

The background features a dark blue gradient with abstract geometric shapes. On the left, a large triangle is formed by a vertical orange line and a diagonal orange line. On the right, a large curved shape transitions from orange to blue. A thin blue line forms a rectangular frame in the lower right quadrant.

# AWS re:Invent

NOV. 29 – DEC. 3, 2021 | LAS VEGAS, NV

MDS 304

# Live, from the cloud: It's production on AWS

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Media and Entertainment—North America  
AWS



# Agenda

Demo

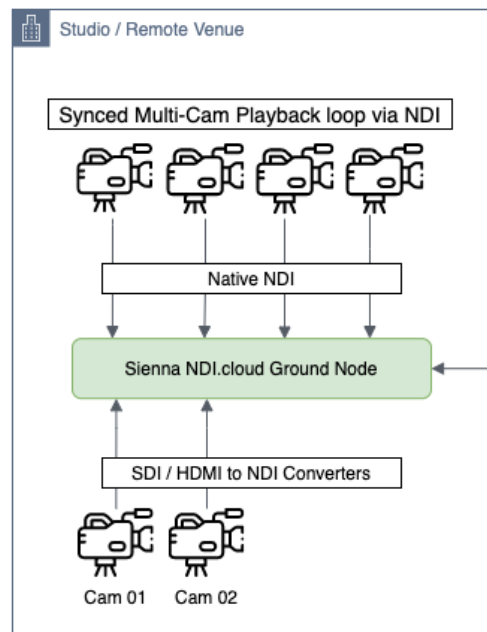
What are we hearing  
from customers?

What are the challenges

# Remote live cloud production



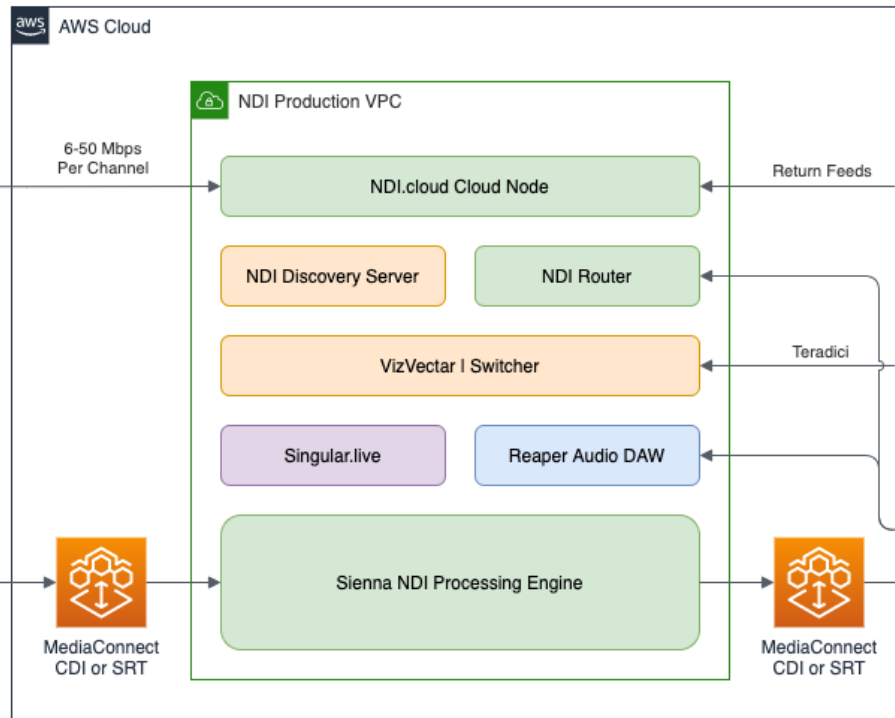
## Remote Live Cloud Production



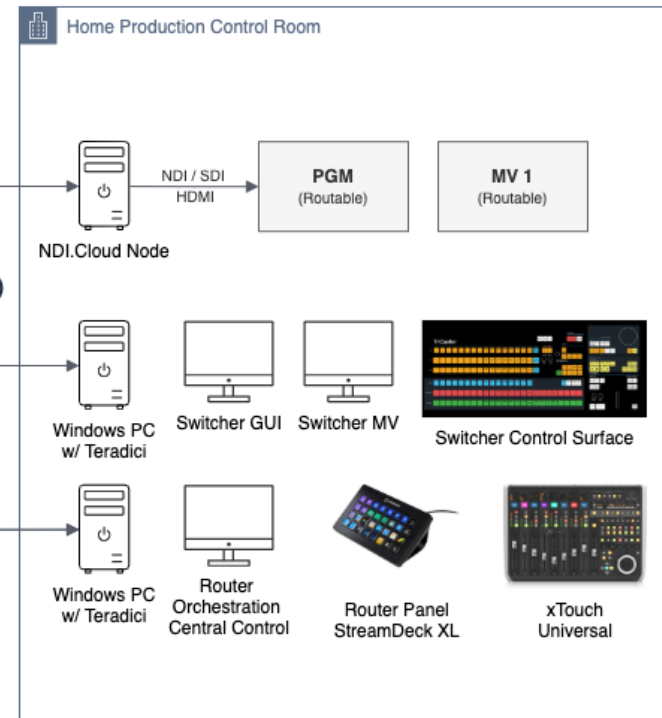
Fios  
1 Gbps



AWS Cloud



Home Production Control Room

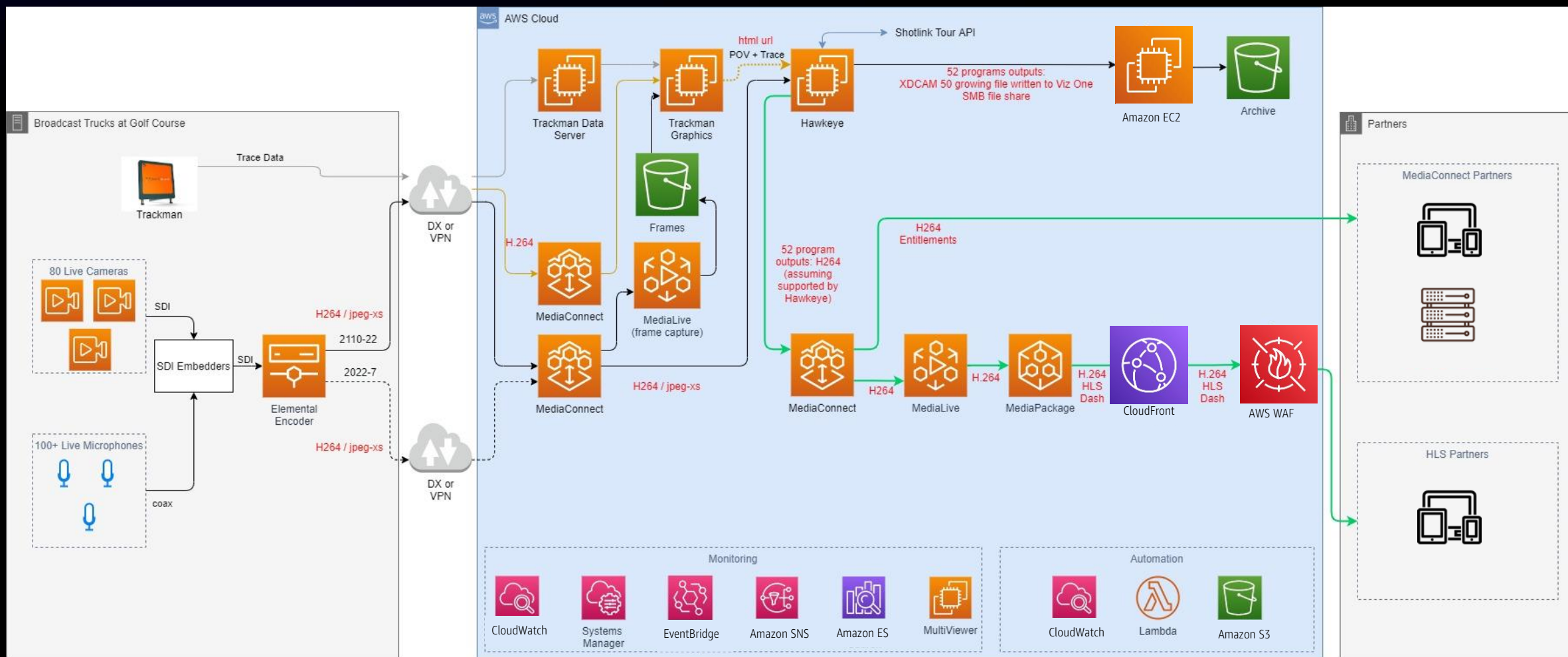


# **AWS virtual live production solution**



# Customer case studies

# PGA Tour - Every shot live



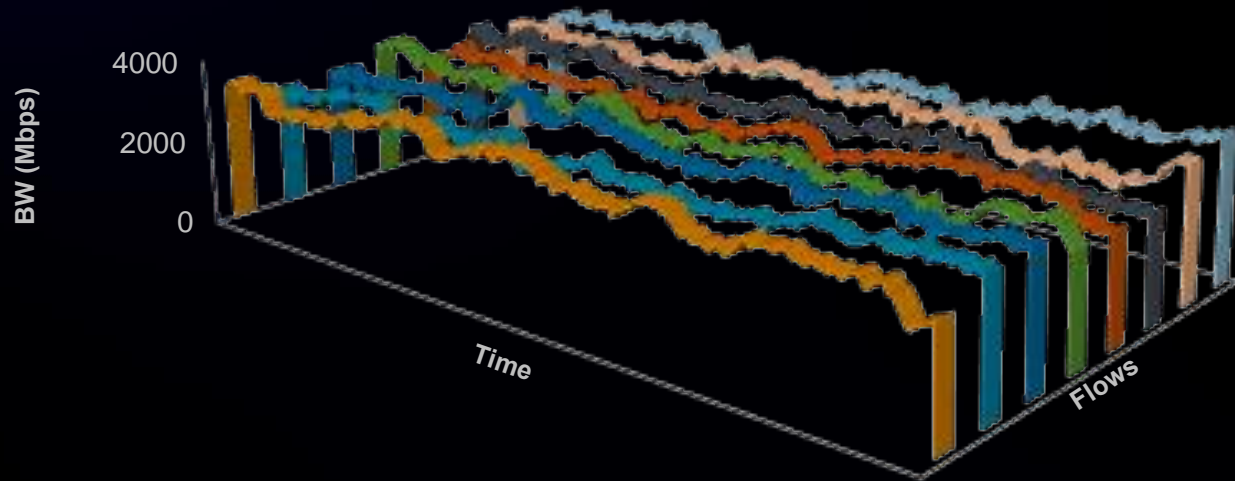
# What is AWS CDI?



- 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**

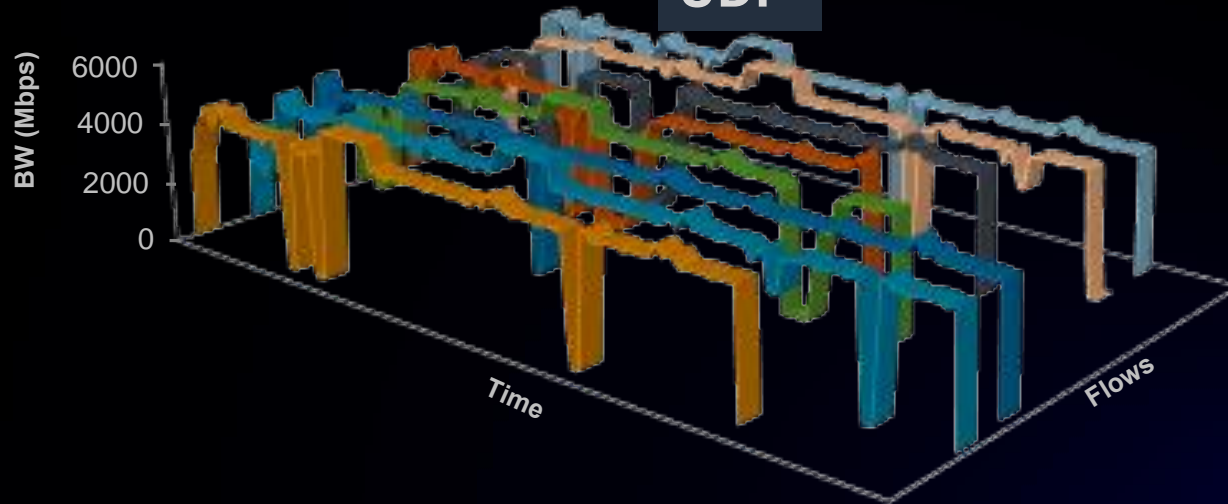
# SRD: Reliable bandwidth

SRD



- Flow 1
- Flow 2
- Flow 3
- Flow 4
- Flow 5
- Flow 6
- Flow 7
- Flow 8

UDP



- Flow 1
- Flow 2
- Flow 3
- Flow 4
- Flow 5
- Flow 6
- Flow 7
- Flow 8

# AWS CDI interop workshop



NETON·LIVE

nevion

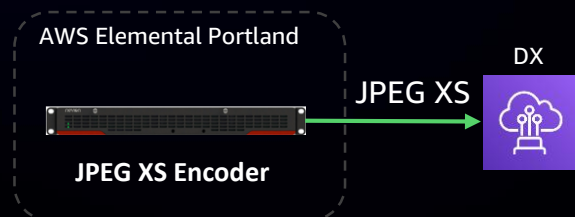
***ROSS***



techex.

telestream

# AWS CDI interop workshop



June 2021

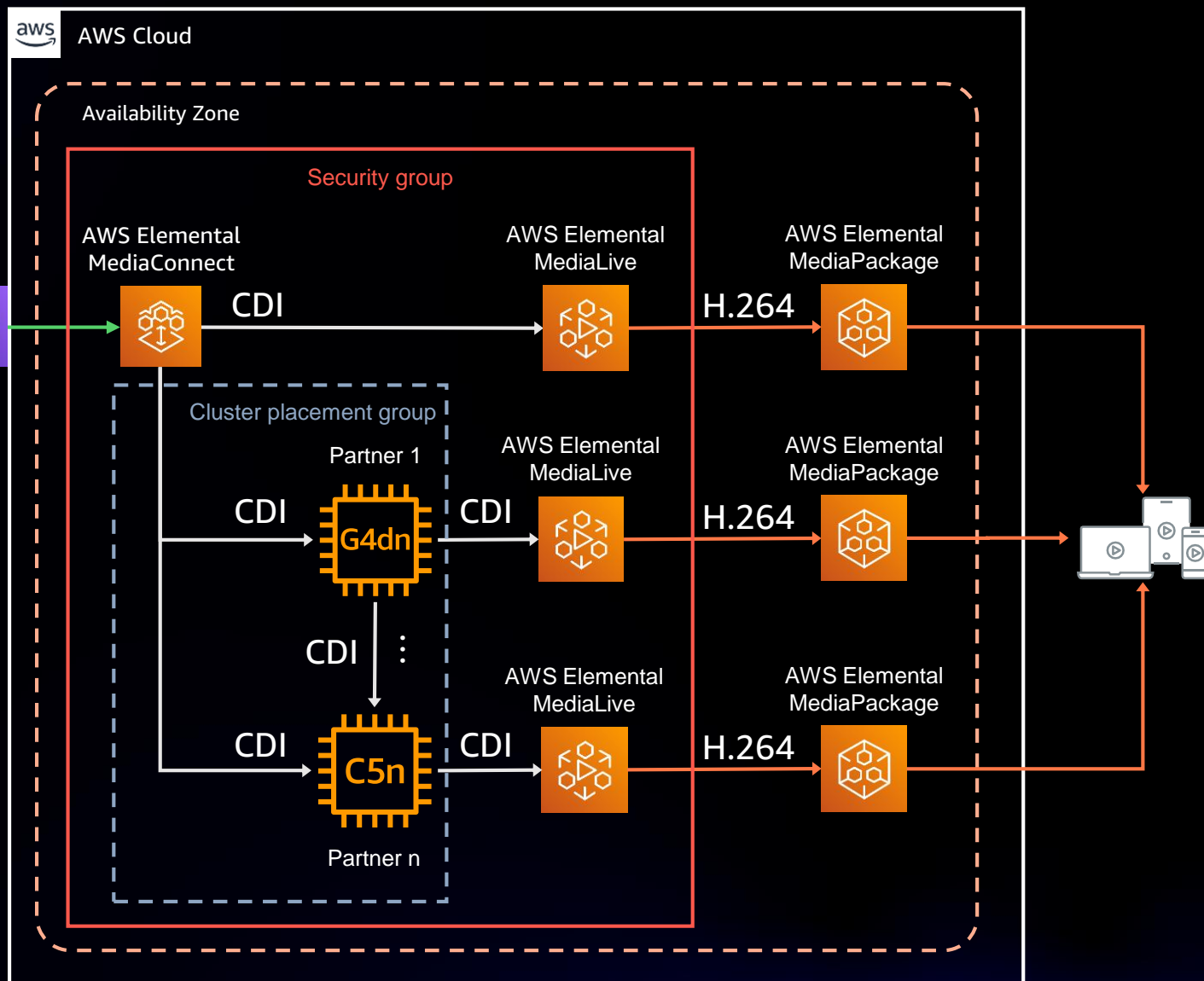
participants:

Drastic, EEG, Gallery Sienna, Imagine, Matrox, NetOn, Nevion, Port9Labs, Ross, TAGvs, TechEx, Telestream

25 engineers across 9 time zones, 20+ applications

All partners interoperated w. ~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!

Peter Riordan

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