

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/openrc
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
```

Binary	Host	None	Status	State	Updated_At
nova-consoleauth	PoC5	nova	enabled	--	2012-05-29 15:40:54
nova-compute	PoC5	nova	enabled	--	2012-05-29 15:40:59
nova-network	PoC5	nova	enabled	--	2012-05-29 15:40:56
nova-scheduler	PoC5	nova	enabled	--	2012-05-29 15:40:54
nova-volume	PoC5	nova	enabled	--	2012-05-29 15:40:56
nova-cert	PoC5	nova	enabled	--	2012-05-29 15:40:59

```
sudo service rsync restart
sudo swift-init main restart
sudo swift-init rest restart
sudo /etc/init.d/apache2 restart
sudo restart nova-api
```

BBC R&D



- AXIOM 4k camera is coming
 - Crowdfunding this year
 - Promises to be << \$ 10.000
 - **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



- 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, openness
 - 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>