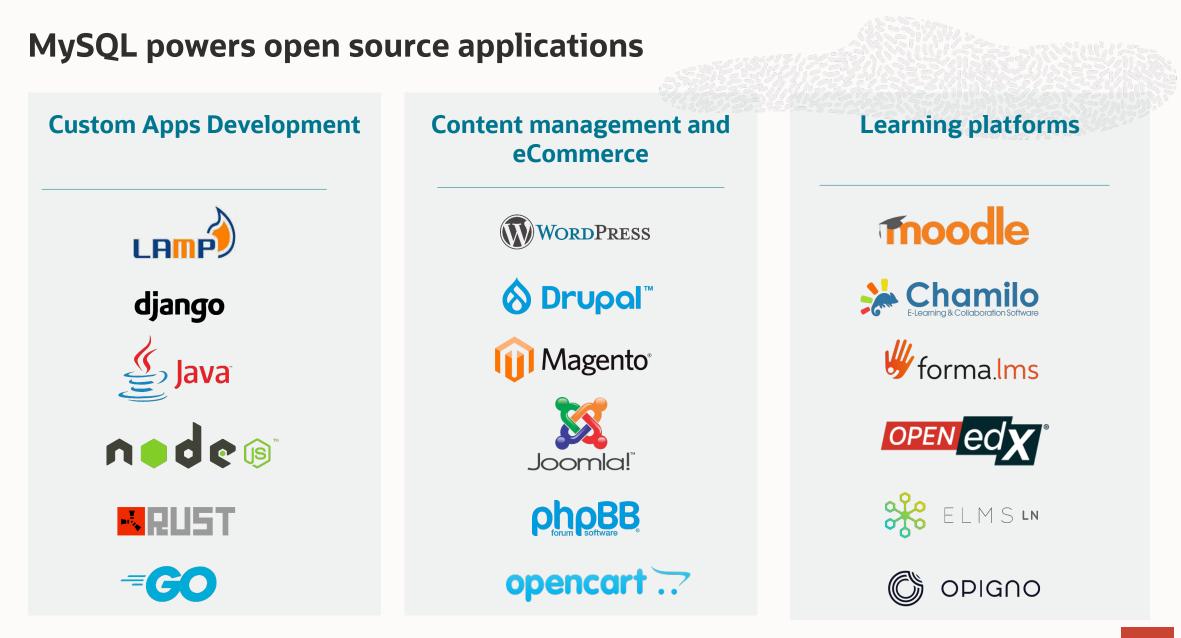
# DevLive Level Up MySQL Summit

# Accelerate Web, Ecommerce, and OLTP Applications with MySQL HeatWave

**Airton Lastori** MySQL Product Manager Oracle

## Innovative organizations across many industries run MySQL

Social	E-Commerce	Tech	Finance	Manufacturing
facebook	Booking.com	APPDYNAMICS part of Cisco	Bank of America.	TESLA
twitter	NETFLIX	GitHub	J.P.Morgan	
	UBER	HubSpot	citi	$\mathbf{W}$
Linked in	airbnb	zendesk		ΤΟΥΟΤΑ
🤏 WeChat	海宝网 Taobao.com		VISA	
Pinterest	阿里巴巴 <b>E</b> Alibaba.com	O New Relic.		CAT®



# MySQL HeatWave

Fully-managed database service

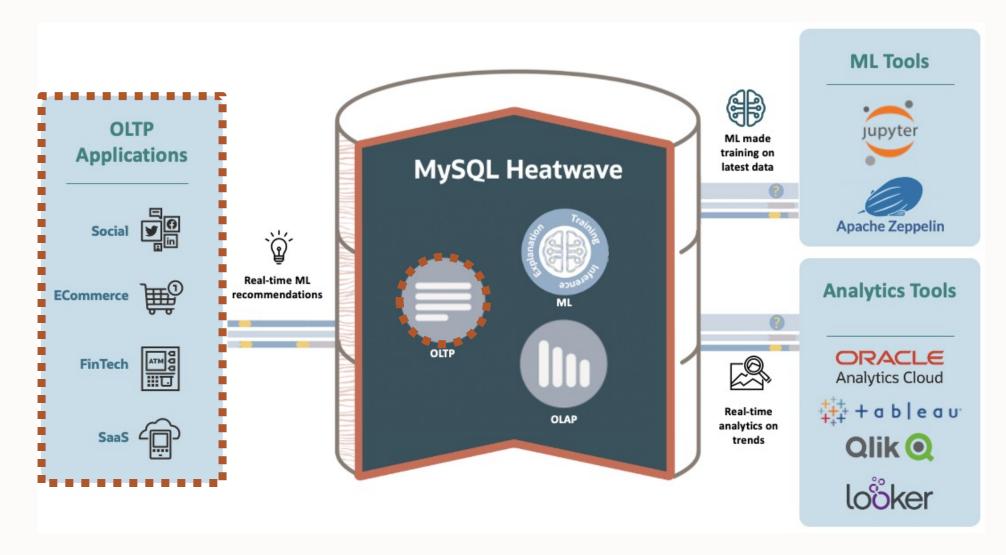


### Productivity

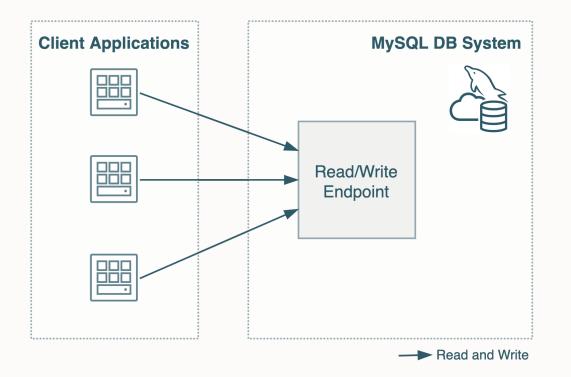
- High-availability & Scalability
- Backups & Restores
- Security & Compliance
- Patching & Upgrades
- Unbeatable price/performance
- Developed and operated by the **MySQL engineering team**
- Enterprise Edition and Premier Support included

# Architectures

## One database service for transactions, analytics, and machine learning



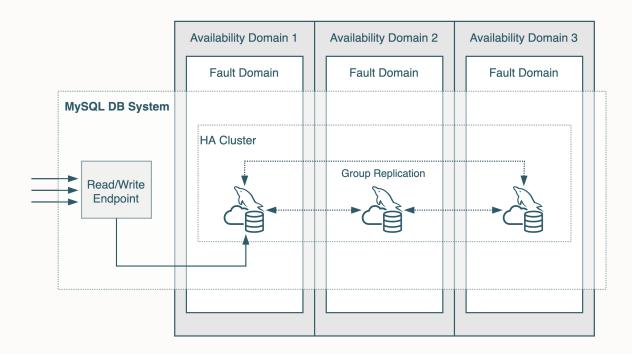
# MySQL DB system



BB Systems   Oracle Cloud Infr × +				
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mysql-ocw				
The user-friendly name for the DB System. It de	The user-friendly name for the DB System. It does not have to be unique. Description Optional			
User-provided data about the DB System. Standalone	High Availability	HeatWave		
Single-Instance DB System	Run a DB system with 3 MySQL Instances providing automatic failover and zero data loss	DB System that allows you to en- able HeatWave for accelerated query processing, suitable for running both OLTP and OLAP workloads		
Create Administrator cre Username () admin	edentials			
Create <u>Cancel</u>		[:::]		
Terms of Use and Privacy Cookie Preferences	s Copyright ©	2022, Oracle and/or its affiliates. All rights reserved.		

# **High Availability**

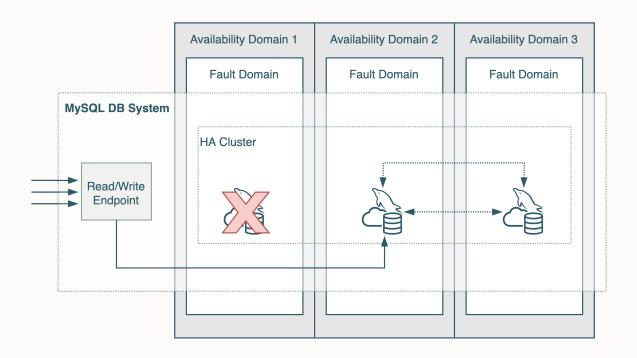
Single-click



DB Systems   Oracle Cloud Infr × + ×				
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Standalone	High Availability	HeatWave		
Single-instance DB System	Run a DB system with 3 MySQL	DB System that allows you to en-		
	instances providing automatic failover and zero data loss	able HeatWave for accelerated query processing, suitable for		
	~	running both OLTP and OLAP workloads		
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Username (i)				
admin				
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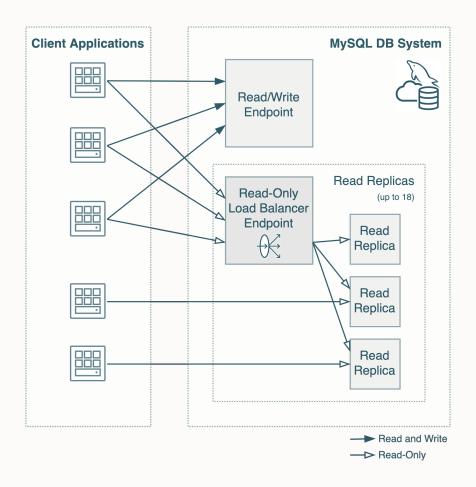
# **High Availability**

Single-click



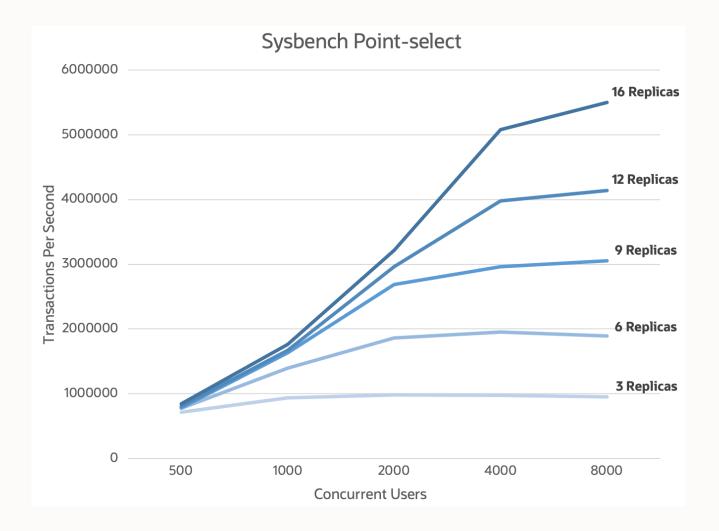
- SLA **99.99**%
- Automatic failover
- Zero Data Loss during failure event
- Option to manually switch-over
- Rolling upgrades during maintenance

## **Read Replicas** Scale Read Workloads



- Increase capacity for read-intensive workloads
- Add and remove Read Replicas for horizontal elasticity
- Easy to deploy and maintain
- Built-in Load Balancer for the read-only endpoint
- HA Cluster is ready for switchover or failover

## **Read scalability**



## **DB system Inbound and Outbound Replication**

### **Cross-region replication**

• DB System to DB System

### **Live Migrations**

• Minimize downtime

### Hybrid deployments

- On-premises and other cloud vendors
- Disaster Recovery
- Capacity bursting
- HeatWave for Analytics, ML, Lakehouse

	Cloud Classic >       Search resources, services, documentation, and Mark         Cloud Classic >       Search resources, services, documentation, and Mark	US East (Ashburn) ✓
() c	reate a channel for the DB system mysql-ocw-ha.	
	Channel filter	
	() Filter templates are provided for items that are typically filtered out in replication. Pick a filter template to match your source.	
	You can also add your own filters manually. Some combinations of filters might cause unexpected results. If you want to add your own filters, make sure you check the MySQL documentation.	
	Common filter templates	
	✓ Select filter template	
	AWS Aurora MySQL v1 (5.6) (no filters required)	
	AWS Aurora MySQL v2 (5.7) (Aurora_version < 2.04.0)	
	AWS Aurora MySQL v2 (5.7) (Aurora_version >= 2.04.0) (no filters required)	
	AWS Aurora MySQL v3 (8.0) (no filters required)	
	AWS RDS MySQL 5.6 (no filters required)	
	AWS RDS MySQL 5.7	
	AWS RDS MySQL 8.0	
Crea	Azure MySQL Flexible Server (5.7)	
	Azure MySQL Flexible Server (8.0)	
Terms o	Azure MySQL Single Server (5.7)	© 2022,
	Azure MySQL Single Server (8.0)	
	Google Cloud SQL MySQL (5.7)	
	Google Cloud SQL MySQL (8.0)	
	AlibabaCloud ApsaraDB RDS for MySQL (5.7)	
	AlibabaCloud ApsaraDB RDS for MySQL (8.0)	

## **Security, Patches and Upgrades**

### **Always Secure**

- Enforces use of private networks and security lists
- Always encrypted
- Enterprise Data masking functions
- Enterprise Encryption functions
- Identity federation
- Public API audit
- Password policy validation
- Connection control against brute force attacks attempting to guess MySQL login credentials

# Always up-to-date

- Latest MySQL Server patches in the same day or earlier
- Automatic upgrades
- Rolling upgrades
- Long-Term Supported (LTS) releases Coming soon



ORACLE Cloud	Cloud Classic >
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APPLICATION DEVELOPMENT

APPLICATION DEVELOPMENT

6-8 mins

7-9 mins

Deploy a WordPress website

Deploy a baseline landing zone

ORACLE Red Bull

RACING

GLOUD PARTNER

 $\square$ 

### Get started

Dashboard

### Service links

PINNED	RECENTLY VISITED	RECOMMENDED - Customize	Your tenancy mdspm
<ul> <li>★ Instances Compute</li> <li>★ Virtual Cloud Networks Networking</li> </ul>	You haven't visited anything yet.	Groups Identity Policies Identity Tenancies Organization Management Buckets Object Storage & Archive Storage Autonomous Database Autonomous Database Logging Logging	All services operational View health dashboard Cost savings opportunities Estimated savings: 0 View recommendations (38)

W

R

APPLICATION DEVELOPMENT

3-5 mins

DATABASE

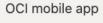
2-4 mins

Deploy a low-code app on

Autonomous Database

Autonomous Database using APEX

Visualize and analyze Strava data on



Review alarms, access billing and usage data, and manage resources on the go.

### Install now

View my deployments

X

Å

Get early access to OCI features

Try out upcoming features and share your feedback

Join preview program

What's new

0 ::::

Pipelines and pipeline runs are introduced. Jan 25, 2023

Management Agent Enhancements Jan 23. 2023



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✓ Quickstarts

Predict the result of the

APPLICATION DEVELOPMENT

Deploy RStudio in a container

FEATURED

next race

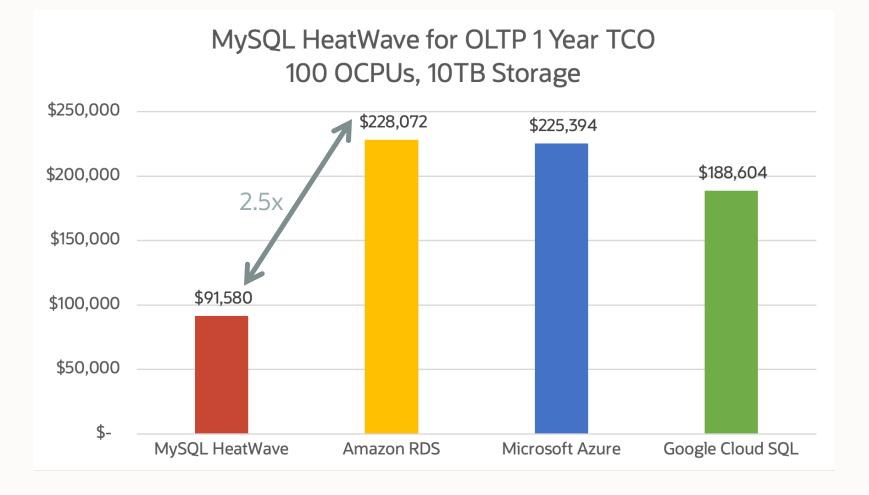
25-30 mins

10-12 mins

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# Wrap-up

## **Unbeatable price/performance**



MySQL HeatWave Standard X9 Intel 16GB/Core, all regions have the same price.

Amazon RDS: Intel R5 16GB/Core, AWS US East. Azure: Memory Optimized Intel 20GB/Core, MS Azure US-East.

Google: High Memory N1 Standard Intel 13GB/Core, GCP Northern Virginia.

## The MySQL team as part of your team





Oracle Premier Support included

Service Operations by the MySQL developers



MySQL Enterprise Edition included

# Get started with MySQL HeatWave

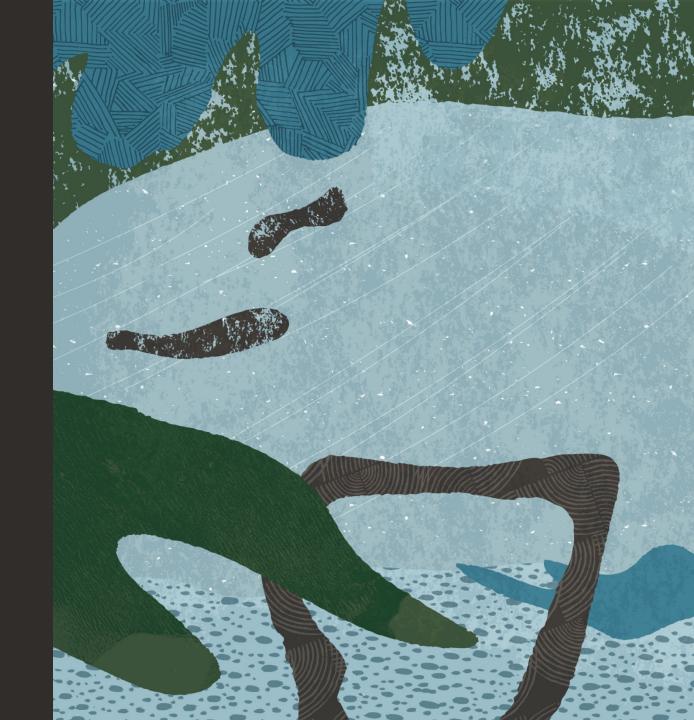
Get \$300 in credits and try free for 30 days

>> oracle.com/mysql/free





# Thank you!



# DevLive LevelUp MySQL Summit

# Please rate this session. Session ID - MS02



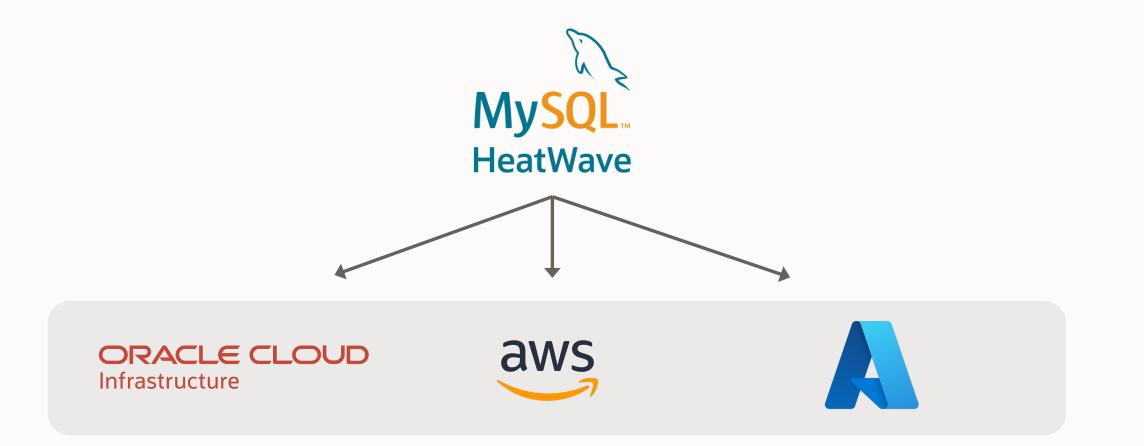


# MySQL HeatWave Cloud Service

100% developed, managed, and supported by Oracle

	Automation	MySQL HeatWave
Database	High Availability	
	Read Replicas	
	Backup	
	Query Acceleration	
	AutoPilot	
	AutoML	
	Security Patch & Upgrade	
	Provision & Configure	
OS	OS Security Patch & Upgrade	
	OS Installation	
Server	Hardware Provisioning & Maintenance	
Storage	Storage Provisioning & Maintenance	
Data Center	Rack & Space	
	Power, HVAC, Networking	

## **Available in Public Clouds**



Optimized to deliver the best price performance in each cloud

# Available in OCI datacenters worldwide

35 Regions

