HCF Eliminates Application Downtime and Ensures 24x7 Customer Availability with Next Generation Technology

“BMC is a progressive and proactive organization. They keep us informed of new developments and ensure we get the best results possible.”

Greg Cantori | Database Administrator for HCF

Company Overview

The Hospitals Contribution Fund of Australia (HCF) is the largest not-for-profit health fund and the third largest health insurance company in Australia. Based in Sydney, the company provides private health insurance as well as a full range of other options, including pet insurance, travel insurance and life insurance.

HCF runs a transaction-based mainframe application system using IBM® CICS® and IBM® Db2® databases on a production partition with additional mirrored and test partitions. There are many peripheral applications, mostly using about 40 Microsoft SQL servers, which communicate dynamically with the mainframe. Some applications are physically independent but are periodically refreshed by Db2. The HCF data center is offsite, but HCF is in the process of diversifying its storage needs using cloud technology.

The Business Goals: Increase Speed and Reliability and Minimize Downtime

HCF sought to complement IBM’s packaged toolset for its back-up requirements, including the need for greater flexibility, ease-of-use, speed, reliability, and lower cost. Today, customers expect all systems to be available outside of traditional business hours, which reduces the available time for batch housekeeping tasks. HCF needed a solution that minimizes scheduled system outages to reduce downtime.
The Challenges: Satisfy Back-up Requirements, Reduce Fragmentation, and Improve Application Availability

HCF already had an IBM-packaged toolset but lacked a complementary solution that would meet all its back-up requirements. HCF also needed a way to reduce the fragmentation of its live mainframe tables as reorgs are run. In addition, in order to continue ensuring outstanding customer satisfaction, HCF sought a way to satisfy demands for 24x7 application availability.

The Solution: NGT Copy for Db2, NGT Reorg for Db2, MainView

In the words of HCF Database Administrator Greg Cantori:

“The BMC products have consistently outperformed their competitors in terms of value, functionality, and reliability. They have a great sales and support team who not only help us resolve issues, but frequently touch base with us to ensure we are exploiting the benefits of their software.”

BMC’s NGT Copy for Db2 was initially chosen to complement IBM’s packaged toolset for HCF’s back-up requirements due to a range of factors, including its flexibility, ease-of-use, speed, reliability, and lower cost. NGT Copy runs on a nightly basis and reliably backs up over 900 legacy Db2 tables in each of the 13 schemas, plus hundreds of catalog, user, and third-party software tables. In all, well over 16,000 tables are backed up daily in a brief window of time prior to starting the batch work.

HCF also chose to add the NGT Reorg for Db2 solution to perform its Db2 tablespace reorgs. NGT reorgs are run across alternate weekends, compressing data, reorging indexes, and reducing fragmentation for the live mainframe tables.

In addition to these solutions, HCF also uses MainView to keep track of active threads, transactions, buffer pools, I/O, and locking. MainView is also used for system start-up/shutdown and extensive monitoring, which has become part of HCF’s day-to-day automated systems management.

Benefits

Shifting to a proactive monitoring approach, HCF now uses MainView to enable its network support analysts to become aware of problems sooner, which means the tech support staff can take preventative action (e.g. add volumes, reassign disk storage groups, rebalance partitions) instead of remedial actions (e.g. archiving database rows to create space). Additionally, by monitoring CPU usage continually, HCF can raise or lower IBM’s capacity threshold before the limit is reached and before users experience transaction freezes or system slow-downs.
Using BMC’s NGT Copy in conjunction with virtual tape drives has enabled HCF to complete its nightly housekeeping earlier, reducing staffing costs and allowing data to be accessed more reliably by peripheral applications.

NGT Reorg has produced noticeable benefits for HCF by eliminating the need to put hundreds of databases into utility mode. Reorgs operate while the tablespace is in full read/write mode, and since they are non-destructive, there is no impact to users if a failure occurs. HCF uses the RESTART parameter and on the rare occasion that NGT encounters an error (usually disk space-related), the QUICKEXIT option can be run to clean up the utility IDs.

NGT Reorg can be run at any time, and HCF no longer needs to take its application down for reorgs, allowing continuous availability of several critical services for customers, including its quoting tool, new claim submissions, and new member sign-ups.

In the process of transitioning all legacy applications off the mainframe, the BMC solutions have afforded a huge degree of comfort to IT managers as they free up staff to be redeployed to new projects, while retaining utmost confidence that existing database availability and performance are solidly preserved.

- Total elapsed time for NGT reorgs is averaging around 27% faster than IBM reorgs, down from 75 minutes to about 55 minutes.
- No BMC reorg failures have been reported since implementation, substantially freeing up HCF’s tech support on-call staff.
- As the reorgs are now online and non-destructive, HCF has been able to safely perform these on large data warehouse tablespaces previously excluded from housekeeping due to risk of failure.
- NGT eliminates separate stats collection, resulting in less CPU use and fewer outages.
- By reorganizing faster and earlier, NGT Reorg reduces the need for operators during the weekends, improving how HCF manages the shift work. This also reduces the need for overtime, which saves on operator costs.
- Month-end data collection SLAs have been reduced from three working days to two or less, since batches start earlier and reorgs finish much faster.

Learn More About These BMC Solutions

- Visit the NGT Reorg for Db2 webpage
- Download the NGT Reorg for Db2 datasheet
- Visit the NGT Copy for Db2 webpage
- Download the NGT Copy for Db2 datasheet
- Visit the MainView webpage