ORACLE

Oracle Cloud Winter Camp

Sumérgete en la nube de 2ª Generación

4 Febrero 2020

Speakers

Borja Gómez

Business Development Manager Cloud Innovation, Oracle

Jesús Brasero

Principal Cloud Architect, Oracle

Safe harbor statement

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

Borja Gómez

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Immersion in the 2nd Generation Cloud | Agenda

10:00 – 10:05	**Welcome**
10:05 – 10:40	Oracle Cloud Introduction
10:40 – 11:00	Oracle Cloud Architecture
11:00 – 11:30	Walkthrough console and demo and Q&A

Oracle Cloud in 8 Steps | Agenda

4 th Feb	**Immersion in the 2nd Generation Cloud**	Borja Gómez, Jesús Brasero
5 th Feb	**High-reliability architectures for mission-critical applications**	Alejandro de Fuenmayor, Raúl de Diego
11th Feb	**Forecasting, optimization and cost management in the Cloud**	José Criado, Sergio Álvarez
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24th Feb	**How to migrate enterprise applications to the Cloud**	Mariano Jimenez, Guillermo Best
26th Feb	**Cloud-Native development with Oracle Cloud**	Iván Sampedro, Victor Mendo

Scan to see all events

Format

Day of the event

1. Topic Presentation
2. Demo
3. Live Q&A Chat

Post event | During the week

4. Hands-on @home
5. Need help? Dedicated group on LinkedIn (http://bit.ly/OCICafe)

Participation to different event steps is optional

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Oracle helps businesses solve their biggest challenges

Record financial transactions

Improve customer experience

Build better products

Understand insights from data

Foster innovation

Accelerate critical processes

Cloud for your critical enterprise apps and data

First Generation Cloud		Oracle Cloud
Elastic resources		Superior and predictable performance
Pay for what you use		Unbeatable price
High scale	+	Enterprise class
Self-service		Security first
Easy to use		Open ecosystem

29 Oracle Cloud regions and growing

November 2020: 29 Regions Live, 9+ Planned; 6 Azure Interconnect Regions

Oracle Cloud – Complete Cloud Strategy

Oracle Fusion Applications

Financials | Supply Chain & Manufacturing | Human Resources | Sales | Service | Field Service | Marketing | Data

Oracle Cloud Infrastructure

Autonomous Technologies:

Autonomous DB
Autonomous Linux

Integration

Analytics

Security

App Dev

Compute

Networking

Storage

Cloud Databases

29 REGIONS

The Complete, No-Compromise choice of services

Partner Ecosystem

Altair · Couchbase NoEQUAL · FORTINET · Microsoft · paloalto NETWORKS · vmware

Next Layer Services

Low Code	Analytics	Integration	Hybrid Services	Migration/Hybrid
Digital Assistant	Oracle Analytics	Integration	Azure Interconnect	Identity (AD, SSO, LDAP)
Visual Builder	Data Science	Data Integration	Exadata Cloud@Customer	VMware Solution

Developer Services

AppDev	DevOps	Container Ecosystem	Serverless	Observability
CI/CD/Deployment	Dev Tools / Resource Mgr	Kubernetes / Registry / API	Functions / Events	Monitoring / Logging

Data Services

DBaaS/ExaCS	Autonomous Database	Other Data	Other Data Mgmt	Big Data
VM and Bare Metal	Dedicated and Serverless	NoSQL	Database Migration	Big Data / Data Flow
Exadata Cloud Service	ADW, ATP and AJD	Streaming / Kafka	Data Catalog	Data Integration

Core Services

Compute/OS	Storage	Networking	Security	Governance & Management
Bare Metal	Block	VCN	KMS / Virtual Vaults	Compartments & Tags
VMs / Dedicated VMs	Object	Cluster Networking	Policy / Data Safe	Audit
GPU shapes	Object Archive	Load Balancer	Identity / Secrets Mgmt	Email
High frequency CPUs	File	Service Gateway	CASB / Cloud Guard	Notifications
Autonomous Linux	Import Appliance	FastConnect w/IPSEC	WAF	Cost Management
OS Management	Storage Gateway	DNS	DDoS	

Regions

Phoenix	Ashburn	Toronto	UK/Gov (4)	Frankfurt	Israel	Dubai	Jeddah	Tokyo	Seoul	Mumbai	Sydney	Sao Paolo	Chile
Bay Area	US Gov (5)	Montreal	Amsterdam	Zurich	S. Africa	UAE 2	Saudi 2	Osaka	Chuncheon	Hyderabad	Melbourne	Singapore	Vinhedo

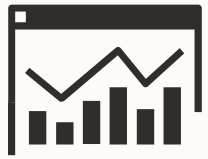
Compute

Compute services for any enterprise use case

Bare Metal	VMs	Containers	Functions
Instance isolation Highest IOPS High throughput Low latency	Security- hardened hypervisor Flexible sizing Dense IO and Dedicated host options	Bare metal performance Self-healing clusters	Pay only for usage Serverless Container-native Open source

AMD EPYC	Intel Xeon	NVIDIA GPUs

Local Attached Storage	Remote Attached Storage
NVMe SSDs Up to 51.2 TB Millions of IOPS	NVMe Block Volumes up to 1PB 32 TB / volume 75 IOPS / GB



Governance & Management

Architected from the ground up for maximum isolation and protection

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

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

A comprehensive enterprise cloud strategy

Professional Services: Global System Integrators, Oracle Advanced Customer Support

ORACLE ENTERPRISE APPLICATIONS

ORACLE Applications · ORACLE E-Business Suite · ORACLE Siebel · ORACLE JD Edwards · ORACLE Hyperion · ORACLE PeopleSoft

CUSTOMER & ISV APPS ON ORACLE DATABASE

PERFORMANCE INTENSIVE WORKLOADS

CLOUD NATIVE APPLICATIONS

Oracle Cloud Applications

CX · HCM · SCM · EPM · ERP · Data

Mission-critical enterprise cloud applications

OPEN ECOSYSTEM

Third party applications, tools, and services

Oracle Cloud Infrastructure

Tools and services to migrate, build, extend, and deploy enterprise applications

COMPUTE · CONTAINERS · STORAGE · DATABASE · AUTONOMOUS DATABASE · SECURITY · INTEGRATION

Oracle Cloud Regions

Oracle's commitment to open source

Leadership role in open source communities

THE LINUX FOUNDATION

Linux

CLOUD NATIVE COMPUTING FOUNDATION

kubernetes

OPENAPI INITIATIVE

ECLIPSE FOUNDATION

HYPERLEDGER

MySQL

Bringing open source software to OCI platform

Terraform

ANSIBLE

CHEF

docker

kubernetes

Contributing back to open source software

fn

GraalVM

GraphPipe

OpenJDK


smith


crashcart


railcar

Our Take on Cloud Native

Clouds Should Embrace Openness and Enable Portability

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	
Orchestration	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 (&+)	

Build Cloud Native Apps on Oracle Cloud

Wide choice of big data deployment and services on the best price/performance cloud

Roll Your Own

Oracle Validated

kubernetes

Pre-built Kubernetes Installer

Quickstart Experience (OSS Terraform Installer on GitHub)

Oracle Native Solutions

Oracle Container Engine for Kubernetes (OKE)

Best-in-Class Compute, Storage and Networking, Lowest Cost, Predictable Performance

Open standards-based platform; Weblogic on Kubernetes

Enterprise grade infrastructure

Right-size cloud-native infrastructure

30% faster operations on bare metal

No charge for Kubernetes management (only worker nodes)

Native Terraform + Ansible support

How to start for free?

Always Free

Services you can use
for an unlimited time

+

Free Trial

400 €
free credits for 30 days

Learn, Explore, and Build for Free

Always Free – What's Included

Autonomous Database

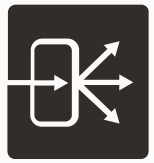
2 x Autonomous Databases
20 GB each

Compute

2 x VMs
1 GB Memory each

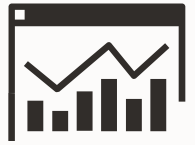
Storage

100 GB Block
10 GB Object
10 GB Archive



Networking/ Load Balancing

10 Mbps LB
10 TB Outbound Data Transfer



Monitoring / Notifications

500M Metrics Ingestion
1B Metrics Retrieval
1M Http Notifications
1K Email Notifications

Available to All New and Existing Cloud Accounts

Flexible Pricing & Consumption Models

Flexible

Universal Credits

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

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
- Discounting based on consumption

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Jesús Brasero

Principal Cloud Architect

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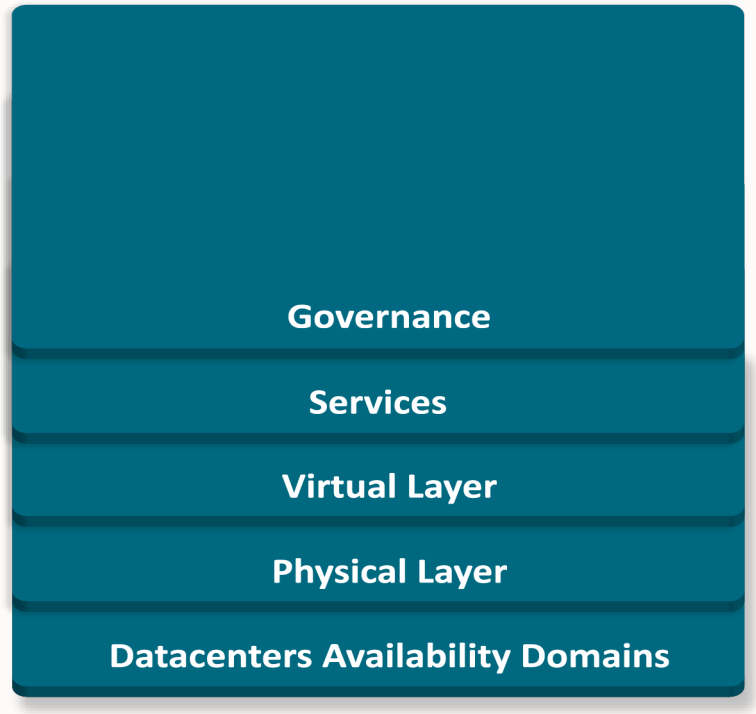
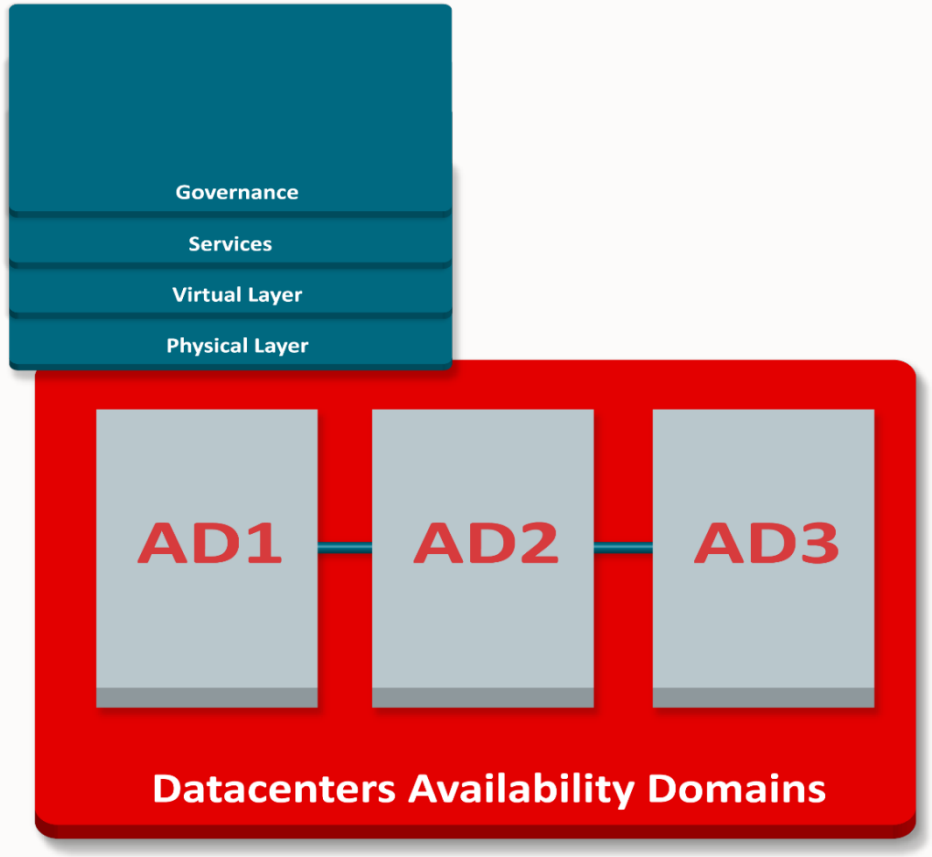
Regions



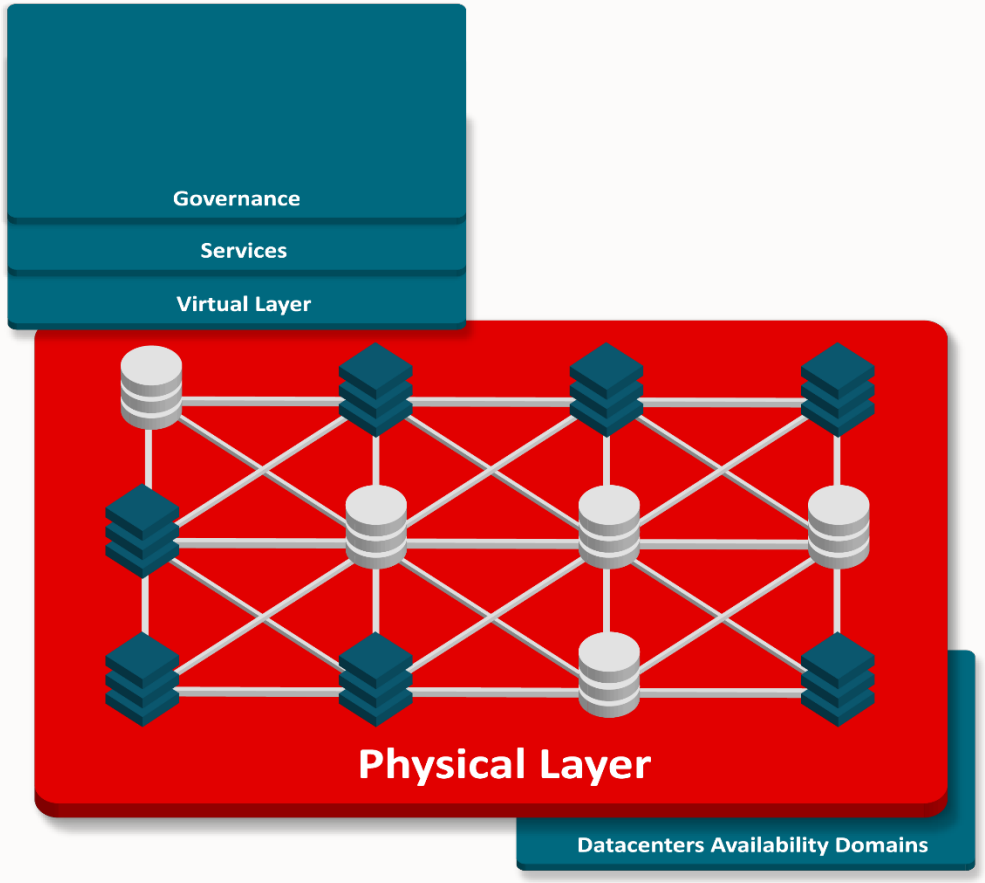
- Regions serve different geographies, and provide widely dispersed Disaster Recovery capabilities
- Oracle's Backbone Network and Peering capabilities provide for connectivity between regions
- Availability Domains provide a foundation for High Availability within a region, and contain multiple fault domains

Inside a Region – High Availability Building Blocks



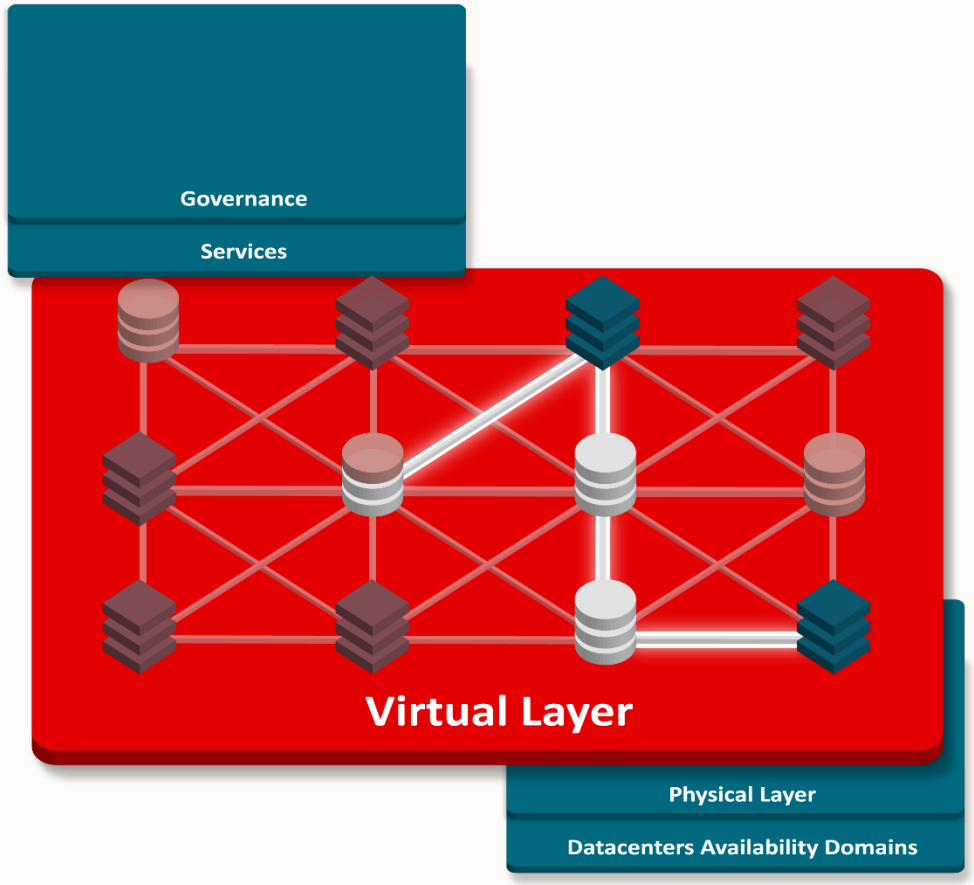
- Options for HA:
  - Multi-Region
  - Multi-Availability Domain
  - Multi Fault Domain
- High Availability for traditional and cloud-native applications

Fast and predictable physical network infrastructure



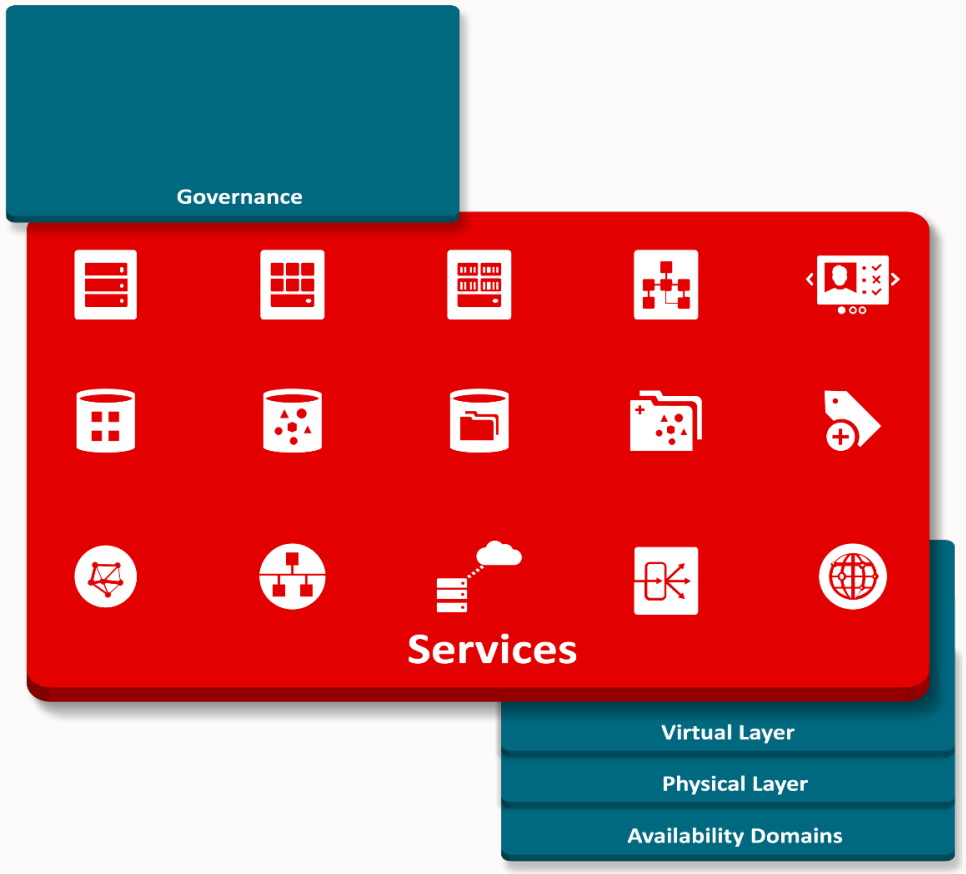
- Non-oversubscribed network
- Flat network speeds traffic by reducing the switches between any two hosts
- High speed interconnects: 2 x 25Gbps bandwidth
  - Predictable, low latency < 100µs expected one-way latency between hosts in an AD
  - <500µs between ADs
- The only cloud network performance SLA

Comprehensive Virtual Network with off-box IO Virtualization



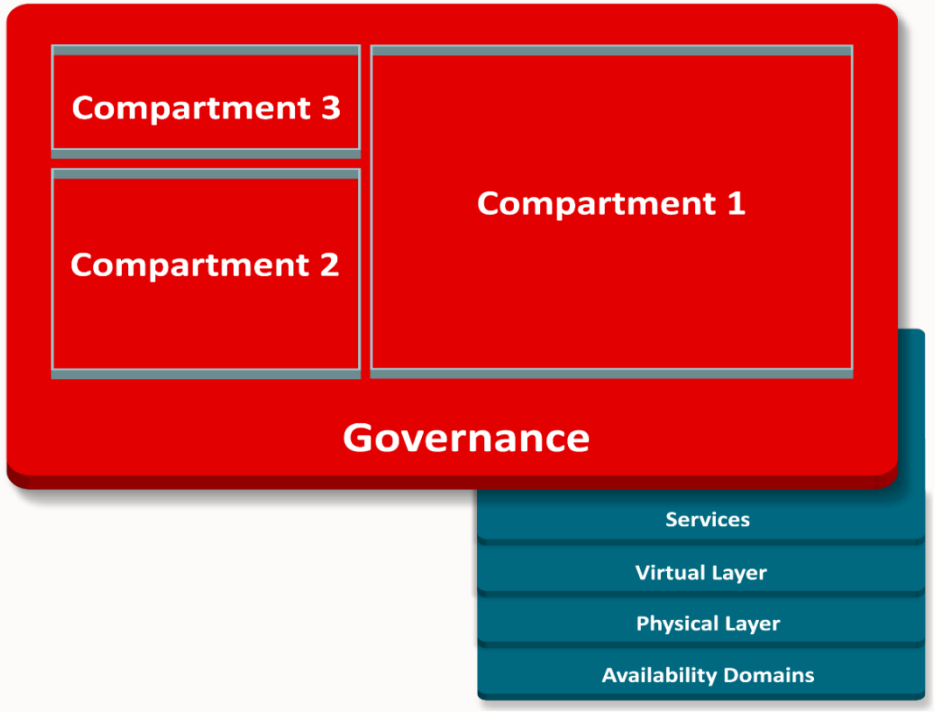
- Layer-3 virtual networks
- Bare metal available through the same portal and APIs as VMs
- Exadata and Real Application Clusters (RAC) options available for database performance and reliability

Services



- Millions of read and write IOPS
- Best DB service for Oracle
- Only cloud performance & manageability SLA
- Broad compute options including bare metal, VM, GPU, containers
- Edge services, including industry-leading DNS
- 58 services

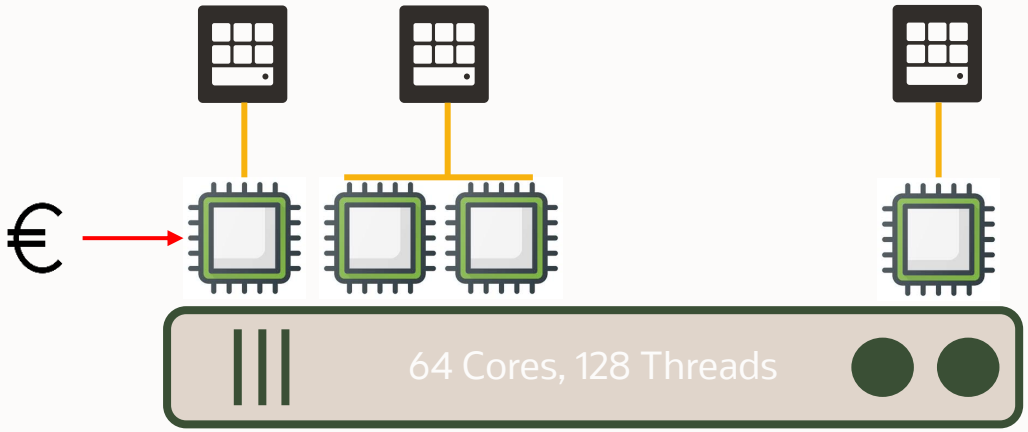
Governance



- Compartments
- Identity federation
- Tags – including structured tags
- Budgets and usage analysis
- Universal credits

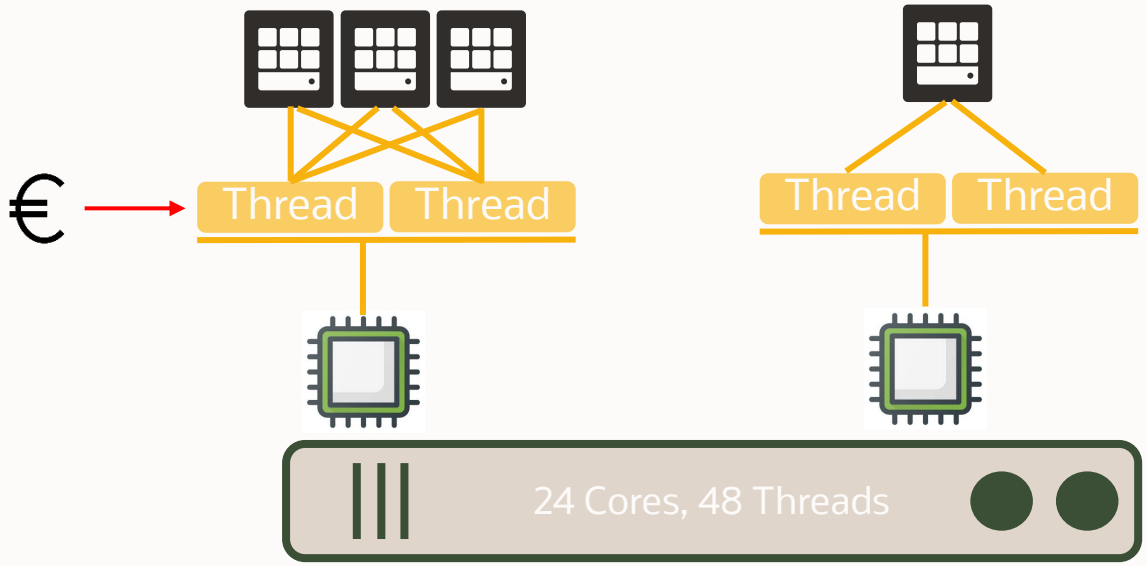
Oracle oCPU

Other Clouds



oCPU = 2 Threads

No sharing of compute resources!

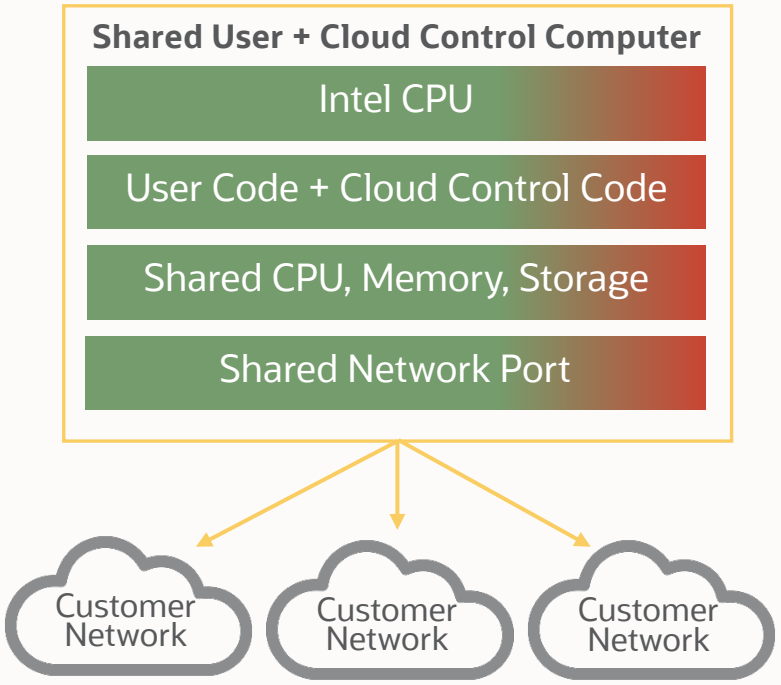


vCPU = Thread

Each Thread is shared by VMs

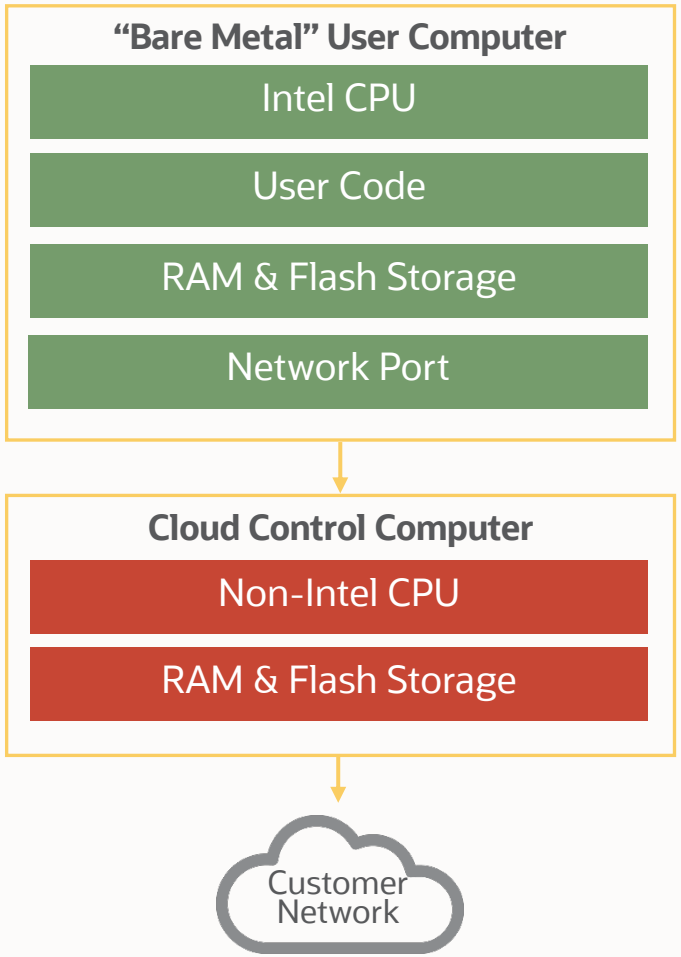
Gen 1 Clouds
Shared Computers

- Cloud provider can see customer data
- User code can access cloud control code



Oracle Cloud Infrastructure
Separate Cloud Control Computers

- ✓ Oracle cannot see customer data
- ✓ No user access to cloud control computer



End-to-end cloud infrastructure SLAs

	Oracle	AWS	Azure	GCP
Availability	✓	✓	✓	✓
Performance Disk IOPS & Network	✓	✗	✗	✗
Manageability API Error Rate	✓	✗	✗	✗

Global, regional, and industry compliance

Global

SOC 1 : SOC 2 : SOC 3

27001 : 27017 : 27018

Level 1

US Privacy Shield

Government

DoD DISA SRG IL2

DoD DISA SRG IL5

High – Agency ATO

CJIS

VPAT – Section 508

G-Cloud 11 - UK

Model Clauses - EU

Industry

HIPAA

PCI DSS

TISAX - Germany

FISC - Japan

IG Toolkit - UK

FINMA - Switzerland

Regional

GDPR - EU

BSI C5 - Germany

ENS - Spain

PIPEDA - Canada

Cyber Essentials Plus - UK

My Number - Japan

Cloud Security Principles - UK

Partnerships

ORACLE + Microsoft

Interconnected Multi-Cloud Solutions for Enterprise

- ✓ Microsoft Azure and Oracle Cloud are interconnected today, so you can migrate and run mission-critical enterprise workloads across clouds
- ✓ Unified identity and access management via single sign-on with automated user provisioning to easily manage resources across clouds
- ✓ Collaborative support of custom and Oracle Applications on Azure with Oracle Database on Oracle Cloud – connect best-in-class services across clouds

Available Now: San Jose, Toronto, Ashburn, London, Amsterdam, Tokyo
More Regions coming Soon

Partnerships

ORACLE + vmware®

1

Dedicated with Full Control

Self-service provisioning with full administrative control, including root access. Root access provides full control over your environment.

2

Keep the Same VMware Tools

Leverage your existing skillsets with tools you are already using on-premises; vSphere, vSAN, NSX, and Third-party ISV solutions.

3

Seamless Migration

Migrate applications “as-is” and avoid modifications by relying on a single VMware specification that works both on-premises and in the cloud.

4

Access to Oracle Cloud Services

Deploy VMware-based applications in the same cloud environment as Oracle’s broad portfolio of cloud services including Autonomous Database, DBaaS, and Exadata CS

5

Global Availability

Deploy into any of the Commercial OCI regions

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Register now for next events!

Thank you

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