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FLOSS Media Centers State of the Art
Comparison Chart

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Introduction

This paper presents a Comparison Chart reflecting the State of the Art for the most prominent Media Center (MC) projects in the FLOSS (Free/Libre Open Source Software) community at the time of this writing.

This document is not aimed to "pick a winner", nor to promote any of the compared MCs. It also shouldn't be considered the "ultimate truth" about the Media Centers showcased here. Please do your own research before picking your choice.

The goal here is simply to share knowledge about the current State of the Art done by the community on FLOSS MC projects, and to provide project leaders and developers with enough feedback on which features to focus on next in opposition to other projects, in an effort to discover new synergies with other existing FLOSS projects.

Before starting a public survey, we divided projects into two main categories: FLOSS Media Center Projects (with or without PVR features) and FLOSS *All-in-one* solutions (custom GNU/Linux Media Center distributions). We'll be focusing and detailing the first category of Media Centers here.

FLOSS Media Center (w/ or w/out PVR)		FLOSS All-in-one (distro)	
Elisa	http://elisa.fluendo.com/	LinuxMCE	http://www.linuxmce.org/
XBMC	http://xbmc.org/	Mythbuntu	http://www.mythbuntu.org/
MythTV	http://www.mythtv.org/	KnoppMyth	http://www.knoppmythwiki.org/
Boxee	http://www.boxee.tv	MythDora	http://www.mythdora.com/
Neuros OSD	http://www.neurostechnology.com/	iMedia Linux	http://www.imedialinux.com/imedia_mythtv/
Freevo	http://freevo.sourceforge.net/	MiniMyth	http://minimyth.org/
My Media System	http://mymediasystem.org/	GeeXboX	http://geexbox.org/en/index.html
Entertainer	http://www.entertainer-project.com/		
MediaPortal	http://www.team-mediaportal.com/		
CenterStage+Plex	http://centerstageproject.com		
	http://www.plexapp.com/		

Presenting: Boxee
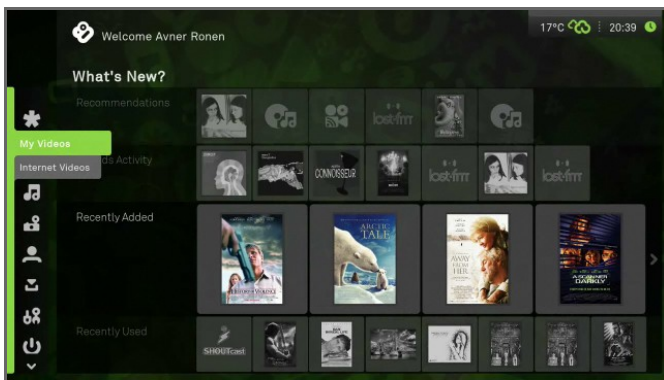

Photo: Avner Ronen   <featured video>

Boxee is a startup company. It is also a "Social Media Center" that enables users to view, rate and recommend content to their friends through many social networking features. Boxee's CEO, Avner Ronen, announced the first alpha release on June 16, 2008. The alpha phase is invite-only but anyone can apply for an invitation on Boxee's website. Boxee is a FLOSS Media Center based on XBMC and currently runs on Mac and Linux platforms. Alternatively, it can run on Apple TV with a patch.

Presenting: CenterStage+Plex

Photo: Enrique Osuna   <featured video>

The CenterStage project was founded in January 2005 by Neil Curry. In May 2008, Elan Fieldgold, who was working on the Mac OS X port of XBMC, left the XBMC project and started a new project called Plex. On July 13, 2008 Plex and CenterStage projects announced that they had teamed up, with Plex developers focusing on backend and the CenterStage developers working on the GUI. The new Media Center is still under development and currently only an alpha version of Plex is available.

Presenting: Elisa

Photo: Fluendo.com   <featured video>

The first release of Elisa Media Center was issued in July 2006. The private company Fluendo decided to start developing a cross-platform solution, targeted at both Home Theater PC's and set-top boxes. Elisa runs on top of the GStreamer multimedia framework. The core system is licensed under the GPL version 2. The GPL part of Elisa is also available under a commercial licensing agreement from Fluendo. Elisa core plug-ins are licensed under the MIT license.
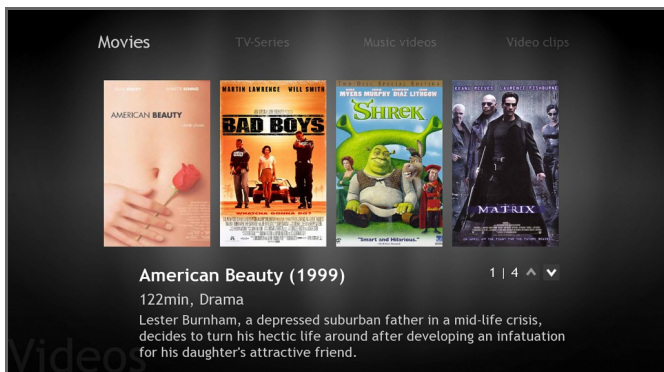
Presenting: Entertainer

Photo: Laterix – Flickr   <featured video>

The Entertainer Project was started in October 2007 by Lauri Taimila, as his pet project to learn Python and build something like Windows Media Center for Linux. Entertainer is a very young project and is still in its early stages. It uses GStreamer's multimedia framework for multimedia playback and the UI is implemented with the Clutter library, which allows OpenGL animated user interfaces.

Presenting: Freevo

Photo: comnetslash.com   <featured video>

Freevo started up in 2002, and, as with the majority of other Media Centers, basic functions provided can be extended by plug-ins. Freevo is written in Python, which makes it easy for users to develop new plug-ins. This may also be the reason why many plug-ins are discontinued. Various plug-ins are bundled with Freevo, and they just need to be activated. Freevo offers so many plug-ins that it is almost impossible to know and use them all. Freevo runs on Linux, but there are reports of users using it on Mac and Windows too, though a certain degree of expertise is required to install it.

Presenting: MediaPortal

MediaPortal is an XBMC fork started up in February 2004 by Erwin Beckers (also known as Frodo), who was actually one of the founders of XBMC in its early days. MediaPortal is built on the Microsoft .NET framework using C#, and supports a plug-in system and a skin engine allowing users to extend the base software. In 2006, MediaPortal released the "TV server." For the first time users can now use multiple frontends for viewing and recording TV streamed from 1 or more TV servers.

Photo: Team MediaPortal   <featured video>

Presenting: My Media System

The project My Media System (mms) was started as "Mpeg Menu System" in the summer of 2002 by Anders Rune Jensen. After a half year of development, mms was rewritten in late 2002, and mmsv2 was released in January 2003. After four years, it was time for a new name, since mms had grown out of its mpeg-only output starting point and into a full media system. The new name, My Media System, was selected with overall consensus from the forum's users. Versions prior to 1.1.0 do not support plug-ins.

Photo: mymediasystem.org <featured video>

Presenting: MythTV

The MythTV project was started up in April 2002 by Isaac Richards. In early 2007 a book called "Practical MythTV" about MythTV and its installation was published. During this time, MythTV grew considerably, and is still growing today, supported by a very active community. There are several other projects which include a Linux distribution bundled with MythTV ("all-in-one" solutions) to make the installation, configuration and maintenance easier and faster. MythTV has a modular structure, so that what can't be found in default modules is probably available using unofficial plug-ins.

Photo: Team MythTV   <featured video>

Presenting: Neuros OSD

The result of a spin-off from Digital Innovations in December of 2003, Neuros Technology is a private company selling Neuros OSD, a set-top box running an Open Source firmware based on Linux. The next generation (Neuros OSD2.0) is part of the "Neuros Open Internet Television Platform", a system aimed to bring the freedom of the internet to the people's living rooms. It is almost ready for shipping, and will support HD.

Photo: Mike Kurdziel   <featured video>

Presenting: XBMC

XBMC initiated in 2002 under the name "Xbox Media Player" (XBMP); it was renamed XBMC a year later, since it was growing out of its "player" name and into a "center" for media playback. It runs on Linux, Mac, Windows, Xbox console and Apple TV. The Xbox version of XBMC has the ability to launch console games. XBMC is not produced, endorsed, or supported by Microsoft or any other vendor. As a result, XBMC for the Xbox console requires a modchip or softmod exploit to run. Apple TV also needs a patch in order to run XBMC. XBMC is a very mature Media Center project, and Boxee, Plex and MediaPortal are all forks from the XBMC project.

Photo: Team XBMC   <featured video>

The next 2 pages present this work's core: the FLOSS Media Center State of the Art Comparison Chart.

This chart and paper should be considered a work still in progress.
Refer to the last page to learn how you can contribute to the next versions of this work.

		A	B	C	D	E	F	G	H	I	J
	Feature/Media Center	MythTV	Freevo	My Media System	XBMC	Neuros OSD	MediaPortal	Elisa	Entertainer	Boxee	CenterStage+Plex
1	Project Started	2002	2002	2002	2002	2003	2004	2006	2007	2008	2008
	Distribution										
2	Run on ...	Linux	Linux, Windows, Mac	Linux	Xbox, Linux, Mac, Windows, Apple TV	Set-top Box	Windows	Linux, Windows	Linux	Mac, Linux, Apple TV	Mac
3	LiveCD	√	√	√	√	n/a	×	×	×	×	×
4	Built-in hard drive	n/a	n/a	n/a	√ Xbox/Apple TV hard drive	× Needs external HD	n/a	n/a	n/a	√ Apple TV hard drive	n/a
	Video										
5	Video player/handling	FFmpeg, mplayer, vlc, xine	xine, mplayer	CXFE, xine, mplayer	mplayer, FFmpeg, custom DVD-player	vlc	windows codecs	gstreamer	gstreamer	XBMC custom player	XBMC custom player
6	Play DVD	√	√	√	√	×	√	√	×	√	√
7	Subtitles support	√	√	√	√	√ srt only	√	√	×	√	√
8	DVD ripping	√	√	×	×	using external DVD player	√ using plugin	×	×	×	×
9	Burn DVD	√	√ using plugin	×	×	×	√ using plugin	×	×	×	×
	Audio										
10	Audio player/handling	FFmpeg, mplayer, vlc, xine	xine, mplayer	alsaplayer, xine, gstreamer	PAPlayer, FFmpeg	vlc, xmms2	windows codecs	gstreamer	gstreamer	PAPlayer, FFmpeg	PAPlayer, FFmpeg
11	Play CD	√	√	√	√	×	√	under development	√	√	√
12	Cross-fading and gapless playback	● only gapless playback	×	×	√	● only gapless playback	√	● only gapless playback	● only gapless playback	√	√
13	CD ripping	√	√	×	√	×	√	×	×	√	√
14	Burn CD	√	√ using plugin	×	×	×	√ using plugin	×	×	×	×
	Images										
15	Play Slideshow	√	√	√	√	√	√	√	×	√	√
16	Animated music/image slideshow	√	√	√	√	√	√	√	×	√	√
	TV / Radio										
17	TV Watch/Recording	√	√	● partial support	● under development	√	√	×	×	×	×
18	Support Multiple TV Tuner Cards	√	√	×	×	×	√	×	×	×	×
19	Full HD support (1080p)	√	√	√	√ except on Xbox	● under development	√	√	√	√	√
20	Video Encoding	√ MPEG-4, MPEG-2, RTjpeg, Nuv	√ MPEG-4, MPEG-2, AVI	×	×	ASF, MPEG-4	√ MPEG-2	×	×	×	×
21	Schedule timed recordings	√	√	×	● under development	√	√	×	×	×	×
22	TV Guide navigation	√	√	√	● under development	×	√	×	×	×	×
23	Commercials Removal	√	● external add-on	×	● under development	×	√ using plugin	×	×	×	×
24	IR Blaster	√	√	×	√ except on Xbox	√	√ using plugin	×	×	√	×
25	Radio FM	√ unofficial plugin	√	×	×	×	√	×	×	×	×
	Applications										
26	Games	√ MAME, NES, SNES, PC	√ MAME, SNES, PS1, Linux native	√ MAME, NES, SNES, PSX	√ Xbox Games, MAME, NES, SNES, PSX	×	√ using plugin	×	×	● under development	√ MAME, SNES
27	VoIP	√	×	√ using plugin	×	×	√ using plugin	×	×	×	×
28	Web Browser	√	×	×	√	● under development	√ using plugin	×	×	×	×
29	Email	● under development	×	×	√ using plugin	×	√ using plugin	×	×	×	×

#	Feature/Media Center	A MythTV	B Freevo	C My Media System	D XBMC	E Neuros OSD	F MediaPortal	G Elisa	H Entertainer	I Boxee	J CenterStage+Plex
30	P2P File Sharing	×	×	×	×	×	√ using plugin	×	×	√ only metadata is shared (bittorrent and http)	×
31	Plug-in support for user apps	√	√	√	√	• under development	√	√	×	√	√
	Network & Online Services										
32	Weather	√	√	√	√	×	√	√	√	√	√
33	YouTube	√ unofficial plugin	√ using plugin	√	√	√	√ using plugin	√	×	√	√
34	Other Video Sites	√ unofficial plugin	Apple trailers	×	√ using plugin	• under development	√ using plugin	×	×	blip.tv, CNet, revision3, CNN	Apple trailers
35	Image Sites	×	√ using plugin	√ using add-ons	√ using plugin	×	×	flickr	×	flickr, picasa	flickr
36	Web Radio	√ unofficial plugin	√	√	√ using plugin	shoutcast	√ using plugin	shoutcast	×	shoutcast	shoutcast
37	User-added News RSS	√	√	×	√ using plugin	×	√	• under development	√	√	√
38	User-added Podcast RSS	√	√	×	√ using plugin	×	×	• under development	×	√	×
39	User-added Videos RSS	√	√	×	√ using plugin	×	×	×	×	√	×
40	CDDB	√	√	√	√	×	√	×	√	√	√
41	IMDB	√	√	√	√	×	√	×	√	√	√
42	Covers Retrieval	√	√	√	√	×	√	√	√	√	√
43	Home networking (Media Server)	√	√	√	√	×	√	•	×	√	√
44	Keyword-search in webtv/video sites	×	×	√	√	√	√ using plugin	• under development	×	• partial support	×
45	Others	netflix	lyrics, last.fm	lyrics, last.fm	last.fm	last.fm	lyrics, last.fm, netflix	dailymotion, picasa	lyrics	last.fm, twitter, friendfeed, thumblr, jamendo, lyrics, CNN	lyrics, last.fm
	Accessories / Support										
46	Remote Control support	√	√	√	√	√	√	√	√	√	√
47	Gyroscope Remote	• partial support	×	×	• partial support	×	√	• partial support	×	√	×
48	Microsoft Multimedia Wireless Keyboard	√	√	×	√	×	√	×	×	√	×
49	Support for Universal Plug 'n' Play devices e.g. Media streamers, usb key, sd cards…	√	√	×	√	√	√	√	×	√	√
50	Sony PSP support	×	×	×	√	√	×	×	×	√	×
51	iPod Support	√ using add-on	√ using plugin	• partial support	×	√	×	√	×	√	×
52	DRM support	×	×	×	×	×	• partial support	×	×	×	×
	Miscellaneous / General										
53	Support Skins/Themes	√	√	√	√	×	√	√	√	• under development	√
54	Multi-language UI	√	√	√	√	√	√	√	• under development	√	√
55	Keyword-search in media library	√	×	√	√	×	√ using plugin	• under development	×	×	√
56	Playlists and Smartlists	√	playlist only	playlist only	√	playlist only	√	playlist only	• under development	playlist only	√
57	Software Update	Linux - Built in OS	Linux - Built in OS	Linux - Reinstall (deb packages available)	Linux - Manual, script Mac - Reinstall Windows - Reinstall Xbox - Manual, script Apple TV - Built-in	Automatic built-in software update	Windows - Manual, script	Linux - Built in OS Windows - Reinstall	Linux - Built in OS	Mac - Reinstall Linux - Built in OS Apple TV - Built in	Mac - Reinstall
58	Latest Version	0.21	1.8.2	1.1.0 RC8	Atlantis Beta 2	1	1.0 RC3	0.5.13	0.1 Beta	0.9 Alpha	Plex 0.5.21
59	Project Page URL	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
60	Source Code URL	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]

A word about "All-in-one" Solutions

Although not the focus of this paper, we thought it might be important to say a few words about the other Media Center projects providing a full application environment to enjoy video, music, photos and much more...

- **LinuxMCE** – LinuxMCE is *also* a Media Center. The best definition would be it is a Smart Home Entertainment Center. LinuxMCE started in mid 2006, initially as a fork of the PlutoHome system from Pluto Inc. to Ubuntu. It bundles MythTV with Kubuntu as the GNU/Linux distribution. It can perform light and climate control, manage home security systems with alarms and stream video to a mobile phone. It blends media center, home automation, telecom control and home security into a single unified user experience. Users can (optionally) control the user interface with a Gyro remote and 3 command buttons. Any peripheral connected replicates across to the entire house, and any media is also available house-wide. Presence detection is also available, and can be implemented with either Bluetooth or RFID technologies, to implement "Follow Me" functionality, so that media, lights, climate, and telecom follow the user throughout the house.

  Note: Although the majority of the software is under the GPL license, some key pieces of LinuxMCE (the DCERouter, Orbiter, etc.), are under the PPL license which is not GPL compatible. The PPL is almost exactly like the GPL, except that when LinuxMCE is sold as a bundle of hardware and software, a license must be paid to Pluto on a per-unit basis.

- **MythBuntu** – Based on Ubuntu and MythTV, MythBuntu is designed to simplify the installation of MythTV on a Home Theater PC. It can be used to install a standalone frontend, backend, or combination of the two. All unnecessary standard Ubuntu applications such as OpenOffice, Evolution, and a full Gnome desktop are not installed for MythBuntu. Users who wish to do so can add a full desktop onto their installation after using the control panel. The development cycle of MythBuntu closely follows that of Ubuntu, with releases occurring every six months, approximately two weeks after Ubuntu releases.

- **KnoppMyth** – KnoppMyth has been around since August 2003. It is a blend of Knoppix and MythTV. It is a Debian-based operating system using Knoppix configuration scripts and *Knoppmyth*-specific scripting that installs and configures the MythTV PVR software and a number of add-ons. Similar to MythBuntu and MythDora, the goal is to make the often complex installation and configuration of a MythTV-based Linux Home Theater PC system relatively easy and pain-free. KnoppMyth can also run directly from a LiveCD (i.e. without installation), providing there is a network connection to a PC with a 'complete installation' (a MythTV backend server).

- **MythDora** – MythDora is a GNU/Linux distribution based on Fedora and MythTV. Like KnoppMyth and MythBuntu, MythDora is designed to simplify the installation of MythTV on a Home Theater PC. Unlike KnoppMyth, however, it does not run as a LiveCD yet. The work on a LiveCD is in progress at the time of this writing. Currently, the distribution must be installed on the computer in order to run. The project started in early 2004 as a pet project, with no real intention of going public.

- **iMedia MythTV Linux** – iMedia Linux is a GNU/Linux distribution used in streaming encoders/servers and Mini-Box embedded systems by iTuner Networks. iMedia Linux distribution aims for a small footprint installation, stability and usability on small disk space and memory restrictions. iMedia MythTV Linux distribution is created as a showcase for the larger commercial iMedia embedded Linux distribution. It is based on MythTV and a freedesktop.org Xorg kernel with several modifications and specific drivers. Target hardware are small embedded mini-ITX systems with VIA EPIA mini-ITX mainboards and Hauppauge PVR capture cards. With this hardware configuration, iMedia MythTV distribution will run out-of-the-box after its installation has been performed. Different hardware configurations should use iMedia's commercial version.

- **MiniMyth** – The MiniMyth project was initiated in 2003. It is a small GNU/Linux distribution that turns a diskless computer into a MythTV frontend. Originally, MiniMyth was developed to download and boot the root file system over the network, and run on VIA EPIA m motherboards. It now supports local boot, runs in several new chipsets, and supports more MythTV plug-ins. MiniMyth was developed to run on a diskless computer. As a result, MiniMyth runs with its entire compressed file system resident in memory, thus requiring more memory than a typical MythTV frontend.

- **GeeXboX** – With a tiny 8 megabyte ISO, GeeXboX can boot from a CD, USB stick, or the network and run totally in RAM. It comes with a utility called 'generator,' which allows for the customization of GeeXboX discs, including the possibility of adding custom media files, non-free codecs, extra themes and configuring a wide range of custom settings. GeeXboX can run on diskless computers, and there is an alpha version for the Nintendo Wii console. The project was started in 2002; by 2006 the GeeXboX and Freevo projects decided to work together, redefining a multimedia framework that could be used either as a standalone application on any GNU/Linux distribution or natively built-in with the GeeXboX project.

Table Notes

[1] http://www.mythtv.org/

[2] http://freevo.sourceforge.net/

[3] http://mymediasystem.org/

[4] http://www.xbmc.org/

[5] http://www.neurostechnology.com/

[6] http://www.team-mediaportal.com/

[7] http://elisa.fluendo.com/

[8] http://www.entertainer-project.com/

[9] http://www.boxee.org/

[10] http://centerstageproject.com/ and http://www.osxbmc.com/

[11] http://svn.mythtv.org/trac/

[12] http://tvcentric.com/viewvc/freevo/

[13] http://mymediasystem.org/wiki/index.php/Download_Devel#Where_and_how_to_get_it

[14] http://xbmc.org/wiki/?title=HOW-TO_compile_XBMC_for_Linux_from_source_code#Getting_the_source_code

[15] http://svn.neurostechnology.com/

[16] http://wiki.team-mediaportal.com/MediaPortalDevelopment/MediaPortalSVN

[17] http://elisa.fluendo.com/download/

[18] http://www.entertainer-project.com/download.php

[19] http://app.boxee.tv/download/source (needs to be a registered user)

[20] http://centerstageproject.com/downloads.php and http://www.plexapp.com/index.php/How_to_Compile#Getting_the_Code

Research References and Sources

General

http://wiki.linuxmce.org/index.php/History – LinuxMCE History

http://wiki.linuxmce.org/index.php/Video – LinuxMCE Video References

http://www.viddler.com/explore/lsnet/videos/2/ - LinuxMCE 0704 and KDE Demo

http://en.wikipedia.org/wiki/Mythbuntu – MythBuntu on Wikipedia

http://en.wikipedia.org/wiki/KnoppMyth – KnoppMyth on Wikipedia

http://mysettopbox.tv/KRP.html – Reference Platform for a KnoppMyth system

http://www.mythpvr.com/mythtv/ - MythTV all-in-one distributions resources (including screencasts)

http://www.imedialinux.com/MMS-Settop-box – iMedia Embedded Linux Set-top box

http://www.imedialinux.com/imedia_mythtv – iMedia MythTV Linux overview

http://minimyth.org/document-history.html – MiniMyth History

http://www.youtube.com/watch?v=oFzZaC2D_yk – Video of GeeXboX running on Nintendo Wii console

http://en.wikipedia.org/wiki/Geexbox – GeeXboX on Wikipedia

https://wiki.ubuntu.com/MediaCenter/StateOfTheArtSpecs - Ubuntu Media Center old specs on Media Center State of the Art

MythTV

A1 - http://en.wikipedia.org/wiki/MythTV#History – MythTV on Wikipedia

A3 – Using one of the "All-in-one" solutions described

A12, A16, A48, A55 – Inferred from RAW data

A25 - http://mythextra.napsi.net/mythFM.html

A29 - http://mythextra.napsi.net/mythMail.html. There's also a plug-in to scroll header from last emails received:
http://www.mail-archive.com/mythtv-users@mythtv.org/msg08812.html

A33, A34 - YouTube, Veoh, Revver, DailyMotion, blip.tv, Yahoo! Video, Google Video or others using unofficial plug-in
http://www.mythtv.org/wiki/index.php/MythTube

A36 - http://home.kabelfoon.nl/~moongies/howto/index.html

A47 – http://ubuntuforums.org/showthread.php?t=479897, http://mythtv.org/wiki/index.php/Gyration-based_MCE_Remotes

A50 – But you can try hacking it as described in http://www.22balmoralroad.net/index.php?/archives/12-MythTV-and-a-Sony-PSP.html#extended

A51 – Using http://www.myth2ipod.com/ or script as http://www.mythtv.org/wiki/index.php/Ipod_export
https://help.ubuntu.com/community/MythTV – MythTV Ubuntu Documentation
http://www.mythtv.org/modules.php?name=MythFeatures – MythTV Screenshots Gallery
http://www.extremetech.com/article2/0,2845,2050665,00.asp – MythTV Plug-ins (Official & Unofficial)
http://www.washingtonpost.com/wp-dyn/content/article/2006/03/25/AR2006032500115_pf.html – MythTV Review
http://www.apress.com/book/view/1590597796 – Book - Practical MythTV: Building a PVR and Media Center PC
http://www.mythtv.org/wiki/index.php/Commercial_MythTV_System – Commercial MythTV Systems
http://www.youtube.com/watch?v=jwcB88yFeZ0 – Exploring MythTV and mediaMVP
http://www.youtube.com/watch?v=4dnVPSHculk, http://www.youtube.com/watch?v=7jARP8YbiIc,
http://www.youtube.com/watch?v=JLZxB6RCm0Q – MythTV as HTPC Long version (part I, II and III)
http://www.youtube.com/watch?v=PxeY14L3O_I – MythTV Promo

Freevo

B1 - http://sourceforge.net/projects/freevo/ - Freevo Sourceforge Profile

B3 - http://freevo.sourceforge.net/download/live.php

B5, B10, B12, B16, B27, B29, B30, B31, B44 – Inferred from RAW data

B8, B9 – Inferred from RAW data and http://doc.freevo.org/MoviePlugins/Encodingserver and
http://tvcentric.com/viewvc/freevo/branches/rel-1-7/freevo/src/video/plugins/dvdbackup.py

B13 - http://doc.freevo.org/AudioPlugins#head-0c57a4072cc63f927aadc2afea5dcf722eb49b53

B14 - http://tvcentric.com/viewvc/freevo/branches/rel-1/freevo/src/plugins/cd_burn.py

B23 – Using http://doc.freevo.org/CommdetectServer

B25 – Inferred from RAW and http://doc.freevo.org/AudioPlugins#head-a159c1c774e57bbc008acbbf9d301b82c1f9dd10

B28 – Waiting in wish list http://doc.freevo.org/WishList

B33 - http://doc.freevo.org/MoviePlugins/Youtube

B35 - http://doc.freevo.org/ImagePlugins#head-0ebce087baf572a943b827fb40eb55731a964f6d

B36 - http://doc.freevo.org/AudioPlugins#head-a19371ad20096026fec0100d8d808f0f87a5eb00 and
http://www.excentral.org/archives/2006/07/03/new-py_shoutcast-freevo-plugin

B49 - http://doc.freevo.org/GeneralPlugins/USBstorage

B51 – Freevo-IPOD plug-in at http://freevo.sourceforge.net/addons/index.php?direction=0&order=&directory=Plugins

B55 – Waiting in wish list http://doc.freevo.org/WishList

http://doc.freevo.org/FreevoInAction – Freevo Video and Screenshots Gallery

http://doc.freevo.org/Plugins – List of Freevo Plug-ins

http://freevo.sourceforge.net/addons/ - Other Freevo Skins and Plug-ins

http://doc.freevo.org/Windows - Freevo on Windows

http://doc.freevo.org/MacOSX – Freevo on MAC

http://www.youtube.com/watch?v=-4w9fkXYjOk – Expected Freevo 2

http://doc.freevo.org/FAQ – Freevo FAQ

My Media System

C1 - http://en.wikipedia.org/wiki/My_media_system – My Media System on Wikipedia

C3 - http://wiki.mymediasystem.org/wiki/index.php/Download_LiveCD

C5 - http://forum.mymediasystem.org/viewtopic.php?f=1&t=1417&p=11970#p11970

C10, C12, C14, C24, C25, C44 – Inferred from RAW data

C17, C18, C20, C21 – Needs some hacking and specific hardware. Inferred from RAW data, http://bugs.mymediasystem.org/?do=details&task_id=706 and http://mymediasystem.org/wiki/index.php/MMS_Systems#Uatschitchun

C27 - http://wiki.mymediasystem.org/wiki/index.php/Plugins

C36 - http://wiki.mymediasystem.org/wiki/index.php/Tips_%26_Tricks#Your_personal_Online-Radio-Favorites

C51 – Using http://wiki.mymediasystem.org/wiki/index.php/Download_Pyglets#IpodSync_:

C57 - http://mymediasystem.org/wiki/index.php/Installation_on_sarge

http://mymediasystem.org/wiki/index.php/MMS_Features – MMS Screenshots Gallery

http://wiki.mymediasystem.org/wiki/index.php/Tips_%26_Tricks - Tips and Tricks

http://forum.mymediasystem.org/ - MMS Forum

http://wiki.mymediasystem.org/wiki/index.php/FAQ - MMS FAQ

http://www.youtube.com/watch?v=tOm4ePSh9tw – MMS Demo Video

XBMC

D1 – http://en.wikipedia.org/wiki/XBMC#XBMC_History, http://xbmc.org/about/history/

D2 - http://code.google.com/p/atvusb-creator/ - XBMC patch for Apple TV

D3 - http://xbmc.org/download/

D5 - http://en.wikipedia.org/wiki/XBMC#Audio.2Fvideo_playback_and_handling

D8 - http://forums.xbox-scene.com/lofiversion/index.php/t465355.html

D17 - It is possible to integrate with MythTV:

http://www.mythtv.org/wiki/index.php/Xbox_Frontend#Running_XBMC_MythTV_Frontend_Python_Script

D17, D21, D22 - http://xbmc.org/wiki/?title=GSoC_-_Unified_PVR_Frontend

D23 - http://xbmc.org/wiki/?title=EDL_(commercial_skipping)_and_SceneMarker_support

D28 – Using linksbox which is not considered much user-friendly: http://xbmc.org/forum/showthread.php?t=25&page=15,

http://www.xbox100.com/forums/showthread.php?t=12183

D29 – xinbox: http://www.xbmcscripts.com/index.php?option=com_docman&task=search_result&Itemid=Array&search_mode=phrase&search_phrase=XinBox%20(V.0.99.95) and

xbmcmail: http://sourceforge.net/projects/xbmcmail-imap/,

http://xbmc.org/forum/showthread.php?t=2773&page=11

D35 - http://www.xbmcscripts.com/index.php?

option=com_docman&task=search_result&Itemid=Array&search_mode=phrase&search_phrase=Flickr%20for%20XBMC%20v0.2

D37, D38, D39 – http://www.xbmcscripts.com/index.php?

option=com_docman&task=search_result&Itemid=Array&search_mode=phrase&search_phrase=MultiRSS%20Reader%20v1.5,

http://www.xbmcscripts.com/index.php?

option=com_docman&task=search_result&Itemid=Array&search_mode=phrase&search_phrase=MediaStream%20v0.85, http://www.xbmcscripts.com/index.php?

option=com_docman&task=search_result&Itemid=Array&search_mode=phrase&search_phrase=Media%20Feed%20Browser%20v1.0

D44, D55 – Inferred from RAW data

D47 – There might be compatibility problems. http://xbmc.org/forum/showthread.php?t=32525, http://www.se7ensins.com/forums/xbox-hardmod/89814-usb-devices-compatible-xbmc.html

D50, D51 - http://xbmc.org/wiki/?title=USB_Mass_Storage_support_in_XBMC#Other_USB_Mass_Storage_Devices

http://xbmc.org/media/ - XBMC Videos and Screenshots Gallery

http://xbmc.org/about/team/ - XBMC Founders and Team

http://blog.boxee.tv/2008/08/08/first-ever-exclusive-video-of-team-xbmc/ - XBMC Team Video Presentation

http://xbmc.org/wiki/?title=Frequently_Asked_Questions – XBMC FAQ

http://xbmc.org/wiki/index.php?title=XBMC_Online_Manual – XBMC Online Manual

http://www.xbmcscripts.com/ - Additional XBMC Plug-ins

http://savvygeek.com/xbmc-skins/ - Repository of XBMC Skins

http://lifehacker.com/software/geek-to-live/transform-your-classic-xbox-into-a-killer-media-center-299809.php – Xbox softmod

http://www.youtube.com/watch?v=u-z-cwnFk-Q – XBMC and MediaStream Skin

http://www.youtube.com/watch?v=K6EY56qiQUE – XBMC and Aeon Skin

http://www.youtube.com/watch?v=8amNvWnGrew – XBMC in Action

Neuros OSD

E1 - http://wiki.neurostechnology.com/index.php/Company_General_Information – Neuros OSD History

E5 - http://wiki.neurostechnology.com/index.php/OSD_2.0_HD

E6, E9, E11, E14 – It doesn't have a CD/DVD drive

E13, E16, E44, E56 – Inferred from RAW data

E28 - http://wiki.neurostechnology.com/index.php/Summer_of_Code_2008/Browser – Web browser support

E34 - http://wiki.neurostechnology.com/index.php/Summer_of_Code_2008/N-Tube_FLV_Browser – Other video sites support

E45 - http://wiki.neurostechnology.com/index.php/Summer_of_Code_2008/Last.fm_radio – Neuros and Last.fm

E53 – No documentation found about Neuros OSD supporting UI Themes/Skins

http://www.vimeo.com/1264921 – Linux Journal Video Review

http://code.google.com/soc/2008/neuros/about.html – Neuros projects on GSOC 2008

http://www.digitalinnovations.com/ - Digital Innovations, the beginning of Neuros

http://wiki.neurostechnology.com/index.php/Open_Source_Projects – Neuros Open Source Projects

http://www.nytimes.com/2008/01/06/business/06novel.html?_r=1&oref=slogin – Neuros on the New York Times

http://www.boingboing.net/2007/05/15/neuros-osd-a-settop-.html – Neuros on BoingBoing

http://www.pocketnow.com/index.php?a=portal_print&t=reviews&id=1024 – PocketNow Review (with Videos)

http://wiki.neurostechnology.com/index.php/Neuros_Open_Internet_Television_Platform – Neuros Open Internet TV Platform

MediaPortal

F1 - http://www.team-mediaportal.com/about_mediaportal.html

F8, F9, F13, F14, F16, F25, F44, F47, F55 – Inferred from RAW data

F13 - http://sunbreeze.dk/cms/index.php?page=cdslayer

F23 - http://www.team-mediaportal.com/files/Download/Plugins/VideoorMovies/Dvr-MpegCut/

F24 - http://www.team-mediaportal.de/dateien/Download/Plugins/Others/MyBlaster/

F25 - http://www.team-mediaportal.com/files/Download/Plugins/AudioorRadio/MyFMRadio/ and http://www.team-mediaportal.com/manual/Extensions-Plugins/MyRadio2

F26 - http://www.team-mediaportal.com/files/Download/Plugins/Utilities/MyPrograms/ and http://forum.team-mediaportal.com/my-emulators-247/

F27 - http://www.team-mediaportal.com/files/Download/Plugins/Utilities/AsteriskCallerID/ and http://www.team-mediaportal.com/files/Download/Plugins/Web/MySkype/

F28 - http://www.team-mediaportal.com/manual/Extensions-Plugins/WebBrowser and http://www.team-mediaportal.com/manual/Extensions-Plugins/WebBrowserIE

F29 - http://www.team-mediaportal.com/manual/Extensions-Plugins/MyMail

F30 - http://www.team-mediaportal.com/files/Download/Plugins/Utilities/MyTorrents/

F33, F34 - http://forum.team-mediaportal.com/onlinevideos-244/

F36 - http://www.team-mediaportal.com/files/Download/Plugins/AudioorRadio/ShoutcastDirectoryPlugin/

F37 - http://en.wikipedia.org/wiki/MediaPortal#Features

F38 – But older releases can use http://www.team-mediaportal.com/files/Download/Plugins/AudioorRadio/MyPodCasts/

F45 - http://www.team-mediaportal.com/files/Download/Plugins/AudioorRadio/MyLyrics0.13/

F52 – Depends on installed and configured players and codecs.

F56 - http://www.team-mediaportal.com/files/Download/Plugins/AudioorRadio/MySmartPlaylists/

F57 - http://www.team-mediaportal.com/manual/UpdateingMediaPortal

http://sourceforge.net/projects/mediaportal/ - MediaPortal Sourceforge Profile

http://www.team-mediaportal.com/showcase.html – MediaPortal Videos

http://www.team-mediaportal.com/screenshots/ - MediaPortal Screenshots Gallery

http://www.team-mediaportal.com/manual/GeneralRequirements – System Requirements

http://www.team-mediaportal.com/files/Download/Plugins/ - List of Plug-ins

http://www.team-mediaportal.com/manual/Extensions-Plugins – List of Plug-ins

http://home.primusonline.com.au/campling/ - XBMC integration plug-in

http://www.youtube.com/watch?v=SzyJbOnanbY – MediaPortal RC2 new skin

Elisa

G1 - http://markmail.org/message/onz22two5675cetm – Elisa First Release announcement

G11 - http://www.mail-archive.com/python-announce-list@python.org/msg03246.html

G12, G16, G18, G19, G24, G25, G48, G56 – Inferred from RAW data

G17, G21, G22 – However you can try some hacking: http://elisa.fluendo.com/forums/viewtopic.php?id=46. Collaboration is expected from http://www.k-d-w.org/

G37, G38 - https://code.fluendo.com/elisa/trac/browser/trunk/elisa/plugins/ugly/aggregator_plugin?rev=4740

G31, G45 - http://elisa.fluendo.com/plugins/

G44, G55 - https://blueprints.launchpad.net/elisa/+spec/local-search-ui and https://blueprints.launchpad.net/elisa/+spec/yes.fm-ml-fillup

G47 - http://www.youtube.com/watch?v=qhgnYMWO3Wc – Elisa using a Wii Remote

G51 - https://bugs.launchpad.net/elisa/+bug/256976

http://elisa.fluendo.com/screenshots/ - Elisa Video and Screenshots Gallery

http://www.youtube.com/watch?v=qn4iJ0Cp7Gs - Demo video of Elisa Media Center for Linux

http://en.wikipedia.org/wiki/Elisa_%28software%29 – Elisa on Wikipedia

http://elisa.fluendo.com/features/ - Elisa Features List

http://www.youtube.com/watch?v=qefZpX_YIWE – Demo video of Elisa Media Center for Linux

http://www.linux.com/feature/61859 – Elisa Review on Linux.com

http://elisa.fluendo.com/wiki/TipsAndTricks – Tips and Tricks

Entertainer

H1 - http://www.taimila.com/?q=node/32 – Entertainer First Release announcement

H46, H54, H56 – Inferred from RAW data

http://www.youtube.com/watch?v=UhWbNj0ndN8 - Demo video of Entertainer Media Center for Linux

http://www.youtube.com/watch?v=gh0QlWOddnQ – Quick Demo Video

http://lists.ironlionsoftware.com/pipermail/entertainer-dev-ironlionsoftware.com/ - Dev Mailing List Archives

http://www.taimila.com/ - Developer's Blog

http://www.entertainer-project.com/faq.php – Entertainer FAQ

https://launchpad.net/entertainer – Project Development Pages

http://tuxenclave.wordpress.com/2008/02/16/entertainer-the-best-media-center/ - Review

http://www.entertainer-project.com/development.php – Team Entertainer

Boxee

I1 - http://blog.boxee.tv/2008/06/16/boxee-for-mac-is-available-for-download/ - Boxee First Release Announcement

I2 - http://code.google.com/p/atvusb-creator/ - Boxee patch for Apple TV

I5 - http://en.wikipedia.org/wiki/Boxee#Video_playback_in_detail

I10, I12 - http://en.wikipedia.org/wiki/Boxee#Audio_playback_in_detail

I16 – Inferred from RAW data and http://forum.boxee.tv/showthread.php?t=245&highlight=slideshow

I26, I44, I53 – From RAW data and private emails

I30 – Private emails and http://www.macnn.com/articles/08/06/30/front.row.meets.twitter/ - Boxee Review

I37, I38, I39 - http://blog.boxee.tv/2008/08/25/new-version-lots-of-good-stuff/

I47, I48, I51 – Inferred from RAW data

I55 – However it offers many filtering options and visualization modes

http://en.wikipedia.org/wiki/Boxee – Boxee on Wikipedia

http://blog.boxee.tv/2008/06/12/what-made-us-start-boxee/ - Boxee History

http://blog.boxee.tv/ - Boxee Blog

http://wiki.boxee.tv/Main_Page – Boxee Wiki

http://news.cnet.com/8301-17939_109-9977098-2.html - Hands-on with Boxee: video

http://lifehacker.com/396382/boxee-is-xbmc-with-newer-look-and-social-flair – Boxee Tour

http://www.viddler.com/explore/centernetworks/videos/243/ - Boxee Demo

http://www.mefeedia.com/entry/two-and-a-half-minutes-with-boxee/11071654/ - Video Tour

http://www.pcmag.com/article2/0,2817,2327906,00.asp – Boxee Review PC Magazine

http://www.alleyinsider.com/2008/6/apple_tv_boxee – Boxee Review

http://www.appletvhacks.net/2008/06/30/boxee-on-apple-tv/ - Boxee Review

http://www.youtube.com/watch?v=MwQG-4kT7FE – Boxee Overview and Navigation

http://blog.boxee.tv/2008/08/04/boxee-reviewed-by-tekzilla/ - Boxee Review by Tekzilla

http://www.youtube.com/watch?v=NzXu05ZuvII – Boxee CEO, Avner Ronen, presents Boxee

CenterStage+Plex

J1 – http://en.wikipedia.org/wiki/Centerstage#History_.26_Project_Information, http://centerstageproject.com/news.php?id=222, http://elan.plexapp.com/2008/07/13/were-teaming-up-with-centerstage/ – CenterStage+Plex announcement

J5, J10 - http://elan.plexapp.com/2008/08/29/release-0514-bugfixing-bonanza/

J8, J13, J14, J16, J26, J34, J35, J36, J37, J38, J44, J47, J48, J55, J56 – Inferred from RAW data

J17, J22 – Inferred from RAW data and feedback from Team XBMC on this paper v1.0

http://www.vimeo.com/1351980?pg=embed&sec=1351980&hd=1 - HD video of Plex + Aeon alpha stage skin

http://vimeo.com/1501354?pg=embed&sec=1501354 – HD video of Plex + MediaStream skin

http://centerstageproject.com/the-future.php – CenterStage User Interface

http://www.youtube.com/watch?v=iMm4A0xzvqA – Plex Tour

http://www.tinkeringwithin.com/2008/08/10/plex-osxbmc-with-mediastream-skin-demo/ - Plex + MediaStream skin

http://forums.plexapp.com/index.php?showtopic=497 – FAQ on CenterStage + Plex

http://wiki.plexapp.com/index.php/FAQ – Plex FAQ

http://elan.plexapp.com/2008/05/21/exodus/ - The OSXBMC/Plex fork from XBMC

http://uk.youtube.com/watch?v=tGdihkA5FK4 - Walk-through on a mac mini running OSXBMC (0.1.3)/xTV/MC360/PMIII theme

http://lifehacker.com/5044004/xbmc-for-mac-now-plex-redesigned – Media Stream skin for Plex

http://wiki.plexapp.com/index.php/Documentation – Plex Documentation

http://plexapp.com/credits.php – FLOSS used by Plex

Many thanks to everyone who contributed in collecting data

General

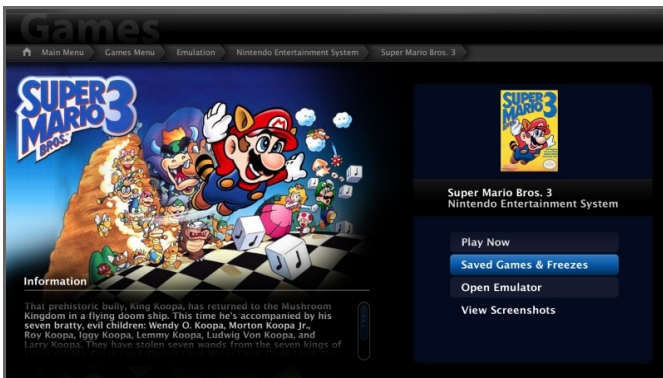JimmyGosling, tschak909, nite_man and Thom Cherryhomes from LinuxMCE project.

Boxee

Andrew Kippen, Avner Ronen, Bernhard Rode, gidon coussin, team boxee

Photo: Dave Mathews

CenterStage+Plex

Adam Stern, Conny Svensson, Isaac, Jon Micheletto, Muzo Berberoglu, Scott Olechowski
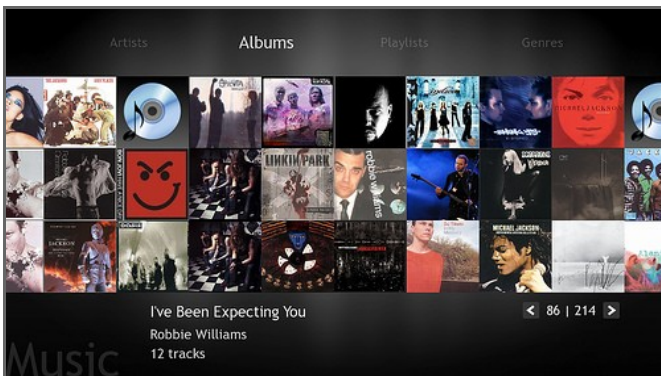
Photo: Team CenterStage

Elisa

Eduard Sukharev, Hugo Baldasano, Kuntz, Michael Kötter, Saviq

Photo: Fluendo.com

Entertainer

charclo, Joshua Scotton, Lauri Taimila

Photo: Laterix - Flickr

Freevo

Alex Mondshain, anon, Bastian Farkas, Bjorn, D. A. Seifert, Delyan Kratunov, Dinyar Rabady, Duncan Webb, Frittella Laurento, Hans Meine, Henne Vogelsang, John Molohan
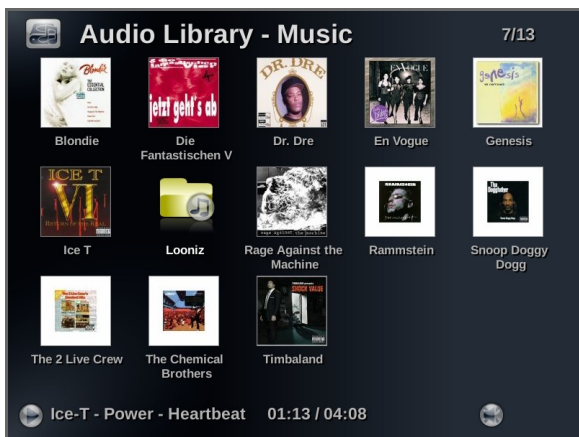
Photo: danubuntu.wordpress.com

MediaPortal

Aquarius, Luksmann, tourettes

Photo: Team MediaPortal

My Media System

Anders Rune Jensen, lorenzodes, Uatschitchun

Photo: mymediasystem.org

MythTV

Alex Kulcsar, blackpaw, Bob Igo, Carl Reynolds, Christian Hack, Dave Rudder, David, David Whyte, Darryl Ross, gerhard, Marc Randolph, Mitchell Gore, mtrax, MythTV User, Ookaze, Paul Andreassen, Pedro Pessoa, Peter Schachte, Rafael Moslin, Ralphthedog, Robin, Ross Camm, Thomas Mashos
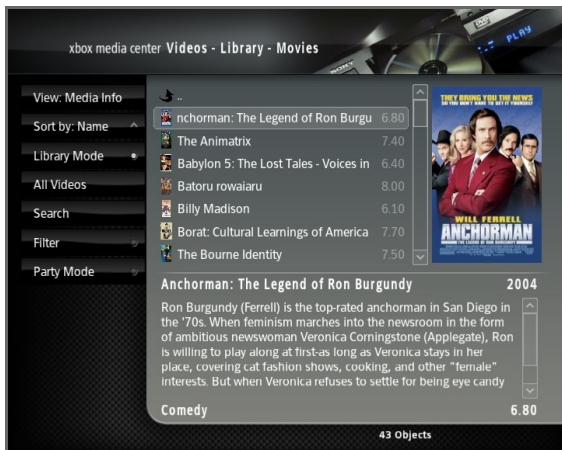
Photo: MythTV Gallery

Neuros OSD

Jason Shah, Joe Born, Matthew Wild, NexuS6, Ugo Riboni

Photo: neurostechnology.com

XBMC

Aaron G, Andreas Setterlind (a.k.a. Gamester17), anoobie, Bjoern, Dan (evilkorn), David Saunders, duduke, EsOsO, GT, Gunnar Holmberg, Henko van de Weerd, idioteque, Matt, QuiescentWonder, Randal Grimble, Robbienes, Sean Smith, si, Tomas Watz, Torben Gerkensmeyer, yoyo

Photo: Team XBMC

FLOSS Media Centers State of the Art
Comparison Chart

Get the latest version of this file at:

www.telematicsfreedom.org/en/flossmediacenter

For information on latest updates:

www.telematicsfreedom.org/en/blog

This continues to be a work in progress.
Send feedback, notes or corrections to Giovani Spagnolo at:

info (at) telematicsfreedom (dot) org

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