EDB

CUSTOMER SUCCESS STORIES

Purpose Financial Secures and Scales Lending Data with EDB and Postgres®

CUSTOMER:
PURPOSE FINANCIAL

EDB customer since 2016

Jyothi Bhomireddy
Director of Data Operations
Purpose Financial

CHALLENGE: Purpose Financial was looking to transition from an on-premises setup to a scalable Postgres and AWS cloud-based architecture while ensuring seamless operations and financial data security for the long term.

EDB SOLUTIONS: EDB Postgres Advanced Server, EDB Remote DBA Service

RESULTS: With Postgres and EDB's Remote DBA Service, Purpose Financial achieved significant cost savings, scalability, and performance. By implementing strategic backup, maintenance, and data protection strategies, Purpose Financial has embraced digital transformation to power lending innovation for the future.

OVERVIEW

Delivering the future of lending with EDB Postgres and Remote DBA

Purpose Financial's mission is to help every customer achieve their version of financial stability, today as well as in the future. Whether they lack access to savings and credit, are underbanked, or simply want to find better financial footing, Purpose Financial offers a variety of innovative solutions and resources to meet customers' ever-evolving financial needs. With accessible borrowing options through its Advance America and Purpose Money brands, the company has become one of the largest state-licensed consumer lenders in the United States. Purpose Financial's powerful and secure database operations have been critical to its success in the rapidly accelerating banking, financial services, and insurance (BFSI) industry. Efficiently and effectively storing and managing data will be critical to the continued success of the business.

Investing in growth through open source

Purpose Financial's tech stack is inherently data driven, and the company's primary focus is on keeping its data flowing seamlessly and securely through its systems. When Purpose Financial started considering open source as a way to cut costs and leverage new financial data innovations, they found EDB Postgres AI to be the ideal database solution. The company saw that EDB Postgres made it possible to safeguard highly sensitive financial information against breaches and manage exponentially growing data volumes—all while maintaining uninterrupted services for its customers.

Today, Purpose Financial's centralized repository database, Omni, uses EDB Postgres as the backend, and all core business operations, including loan processing, customer lookups, and eligibility checks, are securely managed through this database.

Partnering for maximum performance

Purpose Financial took a hands-on approach when moving to open source, building out a robust architecture themselves and integrating disaster recovery capabilities. The company used a standby server to separate the workloads for business, change data capture, and reporting. This architecture included cascading replication and Pgpool for load-balancing microservice transactions, which proved to be highly effective for managing database operations.

A significant turning point came, however, when the company discovered EDB's Remote DBA Service. "EDB Remote DBA Service changed everything, even the way we were looking at our systems," says Jyothi Bhomireddy, director of Data Operations at Purpose Financial. "This service not only simplified resource management but it also provided top-level optimization and enhanced system stability."

As a result, the team quickly attained the high-performance, reliable database environment that they had been working toward, but with significantly less internal overhead.

Another strategic move: From on-prem to cloud

Initially, Purpose Financial's entire data center was on-premises. So when the company decided to transition its infrastructure to AWS cloud and EDB Postgres as part of its modernization efforts, EnterpriseDB (EDB) worked closely with the data operations team to plan and execute the move.

Before the migration, EDB's Remote DBA team performed health-check assessments, identifying critical improvements needed in Purpose Financial's backup strategy. Following EDB's recommendations, Purpose Financial implemented specialized backup scripts in its production environment and established continuous backup restore validations to ensure successful backup restoration and accuracy of the restored data.

This improved backup strategy proved to be invaluable during a critical system incident. With EDB's support, Purpose Financial was able to restore its database quickly and efficiently, which wouldn't have been the case under its previous backup approach. EDB's Remote DBA Service not only helped stabilize the environment but also protected the company's data through proactive system improvements.

Smart monitoring ensures data availability

As a financial services company, Purpose Financial manages sensitive banking and insurance data in extensive transactional tables. These large tables handle simultaneous demands from both microservices and reporting functions, which creates significant operational challenges that vary based on database activity levels.

To address these challenges, the Remote DBA team implemented sentinel monitoring alongside the existing monitoring tools that Purpose Financial had. This comprehensive monitoring approach delivers proactive alerts about potential issues, such as memory exhaustion and storage constraints. which enables Purpose Financial to address resource needs before they impact performance. As a result, the company can effectively manage system resources and maintain stable performance even during periods of peak business activity.

EDB's Remote DBA Service also helps to address write-ahead log (WAL) file generation spikes that could potentially affect their standby servers. EDB's team proactively monitors these situations and implements work-arounds to prevent any disruption to Purpose Financial's applications or standby servers, ensuring that continuous system availability and performance are as designed.

In addition, EDB's Remote DBA Service optimized database maintenance by replacing default vacuum settings with a customized schedule. Understanding the constraints of 24/7 operations, EDB analyzed usage patterns to identify low-traffic periods for safely running vacuum operations on large tables. This strategic scheduling improved database performance—and it was so seamless that neither internal teams nor customers noticed the changes.

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> **Jyothi Bhomireddy**
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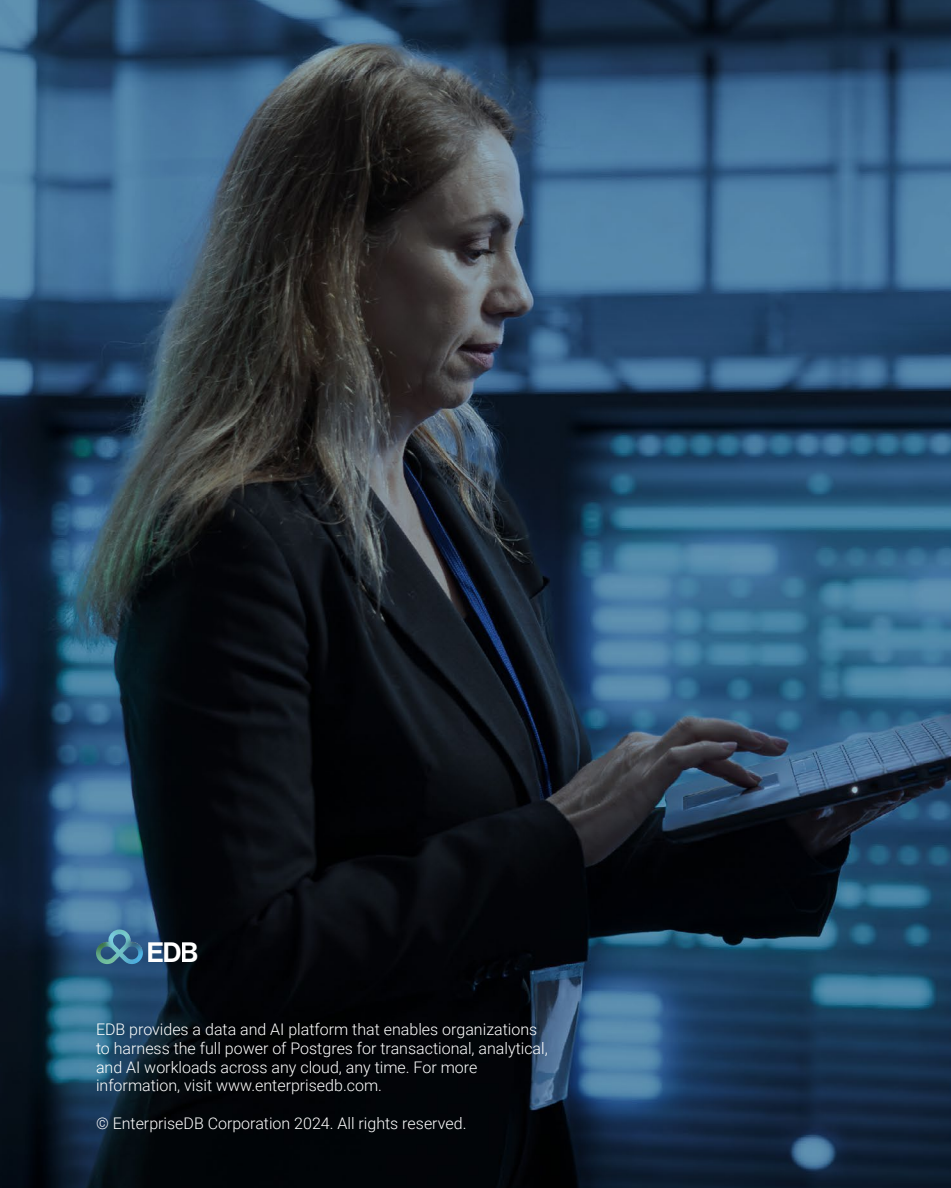
Compliance without compromise

Other critical challenges included securing sensitive personal identifiable information (PII) while ensuring scalability and implementing encrypted storage to meet compliance requirements during the cloud migration to AWS. EDB's Remote DBA team addressed these challenges by establishing comprehensive role-based access controls. They also provided expert guidance on encrypted storage selection and configuration, helping map existing resources to cloud equivalents and suggesting optimal work-arounds for technical challenges. This expertise helped Purpose Financial achieve a compliant environment where data is encrypted at rest, including in cold storage, to meet all required security protocols.

"Meeting all the required security protocols is a journey, a transition. But with EDB, it has gotten easier," says Bhomireddy.

EDB's SOC 2 Type 2 certified services exceed baseline security requirements for handling PII data, with a comprehensive security approach that includes data isolation, granular access controls, role-based permissions, cluster-level security, encryption both in transit and at rest, and thorough audit logging. For regulated clients such as Purpose Financial, EDB maintains strict, auditable processes for all aspects of data management, from retention to secure transfer and storage protocols.

From cost cutting to cutting edge

If Purpose Financial had chosen a different solution than EDB for its new architecture and application initiatives, Bhomireddy says the company would have incurred 60% to 70% more in licensing costs due to vendor lock-in and other factors. "EDB has allowed us to achieve our goals more cost effectively while minimizing the risks associated with being tied to a single vendor," she says.

Purpose Financial started with one application and today has close to 40 applications running on its Omni database. "With EDB, we were able to scale our database and accommodate our growing business needs," says Bhomireddy. "So I'm extremely thankful to EDB's Remote DBA team for always being there."

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