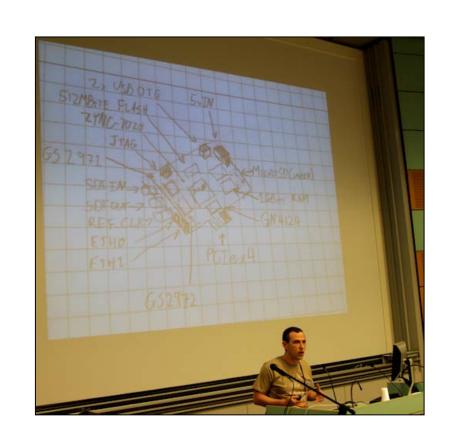
RMLL – Media production

Products are too expensive

- "No board is worth \$ 10.000"
- But "some dongles cost \$ 29.000"

Free hard-/software

- Promises lower prices
- Broadcasters should demand it
- Support is a key issue
- But can provide business too





RMLL - Available now

Openstack

- In use now for commercial services
- Functionality is increasing
- Can be difficult to install (3 weeks!)
- The manual could be better too

CasparCG

- Proven in many live broadcasts
- May even become a (web)transcoder
- Less well-known than deserved

Complexity: Starting multiple services

```
sudo start nova-network
source ~/creds/openro
sudo service mysql restart
sudo service keystone restart
sudo service glance-registry restart
sudo service glance-api restart
sudo restart libvirt-bin
sudo service rabbitmq-server restart
sudo service iscsitarget start
sudo service open-iscsi start
sudo restart nova-api
sudo restart nova-compute
sudo restart nova-network
sudo restart nova-scheduler
sudo restart nova-consoleauth
sudo restart nova-volume
sudo restart nova-cert
sudo restart libvirt-bin
sudo /etc/init.d/rabbitmq-server restart
sudo nova-manage service list
                                               Status State Updated At
Binary
                                                  enabled :-) 2012-05-29 15:40:54
                                                    enabled :-) 2012-05-29 15:40:59
                                                    enabled :-) 2012-05-29 15:40:56
nova-scheduler
                                                     enabled :-) 2012-05-29 15:40:54
                                                     enabled :-) 2012-05-29 15:40:56
sudo service rsync restart
sudo swift-init main restart
sudo swift-init rest restart
sudo /etc/init.d/apache2 restart
sudo restart nova-api
```





RMLL - Hot news

- AXIOM 4k camera is coming
 - Crowdfunding this year
 - Promises to be << \$ 10.000</p>
 - The sensor will not be open
- YLE's FreeLCS is (just) out
 - EBU R 128 loudness correction
 - Performs well on modest systems
 - Lots of interest from the community





RMLL - video / animation

- Blender is greater than ever
 - Almost 10 years FLOSS now
 - 100's of add-ons are available
 - SwissBUG community is starting



Swiss watch, made in Blender by Olivier Amrein

FLOSS NLEs

- Supporting wide range of codecs (FFmpeg)
- Still seem far from current closed source systems
- Several (OpenShot, PiTiVi, Kdenlive) continue to be in active development
- Most advanced currently may be Cinelerra



RMLL – talking video...

OpenNLP works well

- Used in RAI's multi-modal news system
- Training function allows use for new languages too
- Example of how FLOSS can help address new markets & trends

Radio play-out going video?

- Airtime may add video play-out scheduling
- The Airtime business model (hosted clone pays the development) works well
- Technology helps against monopolies and achieve accountability



RMLL – discussion results

- All media production with FLOSS?
 - "That would be nice, but may not be realistic"
- What can broadcasters do?
 - Be more demanding towards their suppliers: support, quality, openess
 - Share technical facilities with interested FLOSS developers (hackspace?)
 - Team up under EBU umbrella to invest in/develop FLOSS together
- What can the EBU do?
 - Continue to create freely available specifications
 - Provide incentives e.g. a bounty for solving a specific problem
 - Set up a medialab to create example/reference code



We had fun too - thank you!

Geeksong by Eoghan O'Sullivan

http://www.youtube.com/watch?v=oG7EQAho95M

