

# Making the Right Call: How Hawk-Eye Stays Secure with ESET

In the high-stakes world of global sports technology, precision, speed and reliability are non-negotiable. Hawk-Eye Innovations stands at the forefront of this space, trusted by the world's biggest sporting organisations to deliver real-time tracking, officiating and broadcast solutions that define the modern sports experience. With over 20 years of experience and a global team of 1,400+ experts, Hawk-Eye powers everything from VAR in football to electronic line calling in tennis, skeletal tracking in elite coaching and data-driven broadcast enhancements.

As Hawk-Eye's influence and technical infrastructure have scaled rapidly, so too has the critical need for resilient, high-performance cybersecurity. In a landscape where billions may be watching and where real-time decisions are paramount, protecting systems from compromise is vital. For over 16 years, Hawk-Eye has partnered with leading cybersecurity provider ESET to ensure their technology remains secure, agile and trusted.

This case study explores how Hawk-Eye's cutting-edge innovations intersect with ESET's cybersecurity expertise, detailing the collaborative evolution of a partnership that safeguards some of the most important moments in modern sport.



## Introduction

### Q: Who are Hawk-Eye?

---

**A:** Hawk-Eye Innovations is the leading sports technology company providing innovative solutions for officiating, broadcasting, data analytics and fan engagement.

We provide vision-processing, video replay and data capture technologies to make sports fairer, safer, more engaging and better informed. Our innovative technologies advance sports broadcasting, data insights, officiating and digital across the world's biggest sports.

We have over 20 years' experience driving a longstanding reputation for delivering cutting-edge technology to major sports rights-holders, leagues, and federations. With a global presence and over 1400+ employees located around the world; we are trusted by the world's biggest sporting events to make accurate calls when it matters most.

---

### Q: Can you tell us about what Hawk-eye do with real world examples?

---

**A:** Hawk-Eye's technologies enhance sports in various ways, with real-world examples:

- In American Football Hawk-Eye systems will instantly notify officials whether a first down has been gained improving accuracy in officiating.
  - In football, Hawk-Eye's Video Assistant Referee (VAR) presents every camera angle to officials, helping them make the right decisions quickly.
  - Hawk-Eye's Semi-Automatic Offside Technology (SAOT) is used in UEFA Champions League football to make faster and more accurate offside decisions.
  - For the PGA Tour Netflix docuseries ""Full Swing,"" Hawk-Eye provided the technology to capture and clip every shot from every camera.
  - Hawk-Eye Sight provides coaching analytics, focusing on biomechanics and movement analysis.
- 

### Q: Can you talk us through tracking and insight?

---

**A:** SkeleTRACK is Hawk-Eye's cutting-edge skeletal tracking technology that monitors athlete and object movements with precision, capturing 29 skeletal points on an athlete's body. It turns tracking data into actionable insights that elevate performance, improve broadcasts, enhance officiating, and engage fans through virtual recreations. SkeleTRACK is designed to address the diverse needs of athletes, broadcasters, and fans, offering performance analysis, broadcast enhancements, and virtual recreations.

""INSIGHT"" is Hawk-Eye's stream of technologies that provide data collation, storage, aggregation, delivery, and visualisation capabilities. This includes Graphics Systems, Content & Data Platforms, and Timers & Communications. These systems bring broadcast viewers new data visualisations, provide data collation and delivery, and support officials with tools they need.

---

### Q: Can you tell us about the technological evolution of Hawk-eye in the last decade? Talk us through the journey, the innovations and what that means today?

---

**A:** Hawk-Eye has evolved from providing basic ball tracking to offering comprehensive tracking, officiating, broadcast, data, and digital solutions across various sports. Our technology has become integral to major sports leagues and events globally. Expansion of Tracking Capabilities: Hawk-Eye has significantly expanded its tracking capabilities, moving beyond basic ball tracking to include detailed player tracking. SkeleTRACK, a revolutionary optical tracking system, now accurately tracks 29 skeletal points on each player in real-time, providing data for performance analysis and virtual recreations.

Advancements in Officiating Technology include:

- Goal Line Technology (GLT) and Hawk-Eye was the first company to receive a FIFA license for GLT.
- Video Assistant Referee (VAR) technology was developed and has been adopted by numerous leagues and federations globally.
- Electronic Line Calling in tennis has evolved to Hawk-Eye Live, officiating full matches without line umpires.
- HawkREPLAY offers remote production and instant replay solutions, enabling broadcasters to show slow-motion replays and data-driven clips.

**Q: How has the success of Hawk-eye grown as a result?**

---

**A:** Hawk-Eye's success has grown due to our commitment to innovation, accuracy, reliability and strategic partnerships in major sporting events, leading to industry recognition and trust. We have seen substantial growth globally with strong partnerships across the US 4 major sports with the NBA, NFL, NHL and MLB.

---

**Q: Can you tell us about how Hawk-eye are now viewed globally?**

---

**A:** Hawk-Eye has built a strong reputation for providing accurate and reliable technology, which has led to trust from major sports organisations. The World's biggest sports organisations trust Hawk-Eye to make the right call when it matters most.

Hawk-Eye has expanded its global presence with 1400+ employees located around the globe. This global reach allows us to serve major sports leagues and events worldwide via regional hubs globally to better serve local markets individual requirements.

---

**Q: Talk us through why the work Hawk-eye does is so significant globally?**

---

**A:** Hawk-Eye's officiating technologies, such as VAR in football, DRS in cricket, and Electronic Line Calling in tennis, are crucial for ensuring fair play. They provide accurate and objective decisions, reducing human error and improving the integrity of sports.

---

**Progress. Protected.**



## The Challenge

---

### Q: What would happen if Hawk-eye security was breached?

---

**A:** Cybersecurity is essential for protecting sensitive data, ensuring the integrity of our services, maintaining our reputation, and staying competitive in the market. Given the critical nature of our technology in sports and entertainment, any compromise could have far-reaching consequences – especially with, potentially, billions of people watching. We faced the challenge of managing multiple versions of software running across various devices, many of which were offline and difficult to manage. To address this, we needed a robust, secure online management solution that could ensure security across all devices without affecting performance. After working with ESET for 10 years, we partnered with them to implement a seamless transition to ESET Protect Complete, helping us safeguard our technology and maintain trust in our services.

---

## The Solution

---

### Q: What measures do Hawk-eye take to protect their technology?

---

**A:** Hawk-Eye's systems are secure & resilient by design, with resilience & redundant measures baked in.

Secure hardened configurations are used, multi-layer firewalling is implemented, ESET's robust endpoint security products are implemented, systems are continuously scanned for vulnerabilities & patching applied.

---

### Q: Can you talk us through your relationship with ESET, when did it begin?

---

**A:** Hawk-Eye have partnered with ESET for 16+ years. Hawk-Eye selected ESET's product as they stood out and continue to stand out from the competition for their product(s) high performance capabilities, coupled with their light footprint, both of which are critical for our latency sensitive real-time processing and decision-making systems. Further we identified in ESET an agile & passionate partner that shares many of the same values as Hawk-Eye does, namely: A commitment to innovation, A commitment to progress & a commitment to listening to their customers & adapting their products and services to changing & evolving requirements & priorities.

---

## The Deployment

---

### Q: Can you tell us about the ESET products and solutions that Hawk-eye use?

---

**A:** ESET Endpoint Security & ESET Endpoint Antivirus products coupled with ESET's vulnerability detection & patching modules, form part of our strategy for monitoring and keeping our computers secure.

ESET Protect Cloud - Used by our IT and security teams to efficiently & easily centrally manage and maintain & monitor ESET's endpoint security software across the business's entire computer estate. We transitioned from an on-premises management console to a cloud-based solution. We initially used an "Essential" on-prem solution with ESET that ensured a low footprint but have now upgraded to an "Advanced" version for better zero-day threat protection. ESET gave us the opportunity to test the Cloud Console before committing, ensuring it met our needs. Their collaborative approach and exceptional support were key to making this transition seamless, proving that their commitment and patience set them apart from other vendors.

---

### Q: Can you tell us about ESET's service and how they cater to the specificities of Hawk-eye as a company?

---

- High Performance Solutions (Effectiveness)
- Light overheads / low processing footprint (Don't negatively impact the performance of our systems)
- Value for Money - Important given the number of endpoints that there are to protect
- Agile, excellent commercial, support & engineering teams, which are always rapid to respond when called upon.

The cloud-based console eliminated the need for manually connecting offline devices to the network for updates, simplifying management and improving security. It also provided real-time visibility into endpoints without requiring VPN or physical network connections. Additionally, ESET helped us scale our entire computer network, expanding from 3,300 seats to 5,000, ensuring we could support our growing needs efficiently.

---

## The Results

### **Q: How have ESET grown and evolved alongside you?**

---

**A:** ESET have not lost sight of what is important, they remain agile and responsive, whilst growing their organisation and broadening & enriching their product suite, just as Hawk-Eye has. The relationship with ESET was a crucial factor in our decision-making process. From the start, ESET engaged with us to understand our specific requirements and provided ongoing developmental support. Hawk-Eye also contributed valuable feedback that helped shape ESET's solutions, making it a true partnership rather than just a supplier-client dynamic. Having trusted ESET for over 10 years, we're confident in continuing this strong relationship well into the future.

---

### **Q: Define the trust you need in ESET to work with them in protecting Hawk-eye, given the significant importance of Hawk-eye operating correctly?**

---

**A:** Many will be aware of the highly publicised case from 2024 where an AV vendor's flawed update process took down a large portion of their userbase with far reaching consequences. ESET's products are trusted to keep our assets and data safe & we trust that ESET's products processes would mean that nothing similar could ever happen to us.

---

### **Q: How do you see the partnership with ESET continuing into that future?**

---

**A:** We foresee an ongoing and strong partnership with ESET stretching into the future. Beyond compliance, the security upgrade enhanced business continuity, strengthened trust in our infrastructure and reduced the risks associated with compromised systems. It also demonstrates our ongoing commitment to security, positioning us as a reliable and trustworthy leader in our industry.

---

### **Q: What would you say to company considering working with ESET and ESET technology?**

---

**A:** ESET steadfast commitment to research is reflected by class leading performance & protection that their products can provide whilst consuming minimal processing resources. If you want to work with a security partner focused on offering you the ultimate in protection, continuous innovation, agile support as well as excellent value for money, then you need look no further than ESET. Beyond compliance, the security

upgrade enhanced business continuity, strengthened trust in our infrastructure and reduced the risks associated with compromised systems. It also demonstrates our ongoing commitment to security, positioning us as a reliable and trustworthy leader in our industry.

Despite the challenges we've faced along the way, the trust we've built with ESET has only strengthened. Our continued collaboration is a testament to the strong partnership we've forged, backed by exceptional technical support and a shared commitment to success. It's the strength of support, rather than just the tools we use, that truly drives the lasting impact and value of this relationship. If you're looking for exceptional technology to secure your business, no matter its size, ESET and their unparalleled support have consistently delivered. We wouldn't hesitate to recommend them to anyone.

---

“If you're looking for exceptional technology to secure your business, no matter its size, ESET and their unparalleled support have consistently delivered.”

**Progress. Protected.**