



Evercast

Behind the scenes: WebRTC for collaborative content creation

OCTOBER 3, 2023

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Archie Leach	Caryn Johnson
Margarita Cansino	Robert Zimmerman
Briana Sidony	Eric Bishop



PRODUCER



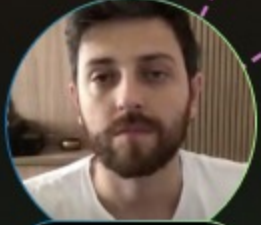
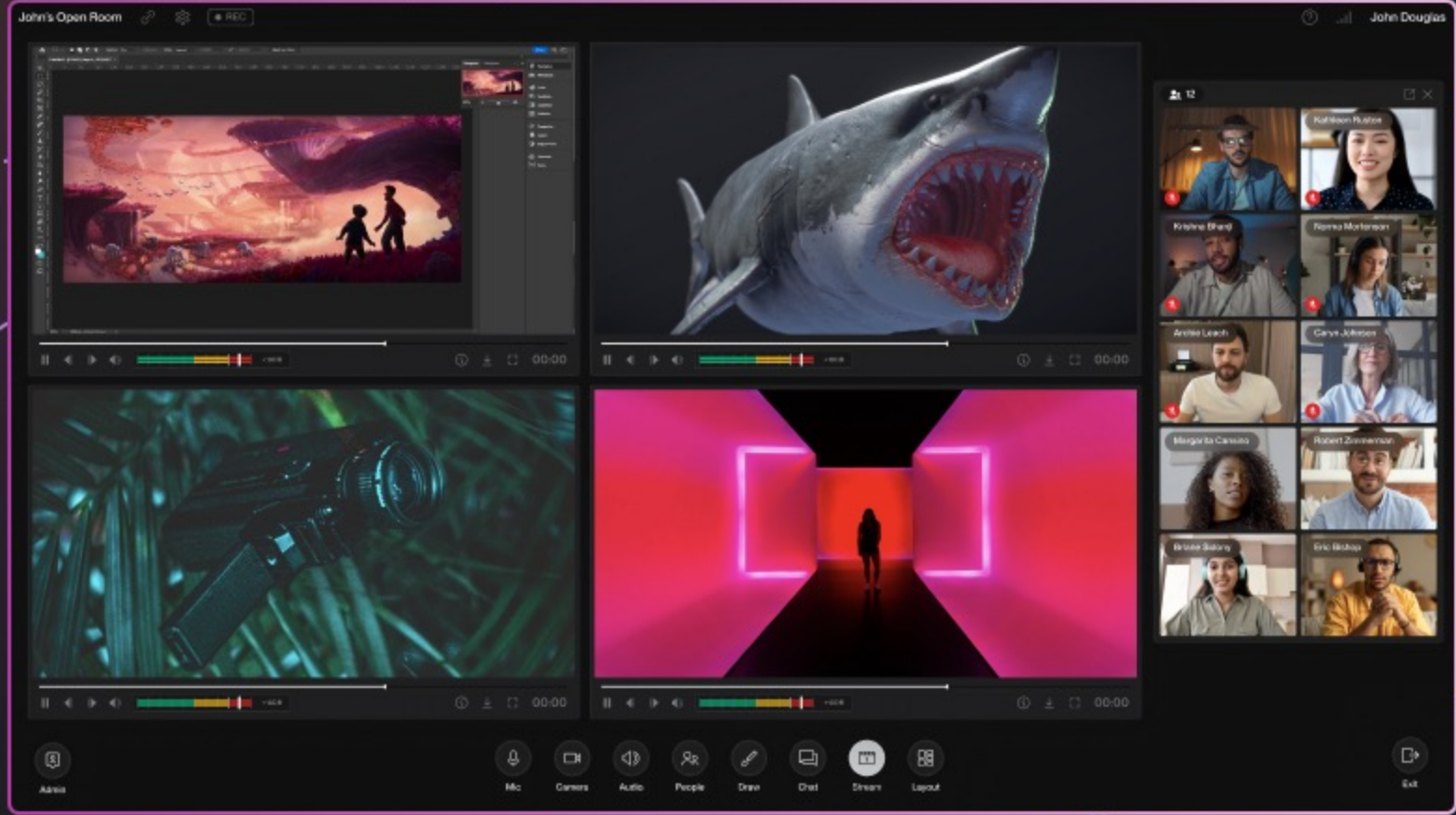
CASTING DIRECTOR



LOCATION SCOUT



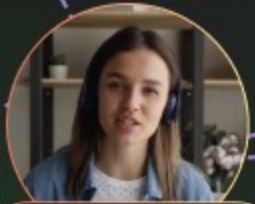
COMPOSER



EDITOR



DIRECTOR



COLORIST



VFX ARTIST



ARTIST

CONCEPT ART

SCREEN SHARE

DIRECTOR

STREAM FILE

VFX SUPERVISOR

BOX FILE

STORYBOARDING

LIVE CAMERA STREAMING

VISUAL EFFECTS

EDITORIAL

CAMERA A

ULTRASTUDIO

PRODUCER

STREAM NDI

EDITOR

AVID

Studio-grade performance

Evercast streams with low latency, high resolution, precise synchronization, and color accuracy, which is essential for professional creative work and not available in standard video conferencing tools like Zoom or Google Meet.

7.1

surround sound

60

frames per second

150ms

average latency

4K

resolution

HDR

video supported

10-bit

4:4:4 color accuracy



Evercast

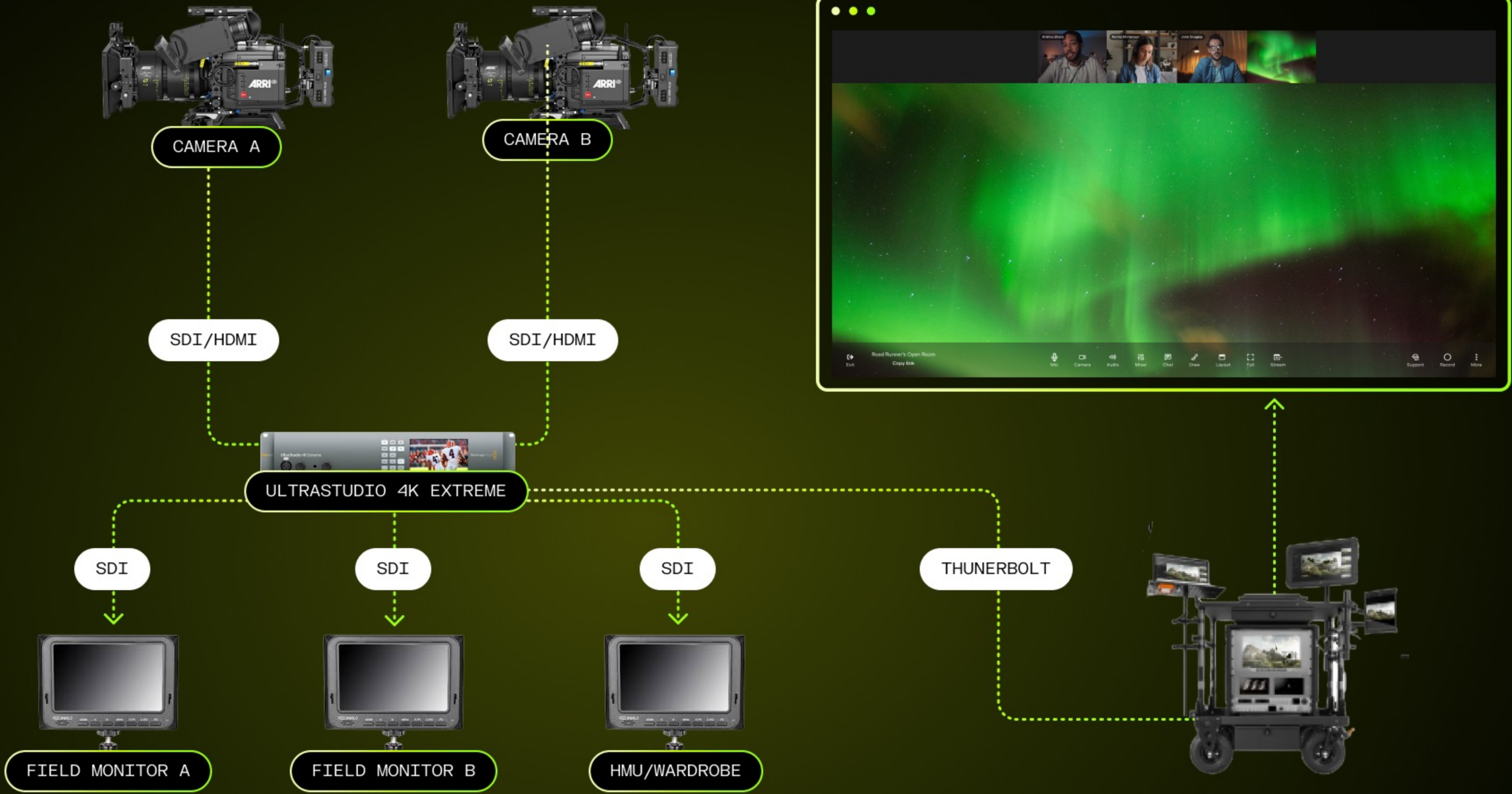




Multiple live camera streaming

Build a virtual video village and stream from one or multiple camera feeds, allowing stakeholders to be on set from anywhere in the world.

FIG MLC3





Virtual production

Share your game engine or virtual production set
with your remote team, instantly.



FIG VP1



ARTIST



UNREAL ENGINE

FIG VP2



VFX ARTIST



UNREAL ENGINE

FIG VP3



CAMERA A



ULTRASTUDIO

SCREENSHARE

PRODUCER

NDI

VIRTUAL CAM

STREAM DECKLINK

DIRECTOR





Visual effects

Stream your Media Composer, Nuke, Maya, or any other software in real time at 1080p/60fps—no uploads required.

FIG VFX1

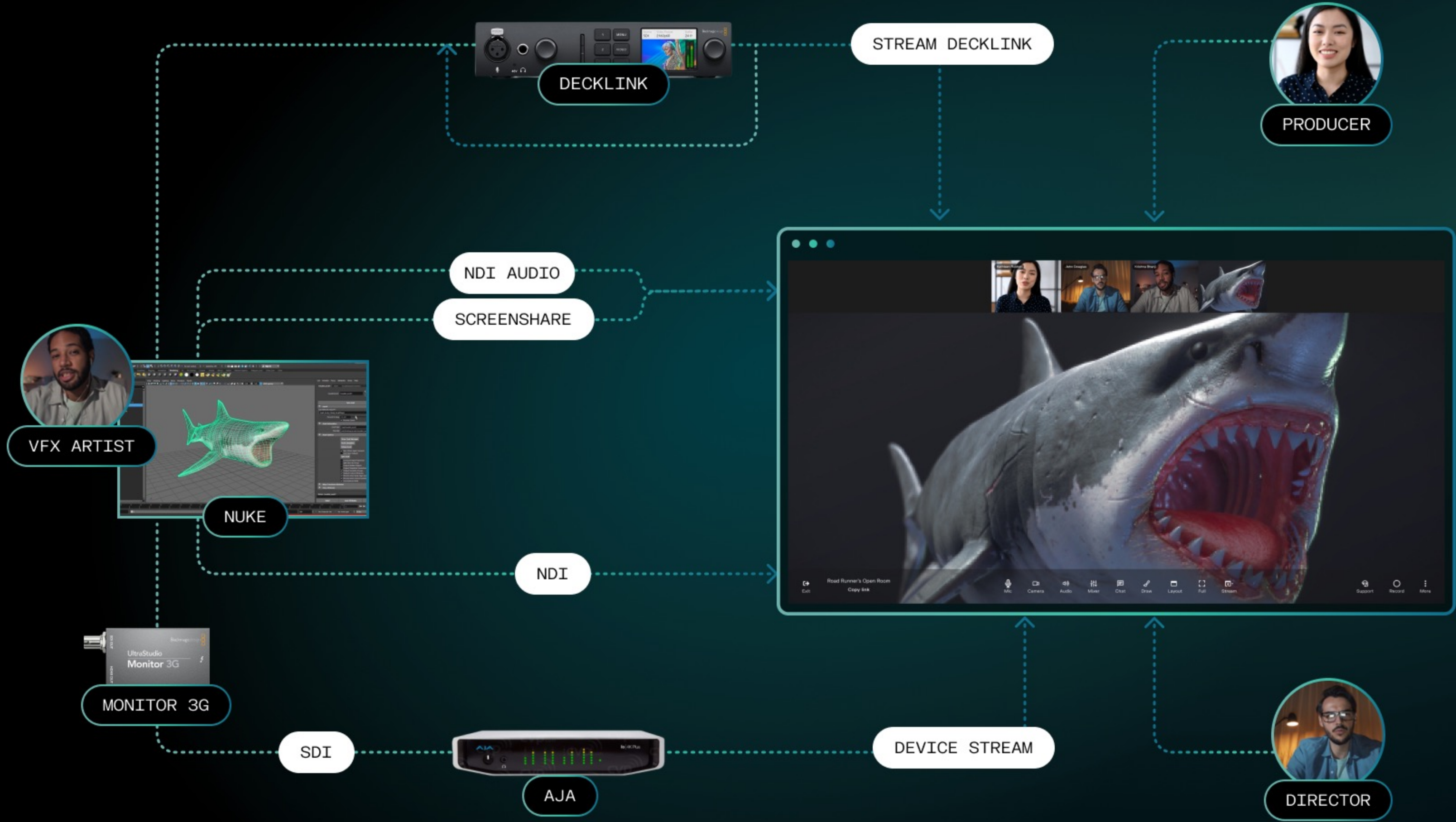
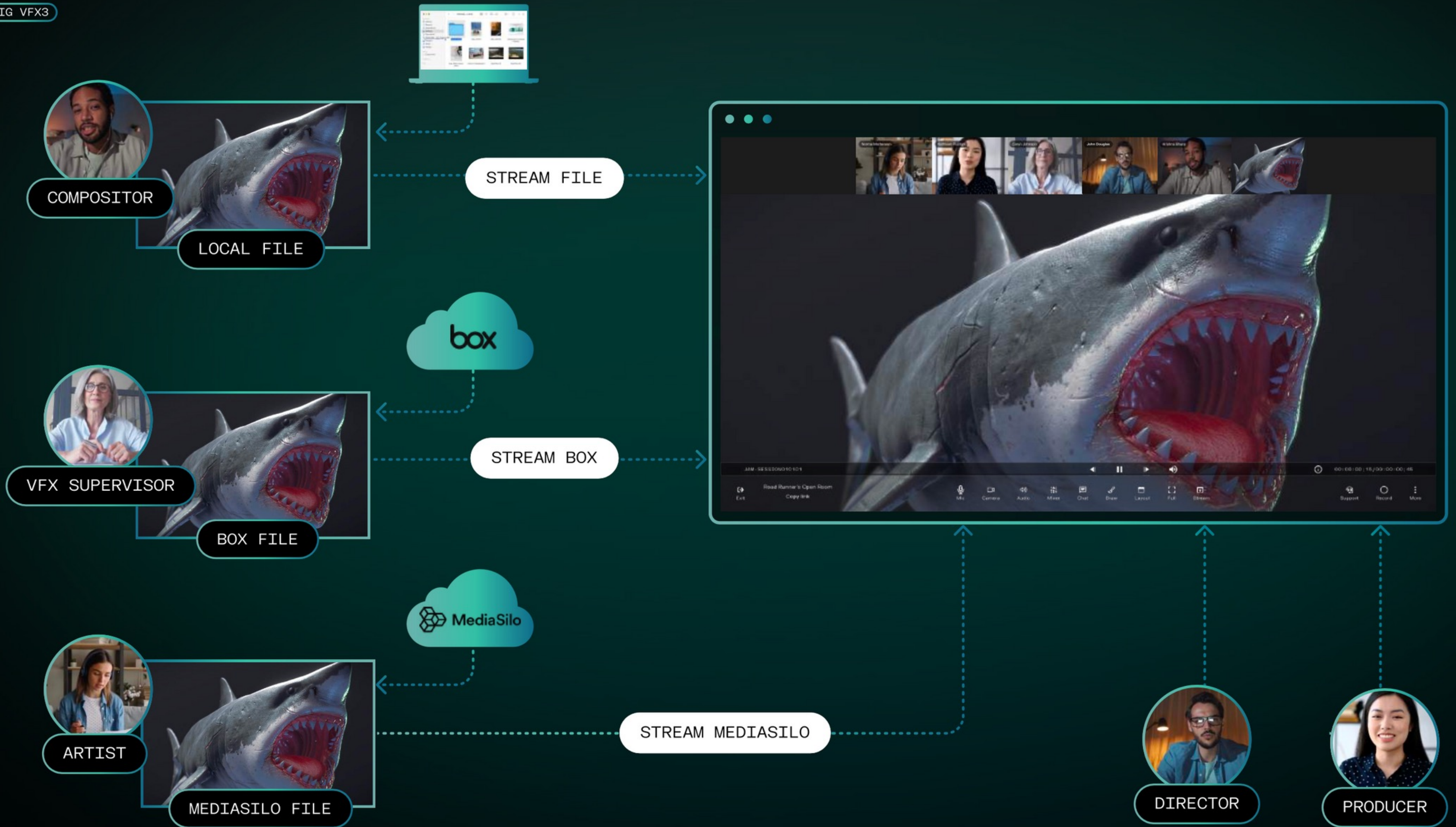


FIG VFX3





Music & scoring

Experience unbeatable sound quality with full spectrum audio and 5.1 or 7.1 surround sound.



COMPOSER



PRO TOOLS

FIG MS5



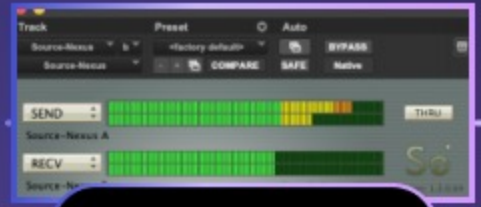
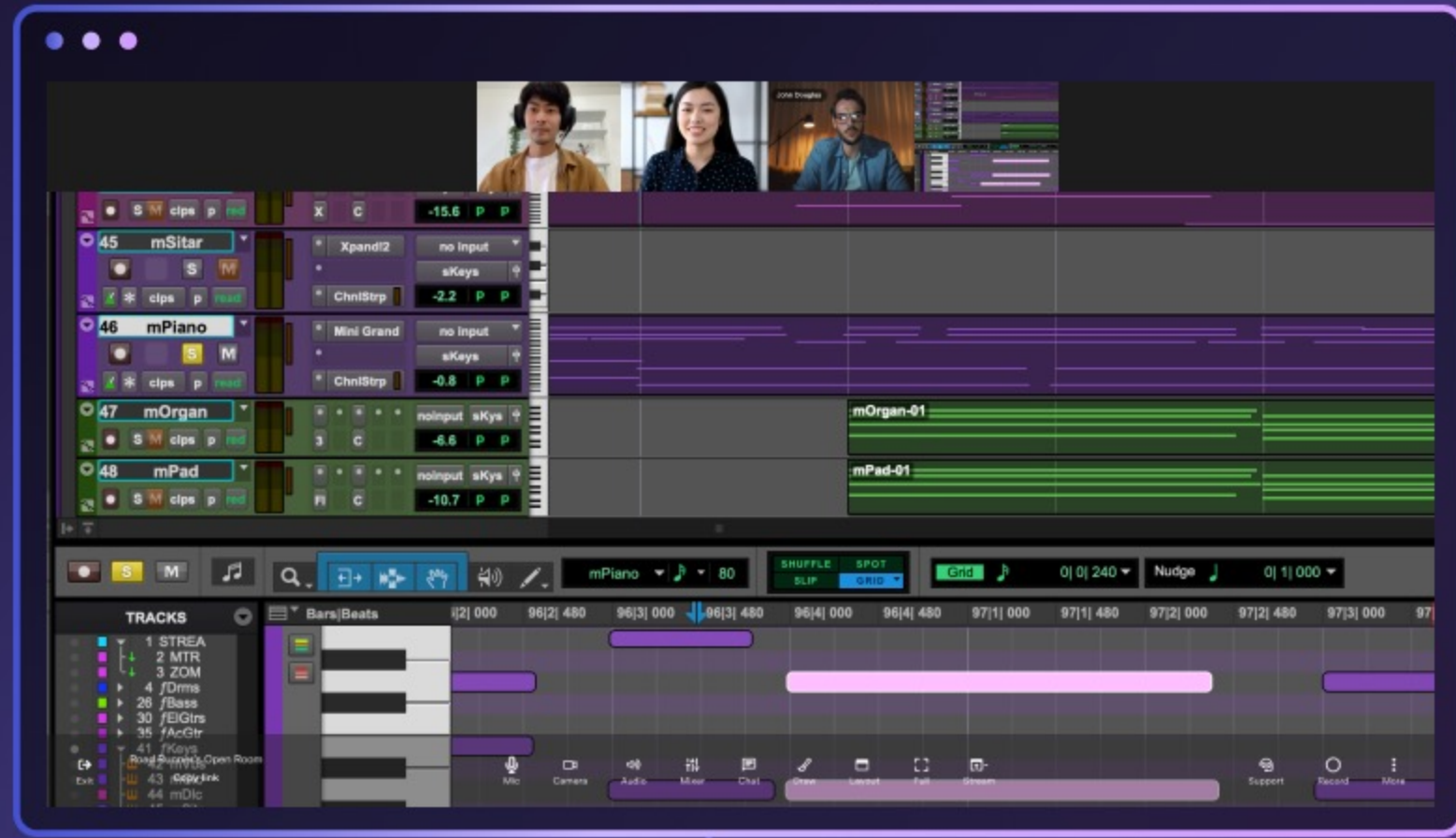
AUDIO INTERFACE



SPEAKERS



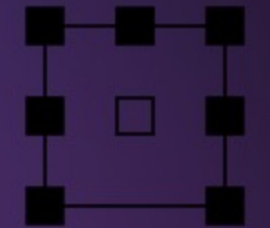
PRODUCER



SOURCE NEXUS



PRO TOOLS MTRX



7.1 SURROUND



DIRECTOR



AV RECEIVER

DECKLINK OUTPUT



DECKLINK

HDMI

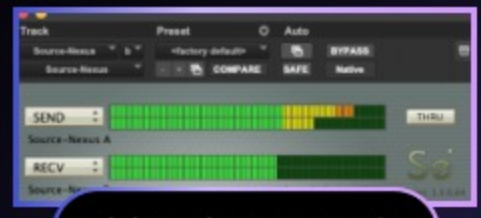


LG CX SERIES

FIG MS6

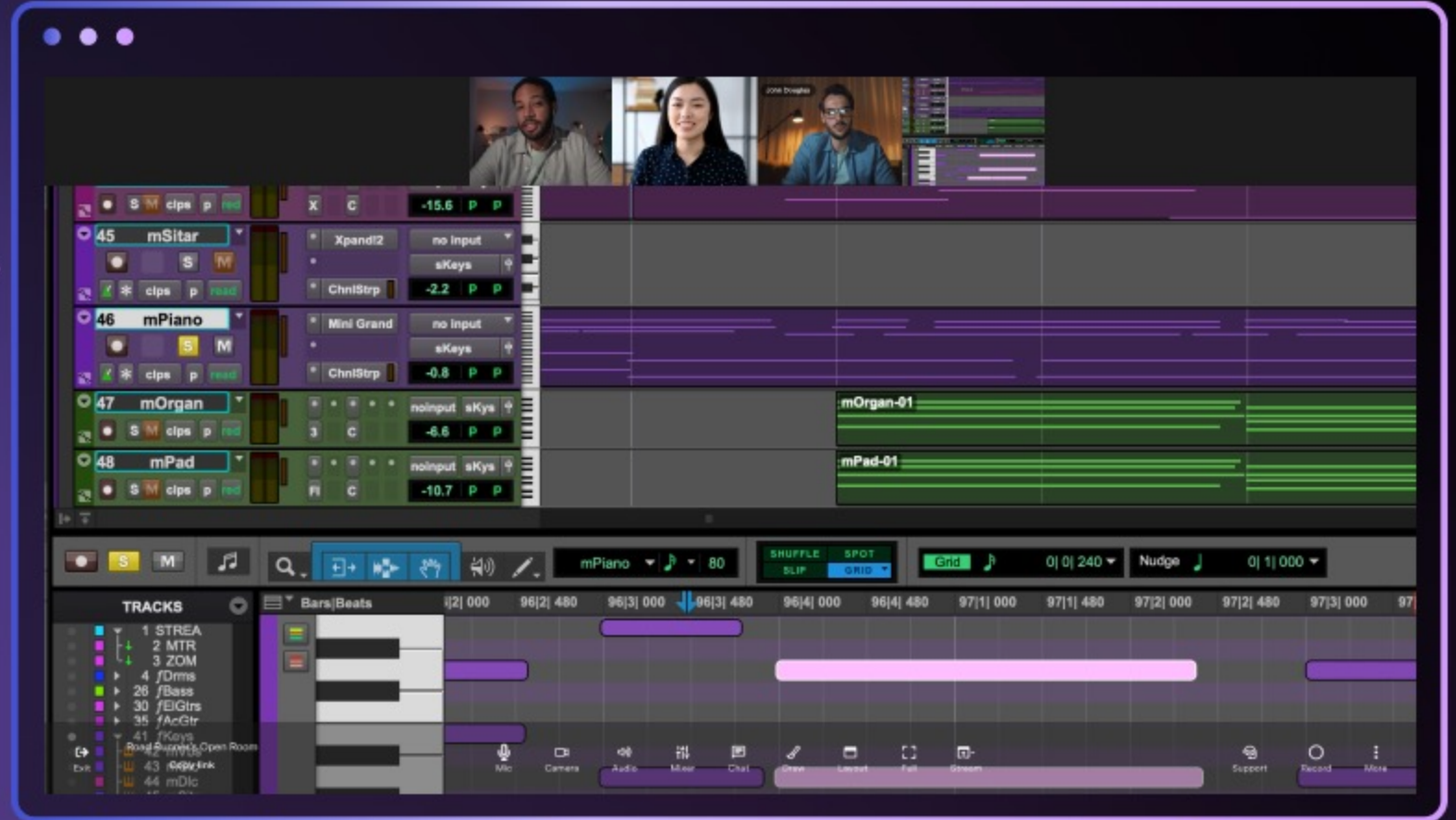


FIG MS3



SOURCE NEXUS

SCREEN SHARE

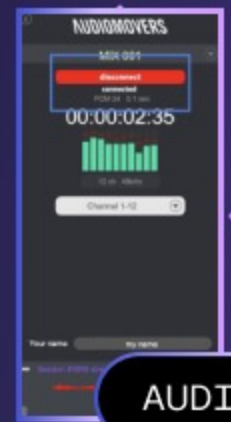


COMPOSER

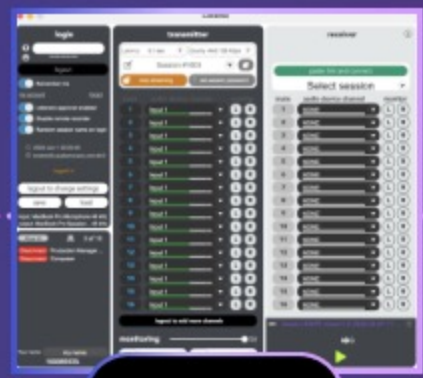


PRO TOOLS

FIG MS4



AUDIOMOVERS



LISTENO



TALENT



AUDIO INTERFACE



DIRECTOR





Color grading

Evercast integrates seamlessly with your creative software, to stream color-accurate content to any calibrated monitor or projector.

FIG CG1

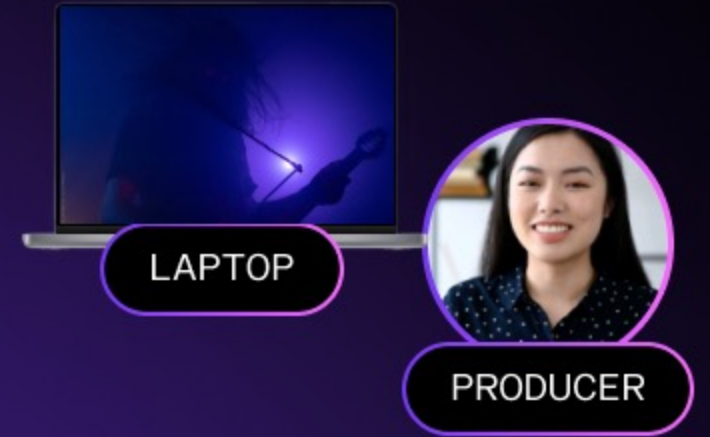
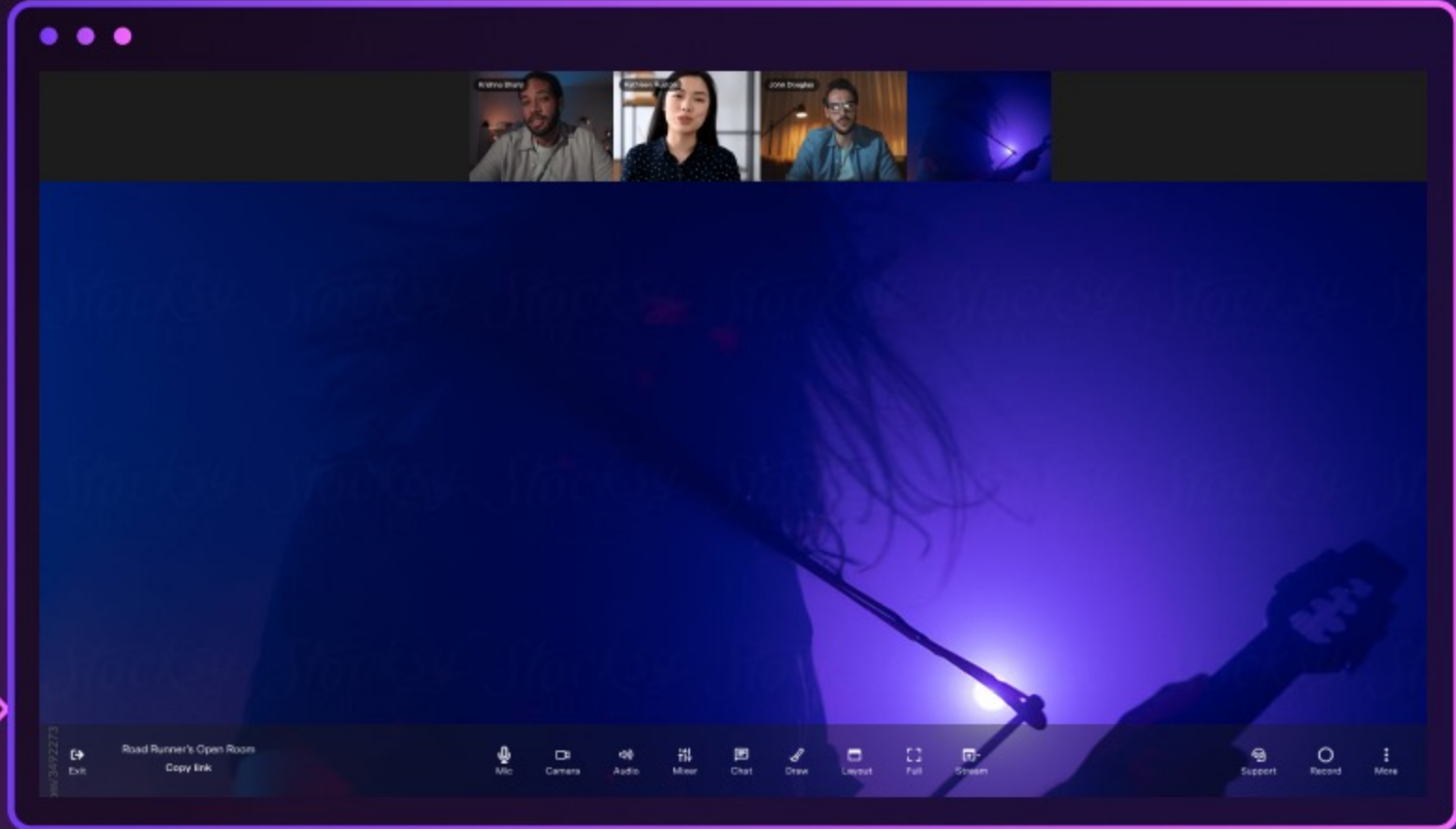
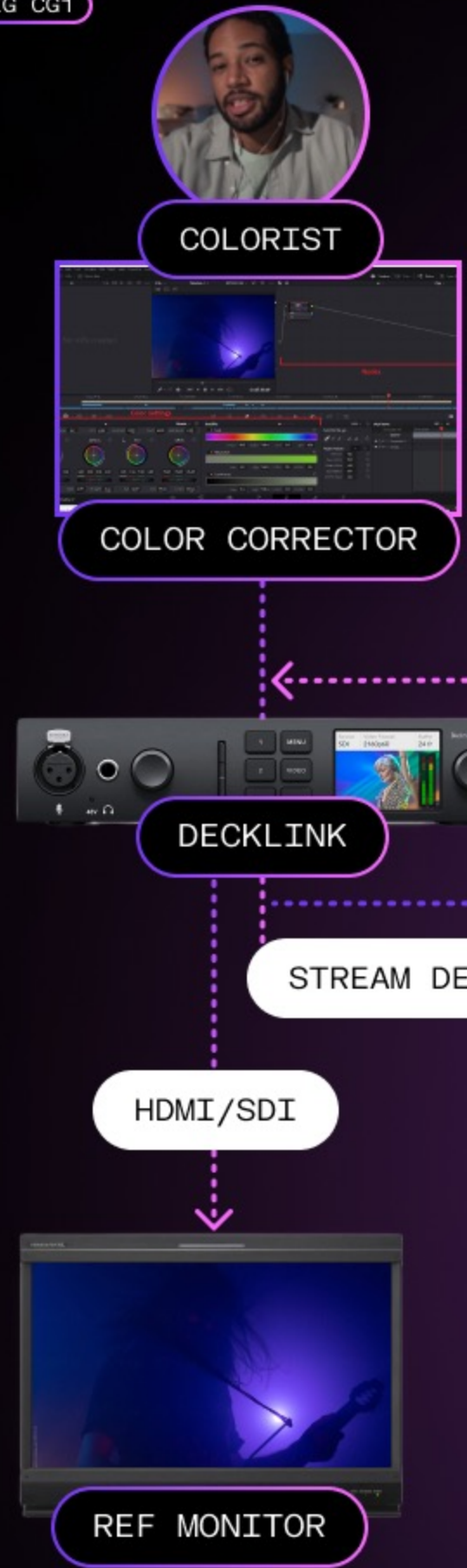
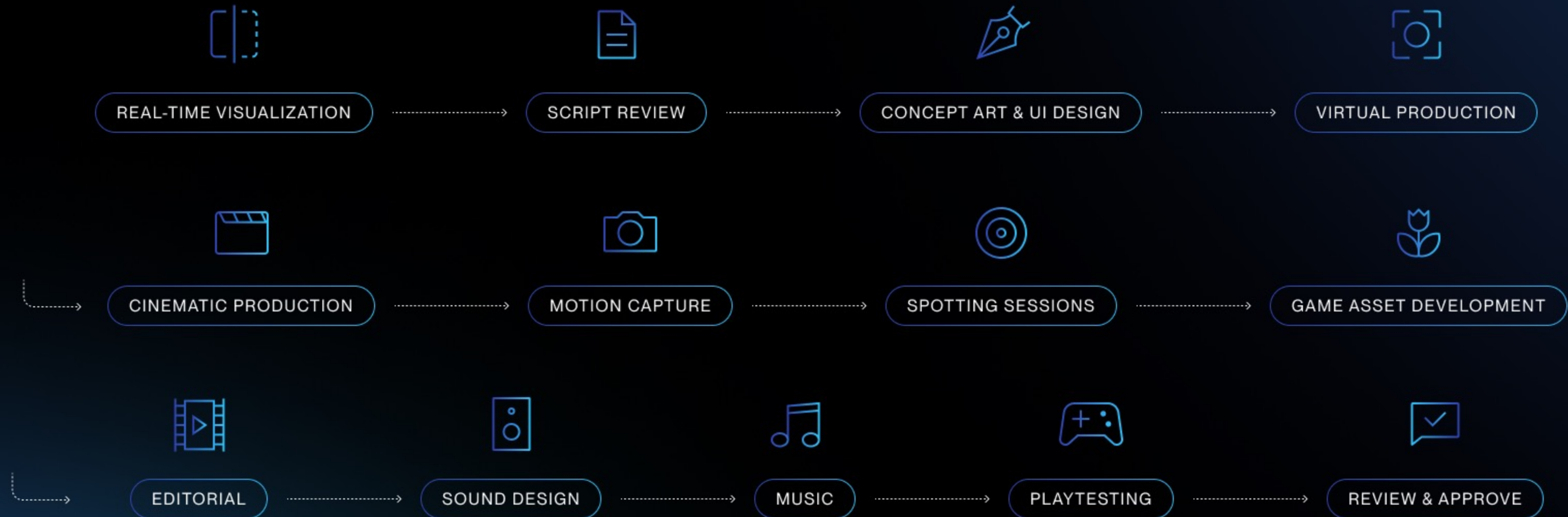


FIG CG2



Real-time collaboration at every stage of the game development pipeline

Evercast combines video conferencing and powerful content streaming on one reliable platform, offering a shoulder-to-shoulder experience that connects producers, designers, artists, editors, and more from pre- to post-production.



GAME DEVELOPMENT WORKFLOWS

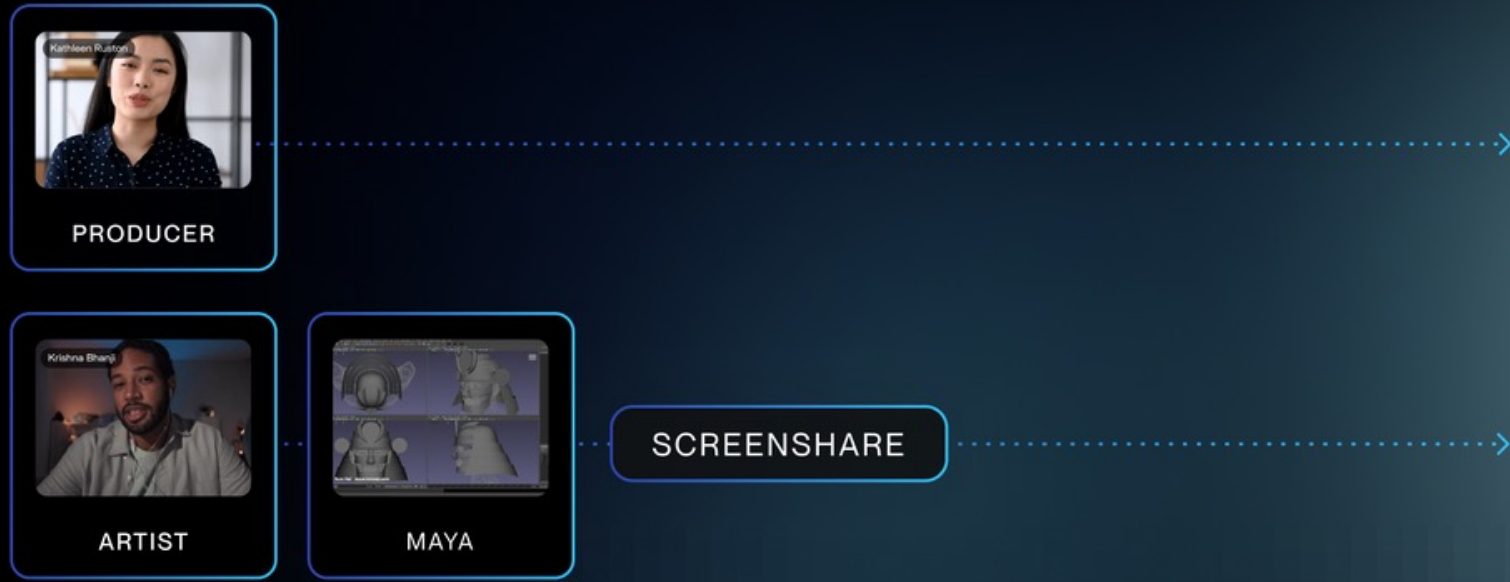
Game asset development

Evercast can streamline your game asset creation workflow. Instead of sending drafts and revisions back and forth by email or file transfer, simply jump into a room together and review concept art or sculptures in real time.

Our studio-grade security features and end-to-end encryption help keep your pre-release content secure throughout development.



GAME DEVELOPMENT WORKFLOWS → GAME ASSET DEVELOPMENT



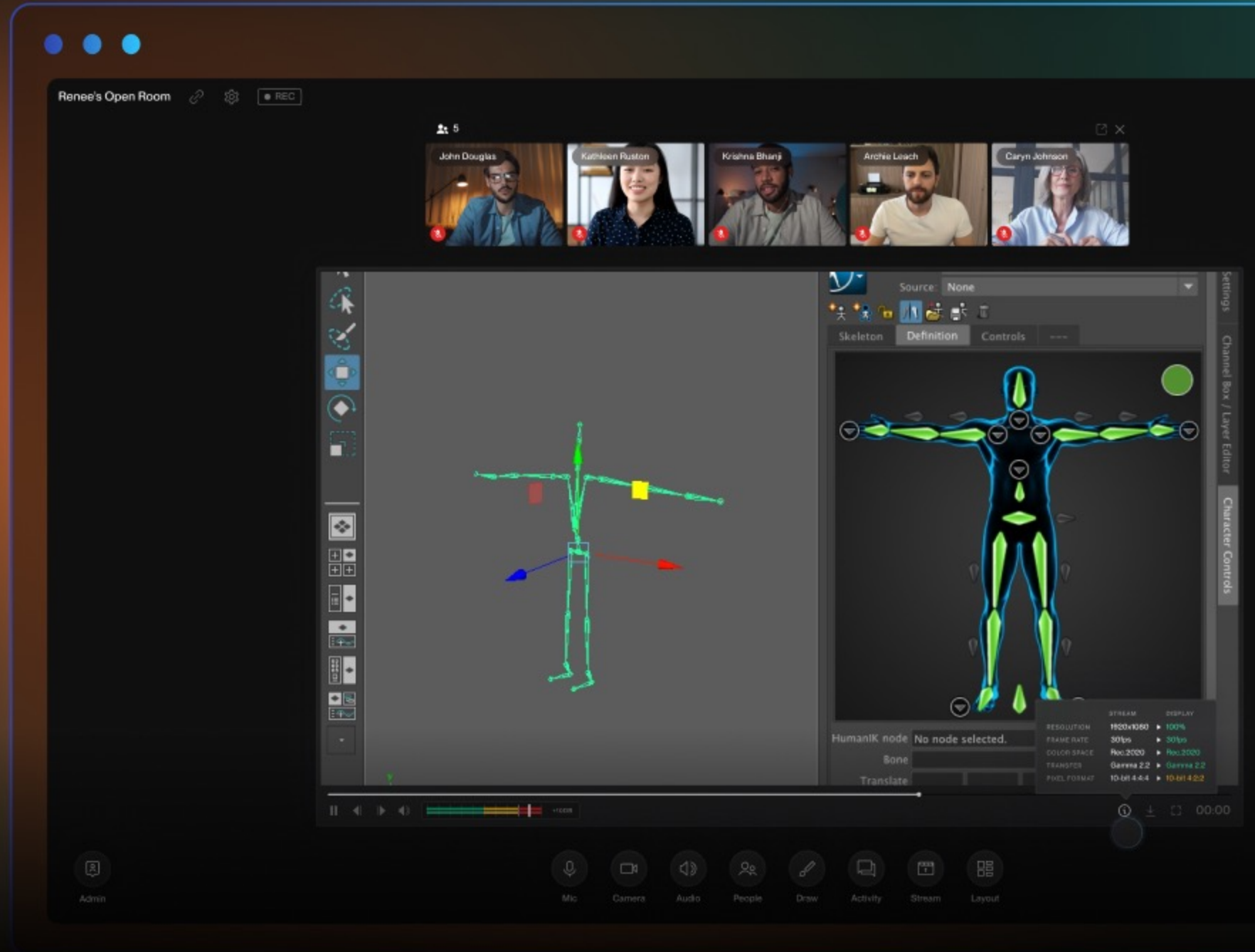
Motion capture

Speed up your animation process with live collaboration. Remote stakeholders can easily monitor a mocap session and guide the actor's movements for better feel and readability. Then animators can retarget the captures and stream the character rig to the room for an instant review.

Evercast works seamlessly with standard industry tools like Unreal Engine, Unity, Blender, MotionBuilder, and Maya, and integrates directly with Elgato Stream Deck.

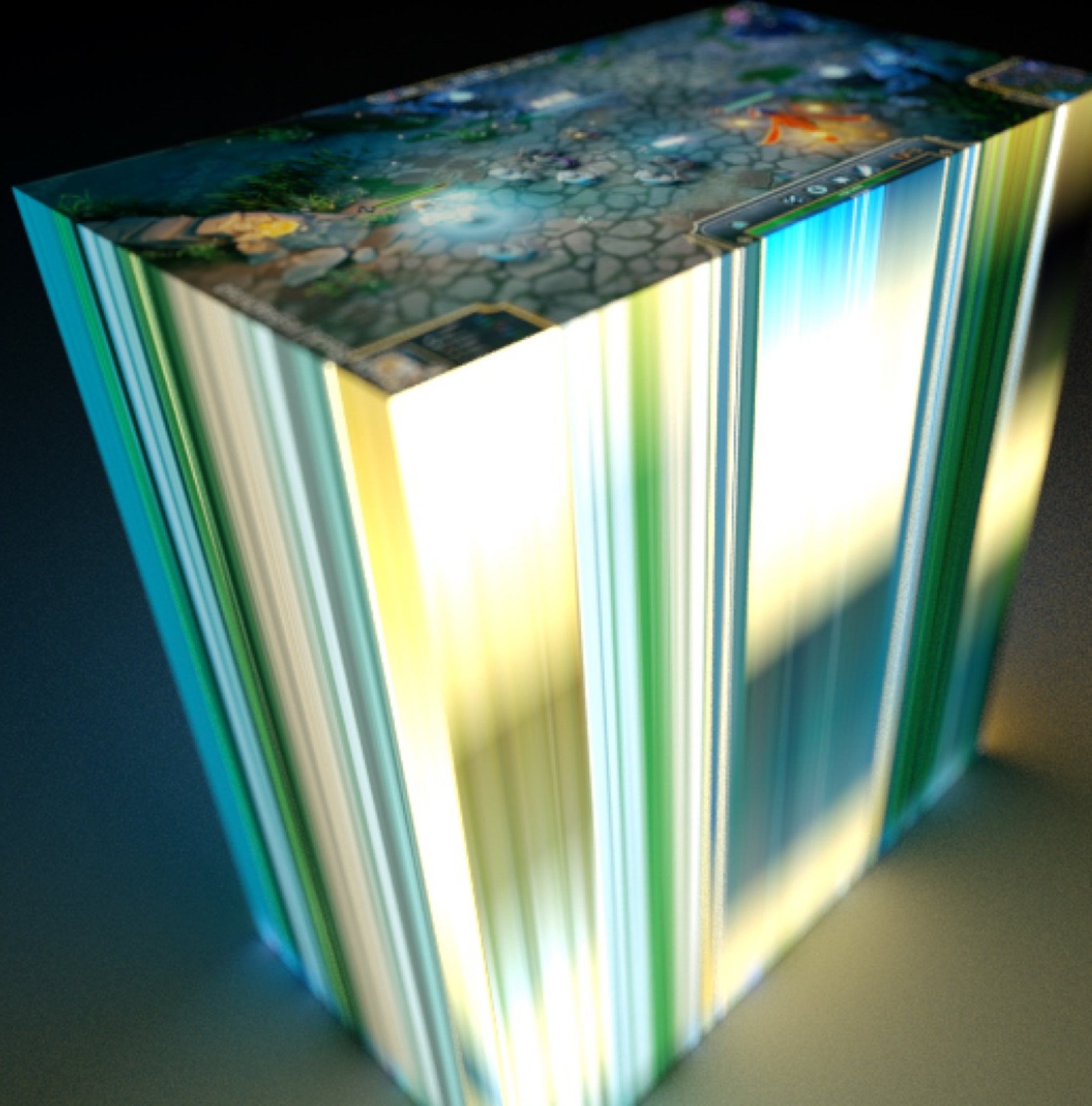


GAME DEVELOPMENT WORKFLOWS → MOTION CAPTURE

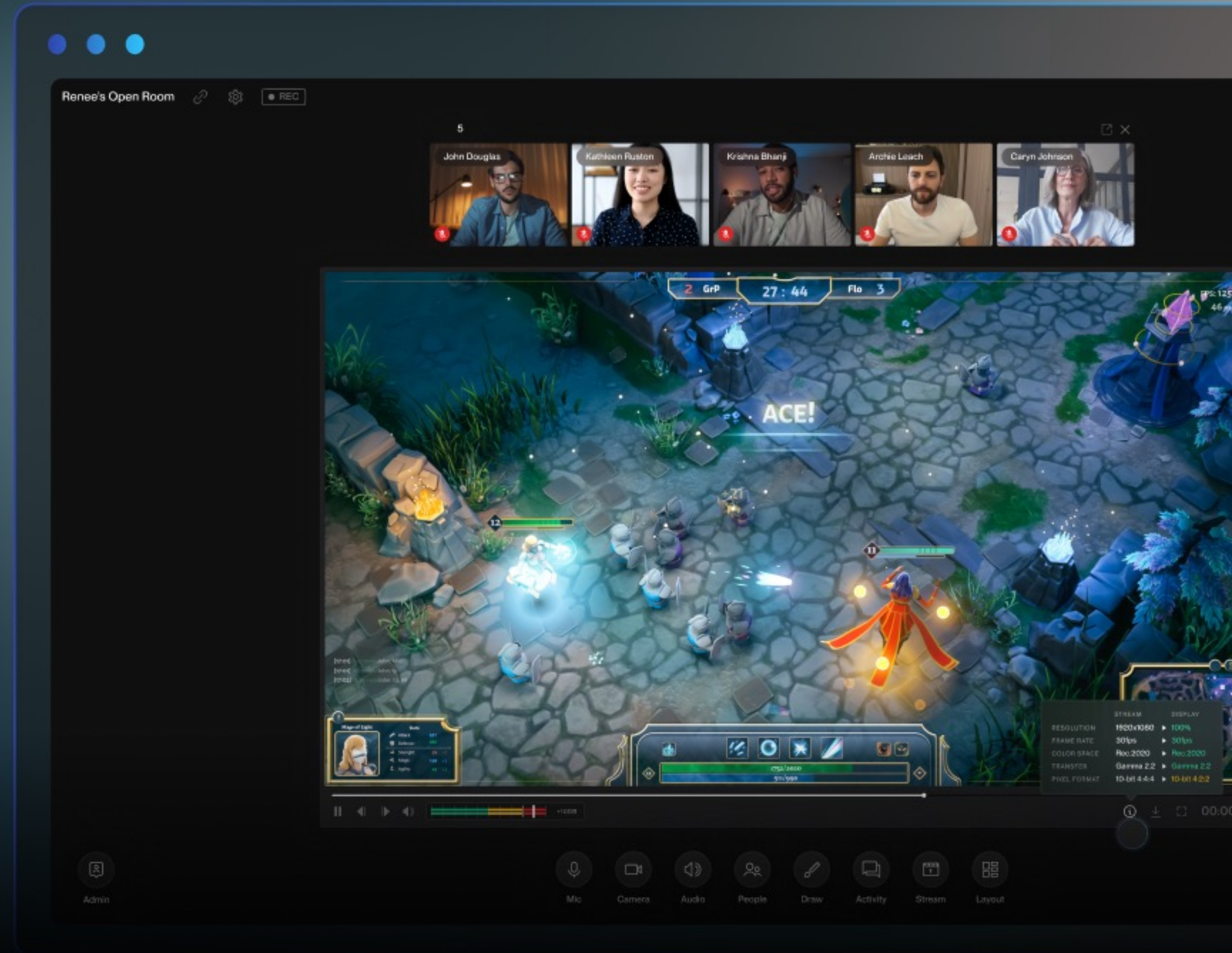


Play testing

Playtesters can share their screen during an Evercast session to demonstrate bugs or difficult sections of the game. Live discussion with the developers can provide valuable feedback on how the playtesters approach a particular challenge.



GAME DEVELOPMENT WORKFLOWS → PLAYTESTING



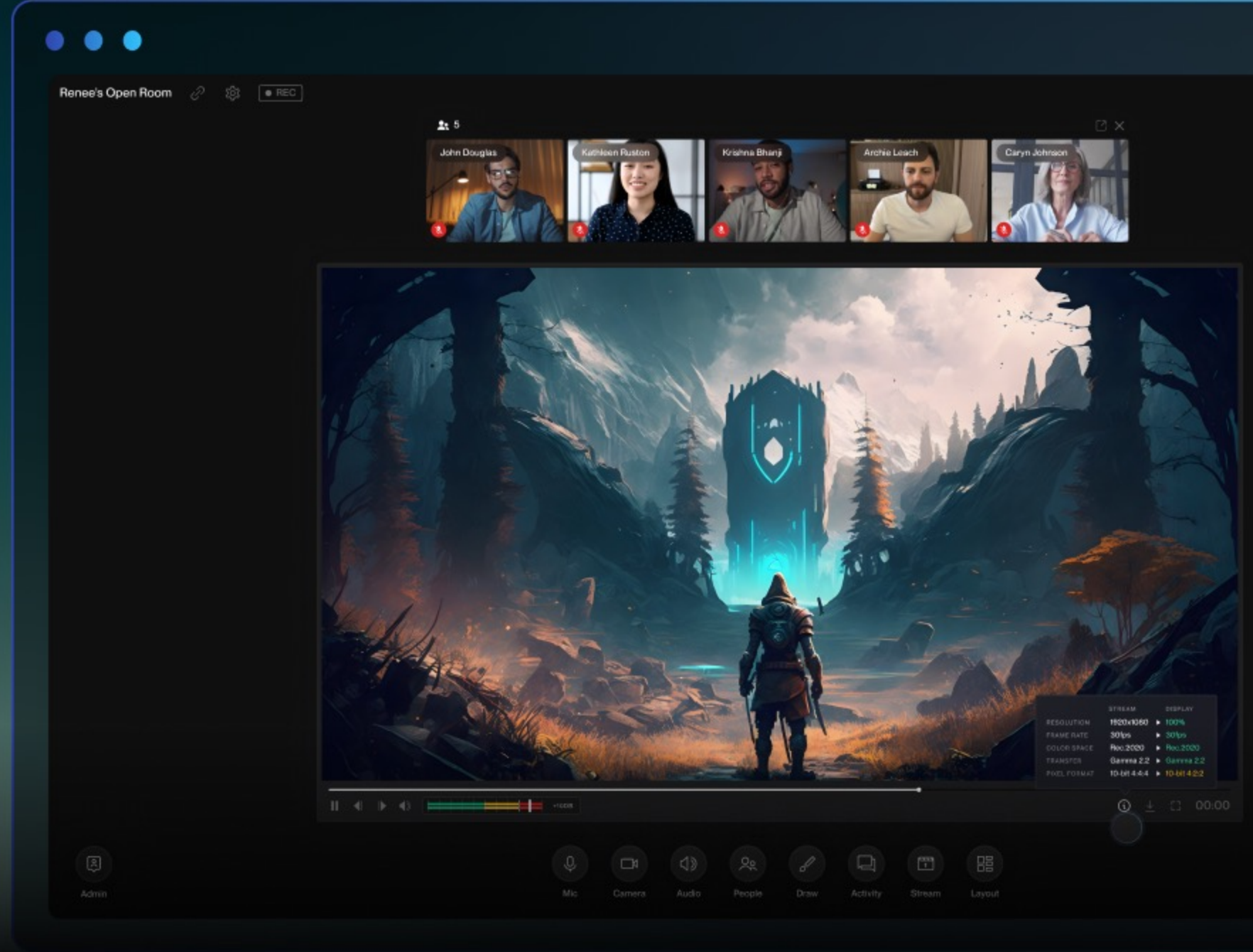
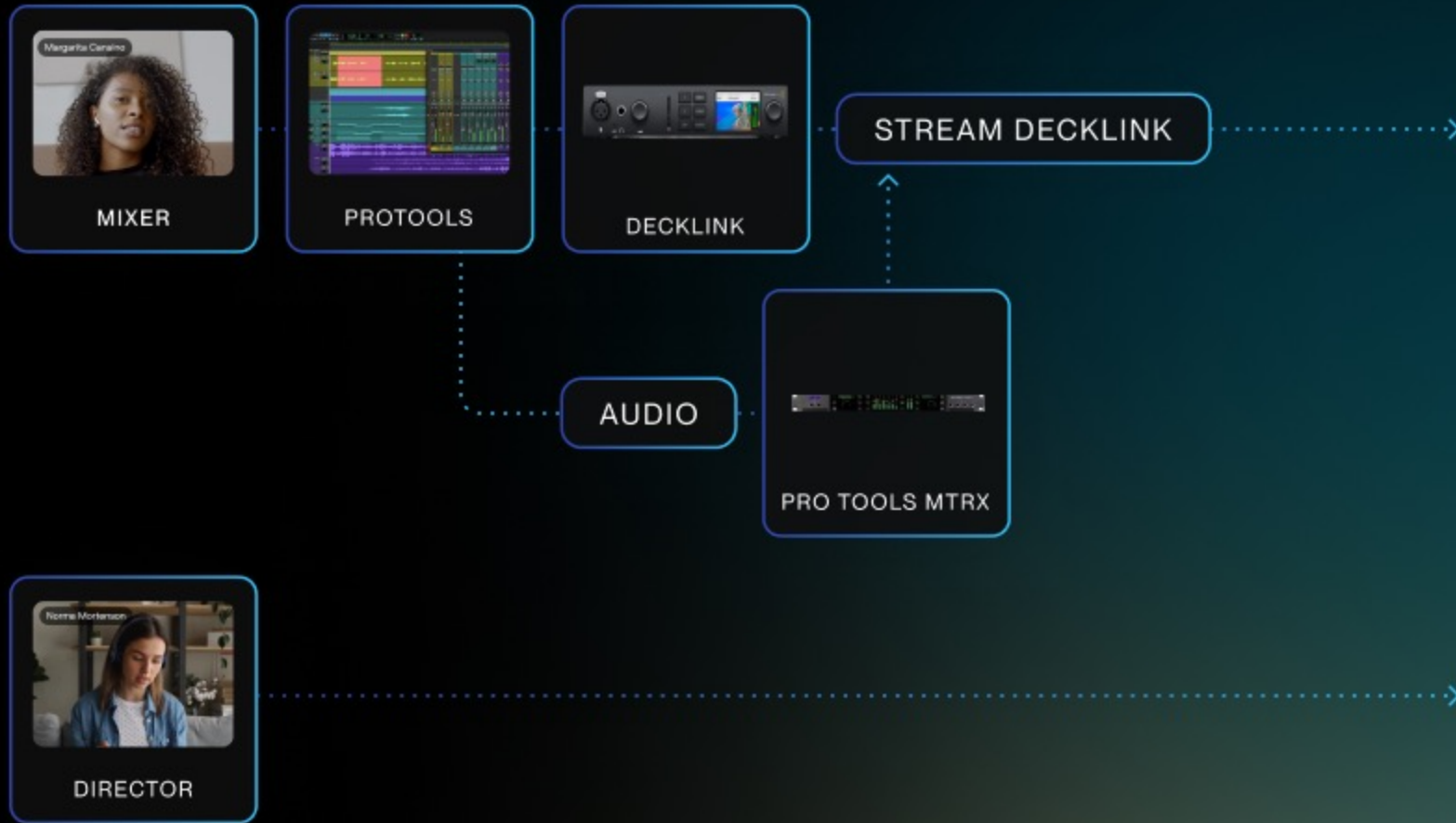
GAME DEVELOPMENT WORKFLOWS

Sound design

From early planning sessions through to master processing, you can collaborate with your team while streaming from your DAW with ultra-low latency. Our flexible platform supports both software and hardware setups.

Evercast accurately streams up to eight channels to your Evercast room, and can be downmixed to stereo as needed.

GAME DEVELOPMENT WORKFLOWS → SOUND DESIGN & MIXING



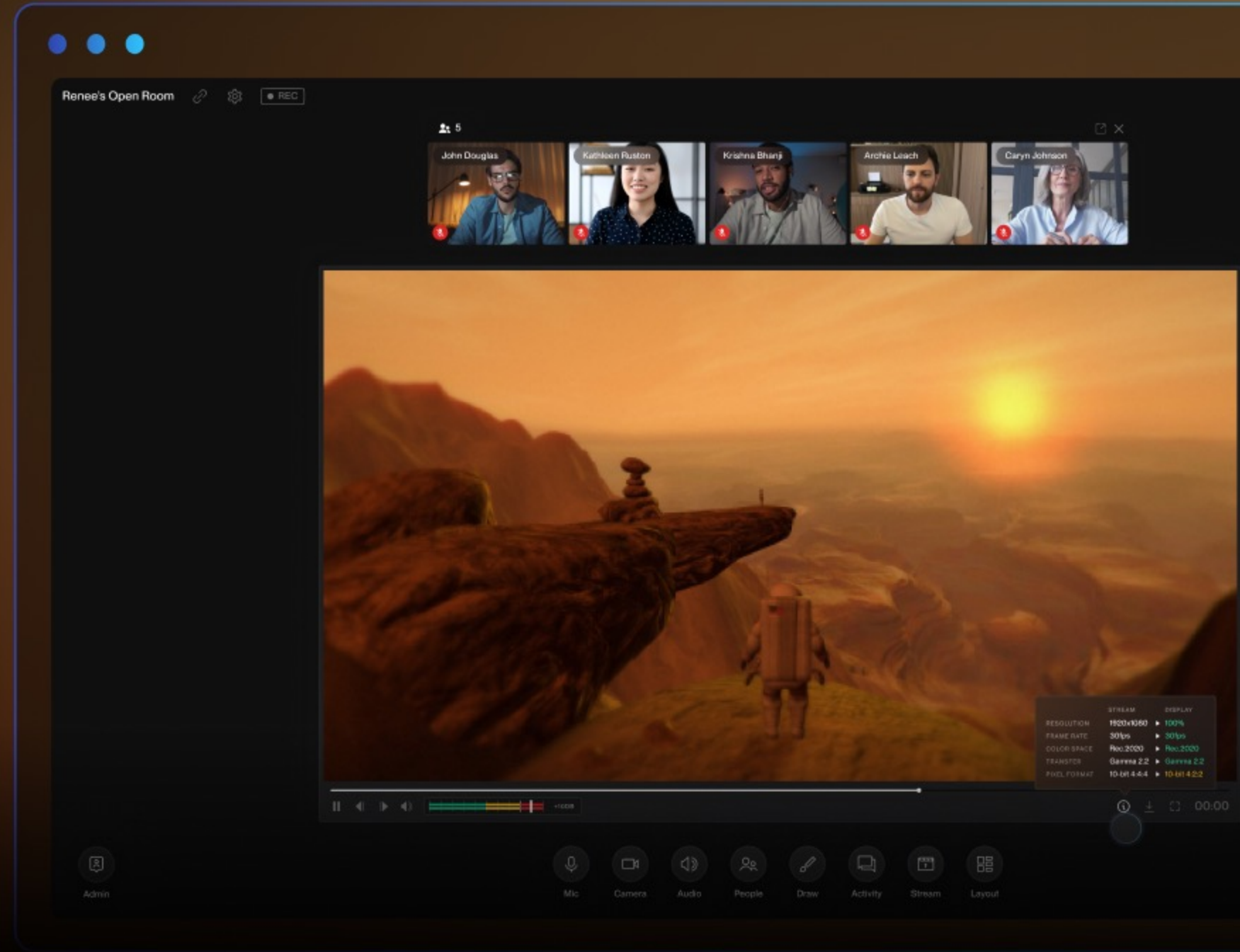
GAME DEVELOPMENT WORKFLOWS

Mobile gaming

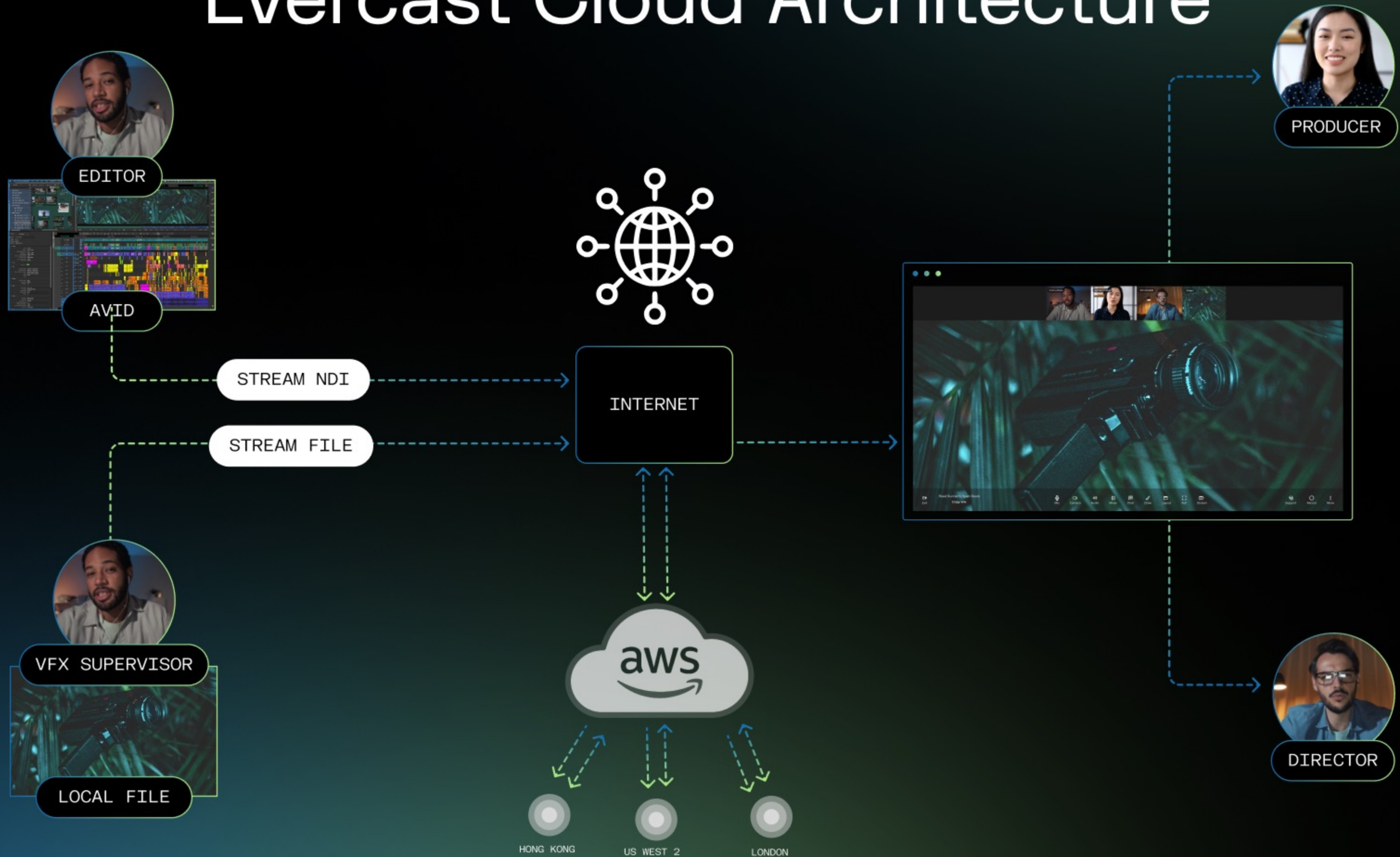
Evercast offers low latency, high resolution, precise synchronization, and color accuracy. This allows playtesters and developers to stream from a mobile device and share exactly what they are experiencing with the rest of the team.



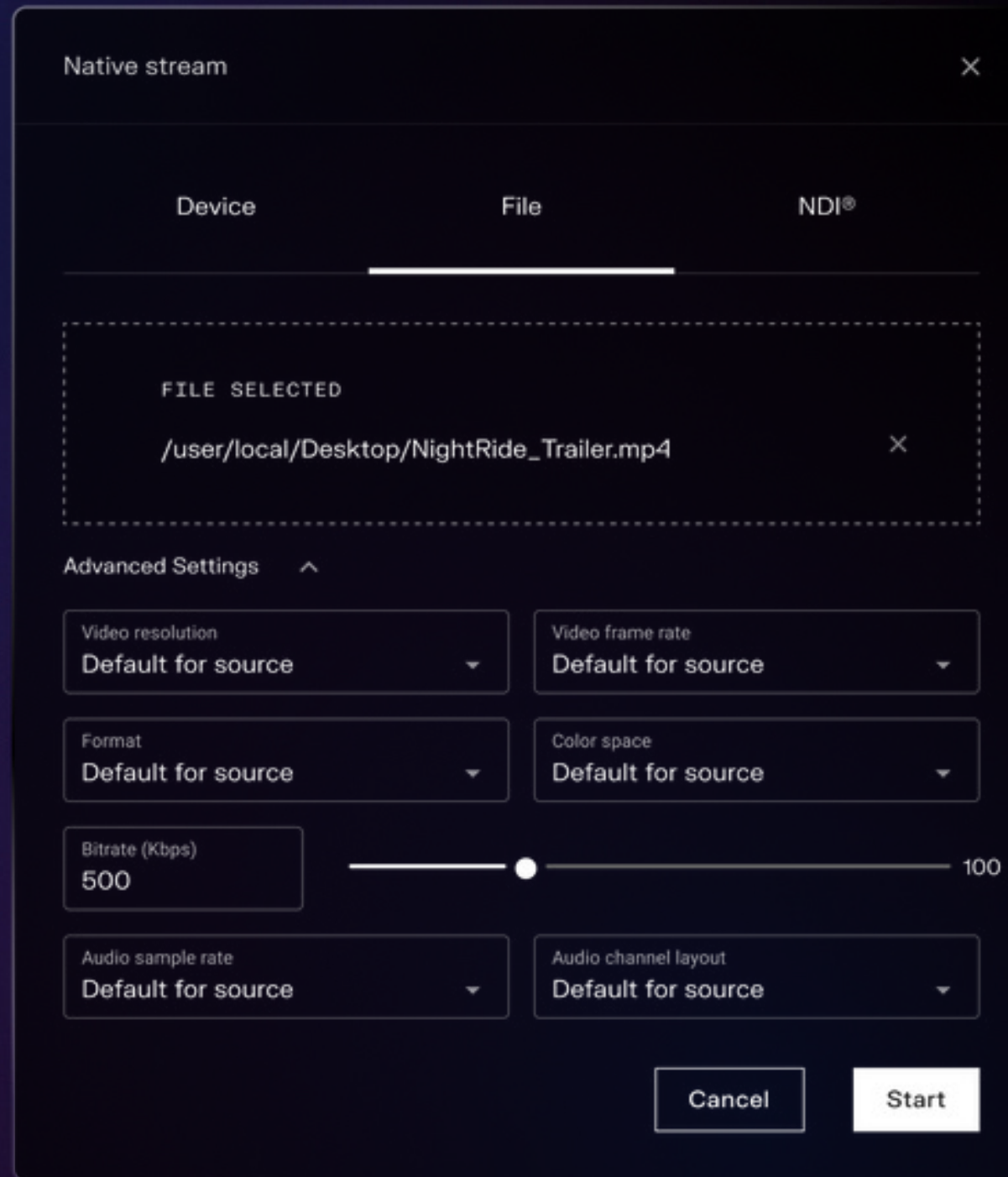
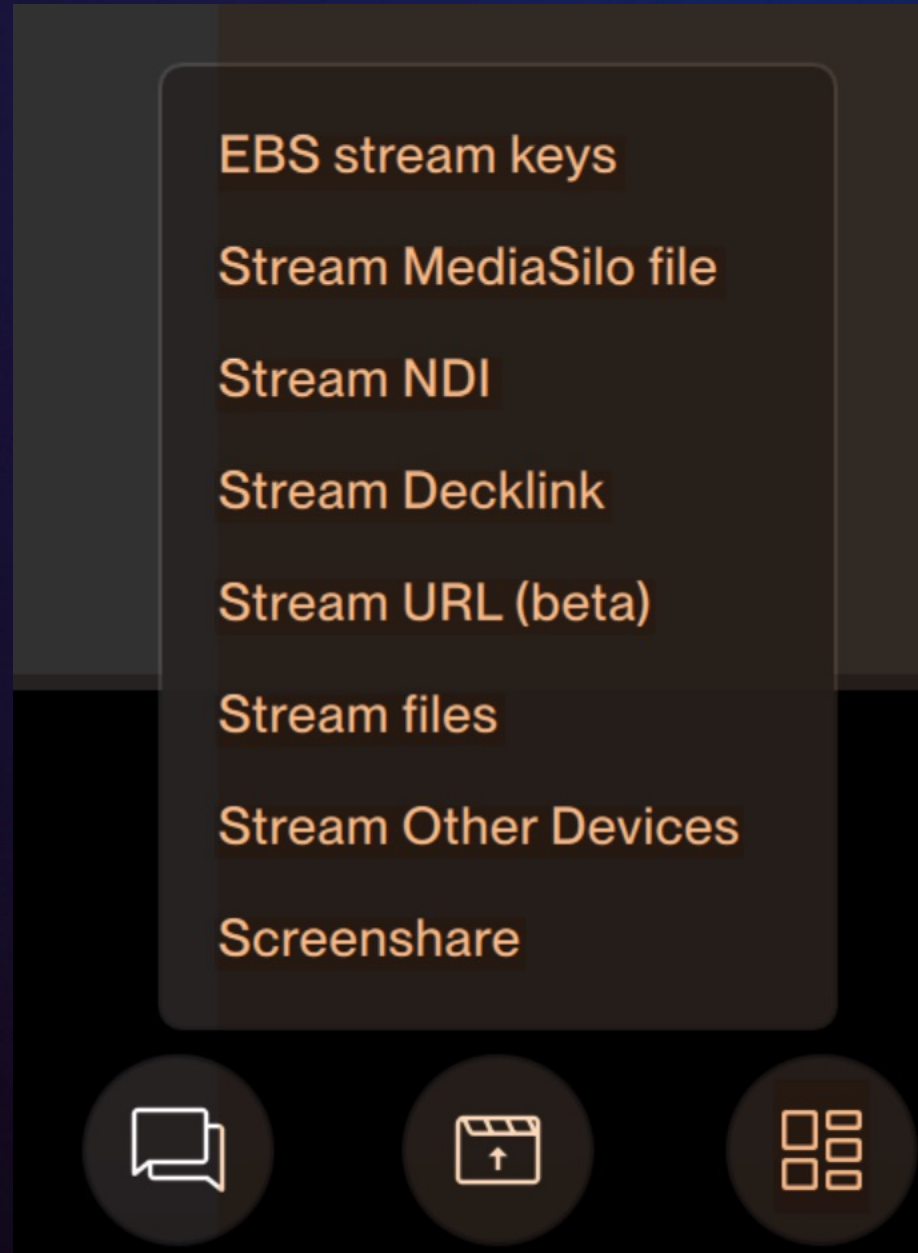
GAME DEVELOPMENT WORKFLOWS → MOBILE GAMING



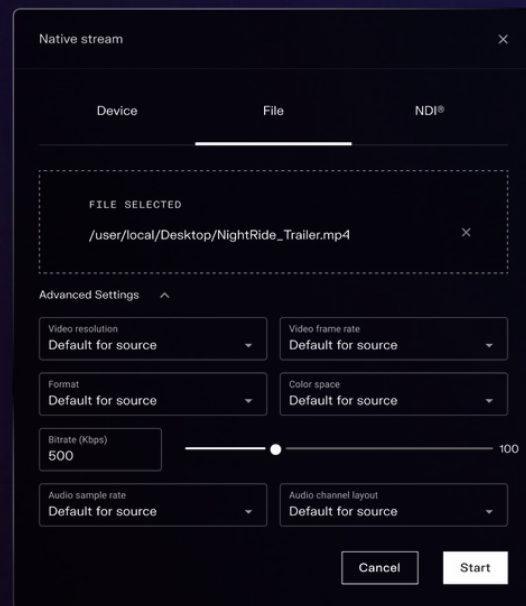
Evercast Cloud Architecture



Source Possibilities



Source Possibilities



Local Stream

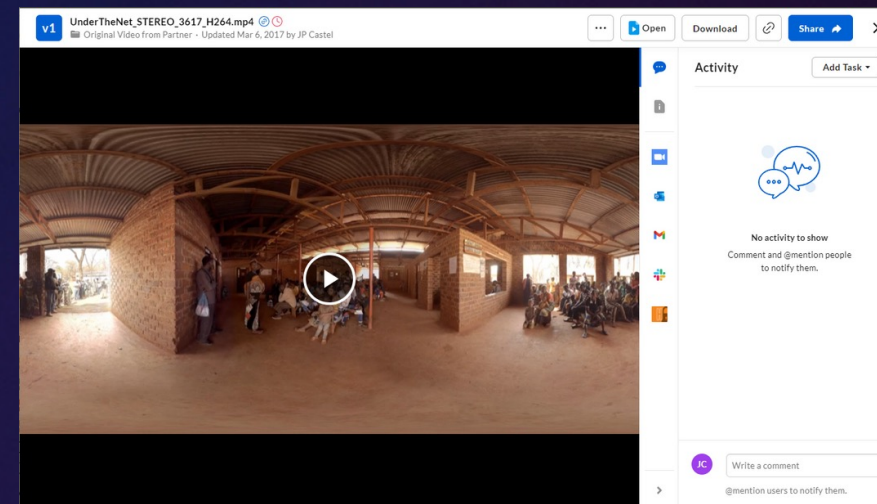
The file is streamed from the source computer to everyone in the evercast room. Everyone in the room can control playback, together.



File Sync

The file is played locally from each participant's computer, within the application, timeline is synced (this is similar to Cinesync).

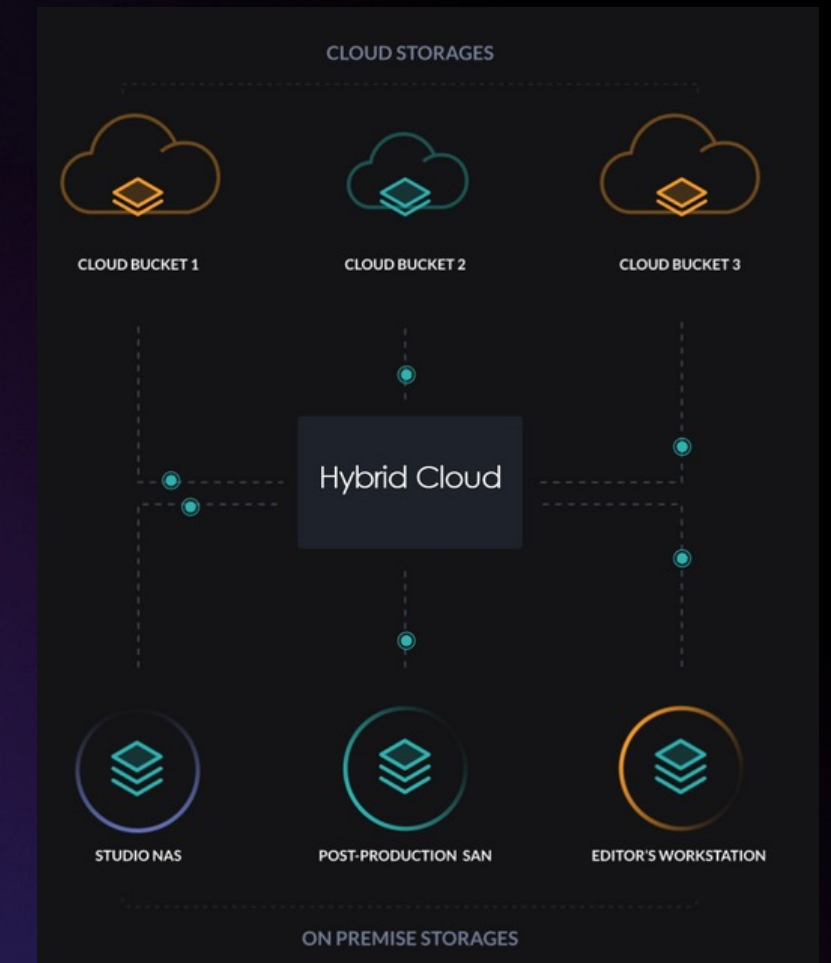
The full file(s) are securely transferred to all participants from the source computer utilizing the Evercast platform and stored an encrypted cache for local playback / sync.



Hosted / DAM Playback

Original Camera files are uploaded to DAM system and buffered and playback are fed to all participants in the room.

Notes & comments are synchronized through the cloud to all assets connected including the NLE etc.



Hybrid

Only Proxy versions of media are upload and shared via the DAM cloud.

Original camera media are tracked and synchronized / transferred in multiple supported large scale cloud buckets or local DAS infrastructures.

Network & Stream Details

Krishna Bhanji	
AVERAGE UPLOAD SPEED	--
ROUND TRIP TIME	2345 ms
AVERAGE JITTER	52 ms
AVERAGE TRACEROUTE	1,235 ms
CONNECTION TYPE	ETH 0
CPU TYPE	M1
CPU USAGE	50%
PLATFORM VERSION	10.2
OPERATING SYSTEM	Windows

	STREAM	DISPLAY
RESOLUTION	1920x1080	▶ 100%
FRAME RATE	30fps	▶ 30fps
COLOR SPACE	Rec.2020	▶ Rec.2020
TRANSFER	Gamma 2.2	▶ Gamma 2.2
PIXEL FORMAT	10-bit 4:4:4	▶ 10-bit 4:2:2

Network connectivity window

- Instantly check connection speeds to Evercast servers
- Gain network information about participants in your Evercast room
- Easily diagnose issues with streaming quality or room performance

Stream details window

- Instantly learn key stream information
- See how your local display compares to the source stream
- Frame rate performance indicator
- Color space / gamma comparison

Visual & forensic watermarking

