

# **NETS 2025**

# Smarter ingest workflows

Benjamin Desbois







# **Industry Trends Driving Media Transformation**

# Platform Fragmentation & Multiformat Complexity

Multiformat delivery across fragmented viewing platforms

### IP & Cloud-Native Transition

Hybrid infrastructure reshaping media pipelines

#### Rise of Live & Remote Production

Real-time collaboration across distributed teams

### Al-Driven Automation & Metadata Enrichment

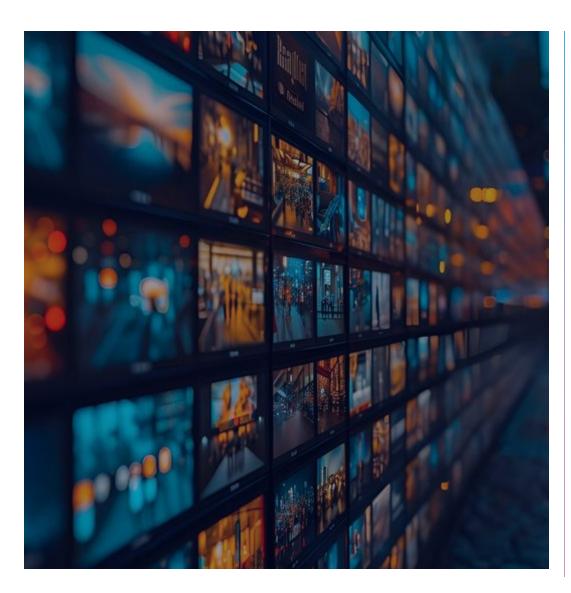
Workflow intelligence and practical automation for QC, metadata, and search

# Demand for End-to-End Observability

Visibility across contribution, playout, and OTT delivery is mission-critical



# Efficiencies in today's content supply chain



Automate where you can

Go faster and be more flexible

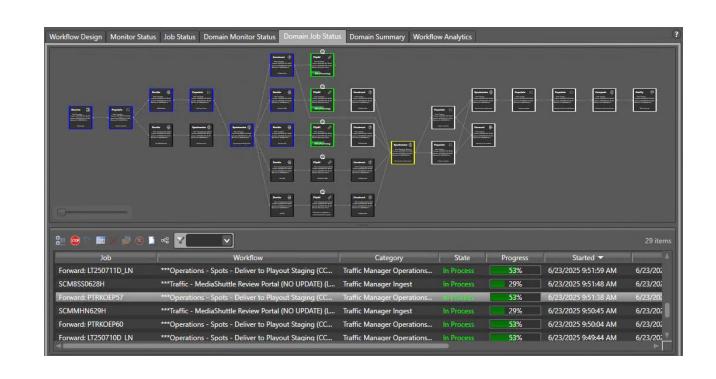
Be more cost conscious and storage efficient

Let AI do the dirty work to reach further

Reduce errors, learn and apply learning

### Consolidate - Automate the not so simple

120 to 1





### Go faster

Big time savings upon ingest and processing

# **Cloud Repatriation**

Do you understand your costs and can you do something about it?



# **Archive optimization**

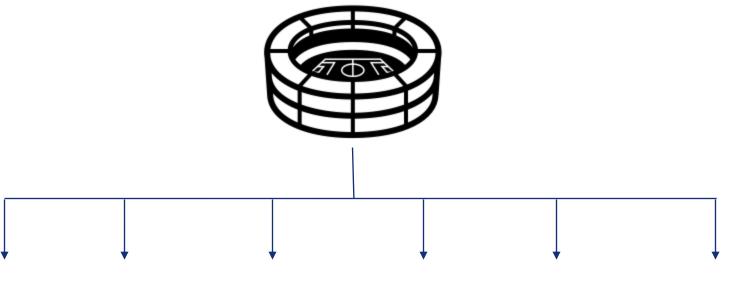
27%

# Savings on storage



### **Nose to Tail**

Extract every last drop of value from feeds And ignite fan engagement



Team arrival Multiangle feeds

Pre-match Interviews Warmup

Postmatch Localization



### Time to Value

"I created a digital copy of myself that works 24/7 and sends me notifications when things are done"



# Can Al help?

### Let it do the dirty work

Auto generation of time-based metadata

Quality control

Localization

Automate change of credits and logos

Automatic highlights



### **Key questions for any Ingest Challenge**

#### What are you ingesting?

- SDI or ST2110 on Prem
- SRT or NDI in the Cloud
- Sony, Panasonic, Arri camera cards
- IPhone or Android Files

This tends to be Table-Stakes where density/cost are factors.

#### What are the next steps in the workflow?

- Proxy Generation
- Format Normalization to House or Edit formats
- Send to On-line, NAS, Tape or S3 buckets
- Add Meta Data to Log, Summarize, Categorize, make searchable, etc.
- Check in to the MAM or PAM
- Caption, Translate, etc.

This is where there can be quite a difference between solutions and where we help saving time, removing manual steps, glueing the right tools together

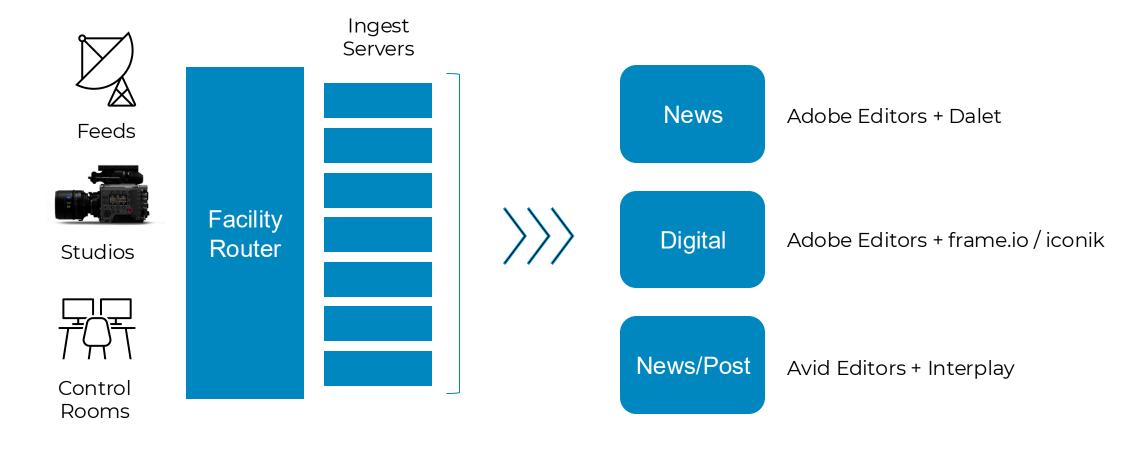
#### What is the end goal?

- Sometimes we refer to this as "outgest"
- Deliver to the Control Room, Master Control, Origin Server, etc.

Thinking about the entire process led to the inclusion of playout for key solutions

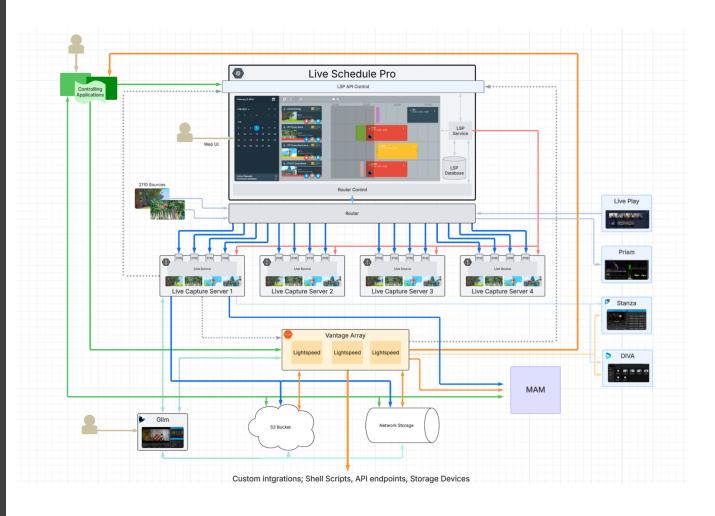
### Centralized Ingest in a large facility

Organizations moving multiple points of ingest to a single operation feeding different departments



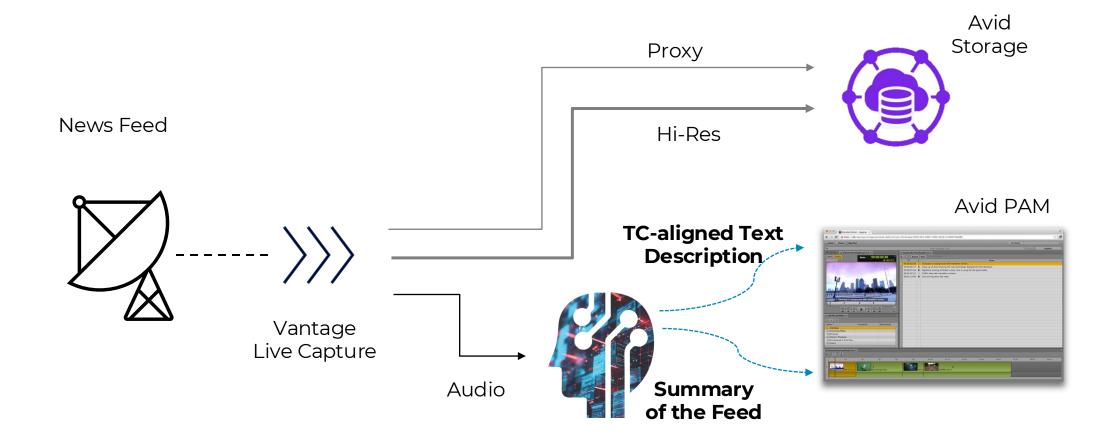
Ingest is managed as a pool of flexible resources that can be configured To the needs of the different departments with unique MAM/PAM deployments

# Large Scale ST2110 Live Ingest



- 128 channels of 1080p using 8 x 8 channel Live Capture Servers over ST2110
- Direct ingest to editing with growing file support
- Concurrent Proxy generation for MAM review
- 3<sup>rd</sup> Party orchestration scheduled events through Live Schedule Pro API
- Intelligent Channel
   Management eliminated
   resource conflicts
- Al used on prem to generate metadata

### Practical use of AI to log news feeds



The captured asset shows up in Interplay with Searchable metadata ... but it works the same way with other MAM systems

### **Capture Environments Paris 2024**

Live Capture deployed to NBCS HQ, Olympic Venues and The Cloud (AWS)



#### **NBCS HQ**

Stamford, CT

28x LSL Capture C3 (4 channel ingest per system)14x LSL Capture C5 (6 channel ingest per system)

Discrete, standalone systems

Telestream's Live Capture hardware and software solutions were the mezzanine ingest devices in use for the Olympics

#### **The Cloud**

AWS us-east-1

**24x** Software Only (2 channel ingest per system) G3.16XL Instance Type

Discrete, standalone systems

#### **Athletics Venue**

Stade de France

2x C5 (6 channel ingest per system)

Discrete, standalone systems

#### **Gymnastics Venue**

Bercy

2x C5 (6 channel ingest per system)

Discrete, standalone systems

#### **Swimming Venue**

La Defense Arena

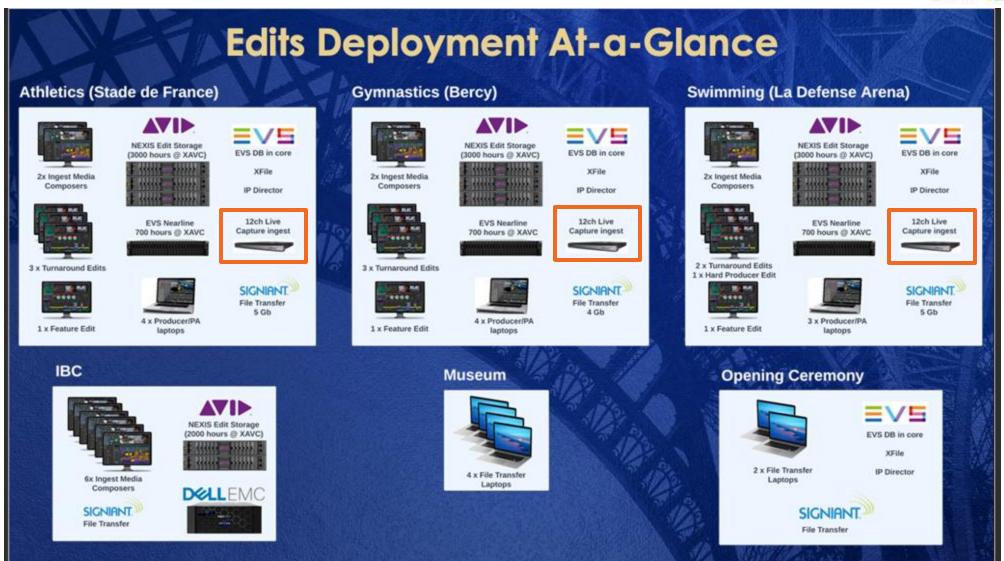
2x C5 (6 channel ingest per system)

Discrete, standalone systems

### **Capture Environments Paris 2024**

Venue Deployed Live Capture systems at a glance

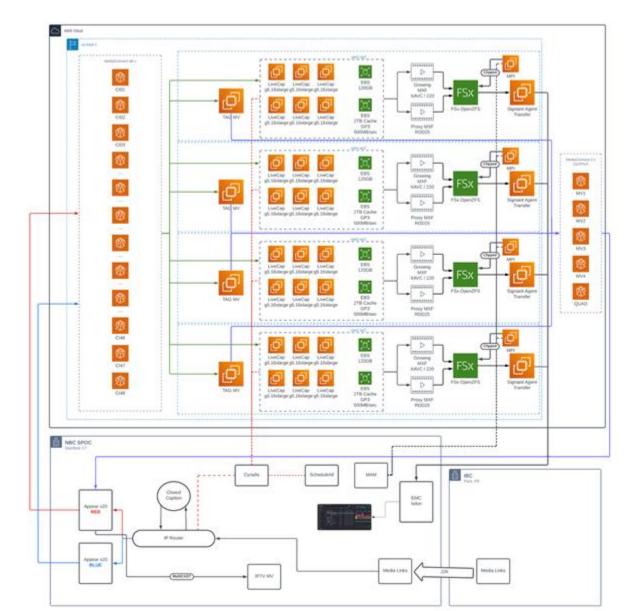




# **Live Capture Environments**

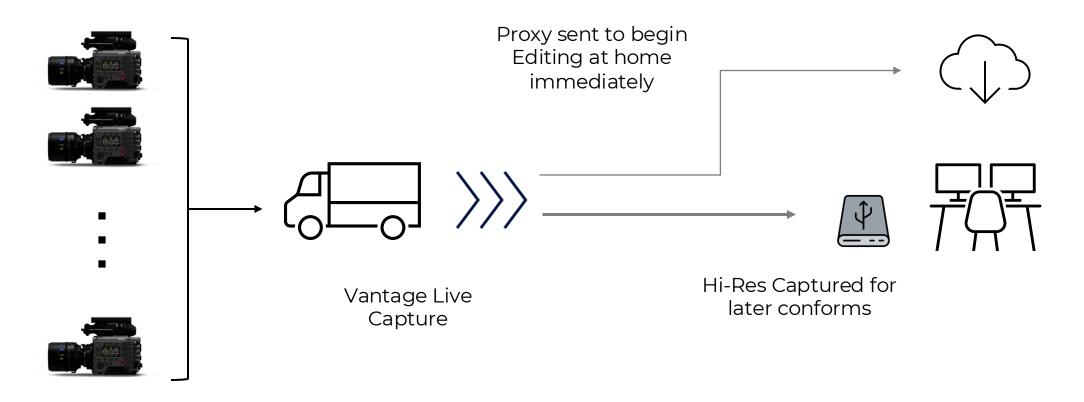
Cloud (AWS) deployed capture system diagram





### **Mobile UHD Capture with Remote Edit**

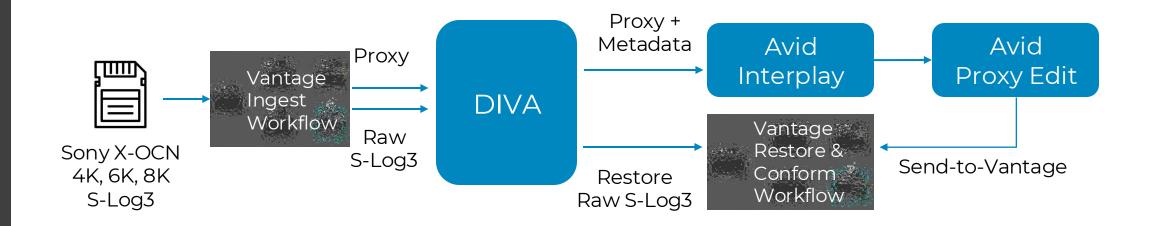
For Concerts, Reality TV or Sport where multi-cam fast-turn can be done on tight budgets



18 UHD Cameras 23.98p or 25p

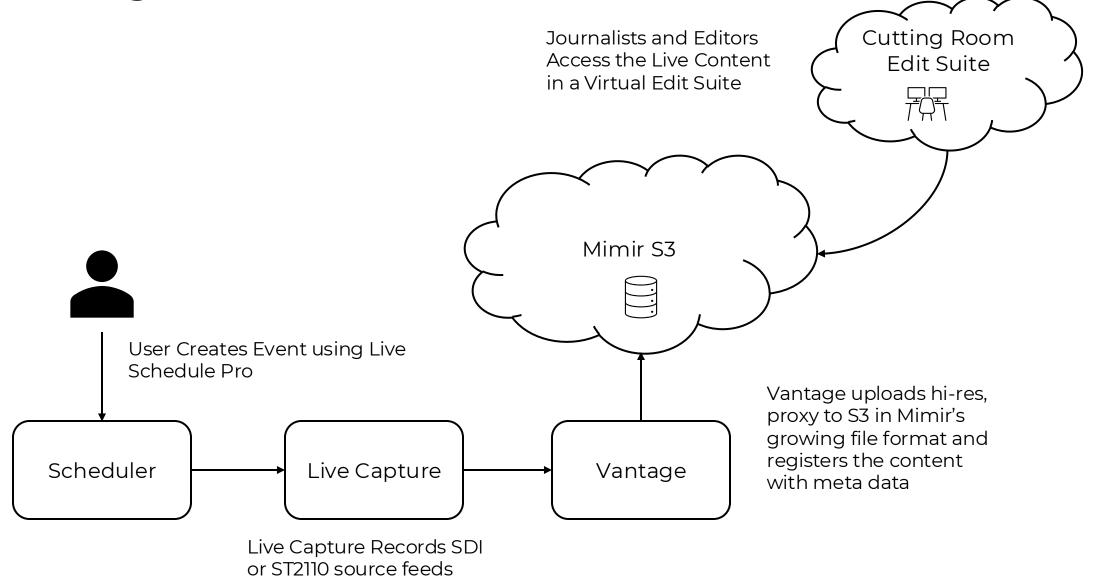
The edit process begins immediately as Vantage checks in content to the MAM...and later associates the Hi-Res to create the finished product

### Vantage + DIVA workflows at Large Post Facility

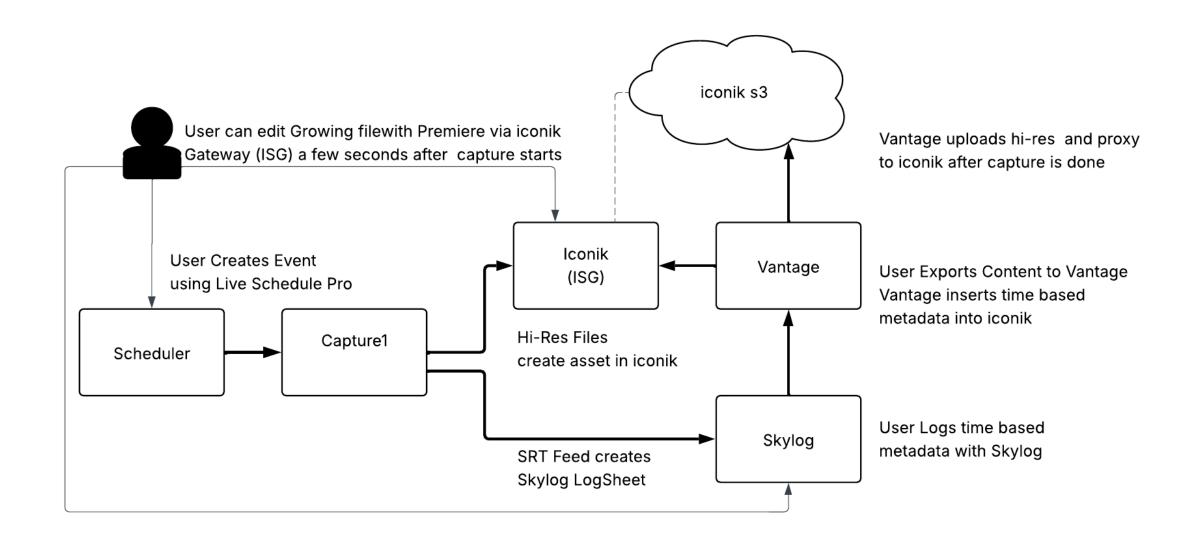


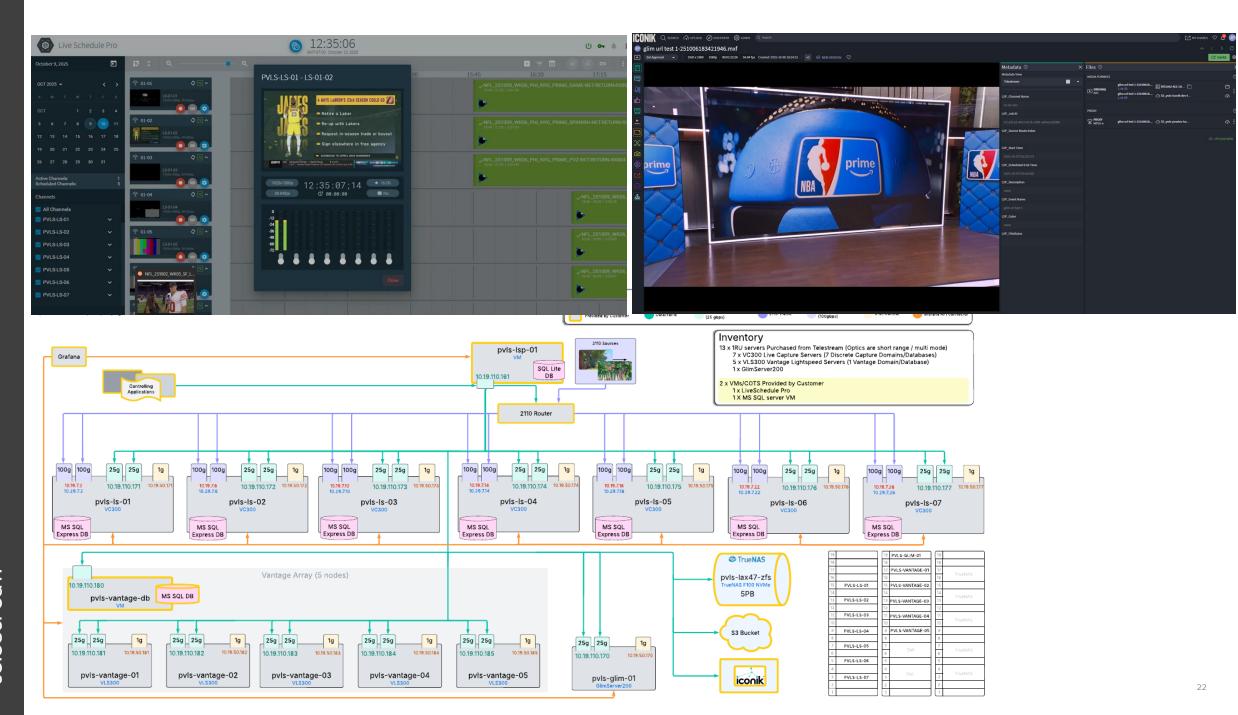
- Ingest & Processing stores content in its native format, generating a proxy for MAM and editing
- Source files are registered in MAM with proxy and meta-data pointing to the originals in DIVA
- Content is edited in Proxy and then conformed with a Vantage workflow that only restores what's needed
- The customer uses cost effective tape storage for very large files and only processes them with more expensive compute when needed

### **Live Ingest with Mimir**

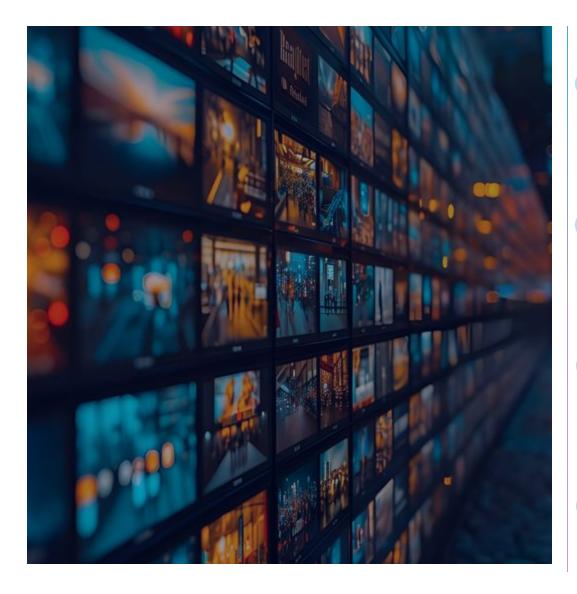


### Sports Ingest with Skylog and iconik (logging + MAM)





# **Final Thoughts**



Automate

Consolidate

Optimize

Al

# telestream

# **THANK YOU**











