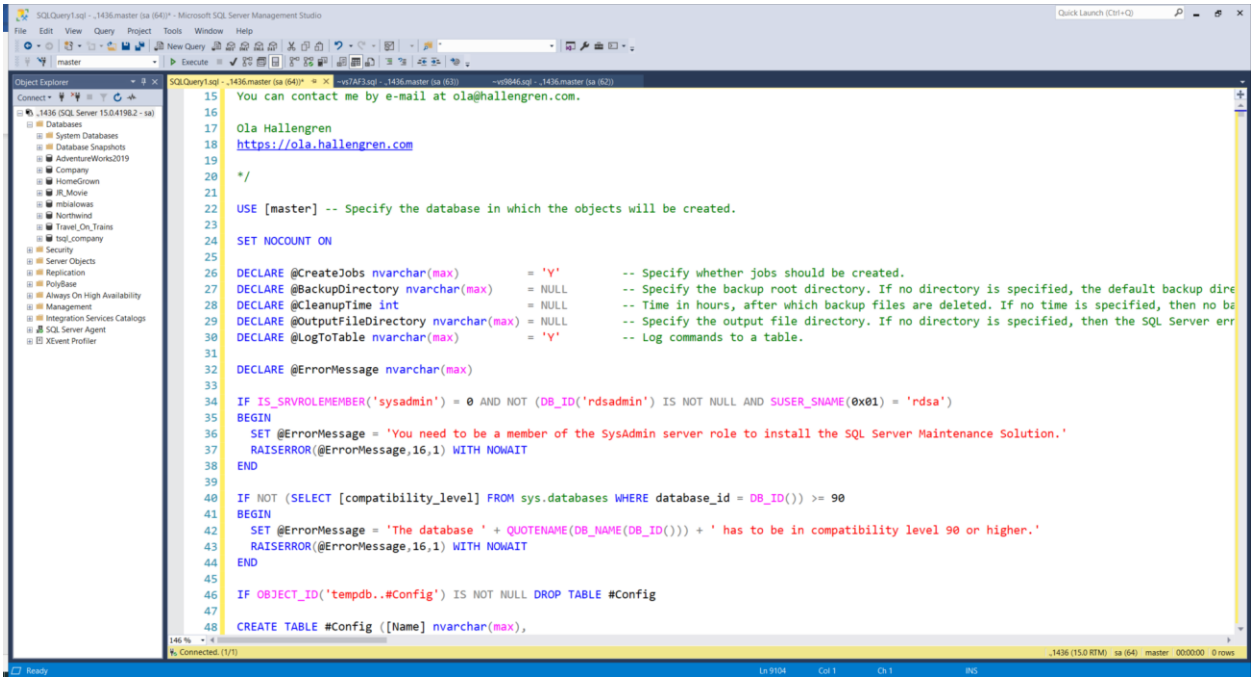
Ola Hallengren Scripts Setup

Procedure

1. Download MaintenanceSolution.sql from [SQL Server Maintenance Solution Downloads (hallengren.com)](hallengren.com)
2. Open MaintenanceSolution.sql inside SSMS

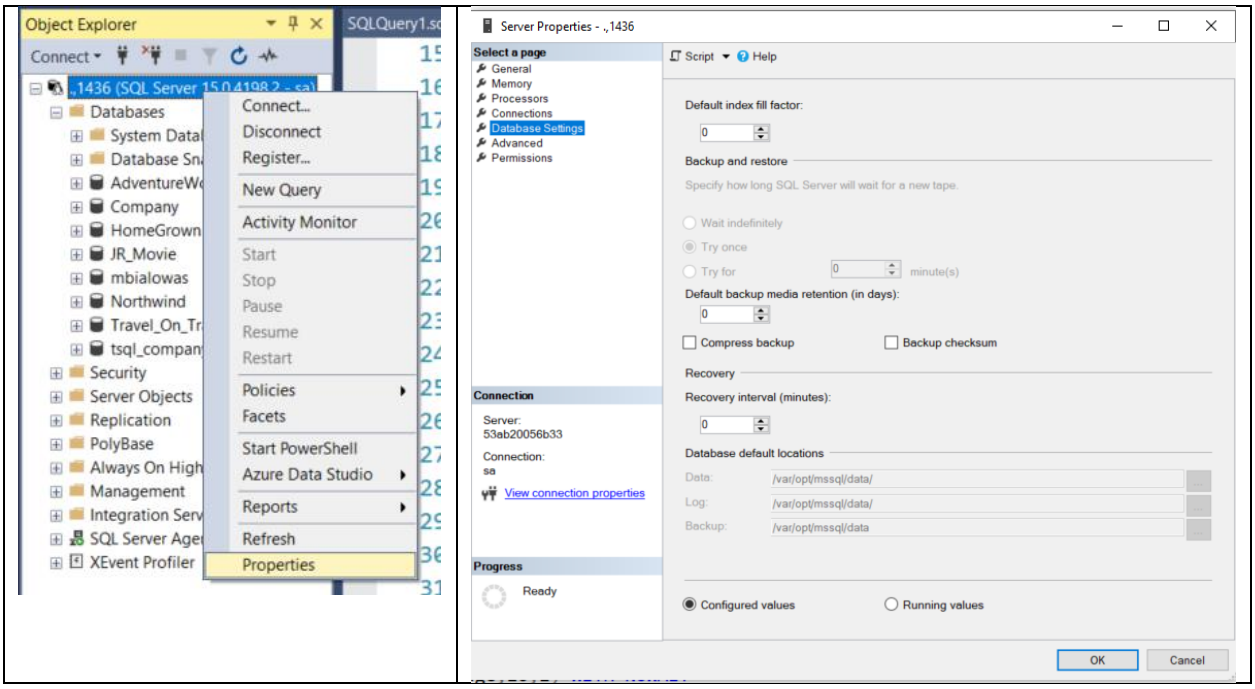


3. Some configurations can be changed(see Lines 26-30). We will just accept the default settings.

Notes:

Default locations

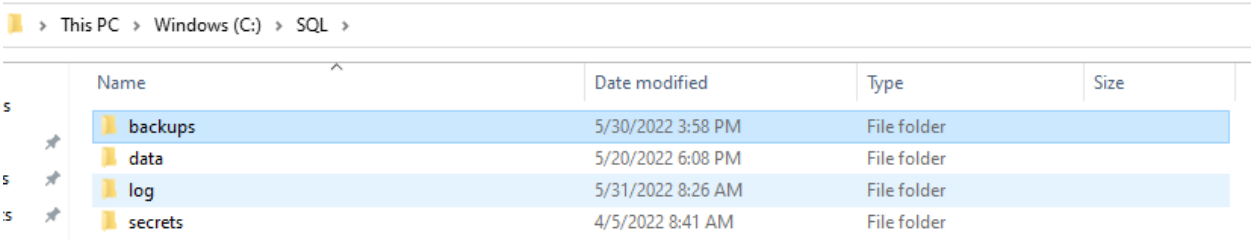
1. right mouse the **server** instance
2. then click properties
3. last click Database settings – see database default locations



You can change the settings as follows or leave them as the default:

Linux Path	Windows Path
Data: /var/opt/mssql/data/	C:\SQL\data
Log: /var/opt/mssql/data/	C:\SQL\log
Backup: /var/opt/mssql/data/	C:\SQL\backups

Recall we are running SQL Server in Linux and we mapped the linux paths above to windows equivalents

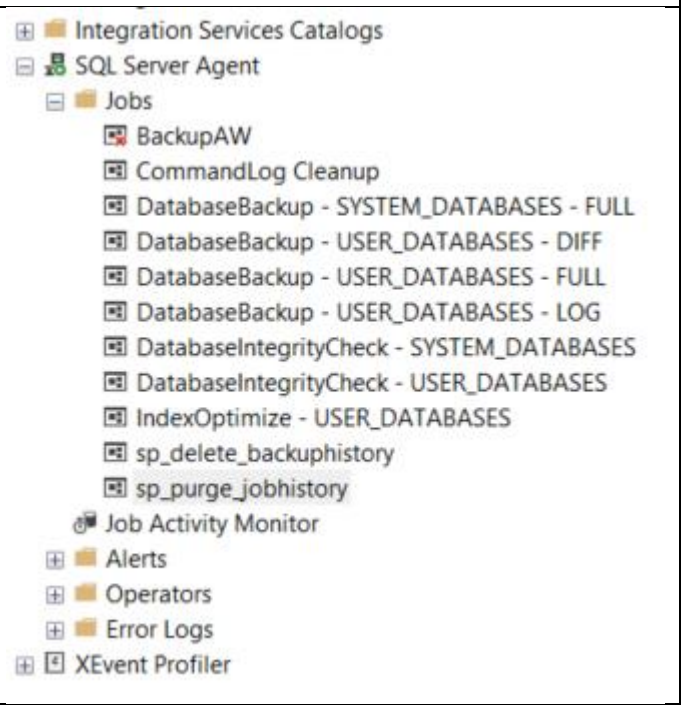


Going back to Ola script in SSMS

NOTE: each time script is run it will recreate any jobs unless you change the value of @CreateJobs variable to N instead of Y.

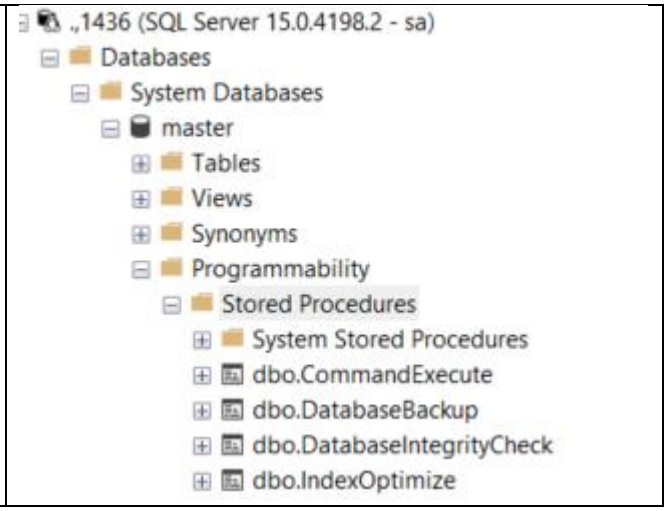
Note: Ensure your SQL Server Agent is started. It's located at the bottom of the object explorer in the left pane. Right click to start if needed.

Let's now run the Ola script to create sprocs and jobs, the sprocs will be created in master database.

Before	After
	

Ola script created 10 jobs and 4 sprocs:

1. CommandExecute
2. DatabaseBackup
3. DatabaseIntegrityCheck
4. IndexOptimize

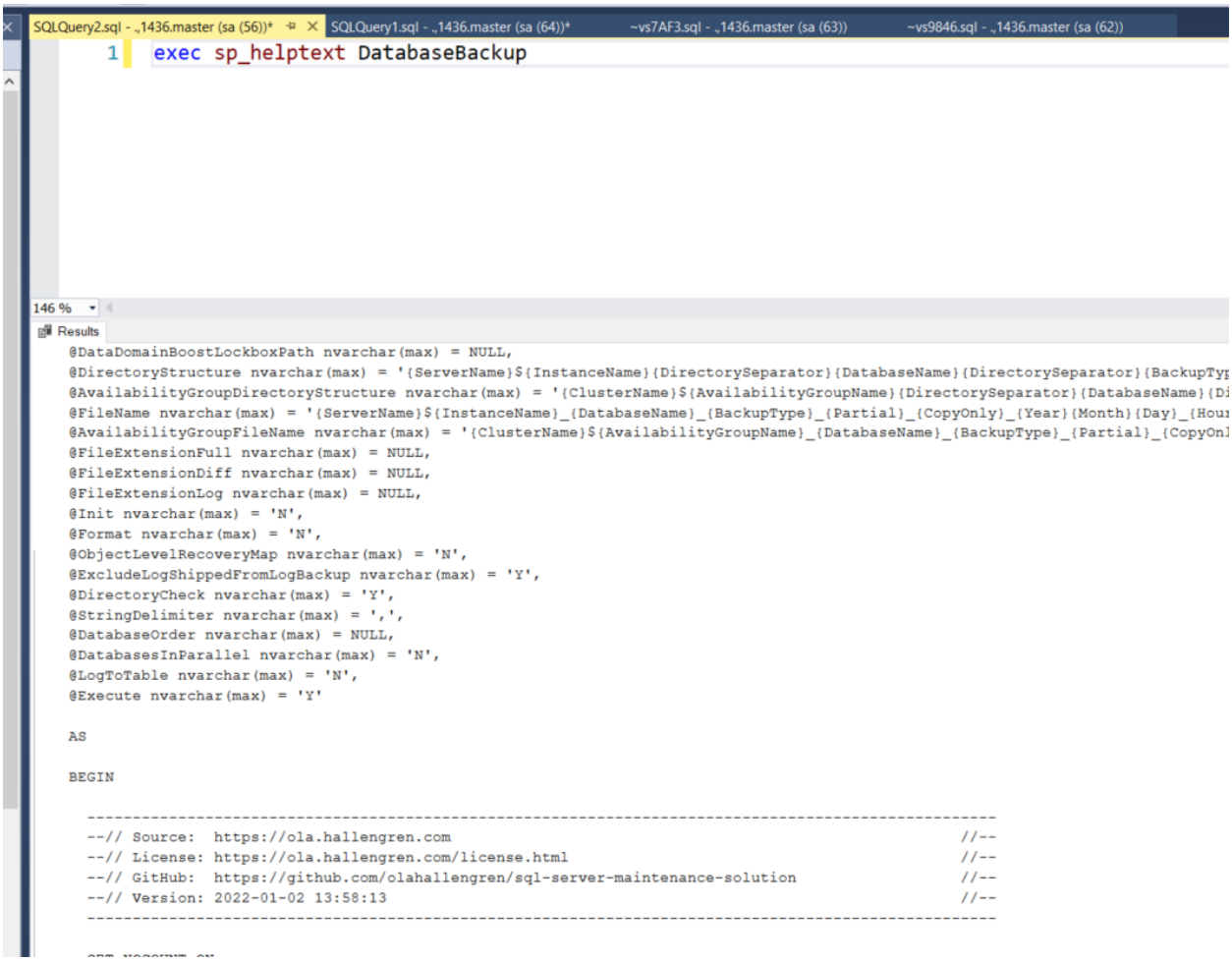


We already learnt about creating user-defined stored procedures. Have a look at sprocs used in ola scripts!

Run the following TSQL command to see how something is implemented:

E.g

Exec sp_helptext DatabaseBackup

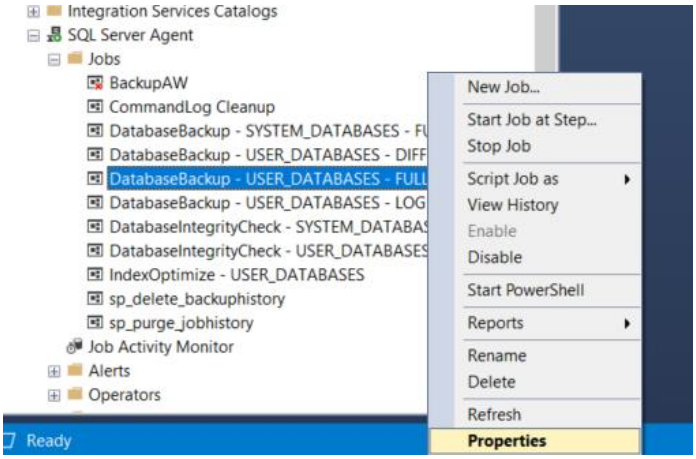


Note: Ola scripts don't automatically set the schedule for the jobs. We will do that next.

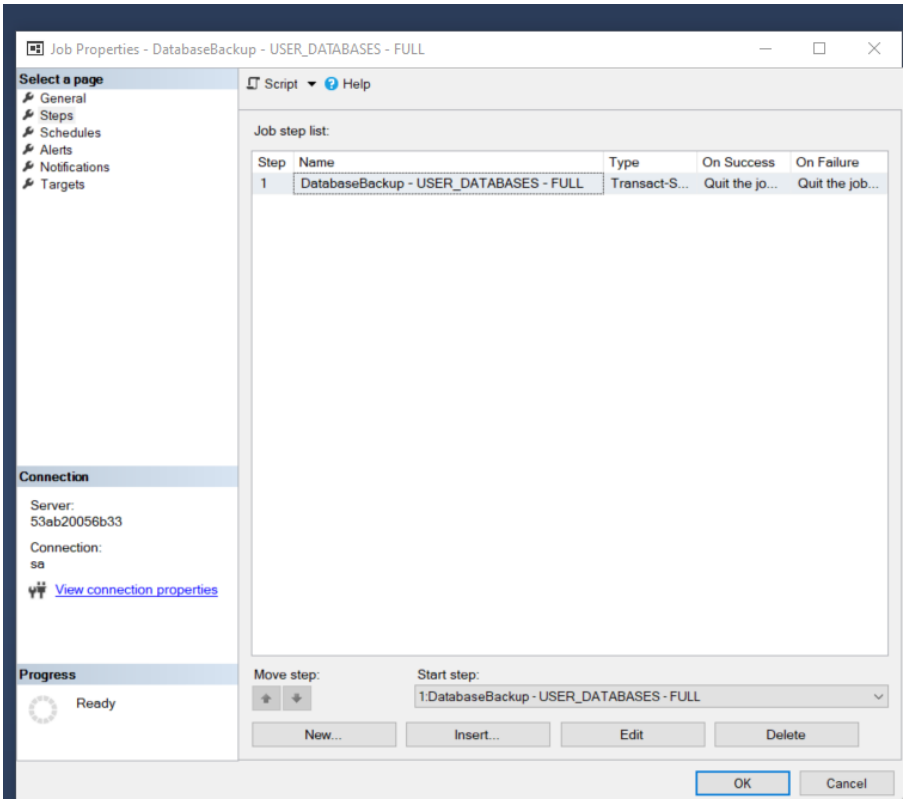
Scheduling jobs

Full Back up of User Databases

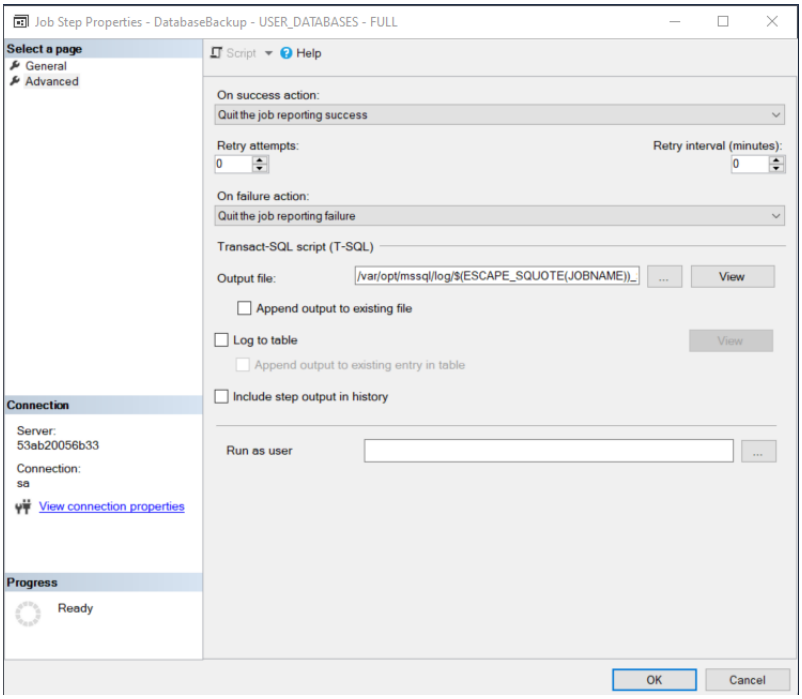
1. Right click on job--> Full Back up of User Databases, click properties



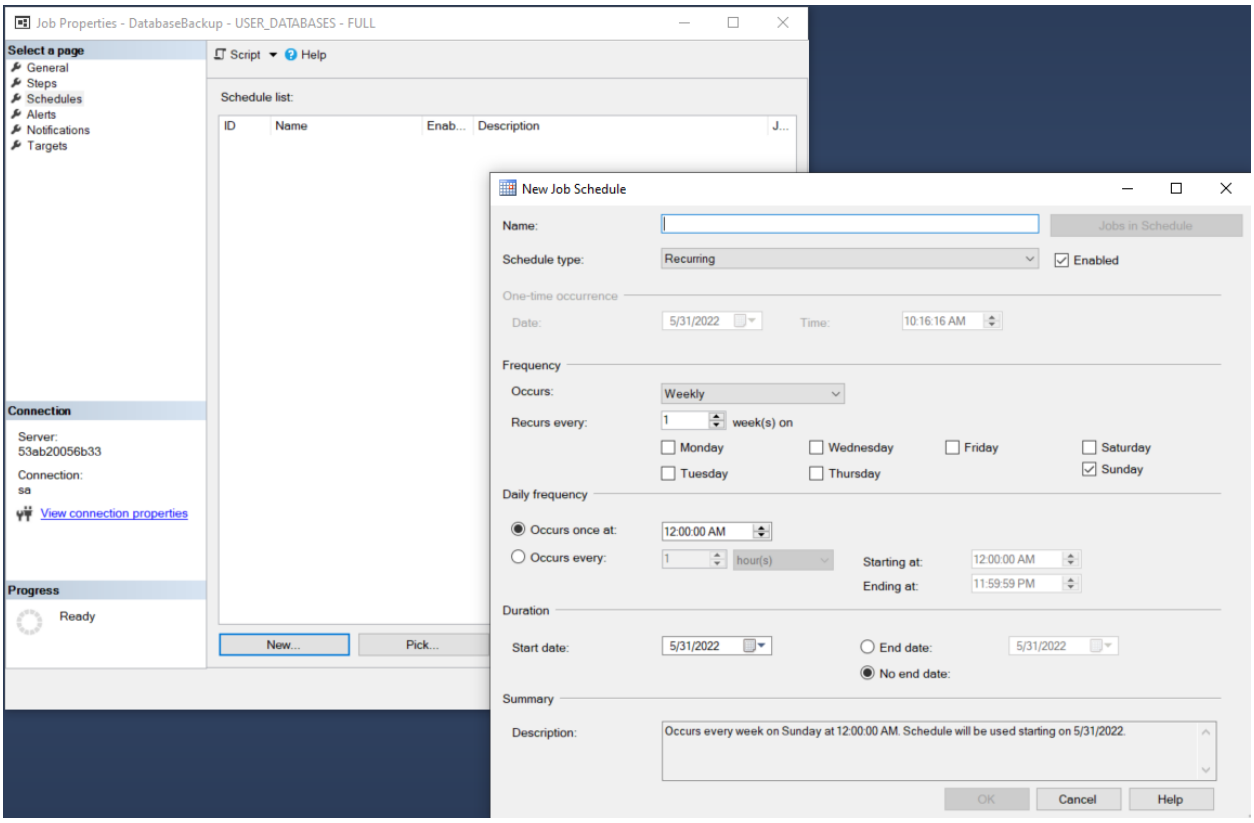
2. Under steps click on step



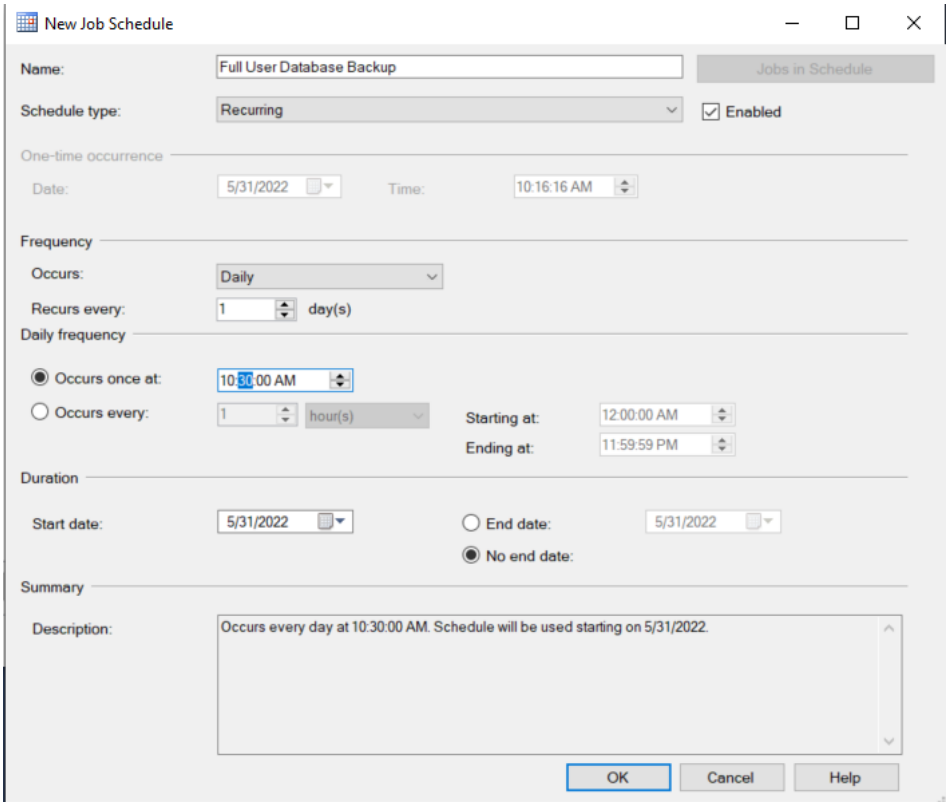
3. Then click on **Edit** then **Advanced** to ensure there is an output file. Click cancel.



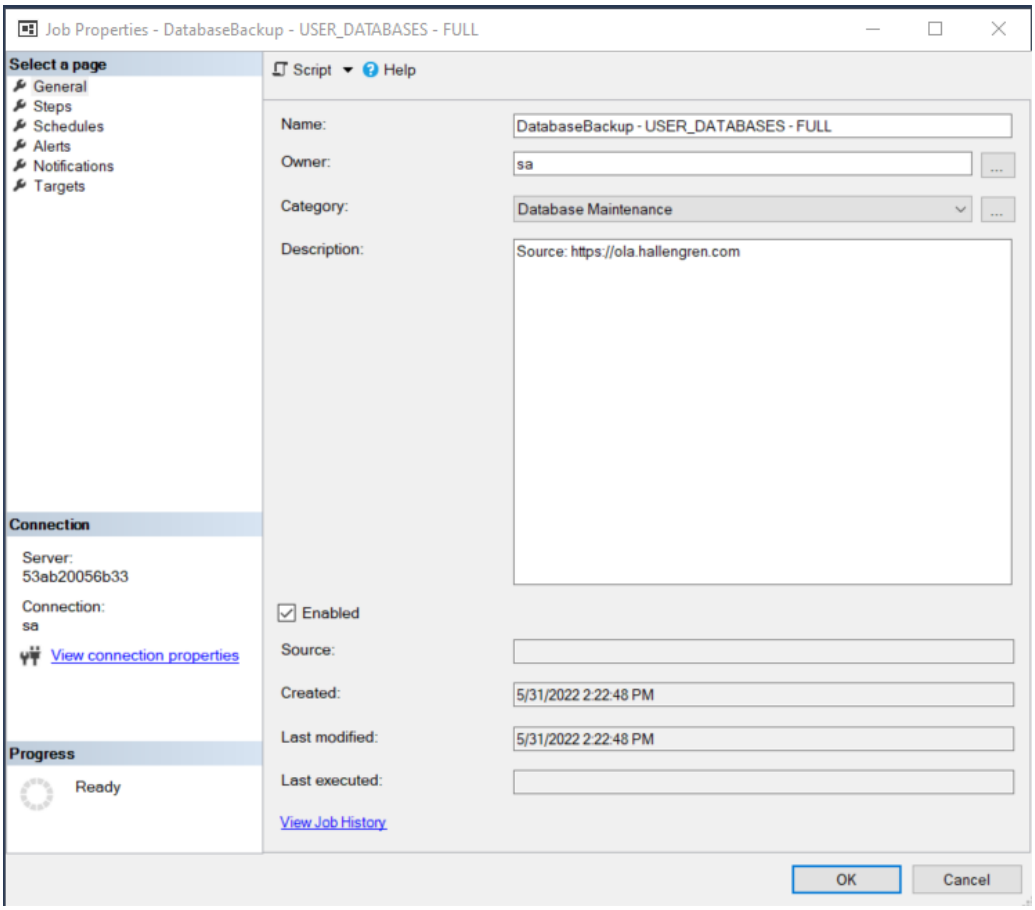
4. Click on schedules and click on new



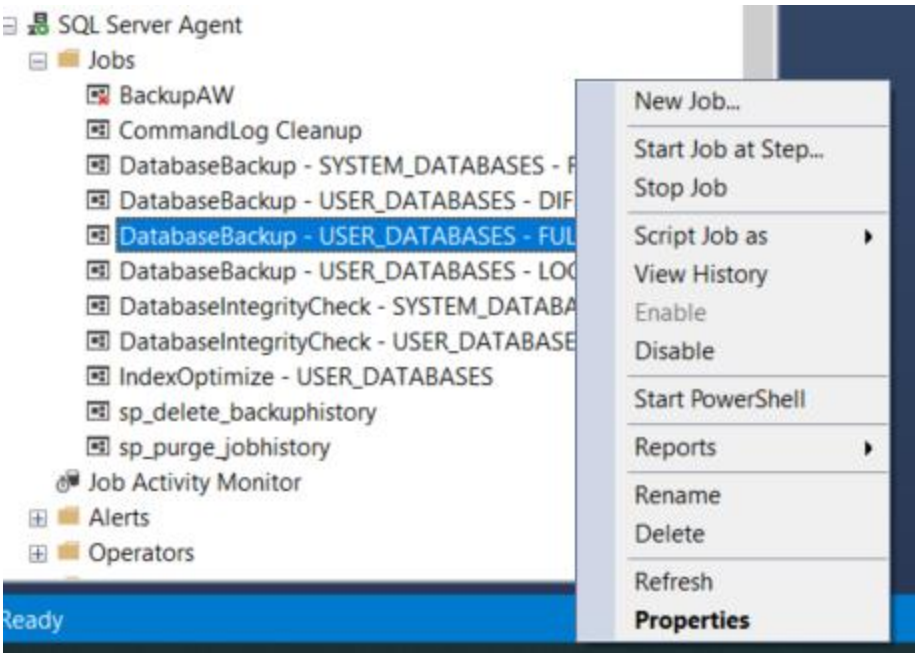
5. Give the job a name and set when the backup should run. Click Ok.



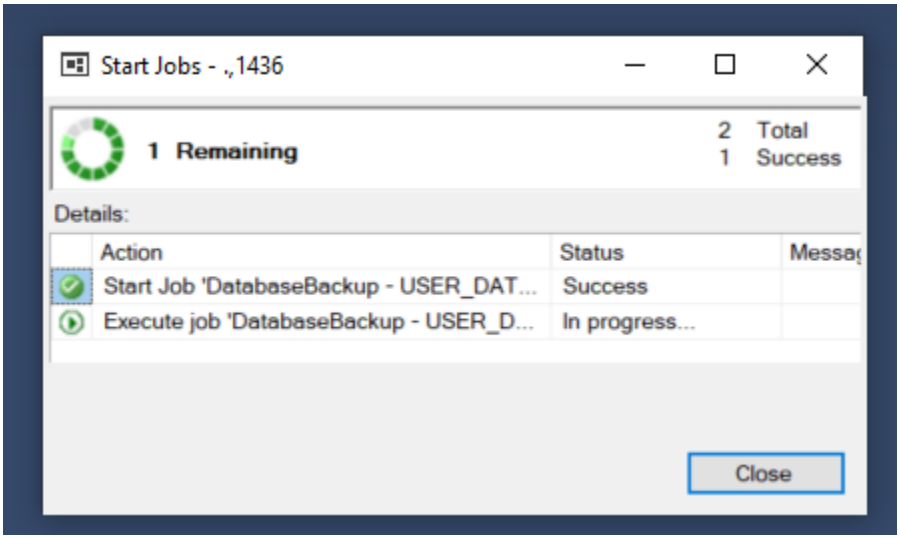
6. Last ensure job is enabled on general tab of job properties



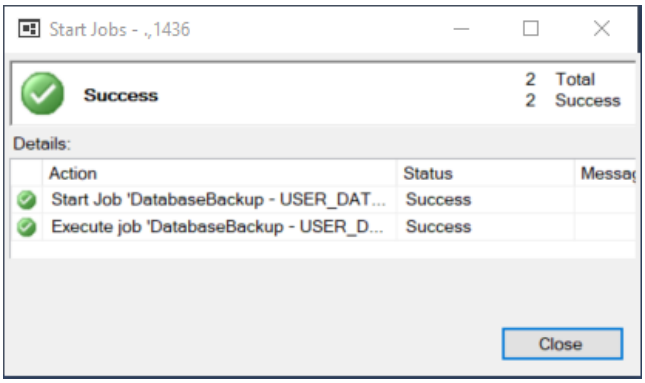
This job can be run manually the first time to see if it runs. Just right mouse click it and click **Start Job at Step**



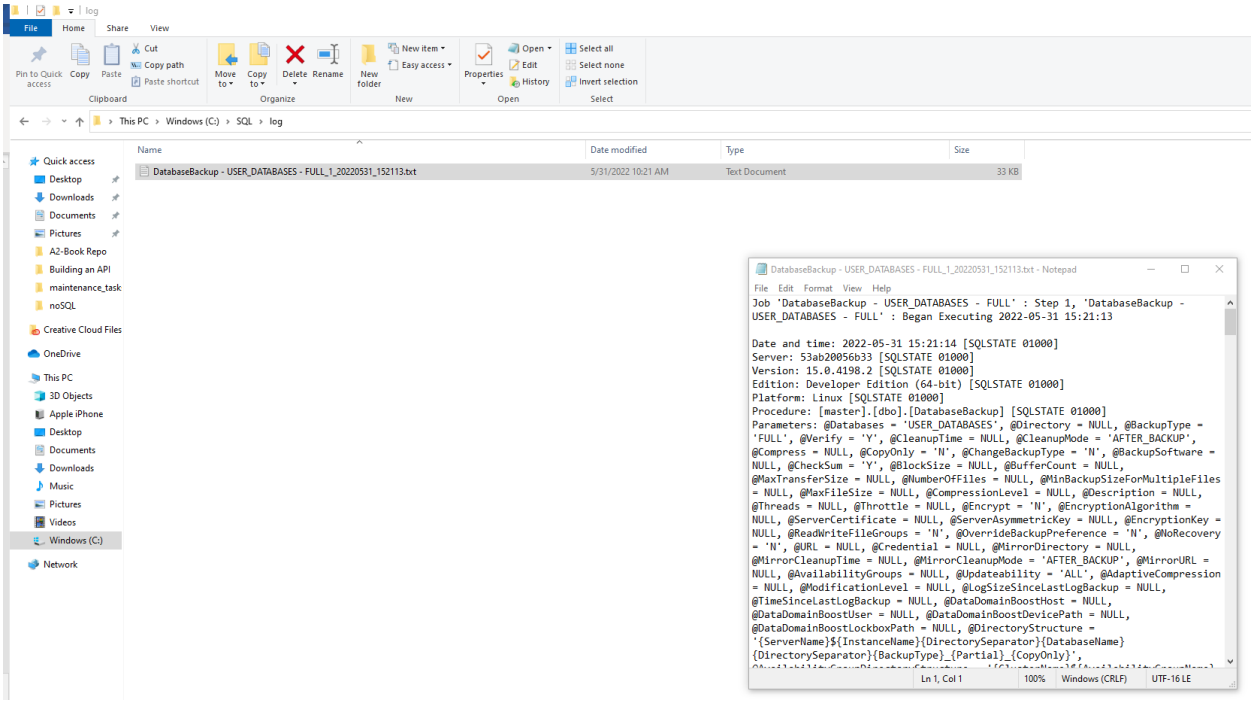
As job runs, a window will appear as depicted below



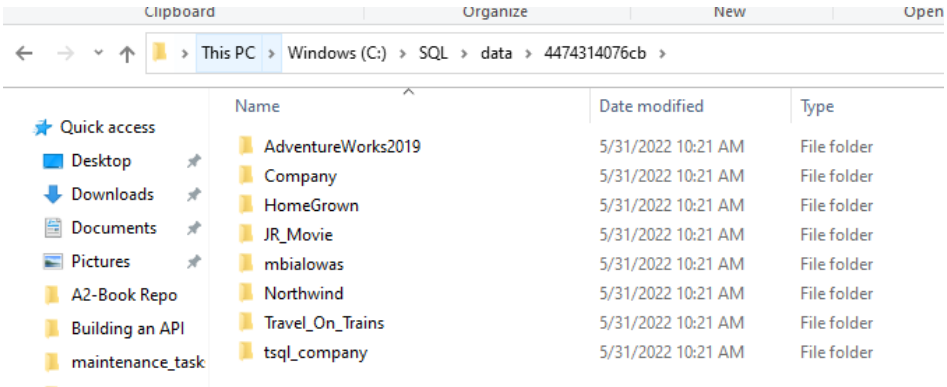
If a job ran successful, you would receive a message stating so.

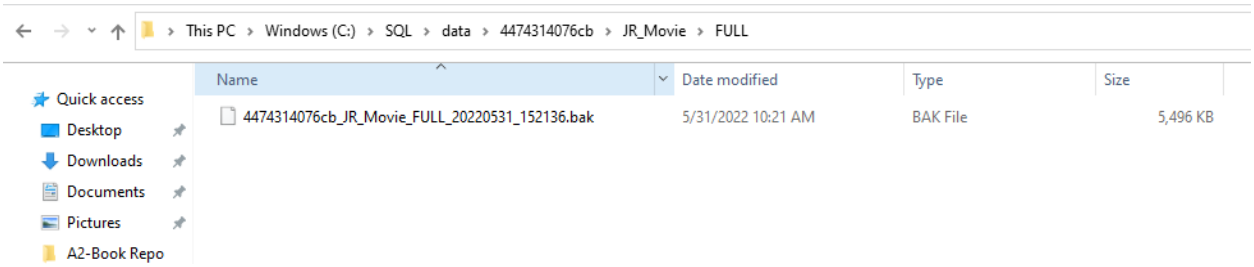


Confirm backups are located in mapped paths



Each of the user databases was fully backed up



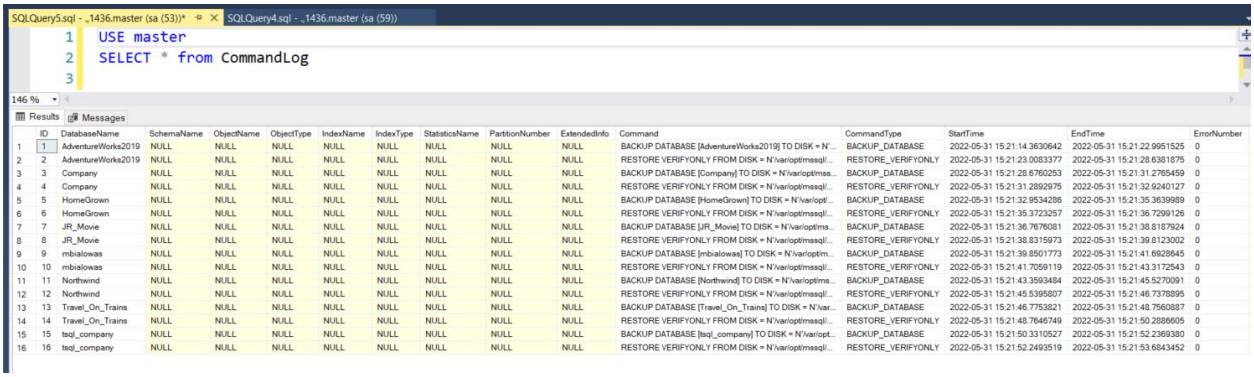


This process can be repeated for other jobs: diff, log, and indexOptimize

To see which jobs and processes ran, please do

USE master

SELECT * from CommandLog

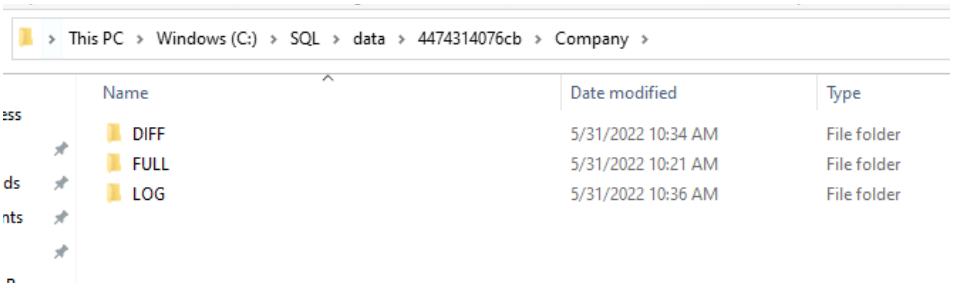


Restoring a database

Ola scripts don't restore databases so we will perform this manually.

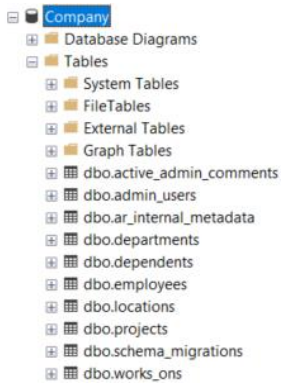
Procedure

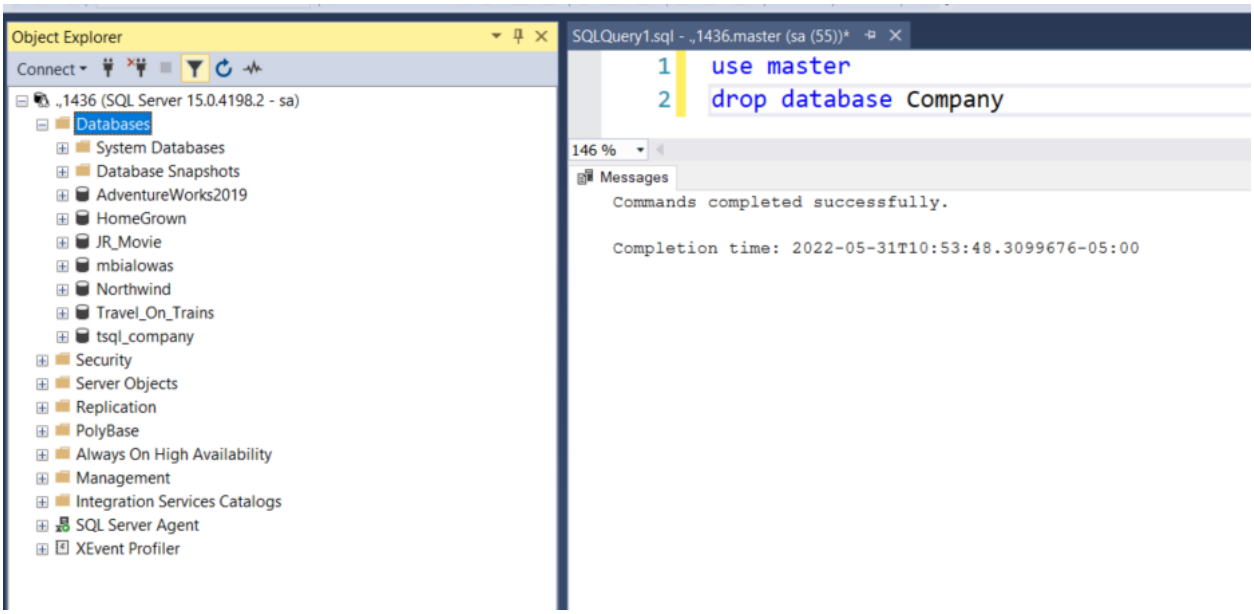
1. Check to see if you have a database backup to work from - we should as we just did a backup 😊



2. Delete a database - we are going to use the Company database for this example (any database can be deleted if you have the backup)

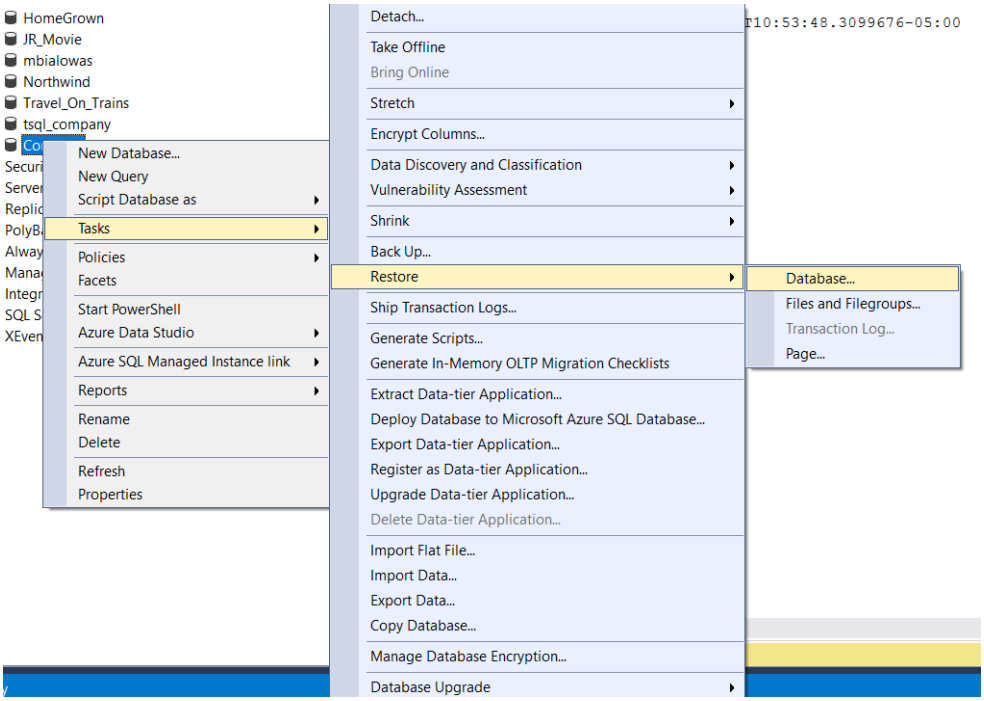
Drop database Company





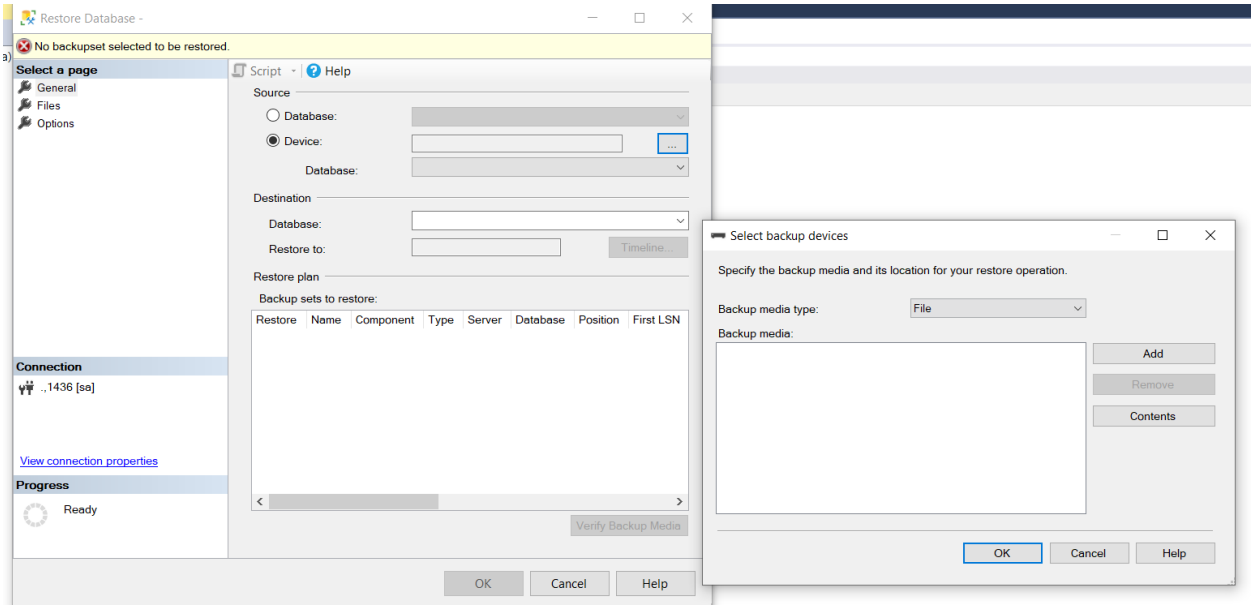
Time to restore database

1. Create a new database called Company
2. Right mouse click on Company database, then select tasks, then click on restore database

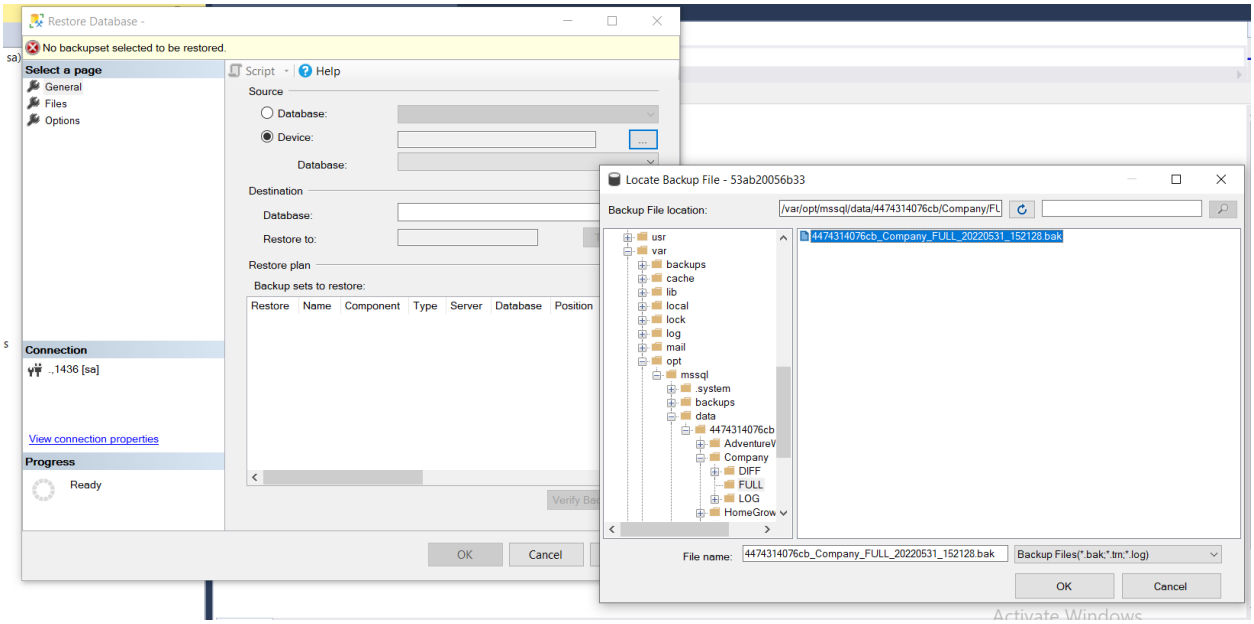


3. Select Device then click on 3 ellipsis …

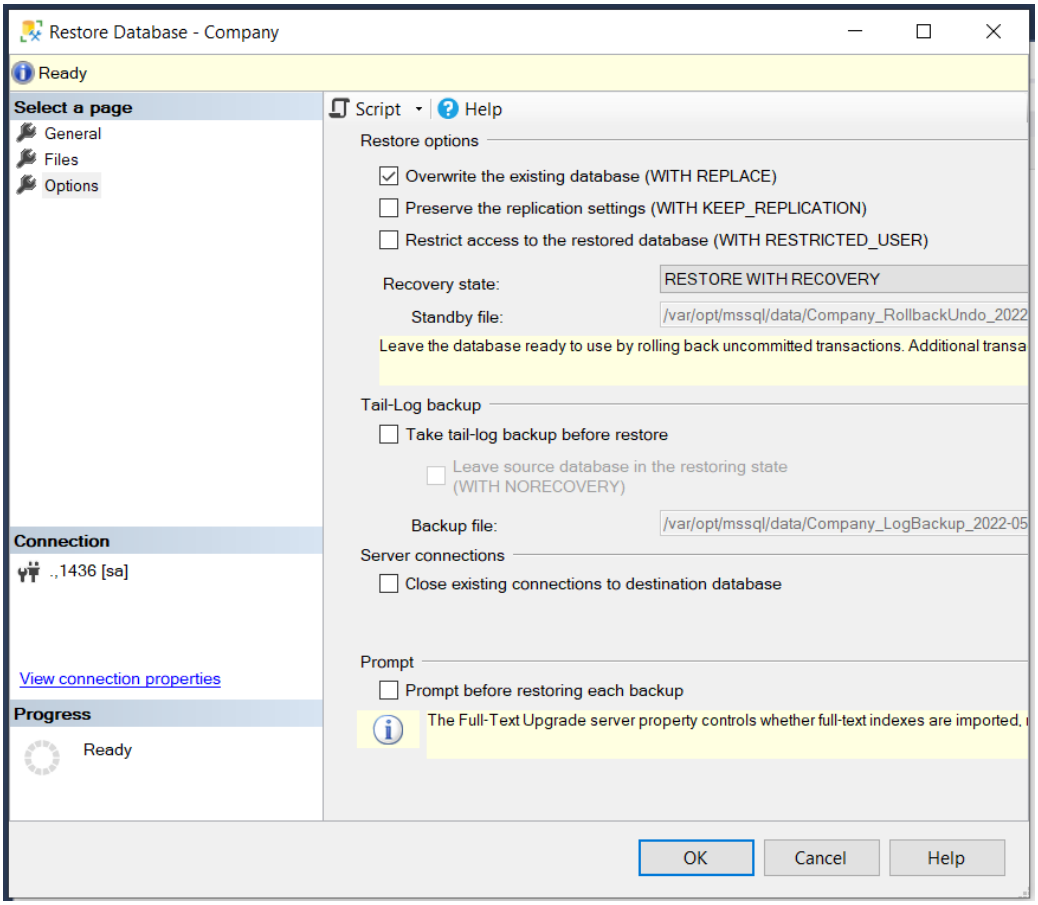
Click Add



4. Select Full backup, click OK.



5. Then click OK, then click on Options, check off Overwrite the existing database (WITH REPLACE) and uncheck Take Tail-log backups before restore



Both DIFF and log backup don’t require replace option to be checked off when restoring