



HIGH-AVAILABILITY



Success Story



The world never stops...



The Customer

Nottinghamshire Police – www.nottinghamshire.police.uk – is one of 43 forces in England and Wales. A medium sized force organised in four divisions, it employs over 2,500 police officers and a further 2,000 police support staff to administer crime prevention and detection across a county with one of the UK's higher crime rates. With 1,000 less officers than other forces with comparable levels of criminal activity, this makes it the busiest force in the country in terms of crimes dealt with by individual officers.

Recently, with the introduction of new crime reporting technology, the force has significantly boosted its performance, a significant contribution to this improvement has been the adoption two years ago of a new 24x7 Crime Reporting Management (CRM) system from ABM – www.abm-uk.com.

This is running on a pair of SunFire Unix V880 machines – and is guaranteed uninterrupted uptime by High-Availability.Com's RSF-1 solution. The system was supplied and implemented by HAC partner Esteem – www.estem.co.uk. Since the software was installed, no unplanned downtime has interfered with the force's round-the-clock efforts to deter and detect crime.

The Need

"Until two years ago we had a nine-to-five crime reporting system," says Nottinghamshire Police Senior Technical Officer David James. This ran on Compaq Unix DS20's with a RAID disc array. It was adequate as far as it went but was really a straight reporting system, providing records but with little management intelligence capability. And as it wasn't 24x7, there was no high availability back-up"

With the Home Office and Police Standards Unit calling for increased efficiency, Nottinghamshire decided to move away from its former paper based system to one which was automated so that the crime form is fed immediately and directly in using scanners.

Subsequent enquiries are also all electronically captured. A number of crimes are reported to the police directly over the telephone and if the crime does not require attendance at the scene, the details can be taken by telephone and entered directly into the system.



“...completely transparent to users...”

▪ David James



STRATEGIC DEVELOPER



Then we installed the more comprehensive Criminal Records Management System (CRMS) which is used by a number of forces across the country - from ABM, an international supplier of global business solutions for criminal justice organisations world-wide.

Users include Strathclyde Police, Western Australia Police, Pennsylvania State Police and the Metropolitan Police. It records all crime information across the police force, providing users with a complete picture of each crime at the click of a button, making it much easier to identify, for example, repeat victims and locations.

The Solution

“The new system now provided a round-the-clock, seven-day-a-week capability and we needed to ensure that it always be available all the time, day or night. Police work is now very much a 24-hour a day business and we just couldn’t afford for it ever to be unavailable to officers entering information or accessing its database. We needed to make sure we provided the maximum support for bobbies on the beat”.

The new system was installed on a Unix SunFire V880 cluster – with the application running on one server and the database being held on the other. “The hardware suppliers, Esteem, recommended the High-Availability.Com RSF-1 solution and after a review of alternatives that was the system we chose, particularly in light of the fact that the system was in use for similar applications with other UK police forces,” says David.

RSF-1 was originally released in 1995 and is designed to make services ‘highly available’ by switching between servers if a server or service fails. It provides multi-directional redundant ability that allows servers to constantly monitor and shadow each other. Rather than maintain a standby option idle as a failover server, RSF-1 allows operational systems to act as standby servers, ensuring that hardware investment is optimized.

In the event of server failure, RSF-1 includes both Java and Windows based system admin modules that allow the cluster to be monitored and administered in real time – showing the status of any RSF-1 instances available on the network and provide manual switchover functions.

High-Availability.Com designed and developed the first high availability solution for Sun Unix servers and has been leading the mission-critical market ever since with innovative products to help customers maximize their business IT and Internet functions. The company sells and supports products to customers throughout the world, ensuring critical



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“...virtually instant failover backup...”



applications and services keep running in the event of system failures.

Other UK police forces using the system include Avon and Somerset, Mersey, Sussex and Warwick. In addition, RSF-1 is used by such crime/security organisations as Securicor Information Systems.

The system supports the CRM system for around 2,000 users at over 20 different locations across the force's four divisions and was progressively rolled out over the entire constabulary over a year. Since it was installed, there has been no unplanned downtime. "It also means that we can handle maintenance and upgrades without any interference," says David.

"We just transfer, for example, the application from one server to the other server running the database and then vice versa, respectively manually failing over and then back again when maintenance has been completed. This is completely transparent to users for whom the system continues as if nothing had happened".

The Benefits

"The new CRMS system has contributed to a significant improvement in the way we record crime," says David. "But an essential element is guaranteeing the system is always available any time – day or night".

"Our IT department however, is not manned on a 24x7 basis so RSF-1's automatic failover facility is essential, although we have never had to use it – and for maintenance we do it manually. The system is reliable, easy to use and rugged – and gives us complete peace of mind for what is a crucial application and the knowledge that there is virtually instant failover backup if anything ever does go wrong".

"We also like the intuitive graphical user interface (GUI) which has all the functionality of the command line – and the flexibility to enable individual users to employ either, according to their preference".

