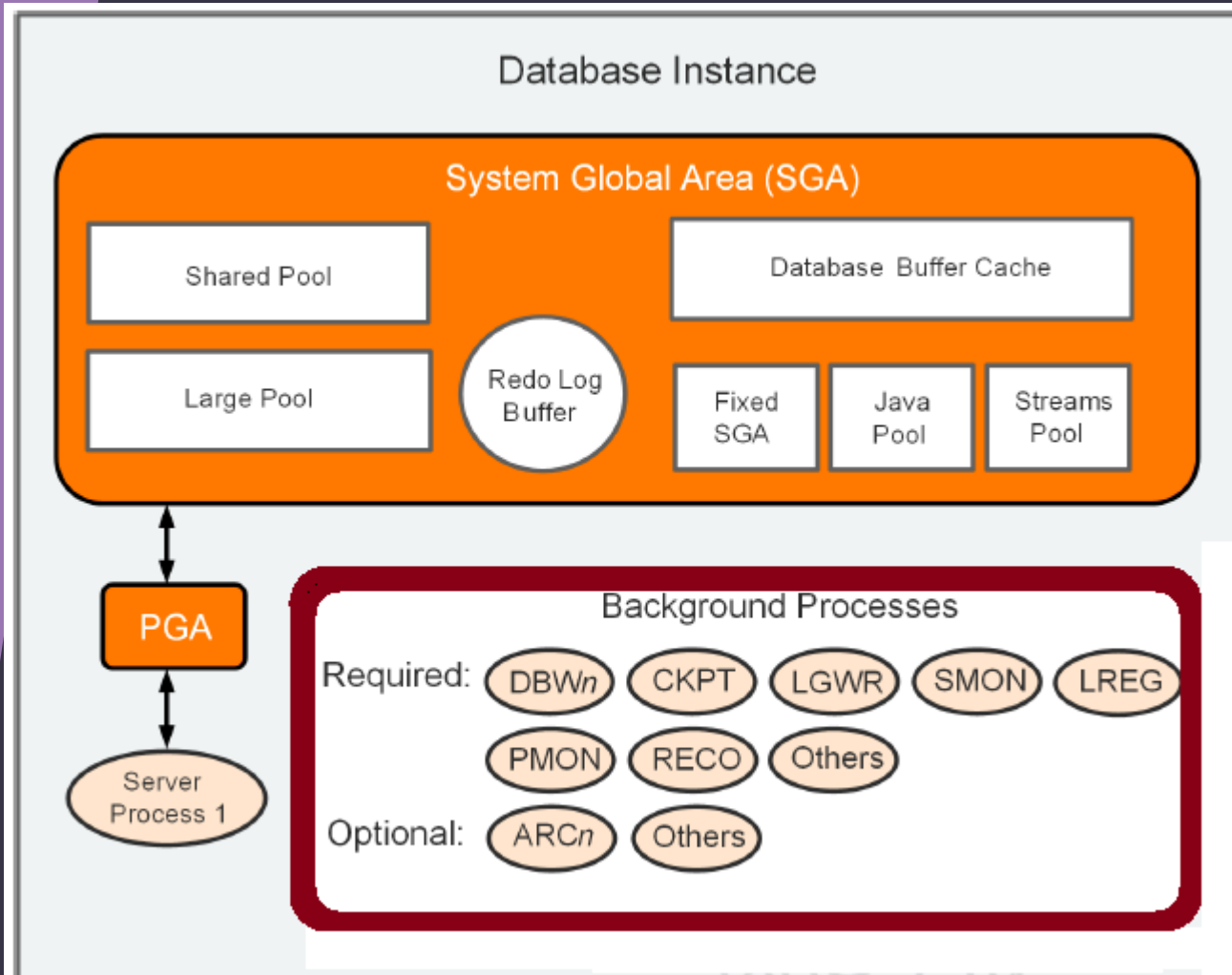


# Database Instance

## Background Processes

What we will learn in this lecture?

- What are the Background processes?
- The Main purpose of each Background process



### Background Processes:

bunch of dedicated server-side processes running in the background

### TASKS:

- writing database blocks to disk
- writing redo entries to disk
- making sure all of the database files on disk are synchronized
- perform maintenance tasks

- Database Writer processes (DBWn )

responsible for writing contents of the database buffers to data files on disk

- Log writer (LGWR)

responsible for writing redo records from the redo log buffering memory into a physical disk

- checkpoint process (CKPT)

This process handles database checkpoints.

An Oracle checkpoint is a database event which synchronizes modified data blocks in memory from the buffer cache with the data files on disk

- System Monitor process (SMON)

performs recovery during the startup sequence of the Oracle Instance if required.  
responsible for cleaning up any unused temporary segments.

- Process Monitor ( PMON)

performs process recovery when a user process or a session fails.  
responsible for cleaning up any changes made to blocks in the database buffer cache,  
and releasing resources that were previously used by a failed user session.

- Recover Process (RECO)

used as part of distributed database transactions.

**Distributed transactions** are transactions that involve multiple databases, and should either commit a rollback on both databases at once.

- Listener registration process (LREG)

It is responsible for registering the Oracle instance with the Oracle network listener.

**The listener accepting remote incoming user connections**

- Archiver process (ARCn)

It is responsible to copy the Oracle redo log files to a remote storage device after a redo log switch has occurred

**Note:** Copying the database relogs to another storage system is very important from a backup and recovery perspective

# Thank You