# Bringing Live Football to the Fans PAOK TV in the Cloud

#### **Executive Summary**

For the 2019-2020 season, PAOK FC launched PAOK TV, an over-the-top (OTT) platform that provides live matches, postgame shows, and on-demand content to fans across Greece and the world. The initial launch disrupted football TV rights in Greece, demonstrating a new way to broadcast matches and exploit new technologies, and ultimately allowing the club to manage its own TV rights exclusively across the world.

Following this initial success, PAOK FC looked to launch a new version of its OTT service as part of a wider overhaul of the club's digital strategy. PAOK FC wanted the new platform to be visually better, automated, have a modern interface, and be user friendly. Panagiotis Aroniadis, PAOK TV Project Manager and PAOK FC New Media Director, said, "We decided to create a new OTT platform from the beginning so that we could become better, faster, safer, and offer a better user experience for our subscribers. #DareToDream is more than a motto for us".

#### **PAOK TV**

Developed by <u>Insys Video Technologies</u>, PAOK TV is a subscription and pay-perview platform that broadcasts the club's home games for the Greek Super League along with exclusive VOD content and special programming. It includes 25 live matches in each season, three-hour broadcasts of pregame and postgame shows, and on-demand content including training, talk shows, and exclusive interviews. The platform is available in three languages: Greek, English, Russian.

#### Moving to the Cloud

PAOK FC decided that the new version of its OTT platform should be entirely cloud-based, running on <u>Amazon Web Services</u> (AWS). This would be key to allowing the club to reduce infrastructure costs during low-traffic periods while automatically-scaling for traffic spikes during live matches. A pay-per-use model made the costs viable for the club. The presence of an Amazon CloudFront (CDN) edge location in Greece would ensure that matches can be streamed live with extremely low latency.

#### Improving the User Experience

PAOK FC was keen to ensure a good user experience for fans. This meant being able to deliver content to every available platform in the highest quality, with low latency. Aroniadis commented, "It is important for us to turn PAOK TV into a complete, modern, easy to use, user-friendly service that during the live match turns into a viewing experience."

At the same time, ensuring protection against piracy was naturally high on the agenda, given the premium nature of the content being delivered to fans.

## **About PAOK FC**

aws

partner

network



Panthessaloníkios Athlitikós Ómilos Konstantinopolitón (Panthessalonian Athletic Club of Constantinopolita ns) is commonly known as PAOK FC. It is the largest football club in Greece.

The club was originally established in April 1926 by Greek refugees who fled to Thessaloniki from Constantinople.

PAOK FC has a huge following across the country, especially in Northern Greece where it is the most widely supported club.



## **Insys Sport**

Insys Video Technologies (Insys VT) provided a fully cloud-based, end-to-end solution built on the AWS Cloud. The platform is based on Insys Sport, a complete and flexible solution designed for companies and organizations who want to improve sports fans' experience by sharing their sports video content online in an innovative way. PAOK FC can easily handle high website traffic thanks to the scalable AWS environment.

The new PAOK TV service uses Insys Multi DRM, which protects the video content from piracy using encryption and digital licenses. Insys VT also integrated a watermarking solution: floating watermarks appear randomly in different places on the screen, and after a sequence of watermarks, PAOK FC can easily identify anyone streaming the match illegally, and that user can be blocked instantly.

## **Delivering Flexibility with the Cloud**

The new version of PAOK TV has been integrated with a number of AWS Media Services, managed cloud services that make it fast and easy to prepare, process, and deliver broadcast and multiscreen video at scale. This includes <u>AWS Elemental</u> <u>MediaPackage</u>, which reliably prepares and protects the video for delivery over the Internet. From a single video input, AWS Elemental MediaPackage creates video streams formatted to play on multiple devices. PAOK TV uses <u>AWS Elemental</u> <u>MediaConvert</u> to transcode and create video-on-demand content.

During the live matches, <u>AWS Elemental MediaLive</u> creates high-quality video streams ready for delivery. These streams are delivered using AWS Elemental <u>MediaConnect</u>.

Thanks to <u>Amazon CloudFront</u>, video content is delivered securely with low latency and high transfer speeds. The cloud environment also enables auto-scaling to cover traffic spikes during matches. The new PAOK TV can be viewed via web browsers, mobile devices, Android TV, LG webOS, and Samsung Smart TV Tizen.

In the 2019-20 season, the original PAOK TV attracted more than 200,000 total subscribers and delivered 5,000 hours of content. The new version of PAOK TV was launched in time for the restart of football and PAOK FC expects viewer numbers to be even greater for the new football season.

## **About Insys Video Technologies**

Insys Video Technologies is a fast-developing video integration company, offering comprehensive implementation of OTT projects from strategy and design through to development, deployment and maintenance. Learn how more than four million consumers use video services powered by Insys solutions at www.insysvt.com.

