Processes, Views, Parameters, Packages, and Privileges
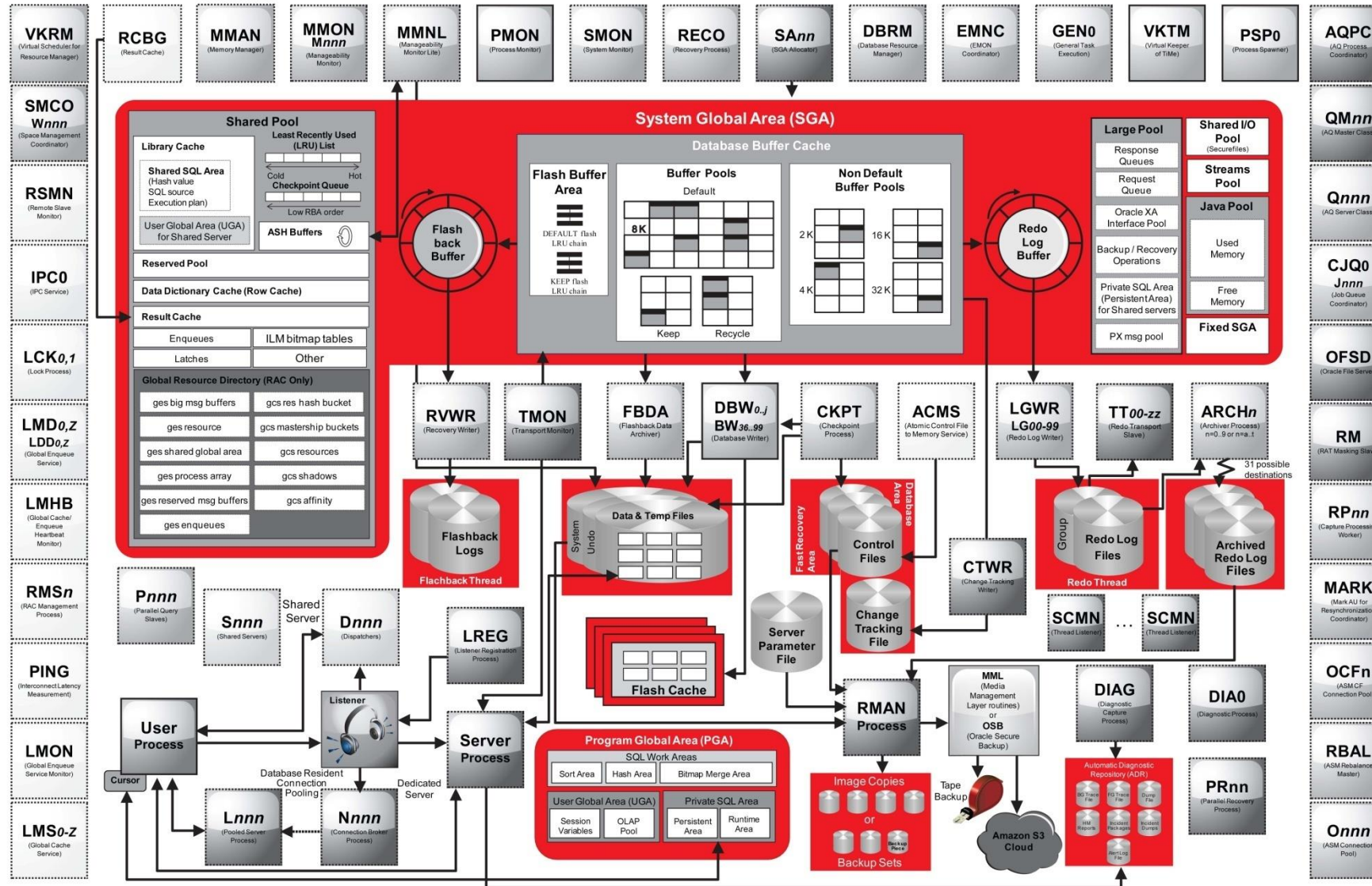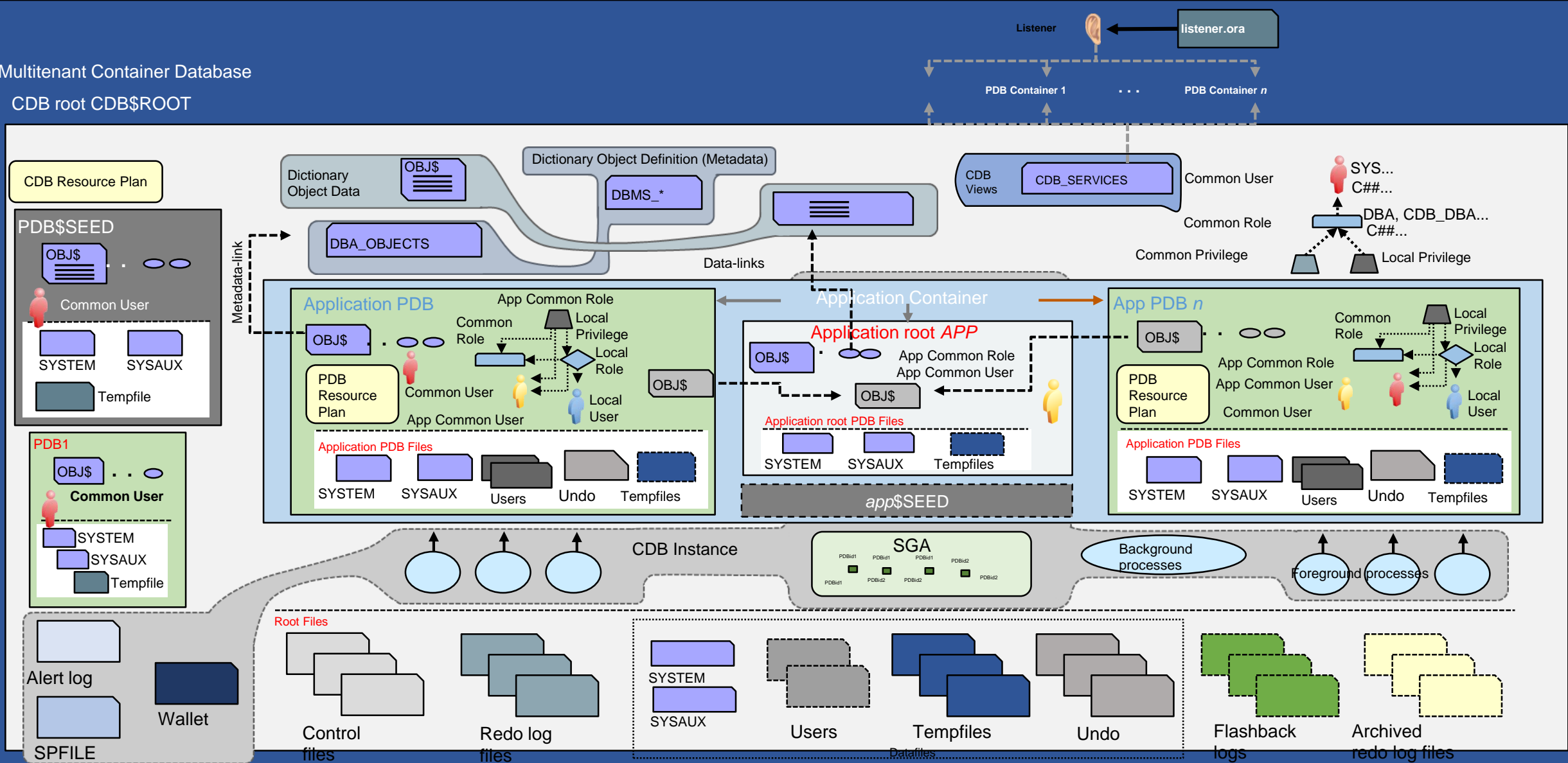
Instance and Database

Multitenant Architecture

CDB and PDB Views and Columns

- CDB_xxx: All of the objects in the CDB across all PDBs
- DBA_xxx: All of the objects in a container or PDB
- `CDB_PDBS`: All PDBs within CDB
- `CDB_TABLESPACES`: All tablespaces within CDB
- `CDB_USERS`: All users within CDB (common and local)
- `CDB_PDB_SNAPSHOTS`: All PDB snapshots associated with PDBs 19c
- `V$PDBS`: Displays information about PDBs associated with the current instance
- `V$CONTAINERS`: Displays information about PDBs and the root associated with the current instance
- `PDB_PLUG_IN_VIOLATIONS`: Displays information about PDB violations after compatibility check with CDB
- `RC_PDBS`: Recovery catalog view about PDB backups

CDB and PDB Views and Columns

- `DBA_APPLICATIONS`: Application created on top of application PDBs
- Other views related to applications:
  - `DBA_APP_PATCHES`
  - `DBA_APP_STATEMENTS`
  - `DBA_APP_ERRORS`
  - `DBA_APP_VERSIONS`
- New columns in `V$CONTAINERS` view:
  - `APPLICATION_ROOT = YES|NO`
  - `APPLICATION_PDB = YES|NO`
  - `APPLICATION_SEED = YES|NO`
  - `APPLICATION_ROOT_CON_ID = <con_id>`
  - `APPLICATION_ROOT_CLONE = YES|NO`
  - `PROXY_PDB = YES|NO`
  - `PDB_COUNT = <nbr>`
- New columns in `V$PDBS` view:
  - `PDB_COUNT = <nbr>`

CDB and PDB Views and Columns

- New columns or column values in `CDB_PDBS` view:
  - `UPGRADE_PRIORITY = <nbr>`
  - `APPLICATION_ROOT = YES|NO`
  - `APPLICATION_PDB = YES|NO`
  - `APPLICATION_SEED = YES|NO`
  - `APPLICATION_ROOT_CON_ID = <con_id>`
  - `IS_PROXY_PDB = YES|NO`
  - `STATUS = NORMAL | RELOCATING | RELOCATED | REFRESHING | STUB` 19c
  - `SNAPSHOT_MODE = NONE | MANUAL | AUTO`
- New columns in `DBA_TABLES` view:
  - `CONTAINER_MAP_OBJECT = YES|NO`
  - `CONTAINERS_DEFAULT = YES|NO`
  - `CONTAINER_MAP = YES|NO`

CDB and PDB Views and Columns

- **New values in** `CDB_OBJECTS` **view, column** `SHARING = METADATA LINK | DATA LINK | EXTENDED DATA LINK | NONE`

- New column `INHERITED = YES|NO` in views:
  - `CDB_USERS`
  - `CDB_ROLES`
  - `CDB_TAB_PRIVS`
  - `CDB_SYS_PRIVS`
  - `CDB_ROLE_PRIVS`
  - `ROLE_ROLE_PRIVS`
  - `ROLE_SYS_PRIVS`
  - `ROLE_TAB_PRIVS`
  - `AUDIT_UNIFIED_POLICIES`
  - `DVSYS.DBA_DV_REALM`
  - `DVSYS.DBA_DV_REALM_OBJECT`

CDB and PDB Views and Columns

- New values in `PROPERTY_NAME`, column in `DATABASE_PROPERTIES` view:
  - `MAX_PDB_SNAPSHOTS = 8` **19c**
  - `CONTAINER_MAP, LOCAL_UNDO_ENABLED , LEAD_CDB = TRUE | FALSE` **19c**
  - `LEAD_CDB_URI = dblink:`*`link_to_cdb_lead`* **19c**
  - `CONTAINERS_HOST = `*`<hostname>`*
  - `CONTAINERS_PORT = 1521`
- New column in `V$ENCRYPTION_WALLET` view:
  - `KEYSTORE_MODE = NONE | UNITED | ISOLATED` **19c**
- `CDB_LOCKDOWN_PROFILES`
- `V$RESTORE_POINT`

CDB and PDB Views and Columns

- `AWR_ROOT_PDB_IN_SNAP`
- `AWR_PDB_PARAMETER`
- `AWR_PDB_RSRC_PDB_METRIC`
- `AWR_PDB_SQL_SUMMARY`
- `V$RSRCPDBMETRIC / V$RSRCPDBMETRIC_HISTORY / DBA_HIST_RSRC_PDB_METRIC`
- `V$RSRC_PDB / V$RSRC_PDB_HISTORY`

CDB and PDB Parameters

- `ENABLE_PLUGGABLE_DATABASE`: Required to create a CDB at CDB instance startup
- `PDB_FILE_NAME_CONVERT`: Maps names of existing files to new file names when processing a `CREATE PLUGGABLE DATABASE` statement
- `CDB_COMPATIBLE`: Enables you to get behavior similar to a non-CDB
- `PDB_OS_CREDENTIAL`: Enables another OS user than `oracle` to connect to PDBs
- `DB_PERFORMANCE_PROFILE`
- `PDB_LOCKDOWN`
- `SGA_MIN_SIZE`
- `MAX_PDBS`
- `WALLET_ROOT`: Replaces the `ENCRYPTION_WALLET_LOCATION` parameter in the `sqlnet.ora` file, which is easier to use to set the location of keystores   `19c`
- `TDE_CONFIGURATION`: Sets the type of keystore to use

`19c`

CDB and PDB New Packages

- `DBMS_PDB.DESCRIBE`
- `DBMS_PDB.CHECK_PLUG_COMPATIBILITY`
- `DVSYS.DBMS_MACADM.CREATE_REALM :`
  - `REALM_SCOPE =>`
    - `DBMS_MACUTL.G_SCOPE_COMMON`
    - `DBMS_MACUTL.G_SCOPE_LOCAL`
  - `ENABLED =>`
    - `DBMS_MACUTL.G_SIMULATION`
    - `DBMS_MACUTL.G_YES`
    - `DBMS_MACUTL.G_NO`