

S/390 Compatible Mainframe Storage Expansion



The Police National Computer Disaster Recovery Site near Birmingham needed a storage boost of 390GB

The Police National Computer (PNC) is run by the Police Information Technology Organisation. The Police National Computer is a cornerstone of PITO's work, having been at the forefront of operational policing for 30 years. Available 24 hours all year round, the PNC is an invaluable store of information, source of intelligence and on-line aid to investigations.

It holds extensive data on criminals, vehicles and property, which is accessible in a matter of seconds, through more than 10,000 terminals across the country. The PNC is accessed through a secure network and all transactions are logged for audit and data protection purposes.

Over the years, the system has grown to embrace many technological advances, incorporating advice from the government and policing bodies, as well as from in-house and industry technical experts. It has developed from a record keeping service to a sophisticated intelligence tool.

The PNC was born in 1974 with Stolen Vehicles as its initial database. Since then, additional applications have been implemented almost every year. The range of facilities, level of detail and potential value of information stored on the PNC has improved significantly.

For example, the Vehicle Online Descriptive Search (VODS) can use a partial description of a vehicle to find matches within 50 million recorded on the system. And Querying Using Extended Search Techniques (QUEST) provides a search capability against the Names application using most elements of the record's content.

Automatic Number Plate Recognition (ANPR) devices can scan thousands of vehicle registrations every hour and check them against PNC records to identify those of interest to the police.

The Comparative Case Analysis (CCA) tool, used to record and examine serious unsolved crimes, can search for

Summary

Problem

- . Storage Expansion
- . Mainframe Environment

Solution

- . High Performance, 100% available storage system

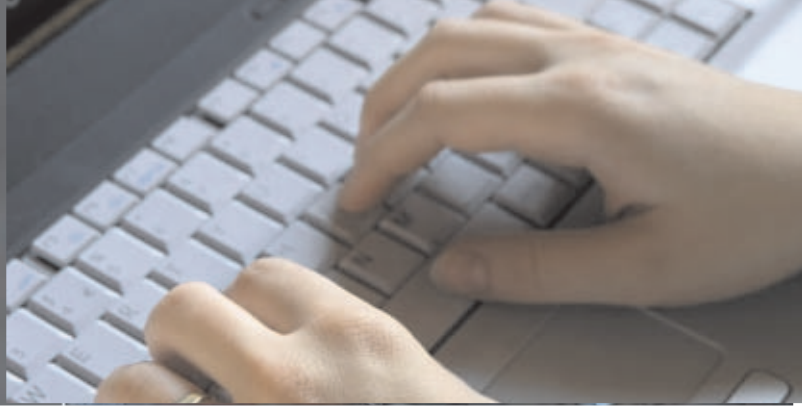
Technology

- . HDS Freedom 7700E disk system

Benefits

- . 100% Availability Guarantee
- . High Performance
- . Highly Scalable
- . Excellent Interconnect

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About Solution Centre

Solution Centre provides vendor agnostic services, consultancy and solutions to public, charity and commercial organisations.

The technology centre on data availability and security.

We map technology to the business need and as we are authorised by all major manufacturers in our field we can give independent and impartial advice from initial problem analysis, through solution definition, implementation to ongoing comprehensive support.

We understand that the technology we work with may not be mainstream to our customers and work with them to provide all the support they need.

similarities in incidents that have taken place miles and even years apart, helping investigators to identify patterns, links and serial offences.

Siemens were the incumbent supplier and provided extensive services to the PNC. The computer itself was a Siemens S150-20 mainframe. 380GB of storage was provided by two Siemens and two EMC disk arrays comprising some 180 disk drives.

When a decision was made to increase the storage capacity at the disaster recovery site PITO went to open tender through the European Journal.



Our proposed solution incorporated Hitachi Data Services (HDS) Freedom 7700E Disk Storage System. This system provided OS/390 connectivity via Escon or Fincon and was designed for 24 x 7 operation from the start. It was the first storage system to offer a financially backed 100% data availability guarantee.

The requirement was to provide 390GB in the first instance with a probable 83GB to follow at a later date. Services required included the installation and configuration of the system, with stringent performance criteria. Ongoing on site maintenance was also required.

The system would actually non-disruptively scale to 11TB and accommodate 16GB of cache, which is vital in a mainframe environment, as opposed to an open system environment.

Despite Siemens being the incumbent supplier, service provider and manufacturer of most of the installed equipment, our solution was so well defined and specified, our bid was successful.

PITO accepted our proposal and the system was installed and commissioned successfully. The second expansion of the further 83GB was implemented at a later date.



CASE STUDY