Solution brief

Vertica to SingleStore: Your Strategic Migration Path

Modernize your analytics infrastructure

Executive Summary

Enterprise analytics teams are at a critical inflection point. While Vertica serves as a foundational analytics platform for many companies, the platform's repeated ownership changes inevitably drive declining innovation investment and escalating licensing costs that erode value for customers. Multiple ownership transitions, diminishing technical capabilities and mounting operational challenges mean that organizations continuing to rely on Vertica will find themselves on an unsustainable technology path. Evolving business requirements for real-time insights, cloud-native architectures and operational efficiency demand a more modern approach that provides long-term, strategic stability.

This solution brief outlines the strategic and financial case for migrating from Vertica (now OpenText Analytics Database) to SingleStore, providing enterprises with a unified platform that delivers both transactional, analytical and AI capabilities while reducing complexity and total cost of ownership.

Key benefits of migration

- Eliminate escalating Vertica licensing costs and vendor lock-in risks
- Real-time analytics for time-sensitive applications (<1s query performance vs. 10-20 s. with Vertica)
- Under 100 days proven migration timeline
- Single platform for OLTP, OLAP and AI workloads

The Vertica challenge: Why businesses are seeking alternatives

The pattern of ownership instability

Vertica's troubled ownership history reveals a concerning pattern of strategic uncertainty that directly impacts customer confidence and platform viability. Since its inception, the platform has been transferred between owners multiple times — sold in 2011, again in 2018, and most recently acquired by OpenText in 2023. This repeated pattern of ownership changes has fundamentally altered the platform's trajectory and strategic positioning in the market, creating significant uncertainty for customers who invested heavily in Vertica's analytics capabilities.

Each transition has resulted in the platform operating under broader enterprise software strategies that may not prioritize the specialized needs of high-performance analytics users. The latest integration into OpenText's portfolio has resulted in reduced expertise and responsiveness in technical support, as specialized Vertica knowledge becomes diluted within a larger enterprise software organization.

Since the most recent acquisition, many enterprises report declining innovation momentum, with limited development of new capabilities specifically designed for modern analytics workloads, while simultaneously experiencing significant cost increases that further erode the platform's value proposition. Furthermore, customers face increasing vendor concentration risk, as their analytics infrastructure becomes more tightly coupled with OpenText's broader enterprise software strategy rather than remaining focused on best-of-breed analytics performance.

Rising TCO and operational complexity

Vertica license fees are aggressively increasing, while total cost of ownership continues to escalate through high renewal costs and per-node licensing fees. Meanwhile, support responsiveness and expertise have declined following the acquisition. This combination of rising costs and diminishing value creates an unsustainable economic equation for enterprises. Organizations also face integration challenges with modern data tools and cloud ecosystems, requiring additional middleware and custom development to maintain operational efficiency.

This shift creates challenges for teams seeking to integrate with modern cloud-native architectures, as the platform's development priorities may not align with the rapidly evolving requirements of cloud-first enterprises. The resulting strategic uncertainty has prompted many IT leaders to evaluate alternatives that provide both immediate performance improvements and long-term strategic flexibility.

Performance and scalability limitations

Companies using Vertica increasingly encounter critical limitations that impact business outcomes. These include inadequate ingestion performance and concurrency issues that prevent teams from meeting real-time analytics requirements. Many users report scalability challenges as workloads grow, with Vertica struggling to maintain performance under high concurrent user loads.

Architectural Rigidity

Vertica's architecture — while powerful for traditional data warehouse scenarios — lacks the flexibility required for modern hybrid workloads. Businesses report limitations around semi-structured data support, particularly with JSON processing, which is increasingly critical for modern applications. The platform's rigid separation of transactional and analytical workloads requires complex architectures and additional infrastructure investments.

The SingleStore advantage: Modern analytics for modern business

Self-managed and on-premises deployment control

The primary reason customers move from Vertica to SingleStore is comprehensive deployment control that puts enterprises back in charge of their analytics infrastructure. SingleStore delivers enterprise-grade performance whether deployed in self-managed on-premises environments, private clouds or public cloud infrastructures. This deployment flexibility is particularly critical for organizations requiring complete control over their analytics infrastructure due to data sovereignty, security or regulatory requirements. Unlike cloud-only solutions, SingleStore enables organizations to maintain direct control over their critical analytics infrastructure — without dependency on external cloud providers or restrictive licensing models.

Unified architecture for hybrid workloads

SingleStore represents a fundamental shift from the architectural limitations and operational complexities that plague traditional analytics platforms like Vertica. At its core, SingleStore provides a unified engine capable of handling transactional, analytical and AI workloads simultaneously, eliminating the architectural complexity that enterprises face with separate systems. This unified approach not only reduces infrastructure costs and simplifies operations, but also enables real-time analytics on live transactional data without complex ETL processes.

Superior performance at scale

The platform's performance capabilities directly address Vertica's most pressing limitations. With real-time ingestion and analytics capabilities, SingleStore delivers the performance required for modern, intelligent applications while scaling to thousands of concurrent users and maintaining consistent performance. This addresses the concurrency limitations and performance degradation that teams consistently experience with Vertica under high-load scenarios.

AI-ready modern data architecture

SingleStore's modern data architecture extends beyond traditional structured data to provide native support for JSON and other contemporary data formats, empowering development teams to work more efficiently with diverse data sources. This capability is essential for companies building modern applications that combine structured and unstructured data. Additionally, SingleStore's built-in vector storage and similarity search capabilities enable AI-powered applications, machine learning workloads and advanced analytics that require semantic search and recommendation engines — capabilities that are increasingly critical for competitive differentiation in modern business applications.

Seamless integration and migration

The platform's enterprise-ready SQL interface, combined with extensive connector ecosystems and standard APIs, ensures seamless integration with existing tools and applications while supporting both hybrid and multi-cloud strategies without architectural constraints. This integration capability reduces deployment friction and accelerates time-to-value, whether organizations choose cloud-native deployments or require the control and security of self-managed infrastructure.

Migration approach: A structured path forward

Note: This framework serves as an example approach. Your use case and timeline may differ based on your specific requirements, data volumes, complexity and business constraints.

Phase 1: Assessment and planning (weeks 1-2)

- **Current state analysis.** Comprehensive review of existing Vertica workloads, performance requirements and integration dependencies
- **Workload prioritization.** Identification of high-impact use cases for initial migration phases
- **Resource planning.** Team allocation and timeline development for migration execution
- **Risk assessment.** Identification of potential challenges and mitigation strategies
- **Stakeholder alignment.** Secure executive sponsorship and establish project governance

Phase 2: Proof of concept (weeks 3-6)

- **Environment setup.** SingleStore cluster deployment and configuration
- **Data model translation.** Schema migration and optimization for SingleStore architecture
- **Performance validation.** Benchmark testing to validate performance improvements
- **Integration testing.** Verification of connectivity with existing tools and applications
- **Detailed discovery.** Complete comprehensive assessment of workloads, integrations and performance requirements

Phase 3: Pilot migration (weeks 7-10)

- **Initial workload migration.** Transfer of selected high-value use cases
- **User acceptance testing.** Validation of functionality and performance with business users
- **Operational procedures.** Development of monitoring, backup, and maintenance processes
- **Training and documentation.** Team enablement for ongoing management
- **Business case finalization.** Develop detailed ROI analysis and secure migration funding approval

Phase 4: Full production migration (weeks 11-14)

- **Remaining workload transfer.** Migration of all remaining Vertica workloads
- **Cutover execution.** Coordinated transition from Vertica to SingleStore

ROI + business impact: Quantified value of migration

Risk mitigation value

Migration reduces strategic and operational risks associated with aging infrastructure and vendor instability:

- **Future-proof technology foundation.** Modern architecture enables seamless adoption of emerging technologies and integration capabilities
- **Vendor diversification.** Reduced dependency on OpenText's enterprise software strategy
- **Skill availability.** Access to broader talent pool familiar with modern database technologies

Direct cost savings

Companies achieve significant cost reductions through SingleStore migration, driven by:

- **Licensing cost reduction.** Elimination of high Vertica renewal fees and per-node licensing
- **Infrastructure consolidation.** Single platform reduces hardware and cloud compute requirements
- **Operational efficiency.** Reduced complexity decreases administrative overhead and support costs

Performance-driven revenue impact

The migration to SingleStore enables measurable business improvements through enhanced performance capabilities:

- **Faster decision making.** Real-time analytics capabilities enable immediate response to market conditions
- **Improved customer experience.** Sub-second analytics support personalization and real-time applications
- **Competitive advantage.** Superior performance enables new product capabilities and market opportunities

Time-to-value acceleration

With proven migration timelines under 100 days, businesses achieve rapid value realization compared to lengthy modernization projects. This accelerated timeline minimizes disruption while maximizing early return on investment through immediate performance improvements.

Proven success: Real customer migrations

Digital advertising platform transformation

Challenge. A major digital advertising platform required real-time fresh data for their digital advertising UI, with critical KPIs for data freshness and performance.

Vertica limitations. The existing Vertica implementation delivered unacceptable query response times of 10-20 seconds for analytical queries, severely impacting user experience and business operations.

SingleStore solution. Migration to SingleStore achieved sub-second performance for analytical queries, replacing Vertica.

Business impact:

- Dramatic improvement in UI experience and performance
- Enhanced customer acquisition and retention rates
- Increased RFP win rates due to superior platform performance
- Measurable uptick in overall revenue

Global stock exchange migration

Challenge. A major stock exchange required a system capable of ingesting millions of records per second while delivering millisecond-latency analytics to fraud detection teams and trading operations.

Vertica limitations. The existing Vertica implementation failed to meet critical business requirements for millisecond-scale latency, and suffered from concurrency issues that limited system usability.

SingleStore solution. Complete migration to SingleStore was accomplished in under 100 working days, enabling low-latency, real-time analytics while reducing overall system complexity.

Results. Achieved millisecond-scale analytics for real-time fraud detection.

Addressing migration concerns

Technical risk management

- **Data integrity.** SingleStore provides comprehensive migration tools and validation processes to ensure complete data accuracy during transition. Parallel system operation during migration phases allows for thorough verification before cutover.

- **Performance risk.** Extensive proof-of-concept testing validates performance improvements before full migration commitment. SingleStore's proven track record with similar workloads provides confidence in expected outcomes.

- **Integration complexity.** SingleStore's SQL compatibility and extensive connector ecosystem minimize integration risks. Standard APIs and protocols ensure compatibility with existing tools and applications.

Operational risk mitigation

- **Skill gap management.** SingleStore provides comprehensive training and support during migration. The platform's SQL compatibility reduces the learning curve for existing database teams.

- **Business continuity.** Phased migration approach ensures continuous service availability. Parallel system operation allows for seamless cutover with minimal business disruption.

Strategic imperative for migration

With proven migration methodologies, comprehensive support resources and demonstrated success across multiple customer implementations, the transition from Vertica to SingleStore represents a strategic investment in long-term competitive capability. The documented success stories demonstrate consistent value realization across diverse industries and use cases, from sub-second query performance improvements to complete infrastructure modernization in under 100 days.

Next steps

Contact SingleStore to schedule a detailed assessment of your Vertica environment and begin planning your migration to a modern, unified analytics platform that delivers the performance, flexibility and cost-effectiveness your business requires for future success.