Mercedes-AMG Petronas Motorsport takes technology pole position through partnership with HPE

Tune in to a Formula One™ Grand Prix race some upcoming Sunday, and chances are you'll see the Mercedes-AMG Petronas Motorsport team battling for a spot on the winner's podium. The team has achieved consecutive Drivers’ and Constructors’ Championships from 2014 to 2018, and driver Lewis Hamilton is considered one of the best in the history of the sport. Take a closer look and you'll see that HPE has joined the team to help pair its high-performance race cars with advanced IT engineering. In a sport where split seconds make the difference, HPE technologies and HPE Pointnext help this F1™ team gain new technology advantages to power its drivers around the track.

**CHALLENGE**
The engine behind the engine

For Mercedes-AMG Petronas Motorsport, winning requires a flawless combination of sophisticated auto engineering and shrewd on-the-track strategy. The right IT is critical at every stage of the race—starting well before race day with the High Performance Compute (HPC) systems required to power state-of-the-art engineering, R&D, testing, and simulations.

**SOLUTION**
Software-defined hybrid cloud paired with a trackside edge

In partnership with HPE, Mercedes-AMG Petronas Motorsport are in the hunt for new ways to leverage state-of-the-art technology.

Their first priority: car engineering. The team implemented new platforms to power engineering and test applications, including race simulation and computational fluid dynamics. In parallel, through a proof-of-value project, Mercedes-AMG Petronas Motorsport is exploring ways to automate and leverage machine learning in areas such as computer vision and complex computational analysis.

**RESULTS**

Smoking tires, blistering speeds, split-second decisions: few things are more exciting than watching Formula 1 racing champions fly around a Grand Prix track, maneuvering for any possible advantage as the laps tick by. And now, with HPE on the team, Mercedes-AMG Petronas Motorsport has the technology it needs to support state-of-the-art machine learning. The team can tackle data challenges more quickly and efficiently and gain better insight into its data. And this in turn delivers the increases in development time and iterations that lead to better team performance.

“ We must optimize our car race weekend by race weekend. That is what it takes to perform. And that is why we need technology engineered by HPE. ”

Toto Wolff, Team Principal & CEO of Mercedes-AMG Petronas Motorsport

**TRENDS**
F1 Racing: A Big Data Sport

From its inception, Formula One – the highest class of single seater auto racing sanctioned by the Fédération Internationale de l’Automobile – has been ruled by daring drivers and genius mechanics. But today, the digitization of cars and engineering processes means that big data is increasingly vital to F1 team strategy.

**SOLUTION RECIPE**

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