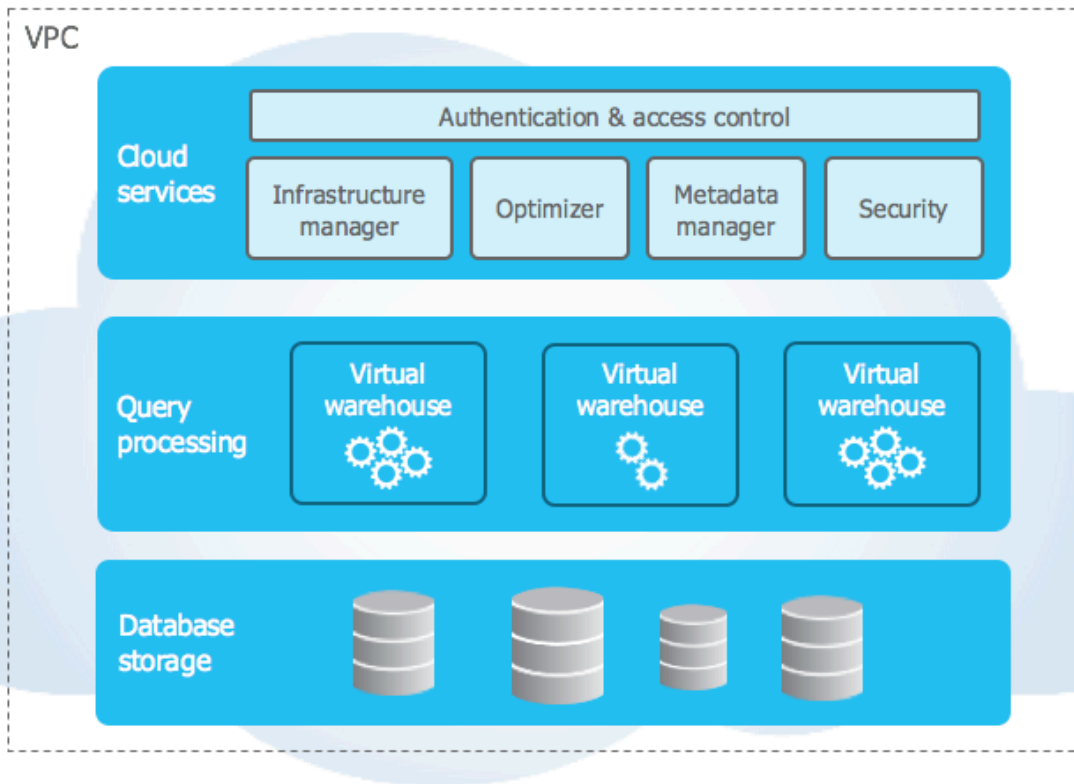


About Snowflake



1. Snowflake Architecture has 3 key layers

a. Database Storage

- When data is loaded into Snowflake, it reorganizes it into its internal optimized, compressed, columnar format and stores this optimized data in cloud storage
- Snowflake manages all aspects of how this data is stored — the organization, file size, structure, compression, metadata, statistics, and other aspects of data storage are handled by Snowflake

b. Query Processing

- Query execution is performed on this layer
- Snowflake processes queries using virtual warehouses
- Each virtual warehouse is an independent compute cluster that does not share compute resources with other virtual warehouses. As a result, each virtual warehouse has no impact on the performance of other virtual warehouses

c. Cloud Services

- A collection of services that coordinate activities across Snowflake
- These services tie together all of the different components of Snowflake to process user requests, from login to query dispatch
- Services managed in this layer include:
 - Authentication
 - Infrastructure management
 - Metadata management
 - Query parsing and optimization
 - Access control