

### Use Cases

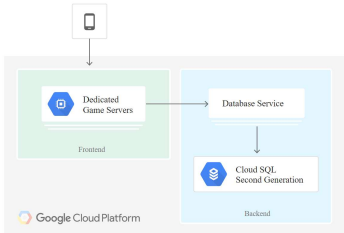


Google Cloud SQL is typically used for keeping track of

- ◆ User orders product catalogs
- ◆ Discussion boards and blogs
- ◆ Content management systems
- ◆ Workflow applications.

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### Use Cases

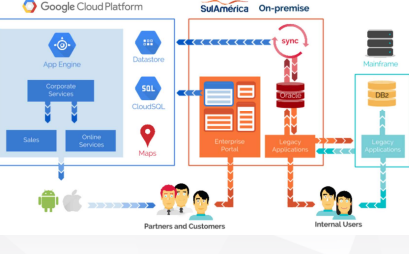


Google Cloud Platform

- ◆ Mobile game backend database.
- ◆ Service-fronted database pattern design.
- ◆ Formed by a pool of worker processes that accepts query requests from the game frontend.

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### Use Cases



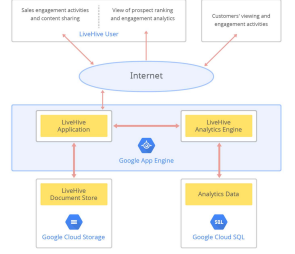
Google Cloud Platform

SulAmérica On-premise

- ◆ SulAmérica
- ◆ Legacy systems
- ◆ Moving the front end user interface and mainframe to Google Cloud Platform
- ◆ Saving 80% cost.

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### Use Cases



LiveHive User

Internet

LiveHive Application

Google App Engine

LiveHive Analytics Engine


Google Cloud Storage

Google Cloud SQL

- ◆ LiveHive
- ◆ sales analytics.
- ◆ wanted to focus our efforts on the product functionality.
- ◆ not spend time dealing with infrastructure issues.
- ◆ Cloud SQL updates sales analytics and usage metrics continuously.
- ◆ Full function and easy integration.

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### Use Cases



- ◆ KissFlow
- ◆ Workflow tool & business process workflow management software to automate your workflow process.
- ◆ Manage Cloud SQL instances and App Engine instances individually for each of our customers.
- ◆ More than 3,000 customers running in 3,000 instances on Google App Engine and Google Cloud SQL.

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### Use Cases



PART 02

- Advantage
- Disadvantage
- Usability
- Cost discussion
- Possible Alternatives

### Advantages

- ◆ Fully Managed
- ◆ Low Cost
- ◆ Flexible
- ◆ Automatic Software Patching
- ◆ Encryption at rest and transit
- ◆ Database management by Google
- ◆ Scalable service up to 10TB of data, 15,000 IOPS and 104GB of RAM per instance
- ◆ Compatible with Wordpress sites, e-Commerce Apps, etc
- ◆ Easy to make copies of instances to run tests
- ◆ Dynamic Memory Allocation

### Disadvantages

- ◆ Does not support MySQL internal tools
- ◆ Less Location Options
- ◆ Downtime – low internet
- ◆ Limited Control

### Usability

Cloud SQL for MySQL

Product Overview

Documentation

Quickstart

How-to Guides

All How-to Guides

- ▶ Creating and Managing Instances
- ▶ Connecting to Instances
- ▶ Replication and Data Management
- ▶ Managing MySQL Databases and Users
- ▶ Using the Cloud SDK

- ◆ Clean UI
- ◆ Clear Steps
- ◆ Large Documentation Support
- ◆ Easy to Use
- ◆ Performance Track

### Cost

◆ MySQL 2<sup>nd</sup> Generation Instance Price

Machine Type	Virtual CPUs	RAM (GB)	Maximum Storage Capacity	Price (\$/hour)	Estimated Cost Price (\$/month)
db-f1-micro	Shared	0.6	2,048 GB	\$0.0150	\$0.0150
db-g1-small	Shared	1.7	2,048 GB	\$0.0300	\$0.0300
db-f1-standard1	1	0.75	10,240 GB	\$0.0065	\$0.0076
db-f1-standard2	2	1.5	10,240 GB	\$0.0130	\$0.0151
db-f1-standard4	4	3	10,240 GB	\$0.0260	\$0.0302
db-f1-standard8	8	6	10,240 GB	\$0.0520	\$0.0604
db-f1-standard16	16	12	10,240 GB	\$0.1040	\$0.1208
db-f1-standard32	32	24	10,240 GB	\$0.2080	\$0.2416
db-f1-highmem4	4	16	10,240 GB	\$0.0311	\$0.0371
db-f1-highmem8	8	32	10,240 GB	\$0.0622	\$0.0742
db-f1-highmem16	16	64	10,240 GB	\$0.1244	\$0.1484

### Cost

◆ MySQL 2<sup>nd</sup> Generation Storage and Networking Price

	Price
Storage	<ul style="list-style-type: none"> <li>• \$0.17 per GB/month for SSD storage capacity</li> <li>• \$0.09 per GB/month for HDD storage capacity</li> <li>• \$0.08 per GB/month for backups (used)</li> </ul>
Network	<p>Ingress to Cloud SQL: Free</p> <p>Note: Egress charges may apply on the source. For example, egress from Google Compute Engine is charged at the <a href="#">external IP addresses rate</a>.</p> <p>Egress from Cloud SQL: See <a href="#">Network Egress Pricing</a></p> <p>IPv4 addresses: \$0.01 per hour while idle.</p>

### Alternatives

- ◆ Amazon RDS
- ◆ Offers a range of managed databases including **MS SQL Server, MySQL, PostgreSQL, Oracle and MariaDB**
- ◆ Provisioning, patching and day to day maintenance
- ◆ running your own instance in EC2
- ◆ Comes in a range of instance types offering up to 40 vCPUs and 244 GB of memory

### Conclusion

- ◆ Fully-Managed MySQL database service
- ◆ offers high performance, low cost, scalability, and convenience.
- ◆ Easy to use
- ◆ Reliability & Security

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PART 03

➤ Demo

### Demo

- ◆ Instances
- ◆ Database
- ◆ Command Line
- ◆ Import
- ◆ Export
- ◆ Access Control

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**THANK YOU!**  
**Q&A**