

# Intelligent SQL Optimization

“Accelerating Data for the Backend”

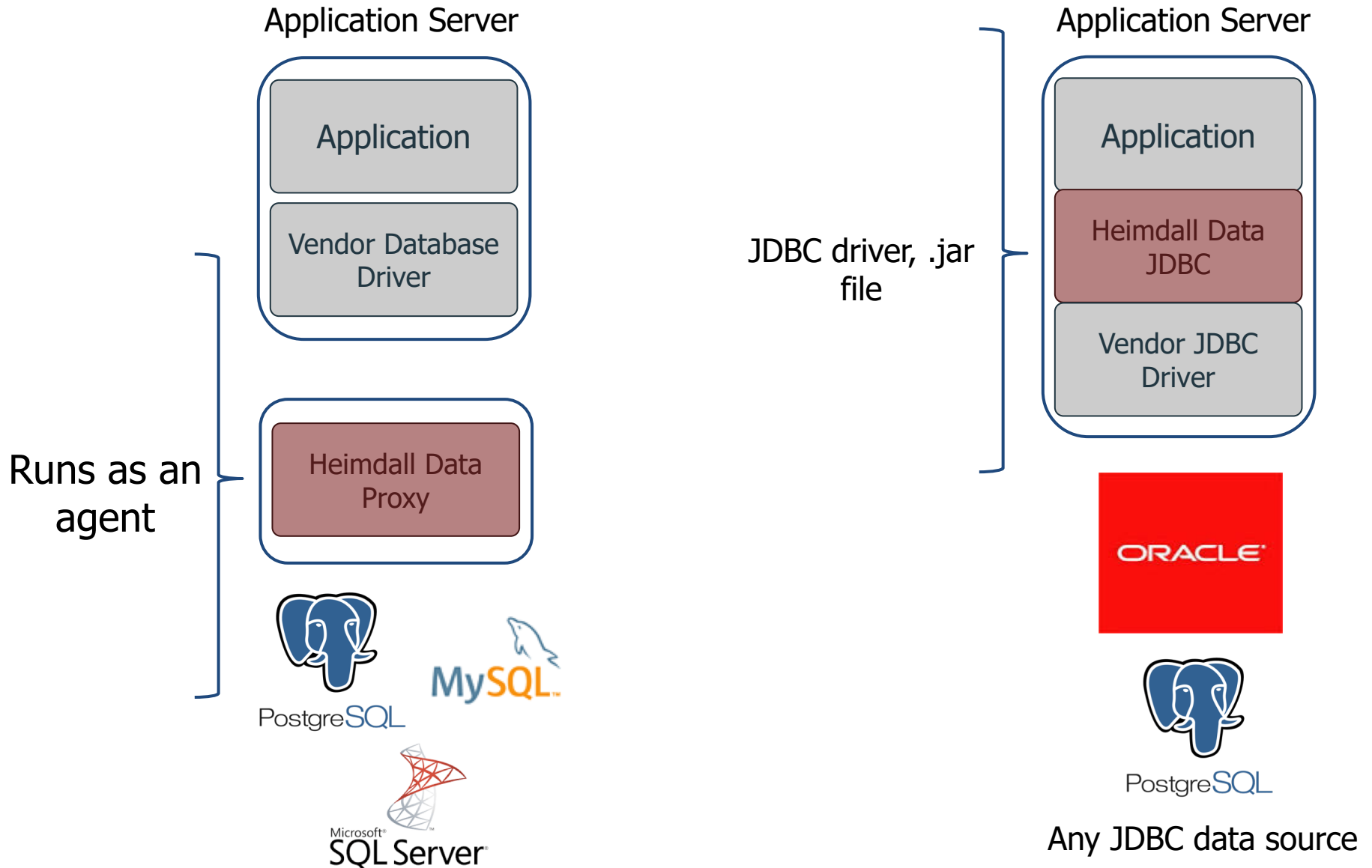


# Executive Summary

**Who:** Anyone with Data Warehouse system in need of improved performance and visibility.

**What:** Quickly implement a Database Proxy and Postgres for query offload

# Heimdall Data Software Options



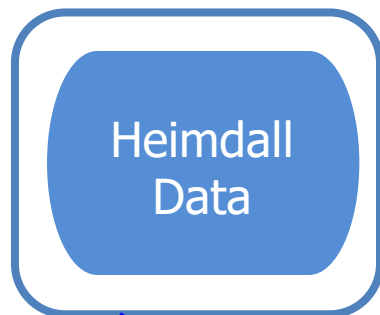
# Heimdall Data Use Cases

Use case	Customer Benefit
Hybrid Transactional / Analytical Processing	<ul style="list-style-type: none"><li>• OTLP Performance at Data Warehouse scale</li><li>• Leverage Postgres (batch processing, materialized views management)</li></ul>
SQL Results Caching	<ul style="list-style-type: none"><li>• Auto-caching / Auto-invalidate</li><li>• NO code changes</li></ul>

# — Heimdall Data / HTAP Architecture

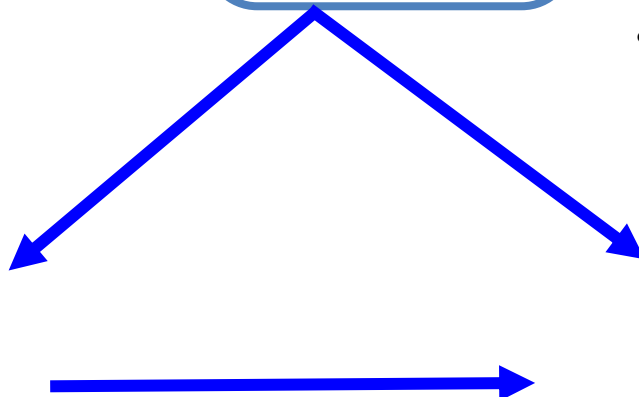
## Problem:

- Slow DB writes/ reads
- High overhead on queries



## Solution:

- Heimdall routes queries to Postgres
- Manages DML buffering
- Manages materialized views for tables and periodic reports



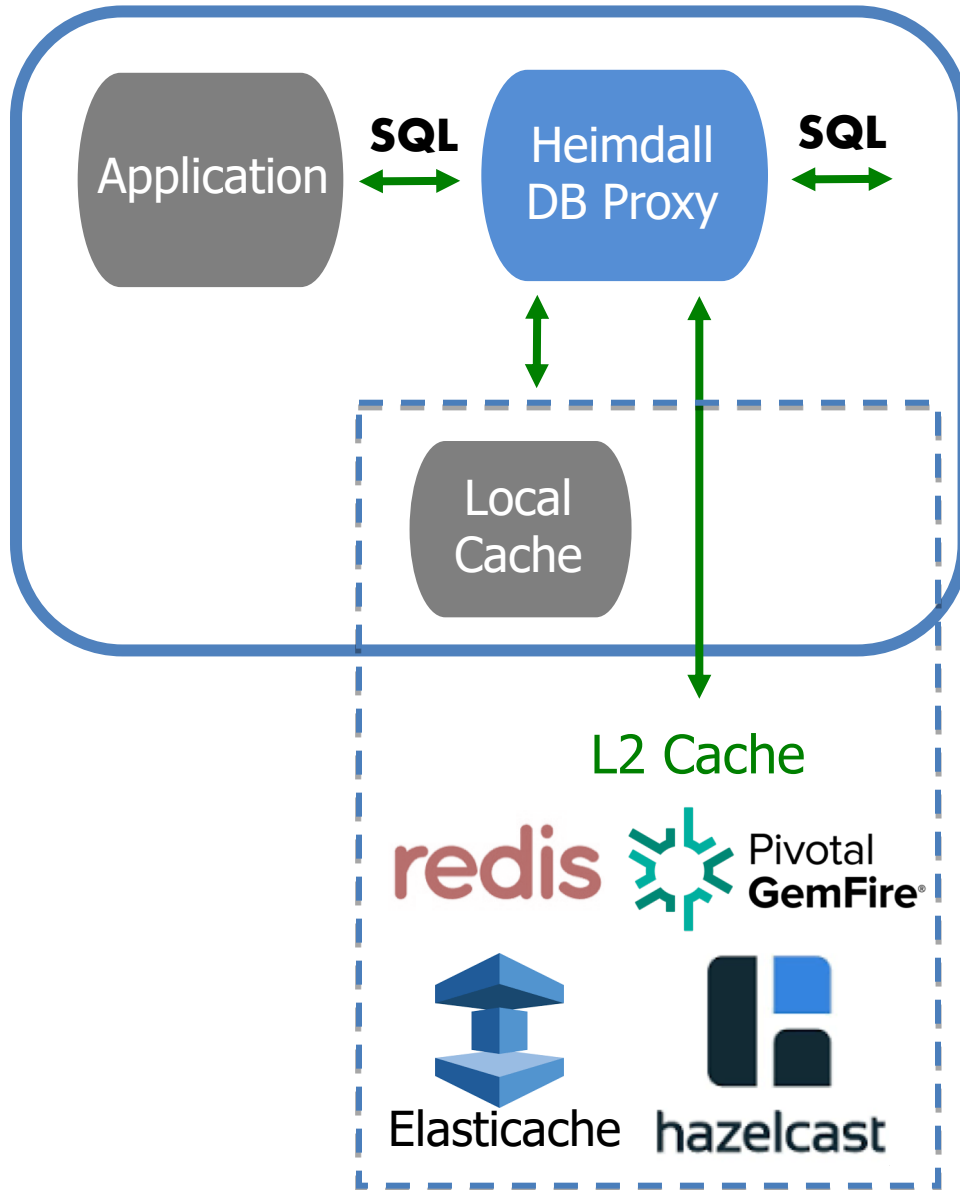
Amazon Redshift

## Customer Benefit:

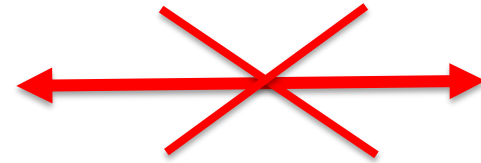
OLTP performance at data warehouse scale

# Application Server - SQL Caching

Application Server



Removes network latency



- L2 look-aside SQL cache
- Auto-caching
- Auto-invalidation

# Next Steps

- Free download at: [www.heimdalldata.com](http://www.heimdalldata.com)
- Use Analytics to identify performance benefits



Thank You

