

Experiences made with the
DebConf video-team
or
the making of
[http://debian-meetings.debian.net
/pub/debian-meetings/](http://debian-meetings.debian.net/pub/debian-meetings/)

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Outline

- whoami
- project aims and features
- software and other dependencies
- challenges
- setup at LCA2007, debconf3,4,5 and 6
- next steps
- some advice



some bits about me

- founded DebConf video-team in 2005
- had no video background, but seen lots of conferences with various efforts & results to make video available
- DebConf organizer
- Debian maintainer (and user since 1996)
- Debian-Edu member, ppc porter and ftpmaster
- FAI (fully automatic installation) developer
- live-package, debian-qa, (debian-installer)
- h01ger on IRC



Project aims

- video and audio archive for talks and workshops from DebConfs and smaller Debian gatherings
- to share and keep the knowledge available



Features

- 10 events since 2005 with approx. 200 videos with 180 GB of data, source+public server (backup)
- videos in mpeg and theora in high, good & low quality, DVD .iso images
- slides
- scripted encoding and DVD (ntsc+pal) creation
- distributed live-streams at debconf6



Featuring

- 2005
 - DebConf5
 - Linuxtag Karlsruhe (slides only)
 - QA meeting Darmstadt
 - debconf-es2
- 2006
 - Debian-Edu Erkelenz
 - FOSDEM Brussels
 - DebConf6
 - i18n meeting in Extremadura
 - QA meeting Badajoz



Software dependencies

- dvgrab
- ffmpeg, ffmpeg2theora, libtheora-mmx
- oggfwf, icecast2, netcat
- bash, make, debconf6-video (scripts plus dvtail)
- videolink by Ben Hutchings
- cinelerra



Other dependencies

- gear (tripods, cameras, audio mixer, etc.)
- fast i386 computers & hdspace & network
- people, people, more people
- #debconf-video on irc.debian.org
- debconf-video@lists.debconf.org



Challenges

- no post-processing (!)
- DFSG free software only
- streaming (optional)
- preserving raw DV (not even HDV) or lossy high quality versions
- getting the slides from the speakers :-)
- capturing live-demos
- subtitles (=post-processing)



LCA 2007 setup

- 4-7 venues (!), 13 people in team
- audio technician from UNSW
- regular team meetings (3 per day)
- wireless mics and audio mixer
- record to DV tapes and DVD recorders
- two laptops for encoding, two servers from Google on the last day
- scripts for encoding and uploading previously prepared
- two test runs before LCA started



DebConf3 and 4

- video enthusiasts captured all talks at debconf3 on DV-tape
- those tapes are still somewhere...
- we even know where :-)
- no structured video capture at DebConf4



DebConf5 setup

- 2 venues, team of 8 people, some helpers
 - cam & camera mic in small venue
 - audio & video mixer setup in big venue
- recorded DV to harddisk via NFS, kept all DV-tapes
- post-processing with cinelerra and blood, sweat and tears (less people involved), bash script for encoding
- ad-hoc uploads to machine at Uni Utrecht, got slashdotted, then moved to Uni Umeå
- all talks released at the end of the conference



DebConf6 setup, part 1

- 2 venues, 5 machines, 3 audio people, 4 main camera operators, 1 developer, 1 organizer, some helpers
 - cam & camera mic in small venue
 - audio mixer setup in big venue
- lots and all kinds of network problems
- two file servers (>600gb each), recorded & streamed raw DV, encoding on another machine, connected with dedicated ethernet cables
- (optional) live-streaming!
- final encoding at home via Makefile
- released all videos two months later



DebConf6 setup, part 2

- loop: dc6-grab
 - dvgrab | nc
- loop: dc6-record-stream
 - nc > \$name
 - loop: dvtail \$name | ffmpeg2theora | oggfwfwd \$icecast_server
- icecast server in local network, streaming to outside server, to which other servers around the world (and clients as well) could connect
- video stream with 200 x 136px, 130kbps, sensible audio



<http://layer-acht.org/debconf6-video/>



next Steps as planned before FOMS

- mirror network (archive & streams)
- automated bit torrents
- integration with Pentabarf, conference management system, mainly for organizing the team member schedules
- start- & end-trailers
- more team maintainance
- upload and maintain debconf-video package
- only for Debian or for FOSS in general?
- FOSDEM 2007 & DebConf7, LCA + FOMS?



new ToDo-list entries from FOMS

- RSS feed
- generate ogg theora intros & outros with yum4mpeg
- use cmml, mod_annodex and cmmlircbot
- get rid of mpeg files - but keep the DVDs :-/
- experiment with dirac before debconf7
- create a webpage with a codec matrix
- flumotion instead of icecast?



misc notes / advice

- preparation is the key
- “please repeat the questions”
- workshops generally hard to record
- compromise on video, but not on audio
- operating cameras is easy – ask people to help
- use IRC to communicate during the sessions
- raw DV is huge (12gb/h), getting storage for a conference is relatively easy, taking it home is harder



• 15 – 10 – 5 min signs

- have fun!



some more advice for LCA 2008

- try to get encoding machines from sponsors
- concentrate on getting the recordings done, consider streams optional – if you consider them at all :)
- prepare! (uploading, linking, encoding and streaming) – DV cams are quite cheap & common now
- audio preparation is more difficult
- find a team organizer (in case Silvia doesn't want to :) who manages the people (and to a lesser degree the technology) and does this full time at LCA
- be fully prepared so everything *can* be done at the end of the conference...



Thanks!

- Questions ?

