Recovery Manager Selections

Choose from the following topics.

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Concept	learn about the Recovery Manager tool
Procedure	recover the database
Elements	read a description of the “Recovery Manager” screen elements

Recovery Concept

The Recovery Manager is used to restore files and recover the Oracle7 database after a system or power failure.
The Recovery Manager only supports offline recovery.
Several structures of an Oracle database safeguard data against possible failures. The following briefly introduce each of these structures and their role in database recovery.

Database Backups

A database backup consists of operating system backups of the physical files that constitute an Oracle database. To begin database recovery from a media failure, file backups are used to restore damaged datafiles or control files.

Redo Log

The redo log, present for every Oracle database instance, records all changes made in an Oracle database. The redo log of an instance consists of at least two redo log files that are separate from the datafiles. As part of database recovery from an instance or media failure, the appropriate changes in the database's redo log are applied to the datafiles, updating database data to the instant that the failure occurred.

Rollback Segments

Rollback segments of a database store the old values of data changed by ongoing, or uncommitted, transactions. A transaction is a series of updates, inserts, or deletes that are applied to the database as a single unit. The rollback segments contain information that allows partially completed transactions to be undone. The information in a rollback segment is used during database recovery to "undo" and "uncommit" changes applied from the redo log to the datafiles.

Control File

The control file of a database stores status on the physical structure of the database. Certain status information in the control file is used to guide Oracle during instance or media recovery.

Recovery Manager: Screen Elements

The elements of the “Recovery Manager” screen are listed below, along with a description of their functions.

Screen Element	Type	Description
Recovery Source: Taoe	Radio Button and Text Field	Indicates the location of the tape upon which the database backup files will be stored

Recovery source: Disk	Radio Button and Text Field	Indicates the location of the directory upon which the database backup files will be stored.
Backup List	Drop Down List	Lists information about all the previous backups.
Backup File	Text Field	Indicates the name of the file containing a previous full database backup.
Recover	Button	Begins the recovery process.

Recovery Manager: Procedure

Perform the following steps to recover the database.

1. Do you want to recover the database in which you are currently?
   - If yes, continue with step 2.
   - If no, choose the appropriate database from your bookmarks or hotlist.
2. Do you want to view information about the most recent database backups?
   - If yes, click on the drop down "Backup List" under the "Recovery Source" heading
   - If no, enter the name of a file containing a database backup in the text field "Backup File" under the "Recovery Source" heading
3. Under the “Recovery Medium” heading,

click on …	and select a destination from the option list to archive the files …
Tape	on a tape device. An error will be generated if you do not select a valid tape destination.
Disk	on the hard drive. The default backup directory is **C://ORACLE_HOME/backup**.

   - Click on the "Recover" button.
     The procedure warns "This operation is to be performed only when your database has been corrupted. If your database is ok, then performing this operation can corrupt your database." The database will be shut down before performing this operation. Click on "Continue" to proceed, or on the browser’s "Back" button to abort the recovery.

Result

You have now recovered all or part of your database files.