Lift and Shift your Zabbix to Oracle Cloud with MySQL Database Service

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whoami

- Linux and MySQL user since ≈ 2006
- Working at Oracle/MySQL since 2017 (lot of travel => lot of fun!)
- Regularly speaking at conferences
- Previously working in the Security and Digital Transformation (API) space
- From Italy but based in Warsaw
- Love movies, travelling, cooking...
Agenda

1. Moving to the cloud
2. Planning the migration
3. Migrating the application
4. Migrating the database to MySQL Database Service
5. Next Steps
Moving to the cloud
Data is moving to the Cloud

49% of the world’s data will reside in public cloud environments by 2025

Source: IDC

Where is the data stored?

Source: Data Age 2025, sponsored by Seagate with data from IDC Global DataSphere, Nov 2018

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Oracle’s Public Cloud Presence

#4 Gartner Magic Quadrant

“Cloud Infrastructure” Ranking
Based on “Completeness of Vision” and “Ability to Execute”

26 Regions Live, 12+ Planned

24+ Industry and Regional Certifications


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Moving Zabbix to Oracle Cloud

1. Get always the latest updates on technology stack, minimizing downtimes and service windows
2. Convert the time you spend managing your monitoring platform in time you spend monitoring your platforms
3. Leverage the most secure and cost-effective cloud platform in the market
Planning the migration
Requirements: What do I need to keep in mind?

- Server Configuration
- Database
- Network topology (Zabbix Clients, Zabbix Proxies, etc)
Requirements: What do I need to set up in my OCI tenancy?

- MySQL Database System
- Compute Instance for Zabbix Server
- Storage for Database and Backup
- Networking/Load Balancing
Oracle Cloud target architecture for Zabbix

Required Components:

- Cloud Networking
- Zabbix Cloud Image
- MySQL Database Service
- VPN Connection for client/proxies
Oracle Cloud target architecture for Zabbix: a simpler solution
Migrating the Application to Oracle Cloud
Deploy the Zabbix Application

Before you begin:
• Set up tenancy and compartments
• Set up cloud networking - public and private VCN

Deploy Zabbix:
• One click deployment vs DIY:
  Use the official Zabbix OCI Marketplace Image
  ...or deploy an OCI Compute Instance and install manually
• Choose the desired Compute “shape” during deployment

Configuration:
• Start the instance
• Edit the config file
• Point to the database

...Done!
## Compute

Compute services for any enterprise use case

<table>
<thead>
<tr>
<th>Bare Metal</th>
<th>VMs</th>
<th>Containers</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instance isolation</td>
<td>Security- hardened hypervisor</td>
<td>Bare metal performance</td>
<td>Pay only for usage</td>
</tr>
<tr>
<td>Highest IOPS</td>
<td>Flexible sizing</td>
<td>Self-healing clusters</td>
<td>Serverless</td>
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<tr>
<td>High throughput</td>
<td>Dense IO and Dedicated host options</td>
<td></td>
<td>Container-native</td>
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<tr>
<td>Low latency</td>
<td></td>
<td></td>
<td>Open source</td>
</tr>
</tbody>
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<tr>
<th>AMD EPYC</th>
<th>Intel Xeon</th>
<th>NVIDIA GPUs</th>
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<thead>
<tr>
<th>Local Attached Storage</th>
<th>Remote Attached Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVMe SSDs</td>
<td>NVMe Block Volumes up to 1PB</td>
</tr>
<tr>
<td>Up to 51.2 TB</td>
<td>32 TB / volume</td>
</tr>
<tr>
<td>Millions of IOPS</td>
<td>75 IOPS / GB</td>
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Migrating the Database to MySQL Database Service
MySQL Database Service
100% developed, managed, and supported by the MySQL team

- Easy
  - Fully Managed Database Service
  - Instant Provisioning
  - Latest Features

- Secure
  - Data Protection
  - Advanced security
  - Latest Security Updates

- Enterprise-Ready
  - Built on MySQL Enterprise Edition
  - On Premises Compatibility
  - Built on Gen 2 Cloud Infrastructure
Considerations before your migration

Before you begin:
• Check your MySQL 8.0 compatibility
• Check your database size
• Plan a service window

High-level migration plan:
1. Setup cloud networking
2. Setup your (on-prem) networking secure connection
3. Create MySQL Database Service DB-System with storage
4. Move the data MySQL Shell Dump & Load utility
Easily create MySQL instances with just a few clicks

- Create customized configuration
- Start the creation of DB system
- Select Virtual Cloud Network (VCN) and Subnet to place your MySQL endpoint
- Select pre-defined MySQL instances or create customized instances for your workload
- Shape for the DB System (CPU and RAM) will automatically be set
- Select size of the storage for data and backup
- Create backup policy or accept the default
MySQL Shell Upgrade Checker Utility
util.checkForServerUpgrade()

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Type '\help' or '\?' for help; '\quit' to exit.

Creating a session to 'admin@mdb.cmafklq6vywl.us-east-2.rds.amazonaws.com:3306'
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 5703
Server version: 8.0.20 Source distribution
No default schema selected; type \use <schema> to set one.

The MySQL server at mdb.cmafklq6vywl.us-east-2.rds.amazonaws.com:3306, version 8.0.20 - Source distribution, will now be checked for compatibility issues for upgrade to MySQL 8.0.21...

1) Issues reported by 'check table x for upgrade' command
   No issues found

Errors: 0
Warnings: 0
Notices: 0

No known compatibility errors or issues were found.
Loading the data
MySQL Shell Dump & Load - NEW!

Amazon, Google, Microsoft, etc.

MySQL On-Premise

MySQL Shell Dump & Load

Oracle Cloud Infrastructure Gen2

MySQL Database Service
Next Steps
Test Drive MySQL Database Service For Free Today

Get $300 in cloud credits and try MySQL Database Service and other services in OCI free for 30 days.

Get in touch with us!
Questions?

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