

## CASE STUDY

### PROJECT SUMMARY

APPLICATION MODERNIZATION

#### COMPANY

TOTAL

#### INDUSTRY

Oil & Gas Industry

#### LOCATION

South Africa

#### SOLUTION

Microsoft Azure cloud migration

## THE CHALLENGE

---

Total required the modernization of several existing Microsoft .Net custom developed solutions to a modern cloud platform. The migration needed to achieve the following high level objectives:

- Reduce the cost of hosting the applications
- Better infrastructure security
- Improved disaster recovery for applications and databases
- Higher application uptime and faster user response times across the applications

## THE DVT SOLUTION

---

As a Microsoft Azure Cloud Platform partner, DVT migrated all four custom developed systems (Dealer Communication, Total Card, Dealer Classification & Total SOC) to the Microsoft Azure cloud.

## TECHNOLOGIES USED

---

Many Microsoft Azure based technologies and components were utilised:

- Application Insights – System health and application status monitoring
- Azure SQL – Managed SQL database platform(PaaS)
- Azure Infrastructure as a Service (IaaS) – Virtual machines, networking/firewalls , managed VM disks
- Blob Storage - Highly scalable and cost-effective storage
- Recovery Services Vault - Virtual machine backups and instant recovery
- Virtual Network Gateway – Securely VPN into Virtual Machines private network. VM is locked down with no RDP ports open to the internet for enhanced security





## ABOUT DVT

DVT is a software development and testing company that focuses on digital transformation technology solutions for clients globally. Its services include custom software development for mobile, web and traditional platforms, software quality assurance, automated regression testing, UX/UI design, cloud application services, DevOps consulting and data & analytics solutions as well as Agile training and consulting.

Founded in 1999, DVT has grown to over 700 staff with offices in the UK (London) and South Africa (Johannesburg, Centurion, Cape Town and Durban). The company services more than 100 local and international medium and large organisations.



## VALUE BENEFITS

- **Reduced hosting costs** means that a bigger portion of the monthly system budget can be utilized to implement additional business requirements.
- **Flexibility.** Utilizing the Microsoft Azure cloud platform, the system can scale to automatically accommodate an increase in user base, database size and processing requirements, without purchasing additional hardware.
- **Improved responsiveness.** The applications are now more responsive with 98.8% of requests returning in less than 250ms
- **Deeper usage insights.** Total is now able to track user base information like country of origin, browser information, peak time of day usage statistics and many more.
- **Security and recovery improvements.** SQL Threat Detection detects anomalous activities indicating unusual and potentially harmful attempts to access or exploit databases. The Azure cloud platform, provides improved security and disaster recovery that was expensive to achieve in a managed hosting solution.
- **Improved data protection.** By using SQL Encryption, the databases are now encrypted by default and no additional cost.
- The **extensive monitoring services** available on the Microsoft Azure cloud platform meant better monitoring of system uptime, earlier detection of system problems and faster resolution of system outages.

## ABOUT TOTAL

Total South Africa was established in 1954 and is 50.1% owned by multi-national Paris-based Company, Total Group. Total South Africa is a significant role player within the Total Group. Total is a multinational integrated oil and gas company and one of the seven "Supermajor" oil companies in the world.

With a portfolio of 547 service stations located throughout South Africa, Total is a key player in the country's petrochemical market, with products ranging from jet fuel, liquid petroleum gas to lubricants, grease and kerosene.

### UNITED KINGDOM

City Pavilion, Cannon Green 1st Floor, 27 Bush Lane, London, EC4R 0AA

Tel: +44 20 3946 7503 | [www.dvt.co.uk](http://www.dvt.co.uk)

### SOUTH AFRICA

Ground Floor, Victoria Gate South, Hyde Park Lane, Hyde Park, 2196

Tel: +27 (0)11 759 5930 | [www.dvt.co.za](http://www.dvt.co.za)