HP by deploying a new Integrity NonStop server platform

Industry: Public Sector

Northumbria Police partners with HP to deploy a new high availability data centre





"The success of the HP Integrity NonStop system is that it is seamless, robust, and gets the job done. It has always been reliable and performed to the highest standards but, above all, it is critical to our ongoing mission to ensure we offer the communities we serve a first class service responsive to their needs." Jon Taylor, Information Services Manager, Northumbria Police

Objective:

Northumbria Police Force needed to upgrade its existing server platform to maintain high availability, enable secure data integration and provide user access to a new web portal.

Approach:

- Partnered with HP and BrightStrand International to deploy a robust, reliable Integrity NonStop server platform.
- Built on over 20-year continuous experience of working within a HP NonStop server environment.

IT improvements:

- The HP NonStop Integrity platform is 3.5 times faster, compared to the previous system.
- Can easily process the typical daily level of 1.5 million user-based transactions, with spare capacity for the integration of additional web applications.
- HP Virtual TapeServer technology eliminates the need for physical tape transfer between sites.

Business benefits:

- Helps enable integration with other law enforcement agencies and criminal justice bodies.
- Provides a platform for a new, secure, unified portal which improves police officer and staff productivity.
- Despite trebling Central Processing Unit (CPU)
 capacity and more than doubling storage space,
 the new system takes up no additional floor
 space, uses the same energy levels and costs the
 same amount to deploy.
- Support costs reduced by 30 per cent.



Northumbria Police is one of the largest forces in the UK, serving a population of 1.5 million people and covering an area of more than 2,000 square miles in the North East of England. It is recognised as one of the top performing forces in the UK and has approximately 4,100 police officers, 2,500 police staff, as well as Special Constables and Community Support Officers, who work together to prevent, detect and reduce crime in the Northumbria area.

Meeting new policing challenges

For over 20 years, Northumbria Police has relied on HP NonStop technology to provide the technological backbone for its IT infrastructure. As part of its five-yearly technical refresh, the IT team considered solutions from several technology vendors including HP and Sun. Following due consideration, they decided on a new high-end HP Integrity NonStop server platform to support The Northumbria Police Integrated Command and Control System (NPICCS)

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Jon Taylor, Information Services Manager, Northumbria Police



application suite, which was developed to support command and control functions as well as incident handling including custody, case preparation, and crime reporting, etc. With over 1.5 million transactions logged on the system every day, including emergency calls, it is critical that the system is available 24/7 – downtime simply is not an option.

"We always make regular upgrades to our server platform in order to stay ahead of the technology curve but this time we also had some specific challenges we needed to address. As well as ensuring 100 per cent availability, we also wanted to add the capability to open up the underlying technology with a new integrated front-end and expose the data from the HP system into a range of other applications. It is also imperative that police services across the country, alongside other criminal justice bodies such as the home office, courts and probation services, are able to securely and reliably exchange information. We wanted a reliable, high-performing solution that would help us meet this objective," explains Jon Taylor, I.S. Manager at Northumbria Police.

A robust, high-performing experience

Northumbria Police worked with BrightStrand International Limited to design and deploy a new data centre environment based on market-leading HP Integrity servers. BrightStrand was the first HP Solutions Partner to be accredited to sell the HP NonStop range of servers in the UK and Ireland. It also has a long-standing relationship with Northumbria Police and provides consultancy, professional services and development resource.

HP Integrity NonStop servers deliver better business outcomes through continuous availability for 24/7 business operations based on a standard-based approach for investment protection and smooth integration. There are now two HP NonStop (NS) NS1200 servers, supported by 7 terabytes (TB) of storage, at two sites in the region. HP NS1204 and NS1208 servers in Ponteland act as the main data centre and are mirrored by a disaster recovery platform in South Shields.

Northumbria Police also uses HP ProLiant servers for front-end processing of non-critical applications

and HP NonStop software enhances manageability, performance and disaster recovery. In addition, HP Virtual TapeServer technology emulates a physical tape drive and backs up data onto a physical disk. For Northumbria Police, this eliminates the need for tape handling and the physical transfer of back-up tapes between sites which was previously done using a van. HP Services assisted with the data centre migration and also provides 24/7 live support of all NonStop hardware and software within a four hour response window, ensuring that any issues are dealt with quickly and efficiently.

The new solution made an immediate impact on performance: "We first noticed the sheer power of the HP Integrity NonStop platform – it is 3.5 times faster that the previous system and can easily process the typical daily level of 1.5 million user-based transactions," explains Taylor. "Where appropriate and approved, it also frees up our data to be securely shared with other agencies. Our internal systems have always been integrated but cross-border crimes are different and traditionally sharing with third parties has been difficult."

"Most importantly, we are currently modernising the front-end so that officers and staff will be able to log on to the network securely via a role-based, personalised portal. This will present them with information about current incidents and crimes they are working on, alongside everything from annual leave to mileage claims. All that data currently has to be actively retrieved by the user and that takes time and reduces efficiency. The new platform will improve productivity, allowing our officers to spend more time on the streets doing their job, meaning an improved service to the public," adds Taylor.

Increased performance and energy efficiency

As with all public sector bodies, value for money is a key factor in deploying new technology and increasingly, energy consumption is also important. In this regard, the HP Integrity NonStop platform does not disappoint.

Customer solution at a glance

Primary hardware

- 2 x HP Integrity NonStop NS1208
- 2 x HP Integrity NonStop NS1204
- 70 x HP ProLiant DL series rack mounted servers
- 15 x HP ProLiant ML series tower configurations
- 14 x HP ProLiant Blade servers

Primary software

- HP NonStop Remote Database Facility
- HP NonStop Transaction Management Facility
- HP NonStop SQL
- HP NonStop Autosync
- HP Virtual TapeServer
- HP Pathway
- WebLogic Server
- COBOL85
- C Compiler Software

HP services

- HP Data Center Migration Services
- HP Support

"Given the huge increase in productivity, we were expecting a simultaneous increase in cost, energy usage and physical footprint," comments Taylor. "However, despite trebling Central Processing Unit (CPU) capacity and more than doubling storage space, the new system takes up no additional floor space, uses the same energy levels and costs the same amount to deploy. In addition, we're expecting ongoing support costs to be reduced by as much as 30 per cent due to the new platform's reliability."

HP technology has been at the heart of Northumbria Police's IT infrastructure for over two decades, during which no significant downtime has been experienced. The new Integrity NonStop platform builds on this reliable foundation while preparing the organisation for the new challenges facing the police service and its cross-border counterparts.

"The new HP Integrity NonStop platform is faster, more resilient and is enabling us to meet new technological challenges. It is critical to the service we provide to the people of Northumbria and will indeed help us provide more productive, efficient and effective policing," concludes Taylor.

Partner at a glance

Company: BrightStrand International Limited

Headquarters: Glasgow, UK
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Number of employees: 50
URL: www.brightstrand.com

Business: Product sales, project management, system implementation, integration, consultancy and managed services

Products: HP Integrity NonStop



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