

An Introduction to MythTV

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So what's MythTV?

- PVR / DVR - Digital Video Recorder
- Free and Open Source
- Runs on Linux, BSD and Mac OS X
- Media Server, and client
- Shiny, easy(ish) to use interface, controllable with a remote!



How it works - Old (Analog) way

- Analogue signal transmitted
- Converted to raw digital signal by a (Analog) capture card
- Either displayed on screen or stored to disk to be watched later
- Pros:
 - Doesn't require a lot of CPU power to view.
- Cons:
 - Is going to be turned off soon anyway!
 - Poor quality
 - Eats LOTS of disk space, unless encoded into something more sane (like MPEG).
 - Encoding needs lots of CPU power to be done in real time.

How it works - New (Digital) Way

- Digital signal transmitted
- Digital signal received by (digital) capture card
- Either decoded to screen or stored to disk to be watched later
- Pros:
 - Doesn't require a lot of CPU power to store sanely.
 - Better quality
- Cons:
 - Requires some CPU power to view (a lot less than encoding the raw stream for storage though)
 - Future proof (well more so than analog anyway!)

A bit of Background - DVB

- DVB (Digital Video Broadcasting) is the 'standard' for Digital TV
- DVB provides DVD like quality
- 3 common types of DVB :
 - DVB-T - Terrestrial (read Freeview)
 - DVB-S - Satellite (read Sky)
 - DVB-C - Cable (read NTL)
- Basically a carrier for a bunch of MPEG2 streams and a bit of data (EPG, Text, etc)
- Just like DVD's the MPEG2 streams in turn carry Audio, Video and Data (i.e. subtitles!)

Where MythTV fits in...

- Most OS's provide basic video capture / viewing from TV cards.
- MythTV provides
 - A shiny interface to plug into your TV
 - A way to watch and switch between channels on Live TV
 - A program guide, listing what's on when.
 - A intelligent scheduler to record your favourite shows (more on this later)
 - Multiplayer TV!



What hardware you need (and what it costs)

- Minimum CPU 500MHz (so practically free these days)
- Quite a bit of memory (512min) - very memory hungry, will probably improve with time
- TV capture card, DVB (Nova-T £35 from ebay)
- Big Disk (£40+)

Now a quick but poorly planed demo...

- Yay demo! :)

Interested?

- Packages for Ubuntu and Debian (and probably others)
- See <http://www.mythtv.org/> for more information

