

“The data centre allows us to address market demands without additional investment. Vehicle manufacturing automation has increased significantly allowing for a modernised and responsive manufacturing process.”

Antonio Raposo
CIO, Information Services
Volkswagen Group South Africa

VOLKSWAGEN
GROUP SOUTH AFRICA



Volkswagen South Africa replaced +300 physical servers with 14 virtualised FUJITSU Server PRIMERGY for lower costs and improved performance.

At a glance

Country: South Africa
Industry: Automotive
Founded: 1951
Employees: 3,800+
Website: www.vw.co.za

Challenge

Volkswagen South Africa wanted to replace more than 300 legacy data centre servers with a modern, virtualised and consolidated solution in order to fully exploit the opportunities offered by 'Industry 4.0' and the Internet of Things.

Solution

By leveraging the existing global relationship in place with Fujitsu, it was able to deploy a cost effective, high-performing new data centre, consisting of 14 FUJITSU Server PRIMERGY RX2530, each hosting an average of 25 virtual machines and supporting over 100 business critical applications.

Benefit

- Reduction in annual operating costs
- Capacity has increased by 35 per cent, processing power has leaped 150 per cent, so VW SA can quickly scale and roll out new products and services
- Vehicle body production automation has increased to 70 per cent, making the manufacturing process significantly more agile
- Total visibility of business intelligence, enabling smarter business decisions

Customer

Founded in 1937 and renowned for its iconic VW Beetle, Volkswagen (VW) is the world's largest automobile manufacturer with annual revenues of USD\$245bn. Its South African subsidiary VW SA is based in Uitenhage, and employs 3,800 people across the country. In South Africa alone, VW produces around 120,000 cars, 65 per cent of which are for the export market.

Products and services

■ 14 x FUJITSU Server PRIMERGY RX2530



Challenge

VW SA recently defined a board-level strategy that would transform the company, based around four key pillars: sustainability, manufacturing excellence, employee transformation and customer experience. It wanted to embrace new technology and trends, specifically 'Industry 4.0' – the automation of data exchange in manufacturing technologies, which includes cyber-physical systems, the Internet of Things (IOT) and cloud computing.

"It was a radical rethink designed to make information and business intelligence visual and fully integrated with the manufacturing process. However, our aging legacy data centre was not consolidated and did not have the capacity to support our new ambitions," explains Antonio Raposo, CIO, Information Services, Volkswagen South Africa. "Sixty per cent of the hardware was reaching end of life and it was mostly a physical rather than virtual environment so we had a lot of kit that we wanted to rationalise."

VW SA undertook some local benchmarking research to find the right hardware partner to create a new virtualised data centre. Not only did Fujitsu perform well, the existing global partnership already in place with VW meant that the company could also leverage substantial savings.

"Fujitsu demonstrated that it understood our business and drew up a migration framework with the tools we needed to ensure a seamless transition," adds Raposo. "That, combined with the existing wider relationship and local presence, made it the perfect partner for this next step in our evolution."

Solution

VW SA deployed 14 Fujitsu RX2530 rack servers, each of which runs 25 VMware virtual machines. This replaced more than 300 physical servers reducing the infrastructure by 80 per cent and enabling the company to consolidate and streamline over 100 applications.

The FUJITSU Server PRIMERGY RX2530 is a dual-socket rack server that provides high performance of the new Intel® Xeon® processor E5-2600 v3 product family, expandability of up to 1,536 GB of DDR4 memory and up to 10x 2.5-inch storage devices - all in a 1U space saving housing. As such, the PRIMERGY RX2530 is the optimal solution for VW SA's virtualisation and high performance computing needs.

"The new Fujitsu platform provides the foundation for every aspect of our business, including SAP, HR, Finance, CRM, office tools and production applications," continues Raposo. "It supports over 2,000 internal users as well as 8,000 dealers in the region."

Local Tier One Partner, Technology Corporate Management (TCM), and Fujitsu provide around the clock support for the new data centre to ensure maximum uptime. Any hardware failure is guaranteed to be resolved within a two-hour window.

"We cannot afford any downtime; even losing just 1.5 minutes of operation results in a significant cost impact and loss of production capacity to fulfil our volume requirements, however in the six months that the data centre has been up and running, we have not seen a single incident," says Raposo. "This five-year service contract will ensure optimal performance for both manufacturing and administrative functions."

Benefit

VW SA has seen an instant reduction in operating costs with significant savings/reduction on application licencing and lower energy costs, while also creating 35 per cent more capacity. At the same time, processing power has increased by 150 per cent, delivering increased performance and productivity.

"Our new data centre allows us to address market demands more quickly without additional investment," comments Raposo. "For example, vehicle body production automation has increased to 70 per cent, which means we can be more responsive in the manufacturing process."

Fujitsu has created an environment where business intelligence is available immediately to all levels of the business. Whereas the previous system was siloed, limiting the information flow between departments and the manufacturing floor, VW SA now enjoys total visibility instantaneously, enabling smarter business decisions.

"We have complete transparency across all operations along with simplified management and the ability to scale," remarks Raposo. "KPIs can be monitored minute to minute while bottlenecks can be identified and resolved quickly for a more proactive business. This means fewer manufacturing failures, reduced overtime requirements and on-time vehicle delivery."

With the Fujitsu data centre in place, VW SA is already progressing to consolidate its Oracle and SQL databases, providing additional efficiency.

"We are not technologists and so depend on our IT partners to educate and lead us," concludes Raposo. "Fujitsu has proven itself a worthy teacher and guide, enabling us to realise our strategic vision."

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