Building Real-Time Analytics Pipelines

A Modern Data Cloud Solution

The Problem:
Data Silos, Slow Pipelines, Costly Analytics

Companies deal with massive data stored in S3, spreadsheets, and external sources.

Traditional tools struggle with:

- Slow data ingestion.
- Complex ETL pipelines.
- High costs for scaling.

Real-World Example:
Imagine a retail company with millions of sales records in S3 and weather data impacting sales. How do they combine these datasets for actionable insights?

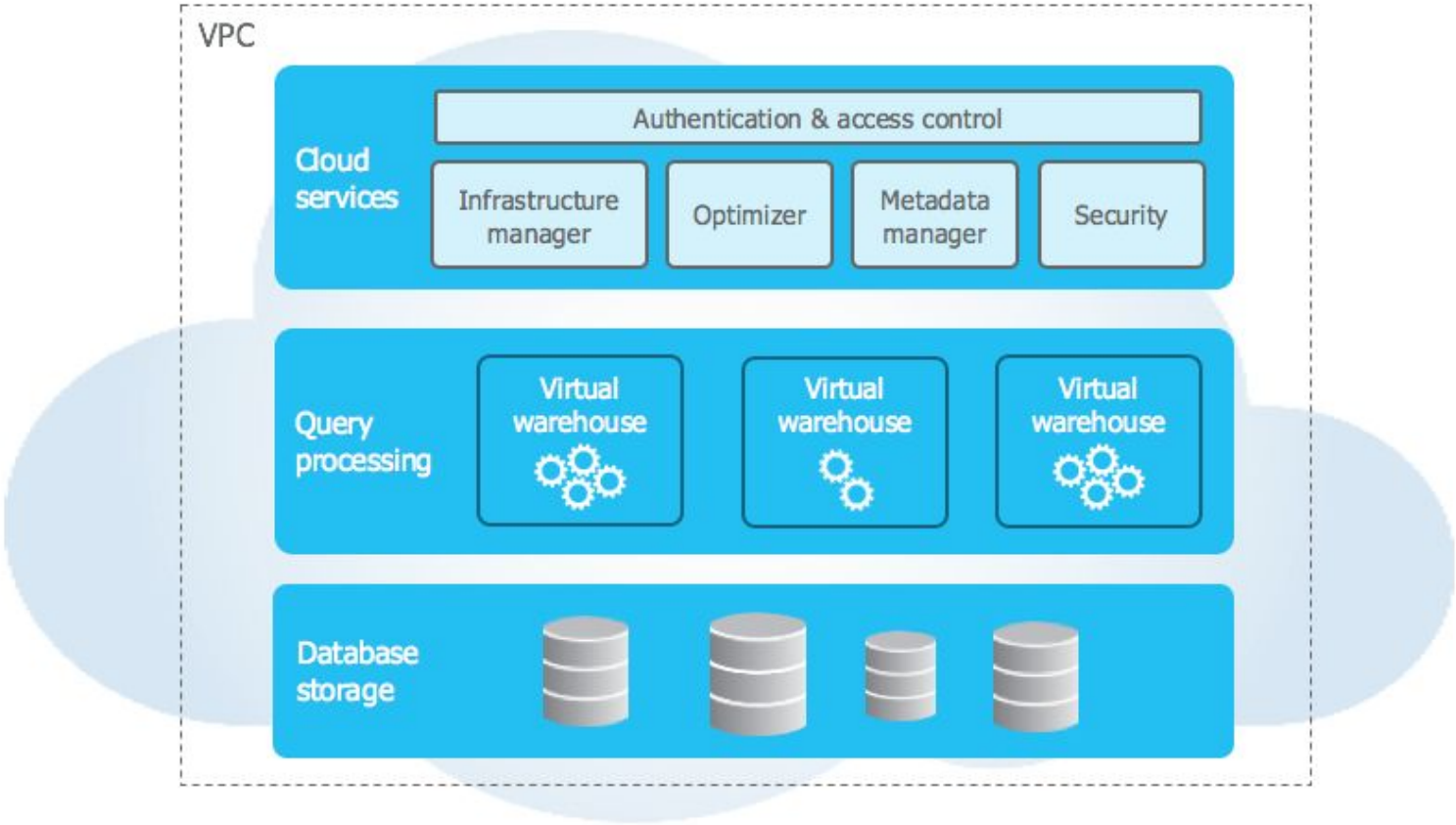
The Solution: Snowflake's Modern Data Cloud

Cloud-based data platform that allows you to store, process, and analyze massive amounts of data without worrying about the underlying infrastructure.

- Zero Management: No infrastructure to manage.
- Scalability: Handles petabytes of data effortlessly.
- Data Sharing: Access external datasets like weather data via Snowflake Marketplace.

Handles the infrastructure for you so you can focus on insights!

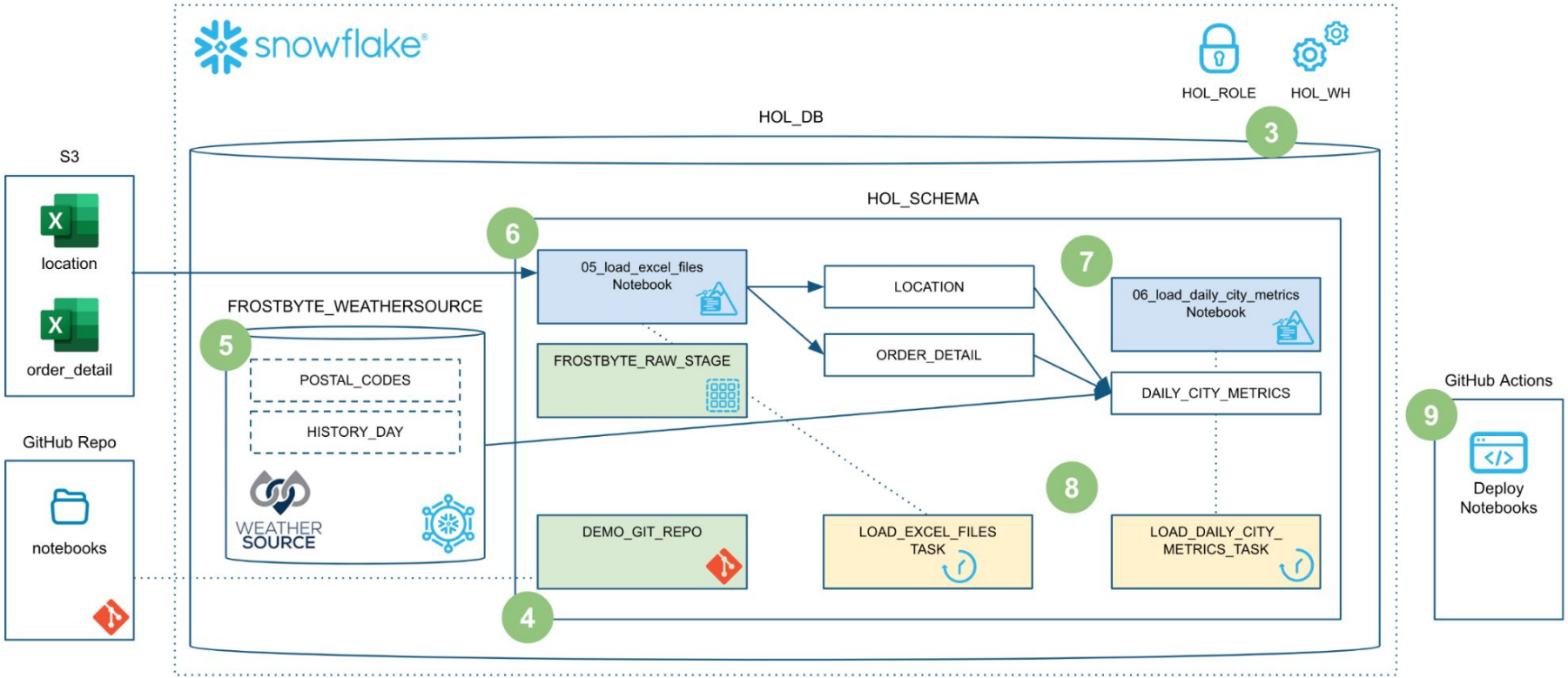
ARCHITECTURE



Source: Snowflake documentation

Demo Time!

A retail company analyzes how weather impacts daily sales and optimizes inventory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DEMO_GIT_REPO
LOAD_EXCEL_FILES
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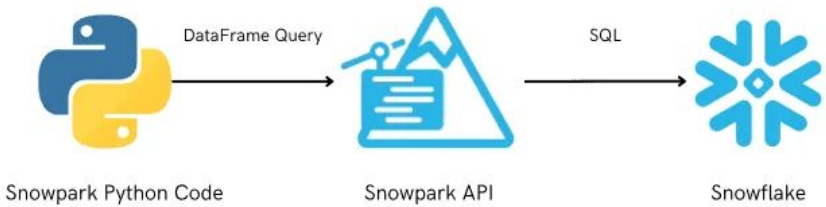
GitHub Actions
9
Deploy
Notebooks

Services Used:

- Snowpark Notebooks: For Python-based data processing.
- Snowflake CLI: For seamless deployment and management.
- Tasks & DAGs: For orchestrating pipelines (Airflow-like syntax).
- Use Python Management API to manage tasks (pause, resume, debug).



Thank you!