Red Shift

Fundamentals of AWS Redshift.

Red Shift is a fast powerful and full managed, Pet-byte-scale data warehouse service in the cloud. Start small and scale up. Costs a tenth of most other data warehousing solutions. It uses SQL for querying and management.
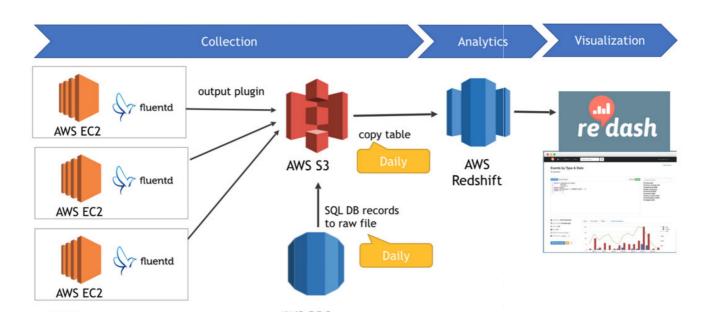
Massive Parallel Processing: (MPP)

Amazon redshift automatically distributes your data and queries across all the nodes.

Note: Data warehousing databases are built keeping in mind that the main use case is to be able to run large and complex queries that do not affect the application which is serving traffic.

Columnar Data Storage: Instead of storing data as a series of rows, redshift organizes the data by columns. Unlike row-based systems which are ideal for transaction processing, column-based systems are ideal for data in a warehouse and analytics, where queries most often involve aggregates performed over large datasets.

A Very Typical RedShift Architecture