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​​

​

MySQL is the software that works with the operating system to merge multiple databases with the computers storage system, helps manage users and network access, create backups.​

What databases are these? Relational Databases: These organizes data into tables with rows and columns. These different tables can have relationships with each other. This means you can string together queries to search across multiple complex tables.​

Management System: How is it a management system: Software system that that allows users to define, create, maintain, and control access to the database.​

​

​ SQL: A language used to create, modify, and extract data from relational databases.​

​

Declarative: Imagine you're at a restaurant, and you order food. You tell them what you want, and it gets prepared for you. You don't need to know how to cook it, only express your desire for it. As opposed to imperative, where you'd be in the kitchen and giving detailed instructions on how to cook food. You specify every step.​

On Prem: This means that they have an RDBMS on the physical company grounds, using servers, hardware, software, all of which is located and managed on the physical premises or company data center, as opposed to using any cloud-based environment, or hosted elsewhere.​

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AWS Database Migration Service is a managed migration and replication service. What does this mean.​

​

Set up Amazon EC2 instance. This is your replication instance and is your target location for databases.​

Set up replication instance's Virtual Private Cloud to configure security groups.​

​

Discover and assess: DMS automation tool inventories and assesses your servers.​

​

Convert: DMS Schema Conversion tool converts the source schema and code to match the target database.​

​

Migrate: Create a task to connect the source and target databases. Use the MySQL script provided by AWS to populate your source database.​

​

Finally, verify your replication has worked by running queries on the target database.​

​

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Even though we have filtered down cloud providers to AWS DMS, there are still possible issues:

Data Integrity: Data transfer must be accurate. Any corruption, inaccessibility, loss could have serious consequences.​

​

Schema Change: If the schema is different between the original source and target instance databases, the transfer needs to be managed, make sure all data ends up where it should do.​

​

Compatibility: Are the source and target db's compatible? Are they different versions? Are they configured to accept the same data types? Many factors to be managed.​

​

Downtime: No service in the world can guarantee 100% uptime. Depending on method used, or external factors, there could be downtime in the changeover phase.​

​

Cost: Depending on resources used, even with a pay-as-you-go metered system, the cost of instances running, data storage, and tools used can mount up, especially if it is a large transfer of data and takes a long time.​

​

Compliance: Is the client in a regulated industry? Is there data privacy that has to be ensured? Security regulations to abide by? Does the cloud provider, in the case of the client being AWS, help to support these compliances?​

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Despite the previously mentioned possible issues, the robustness of AWS DMS, the convenience of use, cost-effectiveness, lack of downtime, all contribute to AWS DMS being the most viable option for a client MySQL transfer to cloud.​

​

After a successful migration, there are a couple tasks that need to be completed to ensure smooth operation in the new environment:​

​

Data Validation – Run queries and data validation to ensure data matches the source.​

​

Security Configuration – Having moved from a physical source database to a cloud-based database, security now has to be reviewed and configured to ensure the same safety that on-prem databases offer.​

​

Backup and Recovery – It is possible the on-prem database was backed up prior to migration, however the fallibility of hardware remains, and the new target database must be backed-up and ready for recovery.​

​

Documentation – Document the process, what happened, what went well, what went poorly, what could be done to streamline in the future.​

​

Slides too simplistic.

Text too small.

Migration process – use the diagram to illustrate process better.

Little more on first slide.

Take a couple more seconds on introduction slides.

Empty screen at start before topics are introduced.

Can’t make criteria then not use criteria to parse the options through to come to a conclusion.

Split it up a little more, spend more screen time / diagrams on each point.

If presenting to management, talk about cost management considerations.

Talk about business perspective, can business decisions be made on this, can the future be predicted from this, future cost flow.

Group 2

Sparta Global taking up a lot of real estate.

Agenda:

Relational databases

* Too many words on screen.
* No illustrations

What is SQL and MySQL

* Still too many words.
* I like the Native disaster recovery use.
* We’re not asked to justify why the client is already presently using MySQL.
  + If you were presenting to management, you wouldn’t go to them to tell them why they’re using the systems they’re already using.

Oracle Cloud:

* “What establishes it from the rest”:
  + What are the rest? You haven’t said what they are.

Initial Assessment

* What’s the image mean?
* Good linking back the size of client database to oracles abilities to accommodate it.
* Are team trained to use the tool:
  + Good line.
* Good initial assessment, but as they didn’t bring up any other services by oracle, we can’t say that this service is any better than the others.
* Good future scalability, that would go well with management.

Test migration:

* Image relevance?
* Good example for how to initially test, get the team used to the tool.

Full Migration:

* Image relevance? Does it help / enhance, or is it just there?
* How does the migration happen?
* What are the steps?
* Good post migration care / future steps however.

Migration Options:

* Good layout, can see them all together, goes over the valid points.
* Good slide.

Why GoldenGate?

* Too many words on screen.
* Words are different from verbal descriptions, makes it confusing to follow along.
* Seemed a bit read from script.
* Good positive points on GoldenGate however.

Post Migration:

* Image relevance?
* Good bringing up monitoring.
  + “easy to allow cost spiralling with GoldenGate”.
  + Doesn’t sound great for management.

Potential Issues:

* “Look at return on investment”
  + Good.

Our Recommendation:

* Feels like they’ve already said this.