Western Illinois University Ensures Data Integrity and Availability with BMC

“Converting our DBADMIN tools to BMC has proven very beneficial to us in terms of increased DBA productivity and reduced MSUs.”

David Lueck | IT Manager, Database Administration, Western Illinois University

Business Overview

With more than 66 undergraduate degree programs, nearly 40 graduate programs, and two doctoral programs, Western Illinois University (WIU) has provided outstanding educational opportunities to students in west central Illinois and beyond for over a century. University Technology (uTech) has 83 full-time employees, 30 of which support Administrative Information Management Systems (AIMS), which provides administrative solutions within the university, including student recruitment and enrollment, payroll, personnel, student records, housing, foundation and alumni, financial aid, finance and budget, emergency notification, and many other university applications. The other 53 employees in uTech support the Center for the Application of Information Technologies (CAIT), IT Security, Infrastructure, Quad Cities Technology, User Support Services, Business Applications, and Web Services.

Business Challenge

While the AIMS team relies on a high-performing IBM® z Systems® mainframe and IBM® Db2® database, designing and programming nearly all of its applications in COBOL in-house, its DBADMIN tool was difficult to use and not entirely reliable. Further, as a PC-based product team, AIMS staff were not able to use the tool outside of campus for data governance reasons. This required staff to drive to the office outside of business hours to fix certain problems.

As an added consideration in addressing the problem, WIU was seeing increased competition with many other learning institutions for a limited
BMC Solution

The products comprising BMC Object Administration for Db2® allow the AIMS team to automate routine database administration tasks and easily manage WIU’s Db2 environments. From simplifying catalog navigation and change management to streamlining the process of loading, unloading, and copying Db2 data, BMC Object Administration for Db2® reduces the time required to make changes to the WIU database, automating routine tasks for improved integrity and enhancing application availability with minimized outages for changes and maintenance. AIMS uses BMC Change Manager for Db2®, one of the solution’s component products, to modify existing data-definition language (DDL) statements on all three of WIU’s Db2 sub-systems. The team also uses BMC’s Next Generation Technology utilities (NGT Load for Db2®, NGT Unload, NGT Copy for Db2®) to handle its largest tables, including LOB REORGs, table UNLOADs and table LOADs, and are in the process of converting more utilities to NGT soon. To date, the AIMS team has exclusively used BMC LOBMaster to run REORGs. LOBs are used extensively in the University’s financial aid area, including sending financial award letters to prospective students. By using BMC LOBMaster allows AIMS to reduce the amount of storage required for these files, and generally speeds up processing when using these LOBs.

With the help of this comprehensive set of tools to simplify its database administration, Western Illinois University has seen several business and process benefits:

- The automation capabilities of BMC Object Administration for Db2® have helped greatly reduce DBA workload and improve productivity.

- The team can sync changes across systems, mitigating change risks and saving time, navigating with the powerful catalog management tool anytime, anywhere.

- Use of the solution’s version control and pre-production testing features have resulted in fewer problems during DDL changes.

- The load, unload, and copy utilities allow AIMS to move and duplicate its data faster and with fewer resources.

- By using BMC LOBMaster REORG for its financial aid LOBs, the team saw a steep decline in pages used.

number of students, resulting in declining enrollment and budget shortfalls. Compounding the issue, the University was receiving reduced financial support from the state of Illinois and requiring cuts in departmental operating budgets, including technology. These factors together drove AIMS to seek a solution that would increase reliability and improve efficiencies, without incurring exorbitant costs. The AIMS team reviewed proposals from both IBM and BMC, and ultimately chose BMC Object Administration for Db2® and BMC LOBMaster for Db2® for their superior functionality and cost benefits.
We are extremely satisfied with our BMC tools and product support, and look forward to leveraging these tools even more in the future.

David Lueck | IT Manager, Database Administration, Western Illinois University

To learn more:
- Visit the BMC Object Administration for Db2® page
- Visit the BMC LOBMaster for Db2® page