



Business challenge

Growing fast, Brazilian credit union system Sicoob must cope with extra transactions at short notice. How could it combat the increased IT complexity that resulted without impacting service quality?

Transformation

Selecting IBM® z Systems™ as its strategic platform, Sicoob migrated and consolidated member databases to IBM DB2® LUW with BLU Acceleration® running in a Linux environment on the mainframe.

Business benefits:

Supports

business growth at a larger scale to respond to market changes

Up to 20x

faster analytics leads to real-time actions

35%

database compression reduces storage costs

Sicoob

Unleashing new growth and operational efficiency with an infrastructure transformation

Credit Unions System for Brazil (Sicoob) is the largest credit union system in Brazil, offering banking and credit services to more than 2.5 million people. Sicoob's customers are also its owners, so the financial returns benefit their communities rather than enriching shareholders.

"IBM solutions help us to ensure consistently excellent service across all of our channels."

Gustavo Maia Aguiar
Leader of Information Technology
Sicoob

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Growing pains

Credit Unions System for Brazil (Sicoob) has successfully built on the country's increasing prosperity to execute a successful growth strategy. Embracing mobile and social technologies supported by an ultra-stable backbone, the organization enables the everywhere-and-always-on services that consumers increasingly demand.

Gustavo Maia Aguiar, Leader of Information Technology at Sicoob, sums up: "In the last five years, we have seen growth in multiple areas; for example our credit operations have increased by 122 percent, checking accounts by 120 percent and dividends by 133 percent. With growth comes challenges, as we look to find new ways to drive internal efficiency without affecting the customer experience."

Rapid business growth, parallel growth in the number and range of Sicoob products and services, and the desire for non-stop services converged to create the perfect storm for Sicoob's existing distributed infrastructure, which was running all core banking services.



Marcos Vinicius, the organization's head of technology infrastructure explains: "We had a lot of servers to process an operational volume that was considerable for the time. However, ongoing and projected future growth meant that the model of adding new servers one by one was financially unsustainable. In addition, the administration of the infrastructure was becoming increasingly complex and costly."

Moreover, each time a new credit union is welcomed into Sicoob, the organization must integrate new systems and processes into its operations, scaling to accommodate additional users, transactions and data.

As a result, Sicoob ended up with hundreds of databases to manage, increasing complexity, inefficiency and cost. To avoid putting the brakes on growth, the organization needed to find a smarter approach.

Simplifying for success

To support the ongoing rapid growth of its business and the development of new capabilities, Sicoob needed a completely new model for IT. The organization made a strategic decision to migrate its Intel processor-based distributed servers to the Linux on IBM z Systems platform. Today, Sicoob is running more than 300 SUSE Linux Enterprise Server-based virtual servers on IBM z/VM® across an IBM zEnterprise EC12 server and a second IBM z Systems server. A third z Systems server located at a second site provides a disaster-recovery option and hosts the development landscape.

Denio Rodrigues, Information Technology Executive at Sicoob, comments: “Challenges and opportunities have led us to restructure our technology infrastructure and adopt IBM z Systems mainframe technology, which guarantees greater stability and performance for our products and services.



“This facilitates our growth, by lowering the cost of maintenance and administration in the production environment, and by reducing power consumption in the data center. The key benefits in adopting Linux on IBM z Systems are availability, scalability, performance, security, lower licensing costs, easier management, less use of space in the data center, and in particular reduced energy consumption.”

Finding a winning formula

Sicoob also embarked on a migration and consolidation of its member databases to IBM DB2 for Linux, UNIX and Windows (DB2 LUW), choosing to host the solution in virtual environments on its z Systems platform.

“It was a natural decision to move our database technology to the mainframe, and that strategy has paid dividends for many parts of our IT environment,” elaborates Aguiar. “In particular, the virtually limitless scaling capability of IBM z Systems was well-suited to such a fast-growing, critical system.”

Working closely with IBM, Sicoob undertook a complex restructuring of its member databases. Aguiar says: “Before, we had multiple databases for each credit union. The database migration offered us an opportunity to reorient and take more of a cross-organizational approach, creating single databases for topics such as customers and credit cards. The challenge was how to carry out this transition with minimal impact on operations—IBM is proving an invaluable resource in helping us to achieve this goal.”

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Gustavo Maia Aguiar, Leader of Information Technology, Sicoob

By deploying IBM DB2 with BLU Acceleration technology, Sicoob incorporated next-generation in-memory computing to enable deeper insight and quicker actions. In upgrading to IBM DB2 LUW 10.5, the organization was also able to take advantage of advanced compression, helping it optimize use of resources.

“BLU Acceleration sped up our analytical queries by as much as 20 times,” comments Aguiar. “We use this capability to monitor our systems closely and access key performance indicators. For instance, we measure transaction times, and can quickly flag up any that exceed a second, drill down to the potential cause and act fast before there is any impact on service. We also achieved impressive compression results of about 35 percent, saving on disk capacity.”

Dynamic and proactive

In the former distributed infrastructure, the time taken to procure and deploy new physical servers was an obstacle to launching new services. “We had ready-to-go applications that we could not launch because of the lack of infrastructure capacity,” recalls Ricardo Antonio, Chief Information Officer at Sicoob. “With z Systems, growth is easy: we can start a new Linux virtual server on z/VM in seconds, or for a larger requirement, simply ‘turn on’ a new processor.”

By taking a more proactive approach to performance optimization, Sicoob is helping to ensure it can continue to reliably deliver the quality of service its members have come to expect.

“With more detailed, responsive monitoring in place driven by IBM DB2 LUW with BLU Acceleration, we have the tools to ensure consistently excellent service across all of our channels,” states Aguiar. “Even better, this is achieved alongside greater internal efficiency, with easier database management and lower storage costs.”

With the robust z Systems hardware and highly integrated IBM mainframe software for Linux on IBM z Systems, Sicoob has a secure platform capable of supporting its rapid growth.

“We chose what the other major banks throughout the world use: IBM z Systems,” concludes Ricardo Antonio. “It’s the best environment for financial services. And when you know you are using the best, you can focus on developing the business rather than worrying about the technology.”

Solution components

- IBM® DB2® LUW 10.5 with BLU Acceleration®
- IBM zEnterprise® EC12
- IBM z/VM®
- SUSE Linux Enterprise Server for IBM z Systems™

Take the next step

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