Microsoft

Architect a secure, scalable data platform for your financial services applications

Deliver the secure, compliant data solution your demanding financial applications need with Azure Database for PostgreSQL, Elastic Clusters, and Microsoft's built-in security and compliance

Applications supporting sensitive financial data and personally identifiable information (PII) struggle when legacy databases can't meet strict performance and compliance demands.

High-volume transaction workloads strain single-server architectures and limit scalability.

Security and regulatory requirements demand identity controls, auditing, and isolation that are difficult to maintain manually.

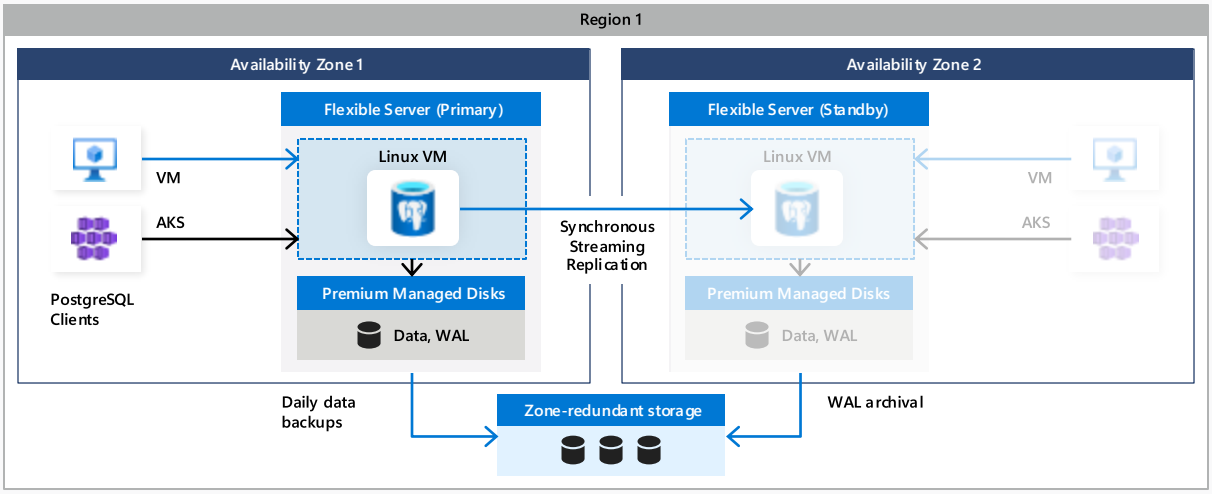
Downtime risks and complex failover processes make it hard to deliver always-on experiences for critical financial workloads.

Provide FinTech systems with a scalable, compliant data foundation

Azure Database for PostgreSQL provides the reliability, elasticity, and governance modern financial applications require across trading, payments, banking, and data platforms.

- Scale transaction throughput with Elastic Clusters and distributed architectures.
- Enable zone-redundant high availability with fast, automated failover.
- Protect sensitive data with Private Endpoints, Entra ID, and customer-managed key (CMK) encryption.
- Support multi-tenant SaaS models, advanced dashboarding, and microservice models with schema or row-level placement.
- Offload reporting, analytics, and fraud detection to read replicas.
- Expand capabilities with PostgreSQL extensions offering AI and vector data, advanced analytics, and geo-spatial features.

Zone-redundant high availability architecture for Azure Database for PostgreSQL



Deliver performance, security, and operational confidence

Achieve high throughput and low-latency performance for mission-critical transactions.

Reduce downtime risk with automated failover and geo-redundant backups.

Lower operational overhead with a fully managed PostgreSQL service.

Strengthen security and compliance with identity, auditing, and built-in governance controls.

Support real-time analytics and fraud detection without impacting OLTP workloads.

BNY

BNY Mellon transforms resiliency and scale with a managed PostgreSQL foundation

BNY Mellon migrated a mission-critical self-managed database to Azure Database for PostgreSQL, creating a more resilient, flexible, and scalable foundation for its global Data Vault platform. As a result, BNY Mellon:

- Completed a full migration to Azure Database for PostgreSQL in nine months.
- Improved resiliency and scalability for multi-tenant financial data workloads.
- Freed teams to focus on innovation by eliminating time spent managing and tuning self-hosted databases.

Get started

Azure Database for PostgreSQL gives financial institutions a secure, scalable, and compliant foundation for modern applications—without the overhead of self-managed infrastructure.

Learn more or contact Microsoft to get started.

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