

Introducing Database Tablespaces and Datafiles

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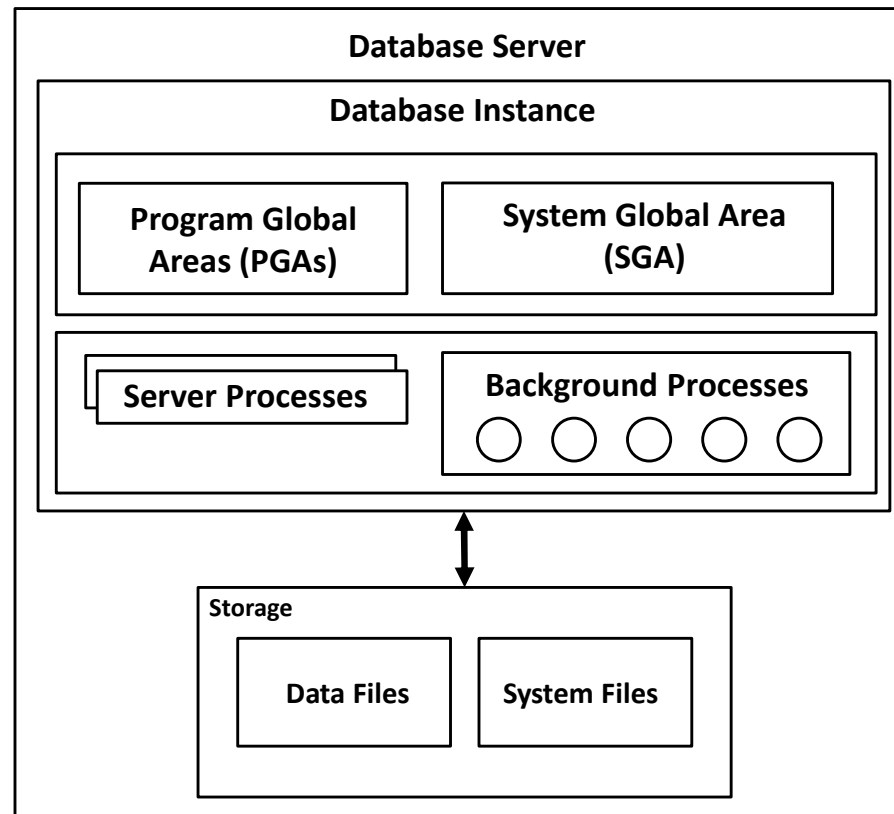
Objectives

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

- Describe database tablespaces and data files

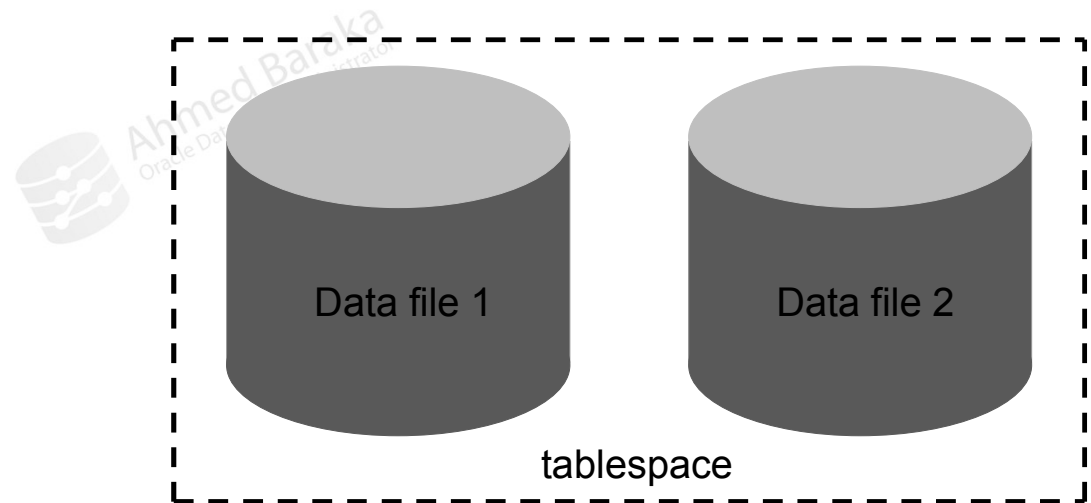


Oracle Database Server Architecture



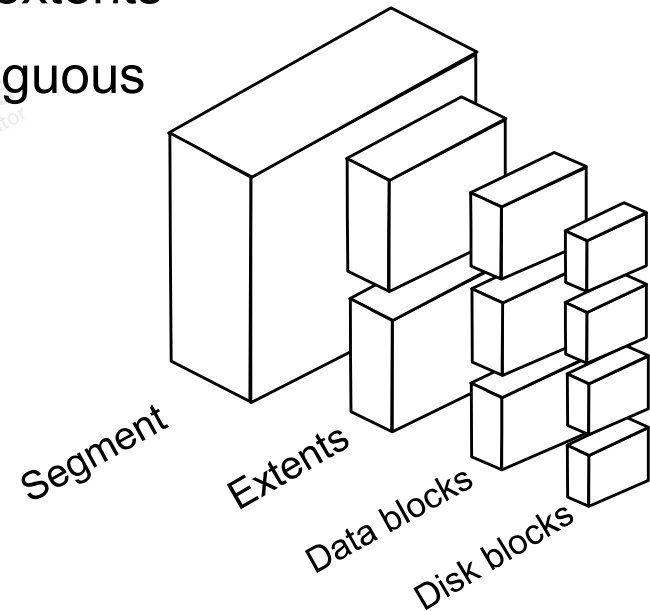
Tablespaces and Data Files

- Tablespaces consist of one or more data files.
- A data file belongs to only one tablespace

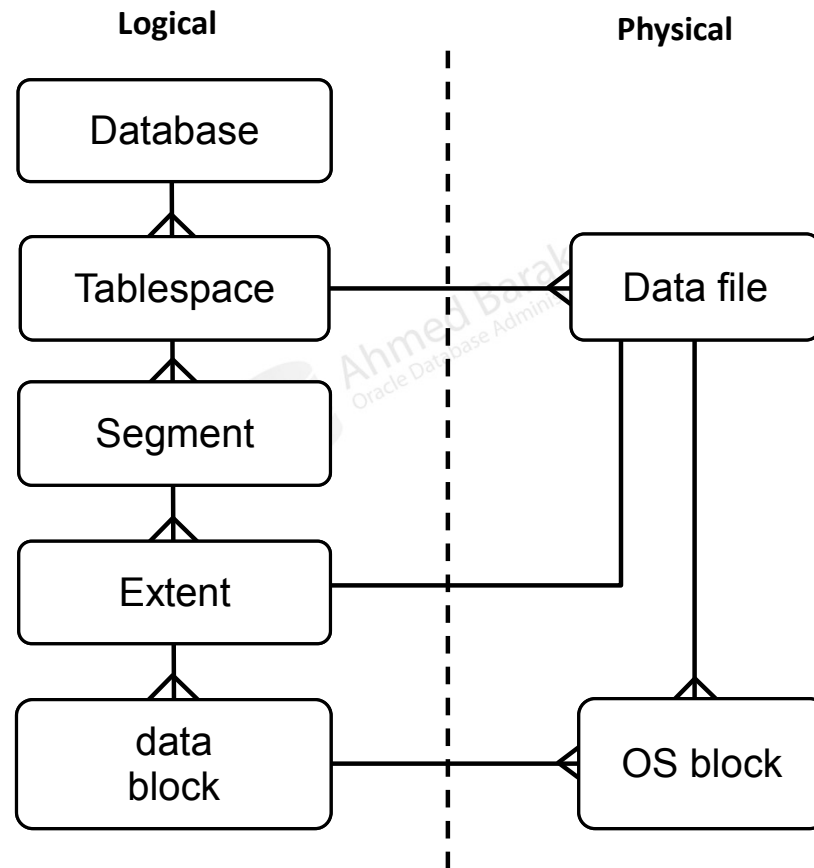


Segments, Extents, and Blocks

- Segments exist within a tablespace
- Segments are made up of a collection of extents
- An extent is a collection of logically contiguous data blocks
 - Cannot span multiple data files
- Data blocks are mapped to disk blocks



Logical and Physical Database Structures



SYSTEM and SYSAUX Tablespaces

- The **SYSTEM** and **SYSAUX** tablespaces are mandatory tablespaces.
- They are created at the time of database creation.
- They must be online.
- The **SYSTEM** tablespace is used for core functionality (for example, data dictionary tables).
- The auxiliary **SYSAUX** tablespace is used for additional database components.

Summary

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

- Describe database tablespaces and data files

