# Overview on Oracle Database Technologies and Options

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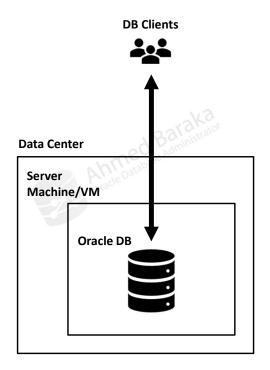
# **Objectives**

In this lecture, you will learn how to perform the following:

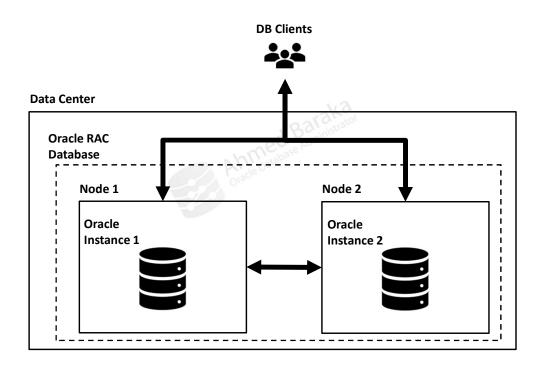
 Describe Oracle database technologies, options, and management packs.



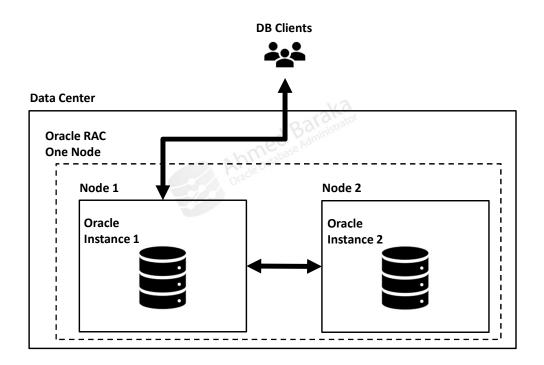
## **Oracle Database Single Instance Architecture**



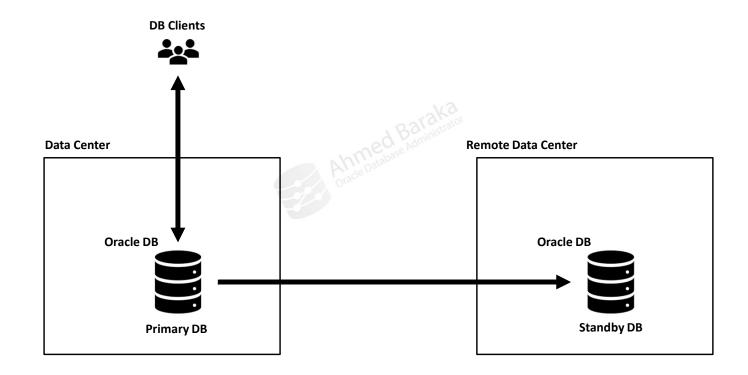
## **Oracle Database Real Application Cluster (RAC)**



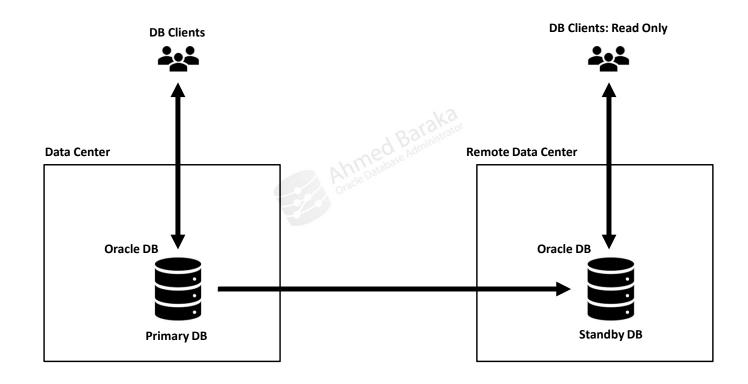
#### **Oracle Database RAC One Node**



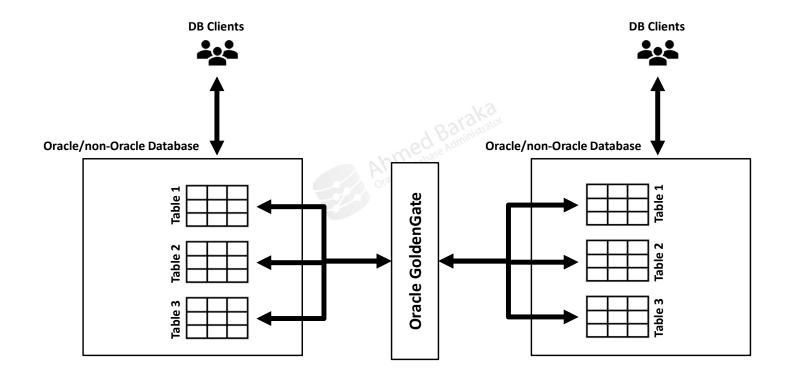
## **Oracle Database Data Guard Configuration**



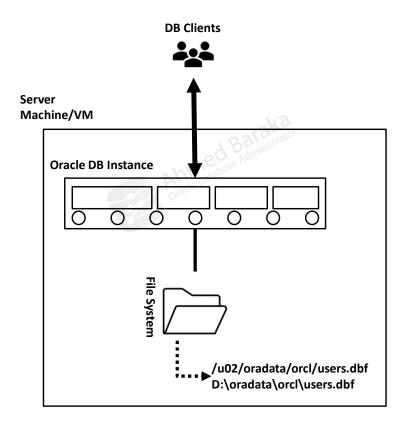
#### **Oracle Database Active Data Guard**



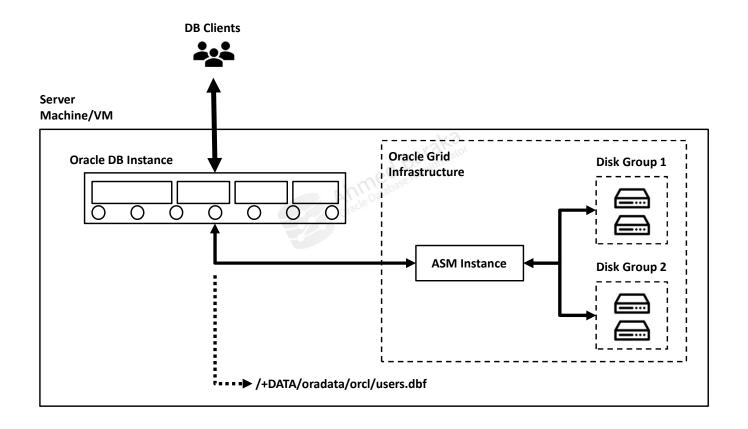
#### **Oracle GoldenGate**



## Oracle Database with LVM (non-ASM)



#### **Oracle Automatic Storage Management (ASM)**



# **Oracle Database Options and Technologies**

Requirement	Database Option/Technology
Hardware failure tolerance (active-active)	Real Application Cluster (RAC)
Hardware failure tolerance (active-passive)	RAC One Node
Disaster recovery (DR)	Data Guard
Disaster recovery (DR) with accessible Standby	Active Data Guard
Replication	Oracle GoldenGate (separate product)
Storage Management (HDD failure tolerance)	Automatic Storage Management (ASM)

## **Oracle Database Other Options**

- Oracle Multitenant
- Oracle Database In-Memory
- Oracle Database Vault
- Oracle Label Security
- Oracle On-Line Analytical Processing (OLAP)
- Oracle Partitioning
- Oracle Real Application Testing
- Oracle Spatial and Graph
- Oracle Application Express (APEX)

## **Oracle Management Packs**

- Oracle Diagnostics Pack
- Oracle Tuning Pack
- Oracle Cloud Management Pack for Oracle Database
- Oracle Database Lifecycle Management Pack for Oracle Database
- Oracle Data Masking and Subsetting Pack

## **Oracle Database and Machine Learning**

- Empowers enterprise users with SQL, R, and Python
- For more information:

https://www.oracle.com/ae/a/tech/docs/technical-resources/oml-technical-brief.pdf

## **Summary**

In this lecture, you should have learnt how to perform the following:

 Describe Oracle database technologies, options, and management packs.

