ORACLE
Data Deep Dive
at AI World Tour

Real-Time AI Everywhere: Deploying Oracle AI Database 26ai on Multicloud

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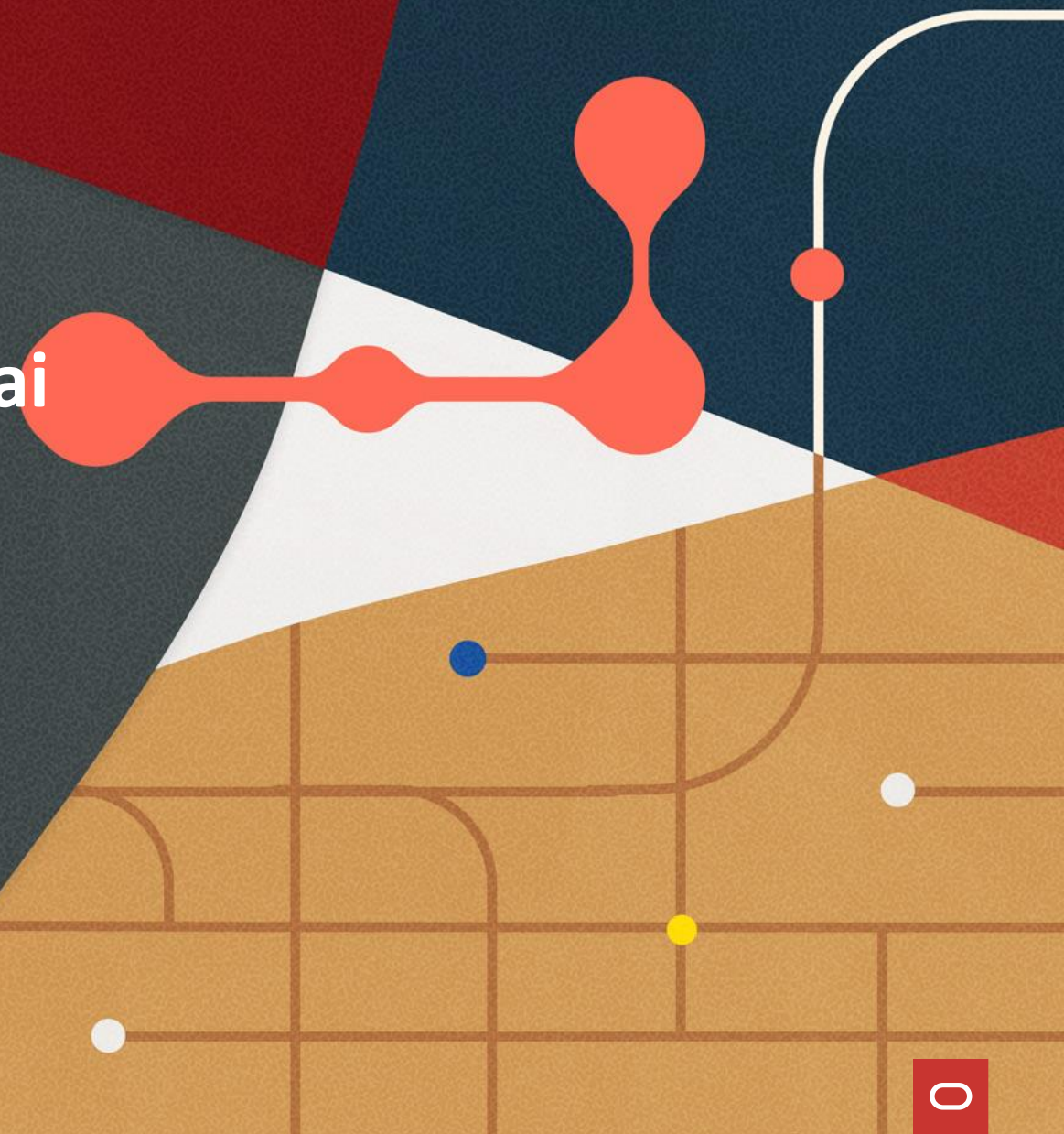
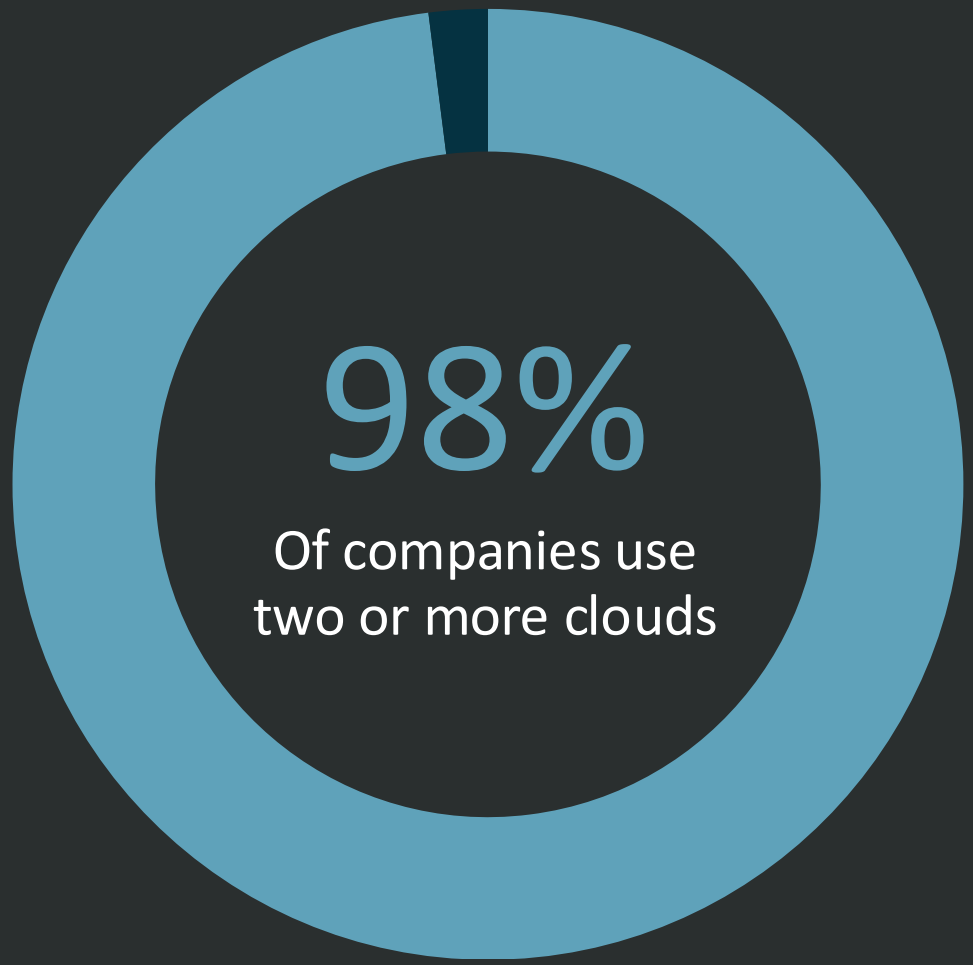


Safe harbor statement

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.

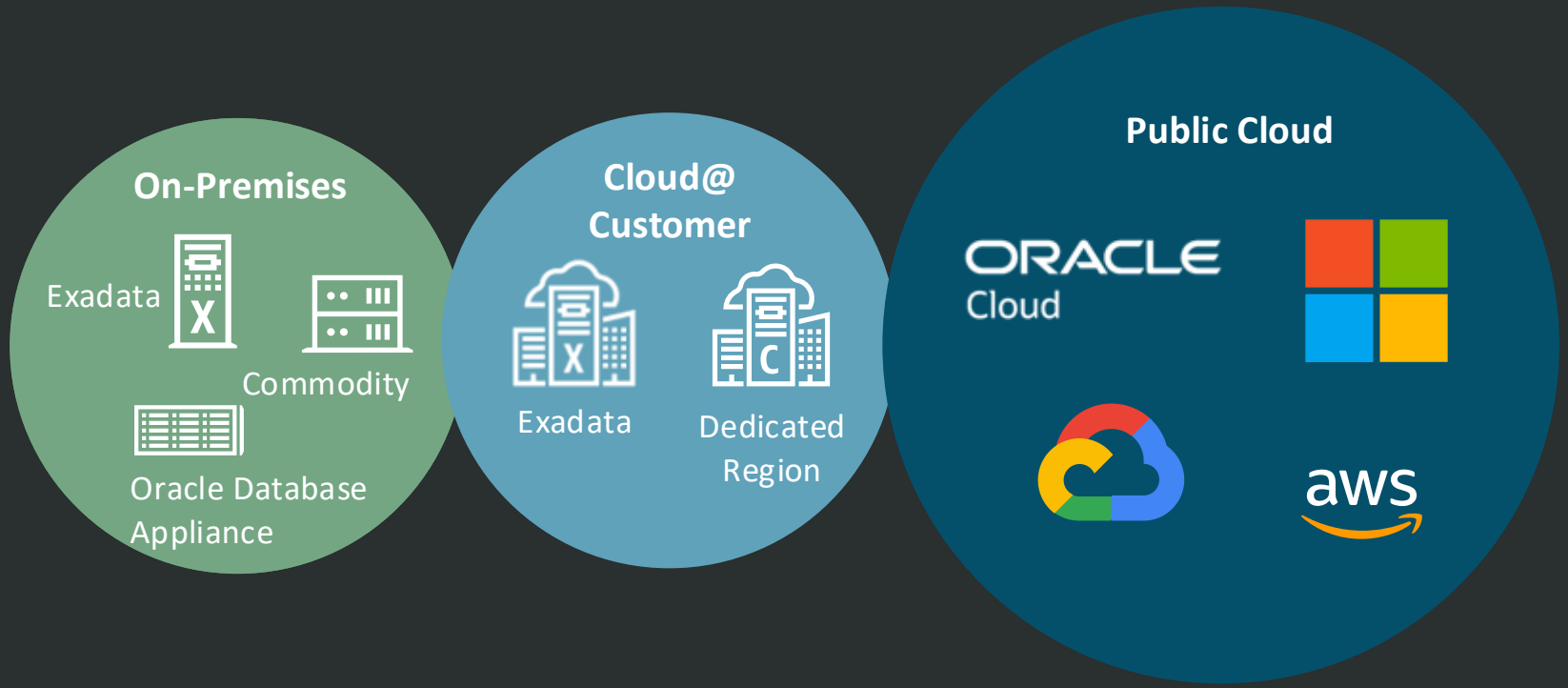


Source: https://www.oracle.com/cloud/multicloud/mainstream/

Customers want choices

- ✓ Faster innovation with the best of all clouds
- ✓ Improved business resilience, reduced risks, lower costs
- ✓ Better regulatory compliance and data sovereignty

Now: with Multicloud, deploy Oracle Database Cloud anywhere



On-premises Hybrid cloud Multicloud

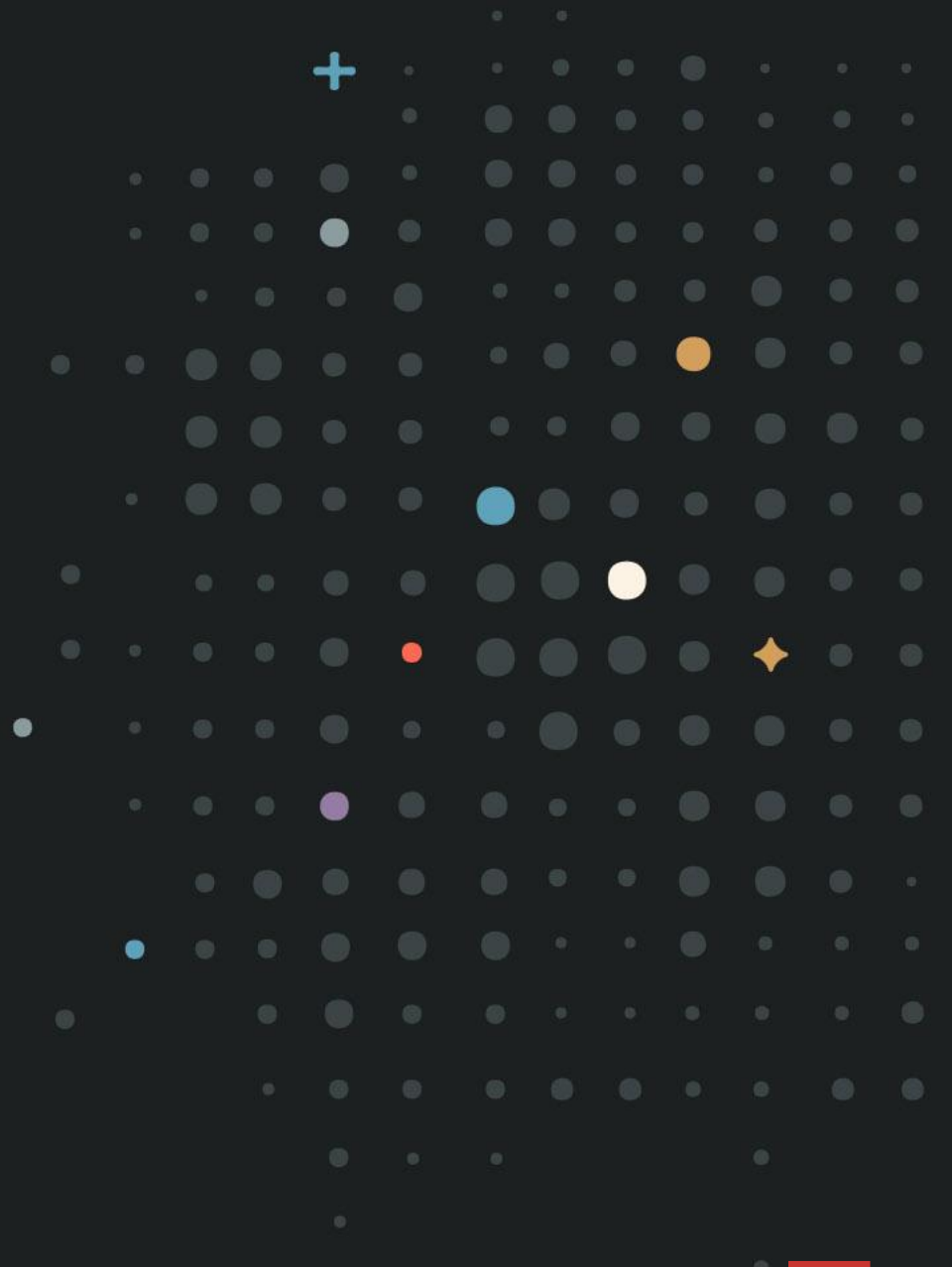
Oracle AI Database Multicloud Solutions

Full Exadata Cloud automation, features, and performance

Use existing Cloud Vendor credits

Sub-millisecond latency

Unique Value of Oracle Database Multicloud



Unique: benefits of Oracle Database Multicloud compared to other Cloud deployments

Oracle AI Database 26ai

All modern datatypes and workloads across AI, OLTP, and Analytics, with no restrictions

Exadata

Extreme performance for workloads of any scale and criticality, with data intelligent software and hardware

RAC

High availability and scalability with Real Application Clusters (RAC), integrated with Maximum Availability Architecture (MAA)

Advanced Security

Secure supply chain, quantum-resistant encryption, SQL injection protection, privileged user control, ransomware resilience

Autonomous Database

Extreme ease of use, reduced risks and lower costs with complete automation of database lifecycle

Delivered at Lowest Cost

Unique: Leverage Oracle AI Database 26ai innovations in Multicloud

Data Domains & Annotations

Globally Distributed Database with Raft

ORACLE AI Database

APEX AI Application Generator

Operational Property Graphs

Microservice Support

Readable Per-PDB Standby

LLM Integration

MCP Server

Data Safe

SELECT AI

Over 30 Machine Learning Models

Private AI

JSON / Relational Duality

{JSON}

[1,4,8]

AI Vector Search

Lock-Free Reservations

SQL Firewall

Built-in AI Agents for knowledge and diagnostics

True Cache

Rolling Updates

External Table Support for Vectors

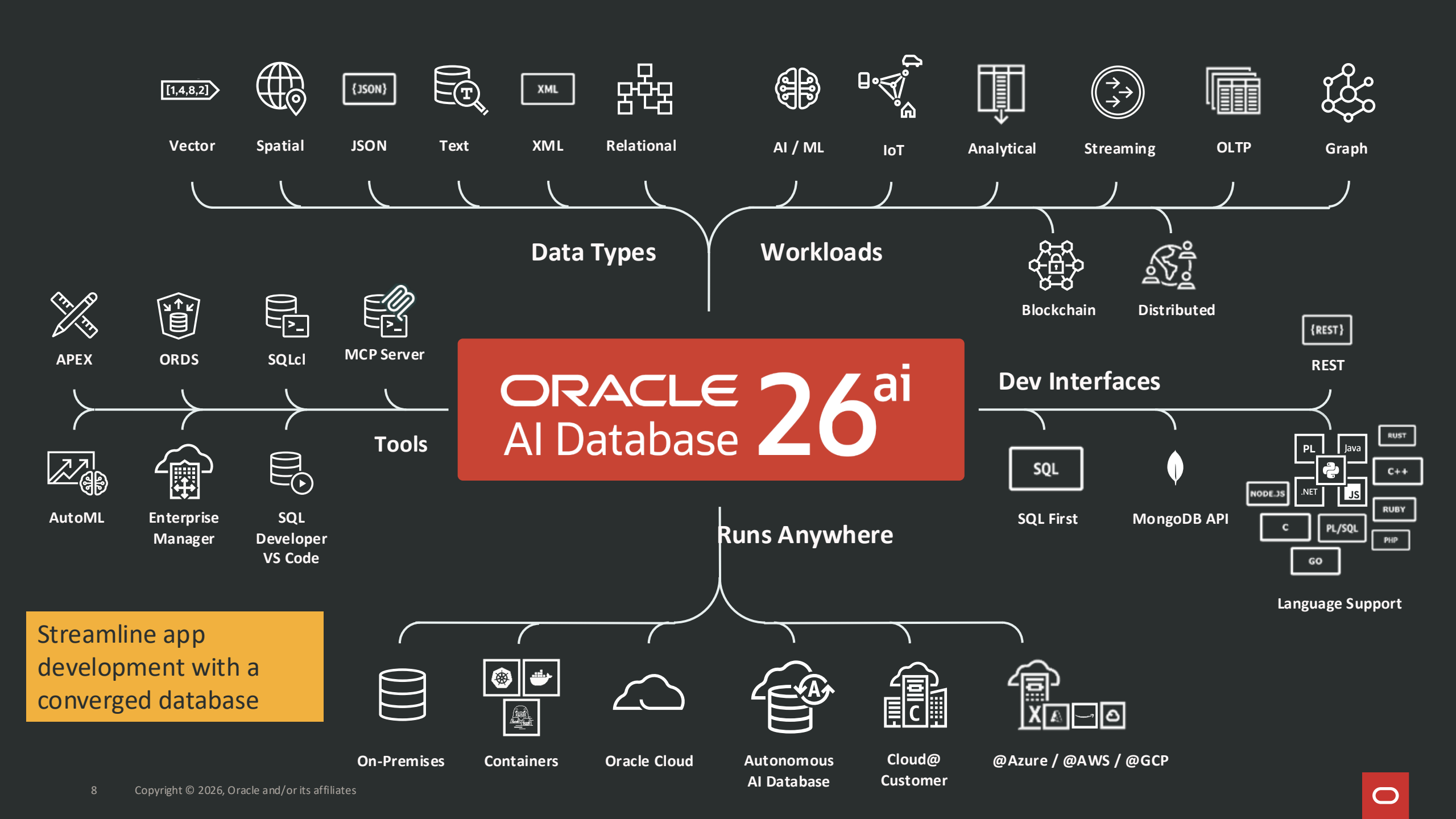
Integration with LangGraph

Real-time SQL Plan Management

SQL

RAG

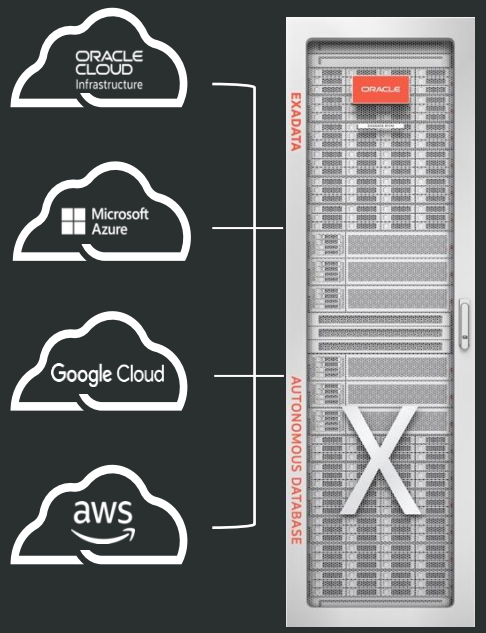
Agentic RAG



Streamline app development with a converged database

Exadata: Next Generation Intelligent Data Architecture for Multicloud

Extreme performance, scalability, and availability for data and AI workloads, at a low cost



Data optimized hardware

Scale-out, data optimized compute, networking, and storage

Data intelligent software

Unique algorithms deliver extreme performance and efficiency for AI, analytics, and mission-critical apps at any scale

Engineered to run everywhere

On-premises, Cloud@Customer, Oracle Cloud, and multicloud

Unique: Exadata extreme performance, now available in every leading cloud

ORACLE CLOUD Infrastructure	Microsoft Azure	Google Cloud	aws
			
Oracle Database @OCI	**Oracle Database @Azure**	**Oracle Database @Google Cloud**	**Oracle Database @AWS**

Co-locate apps and Exadata for the highest performance

Get full Oracle Database and Exadata functionality and compatibility

No app changes, zero downtime migration

Unique: Exadata enhances all aspects of AI-driven modern workloads

OLTP

Much higher performance at a lower cost for all databases

Analytics

Much faster complex queries on larger data volumes at a lower cost

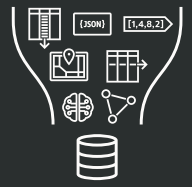
AI

Combined with Oracle Database 26ai, mission-critical AI at any scale

Efficiency

Extreme efficiency: performance, utilization & administration

Modern Apps



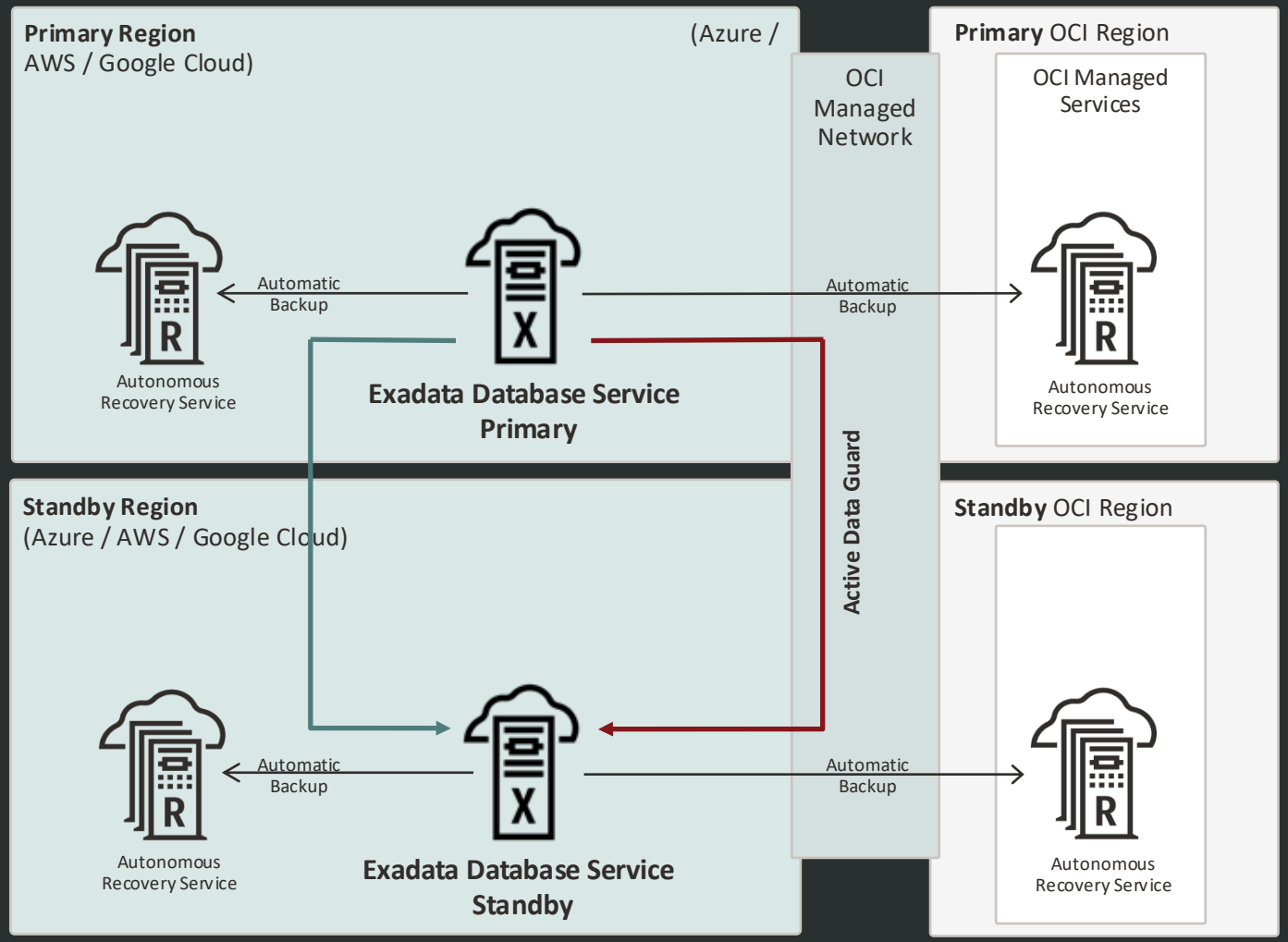
Enhanced support for modern data types and workloads

Resiliency

Integrated full-stack security and availability to reduce risk and costs

Unique: Maximum Availability Architecture (MAA) in Multicloud

Fully automated, built-in resilience for continuous data access



GOLD

- Built-in Exadata redundancy and fault tolerance
- Active Data Guard for disaster and corruption protection
  - Offload backups and reporting to standby
- Application Continuity with Oracle RAC & Active Data Guard
  - Minimal downtime for upgrades and migrations
- Zero data loss with local/remote Autonomous Recovery Service

Unique: Zero Data Loss Autonomous Recovery Service (ZRCV)

Intelligent data protection for Oracle databases in OCI, Multicloud & On-premises

Zero Data Loss Recovery

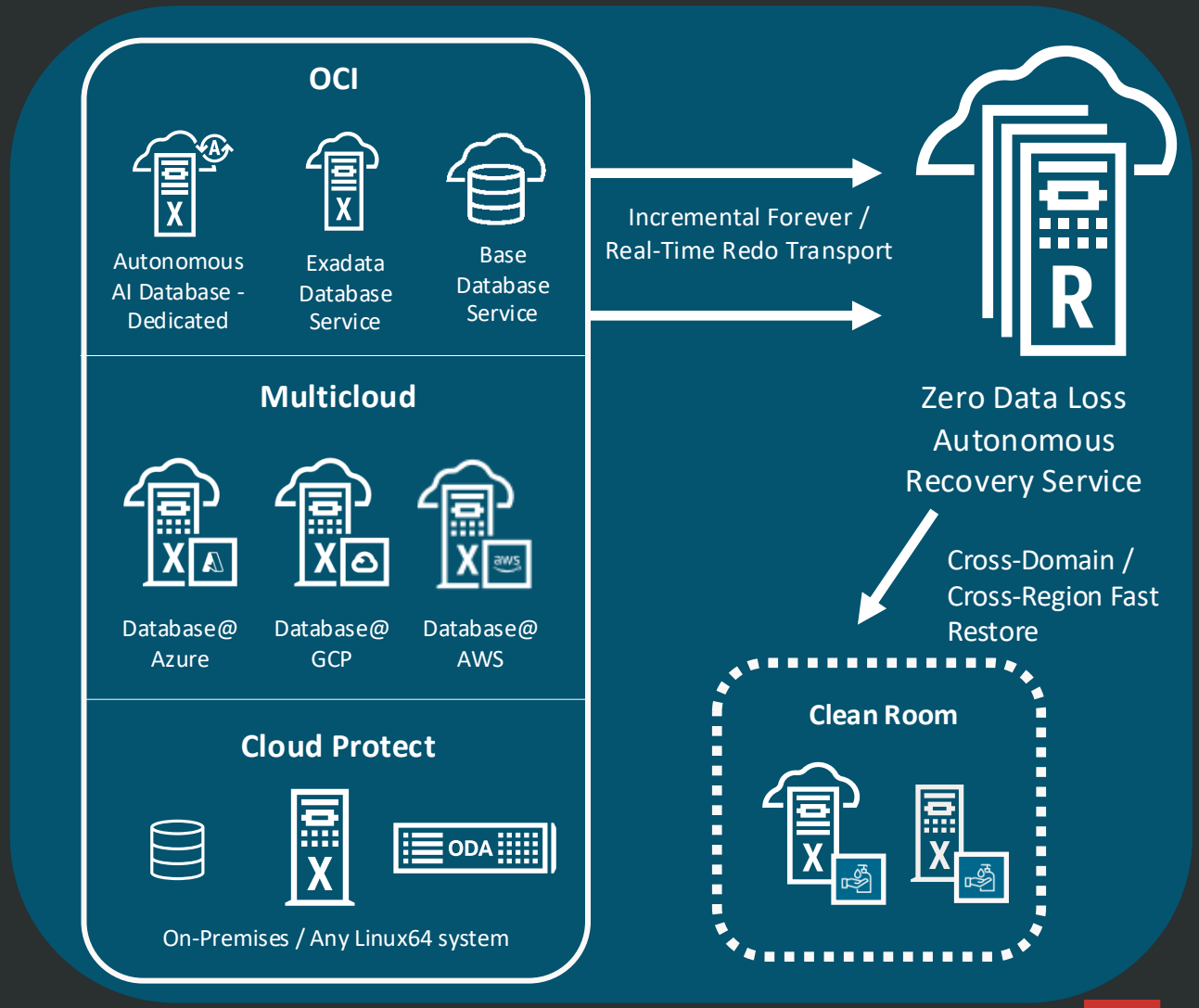
- Real-time transaction protection
- Continuous recovery validation

Fast, Low-Impact Backup and Recovery

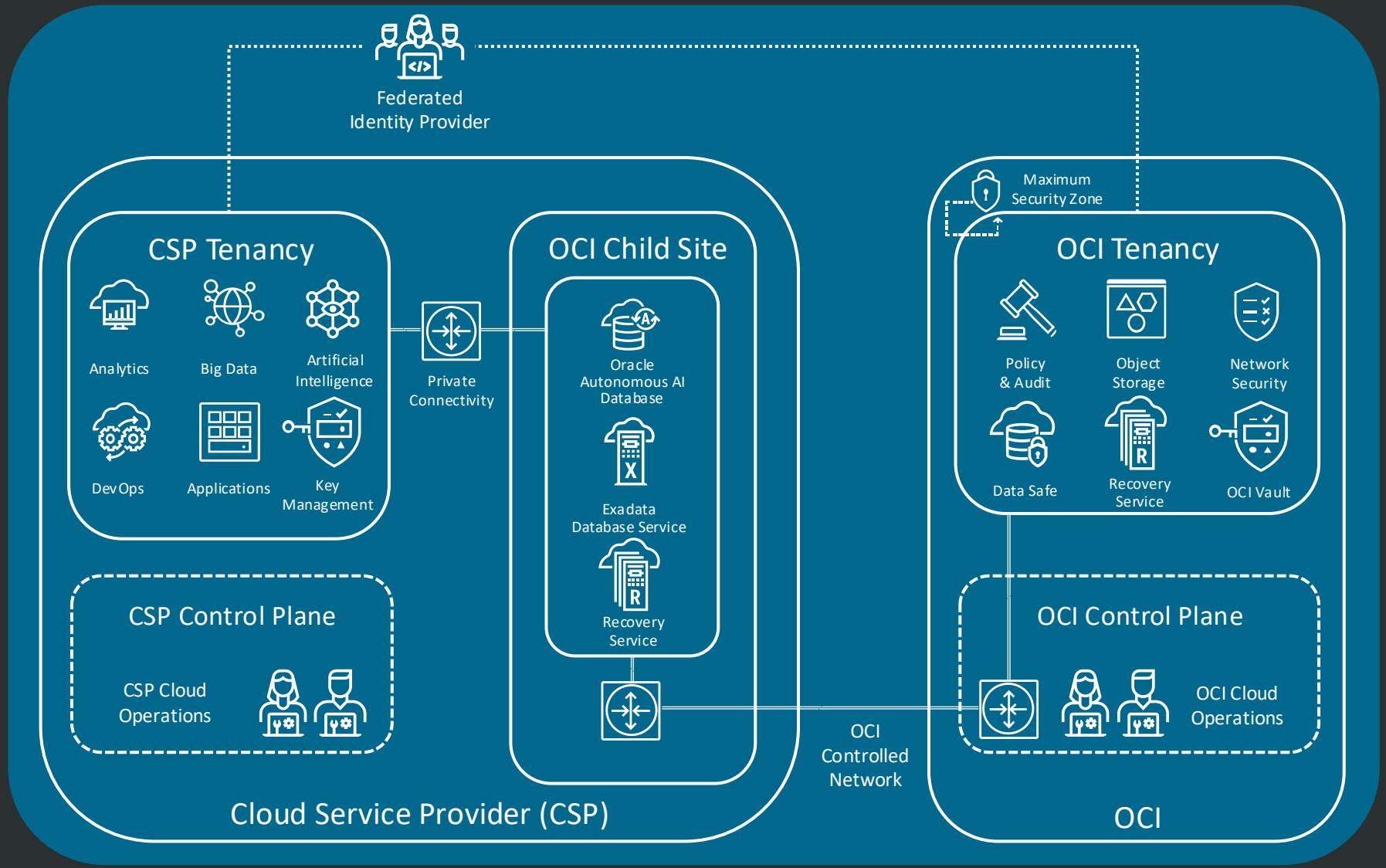
- Space-efficient incremental forever
- One-step recovery without incremental apply

Database-aware Ransomware Resiliency

- Data always encrypted
- Immutable backups with retention lock
- Separation of duties and granular access control
- Logical airgap between the customer and Oracle Cloud Operations tenancies
- Cross-domain and cross-region clean room support



Unique: Integrated defense-in-depth security in Multicloud



- Authentication via Federated Identity Provider
- Low-latency private connectivity between applications and Oracle Database services
- Database service lifecycle management and OCI service access via OCI controlled network
- Database data always encrypted
- Store and manage the TDE master key in Oracle Wallet (default), OCI Vault, Oracle Key Vault, Azure Key Vault, or Google Cloud Key Management Service
- Recovery Service for ransomware resiliency
- Data Safe for management and monitoring of data security controls through a unified dashboard

Unique: Autonomous AI Database delivers the best data experience

With the lowest total cost of ownership

Unique attributes that lower costs for Oracle AI Database on Multicloud

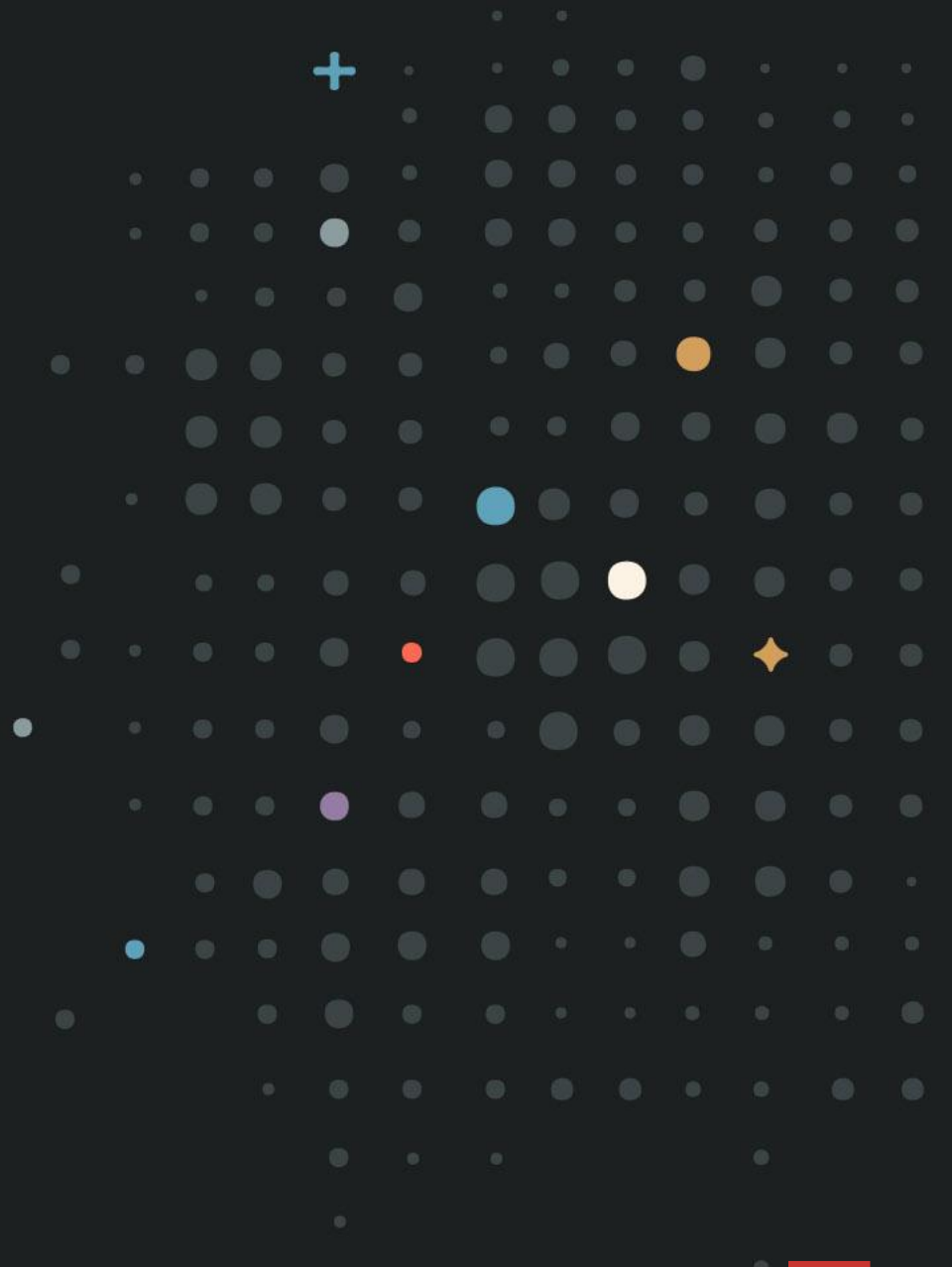
- Lower deployment costs
  - Built and operated by the Oracle Database engineering team
  - No extra cost for high-performance IOPS
  - Support Rewards reduce support costs for on-premises licenses

- Lower subscription costs
  - Lowest cost for Oracle Database License-Included
    - All Database features included with the License-Included Option
    - Online up and down CPU core scaling to align license cost to workload requirements
  - Lowest cost to bring your own license (BYOL)
    - Includes several database features and options at no extra cost
    - Requires half the Oracle Database licenses compared to other cloud deployment methods
      - 1 EE License per 4 vCPUS and 1 SE license per 8 vCPUs

→

- ✓ Transparent Data Encryption (TDE)
- ✓ Real Application Testing
- ✓ Data Safe
- ✓ Diagnostics Pack
- ✓ Tuning Pack
- ✓ Data Masking and Subsetting Pack
- ✓ GoldenGate with migration automation to cloud
- ✓ Exadata Columnar Flash Cache

Multicloud Experience



Migrating to Multicloud with Oracle Zero Downtime Migration (ZDM)

Simple, comprehensive solution to migrate Oracle databases across platforms with no downtime

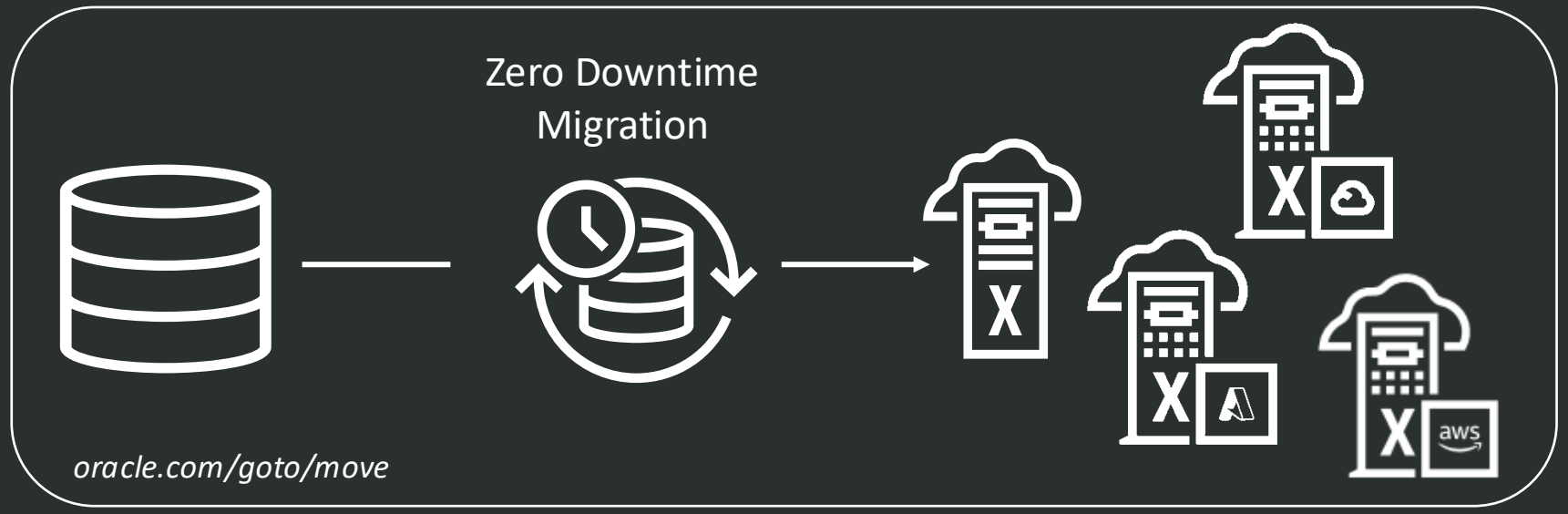
Oracle Database Sources

- On-premises deployments
- Cloud deployments (hybrid, public cloud)
- Oracle Database Enterprise & Standard Editions

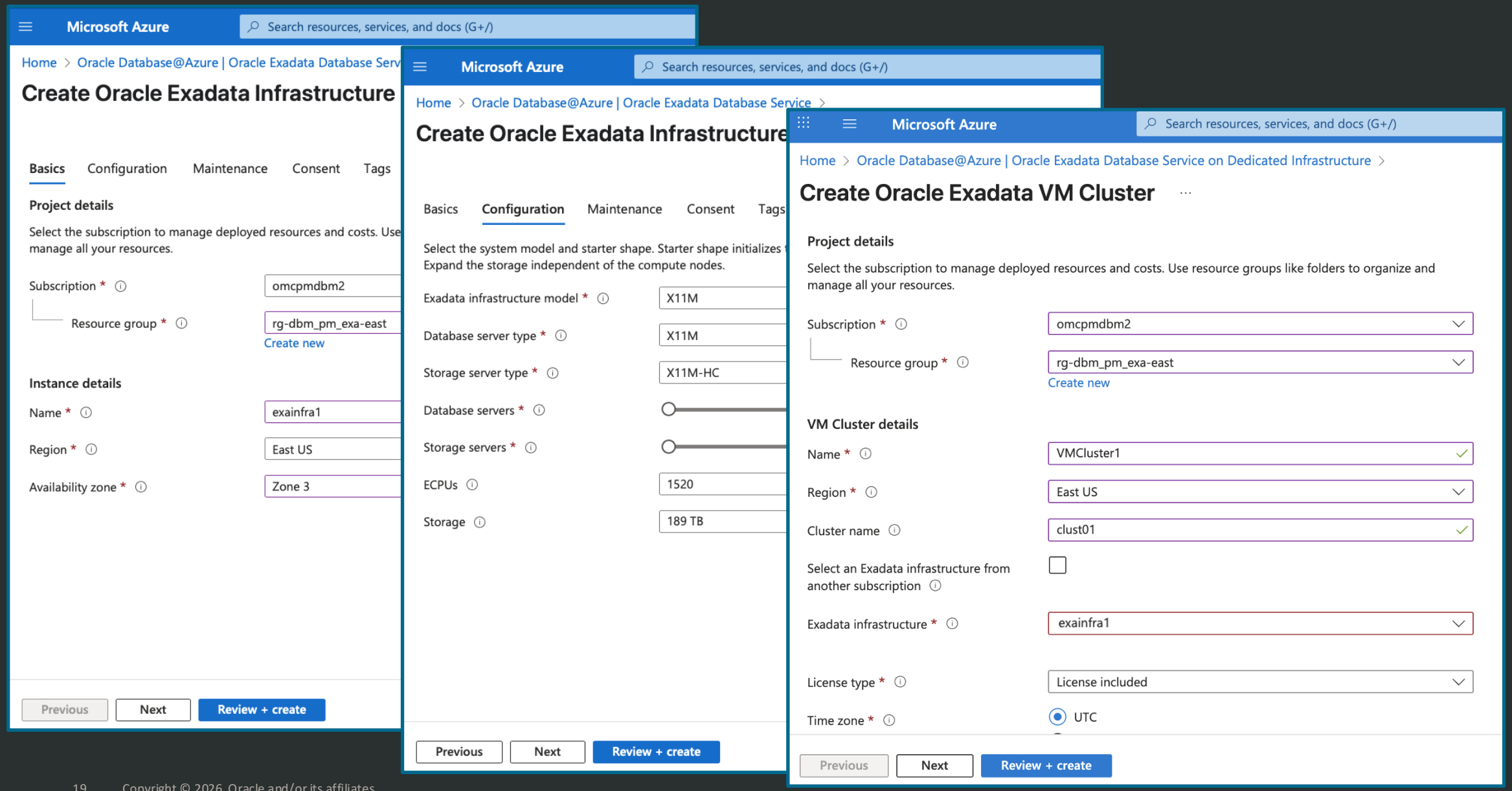
Oracle Cloud / Multicloud Targets

- Oracle Autonomous AI Database
- Oracle Exadata Database Service
- Oracle Base Database Service

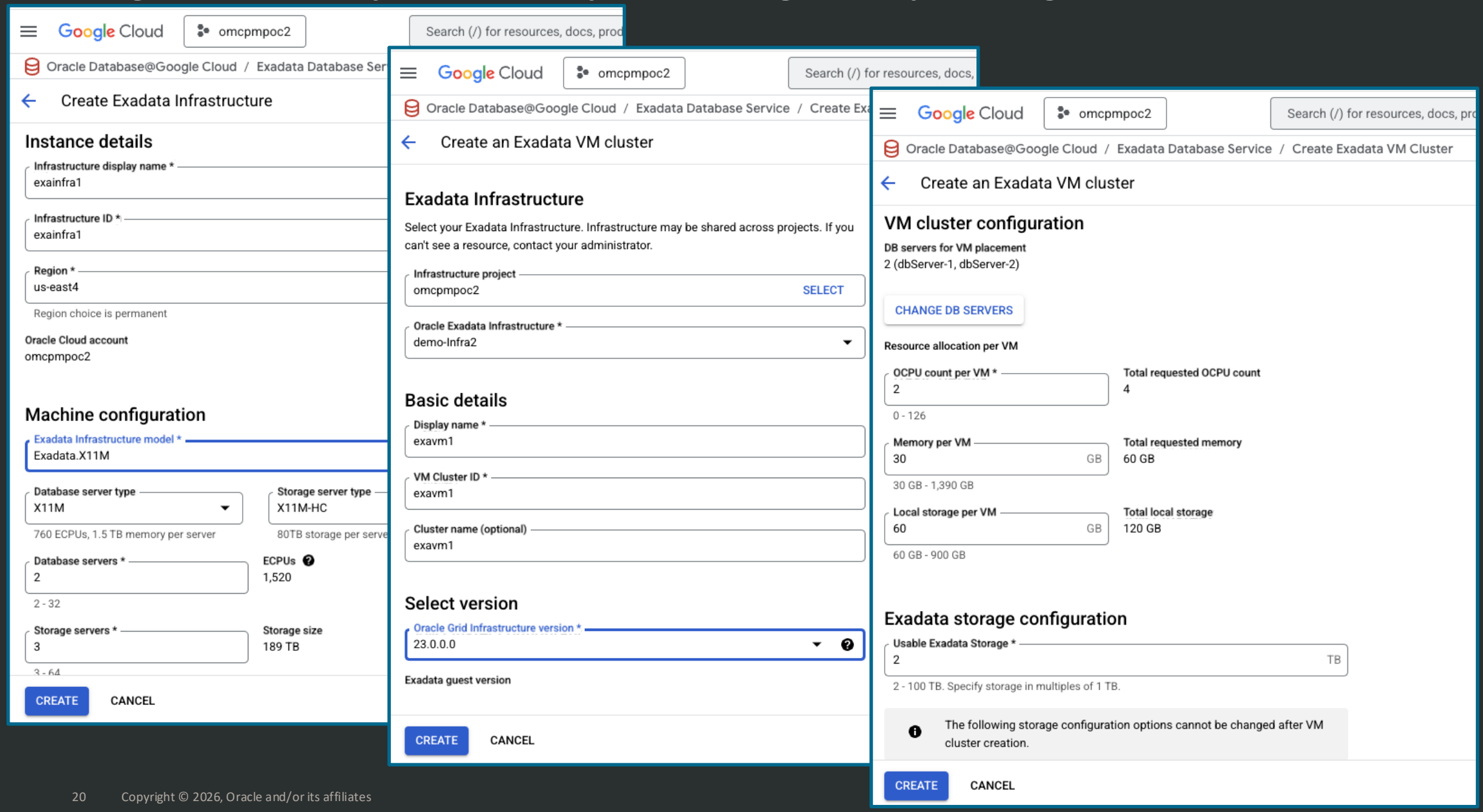
- ✓ Pre-migration checks
- ✓ Data transfer
- ✓ Ongoing synchronization
- ✓ Switchover
- ✓ Post-migration validation



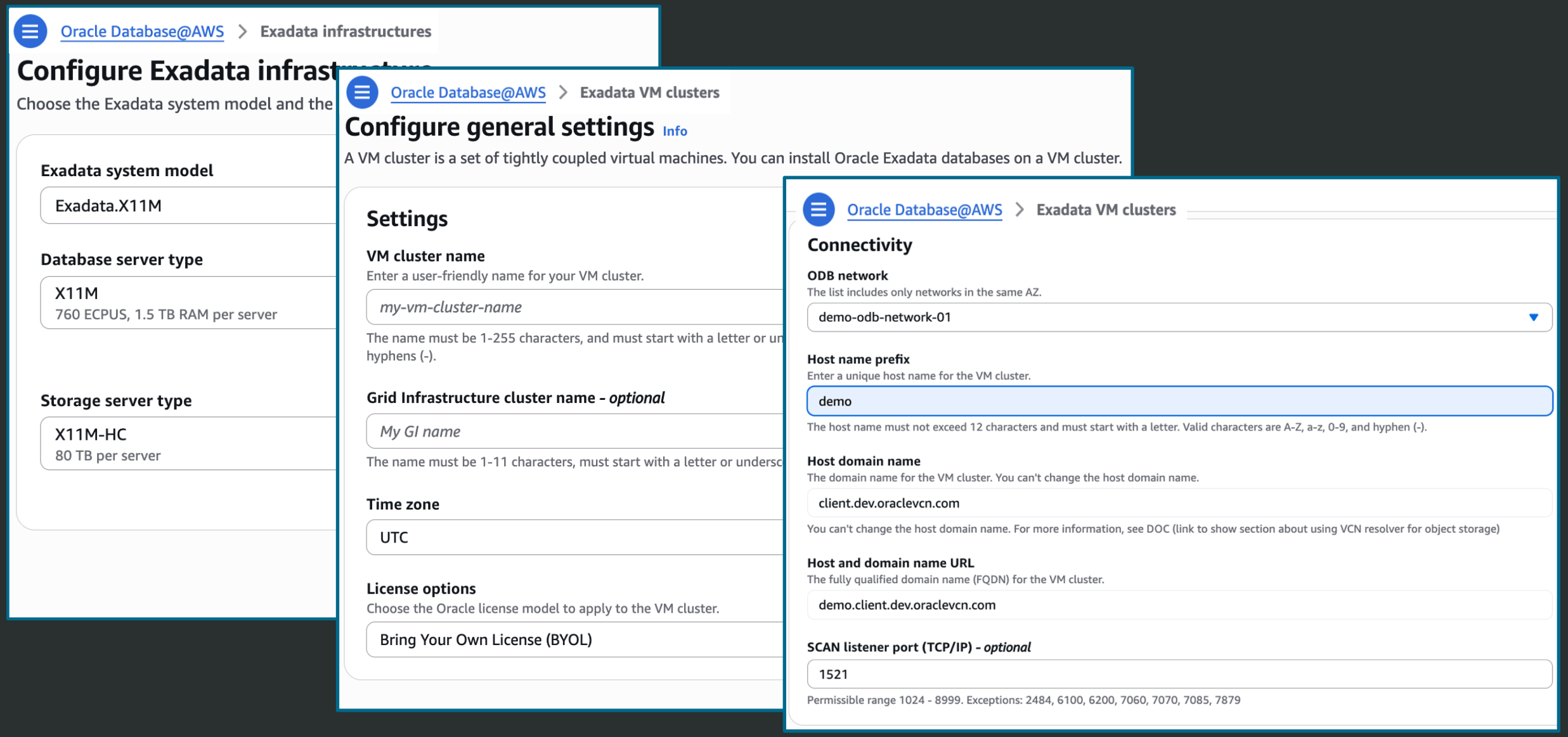
Integrated user experience for provisioning: example Azure



Integrated user experience for provisioning: example Google Cloud



Integrated user experience for provisioning: example AWS



Oracle multicloud observability and management

Fully automated observability with built-in resilience & no monitoring blind spots

Database Management

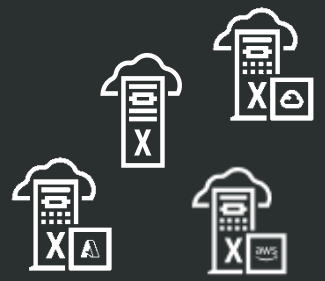
- Database & Exadata fleet level monitoring, administration and jobs
- Comprehensive diagnostics and tuning via Performance Hub, SQL Monitoring, Automatic SQL Tuning, AWR Explorer

Ops Insights

- Database & Exadata fleet level analytics
- ML powered capacity forecasting, predictive alerts, Chargeback, SQL insights

Log Analytics

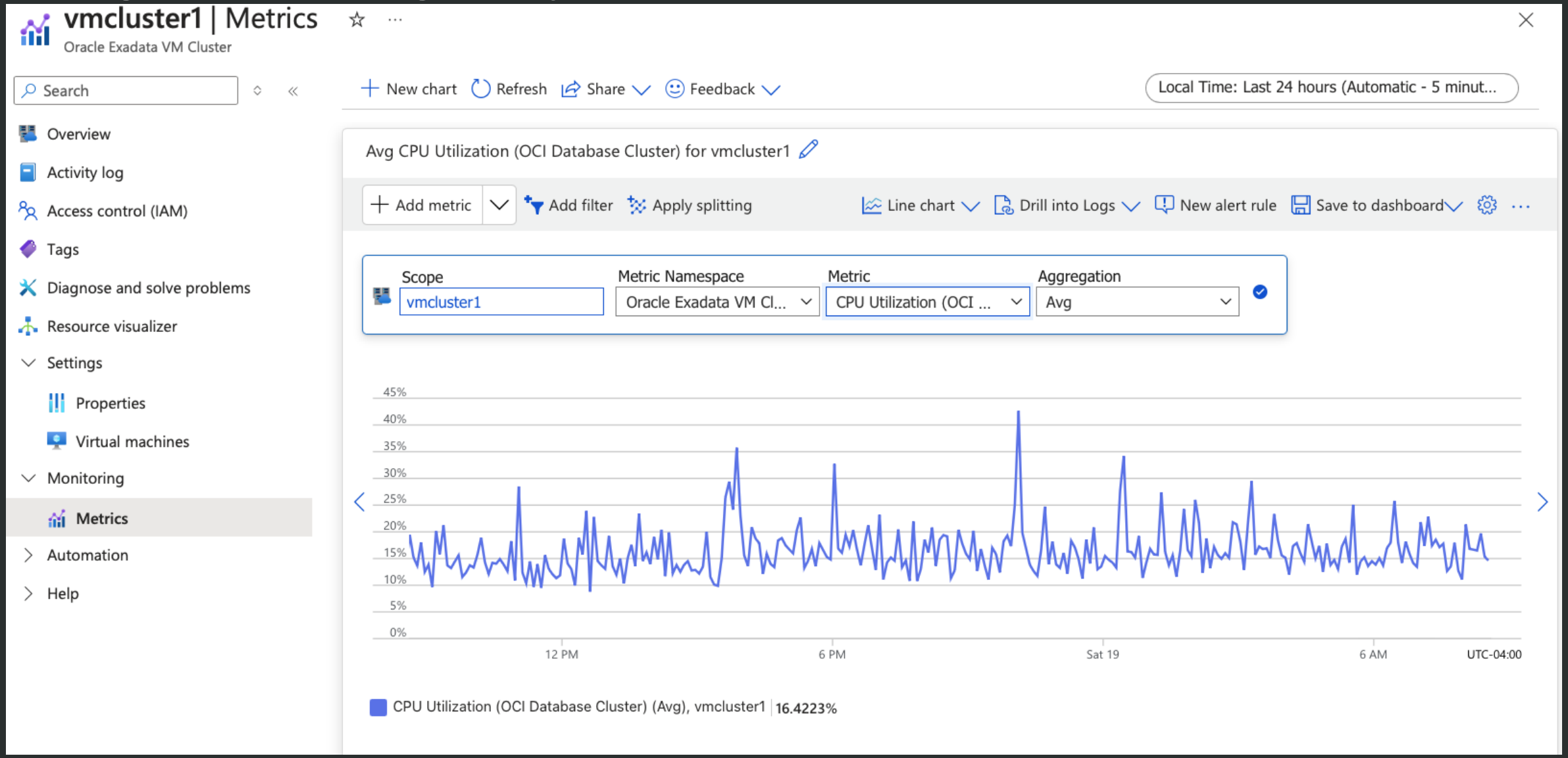
- ML-powered log analysis & exploration, 250+ parsers, log enrichment for Oracle



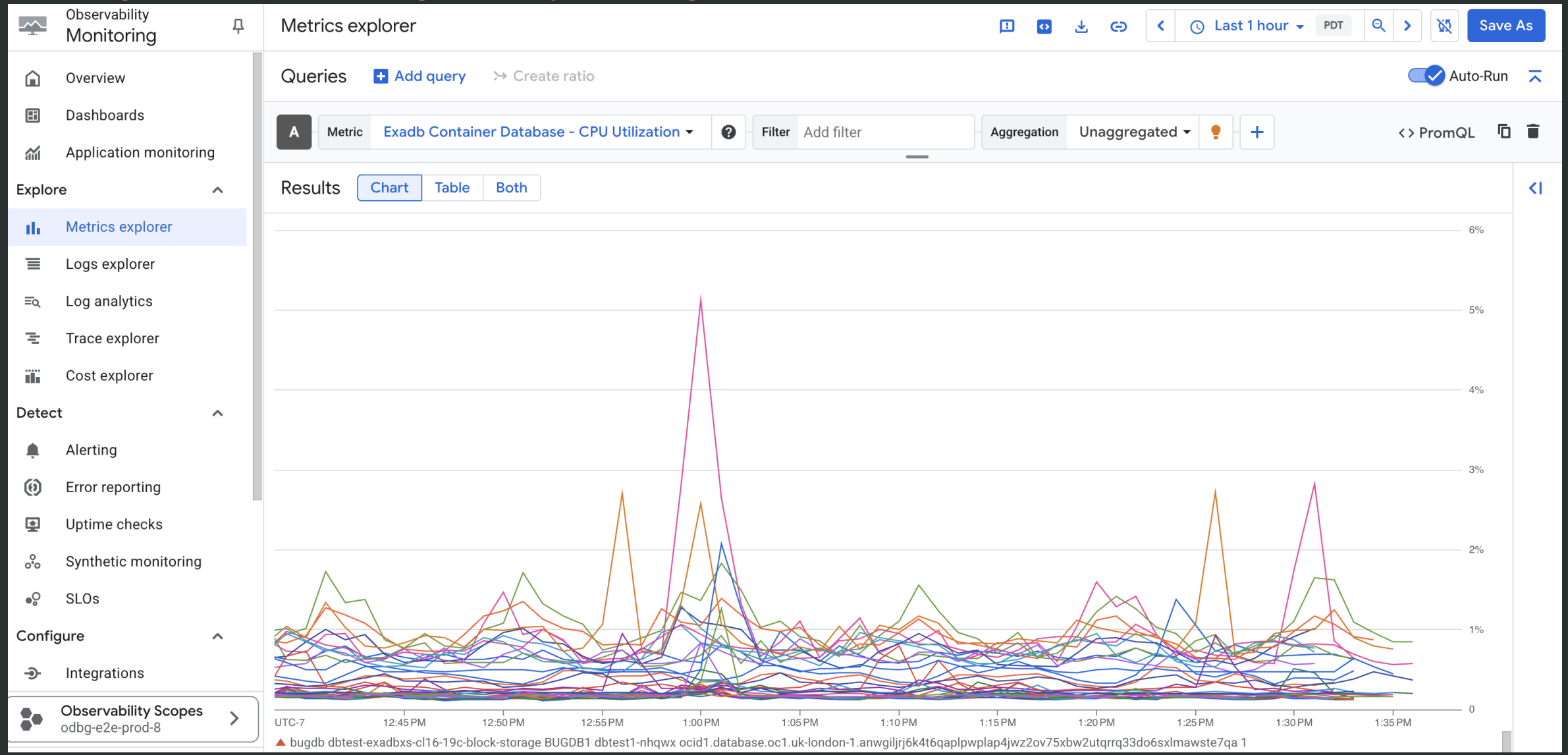
Single pane of glass across multicloud

- ✓ End-to-end observability & consistent operations across hyperscalers
- ✓ GenAI-based troubleshooting
- ✓ Consolidated multi-region dashboards

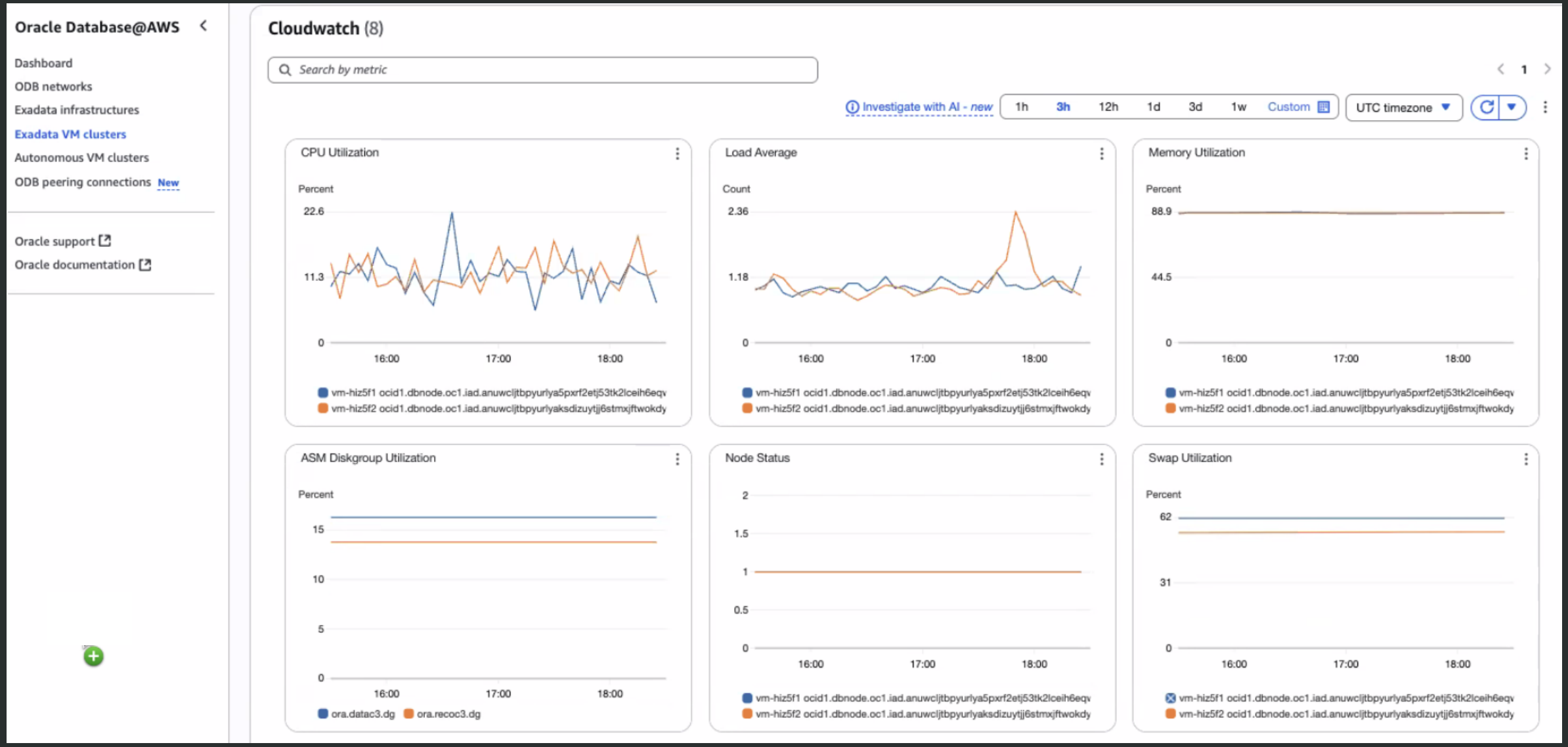
Integrated monitoring: example Azure



Integrated monitoring: example Google Cloud



Integrated monitoring: example AWS

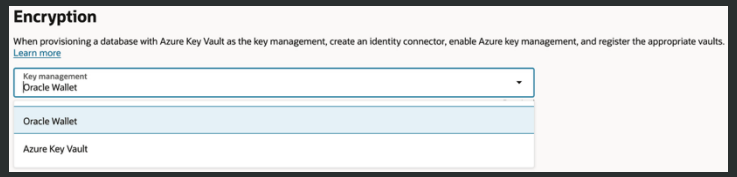


What's New: Key Management for Exadata Database Service on Multicloud

Azure Key Vault (AKV)

Cloud automation to store and manage TDE keys in AKV Standard, AKV Premium, and AKV Managed HSM

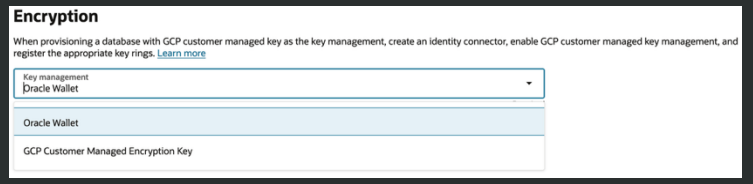
Create Database



Google Cloud Key Management Service

Cloud automation to store and manage TDE keys in Customer-managed encryption key (CMEK)

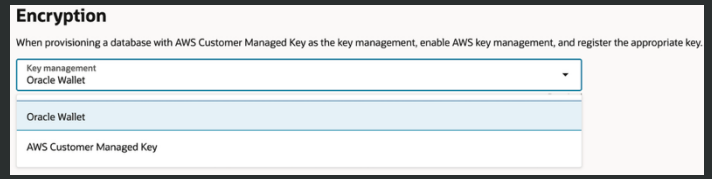
Create Database



AWS Key Management Service

Cloud automation to store and manage TDE keys in AWS Customer Managed Keys using AWS KMS and CloudHSM key stores

Create Database



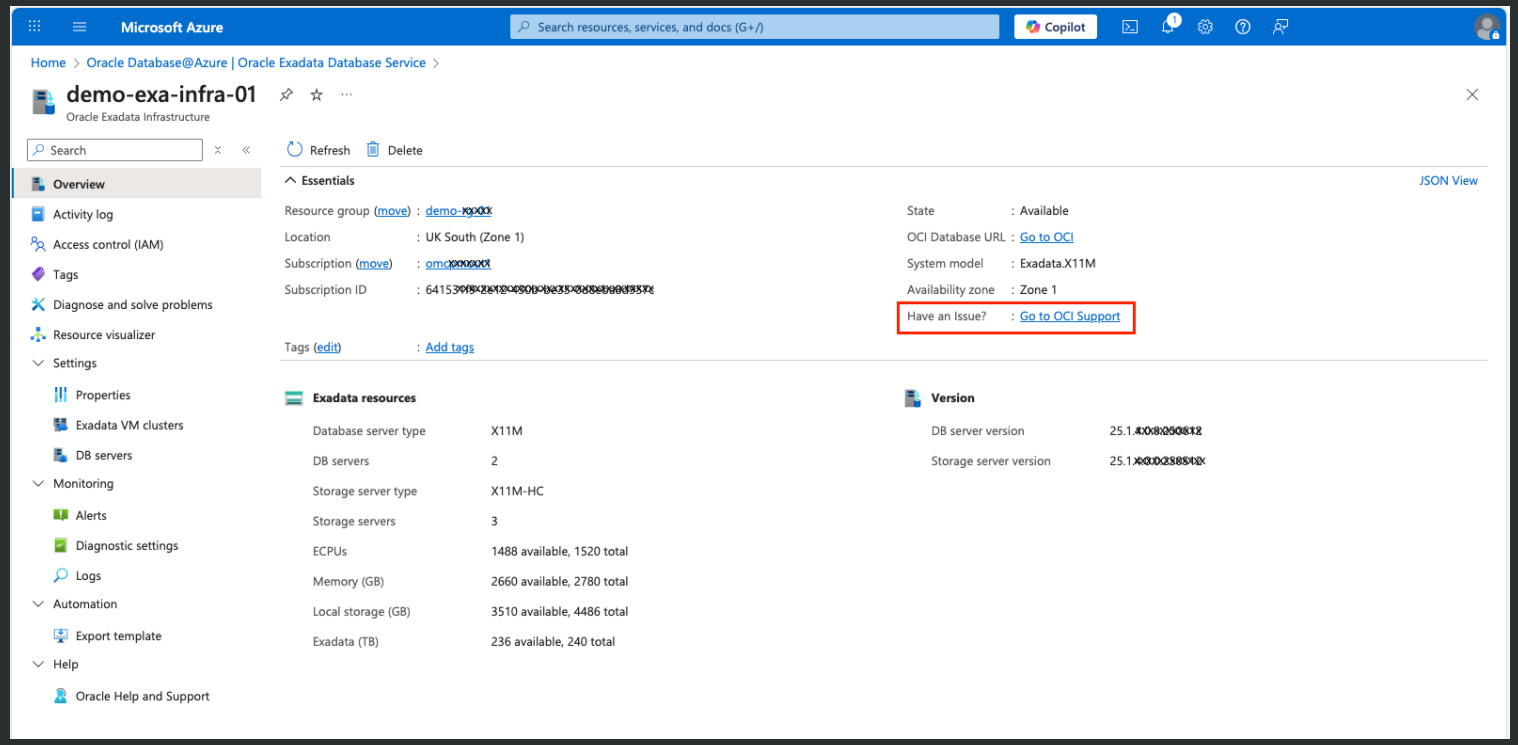
Benefits

- Consistent key management across apps & databases
- Data residency compliance with keys in your cloud of choice
- Seamless integration with native hyperscaler key management

TDE: Transparent Data Encryption *HSM: Hardware Security Module* *KMS: Key Management Service*

Unified Multicloud support experience: streamline resolution, expert focus

- Oracle Support: first line of support for all Oracle Database@CSP topics
- Contacted through the Multicloud console, e.g. for Azure:



- Examples of topics: Database connection and performance, OCI networking, database service capacity, new generation hardware

- Leverage CSP Support for all CSP issues, using familiar CSP support portal

- Examples: CSP networking, firewalls, DNS and traffic management, latency management, CSP-specific monitoring or key management, billing

Oracle and CSP Support teams are integrated to provided a collaborative and unified multicloud support experience

** CSP: Cloud Service Provider, one of AWS, Azure, Google Cloud*

Simple Multicloud procurement experience: using familiar methodology

Offer Type	Description	Best For	Example Scenarios
Public Offer	Standard, published pricing and configurations available directly through Marketplace	Organizations ready to deploy quickly using standard SKUs	Proof of concept, pilot deployments, predictable workloads
Private Offer	Customized pricing, terms, or configurations negotiated directly with Oracle and CSP	Enterprises with specific performance, licensing, or cost requirements	Large-scale migration, BYOL (Bring Your Own License), multi-region rollouts

- ✓ Seamless integration with familiar CSP services
- ✓ Payment for Oracle Database Multicloud counts toward CSP Cloud commitments
- ✓ Unified billing from CSP
- ✓ Oracle Database@CSP usage can accrue the same Oracle Support Rewards as eligible OCI spend
- ✓ Oracle Database customers can use License Included or Bring Your Own License (BYOL)

Recently Announced: Multicloud Universal Credits

Unified Cross-Cloud Experience

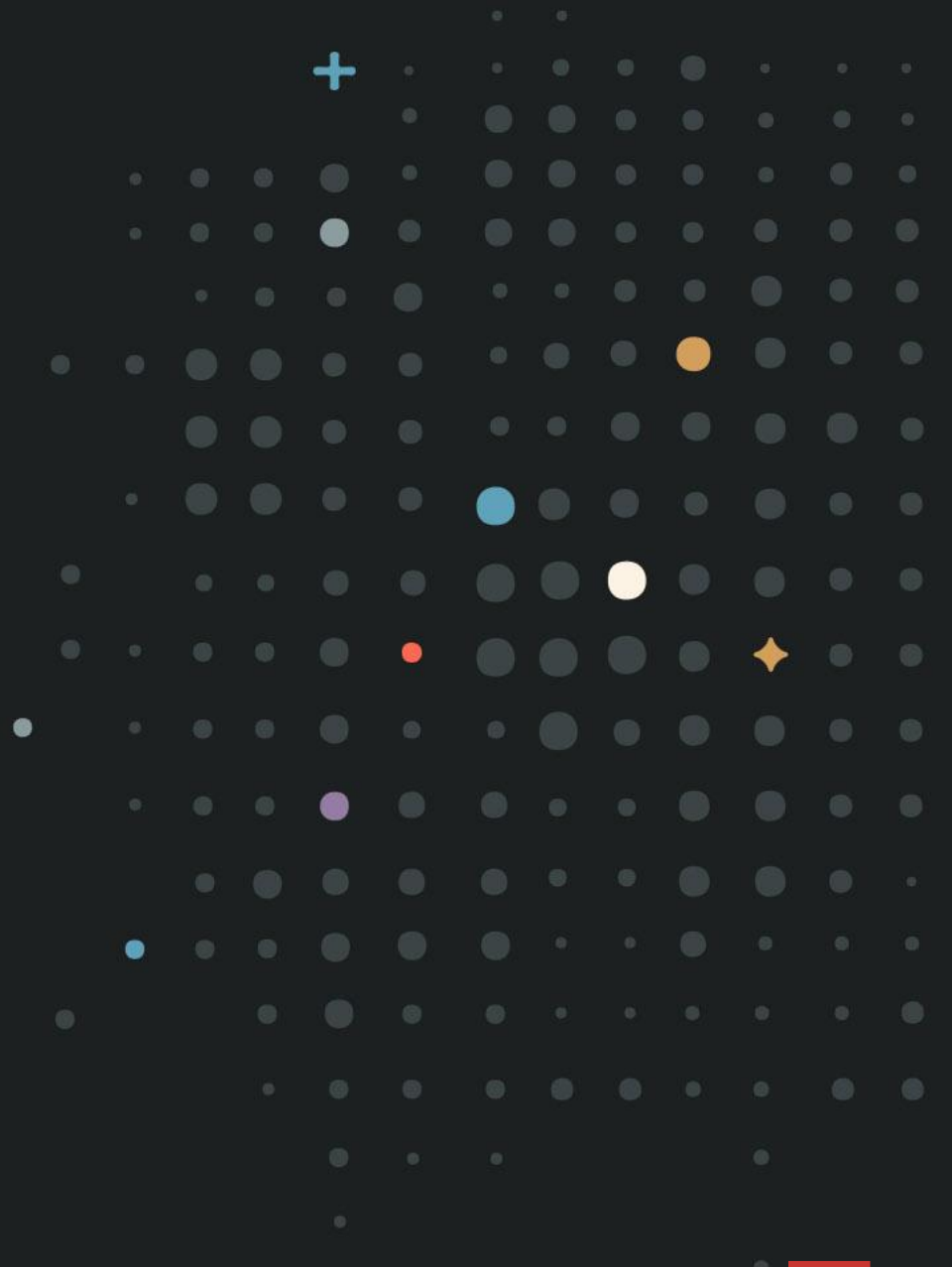
1. A single consumption model across Oracle Database@AWS, Oracle Database@Azure, Oracle Database@Google Cloud, and OCI

2. Deploy Oracle AI Database workloads on OCI across any available AWS, Google Cloud, Microsoft Azure, or OCI regions

3. Unlock commercial freedom to run Oracle AI Database workloads across multiple clouds — with a consistent database management experience

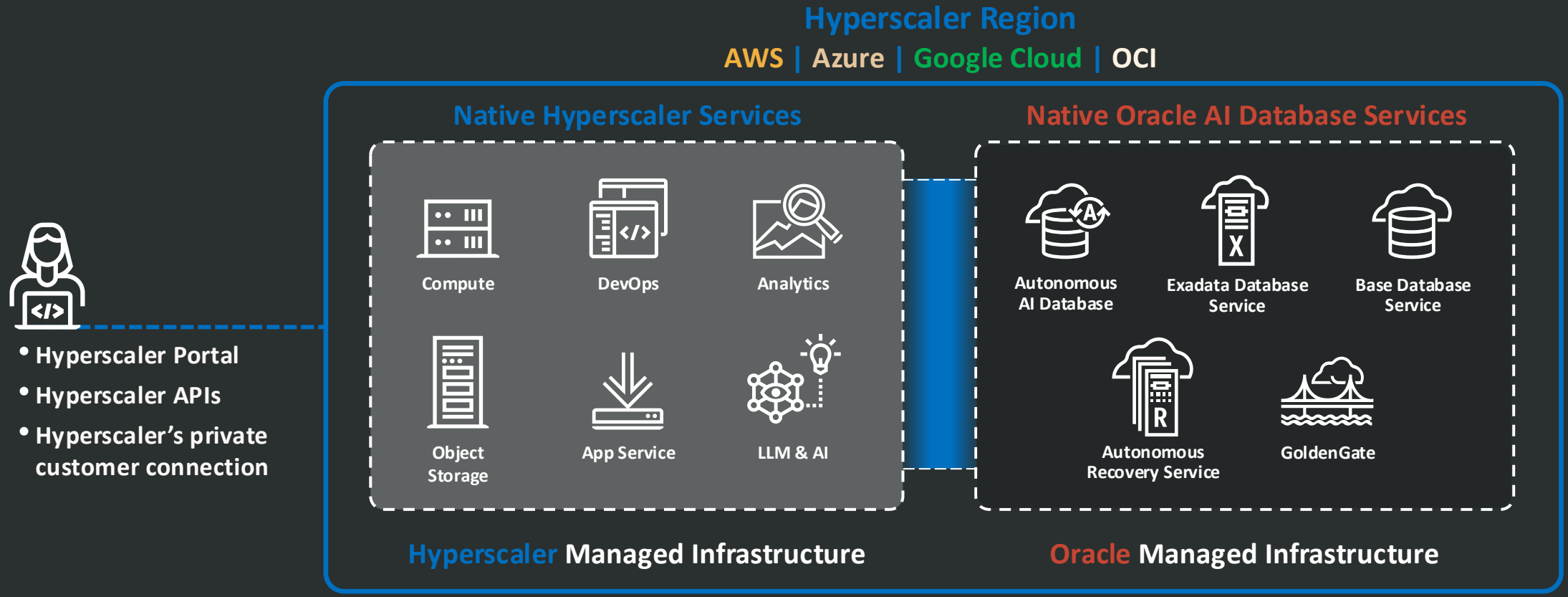
Ref. https://www.oracle.com/news/announcement/ai-world-oracle-introduces-multicloud-universal-credits-2025-10-14/

Multicloud Solutions



Oracle Database multicloud solutions: the best of both clouds

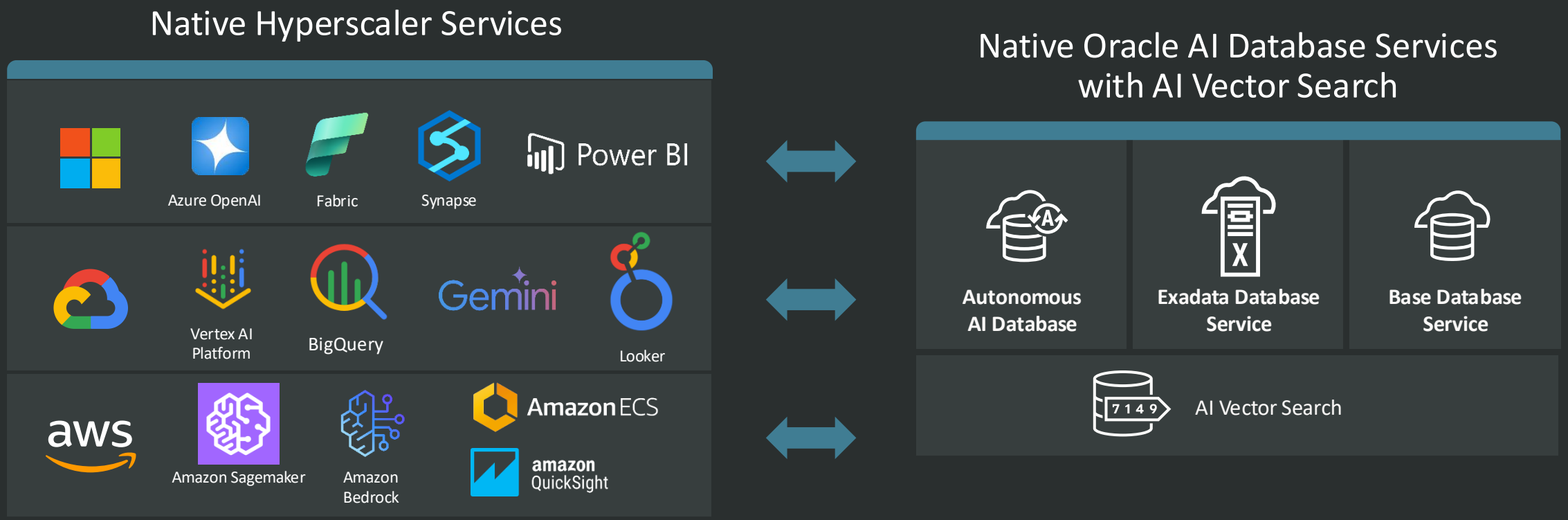
A choice of services directly from the hyperscaler's Marketplace and Cloud Portal



Ultra-low latency between applications and Oracle databases

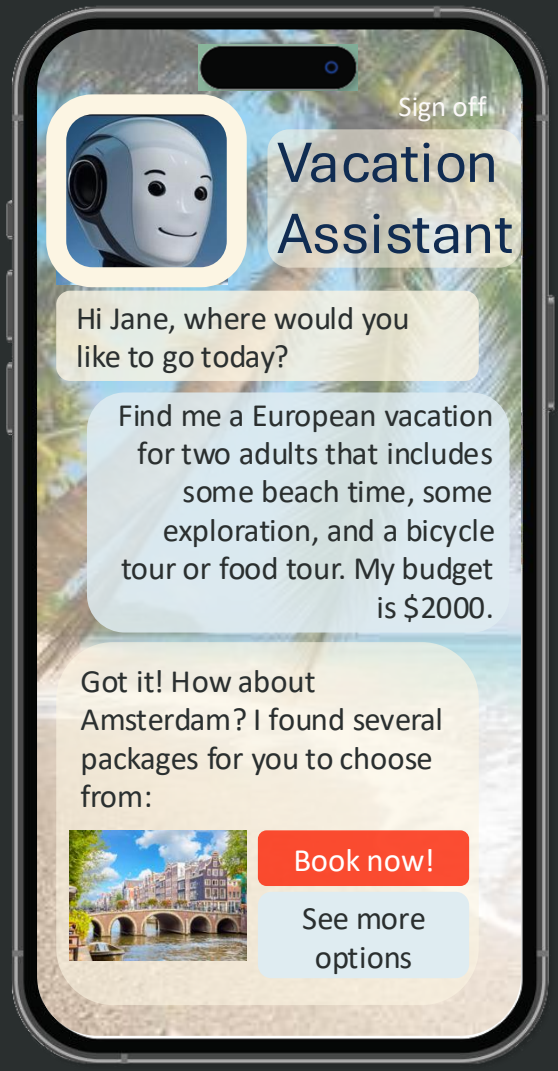
Available services vary by hyperscaler

Build modern AI applications by integrating data and services in multicloud



Maximize the value of business data with AI and hyperscaler cloud services

AI Use Case #1: Transform E-Commerce product search with Oracle Database@Google Cloud and Google Vertex AI



How can we improve product search to understand customer intent beyond basic keyword matching?

- ✓ **Improve search accuracy and customer satisfaction** with deep semantic understanding of catalogs, storefronts, and product data
- ✓ **Find relevant results across the entire catalog** using keywords, similarities, images, and intent-based matching
- ✓ **Reduce operational costs while increasing revenue opportunities** by reducing cart abandonment and customer support inquiries

AI Vector Search in Oracle AI Database Powers Complete Gen AI Pipeline

Retrieval Augmented Generation (RAG) with your enterprise data

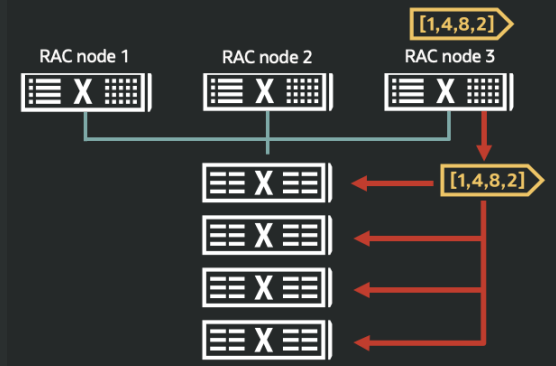
Vectorize Question
An end-user's human language question is encoded as a vector

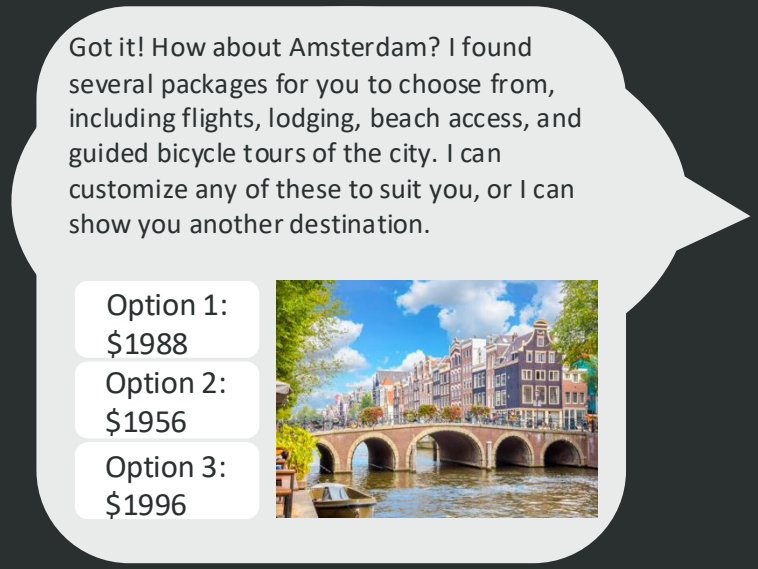
1

AI Vector

2

Find Related Data up to 30x faster
AI Vector Search is transparently offloaded to intelligent Exadata storage





User

Retrieval Augmented Generation (RAG)

Product catalog data and info

LLM Synthesizes Results
The LLM interprets the result set and provides an informed natural language response to the user

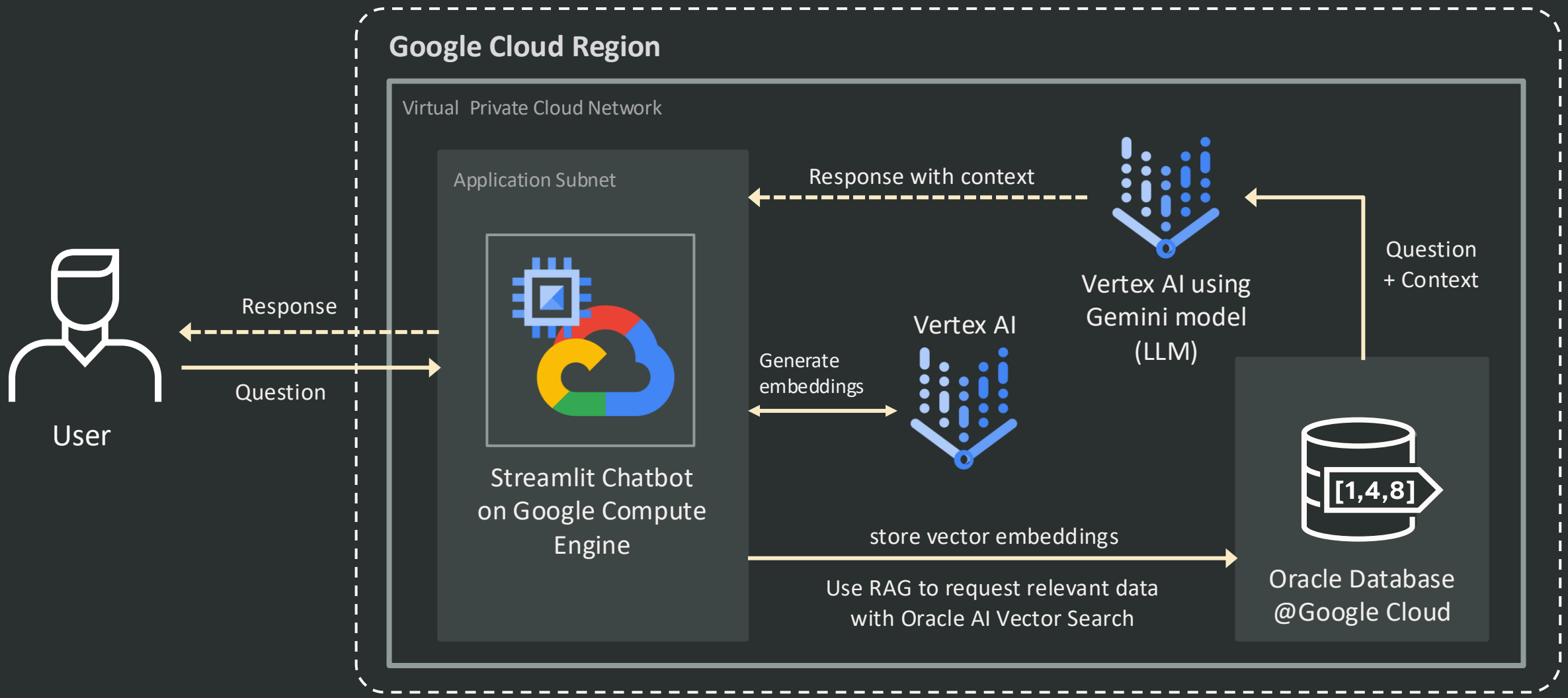
4

Vertex AI using Gemini model (LLM)

3

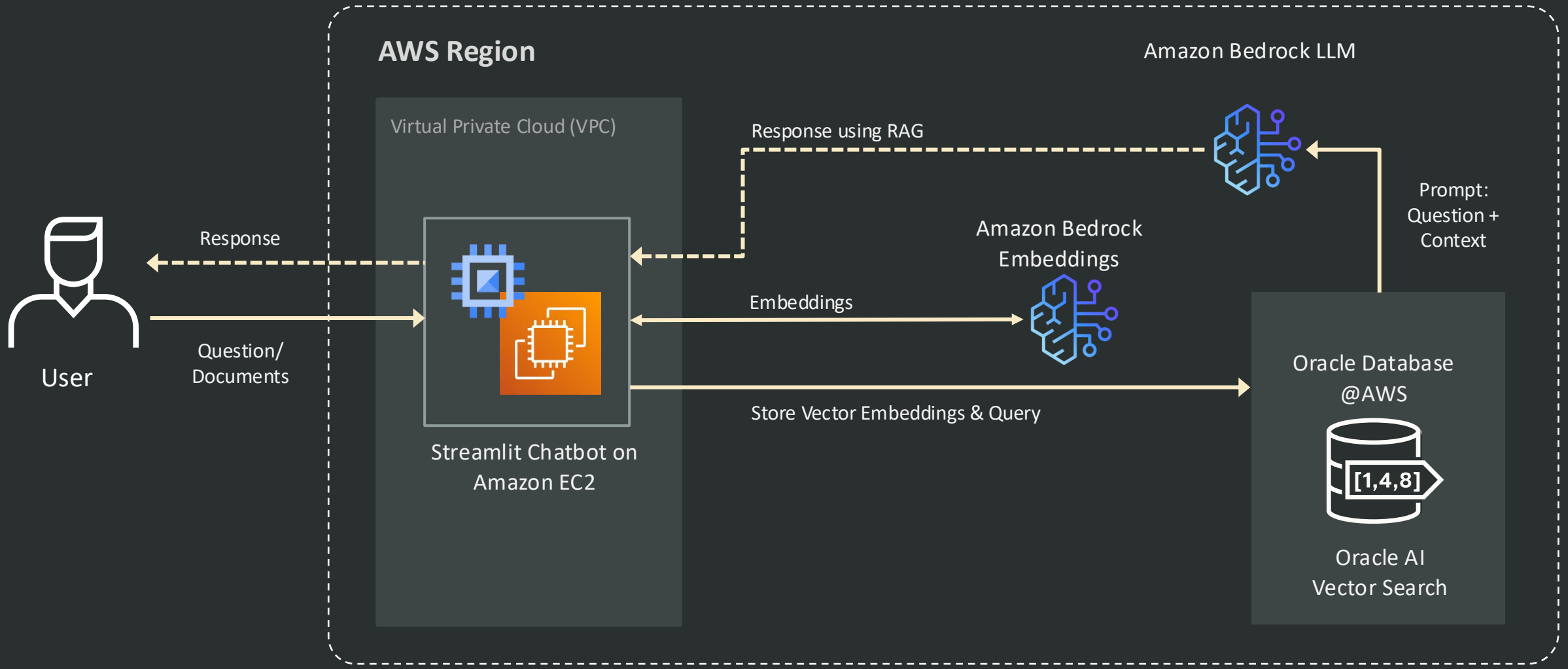
Augment Prompt and Response
The user's prompt is augmented with the vector search result and sent to an LLM

Architecture: Build intelligent apps using Google Vertex AI with Oracle Database@Google Cloud and Oracle AI Vector Search



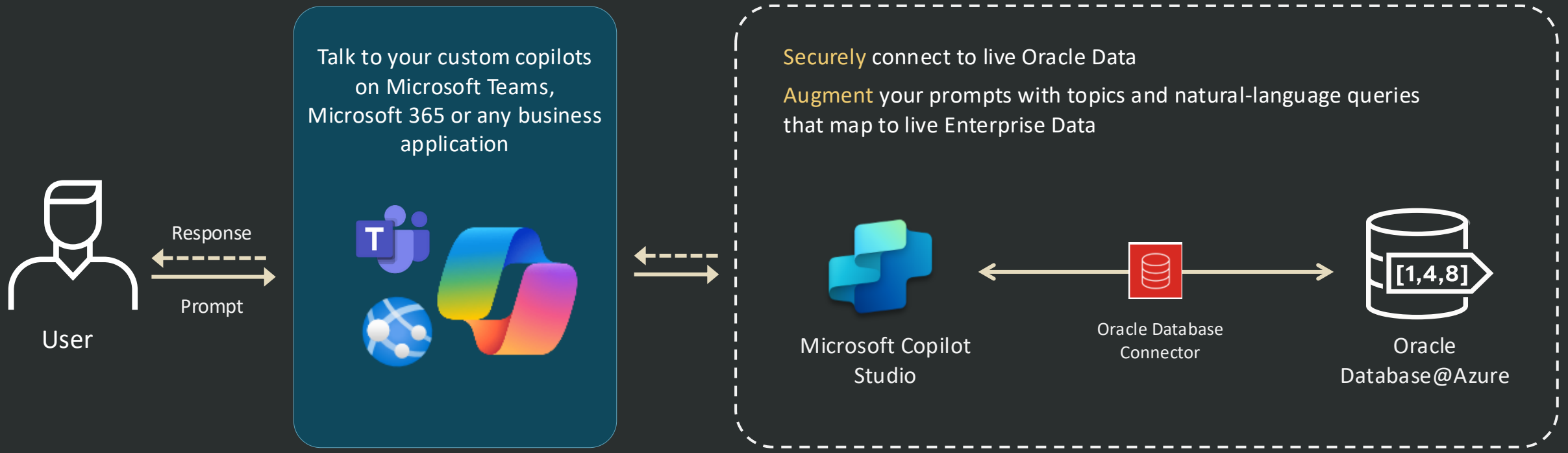
https://www.oracle.com/artificial-intelligence/build-multicloud-ai-chatbot-with-google/

Build intelligent chatbots quickly and easily with Oracle Database@AWS using Oracle AI Vector Search



https://aws.amazon.com/blogs/database/accelerate-generative-ai-use-cases-with-amazon-bedrock-and-oracle-databaseaws/

Build your own custom copilots with Microsoft Copilot Studio and Oracle Database@Azure

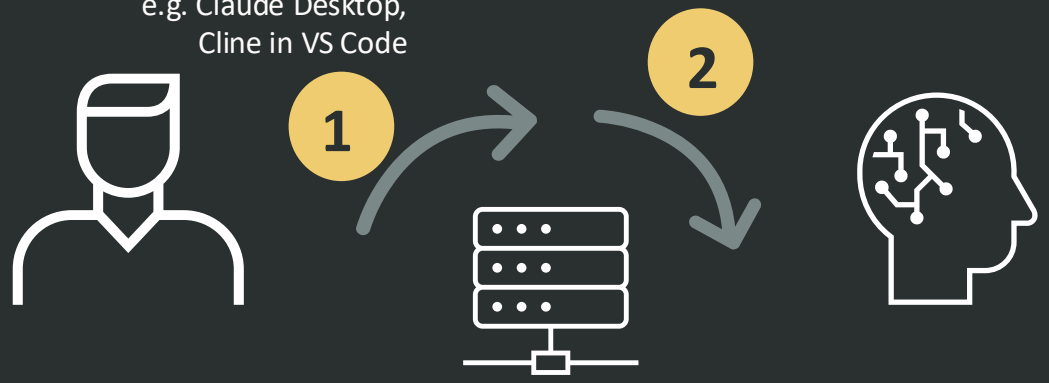


https://techcommunity.microsoft.com/blog/oracleonazureblog/build-your-own-custom-copilots-with-microsoft-copilot-studio-and-oracle-database/4468211

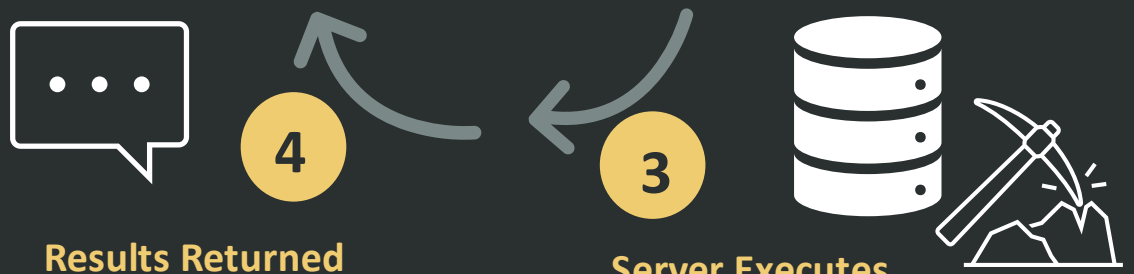
AI Use Case #2: Enhance productivity with Oracle MCP Server on Oracle Database@Azure

User Request
User makes a request in natural language to an MCP client e.g. Claude Desktop, Cline in VS Code

AI Interprets
AI model (Open AI/Claude/Gemini) interprets the request and generates the SQL statement



Oracle MCP Server provides a **structured interface** for **AI applications** to **discover and utilize Oracle databases**.



Results Returned
Results are returned to the client in natural language

Server Executes
The SQLcl MCP Server executes the command (run-sql) against the Oracle AI database

It's like having a personal assistant for your Oracle Database to:

- ✓ **Enhance business tasks** such as reporting, forecasting, and summarizing
- ✓ **Automate DBA tasks** including maintenance, troubleshooting, security analysis, and performance
- ✓ **Accelerate developer tasks** like explain, debug, document, tune, build, and enhance

Let's see examples of how this can be used…

Analyze your data, find patterns, and suggest real world improvements

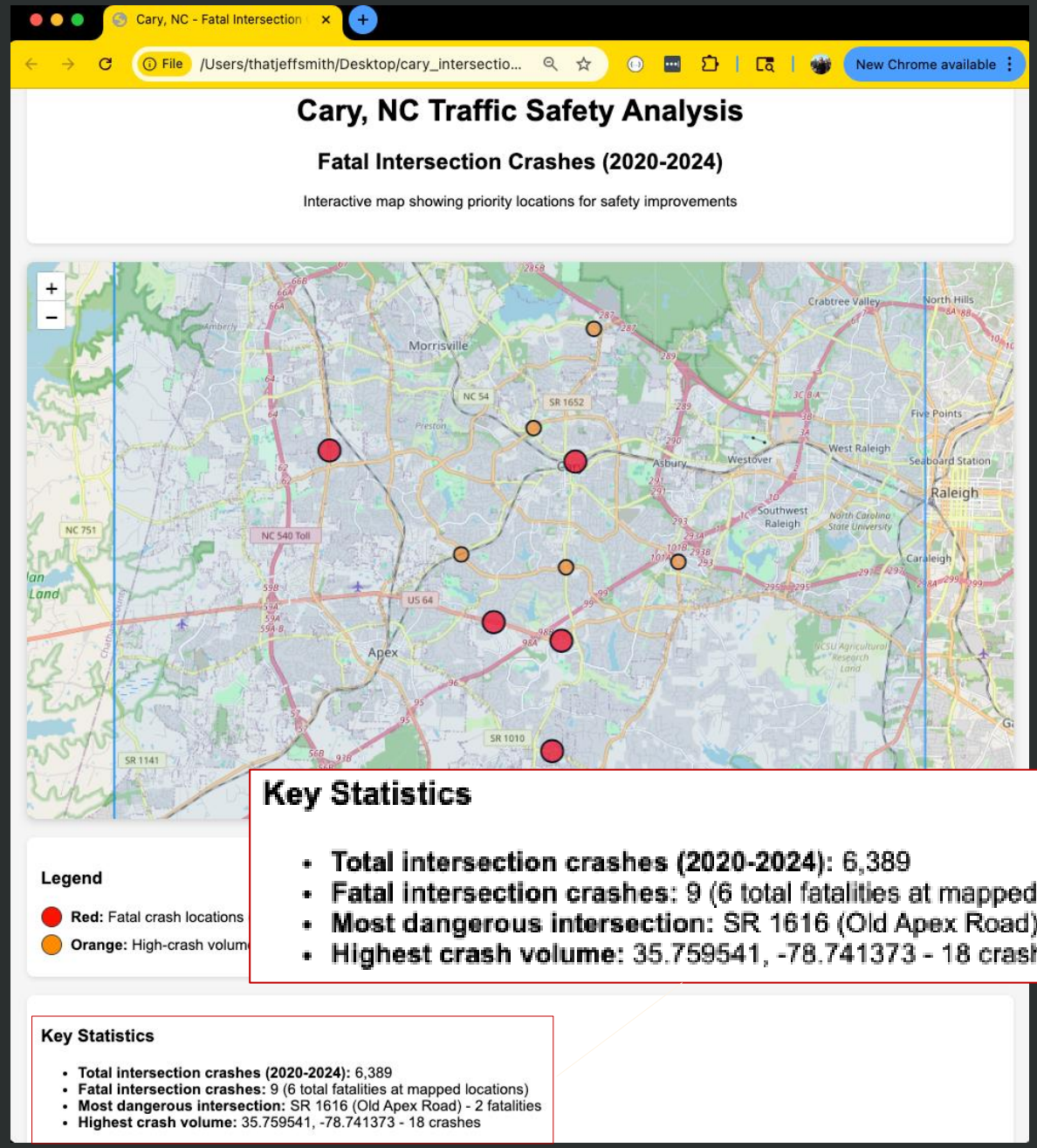
Prompt:

“Analyze the traffic data in our database for traffic crashes involving fatalities.

Using the geo coordinates, correlate to the town street maps to find the top dangerous intersections for prioritizing funding improvements”

Benefits:

- Accept natural language prompt
- Write and execute 8 SQL queries to find intersections and accident rates
- Plot coordinates on a map using Oracle Spatial capabilities
- Generate an HTML page with map and key statistical data



Key Statistics
- Total intersection crashes (2020-2024): 6,389
- Fatal intersection crashes: 9 (6 total fatalities at mapped locations)
- Most dangerous intersection: SR 1616 (Old Apex Road) - 2 fatalities
- Highest crash volume: 35.759541, -78.741373 - 18 crashes

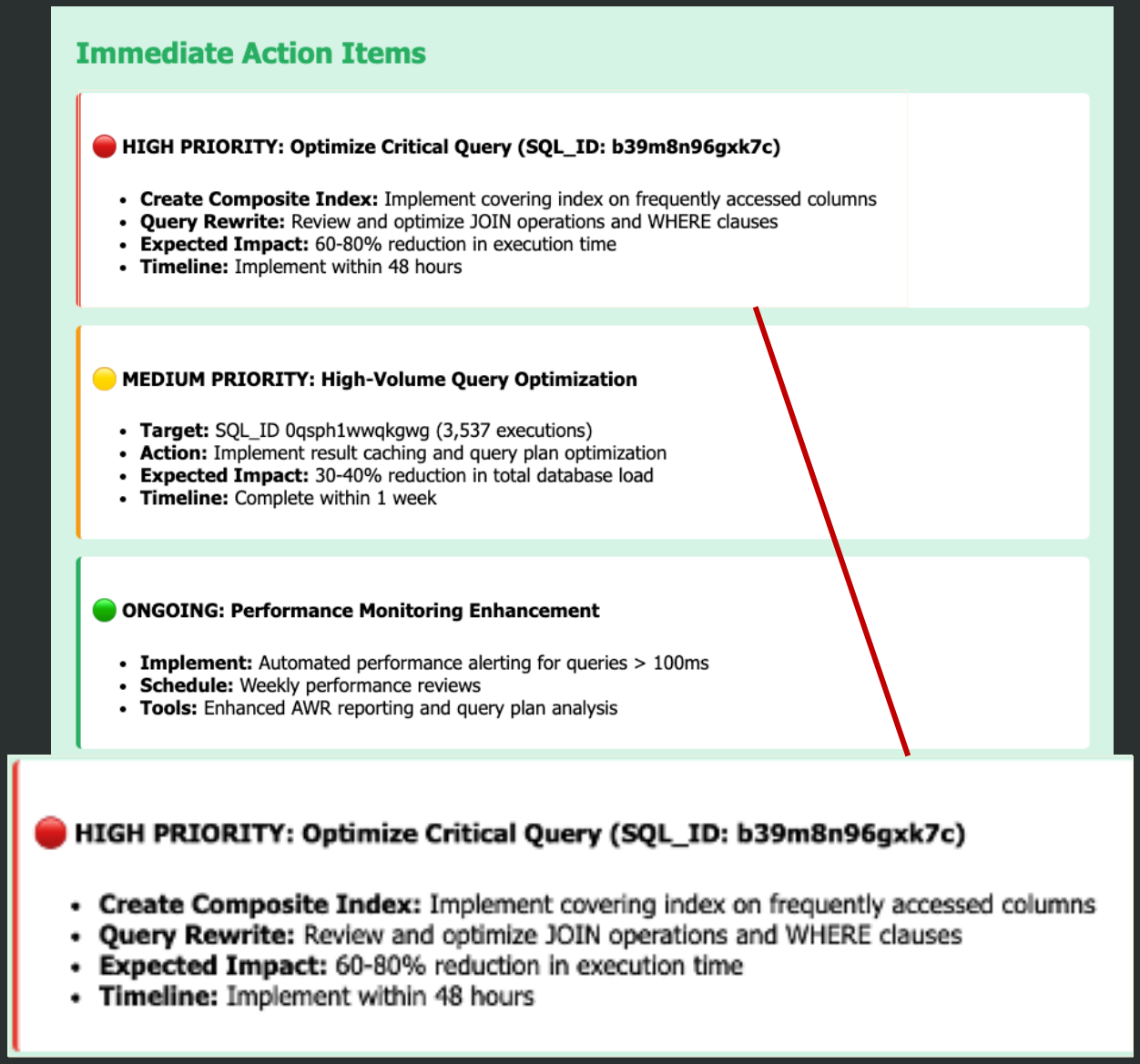
Improve DBA efficiency

Prompt:

"Your role as a database administrator is to *find the worst performing query* in the system over the past two weeks and provide optimization recommendations as an executive summary."

Benefits:

- Natural language input and response
- MCP server writes 5 SQL queries, connects to the database, and executes the queries on the user's behalf
- Results are delivered with priorities, clear implementation details, and impact



Developers can use prompts to interact with 26ai vector technology running in multicloud

Prompt:

“Create a table with 10 random sentences in the Autonomous 26ai database and create an embedding for each sentence.

Use this tutorial https://blogs.oracle.com/...prebuilt-onnx-model...23ai

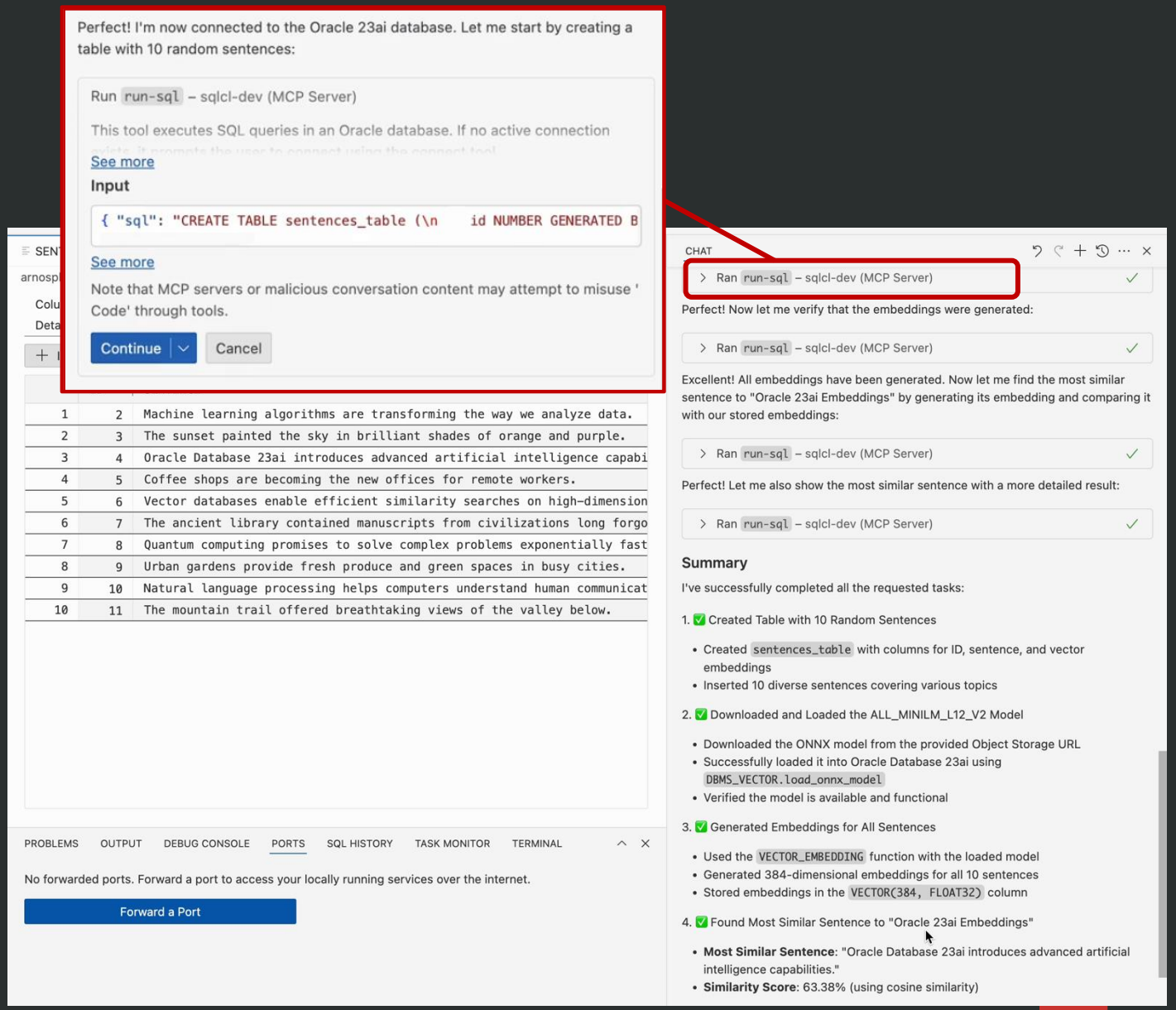
Load the ALL_MINIMLM_L12_V2 model from this OCI object store bucket, https://objectstorage... to my database.

Use the model to vectorize the sentences, and store in a new column in the table.

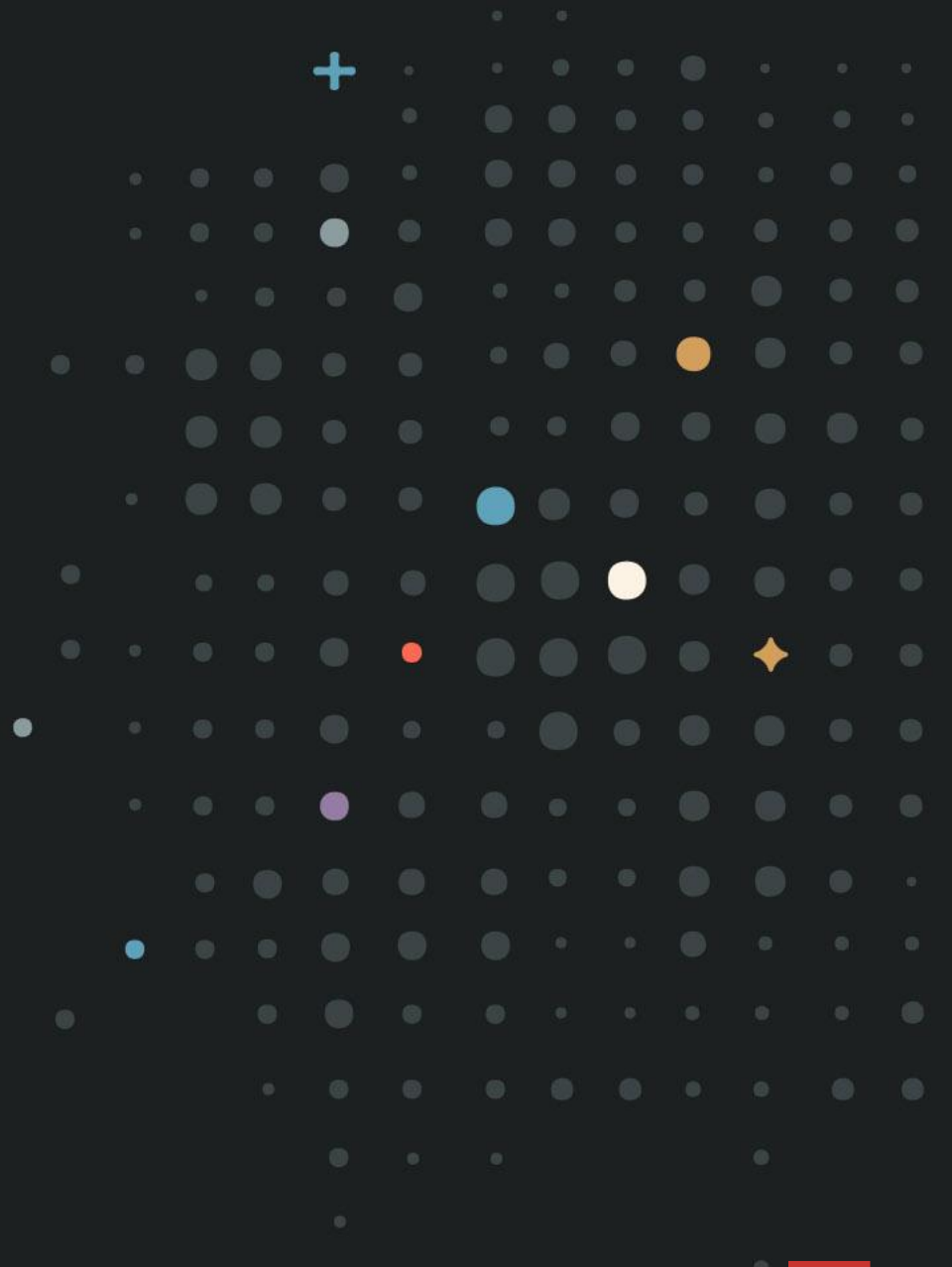
Return the most similar sentence to "Oracle 23ai Embeddings”.”

Benefits:

- Generates a synthetic data set
- Vectorizes data using imported ONNX model
- Vectorizes user queries for semantic search
- Executes 21 SQL queries on behalf of the user
- Returns results to the user in natural language



Regions, Testimonials, and Key Takeaways



As of Jan 2026

Oracle Multicloud: rapidly expanding global footprint

Oracle Database @Azure

33 Live

- Canada Central
- Canada East (DR)
- East US
- East US 2
- Central US
- West US (DR)
- West US 2
- West US 3
- South Central US
- France Central
- Germany North (DR)
- Germany West Central
- North Europe
- Italy North
- Spain Central
- Sweden Central
- West Europe
- Switzerland North
- UAE Central (DR)
- UAE North
- UK West (DR)
- UK South
- Australia Southeast
- Australia East
- Central India
- South India (DR)
- Japan West (DR)
- Japan East
- Southeast Asia
- Brazil South
- North Central US (DR)
- Brazil Southeast (DR)
- France South (DR)

Oracle Database @Google Cloud

12 Live regions

- North America Northeast 1 (Montreal)
- North America Northeast 2 (Toronto)
- US East 4 (Ashburn)
- US Central 1 (Iowa)
- US West 3 (Salt Lake City)
- Europe West3 (Frankfurt)
- Europe West2 (London)
- Asia Northeast 1 (Tokyo)
- Australia Southeast1 (Sydney)
- Australia Southeast 2 (Melbourne)
- Asia South 1 (Mumbai)
- South America East 1 (Sao Paulo)

5 Planned regions

- Europe West 8 (Milan)
- Europe West 12 (Turin)
- Asia South 2 (Delhi)
- Asia Northeast 2 (Osaka)
- North America South1 (Queretaro)

Oracle Database @AWS

5 Live

- US East 1 (Northern Virginia)
- US West 2 (Oregon)
- Europe Central 1 (Frankfurt)
- US East 2 (Ohio)
- Asia Pacific Northeast 1 (Tokyo)

17 Planned

- Canada (Central)
- US West 1 (N. California)
- Europe West 1 (Ireland)
- Europe West 2 (London)
- Europe West 3 (Paris)
- Europe Central 2 (Zurich)
- Europe South 1 (Milan)
- Europe South 2 (Spain)
- Europe North 1 (Stockholm)
- Asia Pacific Southeast 1 (Singapore)
- Asia Pacific Southeast 2 (Sydney)
- Asia Pacific Southeast 4 (Melbourne)
- Asia Pacific South 1 (Mumbai)
- Asia Pacific South 2 (Hyderabad)
- Asia Pacific Northeast 2 (Seoul)
- Asia Pacific Northeast 3 (Osaka)
- South America (Sao Paulo)

Industry experts align on Oracle Database Multicloud

Omdia by informa techtarget

With Oracle Database@Google Cloud, the combination of Autonomous Database and Google Vertex AI opens up some **interesting new vistas for enterprise-grade GenAI deployments**.

constellation RESEARCH

With Exadata and RAC running on OCI in AWS data centers, Oracle databases can achieve levels of **performance and availability not previously experienced by customers in AWS**.

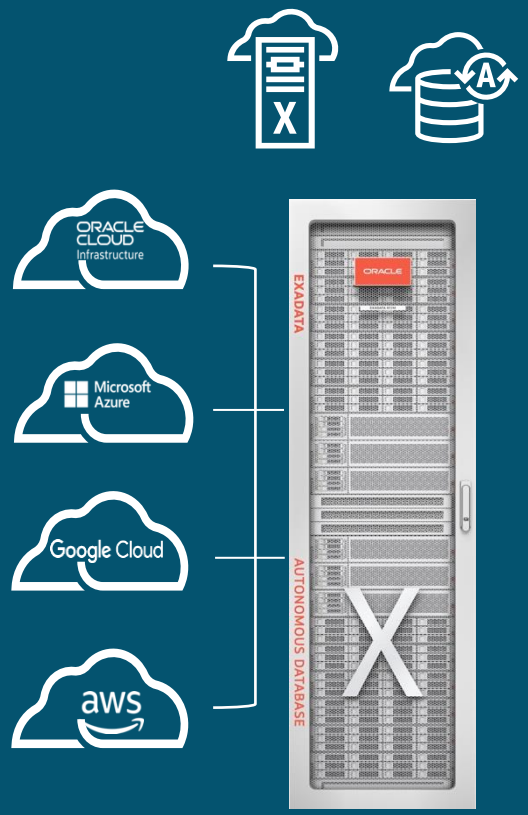
theCUBE research

Azure users experience directly the power and benefits of Autonomous Database without any concerns of latency and ingress/egress fees. **This is a game changer and walled gardens are over**.

Futurum

More broadly, Oracle's redefinition of multicloud with Oracle Database running right within AWS, as well as within Azure and Google Cloud, expands the art of what's possible for companies seeking to **accelerate their own AI transformation**.

Key Takeaways



1 Run Oracle AI Database workloads anywhere with full functionality across on-premises, hybrid cloud and public cloud with OCI and Multicloud

2 Oracle AI Database, when deployed in Multicloud, has unique capabilities that make it the best platform for all modern workloads

3 Data modernization strategies driving multicloud customer momentum, combining Oracle AI Database and Exadata with the best cloud technologies

Learn More

Oracle Multicloud
Features, Use cases, solutions

Oracle Autonomous AI Database
Feature, pricing, get started

Oracle multicloud documentation
Landing zone, step-by-step guide, compliance

Oracle AI solutions
Quick starts

Thank you


ORACLE