



houda.

PRODUCT DOCUMENTATION

# CacheDB PostgreSQL Proxy Compatibility

## What CacheDB does

CacheDB sits transparently between a PostgreSQL application and its database. It can serve eligible reads from a result cache, apply script-defined cache lifetimes and invalidation after writes, and expose workload and cache behavior in the operations console. Teams can start in transparent mode to observe traffic before enabling cache behavior.

## Proxy and compatibility model

The CacheDB PostgreSQL Proxy relays PostgreSQL protocol between client and server. Applications keep PostgreSQL SQL and their existing driver; the proxy does not translate SQL dialects. Simple and extended query flows are supported, including prepared statements. The proxy tracks prepared-statement parameters when forming cache identity.

### PostgreSQL server versions

| Server release                                         | Status                                    | Scope                                                                                                              |
|--------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Current validation image, <code>postgres:latest</code> | Exercised by the current validation suite | The image tag floats; the published compatibility record does not pin the resolved PostgreSQL major/minor release. |
| Other specific PostgreSQL releases                     | No version-specific status published      | The protocol is relayed, but qualify the exact server release when version-level assurance is required.            |

## Client and runtime coverage

| Client family                                                    | Status and notes                                                                                                                                           |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PostgreSQL JDBC drivers such as pgJDBC (Java)                    | The protocol relay is designed to work with PostgreSQL clients. The current native-proxy record does not publish an individually validated pgJDBC version. |
| Npgsql (.NET), libpq (C), pgx (Go), and other PostgreSQL drivers | Same protocol-level expectation; exact current versions are not individually listed as validated through this native proxy.                                |
| Native proxy protocol conformance and shared query catalogue     | Included in the current validation suite. These checks do not establish a version-by-version matrix for every driver family.                               |

Earlier named-driver measurements for pgJDBC, libpq, pgx, and Npgsql were made against PostgreSQL-wire translation proxies that have since been retired. They are not evidence of those exact versions being validated through the current native proxy.

## Important integration points

- **Authentication:** Cleartext, MD5, and SCRAM-SHA-256 are relayed. SCRAM-SHA-256-PLUS channel binding cannot cross the proxy's separate TLS sessions; SCRAM clients using TLS need channel binding disabled.
- **TLS:** The client starts TLS using PostgreSQL's `SSLRequest`; direct TLS negotiation is not supported. The proxy can establish TLS independently to the backend. TLS termination supports TLS 1.2 and newer.
- **Cancellation:** PostgreSQL `CancelRequest` is forwarded to the backend, including when the backend connection uses TLS.
- **Cache eligibility:** Eligible reads may be served from cache. Requests the proxy does not inspect, including PostgreSQL fastpath `FunctionCall` requests and requests above the configured inspection limit, are relayed without cache or inferred invalidation.
- **SQL behavior:** CacheDB does not translate PostgreSQL SQL. Authentication, server version, and driver behavior remain PostgreSQL-specific.

For Java, .NET, and other named drivers, confirm the exact driver release, PostgreSQL server release, authentication, TLS, and application features in a proof of concept. The published native-proxy evidence supports protocol-level compatibility, not a universal guarantee for every driver version.