ORACLE

Oracle Cloud Infrastructure

A secure, high-performance platform for all your workloads
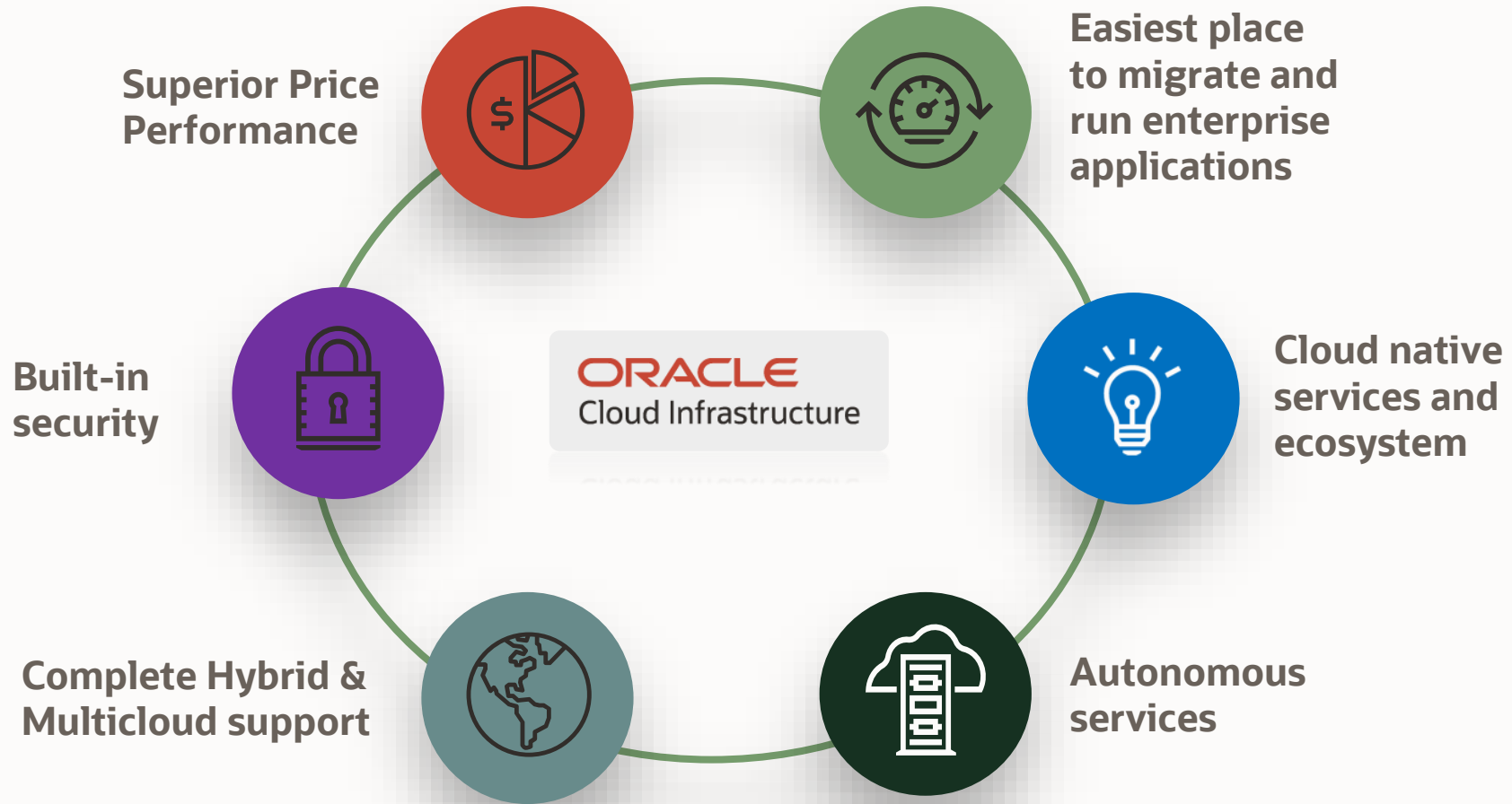
Jason Grogan

Director – **CE Infrastructure And Security Specialists**
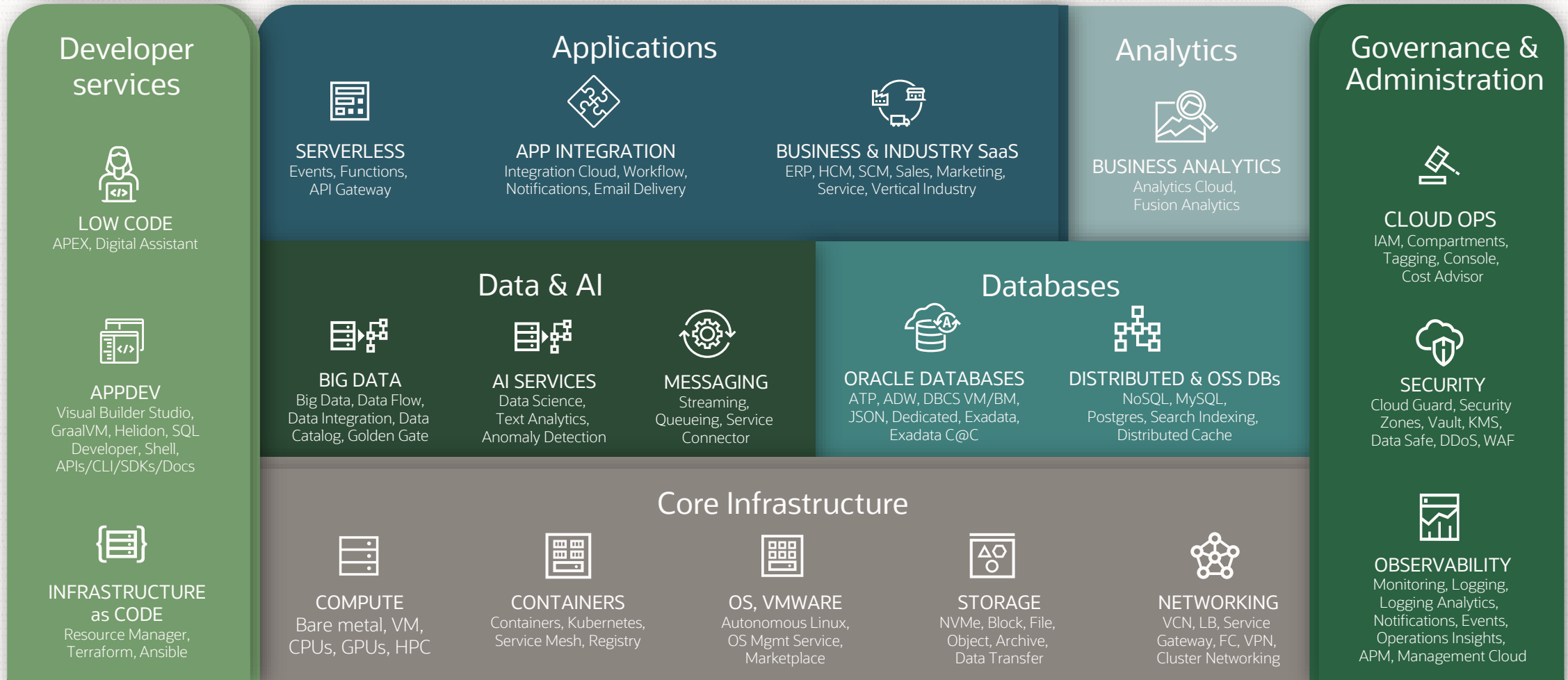
Oracle Cloud Infrastructure
Built for all your workloads

ORACLE
Cloud Infrastructure

Superior Price Performance

Easiest place to migrate and run enterprise applications

Built-in security

Cloud native services and ecosystem

Complete Hybrid & Multicloud support

Autonomous services

Complete cloud capabilities

Developer services

LOW CODE
APEX, Digital Assistant

APPDEV
Visual Builder Studio, GraalVM, Helidon, SQL Developer, Shell, APIs/CLI/SDKs/Docs

INFRASTRUCTURE as CODE
Resource Manager, Terraform, Ansible

Applications

SERVERLESS
Events, Functions, API Gateway

APP INTEGRATION
Integration Cloud, Workflow, Notifications, Email Delivery

BUSINESS & INDUSTRY SaaS
ERP, HCM, SCM, Sales, Marketing, Service, Vertical Industry

Analytics

BUSINESS ANALYTICS
Analytics Cloud, Fusion Analytics

Governance & Administration

CLOUD OPS
IAM, Compartments, Tagging, Console, Cost Advisor

SECURITY
Cloud Guard, Security Zones, Vault, KMS, Data Safe, DDoS, WAF

OBSERVABILITY
Monitoring, Logging, Logging Analytics, Notifications, Events, Operations Insights, APM, Management Cloud

Data & AI

BIG DATA
Big Data, Data Flow, Data Integration, Data Catalog, Golden Gate

AI SERVICES
Data Science, Text Analytics, Anomaly Detection

MESSAGING
Streaming, Queueing, Service Connector

Databases

ORACLE DATABASES
ATP, ADW, DBCS VM/BM, JSON, Dedicated, Exadata, Exadata C@C

DISTRIBUTED & OSS DBs
NoSQL, MySQL, Postgres, Search Indexing, Distributed Cache

Core Infrastructure

COMPUTE
Bare metal, VM, CPUs, GPUs, HPC

CONTAINERS
Containers, Kubernetes, Service Mesh, Registry

OS, VMWARE
Autonomous Linux, OS Mgmt Service, Marketplace

STORAGE
NVMe, Block, File, Object, Archive, Data Transfer

NETWORKING
VCN, LB, Service Gateway, FC, VPN, Cluster Networking

30 + COMMERCIAL REGIONS / GOV REGIONS / CLOUD@CUSTOMER

Many enterprise applications are challenging to move to the cloud

Enterprise applications

Technical computing

Departmental applications

First-generation clouds were not designed for:

- ✖ Ultra-low latency networking
- ✖ Persistent connections to relational databases
- ✖ Clustering for availability
- ✖ Scale-up architectures, rather than scale-out

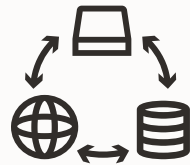# OCI core technologies make it far easier to migrate enterprise applications

Off-box virtualization

Complete instance isolation for higher security and performance

Custom security chips

Zero-trust approach to keep you safe from other tenants

Non-blocking networks

Cloud networks designed to match dedicated on-premises networks

L2 network virtualization

Cloud networking to natively support VMware, Oracle Database, and other clustering architectures
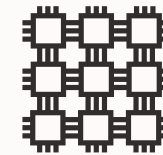
RDMA cluster networking

Microsecond latency clusters for the most compute-intensive workloads
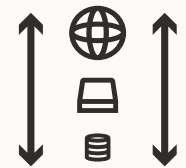
Flex infrastructure

Online infrastructure scales resources up and down; economy with preemptible and burstable instances

Automated Planning Tools and Migration Options
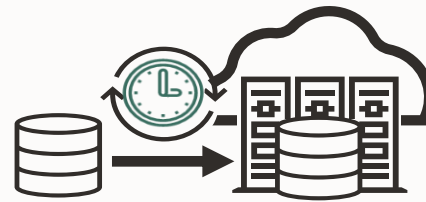Streamlined database migration Oracle Database Cloud Services in OCI
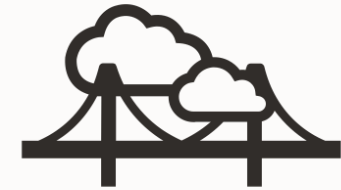
Planning tools
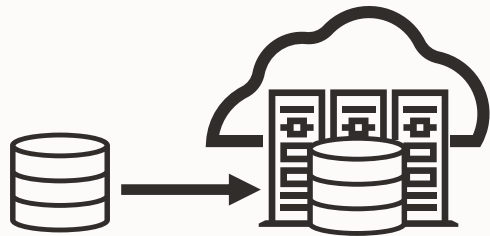
Cloud Migration Advisor

Oracle Database Consolidation
Workbench and Advisor

Migration options

Zero Downtime Migration

Online

GoldenGate

Physical   **Logical**

Offline

Recovery Manager (RMAN)

Data Pump

Oracle makes it easy to move to the cloud: from design to go-live
Maximize TCO, minimize risk, accelerate your success

Flexible licensing, Volume discounts

Bring Your Own License

BYOL from on-prem to OCI

Extend your Oracle apps support to the cloud

Universal Credits

Credits that can be used for any infrastructure or platform services worldwide

Volume discounts

Ability to ramp consumption, and increase predictability

Easy to migrate, no re-architecture, strong SLAs

No Re-Architecture

Application and data move as-is

Keep customizations, integrations

No retraining required

Availability, Performance, and Manageability SLAs

Including high performance compute, block volume, object storage, and FastConnect

The first major cloud vendor to guarantee performance

Oracle Cloud Lift

White glove services to help you move and go-live at no additional cost

Business Case Development

Architecture Design

Network/Security Review

Onboarding

Migration

Training

Go-Live Support

Oracle Support Rewards

Earn rewards to reduce your tech license support bill, even down to zero

Earn 25 cents for every $1 you spend on OCI

No limits to rewards you can earn, or how much you can apply

Everything you need to build modern cloud native applications

Broad set of OCI services

Interfaces and automation
Console, CLI, API/SDKs, cloud shell, resource manager (Terraform)

API management
API design / API gateway

Databases
Oracle Autonomous Database, MySQL services

Containers
Container registry, Container Engine for Kubernetes

Machine learning
Full lifecycle ML service (data prep, training, inference)

Serverless
Functions for serverless code execution

Streaming
Kafka-compatible service

Ops
Continuous deployment, observability, management, monitoring

Deep tools ecosystem

Terraform

ANSIBLE

GitHub

GitLab

paloalto NETWORKS

TREND MICRO

FORTINET

PagerDuty

cybereason

TANIUM

JFrog

servicenow

DATADOG

RANCHER

Grafana

More details

OCI is open across the stack

Technology	Oracle Cloud	Oracle elsewhere
Language	Java	
OS	Autonomous Linux + OSMS	Autonomous Linux
Containers	Docker/Kubernetes	
Serverless	Fn-based Functions	Fn
Database	Oracle Database/MySQL	
Data processing	Oracle Database/Spark	
Automation	Terraform	
Events	CNCF Events	
Streaming	Kafka-compatible	Kafka
Gateway	API Gateway	
APM	Monitors cloud and on-prem	
Identity	SAML Federation, OAuth, OpenID	
Multi-cloud	Azure Interconnect	

Open Source Initiatives Supported

Java · kubernetes · MySQL · CLOUD NATIVE COMPUTING FOUNDATION · fn · HashiCorp Terraform · kafka · OPENAPI INITIATIVE

Autonomous services automatically secure, tune, and scale your apps

✔ **Automatic provisioning**

✔ **Automatic configuration**

✔ **Automatic encryption**

✔ **Automatic online patching and updating**

✔ **Automatic elastic scaling**

✔ **Automatic tuning**

→

Eliminates human labor

Eliminates human error

Eliminates scaling complexity

Eliminates performance tuning

Eliminates downtime

Oracle Autonomous Database supports a wide range of transactional and analytics workloads

Oracle Autonomous Data Warehouse

Analytical and machine learning workloads

62% lower
total cost of operations

Oracle Autonomous Transaction Processing

Business applications and mixed workloads

50X better storage latency
than Amazon Aurora

Oracle Autonomous JSON Database

Document database

30% cheaper
than MongoDB Atlas

Support multiple data models without sacrificing security and governance controls

The most complete support for hybrid and multi-cloud strategies

Oracle Public Regions

Hyperscale cloud regions in 30 worldwide locations

Dedicated Regions

All OCI services, running in customer data centers

Oracle Cloud VMware Solution

Native VMware on OCI in public cloud or dedicated regions

Exadata Cloud@Customer

Cloud Autonomous Databases, running in your data center

Roving Edge Infrastructure

OCI compute and storage for remote, disconnected use

Microsoft Azure Interconnect

Regional low-latency integration for multicloud architectures

Worldwide or exactly where you need it, with scale and control

Oracle Cloud Infrastructure Global Locations
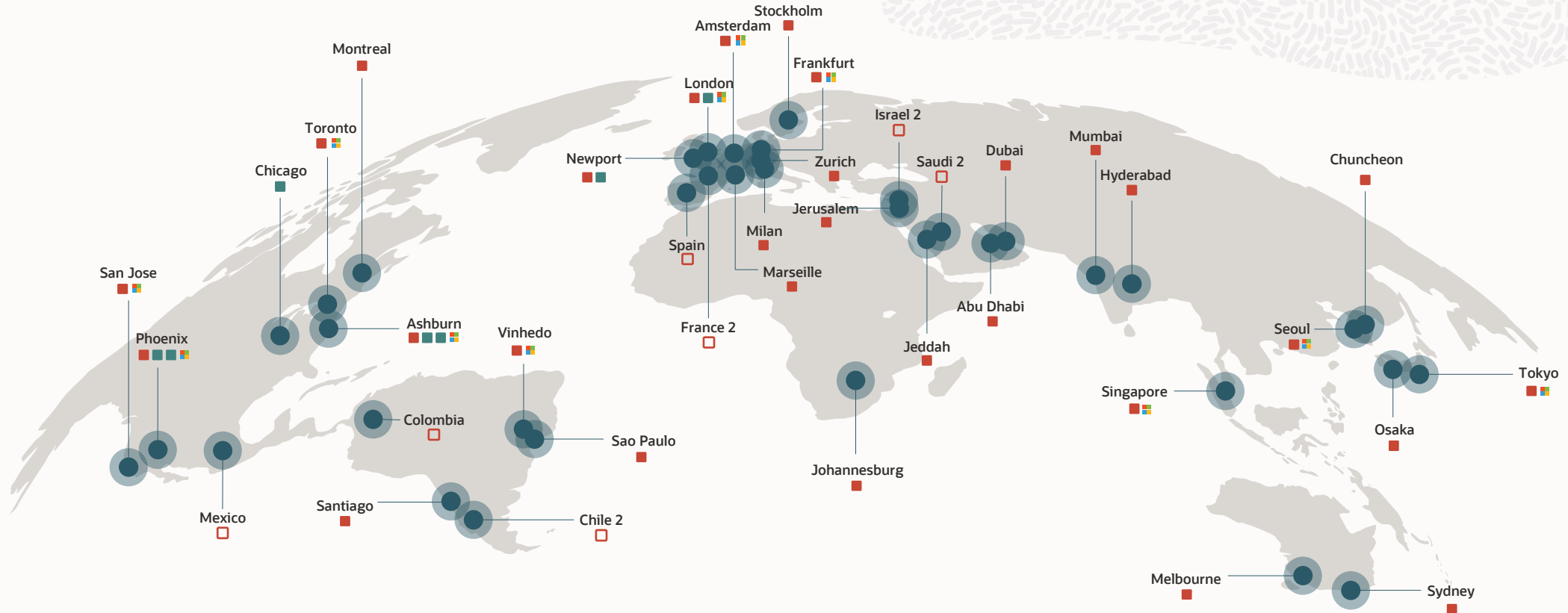
April 2022

37 regions; 7 more planned by end of 2022

11 Azure Interconnect Regions

Legend:
- Commercial
- Commercial Planned
- Government
- Microsoft Interconnect Azure

Locations: Montreal, Stockholm, Amsterdam, Frankfurt, London, Israel 2, Toronto, Chicago, Newport, Zurich, Saudi 2, Dubai, Mumbai, Chuncheon, Hyderabad, San Jose, Ashburn, Spain, Jerusalem, Milan, Phoenix, Vinhedo, Marseille, Abu Dhabi, Seoul, Tokyo, Colombia, France 2, Jeddah, Singapore, Osaka, Sao Paulo, Santiago, Chile 2, Johannesburg, Melbourne, Sydney, Mexico

Oracle Dedicated Region Cloud@Customer

All the capabilities of an Oracle public cloud region, delivered on-premises

OCI support & SLAs

Pay only for what you use

Installed and operated at customer site by OCI
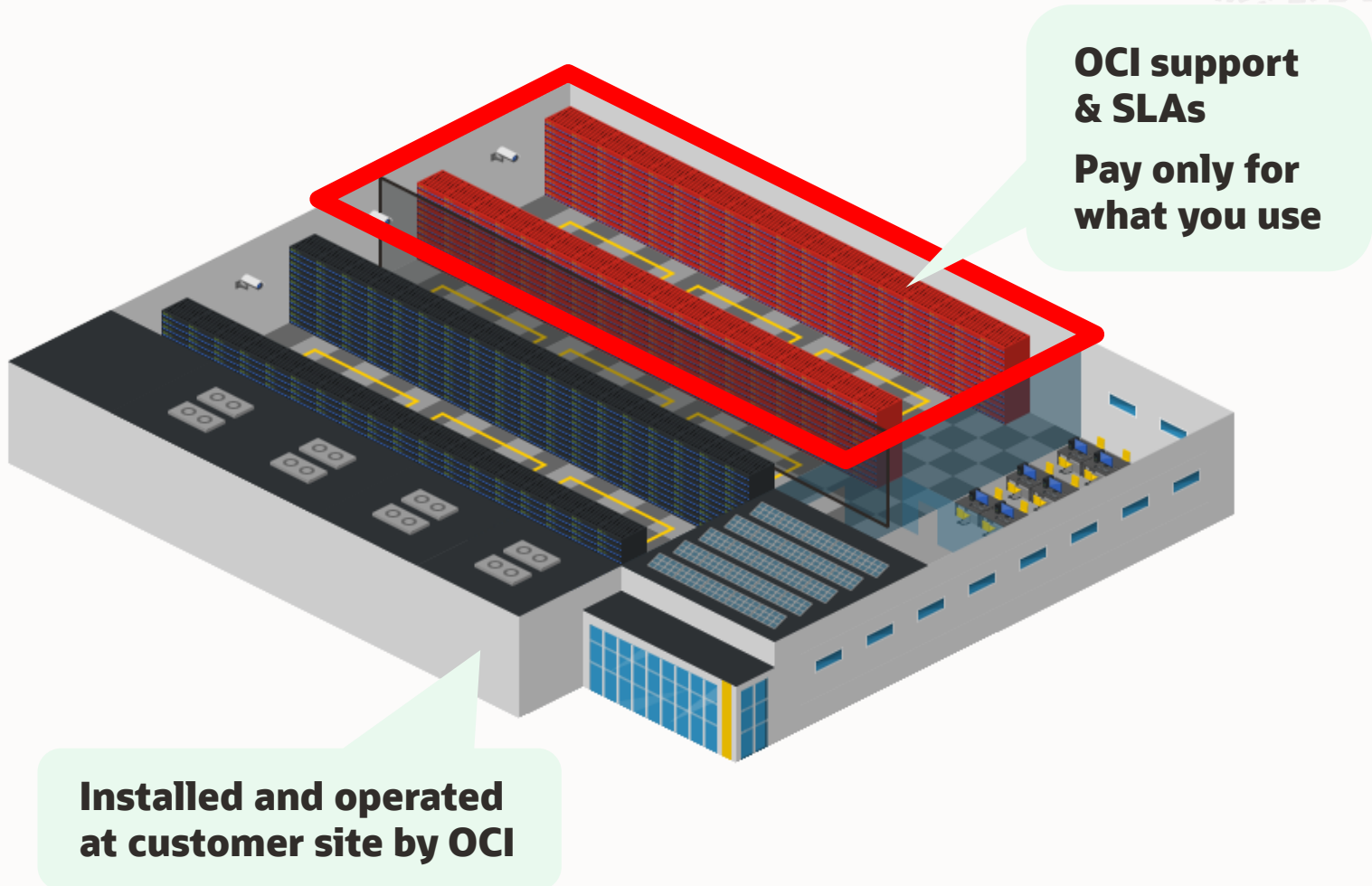
80+ OCI CLOUD SERVICES

Latest compute, storage, networking, security services

Modernize Data Platform: Autonomous Database, Exadata, MySQL + Heatwave, Object Storage Data Lake, Big Data services like Spark, Data Science

Optimize Apps: Observability and Management

Modernize Applications: Developer Services like Container Engine, Kubernetes, DevOps

SaaS in your own data center: Oracle Cloud Applications like ERP, HCM, ACX

Oracle Cloud VMware Solution

ORACLE CLOUD VMWARE SOLUTION

10's to 1,000's of VMs

vmware®

3-64 node
bare metal compute clusters

80+ cloud services

10's to 1,000's of VMs

vmware®

Customer's servers on-prem

ORACLE CLOUD INFRASTRUCTURE
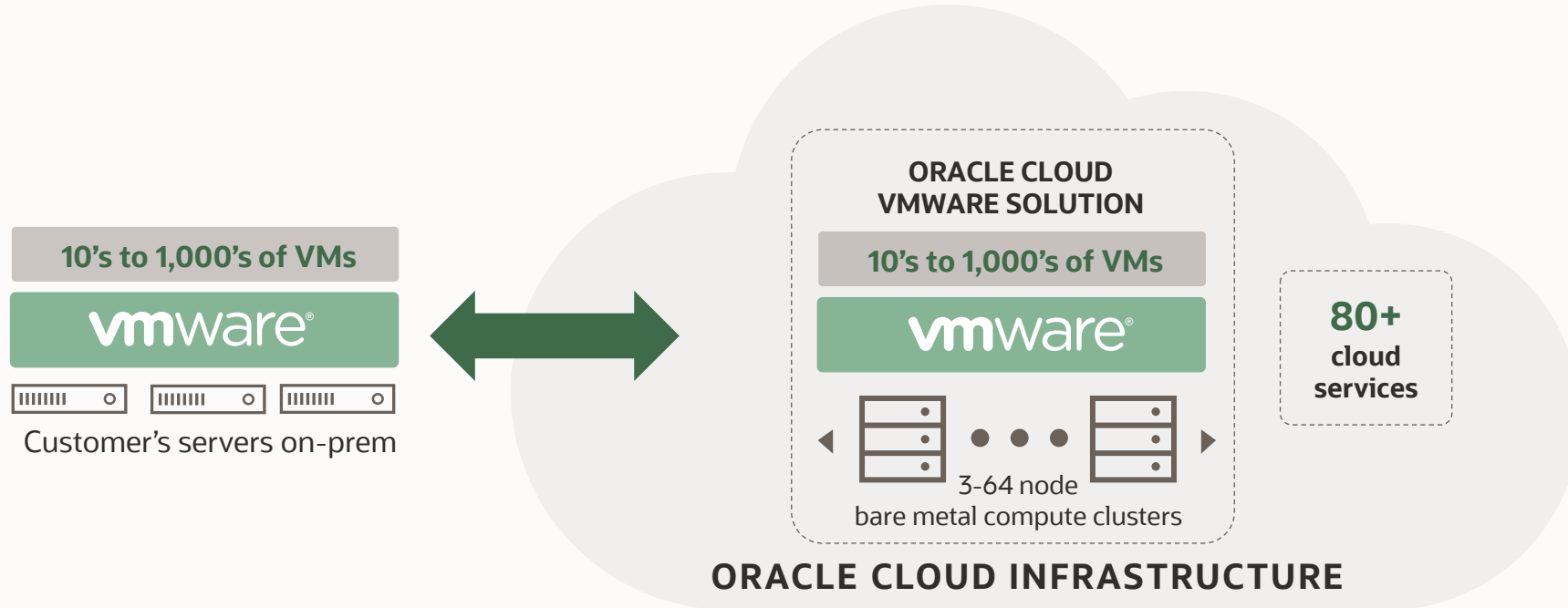
Key use cases:
• Data Center Migration
• Hybrid Cloud Expansion
• Disaster Recovery Site

Protect VMW Investment

Most like on-premises VMW
Control versions, policies
Full access, all features

Modernize Infrastructure

Elastic capacity
OCI + NSX + hybrid flexibility
Security-first architecture

Modernize Applications

Increase performance & scale
Integrate 80+ OCI services
Integrate Oracle SaaS

Global Availability

23 commercial regions
5 US Gov regions
OCI Dedicated Region

(June 2021)

Oracle Cloud + Microsoft Azure Interconnect
Multicloud solution

ORACLE + ■■ Microsoft

Customer Premises Equipment · **Customer Data Center**

FastConnect/VPN · ExpressRoute/VPN

ORACLE Cloud Infrastructure

VCN

Autonomous DB / Exadata · **Enterprise Applications** · **FastConnect** · · · · · **ExpressRoute**

■■ Microsoft Azure

vNet

Microsoft Applications · **Azure Services**

ORACLE CLOUD INFRASTRUCTURE (Ashburn)

MICROSOFT AZURE (US East region)
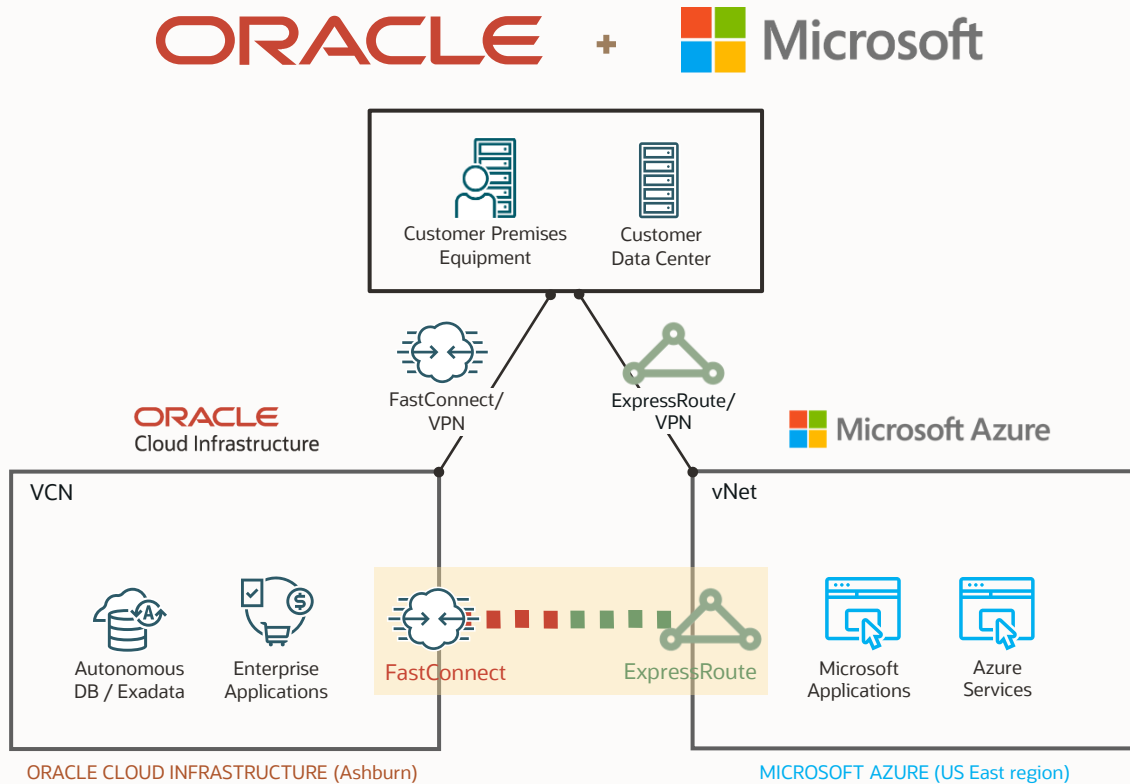
✓ Microsoft Azure and Oracle Cloud are **interconnected today**, so you can migrate and run mission-critical enterprise workloads across clouds

✓ **FastConnect and ExpressRoute** direct connection with 2 millisecond latency and no intermediate service provider required

✓ **Unified identity and access** management via single sign-on with automated user provisioning to easily manage resources across clouds

✓ **Collaborative support** of workloads across clouds, for example, custom and Oracle Applications on Azure with Oracle Database cloud services – connect best-in-class services across clouds

✓ **Available Now:** Ashburn, San Jose, Vinhedo, Toronto, London, Frankfurt, Amsterdam, Tokyo

✓ **Coming Soon:** Government, Asia, Europe regions

Oracle Security protects your data

- Protecting data is top priority

- Foundational requirement is establishing trust

- From "zero trust" to ensuring that trust is established for any infrastructure, application and interactions with data

- Secure-by-design, incorporating security requirements and threat modeling end-to-end

- Continuous assessment of risk and trust

Effective cloud security is built in, not bolted on

Stronger isolation and control from data to identity

Application

Edge Services
- Global PoPs
- DDoS Protection
- DNS Protection
- WAF Protection

Monitoring
- 3rd Party Security
  - NGFW
  - IPS
  - SIEM
- User Monitoring
- Configuration Monitoring
- Logging/Flows
- Governance
- Compliance

Virtual Network
- Interface Segmentation
- Network Isolation
- SLs/NSGs
- Private Networks
- Bastion Access
- SSL Load Balancing
- FastConnect WAN
- IPSec VPN

Instance
- Root-Of-Trust Card
- Tenant Isolation
- Hardened Images
- Hardware Entropy
- SSH Keys
- Certificates
- Signed Firmware
- Hardware Security Modules

Data/Database
- At-Rest-Crypto
  - OSS – AES-256
  - DB – TDE
- In-Transit-Crypto
  - TLS
  - DB – NNE
- Managed Keys
- Custom Keys
- Managed Vault

Identity
- Identity Federation
- Role-Based Policy
- Compartments & Tagging
- Instance Principals
- Resource Principals

Internet

OCI Advantage
6. Comprehensive Regional, Global & Industry Compliance

REGIONAL

Australia
- IRAP
- APRA
- Certified Strategic (DTA)

India
- MeitY
- RBI/IRDAI

Singapore
- MTCS
- MAS TRM
- ABS

South Korea
- FSI
- ISMS

Japan
- ISMAP
- FISC
- NISC
- Three Ministries
- My Number Act

GLOBAL

AICPA SOC
SOC 1 : SOC 2 : SOC 3

ISO
9001 : 27001 : 27017 : 27018 : 27701: 20000-1

Trusted Cloud Provider CSA
Level 2
CSA STAR

INDUSTRY

Government

MeitY [India]

IRAP [Australia]

NISC [Japan]

K-ISMS [Korea]

My Number [Japan]

Singapore MTCS

DoD DISA SRG IL5

FedRAMP — JAB P-ATO

HM Government G-Cloud Supplier — G-Cloud 12

Cyber Essentials Plus [UK]

CJIS

NIST

Canada Protected B

Financial

PCI DSS – Level 1

FISC [Japan]

RBI Guidelines [India]

APRA CPS 231, SPS 231, HPS 231 [Australia]

ABS Guide [Singapore]

MAS Guidelines [Singapore]

IRDAI /5/142/2017 [India]

EBA

Others

HIPAA

HITRUST CSF

TISAX

GxP

Rely on consistent superior performance

OCI delivers on enterprise-grade computing requirements and aligns to the cloud's promise of competitive costs, rapid provisioning, and global scale support

Faster performance than other clouds, matches or exceeds on-premises

- Bare metal and VM CPU and GPU
- Bare metal HPC
- NVMe SSD local storage and block storage
- Bare metal, RAC, Exadata

More available network bandwidth between products
- No over-subscription, no noisy neighbors, very low latency
- High speed interconnects: 2 x 25Gbps bandwidth
- Predictable, low latency - < 100μs expected one-way latency between hosts in an AD, <500μs between ADs
- The only cloud network performance SLA

First cloud-based cluster networking with 1.5 μs latency
- The most stringent on-premises workloads can now run efficiently in the cloud
- Oracle connects the servers directly to the RDMA switch
- Cluster Networking – Up to 20,000 cores in a single RDMA cluster
- No hypervisor, no virtualization, no jitter bare metal HPC

More reliable, higher performance infrastructure at lower cost

Simplified, everyday low pricing

62% less expensive than AWS for compute

98% less than Azure for high-performance block storage

Same low price in every region

Substantially lower network pricing

<1/10 the cost of AWS and Azure for network bandwidth

Key enterprise capabilities are included free

Enterprise Support

Kubernetes management

Data security

Infrastructure security advisor

	Oracle vs. On-prem	Oracle vs. AWS
EBS	38% less	44% less
People Soft	38% less	52% less
Custom App	56% less	21% less
HPC	36% less	N/A
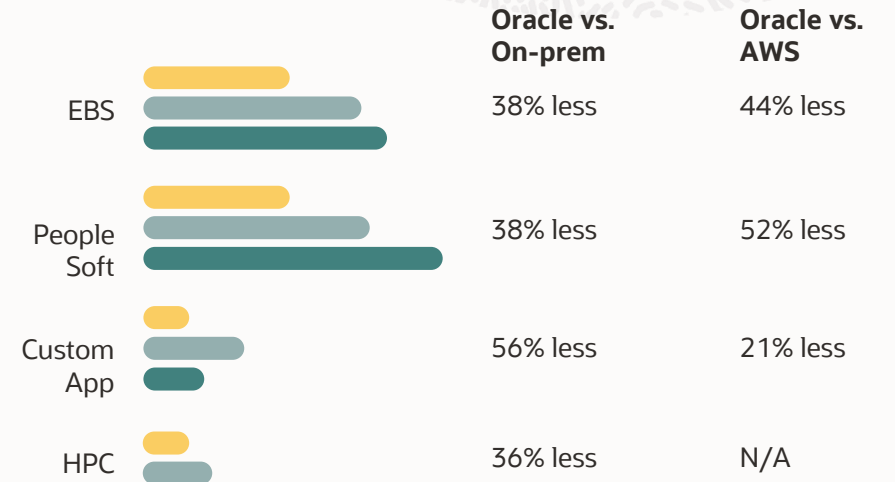
Backed by industry's only SLAs across three dimensions

	Oracle	AWS	Azure	GCP
Availability	99.95% Includes planned downtime	99.9%	99.9%	99.9%
Performance	Covered Disk IOPS & Network	No Coverage	No Coverage	No Coverage
Manageability	Covered API Error Rate	No Coverage	No Coverage	No Coverage

Analyst and customer reviews

Gartner
It's time to include Oracle as a viable option when evaluating public cloud providers

pilosa
DeepZen Oracle, AWS, and Azure benchmarking shootout

IDC
IDC: Oracle IaaS (OCI) receives the highest customer satisfaction score

RedMonk
IaaS pricing patterns and trends 2020

OMDIA
"Oracle Cloud Infrastructure provides a high level of security, performance, and competitive cloud economics."
Roy Illsley
Chief Analyst, Omdia

7-ELEVEN
"Oracle Cloud Infrastructure was undeniably the clear choice, There is no better solution for databases than Exadata, and Oracle is the only cloud that offers it."
Sanjay Date
Sr. Program Manager, 7-Eleven

zoom
"We explored multiple platforms, and Oracle Cloud Infrastructure was instrumental in helping us quickly scale our capacity and meet the needs of our new users."
Eric S. Yuan
CEO, Zoom

Oracle Cloud Infrastructure serves global brands across industries

Automotive **I** Financial Services **I** High Technology **I** Healthcare **I** Retail **I** Industrial Manufacturing & Industry Segments **I** Education (K-12)

Why customers are choosing OCI

1. Far easier to migrate critical enterprise applications

2. All the services developers need to build cloud-native applications

3. Autonomous services make it far easier to manage security, performance, and scalability

4. The most complete support for hybrid cloud strategies

5. Security that's built in, on by default, at no extra charge

6. Superior price-performance

Two free trial options

New

Always free

Services you can use for an unlimited time

$+$

Free trial

Free credits for 30 days

Learn, explore, and build for free

oracle.com/cloud/free/

Product-specific content

ORACLE

Compute

Compute services for any enterprise use case

Bare Metal	VMs	Containers	Functions
• Instance isolation • Highest IOPS • High throughput • Low latency	• Flexible sizing • Security-hardened hypervisor • Burstable instances • Preemptible instances • Dense IO and dedicated host	• Managed Kubernetes • Bare metal option • Self-healing clusters	• Pay only for usage • Serverless • Container-native • Open source

AMD EPYC	Intel Xeon	Ampere (Arm)	NVIDIA GPUs

Local Attached Storage	Remote Attached Storage
NVMe SSDs Up to 51.2 TB Millions of IOPS	NVMe Block Volumes up to 1 PB 32 TB / volume 225 IOPS / GB

Fast and scalable compute: Flex VMs, bare metal, and GPUs

WEB & APPLICATION SERVERS, STREAMING	ENTERPRISE APP SERVERS, DATABASES, BIG DATA	CLOUD NATIVE APPLICATIONS	HPC, AI/ML, 3D RENDERING	DNA SEQUENCING, CFD, CRASH SIMULATIONS

Virtual Machine

Flexible Ampere A1 Virtual Machines 1-80 OCPUs, 1-512 GB RAM, $0.01 core/hr, $0.0015 GB RAM/hr

Flexible E4 Virtual Machines 1-64 OCPUs, 1-1024 GB RAM, $0.025 core/hr, $0.0015 GB RAM/hr

Flexible X9 Virtual Machines 1-18 OCPUs, 1-256 GB RAM, $0.054 core/hr, $0.0015 GB RAM/hr

Bare Metal Compute

Ampere A1 Bare Metal Standard 160 OCPUs, 1024 GB RAM, $3.136/hr

E4 Bare Metal Standard* 128 OCPUs, 2048 GB RAM, $6.272/hr

X7 Bare Metal Standard* 52 OCPUs, 768 GB RAM, $3.3176 hr. **X7 BM Dense** adds 51.2 TB NVMe local storage, $6.6352/hr

X9 Bare Metal Dense 36 OCPUs (3.6 Ghz Turbo), 512 GB RAM, 3.84 TB NVMe, 100 Gbps RDMA, $2.712/hr

VM GPU 3.x 1-4 V100 GPUs, 6-24 OCPUs, 16-64 GB RAM, $1.275 - $2.95 GPU/hr

Bare Metal GPU 3.8 8 V100 GPUs, NVLINK, 52 OCPUs, 768 GB RAM, $23.60/hr

Bare Metal GPU 4.8 8 A100 GPUs, NVLINK, 64 OCPUs, 2 TB RAM, 8 x 200Gbps RDMA, $24.40/hr

- All instances can attach up to 1PB of block storage
- X7 standard VM instances are also available in "t-shirt" sizes from 1-24 OCPUs, 15-320 GB RAM
- X7 dense VM instances are available in "t-shirt" sizes from 8-24 OCPUs, 120-320 GB RAM, 6.4-25.6TB local NVMe storage
- *Also available as Dedicated VM Hosts

Storage

Comprehensive, best-performing storage services for enterprise workloads

Local	Block	File	Object
NVMe SSDs Up to 51TB Millions of IOPS 10-100 µs latency	NVMe SSDs 32 TB / volume 225 IOPS / GB <1ms latency Online performance tuning and capacity expansion	HA file system Start with KBs, scale to Exabytes	Distributed, HA Self-healing Unlimited scalability

HPC File Systems	Archive	Storage Gateway	Data Transfer
IBM Spectrum Scale, Lustre, BeeGFS, GlusterFS Proven 60 GB/s performance	Durable object storage at 90% lower cost	Local NAS-like performance Configurable cache	Move petabyte scale data Option for appliance, disk No cost to transfer data

Complete storage portfolio, with consistently fast performance

DATA LAKE, RICH MEDIA, LOGS, BACKUP, ARCHIVE

ENTERPRISE APPLICATIONS, DATABASES, GPU, CONTAINERS, APPLICATION LIFECYCLE

ANALYTICS, OLTP, HPC, CONTAINERS, KUBERNETES

X7 Bare metal Dense IO
51 TB
NVMe SSD
5M IOPS
Performance SLA

Block Volumes
Network NVMe SSD block storage
Up to 32 TB volumes
Up to 1 PB/host
Up to 225 IOPs,
2,680 MB/s per volume
Snapshots, scheduled backups,
clones, grouped clones,
encryption, online performance &
capacity scaling
Performance SLA

File Storage
Network NVMe SSD file storage
150 MB/s per TB
Scales to exabytes, NFS, NLM,
snapshots, encryption

X9 Bare metal Dense IO
3.84 TB
NVMe SSD
100 Gbps RDMA

Object & Archive Storage
Limitless capacity
Native & S3 APIs, HDFS,
encryption, storage lifecycle,
WORM, 10TB max object size

X7 VM Dense IO
6.4-25.6 TB
NVMe SSD
1.8M IOPS
Performance SLA

Storage Gateway
NFS, at rest and inflight
encryption, configurable cache

Data Transfer Service
HDD or 150TB appliance, encryption

Networking

High fidelity virtual networks and connectivity

VCN	FastConnect	Load Balancing
Fully configurable subnets, routing, firewalls Default IPSec VPN 25Gb network infrastructure	Dedicated, SLA backed connectivity No data transfer charges 42 carriers worldwide	Choice of TCP, HTTP, HTTP/2 Flexible, autoscaling End-to-end SSL TLS encryption

Service Gateway	DNS
Private access without traversing internet Full range of IaaS/PaaS services covered	<30ms response time Global load balancing Traffic management Network health checks

Networking flexibility and control

CUSTOMER DATA CENTER

ORACLE CLOUD REGION

Web Tier

Virtual Machines

App Tier

Virtual Machines

Database Tier

Database Storage

Load Balancer

DNS

Customer Datacenter

VPN

FastConnect

DRG

VIRTUAL CLOUD NETWORK

AVAILABILITY DOMAIN-1

Subnet-A

AVAILABILITY DOMAIN-2

Subnet-B

AVAILABILITY DOMAIN-3

Subnet-C

Backbone
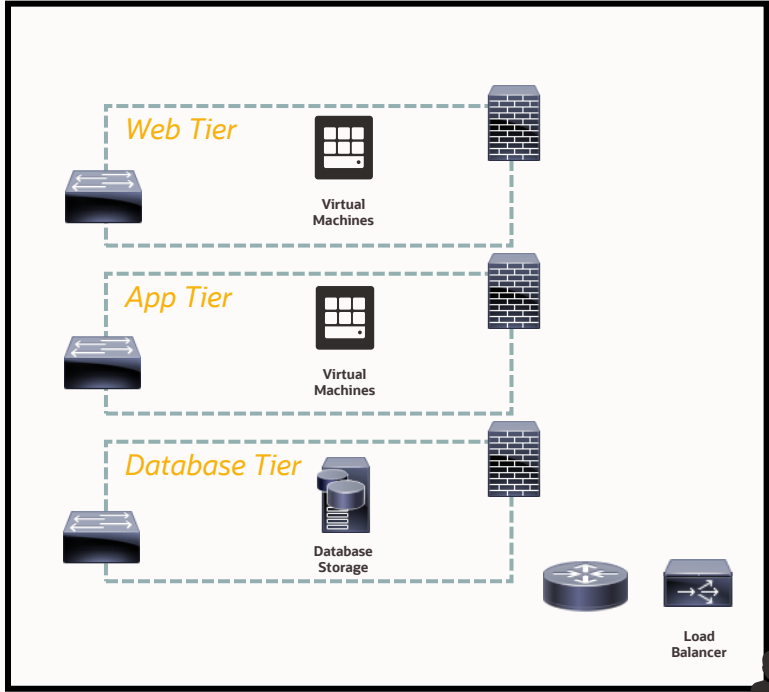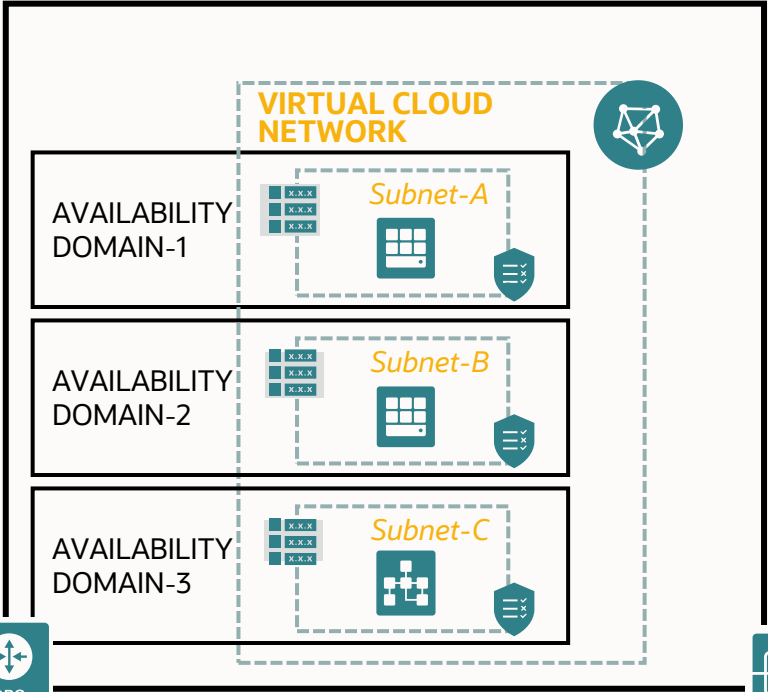
OTHER ORACLE CLOUD REGIONS

DNS

Provisioned bandwidth Load Balancing

End customers

HPC on Oracle Cloud Infrastructure

On-premises performance in the cloud

Low cost

Lowest cost cloud HPC

Best price-performance

Move CAPEX to OPEX

Flexible

CPU, GPU, bare metal

Universal Credits

Always the right capacity

High performance

Largest bare metal HPC

Most on-node storage

Cluster networks

CPU Servers   **GPU Servers**   **Exadata**

1.5µs latency, 100Gbps RDMA Cluster Network

https://www.oracle.com/cloud/hpc/
https://www.oracle.com/cloud/economics/
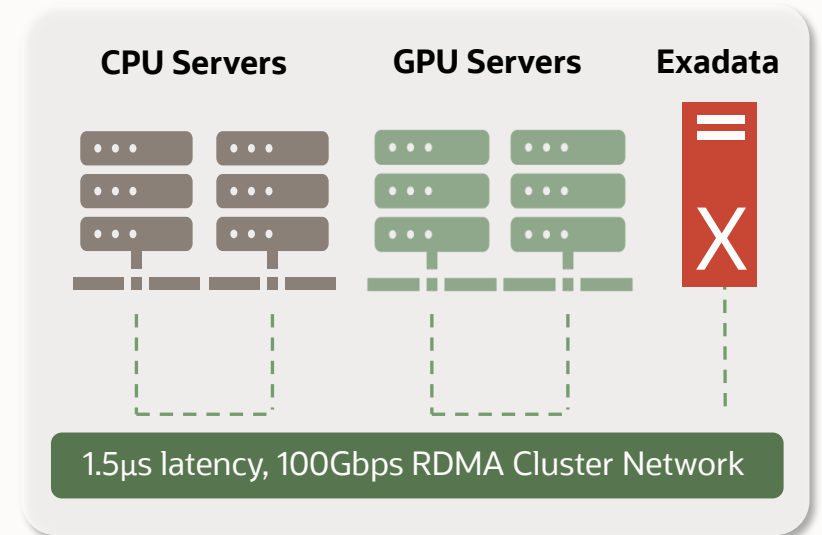
CUSTOMER MANAGED

MANAGED

AUTONOMOUS

Oracle Database on Compute
VM/Bare Metal
Data Guard
Auto TDE

Oracle Database Cloud Service
VM/Bare Metal
RAC
Data Guard
Auto TDE
Automated backup, patching

Oracle Exadata
Extreme performance
Base – Full rack
RAC
ADG
IORM
Cloud Service/
Cloud@Customer

Autonomous Database
Auto-scaling, Auto-tuning, Auto-patching

ADW
Serverless or dedicated
Spatial, graph, ML
SQL Developer

ATP
Serverless or dedicated
APEX

Database
The most comprehensive, resilient, high performing database services

MySQL Service
100% built and managed by MySQL team
Optimized for OCI
HeatWave: unique integrated high perf analytics engine
1/3 the cost of Amazon RDS

ORACLE®
NoSQL Database

NoSQL Service
JSON documents, columnar, or key-value data model
Instant scaling
Transaction consistency
Lower cost than AWS DynamoDB

JSON
Serverless
Simple document APIs
ACID transactions

CONTROL →→→ AUTOMATION

Highest database performance on VM, Bare Metal, Exadata

Database shapes based on high performance X7 and X8 server platform

- VMs, Bare Metal, or Exadata
- Up to 1,600 Intel Xeon cores per instance
- Up to 2.5 PB of usable HC storage per Exadata instance
- Up to 40 TB network NVMe SSD block storage per VM instance
- Up to dual 25 Gbps network interfaces per instance

BYOL or License-included

- Oracle DB 11.2, 12.1, 12.2, 18c, 19c
- Standard, Enterprise, High Performance, Extreme Performance Editions

ENTERPRISE APPS & DEV/TEST

Oracle DB on Virtual Machines
*1-24 OCPUs
15-320 GB RAM
Up to 40 TB usable remote storage*

ENTERPRISE APPLICATIONS

Oracle DB on X7 Bare Metal
*2-52 OCPUs
768 GB RAM
Up to 16 TB usable local NVMe storage*

ENTERPRISE APPS Local HA with seconds of SLA

Oracle RAC on Virtual Machines
*4-48 OCPUs
60-640 GB RAM
Up to 40 TB usable remote storage
Extreme Performance Edition*

ENTERPRISE APPS Local HA with massive capacity and seconds of SLA

Oracle Exadata
*100-1,600 OCPUs
150-2.5 PB usable storage
Extreme Performance Edition*

DATABASE STORAGE CAPACITY

AVAILABILITY

Exadata cloud service

2 Database Servers, 3 Storage Servers

- 100 Maximum OCPUs, 2,780 GB DRAM
- 149 TB Usable Storage, 76.8 TB Flash, 4.5 TB PMEM

Expansion is fully online

Dedicated Infrastructure – no noisy or malicious neighbors

+ Database

+ Storage

Each Database Server adds

- 50 Maximum OCPUs, 1,390 GB DRAM
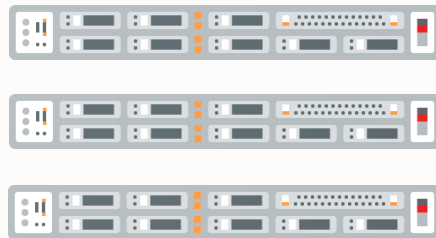
Each Storage Server adds

- 49.9 TB Usable Storage, 25.6 TB Flash, 1.5 TB PMEM

Elastic Expansion

Up to 32 Database and 64 Storage Servers

Compute Scaling

Storage Scaling

OLTP
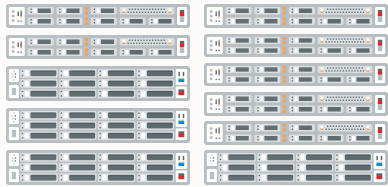
Up to:
- 1,600 database cores
- 44 TB DRAM
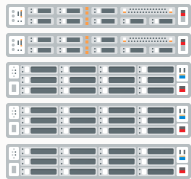
Enterprise Consolidation

Starting Configuration
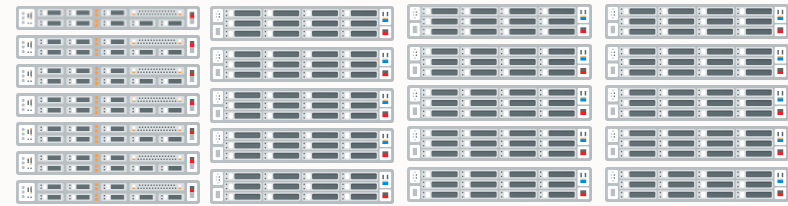
Data Warehousing

Up to:
- 3,072 storage cores
- 96 TB Persistent Memory
- 1.6 PB Flash
- 25 PB Database Size (w/compression)
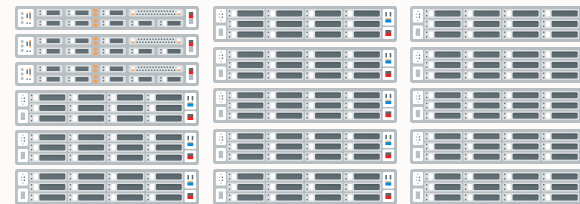
Governance & Management

Architected from the ground up for maximum isolation and protection

Access Control	Resource Governance	Cost Management
Integrated IAM for all services	Flexible compartment structure	Cost analysis dashboard
Simple role-based policies	Built-in automation ensures tagging integrity	Budgets
Identity federation		Resource quotas
Resource principals		Detailed, extensible usage reports
		Cost tracking tags

Audit	Monitoring	Notifications
Rich history of all events	Fine-grained out-of-the-box metrics	Fully managed pub-sub
Query API	Robust, custom metrics	Built-in integrations for popular messaging protocols
Bulk export	Alarms	
Custom retention period		

Security

Architected from the ground up for maximum isolation and protection

1st Generation Clouds:
Most Prevalent Today
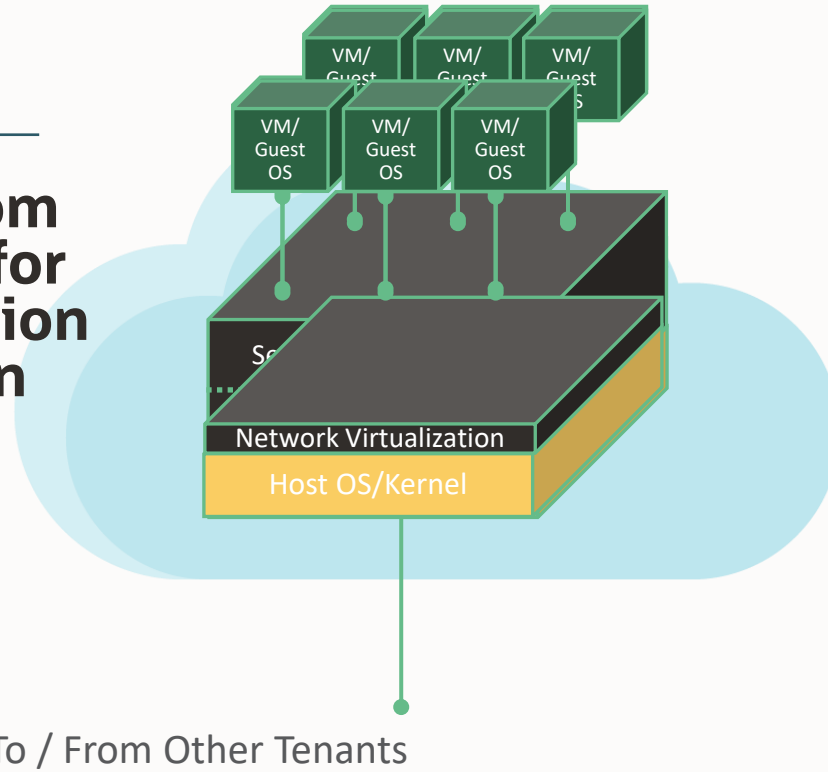
2nd Generation Cloud:
Oracle Cloud Infrastructure-Wide

VM/Guest OS

VM/Guest OS

Network Virtualization

Host OS/Kernel

Container (Optional)
Hypervisor

Host OS/Kernel

Isolated Network Virtualization

Separates Network and Tenant Environment

To / From Other Tenants

To / From Other Tenants
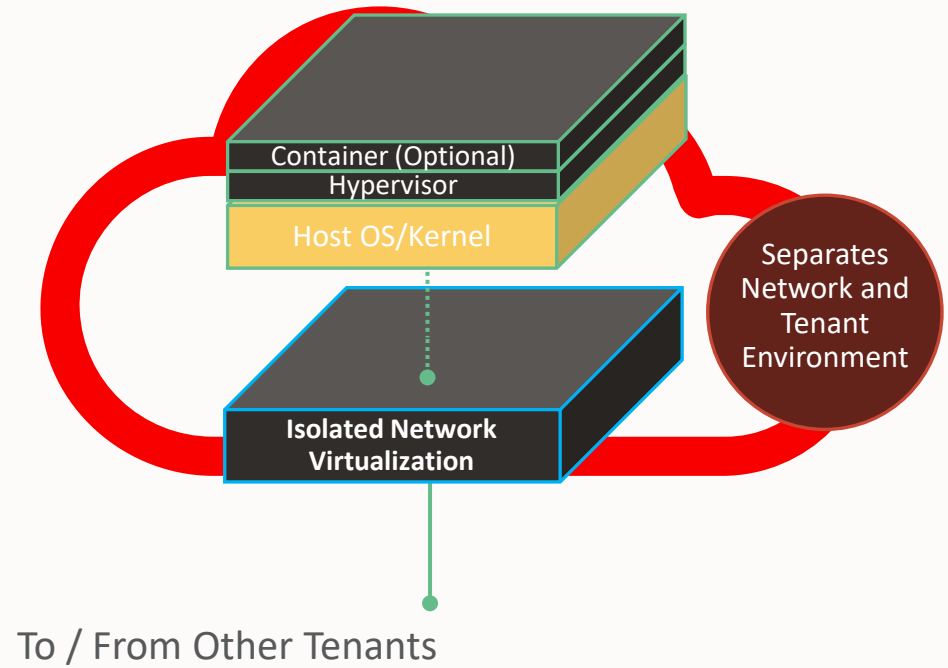
The Oracle Lake House
The core of the modern data platform

Modern Data Platform

Lake House

Operational Databases

Enterprise Applications

SaaS Applications

Events/ Sensors

Oracle GoldenGate

Oracle Data Integration

Partners Informatica…

Open source Apache Kafka…

OCI Data Integration

Autonomous Data Warehouse or MySQL HeatWave

Object Storage Data Lake

Managed Open-source Services: Elasticsearch, Spark, Hadoop, Redis

Data Catalog

Consumed by → Oracle Analytics Cloud

Consumed by → OCI Data Science OCI AI Services Oracle Machine Learning

Consumed by → Applications

Autonomous Data Warehouse: automated management with high-performance storage and analytics

MySQL Heatwave: high performance analytics for MySQL

Object Storage Data Lake: low-cost storage

Managed Open-source Services: customer needs what works best—or what they are already using (Spark, Hadoop, Elasticsearch, Redis)

OCI Data Integration: Easily extract, transform, and load (ETL) data for data science and analytics. Design code-free data flows between data lakes and data warehouse

OCI Data Catalog: Maintains an inventory of assets used by both data lake and data warehouse for data discovery

Oracle Cloud Infrastructure Developer Services

EASY TO BUILD

- Continuous deployment, build pipeline, Git repos, and CI/CD security
- Managed Docker containers and Kubernetes, Service Mesh, Registry
- All the SDKs (Java, Python, Go, etc.) and plug-ins (Eclipse, VS) you need
- Integrations with broad ecosystem including Jenkins and Spinnaker

EASY TO RUN AND MANAGE

- Serverless Kubernetes and Functions
- App Service and API Design/Gateway
- First-class automation with Terraform
- Full portfolio of observability and management services

Deep tools ecosystem

Terraform   ANSIBLE

GitHub   GitLab

paloalto NETWORKS   Jenkins

FORTINET   PagerDuty

cybereason   TANIUM

JFrog   servicenow

RANCHER   DATADOG   Grafana

More details

Container Engine for Kubernetes and Registry

Cloud Native

- Standard Docker and Kubernetes
- Registry Integration
- Integrated with virtual cloud networking and storage

Developer Friendly

- Streamlined workflow
- Full REST API
- Built in cluster add-ons
- Open standards

Enterprise Ready

- Simplified Cluster Operations
- Full Bare Metal Performance and Highly Available IaaS
- Team Based Access Controls
- Autonomous Clusters

OCI Registry

In-flight and at rest data encryption

OCI Container Engine for Kubernetes

Cluster Management

HA - 3 Masters/etcd across 3 ADs

Container Engine Dashboard

Customer's OCI Account/Tenancy

VM based Clusters and Nodes

Bare Metal Clusters and Nodes

Oracle Cloud Infrastructure

Oracle Managed

Customer Managed
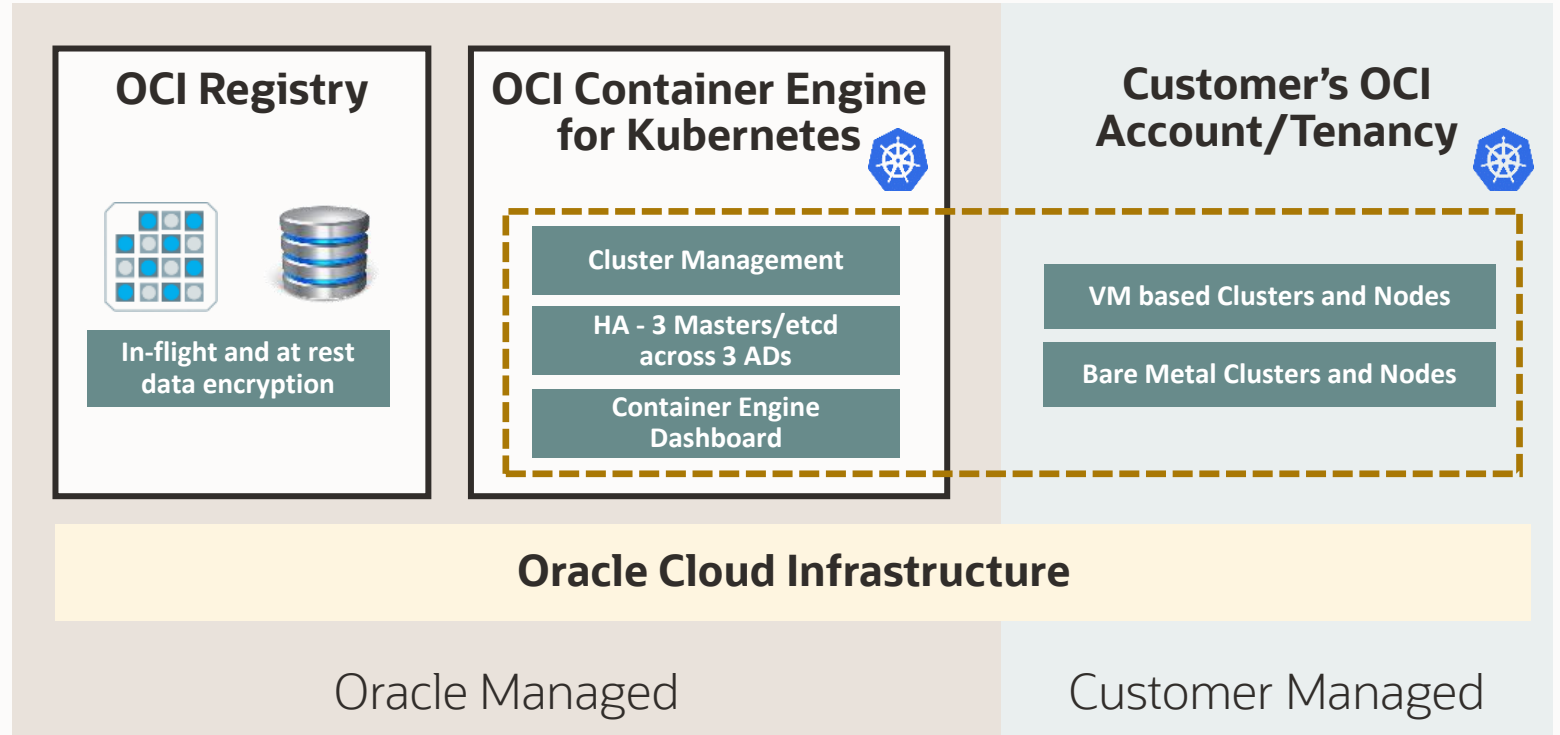
A better cloud for the most intensive workloads

Enterprise-native applications

✓ Scale up compute* and storage online
✓ Scale storage performance up and down online
✓ Scale database cores up and down online
✓ Exadata: 1,600 cores, 2.5 PB storage, 44TB RAM

Infra-heavy and scale-out applications

✓ Compute: up to 128 cores, 51TB local SSD, 2TB RAM
✓ Autoscale compute by metric or schedule
✓ 2µs-latency RDMA clusters with up to 20,000 cores
✓ Over 450 GB/s storage bandwidth

Packaged enterprise apps   Custom enterprise apps   VMware cloud   Data warehouses   HPC simulations   Machine learning   Big Data processing   Real-time streaming

Oracle Cloud Infrastructure

Flexible VM Compute	VM GPUs

Bare Metal Compute	HPC Bare Metal	Bare Metal GPUs

Clustered File Systems + Block

Flexible Block Storage

RAC, Exadata, Autonomous DB	RDMA Cluster Networking

The Oracle Cloud ecosystem

Oracle	OS, Virtualization	Apps, Management, Migration	Networks, Security	Data	Analytics, AI/ML, HPC
E-Business Suite	ORACLE Linux	servicenow	A10	Microsoft SQL Server	Altair
JD Edwards	Microsoft	CloudHealth by vmware	AVI Networks Now part of VMware	ORACLE Database	compellon
PeopleSoft	stromasys legacy server emulation	blueprism	aviatrix	SCYLLA.	H2O.ai
Hyperion	SUSE	RMM Rackware	CIS Center for Internet Security	sesame SOFTWARE	kinetica
Siebel	ubuntu	Solution-Sof	FORTINET		PYRAMID ANALYTICS
WebLogic	vmware	ZERO DOWN	paloalto		
FLEXCUBE			SHIELDIO		
Modern Risk and Finance					
Financial Crime and Compliance Management					
Financial Services Data Foundation					
Insurance Data Foundation					

Oracle Cloud Lift Services

- Oracle Cloud experts assist customers from planning through go-live

- Included with your cloud agreement to accelerate onboarding

- Key services:
  - Business Case Development
  - Architecture Design
  - Network/Security Review
  - Onboarding
  - Migration
  - Training
  - Go-Live Support

Supported workloads include:

- **Oracle Packaged Applications**: E-Business Suite, JD Edwards, PeopleSoft, Siebel, Hyperion, and others

- **Custom Apps on Oracle Database:** Custom applications built on an Oracle database or Exadata

- **HPC**: High-performance computing applications

- **Cloud Native Applications:** Cloud Native integration including OKE, Oracle Data Science, Streaming, Functions, etc.

- **VMware**: Oracle Cloud VMware Solution

- **Data Warehouse & Analytics:** Oracle Data Warehouse, Oracle Analytics Cloud, or 3rd party analytics workloads

Flexible Pricing & Consumption Models, Rewards for Consumption

Investment Protection

Universal Credits

- 1 simple contract
- 1 global standard pricing model (IaaS/PaaS)
- Simplified buying experience
- BYOL discounts

Support Rewards

- Earn $0.25 rewards for every $1 of new OCI consumption ($0.33 per $1 for ULA customers)
- Rewards can be used to lower Technology support bill, even down to zero

Consumption Choices

Pay As You Go

- No upfront commitment
- Pay only for usage
- Pay in arrears based on usage
- List pricing

Annual Flex

- 1-year min term
- Use annual commitment throughout the year
- Published volume discounts

OCI offers the lowest prices in almost every category

		Oracle	AWS	Azure	GCP
COMPUTE	**Flex Virtual Machine** (Hourly, 2 core, 16 GB RAM)	**$0.074**	+132%	+159%	+104%
	Bare Metal Standard ($/OCPU/Hour)	**$0.0638**	+82%	N/A	N/A
	Bare Metal Dense IO ($/OCPU/Hour)	**$0.1275**	+64%	N/A	N/A
	Kubernetes Cluster (Monthly, 50 cores, 750 GB RAM)	**$2,297**	+56%	+47%	+31%
STORAGE	**Block Storage High IO** (Monthly, 400 GB, 25K IOPS)	**$23.80**	70X	54X	77X
NETWORK	**Public Bandwidth Transferred Out** (50 TB/Month)	**$340**	12X	12X	12X
	Private Line Network (Monthly, 1 Gbps, 100 TB data)	**$155**	14X	36X	14X
DATABASE	**Managed MySQL** (Monthly, 100 OCPUs, 1 TB data)	**$5,486**	3X	3X	2.5X

Green = Lowest cost

Based on published pricing as of May 13, 2021

Functionality "built in" at no extra cost

	Oracle	AWS
Kubernetes Cluster (monthly, 50 cores, 750GB RAM)	**Just compute + storage**	$0.10/cluster management + compute + storage
Traffic between ADs	**No cost**	$0.01/GB in each direction
Security Zones	**No cost**	N/A
Cloud Guard	**No cost**	$0.001 per security check (tiered) $0.00003 per ingestion event for >10K events
Logging	**Just storage ($0.05/GB/mo for >10GB)**	$0.50/GB collection $0.03/GB storage $0.005/GB scanned

Green = Lowest cost

Based on published pricing as of May 13, 2021

Low pricing, worldwide

	Oracle **Worldwide**	**AWS** **US East**	**AWS** **Tokyo**	**AWS** **London**
Flex Virtual Machine (Hourly, 2 core, 16 GB RAM)	**$0.074**	+132%	+203%	+170%
Block Storage High IO (Monthly, 400 GB, 25K IOPS)	**$23.80**	70X	79X	81X
Public Bandwidth Transferred Out (50 TB/Month)	**Regional**	12X	3.7X	12X

Green = Lowest cost

Based on published pricing as of May 13, 2021

ORACLE

Oracle Cloud Infrastructure
Top Use Cases and Customer Stories

For additional updates, please consult:

https://salescentral.oracle.com/SCAssetsRest/downloadservice?id=157548

Benefits of moving workloads to Oracle Cloud

Customer	Workload	Benefit
7-Eleven	E-Business Suite + back office	Up to 30x E-Business Suite transaction improvement
Darling Ingredients	E-Business Suite + all back office	Doubled Reporting Performance
Mazda	E-Business Suite + back office	Cuts costs 50% and boosts performance 70%
BANDAI NAMCO	E-Business Suite	Completed full migration ahead of scheduled go-live date
Murad	E-Business Suite + all back office	30% performance improvement and cost savings of 30%
Minor Hotels	E-Business Suite + Hyperion	Improved business continuity RTO/RPO from 24 hrs to 2 hrs
TruGreen	JD Edwards	4 – 5X faster performance
Rotary	PeopleSoft	Modernized its humanitarian mission
Alliance Data	PeopleSoft	$1 Million savings
National Grid ESO	HPC + Machine Learning + back office	40% improvement in accuracy
University of Bristol	HPC	Powered COVID-19 breakthrough with atomic super computing
Nissan	HPC	Delivers superior value and gets to market quicker
Altair	HPC	20% better price performance
DeepZen	HPC	Boosted performance of voice models by 36%

Benefits of moving workloads to Oracle Cloud

Customer	Workload	Benefit
OceanX	Marketing SaaS and Analytics	10X performance improvement
FedEx	Analytics	Standardized over 200 global operations using 40+ Oracle apps
Western Digital	Analytics	ERP refreshes that took 24 to 48 hours now take 5 seconds
Zoom	Cloud Native Live Conferencing	Streaming over 7 petabytes of data every day
Cisco	Cloud Native Analytics	60X performance increase
CERN OpenLab	Cloud Native	2 minutes to Deploy
Dropbox	Departmental Data Warehouse	Accelerated its time to market by 4X
Workforce Software	Move Oracle ISV Apps	Experienced a 30-35% cost reduction
The Library Corporation	Move Oracle ISV Apps	Enabled staff to serve millions of patrons remotely
8x8	Move Non Oracle ISV Apps	25% increase in performance, 80% savings in egress costs
NRI	Dedicated Region Cloud@Customer	Increased both cost and operational efficiency
OICT Group	Dedicated Region Cloud@Customer	Awarded significant cost benefits to government entities
Entel	VMware	Cut infrastructure costs by 50%
Unimed	Migrate Custom Oracle DB App	Extended EMRs to 344 Unimed branches in fewer than 15 days

E-Business Suite

7-Eleven trusts core applications and disaster recovery to Oracle Cloud Infrastructure and sees a 30X performance improvement

"Oracle Cloud Infrastructure was undeniably the clear choice. There is no better solution for databases than Exadata, and Oracle is the only cloud that offers it."

Sanjay Date
Senior Program Manager, Enterprise Infrastructure Group, 7-Eleven

Business Challenge:

7-Eleven is the largest convenience store chain in the United States, with a large global presence as well. Complying with a corporate mandate to modernize its IT environment and undergo a digital transformation, 7-Eleven needed to migrate its critical workloads to the cloud and create a disaster recovery environment.

Results:

7-Eleven consolidated production and disaster recovery for Oracle E-Business Suite on Oracle Cloud Infrastructure. By moving to OCI, 7-Eleven lowered the total cost of ownership of the infrastructure that supported its critical production applications, while retaining the same high performance and availability.

- ✓ Created its disaster recovery (DR) environment in the cloud and successfully tested the failover of applications and database to Oracle Cloud Infrastructure in less than 16 weeks – a project record
- ✓ Leveraged Exadata on Oracle Cloud Infrastructure to mirror the DR environment it had on-premises
- ✓ Ran failover tests in 20 seconds vs. 10 minutes, a 30X performance improvement
- ✓ Leveraged Oracle Maximum Availability Architecture for cloud deployments and unique features such as Oracle Active Data Guard and Oracle Real Applications (RAC) that are only offered through Oracle Cloud
- ✓ Decommissioned 60 on-premises services by moving to Oracle Cloud Infrastructure

Products Used:

Oracle Cloud Infrastructure	Oracle Exadata
Oracle Cloud Compute	Oracle E-Business Suite

Darling Ingredients modernizes with Oracle cloud

"Darling Ingredients has had an aggressive plan to move all of our key IT applications into the cloud. We have a number of critical Oracle applications, many of which rely on Oracle Database. Oracle Cloud Infrastructure Database on bare metal met our stringent performance requirements. Having predictable, high bandwidth connectivity to our end users is critical, and Oracle FastConnect was a great solution."

Tom Morgan
Oracle Apps DBA Manager, Darling Ingredients

DARLING
INGREDIENTS INC.

Business Challenge:

With over 200 processing plants around the world, Darling Ingredients serves the agri-food industry by repurposing natural materials. Hosting its Oracle databases and applications on aging hardware, Darling Ingredients began to explore moving workloads to the cloud.

Results:

Darling Ingredients migrated its Oracle footprint from its co-located data center to OCI. As a result, Darling Ingredients gained reliable performance and high-bandwidth connectivity between its Oracle applications that resulted in steep efficiency gains.

- ✓ Consolidated 19 databases to 3 Oracle Database Cloud systems running on bare metal servers
- ✓ Deployed 30-plus database instances across 13 Oracle Database Cloud Services on bare metal systems
- ✓ Reduced in-house maintenance, enhanced infrastructure capabilities, and improved performance
- ✓ Provided reliable bandwidth from Oracle's 10 Gbps FastConnect connection for Oracle footprint
- ✓ Payroll application that formerly took 6.5 hours now takes less than 3 hours

Products Used:

Oracle Cloud Compute   Oracle Cloud Infrastructure Block Volumes

Oracle Database   Oracle Cloud Infrastructure

Mazda cuts costs by 50% and boosts performance by 70% with OCI

"We migrated a global inventory management system that tracks thousands of automotive repair parts and accessories from an on-premises system to Oracle Cloud Infrastructure. We've already achieved a 70% increase in performance and cut our 5-year total cost of ownership in half."

Masahiko Tamura
General Manager, Supply Chain Systems Department, Mazda Motor Corporations

MAZDA

Business Challenge:

As a multinational automaker that supplies 1.5 automobiles annually, Mazda has a complex inventory management system. In order to simplify its system, Mazda needed to shorten its demand forecasting processing cycle and improve the accuracy of demand forecasting.

Results:

Mazda switched from its on-premises server and storage infrastructure to Oracle Cloud Infrastructure because it delivered significant performance improvements and reduction in the five-year total cost of ownership. In addition to cost savings and performance gains, Mazda can also scale transaction capacity up or down based on business demands, so it can run its inventory forecasts daily instead of monthly.

- ✓ Improved performance by 70% compared to its previous on-premises infrastructure
- ✓ Lowered its total cost of ownership over five years by 50% compared to its previous systems
- ✓ Improved the accuracy of demand forecasting calculations and inventory management reports
- ✓ Eliminated the need to share on-premises resources between applications

Products Used:

Oracle Cloud Infrastructure

Oracle Bare Metal Servers

Oracle GoldenGate

Murad saves 30% moving Oracle's E-Business Suite, Demantra, and OBIEE to Oracle Cloud Infrastructure

"We were expecting some performance improvements when we moved to Oracle Cloud Infrastructure, but we weren't expecting it to be that good. Our business stakeholders are coming up to us saying that their queries are coming up faster. Overall, we would estimate a 20-30% improvement in performance."

Rishabh Sinha
Senior Director of Enterprise Applications, Murad

Murad.®

Business Challenge:

Leading skincare company Murad had a complex business model which required faster back-office operations. The application stack, including the infrastructure, needed to support the high volume and growth of direct-to-consumer transactions more effectively. Additionally, Murad wanted to offload hardware maintenance to a cloud vendor while enhancing its core infrastructure.

Results:

Murad's path to Oracle Cloud Infrastructure involved experimenting with trial licenses and executing a pilot to get familiar with the platform. It moved its test environments for EBS, Demantra, and OBIEE so that it could allow its super users to test in the new cloud infrastructure. Murad also migrated its standby database, leveraging Oracle's "Bring Your Own License" (BYOL) program to deploy Oracle Database on OCI Compute. Murad also moved its production workloads for EBS, Demantra, and OBIEE to the Oracle Cloud.

- ✓ Achieved an overall 20-30% improvement in performance
- ✓ Improved query and reporting times in EBS, from 15-20 minutes to just 5 minutes
- ✓ Estimated a 30% cost benefit, with the biggest component saved being the high line connection cost from its prior data centers to its office
- ✓ Leveraged Oracle's unparalleled support with its dedicated customer relationship manager to enable the migration
- ✓ Completed its migration seamlessly, "like flipping a switch"

Products Used:

Oracle Cloud Compute

Oracle Cloud Infrastructure Storage

Oracle Cloud Infrastructure Networking

Oracle Database

Oracle E-Business Suite

Oracle BI Enterprise Edition

BANDAI NAMCO Entertainment Europe lifts and shifts ERP to Oracle Cloud Infrastructure

"By moving on-premises applications including Oracle E-Business Suite to Oracle Cloud, we upgraded our ERP system and cut hardware costs, but also achieved the long-time goal of having a true disaster recovery installation based on the latest Oracle Cloud Infrastructure."

David Aubert
CIO & Innovation Project Leader, BANDAI NAMCO Entertainment
Europe S.A.S

Business Challenge:

BANDAI NAMCO is a world leader in interactive entertainment products developed for all major gaming consoles, iOS, Android, and online platforms. Running a highly customized Oracle E-Business Suite as its core business application, the company needed to establish a business continuity plan that included a true disaster recovery plan that complied with corporate policies and ensured uninterrupted business operations.

Results:

BANDAI migrated its ERP system to Oracle Cloud Infrastructure, upgraded its ERP system to Oracle E-Business Suite 12.2, cut hardware costs, and achieved its long-time goal of having a disaster recovery installation in the cloud.

- ✓ Within 3 months, BANDAI obtained an Oracle Cloud center test and development environment for carrying out its on-premises migration

- ✓ With the help of an Oracle Customer Success Manager, BANDAI was able to complete its full migration ahead of its scheduled go-live date

- ✓ Implemented a disaster recovery facility that enabled the company to switch within 15 minutes to the recovery site in case of a major outage in the production data center

- ✓ Leveraged Oracle's Bring Your Own License offering for moving on-premises applications to Oracle Cloud at no cost, achieving automatic replication between data centers with full backup and recovery capabilities

- ✓ Achieved significant cost savings by moving 280 users in 11 entertainment operational units 24/7 from on-premises to Oracle Cloud Infrastructure

Products Used:

Oracle Cloud Infrastructure

Oracle Cloud Block Volumes

Oracle Cloud Infrastructure Object Storage

Oracle E-Business Suite

Minor Hotels improves business continuity with Oracle Cloud

"Bringing our mission-critical financial processes onto Oracle Cloud Infrastructure has provided great benefits. We have seen speedy data recovery, in just 2 hours as compared to 24 hours before. Data is the core of our business, and we are confident in entrusting our data security to Oracle."

Rawat Leepaisomboon
Group Director, Information Technology Core Systems, Minor Hotels

MINOR
HOTELS

Business Challenge:

Minor Hotels is an international hotel corporation with over 535 hotels in 55 countries across Asia Pacific, the Middle East, the Indian Ocean, Europe, and South America. As part of its digital transformation strategy, Minor Hotels decided to migrate its mission-critical Oracle E-Business Suite financial, purchasing, and procurement applications to the cloud.

Results:

Minor Hotels chose Oracle Cloud Infrastructure as its cloud provider, as other providers that the company considered did not offer database platform-as-a-service (PaaS) and infrastructure. Minor Hotels migrated Oracle E-Business Suite, Hyperion, and Oracle Business Intelligence Enterprise Edition (OBIEE) to Oracle Cloud Infrastructure.

- ✓ Improved business continuity RTO (recovery time objective) and RPO (recovery point objective) from 24 hours to 2 hours and increased automation with OCI and Oracle Data Guard

- ✓ Achieved greater operational efficiency by leveraging E-Business Suite Cloud Manager and Oracle Resource Manager automation

- ✓ Improved performance and user experience through Oracle Database Cloud Services on bare metal

- ✓ Reduced costs and increased flexibility through Universal Cloud Credits and license mobility

- ✓ Met GDPR compliance requirements for business continuity strategy and data security

Products Used:

Oracle Cloud Infrastructure   Data Cloud

Fusion Applications Suite

JD Edwards

TruGreen achieves 4-5X faster performance for JD Edwards on OCI

"Our finance and branch teams that use JD Edwards are just ecstatic over the performance. They can run financial reports and manage distribution tasks faster than ever."

Clif Lee
Director of Corporate Systems, TruGreen

Business Challenge:

TruGreen is the country's largest lawn-care provider, serving more than 2.3 million residential and commercial customers. When it spun off from its parent company ServiceMaster, TruGreen's IT staff knew it needed to modernize its legacy JD Edwards system as the processes were disjointed, obsolete, and unsupported at every layer.

Results:

Working with Oracle Partner Velocity Technology Solutions, TruGreen adopted a hybrid cloud approach. TruGreen archived its historical data in Velocity's private cloud while implementing JD Edwards EnterpriseOne 9.2 on Oracle Cloud Infrastructure using both the Infrastructure-as-a-Service and Platform-as-a-Service products.

- ✓ Leveraged Oracle's API and Velocity's Cloud Application Management Platform™ to deploy the new JD Edwards environment quickly, leading to immediate cost and user benefits
- ✓ Achieved an immediate 30-40% reduction in TCO and 4-5X faster performance
- ✓ Delivered critical new functionalities for its JD Edwards environment while streamlining processes for disperse lines of business
- ✓ Gained stronger security with VCN and separate subnets to isolate private and public resources

Products Used:

Oracle Cloud Infrastructure Storage

Oracle Cloud Compute

Oracle Cloud Infrastructure Load Balancing

PeopleSoft

Rotary modernizes its humanitarian mission by moving PeopleSoft to Oracle Cloud

"When we look at where Oracle's vision is and what Oracle's strategy is, then we look at what our vision is and what our strategy is, there is a synergy between the two."

Faiz Hanif
CIO, Rotary International

Business Challenge:

Rotary International is a global service organization that unites business and professional leaders behind a wide range of humanitarian causes, including COVID-19. With only a small IT staff, Rotary sought both a fully-functional cloud platform and an experienced technology partner to help it migrate its resource-starved grant application system to the cloud.

Results:

After evaluating various cloud vendors, Rotary, a PeopleSoft customer, decided to leverage Oracle Consulting as an implementation partner for its cloud migration expertise in moving on-premises applications to Oracle Cloud Infrastructure using Oracle Soar, which is a proprietary methodology. It also liked Oracle's comprehensive and integrated set of cloud services and its cloud partnership with Microsoft, supporting Rotary's multi-vendor environment.

- ✓ Partnered with Oracle Consulting to complete a "lift-and-shift" cloud migration of its on-premises PeopleSoft application footprint to Oracle Cloud Infrastructure with disaster recovery
- ✓ Stabilized its most important financial toolset and grant application system using Oracle Cloud Infrastructure's scalable compute and storage instances
- ✓ Fulfilled PCI-compliance requirements with OCI to enable staff to continue using its credit cards
- ✓ Scaled with spikes in demand from its events, global disasters, and other factors
- ✓ Launched an initiative to implement Oracle Cloud ERP financial applications along with the Oracle Cloud CX Service suite of customer-facing applications

Products Used:

Oracle Cloud Infrastructure	Oracle CX Service
Oracle Cloud CX	Oracle Cloud Compute
Oracle Cloud ERP	

Alliance Data moved critical back-office and analytics systems to Oracle Cloud

- Data provider to leading consumer marketing and loyalty programs

- Moved 6TB of mission critical data in PeopleSoft, EPM, Exadata, and Windows

- 6 environments in cloud. **Easy to monitor, manage**

- Zero business interruption in 5-month transition to Oracle Cloud Infrastructure

- Saving $1 million per year in software licensing and support to reinvest strategically

CUSTOMER PERSPECTIVE

We moved all of our environments to the cloud from dev/test to production, and our end-users didn't even realize it. I consider that a successful migration.

– Mike Rosello, SVP and CIO, Alliance Data Systems

HPC

National Grid analyzes weather 40% better on Oracle Cloud

"Oracle just works. You can trust it. It doesn't fall over, it just does its job, and it does it really, really, well."

James Kelloway
Energy Intelligence Manager, National Grid ESO

nationalgrid

Business Challenge:

Great Britain partnered with UK-based energy company National Grid to work towards its goal of operating a zero-carbon electricity system by 2025. To lower carbon emissions, National Grid needed lightning-fast computing power to run complex machine-learning models to accurately predict renewable energy sources.

Results:

With Oracle, National Grid can now use more than 21,000 machine-learning models to analyze data sets and uncover patterns to efficiently manage Great Britain's renewable energy supply.

- ✓ Developed a virtual supercomputer using OCI to run the machine-learning models required to predict Great Britain's energy supply and demand

- ✓ Leveraged NVIDIA GPU-based computing power on OCI to run tens of thousands of machine-learning workloads simultaneously

- ✓ Achieved up to 40% performance and accuracy improvement for its machine-learning models

- ✓ Reduced the time it took to run GPU queries from hours to minutes

- ✓ Helped Great Britain hit a milestone of producing 48.5% of its electricity from renewable sources for the 12 months ending in December 2019

Products Used:

Oracle Cloud Compute

Oracle Cloud Infrastructure

University of Bristol powered a COVID-19 breakthrough using atomic computer imaging

"The cloud computing let us work at the pace required to achieve tangible results in this crisis."

Imre Berger,
Biochemistry Professor, University of Bristol

University of BRISTOL

Business Challenge:

Scientists at the University of Bristol needed access to powerful cloud servers to run complex atomic 3D image modeling in their quest to find new ways of attacking COVID-19.

Results:

Oracle Cloud helped the scientists run their experiment and speed a discovery that could open a new avenue for drugs that halt the pathogen's potency and spread.

✓ Gained immediate access to OCI, speeding their ability to analyze the virus

✓ Discovered that virus spike protein binds with a bodily acid that regulates inflammation and immune response

✓ Authored a breakthrough paper published in the journal Science, published September 21, 2020

✓ Their findings may let doctors administer drugs that interact with the virus's spike proteins, rendering it incapable of infection

Products Used:

Oracle Cloud Infrastructure

Nissan gets to market quicker with Oracle Cloud HPC

"We selected Oracle Cloud Infrastructure's HPC solutions as part of our multi-cloud strategy to meet the challenges of increased simulation demand under constant cost savings pressure. I believe Oracle will bring significant ROI to Nissan."

Bing Xu
General Manager, Engineering Systems Department, Nissan Motor Co., Ltd

NISSAN
MOTOR CORPORATION

MAGNITE

Business Challenge:

As a global automobile manufacturer, Nissan is a leader in adopting cloud-based high performance computing (HPC) for large scale workloads such as safety and computational Fluid Dynamics (CFD) simulations. Nissan needed a provider to meet its challenges of increased simulation and HPC demand and counter increased cost savings pressure.

Results:

Oracle Cloud HPC enables Nissan to launch tens of thousands of cores and GPU-based high-end visualization servers with tremendous flexibility based on the compute needs of its engineers. With its migration to Oracle Cloud HPC, Nissan anticipates lower costs with the ability to easily run its engineering workloads in the cloud.

- ✓ Improved performance compared to on-premises deployment with OCI's HPC networking (RDMA), which offers latencies of under two microseconds and 100 Gbps bandwidth
- ✓ Became one of the first Automotive OEM in the world to move mission critical HPC workloads and tens of thousands of cores to the public cloud
- ✓ Reduced the cost and overhead of large data transfer by using Oracle's bare-metal GPU-accelerated hardware
- ✓ Required no change to its applications or workflow

Products Used:

Oracle Cloud HPC

Altair improves performance and saves 25% with Oracle Cloud Infrastructure

"Access to GPU compute resources can be challenging for our customers. The integration with Oracle's cloud platform addresses this challenge and provides customers the ability to use GPU-based solvers in the cloud for accelerated performance leveraging the state-of-the-art GPU compute resources. Ultimately, this leads to improved productivity, optimized resource utilization, and faster time to market."

Sam Mahalingam
Chief Technical Officer for Enterprise Solutions, Altair Engineering

△ ALTAIR

Business Challenge:

Altair Engineering provides high-performance computing solutions for engineering and product development projects for customers in various industries. Realizing its customers needed access to highly scalable compute and storage capacity, Altair needed a cloud partner expert in handling that technology.

Results:

Altair turned to Oracle Cloud Infrastructure for its best-in-class bare metal high performance cloud compute cycles, high-speed cloud networking, and I/O-optimized cloud storage. Additionally, Altair chose Oracle because of its experience with GPU engineering and application development.

- ✓ Migrated its most advanced engineering suite, HyperWorks Computational Fluid Dynamics (CFD) Unlimited, onto OCI and saw improved performance
- ✓ Leveraged OCI's bare metal compute and low-latency RDMA networking services to achieve up to 25% better price-performance for CFD and Structural Mechanics solvers
- ✓ Reduced the time it took to provide complex vehicle simulation results to <12 hours
- ✓ Reduced the time it took for customers to deploy HPC solutions from months to <1 hour

Products Used:

Oracle Cloud Infrastructure

Oracle Cloud Compute

DeepZen turns text into emotion-rich speech with Oracle Cloud

"We are highly dependent on high-performance computing because we are a machine-learning company. There's lots of video, animations, and advertisements that need voiceovers. We are able to create voice very quickly. And we are doing it on Oracle Cloud and its GPU services."

Kerem Sozugecer
CTO and Cofounder, DeepZen

Business Challenge:

DeepZen uses artificial intelligence to replicate human emotions and bring audio books to the masses. DeepZen needed a high-performance computing (HPC) platform on which it could train its "cloned" voices to better articulate emotions and expressions.

Results:

After joining Oracle for Startups, DeepZen was one of the first companies to try out Nvidia's A100 Tensor Core GPUs on bare metal instances on Oracle Cloud Infrastructure. By running its HPC workloads on OCI, DeepZen gained unmatched scalability and flexibility.

- ✓ Boosted the performance of the company's voice models by 36%
- ✓ Accelerated the recording of audio books from 65 hours to 1 hour
- ✓ Auto-regressive neural-network model now takes 5 days to complete vs. 7 days
- ✓ Reduced voice-training times, saving a whole month for every three months
- ✓ Switched all its servers to A-100 GPUs on OCI to scale with growth

Products Used:

Oracle Cloud Infrastructure

Marketing SaaS and Analytics

OceanX improves performance 300X when switching from AWS

"At OceanX, we have witnessed first-hand the power of combining our data management solutions with Oracle Cloud...and so have our clients."

Georg Ricther
CEO & Founder, OceanX

OCEANˣ

Business Challenge:

OceanX provides retailers commerce platforms that combine e-commerce, fulfilment, customer care, and business intelligence operations. Hosting its Oracle databases on AWS EC2 and RDS, OceanX realized that data processing performance was slow, that key Oracle database features such as RAC, multi-tenancy, and Data Guard weren't supported, and that scalability was limited.

Results:

OceanX needed a cloud provider that could not only provide a solution for its reporting needs, but also grow with its business. On OCI, OceanX set up a dedicated FastConnect connection from Oracle's data center to Direct Connect into its applications hosted in AWS, and took advantage of RAC on OCI for high availability and scaling.

✓ Consolidated 13 databases into 5 container databases, with one container database having 6 pluggable databases to improve manageability and patching

✓ Eliminated file storage limitations with 60 terabytes available on OCI

✓ Built an 11 million row Cognos cube on Exadata in 8 minutes compared to 40 minutes on AWS EC2, saving time and money by eliminating the need to run each database on separate AWS instances

✓ Created a disaster recovery environment in Exadata that isolated critical databases, effectively reducing costs and increasing performance by using a single platform for mixed workloads

✓ Achieved a 300% performance increase and reduced costs by 30%

Products Used:

Oracle Cloud Infrastructure

Oracle Cloud Compute

Oracle Exadata Cloud Service

Bold back-office changes deliver continued market leadership for FedEx

"The Oracle Analytics tools allow us to drill into operations on an almost real-time basis and evaluate how things are developing worldwide."

Chris Wood,
Vice President of Business Transformation, FedEx Services

Business Challenge:

FedEx is known for innovative package delivery service. As competitors raised the bar, FedEx needed to upgrade the back-office systems powering its massive global logistics network.

Results:

Under its new Digital Innovation Center of Excellence, FedEx consolidated the bulk of its core back-office operations onto more than 20 Oracle Cloud applications. It also used Oracle Cloud Infrastructure to make steep efficiency gains. When COVID-19 hit, FedEx was ready to handle the global surge in online buying.

- ✓ Standardized over 200 global operations using 40+ Oracle applications
- ✓ Involved a mix of custom and third-party applications along with Oracle's
- ✓ Facing COVID-19 travel restrictions, virtually deployed 9 new instances of Oracle Cloud ERP
- ✓ 3,000+ employees now use Oracle Cloud Analytics to make data-driven decisions and for access to AI, machine learning, and service automation
- ✓ Use Oracle Cloud Infrastructure to optimize performance of cloud applications

Products Used:

Oracle Cloud HCM

Oracle Cloud ERP

Oracle Cloud EPM

Oracle Cloud SCM

Oracle WebLogic Server

Oracle Cloud Analytics

Oracle Digital Assistant running on Oracle Cloud Infrastructure

Oracle Integration Cloud

Western Digital turns to Oracle Analytics for a unified reporting view

"Business users are manipulating data using visualizations in Oracle Analytics. An unexpected benefit was that users identified some anomalies, helping Western Digital realize better quality in the data. We were able to have better insights and better forecasts as a result."

Bill Roy
Senior Director of EPM and Business Intelligence, Western Digital

WD Western Digital®

Business Challenge:

Western Digital is a leading provider in hard disk drive manufacturing and data storage. After major acquisitions, Western Digital experienced disparate analytics processes and slow internal workflows. In order to align processes, Western Digital needed a cloud-based system that offered real-time access to data and reporting, while leveraging emerging technologies.

Results:

Western Digital championed going with Oracle because the suite of products would help create efficiencies within its financial reporting and overall business. Western Digital created an "always-on" suite of Oracle products including Oracle Cloud Infrastructure, Oracle Database technologies, Oracle Analytics Cloud, Oracle ERP, and Oracle Exadata.

- ✓ Consolidated data and platforms onto OCI, effectively streamlining workflows, minimizing steps, and eliminating redundancy
- ✓ Created a single-source of truth between disparate systems by removing legacy systems
- ✓ Decreased the number of contractors required for infrastructure maintenance and support, effectively reducing costs
- ✓ Reduced the time it took to access analytical data from 24 to 36 hours to less than 20 minutes
- ✓ Cut reporting time from 8+ hours to 20 minutes
- ✓ ERP refreshes that took 24 to 48 hours now take 5 seconds

Products Used:

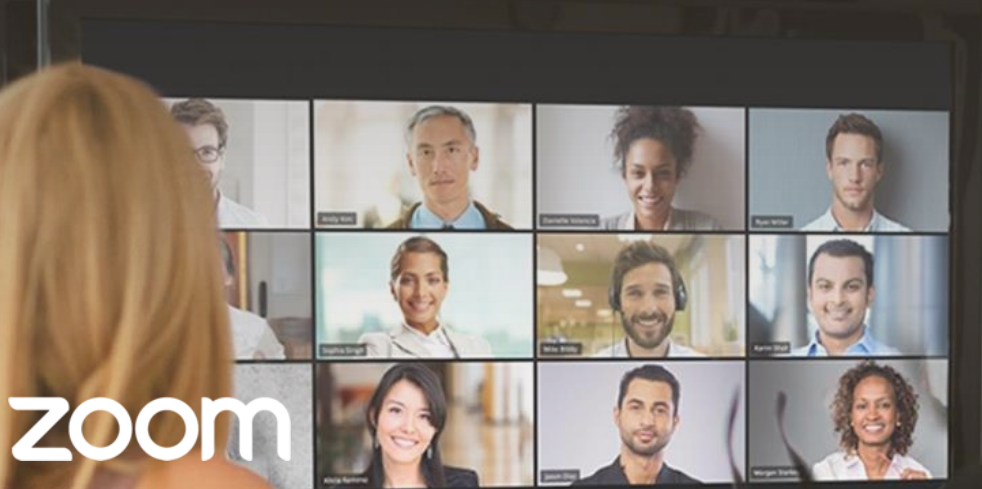|	
Oracle Cloud Infrastructure	Oracle Database
Oracle Analytics Cloud	Oracle Exadata
Oracle Cloud ERP	Oracle Integration Cloud

Cloud Native

Zoom meets performance and cost goals while scaling volume 30X

"We selected Oracle for its advantages in performance, scalability, reliability, and superior cloud security."

Eric S. Yuan
CEO, Zoom

zoom

Business Challenge:

Zoom needed to find a Cloud partner as performant and cost-effective as their purpose-built environment, that could scale to a 30X increase in volume as demand soared under the COVID-19 pandemic.

Results:

Oracle's engineering team helped Zoom move from deployment to live production in just 9 hours. Zoom now supports millions of concurrent live streams every day—in the cloud, without having to rely on managing their own hardware or data centers.

- ✓ Quickly scaled to meet user demand as it grew from 10 million to 300 million daily participants, December to April
- ✓ Considered other clouds, but only Oracle met their requirements
- ✓ Has grown from 7 to 20 petabytes of video and audio transferred per day through Oracle Cloud Infrastructure servers—a 3x increase from April
- ✓ Eliminated the 40-minute limit for K-12 schools on its free tier
- ✓ Next, Zoom and Oracle are partnering to add videoconferencing to webinars, sales calls, and customer service within Oracle CX Cloud

Products Used:

Oracle Cloud Infrastructure

Oracle Virtual Machines

Oracle Block Volumes

Cisco performance increases 60X using Oracle Cloud Infrastructure

"The partnership with Oracle has been fantastic. This is why this whole magic with Cisco Tetration is happening."

Navindra Yadav
Founder, Cisco Tetration

CISCO

Business Challenge:

Cisco is a worldwide leader in IT, networking, and cybersecurity solutions. When Cisco started developing its security platform Tetration as a cloud service, it required tremendous processing power to analyze real-time telemetry from enterprise servers, networks, applications, and end-user devices. In order to offer Cisco Tetration as a functional SaaS application to its customers, Cisco needed a reliable, scalable, and high-performance cloud provider.

Results:

Cisco used Oracle Cloud Infrastructure's bare metal instances in order to achieve outstanding hardware efficiency for its Tetration platform. By partnering with Oracle, Cisco can now offer Tetration as a highly-scalable, cloud-based, SaaS application to its customers with cost-savings benefits.

- ✓ With Oracle Cloud Infrastructure, the Cisco Tetration application gets 70%-75% CPU utilization, compared to 5%-10% as seen with other cloud providers
- ✓ Delivered 60X better performance using Oracle's Gen 2 Cloud Infrastructure
- ✓ Achieved 60X better CPU utilization compared to AWS
- ✓ Accelerated provisioning time from 6 weeks to hours
- ✓ Realized 2.5X the performance vs. appliance
- ✓ Reduced customer TCO by 90% by running on Oracle Cloud Infrastructure vs. on-premises

Products Used:

Oracle Cloud Infrastructure

Oracle Cloud helps CERN explore our universe

"Having a strong partnership with Oracle is very important, because we sometimes hit limits in our work that Oracle helps us to overcome."

Frédéric Hemmer
IT Department Head, CERN

Business Challenge:

CERN is a European research organization that operates the largest particle physics laboratory in the world. Scientists from around the world carry out experiments at CERN's Large Hadron Collider (LHC), a 17-mile-long particle accelerator buried underground at the French-Swiss border. In order to support the control systems for LHC, CERN needed both reliable and innovative cloud technologies.

Results:

CERN leverages Oracle Autonomous Database and Oracle Cloud Infrastructure to improve the operational efficiency of CERN's LHC, scale its operations to the unprecedented levels its research requires, and accelerate its scientific discovery.

- ✓ Integrated Oracle Cloud within the large worldwide LHC Computing Grid with up to 10,000 cores on Oracle Cloud Infrastructure
- ✓ Used Oracle Cloud Infrastructure Container Engine for Kubernetes and Terraform for provisioning
- ✓ Leveraged Autonomous Transaction Processing Database (ATP) for storing data
- ✓ Developed an event reservation application entirely on OCI and delivered its solution in just 75 days
- ✓ Scaled up its database by 10x and its Kubernetes engine by 3x in a couple of minutes, resulting in better cost management
- ✓ Automated database management tasks, lowering database management time to zero for CERN's IT staff
- ✓ Gained transparency and flexibility in its collaboration through Oracle Cloud's microservices architecture

Products Used:

Oracle Cloud Infrastructure   Oracle Autonomous Database

Departmental Data Warehouse

Oracle Cloud helps Dropbox usher in the shift to distributed work

"We needed a solution with built-in machine learning that integrated with our ERP, eliminated complexity, and simplified application development. Running on Oracle Cloud Infrastructure means we close our accounts receivable process four times faster."

Vikram Singhvi
Head of Enterprise Applications, Dropbox

Dropbox

Business Challenge:

Founded in 2007, Dropbox develops smart content and collaboration products used by 600 million people across 180 countries. With demand for its distributed work solutions growing rapidly, Dropbox needed a unified solution that could automate and cleanse its financial data. Dropbox also wanted to deliver that information quickly so that it could analyze and guide resource allocation decisions.

Results:

An early adopter of Oracle ERP and EPM, Dropbox expanded its footprint to include Oracle Analytics Cloud, Oracle Integration Cloud, Oracle Database, and Oracle Autonomous Data Warehouse to turbocharge its financial processes, consolidate invoices, and automate delivery to subsequently capitalize on the shift to distributed work.

- ✓ Cut its financial period close in half and its accounts receivable period close from four days to one by using Oracle Cloud ERP
- ✓ Automated user access controls to ensure segregation of duties (SOD) compliance worldwide for all business units with Oracle Cloud Risk Management
- ✓ Cut the cost of financial records processing, reduced the volume of transactions, and accelerated its time to market by 4X with Oracle Integration Cloud and OCI
- ✓ Used Oracle Analytics Cloud provides its finance teams access to dashboards and self-service analytics to monitor and improve business performance
- ✓ Managed cash flow, modelled the impact of new product offerings, and reallocated resources to high-value initiatives with Oracle Cloud EPM
- ✓ Launched an initiative leveraging Oracle's new Intelligent Document Recognition tool to automate the scanning of invoices

Products Used:

Oracle Cloud Infrastructure   Oracle Integration Cloud   Oracle Cloud EPM

Oracle Cloud ERP   Oracle Analytics Cloud

Move Oracle ISV Apps

Workforce Software moves from Azure to Oracle Cloud, ups performance 30%

"We saw a financial performance that allowed us just out of the gate to save 30 to 35% in our CapEx expenditure, and with the great performance we're getting from OCI, the ROI that we deliver with our suite continues to get better and better."

Mike Morini
Chief Executive Officer, WorkForce Software

workforce
SOFTWARE

Business Challenge:

WorkForce Software provides cloud-based workforce management software to major customers such as Air Canada, ATB financial, ATS Automation, Rite Aid, and Tenet Health. When Microsoft Azure fell short of delivering adequate performance for its most data-intensive applications, Workforce Software began to look for an alternative public cloud provider that could host its development, testing, disaster recovery, and production of its software.

Results:

WorkForce Software chose Oracle Cloud Infrastructure when AWS and Google Cloud didn't meet its stringent needs. WorkForce chose Oracle for its advantages in performance, economics, reliability, scalability, and its ability to deliver the latest updates automatically to users worldwide.

- ✓ Estimated that the combination of OCI's low-latency network and the processing speed of the Oracle Exadata Database Service delivered a 30% performance improvement compared to its previous setup

- ✓ Migrated most data-intensive workloads while making no changes to its core application

- ✓ Experienced a 30-35% cost reduction by switching to OCI while improving performance, an advantage only OCI could provide

- ✓ Eliminated cost surprises associated with hard-to-estimate usage elements such as data egress and storage performance with Oracle's consistent pricing structure

- ✓ Plans to deliver its cloud software to customers in new regions as Oracle expands its data center footprint

Products Used:

Oracle Cloud Infrastructure

TLC keeps libraries open during COVID-19 using Oracle Cloud

"Oracle Cloud Infrastructure brings so many benefits to our developers and staff, as well as to our customers and their patrons, who appreciate the power and scalability that OCI provides."

John Burns
Chief Operating Officer, TLC

TLC

Business Challenge:

The Library Corporation (TLC) provides library management solutions to over 5,500 library locations. When the COVID-19 pandemic hit, TLC needed to respond immediately and enable libraries to continue their operations and services remotely.

Results:

Because TLC had built its ILS platform on Oracle Database, it felt that migrating its platform to Oracle Cloud Infrastructure would provide customers with unmatched control, security, and predictability to deliver high-performance, cloud-based infrastructure services.

- ✓ Enabled library staff to serve millions of patrons while working remotely
- ✓ Developed new, digitized ways to continue operations during COVID-19
- ✓ Allowed libraries to manage patron accounts, issue and renew library cards, and check in materials remotely
- ✓ Added web and mobile interfaces such as "library-to-go" catalogs
- ✓ Staff can configure rules for different user groups with OCI's advanced security and authentication capabilities

Products Used:

Oracle Cloud Infrastructure

Move Non Oracle ISV Apps

8x8 provides free video conferencing to millions while cutting costs

"As video meetings quickly became the connective tissue of today's new world, we saw our user count soar. To support that exponential growth, we looked at several platforms and chose Oracle Cloud infrastructure for its strong security, outstanding price/performance, and world-class support."

Vik Verma
CEO, 8x8

8x8

Business Challenge:

As videoconferencing became the standard for remote working, customer engagement, distance learning, and telehealth, 8x8 needed to hyperscale quickly to support demand, while also stemming its soaring cloud computing costs. To accommodate for its increased traffic of 2 million active monthly users and 1.5 petabytes of data incoming per day, 8x8 needed a cloud provider that could support the exponential growth of its free video meeting services.

Results:

Oracle's engineering team helped 8x8 connect its core infrastructure to OCI without having to make any changes to its application. 8x8 now provides valuable video meeting services to millions of customers all over the world, including schools, hospitals, and substance abuse programs – while experiencing substantial performance enhancements and reduced costs.

- ✓ Migrated its video meeting services from AWS to OCI in 4 days
- ✓ Delivered more than a 25% increase in performance per node
- ✓ Saved more than 80% in network egress costs
- ✓ Increased the number of monthly active users from 150,000 to 2 million

Products Used:

Oracle Cloud Infrastructure

Oracle Cloud Compute

Dedicated Region Cloud@Customer

NRI modernizes its data center with Oracle's Dedicated Region Cloud@Customer

"With Oracle Dedicated Region, we can significantly reduce our on-premises costs and invest more in our digital transformation."

Tomoshiro Takemoto
Senior Corporate Managing Director, NRI

![NRI logo]

Business Challenge:

As the largest consulting firm and IT solutions provider, NRI needed to invest in digital transformation in order to modernize, ensure advanced control, and provide governance in its own data center.

Results:

NRI moved its mission-critical SaaS applications, which are used by about 70% of the capital markets firms in Japan, from on-premises to an Oracle Dedicated Region Cloud@Customer in its own data center. Dedicated Region enables NRI to incrementally modernize its technology stack while reducing the risk and expense of adopting new technologies.

- ✓ Achieved agility and seamless expansion while maintaining high availability at the same level as its previous on-premises platforms
- ✓ Maintained the high level of financial control based on Japanese security standards such as SOC2 and FISC
- ✓ Leveraged cloud native tools such as Oracle Blockchain Platform and Oracle Container Engine for Kubernetes to further accelerate digital transformation
- ✓ Migrated other workloads to OCI and anticipates a second Dedicated Region/OCI project towards October 2021
- ✓ Cost savings allowed NRI to reallocate investments and resources into more strategic areas, transforming its own and its customers' business
- ✓ Increased both cost and operational efficiency compared to its on-premises platforms

Products Used:

Oracle Dedicated Region Cloud@Customer

Oracle Cloud Infrastructure

Oracle Blockchain Platform

Oracle Container Engine for Kubernetes

Sultanate of Oman selects Oracle Dedicated Region Cloud@Customer to strengthen its digital economy

"Oracle's innovative approach to cloud is helping us achieve and exceed the goals on this transformative journey."

Said Al Mandhari
CEO, Oman ICT Group

OICT GROUP
المجموعة العمانية للاتصالات وتقنية المعلومات

Business Challenge:

The Oman Information and Communications Technology Group (OICT Group) aims to strengthen the country's digital economy. The OICT Group needed to create a modern IT infrastructure that provided scalability, agility, and security with a compelling cost of ownership.

Results:

The OICT Group selected Oracle Dedicated Region Cloud@Customer to accelerate its digital transformation. After carefully evaluating other options, the OICT Group chose Oracle Cloud Infrastructure for its strong SLAs, advantageous economics, and guaranteed data sovereignty.

- ✓ Provided 120+ Omani government entities with a fully-managed cloud region
- ✓ Can now efficiently bring new applications and services online
- ✓ Awarded significant cost benefits to various government entities
- ✓ Ensured the highest level of data privacy for all government agencies while managing its data locally
- ✓ Explored Oracle Cloud's emerging technologies while following Oman's data sovereignty regulations

Products Used:

Oracle Dedicated Region Cloud@Customer

Oracle Cloud Infrastructure

VMware

Entel launches digital transformation project to seize growth opportunities

"One of the best things about Oracle Cloud Infrastructure is that we can run all of our VMware workloads and other mission-critical applications for two companies, in two regions, on one cloud infrastructure."

Alfredo Vaz Pinto
Infrastructure Manager, Entel
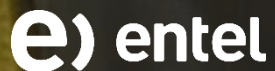
e) entel

Business Challenge:

Leading Chilean telecommunications provider Entel was limited by its expensive legacy systems that required 100+ people to operate and maintain. Through a project called Transformacion Digital Entel, Entel sought to build a digital, leaner, and more agile organization to seize its growth opportunities by moving to the cloud.

Results:

Rather than having to re-architect multiple applications to get them to run natively in the cloud, Entel moved its business applications and VMware workloads to Oracle Cloud Infrastructure. This put an end to buying hardware, managing warranties, and maintaining redundant platforms and data centers. Entel also uses Oracle Analytics Cloud to better forecast revenues, detect fraud, and assess credit risk.

- ✓ Reduced implementation time from months to less than two days
- ✓ Cut infrastructure costs by 50% compared to on-premises systems
- ✓ Reduced administration and monitoring efforts by 90%
- ✓ Extended life and investment of applications running on VMware

Products Used:

Oracle Cloud Infrastructure

Oracle Integration Cloud

Oracle Cloud Compute

Oracle Analytics Cloud

Oracle Cloud – Microsoft Azure Interconnect

TIM Brasil selects Oracle and Microsoft to migrate its whole datacenter to the cloud

"Oracle has been a fantastic partner in our technology evolution."

Pietro Labriola
CEO, Tim Brasil

Business Challenge:

TIM Brasil is one of the largest telecommunications providers in Brazil with more than 61 million customers. As the COVID-19 pandemic reshaped businesses, TIM Brasil needed to accelerate its digital transformation in order to meet evolving customer needs.

Results:

As part of its modernization project, TIM Brasil selected Oracle and Microsoft as its technology partners. With the adoption of Oracle Cloud Infrastructure and Microsoft Azure, TIM Brasil will move 100% its on-premises workloads to the cloud.

- ✓ Oracle Cloud Applications, Oracle Database, VMware servers, integration, and Oracle-based custom application workloads on OCI
- ✓ SAP, Microsoft, Virtual Desktop Infrastructure, and non-critical application workloads will run on Microsoft Azure
- ✓ Oracle-Microsoft Azure Interconnect will provide 40 Gbps initial speed, federated identity, and 99.95% SLA
- ✓ TIM Brasil will migrate 7,000 servers, 35,000 cores, 1,200 databases, and 15 petabytes of storage
- ✓ Reduced carbon emissions directly associated with physical data centers

Products Used:

Oracle Cloud Infrastructure

Migrate Custom Oracle DB App

Unimed taps Oracle Cloud in the fight against COVID-19

"The main reasons we migrated our databases and, most important, our patients' medical records to Oracle Cloud Infrastructure were the efficiency, scalability, and security provided through cloud technology without impacting our work."

Leandro Schmitz
IT Manager, Unimed Services Central

Business Challenge:

As Brazil's largest healthcare system, Unimed needed a reliable and robust platform to report suspected or confirmed COVID-19 cases via electronic medical records (EMRs) – as part of a broader effort to monitor the pandemic.

Results:

Unimed chose Oracle Cloud Infrastructure as its underlying platform for its aggressive EMR rollout. OCI's high performance, scalability, security, and automatic updates allowed Unimed to replicate and deploy its EMR databases quickly.

- ✓ Extended EMRs to all 344 Unimed branches in fewer than 15 days
- ✓ Reported more than 32,000 confirmed COVID-19 cases
- ✓ Increased visibility into COVID-19 cases and hospital and ICU capacity
- ✓ Enabled medical teams anywhere on the Unimed network to report data
- ✓ Freed up IT staff's time by automating maintenance, allowing them to focus on high-value activities

Products Used:

Oracle Cloud Infrastructure

Security

Gonzaga University improves disaster recovery and reduces costs

"We were 95% moving to AWS. [But] at the end of the day, our Infrastructure team, our ERP team, our Project Management team voted—it was unanimous for OCI."

Darren Owsley,
CTO, Gonzaga University

Business Challenge:

As one of the largest private universities in Washington, Gonzaga committed to a cloud-first strategy while focusing on security and disaster recovery. When Gonzaga IT staff learned that its ERP system - which was running in its own data center - would soon be retired, they needed a performant and scalable provider.

Results:

With Oracle, Gonzaga migrated its customized ERP system to Oracle Cloud Infrastructure. Gonzaga accelerated its ERP upgrade, improved disaster recovery, and maintained high security standards.

- ✓ Cloud-based deployments take 75% less time than they would on-premises
- ✓ Eliminated the need for time-consuming configurations, and provisioned new servers in minutes vs. weeks
- ✓ Enhanced performance by running bare metal servers on OCI
- ✓ 25% cost savings in infrastructure costs by switching to OCI
- ✓ Completed the project in 7 months – 2 months ahead of schedule

Products Used:

Oracle Cloud Infrastructure

Acuant migrates SaaS platform to Oracle Cloud Infrastructure

"Oracle Cloud Infrastructure's high performance and elastic scaling enables us to quickly and cost effectively expand our transaction processing capabilities as we continue to add new clients, features, and services."

Kieran Sherlock
Chief Technology Officer

acuant

Business Challenge:

Acuant (formerly IdentityMind) is a regulatory technology company that offers complete identity verification, regulatory compliance, and digital identity solutions. As the company grew, it faced scalability, security, and deployment challenges that required a more reliable and secure infrastructure.

Results:

Acuant chose OCI for its advantages in security, support for regulatory compliance efforts, and predictable pricing. By leveraging Oracle Web Application Security suite, Acuant ensured that its workloads were secured before, during, and after the migration.

- ✓ Reduced the time it took to onboard customers from 90 days to < 1 week
- ✓ Achieved 99.5% SLA availability for its mission-critical SaaS platform
- ✓ Leveraged Web Application Firewall (WAF), DDoS Protection, and API Protection
- ✓ Achieved faster resolution times due to direct access to technical support team
- ✓ Gained a better understanding of attack vectors and reduced its attack surface

Products Used:

Oracle Cloud Infrastructure

Oracle Cloud Compute

Oracle Cloud Infrastructure Web Application Firewall

Customer success with OCI security

DARLING INGREDIENTS INC.

Billion-dollar manufacturer wanted to raise security posture across critical apps

Cloud Guard quickly provided security best practices at no extra cost

discngine

Bioinformatics company had limited IT staff but required security certifications for customers

Cloud Guard enabled them to quickly and continuously monitor and report on security posture

GRUPO DPSP

Large Brazilian drugstore needed to build commerce application for 18 million customers in four weeks.

High default security of ATP enabled fast development and strong customer protections

Price-Performance

Mazda cuts costs by 50% and boosts performance by 70% with OCI

"We migrated a global inventory management system that tracks thousands of automotive repair parts and accessories from an on-premises system to Oracle Cloud Infrastructure. We've already achieved a 70% increase in performance and cut our 5-year total cost of ownership in half."

Masahiko Tamura
General Manager, Supply Chain Systems Department, Mazda Motor Corporations

Business Challenge:

As a multinational automaker that supplies 1.5 automobiles annually, Mazda has a complex inventory management system. In order to simplify its system, Mazda needed to shorten its demand forecasting processing cycle and improve the accuracy of demand forecasting.

Results:

Mazda switched from its on-premises server and storage infrastructure to Oracle Cloud Infrastructure because it delivered significant performance improvements and reduction in the five-year total cost of ownership. In addition to cost savings and performance gains, Mazda can also scale transaction capacity up or down based on business demands, so it can run its inventory forecasts daily instead of monthly.

- ✓ Improved performance by 70% compared to its previous on-premises infrastructure
- ✓ Lowered its total cost of ownership over five years by 50% compared to its previous systems
- ✓ Improved the accuracy of demand forecasting calculations and inventory management reports
- ✓ Eliminated the need to share on-premises resources between applications

Products Used:

Oracle Cloud Infrastructure

Oracle Bare Metal Servers

Oracle GoldenGate

Nissan gets to market quicker with Oracle Cloud HPC

"We selected Oracle Cloud Infrastructure's HPC solutions as part of our multi-cloud strategy to meet the challenges of increased simulation demand under constant cost savings pressure. I believe Oracle will bring significant ROI to Nissan."

Bing Xu
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NISSAN
MOTOR CORPORATION

MAGNITE

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Products Used:

Oracle Cloud HPC