Core Modernization & The SQL Migration

ORGANIZATION

For the modern credit union, the database is the engine room of the entire institution. From the nightly batch processing that ensures balances are accurate by morning, to the real-time API calls that power mobile banking apps, performance is non-negotiable.

Yet, many face a common set of hurdles: skyrocketing labor costs for senior technical talent, relentless security mandates from the NCUA and FFIEC, and the complexity of migrating legacy core systems to open architectures.

XTIVIA's Virtual-DBA service has partnered with credit unions across the U.S., from community institutions to multi-billion-dollar-asset leaders, to turn these challenges into advantages. We have helped credit unions stabilize operations, secure data, and dramatically improve their efficiency ratios.

Profile: A Southeast Credit Union ($2B+ Assets)

Environment: Jack Henry Symitar (Episys), AIX to Windows/SQL Migration

CHALLENGE

Like many forward-thinking credit unions, this institution was moving its core banking data from a proprietary, hierarchical database structure to an open Microsoft SQL Server environment to better leverage business intelligence (BI) tools.

However, post-migration, they experienced severe performance degradation. Reports that used to run in minutes were taking hours. The "lift and shift" of data had not accounted for the nuances of how the SQL Query Optimizer handles complex financial calculations.

TECHNICAL SOLUTION

XTIVIA's team, possessing deep familiarity with the Symitar data model, stepped in to stabilize the environment.

- **Configuration Review:** We identified that the default SQL Server memory and parallelism settings were unsuited for the core banking workload. We tuned MAXDOP (Maximum Degree of Parallelism) and Cost Threshold for Parallelism to align with the application's specific traffic patterns.
- **Index Optimization:** We implemented a custom maintenance plan to handle the massive fragmentation caused by daily transaction processing, ensuring statistics remained accurate for the query optimizer.

- **Knowledge Transfer:** We worked side-by-side with the credit union's application team, teaching them how to write efficient SQL queries against the new schema so their BI reports would run instantly.

BUSINESS RESULT

System performance stabilized within 48 hours. Report generation times dropped by 80%, allowing the executive team to access daily dashboards by 8:00 AM. The credit union successfully completed its modernization project without needing to hire a specialized (and expensive) SQL Architect.

ABOUT XTIVIA VIRTUAL-DBA

At XTIVIA, we've been providing IT solutions and consulting services for over 30 years with a wide range of services, including technology assessments, IT service and asset management, software development, data analytics, cloud migration, DevSecOps, ERP, and enterprise content management. Dedicated to each discipline, ensuring that our clients receive the best possible service. Through strategic acquisitions, we've acquired talented people who are experts in their industries, passionate about what they do, and committed to providing exceptional service to our clients. Whether you need to improve your IT infrastructure or implement new software solutions, XTIVIA is here to help you achieve your business goals. XTIVIA has offices in Colorado, New York, New Jersey, Texas, Virginia, and India. www.virtual-dba.com