

ORACLE

# The Economics of Multi-Cloud

Understanding Cost, Complexity, and Control

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Director Strategy & Innovation

# Agenda

- 01 Control Cost
- 02 Eliminate Complexity
- 03 Control Data
- 04 Accelerate Innovation

Multi-cloud increases complexity.  
Complexity drives cost and erodes control.

# The Enterprise Challenge

Optimizing technical performance and costs across the application landscape

## Runaway Cloud Costs

Unpredictable IOPS charges, oversized compute shapes, and idle resources inflate bills. Customers pay for infrastructure, not business outcomes.

## Data Sprawl

Separate tools for relational, JSON, graph, and AI vector data create silos. Moving and replicating data adds cost and breaks consistency.

## AI Without a Foundation

Fragmented data means fragmented AI. Every disconnected data store weakens model accuracy, increases latency, and multiplies operational complexity.

# Your Oracle Investment Already Delivers

One license. Ten database types. Zero incremental cost for capabilities you currently own.



- ✓ Relational (OLTP & OLAP)
- ✓ JSON / Document Database
- ✓ Graph Database
- ✓ AI Vector Database
- ✓ Time-Series Database
- ✓ Key-Value Database
- ✓ Wide Column Database
- ✓ Globally Distributed DB
- ✓ Blockchain Ledger
- ✓ Analytics Cloud Platform

## The Numbers Don't Lie

# 56%

## lower total cost of ownership

*Oracle DB@AWS vs. AWS RDS — 3-year TCO*

**\$1.33M** saved over 3 years across 20 databases

**No IOPS** charges **ever** on Oracle Exadata

**BYOL** leverage existing license entitlements

**1/2** the license cost of EC2 or RDS

Source: Oracle cost analysis. Assumptions: RDS 20 instances, 408 vCPUs, 142TB storage | Exadata BYOL: 144 eCPUs, 732TB available, 142TB used.

# Workload Scenarios Considered

## Small Workload

## Medium Workload

## Large Workload

BOM	AWS EC2 & RDS	Oracle Exadata & Autonomous	AWS EC2 & RDS	Oracle Exadata & Autonomous	AWS EC2 & RDS	Oracle Exadata & Autonomous
Compute	R7i.4xlarge; 16vCPUs	2 data x 3 storage servers	R7i.12xlarge, 48 vCPUs	2 data x 3 storage servers	R7i.24xlarge (96 vCPUs)	2 data x 3 storage servers
Storage	GP3 - 1.5 TB Volume GP3 - 30k IOPs GP3 Throughput 3k MB	240 TB included	IO2 - 5 TB Volume IO2 - 30k IOPs	240 TB included	IO2 - 10 TB Volume IO2 IOPs 80k	240 TB included
CloudWatch	Database Insights - No	Not Needed	Database Insights - No	Not Needed	Database Insights - No	Not Needed
Deployment Option	Single AZ	Single AD	Single AZ	Single AD	Single AZ	Single AD
Backup	Not Included	Not Included	Not Included	Not Included	Not Included	Not Included
Autoscaling	Not possible	Enabled	Not possible	Enabled	Not possible	Enabled
License Model	BYOL	BYOL	BYOL	BYOL	BYOL	BYOL
Licenses Used	Enterprise Edition, Diagnostic, Tuning	Enterprise Edition & RAC	Enterprise Edition, Diagnostic, Tuning	Enterprise Edition & RAC	Enterprise Edition, Diagnostic, Tuning	Enterprise Edition & RAC
Pricing Assumption	1-Yr RI, No Upfront	Standard discounting	1-Yr RI, No Upfront	Standard discounting	1-Yr RI, No Upfront	Standard discounting

As of February 10, 2026 - Oracle DB@AWS offers only Exadata Database Service Dedicated and Autonomous Database Dedicated.

**Note:** There are many possible architectural choices and configurations. This analysis compares acquisition, license, and labor costs only excluding extensibility advantages offered by Oracle DB@AWS. Licenses support considers a 70% discount on entitlements with 22% net support model.

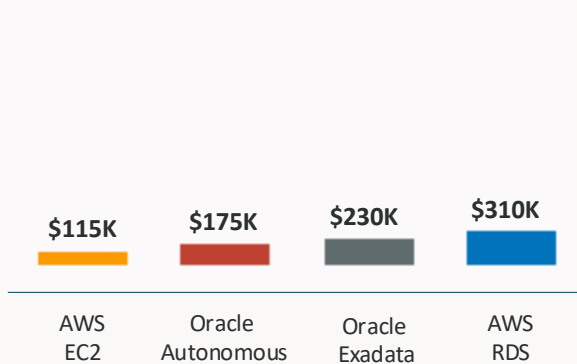




# Amazon EC2 and RDS for Oracle vs Oracle Multi-cloud: Acquisition Costs of 10 Database Workloads

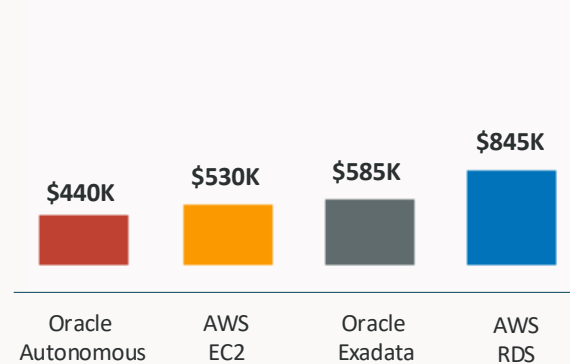
## Small Workload

Low core counts, low storage, and variable consistency  
16 vCPU per DB



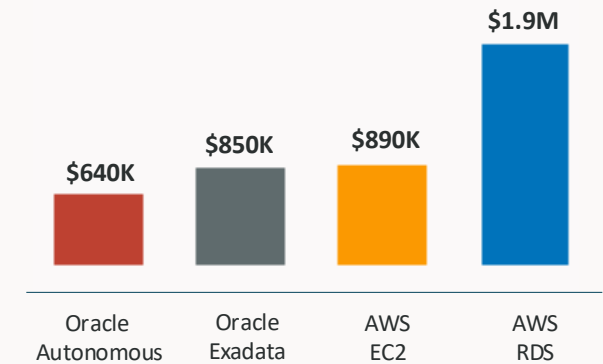
## Medium Workload

Medium core count, moderate storage & consistency  
48 vCPU per DB



## Large Workload

High core count, lots of storage, high consistency  
96 vCPU per DB



Small databases with limited storage are often less expensive on EC2 when license and ongoing operational labor costs are excluded. However, as database counts scale and storage requirements grow, Oracle Exadata and Autonomous Database deliver greater overall value, driven primarily by the economics of storage compared to Elastic Block Storage.

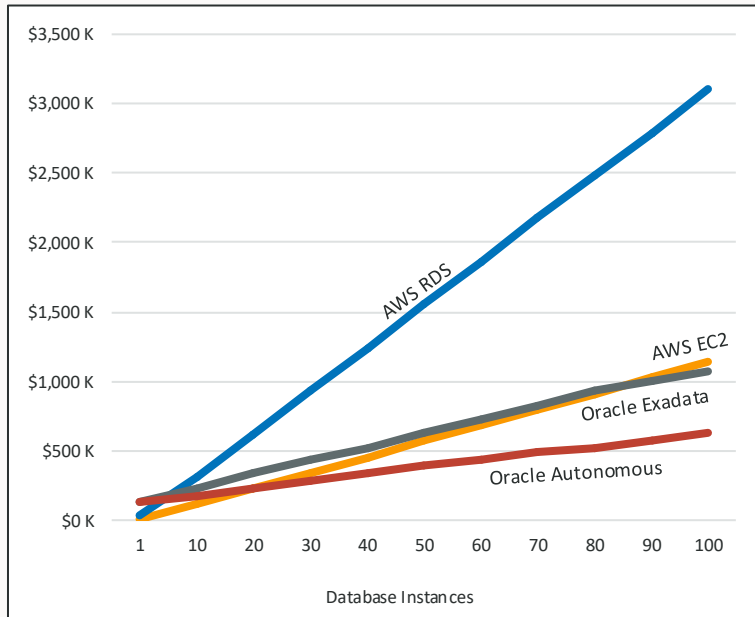




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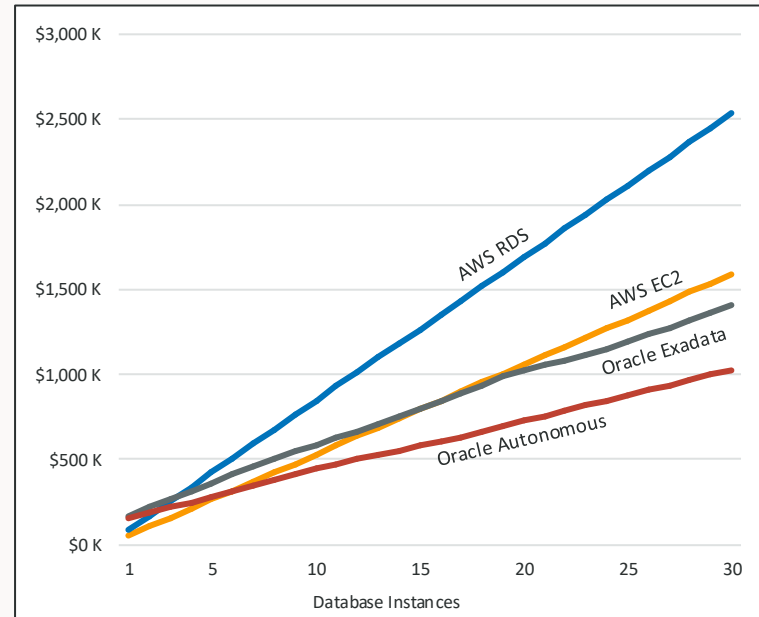
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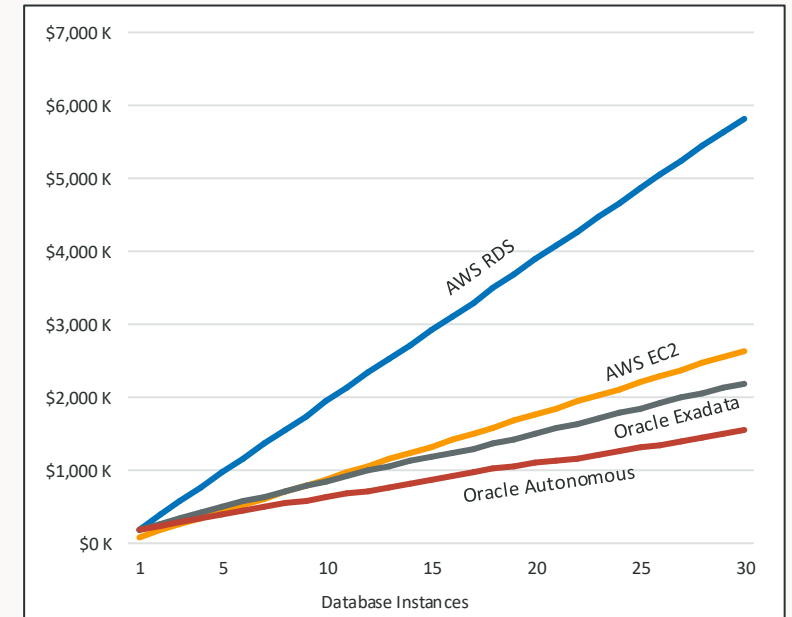
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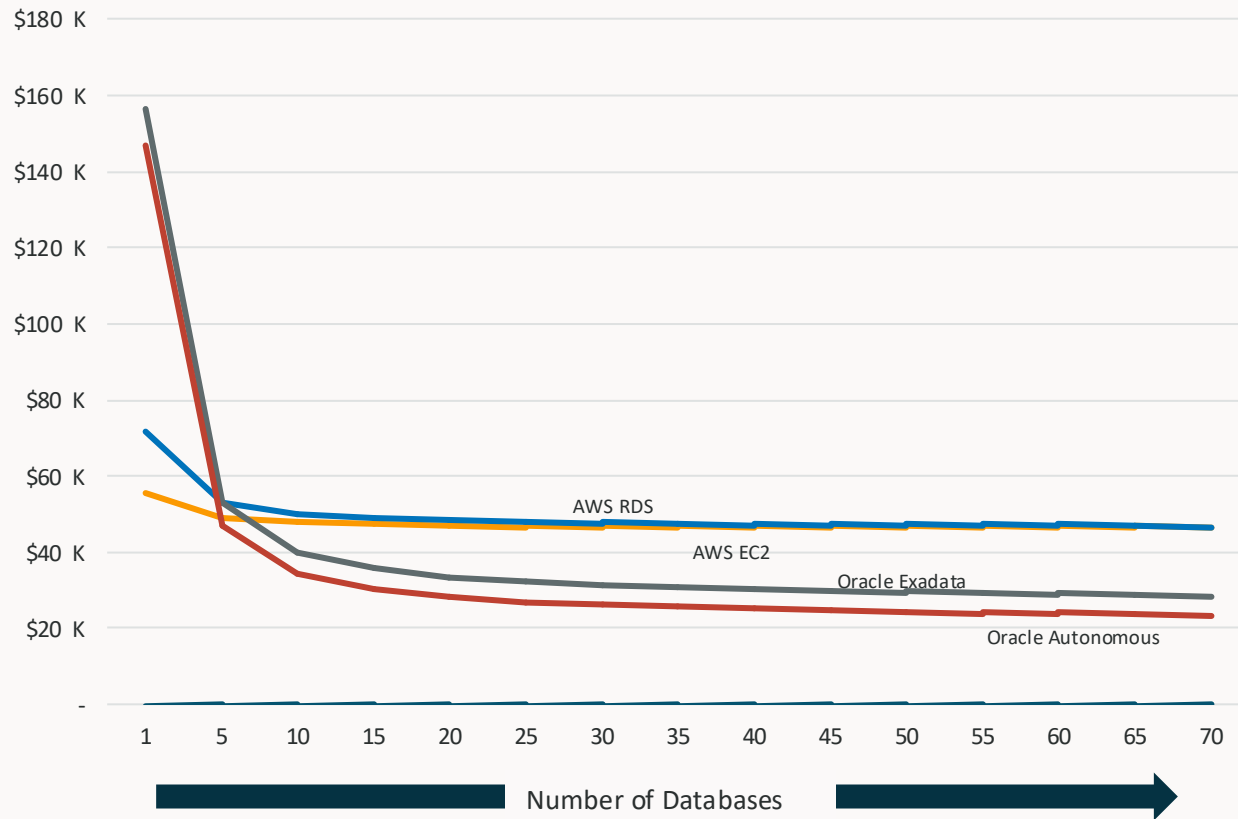


As database portfolios grow in volume, size, and performance demands, Exadata's advantages compound through consolidation, performance density, and operational efficiency. At scale, DB@AWS reaches a clear cost inflection point where it becomes less expensive than other deployment models.



# Economics of Scale

## Acquisition Costs of 10 Database Workloads



### Oracle Cost per database declines as scale increases

As database counts, storage, and IOPS grow, isolated infrastructure hits a wall. Exadata and Autonomous are built for consolidation – they absorb that growth more efficiently, and the cost per database keeps dropping as scale increases.



# Amazon EC2 and RDS for Oracle vs Oracle Multi-cloud:

DB@AWS requires half the processor license of EC2 or RDS

## Small Workload

Low core counts, low storage, and variable consistency  
16 vCPU per DB

**8** Processor Licenses

80 Total Required AWS

**4** Processor Licenses

40 Total Required DB@AWS

## Medium Workload

Medium core count, moderate storage & consistency  
48 vCPU per DB

**24** Processor Licenses

240 Total Required AWS

**12** Processor Licenses

120 Total Required DB@AWS

## Large Workload

High core count, lots of storage, high consistency  
96 vCPU per DB

**48** Processor Licenses

480 Total Required AWS

**24** Processor Licenses

240 Total Required DB@AWS



Exadata Storage Server Software



Transparent Data Encryption (TDE)



Real Application Testing option



Data Masking and Subsetting Pack



Diagnostics and Tuning Pack

Oracle includes these advanced technologies in BYOL subscription

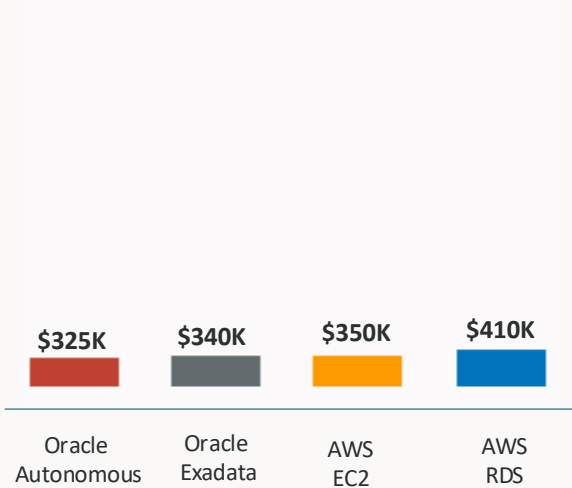




# Amazon EC2 and RDS for Oracle vs Oracle Multi-cloud: Acquisition + License Support Costs of 10 Database Workloads

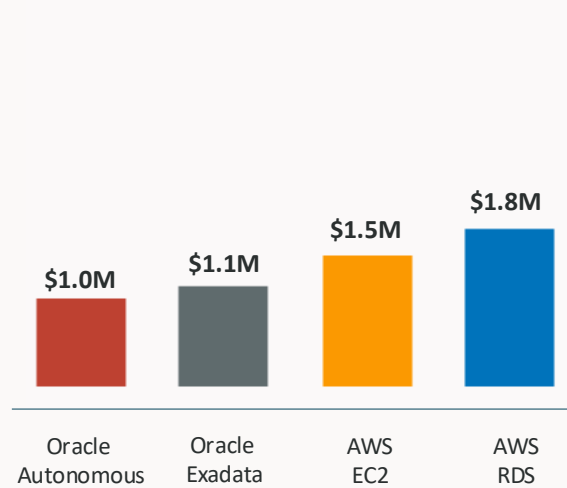
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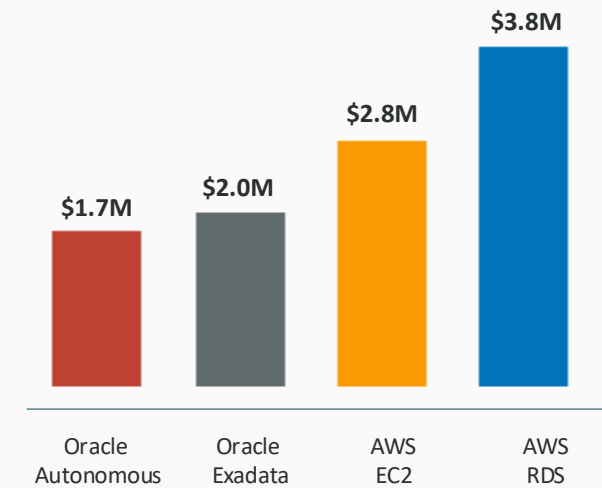
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High core count, lots of storage, high consistency  
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# Amazon EC2 and RDS for Oracle vs Oracle Multi-cloud: Acquisition, License Support, and Labor of 10 Database Workloads

## Small Workload

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16 vCPU per DB

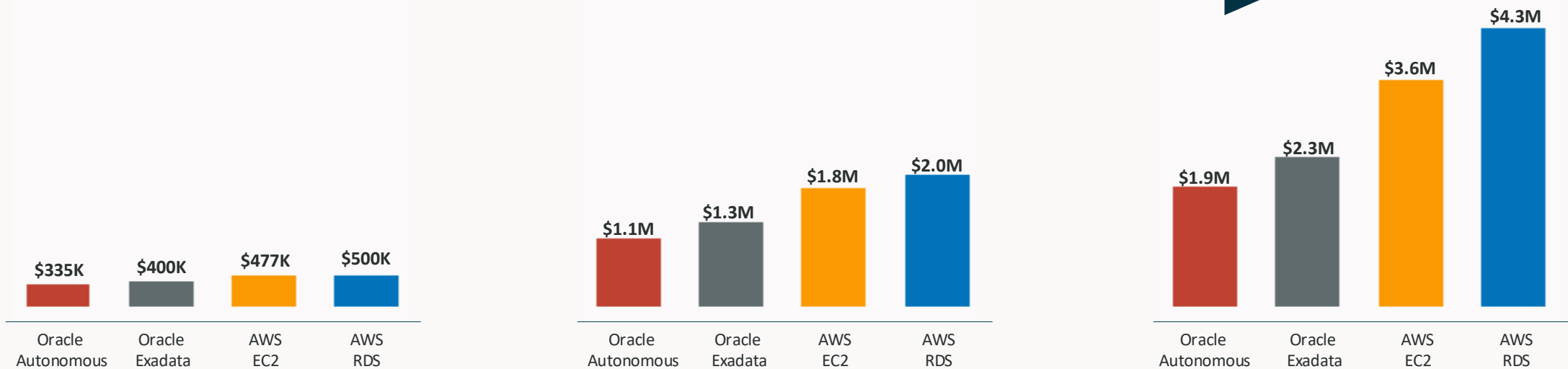
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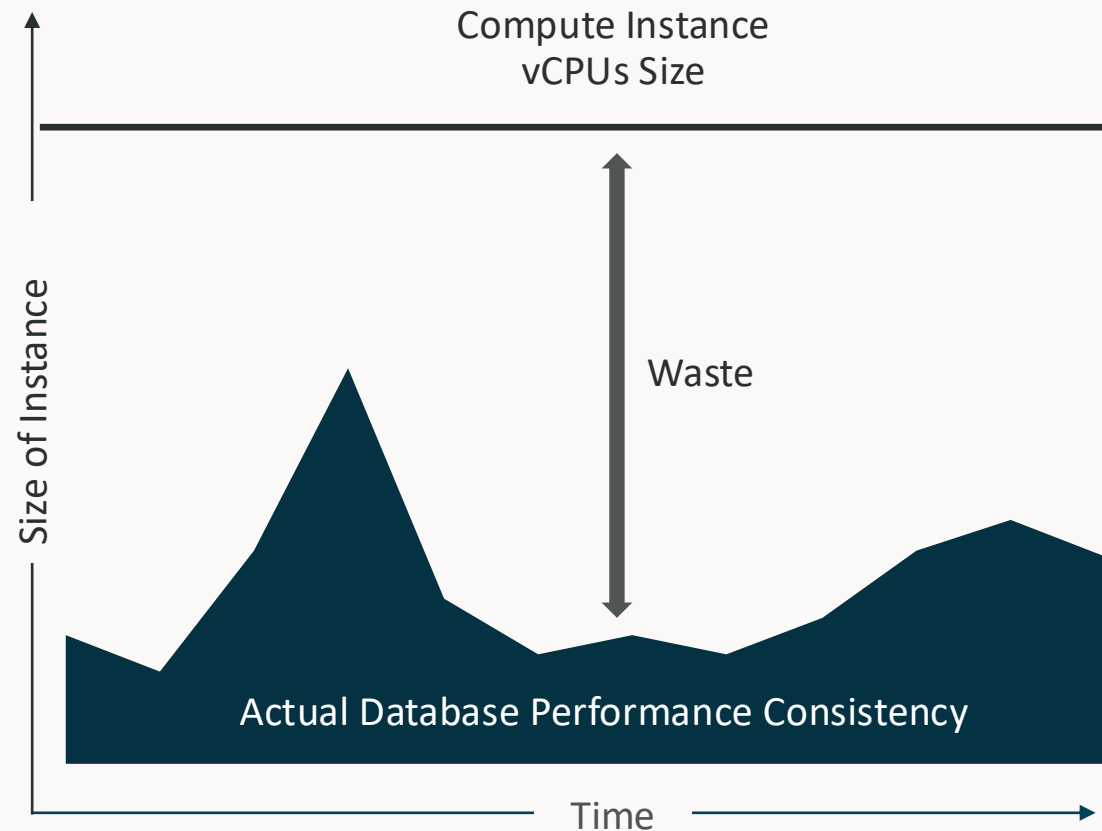
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High core count, lots of storage, high consistency  
96 vCPU per DB

Less to manage. DB@AWS reduces operational labor 49% vs. EC2 and 33% vs. RDS.



# The Hidden Cost: Compute Waste in Native Cloud



- 1 Instances sized for peak workload, regardless of actual usage
- 2 Fixed compute costs. You pay for resources, not consumption
- 3 As needs change, migrating to a larger shape is the only option
- 4 Larger compute shapes require additional license entitlements
- 5 Performance inconsistency despite constantly high cost



# Eliminate Complexity

—  
Same engine. Same code. Same skills.

# One Oracle. Any Cloud.

Same Exadata engine, same code, same pricing. Deployed wherever it makes sense for each workload.

OCI	AWS	Azure	GCP
Oracle Cloud Infrastructure	Oracle DB@AWS	Oracle DB@Azure	Oracle DB@Google Cloud
Full Oracle feature set	12 regions live 20+ planned	22 regions live 33 planned	Growing fast 10+ planned
BaseDB ✓ ExaScale ✓ Exadata Dedicated ✓ Autonomous Serverless ✓ Autonomous Dedicated ✓	Exadata Dedicated ✓ Autonomous Dedicated ✓	BaseDB ✓ ExaScale ✓ Exadata Dedicated ✓ Autonomous Serverless ✓ Autonomous Dedicated ✓	BaseDB ✓ ExaScale ✓ Exadata Dedicated ✓ Autonomous Serverless ✓ Autonomous Dedicated ✓

Cloud spend counts towards commitments at each cloud's vendor.

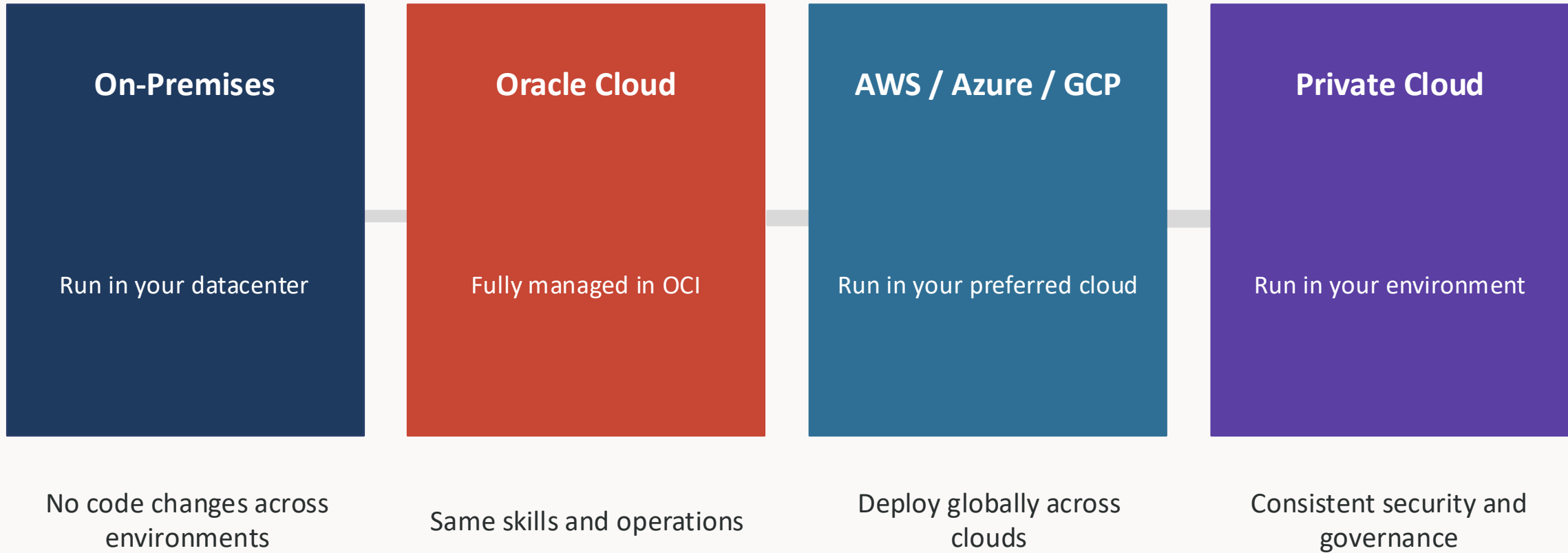
Contracts are Private Offers via the marketplace.

Able to leverage existing licenses (BYOL).



# One Database. Any Cloud. Same Experience.

Standardize on the database. Choose where to run it.



# Control Data



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What are you doing with your data?

# Your Data Strategy Is Your AI Strategy

AI doesn't run on code – it runs on data. The quality of your AI reflects the quality of your data management.

## Deep Learning

Massive, consistent data

- Cost scales rapidly with volume & compute
- Low-quality data wastes training investment
- Requires disciplined data pipelines

No data control = no cost control

## Machine Learning

Structured, labeled data

- Data prep & labeling drive cost
- Fragmented data → unreliable results
- Governance ensures repeatability

Better data = better outcomes

## AI Vector Search & GenAI

Trusted, unified data

- Output quality depends on data relevance
- Poor data access → incomplete or incorrect responses
- Requires strong access control & data context

No trust = no adoption

AI performance reflects the quality and control of your data.

# The Fragmentation Tax

Each new data tool adds cost, complexity, and risk.

## Fragmented Approach

PostgreSQL (transactions)

Databricks (analytics)

MongoDB (documents)

Snowflake (warehouse)

Redis (cache)

Vector DB

More tools • More pipelines • More inconsistency

## Unified Data Platform

Relational + JSON + Document

Graph + Spatial analytics

AI Vector Search built-in

OLAP + OLTP on same platform

True Cache

In Memory + Time-series

One platform • One copy of data • Consistent results

Higher cost • Data duplication • ETL overhead • Governance gap

Lower cost • Single source of truth • No ETL • Built-in governance

# Innovation Unlocked



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Oracle 26ai delivers capabilities your competitors don't have... yet.

# Oracle Database 26ai

One platform for every data type, workload, and AI use case.

## For App Developers

- JSON Relational Duality Views
- Property Graph as SQL Views
- JavaScript Stored Procedures
- One data model for REST, MongoDB API, or SQL

## For IT & Operations

- Real-Time SQL Plan Management
- Rolling Patches for Complex Changes
- True Cache (low-latency read scaling)
- In-Database Firewall

## For AI & Data Science

- Native AI Vector Search
- RAG: Retrieval Augmented Generation
- Select AI: natural language to SQL
- No ETL. AI runs where the data lives



# AI Built In - Not Bolted On

Search, generate, and query with AI without moving your data to another platform

## AI Vector Search

Search documents, images, and structured data based on semantic meaning, not keywords. Combines AI search with SQL business data in a single query.

Find properties like this image, priced within budget, in the customer's preferred city, in 6 lines of SQL.

## RAG: Retrieval Augmented Generation

Overcome LLM limitations such as frozen training data and lack of private context. Provide real-time enterprise data without retraining the model.

LLMs are frozen in time. Oracle Vector Search gives them your current business data, grounded and accurate.

## Select AI

Query your database in plain English. Oracle generates SQL automatically, making enterprise data accessible to every team, not just SQL experts.

"Show me Q3 revenue by region" becomes an instant, accurate SQL query against your actual operational data.

# Exadata: The Engine That Changes the Math

Purpose-built for Oracle workloads at hyperscale. Available on OCI, AWS, Azure, and GCP.

**30x**

higher throughput  
vs. fastest AWS shape

*Faster than AWS on AWS.*

**300 GB/s**  
SQL Flash Bandwidth

**5.6M**  
Max SQL Read IOPS

**3.75 TB**  
XRMEM Cache

**90% less**  
Storage Compression

**Up to 30x**  
AI Vector Search Speed

**4x capacity**  
Database Consolidation



# Getting Started: Multi-cloud Acceleration Packages

Structured paths to production. Oracle engineering, migration tooling, and professional services included.

<b>Landing Zone</b> 3 Months	<b>Enterprise</b> 12 Months	<b>Mission Critical</b> 12 Months
<p><b>Validate Oracle DB@ capabilities with real-world applications</b></p> <ul style="list-style-type: none"><li>• Foundation Workshop included</li><li>• Database Estate Analysis</li><li>• Up to 3 non-prod databases migrated</li><li>• Typical: Quarter Rack Exadata Dedicated</li></ul>	<p><b>Migrate production workloads and modernize infrastructure</b></p> <ul style="list-style-type: none"><li>• Enterprise Workshop + 8-week production acceleration team</li><li>• Security, Observability &amp; Resiliency Assessments</li><li>• Up to 20 databases (prod, non-prod, DR)</li><li>• 10% volume discount on Multicloud SKUs</li></ul>	<p><b>Move and modernize mission-critical workloads at scale</b></p> <ul style="list-style-type: none"><li>• Production Readiness Workshop + 12-week production acceleration team</li><li>• Full suite of technical health assessments</li><li>• Up to 50 databases across all environments</li><li>• 15% volume discount on Multicloud SKUs</li></ul>



# The Economics of Multi-Cloud, Simplified

Control cost, eliminate complexity, and unlock AI with a unified data platform

01

## Control Cost

Oracle Multi-Cloud is more cost-effective at any scale, with data to prove it. BYOL, no IOPS charges, and license consolidation mean your existing Oracle investment goes further.

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02

## Eliminate Complexity

One Oracle. Any cloud. Same engine, same code, same skills across OCI, AWS, Azure, and GCP. No re-architecture. No retraining. No new database vendors.

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03

## Control Data

Your AI strategy is only as strong as your data strategy. Oracle 23ai unifies every data type on a single platform, including relational, JSON, graph, and vector, with no ETL and no silos.

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04

## Accelerate Everything

With costs controlled, complexity removed, and data unified, Oracle 26ai's AI capabilities, including Vector Search, RAG, and Select AI, are immediately actionable.

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