



HIGH-AVAILABILITY



Success Story



The world never stops...



Xansa, the Business Consulting, Information Technology and Outsourcing company, have upgraded their IT infrastructure to improve performance, resilience and maintainability. The solution chosen by Xansa was High-Availability.Com's RSF-1 cluster middleware. The upgrade also supports capacity for future growth and significantly improves disaster recovery procedures. Operating throughout Europe and the UK, North America, India and Asia-Pacific, Xansa transforms the business capabilities of its clients by harnessing knowledge of selected industries and business processes with proven skills in applying technology.

The group's four key areas of expertise are business consulting, IT, outsourcing and business process management. Value is added through large-scale business and IT change programmes, contributing expert management, mobilising extra resources and re-skilling staff. Clients include some of the world's largest and most successful organisations, including, for example, BT, Barclays, Diageo, AXA Sun Life and Tesco.

"We wanted to split financials from HR so that the two databases could not impact on each other -both with regard to day-to-day operation, and in the event of problems. The strategic goal was to improve capacity, resilience, maintainability and reporting capability, but in a failure situation, all three applications would be able to run on just one server " says Kati Gholam, Xansa's Senior Consultant for PeopleSoft Infrastructure.

Xansa also wanted to reduce the reporting time-cycle, for example, cutting month-end processing from four to three days, but the existing infrastructure would not have been able to support such a reduction. The necessary solution had to be cost-effective, re-use existing hardware, allow return to platforms supported by Oracle, and minimise disruption to year-end.

It was resolved to leave the two HR databases on the original server and separate HR from financials by adding a new financials server to improve performance and increase capacity. It was decided to purchase resilient disks to replace the A5000s. Crucially, it was determined to implement a full high-availability solution to improve maintainability and negate DR problems. Other infrastructure change resolutions included upgrades to Solaris 8 and Oracle 8i, and a change in back-up strategy to run initially to disk instead of tape to improve back-up speed. The issue of a high-availability solution required serious consideration. "We looked at a variety of options and at different levels," says Kati Gholam .

"At the hardware level, Sun Cluster would have enabled us to share the file systems but would have done nothing for the applications. Oracle clustering would have supported database clustering only. Both were expensive. We wanted something that addressed hardware, database and application in one solution, at a reasonable cost and with assurance that we would not want for intelligent, sharp and proactive support". Xansa's hardware provider Peritech introduced the organisation to High-Availability.Com's RSF-1 which was evaluated and finally selected on the basis of its ability to provide a solution, and supplier support.

RSF-1 ensures critical applications and services keep running in the event of system failures. Typically, it sits between the storage volume management and application layers of Web, application, firewall and database servers. It provides support for most leading applications. The system offers a simple, powerful configuration and management framework that allows customers to deploy high-availability solutions in hours rather than days.



RSF-1 ORACLE® PeopleSoft



With optional monitoring agents for many popular databases, middleware and end-user software, RSF-1 is able to switch critical applications from servers with network, hardware, OS, or application failures to alternative servers in the cluster to minimise downtime. Incorporating feature-rich command-line and GUI interfaces, RSF-1 allows manual and automated fail-over of up to 200 critical applications and services within a 2-64-node cluster.

RSF-1 leads the field in its combination of ease of use, flexibility, resilience and cost-effectiveness. It provides the environment for high-availability, asymmetric and symmetric failover across multiple servers on a mixture of architectures, including Solaris SPARC/Intel), AIX, Linux, FreeBSD and HP-UX.

Following the purchase decision, the first task was to build the application on the new server, and rebuild the old server to meet the upgraded operating system. With both servers constructed to the same specification it was ensured that all databases - HR and financials - could restart on either server. "We then worked with High-Availability.Com to tune the software so that the resilience functionality would automatically monitor all applications, with optional manual/automatic failover/re-start in the event of an operational failure or for maintenance," says Gholam.

"Planning took a month and implementation took two months. The effect was stunning. When we were testing we expected users to recognise the changeover but in fact, nobody noticed - or even received an error message. We expected, at least, that power users would get some error messages but they didn't. And when we forced extreme and strong load simulated address to the applications for destructive analysis, the result was the same".

"There was no demand to logout/in and no need to reconfigure individual machines to address the other server for failover. The bottom line was that users would now be unaware of failover. Online access would be unaffected, reporting access would be only slightly affected, two and three-tier access was fully and securely supported - and there was comprehensive support for SQR, Crystal, nVision and Application Engine reporting and processes".

"To be fair - warts and all - there were initially some occasional errors in the implementation. For example, panel load (application server error), panel save (cancel panel) and some Cobol and SQR processes did not initially crystallise. We also had a few SQL*Plus query errors. But these were resolved professionally and quickly and we learned some useful lessons from the resolution".

"Other issues successfully addressed during testing and implementation included maintenance of consistent database initialisation files and PeopleSoft configuration files. These were both resolved by synchronisation. We had some phantom failovers. These were resolved by increasing time-outs. Otherwise it all went rather smoothly".

"Cost savings have been phenomenal. Part of the reason we had problems before was that before, using an older version of the operating system, we could not easily patch it. At the time we started the IT infrastructure review and upgrade process, we had a full-time person supporting the PeopleSoft infrastructure alone".

