

Deploying **VPUs at the Edge** for Improved Video Encoding, Density and Efficiency



TREAMING
SUMMIT



NABSHOW[®]
Life



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NETINT





DELIVERY



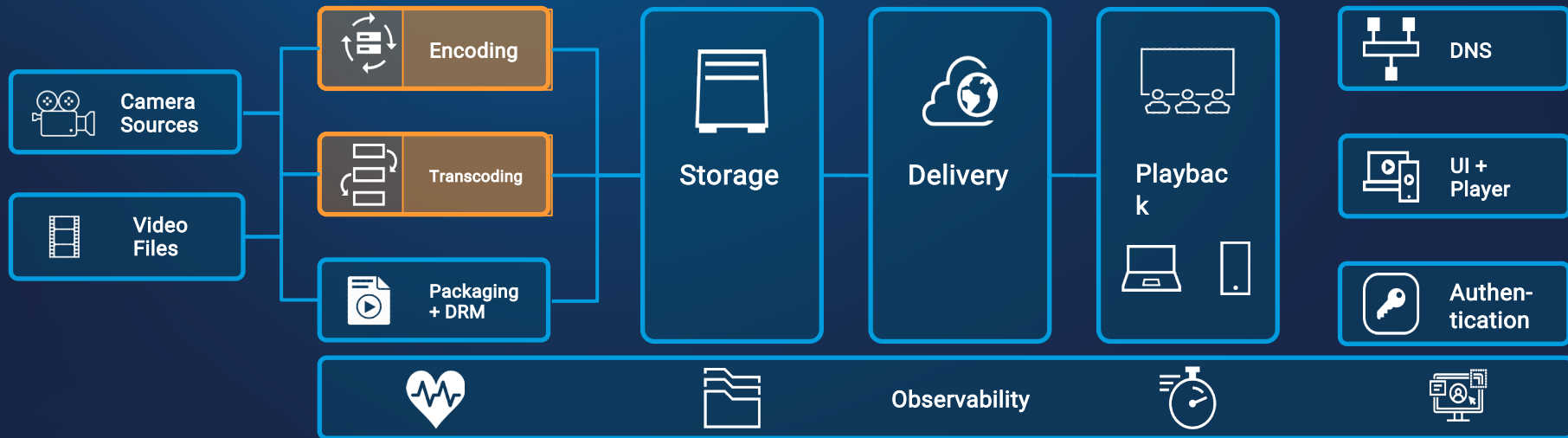
COMPUTE



ECOSYSTEM

Our Road to Building the
Media Cloud

Full-Stack Media Cloud



Driving Efficiency with VPU



CPU

16 GB RAM - 8 CPU
Dedicated Plan



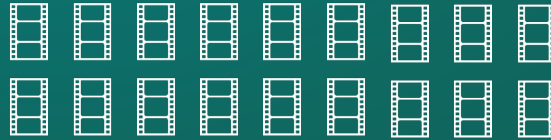
\$72

per stream per month

Egress
Pricing

VPU

2x Quadra T1U
Accelerated Plan



\$15.55

per stream per month

\$5 per TB
(\$0.005 / GB)



VT1

1x Xilinx U30
Media Accelerator
Plan



\$62.72

per stream per month

Egress
Pricing

\$90 per TB
(\$0.09 / GB)



Deploy Accelerate Compute on Akamai Cloud

Run VPUs in the cloud for the first time
– starting at **\$0.42 per hour**.

Now Available

Los Angeles, USA

Miami, USA

Frankfurt, DE

Chennai, IN

Melbourne, AU



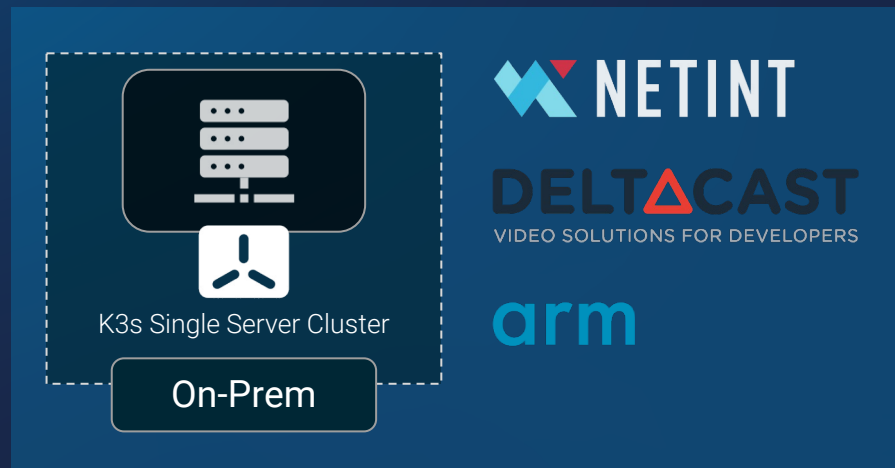
Talk with VPU Media Experts at NAB

Akamai Lounge - W234LMR
(West Hall, 2nd Floor)

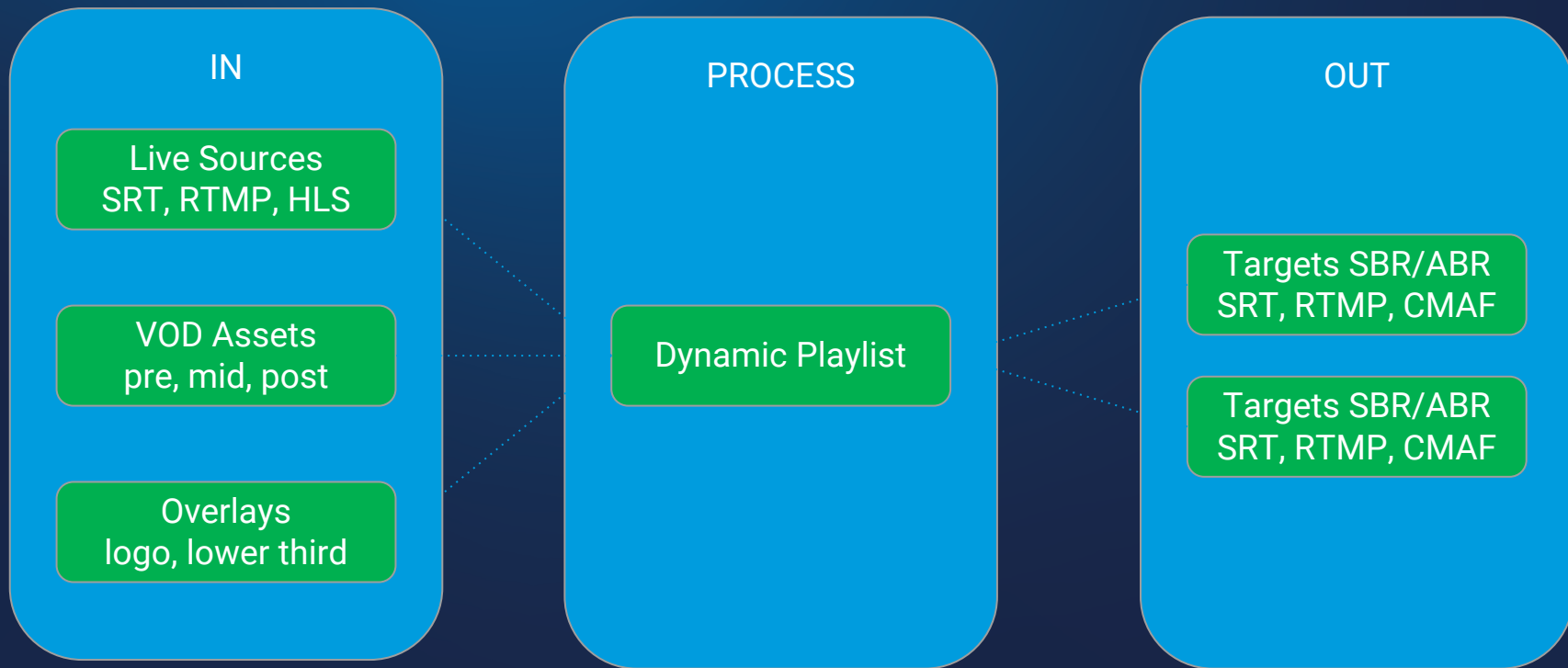
NETINT Booth - W3531



On-Prem VPU Setup



G&L Modular Live Playout



Media Library



File Format Add

- ```
> wdr-testclips-
 various
> wdr-
 sportschau-
 loops
> gl-test-folder-
 2-longname
> gl-test-folder
1280x720p50_6b
ar_6ch_x264_hig
h422_yuv422p_in
tra_bit112M_max
112M_buf112M
```

## ▼ Livestreams

| Available livestreams | Status | Add |
|-----------------------|--------|-----|
|-----------------------|--------|-----|

SDI OK

## ▼ Playlists

| File | DurationLoad |
|------|--------------|
|------|--------------|

- ```
> automationLis 02:40:30 [→]
t

> automationLis 02:40:30 [→]
t
```

testtest STARTED ok 02.04.2025 13:13 - 17:08 ID: 67ed1ab6d2b2b412d637...

PREVIEW SDI

SDI

Audio meter >

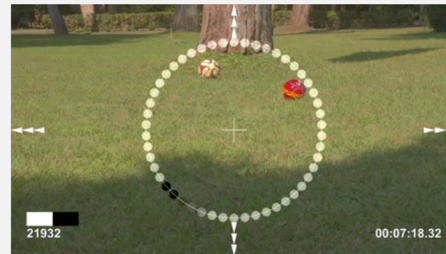
PROGRAM OUT SDI

Audio meter >



Playlist: Initial

Graphics



Played

02:57:17.25

Remaining

00:00:00.00

Output settings

 Save playlist

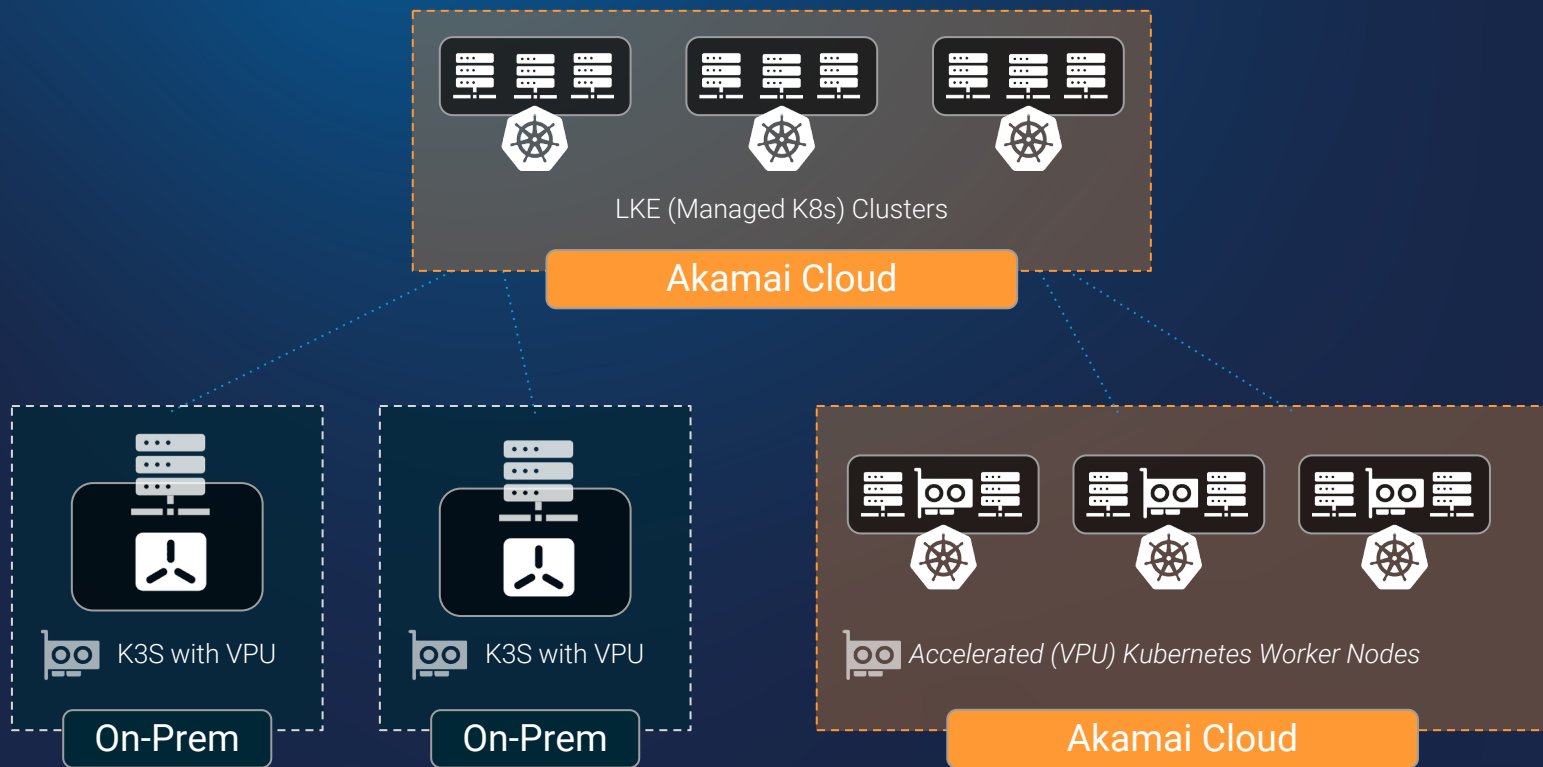
 Delete

☐	Name	Type	Duration	Settings	Actions	
☐	IBC_Panel_Hydrolix_edit	   VOD	00:01:20		<button>Preview</button> <button>Take</button>	...
☐	testupload	   VOD	00:00:00		<button>Preview</button> <button>Take</button>	...
☐	SDI	   LIVE - OK	00:00:00		<button>Preview</button> <button>Take</button>	...
☐	bbb_sunflower_1080p_60fps_normal	   VOD	00:10:34		<button>Preview</button> <button>Take</button>	...
☐	BigBuckBunny	   VOD	00:09:56		<button>Preview</button> <button>Take</button>	...
☐	ElephantsDream	   VOD	00:10:53		<button>Preview</button> <button>Take</button>	...
☐	gleich_gehts_weiter_-_sportschau	   VOD	00:00:20		<button>Preview</button> <button>Take</button>	...

G&L Hybrid Approach: everything on K8S / K3S



G&L Hybrid Cloud Live Streaming Application



G&L customer: European Parliament

5 On-prem Data
Centers

2 Akamai
Connected Cloud
locations

9 40x40 SDI
matrices

30 live channels

32 audio tracks per
channel

200 concurrent
social media
streams

Clipping &
email w/ MP4 link

15 years of legacy
archive

21 200 legacy
events

89 200 hours of
content

Historically grown
metadata &
encoding
configurations

G&L Benchmark

Input 1080p50, encoding in HEVC only, 4 rungs

Width	Height	Bitrate (Kb/s)	CRF
1920	1080	3 200	23
1280	720	2 000	23
960	540	1 000	23
640	360	500	23

G&L Benchmark - Premium CPU vs. Accelerated (VPU)

1 ladder 4 x HEVC

Akamai Cloud Premium 32 GB

32 GB RAM, 16 CPU cores

\$0.52/h

1 ladder 4 x HEVC

1 ladder 4 x HEVC

1 ladder 4 x HEVC

1 ladder 4 x HEVC

1 ladder 4 x HEVC

1 ladder 4 x HEVC

Akamai Cloud NETINT

Quadra T1U VPU x1 Medium

24 GB RAM, 12 CPU cores

\$0.53/h



Q&A