



Architecture Diagrams

SQL Based Data Processing in Amazon ECS



SQL Based Data Processing in Amazon ECS: Architecture Diagrams

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3. The ARC Jupyter notebook produces a job flow configuration JSON file. The user uploads the file and SQL scripts to [Amazon Simple Storage Service](#) through a CI/CD automated deployment process or manually.
4. An Amazon S3 file arrival event triggers an [AWS Lambda](#) function.
5. The Lambda function spins up an Amazon ECS task to process batch data in a transient way, or to process stream data continuously in a long-running container. Each job uses isolated compute resources.
6. [Amazon CloudWatch](#) Events schedules and orchestrates regular ARC ETL jobs and Amazon ECS tasks with AWS Fargate or Amazon EC2 launch types.
7. ARC ETL jobs generate application logs for each data processing stage at a granular level. CloudWatch provides monitoring and alerting capabilities.

Further reading

For additional information, refer to the following resources:

- [AWS Architecture Icons](#)
- [AWS Architecture Center](#)
- [AWS Well-Architected](#)

Diagram history

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Change	Description	Date
Initial publication	Reference architecture diagram first published.	March 8, 2021

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