

# More eyes, greater intelligence: Twickenham Stadium controls its perimeter beyond match day.

Axis' innovative Zipstream technology helps reduce bandwidth and storage requirements despite increasing camera locations.



## Organization:

Twickenham Stadium

## Location:

Twickenham, London, UK

## Industry segment:

Stadiums and venues

## Application:

Safety and security, remote monitoring

## Axis partner:

Vindex Systems

## Mission

Twickenham Stadium, the home of England Rugby and the second largest stadium in the UK, is now utilising Axis technology to future-proof its security processes and integrate analytics into its day-to-day surveillance activities. The stadium was set to host many high-profile matches during the 2015 Rugby World Cup, and the operations team wanted to future-proof its security practices and modernise its technology to ensure match goers and venue workers were safe during the event. Axis' partner Vindex Systems, a market leading systems integrator, recommended Axis' innovative technology.

## Solution

To secure the stadium's vast perimeter 24/7, Twickenham Stadium chose 20 AXIS P1425-LE Network Cameras with infrared capabilities. Utilising Digital Barrier analytics, the cameras have been strategically placed around the stadium's perimeter, automatically alerting the operations team if an intruder attempts to climb the fence. In addition, 18 AXIS M3007-PV Network Cameras have been integrated inside the stadium to monitor daily activities, such as conferences and maintenance work.

A further 33 AXIS Q6045-E Network Cameras have been deployed to monitor activity in the concourse, lift lobbies and key public areas. All of the legacy analogue cameras communicate via six AXIS Q7436 Video Encoder Blades and a Genetec VMS, improving the image quality of the analogue cameras already in use. Axis' innovative Zipstream technology, which lowers bandwidth and storage requirements by an average of 50 per cent or more, is helping the operations team cope with the increased data demands.

## Result

Twickenham Stadium hosts between 25 and 30 rugby matches in a calendar year, however, it is when games are not being played that improvement in security and health & safety has been most readily felt. During the Rugby World Cup, several potentially serious security incidents were uncovered through the utilisation of Axis technology. Beyond the World Cup, continued surveillance means health & safety issues are flagged almost daily. With many contractors working onsite all year around, as well as public stadium tours and regular conferences, constant surveillance is paramount.

**“Wireless cameras on the front of the buildings have proven to be a huge asset. Following the initial installation, we noticed an individual attaching a scanner to the cash machine. We’d never had this additional vision before and therefore would not have identified this fraudulent activity prior to the installation.”**

**Phil Parker, Venue Operations Manager at Twickenham Stadium.**

### **More eyes, greater intelligence, enhanced security**

Before the modernisation, Twickenham Stadium utilised analogue CCTV equipment without analytic capabilities. Vindex Systems steered the operations team through a smooth regeneration of its equipment, upgrading to network camera technology from Axis. This led to a proliferation of cameras, ensuring enhanced visibility during the 2015 Rugby World Cup, and maintaining this beyond match day for greater health & safety and 24/7 border surveillance, guaranteeing no unauthorised access to the venue.

“The aim of the installation was not only to update what we already had, but to push our security processes way beyond what was available before,” said Phil Parker, Venue Operations Manager at Twickenham Stadium. “The project wasn’t just about replacing existing locations, but increasing the amount of coverage, and consistency of that coverage, throughout the stadium. We’ve added 40 new locations, the majority of which were AXIS P1425-LE cameras including built-in Digital Barrier analytics. This means if a person attempts to climb a fence and crosses an invisible barrier, an alert is instantly sent to the team advising of a breach, helping to swiftly resolve incidents.”

### **Shifting from reactive surveillance to proactive intelligence**

There is a vast amount of movement both inside and outside Twickenham Stadium - not only on a match day. A constant stream of contractors visits the site; corporate events take place on a regular basis; and members of the public can often be seen on stadium tours. Being alert to the security and health and safety issues surrounding these activities is of significant importance.

Utilising AXIS M3007-PV and AXIS Q6045-E Network Cameras, Twickenham Stadium's operations team can identify the poor practice of contractors on site, from not cordoning working zones correctly, to working at height without authorisation. The majority of incidents identified at Twickenham Stadium through the use of network camera technology are health and safety related.

The identification of this type of incident used to rely on physical patrols, meaning security staff could only see what was happening when it was taking place directly in their vicinity.

### **Propelling Twickenham Stadium into the future through technology**

With an increased amount of footage being captured, it is essential that Twickenham Stadium is able to store the data in order to help with post-incident reporting and investigative work. Axis' Zipstream technology has played a crucial role in reducing bandwidth and storage requirements through analysing and optimising the network camera's video stream in real-time. Scenes containing interesting details are recorded in full image quality and resolution, while other areas of low-interest, such as a parking area, are filtered out. This means Twickenham Stadium has the capacity to hold a larger amount of footage to help with investigative work than was previously available.

Clive Talbot, Director of Vindex Systems, said, “We’ve been working with Twickenham Stadium since July 2015 in order to prepare the stadium for the 2015 Rugby World Cup and beyond. We have an excellent relationship with the operation’s team; our specialists regularly visit the site to provide on the job training and ongoing support to assist with the integration of the camera system. We also have many new projects in the pipeline, including expanding surveillance coverage into the external car parking areas and the re-development of the East Stand.”

