# amagi

# Power your **live sports channels** with Amagi's next-gen cloud solutions

Create, launch and run live linear sports channels across broadcast and streaming TV with Amagi's end-to-end cloud-architected solutions

In this whitepaper, we explore

• The unique capabilities you need to create, distribute and monetize live sports channels

• How cloud gives you an edge in launching and running live sports channels

• How Amagi can be your one-stop tech partner for all your live sports channel requirements

# Content

# Live sports gets its rhythm back

If there's a content genre that audiences still prefer watching live, it is without a doubt - sports. A Nielsel report confirms that in spite of the pandemic impact, the overall interest in sports remains high. Broadcast companies are betting on a steady return to normal of viewership including those of Super Bowl, NBA and World Series. Adding cheer to the big picture is the increasing viewership that even women's professional sports is garnering in recent times.

For sports broadcasters, now is an opportune time to leverage cloud technology to revive the splendor of sports. Not merely on cable and satellite but also across connected TV including the rising star of OTT - 'Free Ad Supported Streaming TV' (FAST).

## Grab the moment; give sports the cloud power

At Amagi, we enable you to make the most of cloud to power your live sports channels. With our integrated and end-to-end cloud-architected solutions, you will be confidently poised to create, launch and run live linear sports channels across any platform, from anywhere.

# Distribute your sports content to any platform, anywhere



Connected TV

Direct-to-consumer Apps

Sports/ News

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Cable/Play TV
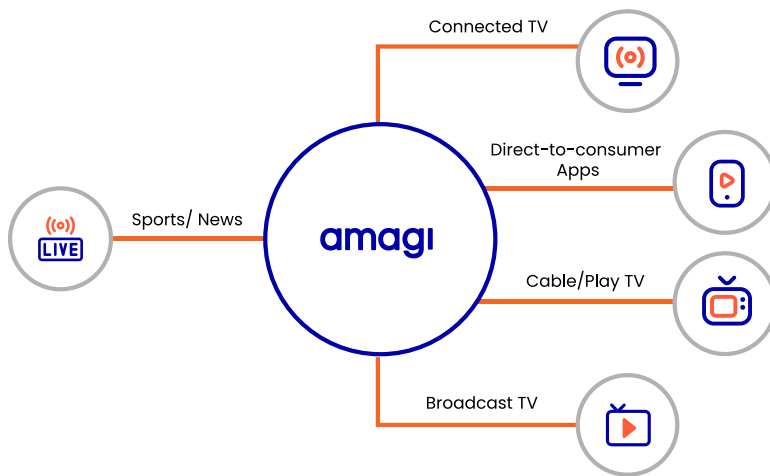
Broadcast TV

## Expand your reach and boost revenues With Amagi as your one-stop tech partner

A pioneer in cloud solutions for broadcast and streaming TV, we have been running sports channels on the cloud across geographies. Today, we are the go-to tech-partner for top global media companies, offering comprehensive expertise including in delivering UHD on the cloud with live workflows.

# A quick glimpse into the Amagi product portfolio for sports broadcasters



amagi CLOUDPORT     amagi THUNDERSTORM

| CP-TORNADO | CP-AUTOMATION | | Amagi SWITCHER | | MONETIZE |

Video Content

AI Content Prep

Linear Channel Playout

CP-PLAYER

VOD Package Delivery

Fiber/ Satellite/ IP Delivery

OTT/CDN Delivery

Planning, Scheduling

Live Event Production and Mgmt.

- Content Monetization - DAI
- Smart content distribution
- Viewership/Ad data analytics

Multi Screen Audience

| Amagi PLANNER | Amagi LIVE | | Amagi ON-DEMAND | DISTRIBUTE | ANALYTICS |

Media Planning, Production and Management

Content Delivery – Traditional + New Age

Content Distribution, Analytics, Monetization

☐ CLOUDPORT Product    ☐ THUNDERSTORM Product

# Let's take a look at some of the key capabilities Amagi helps you enjoy on cloud.

# Spin up channels instantly

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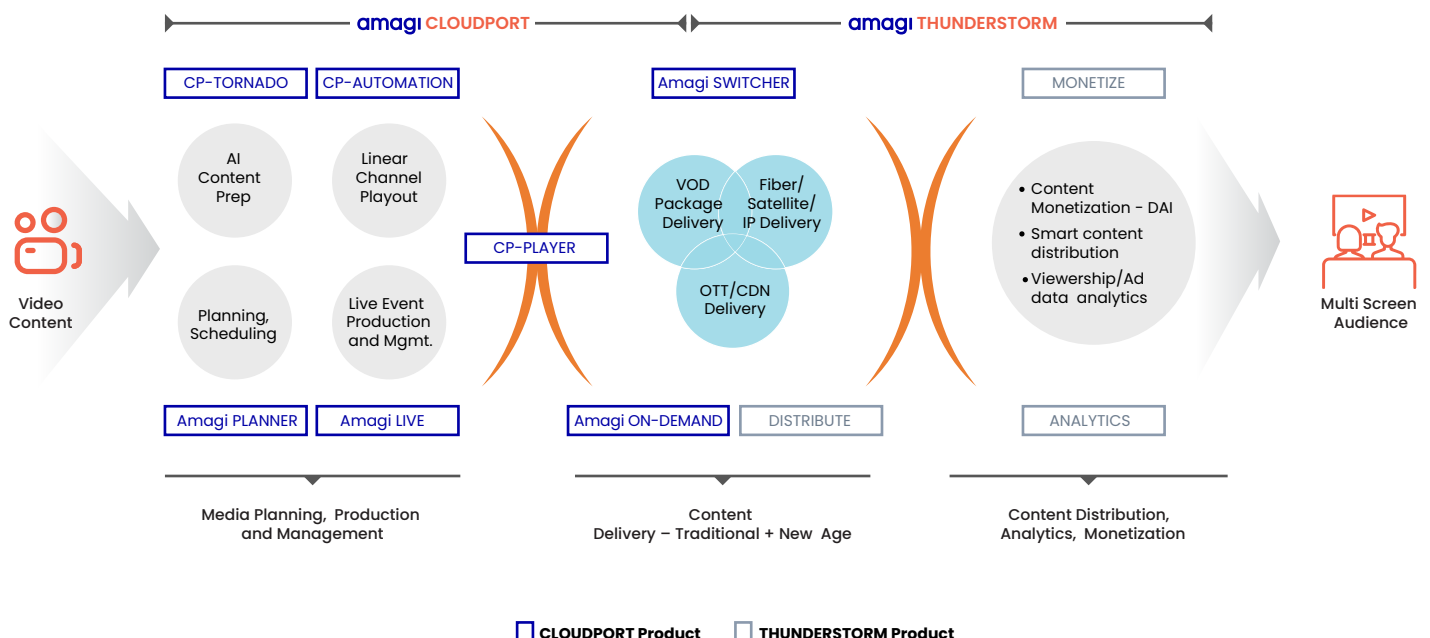
## Get the flexibility of remote production on cloud

*What was unthinkable till a few years back is now a sweet reality for sports broadcasters*

**Amagi LIVE is entirely cloud based, giving you the flexibility of remote production.**

- Take the feeds coming in from the sporting premises, process, mix and match them and create a 24/7 channel that can be broadcast to the world across platforms.
- Do this from anywhere in the world using a single, user-friendly web interface with multiple operation modes.

## Simplify your operations

*Yes, live sports broadcast is now possible with ease and greater control*

At Amagi, we enable you to make the most of cloud to power your live sports channels. With our integrated and end-to-end cloud-architected solutions, you will be confidently poised to create, launch and run live linear sports channels across any platform, from anywhere.

## Go for scale

*You can now aim bigger*

In Amagi LIVE, you have a versatile live orchestration platform that offers the scalability to manage multiple channels with different ads and graphics playlists for the same breaks.

- Manage multiple live feeds simultaneously by dynamically spinning up virtual infrastructure. All using a single live control experience.
- Ultimately, reduce your overall infrastructure and operations costs since you do not need multiple live operators per event.

## Drive on-demand orchestration on cloud

*Quit worrying about cost*

With our solution on cloud, you can scale infrastructure resources up and down and spin up offerings for sports events without large capital expenditure costs. For instance, if you decide to stream only a limited number of hours of live content in your 24 hours programming in a day, you have the flexibility to bring up the cloud resources only for those specific hours, while deprovisioning them during the rest of the time. This translates directly into significant cost savings.

## Smart hitless switching for greater reliability

*Insure against disruptions*

For high stakes, global events such as Olympics, you can rely on Amagi's smart hitless switching combined with multi region redundant streams to protect against major geographical outages. Viewers will enjoy a seamless experience since the end output is hitless, thanks to Amagi's smart switcher residing on cloud.

## 24/7 monitoring and tech support

*Ensure seamless operations and error-free playout*

You can leverage our fully managed monitoring service we offer as an add-on along with Amagi CLOUDPORT and Amagi LIVE. We monitor your channels 24/7, notify any issues in the feed be it of linear channels, internet streaming or live, and ensure fault-free service.

- Our team manually monitors the playout output to identify issues such as freeze, black and audio silence, at defined intervals in a day. This is complemented with an automated email alert system, during the rest of the time, thus ensuring 24/7 monitoring.
- For live sports content, our dedicated operators continuously monitor both the incoming source as well as the cloud playout output. They also trigger ad breaks and graphics such as tickers and other promotional content as and when advised by the customer, to ensure smooth output.
- Our monitoring service is further bolstered by our customized, in-house AI applications.

# Dazzle audiences with awesome viewing experiences

Viewers today expect impeccable quality of experience and are more vociferous than ever with their grievances, putting added pressure on sports broadcasters to deliver the best possible content quality. Amagi gives you unique capabilities to efficiently address this demand.

## Achieve low latencies
*Superior QoE guaranteed*

One of the biggest challenges for sports broadcasters is ensuring latency, even while you aim for scale. We enable you to orchestrate live events with very low latencies close to on-prem latencies. You can thus eliminate any lag between the broadcast and viewers and deliver a superior QoE.

## Deliver rich HDR graphics with DVE effects including HTML graphics
*For rich branding and uncompromised quality of experiences*

One of the most complex requirements for a live sports channel is rich graphics. Amagi CLOUDPORT Graphics is a versatile platform that complements your channel programming with advanced broadcast grade graphic overlays.

- Our platform supports multi-layered graphics rendering with a higher level of automation to simplify the graphics playout.
- Rich animated sequences can be played out as static, or template-driven, rule-based graphics using our solution's graphics ingest and automated scheduling function.
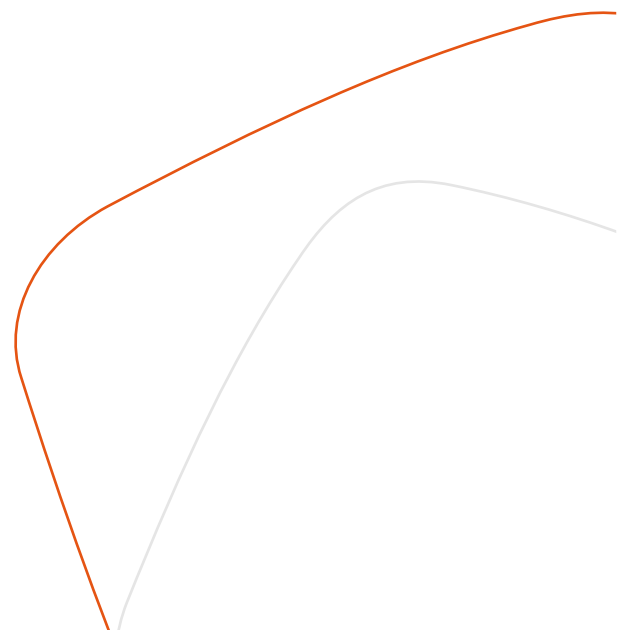
# Graphic formats we support:

**Static graphics or animated sequences:** Static graphics are designed once and do not have any dynamic element that needs to be added or modified during playout. This can be an image or an animated graphic.
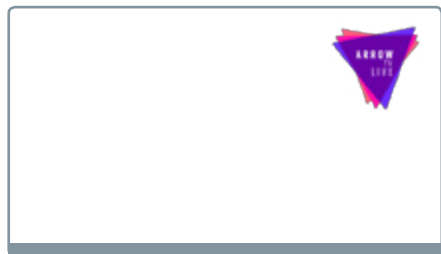


**Logos/Bugs**



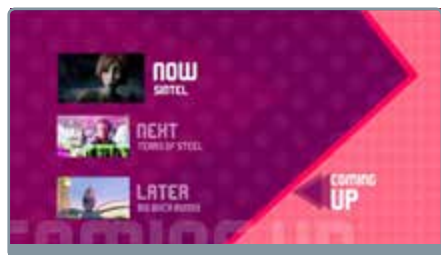**Lower-third banners**



**Promos**



**Full screen cards**



**Channel bumper**

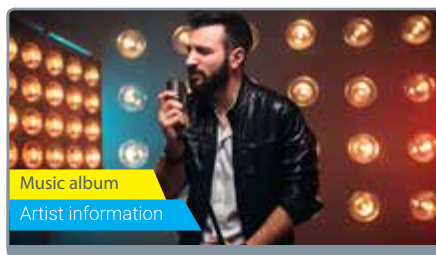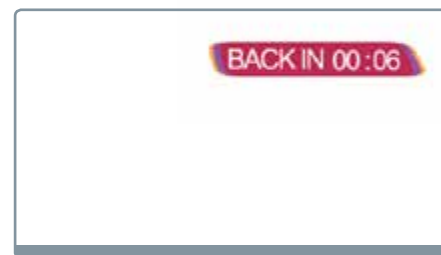**Advanced dynamic graphics:** Amagi CLOUDPORT provides an automated way of publishing dynamic graphics in the playlist by using the template of the graphic. Templatization ensures that the dynamic graphic is created only once but can be used any number of times repeatedly in an automated way.
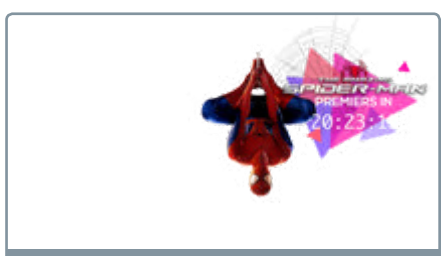


**Full screen Now / Next / Later**



**Music album / artist information**



**'Back in' counter**



**Countdown**

# Live, AI/machine learning-driven closed captioning

*Simplify real time captioning*

Real-time captioning is a huge requirement for live sports channels, what with the legal mandate to make content accessible to everyone across platforms. Amagi CLOUDPORT provides support for using Google's Speech to Text (GS2T) service. It helps convert audio in a live event to captions just before the playout and send it as captions with the stream.

**Amagi's Capsequo service** is leveraged to implement GS2T and EEG Alta, and is integrated with the file system and the playout server for captioning Live, VOD and File. Capsequo allows multiple services to call it simultaneously with input audio streams and provides captions back in the required format.

**Live event/single source:** GS2T captioning is used to caption live events in real time. For single source live events, the specified audio track (configuration) is sent to GS2T's service, and the text that is received back is converted to captions. The breaks played during the live event are not captioned.

**Live event/multi source:** In case of multi-source live events, the audio track available in the audio after the live source switching, is used for captioning. The captioning is executed on the audio post switch, so the other sources which are not active currently are not captioned.

**Case study.** [Live closed captioning for a leading esports channel](#)

We enabled playout of live events and near-live events (deferred live) with live captioning for a leading esports channel. AI based GS2T was used to deliver high quality, low cost captioning.
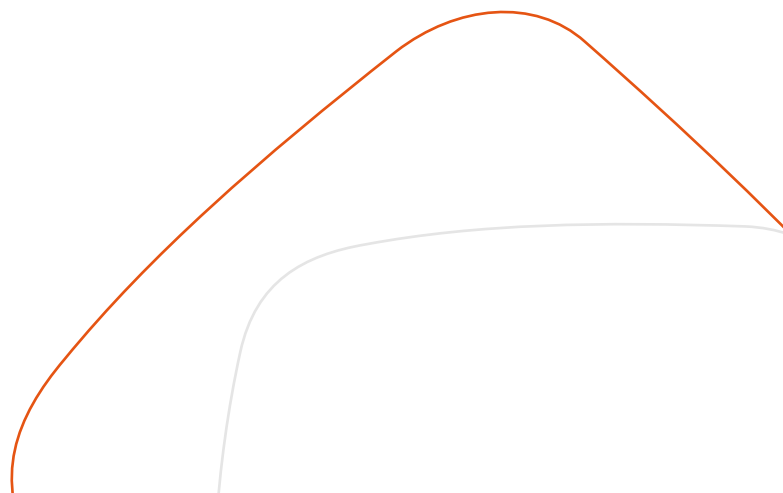
# Live graphics

Amagi CLOUDPORT supports native graphics animations and renders them directly on the playout engine. Native graphics animations are added during live playout using the schedule, the live controls on the web UI or automated overlays. Amagi has also added support for more cloud-based graphics vendors including Singular.live and NDI-based live graphics.

- **Ticker:** You can create tickers - real-time banners that can be used to create dynamic real-time sports scorecards, news and stock tickers, weather updates, count-down timers, clocks, and multiple other sophisticated parameters-driven graphics rendering and overlay on the player.

Case study. [HTML5 graphics for a leading sports betting channel on FAST platforms](#)

We helped a top brand launch their sports betting channel comprising 24/7 HTML5 graphics playing with real time data being pulled from a custom API. Once the HTML5 webpage is created and hosted, the Javascript within the HTML5 uses an API to fetch the scores and betting lines data. These are displayed on HTML 5 graphics - which is then overlaid on top of the video.

## No GPUs. Only CPUs.
*High quality at low cost*

We leverage normal off-the-shelf CPU processors instead of high-end GPUs for processing visuals. While we help you achieve cost savings this way, we do not compromise on high quality visuals.

## UHD cloud playout
*Embrace game changing capabilities*

Amagi enables UHD playout on the cloud, with support for JPEG-XS, SMPTE 2110, and AMWA NMOS. Combine this with our ability to support Dolby Atmos 10 channel audio, and what you can deliver to worldwide audiences is a rich 4K experience with immersive sound that add up to a near-live experience at home.

Case study. [NBC Olympics engages with Amagi for UHD cloud playout](#)

Amagi has enabled UHD playout with cloud automation for NBC Olympics' production of the Games of the XXXII Olympiad held between July 23 – August 8, 2021 in Tokyo, Japan. With HEVC playout and mezzanine quality UHD encoding, Amagi CLOUDPORT architecture creates a new benchmark for video transmission over IP, especially for a global and premium live sporting event such as the Olympic Games.

## Do more with secondary content assets

### Live stream recording
*Reuse live content and get more value*

With Amagi's sophisticated VOD recording system, you can easily record live sports and leverage the recorded file in many ways to get more from your content. Here are the various use cases.

- **Live2VOD:** Record source video/clean feed
- **Record with ad breaks:** Take a live stream and record it with potential ad-breaks.
- **Record playout output:** Record the branded or the playout output that comprises graphics as well as ad breaks.

**Case study.** [Live2VOD recording for NBC Olympics](#)

For NBCU Olympics channel, we implemented Live2VOD recording of their live streams and delivered it to the leading FAST platform, Peacock.

## Localized, opt-out feeds
*Be local & relevant*

Delight regional audiences by creating localized, opt out feeds with region specific ads and graphic templates.

- **Create the same live event as localized streams for various regions.** Using our 1 to N set up, we can create multiple streams, even as we allow a single operator at the terminal to control the feeds and insert ad breaks or graphics. All at the click of a button.

- **Local opt out using Amagi STORM.** You can dynamically replace ads to improve regional relevance and accuracy, with Amagi's STORM platform.

- **Opt out as a separate playout managed within the playout automation - for UHD.** Your 24/7 programming playlist is replicated twice over. We create two playlists with the ads changed across the two, finally driving two playout channels.

- **Live STORM deployment – for HD.** We take the primary feed coming out through the playout system, and replace the ads alone based on Amagi's SCTE markers. Using STORM platform, the primary feed is split apart - one going to the original location, and the second to another region with different ads.

Case study. [Opt-out feeds for a top media company - for its European HD channel](#)

Ads are replaced for the three regions using Amagi STORM platform. While the playout is carried out in Ireland, the STORM servers are based in the specific regional locations. The Amagi played out streams coming in from Ireland are sent to three regional STORM servers, along with the different content playlists, the ads playlist and the content for the ad playlists. The playout streams are sent to the STORM servers via Zixi protocol and fibre. Based on the SCTE markers and the ads playlist, the ads are replaced and the new opt out stream goes on air, with varying ads but the same primary content.
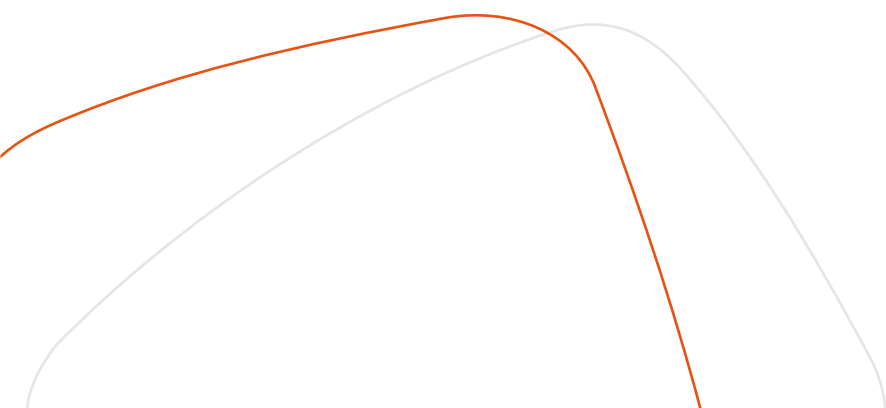
# Reach audiences on a platform of their choice

Our industry-leading distribution network will give you just what you want – unparalleled reach across audiences, geographies and platforms. We deliver live, linear and VOD programming to leading video platforms including broadcast TV, cable and Pay TV, connected TV and direct-to-consumer apps.

## Ingest and deliver in any format

*Forget about the complexities of different formats and protocols*

• With our versatile sports automation product, you can bring studio and stadium feeds in a variety of protocols directly into the cloud for transcoding, orchestrating and delivering to live playout streams.

   **Ingest formats:** NDI IP standard, RTP, RTMP, HLS, Zixi, LTN, SMPTE 2110 and more.

• We also help deliver your channels across platforms with varying delivery formats and protocols.

   **Delivery formats:** HLS, RTMP, and HD-SDI, and can also be used for VOD delivery to vMVPD platforms.

## Generate metadata and platform-specific EPG with automation
*Easily deliver content to any platform of your choice*

Our cloud playout solution creates and enriches metadata of content assets using automation - for easy retrieval of video files to build playlists. The solution's automated workflow takes in EPG information as a part of the programming schedule. Metadata is inserted and the schedule is converted into different EPG formats as mandated by the end platforms.

# Here's the REACH we can get you

**200 million**
connected TV households

**50+ top FAST**
platforms

**100+**
AVOD & D2C platforms

fubo TV   hulu   IMDb TV   PLEX   PLUTO   Rakuten TV   peacock

## Boost your revenues with targeted ads

*Deliver personalized and seamless ad experiences at scale*

We not only help you create and launch live sports channels but also make your content perform via targeted ads. With Amagi STORM IRD solution, you can leverage a common satellite feed to create multiple local feeds, and allow regional advertisers reach target audiences with geo-targeted ads.

Our dynamic ad insertion platform – Amagi THUNDERSTORM supports automated ad detection using advanced machine learning, and enables you to effectively monetize live, linear and VOD content across FAST and AVOD platforms.

- Amagi THUNDERSTORM supports tens of millions of simultaneous viewers using high concurrency 'hyperscale' feature.
- With our robust graphics capabilities, we also help you leverage the growing number of innovative ad formats to capture and captivate consumers without disrupting their viewing experience. These in turn help attracting more advertisers to the platforms.

*With Amagi, you have access to over 2 billion ad opportunities per month across FAST platforms.*

**Gain accurate data and sharp insights**
*Make informed content and advertising decisions*

With Amagi ANALYTICS, you can gain granular data and comprehensive insights into audience behavior and content performance. You can derive comprehensive 'first hand' data on several key metrics including viewership and ad impressions. Armed with real time insights, you can finetune your programming and content monetization strategies for sustained success.

# Thrive with Amagi

Leverage an end-to-end solution for all your needs

*Manage all your live sports channel needs with one single expert - Amagi*

Along with channel creation, delivery and monetization, we also enable live recording, highlights creation, playback and VOD deployment - all within the same system.

What we offer is full-blown sports automation, running in the cloud and operated from a browser, well complemented by our unmatched distribution network.

With our strong capabilities for customization, you can also meet your unique needs depending on the configuration of events and source of feeds.

Finally, our dynamic ad insertion platform helps you monetize content with targeted ads, while our analytics solution delivers accurate data and insights on audiences and viewership.

Cloud is ready for sports.
With Amagi, you'll be ready to bring
sports alive on cloud.

Reach out to us:
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