Live, from the cloud:
It’s production on AWS

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Agenda

Demo

What are we hearing from customers?

What are the challenges
Remote live cloud production

**Remote Live Cloud Production**

**AWS Cloud**
- NDI Discovery Server
- NDI Router
- VarVector I Switcher
- Singular.Ive
- Reaper Audio DAW
- Sienna NDI Processing Engine

**Home Production Control Room**
- NDI Cloud Node
- PGM
- MV 1

**Methods of Contribution**
- ZiXi
- SRT
- JPEG
- Xs

**Synced Multi-Cam Playback loop via NDI**
- Native NDI
- SDI / HDMI to NDI Converters

**Sienna NDI cloud Ground Node**

**Fios 1 Gbps**

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AWS virtual live production solution
Customer case studies
PGA Tour - Every shot live
What is AWS CDI?

- Move **uncompressed** media in the cloud, **reliably**
- Expected latency: **Less than a frame**
- An **open** SDK available on GitHub
- Implemented on AWS using **SRD** running on **EFA**
SRD: Reliable bandwidth

SRD

UDP

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AWS CDI interop workshop
June 2021 participants:
Drastic, EEG, Gallery Sienna, Imagine, Matrox, NetOn, Nevion, Port9Labs, Ross, TAGvs, TechEx, Telestream

25 engineers across 9 time zones, 20+ applications

All partners interopw. ~6-10 others >100 interoperation points

Testing also used open source CDI plug-in for OBS: https://github.com/aws/obs-cdi
# Building Sustainable Production Facilities in the Cloud

## Problem
Sky News UK required a production facility, closely matching their current production environment, to produce live coverage of the 12-day COP26 Climate Conference.

## Challenges
- No traditional facilities available
- Limited time and budget to build new facilities
  - Only six weeks from first conversation to on-air
- No time to re-train staff on “other solutions”
- Quality, resiliency, and low carbon footprint was critical
  - Key sponsor at COP26 with commitment to NCZ by 2030

## Results
- Designed and delivered in 6 weeks
- Integrated with existing NRCS - Minimal training required
- **Efficient Operation**, staffed with 4 people: Dir, Prod, Sound, Tech
- **96 hours of live coverage with 100% success** - Across DTH, OTT and Sky Glass
- **Near-zero latency** - 120 ms round trip
- Total AWS running cost <$750 Per day
- Repeatable with CI/CD best practices, with a few lines of code, technology available to other lines-of-business
Thank you!

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