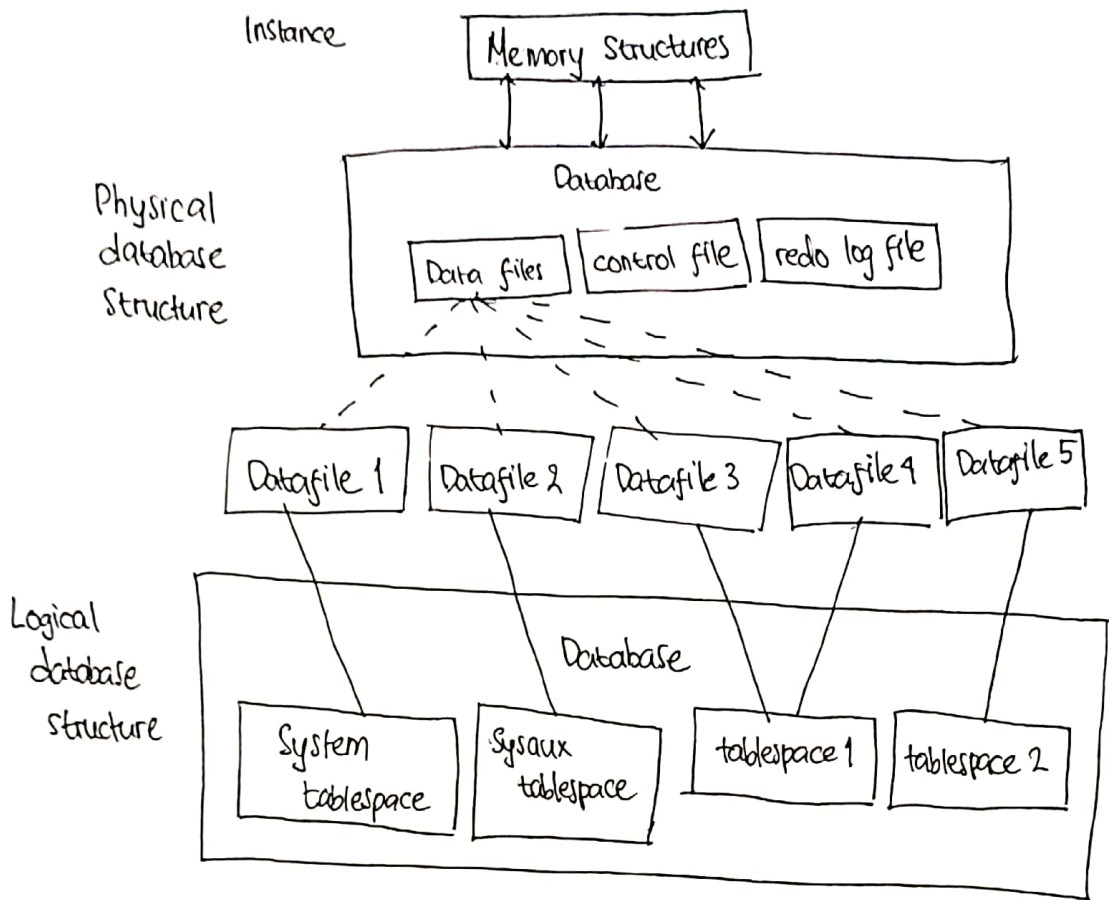


Storage Structure



Datablock → smallest unit of disk space allocation

Datablock size → Multiplicity of operating system block size (2K, 4K, 8K, 16K, 32K)

Extent → a specific number of contiguous data blocks (default 5 block, min 2 blocks)

TABLESPACE

System → Tablespace created automatically, used to manage database. Contained in SYS schema (data dictionary, set of tables and views, administrative information)

SysAux → Auxiliary tablespace to the system. Contain data for some components and products

UNDOTBS1 → stored undo information

users → default tablespace for all new users

ALLOCATE MORE SPACE FOR A DATABASE

1. Add a data file to tablespace
2. Add a new tablespace
3. Increase a data size of a data file

Types of Tablespace

- Locally managed tablespace
 - Free extents are managed in the tablespace
 - each bit corresponds to a block or group of blocks
 - The bit value indicates free or used extents
 - The use of locally managed tablespace is recommended

Temporary tablespace

- provides performance improvements
- All operation that use sort, joins, union, index build, ordering, computing aggregates benefit from temporary tablespace
- It is optionally and permanent in nature but their segments are temporary in nature.

Dictionary

- Information about tablespace and their component data files
- Status of tablespace → ONLINE, OFFLINE, READ-ONLY
- Information about the files a tablespace included in data dictionary view DBA - DATA - FILE FILES.
- File status → AVAILABLE or INVALID
- A data dictionary view DBA - SEGMENTS contains information about the present size of each segment.