

Task-N09  
7/10/25

## Backing up and recovery in databases

Aim: To perform the backup and recovery scenarios.

a) Recovering a NOARCHIVELOG Database with incremental backups

b) Restoring the server parameter file

c) performing Recovery with a. Backup control file

Scenario 01: Recovering a NOARCHIVELOG database with incremental Backups.

Step-1: Backup Database

BACKUP DATABASE [database-name] TO DISK = "backup-file.bak"  
WITH NOFORMAT, NOINIT, NAME = 'Full Database Backup',  
SKIP, REWIND, NOUNLOAD, STATS = 10.

BACKUP DATABASE [Banking] TO DISK = "backup-file.bak"

Step-2: Create Incremental Backup.

BACKUP DATABASE [Banking] [ ] TO DISK = 'incremental backup.bak'  
WITH DIFFERENTIAL, NOFORMAT,  
NONINIT,  
NAME = 'Incremental Database Backup', SKIP, REWIND, NOUNLOAD,  
STATS = 10

BACKUP DATABASE [Banking] TO DISK = 'Incremental backup.bak'

Step 3: Simulate data loss.

Intentionally delete or modify data.

Step 4:- Restore Database

RESTORE DATABASE [database-name] FROM DISK = 'backup-  
file.bak' WITH REPLACE

RESTORE DATABASE [Banking] FROM DISK = 'backup-file.bak'  
WITH REPLACE.

Step 5: APPLY Incremental Backup.

RESTORE DATABASE [database-name] FROM DISK =  
'incremental-backup.bak' WITH REPLACE

RESTORE DATABASE [Banking] FROM DISK = 'incremental  
- backup.bak'

Step 6 : Recover Database

RECOVER DATABASE [database-name]  
RECOVER DATABASE [Banking]

Step 7 : Open database

ALTER DATABASE [database-name] SET ONLINE.

ALTER DATABASE [Banking] SET ONLINE

Scenario 2: Restoring the server parameter file (SPFILE)

Step-1 : Backup SPFILE

BACKUP SERVER PARAMETER FILE TO FILE = 'spfile.bak'

Step-2 : Simulate SPFILE loss

Delete or modify SPFILE

Step-3 : Restore SPFILE

STARTUP MOUNT

RESTORE SERVER PARAMETER FILE FROM FILE = 'spfile.bak'

SHUTDOWN

STARTUP

Scenario 3: performing recovering with a backup control file

Step 1 : Backup control file

BACKUP CONTROLFILE TO FILE = 'controlfile.bak'

Step 2 : Simulate control file loss

Delete or modify control file.

Step 3 : Restore control file.

STARTUP MOUNT

RESTORE CONTROLFILE FROM FILE = 'controlfile.bak'  
ALTER CONTROLFILE REUSE;

Step 4 : Recover database

RECOVER DATABASE USING BACKUP CONTROLFILE;

Step-5 : open database

ALTER DATABASE OPEN RESETLOGS;

SQL Server commands :

- BACKUP DATABASE
- DECLEAR DATABASE
- RESTORE DATABASE
- ALTER DATABASE
- BACKUP SERVER PARAMETER FILE
- RESTORE SERVER PARAMETER FILE
- BACKUP CONTROLFILE
- RESTORE CONTROLFILE



VEL TECH	
EX. No.	9
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	15
ON WITH DATE	20/07/2013

Result:-

the Backup and recovery in database was successfully executed.