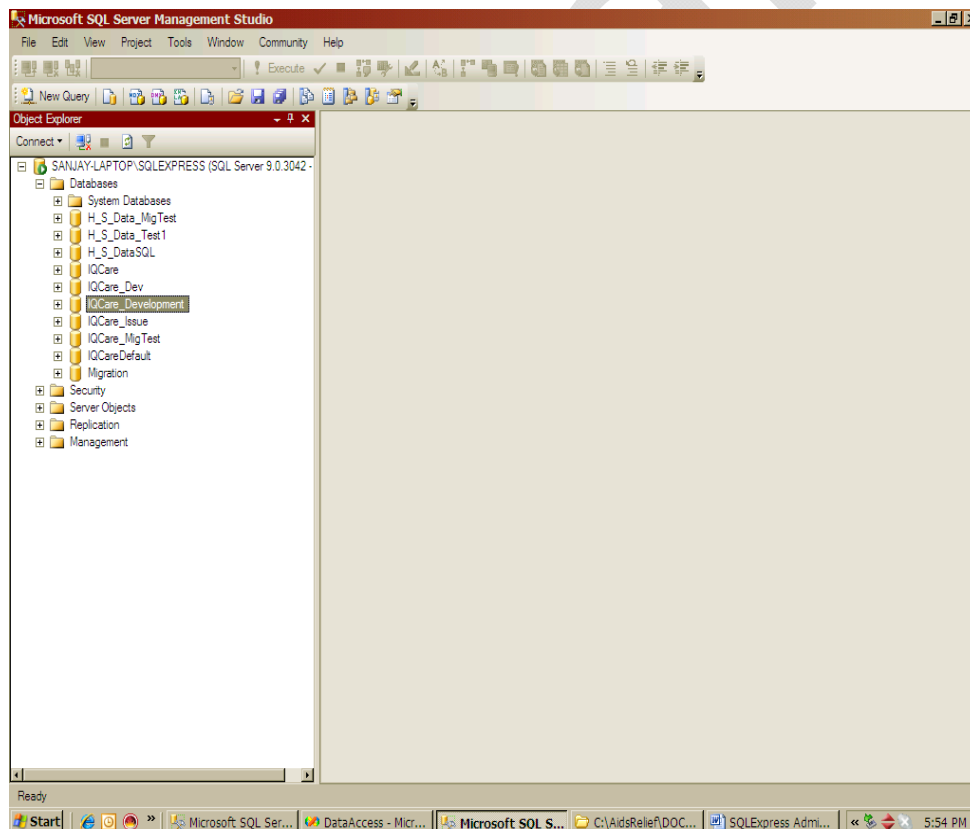# SQL Express Administration

This document covers the issues related to the management and maintenance of SQL express ones deployed in the field with IQCare system.
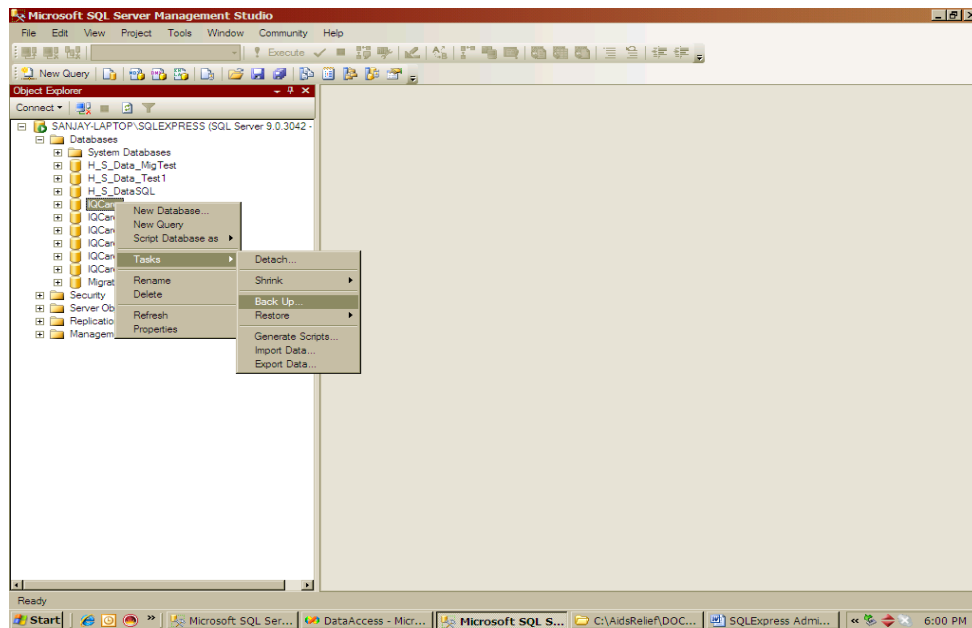
1. Transaction Log

In this section, we will look on to how to control the growing size of Transaction log. Transaction log is very important for the database in SQL format. It keeps the track of all the transactions and can be very helpful in the time of crises with the restoring of the database. However, growing size of it can take lot of disk space and can take system on the slower side as far as performance is concerned. Here are the few steps for controlling/Truncating it.
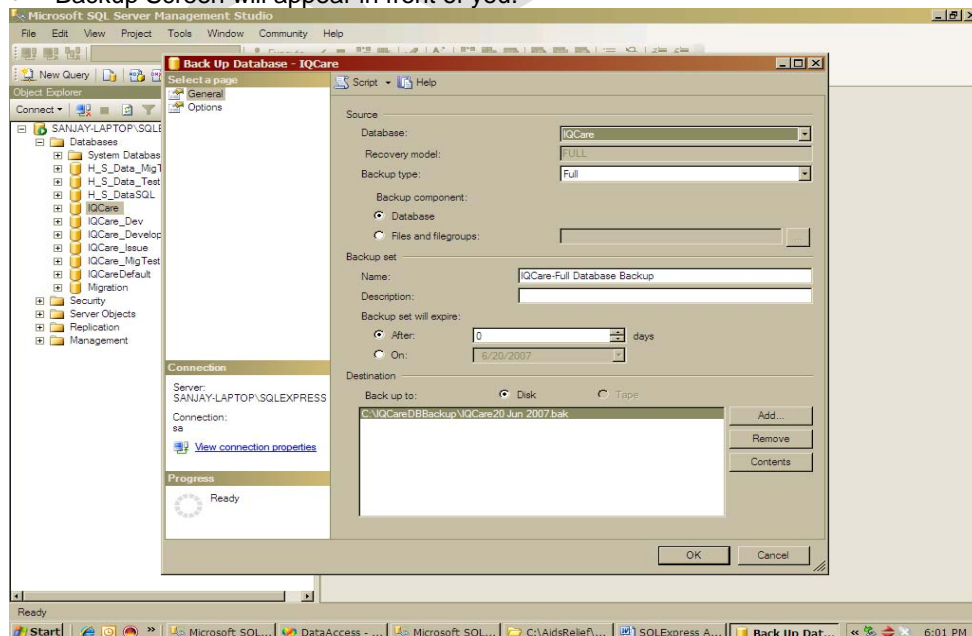
- Take the Backup of the database from the Backup Option of IQCare.
- Open the Microsoft SQL Server Management Studio and expand the "Databases" option on the left side of the screen.

- Right click on the "IQCare" Database and move to the "Tasks" option within it. "Tasks" option will expand to another sub menu within it. Move to the "Backup" in the submenu.
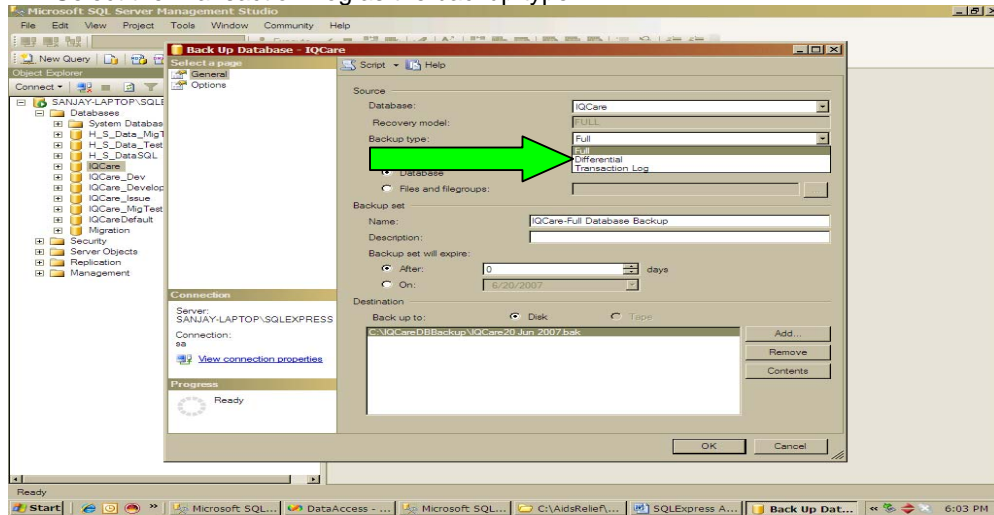

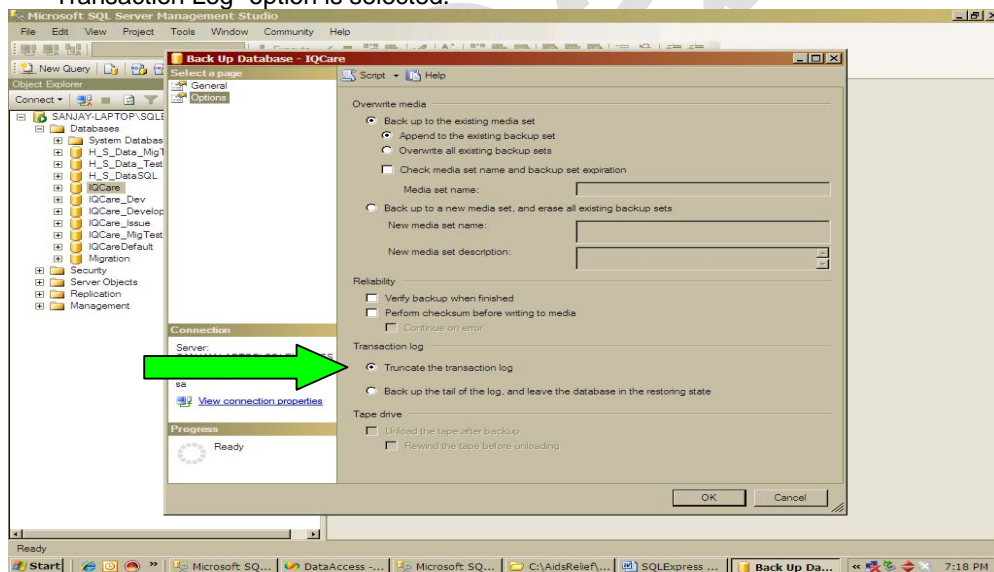- Backup Screen will appear in front of you.

- Now select the Backup type from the "Backup Type" option on the top of the screen. Select the Transaction Log as the backup type.
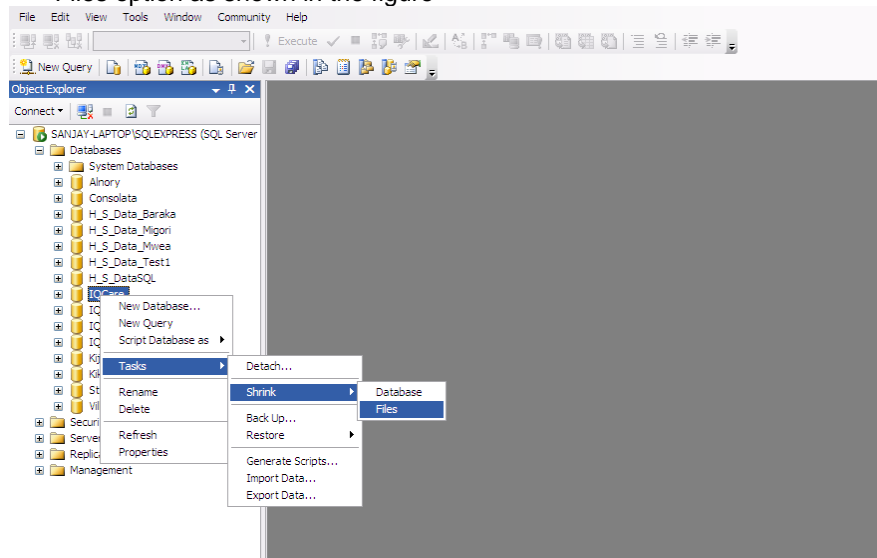

- Now click on the Options on the left hand side. Make sure that the "Truncate the Transaction Log" option is selected.
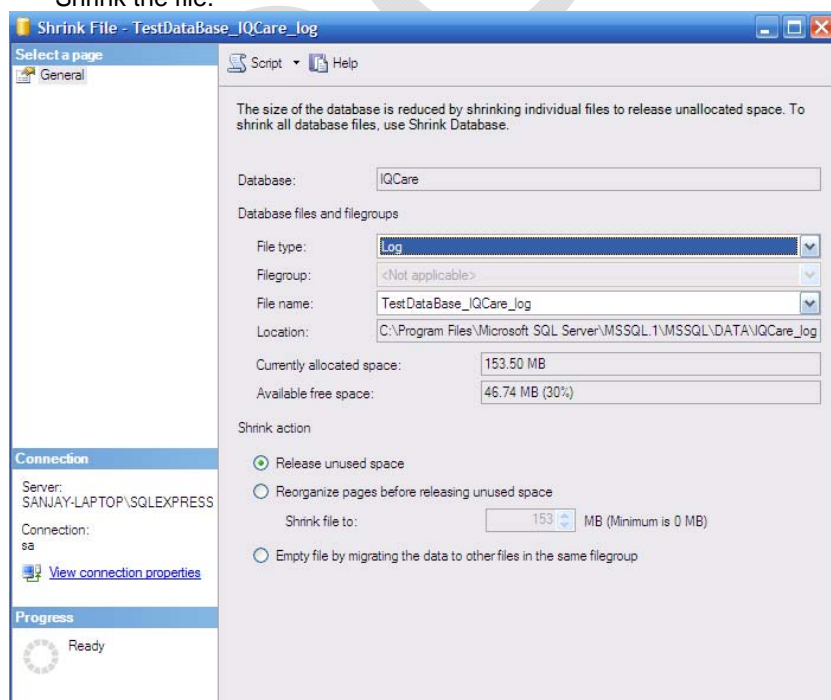

Click "OK" button to execute. This step will truncate the transaction log of the system and will make the space available for the new transactions within the same allocated space (if the transaction log was of 150MB then the same space can be used after you have truncated the log.

Now close the instance of SQL Express and restart the SQL Express Service from the SQL Express Configuration Manager.

- After restarting the SQL Express, Open the SQL Management Studio once again and right click on the database to move to the Tasks and then to Shrink which will lead you to Files option as shown in the figure

- In the Shrink File option choose the File type to Log file (as shown in the fig.). System will show you how much space will be released after doing this activity. Click OK button to Shrink the file.
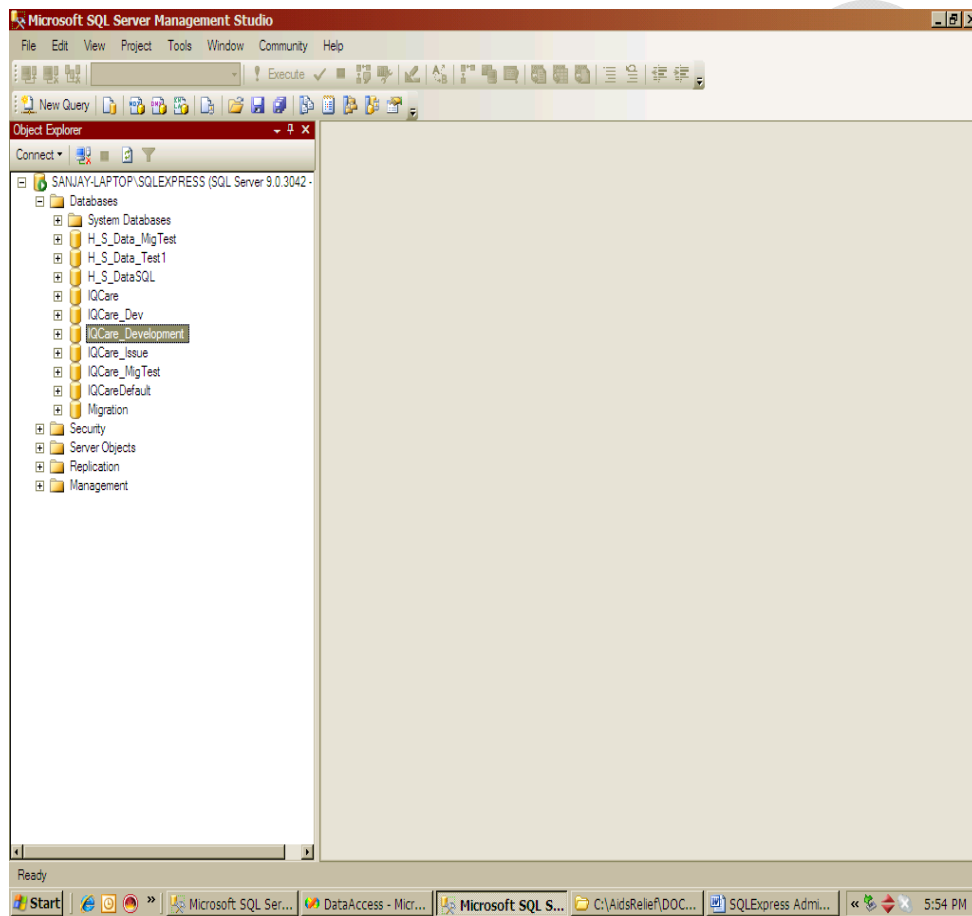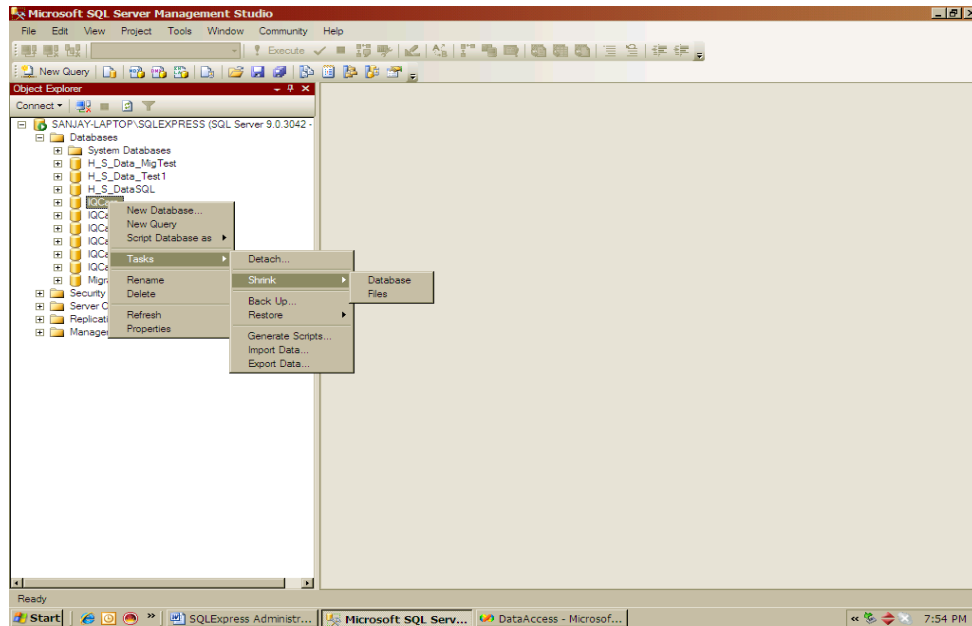
2. Shrink Database

In this section, we will look on the shrinking of database. This feature of SQL releases the free space from the database, created because of regular insert, update and delete transaction. Steps are as follows.

- Take the backup of database from Backup option of IQCare.
- Open Microsoft SQL Management Studio and expand the "DataBases" option on the left hand side of the screen.

- Right click on the IQCare Database and move into the Tasks option. Tasks will again expand to Shrink and Shrink will in-turn expand to Database and Files option.

- On selection of "Database" Option, below screen will popup. Now you can see the Allocated Database size and the Available Free Space. Now the database can be shrinked by clicking on "OK" button.