



# MOBII ULTRA LOW- LATENCY VIDEO SERVICES

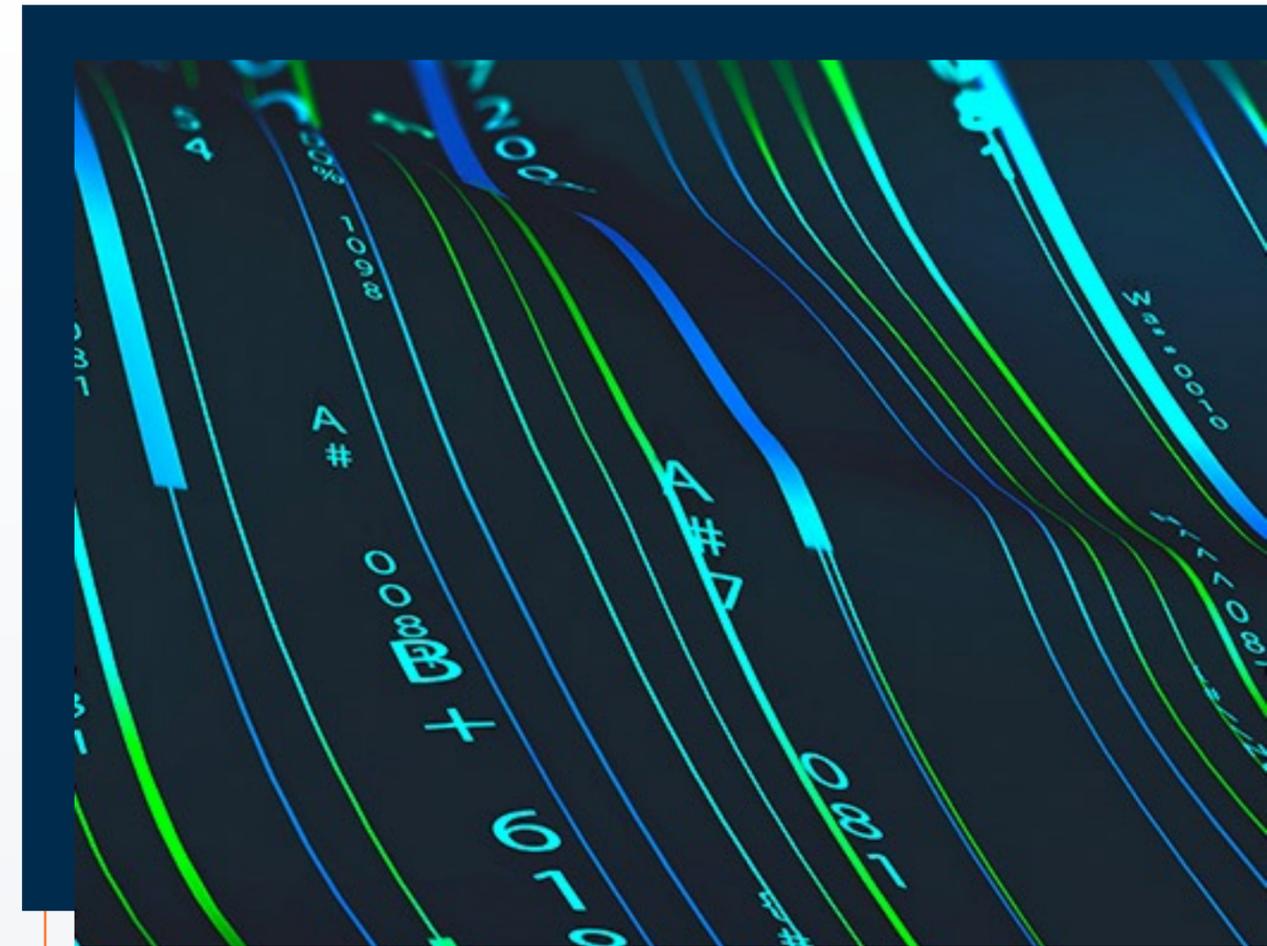
Scalable live streaming video at sub <1 second latency

31 MAY 2022

**mobii**

# Solve your live streaming latency with Mobii and Azure

Mobii and Azure reduce your streaming latency to less than 1 second compared to today's legacy live streaming latency, which can be anywhere from 5 to 60 seconds



## CHALLENGES

Live streaming's delay is alienating consumers and preventing the industry from innovating with real-time services

## IDEAL SOLUTION

Our solution integrates into your current workflow, reducing latency to less than 1 second, empowering you to create enriched and active real-time user experiences like multi-angle video selection, and interactive data overlays

## DESIRED OUTCOMES

Our solution ensures the fastest delivery of scalable live streaming video unlocking real-time services and a better user experience



# mobii

## MOBII ULTRA LOW-LATENCY SERVICES

Latency matters, and that is why we've re-engineered it to deliver innovation with real-time services and increased performance, while adapting to your existing workflows

# 1

### Speed

Bring in sub <1 second ultra low - latency streaming that unlocks new and improved workflows

# 2

### Synchronization

Data, Video, and Audio, perfectly frame-synchronized to deliver unique experiences for the modern consumer

# 3

### Scalability

Deliver standardized and compliant streams globally at scale via existing CDNs and video players

# Mobii's Ultra Low-Latency Services & Microsoft Azure

We've created a media services environment that harnesses Azure's power in order to deliver Speed, Synchronization, Scalability, and Stability and making it easy to encode, store, and distribute your streams anywhere in the world

## VIRTUAL ENCODING

Leveraging Azure's virtual machines to deploy mobii-enabled virtual encoders on-demand within your Azure environment

## AZURE REGIONS

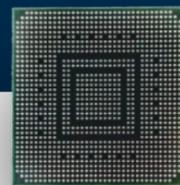
Mobii solves global distribution latency by leveraging dedicated pipelines between Azure Regions that egress to multiple CDN's as a last-mile solution

## BACKED BY THE CLOUD

Using Azure's proven IaaS platform and Mobii's Microblock technology, we ensure the hyper reliability and self-healing of your video streams

# Ingest, Encode & Deliver from anywhere to everywhere in less than a second

Broadcasters, Media Publishers, and Smart Stadiums can now ingest in the cloud, on-premises or on-the-go to deliver real-time streaming content with rich innovative services for viewers and professionals alike.



## VIRTUAL

With on-site Microblock enabled encoders, multiple streams can be delivered to remote production studios, globally, in real-time and in different output format



## ON-PREMISES

The Smart Encoder is designed for semi and permanent based on-site installation. Deployed into sport stadiums/arena's, Broadcast production sites, Data Centres and Outside Broadcast vehicles, the Smart Encoder will ingest a variety of input video sources such as SDI, NDI, SRT, MPEG-TS.



## ON-THE-GO

The One Encoder is a compact, portable encoder designed for "Drop & Go" deployment. Powered with Microblock Technology, this encoder will generate Dash and HLS using CMAF, with an Encoding latency of just 50ms and a global End-to-End latency of less than 1 second.

# Our technology unlocks the true potential of video streaming

*Microblock Technology* has revolutionized the way video streams are synchronized, encoded & distributed globally. Our technology ingests a variety of video sources and generates compliant CMAF in DASH /HLS outputs that integrate into existing CDN's and video players.

## SYNCHRONIZER

The Synchronizer ingests a variety of video source formats and converts these to a Microblock protocol. Individual Microblocks are perfectly time synchronized at ingestion.

## REAL-TIME DISTRIBUTED ENCODING

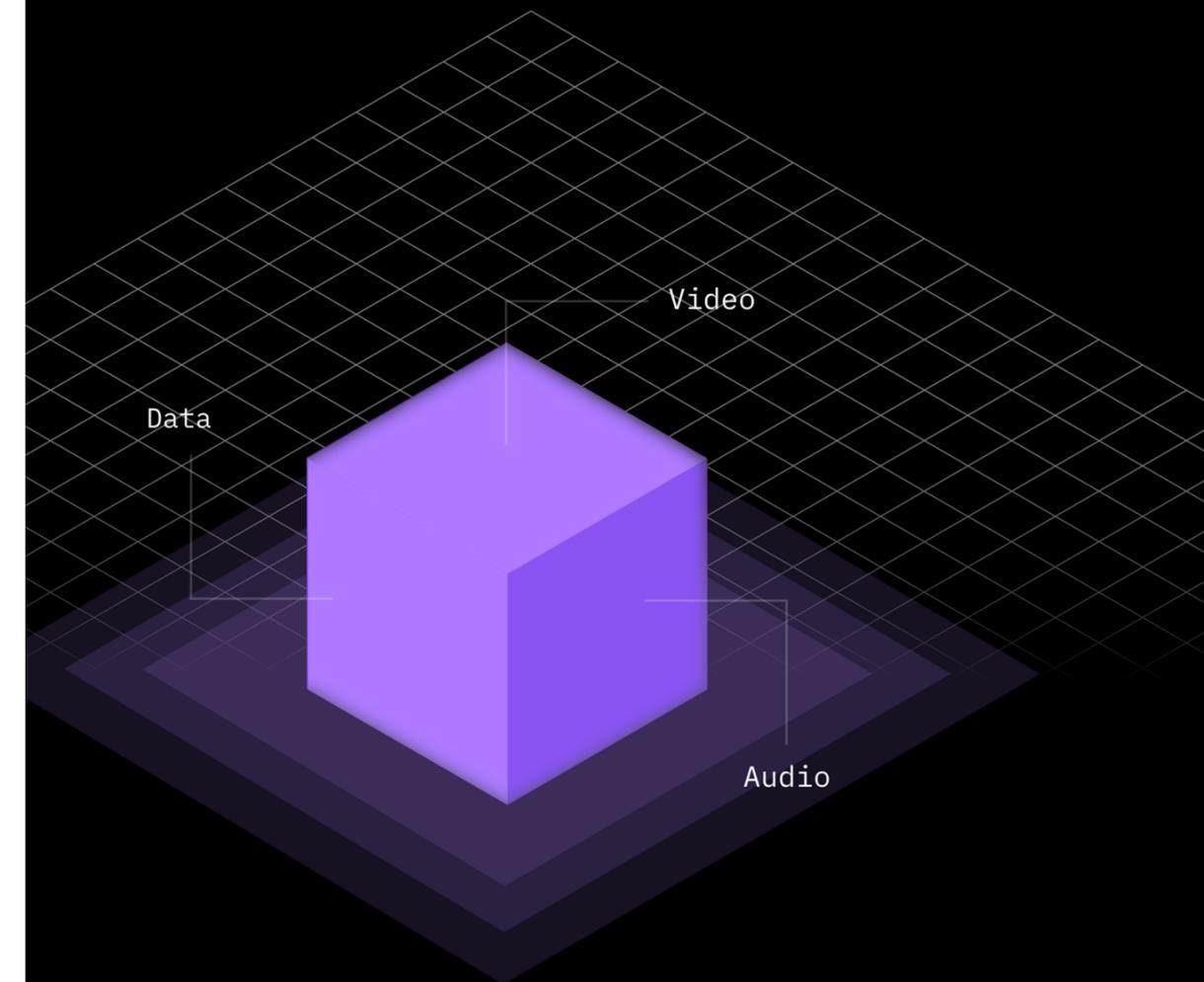
Microblock Technology has enabled Real-Time Distributed Encoding, where a cluster of encoding nodes work together to encode individual Microblocks. This offers a significant performance gain over existing linear encoding pipelines.

## CO-ORDINATOR

The encoded output remains wrapped in a Microblock protocol and ingested to a regional edge cluster in the cloud. From this regional edge cluster, the Co-Ordinator will move the Microblock stream in real-time to additional global edge clusters in the regions where content is to be consumed.

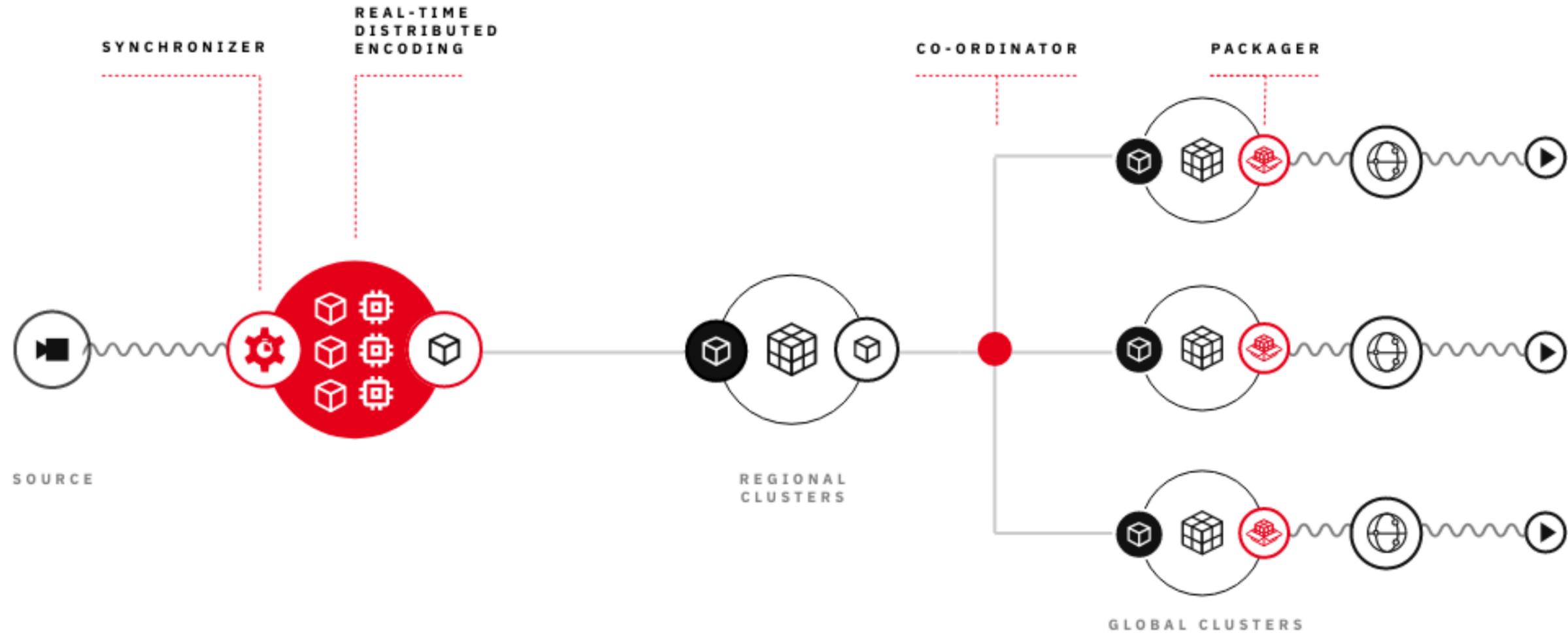
## PACKAGER

Once the Microblock stream has reached the closest edge cluster to where content will be consumed, it is packed into a CMAF (MPEG-Dash / HLS) Ultra-Low latency fragmented stream and egressed out to a regional CDN for last mile distribution to playback devices.



**mobii** MICROBLOCKS™

# MOBII MICROBLOCK ARCHITECTURE



**SOURCE**  
TO MICROBLOCK ENCODER



**MICROBLOCK EGRESS**  
FROM ENCODERS / CLUSTERS



**CLUSTER STORAGE**



**PLAYER**  
ULTRA-LOW LATENCY CMAF



**SYNCHRONIZER**  
INGEST / TIME-SYNC / ENCODE



**MICROBLOCK INGRESS**  
FROM ENCODERS / CLUSTERS



**PACKAGER / EGRESS**  
PACKAGER TO CMAF & EGRESS TO CDN



**CDN**  
EXTERNAL CDN (EG: AKAMAI)



# Customer success: Major League Rugby Match day services

“With Mobii, we have been able to support critical match day services that depend on reliable, ultra-low latency video distribution. The ability to deliver multiple frame-synchronized video feeds with sub 1-second latency, means that Television Match Officials and Medical teams can make key decisions when it matters most. This ability supports our vision to migrate critical match-day venue operations to fully remote workflows.”

-Nishant Nereyeth, *Major League Rugby*

## Integration with 13 stadium and 2 remote production facilities

Capturing multiple camera feeds, frame synchronizing and encoding to CMAF compliant streams

## Mobii's Real-time Distributed Encoding architecture

Leveraging Microsoft Virtual Machines to reduce encoding latency and improve performance over linear encoding pipelines

## Fast global distribution

Using Microsoft Azure, encoded feeds are distributed at ultra-low latency to global edge clusters, using CDN as a last mile solution.

# Employ Mobii's Ultra Low-Latency Services and deliver live video at lightning speed

Get in touch: [contact@mobii.com](mailto:contact@mobii.com)

Learn more: [mobii.com](https://mobii.com)

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