PURESTORAGE®

About Customer

The Mercedes-AMG Petronas Formula One Team is one of the most successful teams in recent F1™ history and holds the record for the most consecutive wins in a season and for the most consecutive constructors' championship titles.
www.mercedesamgf1.com

Geo

EMEA

Industry

Automotive

Solution Area

Accelerate Core Applications

Products in Use

Pure Storage® FlashArray®
Pure Storage FlashBlade®
ActiveCluster™

Mercedes-AMG Petronas Formula One Team's Winning Formula

For the Mercedes-AMG Petronas Formula One Team, speed matters, and not just on the track. Behind the scenes is an IT engine that collects, stores, and analyzes more than a billion data points and many terabytes of data generated by the car itself – as well as every other aspect of the business, from social media to lean manufacturing.

To drive faster decision making, The Team embarked on a modernization initiative that saw 3PB of data migrated onto Pure Storage FlashArray and FlashBlade. From better application performance to enhanced data protection capabilities, Mercedes gains a competitive advantage, both on and off the track.

> "Pure's architecture makes it very easy to provision storage and provide storage-based services in the data center with the least amount of input but the most amount of control."

MICHAEL TAYLOR,
IT DIRECTOR, MERCEDES-AMG PETRONAS FORMULA ONE TEAM

Impact on Mercedes-AMG

Fast-tracks critical decision-making for improved performance

Reduces operational friction to support knowledge-driven culture

Builds agility and resiliency into operations, on and off the track

Challenges

Applications housed in disparate systems yielded inconsistent results

Adding new services and applications fueled exponential data growth

Managing infrastructure from multiple vendors was complex and expensive

Results

Up to 90% faster access to application data, including track-side files

Agile, always-on data infrastructure provides continuous in-car insights

3PB of data managed by a single storage administrator

Putting Data in The Driver's Seat

At Mercedes-AMG Petronas Formula One, there is one ambition that unifies drivers, pit crew, and IT staff alike: a desire to beat the competition. For IT Director Michael Taylor, fast access to data is the ultimate differentiator.

"For us, it's about investing to develop a new capability, something that we can't do today but that we could tomorrow," he says. "And if there's a technology that makes this possible, the business case is much easier to justify."

Increasing data volumes, fueled in part by bringing new services such as simulators online, became a significant operational overhead in the organization's existing data center. Infrastructure from multiple vendors created a costly and complex environment to manage. It also meant that applications resided in different systems, resulting in inconsistent performance levels across the business.

"We knew we needed to provide data services to the organization at a cost point that is effective, but we also needed basic controls to secure the data and provide a certain level of performance," says Taylor.

The F1 Approach to Storage

The Mercedes-AMG Petronas Formula One Team standardized on Pure Storage FlashArray and FlashBlade. The organization also safeguards data with ActiveCluster for uninterrupted insights both on and off the track.

"The performance of Pure Storage was an immediate standout for us, but the simplicity of the offer made them absolutely different from the competition," says Taylor. "They were taking the F1 approach to storage."

The organization has since experienced a 90% improvement in query times for database applications and 66% faster access to track-side files. And, even with the increased volume of data, only one storage administrator is needed to manage the entire environment.

On Track for Smarter Sensors

Mercedes-AMG Petronas Formula One currently generates thousands of channels of data, augmenting and supplementing them with virtual channels. In the future, smart sensors will do some of the processing, filtering out noise from insightful data – potentially during a race.

"We want to be knowledge-driven, so we must reduce operational friction and seamlessly use data as an enabler to make effective decisions," says Taylor. "Pure's architecture makes it very easy to provision storage and provide storage-based services in the data center with the least amount of input but the most amount of control."