What is the Oracle Cloud?

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What is the Oracle Cloud?

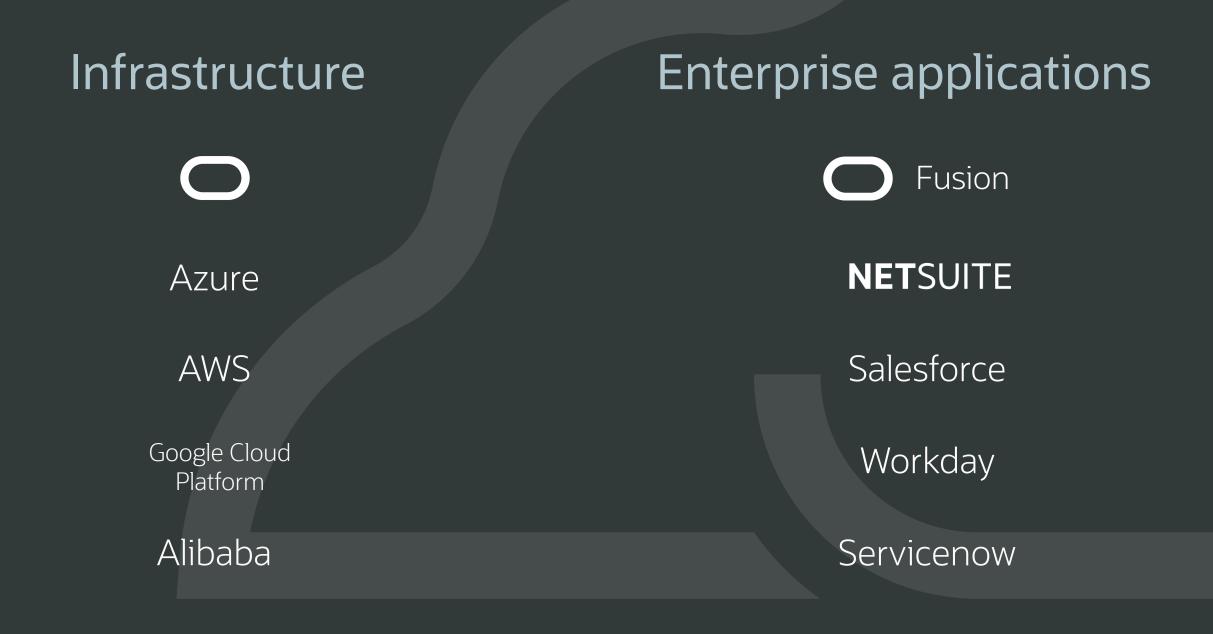
The Oracle Cloud is a comprehensive cloud computing platform that offers a wide range of services, including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). Oracle Cloud is designed to provide a secure and scalable cloud platform for businesses and organizations.





The Cloud A collection of services, provided over a network, operated by someone else.

The Cloud A collection of services, provided over a network, operated by someone else.



Industry applications



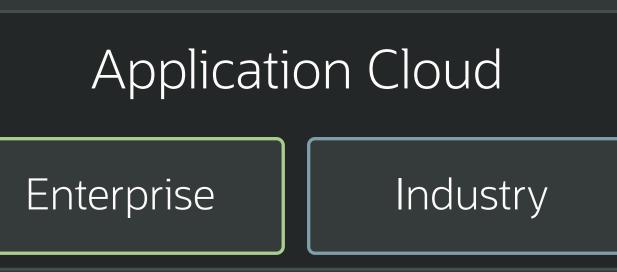


Micros

IBM Sterling

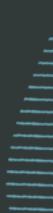
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Toast

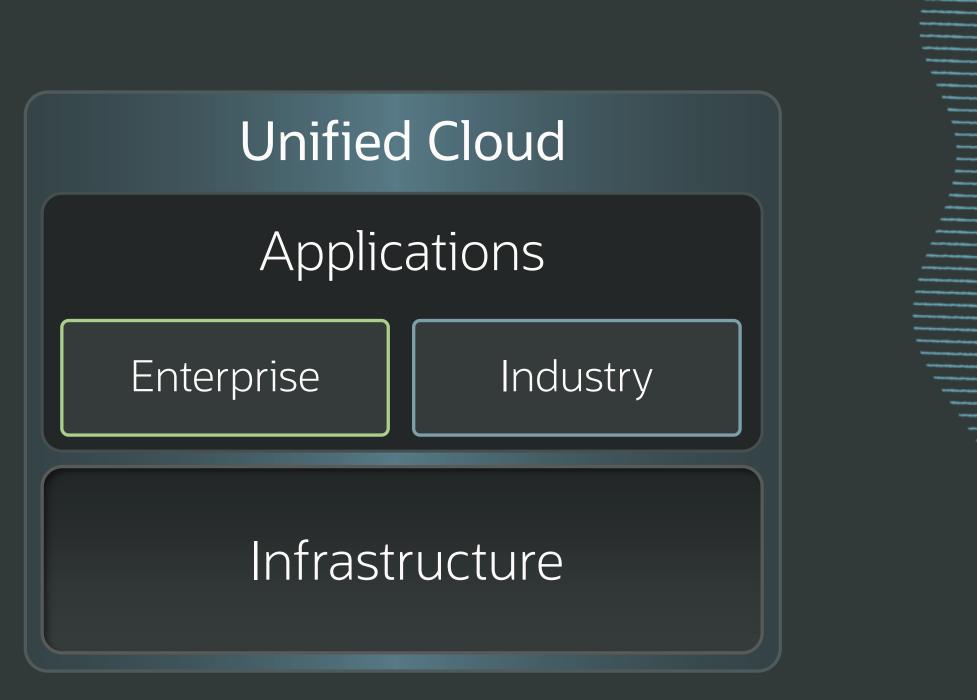


Typical cloud strategy

Infrastructure Cloud



Oracle's Cloud

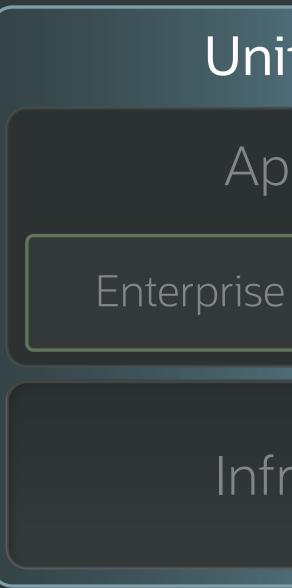


Oracle Cloud

Deployment choice

Extensibility

Governance and control



Unified Cloud

Applications

Industry

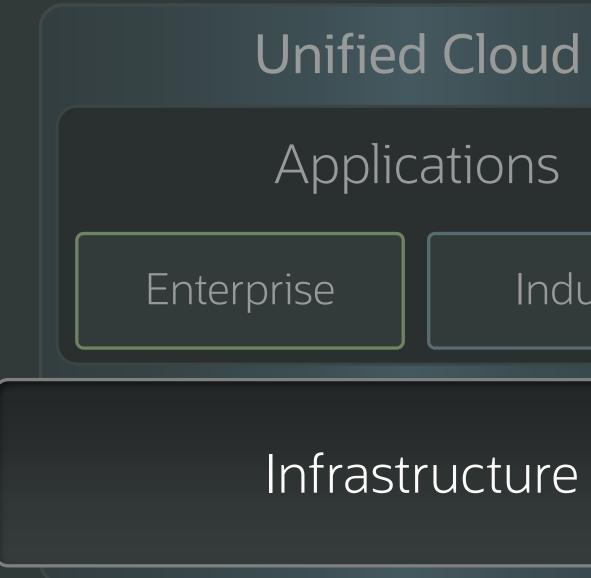
Infrastructure

Oracle Cloud Infrastructure

120 services

24k+ customers

68 customer-facing regions

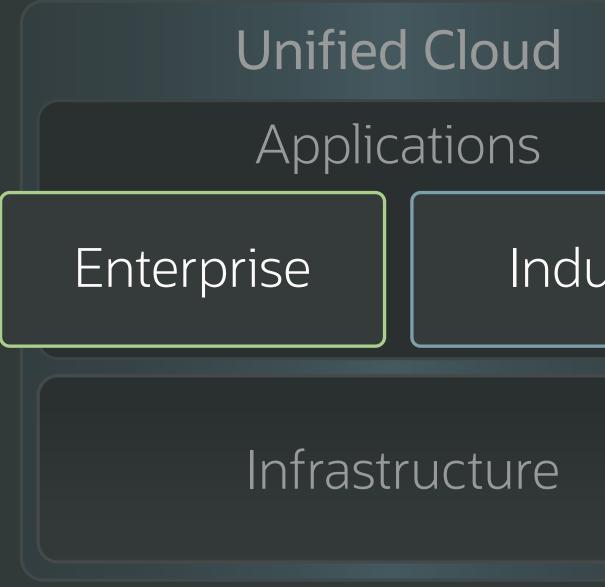


Industry

25M+monthly users Oracle Fusion Apps

36k+ customers in 217 countries (256) Oracle NetSuite

10k+ customers in 180 countries Oracle Industries Apps



Industry

The Oracle Cloud is applications and infrastructure.

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30% Public cloud adoption

Because it can be complicated

and privacy Expensive to migrate Expensive to run

Data residency, security,

Latency and performance

Regulatory compliance

The cloud delivered where you need it

Unified Cloud

Enterprise

Applications

Industry

Infrastructure









Launched April 2021





مجموعة إخكاء ITHCA GROUP



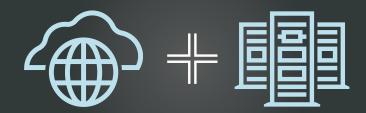


Managed cloud

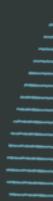


Full cloud





Your cloud





MySQL Heatwave

Oracle DB (Autonomous & Exadata)

OCI Interconnect with Azure

Clouds work better together







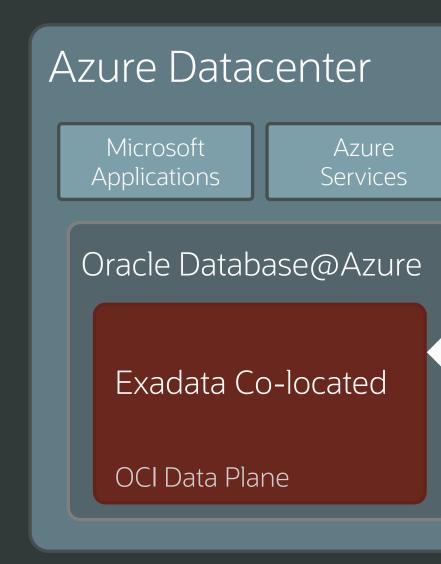


The power of Oracle Database@Azure

Run workloads where you choose

Migrate, modernize, and innovate with Oracle and Azure services

Simplify cloud purchasing and management



OCI Region

Object storage

Oracle managed backup

OCI Control Plane

The Oracle Cloud is distributed.

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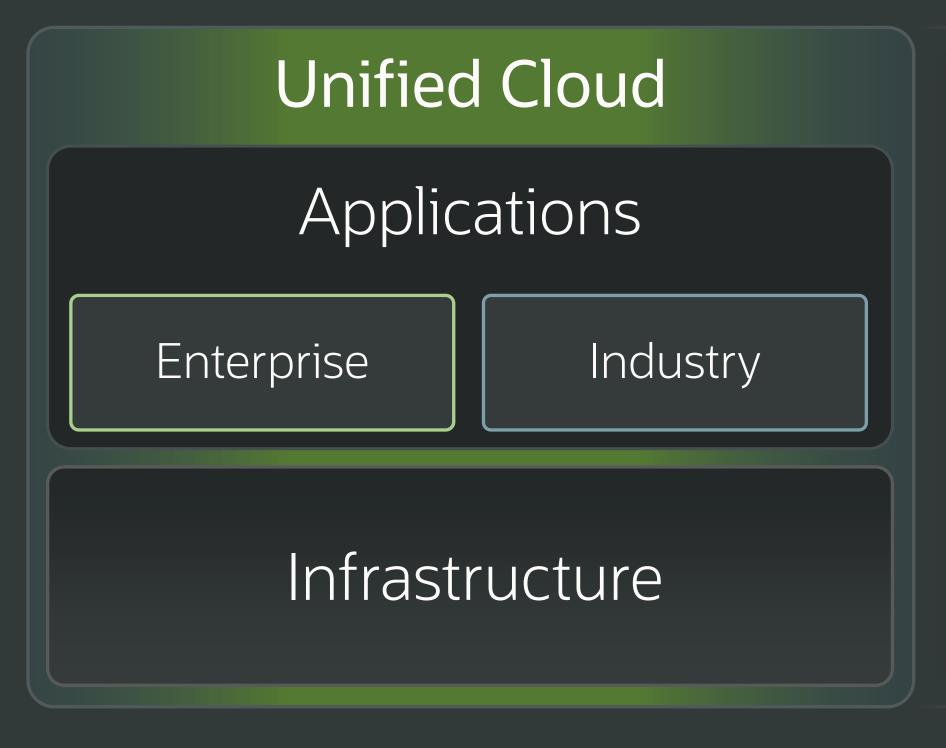
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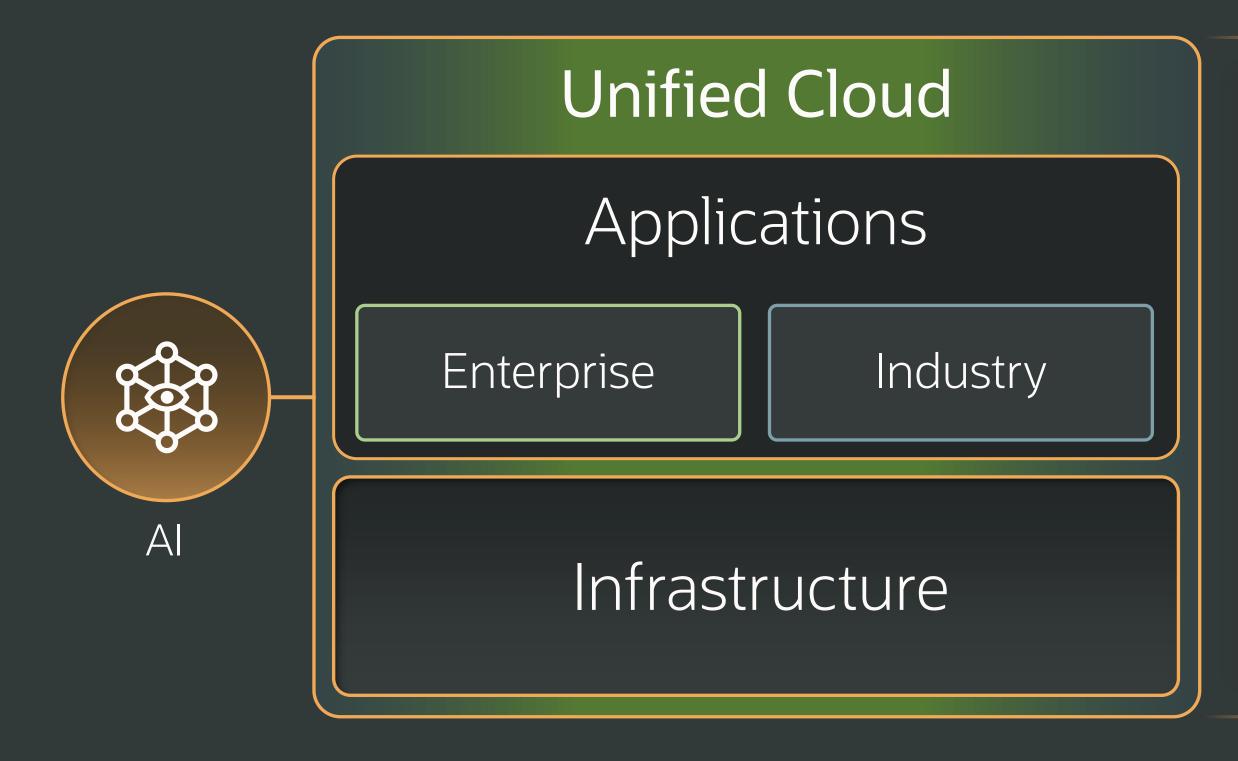


Dedicated



Alloy







Dedicated



Alloy



Machine learning has been around for years.

Recommendation engines Object detection Facial recognition Natural language processing Price optimization Route planning Travel time estimation Email classification

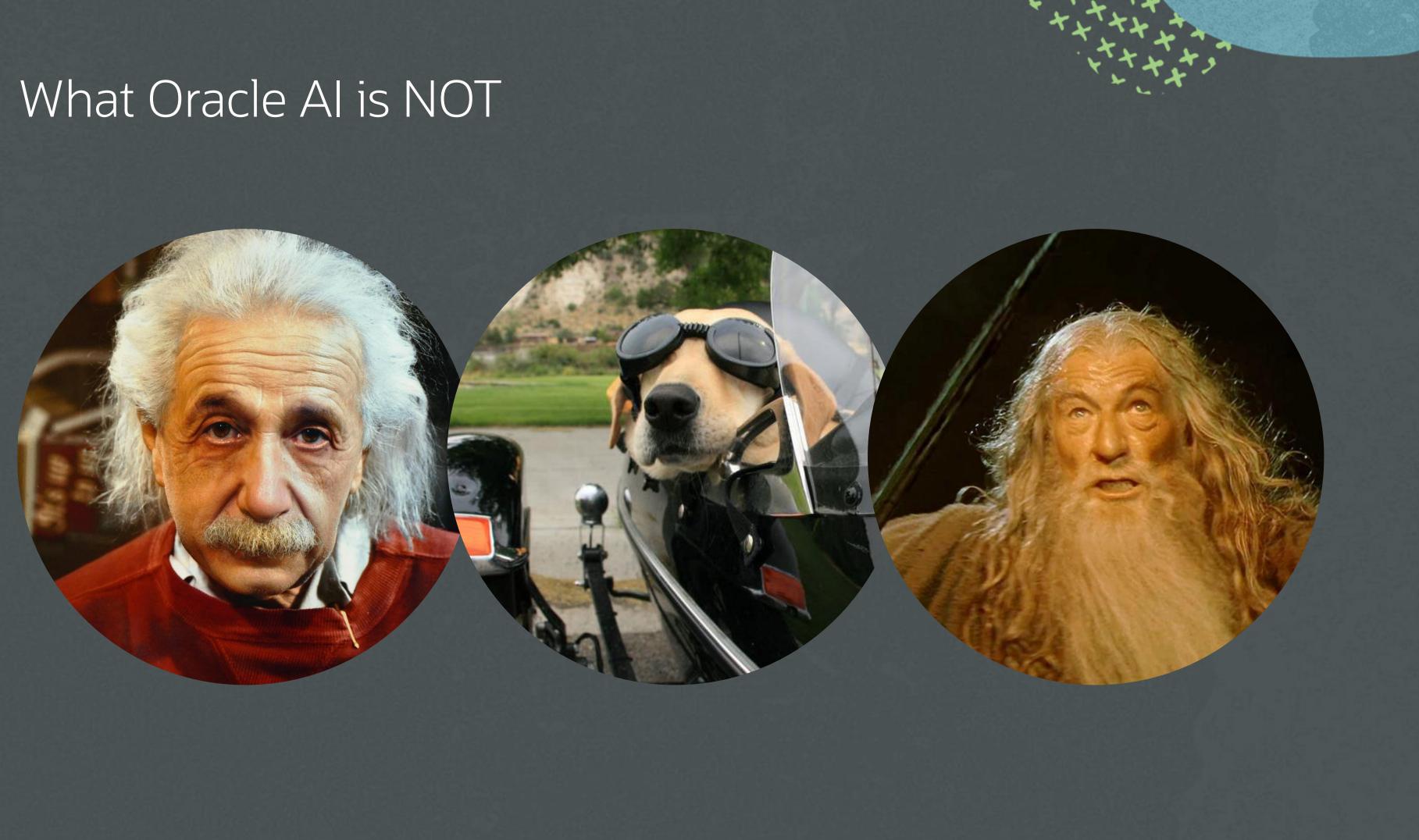
Al capabilities embedded throughout

Fusion + Industry Apps

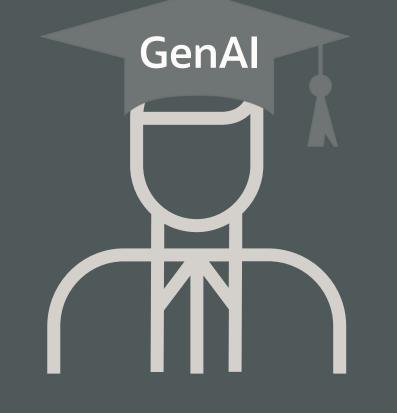
Data

Infrastructure

Al Services



Generative Al is like a smart college graduate Generative Al is like a smart college graduate



Imagine you hire smart college grads to answer your company's support calls

The grads have lots of general knowledge, but know nothing about your products or past product issues

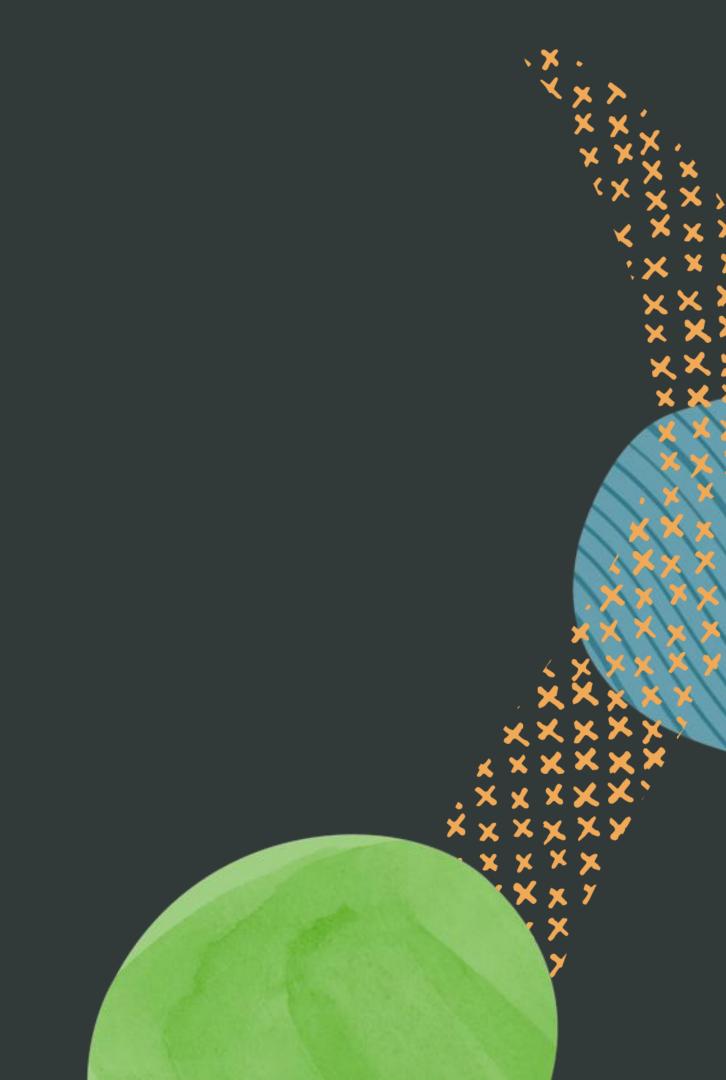
Oracle Al: Your Al Advantage

The best AI starts with the best data – your data

Our data expertise helps you make the most of it

Naturally embed it across your entire business

What's new?



Better software 2017 🄶

Context and meaning from relationships in sequential data

Transformer model

Image recognition model



10,000 images to train

Transformer model

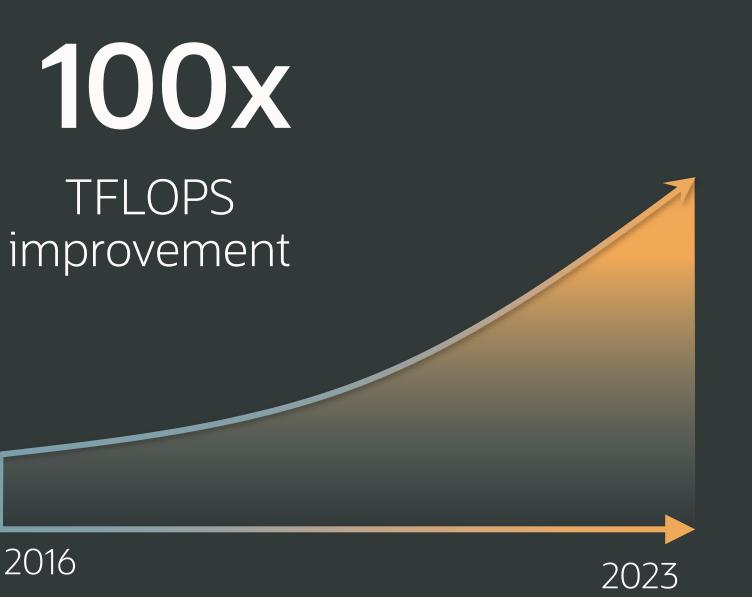
What is the Oracle Cloud?



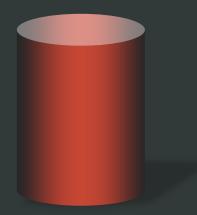
Terabytes of text to train

2017 – Better software Better hardware 2021

2016



GPUs for all



Optimized for 3D calculations on pixels or vertices Researchers use the calculation engines to solve new problems

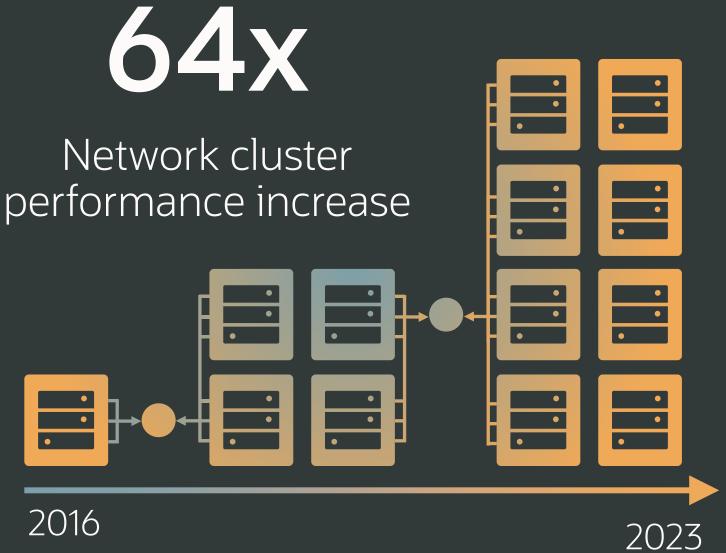
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Performance, scaling, efficiency are ideal for neural networks

– Better software 2017 | Better hardware 2021 Better networking 2022





Moving faster

Virtualized Front End Network

Highly featured with cost to bandwidth and latency

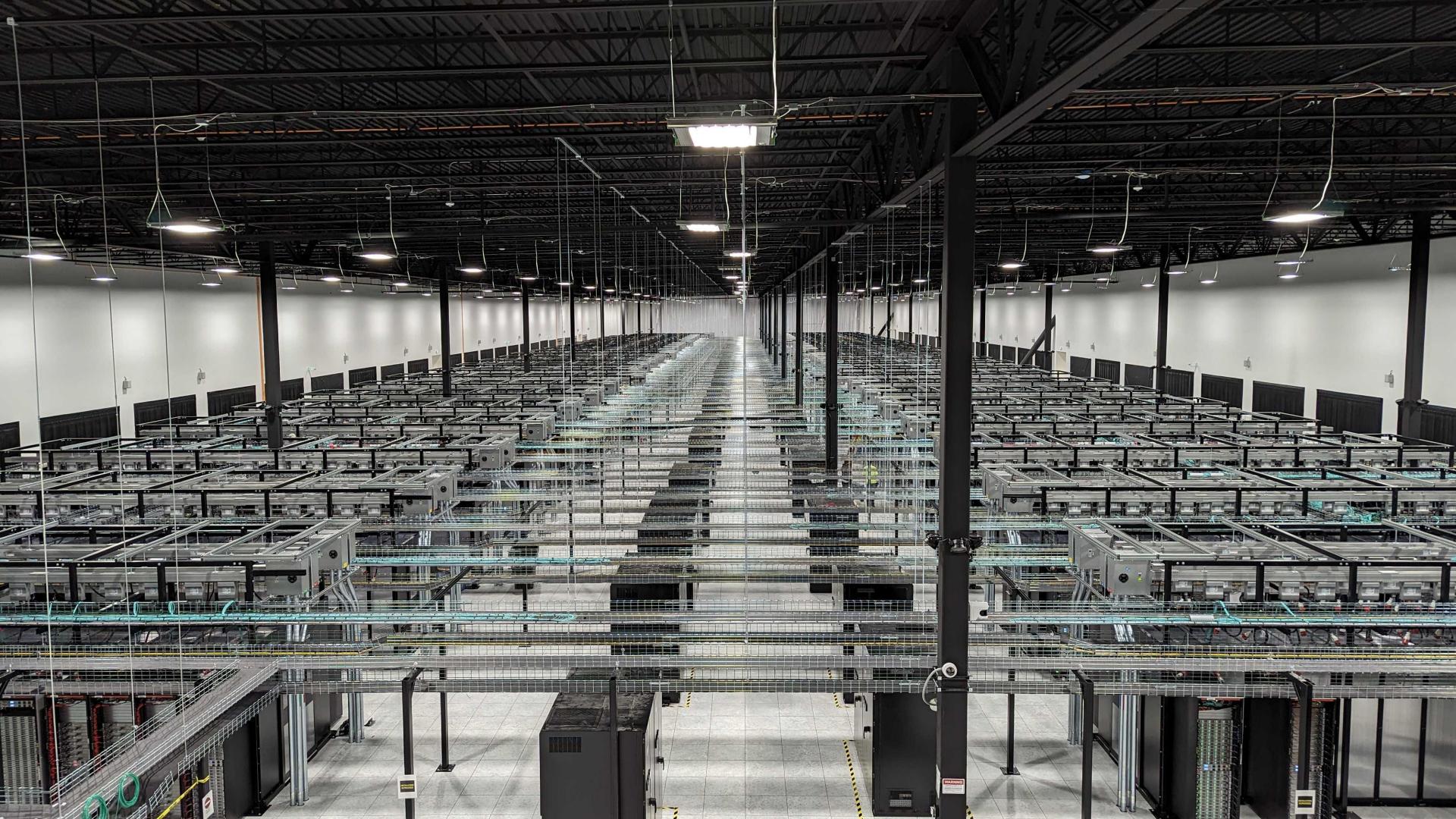


Cluster Network

Optimized for high performance Superclusters are powering the world's best models.



OCI Superclusters Microsecond latency with RDMA Cluster up to 32k NVIDIA GPUs /// mosaic^{ml} inworld



Is that enough? No.

It's hard to get access It's hard to control

Controlled access

Available now LLM choice

OCI Generative AI

- Available as sovereign Al
- Fully managed enterprise service
- Control your instance

Is that enough? No.

It's not easy to integrate

The best kind of integration is the one you don't have to do.

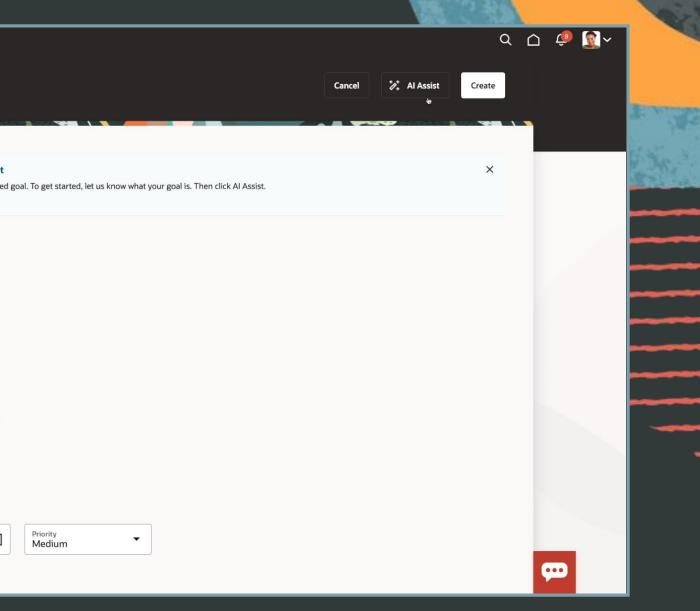
We've done the integration work.

Al Assisted Goal Setting Oracle Fusion HCM

Job Description Generation Oracle NetSuite

Schedule Al Assist Oracle Construction and Engineering

INSPIRE				
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	O Consta have	and fort	with Orrelate	Al Assist
			r with Oracle's new tool quickly generates a	
	What's your g	bal?		
	Collaborate more e	ffectively acro	oss teams.	
	Any additiona	l info you v	want to add?	
	Use # (Hashtag) to categ	orize your goal.		
	How will you k	now you'v	e achieved you	r goal?
	Start Date 08/09/2023		Target Date 07/30/2023	Ē
	<u></u>			



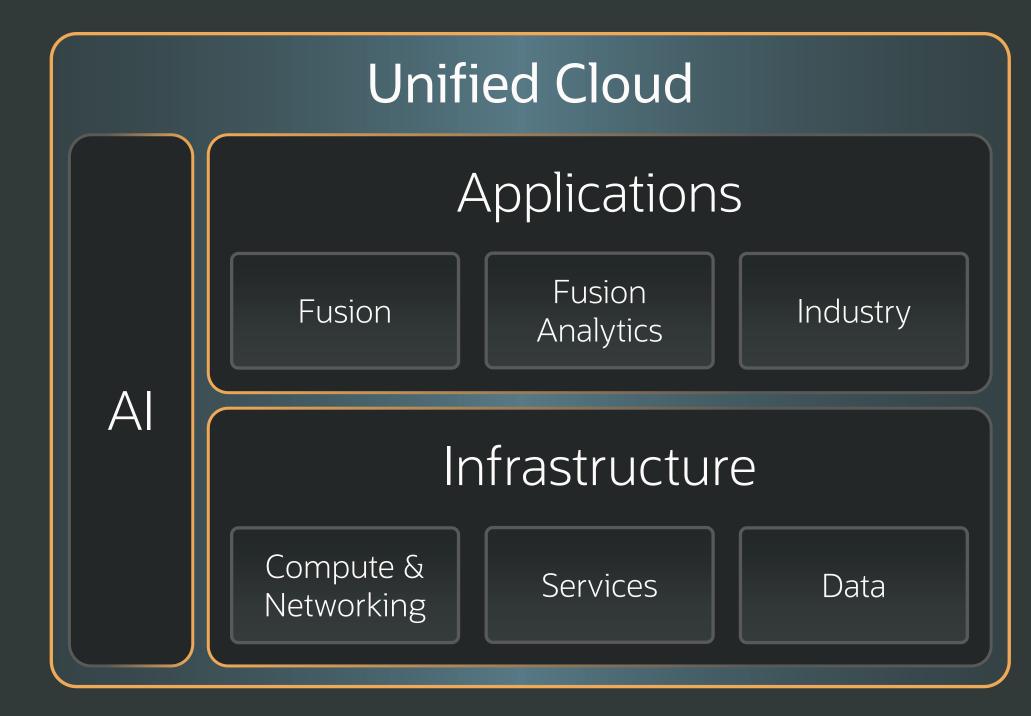
A complete cloud Al solution

Infrastructure

Databases

Models & services

Embedded in apps



The Oracle Cloud is continuously learning.

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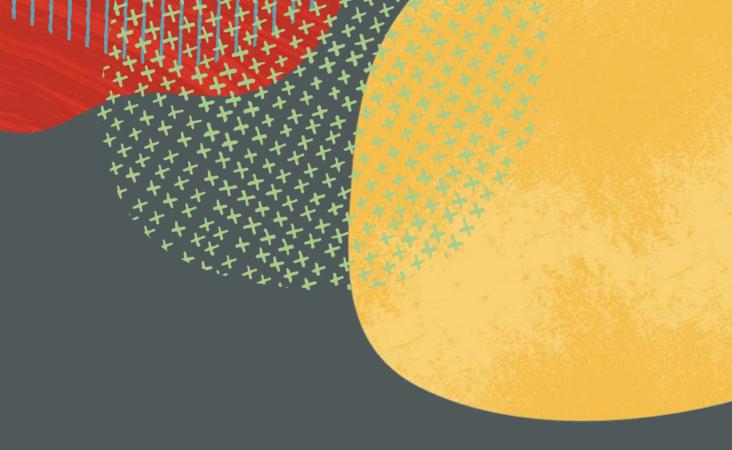
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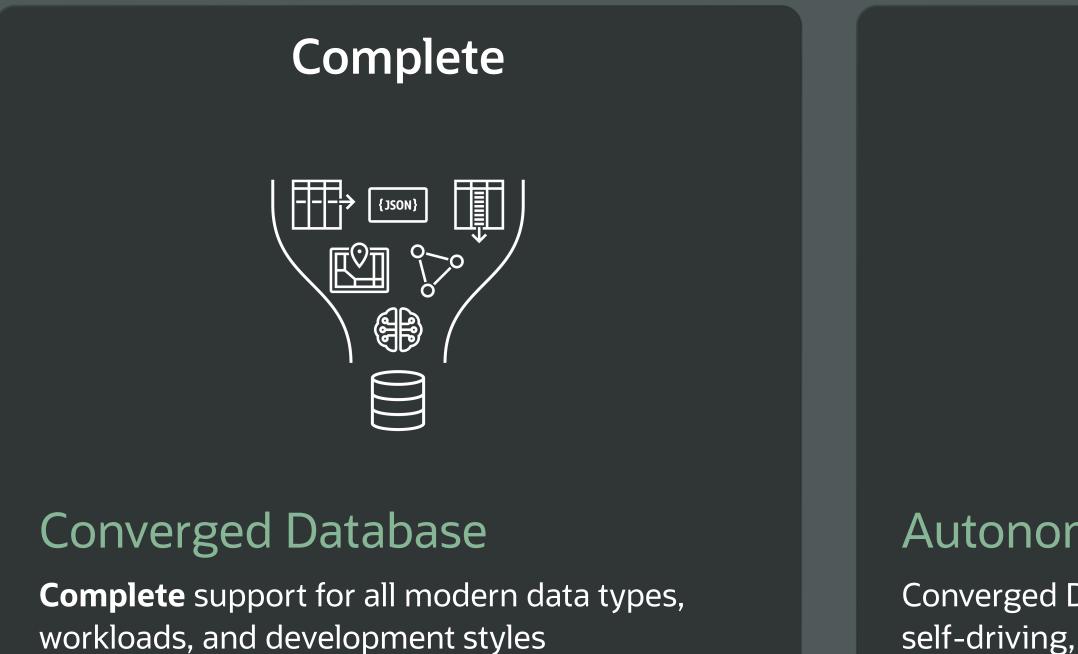
Oracle Database Vision

Make modern apps and analytics easy to develop and run for all use cases at any scale



How we deliver the Vision

Complete and Simple Platform for All Data Management Needs



Simple



Autonomous Database

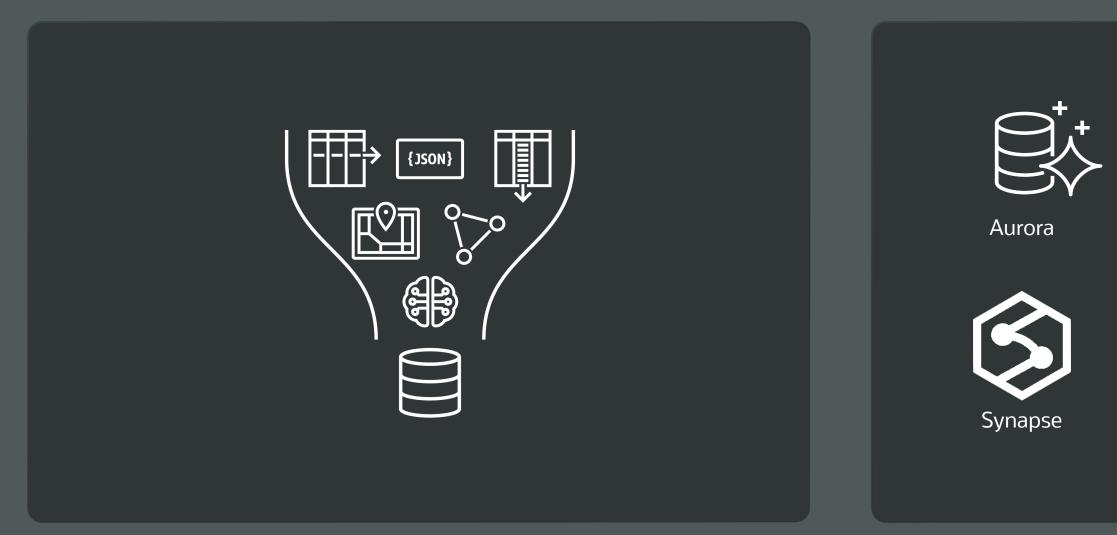
Converged DB on Exadata Cloud delivered as a self-driving, self-securing, self-repairing **service**

 \bigcirc

Comparing Database Strategies

Run converged, open, SQL Database

Instead of single-use proprietary databases



Developers and IT focus on Innovation Developer



DocumentDB





Redshift

Snowflake



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Quantum
Ledger
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Big Query

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Developers and IT focus on Integration

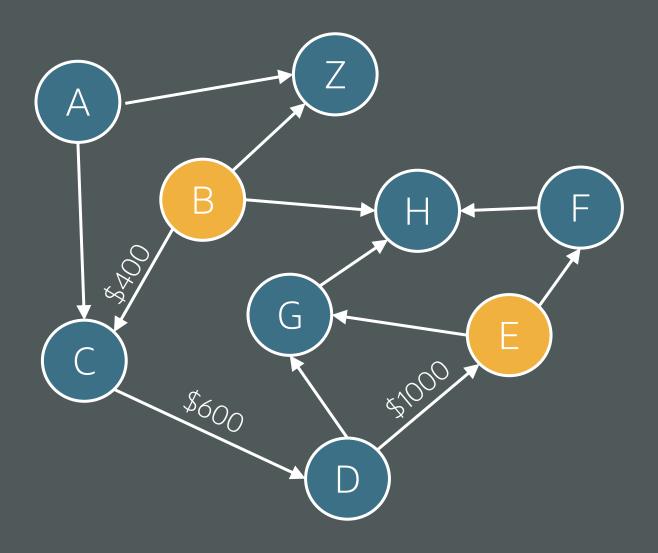
Unification of Graph and Relational Delivers Developer Nirvana:

Navigation simplicity of Graph with the Power of Relational

New Property Graph Views in Oracle Database 23c enable developers to treat data as vertices or edges in a graph

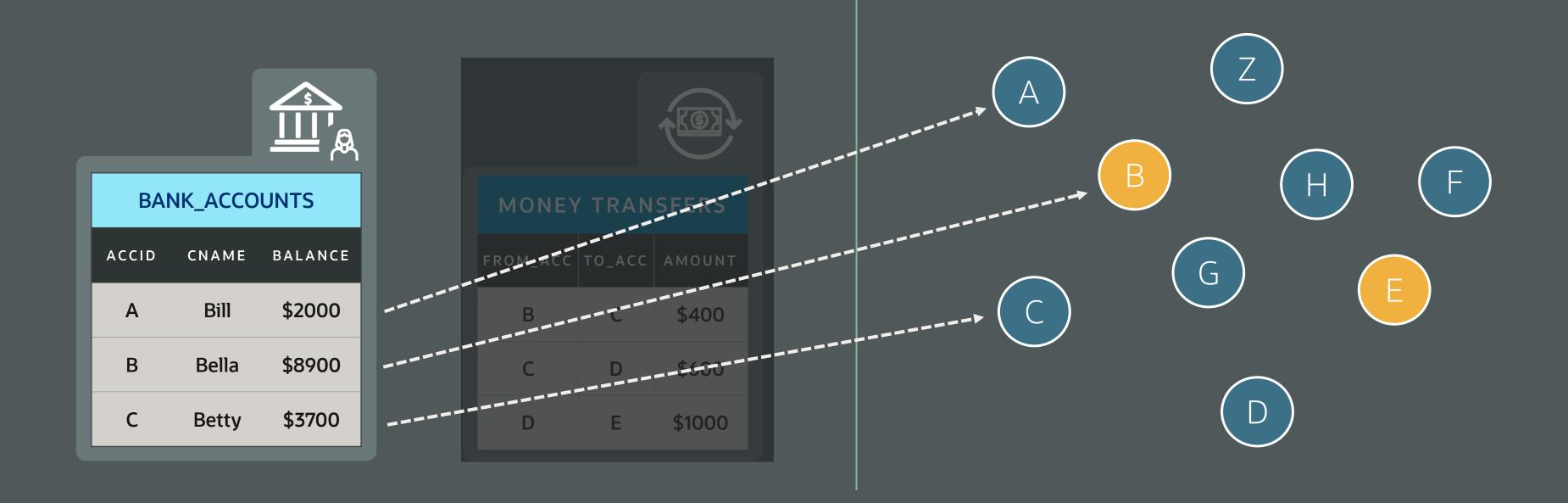
Graphs are a powerful way to query connections and relationships between data

For example, to discover indirect money movements from bank account 'B' to bank account 'E'



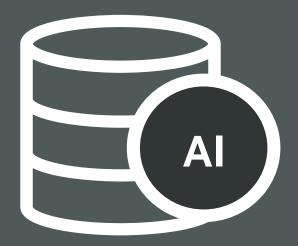


Graph views enable treating bank account rows as graph vertices





Unification of Al and Databases





Al uses a data representation called Vectors

50 21 16 42 33



0

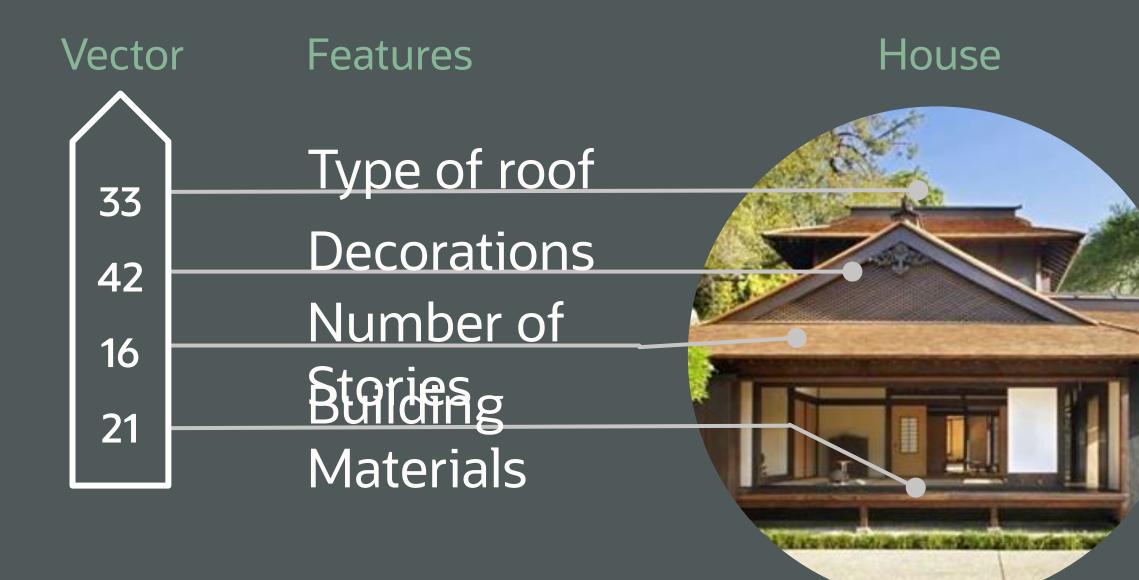
Vectors represent the semantic content of images, documents, videos, etc.



A vector is a sequence of numbers, called dimensions, used to capture the important "features" of the data



Example: the features for a house image could be

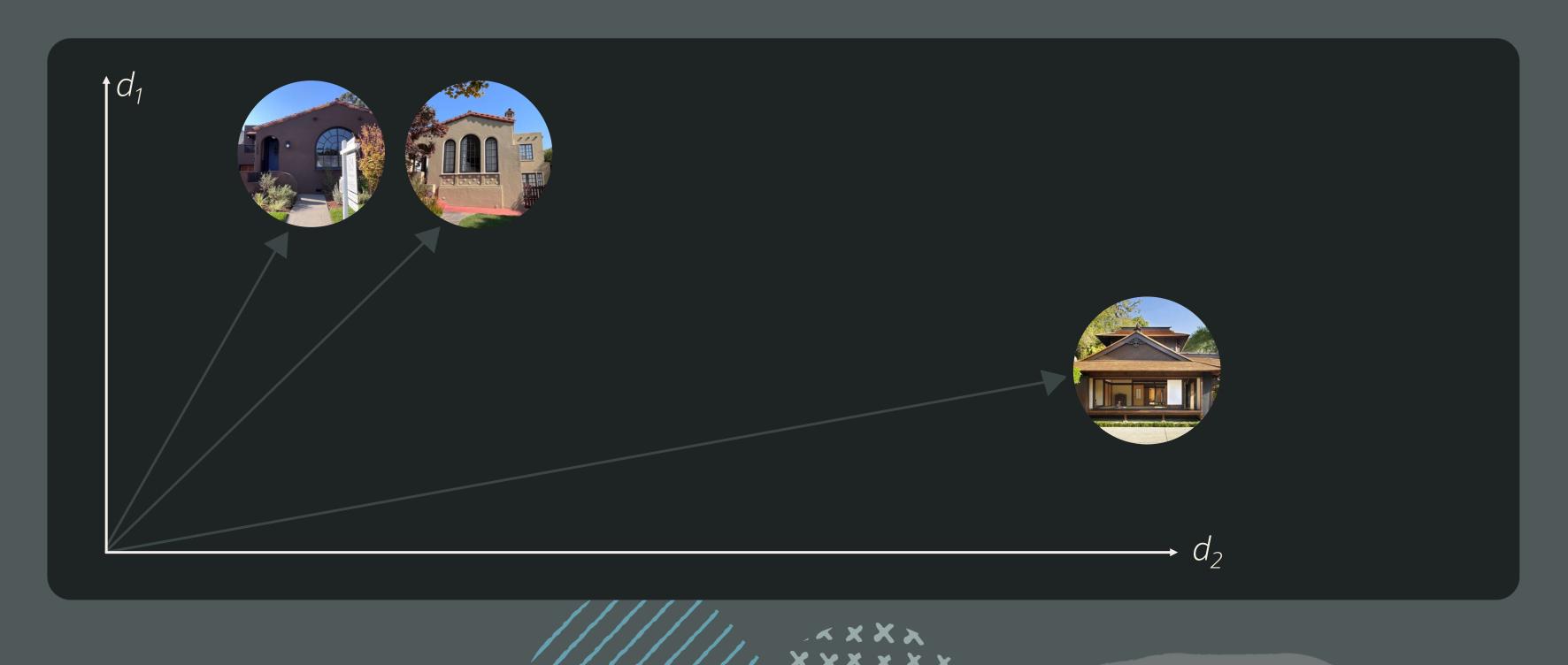


Note: Features are determined by ML algorithms so are not as simple as shown here

Each dimension (number), represents a different feature of the house

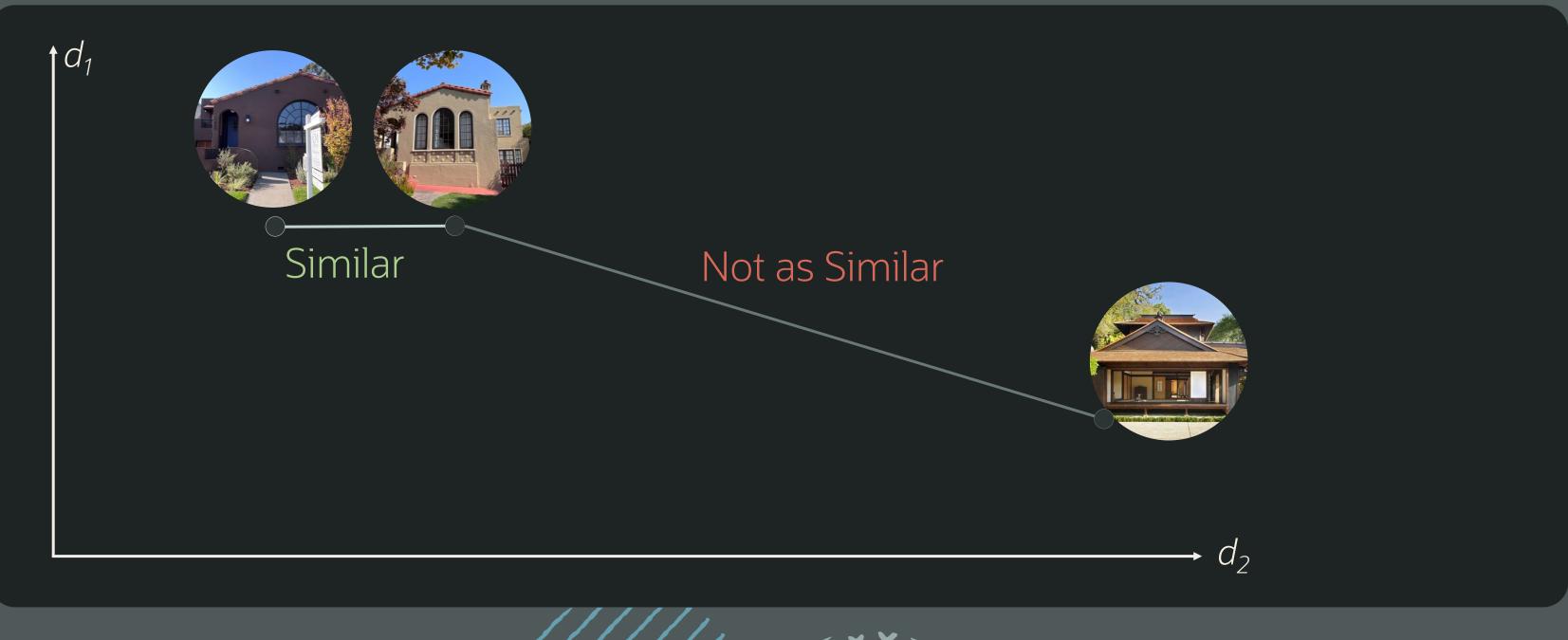
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House vectors when collapsed into 2 dimensions instead of hundreds could look like this





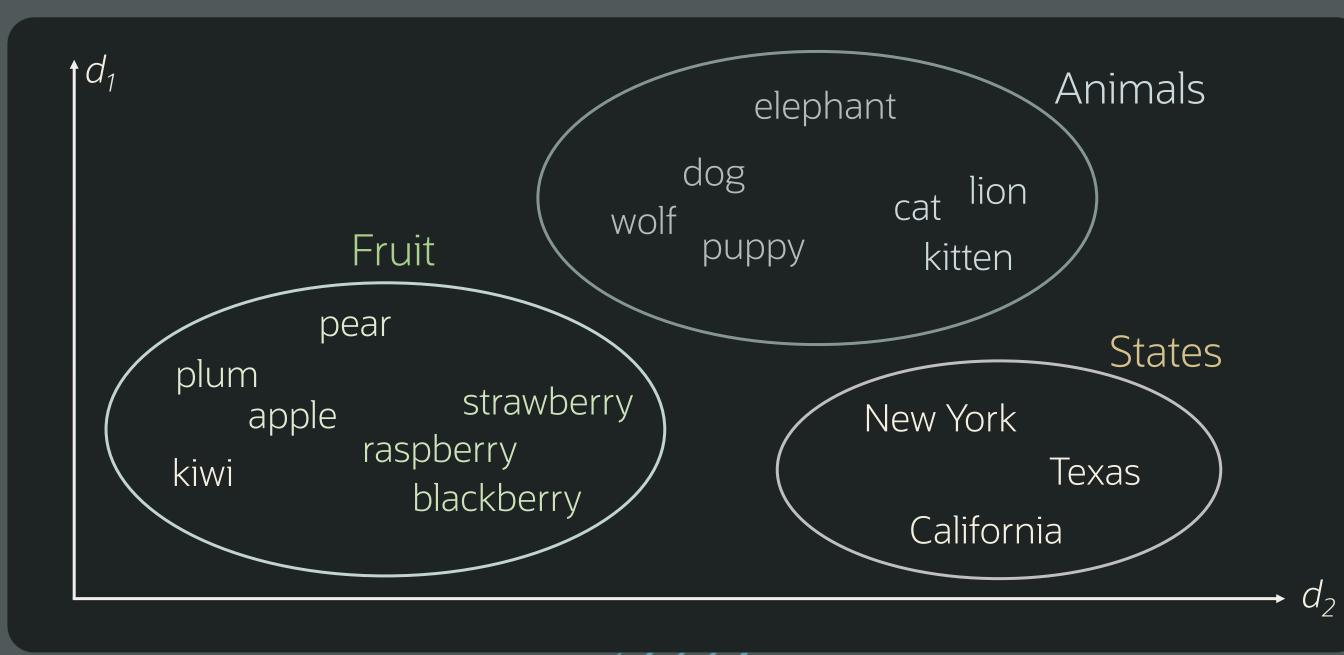
The distance between the vectors is proportional to their semantic similarity







Word similarity works the same way Word vectors that are close are more semantically similar





Documents also work the same way

Documents vectors that represent similar content are closer in distance than those representing dissimilar content

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Let's look at an example

Imagine a house-hunting app that helps customers find houses for sale that are similar to a picture the customer uploads





Finding a good match requires combining semantic picture search with searches on business data including:

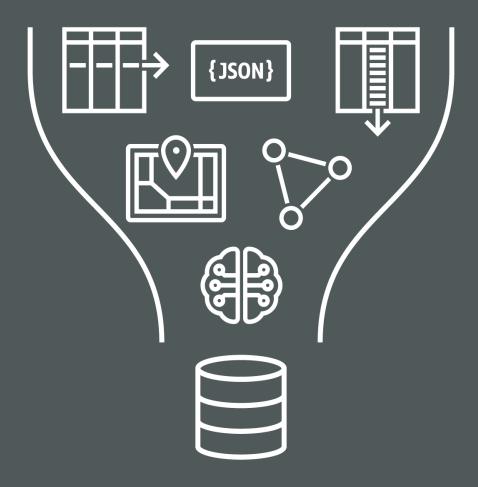
- and budget

Customer data such as location preference

• Product data such as houses available for sale by location and their price



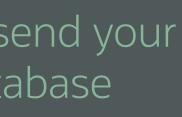
Searches on a combination of business and semantic data are more effective if both types of data are stored together



One solution is to continuously send your business data to a vector database

User and Product Data

Business Database







Vector Database



Oracle Autonomous Database



Addresses top operational pain points

- Fully automated provisioning, patching, upgrades, and hardware refreshes
- Auto-detection and proactive remediation of bugs and errors
- Auto-scale and enterpriseclass business continuity

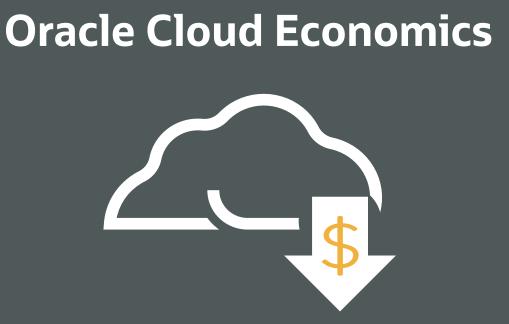
Improves developer productivity

- All the benefits of a converged database
- But it's more than just a database - it's a complete data platform
- With a built-in low code IDE, Data Studio, REST services, In-database graphs, ML/AI, data insight discovery, etc.



Announcing: Oracle Database Cloud Services for Developers

Unlimited number of Zero to Low-Cost Developer Databases





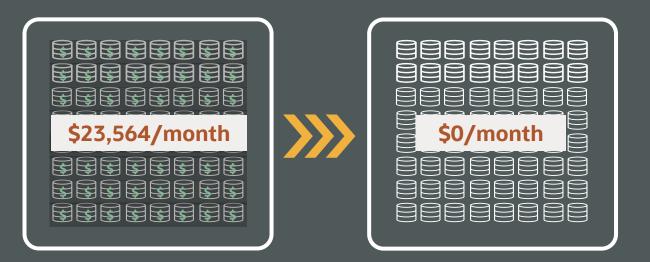
Al and Database at Oracle Cloud

simpler, faster, with lower cost app runtimes



Available today on Autonomous Database, coming to all Oracle Database cloud services

Cost of 100 Developer Databases



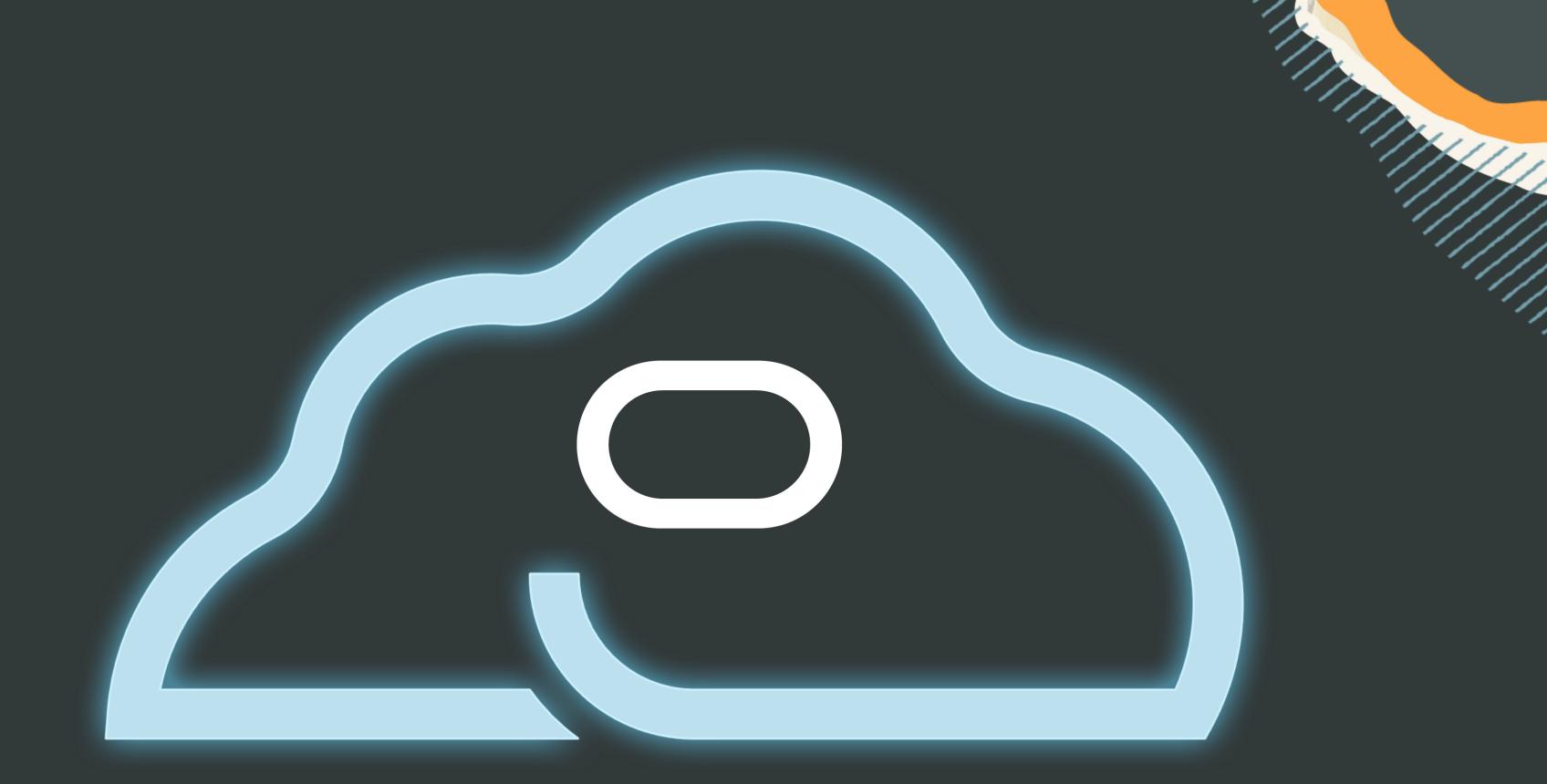
Now even more Affordable*

Development at Oracle Cloud

...now with even lower cost

* https://www.oracle.com/cloud/economics

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Infrastructure and applications | Distributed | Continuously learning