# re:Invent

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**AMZ203** 

# Amazon MGM Studios: Building a next-generation studio

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# Agenda

- **01** Content creation trends
- **02** AWS for media workloads
- 03 Simplified content workflows
- O4 Case study: Amazon MGM Studios –
  The art of building a next-generation studio
- **05** Q&A



# **Content creation: Trends**

Companies are looking to **reinvent** how they create, optimize content workflows, and compete for audience attention



Need for fresh content



Speed and reduced cost



**Distributed production** 



Simplified content workflows



# **Amazon MGM Studios: The home for talent**







More than 500 AWS Partners for M&E



# Simplify to empower visual storytellers





# **AWS for media workloads**



# **Solution areas**

THE MOST PURPOSE-BUILT CAPABILITIES AND PARTNER SOLUTIONS FOR REINVENTING CONTENT PRODUCTION, MEDIA SUPPLY CHAIN, BROADCAST, DIRECT-TO-CONSUMER AND STREAMING, ANALYTICS AND MONETIZATION



**Content production** 



Media supply chain and archive



**Broadcast** 



Direct-to-consumer and streaming



Data science and analytics for media



Monetization



# **AWS Solutions Library**

A COLLECTION OF CLOUD-BASED SOLUTIONS FOR DOZENS OF TECHNICAL AND BUSINESS PROBLEMS, VETTED FOR YOU BY AWS



# One-click launch

Launch a fully tested solution starter kit in your AWS account with one click



# Accelerate revenue

Get started with your project quickly and start monetizing your content



#### Wellarchitected

Rely on the architecture as it reflects

AWS best practices



#### **Agility**

Save the resources developing a solution from the beginning



# Expand and add

Use the framework and available guides to expand the solution starter kit based on your needs





# **AWS for M&E | Content production**

SPEND LESS TIME RENDERING AND MORE TIME CREATING WITH THE MOST COMPREHENSIVE SET OF CLOUD CAPABILITIES FOR CONTENT PRODUCTION



Examples of AWS solution-specific services



AWS Elemental MediaConnect



**NICE DCV** 



AWS Thinkbox Deadline



Render Farm Deployment Kit



Examples of AWS Solutions

VFX burst rendering framework on AWS

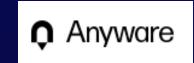
**VFX workstations on AWS** 



Partner network







40+ more



Core Services



Amazon G4/G5 Instances



**Amazon EBS** 



Amazon FSx for Windows File Server



Amazon S3



# **AWS M&E partner community**

MORE THAN 500 AWS PARTNERS FOR M&E

















**D** Dolby

**G** grabyo

LUMEN

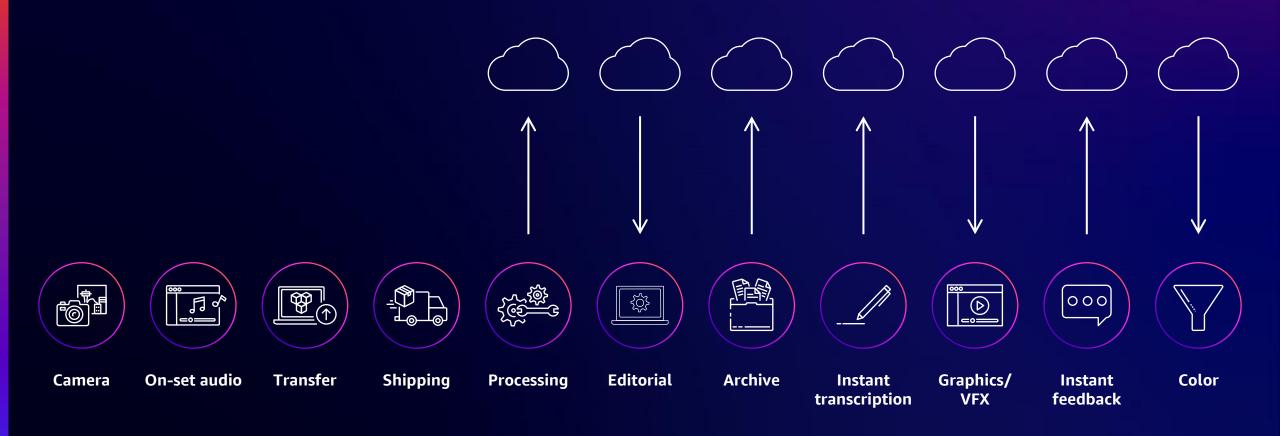
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**SOUTHWORKS** 

# Simplified content workflows

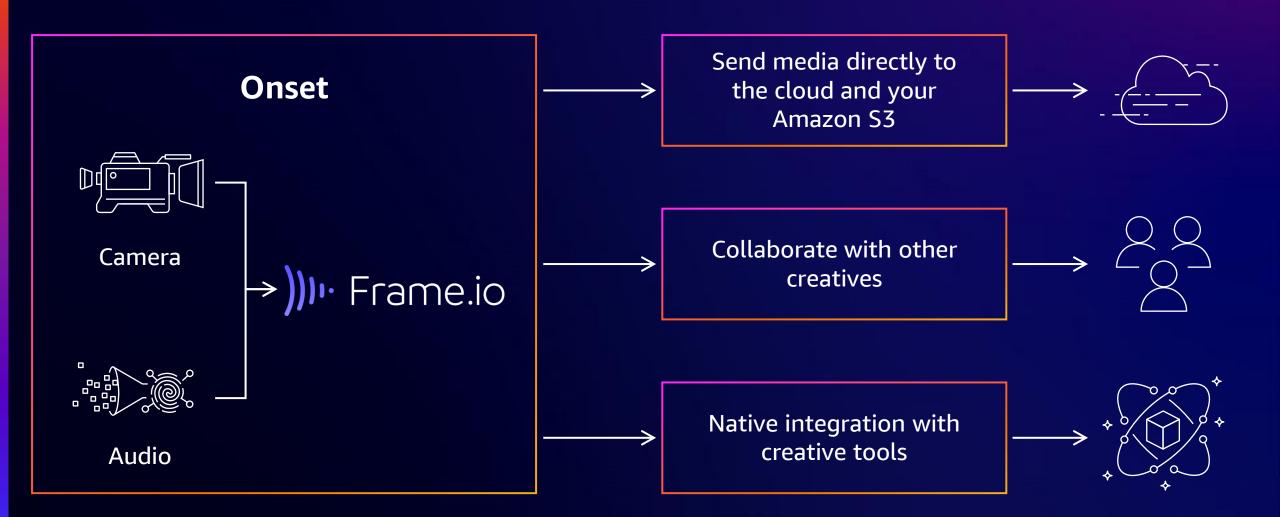


# Media workflows need optimization





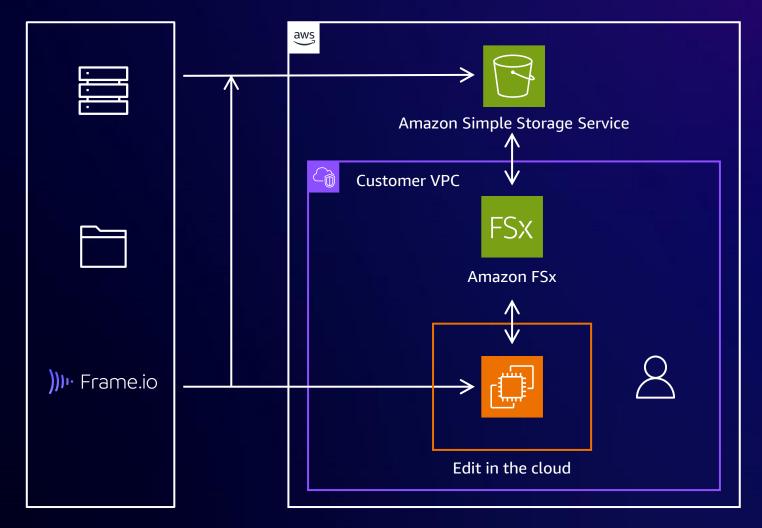
# Camera-to-cloud workflow





# Storage solutions and content sharing

Connect your fully owned Amazon S3 bucket to Frame.io's stack

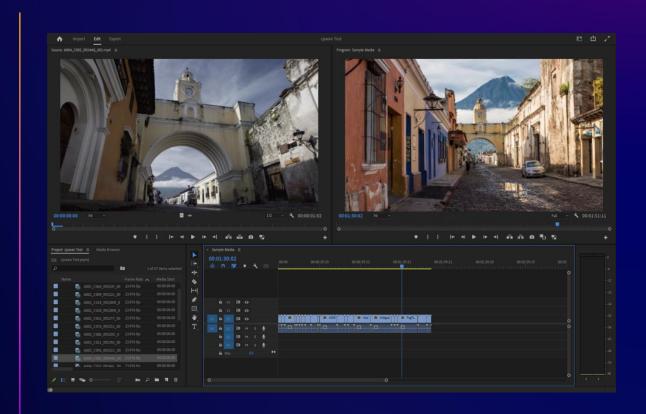




Learn about cloud storage on AWS

# Simplified content workflow

- High-Speed integration with Frame.io
- Frame.io integrated with Adobe Premiere Pro, Davinci Resolve and more
- 4K Video editing workstation running in AWS
- Content stays securely in the cloud
- Aligns to the MovieLabs 2030 Vision











# Cloud-to-ground video

WITH STREAMBOX





- Confidence monitoring provided by Streambox
- High-quality HD or 4k video signal
- HDMI & SDI out via hardware decoder for professional edit bay experience
- Stream to digital device (phone/pad/computer)
- Adobe plugins supporting creative cloud applications



# Building a studio with cloud



# Media engineering and innovation (MEI)

WHO ARE OUR CUSTOMERS & WHAT VALUE DO WE DELIVER?



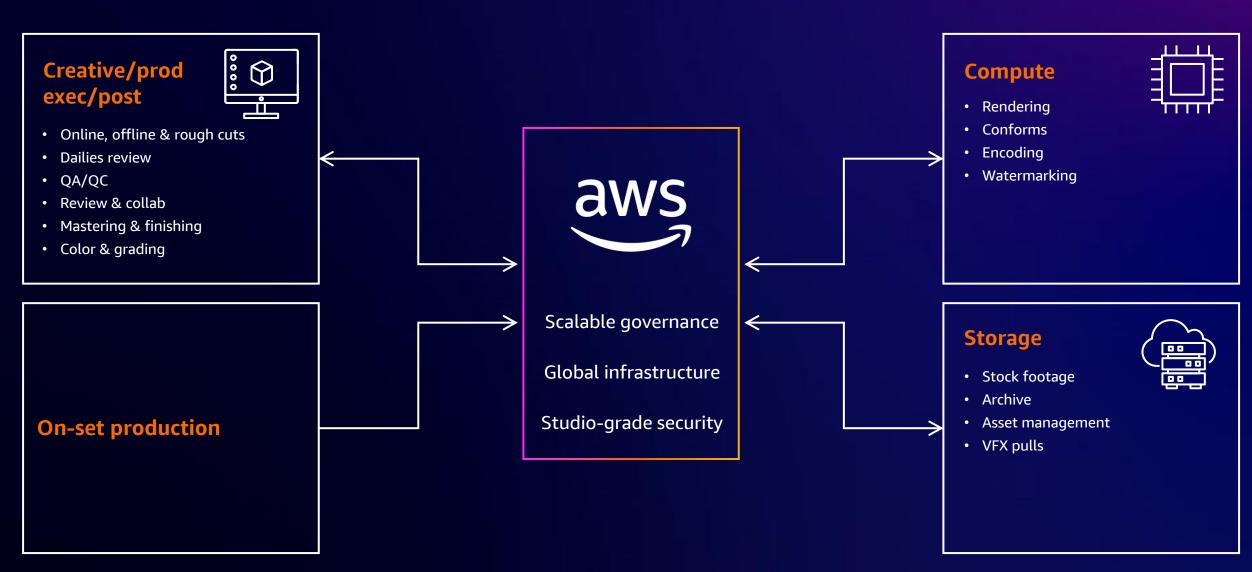
Empowering Amazon's visual storytellers and studio teams



The Studio126 Innovation Lab is a center for interdependent collaboration, where technology and stories converge

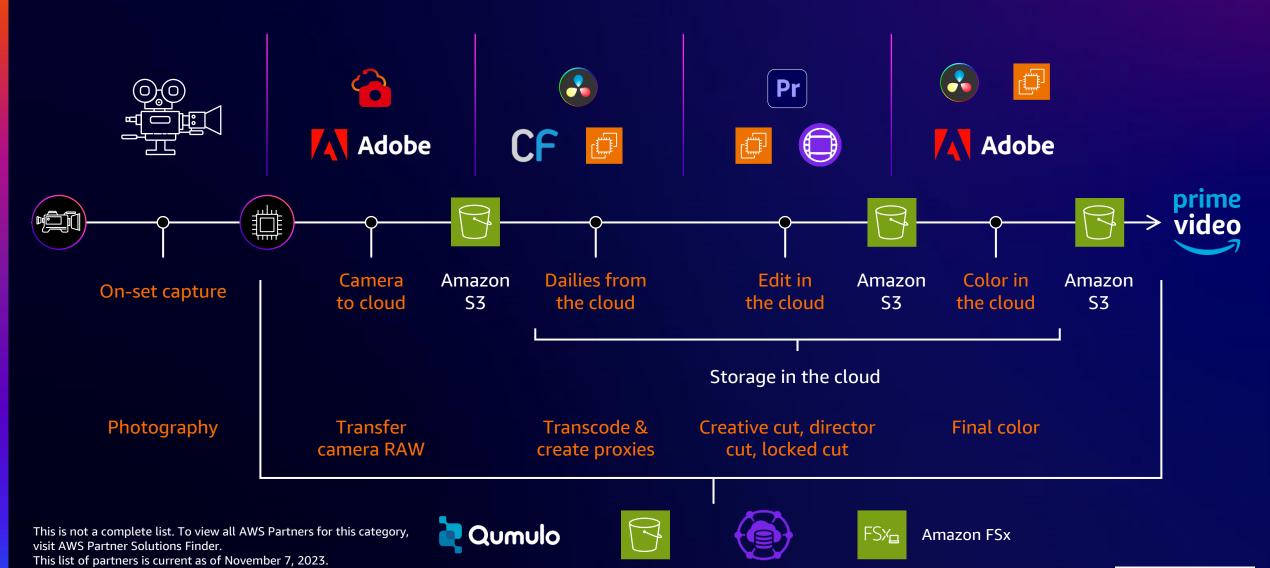


# Why build in the cloud?





# Pure cloud production





## Camera raw to cloud

#### Who does this impact?

Production and post: Production, post operations, and media management teams

#### Why does this matter?

- Camera-to-cloud (or OCN/OCN/RAW-to-cloud) is the on-ramp for enabling cloud-based workflows that support production and post workflows
- By expediting camera raw to cloud first, we are able to archive and centralize production content while on set
- With Frame.io C2C footage is available instantly, globally – there's no going back



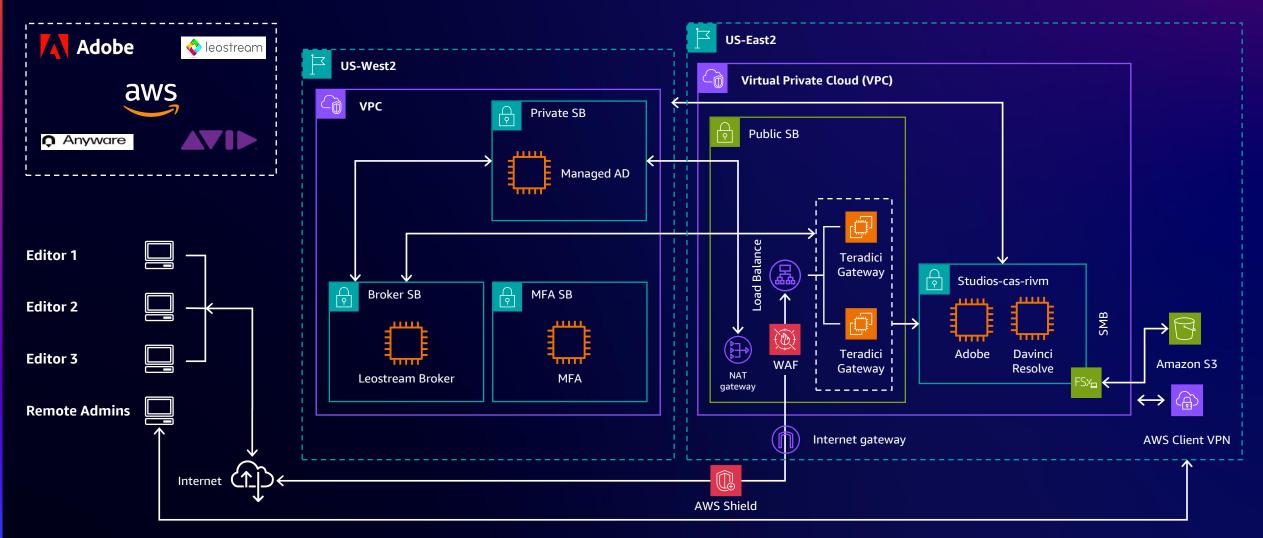






## **Amazon MGM Studios Editorial on AWS**

CLOUD-BASED CREATIVE EDITORIAL PROGRAM!





# Color in the cloud

IN PRODUCTION WORKLOADS

#### Who does this impact?

Studios production and post operations

#### Why our creatives care?

Virtualizing DI/color grading workstations improves collaboration and flexibility for our talent

#### What are we doing?

- Working with partners to develop a virtualized rendition of their color grading applications for AWS
- Securing network transport for high-quality color signals from AWS
- Orchestrating top-grade signals egress with StudioFabric (next topic)







colorfrontini

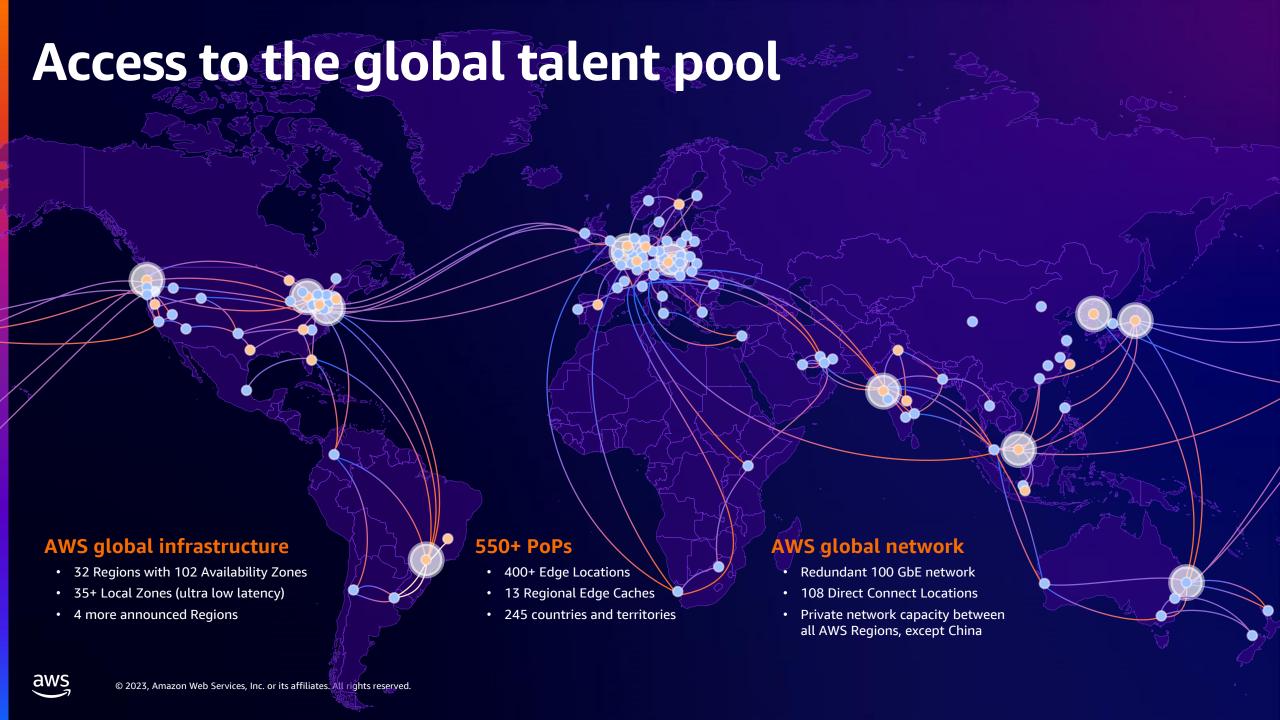


# Cloud production integrated with StudioFabric

- Deployed on AWS Regions and AWS Local Zones
- We use AWS compute, Amazon S3, Amazon RDS, and direct connect network architecture
- AWS Shield protects from DDOS attacks
- AWS Partner solutions hosted on local and AWS cloud







## StudioFabric

OPERATIONAL GLOBALLY



**Virtualized signal** routing connecting people and systems production globally



Sending visually lossless video, uncompressed audio signals worldwide



**Point-to-point** or **one-to-many** work sessions across various locations



Eliminating Covid-related constraints with **interactive** collaborative workstreams



AWS **global network**, COTS (common-off-the-shelf) networks, and IP-video gateways for high performance network



**High-quality video and audio signals** traversing the globe through the cloud



**Partners** on premises and virtualized content creation applications supported



Dream to action by running DI, sound mixing, editorial, and VFX review sessions **remotely** 



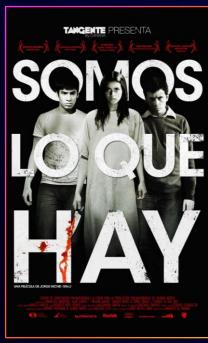
**Functional parity** with on-premises, post productions, and virtual instantiations on AWS



# **Production pilots**

# AMAZON ORIGINAL











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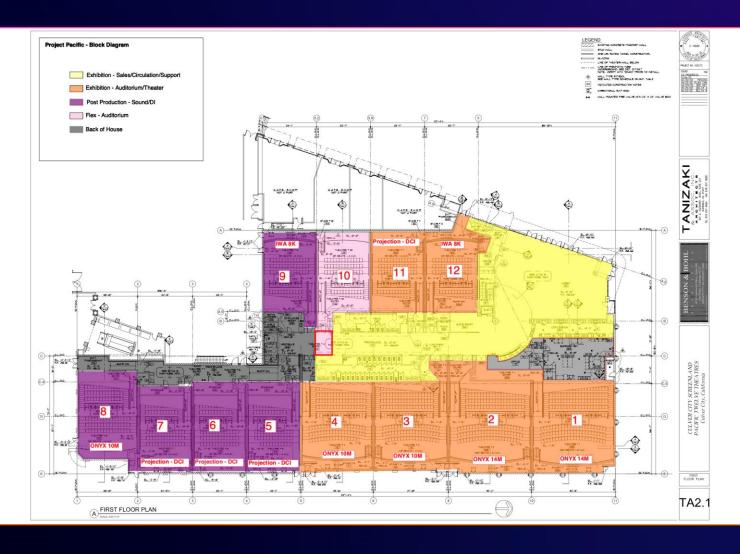


# Project Pacific: Amazon MGM Studios post-production facility and public exhibition theater



# Project Pacific: Floor plan

WE HAD A VISION!



# **Project Pacific: Before**







# **Project Pacific: The Culver Theater**

WORLD'S FIRST 8K THEATER



THE CULVER THEATER











# Post-production facility

DELIVERING OUR VISION!









# Virtual production: Stage 15

LAUNCHED Q4 2022

#### Who does this impact?

- Studios virtual production team
- Amazon Studios filmmakers

#### Why our creatives care

Gives filmmakers the ability to imagine, plan, and film any or all aspects of their production in a digital arena

#### What are we doing?

We partner with ASVP to build and support the physical infrastructure of Stage 15



# Q&A



# **Takeaways**

Let your imagination define your solutions. Understand AWS tools available to build your solution!



Scan to learn more about AWS for media and entertainment



# Thank you!



Please complete the session survey in the mobile app

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