
ORACLE®

OpenWorld 2017
Running Workloads using Oracle MySQL Cloud Service

Customer Journey to Cloud using Oracle MySQL Cloud Service

Diby Malakar
VP, Product Management
Oracle Cloud Platform

Jalo Kääminen
CEO and Co-Founder
Naveex Ltd

Mandy Pang
Principal Product Manager
Oracle Cloud Platform

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ORACLE
MySQL Cloud Service

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. Market Overview
2. Announcements
3. Journey to the Cloud
4. Customer Success Story – Naveex Ltd
5. Summary

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65%

The global database as a service (DBaaS) market is forecast to grow at a CAGR of 65.49% during the period 2016-2020

Source: Research And Markets, Global Database as a Service Market 2016-2020

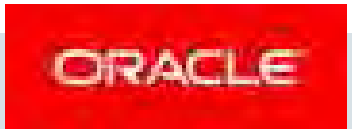
70%

By 2018, more than 70% of new in-house applications will be developed on an Open Source RDBMS

Source: Gartner, State of Relational Open Source RDBMSs 2015

Digital Disruptors Rely on MySQL to Innovate

World's Most Popular Open Source Database



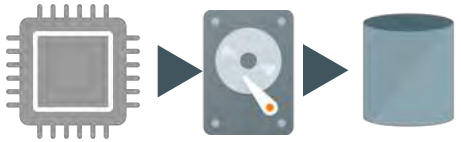
Oracle MySQL Cloud Service

A database service designed for both DBA and Developers

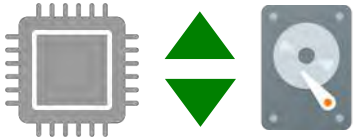
Full Control with Shell Access

AND

Support ALL MySQL Enterprise Edition Features

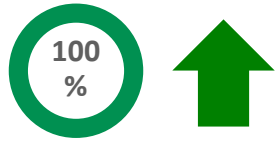


Self-service Provisioning, Cloning & Snapshot



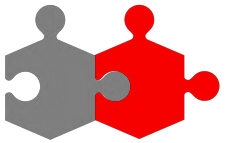
Automated Scaling

Automated DBA, Patching



Automated High Availability*

Automated Backup



Integrated with Oracle Cloud

* Will be available in future releases

Enterprises & Startups rely on MySQL Cloud Service

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Announcing MySQL on Oracle Cloud Infrastructure

- Enterprise-level high availability
- Predictable low latency
- Eliminates “noisy neighbors”
- Highest IO workloads

ORACLE®
Cloud Infrastructure

Announcing MySQL on Oracle Cloud Machine

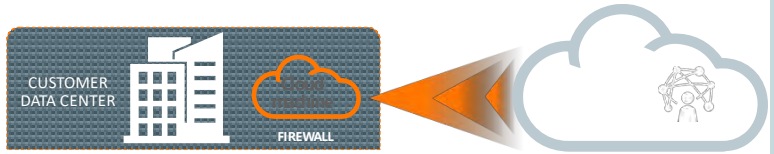
- Deliver cloud innovation on premises
- Meet business and regulatory requirements
- Choose where to deploy

ORACLE®
Cloud Machine

Flexible Deployment Options

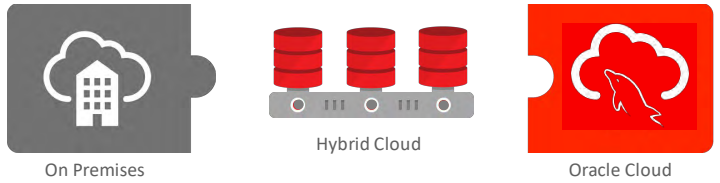
Same Standards, Same Software, Unified Management

Oracle Cloud Machine



- Oracle Cloud operated and **delivered as a service** behind your firewall
- **Same** MySQL Cloud Service technology, same updates as Oracle Cloud
- **Conforms** to regulatory, privacy, legal and business requirements

Hybrid



- **Move workloads** between on-premises and Oracle Cloud
- **Keep control** over business-critical systems
- Oracle Enterprise Manager & MySQL Enterprise Tools for **unified management**

Oracle Cloud

- **Migrate** existing MySQL applications
- **Build** cloud native MySQL applications
- **Same** programming languages support as on-premise
- **Infrastructure choices** across various Oracle Cloud Infrastructure services

Announcing New Universal Credits Pricing

Metric	Monthly Universal Credit	Annual Universal Credit	Pay As You Go
Per OCPU per Hour	**$0.1210**	**$0.1555**	**$0.1728**

Most flexible buying and consumption model for cloud services in the Industry

- One simple contract: Universal access to all current and future IaaS & PaaS services
- Monthly or annual dollar commitment determines price discounts
- Simplifies customer buying experience; try and use any IaaS or PaaS service
- Enables the flexibility to upgrade, expand or move services across datacenters

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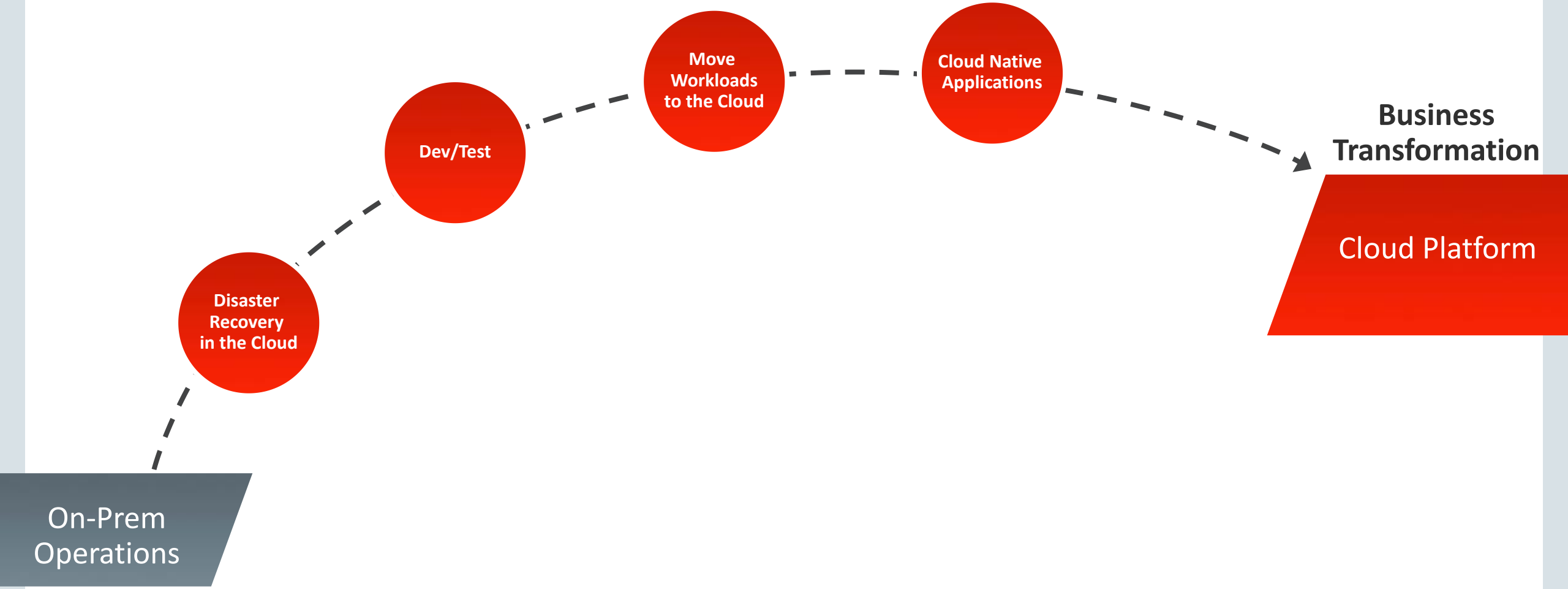
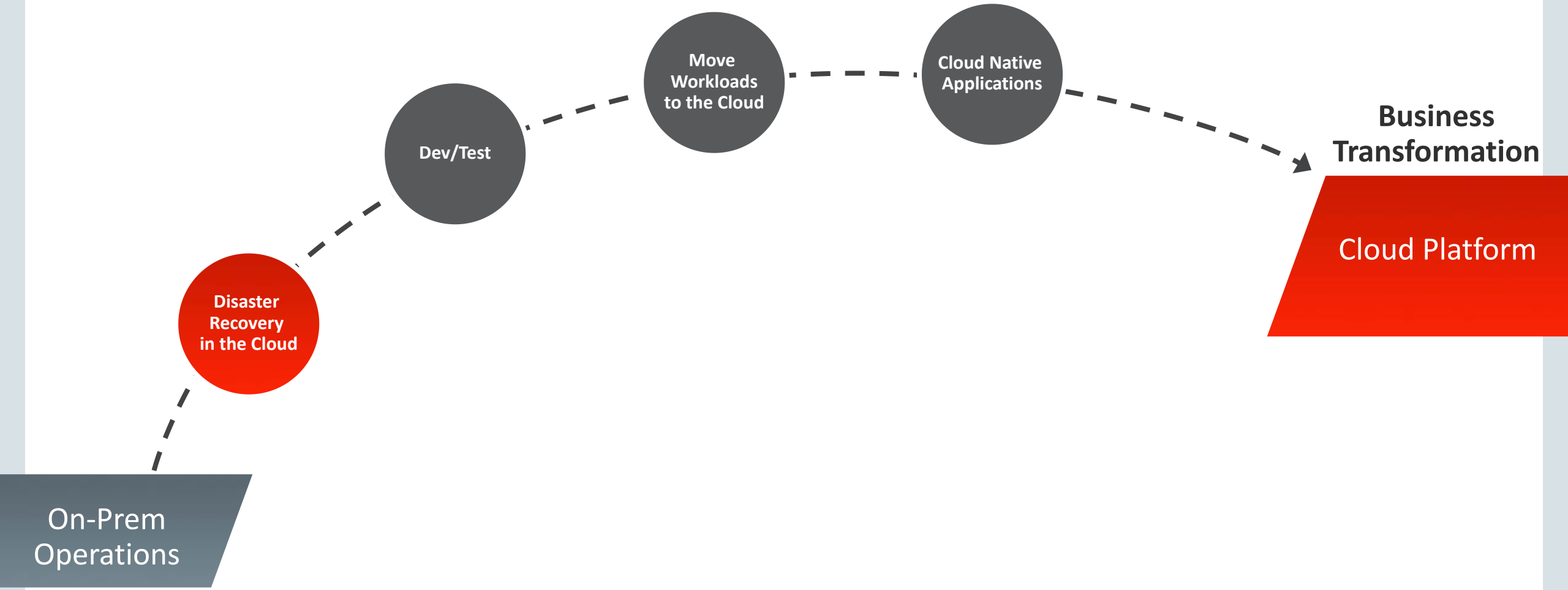
Journey to the Cloud



Journey to the Cloud



Disaster Recovery in the Cloud

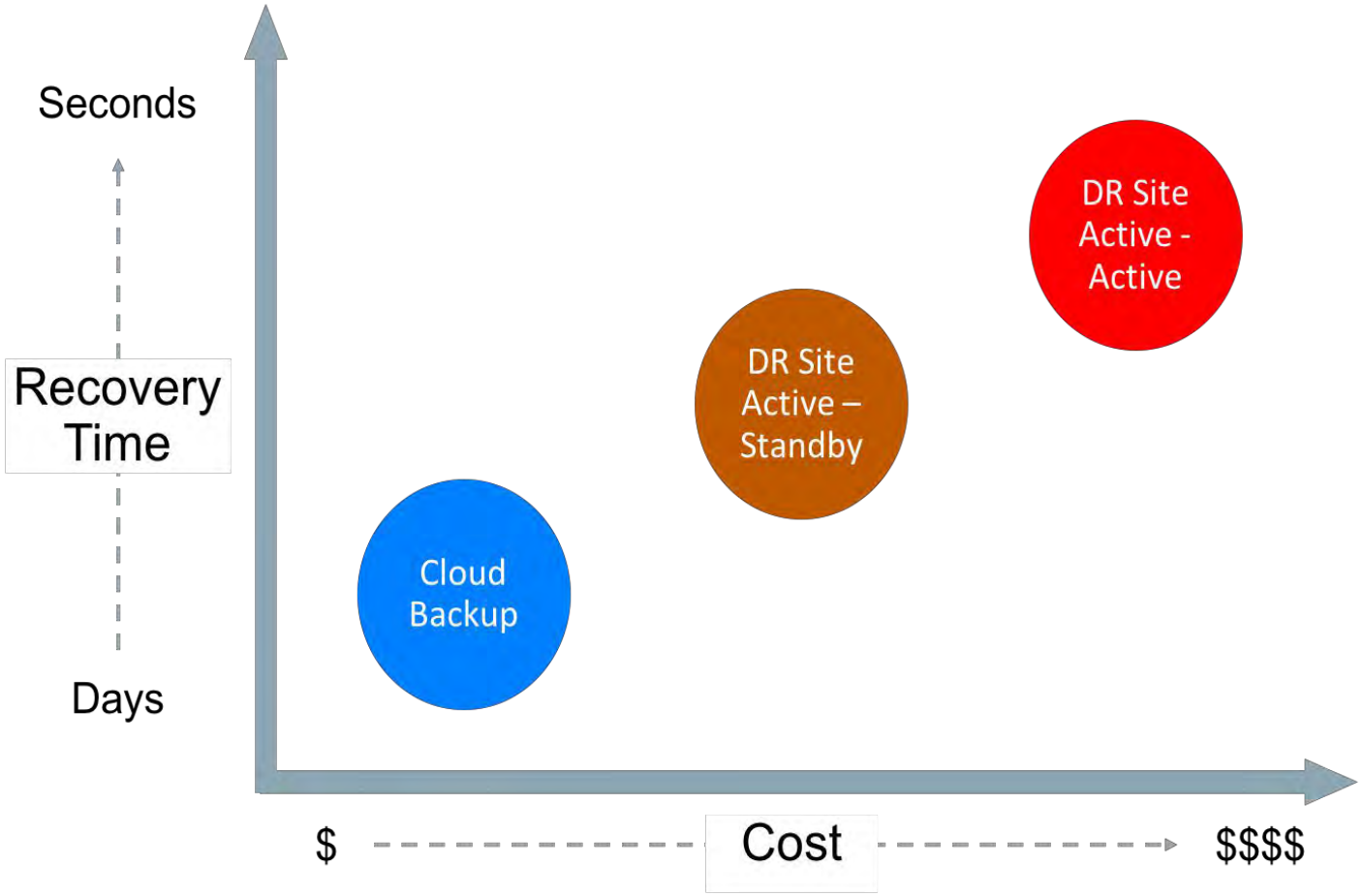
Common Use Cases

Cloud Backup

Warm DR Site

Hot DR Site

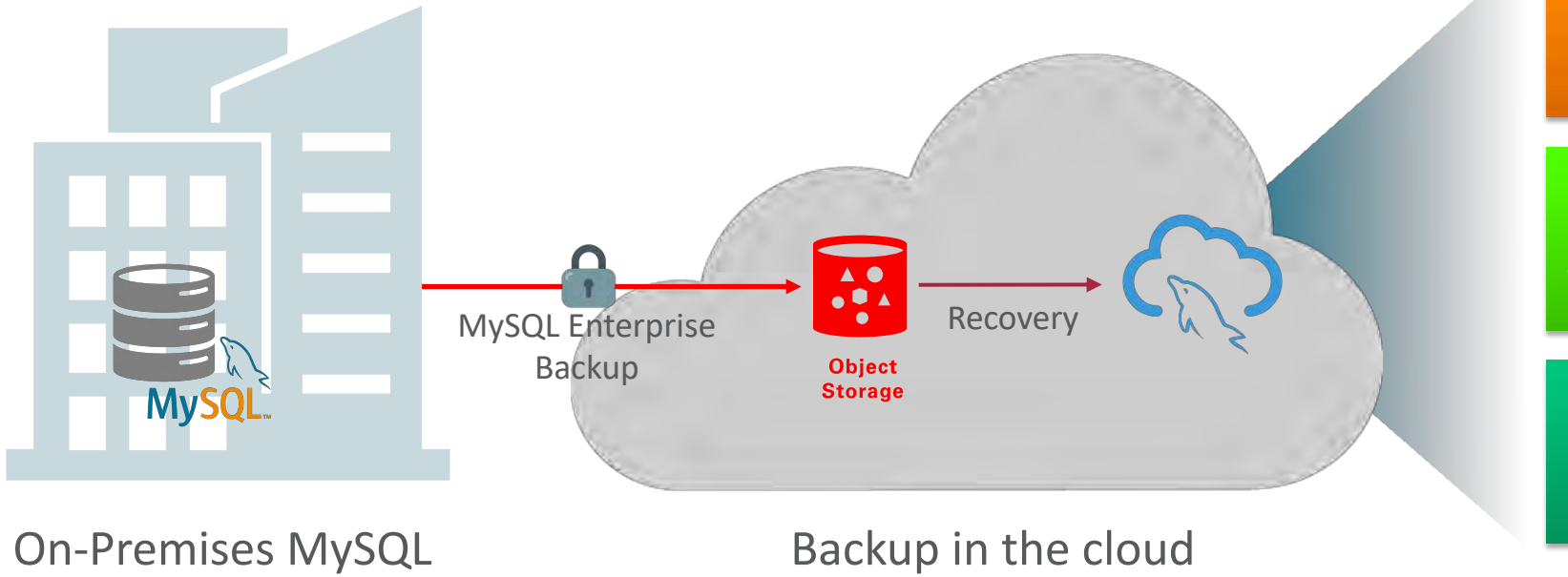
Disaster Recovery - Options



- Cloud Backup
  - Store MySQL backup to Oracle Storage Cloud
- MySQL Cloud Service as DR Site
  - Active – Standby (Warm DR)
  - Active – Active (Hot DR)

Disaster Recovery - Backup to Storage Cloud Service

Store Backups to Cloud using MySQL Enterprise Backup



- No CAPEX with low OPEX
- Eliminate tape costs
- Backup data always available
- Increase data durability
- Data loss depends on last backup
- Recovery or migration to cloud

Disaster Recovery - Backup to Storage Cloud Service

Store Backups to Cloud using MySQL Enterprise Backup

```
mysqlbackup \
--include-tables=testdb.t1 --use-tts=with-full-locking \
--cloud-service=openstack  --cloud-container=<oracle storage cloud container> \
--cloud-user-id=<serviceInstanceName>-<identityDomainName>:<userName> --cloud-password=<password> \
--cloud-tempauth-url=https://<dataCenterCode>.storage.oraclecloud.com \
--cloud-trace=1 --cloud-object=image_900.mbi \
--backup-dir=/home/user/dba/orbackuptmpdir \
--backup-image=- \
backup-to-image
```

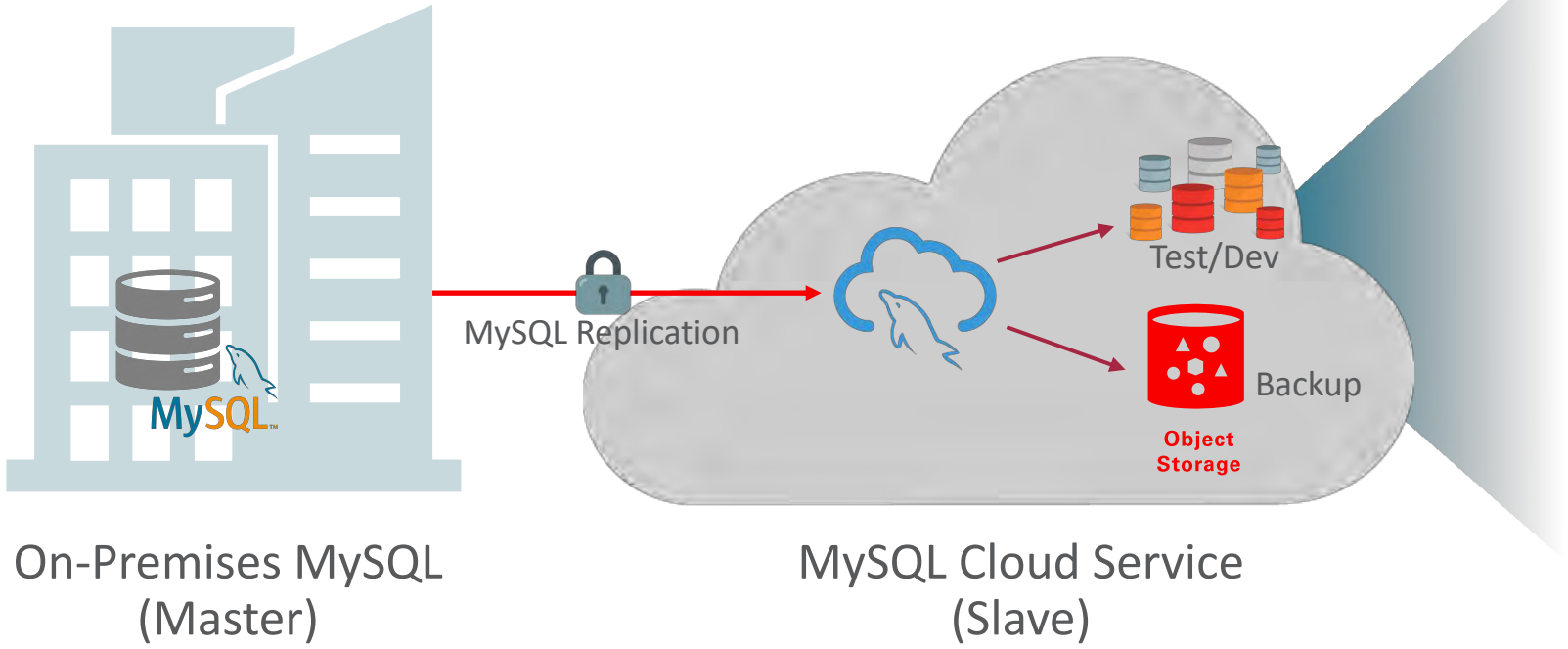
Disaster Recovery – Recover to MySQL Cloud Service

Recover MySQL Database in Minutes from Backup stored in Storage Cloud

- Create new instance in minutes
  - Pre-loaded with existing data from backup
  - Provisioned with MySQL Enterprise Monitor
  - Optimized configuration

Disaster Recovery – Warm DR to MySQL Cloud Service

Setup a MySQL Slave in the Cloud using MySQL Replication



- No CAPEX with low OPEX
- Instant DR to the cloud
- Increase data availability and durability
- Reduce downtime with planned upgrades
- Offload backup, test/dev tasks
- Bursting during failovers

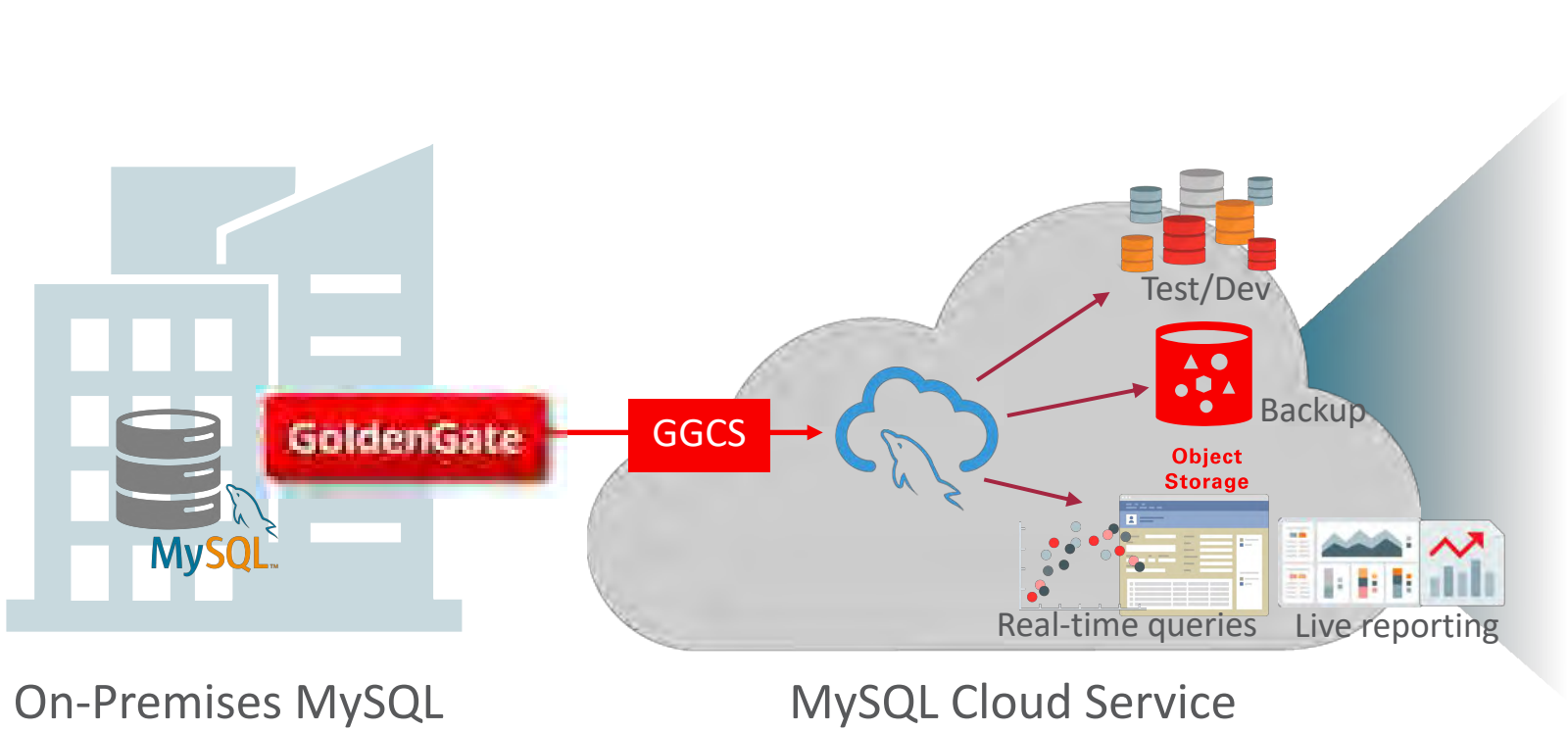
Disaster Recovery - Warm DR to MySQL Cloud Service

Simple steps to setup replication between on-premise MySQL and MySQL Cloud Service

STEP 1: Upload backup from on-premise MySQL to Storage Cloud
STEP 2: Provision MySQL Cloud Service with Backup
STEP 3: Create Access Rules to allow communications between on-premise MySQL and MySQL Cloud Service
STEP 4: Configure on-premise MySQL as Master
STEP 5: Configure MySQL Cloud Service as Slave
STEP 6: Start replication
STEP 7: Check replication status

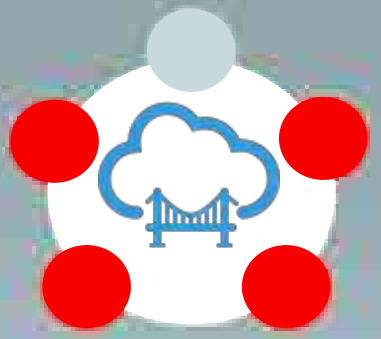
Disaster Recovery – Hot DR to MySQL Cloud Service

Setup Active Database in the Cloud using GoldenGate Cloud Service



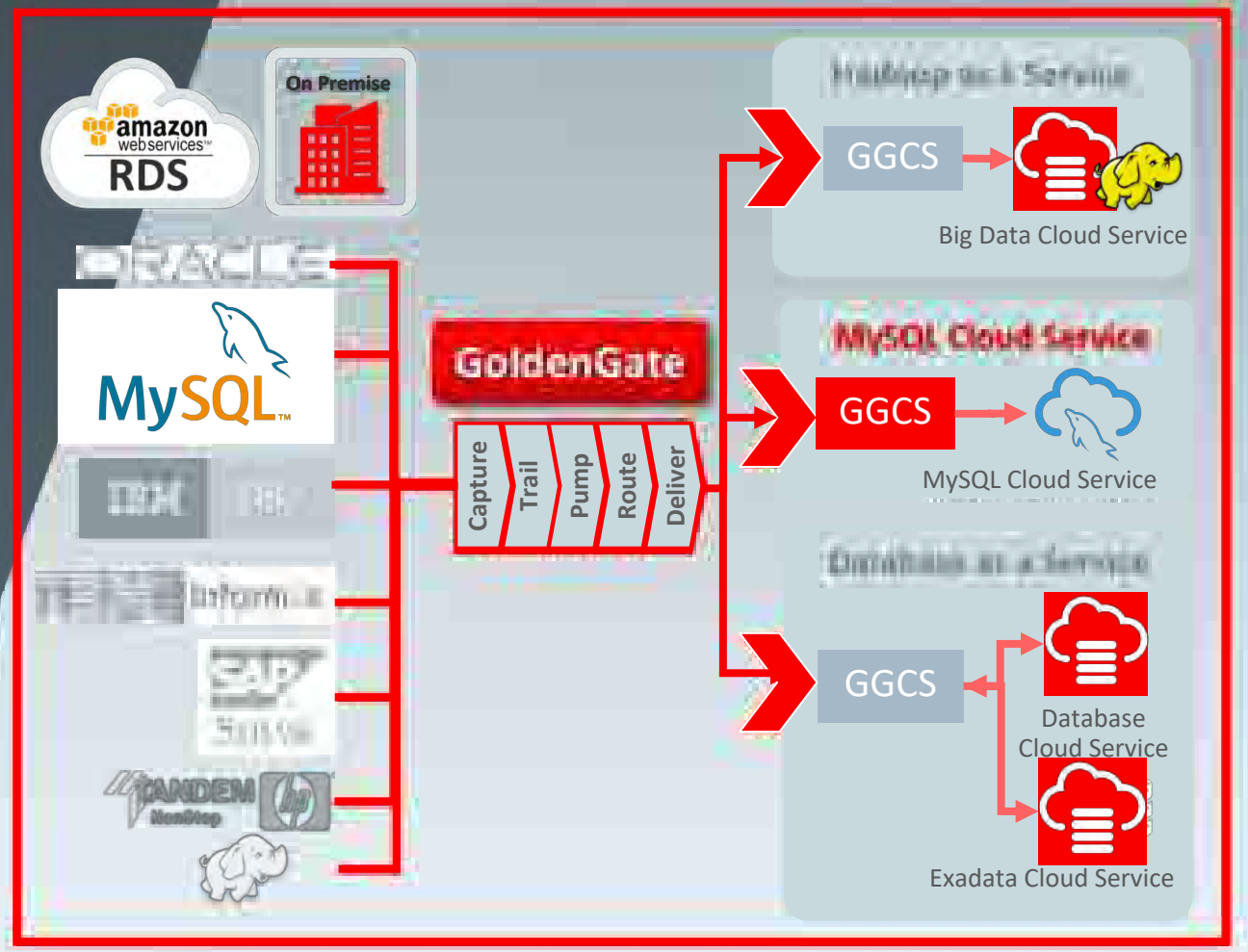
Disaster Recovery - GoldenGate Cloud Service

Robust Real-time Data Replication platform for Cloud

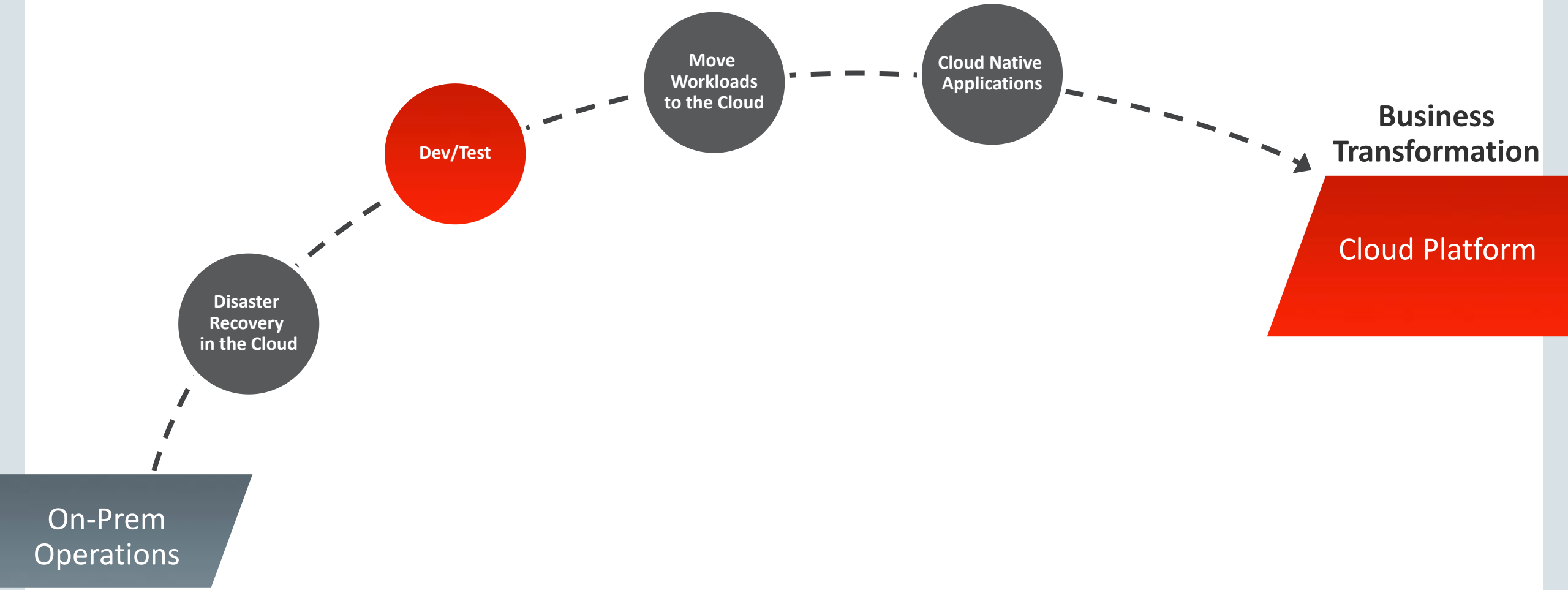


Key Features

- ✓ **Consistent user experience** with the core Oracle GoldenGate technology
- ✓ **Replication in Hybrid Cloud -** From On-Premise to Cloud, Cloud to Cloud and Cloud to on-Premise
- ✓ **No Data Loss**
- ✓ **Real-time Data Delivery**
- ✓ **Built-in monitoring and alerting**



Journey to the Cloud



Create Dev/Test Environment in the Cloud

Common Use Cases

Recreate Production Workloads in Cloud

Cloud Native Dev/Test

Dev/Test - Oracle Solution for Cloud Native Applications

Developer
CICD for Apps

git, maven, gradle, Jenkins

Any Framework

Polyglot
12 Factor Apps

node, php, Java, docker, python

Mobile
Bots & Analytics

Serverless
f(x)

Polyglot Function

Data Management

RAC
Dataguard
Pluggable DBs

Exadata

MySQL, Cassandra

API Platform

apiary
Design
Catalog
Gateway

Management & Security

APM
Logs
Java
Diagnostics
Authentication/ Authorization
User Provisioning

High Performance/Secure IaaS (Bare Metal, Virtualized, Dedicated, Cloud@Customer)