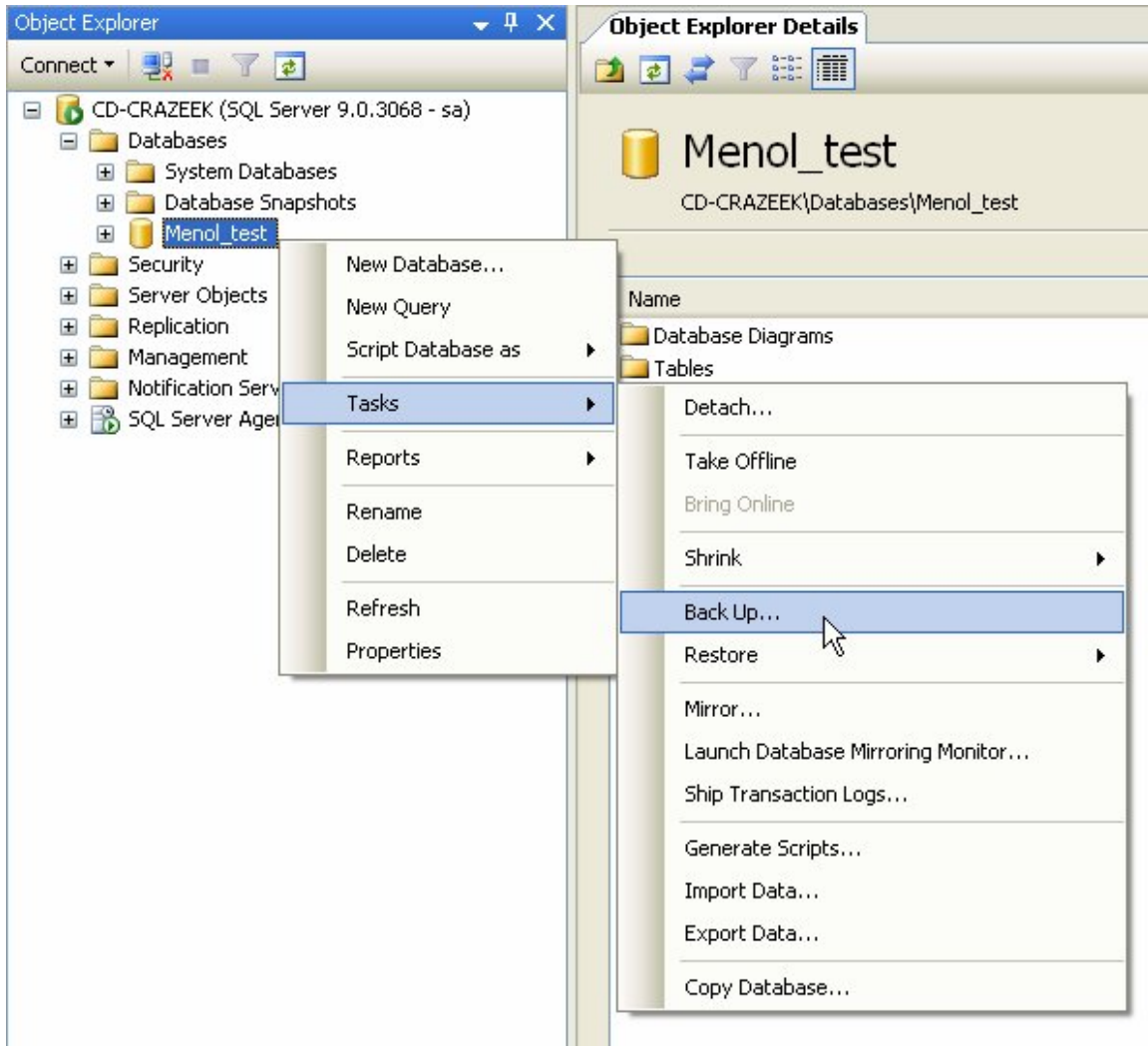


# How to backup and restore a database in Microsoft SQL Server 2005

Step by step guide.

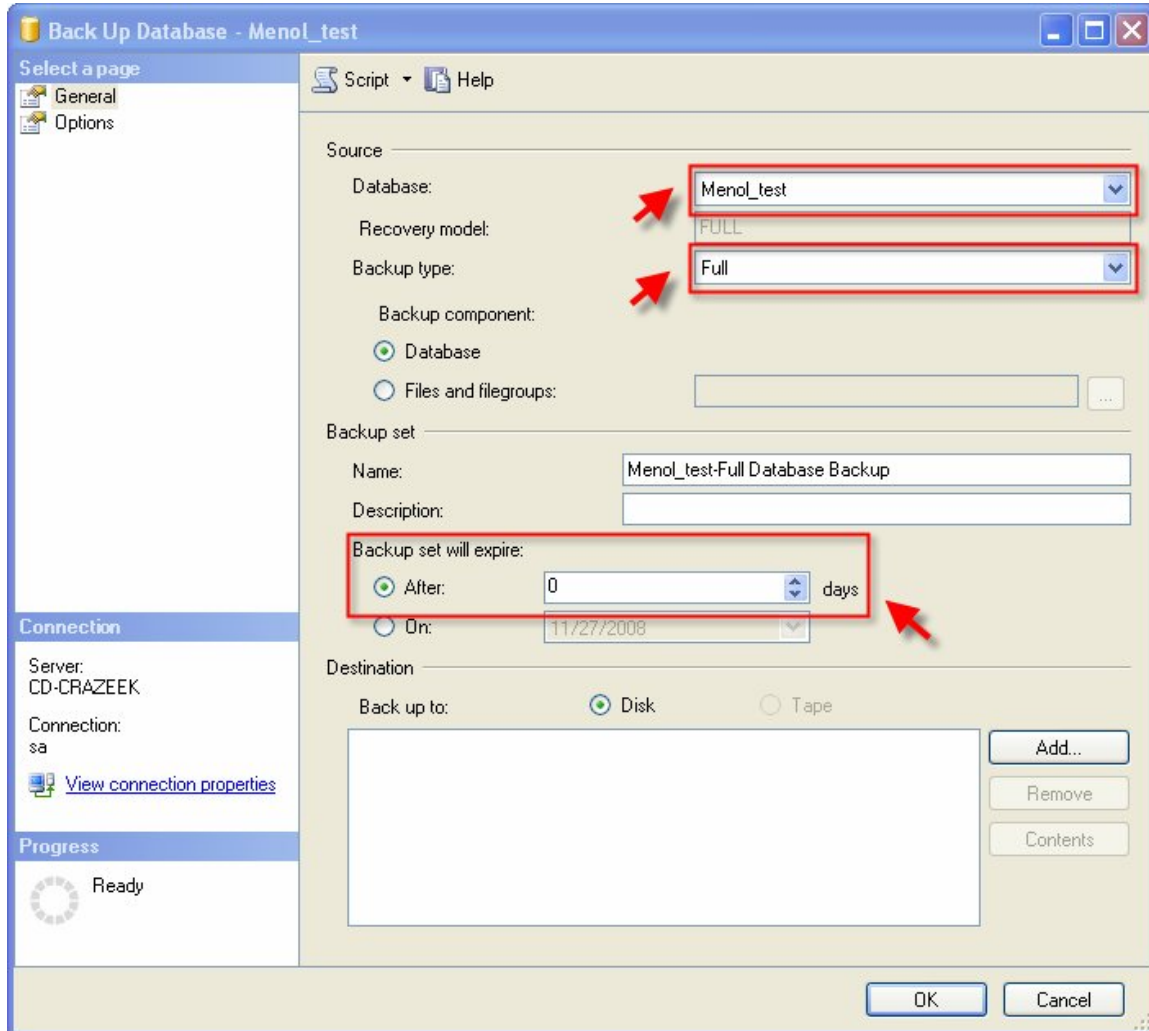
## Taking the backup

- 1) Open SQL Server Management Studio
- 2) In the object explorer, Expand databases folder and locate the database
- 3) Right click on the database then select Tasks → Backup... (Figure 1)
- 4) A dialog box will appear to configure backup



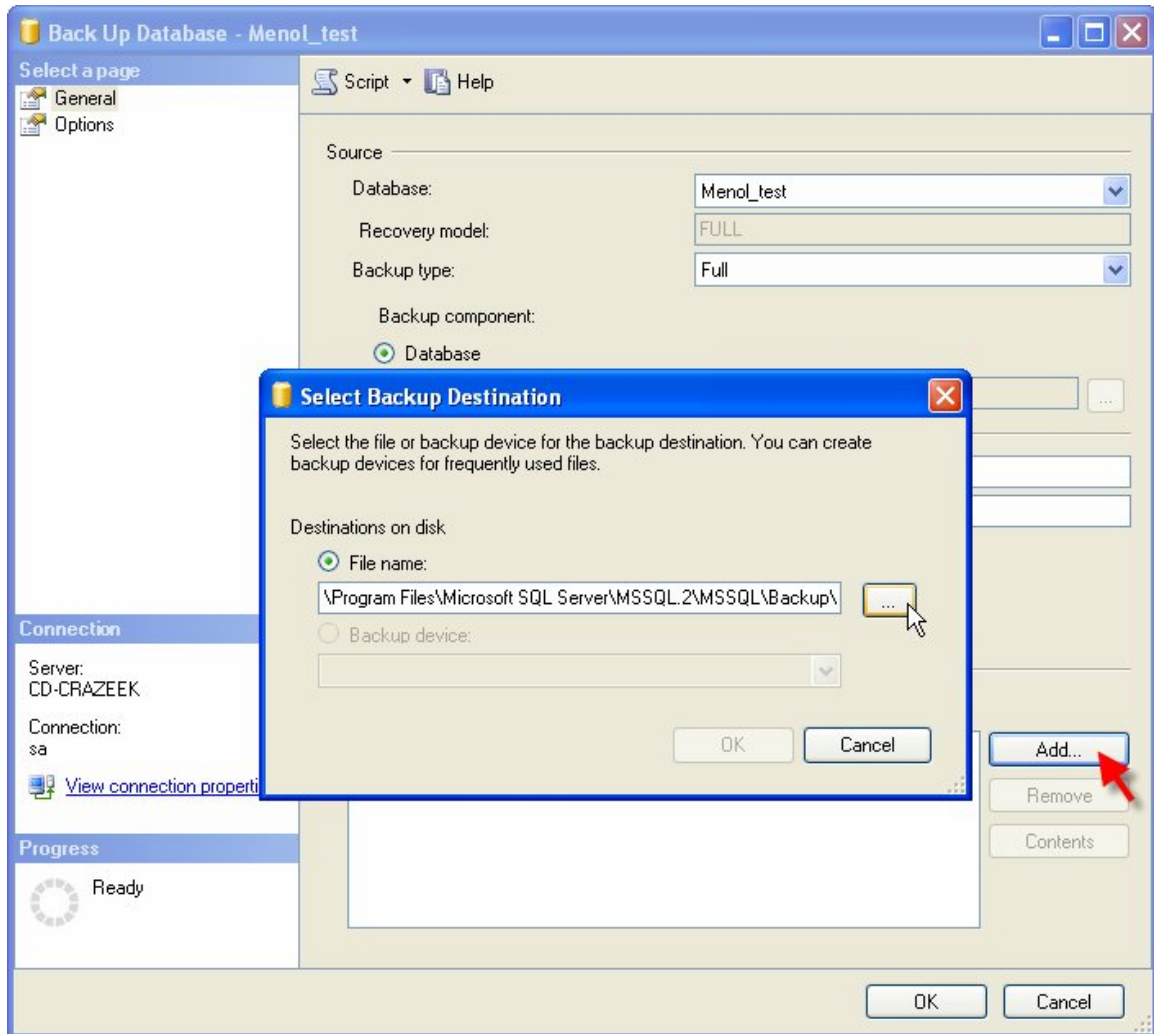
(Figure 1)

- 5) In the dialog box make following selections (Figure 2):
- i. Make sure the appropriate database is selected in the Database drop down list
  - ii. Select “Full” as backup type if it is not selected already
  - iii. Make sure 0 days are selected as the number of days to expire backup set



(Figure 2)

- 6) Select a place to store backup files:
  - i. In destination section select Disk option and click on the Add... button
  - ii. "Select Backup Destination" dialog box will appear for you to select the place to store the backup file.
  - iii. Click on brows ("...") button to choose the destination (Figure 3)

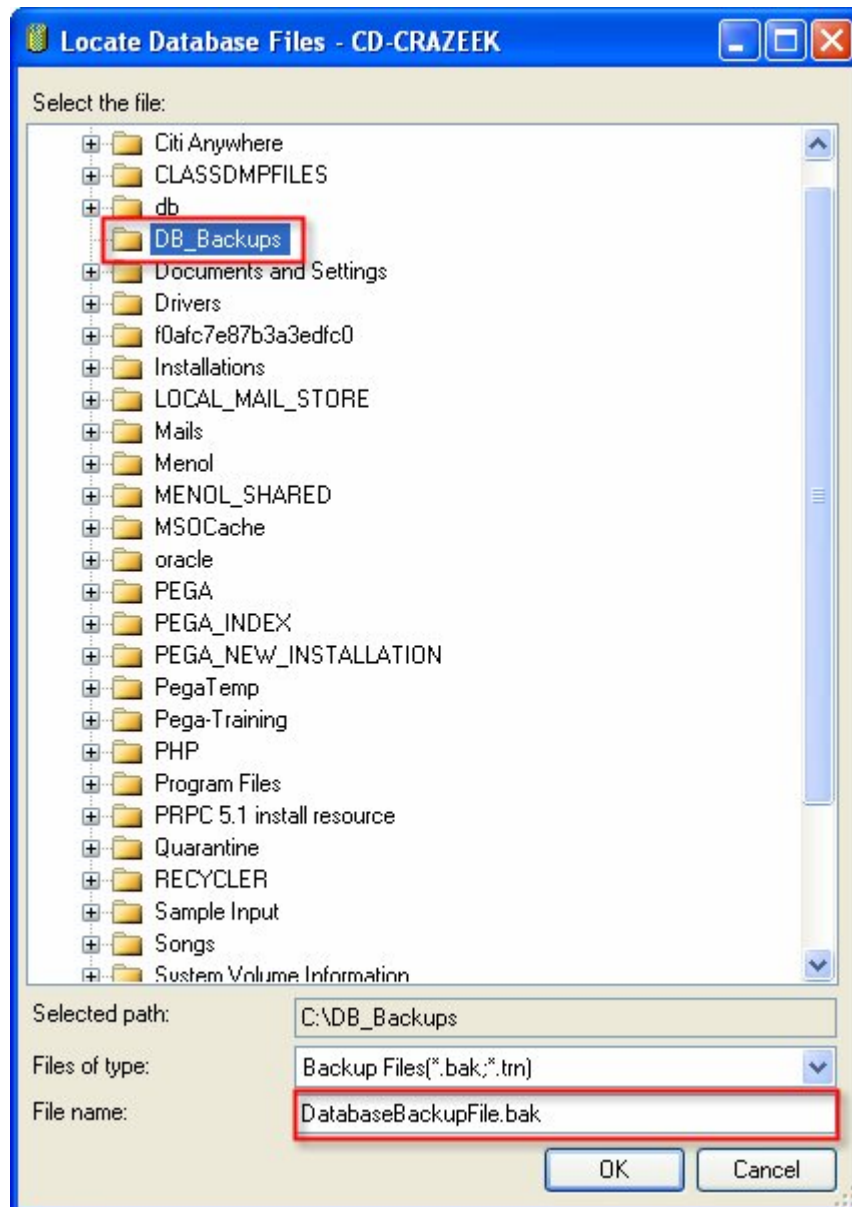


(Figure 3)

- iv. As illustrated in the figure below (Figure 4) select the folder you want to store the backup and type in a file name in File Name text area.

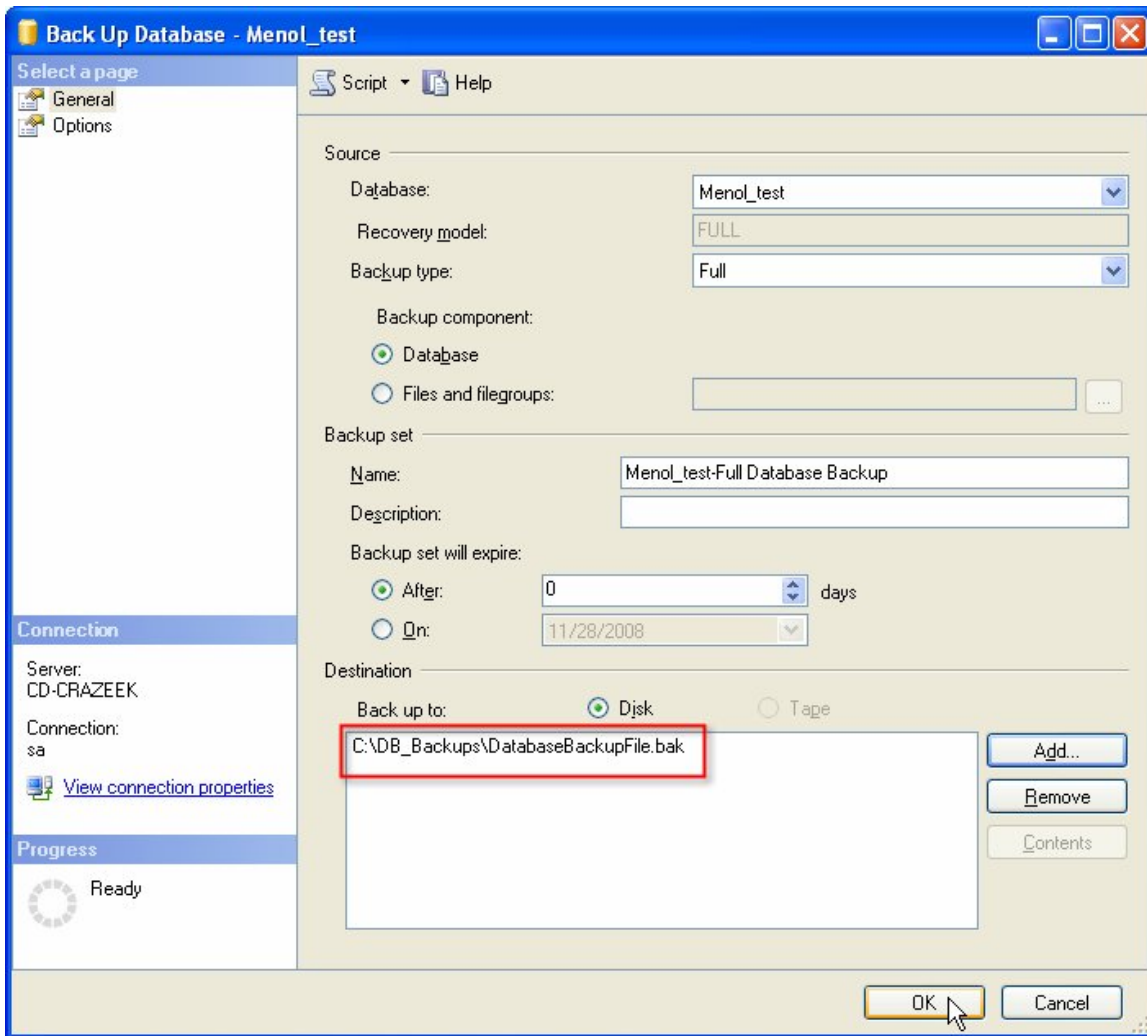
Note: Remember to add the extension .bak at the end of the file name since it is not automatically added. This is **not** necessary but having this extension makes it easy to locate the file when restoring the database.

- v. Once you are done click on OK button.



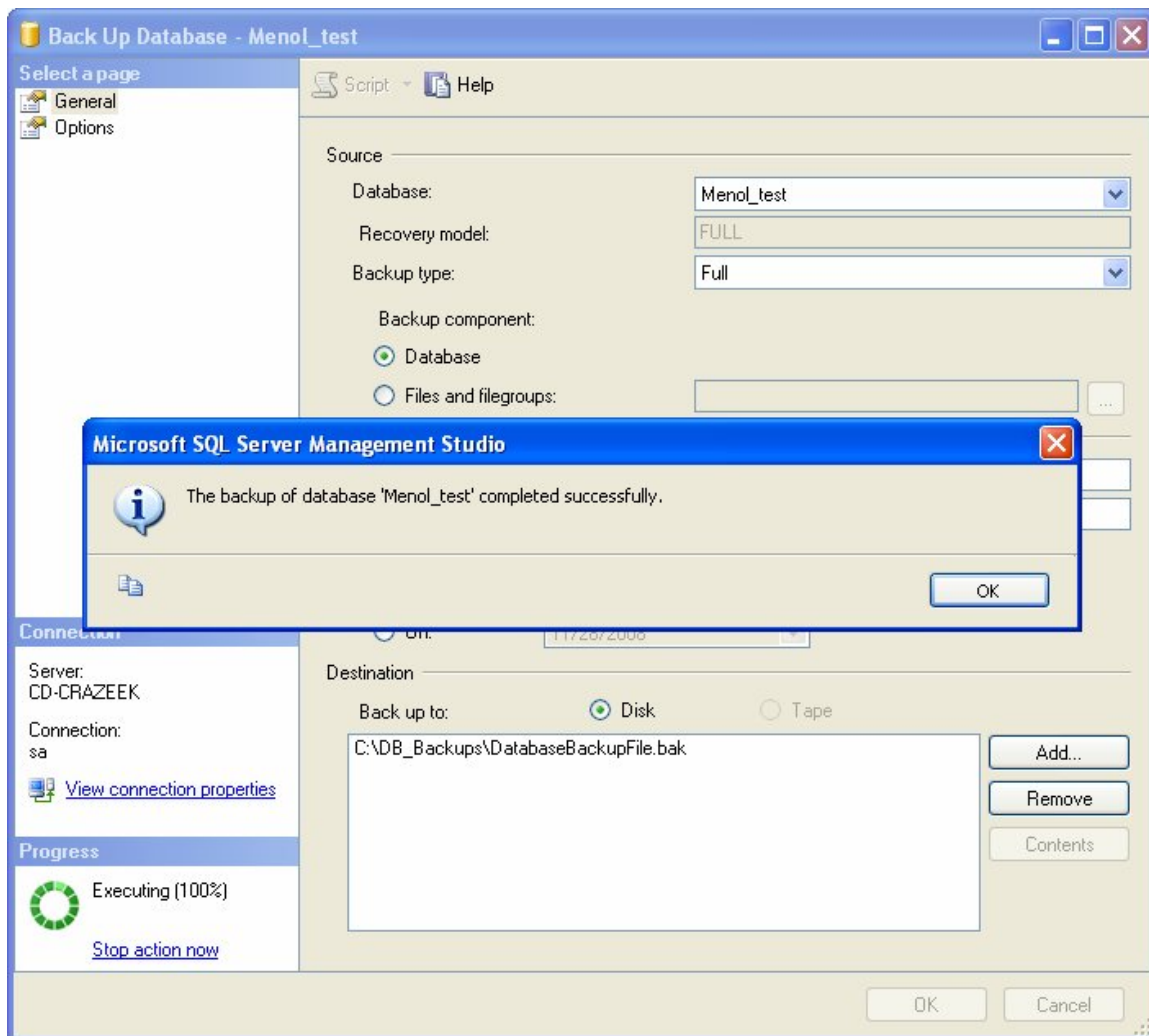
(Figure 4)

- 7) When you return to the Backup database dialog box you will see the destination you selected in Destination area (Figure 5)



(Figure 5)

- 8) You will be given a message after backing up the database (Figure 6). Now you can find the database backup file from the specified location.

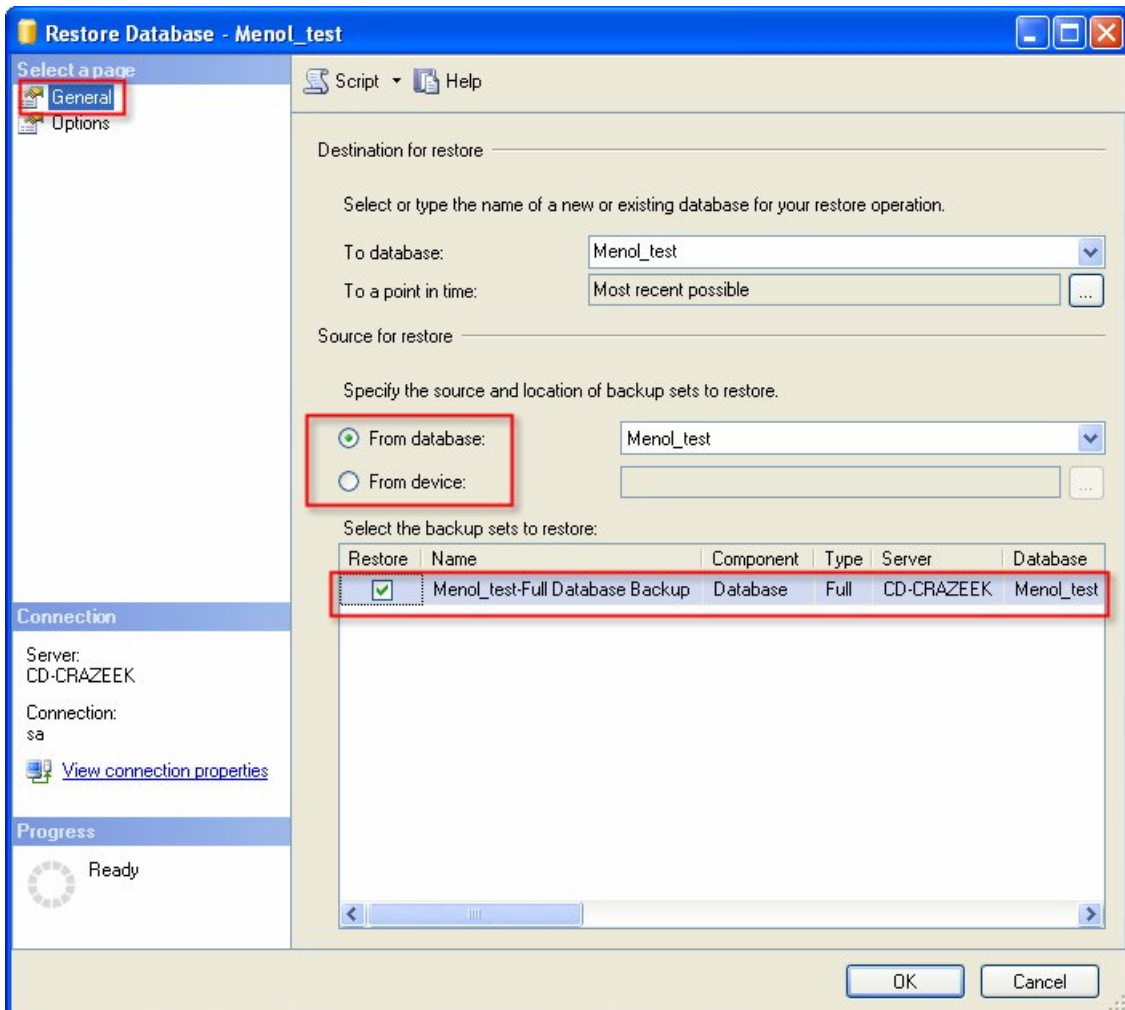


(Figure 6)

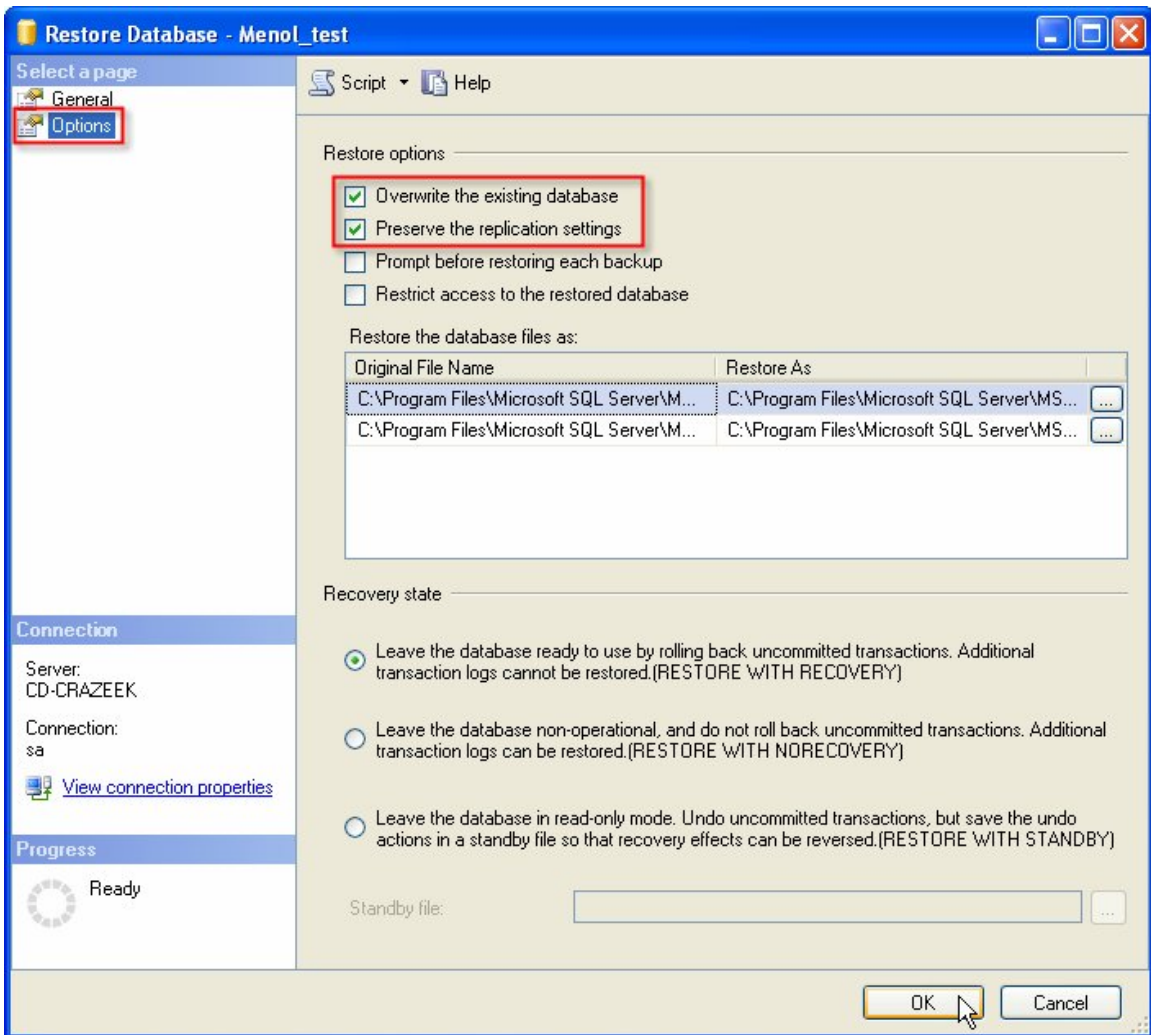
## Restoring the Database

*Restore the database using the already taken full backup (Figure 7-a, 7-b):*

- 1) Right click on the database then select Tasks → Restore → Database...
  - i. If you have maintained a backup that backup should be displayed in the “Select the backup sets to restore: “ area. Select your backup.
    - a. If your backup is not displayed or if you are restoring to a new SQL server instance then select **From device** option (instead of **From database** option) and then click on the browse (...) button
    - b. Then on the resulting dialog box click on **Add** button and select the database backup set from your location.
  - ii. Since we are not using a tail log we have to overwrite our database from our backup. For that go to “**Options**” page from the “**Select a page**” section and select “**Overwrite the existing database**” check box. If you want to preserve existing replication settings select “**Preserve the replication settings**” check box as well.
  - iii. Click OK
  - iv. The message box will appear after successful completion.



(Figure 7-a)



(Figure 7-b)

### ***Restoring the database with the tail log:***

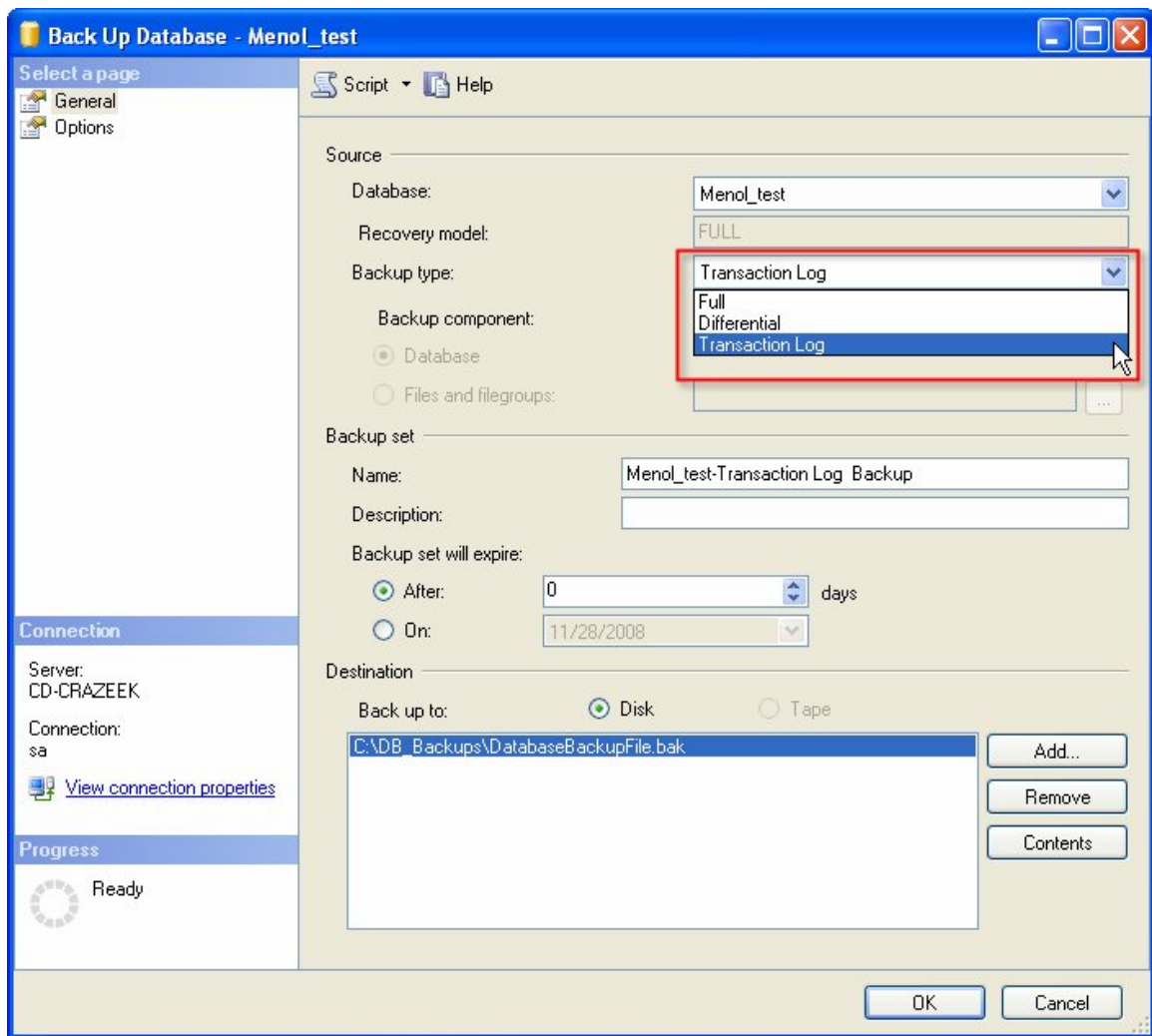
When we are restoring a backup we are only able to restore data stored before taking the backup. The data stored after time of backup are lost most of the time.

SQL Server 2005 has provided a mechanism to restore a database with later transactions which even recovers transactions taken place after taking the backup.

Steps to recover a database using the tail log.

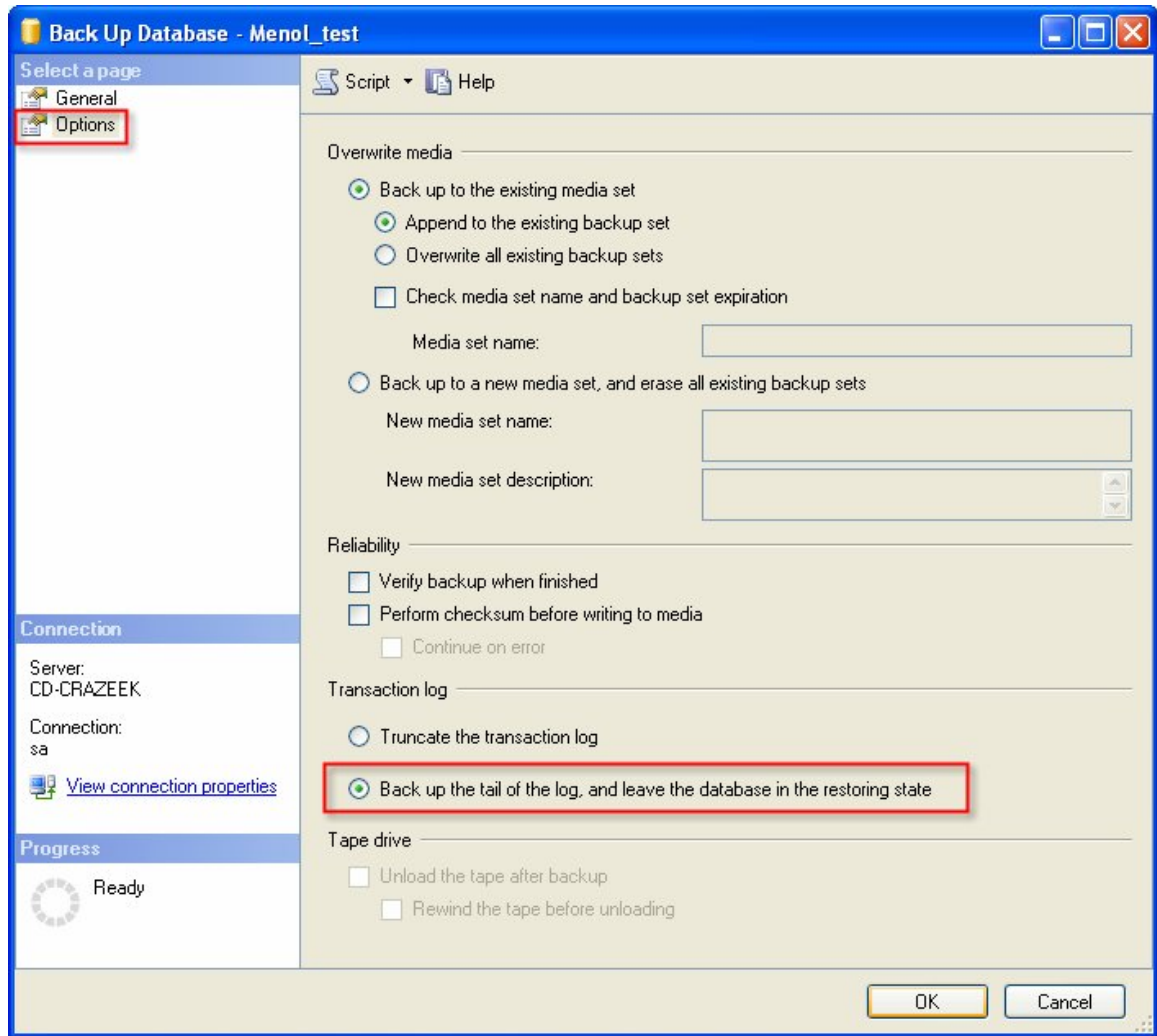
**Before proceed with the transactional log backup and put the database in Restoring mode you must make sure that you have taken a Full backup of your database.**

- 2) First you have to take a tail log backup:
  - i. Right click on the database and select backup...
  - ii. Select “Transactional Log” option from Backup type drop down list (Figure 8)



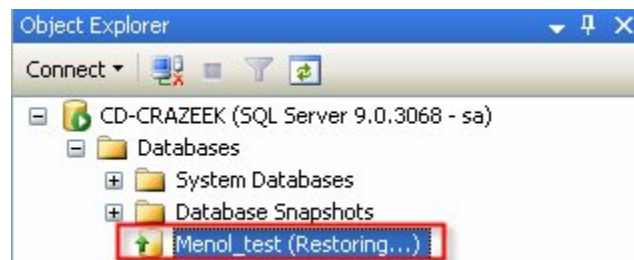
(Figure 8)

- iii. Go to the “Options” page by clicking on the options link in the “Select a page” area:
- iv. In the “Transactional Log” section select the option “Back up the tail of the log, and leave the database in the restoring state” (Figure 9)
- v. Click on OK button to take the transactional log backup.



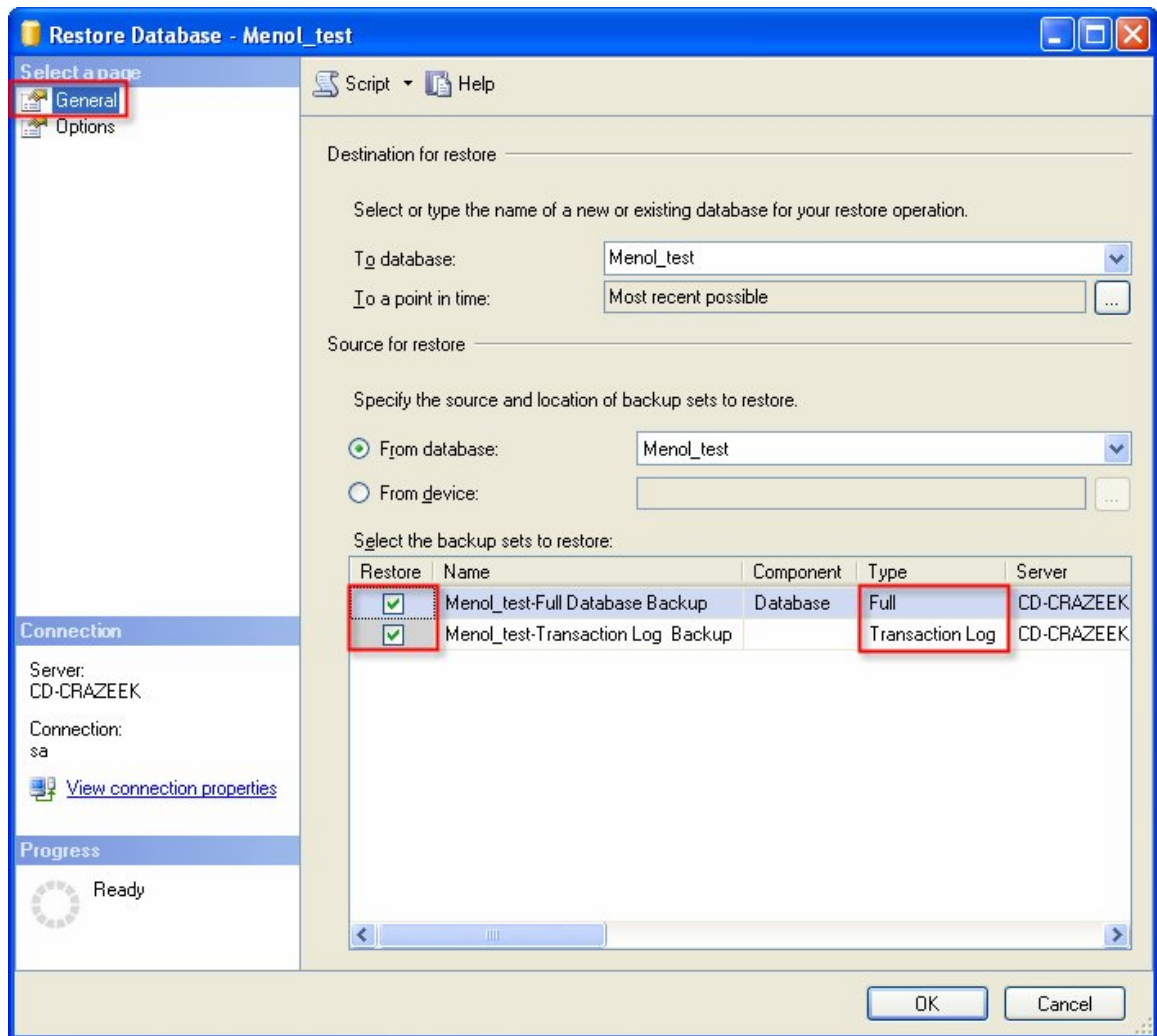
(Figure 9)

- 3) recover the database using the “Full” backup and “Tail Log”
  - i. In the **Object explorer** you will notice your database has gone to the restoring stage and your database is not operational until it is restored (Figure 10).

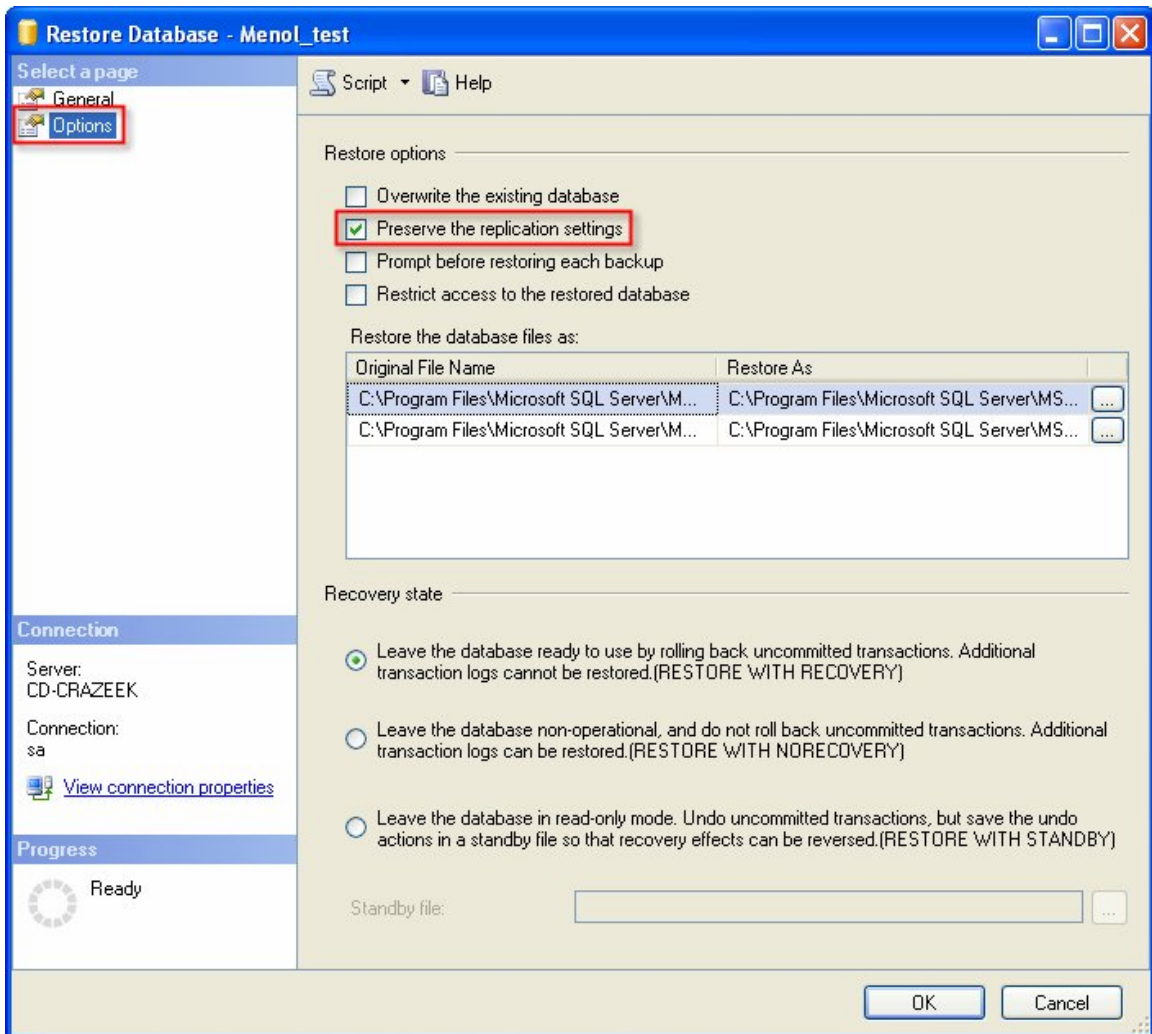


(Figure 10)

- ii. Right click on the database then select Tasks → Restore → Database...
- iii. If you have made your backups successfully you will see both your full and transactional log backup in the “**Select the backup sets to restore:**” area (Figure 11-a).
- iv. If you see several versions of your backups select the most recent version of **Full** backup and the most recent version of **Transaction Log** backup using the Start Date and Finish Date columns in the grid.
- v. In the **Options** page select **Preserve the replication settings** check box to preserve your replication settings (Figure 11-b).
- vi. Click on Ok button and you should see a message box showing that the operation was successful.



(Figure 11-a)



(Figure 11-b)

