Official Cybersecurity Partner







# MERCEDES-AMG PETRONAS FORMULA ONE TEAM CASE STUDY



# EVERY Sono GOUNTS

# ENSURING PROTECTION WITH CROWDSTRIKE AS THE FORMULA ONE TEAM PUSHES THE THEORETICAL LIMITS OF DESIGN

Formula One™ is a celebration of the extreme: speed, risk, stakes and success. But while the sport is steeped in adrenaline and emotion, it is grounded in science and math. The pinnacle of motorsport, F1 racing is not just a form of entertainment, but a feat of modern-day engineering.

The Mercedes-AMG Petronas Formula
One Team is one of the most dominant
forces in F1 today, and a company that
recognizes the role of technology and
data in competition. The organization
draws 18,000 channels of data on its
racing cars, measuring everything from
pressure and temperature to acceleration
and force. Vehicles are equipped with
as many as 300 sensors, collectively
generating one terabyte of data each race

weekend, all of which is transported to the trackside engineering team and the factory in near real time.

"As a team we generate, process and analyse significant amounts of data, very quickly – we must ensure our information systems are an enabler for performance, not a blocker, but conversely we also need to ensure they are secure" explains Michael Taylor, IT Director at the Mercedes-AMG Petronas Formula One Team.

Compounding matters further is the team's proverbial "need for speed."

"In F1, performance is everything, time is our biggest challenge/opportunity" notes Taylor.

In CrowdStrike, the Formula One team found a partner that understands this distinction. The market leader in cloudbased endpoint protection, detection and response, CrowdStrike has built its reputation on superior protection delivered at stunning speed. The organization embraces the "1-10-60 rule," which sets the goal to detect suspicious activity, investigate a threat and successfully contain and remediate the incident within 1, 10 and 60 minutes, respectively. And, like the Mercedes-AMG Petronas Formula One Team, CrowdStrike is built on a culture of continuous innovation — pushing the boundaries of technology and engineering in pursuit of competitive advantage.



## **FACTS & FIGURES**

# THE CROWDSTRIKE FALCON PLATFORM HELPS ORGANIZATIONS:



Deploy immediately to **100,000+** nodes in a day



Realize **75%** efficiency gains



Experience a **25X** reduction in resource utilization





"Thanks to CrowdStrike, we know exactly what we're dealing with, which is a visibility I never had before."

#### **Rob Thomas**

COO, Mercedes-AMG Petronas Formula One Team



"We rely on our partners – in particular on CrowdStrike – to make sure that we have the cybersecurity that will ensure our success."

#### **Geoff Willis**

Director of Commercial Engineering, Mercedes-AMG Petronas Formula One Team



# ARACE TO WIN AND A REPUTATION TO PRESERVE

While security has become a top concern for every organization, it has reached a fever pitch for organizations like Mercedes F1. Its world-class reputation as a leader in the racing industry makes the brand a potential target for a host of digital adversaries.

"We're an immensely successful team in a global sport representing a prestigious brand – which naturally makes us a target, so security is of upmost importance" says Taylor.

This focus on security is a relatively recent phenomenon in the F1 world. In today's threat landscape, risk exists well beyond the closed course of the racetrack. The Team's intellectual property (IP) has implications in a number of industries, which means that the organization must take extra precautions to ensure the end-to-end

security of its data and trade secrets.

Another challenge in the racing world is mobility. As part of a global sport, the team relocates almost weekly to participate in events in more than 20 countries each year. As such, the company doesn't just need to secure its on-site premises, such as its factory and home office, but also ensure that the on-the-ground team receives iron-clad protection no matter where it happens to be.

"The world is getting riskier and more dangerous," explains Rob Thomas, COO of the Mercedes-AMG Petronas Formula One Team. "Being aware of the risks and putting processes and systems in place to ensure our security is crucial to our success going forward."

Like many CrowdStrike® clients, the

Mercedes-AMG Petronas Formula One Team recognized that it needed outside assistance to develop and deploy an end-to-end security strategy. Taylor explained that part of the appeal of CrowdStrike was its business model. The CrowdStrike Threat Graph® is a proprietary security tool that collects high-fidelity telemetry from millions of endpoints around the globe, analyzing and indexing trillions of events per week for quick and efficient access. In this way, clients like the Mercedes F1 team don't only have the benefit of monitoring their own network for suspicious activity, but are also able to proactively identify and respond to threats detected by CrowdStrike on other client networks.



"By analysing the millions of data points generated by a vast and diverse customer base, often in real time, CrowdStrike are able to provide our team with a comprehensive and clear picture of exactly what is happening across the globe, 24/7. That's an essential ingredient in protecting us from issues long before they become a problem" explains Taylor.

CrowdStrike professionals also integrate with the client team seamlessly, acting as strategic advisors, watchdogs and an emergency response team all in one. According to Thomas, one of the most helpful aspects of the CrowdStrike relationship is the preparation of an intelligence report before each race. This document outlines the potential threats present at each event and what is being done proactively to neutralize them. It also includes specific recommendations for the team, such as what devices may not be safe to take to the venue or which should be switched off at certain times.

"Thanks to CrowdStrike, we know exactly what we're dealing with, which is a visibility I never had before," says Thomas. "That gives me a good deal of comfort."

Geoff Willis, Director of Commercial Engineering for the Mercedes-AMG Petronas Formula One Team, agrees: "At the end of the day, Mercedes F1 is fundamentally an engineering organization. We rely on our partners — in particular on CrowdStrike — to make sure that we have the cybersecurity that will ensure our success."

# CROWDSTRIKE: SUPERIOR PROTECTION AND STUNNING SIMPLICITY

There is perhaps no greater example of the value of incremental optimization than Formula One. Each improvement, no matter how small, contributes to the overall speed and performance of the car. Insignificant on their own, these actions, when taken together, enable important efficiency gains, unlocking potential that is otherwise unachievable through a siloed design approach.

"Formula One cars are very sophisticated," says Willis. "In order to extract the full potential from the car, we operate very close to the theoretical limits to which it's been designed."



## THE STORY

#### CHALLENGE

As "an immensely successful team in a global sport representing a prestigious brand" Mercedes-AMG Petronas Formula One Team needed an end-to-end security provider that would protect the company's IP without compromising the speed and performance of its IT system.

#### TASK

To develop and deploy a holistic solution that allows the Mercedes-AMG Petronas Formula One Team to detect and prevent attacks anywhere in the world.

## WHY THE MERCEDES-AMG PETRONAS FORMULA ONE TEAM CHOSE CROWNSTRIKE

The Mercedes-AMG Petronas Formula One Team selected CrowdStrike because its cloud-based Falcon platform offers market-leading threat prevention, detection and response capabilities, delivered through a single lightweight agent and enabled through a team of dedicated security professionals.



#### MERCEDES-AMG PETRONAS FORMULA ONE TEAM

The Team recognized the same capability in CrowdStrike. A revolutionary in the cybersecurity market, CrowdStrike combines the best of both worlds: superior protection and stunning simplicity. The CrowdStrike Falcon® platform leverages a single, lightweight agent to manage the entire threat spectrum, including prevention, detection and response. Meanwhile, Falcon's cloud-native technology enables continuous monitoring of the threat landscape, thus eliminating the need for clients to complete manual scans.

"CrowdStrike ticked every box of our Security Partner assessment criteria – technically advanced, simple, lightweight and intuitive toolset, shared values and ethos and a brilliant understanding of our business context and challenges," explains Taylor.

For these reasons, Taylor selected Falcon Complete™, a turnkey solution that delivers instantaneous endpoint

protection as a service. As the name implies, Falcon Complete combines four industry-leading capabilities, including prevention, detection and response, IT hygiene, proactive threat hunting, and a 24/7 support team. Through this integrated solution, Mercedes F1 receives the highest level of security maturity delivered immediately, without the burden of building and managing a cybersecurity program or hiring and training staff.

"Falcon Complete was a great fit for our team – simple to deploy very quickly, along with an intuitive, cloud based management portal and onboarding process" explains Taylor.

He continues: "The depth and level of expertise which Crowdstrike possess is critical in making the right decisions, quickly and effectively, without negatively impacting our business"

Taken together, the benefits provided by the CrowdStrike Falcon platform enable the Mercedes-AMG Petronas Formula One Team to deploy an end-to-end security solution against threats around the world and the track. Scalable and flexible, CrowdStrike solutions are capable of growing with the organization's needs and responding to an increasingly complex threat landscape. Finally, the combination of cloud-native technology and a single, lightweight agent make CrowdStrike an effective and efficient solution without compromising speed or performance.

"CrowdStrike are a dotted line extension of our IT Department, delivering and operating a key capability, efficiently and effectively" concludes Taylor.





"The depth and level of expertise which CrowdStrike possess is critical in making the right decisions, quickly and effectively, without negatively impacting our business"

## **Michael Taylor**IT Director, Mercedes-AMG

Petronas Formula One Team

## **ABOUT CROWDSTRIKE**

CrowdStrike® Inc. (Nasdaq: CRWD), a global cybersecurity leader, is redefining security for the cloud era with an endpoint protection platform built from the ground up to stop breaches. The CrowdStrike Falcon® platform's single lightweight-agent architecture leverages cloud-scale artificial intelligence (AI) and offers real-time protection and visibility across the enterprise, preventing attacks on endpoints on or off the network. Powered by the proprietary CrowdStrike Threat Graph®, CrowdStrike Falcon correlates over 3 trillion endpoint-related events per week in real time from across the globe, fueling one of the world's most advanced data platforms for security.

With CrowdStrike, customers benefit from better protection, better performance and immediate time-to-value delivered by the cloud-native Falcon platform.

There's only one thing to remember about CrowdStrike: **We stop breaches.** 



### **Begin the conversation today:**

sales@crowdstrike.com crowdstrike.com/f1



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