# **18 Oracle Database Restore & Recover**

**Scenariao 1:**

**Database Is In NO-ARCHIVELOG-MODE**

1. **Loss of controlfile – we can recreate with control file trace with NORESETLOGS.**
2. **Loss of redolog files -- we can recreate the control file with RESETLOGS. (no use of CTL file)**
3. **Loss of non-critical datafiles – In consistant database recovery.**
4. **Loss of critical datafile (SYSTEM & UNDO) -- In consistant database recovery.**
5. **Loss of all datafiles -- In consistant database recovery.**
6. **Loss of Controlfile & redolog files -- we can recreate the control file with RESETLOGS.**
7. **Loss of Controlfile & datafiles -- In consistant database recovery.**
8. **Loss of datafiles & redologfiles -- In consistant database recovery.**
9. **Loss of controlfile,datafiles,redologfiles -- In consistant database recovery.**

**Scenariao 2:**

**Database Is In ARCHIVELOG-MODE**: **From hot conventional backup**

1. **Loss of controlfile – we can recreate with control file trace with NORESETLOGS.**
2. **Loss of redolog files -- we can recreate the control file with RESETLOGS. (no use of CTL file)**
3. **Loss of non-critical datafiles –**
4. **Loss of critical datafile (SYSTEM & UNDO) --**
5. **Loss of all datafiles --**
6. **Loss of Controlfile & redolog files -- we can recreate the control file with RESETLOGS.**
7. **Loss of Controlfile & datafiles --**
8. **Loss of datafiles & redologfiles --**
9. **Loss of controlfile,datafiles,redologfiles –**

**3) Loss of non-critical datafiles** : (**From hot conventional backup**)

* Offline the lost datafile tablespace.

SQL> **alter tablespace u1 offline;**

* select TABLESPACE\_NAME,STATUS from dba\_tablespaces;
* Copy backedup datafiles to the lost datafile original location.
* Recover datafile ‘datafile/users/path’;

SQL> **recover datafile '/SSD/ABC/u1/ul01.dbf';**

* Online the tablespace.

**Checkpoint:**

* select checkpoint\_change# from v$datafile;

**4)** **Loss of critical datafile (SYSTEM & UNDO):** (**From hot conventional backup**)

* Copy backedup datafiles to the lost datafile original location.
* Shut immediate (if not abort)
* Startup mount

**SQL>Recover database;**

**SQL>Alter database open;**

**5)** **Loss of all datafiles**:(**From hot conventional backup**)

* Copy backedup datafiles to the lost datafile original location.
* Shut immediate (if not abort)
* Startup mount

**SQL>Recover database;**

**SQL>Alter database open;**

**Checkpoint:**

* select checkpoint\_change# from v$datafile;

**7)** **Loss of Controlfile & datafiles:**(**From hot conventional backup**)

* shut immediate (if not abort)
* Copy backedup datafiles to the lost datafile original location.
* startup nomount
* create controlfile with **NORESETLOG** from trace script.

**SQL>Recover database;**

**SQL>Alter database open;**

**8) Loss of datafiles & redologfiles:**(**From hot conventional backup**)

* shut immediate (if not abort)
* Copy backedup datafiles to the lost datafile original location.
* startup nomount
* create controlfile with **RESETLOGS** from trace script.

**SQL>Recover database using backup controlfile until cancel;**

**SQL>Alter database open resetlogs;**

9) **Loss of controlfile,datafiles,redologfiles:**(**From hot conventional backup**)

* shut immediate (if not abort)
* Copy backedup datafiles to the lost datafile original location.
* startup nomount
* create controlfile with resetlogs from trace script.

**SQL>Recover database using backup controlfile until cancel;**

**SQL>Alter database open resetlogs;**

**Scenariao 3:**

**Database Is In ARCHIVELOG-MODE: FROM RMAN HOT BACKUP**

1. **Loss of controlfile – we can recreate with control file trace with NORESETLOGS.**
2. **Loss of redolog files -- we can recreate the control file with RESETLOGS. (no use of CTL file)**
3. **Loss of non-critical datafiles –**
4. **Loss of critical datafile (SYSTEM & UNDO) --**
5. **Loss of all datafiles --**
6. **Loss of Controlfile & redolog files -- we can recreate the control file with RESETLOGS.**
7. **Loss of Controlfile & datafiles --**
8. **Loss of datafiles & redologfiles --**
9. **Loss of controlfile,datafiles,redologfiles --**

**3) Loss of non-critical datafiles** : (**RMAN HOT BACKUP)**

* Offline the lost datafile tablespace.

SQL> **alter tablespace u1 offline IMMEDIATE;**

* select TABLESPACE\_NAME,STATUS from dba\_tablespaces;
* Restore datafile from rman backup.

**RMAN>Restore datafile 5;**

* **RMAN>Recover datafile 5;**
* Online the tablespace.

**Checkpoint:**

* select checkpoint\_change# from v$datafile;

**4)** **Loss of critical datafile (SYSTEM & UNDO):** (**RMAN HOT BACKUP**)

* Shut immediate (if not abort)
* Startup mount

**RMAN>Restore datafile 5;**

**RMAN>Restore database;**

**SQL>Alter database open;**

**5)** **Loss of all datafiles**:(**RMAN HOT BACKUP**)

* Shut immediate (if not abort)
* Startup mount

**RMAN>Restore database;**

**RMAN>Recover database;**

**SQL>Alter database open;**

**Checkpoint:**

* select checkpoint\_change# from v$datafile;

**7)** **Loss of Controlfile & datafiles:**(**RMAN HOT BACKUP**)

* shut immediate (if not abort)
* startup nomount
* Restore controlfile first.

**RMAN> restore controlfile from '/SSD/ABC/restore/ABC\_6.rman';**

**RMAN> alter database mount;**

**RMAN>Restore database;**

**RMAN>Recover database;**

**SQL>Alter database open resetlogs;**

**8) Loss of datafiles & redologfiles:**(**From hot conventional backup**)

* shut immediate (if not abort)
* Copy backedup datafiles to the lost datafile original location.
* startup nomount
* create controlfile with **RESETLOGS** from trace script.

**SQL>Recover database using backup controlfile until cancel;**

**SQL>Alter database open resetlogs;**

9) **Loss of controlfile,datafiles,redologfiles:**(**From hot conventional backup**)

* shut immediate (if not abort)
* startup nomount
* Restore controlfile first.

**RMAN> restore controlfile from '/SSD/ABC/restore/ABC\_6.rman';**

**RMAN> alter database mount;**

**RMAN>Restore database;**

**RMAN>Recover database;**

**SQL>Alter database open resetlogs;**