

Oracle GoldenGate for OCI Marketplace

A Customer Managed Cloud Solution

Oracle Development
Summer 2019

Safe Harbor Statement

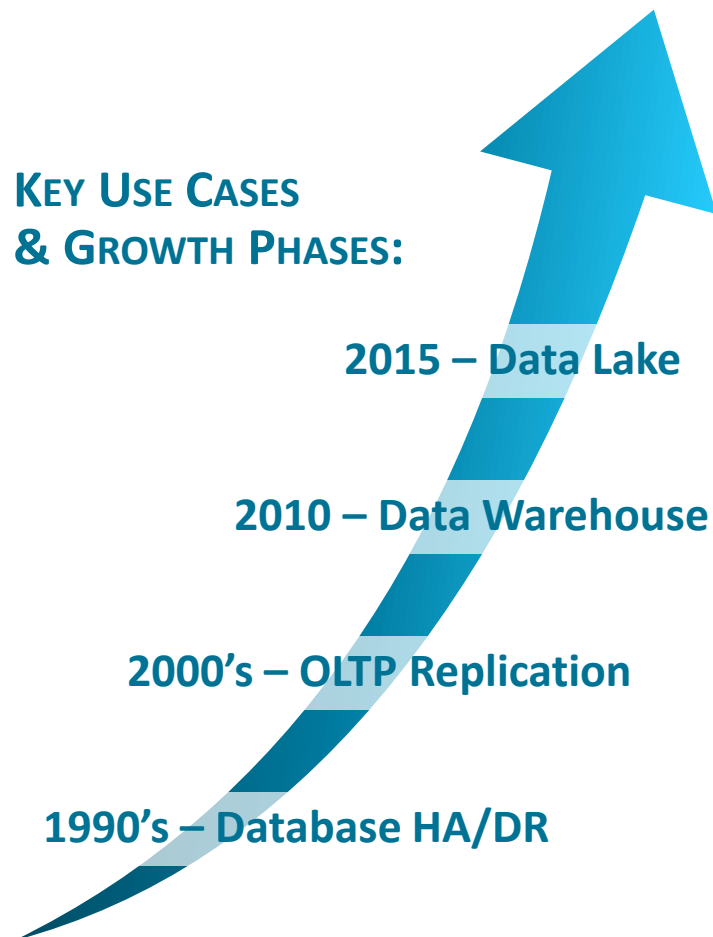
The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development,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

Program Agenda

- 1 GoldenGate Background
- 2 GoldenGate for OCI Marketplace Overview
- 3 Details on Features, Functions and Capabilities
- 4 Step-by-Step Walkthrough

Oracle GoldenGate | 20+ Years of Innovation

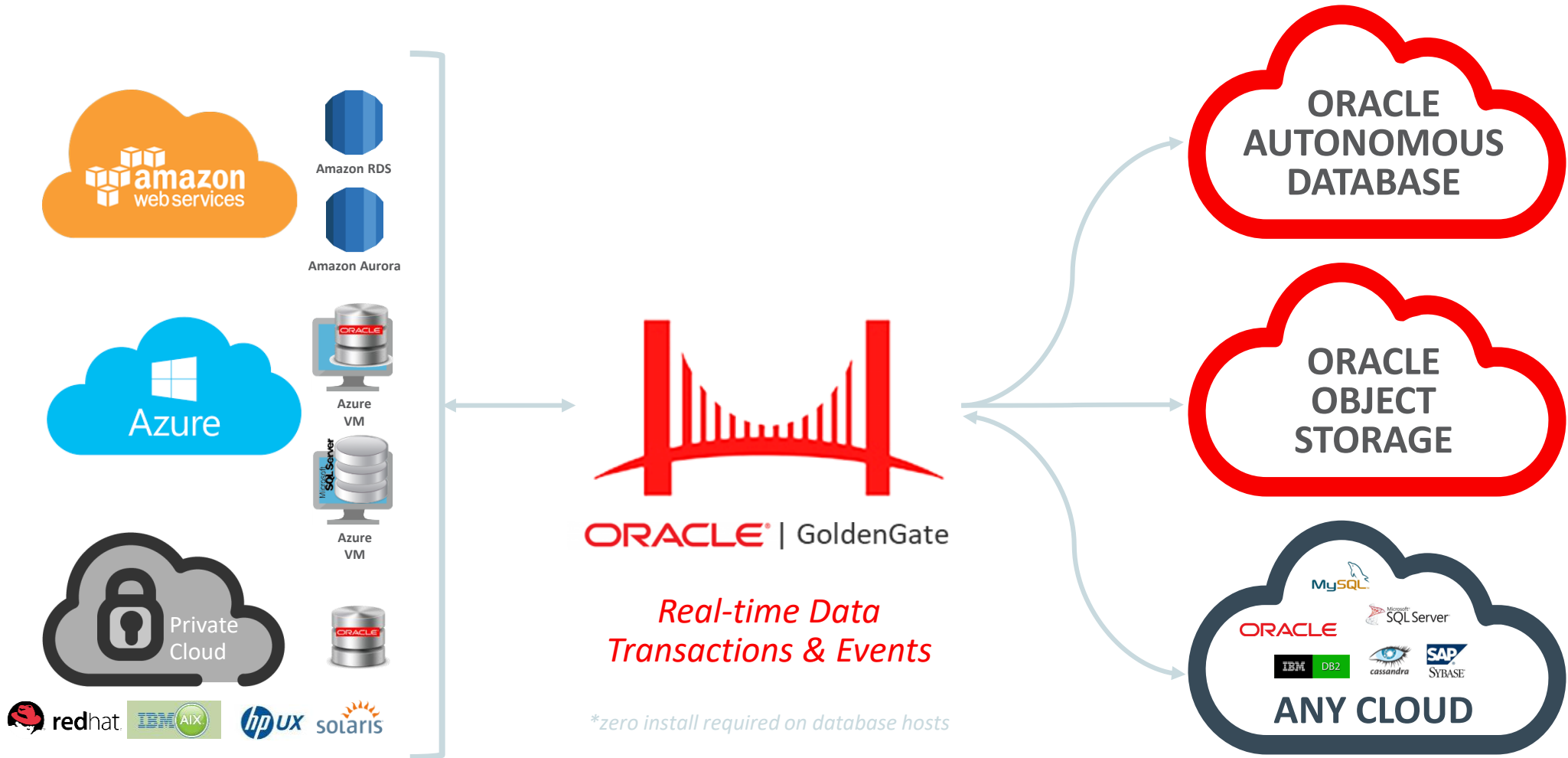
KEY USE CASES & GROWTH PHASES:



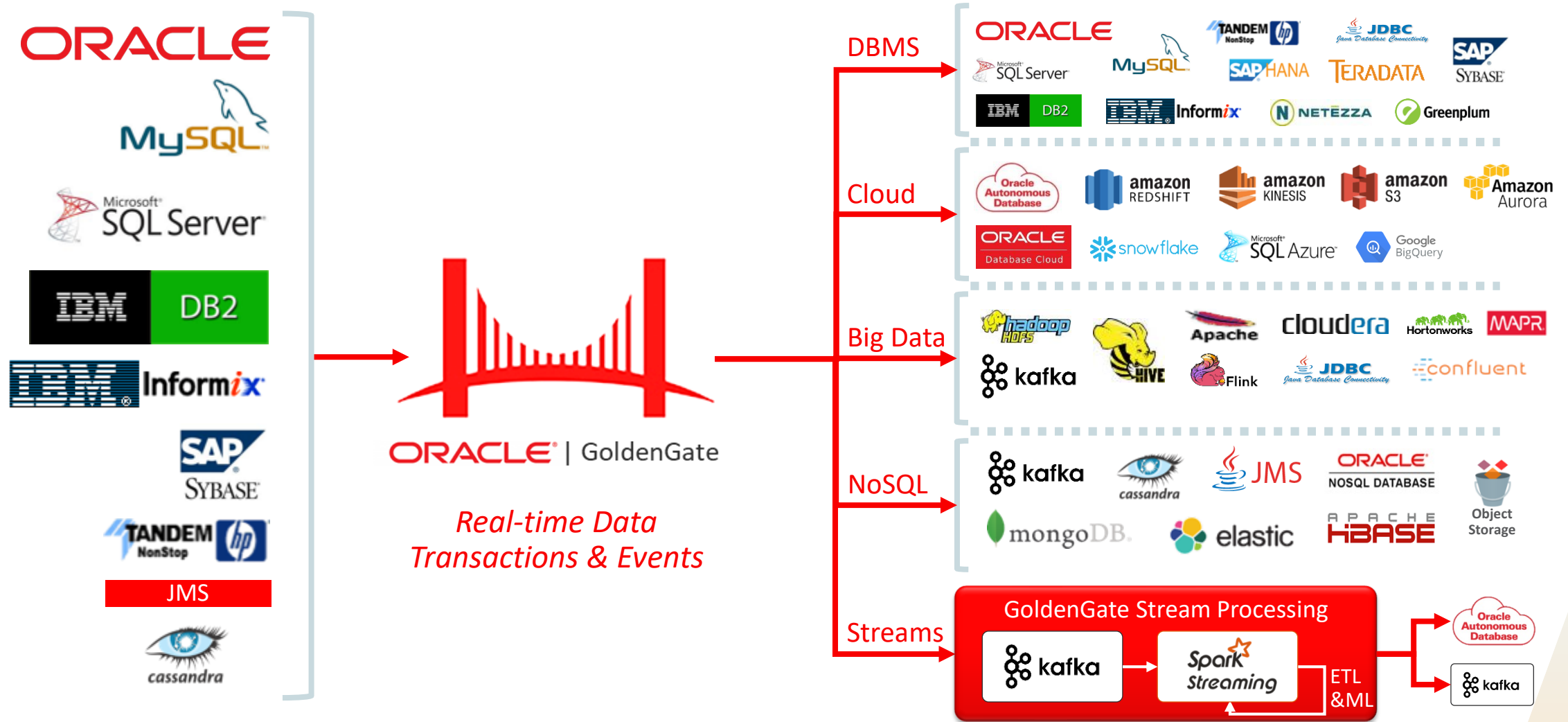
1000'S OF CUSTOMERS GLOBALLY



Oracle GoldenGate | Multi-Cloud Capable



Oracle GoldenGate | Platform for the Whole Enterprise



Oracle GoldenGate | Key Use Cases

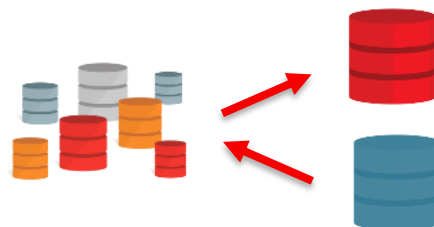
Database HA/DR

Active-Active, Multi-Master,
Zero-Downtime, DB Migrations



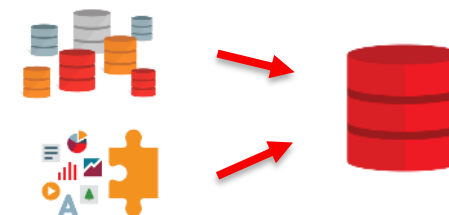
OLTP Replication

Replicate transactions, data &
events across OLTP databases



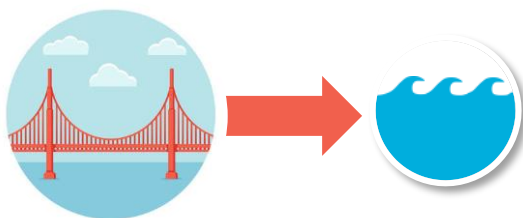
Data Warehouse Ingest

Load and stage data into Data
Warehouse tables



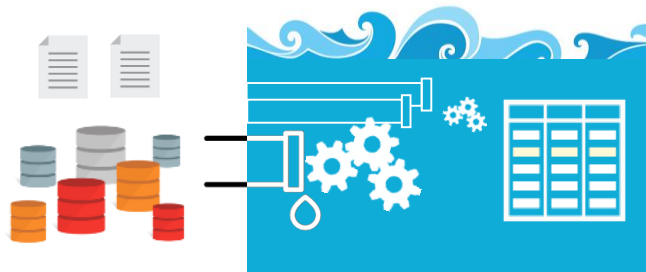
Data Lake Ingest

Best-in-class streaming data
ingestion for all data lakes



Data Pipelines

Transform and process any data
as it arrives in the Stream



Stream Analytics

Apply machine learning, geo-
spatial and advanced rules



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Announcing: GoldenGate on Oracle Cloud Marketplace

Available in OCI global data centers

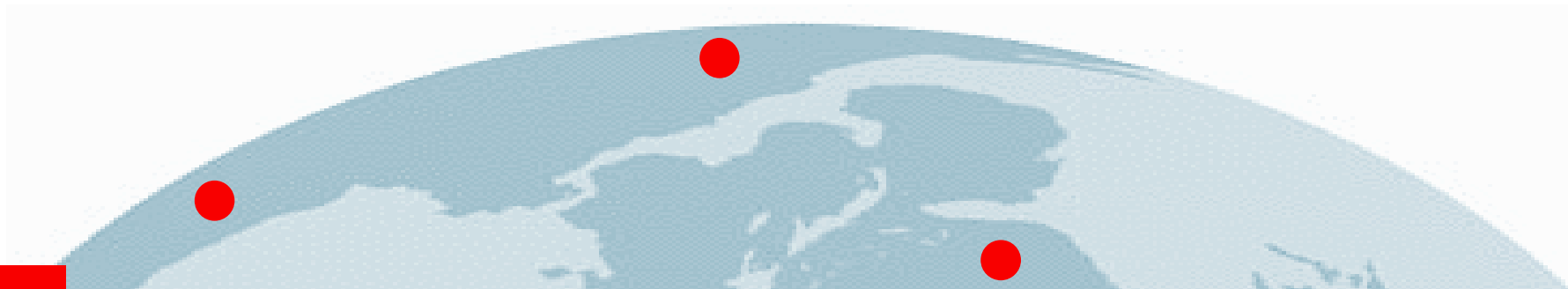
<https://www.oracle.com/cloud/data-regions.html>



Ideal for replicating data to OCI cloud

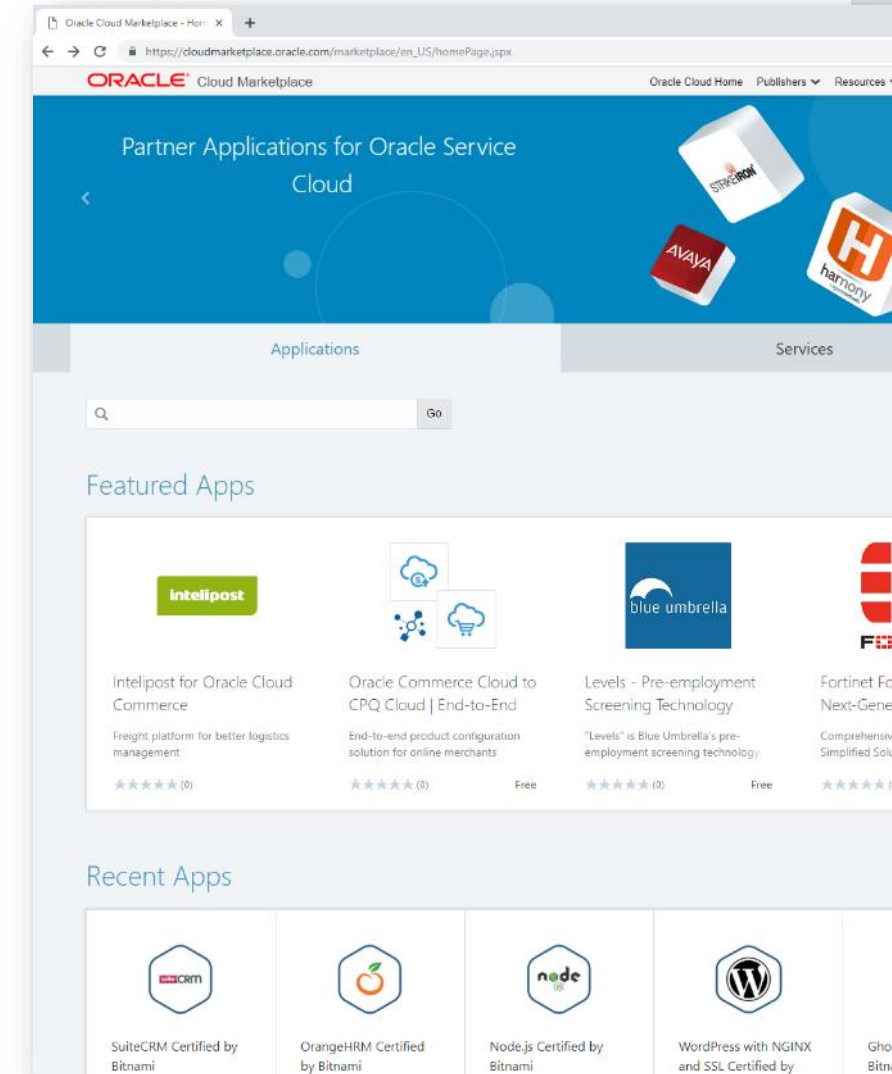
Super-fast cloud infrastructure

Works with on-prem and 3rd party clouds



About OCI Marketplace

- Newest data centers, aggressive build schedule
- High speed Compute, Network and Storage
- Provisioning automation provided via Oracle Terraform scripting
- Will work with Oracle Database Cloud, including Autonomous Database, and any Applications hosted on OCI Compute
- Robust security, standard OCI tenancy and VPN options to support any on-premise or non-Oracle cloud integrations

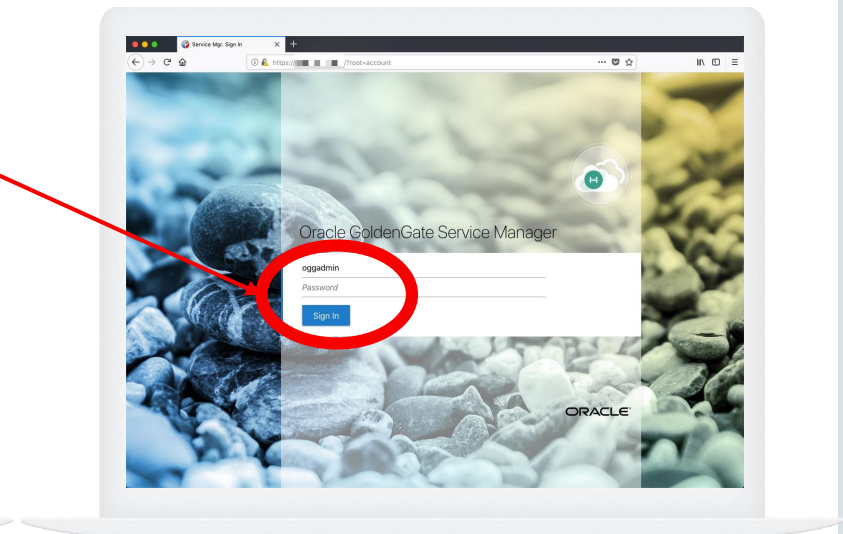
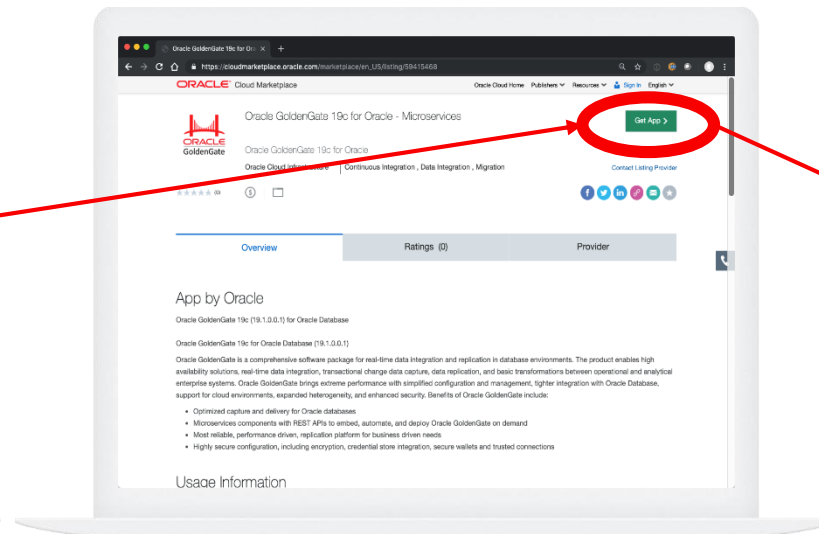
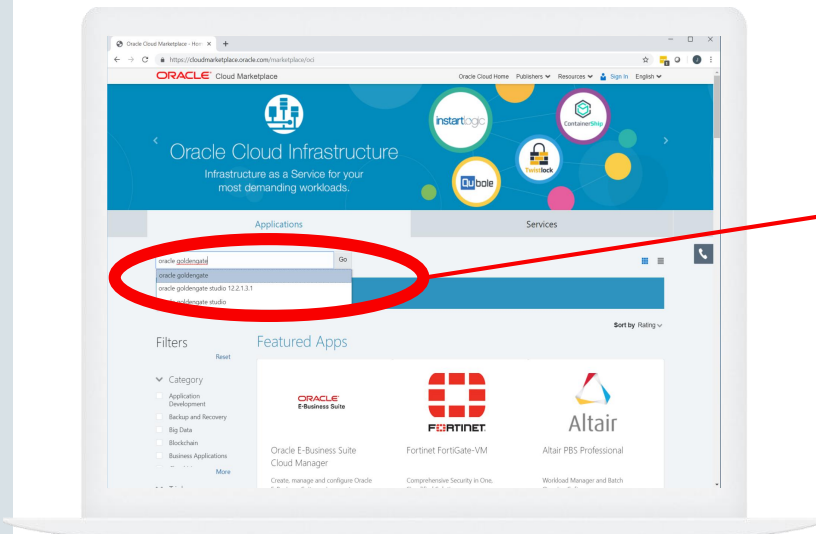


GoldenGate on OCI Marketplace – 3 Steps to Productivity

Step 1: Search OCI Marketplace

Step 2: Provision GoldenGate on OCI

Step 3: Run GG Web Apps



Navigate to <https://cloudmarketplace.oracle.com/> and search for “Oracle GoldenGate”

Choose “Launch App” and click through ~4 pages of forms (existing OCI account is required)

Access GoldenGate Microservices (Web Apps) from public IP Address given via OCI confirmation page

GoldenGate Listings on OCI Marketplace

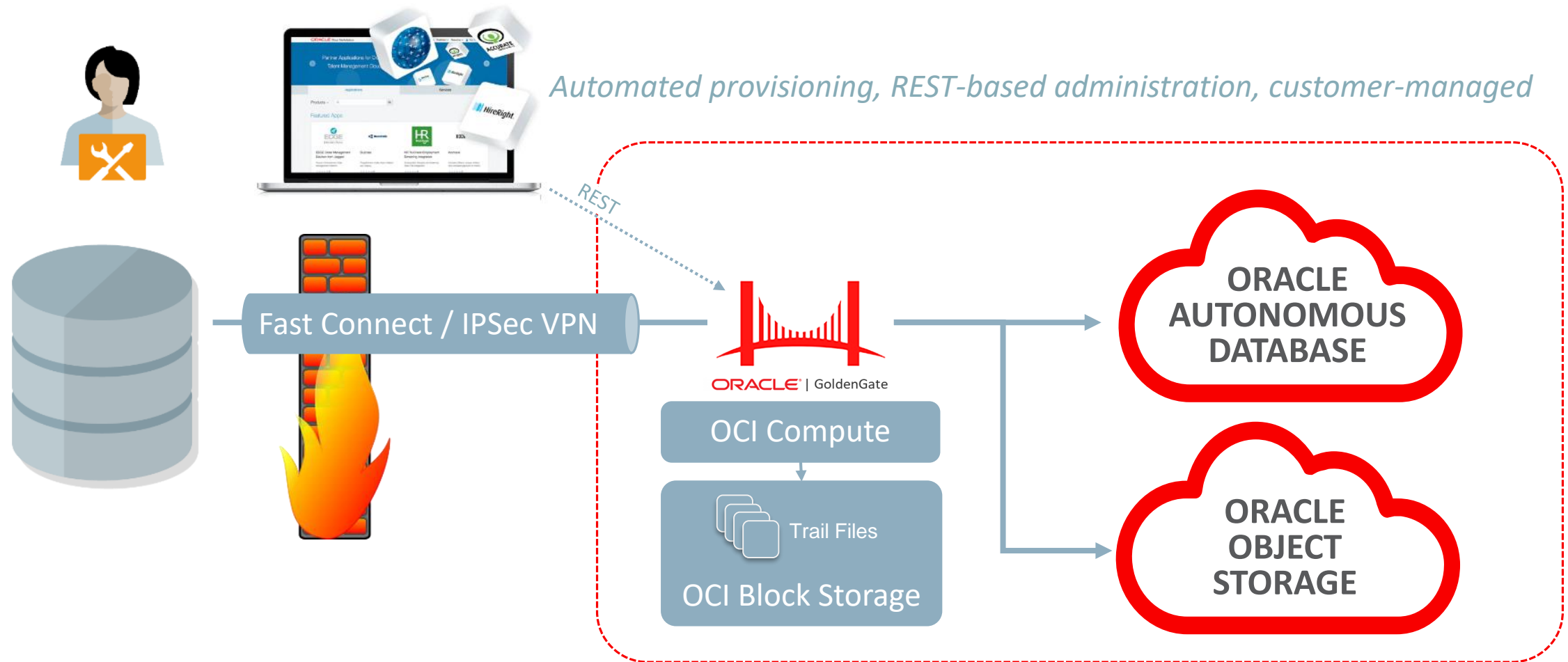
- ✓ GoldenGate 19.1 Microservices Architecture for Oracle DB

Coming Soon:

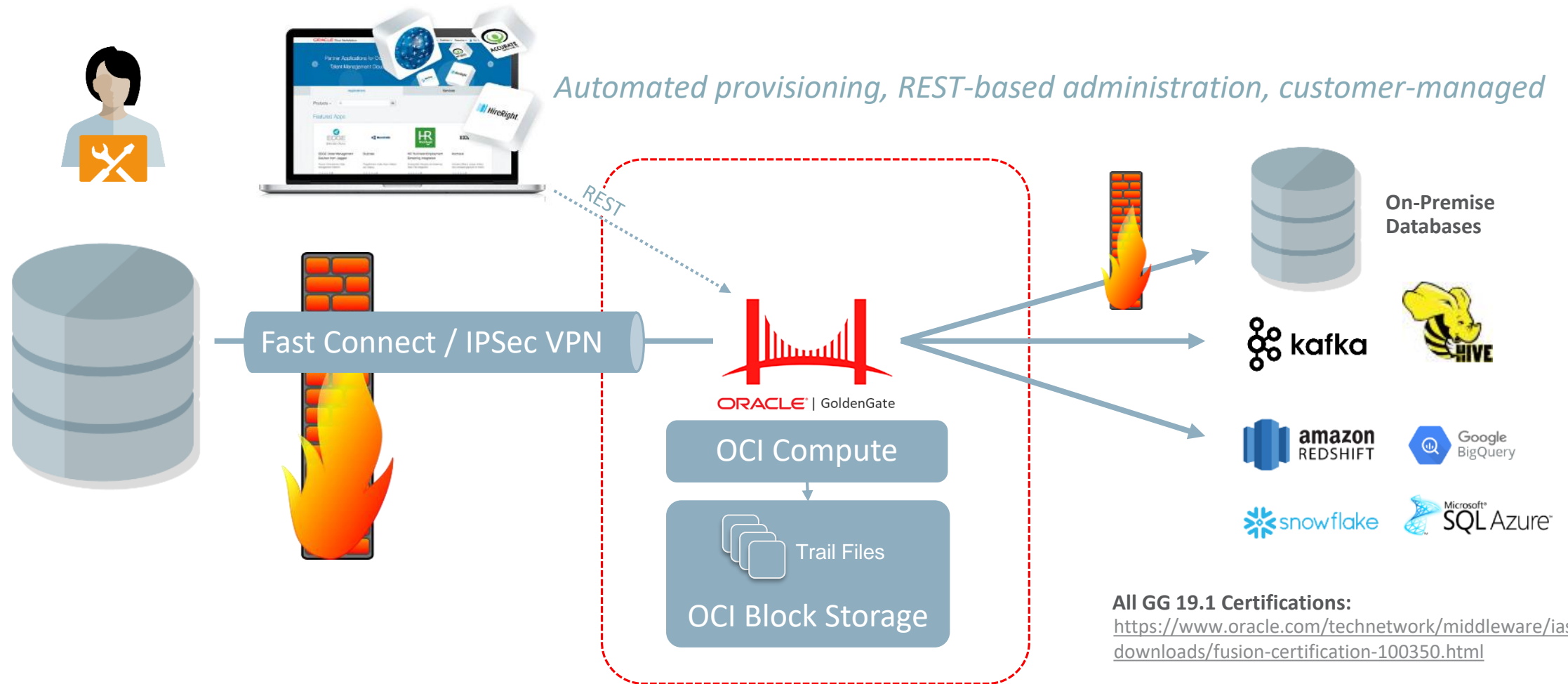
- ✓ GoldenGate 19.1 Classic for Oracle DB
- ✓ GoldenGate 19.1 for Non-Oracle Databases
- ✓ GoldenGate 19.1 for Big Data
- ✓ GoldenGate 19.1 for Mainframe (DB2/z)



GoldenGate Topology for OCI Marketplace



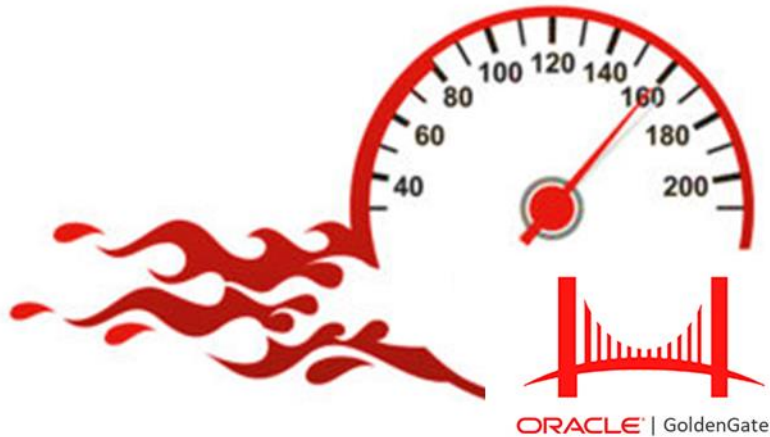
Works With On-Premise and 3rd Party Clouds



All GG 19.1 Certifications:

<https://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>

High Performance



- Remote integrated capture is network-optimized so that any network faster than 100ms latency performs similar to local extracts
 - Fast Connect or standard IPSec VPN to Oracle Cloud data centers can yield same performance as local installs of GoldenGate
 - Can be used for on-prem to on-prem replications! (network routing via OCI)
- No other vendor can compare on Oracle Database replication performance
 - Purpose built APIs for extract and apply
 - Integrated (same DB code base) and highly parallel

GoldenGate on OCI Marketplace | Commercials

- ✓ 30 day free Trial
- ✓ Customer brings their own License
(Term, Processor, Named User, ULA, etc)
- ✓ On Prem as Subscription (OpEx Model)



**Customers always pay for IaaS (Compute + Storage), using UCM/Credits*

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Oracle GoldenGate on Marketplace

➤ Pre-configured Virtual Machine

- ✓ Simple provisioning in OCI Using TerraForm Scripts

➤ Capturing from On-Premises Oracle Databases

- ✓ Capture from Oracle Databases from 11.2.0.4+
- ✓ Support DDL Replication

➤ High Performance Delivering to Cloud Based Services

- ✓ Delivery to Autonomous Resources and DBaaS
- ✓ Integrated Delivery with Parallelism Support
- ✓ Remote Delivery via SQL*Net – EZConnect & TNS Names

➤ Specification

✓ Shapes

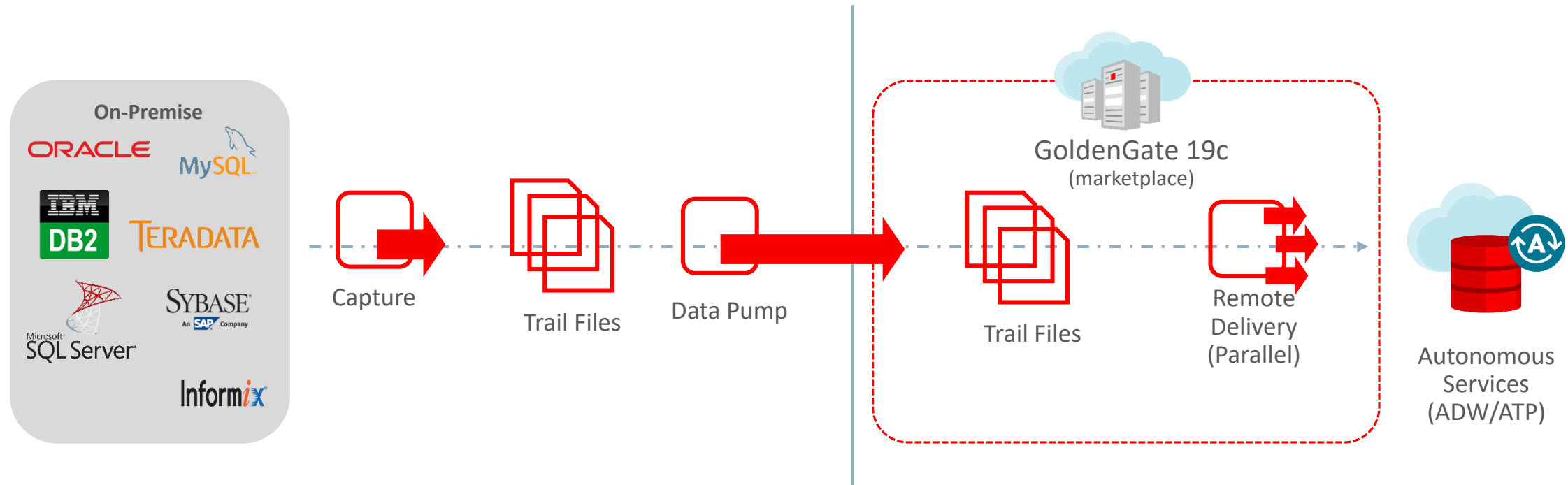
- VM.Standard2.4 (4 CPUs, 60GB RAM)
- VM.Standard2.8 (8 CPUs, 120GB RAM)
- VM.Standard2.16 (16 CPUs, 128GB RAM)
- VM.Standard2.24 (24 CPUs, 320GB RAM)

✓ Latest Software

- Linux 7.6 or later
- GoldenGate 19c (19.1.0.0.1)

Oracle GoldenGate on Marketplace

Hybrid Architecture: On-Premise to Autonomous



- ✓ May run older GoldenGate versions from on-premise
- ✓ Simply link On-Premise sources to Autonomous Services

Oracle GoldenGate on Marketplace

Networking

- ✓ Supports Oracle Native network protocols
 - TNS Names
 - Easy Connect
 - Easy Connect Plus
- ✓ Virtual Cloud Networks (VCN)
 - ✓ Create a new VCN upon compute node creation
 - ✓ Use existing VCN established in compartment
- ✓ On-Premise to Cloud
 - ✓ VPN Connect (IPSec) – for more information: [here](#)
 - ✓ OCI FastConnect – for more information: [here](#)



Oracle GoldenGate on Marketplace

OCI Data Centers and Regions

✓ Regions

- North America
 - Ashburn, VA
 - Phoenix, AZ
 - Toronto, Canada
- Europe
 - London, United Kingdom
 - Frankfurt, Germany
- Asia Pacific
 - Tokyo, Japan
 - Seoul, South Korea
 - Mumbai, India (summer 2019)



<https://www.oracle.com/cloud/data-regions.html>

Oracle GoldenGate on Marketplace

OCI & GoldenGate Security

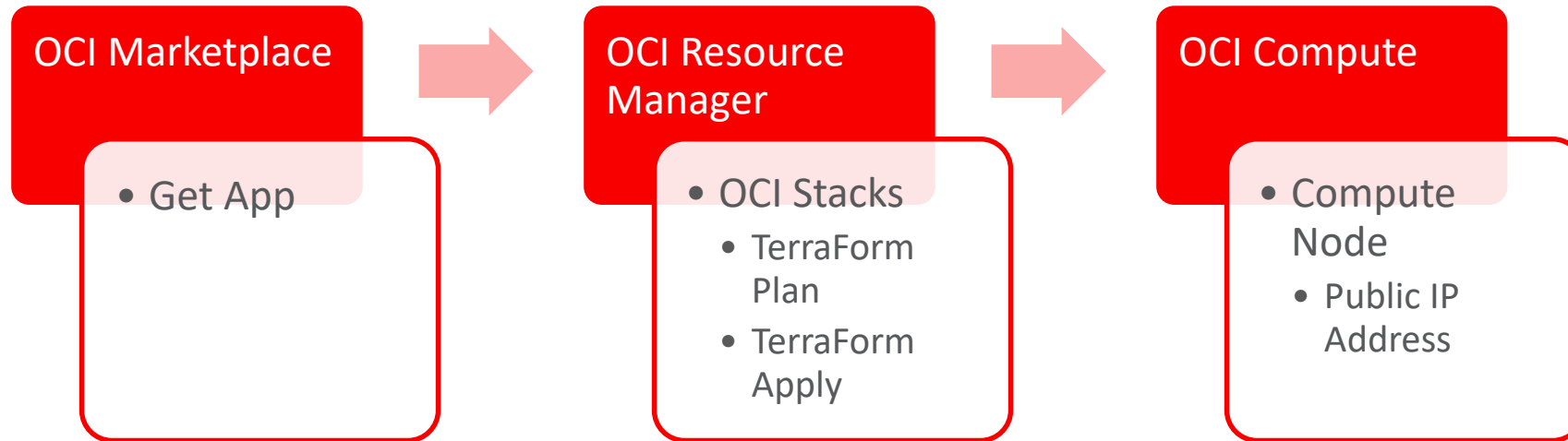
- ✓ Full isolation from other tenants, and same tenant workloads (OCI)
- ✓ Data at Rest Encryption – protect customer data (OCI)
- ✓ Comprehensive log data that allows you to audit and monitor actions on your resources (OCI)
- ✓ Role based security framework (OGG)
- ✓ Secure Socket Layer (SSL)/HTTPs based replication (OGG)
- ✓ Centralized Key Management (OGG)



Oracle GoldenGate on Marketplace

Simple Provisioning

- ✓ Provision in five steps or less
 - ✓ Through OCI Marketplace
 - ✓ TerraForm Stack



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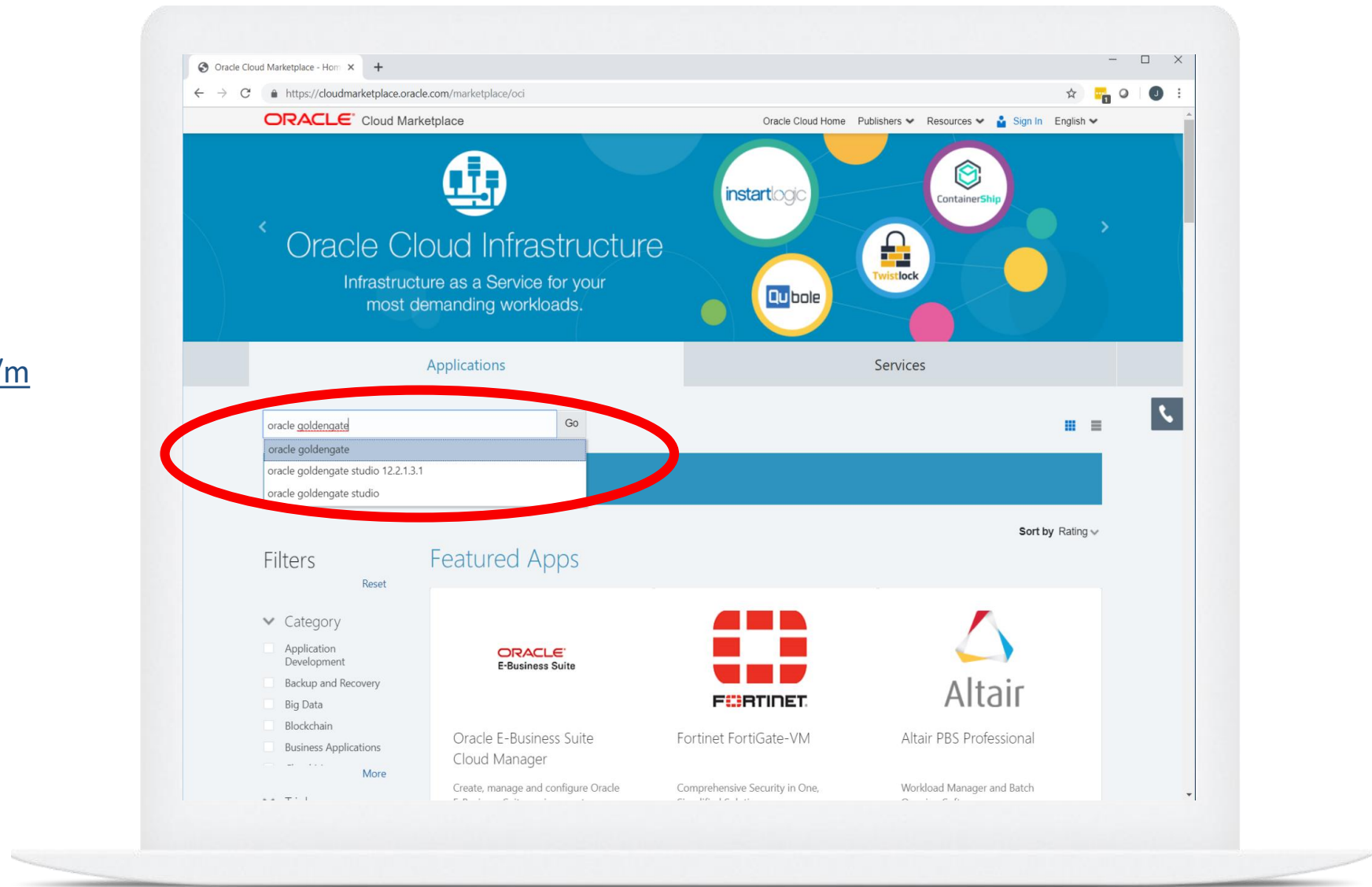
Step #1:

➤ Access OCI Marketplace

<https://cloudmarketplace.oracle.com/marketplace/oci>

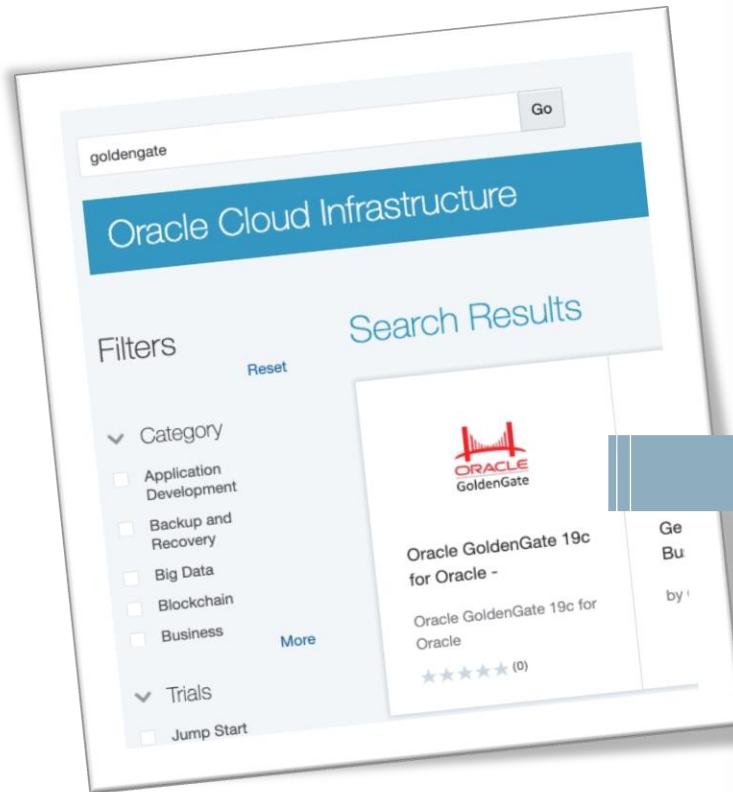
➤ Search for:

Oracle GoldenGate



Oracle GoldenGate on Marketplace

- Click in to listing
- Choose “Get App”



A screenshot of the Oracle Cloud Marketplace listing page for 'Oracle GoldenGate 19c for Oracle - Microservices'. The page header shows the Oracle Cloud Marketplace logo and navigation links. The main content area displays the product name, logo, and a green 'Get App >' button, which is circled in red. Below the product name, there are tabs for 'Overview', 'Ratings (0)', and 'Provider'. The 'Overview' tab is selected, showing the product description and a list of benefits. The description states: 'Oracle GoldenGate 19c (19.1.0.0.1) for Oracle Database'. The benefits listed are: 'Optimized capture and delivery for Oracle databases', 'Microservices components with REST APIs to embed, automate, and deploy Oracle GoldenGate on demand', 'Most reliable, performance driven, replication platform for business driven needs', and 'Highly secure configuration, including encryption, credential store integration, secure wallets and trusted connections'. The 'Usage Information' section is partially visible at the bottom.

Oracle GoldenGate on Marketplace

- Select GoldenGate Version
 - Microservices
 - Classic
- Provide Compartment to build in
- Accept Terms of Use
- Launch Stack

Oracle Cloud Infrastructure

https://console.us-ashburn-1.oraclecloud.com/marketplace/application/59415468/deploy

ORACLE Cloud

us-ashburn-1

Marketplace » Oracle GoldenGate 19c for Oracle - Microservices » Open Resource Manager

Oracle GoldenGate 19c for Oracle - Microservices

Launch Stack

Version

Oracle_GoldenGate_19c_Microservices_Edition_19.1.0.0.1 - default

Compartment

ManagedCompartmentForPaaS

paasdevgg (root)/ManagedCompartmentForPaaS

Terms of Use

☒ I have reviewed and accept the [Oracle Terms of Use](#).

Launch Stack

[Terms of Use and Privacy](#) [Cookie Preferences](#)

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Oracle GoldenGate on Marketplace

- Provide Stack Information
- Configure Compute Variables
- Review & Create

Oracle Cloud Infrastructure

https://console.us-ashburn-1.oraclecloud.com/resourcemanager/stacks/create?sourceType=marketplace&listingId=58489224&packageVersion=Oracle_GoldenGate_19c_Microser...

ORACLE Cloud

Create Stack

1 Stack Information
2 Configure Variables
3 Review

Your application will launch as part of infrastructure resources required to end and runs properly.

NAME OPTIONAL
Oracle GoldenGate 19c - Production

DESCRIPTION OPTIONAL

CREATE IN COMPARTMENT
bocurtis
paasdevgg (root)/GG_ProductManagement/bocurtis

TAGS
Tagging is a metadata system that allows you to organize tenancy. Tags are composed of keys and values which can be used to filter resources. [Learn more about tagging](#)

TAG NAMESPACE
None (add a free-form tag)

TAG KEY

Next Cancel

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Create Stack

1 Stack Information
2 Configure Variables
3 Review

Instance Settings

AVAILABILITY DOMAIN
Select an option
The availability domain for the new Oracle GoldenGate instance

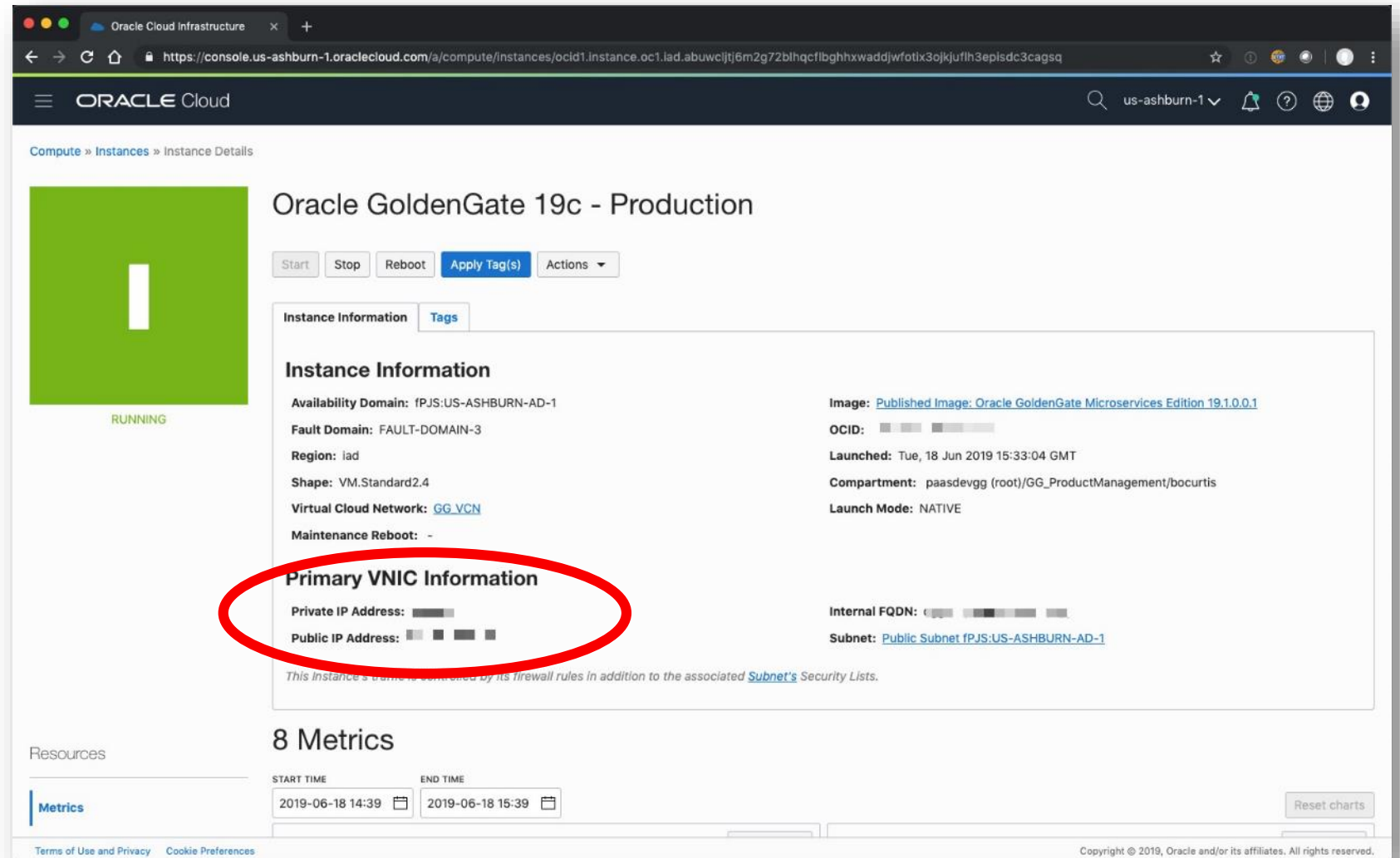
COMPUTE SHAPE
Select an option
VM.Standard2.4
VM.Standard2.8
VM.Standard2.16
VM.Standard2.24

☒ ASSIGN PUBLIC IP
Indicates if the new VM should have a public IP address

☐ CUSTOM VOLUME SIZES
Use this field to customize the size of new block storage volumes

Oracle GoldenGate on Marketplace

- Compute & GoldenGate Builds
- Compute node is accessible via Public IP Address



Oracle Cloud Infrastructure

https://console.us-ashburn-1.oraclecloud.com/a/compute/instances/ocid1.instance.oc1.iad.abuwcljtj6m2g72blhqcflbghxwaddjwfotix3ojkjuflh3episd3cagsq

ORACLE Cloud

us-ashburn-1

Compute » Instances » Instance Details

Oracle GoldenGate 19c - Production

Start Stop Reboot Apply Tag(s) Actions

Instance Information Tags

Instance Information

Availability Domain: fpjs:us-ashburn-ad-1
Fault Domain: FAULT-DOMAIN-3
Region: iad
Shape: VM.Standard2.4
Virtual Cloud Network: [GG_VCN](#)
Maintenance Reboot: -

Image: [Published Image: Oracle GoldenGate Microservices Edition 19.1.0.0.1](#)
OCID:
Launched: Tue, 18 Jun 2019 15:33:04 GMT
Compartment: paasdevgg (root)/GG_ProductManagement/bocurtis
Launch Mode: NATIVE

Primary VNIC Information

Private IP Address:
Public IP Address:
Internal FQDN:
Subnet: [Public Subnet fpjs:us-ashburn-ad-1](#)

This instance's traffic is controlled by its firewall rules in addition to the associated [Subnet's](#) Security Lists.

Resources

Metrics

8 Metrics

START TIME: 2019-06-18 14:39
END TIME: 2019-06-18 15:39

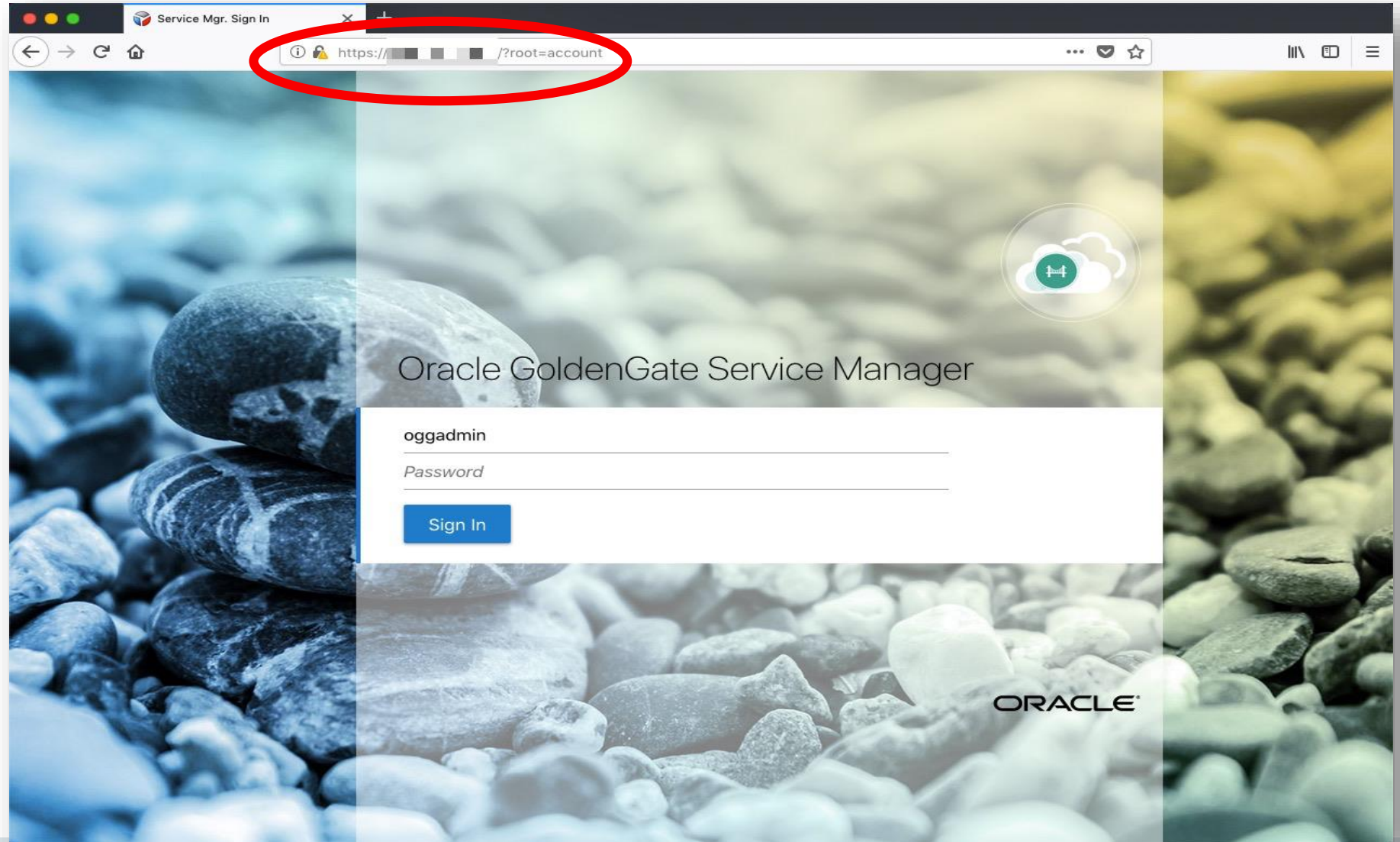
Reset charts

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Oracle GoldenGate on Marketplace

- Accessed via Public IP Address
- Simple Web User Interface
- Best Practices Followed (microservices)



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