

Stop Managing Databases: The Credit Union's Guide to Virtual-DBA Efficiency

XTIVIA | Virtual-DBA

Your ideal partner for Data Management

The traditional model of in-house Database Administration (DBA) is no longer sustainable for credit unions. Facing mounting pressure on efficiency ratios, fierce competition, and a severe technical talent gap, relying on a single in-house DBA creates a crippling fixed cost and a high risk of failure.

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Executive Summary

Your credit union is navigating a period of industry shift. While the fundamental mission of 'people helping people' remains constant, the operations and technology required to deliver on that promise have shifted radically. As we approach 2026, credit unions are no longer just financial institutions; they are data-driven technology organizations that happen to offer financial services. The modern member demands a seamless, "always-on" digital experience that rivals the largest national banks and nimble digital competitors. This demand places an immense, often crushing, burden on the underlying database infrastructure. The database is the silent engine room of your institution. Its pressure to run, on time, every time, is what keeps your IT director and their staff awake at night.

This white paper dives into why credit unions really need to update how they manage their databases. It argues that the traditional model of relying solely on in-house staff is becoming too expensive and far too risky. It's a model that is no longer really working, given the current speed of technological change. We examine this challenge through the lens of efficiency ratios, cybersecurity mandates (NCUA/FFIEC), and technical case studies. The data demonstrates a clear advantage: partnering with a specialized Remote Cloud and Database Administration Service, specifically XTIVIA's Virtual-DBA, provides the critical leverage credit unions need to thrive.

We take a look at operational challenges, including the move from old-school core systems to more open setups, third-party application performance degradation, and the critical need for high availability in mobile banking. By shifting from a fixed-cost staffing model to a flexible, expertise-driven partnership, credit unions can really keep things running smoothly, access a deep bench of technical talent, and ultimately refocus their internal resources on innovation and member service.

1. The Big Picture: Why Credit Unions Need to Get Lean and Smart with Data

To understand why this change in IT is a must-have, you must first analyze the pressure from the current economy that is squeezing your credit union model. Your industry is consolidating; smaller institutions are merging to achieve scale, while larger institutions struggle to maintain the personalized service that sets them apart from trillion-dollar banks. In this environment, making things run smoothly is not just a metric; it's a survival trait.

1.1 The Efficiency Ratio Pressure Cooker

Your primary measure of health for your credit union is your efficiency ratio, essentially, the cost you require to generate a dollar of revenue. It's the pulse of operational discipline. It's calculated by dividing non-interest expenses by the sum of net interest income and non-interest income. Historically, an efficiency ratio of around 60% has been the industry benchmark, but smaller and mid-sized institutions often struggle to reduce this number due to high technology and compliance costs. Recent data indicate that while efficiency ratios improved slightly in the first two quarters of 2025, they still hover around **70.79%** and remain at risk. Inflation has impacted compensation, travel, and office costs, while potential Federal Reserve rate cuts threaten to erode net interest margins (NIM).

The IT Cost Paradox:

IT is traditionally viewed as a massive cost center that drags down the efficiency ratio. However, underinvesting in IT can lead to member churn and security risks. The dilemma is that credit unions must invest more in technology capabilities while reducing operational overhead.

The old way of scaling IT, you know, hiring more full-time employees (FTEs), is actively damaging efficiency ratios. The total cost of ownership (TCO) for a senior-level, in-house Database Administrator (DBA) has skyrocketed. When factoring in:

- **Base Salary:** Often exceeding \$130,000 for senior talent.
- **Benefits & Taxes:** Adding 25-30% to the base.
- **Recruitment:** Agency fees can be 20-30% of the first year's salary.
- **Training & Retention:** The cost of keeping skills current in a cloud-first world.
- **The Specialist vs. Generalist:** Relying on a single in-house DBA for a diverse stack (on-prem SQL Server, Azure SQL, AWS RDS, NoSQL, etc.) creates high operational costs and risks. This generalization of skills leads to slower adoption of new features and significant security vulnerabilities. A high salary investment, therefore, fails to secure deep, comprehensive expertise.

- **Vacation, Sick Leave, Training:** The fixed cost of an in-house DBA doesn't account for coverage gaps during their absence (vacation, sickness, training). This unplanned gap forces a costly scramble for contractors or overburdens existing staff, quickly escalating a manageable situation into an operational risk and a significant drain on internal resources.

A single senior DBA represents a recurring six-figure fixed cost. Maintaining a fully redundant 24/7 internal DBA team requires at least 3-4 full-time staff—a cost most mid-sized credit unions simply cannot absorb. Furthermore, the cost calculation above is only for a single platform, such as Microsoft SQL Server. If your environment includes multi-platform or multi-cloud complexity, which it probably does, such as Oracle, PostgreSQL, and AWS RDS, then the base requirement for fully redundant 24/7 coverage and expertise triples or quadruples. This forces a terrible choice: Do you accept the gut-wrenching risk of your critical systems going dark at 3 AM, or do you strain your existing “generalists” by asking them to manage complex database tasks they were never fully trained for?

The Managed Services Solution:

Here is exactly how the Virtual-DBA model can break this cycle and directly improve your efficiency ratio. Research into IT outsourcing in the credit union industry suggests that you can reduce operating costs by roughly 30%. Research into IT outsourcing in the credit union industry suggests that switching from internal to outsourced IT production can reduce operating costs by roughly 30%.

This is about way more than just cutting labor costs. It's a big change to the IT operating model. By converting a high fixed cost (salaries) into a predictable, lower variable cost (service subscription), credit unions can directly improve their efficiency ratio, freeing up that capital to invest in member-facing cool new digital stuff.

1.2 The Data Dilemma and the Talent Gap

Data is the most valuable asset a credit union possesses. It drives lending decisions, fuels fraud detection, and creates competitive advantages through personalization. However, this asset comes with a significant operational burden. The database infrastructure required to store, protect, and serve this data is complex and relentless.

What makes matters worse is a severe talent crisis. The financial services sector is facing a shortage of specialized technical skills. As senior DBAs retire, replacing them is becoming increasingly difficult and expensive. It's a fundamental scarcity of specialized technical talent. Furthermore, the skill sets required to manage modern data environments have expanded exponentially. We aren't just talking about SQL Server or Oracle anymore. The skills a modern DBA needs have expanded into a labyrinth. It's no longer enough to be a SQL Server expert; they also need to be fluent in:

- **Cloud Platforms:** AWS RDS, Azure SQL, and Google Cloud.
- **NoSQL Databases:** For handling unstructured data in digital apps.
- **Automation:** Scripting with PowerShell or Python to manage environments at scale.
- **Cybersecurity:** Understanding FFIEC guidelines and encryption standards.

Credit unions, often located outside of major technology hubs, struggle to attract and retain this level of multi-disciplinary talent. But what happens when they finally find and hire a skilled individual? Retention instantly becomes a significant risk. When that key person inevitably departs, that is not a simple vacancy; it's an immediate, paralyzing single point of failure that brings your operations to a halt.

The "Shared Brain" Approach:

A managed service provider is a good way to address this up-and-down talent situation. With Virtual-DBA, the credit union is not hiring a person; they are hiring a capability. XTIVIA handles all ongoing training, certifications, and retention, shielding the credit union's budget from the high cost and disruption of talent turnover.³ Your institution gains access to a "shared brain" of certified professionals with an average of 15+ years of experience, ensuring that if one person leaves, it won't tank your operation, keeping you up at night.

1.3 The "Always-On" Member Expectation

Member loyalty hinges on digital reliability. In an era when consumers compare their banking app not to other banks but to Uber and Netflix, tolerance for downtime is nonexistent. A member trying to transfer funds on a Sunday night or pay a mortgage minutes before a deadline does not care about maintenance windows or staffing shortages.

- **Availability:** Mobile and online banking must never go down.
- **Performance:** The "spinning wheel" of latency on a mobile app is the modern equivalent of a locked branch door.
- **Consistency:** There is zero tolerance for data loss or incorrect balances.

Meeting these expectations requires proactive, 24x7 monitoring and tuning. A member trying to transfer funds on a Sunday night... has zero tolerance for downtime. It's a heart-wrenching reputation killer. Meeting this demand requires eyes on the glass at 3:00 AM to detect a blocking chain in the SQL Server before it causes the mobile login process to time out. Most mid-sized credit unions cannot staff this internally. By leveraging a remote DBA service, credit unions ensure that performance blocks, job failures, and high-availability issues are addressed immediately, regardless of the hour, protecting the institution's highly valued reputation and member trust.

2. Keeping Your Databases Healthy: Must-Have Checks for Credit Unions Watching Their Budgets

As non-profit organizations, credit unions face the constant challenge of optimizing IT spending to maximize member value. When budgets are tight, the critical, routine work of database administration can be overlooked, leading to operational risk. The Virtual-DBA model directly addresses this by providing enterprise-level expertise at a predictable, shared-services cost. The fundamental question is: are essential database health controls being implemented?

2.1 Critical Database Health Checklist

For any database environment, especially in a financial institution, non-negotiable best practices must be in place. If you are not doing these types of things, rest assured that your primary assigned Virtual-DBA will be asking you, "Why the heck not?" The Virtual-DBA team's goal is to ensure continuous, expert coverage across these core domains:

- **Disaster Recovery & Backups:** Simply having a backup is insufficient. The critical questions are: *When was the last time a full disaster recovery test was performed? And how recently were backups validated for restorability?* XTIVIA implements **Robust Backup & Recovery Strategies** and conducts **Disaster Recovery Planning & Regular Testing** to ensure data is not only backed up but also fully recoverable and compliant.
- **Performance and Stability:** Database performance degrades over time due to structural issues and inefficient code. This includes:

- **Poorly Developed Queries:** Inefficient SQL can consume excessive CPU and memory, causing system-wide slowdowns. XTIVIA employs **Query Optimization** to analyze and rewrite slow queries, often without touching application code.
- **Duplicate Indexing & Configuration:** Over-indexing and improper configuration, like an incorrect **Fill Factor**, waste storage, and speed up data modification operations (insert, update, delete) but slow down data retrieval operations (select). XTIVIA provides **Schema Design & Optimization** and **Proactive Health & Performance Tuning** to ensure the database runs efficiently.
- **Unstable Activity:** Unforeseen events, such as deadlocks or resource contention (e.g., unstable availability groups), can bring operations to a halt. Proactive 24x7 monitoring and **Advanced Configuration & Automation** prevent these issues from becoming member-facing incidents.

By shifting this burden to a specialized managed service, credit unions avoid the "break-fix" cycle and gain a proactive, expert partner. This allows their lean internal teams to redirect their focus from routine maintenance and fire-fighting to strategic initiatives that directly enhance member service and drive innovation.

3. Show Me the Money: ROI, Buying Stuff vs. Paying for Services, and How Much You Save

In the current economic climate, every expense line on your budget is under review. The decision to partner with Virtual-DBA is supported by a robust financial argument centered on cost reduction, predictability, and risk mitigation.

3.1 Saving Serious Cash: Aiming for 40%

The most direct benefit is simple: a reduction in operating expenses. Industry data and our client experiences indicate that the Virtual-DBA model typically delivers **40% to 60% savings** compared to the total cost of an in-house hire.

Table 1: Cost Comparison - In-House vs. Virtual-DBA

Cost Category	In-House Senior DBA	XTIVIA Virtual-DBA (Premium)	Impact on Credit Union
Annual Salary/Fee	\$130,000 - \$160,000	~\$45,000 - \$80,000*	Immediate 50%+ Reduction
Benefits & Taxes	+30% (~\$40k - \$50k)	\$0 (Included)	Eliminates payroll burden
Recruitment	\$20k - \$30k (Agency Fees)	\$0	Eliminates hiring friction
Training	\$5k - \$10k / year	\$0 (XTIVIA Responsibility)	Skills stay current at no cost
Availability	40 hours/week + limited on-call + are you fully utilizing the resource?	24x7x365	True round-the-clock coverage
Continuity Risk	High (Single Point of Failure)	None (Team approach)	Eliminates "Key Person" risk

**Note: Virtual-DBA pricing varies based on service level, DBA workload, and environment size. The figure represents typical engagements for mid-sized credit unions, similar to those of some of our Credit Union clients.*

For example, in a recent proposal for a credit union, we demonstrated that a Premium, all-US-based support package for 10 SQL Server instances, including 24x7 monitoring and 120 hours of hands-on work, would cost approximately **\$45,840 annually**. Contrast this with the cost of a single in-house DBA, which would easily exceed **\$150,000** fully loaded. This massive delta directly improves the credit union's efficiency ratio.

3.2 Moving from CapEx to OpEx

The model supports a shift from Capital Expenditure (CapEx), those heavy upfront investments, to Operational Expenditure (OpEx), that is, predictable consumption-based spending.

This model is a critical advantage for cloud-native or hybrid environments. In the cloud, costs fluctuate with usage. A poorly tuned database requires larger, more expensive instances to run. The Virtual-DBA team prevents this by tuning databases to run efficiently (what we call 'Query Karate' internally). We strive to suppress your variable costs of cloud consumption. We prevent the 'bill shock' that often accompanies cloud adoption by ensuring you are paying for optimized capacity, not over-provisioned waste.

3.3 The Shared Services Perk: A Flexible IT Retainer

This is a unique differentiator of the XTIVIA model: the Shared Services Benefit. Unlike rigid contracts that lock your hours into specific silos, XTIVIA allows Virtual-DBA contract hours to be applied flexibly as needed. These hours can be used for scheduled work across our entire portfolio of services in most cases.

Contract hours are available to be applied to any critical IT needs. This ensures that any time remaining in the agreement. Like, if a higher-priority need arises or the database work is running smoothly, your time isn't lost. They can be "spent" on other critical IT needs, to name but a few options:

- **Salesforce Consultation:** Customizing the CRM for member services.
- **Power BI Development:** Building dashboards for the Board of Directors.
- **API Integration:** Connecting a new fintech partner to the core.
- **SharePoint Administration:** Cleaning up internal document repositories.

This flexibility transforms the contract from a sunk cost into a versatile IT retainer. It delivers value across the entire organization. We have seen clients use this flexibility to address a range of IT needs without initiating new procurement cycles. It transforms your contract from a sunk cost into a versatile, on-demand IT problem-solver.

4. Security, Compliance, and all that Regulatory Stuff

For credit unions, security is not a feature; it is a mandate. Protecting Personally Identifiable Information (PII) and financial data is the number one priority. The Virtual-DBA service is built from the ground up to meet the rigorous standards of the financial services industry and satisfy the demands of NCUA examiners.

4.1 Keeping Up with NCUA and FFIEC Rules

XTIVIA's services are designed to align with the National Credit Union Administration (NCUA) guidelines. We also meet the standards outlined in the Federal Financial Institutions Examination Council (FFIEC) IT examination handbooks.

Drawing on experience with hundreds of credit union and financial services clients, XTIVIA *follows* the following controls to meet and exceed regulatory expectations:

- **Comprehensive Audit Trails:** We follow best practices and adhere to your security and business rules and policies, ensuring that all database access and changes are logged, providing a clear, immutable audit trail for compliance reporting and security reviews.
- **Access Control:** Access is managed through the principle of least privilege. Our team integrates with your existing access control systems (e.g., VPNs, Active Directory) and performs regular audits of user logins and permissions (**Security Audits**).
- **Vulnerability Management:** We conduct regular **Vulnerability Assessments** and perform proactive **Patch Management** for both database and operating system components to close potential security gaps before they can be exploited.
- **Compliance-Ready Documentation:** XTIVIA maintains clear, up-to-date documentation on all database configurations, recovery procedures, and security protocols, providing the required material for examiners. We can also perform **CIS Benchmark Assessments** to validate your security posture against industry standards.

4.2 Security: It's a Team Effort!

In a remote database management partnership, security is a shared responsibility. While the credit union retains ultimate ownership of the data, the Virtual-DBA partner assumes responsibility for securing the database *platform* and the connection used to manage it.

- **XTIVIA's Responsibility:** Proactive security patching, configuration hardening (following FFIEC guidelines), intrusion prevention (secure the data, app access, logins, etc.), access control management for the DBA team, and maintaining a secure, SOC 2-compliant remote operations center.
- **Credit Union's Responsibility:** Defining the initial access credentials, providing secure connectivity (e.g., VPN or dedicated network connections), and dictating internal data access policies.

This partnership model is transparent and rigorous. XTIVIA provides its **SOC 2 Attestation** and security policy documentation to clients upon request, establishing the foundation of trust necessary to manage mission-critical financial data.

4.3 Audit Defense: Making "Fire Drills" just part of the routine

Audits are a major source of chaos and workload spikes for your IT team. We understand that whether it's a routine NCUA exam or a specific Center for Internet Security (CIS) audit, the demand for evidence creates a 'fire drill' where critical staff are pulled off innovation projects to scramble for patch history and log reports. Virtual-DBA turns that fire drill into a routine.

The Virtual-DBA team acts as your partner in the audit process. We don't just run the databases; we help you prove they are secure.

- **Evidence Collection:** We can gather the logs, patch history reports, and backup verification logs to satisfy examiners.
- **Remediation:** If an audit finding requires a configuration change (e.g., "disable the 'sa' account"), our team executes it immediately across the environment.

- **Third-Party Assurance:** XTIVIA maintains its own **SOC 2 Type 2** compliance. We can provide credit unions with our signed audit reports and documented policies, giving your vendor management team the third-party assurance they need to satisfy their own due diligence requirements.

4.4 Making Sure DR (Disaster Recovery) Works

A database is only as good as its last recoverable backup. Virtual-DBA services can cover the management and verification of backup strategies. We regularly assist clients with **Disaster Recovery (DR) testing**, proving your Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO).

For example, in our work with a long-term credit union client, we conduct quarterly business reviews that specifically track DR readiness and backup verification, ensuring the institution can survive a catastrophic event such as a ransomware attack or data center failure.

5. Technical Expertise: Cloud, Migration, and Modernization

Credit unions rarely run on a single technology. They are heterogeneous environments mixing different database platforms, operating systems, and cloud providers. Building an in-house team that covers all these bases is nearly impossible. XTIVIA provides a "deep bench" of expertise across the entire spectrum.

5.1 The Cloud Journey: AWS, Azure, and Beyond

Credit unions are increasingly moving systems to the cloud. However, the path is fraught with financial and technical peril.

AWS & Azure Optimization:

We help credit unions navigate the cloud not just as a destination, but as a strategy.

- **Right-Sizing:** We analyze actual performance metrics to recommend the optimal instance size (e.g., AWS RDS instance types), preventing the credit union from paying for capacity it doesn't need.¹⁸
- **Licensing Optimization:** Moving a SQL Server license to the cloud can be complex. We help clients navigate the **Azure Hybrid Benefit** and AWS licensing models to ensure they aren't paying twice for the same software license.
- **Cloud Governance:** We set up resource monitors and budget alerts to track consumption, ensuring that a runaway query doesn't result in a massive bill at the end of the month.¹⁸
- **Complete Cloud Coverage:** XTIVIA has dedicated cloud engineers and architects who can be engaged to manage your broader cloud environment, beyond the database, or to assist with migrating your systems to the cloud.

5.2 Legacy Systems and Modernization

While the cloud is the future, legacy systems are the present. We maintain deep expertise in the platforms that still run the financial world.

- **IBM Db2 & Informix:** Many financial institutions still rely on these stable, legacy platforms. Finding talent for them is incredibly difficult. XTIVIA maintains a dedicated team of senior IBM experts, ensuring that these critical systems are supported even as the workforce ages out.
- **Oracle:** Critical for many enterprise-grade applications. Our support covers RAC, Data Guard, and complex licensing optimization. We recently helped a Credit Union navigate a complex upgrade to **Oracle 19c**, including the intricate performance tuning required for the move to the new optimizer.

6. Proven Success: Anonymized Case Studies

The value of the Virtual-DBA service is best illustrated by the real-world challenges we solve for our credit union clients.

Case Study 1: The Core Migration Rescue

The Challenge: A large credit union was upgrading its core banking database to Oracle 19c. Post-upgrade, the system experienced severe performance degradation. Jobs that usually took minutes were taking hours, threatening daily operations.

The Solution: The Virtual-DBA team conducted an immediate deep-dive analysis. They identified that the update had caused queries to switch to suboptimal execution plans, resulting in excessive "db file sequential read" waits.

The Outcome: By implementing precise index tuning and memory adjustments (PGA/SGA optimization), the team restored performance to baseline levels. They also managed the setup of Dataguard for high availability, ensuring the new system was robust and redundant.

Case Study 2: Eliminating the "Morning Panic"

The Challenge: A credit union frequently experienced "morning panic" situations in which nightly batch jobs stalled due to database locking. This puts the opening of the business day at risk.

The Solution: XTIVIA implemented proactive 24x7 monitoring specifically tuned to detect early warning signs of "blocking chains" and deadlocks in the batch process.

The Outcome: The remote team now detects and clears these blocks in the middle of the night, long before branch staff arrives. The "morning panic" has been eliminated, replaced by a status report showing that the system is ready for business.

Case Study 3: Integration & Innovation

The Challenge: A credit union needed to integrate a new third-party collections solution with its core systems. The integration required complex data flows using Mulesoft and Akcelera.

The Solution: XTIVIA provided integration services and database support to map data flows accurately. We worked directly with the credit union's executive sponsors to ensure the project met its strategic goals.

The Outcome: The credit union successfully launched the new collections module, streamlining their operations and improving their ability to manage member accounts.

7. Conclusion: That Old Strategic Pivot

Your data infrastructure is the engine of your credit union, but you shouldn't be trapped in the engine room.

The traditional model of in-house database administration is no longer sustainable for credit unions facing escalating member demands, fierce competition, and increasing regulatory pressure. The cost is too high, the talent pool too shallow, and the risk of a single point of failure is too great.

XTIVIA's Virtual-DBA service is a strategic shift. It converts a crippling fixed cost into a predictable, variable, and lower operating expense, directly improving your efficiency ratio. It replaces the risk of a lone, overburdened generalist with the resilience of a full team of 24x7 specialized experts.

By partnering with XTIVIA, you secure the performance, security, and availability of your critical data, allowing your internal IT team to focus on the strategic, member-facing innovations that drive your business forward.

We'll manage your databases while you manage your business.

Your Custom Plan is Waiting

Your data infrastructure is unique. Your support plan should be, too. Let's build your ideal Virtual-DBA proposal today.

Contact our expert team at **888.685.3101 ext. 2** or **fill out the form on our contact page** to create your custom, no-obligation plan. Your Databases, Our Expertise.

About XTIVIA

XTIVIA has been a trusted technology partner to the financial services industry since 1992. Our Virtual-DBA service, established in 1999, is a pioneer in remote database administration. We are a US-based provider with a deep commitment to the credit union movement, helping institutions of all sizes navigate the complexities of digital transformation.

Contact the Virtual-DBA Team Today

To discuss how XTIVIA can optimize your credit union's database environment and improve your efficiency ratio, contact us for a comprehensive assessment.

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XTIVIA can create it with intelligent
technology and AI-powered solutions.**

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