Streaming and Edit Conference Videos with OBS, Jitsi and kdenlive

Johan Thelin // fosdem // February 2022
Agenda

• Introduction and background
• The Pre-COVID setup
• 2020...
• The virtual setup
• Summary
• Q&A
Introduction and Background
Bio

- Johan Thelin
- **Koderize** and **Eperoto**
- Arranges **foss-north**
- Conference and Pod
- Qt, Linux, Automotive, Licensing, Start-ups
foss-north

- Conference focused on FOSS
- Annually since 2016
- Gothenburg
- Of course you should visit!
Pre-COVID Setup
2016 – 2019, 2023 –

- Physical event
- Recording with multiple cameras
- Recording audio separately
- Separate screen recording
The action cam

- Fish-eye lens videos
- Kdenlive can transform these videos back to a "flat" look
- And I’m a bit of a Qt/KDE person :-(
Syncing Audio

- Multiple audio tracks
  - One from the video recording
  - One from the speaker mic

- Zoom H5
Intro and Exit
2020...
We *really* had to scramble...
Goals

- Live stream
- Publish recordings for after the event
- Live talk
- Q&A
Where we ended up

- Live stream
- Publish recordings for after the event
- Live talk
- Q&A
For the recordings

- OBS as the spider in the web
- Recordings from YT as well as Zoom
- Cutting into pieces, fixing the QA
- Adding intro / exit
- Upload to YT, import into peertube
But this is not very open...
Virtual Setup
How the show is run

- Speaker joins a Jitsi meeting
- Q&A facilitator monitors YT comments
- Broadcaster decides what to show to YT
- Can interact behind the scenes
The OBS Scenes
The OBS Scenes

- Still pictures
- All session times
- We’ll be right back
- Plain logo
The OBS Scenes

- Pre-recorded videos
- Intro
- Exit

- Some speakers
  - We see a shift here...
The OBS Scenes

- The browser plugin

- As a participant in a Jitsi meeting
The Studio Mode
Jitsi

- Broadcaster + Q&A facilitator + speaker
- ... and OBS

- The speaker only sees a Jitsi meeting
Juggling Audio

• Can mute / unmute in Jitsi
• Can mute / unmute in OBS

• Speaker and broadcaster can...
  - ...speak to speaker alone
  - ...speak to audience alone
  - ...speak together privately
  - ...speak together to audience
Saving recordings

- Saved by YT
- Saved locally at broadcaster machine
- We don’t use the Jitsi server side recording due to being complex to setup
Possible Improvements

- OBS for Debian does not package the Browser module (bug #956086)
- Hard to communicate time and issues to speaker without intervening with talk
- Live streaming via peertube
- We still use auphonic for audio processing
Alternatives

- Big Blue Button
  - Nice as a speaker – see the slides + Q&A
  - Complex to setup last time we checked
Resources

• Repository trying to show alternatives and setups
  - https://github.com/e8johan/virtual-conf-resources

• Tools
  - OBS – https://obsproject.com/
  - Jitsi – https://jitsi.org/ (has a Debian package – yay!)
  - Kdenlive – https://kdenlive.org/

• foss-north
  - https://foss-north.se/
Thank you!

Q&A