



# WebRTC in live media production

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# About Grabyo

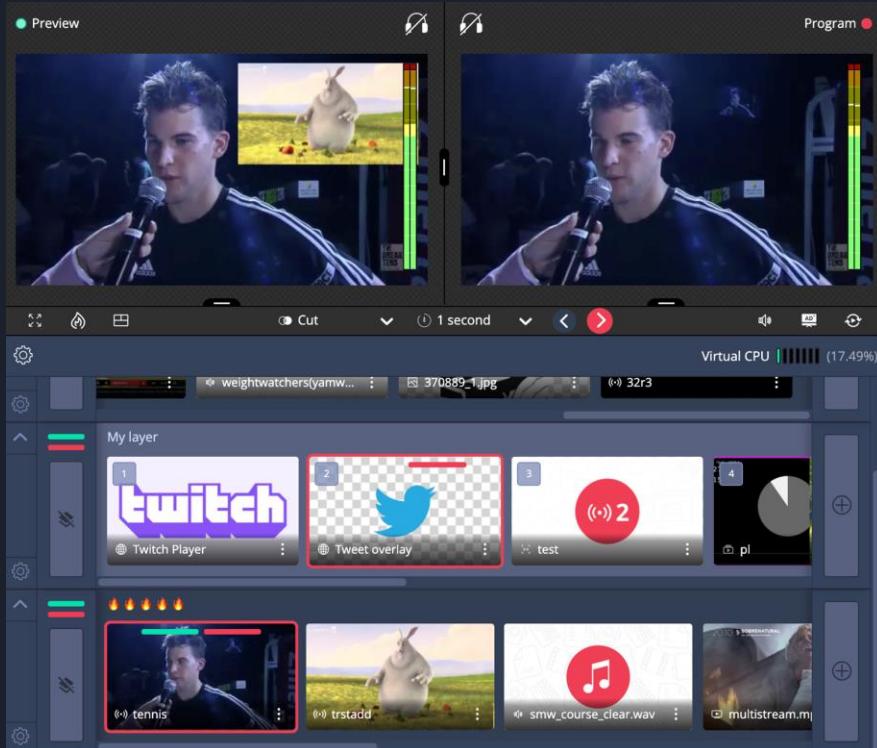
Grabyo is a SaaS platform for broadcast media production aimed at commercial broadcasters.

- Live broadcast production
- Video editing
- Clipping from live streams
- Publishing



# WebRTC @ Grabyo

- Live broadcast production control room
- Real-time collaboration with WebSockets
- Many simultaneous streams with WebRTC
- Multi-window workflows





# Stream synchronisation use cases

- Camera cutting
- Multi-party chat e.g. Zoom
- Viewer engagement - e.g. polls, phone-in/chat competitions
- Online gaming



# Stream synchronisation challenges

- Network conditions are unpredictable
- Cannot correct or reconcile on the client
- Could add embedded timestamps
- WebTransport allows lower-level control

# Sharing connections between contexts

Think “SharedWorker” for WebRTC connections.

**Multi-window workflows** are powerful for professional desktop applications.

Specialised media interfaces.



# Sharing connections between contexts

- Reduce resource consumption
- Inherent synchronisation
- Could this be achieved with SharedWorker + WebTransport?





# MediaStreamTrack Insertable Streams

## A.K.A “Breakout Box”

- Encoding/decoding video data to/from WebRTC connections on the client
- Funny hats
- Background blur
- Chroma keying