BEST PRACTICES:

Winning Sports & Esports

BY STEVE NATHANS-KELLY

Few if any streaming verticals demand higher efficiency, performance, or scalability than sports. All the action is live; many events reach tens of millions of viewers or more; monitoring and responding to real-time performance metrics and load-balancing challenges are critical. When betting or interactive gameplay raises the stakes, ultra-low latency is an absolute must. What's more, dynamic ad insertion is part of every live sports stream, and sports streamers must deliver ads seamlessly to serve the brands who underwrite their broadcasts.

Nothing drives live like sports. The intricacies of navigating live sports rights and licensing gets most of the headlines, as do the increasingly astronomical prices paid for premium events, and the benefits or consequences for streamers and consumers alike of bundling services to ease or complicate access to the sports events viewers most want to see. As this issue of *Streaming Media* goes to press, much of the discussion surrounding the Q2 earnings reports and subscription numbers of top services like NBC's Peacock revolve around the ability of those services to hang on to subscribers who signed up for one NFL game.

Add it all up and you've got a perfect storm of streaming challenges. And if anything—as anyone who's weathered a large-scale live sports event knows—bundling and licensing brouhahas are the calm *before* the storm.

Interoperability, Latency, and Stream Stability

Another critical issue in sports streaming success is delivering the best possible experience to all users across the broadest possible range of devices (a range that grows broader with every passing year, as new devices proliferate and legacy devices remain in play). At Streaming Media NYC in May 2024, on a panel called "How to Succeed With Large-Scale Live Sports Streams," Paramount Lead/Senior Manager, Live Video Nishant Sirohi, underscored the importance of interoperability when discussing his experience with delivering Super Bowl LVIII on Paramount+ (a bumpy ride for some), and the difficulties of delivering premium sports experiences to devices that aren't necessarily equipped to handle them.

Acknowledging that decisions to "cut off" older devices are typically made on the "business side," with those on the tech side left to devise solutions that provide satisfactory outcomes to those devices still supported. "From a technical side of it, when I devise my solution, it needs to be interoperable to both segments of users," Sirohi said. "I want to give a good experience to my non-premium user who chose not to have a premium device. That technical adaptation is something I take on myself. And I want to give my premium users the best possible use case. Catering to both groups of users won't be easy, and it has not been easy for us."

Streaming SuperBowl LVIII with Paramount+

And as for addressing latency expectations with an event like the Super Bowl that has historically drawn so many less-than-flattering comparisons between broadcast and streaming experiences, Sirohi says, "The important part for us was that our latency was synchronized with the broadcast."

But more importantly, he said, Paramount's approach was to look at low latency in the context of other priorities and not to sacrifice other performance and quality metrics just to set latency records. As the person responsible for operations," he said, "my objective was to keep the latency as minimal as possible for streaming without compromising on the quality or the operational ability of the stream. For me, stability is way more important than low latency."

In the end, he said, the goal was to find " a sweet spot between being too aggressive and providing a stable stream, which can give you a good user experience."

What Goes into a Great Sports Stream?

Of course, there are many things that have to go right to achieve sports stream stability, numerous metrics to track, and an array of key technologies, tools, and solutions that contribute to great sports streams. When all eyes are on Peacock in Paris for this summer's Olympics (recently concluded as you read this, 48 hours and counting as I write it), the whole world will be watching and judging streaming's ability to pull it off.

As NBCUniversal SVP, Digital Products & Operations, Content Distribution Monica Williams says in this issue's cover story, "For the Olympics' 17-day span, everything has to go perfectly… How many dress rehearsals do we need to do? What are the details of every single use case? … A huge focus of ours is to try to shrink the turnaround time so that it shows up in the platform as soon as possible."

Perhaps the ultimate indicator of a successful stream at that scale is the ability to make it look easy: "I tell my team that if we're doing our job, we're like ninjas: no one should even know we were there."

As new technologies mature and new audiences emerge and bring with them new expectations, consumers and brands increasingly demand more from their live sports experiences than seamless, hiccup-free experiences that approximate or achieve functional parity with broadcast. What makes a live sports stream not just good but great remains a moving target.

As Altman Solon found in their 2023 Global Sports Survey (go2sm.com/sports2023), "Sports media is innovating at a rapid clip. New technologies, including AI capabilities, virtual production tooling, and cloud-based workflows, are transforming content production and distribution. Meanwhile, digital native sports fans are consuming content in new ways, ranging from ultra-personalized feeds and streaming subscriptions to Web3 fan communities. The landscape is in flux, experiencing top-down and bottom-up changes, and is ripe for new products and revenue streams."
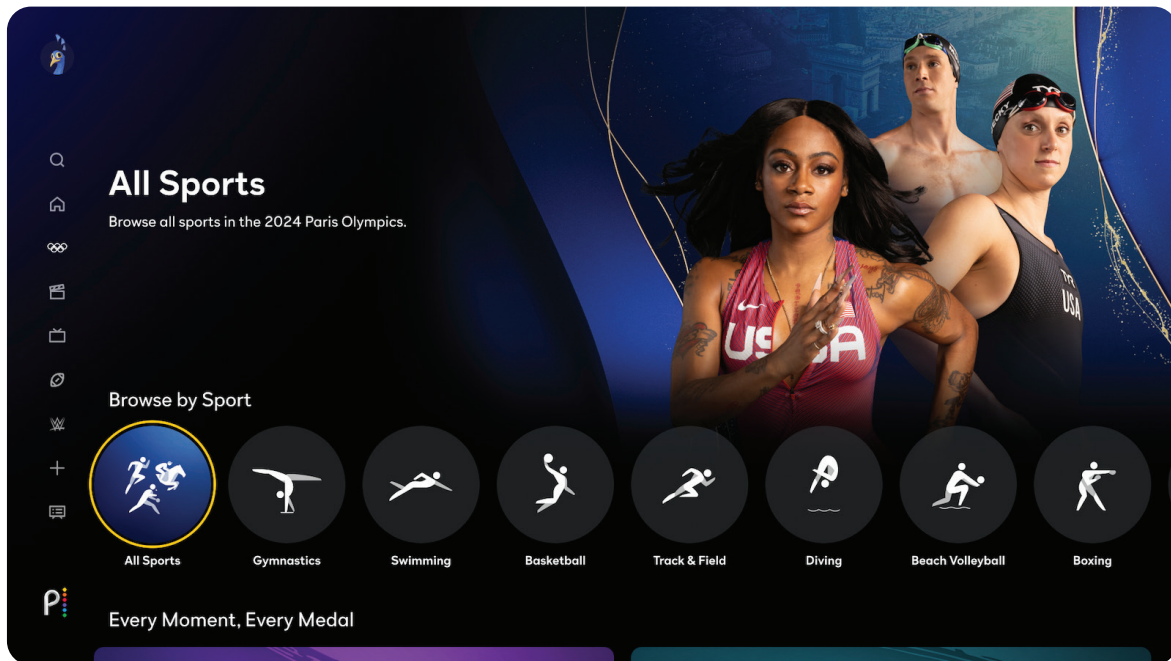
Paris 2024 Olympics streaming on Peacock

Best Practices Make Perfect

In this Sports Streaming Best Practices section, key streaming technology vendors discuss a range of exciting innovation and initiatives that are disrupting, advancing, and to a large degree redefining how we as an industry do live sports at scale.

AJA Technologies (aja.com), a developer of industry-leading video capture cards, digital recording devices, video routers, frame synchronizers and scalers, supplies "How to Simplify Your Next Live Sports Stream in Three Steps," an insightful tutorial on streamlining low-latency live sports production workflows using AJA's IP-based turnkey streaming system BRIDGE LIVE.

In "5 Ways Athletic Brands Win With Cloudinary Video API," image and video SaaS platform provider **Cloudinary** (cloudinary.com), provides five concise case studies explaining how key players in the global sports streaming universe from FC Bayern Munchën to Bleacher Report and PUMA have leveraged AI-driven automation with Cloudinary's API to accelerate video delivery, boost engagement, optimize vast libraries of visual assets, and automate ABR streaming.

One essential component of making live sports streams work is knowing what's going wrong as it happens and pivoting in real time to fix it; that's where monitoring comes in. Live broadcasting monitoring and QA solution provider **Elecard** (elecard.com) provides "Game-Changing Low-Latency Solutions," an insightful look at how to avoid the signal delays that break the spell of immersive sports experiences with an eye to successful premium sports streams where Elecard has played a key role.

In "Mastering the Game: Strategies for Sports and Esports Broadcasting," next-gen edge CDN **Gcore** (gcore.com) discusses the revolution afoot in sports and esports broadcasting, and how edge computing, AI, and support for diverse streaming protocols are emerging as its key driving forces.

Signiant (signiant.com), a key SaaS solution provider for intelligent file transfer, chimes in with "Managing the Content Explosion in Live Sports & Esports Production," which underscores the key role that robust fast file transfer solutions in the fast-expanding world of live sports and esports streaming—before, during, and after the game.

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Cloudinary

5 Ways Athletic Brands Win With Cloudinary Video API

Video content has revolutionized sports marketing, offering unrivaled opportunities for fan interaction and brand growth. In fact, 60% of sports viewers consume sports content via digital platforms, with short video highlights being a popular format.[1]

Most businesses incorporate video into their digital strategies, knowing that videos deliver 66% more qualified leads[2] and 86% more conversions[3]. **But 39% of video marketers still struggle with the time-consuming nature of video production and delivery.**[4]

To overcome this challenge, many brands are leveraging AI-powered solutions like Cloudinary Video API. This innovative tool streamlines video workflows from creation to delivery, enhancing efficiency and driving higher conversion rates.

Discover how five leading athletic brands are using Cloudinary Video API to execute winning video strategies:

1. Bleacher Report boosts engagement by 25% with automated, real-time video highlights

"One challenge we faced was the speed at which we could get video content to our users. Delivering highlights during game time is crucial to Bleacher Report as that's when our users are hyper-engaged. The manual approach just wasn't efficient enough for us to achieve the necessary speed to market, which was a huge consideration in choosing Cloudinary. Not only were we able to implement the full solution in under 5 weeks, we are now able to deliver sports video highlights within minutes."
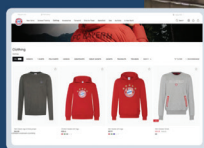
— David Marks, Senior Director of Engineering, Bleacher Report

25% increase
in video views/month

350% increase
in video views within their gamecasts experience

20% increase
in highlight video views/month

Modern image and video workflows
deliver major efficiency and CX gains

2. FC Bayern München accelerates and automates video delivery to drive fan engagement

"We have to be very quick when sharing action clips, and for our editors it's just so much more convenient and faster to deliver those assets with Cloudinary than with our previous solution. With Cloudinary, we keep getting the very latest codecs and optimization techniques. That's so cost-efficient and a great ongoing benefit for the club, as we need to send assets and deliver them in a very optimized way to our users on our websites and apps. Now, we know we can do that—as well as make extensive transformations."

— Digital Platforms Team Lead, FC Bayern München

### 3. ClassPass optimized 1.25M visual assets without any team expansion

"I can't stress enough how core Cloudinary is to what we do now. All the resizing and getting the right images to the right device just gets done for us automatically, without us needing to put engineering resources against any of that. Our millions of images and videos are now effectively managed and automatically optimized without any need for team expansion."

— Neil Kimmett, Director of Engineering, ClassPass

classpass

4.3/5 rating
by ClassPass members for satisfaction with media quality

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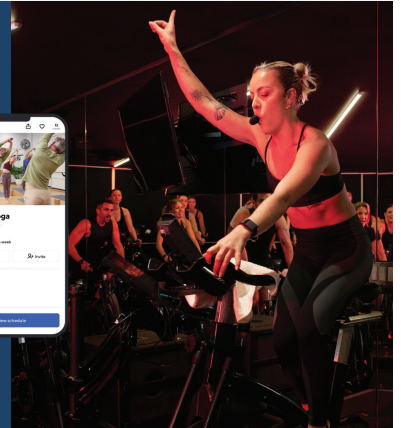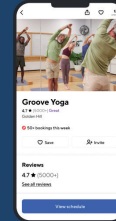
hydrow

75% improvement in Core Web Vitals
Hydrow moved from bottom to top quartile

4. Hydrow used automated ABR streaming for buffer-free videos on any bandwidth

"For visual asset management, if you need to optimize front-end performance, Cloudinary is the best way to fire and forget. They handle your speed concerns and quality management by automatically detecting bandwidth and device type and streaming the video at the most optimal quality setting to eliminate buffering."

— Reuben Kabel, SVP of Engineering, Hydrow

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5. PUMA increased page load speed by 71% with AVIF

"Retail is a wild place; if you can't show something, you can't sell it, and so the image or video is the source of truth for a customer. The web is such a complex sales channel where you need to deliver so much as a brand, so routing every PUMA visual asset through Cloudinary makes doing all this a lot easier. Now, online shoppers only ever see the right images and videos for a PUMA product, as all our websites and apps now rely on Cloudinary for image delivery and anomaly tracking. It's also supporting all our global CRM efforts."

— Bettina Dönmez, Senior Manager Cloud Native Platform Development, PUMA

PUMA

99.95% uptime rate
on PUMA's 20TB resources

Creation to Delivery in Minutes
With Cloudinary's AI-driven Automation

Cloudinary delivers a scalable, high-performance, and cost-effective AI-powered solution that automates video workflows, accelerates your time-to-market, and delivers incredible ROI. With Cloudinary Video API you can:

Automatically optimize performance

Start videos faster on any device and stream smoothly with uninterrupted buffering on any bandwidth.

- Auto-select fastest loading format.
- Auto-adjust quality compression based on content.
- Built-in multi-CDN with dynamic switching.

Optimized
183 kB WebP

Optimized
72.3 kB AVIF

10:24 / 50:26

Get videos to any touchpoint faster

Eliminate the tedious, manual work of adapting and delivering videos on various devices and channels with AI-powered automation.

- Advanced video analysis, moderation, and tagging.
- Auto-crop and focus for web, mobile, or social.
- URL-based customization with text or image overlays.

Deliver an engaging experience

Captivate your audience with videos that can be embedded anywhere and drive higher engagement and conversions with custom viewing experience.

- Auto-generate short previews.
- Add subtitles and captions with AI.
- Built-in customizable video player with analytics, skins, and interactive links.

Click to see this product in the video

0:02 / 0:12

Automate Your Entire Video Workflow
With Cloudinary Video API

Analysis
Tagging,
Moderation,
Transcription

Editing
Crop,
Trim,
Overlays,
Effects

Generation
Previews,
Image to
video/GIF,
Localization

Optimization
Quality,
Formats,
Codecs,
Adaptive Bitrate
Streaming

Delivery
Built-in
Video Player,
Product Gallery
Widget

Video Core | **Upload, Store, Manage**

SDKs | **Widgets** | **Prebuilt Integrations**

Flexible and Composable

Build a sophisticated video workflow with extensible APIs and webhooks that make it easy
to integrate with existing and evolving applications in your technology stack.

**Scan to
learn more and
request a demo**

https//cloudinary.com/solutions/video

**Use this calculator to see
how much Cloudinary
could save your team**

https://cloudinary.com/video_api/value_calculator

Sources:
1. https://www.greenfly.com/blog/why-short-form-digital-media-critical-sports-fan-engagement/
2. https://www.enterpriseappstoday.com/stats/video-marketing-statistics.html
3. https://blog.hubspot.com/website/how-video-can-enhance-your-landing-pages
4. https://blog.hubspot.com/marketing/video-marketing-statistics

Cloudinary

Cloudinary is the image and video technology platform that enables the world's most engaging brands to deliver transformative visual experiences at global scale. More than two million users and 10,000 customers, including Apartment Therapy, Bleacher Report, Etsy, Grubhub, Mattel, Mediavine, Minted, Paul Smith and Peloton, rely on Cloudinary to bring their campaigns, apps and sites to life. With the world's most powerful image and video APIs backed by industry-leading artificial intelligence and patented technology, Cloudinary offers a single source of truth for brands to manage, transform, optimize, and deliver visual experiences at scale. As a result, the most engaging brands across all industries are seeing up to a 203% ROI using Cloudinary with benefits including faster time to market, higher user satisfaction and increased engagement and conversions. For more information, visit **www.cloudinary.com**.