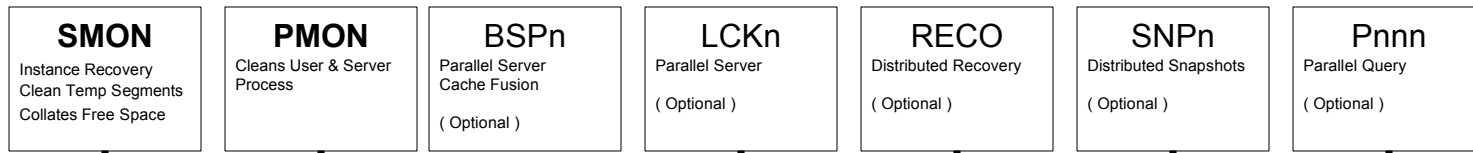


# ORACLE 8i ARCHITECTURE

Instance - SGA and set of background processes  
 Database - Datafiles, Control files, redo logs



5 Required Background Processes O8  
 DBWR, CKPT, LGWR, PMON, SMON

## Processing a Query

### Parse Phase

1. User Process sends query to Server Process
2. Syntax Check ( Semantics )
3. Applies hash algorithm to it.
4. Search Library Cache for existence
5. Structure Check - Object resolution
6. Security Check
7. Search Plan created ( Execution Plan or Parse Tree)
8. Stores Plan

### Execute Phase

1. Search Buffer Cache ( Logical Read )
2. Search Datafiles ( Physical Read )
3. Places blocks in Buffer

### Fetch Phase

1. Return rows to user process
2. Repeats fetch for large transfers

