

# HPA

## 2025 | 30TH

TECH RETREAT

ANNIVERSARY

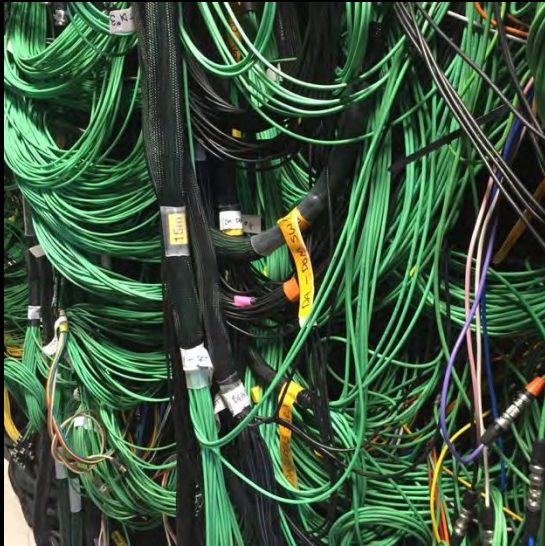
**Re-thinking fast turnaround  
workflows for the cloud**

**Chris Swan, AWS**

Imagine if you can...



# Why me?





# Where we've been

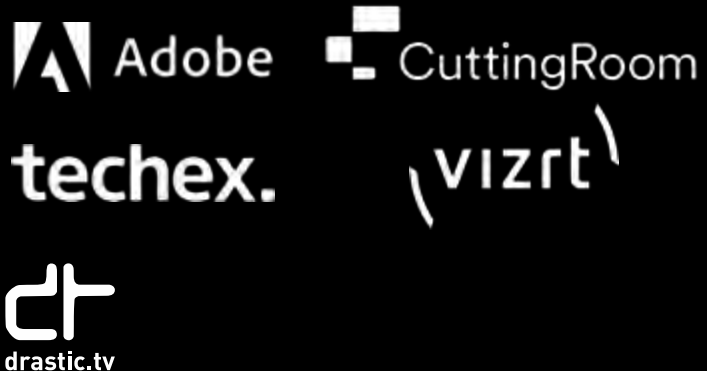
**BBC**  
**R&D**

Time-Addressable  
Media Store (TAMS)

2023

**CNAP**  
Cloud Native Agile Production

2024 – 'Phase 1'

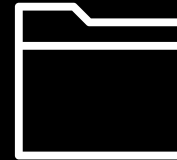


**An open, interoperable,  
cloud-native solution  
for fast turnaround workflows**

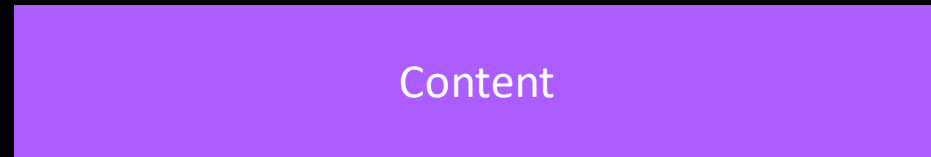
# Cloud Media Storage Challenges

Content

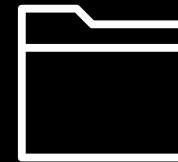
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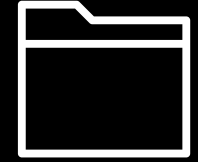
# Cloud Media Storage Challenges



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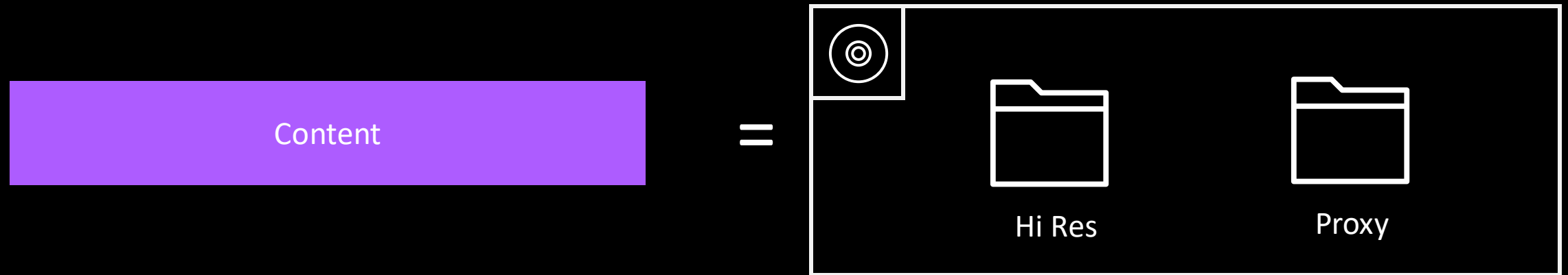


Hi Res

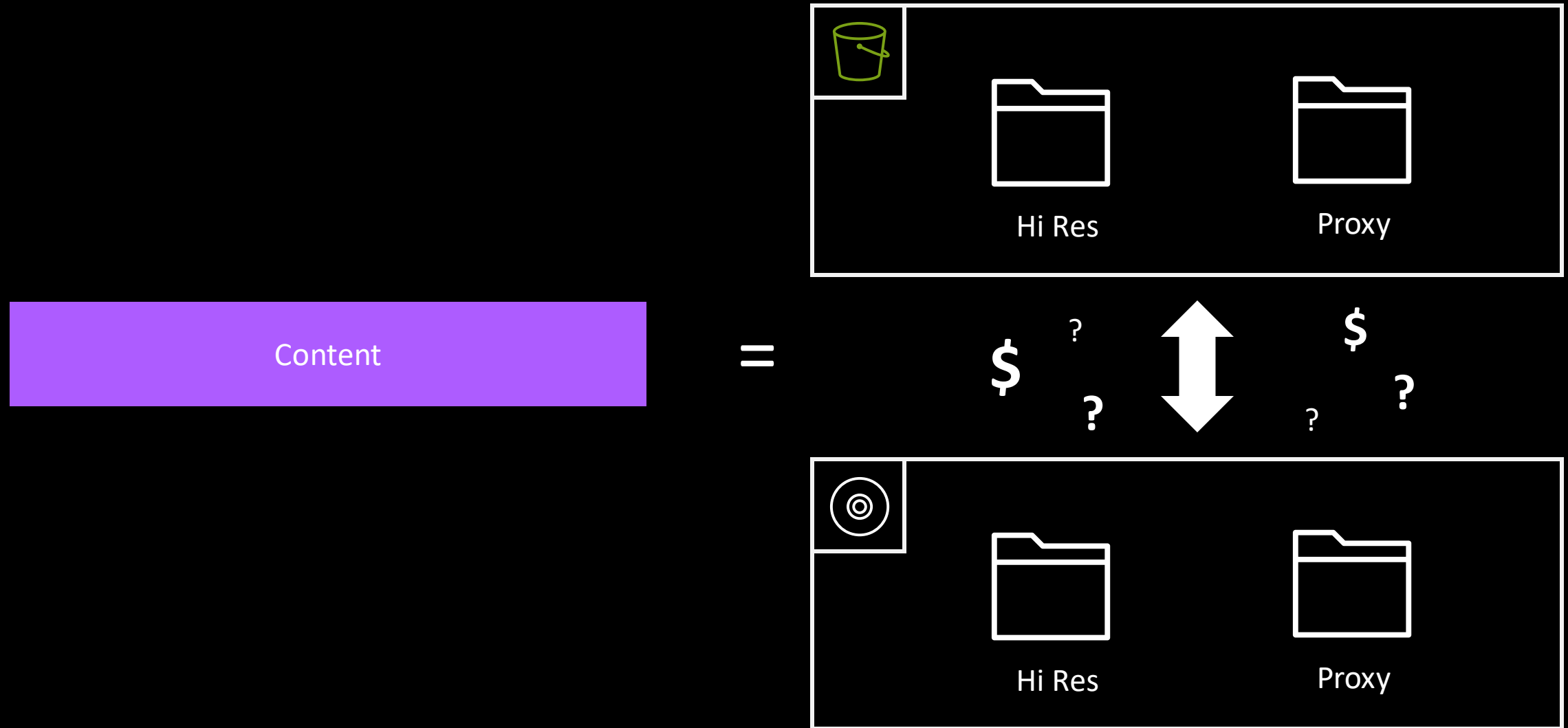


Proxy

# Cloud Media Storage Challenges



# Cloud Media Storage Challenges



“The most dangerous phrase in  
the English language is:  
**‘We’ve always done it this way...’**”

— REAR ADMIRAL GRACE HOPPER



*“What if we could change the workflow to **suit the cloud**, rather than simply move existing solutions **to the cloud**?”*

# MovieLabs 2030 Vision

**PRINCIPLE 1**




**2030 VISION**

All assets are created or ingested straight into the cloud and do not need to be moved




**PRINCIPLE 2**



**2030 VISION**

Applications come to the media



**PRINCIPLE 3**



**2030 VISION**

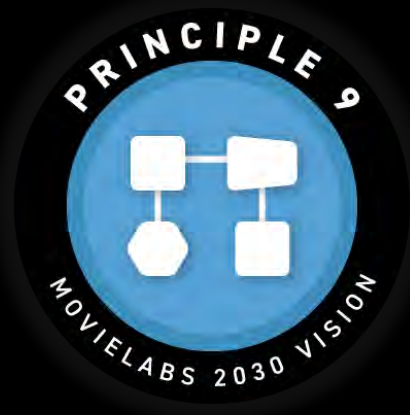
Propagation and distribution of assets is a “publish” function



# MovieLabs 2030 Vision



***Individual media elements are referenced, accessed, tracked and interrelated using a universal linking system***

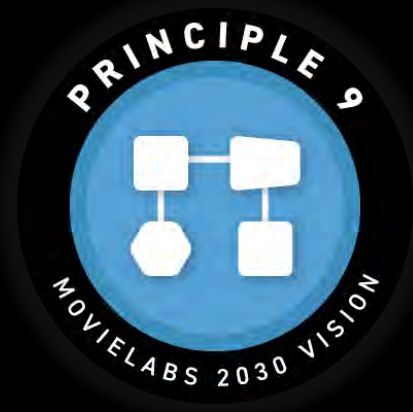


***Media workflows are non-destructive and dynamically created using common interfaces, underlying data formats and metadata***

# MovieLabs 2030 Vision



*Individual media elements are referenced, accessed, tracked and interrelated using a universal linking system*

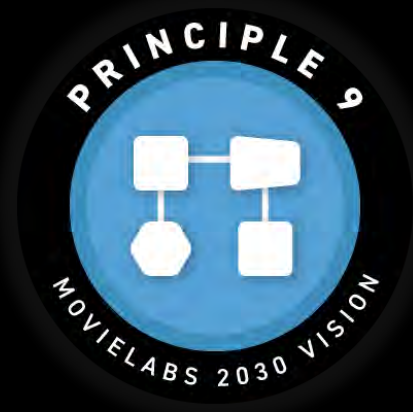


*Media workflows are non-destructive and dynamically created using common interfaces, underlying data formats and metadata*

# MovieLabs 2030 Vision

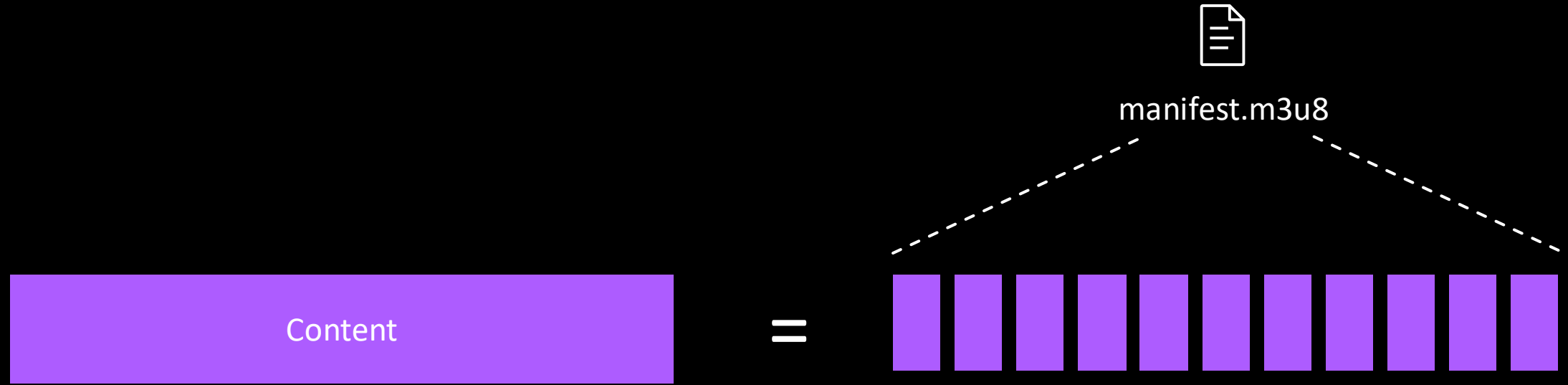


*Individual media elements are referenced, accessed, tracked and interrelated using a universal linking system*

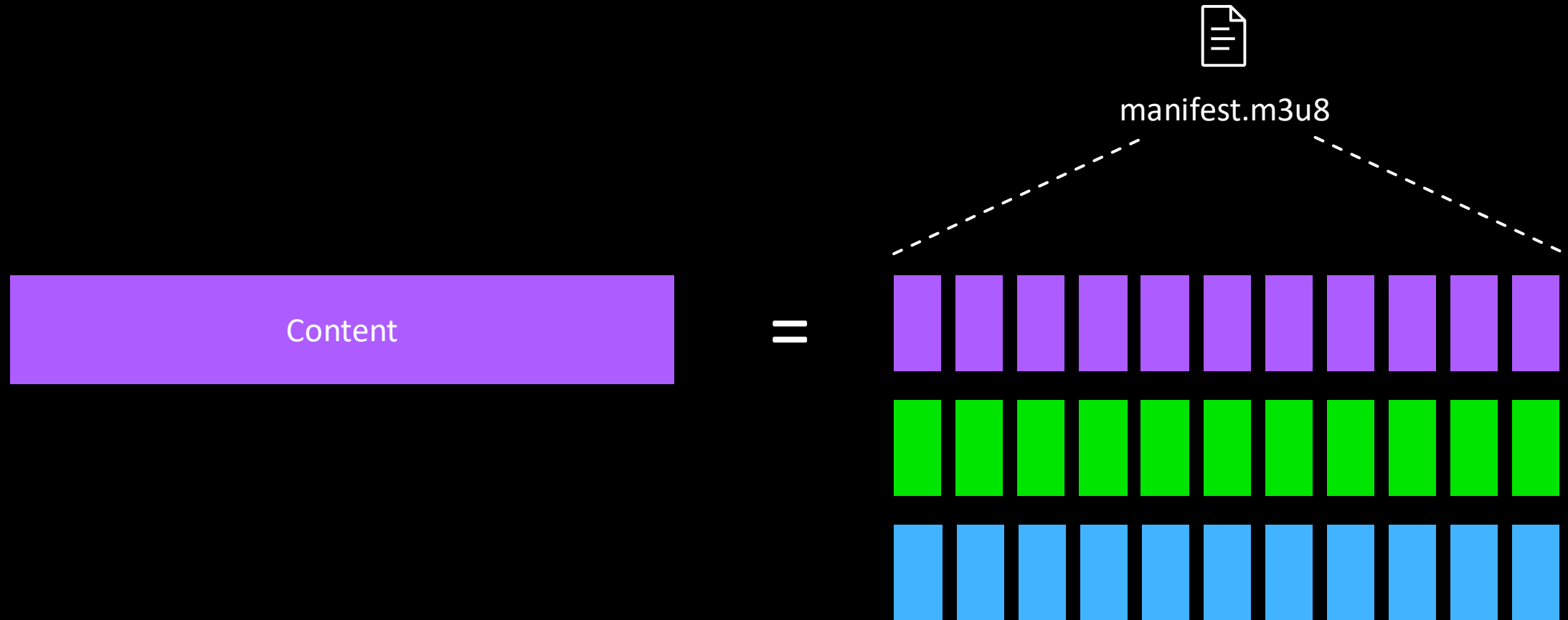


*Media workflows are **non-destructive and dynamically created** using **common interfaces**, **underlying data formats and metadata***

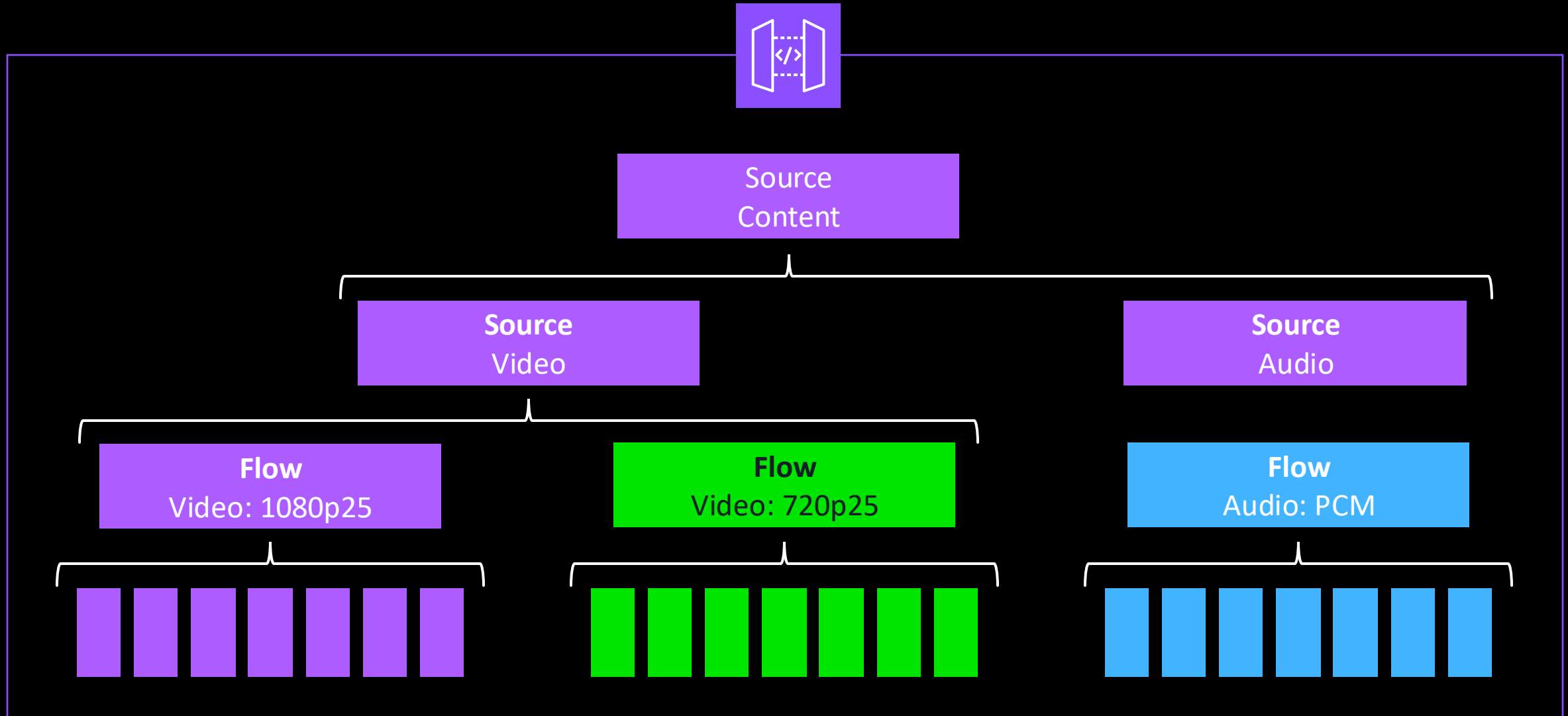
# Streaming Media



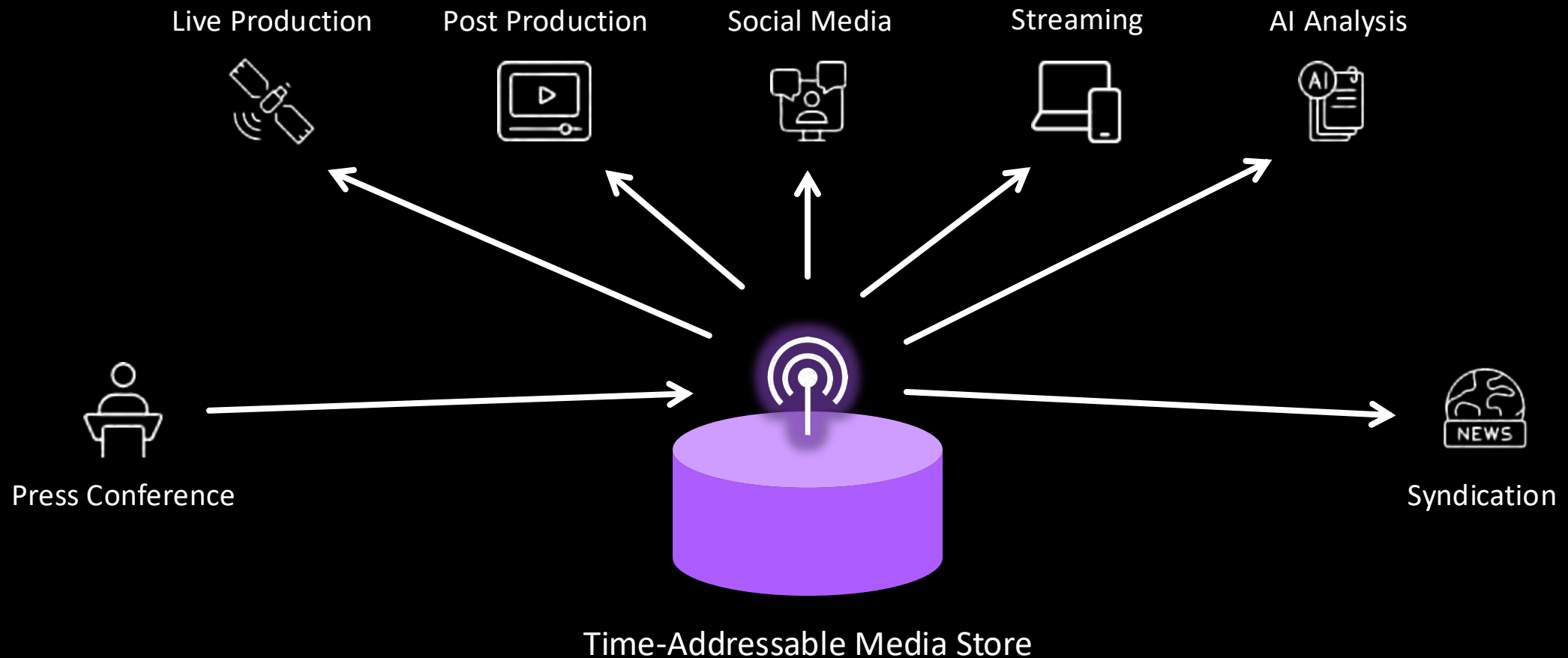
# Streaming Media



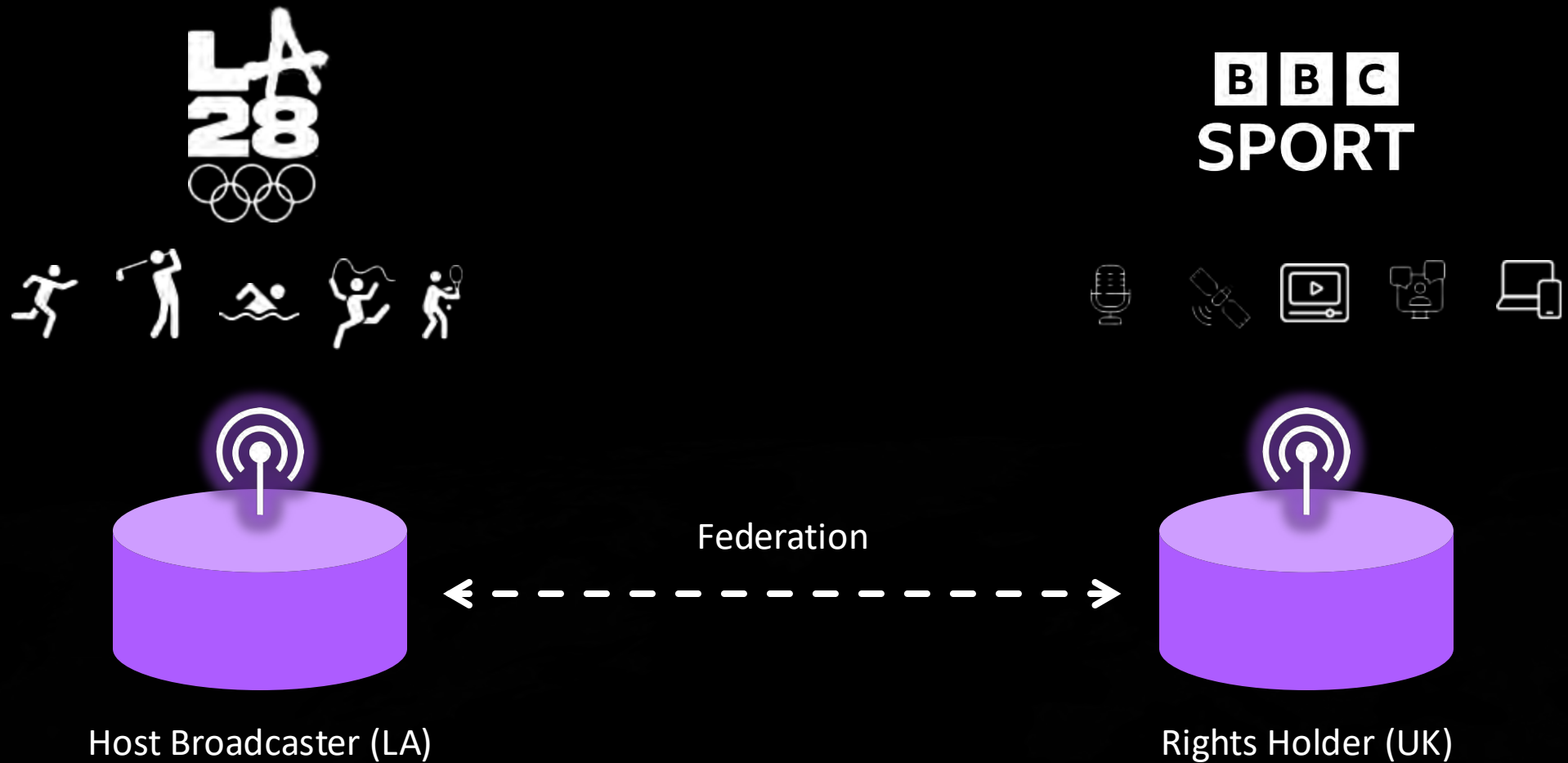
# The Time-Addressable Media Store



# Convergence of use cases



# Convergence of use cases



# Time-Addressable Media Principles



## **Timelines are the main currency**

Common thread that binds together media and metadata



## **Media is stored once and referenced**

Instead of shipping it from place to place



## **Identity & timing the same for streams and stored**

Enables discovery, indexing and synchronisation



## **Timelines support any format or type of media**

By providing an abstract interface that hides the detail



## **Timeline-centric media packaging**

Supports efficient versioned interchange of content



## **Timelines support annotation and segmentation**

Enhanced search, navigation and flexible composition



## **Media may be stored in short duration chunks**

To support nearly-live and efficient random access



## **Media components may be stored separately**

Related together through a common timeline



## **Built using web technology**

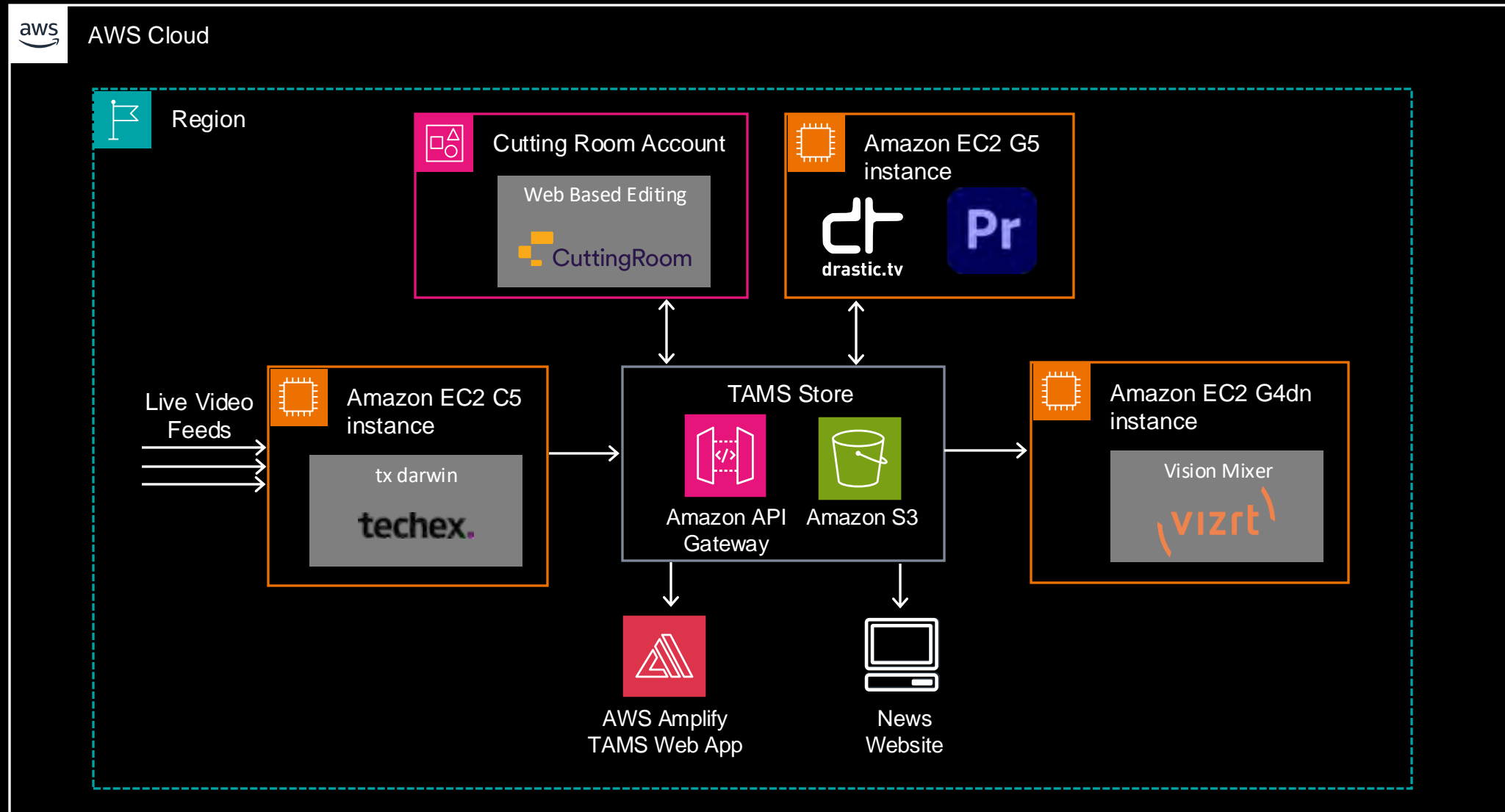
Modular, shared software capabilities with web APIs



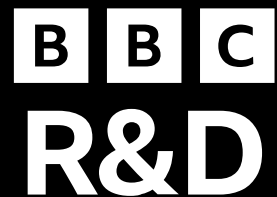
## **Storage may be physically distributed**

Unified via Wide Area Networks and shared indexes

# CNAP IBC Demo



# Where we're going



Time-Addressable  
Media Store (TAMS)

2023

# CNAP

Cloud Native Agile Production

2024 – 'Phase 1'



2025 – 'Phase 2'

Customer Engagement  
Partner Enablement  
TAMS Workshops US & UK

Edit by Reference (OTIO)  
Time-Addressable Data Store (TADS)



# Customer Benefits



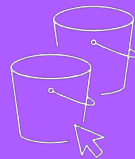
Remove constraints and  
vendor restrictions



An open, interoperable  
approach



Reduces costs, increases  
flexibility



Removes duplication of  
content



Accelerates  
workflows

# How to get involved

**SAVE  
THE DATE**

## TAMS Workshop and Hackathon

London – 3<sup>rd</sup>/4<sup>th</sup> March  
New York – 11<sup>th</sup>/12<sup>th</sup> March

Email:

[aws-cnap-team@amazon.com](mailto:aws-cnap-team@amazon.com)



**IBC Microsite**  
Blogs, GitHub Links,  
Reference Architecture



## Breakfast Roundtable

Table 6  
Tomorrow, 7:30am

**Let's connect!**



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