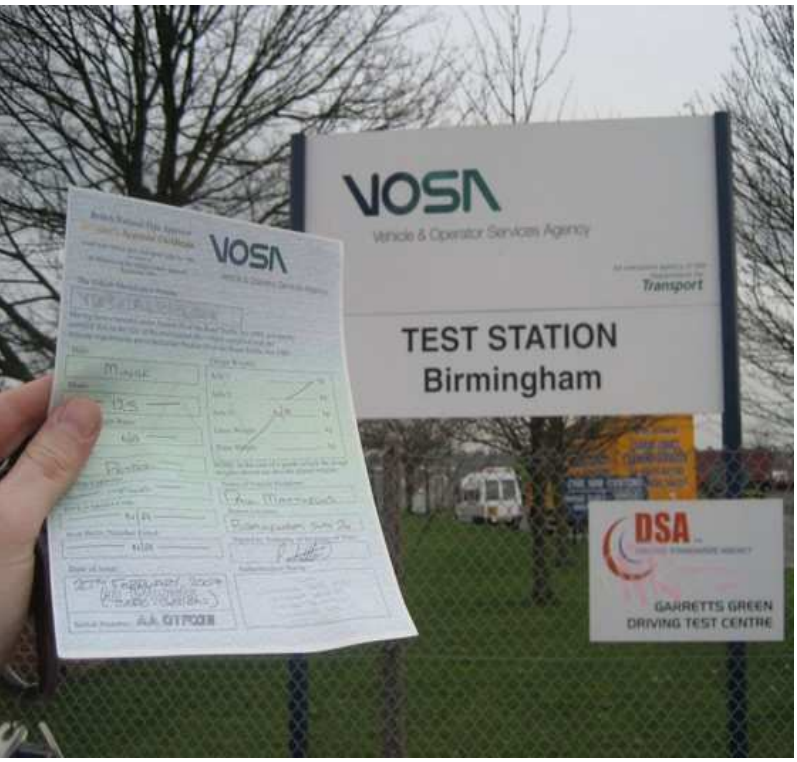
CASE STUDY

BS2000 mainframes are the data hub for vehicle tests in Great Britain

Reliability in Vehicle Testing

"MOT testing requires a stable, high-availability, failsafe and reliable platform. In this respect, the Fujitsu mainframes are now providing 24/7reliability"

Alex Fiddes, Director and Chief Operating Officer, VOSA, Bristol, UK



VOSA is the Government Agency that monitors vehicle roadworthiness in Great Britain, responsible for the so-called MOT tests, the regular annual technical safety check for all private vehicles that are older than three years and registered in Great Britain. The tests are carried out in 19,000 privately-owned, authorised, independent vehicle test stations.
Some 30 million vehicle tests are carried out each year.
More at: www.vosa.gov.uk

The challenges

User-friendly – central data management and the seamless connection to the 19,000 test centres; all of the information pertaining to the MOT tests was to be highly accessible to authorised users quickly and easily

Powerful – the system had to be capable of handling enormous volumes of data from millions of vehicle tests

Stable – the system also had to guarantee high system stability to provide a 24/7 service

The Solution

In order to improve road safety, reduce fraud and address environmental issues, the Vehicle and Operator Services Agency (VOSA) decided to computerise the administration of the British MOT Scheme. Siemens IT Solutions and Services (SIS) was contracted to design, develop, implement, and administer a bespoke IT system. Their solution included a central application and database mounted on BS2000 mainframes from Fujitsu as the heart of the system. VOSA now can access a database which contains 100 percent of the data to monitor and enforce the motor vehicle testing. In addition, computerising the administration of the test scheme has made it possible to capture, file, manage and evaluate the test results. VOSA has already received several important National Awards for MOT Computerisation.

Solution components

- Core IT infrastructure modules:
  BS2000/OSD SX160 as production system,
  BS2000/OSD SX160 as standby system
- Equipment for 19,000 independent test garages:
  ESPRIMO C100 or ESPRIMO C250 PCs

Customer benefits

- Modern IT infrastructure for computer-supported vehicle testing services
- BS2000 mainframes provide 24/7 reliability
- Centralised storage of digital data
- Connectivity with 19,000 MOT test garages
- Greater transparency in the monitoring of country-wide MOT testing activities
- Significantly simplified administration
- Minimal risk of fraud or theft in connection with issuance of MOT certificates

The project

Too much paper costs too much money – that involves an enormous investment in terms of administration and the evaluation of the test data. Prior to the introduction of an IT-based solution, the test results were available on paper only. Each individual garage sent a monthly return of tests carried out to VOSA, where they were filed. This process cost a lot in terms of time, storing the information took up a lot of space and the corresponding costs were high. In order to improve efficiency and combat fraud, VOSA decided to computerise the administration of the MOT Scheme and selected SIS as their IT provider to work out a solution. Priorities included central data management and the seamless connection to the 19,000 test centres.

All of the information pertaining to the MOT tests was to be highly accessible to authorised users quickly and easily. Another important factor: the system had to be capable of handling enormous volumes of data from millions of vehicle tests. The system also had to guarantee high system stability to provide a 24/7 service. SIS developed and implemented an IT infrastructure consisting of hardware made by Fujitsu. An ESPRIMO C100 or C250 PC, including a modem and printer, was installed at each test centre. The testers in the garages input the results of the vehicle tests and print the test documents from these PCs. A telephone line connects the computers with the central database, where all the results of the MOT tests are stored. Using a Web browser the staff at VOSA has access to all test data. But it's two BS2000 mainframes that form the real heart of the infrastructure. An SX160 mainframe serves as the production system, while another SX160 business server acts as the standby system. The mainframes are home to the SESAM database system that stores all the information from the 30 million vehicle tests carried out across Great Britain in the 19,000 test centres each year.

A record of success

VOSA now has access to a 100-percent precise information base for the MOT tests. Overall administration of the MOT Scheme has also been noticeably improved. All the test centres are now linked to the central database and deliver real-time information. The entire process has become more user-friendly. The owner of a vehicle, for example, can conveniently access test information on his own vehicle at home over the Internet. Or anyone else who would like to buy a used car can get the complete history of test results on that vehicle online – subject to the owner's permission. MOT testing requires a stable, high-availability, failsafe and reliable platform. That's why exacting Service Level Agreements were imposed. A possible downtime may not exceed five minutes. After that, the system must be up and running fully and ready for trouble-free MOT testing. This is now the case with the two BS2000 mainframes.

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