MASTERING SNOWFLAKE

Advanced level course

Course Outline

Introduction to Cloud data warehouse & Snowflake

Getting started with Snowflake

Virtual Warehouse

Loading data to Snowflake

Unloading Data from Snowflake

Course Outline

Time Travel, Failsafe & Zero Copy Clones

Data Sharing in Snowflake

Snowflake Access Management

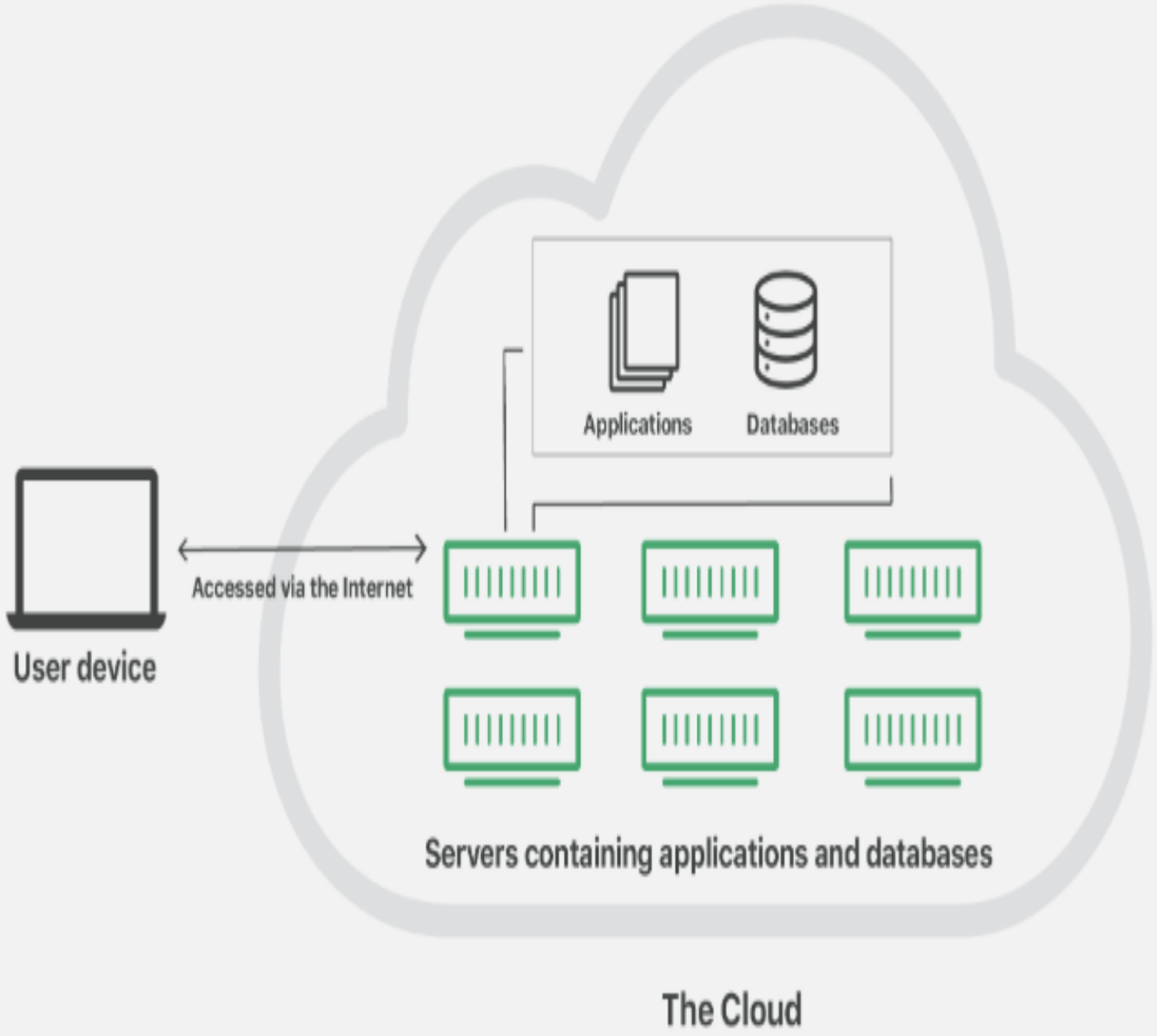
Snowflake SQL

Hands ON Demo on Project

INTRODUCTION TO CLOUD DATA WAREHOUSE & SNOWFLAKE

- Understanding Cloud data warehouse
- About Snowflake
- Architecture : Data Storage , Processing and cloud services
- Supported cloud platforms

Understanding Cloud Data warehouse

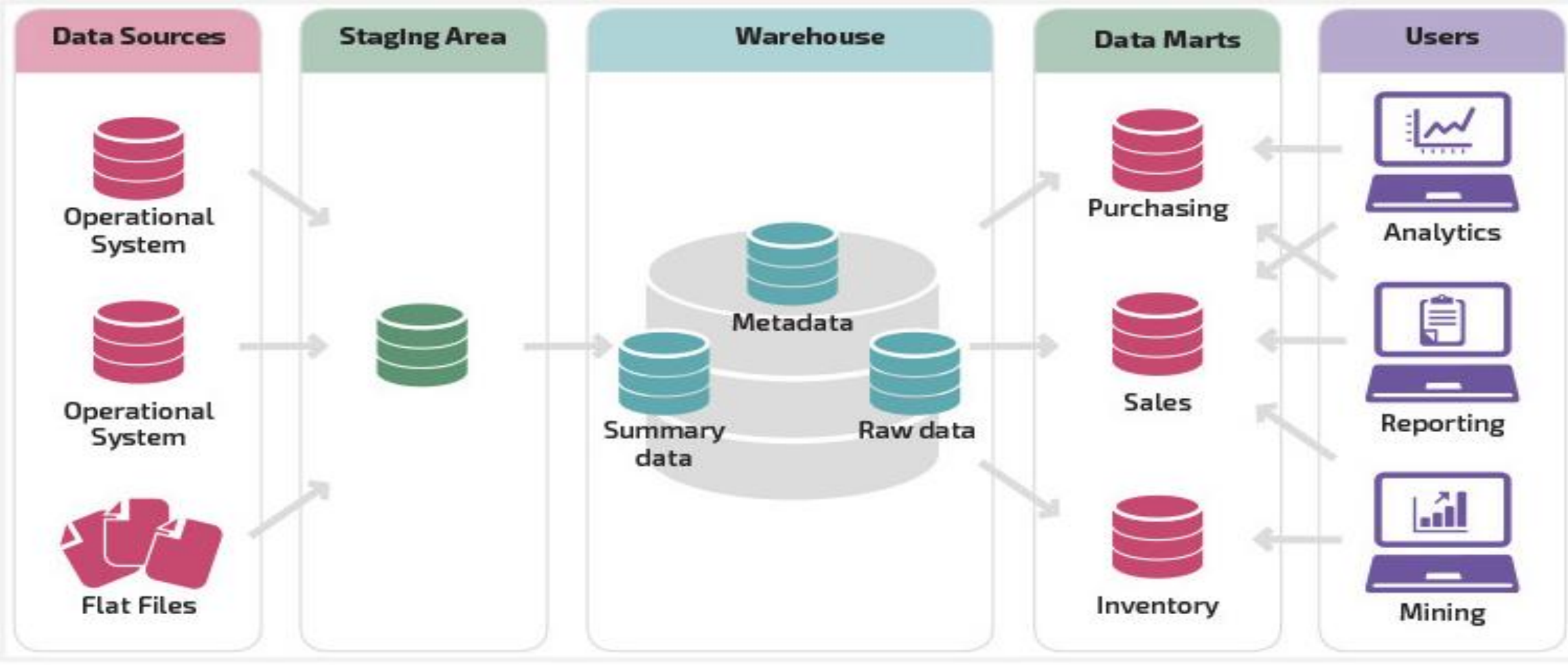


What is cloud ?

"The cloud" refers to servers that are accessed over the Internet, and the software and databases that run on those servers

Traditional data warehouse

A data warehouse is a system that gathers data from a wide range of sources within a company and uses the data to support management decision-making



Cloud Data warehouse

Database delivered in a public cloud as a managed service that is optimized for analytics, scale and ease of use

According to the 2019 Analytical Data Infrastructure Market Study, cloud deployment is currently the highest priority for companies (more than 50% of respondents indicated it as either critical or very important)

FEATURE	CLOUD DATA WAREHOUSES	ON-PREMISES DATA WAREHOUSES
Scalability	Cloud DWHs can be instantly scaled up or down according to business needs.	Scalability is possible, yet it's time- and resource-consuming, as this task requires from hours of reconfiguring the hardware, software, and infrastructure to even months if a company has to purchase more hardware.
Availability	Depends on the service level specified by a cloud provider. For example, Amazon, Microsoft, and Google guarantee 99.9% - 99.99% uptime.	Depends on the quality of available hardware, software, and the competence of an in-house IT team.
Security	A cloud provider ensures that the infrastructure is secure, and the data entrusted to them is protected.	Depends on the competence of an in-house IT team.
Performance	• Well-suited for serving multiple geographic locations. • Perfect for query performance measured in seconds. • Unsuitable for query performance measured in milliseconds.	Shows excellent query performance (including the one measured in milliseconds) but only in case the scalability challenge is resolved.
Cost-effectiveness	• No significant initial investments are required (as there's no need to buy hardware, build and manage an IT team, pay for maintenance and support). Still, there will be fees for the development of a cloud DWH and migration, if any. • Potential to pay only for the storage and computing resources actually used.	The solution requires significant initial investments (hardware, team, training).

About Snowflake