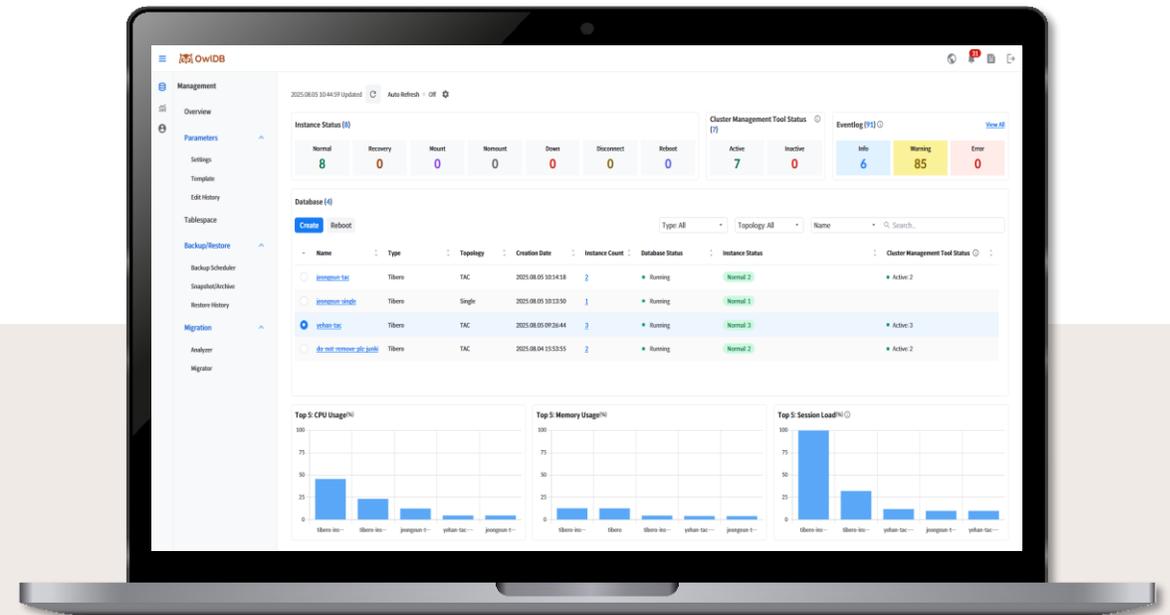**TMAXTibero**

Automation and reliability

A new standard for cloud DB operation automation

OwlDB

Service Brief

OwlDB

Provides a platform service that enables easy and convenient database operations in cloud environments.
Delivers fully integrated database management including **deployment, monitoring, backup, and security** without requiring dedicated infrastructure.

Cloud Native + **High Performance** + **Easy Management** + **Reasonable Cost** + **Technical support**

Cloud Native > **Service Architecture**

Delivering Optimized Cloud Architecture

Created within your customer account	Tibero Deployment through Web Console	Volume Separation by Role	Manage Multiple Instances with OwlDB

- ✓ Own all resources and data
- ✓ OS access and configuration available
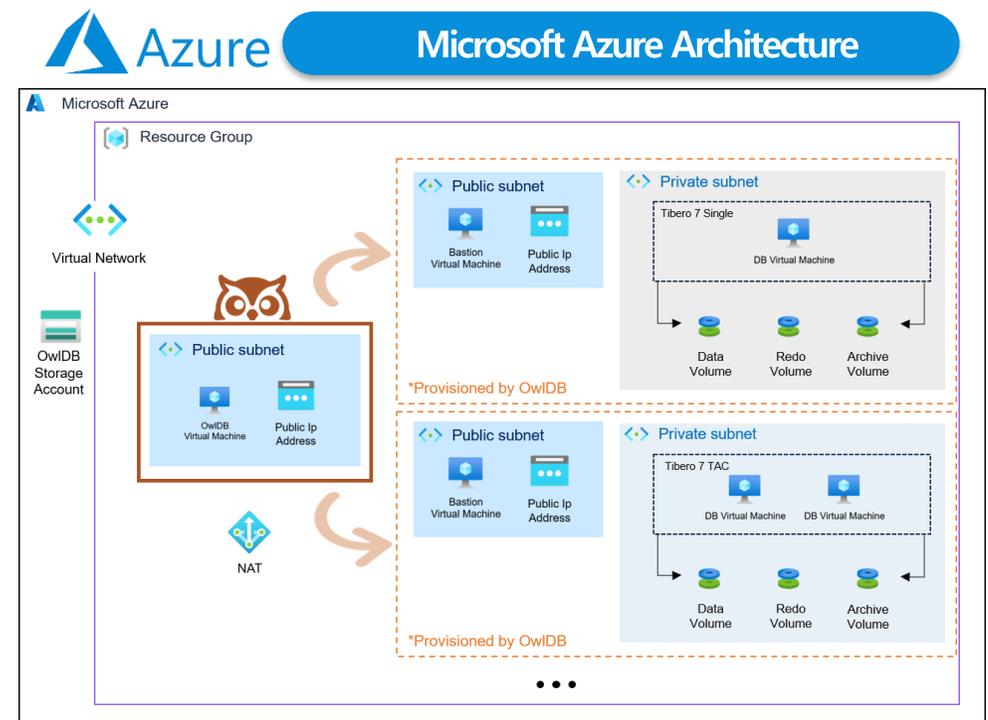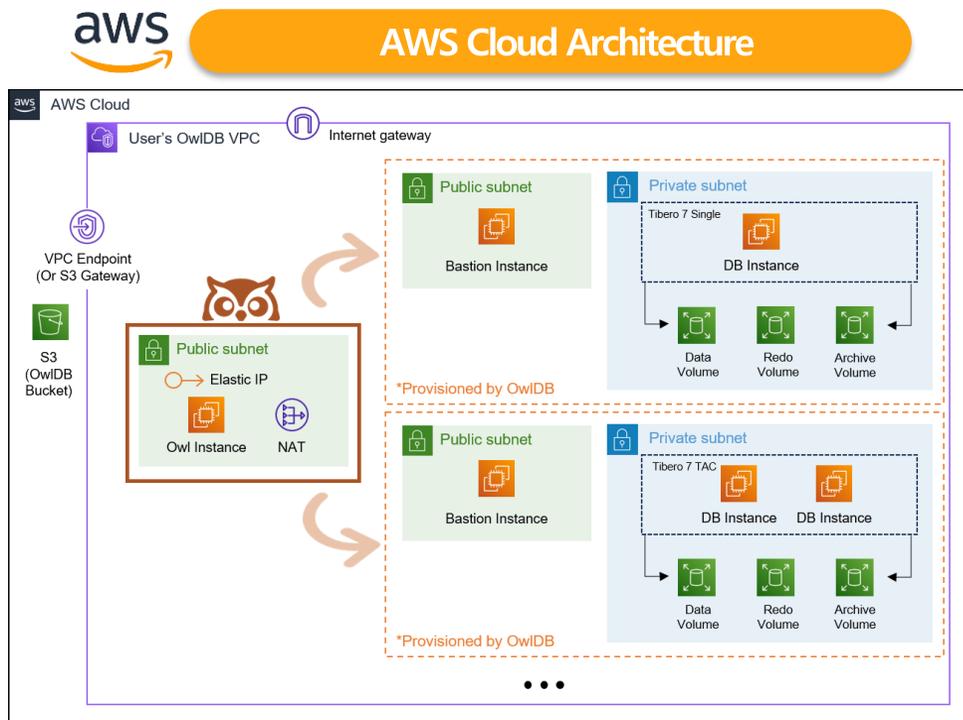
- ✓ Deploy Tibero with just a click
- ✓ Active-Active configuration (TAC)

- ✓ Reduce bottlenecks by minimizing I/O contention

- ✓ Create, operate, and manage multiple instances with one OwlDB

Powered by the High-Performance, Enterprise-Grade Tibero DBMS Engine
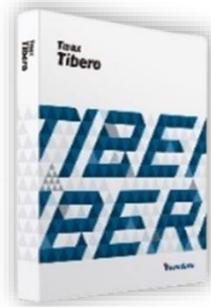
Tibero 7

No. 1

Market share of domestic commercial databases

2,000
Number of Winbacks

10,000
Cumulative number of references

Same core functionality

Features	Tibero	Oracle
Multi-Version Concurrency Control (MVCC)	Supported	Supported
Row-Level Locking	Supported	Supported
Lock Escalation Avoidance to Prevent Table Locking	Supported	Supported
OLTP Compression	Supported	Supported
Partitioning (Range, List, Hash, Composite)	Supported	Supported
Automatic Crash Recovery	Supported	Supported
Log Mirroring	Supported	Supported
Flashback Recovery	Supported	Supported
Multi-node parallel recovery	Supported	Supported
Active Cluster	Supported (Tibero TAC)	Supported (Oracle RAC)
Online DDL Operation	Supported	Supported

Supports Active-Active Configuration in the Cloud, Equivalent to On-Premise
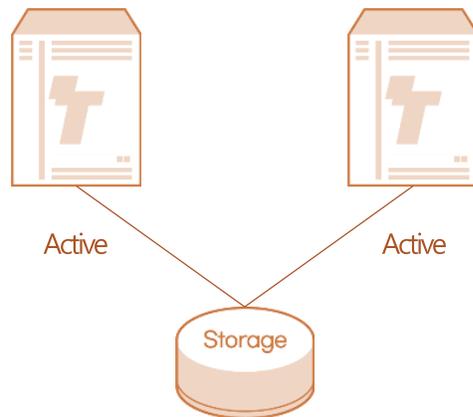
Provides **reliable service without system interruption**
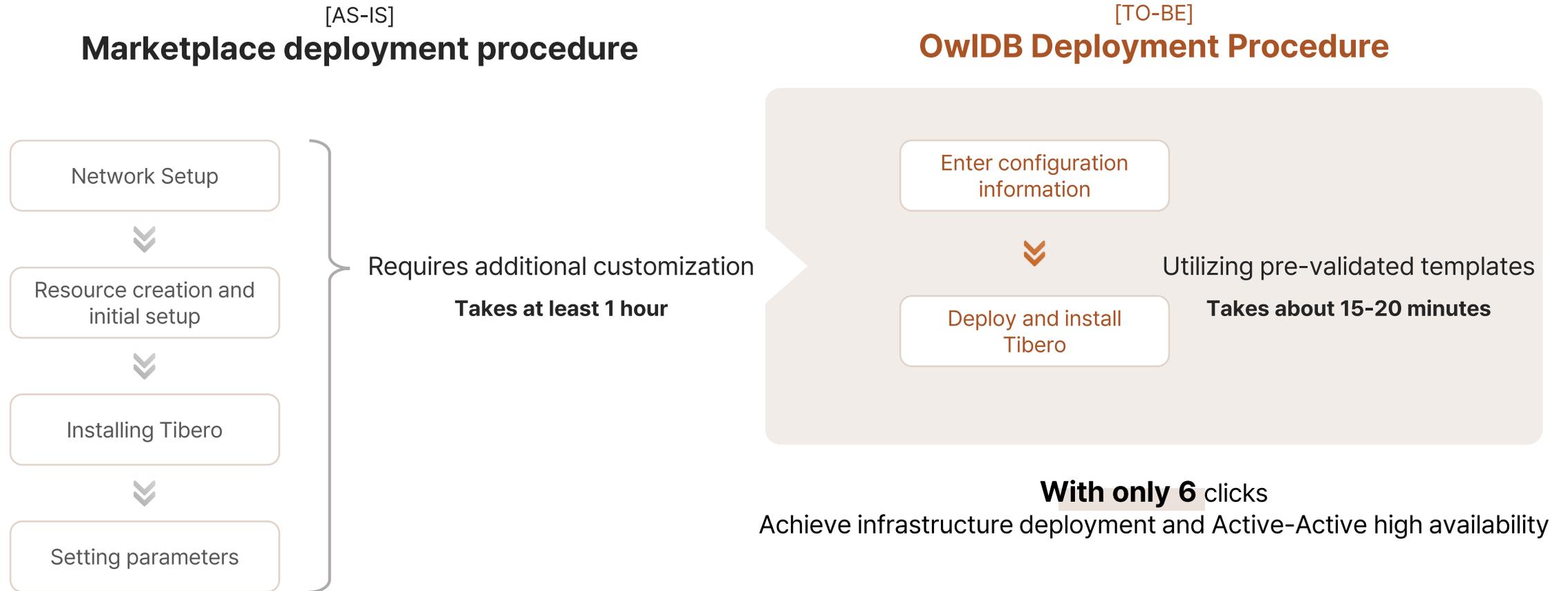Based on shared disks

Tibero Active Cluster (TAC)

✓ Technology held by only two companies: Oracle RAC and Tibero TAC

✓ Automatic fail-over to a healthy node in case of specific node failure

✓ Flexible capacity scaling through horizontal addition of active nodes

✓ Uninterrupted service delivery despite various types of failures

TAC on Cloud

✓ Provides the same redundancy configuration in the cloud environment as on-premise

✓ Allows TAC deployment on any preferred cloud platform without dependency on a specific CSP (*RAC is only available on its own OCI platform)

✓ Ensures zero downtime and data integrity for mission-critical operations in cloud environments

Provisioning process with minimal user configuration

[AS-IS]
Marketplace deployment procedure

[TO-BE]
OwlDB Deployment Procedure

Network Setup

Resource creation and initial setup

Installing Tibero

Setting parameters

Requires additional customization

Takes at least 1 hour

Enter configuration information

Deploy and install Tibero

Utilizing pre-validated templates

Takes about 15-20 minutes

With only 6 clicks
Achieve infrastructure deployment and Active-Active high availability

Parameter Templates Optimized for Various Workload Types

*Ongoing updates scheduled

Recommended Parameter Template Provided

✓ Parameter combinations optimized for workload types, backed by 20 years of expertise

✓ Based on best practices for each operating environment

Ensuring Performance Consistency

✓ Minimize configuration variances with validated templates

✓ Predictable performance in customer environments

Minimized operational risk

✓ Prevent user errors

✓ Minimize Downtime and Failure Risks

Automated backups configured with desired times and intervals
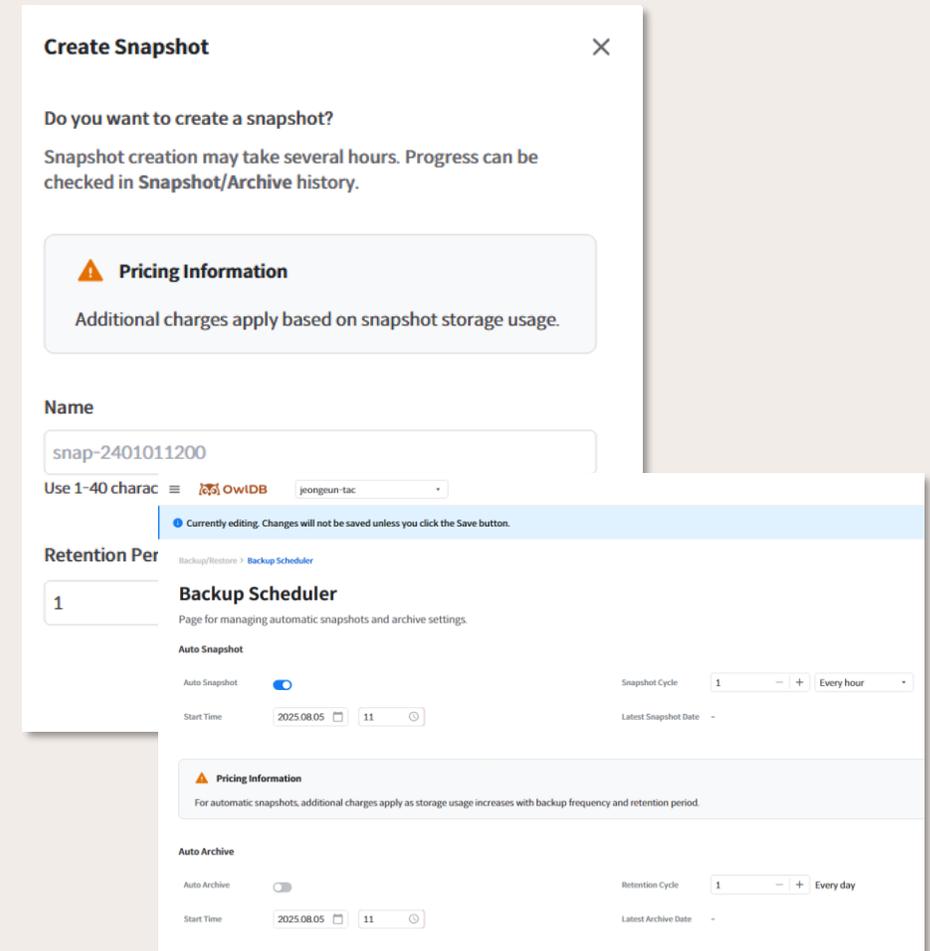
Set Backup Schedule and Data Retention Period

✓ Customizable to desired time zones

✓ Enables scheduled backups with one-time setup, requiring no further manual action

Fast and Flexible Recovery Support

✓ Provides Point-in-Time Recovery Functionality
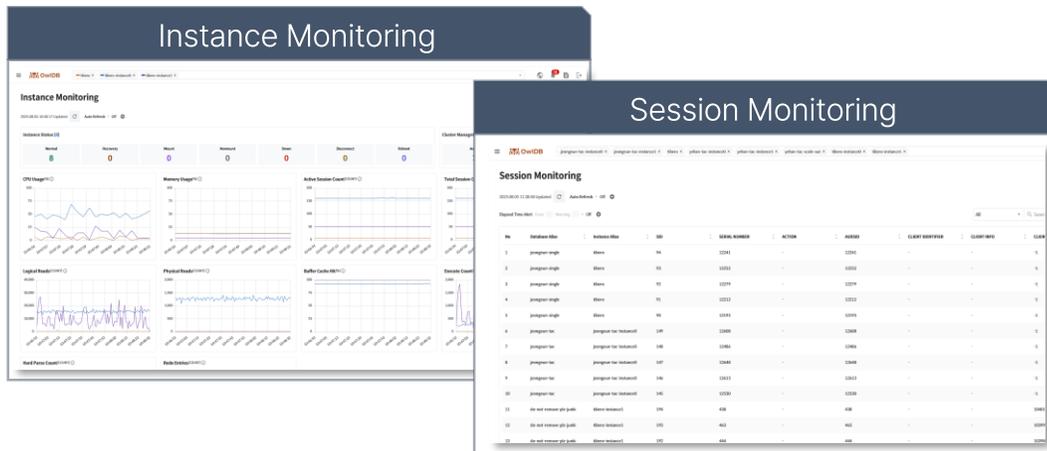
✓ Recovery made easy through intuitive UI
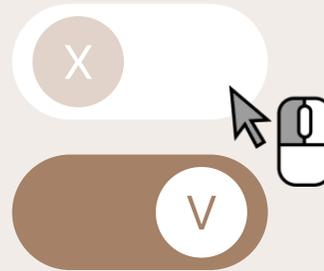
One-click setup

Real-time monitoring of DB resource usage and operational metrics

Multi-Instance Monitoring & Session Monitoring

Instance Monitoring

Session Monitoring

Log Monitoring

Syslog

Bootlog

Eventlog

✓ Comprehensive monitoring of DB status and performance

✓ Real-time status visibility of active sessions

✓ Customizable threshold for session duration, with color-coded alerts
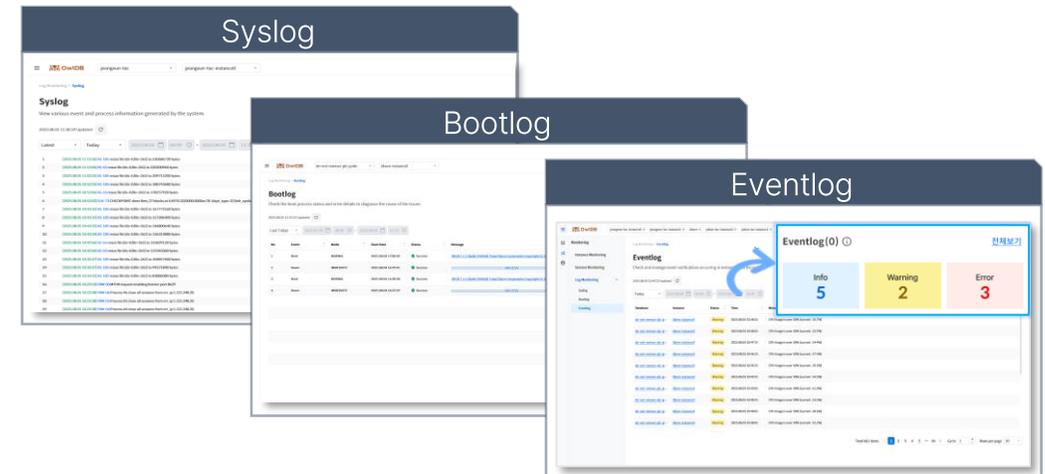
✓ **Syslog -** Records various system-generated events and process information

✓ **Bootlog -** Captures detailed messages generated during the system boot process

✓ **Eventlog -** Tracks database instance event notifications

Provide compatibility analysis and data migration tools

Provides compatibility analysis reports

- ✓ Conducts pre-migration analysis of target databases to ensure compatibility.
- ✓ Enables advanced verification of required modification items prior to migration.

Easy migration to cloud environments

- ✓ Automatic migration of schemas/objects/data
- ✓ Supports migration from Oracle to Tibero.

Type Conversion → Schema Object → Migration Option → Target Database → Data Migration → Result
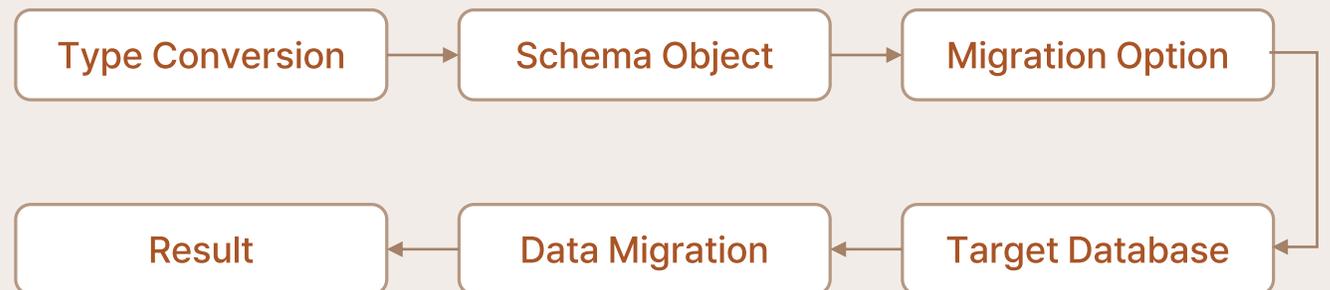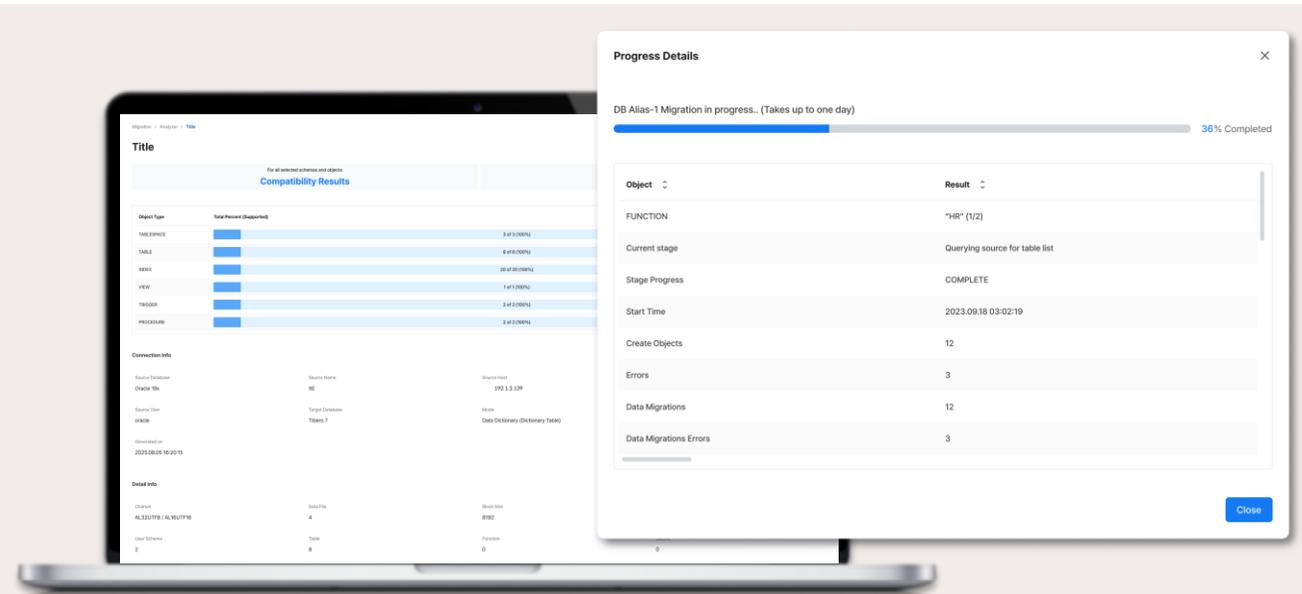
Supports flexible scaling based on resource usage
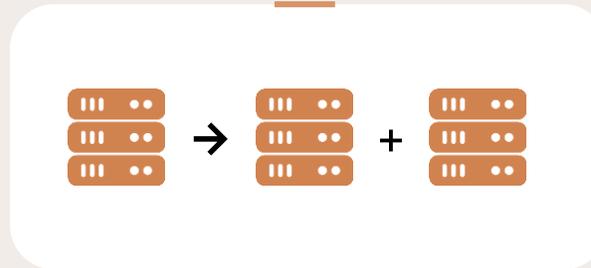
Flexible resource adjustment

✓ Scale Up/Out* vertically and horizontally
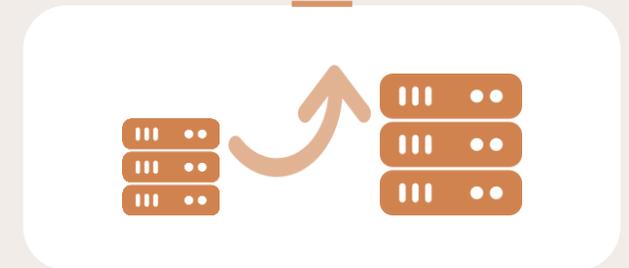
✓ Scalable Volume Expansion Based on Data Volume

Intuitive UI for Seamless Modifications

✓ Adjust resources with just a click

✓ Visual Comparison of Changes Before and After

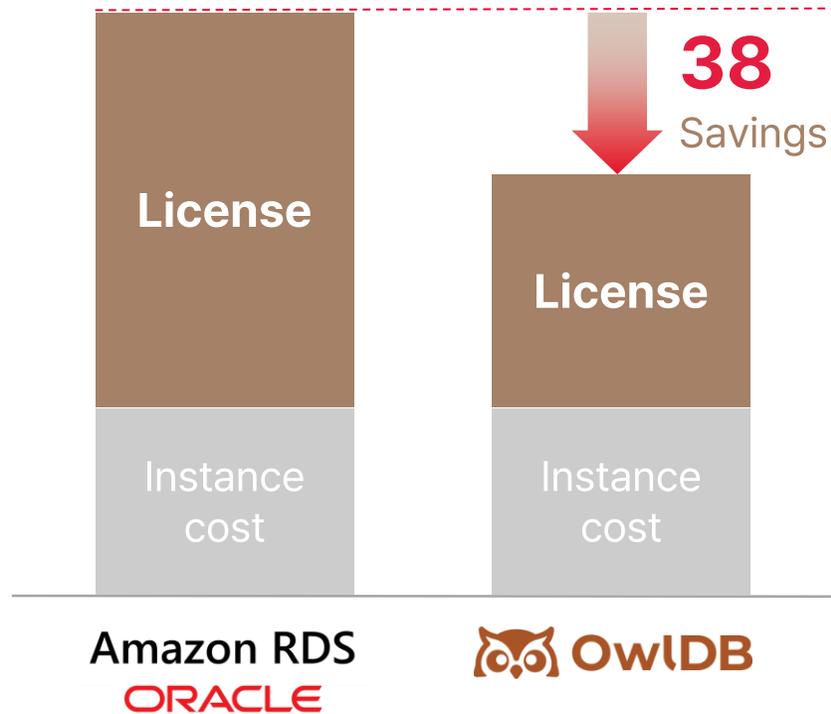# Approximately 40% Cost Savings Compared to Competitor DBs

Single

Based on AWS m5 Instance

38
Savings

License

License

Instance cost

Instance cost

Amazon RDS
ORACLE

OwlDB

38% savings compared to AWS RDS for Oracle

TAC

Based on AWS m5 Instance

41
Savings

License

License

Instance cost

Instance cost

ORACLE
Cloud Infrastructure

OwlDB
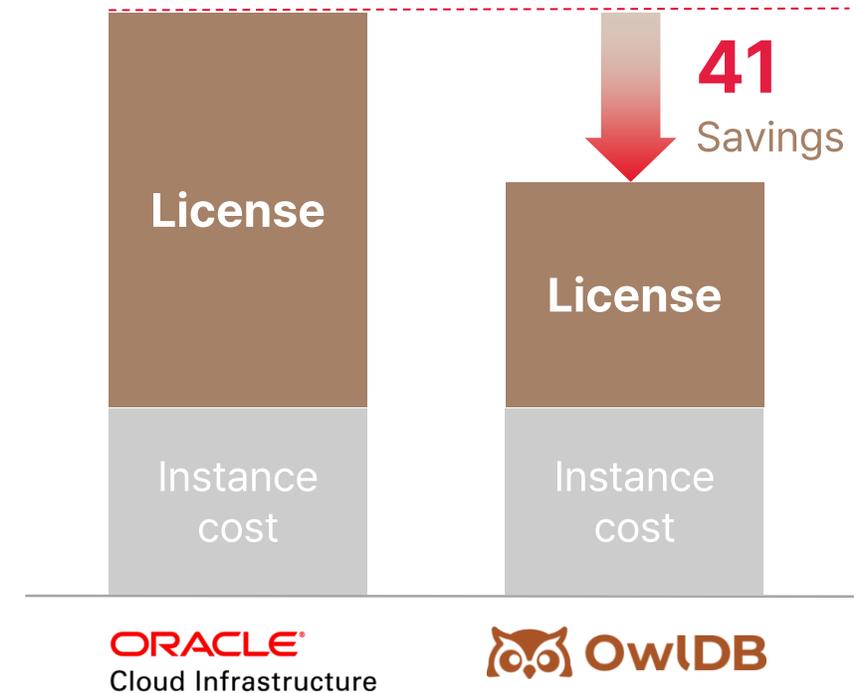
41% savings compared to OCI (Oracle Cloud Infrastructure)

Direct Technical Support from the Manufacturer Without CSP Dependency

Other DBaaS

Limitations of CSP-Centric Technical Support

- ☑ **Black box method** - users can't access OS and DB

- ☑ Delay in CSP's failure response

- ☑ Responsibility for incidents remains ambiguous

- ☑ Leads to Constraints in Dedicated DB Technical Assistance

OwlDB

Fast, organized Direct technical support

- ☑ **White box method** - user has access to OS and DB

- ☑ **Incidents are reported directly to TmaxTibero, who delivers prompt technical assistance**

- ☑ **The dedicated cloud support team provides rapid root cause analysis and effective issue resolution**

- ☑ **Possession of DB Experts with Core Technology**

OwlDB
Thank You