



AS OF 22 SEPTEMBER 2026

PostgreSQL as DepositMatch's system of record

DepositMatch needs one system of record for imports, source rows, invoices, deposits, matches, reviewer decisions, exceptions, and the audit log, so that every accepted match can be explained at month-end and every exception stays owned. It must meet the seven capabilities below. On the public record PostgreSQL 16 meets all seven, six on its own and encryption at rest through the Amazon RDS hosting; restore time and replica lag under an import burst wait on a drill and a test.

1. Required capabilities

- Each capability comes from a project document, named in the last column

CAPABILITY	COMES FROM
Atomic import commit under constraints	decision record, import standard
Attribution and kept history	auditability standard
Access scoped by role to the column	financial-data standard
Encryption in transit and at rest	financial-data standard, architecture document
Point-in-time recovery within fifteen minutes	architecture document
A job queue inside the store	architecture document
A read replica later	decision record

Sources ²

4. Competitive landscape

- MySQL 8.4 has no native row-level security; Amazon RDS adds the at-rest encryption the software cannot supply

CANDIDATE	ROLE SCOPE TO THE COLUMN
PostgreSQL 16	Met
MySQL 8.4 Community	Unmet, no native row-level security
Document database (MongoDB)	not researched
Amazon RDS for PostgreSQL 16	Inherits

Sources ⁷

2. What it is

- An open-source object-relational database, community governed, the most-used in the 2025 Stack Overflow survey, one major release a year with five years of support, no licence fee

Sources ³

3. Capability alignment

- Superusers always bypass row security and owners do unless the table forces it; at-rest encryption and the five-minute log interval come from the hosting

CAPABILITY	RECORD	STATUS
Atomic commit	Transactions, six constraint types	Met
Attribution	Triggers write user, time, row	Met
Role scope	Column privileges, row security	Met
Encryption	TLS, AES-256 via hosting	Met
Point-in-time recovery	Archiving, logs every 5 minutes	Met
Job queue	SKIP LOCKED	Met
Read replica later	Hot standby	Met

Sources ^{4, 8}

5. Open questions

- Restore time waits on the scheduled restore drill, replica lag on the decision's review trigger, and row-security throughput on a test if isolation moves into the database

Sources ⁹