

ORACLE



Journey to AI Innovation

Oracle AI and your path to enterprise modernization

AI Why now ? Why Oracle?

We're hitting that flashpoint, now

31%

of companies now have AI
in production

27%

of businesses claim at least 5% of
earnings are attributable to AI

92%

of large companies report ROI on
their data and AI investments

Oracle AI enables different paths to innovation



Leverage prebuilt models



Create custom models



Build on AI-optimized infrastructure



Leverage pretrained
models

Benefits of OCI AI Services

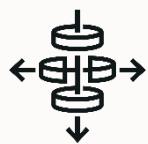


Machine Learning and
AI

AI for everyone



Prebuilt for enterprise requirements



Customizable for your needs



Best-in class support



- An AI starting point, even without data science experience

- Prebuilt models trained on industry-derived data
- Optimized for use cases across finance, manufacturing, and more
- Built-in insight highways into your SaaS applications with Oracle NetSuite, Fusion, and custom apps

- Tailor your AI models without data science experience
- Save costs by training AI models already on OCI

- White glove treatment
- Data scientists on staff, dedicated to ensuring your organization's success
- Pricing to support AI experimentation

OCI AI Services

Applications

AI Services



Digital Assistant



Speech



Language



Vision



Document Understanding



Anomaly Detection



Forecasting

Machine Learning Services

Advanced GPU infrastructure

Data



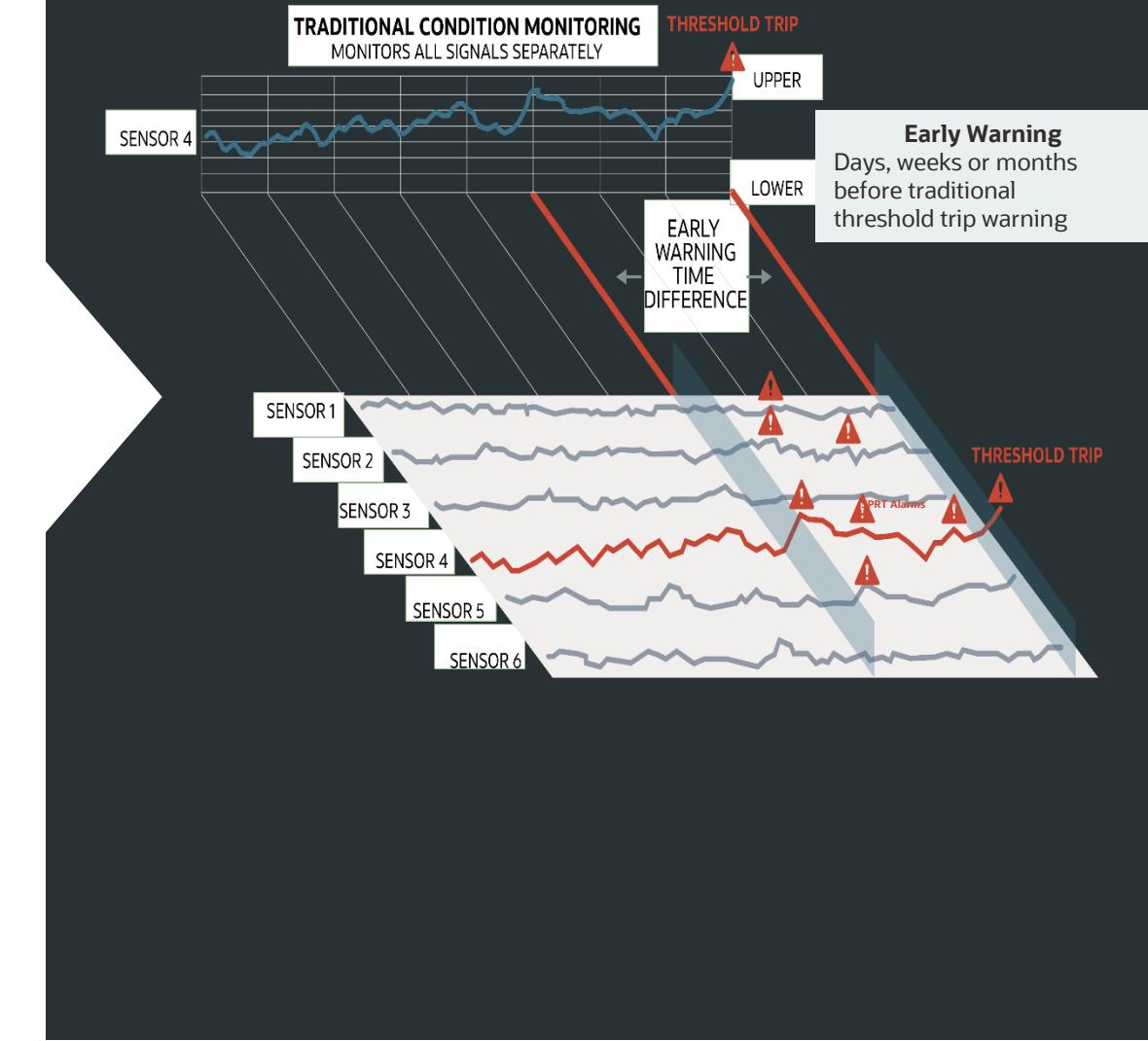
Anomaly Detection

Predict critical incidents by identifying outliers

Predict and respond to critical events equipment failure

Automatically detect issues and trigger remediation processes

Recognize and adapt to demand changes before it's too late





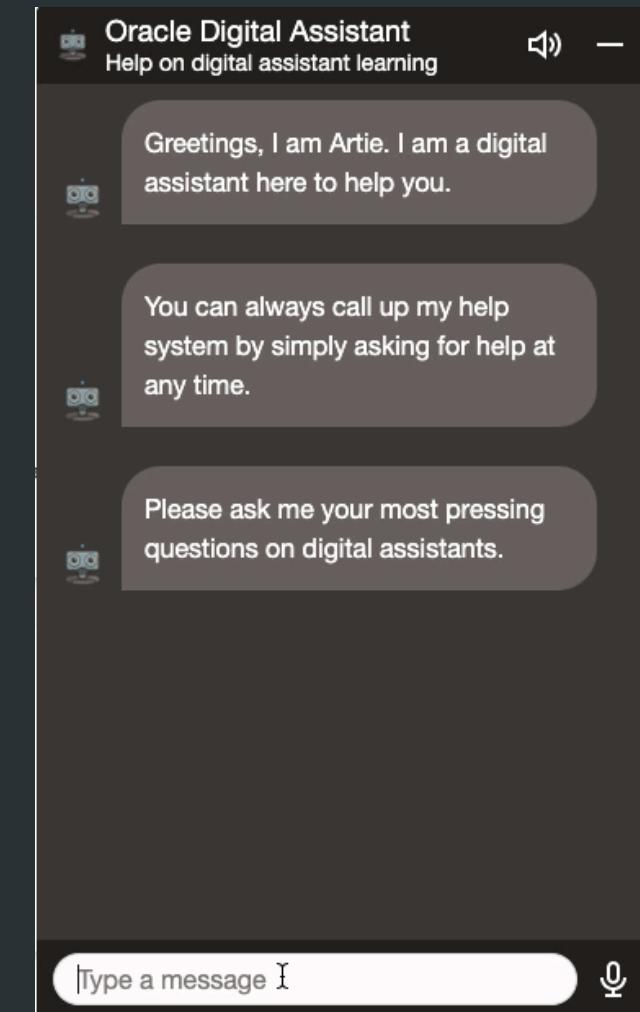
Digital Assistant

Intelligent self service chatbot providing chat, text message, and voice interfaces

Improve self-service experiences with chatbots, voice interfaces, intuitive search

Reach new audiences by creating new application interfaces and dashboards

Create more intelligent customer experiences with added personalization, prediction, analytics, and more





Document Understanding

Recognize and extract text, tables, and key data

Extract text from scanned documents, mobile uploads, PDFs, and more

Preserve table formats and key value relationships recognized in documents

Easily automate tedious business processes based on data output in JSON format

Pretrained using enterprise focused data, providing accurate results for enterprise focused use cases



Text

Tables

Key : value pairs

Application processes and automations



Language AI

Text AI to classify sentiment and extract important entities

Analyze text at scale

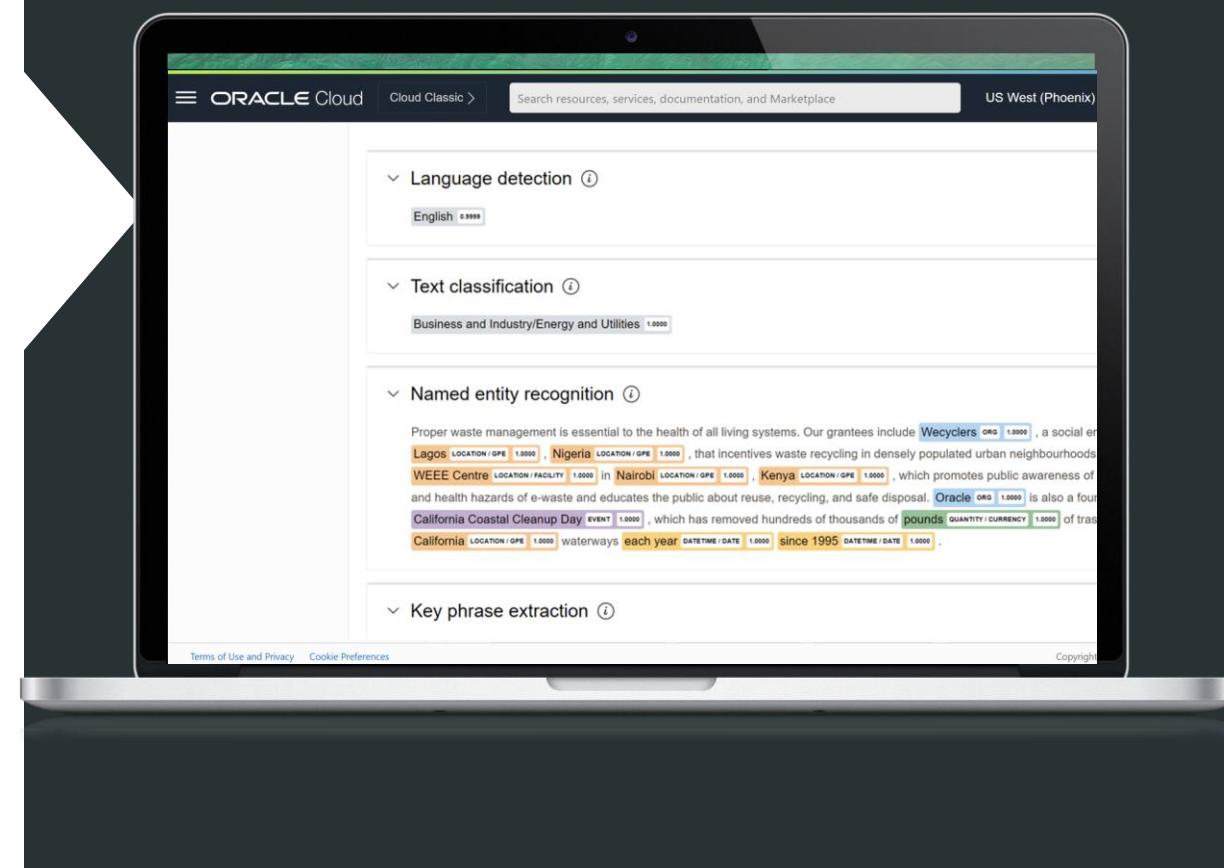
Translate to/from 20+ languages to easily reach new audiences and consumers

Improve user experience by understanding sentiment from text

Recognize sensitive information to protect privacy and ensure compliance

Input text:

Reviews
Voicemail transcriptions
Social media posts
Reports
Articles





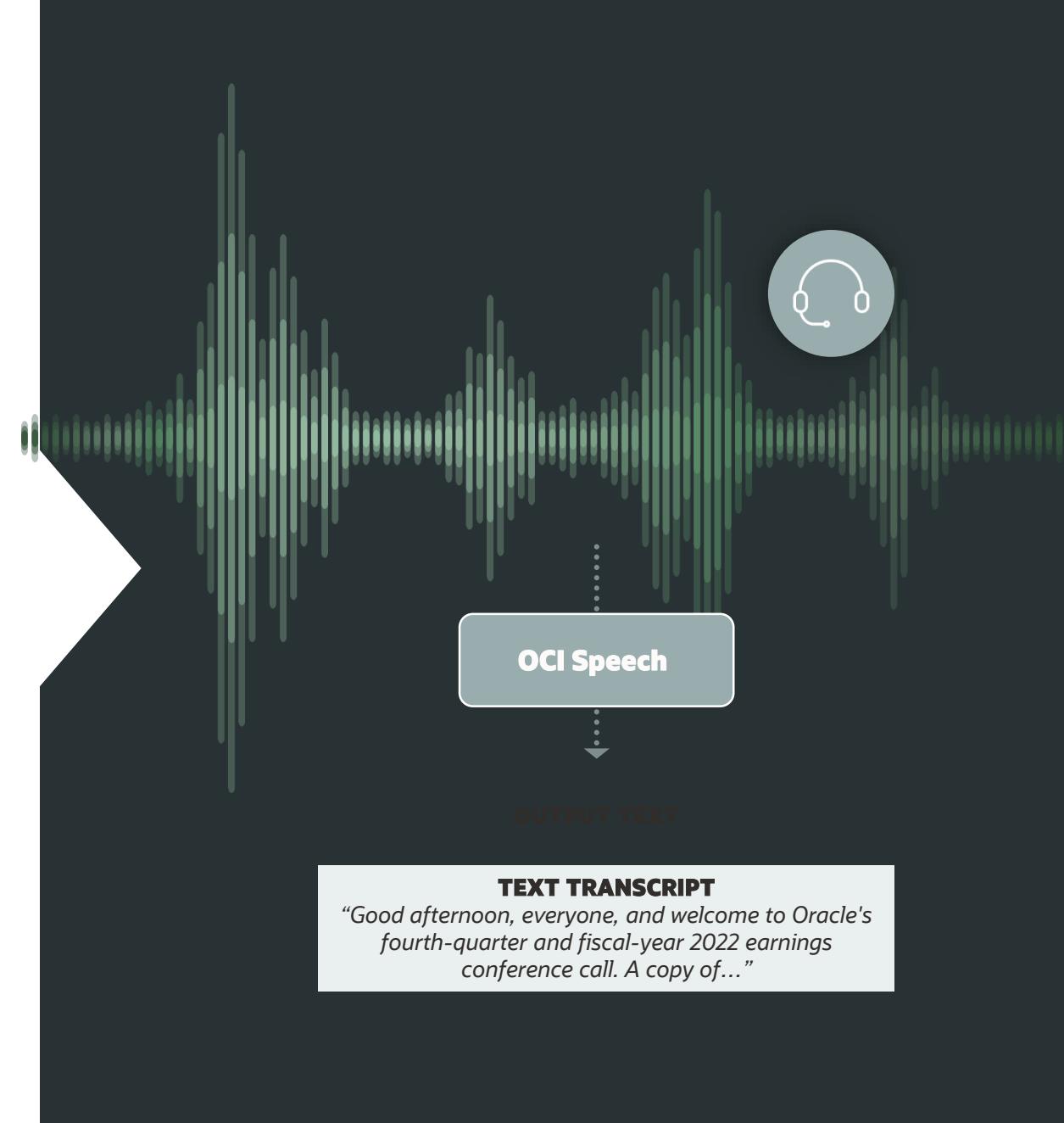
Speech AI

Transcribe spoken audio with multilanguage support

Create searchable, indexed data by transcribing audio files

Filter profanities and leverage confidence scores

Combine with Language or other AI services to analyze sentiment, translate to other languages, and extract key information





Vision AI

Understand images and detect objects

Automate workflows and actions based on image analysis

Gain insights from visual data by automatically extracting text and objects

Enrich image-based files with metadata, including objects and colors for better indexing and retrieval in a digital asset management system

Image classification

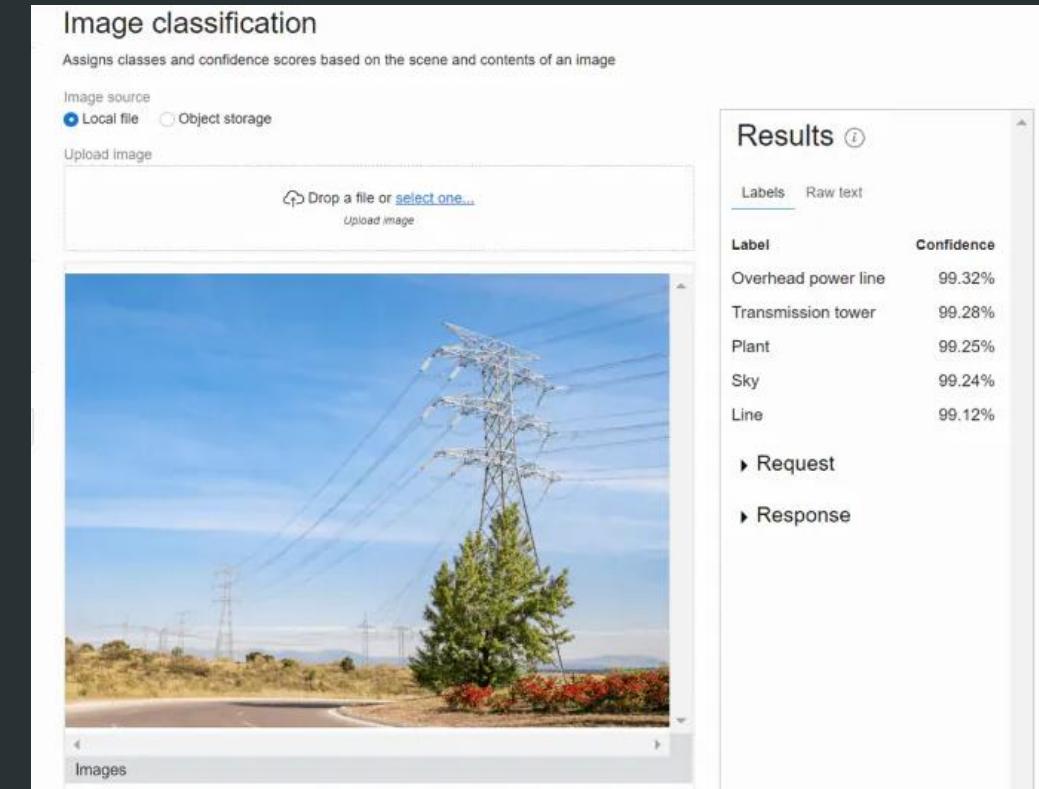
Assigns classes and confidence scores based on the scene and contents of an image

Image source

Local file Object storage

Upload image

Drop a file or [select one...](#) [Upload image](#)



Label	Confidence
Overhead power line	99.32%
Transmission tower	99.28%
Plant	99.25%
Sky	99.24%
Line	99.12%

Results [i](#)

Labels Raw text

Label	Confidence
Overhead power line	99.32%
Transmission tower	99.28%
Plant	99.25%
Sky	99.24%
Line	99.12%

► Request

► Response

Images

Use Case Examples

Healthcare



Hospital Staff Scheduling

- Optimize hospital staff scheduling based on forecasted demand and skillset

Financial Services



Fraud Analytics

- Prevent fraud and financial crimes
 - Insurance claims fraud prediction (property insurance, health insurance)
 - Anti-Money Laundering
 - Know your customer

Retail



Customer Experience

- Understand customer sentiments based on social media and website data
- Improve customer engagement via conversational bot
- Deliver personalized recommendations

Manufacturing



Production Monitoring

- Monitor operations metrics and forecast to improve planning
- Monitor equipment KPIs and predict failures

Transportation



Inventory Analytics

- Monitor inventory and forecast to improve cost and production plan
- Optimize procurement and replenishment schedules

Benefits of machine learning services

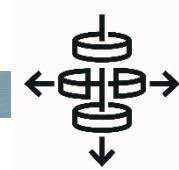


Machine Learning and
AI

High-performance data science



Open platform



- Provide access to automated workflows for building models
- Operationalize ML more easily with reusable jobs and e2e orchestration for ML lifecycle
- Run distributed, high-performance workloads with access to bare metal GPUs

Improved AI experience



- Access to world's best AI software and hardware on OCI
- Use favorite open source tools, frameworks, and models
- Run your AI models anywhere, including hybrid or multicloud platforms

Best-in-class support



- Single discovery and publishing experience for models, features, datasets, and labels
- Operationalize ML at scale
- Choose from in-database machine learning or options with access to open source

- White glove treatment
- Data scientists on staff, dedicated to ensuring your organization's success



Create custom models

Machine Learning Services from Oracle

Applications

AI Services

Machine Learning Services



Data Science



ML in Oracle Database



Heatwave ML



Data Labeling

Advanced GPU infrastructure

Data



Unlock new opportunities

Create data science models with access to open source technologies

Leverage cutting-edge technologies to improve existing processes

Create new opportunities with more insights and knowledge

Drive revenue growth and enter new markets

OCI Data Science

- Accelerate and automate the entire end-to-end data science lifecycle
- Use favorite open-source Python tools and frameworks
- Gain enterprise-grade MLOps with flexible interfaces and unlimited scale
- Collaborate with teammates on shareable and reproducible data science assets
- Run large-scale workloads with access to bare metal GPUs





Faster access to data insights

Gain greater visibility into data and increase efficiency

Decrease timelines for manual processes from months and weeks

Reduce backlogs in gathering and visualizing data

Gain new insights to change business decisions

Machine Learning in Oracle Database

- Support data scientist productivity and empower non-experts with AutoML
- Gain algorithm-specific data preparation, integrated text mining, and partitioned models
- Benefit from over 30 high performance in-database machine learning algorithms
- Deploy and update machine learning models in production via SQL and REST APIs
- Deploy R and Python user-defined functions using managed processes



Real-time marketing insights

Accelerate complex queries from minutes to milliseconds

Analyze massive amounts of data in real time

Understand investments and predict how changing to new channels will perform

Save cost and time

MySQL Heatwave ML

- Includes everything needed to build, train, deploy, and explain ML models
- Automated ML lifecycle, which means expert data scientists aren't required
- Avoid ETL effort and cost with no need to move data to a separate ML service
- Accelerate ML initiatives, while improving security and reducing costs



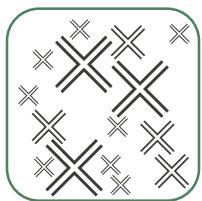
**Build on AI-optimized
infrastructure**

Accelerated AI and HPC Infrastructure

Equal to or better than on-premises

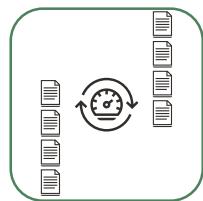


Workloads that previously
needed to be on-premises



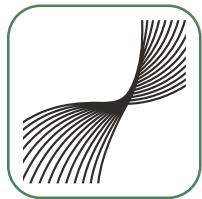
Billions of parameters

Intense AI computation



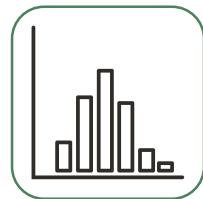
High performance file system

Rapid, parallel read & write



Computational fluid dynamics

Intense matrix computation



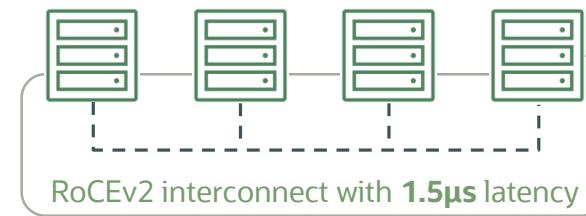
Monte Carlo Simulations

Multivariate computation and analysis

Move to **Bare Metal Compute** on OCI

Build a high performance cluster

Choose between
optimized CPU or
accelerated GPU



Choose:

GPU

AMD: 64 cores
NVIDIA: 8x A100
2TB memory
1.6 Tbps RDMA

Up to 64
512 GPU cores
4,096 CPU cores



Hi-speed CPU

Intel: 36 cores
512GB memory
100 Gbps RDMA

Up to 512
30K CPU cores



Dense I/O

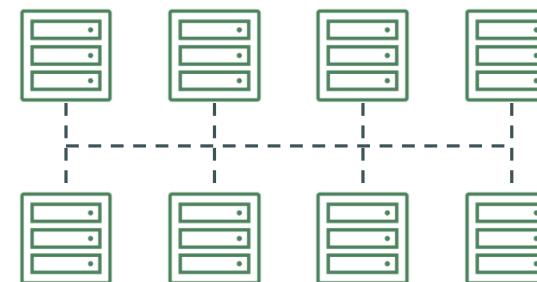
AMD: 128 cores
2 TB memory
54.4 TB NVMe

Up to XYZ
CPU cores



Build a distributed, resilient file cluster

BeeGFS, Lustre,
GlusterFS, WEKA, or
IBM Spectrum Scale





Advanced GPU clusters

Extreme performance NVIDIA shapes and networking

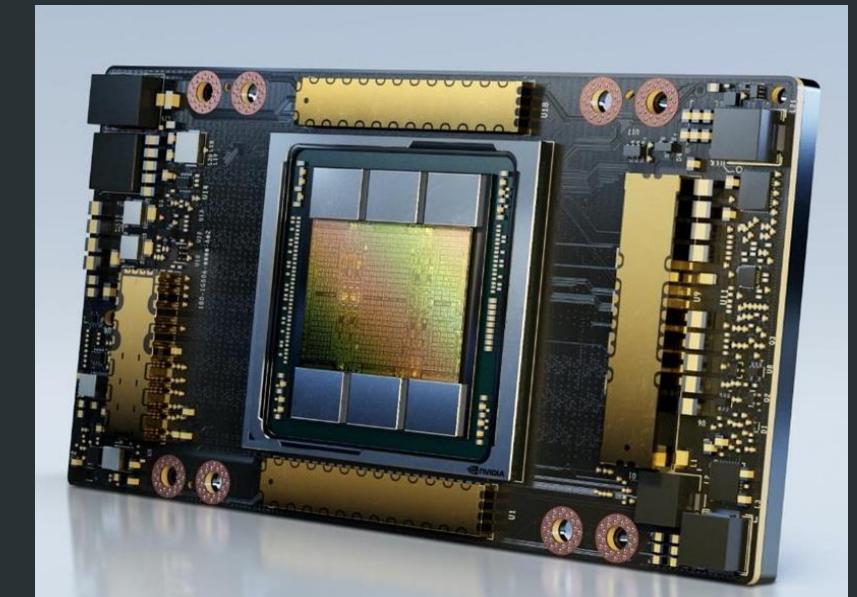
Train models faster than ever and improve time to market for your AI use cases

Partnership and alignment with NVIDIA, the industry leading chip manufacturer

Competitive pricing and flexible deployment options to reduce overhead of on premises implementations

NVIDIA Shapes

- A10
- A100
- H100 – coming soon





Why Oracle for AI?



Unlock your data's AI potential with a modern data platform

Managed and converged data platform



- Combines transactional database, data warehouse, and data lake capabilities into a single platform for AI data, with complete support for many types

One cloud platform from SaaS till IaaS



- Integrated suite of SaaS, IaaS and PaaS with hybrid and multicloud choice

Industry-leading tools for many data types



- GoldenGate, Data Integration, Kafka-compatible streaming, Informatica IDMC, and other partner services

Full portability without vendor lock-in



- Integrated and fully managed stack for all analytics including Oracle applications as well as third-party applications



Oracle Databases



Open Source Databases



Data Lake



Storage



Analytics and BI



Build and extend apps with AI

Work
how you like:



Improve
developer speed:



First-class
reliability:



Superior
cost-performance



- Access to favorite developer services – from Git to K8s
- Open-source based managed services
- Open ecosystem – easily plug-in the tools, technologies and frameworks you're used to
- Integrated with your CI/CD and DevOps processes

- Easy to use pretrained AI and advanced data services
- Managed and Serverless services let you focus on code, not managing servers

- Secured by default
- Enhanced isolation- protecting your IP and Data
- High-performance networking for low-latency AI use cases
- Shared data, autonomous operations
- Designed for multicloud

- 3X better cost-performance compared to other cloud
- Granular Flex Shapes optimize resource consumption
- Better scaling economics
- Lower TCO with a seamless operational experience



Containers and
Functions



Developer
Services



Application
Integration



Compute

Integrate AI with Oracle's business applications

Oracle cloud applications

Better together



- A complete suite of SaaS applications that run on OCI
- Integrate with OCI AI Services, to add AI to your business apps

Modern user experience



- Use the award-winning Redwood Design System to extend Oracle cloud apps or build your own

Innovation that matters



- Rated as a cloud apps leader 49 times

Committed to your success



- Connected customer community to support you with proactive support and expert guidance

Enterprise resource planning

Human capital management

Supply chain management and manufacturing

Marketing

Sales

Service