

## 10/10/15 Task - 9: Backing up and recovery in database

Perform following backup and recovery scenarios.

- Recovering a NOARCHIVELOG Database with Incremental Backups.
- Restoring the server parameter file.
- Performing recovery with a Backup control file.

Scenario 1: Recovering a NOARCHIVELOG Database with Incremental Backups.

Step 1: Backup Database

BACKUP DATABASE TO DISK = 'backup-file.bak' WITH NO FORMAT, NOINT, NAME = 'Full Database Backup', SKIP, REWIND, NOUNLOAD, STATS = 10

Step 2: Create Incremental Backup

BACKUP DATABASE TO DISK = 'increment-backup.bak' WITH DIFFERENTIAL, NO FORMAT, NOINIT, NAME = 'Incremental Database Backup', SKIP, REWIND, NOUNLOAD, STATS = 10

- 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

- Step 5: Apply Incremental Backup

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

- Step 6: Recover Database

RECOVER DATABASE [database-name]

- Step 7: Open Database

ALTER DATABASE [database-name] SET ONLINE

Scenario 2: Restoring the server parameter file (SPFILE)

- Step 1: Backup SPFILE

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

Output:

```
> db.mylab.find({},  
  {item:1,qty:1}).pretty()  
{  
  "_id" : ObjectId("627d13acc73990c  
074e6397c"),  
  "item" : "canvas",  
  "qty" : 100  
}  
{  
  "_id" : ObjectId("627d1598c73990c  
074e6397d"),  
  "item" : "journal",  
  "qty" : 25  
}  
{ "_id" : ObjectId("627d1598c739  
90c074e6397e"), "item" : "mat",  
  "qty" : 85 }  
{  
  "_id" : ObjectId("627d1598c  
73990c074e6397f"), "item" :  
  "mousepad", "qty" : 25}
```

Output :

json



```
{ "_id" : ObjectId("627d13acc  
73990c074e6397c"), "item" :  
"canvas", "qty" : 100, "tags" :  
[ "cotton" ], "size" : { "h" :  
28, "w" : 35.5, "uom" : "cm" } }
```

Step-2 : simulate SPFILE loss

- delete or modify SPFILE

Step-3 : Restore SPFILE

STARTUP MOUNT

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

SHUT DOWN

STARTUP

Scenario 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 USING BACKUP CONTROLFILE;

SQL Server Commands :

- BACKUP DATABASE

- RESTORE DATABASE

- RECOVER DATABASE

- ALTER DATABASE

- BACKUP SERVER PARAMETER FILE

- RESTORE SERVER PARAMETER FILE

- BACKUP CONTROL FILE

- RESTORE CONTROL FILE

Result : Thus, the Backing up and recovery in databases executed and verified output successfully.

VEL TECH - CSE	
EX NO.	9
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
DATE	10/10/20