

Open Source Developers @ Google Speaker Series

Practical MythTV

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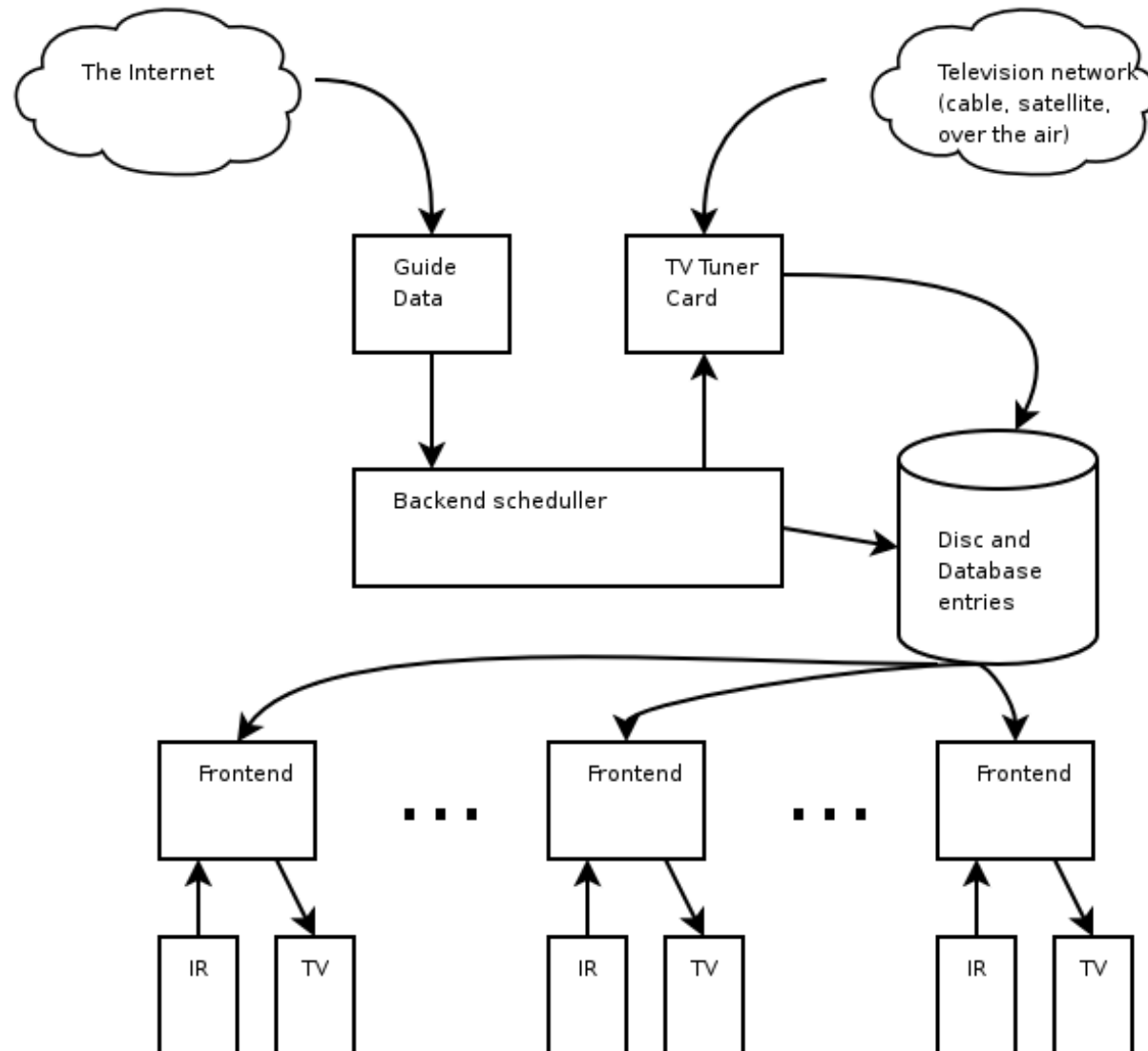
Agenda

What is MythTV?

Demonstration

- What does a fully configured MythTV look like?

What are the moving parts?



DVD playback

- Several ways to play DVDs in MythTV
- External player
 - xine
 - mplayer
 - CoolMultiMediaSuperFashionablePlayer(TM)
- The built-in player
 - based on mplayer
 - much nicer than it used to be

DVD Playback

- Key commands are common to the rest of MythTV
- Menus work
- Encrypted DVDs are supported as well
- Easy to navigate through menus for subtitles etc

DVD Playback

- Demonstration

Commercial Detection

- MythTV can automatically detect advertising in recordings
- These detected adverts can be marked as regions to automatically skip over during playback
- You can convert also automatically and permanently remove these adverts to save disk space

Commercial Detection

- Demonstration of commercial detection

User Jobs

- The MythTV back end can run user defined jobs
- These jobs are just scripts with command line arguments
- The command line arguments can be things like the name of the video file to process, it's title, and so forth
- This makes some pretty cool things possible

User Jobs: nuvexport

- One cool thing is nuvexport

<http://www.forevermore.net/files/nuvexport-latest.tar.bz2>

- Transcode to the right format for iPod and PSP
- As well as AVI, MPEG, SQL backups, and more

- I needed to patch it to get it working

<http://www.stillhq.com/mythtv/nuvexport.002.patch>

- Oh, and a newer version of ffmpeg

User Jobs: variables

`%DIR%` = Path to the directory containing the video file

`%FILE%` = The filename of the video file

`%TITLE%` = The show title

`%SUBTITLE%` = The show subtitle

User Jobs: mythtranscode

- nuvexport is overkill if all you want to do is reduce the resolution of a video, permanently remove advertising or deleted content from a cutlist
- Use mythtranscode
- This can be run from the command line too

User Jobs: other transcode tools

- Because user jobs are just command lines, you can run other tools too
- For example, mencoder

User Jobs: other tools

- Don't limit yourself to transcodes!

Remote Front Ends

- Many front ends
 - TVs
 - computers
- In mythtv-setup on new front end
 - Change the database configuration to point to your master back end
- Supported operating systems: Linux, MacOS

Slave Back Ends

- You can also have more than one back end, if you want to do a lot of transcoding, or have more tuners than will fit in one machine

Network control

- You can also control your front end via telnet or IM
- This makes some forms of remote work much nicer

Network control

- Demonstrate the telnet interface

IM control

- I wrote a simple Google Talk bot which lets you control your front end via IM messages

<http://www.stillhq.com/gtalkbot/>

IM control

- Demonstrate the telnet interface

On screen displays

- You can also display text on screen, as long as playback is currently happening

On screen displays

- Demonstrate mythtvosd

MythWeb

- A Web Based UI for MythTV
- You can schedule shows, stream recorded programs, check upcoming, edit key bindings
- No real security (.htaccess)

MythWeb

- Demonstrate MythWeb 0.21

Other sources of recordings

- There is a video plugin
- Recordings are nicer
- You can use mythnettv to import videos as recordings

<http://www.stillhq.com/mythtv/mythnettv/>

- Also aggregates RSS and ATOM feeds

MythNetTV

- Demonstrate MythNetTV

Installation options

- OS packages
- Source
- LiveCDs

New stuff

- MythTV 0.21 is currently being developed
 - Its what I've been using for these demos
 - Cool new stuff
 - Clock in menus
 - Watch list
 - Storage directories
 - Flash player in MythWeb
 - uPnP
 - ... and more

US Guide Data

- Guide data used to be provided by TMS via Zap2IT
- Not any more
- Schedules direct taking over, for money

Conclusion

- Questions?