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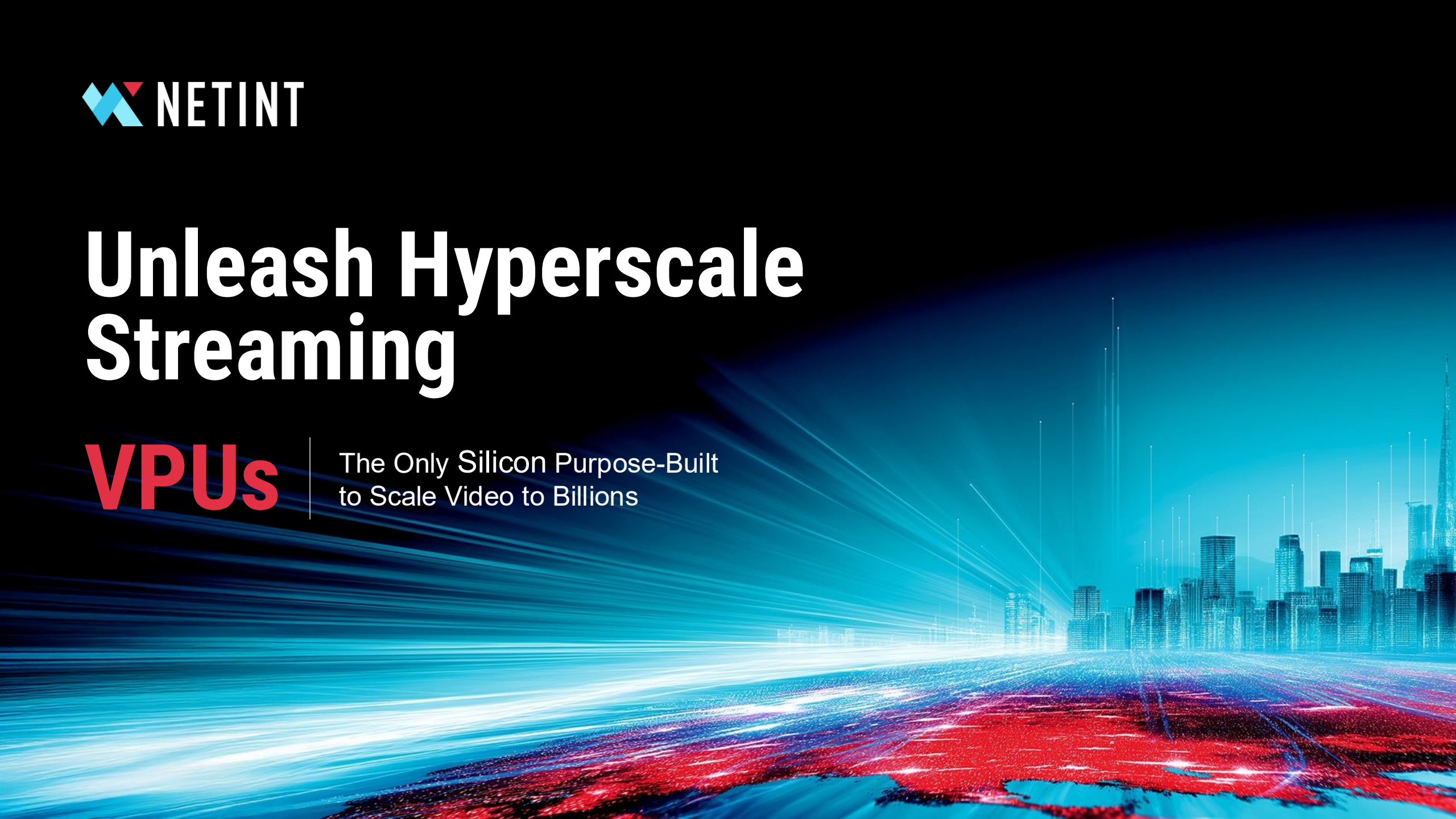
Unleash Hyperscale Streaming

VPUs

The Only Silicon Purpose-Built to Scale Video to Billions

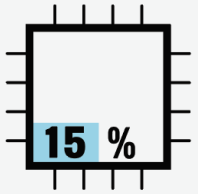


Streaming is broken because it's built with general-purpose hardware.

GPUs dabble in video. CPUs choke on it.

Neither was built for the demands of hyperscale streaming. They're slow, inefficient, and expensive.

GPU



15% Video Encoding
85% AI Inference

CPU

0% Video Encoding
100% General Compute

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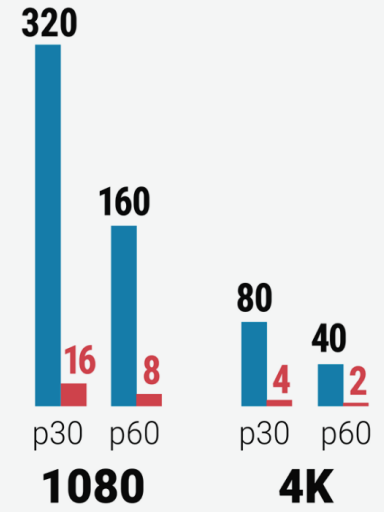
MORE INFORMATION: netint.com/go

VPUs are the Only Game in Town.

VPUs don’t dabble in video. They dominate it.

100% video-dedicated, delivering the scale, speed, and efficiency that CPUs and GPUs can’t touch.

NETINT VPUs are the only commercially-available silicon built for hyperscale streaming.



VPU vs **CPU**

Video streams encoded per resolution

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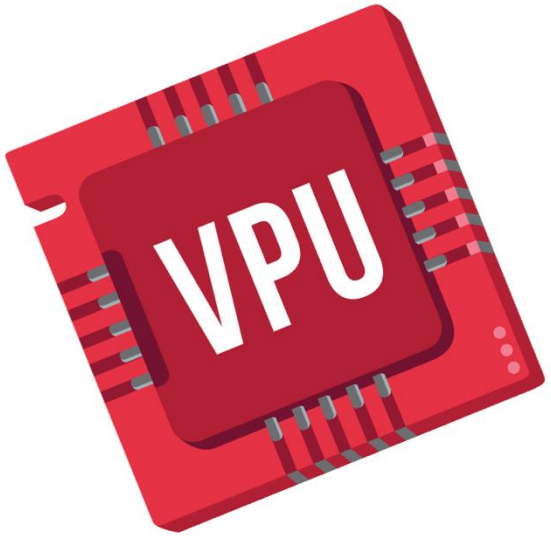
VPUs aren't an upgrade. They're a revolution.

The only silicon purpose-built to scale streaming to billions.

More than 150,000 VPUs have encoded over 1 Trillion minutes of video to date.



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We are the VPU Category Creators.

1st Gen ASIC	2018	2019	2021
2nd Gen ASIC	2021	2022	-
ASIC with AV1	2021	-	-
ASIC with AI	2021	-	-

TECH
Award Winner 2024
Design & Deployment of Efficient Hardware Video Accelerator for Cloud

160+
Engineers from leading silicon companies

3rd Gen VPU
Taping out in 2026

Founded in 2015
Vancouver, HQ + R&D
Toronto, R&D

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VPU Use Cases

VPU Use Case

Infrastructure-as-a-Service (IaaS)

- Significant and impressive cost reductions in monthly subscription costs and egress fees in a VPU infrastructure
- Enable high-density decoding and encoding in the cloud

VPU Plan	$/mo	$/hr	T1U VPUs	CPUs	RAM	Storage
Small	$280	$0.42	**x1**	8	16 GB	200 GB
Medium	$352	$0.53	**x1**	12	24 GB	300 GB
Accelerated	$488	$0.73	**x2**	12	24 GB	300 GB

VPUs delivered:

- Mature and proven high-density video transcoding solution in cloud with a large customer base
- Virtualization with PCIe VF/PF to separate management from transcoding service

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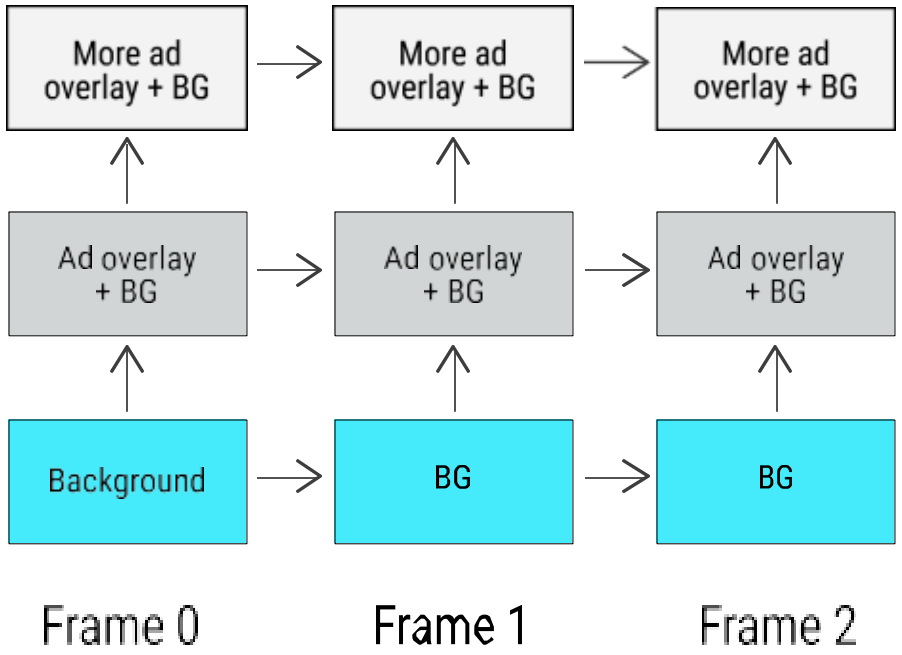
VPU Use Case

Multilayer AV1 Encoding

Multiple layers for creative variations of ads and effects



VPUs delivered:

- Up to 4 layers (BL, EL1-3)
- Customizable reference structure
- Realtime 1080p60 performance

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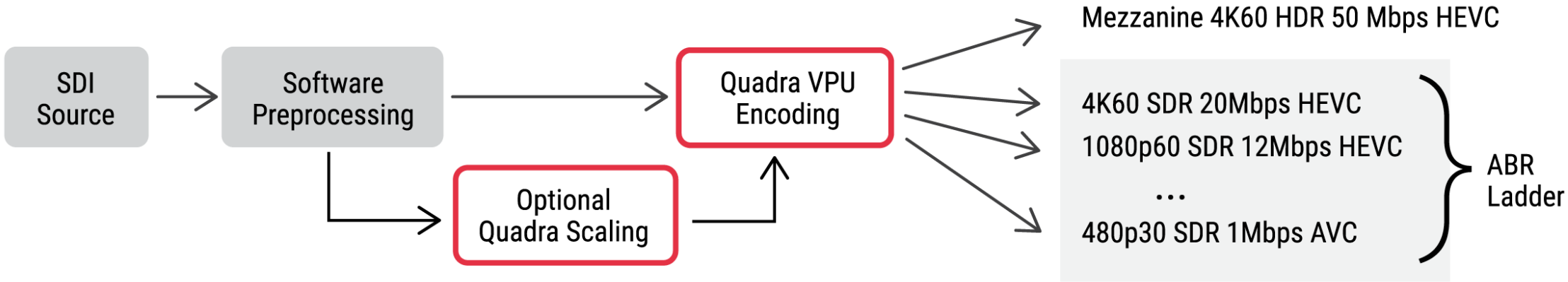
VPU Use Case

Live Contribution Encoding

- SDI Source Capture, high-quality, high-density
- Generates mezzanine stream and ABR ladder simultaneously
- Reduced latency and better quality-control compared with cloud ABR ladder generation

VPUs delivered:

- Encoding (e.g. 4K60 10-bit HEVC)
- ABR ladder generation (e.g. 4K/1080p/720p/480p with various codecs and bitrates)



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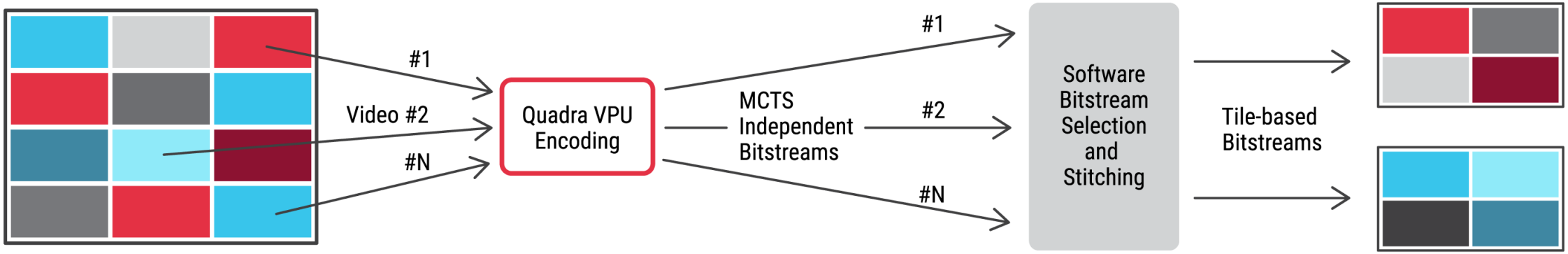
VPU Use Case

Multiview Encoding

- For live streaming multiple games simultaneously in user-defined quad split screen
- YouTube, NBA etc have this feature, ideal for fantasy sports, watching and betting

VPUs delivered:

- Stitching 4 independent bitstreams into one tile-based bitstream
- MCTS encoding to prevent motion vectors from crossing tile boundaries
- Encode only once for each stream, not for each combination



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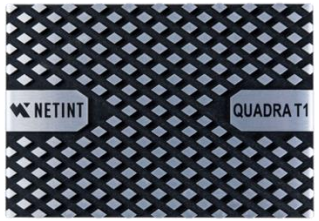
VPU Products

Quadra VPU Family.

- Encodes 32 x1080p30 per chip: AV1, HEVC, H.264
- Decodes 48 x1080p30 per chip: VP9, HEVC, H.264
- 4K & 8K HDR with scaling and graphics engine
- 18 TOPS AI engine per chip

T1U

U.2 x 1 chip



T1M

M.2 x 1 chip

T1A

AIC x 1 chip

T2A

AIC x 2 chips

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Quadra Video Server.

Offload video processing functions like deinterlacing and MPEG-2 decoding to the CPU while VPUs supercharge your encoding operations.

320

simultaneous live 1080p30 encoding sessions at ultra-low latency in a compact 1RU server

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Quadra Mini Server.

- **Ideal for mobile broadcast** on-site event recording and distribution of single stream with edge processing.
- **Push multiple simultaneous streams** to social sites.
- **Includes T1M Smart VPU**
- **Includes SDI capture card inside**

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What about the cloud?

Cloud Premium CPU vs. Accelerated VPU

G&L SYSTEMHAUS

Akamai Cloud Premium 32 GB

32 GB RAM, 16 CPU cores

$0.52/h

1 ladder 4 x HEVC

1080p30

Akamai Cloud with VPUs

Quadra T1U VPU x1 Medium

24 GB RAM, 12 CPU cores

$0.53/h

6 ladders 4 x HEVC

1080p30

NETINT Akamai

Here's what you get with VPUs:

Compared to our existing CPU Plan:

- About 75% less cost
- 9X more stream throughput
- Lowest egress costs in the industry

	Plan	# Channels	Per stream $/mo	Egress Costs
Akamai	**CPU** 16 GB RAM - 8 CPU Dedicated CPU Plan	2	$72	**$5** per TB ($0.005 / GB)
Akamai	**VPU** 2x Quadra T1U Accelerated VPU Plan	18	$15.55	
aws	**VT1** 1x Xilinx U30 Media Accelerator Plan	8	$62.72	**$90** per TB ($0.09 / GB)

Tame Data Egress Charges in the Public Cloud
Gartner, September 2023

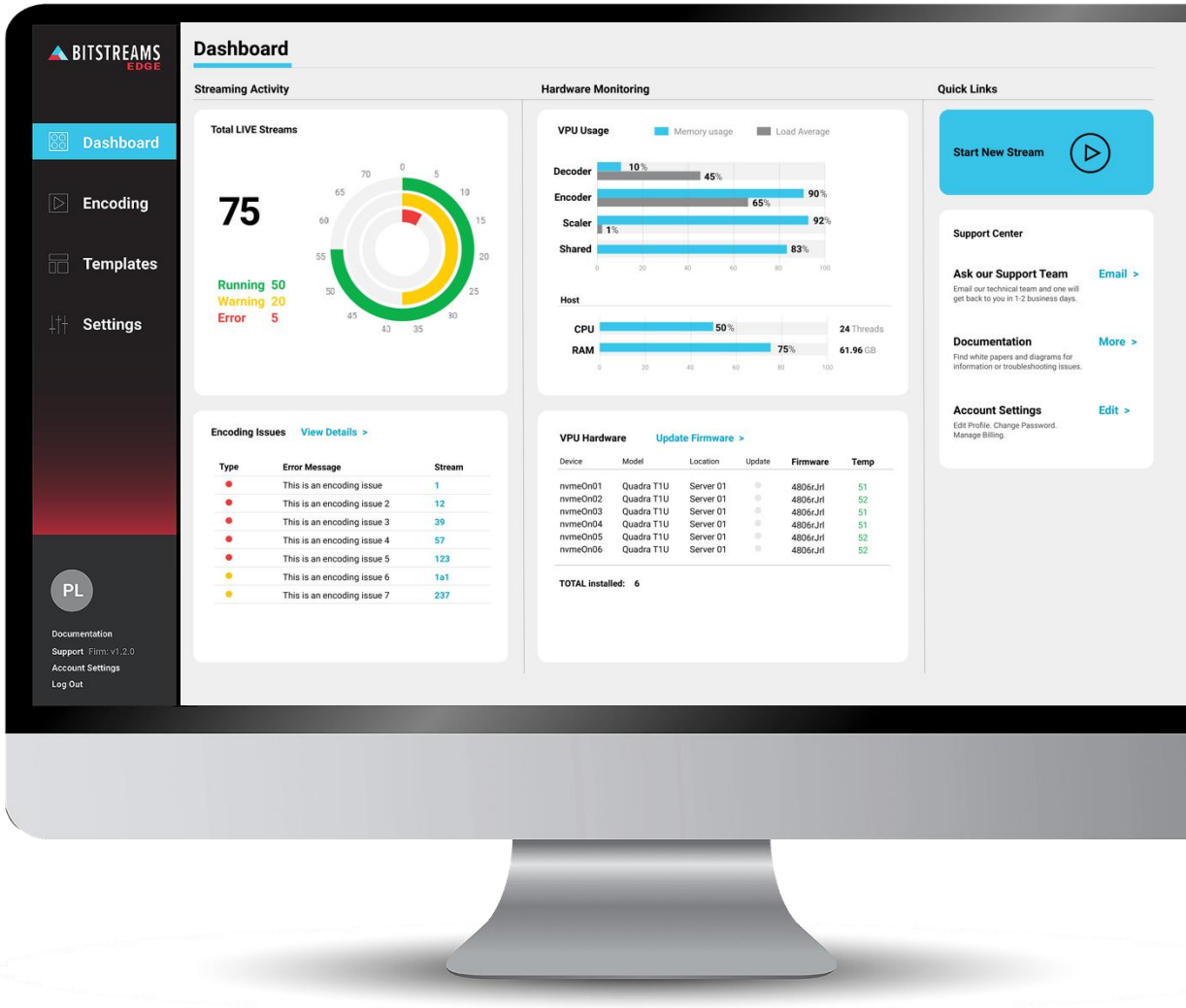
Up to 15%
average annual cloud spend on egress fees.

BITSTREAMS

FFmpeg power without the pain.

NETINT's Bitstreams™ replaces command lines with a friendly dashboard, ready-made templates, and always-on VPU optimization.

Manage, monitor, and scale without coding.



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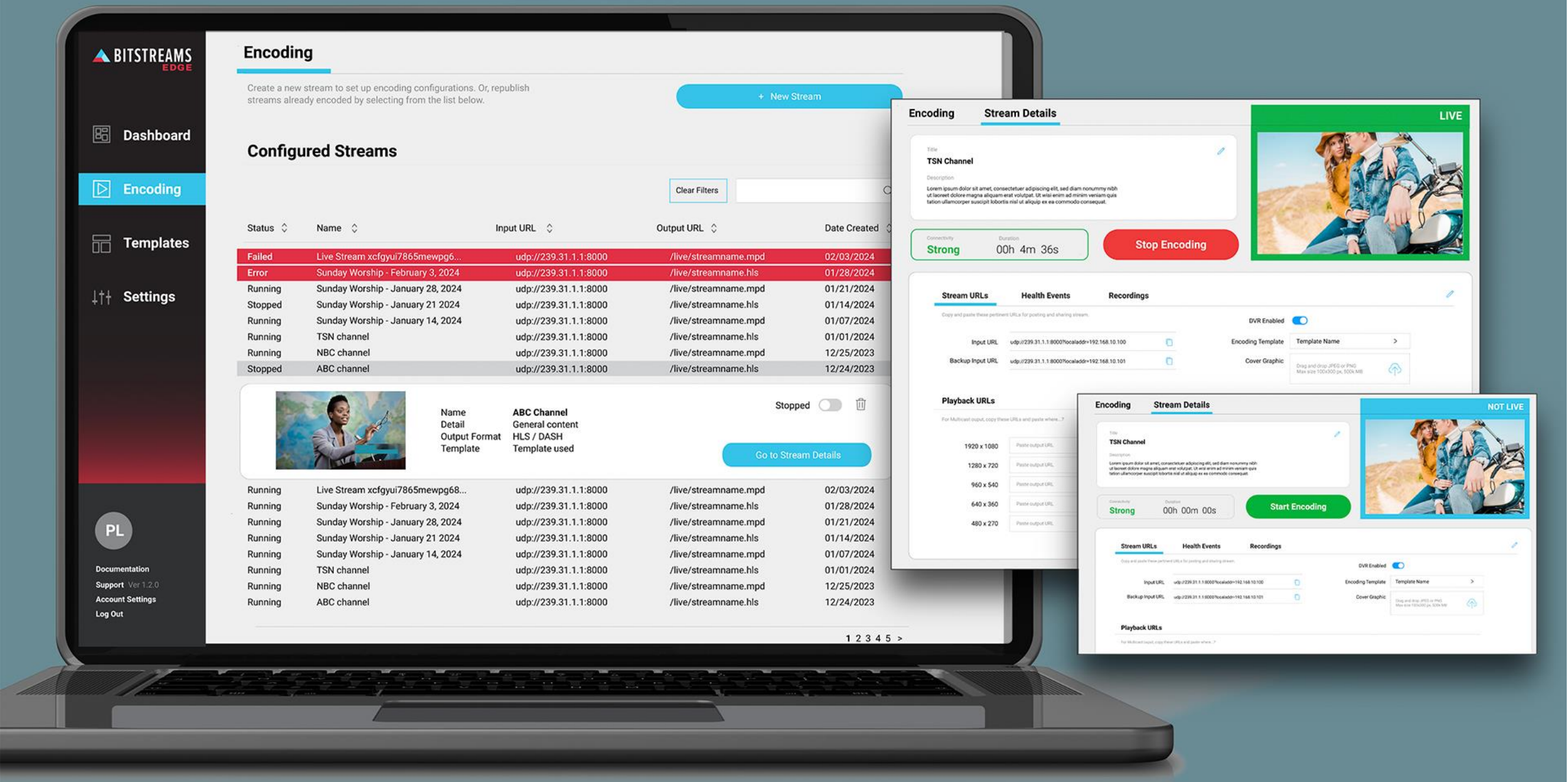

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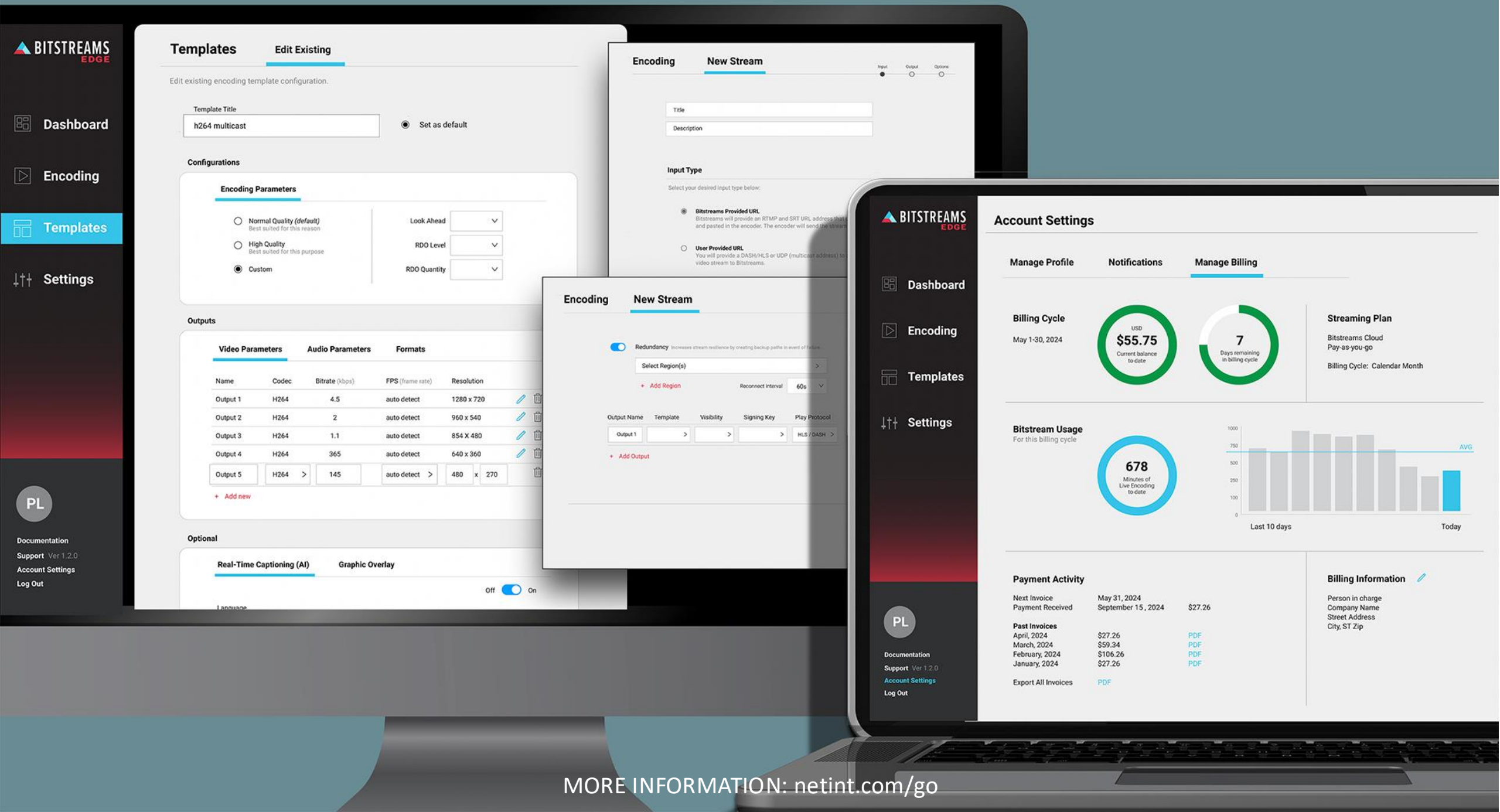

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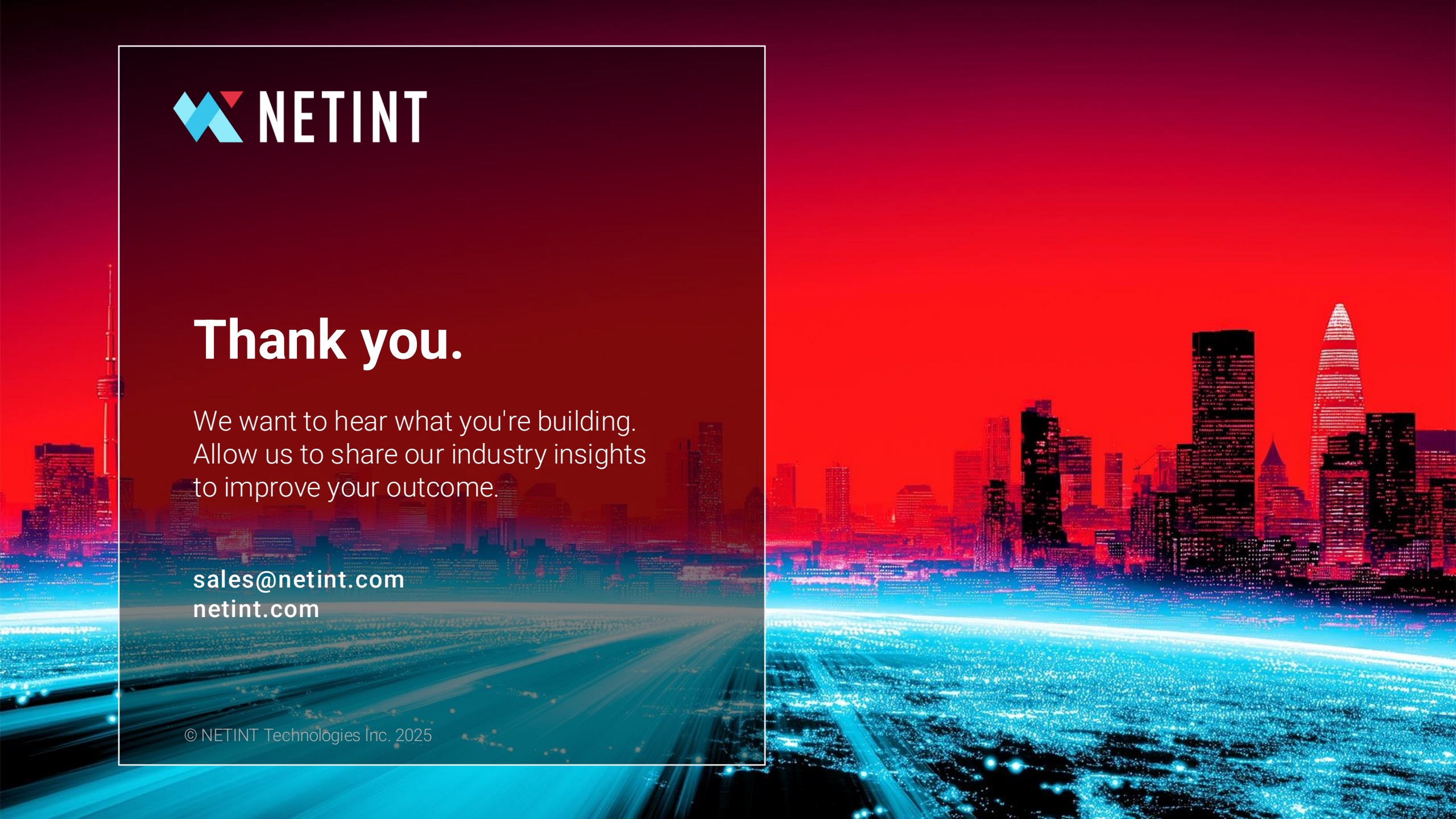
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Thank you.
We want to hear what you're building.
Allow us to share our industry insights
to improve your outcome.
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