

## Delivering full disaster recovery at Nottingham City Council

Nottingham City Council is an all-purpose, unitary authority, working to make Nottingham a better place to invest in, live, work and visit. With 13,000 staff in 100 locations, the council provides a whole range of different services to over one million people.



### Nottingham City Council

Responsible for the council's network and communications infrastructure, the council's 60-strong IT team underpins the delivery of services to citizens, including Social Services, Housing and Council Tax, to Benefits, Leisure facilities and Business Services.

#### / Long-term IT partner

Providing such essential services, many of which are the fabric of everyday life for the citizens of Nottingham, the council wanted to increase the resilience of its IT infrastructure to ensure the continuation of services in the event of any unforeseen circumstances.

Already the council's primary IT partner, Bull has been working with Nottingham for the last nine years, providing its core server and storage infrastructure. Designed to support the council's objectives to meet the Government's transformation agenda and service improvement targets, the model is also helping to reduce IT costs.

"The last three years have been very much focused on achieving the Government's agenda and improving services," commented Jas Padam, Head of IT Operations, Nottingham City Council. "And the set-up Bull provides, along with its ongoing refreshes, underpins this continual improvement of what we offer to our communities."

Through Bull's consultancy services, Nottingham ensures it is using best-of-breed IT right across the council. Recent IT infrastructure updates from Bull include its advanced partition-based AIX servers, with more efficient processor management, plus standardisation onto EMC's DMX SAN storage so applications can integrate with each other easily. This energy efficient infrastructure has reduced power consumption by 15-20%.

#### / Demand for increased resilience

Over the past three years, business continuity plans have been progressed by Bull and Padam's team, evolving Nottingham's existing network into a more robust infrastructure. However, as all the main servers running the council's core applications, plus key staff, are concentrated in a single location, it was clear that a full Disaster Recovery (DR) capability was needed. Bull's DR assessment outlined the need for rapid system recovery in the event of data corruption, equipment malfunction or total outage of the main computer site. Any new approach had to cover five main corporate systems, plus the infrastructure supporting them, including: Corporate Finance, Housing Benefits (council tax, business rates, benefit payments) Housing (management, repairs and rents), Social Services and Payroll.

Existing contingency plans for emergencies mainly involved reverting to manual processes – which in turn relied heavily on telephone, fax and email still being available after any incident. Bull's analysis showed that the economic impact alone, in terms of additional running costs for personnel using systems directly was estimated at over £100,000 per day.



"The ability for the various departments to maintain service levels would be severely damaged in the event of extended system down-time and the impact on the community would be hard to imagine. We have targets for both response times and quality of service, so we need to be up-and-running quickly if anything unforeseen were to happen," explains Padam.

The main objective was to establish fully-blown business continuity for the council's most critical applications and be operational within a few hours, not days or weeks.

### / Off-site data centre allows full DR

After reviewing different suppliers including Sunguard and IBM, it was obvious that costs were prohibitive for proposals that, in addition, would take up to 28 days to return the council to normal working conditions. Bull's proposition involved Nottingham having its own DR facility to handle any potential disaster, from minor outages through to full disaster recovery. Bull recommended creating a replication business continuity centre, five miles from the council's primary IT site at Nottingham Guildhall. Padam says: "We chose the Bull solution as the model would not only give us complete control at the right cost but meant we'd benefit from having our own replicated data centre for application development, new release testing and training purposes too."

### / 'Business-as-usual' within 4 hours

In the event of unforeseen situations such as flood, fire or terrorist threat, all users switch over to the alternative data centre running replicated applications in under four hours. Housing the council's five critical systems, plus internet, intranet and email access, the new DR centre is synchronised to within one hour of the main IT site and is designed for a fast restore to full operation.

Replicating the council's core network, the centre uses virtualised server and storage configuration to keep processing and storage expenditure down. AIX, Windows and LINUX database servers are replicated on a virtualised AIX database server, while Storage Area Network (SAN) requirements are provided by Bull's FDA Array, in place of the EMC DMX and Clariion SAN.

Delivering fast and efficient switch-over to an alternative primary data centre, the DR solution adds a vital new layer of business continuity to the council's service delivery. "Bull really took pride in understanding our challenges and its partnership approach has contributed greatly to the strength of our IT team as a whole," Padam stated.

### / More robust IT, efficiencies gained

Nottingham City Council can now deal with unforeseen situations and continue with business-as-usual in only a few hours, ensuring its citizens keep receiving the range of high quality services they expect. "We were looking for full DR and Bull has helped us prove it is possible to run our own business continuity centre and benefit from everything that entails," commented Padam. "We've now gained the confidence that IT can continue to support service provision in any situation but we can also develop and test future applications, helping in our ongoing improvement of what we provide to the council."

Future plans at Nottingham include closer integration of front-end applications and rolling-out VoIP. Strengthening its DR ability has also allowed the authority to gain other efficiencies. Padam concludes: "Our objective is to keep on continuously transforming the way we work to meet corporate workplace strategy initiatives."

### / Further Details

For further details please contact Bull at:

[information@bull.co.uk](mailto:information@bull.co.uk)

Or call us direct on:

**0870 240 0040**