Starting Up and Shutting Down a Physical Standby Database

This section describes how to start up and shut down a physical standby database.

Starting Up a Physical Standby Database

Use the SQL*Plus STARTUP command to start a physical standby database.
The SQL*Plus STARTUP command starts, mounts, and opens a physical standby database in read-only mode when it is invoked without any arguments.

Shutting Down a Physical Standby Database

Use the SQL*Plus SHUTDOWN command to stop Redo Apply and shut down a physical standby database.

Control is not returned to the session that initiates a database shutdown until shutdown is complete.

If the primary database is up and running, defer the standby destination on the primary database and perform a log switch before shutting down the physical standby database.

Opening a Physical Standby Database

A physical standby database can be opened for read-only access and used to offload queries from a primary database.

Note:

A physical standby database that is opened in read-only mode is subject to the same restrictions as any other Oracle database opened in read-only mode.

If a license for the Oracle Active Data Guard option has been purchased, Redo Apply can be active while the physical standby database is open, thus allowing queries to return results that are identical to what would be returned from the primary database. This capability is known as the real-time query feature.

If a license for the Oracle Active Data Guard option has not been purchased, a physical standby database cannot be open while Redo Apply is active, so the following rules must be observed when opening a physical standby database instance or starting Redo Apply:

- Redo Apply must be stopped before any physical standby database instance is opened.
- If one or more physical standby instances are open, those instances must be stopped or restarted in a mounted state before starting Redo Apply.

Real-time Query

The COMPATIBLE database initialization parameter must be set to 11.0 or higher to use the real-time query feature of the Oracle Active Data Guard option.

A physical standby database instance cannot be opened if Redo Apply is active on a mounted instance of that database. Use the following SQL statements to stop Redo Apply, open a standby instance read-only, and restart Redo Apply:

```
SQL> ALTER DATABASE RECOVER MANAGED STANDBY DATABASE CANCEL;

SQL> ALTER DATABASE OPEN;

SQL> ALTER DATABASE RECOVER MANAGED STANDBY DATABASE DISCONNECT;
```

Example: Querying V$DATABASE to Check the Standby's Open Mode

This example shows how the value of the V$DATABASE.OPEN_MODE column changes when a physical standby is open in real-time query mode.

1. Start up and open a physical standby instance, and perform the following SQL query to show that the database is open in read-only mode:

   ```
   SQL> SELECT open_mode FROM V$DATABASE;

   OPEN_MODE
   --------------------
   READ ONLY
   ```

2. Issue the following SQL statement to start Redo Apply

   ```
   SQL> ALTER DATABASE RECOVER MANAGED STANDBY DATABASE DISCONNECT;

   Database altered.
   ```

3. Now that the standby is in real-time query mode (the standby is open in read-only mode and Redo Apply is active), the V$DATABASE.OPEN_MODE column changes to indicate the following:

   ```
   SQL> SELECT open_mode FROM V$DATABASE;

   OPEN_MODE
   --------------------
   READ ONLY WITH APPLY
   ```