# Why is OCI built for the Enterprise?



June 20, 2018 appsassociates.com

# Confidentiality



The content of this document is proprietary, confidential information pertaining to Apps Associates' products, services, solutions and methods. Information herein is intended for use by the client or prospective client only and must not be shared with any third party without consent from Apps Associates.



# Agenda



- Introduction
- Moving Workloads to the Cloud
- OCI Differentiators
- Q&A/General Discussion

# About the Presenter





Wilfrido Solano









# **About Apps Associates**

- Who is Apps Associates: Global IT Consulting Services provider
- Headquarters: Boston area
- Number of Associates: 850+
- Number of Oracle ERP Cloud Projects (SaaS): 30+
- Number of Oracle EBS Customers on Cloud: 40+
- Partnerships with Oracle Development: PaaS, IaaS, Rev Rec, SCM
- **Specializations**: Oracle Infrastructure as a Service, Oracle Management Cloud



as a Service



2016 & 2017 Winner of Oracle Excellence Award laaS/PaaS







**Custom Dev &** Integration



**Analytics** 

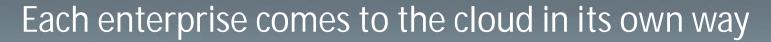


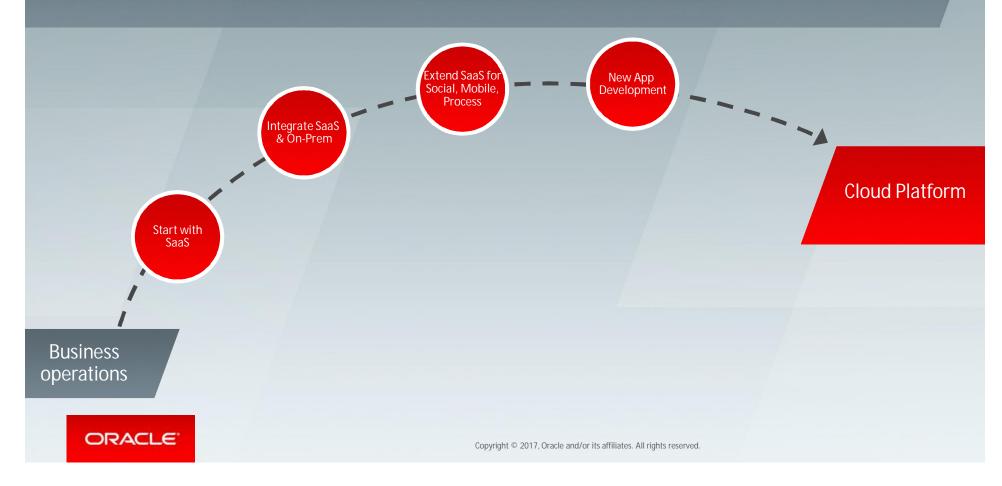
Infrastructure & Cloud **Services** 



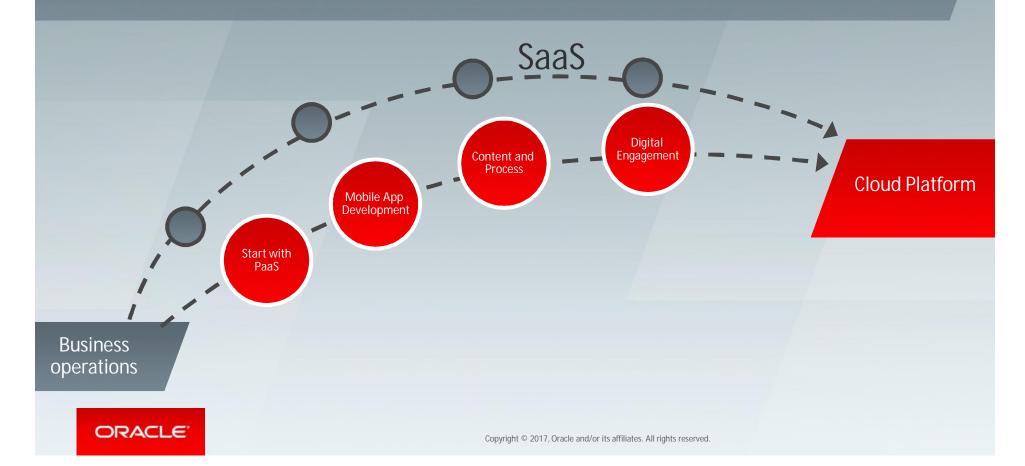




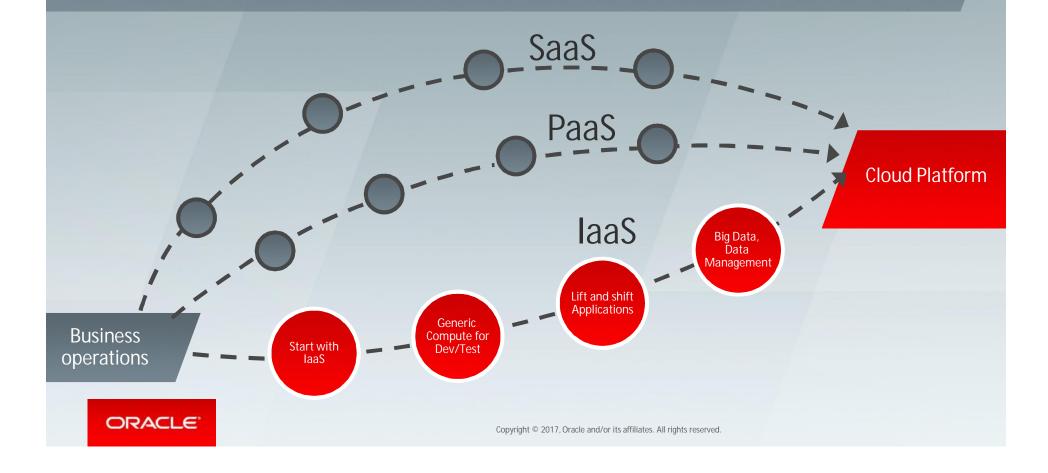




# Each enterprise comes to the cloud in its own way



# Each enterprise comes to the cloud in its own way



#### Paths to Cloud



- Modernize your business with applications in the cloud
- 2 Integrate your cloud applications with existing on-premises workloads
- 3 Extend apps with social, mobile, and process capabilities
- 4 Enable apps to leverage emerging technologies such as Al

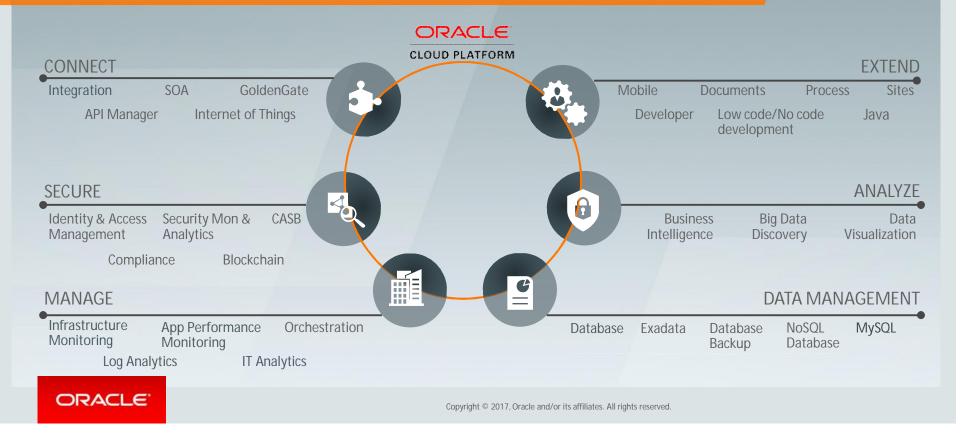
- Start with new app development
- 2 Move that app to a production deployment on premises
- 3 Integrate data and analytics to provide greater insights
- Extend and differentiate apps with chatbots and virtual assistants

- Move existing app workloads from the data center to the cloud
- 2 Integrate them with on-premises workloads and extend capabilities to the cloud
- 3 Add SaaS modules for more features and capabilities
- 4 Use those apps to build data lakes and drive predictive analysis

- Optimize existing on-premises
  systems
- 2 Consolidate servers and storage onto engineered systems
- 3 Add data archive and backup services
- 4 Use Oracle Cloud at Customer to run the public cloud behind your firewall



# Oracle Cloud Platform lets you connect, extend, secure and analyze all of your workloads



# **Oracle Cloud Terminology**

- OMCS On Demand
- OCI Classic Opublic Cloud
- OCI Bare Metal CS





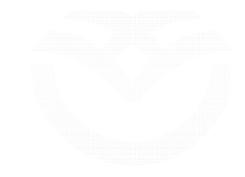
#### Cloud 2.0

The second generation of modern cloud infrastructure from Oracle has the following capabilities:

- Deploy bare metal servers in minutes
- Raw server performance without the hypervisor overhead
- Pay for what you use
- Integrated compute, storage, and database services in a low-latency private network
- Enterprise-level governance
- High availability for traditional and modern applications
- All features usable via console or API



## **OCI** Differentiators



#### OCI has three important differentiators:

- 1. Flat, non-blocking network
- 2. Off-box IO virtualization
- 3. Storage



## Flat, non-blocking network



OCI has created data centers from the ground up with a flat non-blocking network based on Clos network topology (named after Charles Clos) used by telecom companies, where any component (Compute, Storage etc.) can talk to any other with a maximum of **two hops**. A flat Clos network speeds up traffic by reducing the number of routers and switches that data has to pass through

- Flat, fast and predictable data rates
- Very high scale approx. 1 million network ports in an availability domain
- < 100µs RTT (Round Trip Time) latency, 10Gb/s bandwidth</li>

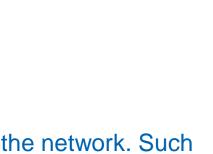


#### Off-box IO virtualization

Highly configurable private overlay networks

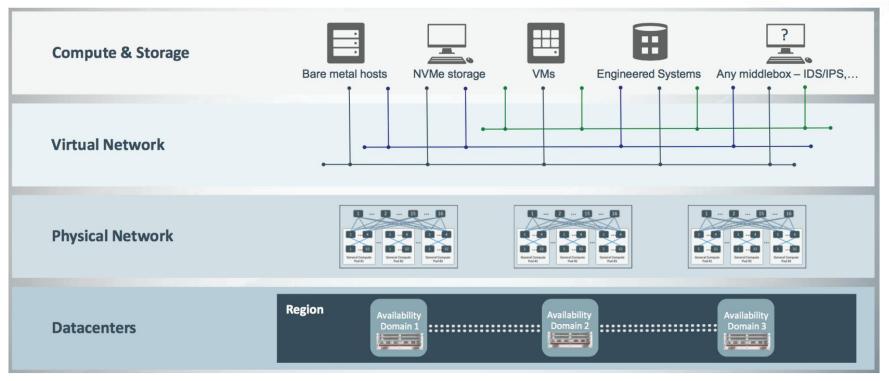
- move management and I/O out of the hypervisor
- reduce compute overhead
- provide bare metal instances.

Oracle took I/O virtualization out of the hypervisor and put it in the network. Such "off-box" I/O virtualization does a couple of things. It eliminates a common cloud performance problem known as "noisy neighbor," whereby server performance degrades because multiple virtual machine workloads are accessing the same hypervisor at the same time, causing I/O bottlenecks.





## Off-box IO virtualization





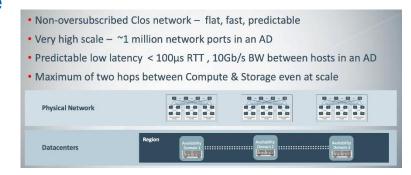
### Storage

- All NVMe-based (Non-Volatile Memory Express) storage infrastructure
- 25K IOPS per volume, at 320 MB/s throughput
- Sub-millisecond latencies
- Configurable volume sizes: 50 GB to 2TB in 1 GB increments
- No storage performance concerns provision your required capacity and performance scales linearly.
- The price is a simple 5 cents a month for each GB you provision.



# Oracle Cloud Infrastructure - Built for Enterprise

- Generation 2 for Modern Cloud Infrastructure
- Oracle has built the data centers from the ground up
- They formed an **A Team** at Seattle hiring from Azure & AWS, who designed the Oracle Cloud Infrastructure learning from mistakes
- High Performance is a key goal -**Designed for Enterprise Customers**
- Oracle RAC & Exadata are available on OCI - A major differentiator





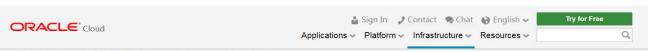
### Where Did We See Improvements

- Improvements in Oracle Cloud Infrastructure vs. Other Providers
  - 20% improvement in downloading software
  - 65% improvement in installing software
  - 40% improvement in configuring software
  - 25% improvement in patching time
  - 30% improvement in database response time
- 20-25% better network performance
- 8X cheaper than AWS for the same configuration
- Inexpensive and simple storage model





# Cloud Jump Start Program



Click 'Try It Free Now' for Demo Labs you're interested in to begin.







https://cloud.oracle.com/jumpstart



# Whitepapers



White Paper

THE FUTURE OF ORACLE E-BUSINESS SUITE

White Paper



# WHY ORACLE CLOUD INFRASTRUCTURE IS BUILT FOR THE ENTERPRISE?



