



Live broadcast in the cloud

“Radio As a Service”

Recap

Piloting with the browser based software

We have had a demand to get rid of native Windows clients so that our production systems could be used with browser on every machine(Chromebook, Mac, Android, Linux and Windows) that does have internet connection and a browser. Also we are hoping to get the background work so that it is scalable and easy to access from any location - internet needed.

So we started the path from studios side as there was project were we did build a new concept where the live broadcasting is done with software instead of the black boxes and physical mixer interfaces.

First it was very revolutionary but as the switch over came closer we went back to the basis and the outcome was more, to simplify things, just switching th AES/EBU point-to-point connections to IP audio AES67 connections. No automatic control and no scalability. This was the first kick that started piloting.

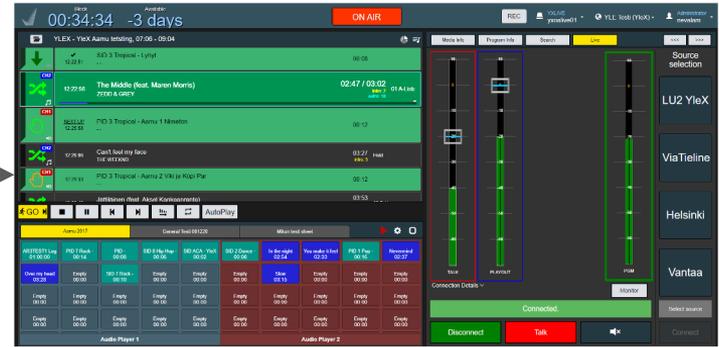
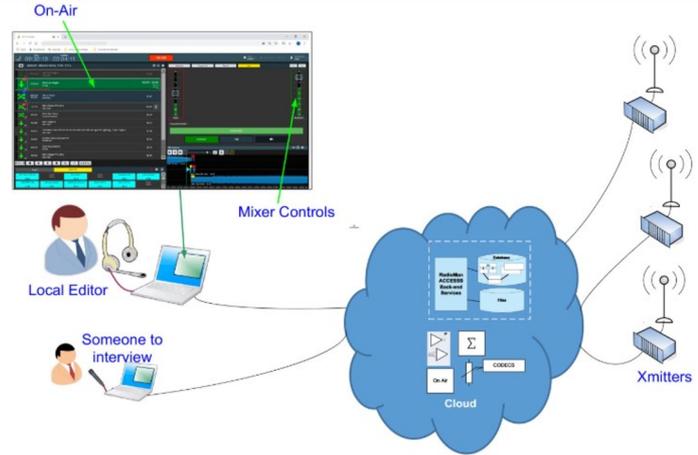
In the beginning of 2019 we did a small PoC to see is it possible to go live with mic-interface laptop and software. On the right basic hardware: Headphones + quality USB audiomixer, laptop (Windows)

Summer 2019 we did PoC in the production -> we wanted to go on but development needed

In the begging of 2020 we started to look how can we operate if the the the DJ's is in quarantine and he or she need to operate from home. The live OnAir Player (media node) was ideal for this.



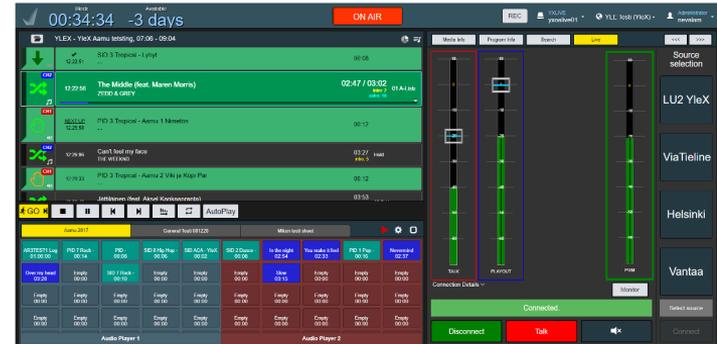
The evolution -UI/UX



Where are we now

MVP for live show - lessons learned

- We haven't made actual production
 - DJ's have tried several times -> not ready, but they want continue
 - The flow isn't just good enough yet. The faders are not in fixed position you need to be extra careful at the earlier versions
 - Autoducking is not needed manual control is better - this is configurable
- We need to people to interact
 - So how about the delays?
 - No issues there. When the control plus when the audio actually starts are going with the same connection
 - People in other locations - with 2 people one interviewing another - no problem ,but the host and the sidekick needs visual input and any delays are bad there -> People need to see each other to get to the right mood and flow of things -> video or people in the same physical location
 - For the people in same room - we need more mic inputs at least 4-inputs
- We need to control background audio individually.
 - Virtual faders one for playlist two for cartwall (player 1 and 2) and the master fader
- We need a automation for the signal flow
 - Could be fixed "gateway" as it is at the moment



Live media node (RadioMan -Jutel)

Development

We have implemented version 1.3 and 1.4 in under testing

- 1.4 includes development
 - Two Audioplayer for Carts (you can set only the individual default level for these)
 - Fixed positions for live contributor faders
 - Planning side for the carts
 - Newsroom integration
 - Music report integration
- In the coming version
 - Live virtual faders to support for the added players
 - Creating playlist on the fly

Changing the deployment model

- For Yle we are going to isolate plugins used for integrations from playout -> after that we can do more focused and smaller changes
 - We are halfway through to change the deployment model to cloud native world
 - We are already using the microservices and messaging queues, but we running them on virtual Linux machines (CentOS or Red Hat)



Kaikille yhteinen, jokaiselle oma
Gemensamt för alla, unikt för mig