

HEXAWARE

Oracle to PostgreSQL Modernization

Solution and
Success Stories



Make your databases faster, simpler, and ready to scale with PostgreSQL

As businesses modernize for the cloud, Oracle environments can become costly to maintain, less flexible to scale, and harder to evolve. PostgreSQL offers an open-source alternative that helps modernize without compromising performance or reliability.

- Up to 70% reduction in licensing and maintenance costs, with 55% lower database TCO
- Cloud-ready architecture designed for scalability, high availability, and resilience
- Improved database performance with simpler operations and reduced complexity

Move beyond expensive legacy dependencies and build a database foundation that's flexible, scalable, and ready for what's next.

Challenges of Oracle DB and Advantages of PostgreSQL

Oracle DB Challenges

- Legacy proprietary database architecture
- High licensing & annual support costs
- Vendor lock-in and limited flexibility
- Scalability constraints for cloud workloads
- Complex upgrades and patching cycles
- High operational & infrastructure costs

PostgreSQL Advantages

Open-source and license-free platform

Move to a more open platform.

Lower total cost of ownership (TCO)

Reduce ongoing database costs.

Reduced vendor dependency

Get more choice and flexibility.

Cloud-native scalability (AWS, Azure, GCP)

Scale easily as workloads grow.

Cloud-native compatibility and easier management

Simplify updates and daily management.

Lower operational costs

Use infrastructure more efficiently.

Additional Advantages of PostgreSQL

Enterprise-grade reliability and performance

Keep applications reliable at scale

Support for complex queries and large datasets

Handle large volumes of data

Advanced indexing, JSON, and analytics capabilities

Work with data and AI more efficiently

High extensibility and customization

Adapt the database to your needs

How Hexaware Delivers Oracle Modernization

Our proven framework for efficient modernization delivery



Portfolio Assessment

Understand your Oracle database state with agentic AI-automated assessments of schemas, objects, dependencies, and migration complexity.



Intake, Design, & Build

Plan and design the finalized scope, assumptions, SOW, and re-platforming approach with AI automation for code and schema conversion.



AI-powered Transformation

Accelerate modernization with our agentic AI-powered transformation platform for automated schema conversion, migration, and validation.



Testing & Validation

Ensure production readiness through test execution, migration validation, sign-off reporting, go-live assessment, and deployment assurance.



Hypercare

Achieve operational continuity with deployment support, rollout stabilization, performance monitoring, issue remediation, and transition assurance.

Futureproof with Hexaware's Cloud Modernization

Build resilient, cloud-native systems that scale
with your business

Business Continuity & Reliability

Containerized microservices reduce operational
downtime by 40%.

Scalable Architecture for Future Growth

Adapt to market changes without expensive
re-architecture or system downtime.

Improved Developer Productivity

Standardized, modern tech stack & reusable
code reduce efforts by 30%.

Comprehensive Business Outcomes

55% TCO reduction and 50% faster feature
deployment cycles.



Client Success Stories

Modernizing Legacy Systems for a Global Financial Services with Agentic AI on AWS

The enterprise needed to modernize a large portfolio of legacy applications and databases spread across complex, tightly coupled systems. Limited knowledge of existing applications, concerns around business disruption, and the limitations of traditional lift-and-shift migrations made modernization difficult while increasing operational risk.

Solution

We modernized the client's legacy applications and databases using our agentic AI-powered transformation platform that accelerated cloud adoption while improving scalability, security, and operational resilience.

- Rearchitected monoliths into microservices for greater agility and scalability.
- Applied 12-Factor principles to build cloud-native applications.
- Upgraded frameworks to .NET 6, Java 21, and current supported versions.
- Remediated vulnerabilities, including Log4J, to strengthen security.
- Migrated Oracle and SQL Server to PostgreSQL using Amaze® and AWS DMS with automated schema, code, and data transformation.
- Containerized applications with Hexaware's EAC framework for scalable deployment.
- Accelerated modernization with our agentic AI-powered transformation platform assessing 20,000 classes, exposing 560 APIs, upgrading 100+ libraries, delivering 20+ microservices, and transforming 650+ database objects.

Financial Services

50%

Reduction in
TCO using AWS

65%

Reduced
modernization time
with Amaze®

40%

Faster time-to-
market in more
business-aligned IT

50% TCO Savings in Oracle to AWS Postgres Database Cloud Migration for a Mortgage Firm

The client needed to migrate a business-critical Oracle database and application landscape from on-premises infrastructure to AWS while minimizing disruption. The complexity of legacy integrations, hundreds of APIs and database objects, large data volumes, and Oracle's high licensing costs made cloud modernization a significant challenge.

Solution

We used our agentic AI-powered transformation platform to automate application re-platforming and database modernization, enabling a low-risk migration to AWS and Amazon Aurora PostgreSQL while improving scalability, flexibility, and operational efficiency.

- Migrated Oracle to Amazon Aurora PostgreSQL using the platform's automated refactoring engine.
- Modernized SOAP services into REST APIs and replatformed applications to Spring Boot.
- Containerized applications and deployed them on AWS ECS Fargate.
- Converted batch workloads to Spring Boot and managed them through ECS Tasks.
- Automated migration of database objects, including stored procedures, packages, functions, triggers, views, and DMLs.
- Migrated a 345 GB database containing 54+ million records, including XML, BLOB, CLOB, and partitioned data.
- Completed database object transformation within six weeks while minimizing impact on business operations and customer experience.

Financial Services

50%

Reduced in TCO through
reduced licensing and
operational costs

50%

Reduced implementation
costs with automation-led
modernization

AWS-Native

Support for seamless
cross-region replication

Java to Azure Accelerate Cloud Modernization Saves 40% TCO for a Major Electronics Retailer

A leading consumer electronics retailer needed to modernize a business-critical Java application running on Oracle and WebSphere while migrating five environments to Azure. The goal was to reduce total cost of ownership by moving to Azure PostgreSQL and Tomcat PaaS while ensuring zero downtime and uninterrupted business operations.

Solution

We used agentic AI-powered transformation platform to automate application and database modernization, enabling a low-risk migration to Azure while improving scalability, performance, and operational efficiency.

- Performed an automated assessment to evaluate application complexity, dependencies, migration risks, costs, and timelines.
- Used our platform to automate application and database modernization for Azure.
- Converted the application from Spring MVC to Spring Boot.
- Refactored Oracle database schemas and DDL scripts for Azure Database for PostgreSQL.
- Migrated from WebSphere to Azure-hosted Tomcat PaaS.
- Split the Java frontend and backend into separate Azure App Services for improved scalability.
- Refactored backend services into APIs and managed them through Azure API Management.
- Delivered an automation-led migration approach that enabled a low-risk transition with zero downtime for end users.

Telecom and Utilities

70%

Reduction in migration time via automated refactoring with Amaze®

40%

Reduction in TCO

5 weeks

Versus the 13 weeks typically required for conventional migration approaches

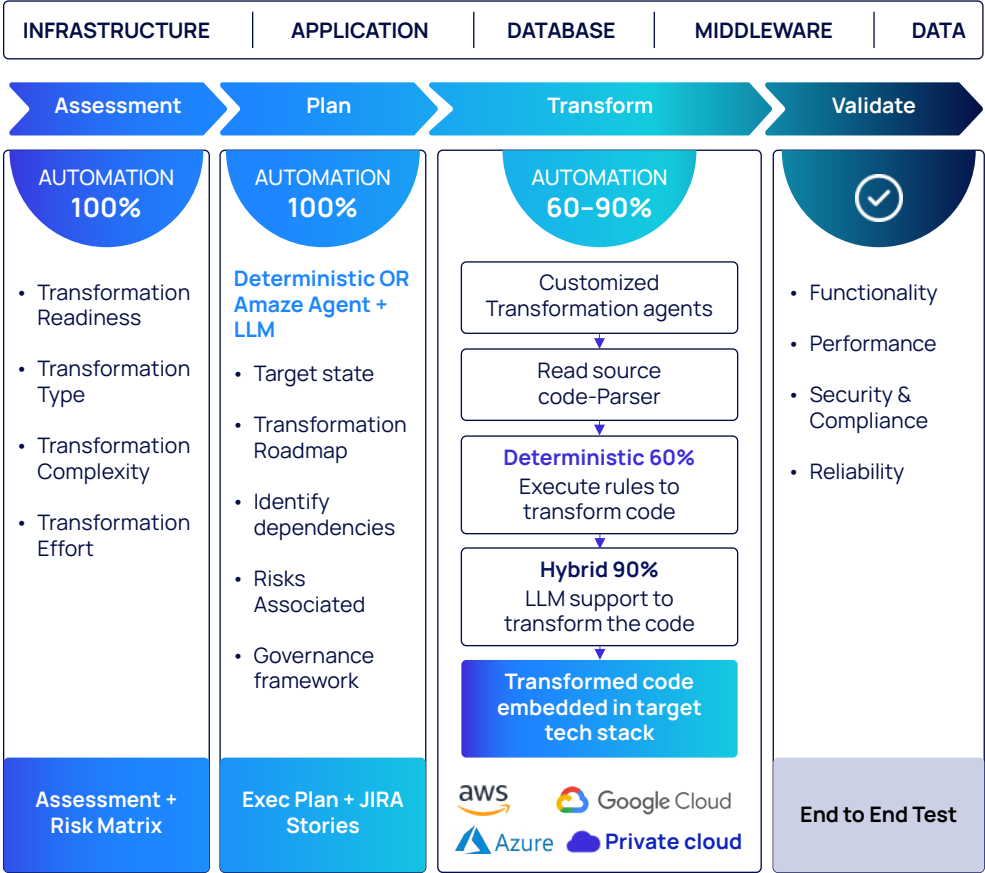


Accelerate Modernization with Hexaware's Agentic AI-powered Transformation Platform

Experience rapid, cost-efficient cloud and
data migration and modernization

Agentic AI-powered Transformation Platform

Our patented, home-grown purpose-built Unified AI Platform for end-to-end transformation powered by AI Agents



BUSINESS BENEFITS



MODERNIZATION OBJECTIVES

- Tech Debt Elimination
- Vulnerability Remediation
- License Elimination
- Cloud Readiness
- Regulatory compliance

PLATFORM CAPABILITIES

TRANSFORMATION LIFE CYCLE MANAGEMENT

- Agentic AI Platform
- Extensible agents
- Universal LLM Connect
- Automated Lifecycle
- Controlled transformation flow
- Plugins & integration ecosystem

20+ AGENTS & GROWING

- Apps modernization agents
- Database modernization agents
- Presentation Layer agents
- DevOps agents
- Mono to Micro agents
- Scheduler agents
- Technical Debt agents

EXECUTION MODELS

Deterministic No LLM API required	Hybrid - Autonomous GenAI + LLM
Hybrid - Semi Autonomous GenAI LLM + Capital AI Assist	Consultant- Led with AI Assist No LLM API required. Use Copilot/AI Tools



Get Started with Modernization-led Migration

Let's start the conversation.

Reach us today at marketing@hexaware.com and discover how our expertise can accelerate your AI-first cloud experience.

About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at <https://www.hexaware.com>.

Get in touch