

# *Technical Guide*

**Moving a Virtual Centre Database  
from one SQL Server to another**

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May 2008

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## Information

### Disclaimer

This guide was written because I, like many others, were asking the question: Can Virtual Centre's SQL Server Database be moved without breaking Virtual Centre? And if so, what is the best way to do this?

Unable to find a definitive answer I decided to go ahead and test it on a Dev environment. The results for me were successful, however, I nor RTFM Education will not be held responsible for any damage or loss of data or equipment that may arise from following this guide. Use this guide at your own risk!

It is generally best practise to test anything in a dev/test environment before doing it in your production environment.

Note that this may also not be the best or recommended process according to others but the views/opinions expressed herein are solely my own.

All names used in this guide are purely fictional and represent no company or body in real life

### Assumptions

It is assumed that you have the necessary permissions to carry out these procedures, preferably Administrative rights in SQL Server, Windows Server and XP Pro

### Products & Versions Used

The following products & versions were used in this guide

- Windows 2003 Standard R2
- SQL Server 2005 Standard
  - This was installed on Windows 2003 Std R2. This was done on 2 Servers.
- VMWare Virtual Centre 2.5
  - Virtual Centre, the ODBC Data Source and VMware Virtual Infrastructure Client (VIClient) were installed/configured on Windows 2003 Std R2
- Windows XP Professional SP2
  - The SQL Server Management Studio was installed on Windows XP Pro SP2

Although this guide is based on SQL 2005 it is possible that this will be relevant for SQL 2000 too, however, I have not tested this. Other product and version variations may also work, but again, I have not tested this.

### Naming Conventions Used

The following naming conventions were used in this guide and will be different to your own conventions

- The Database name
  - **VirtualCentre**
- The Database username
  - **VMCentreAdmin**
- The 2 servers names
  - **SQL-Server-Dev-01** - Source SQL Database
  - **SQL-Server-Dev-02** - Destination SQL Database
- The ODBC Data Source Name
  - **VMCentre**

## Preparation Steps

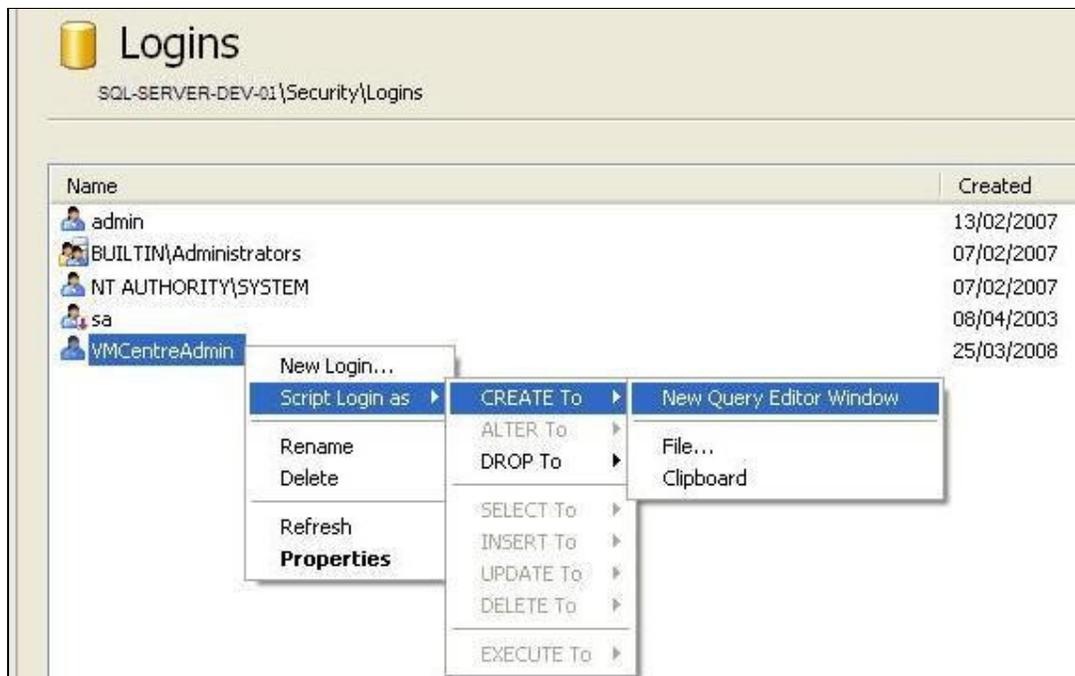
### Create Script for SQL User Account

In order to keep the same username and settings for the new Database, it is quicker and less error prone to create a SQL script that will automatically create the user for you

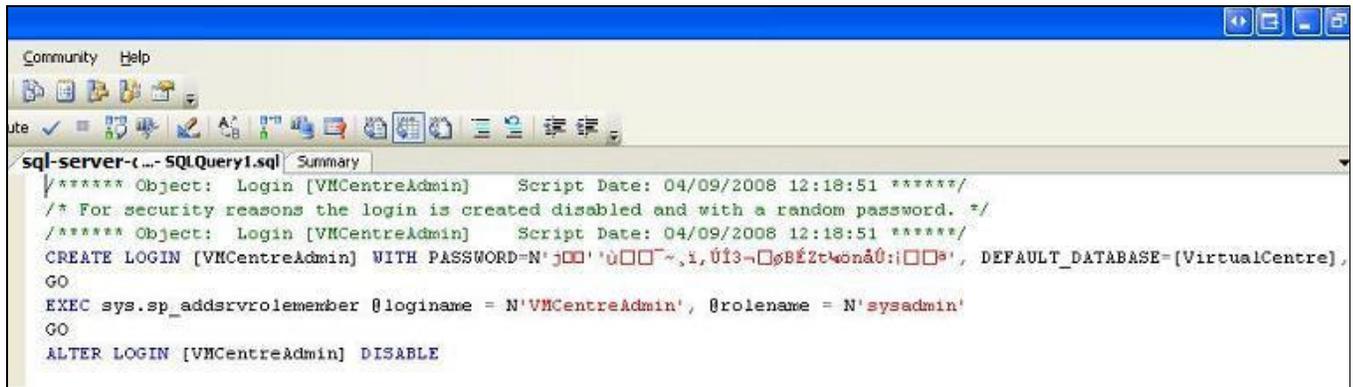
1. Open SQL Server Management Studio
2. Connect to the Source SQL Server that contains the Database you want to move
3. Expand **Security** -> Select **Logins**



4. Over on the right, **right-click** on the **account** you want to create a script for -> Select **Script Login as** -> **CREATE To** -> **New Query Editor Window**



5. This will open the Query Editor Window and show the script that can create this account again by running it



6. Copy the script to Notepad and save it for later

**Note:** When creating a script of a user account it will not create the password and will set the account as disabled. Ensure you know what the password is as you will need it later

## Stop the Virtual Centre Server Services

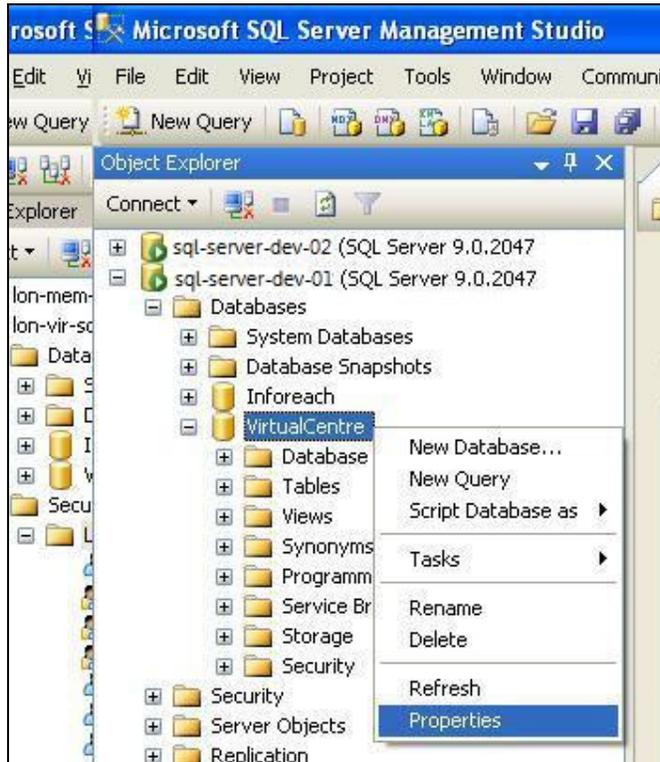
Before being able to detach the Database you will need to stop all the Virtual Centre services. You may want to temporarily set all these services to disabled to prevent accidental starting.

1. On your Virtual Centre Server, Select **Start -> Control Panel -> Administrative Tools -> Services**
2. Right-click the **VMware VirtualCenter Server service**, choose **Stop**, and wait for it to stop
3. Repeat step 2 for the following services:
  - a. **VMware Update Manager Service**
  - b. **VMware Converter Enterprise Service**
  - c. **VMware Capacity Planner Service**
  - d. **VMware Infrastructure Web Access**
  - e. **VMware License Server**
4. Close the Services dialog box

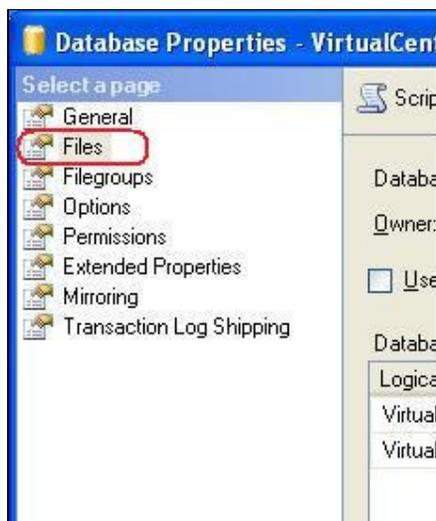
## Database Steps

### Detach the Database

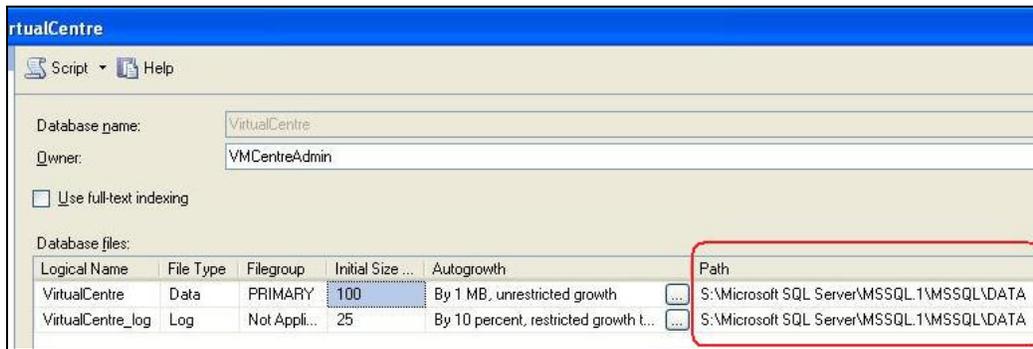
1. Make a note of the File locations for the .MDF and .LDF SQL Data and Log files as follows
2. Right-Click your Virtual Centre Database -> Select **Properties**



3. When the Database Properties window appears, click the **Files** option on the left



- Over on the right side, scroll across to note the path of the file locations

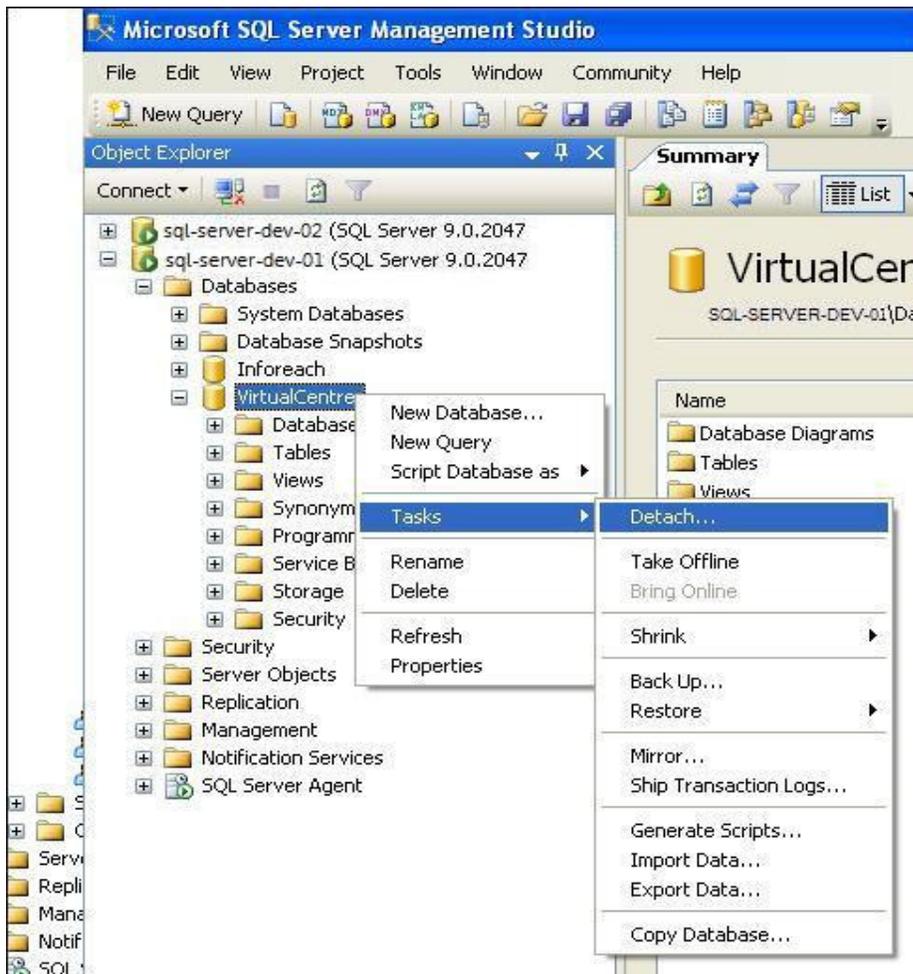


- Close the Database Properties box

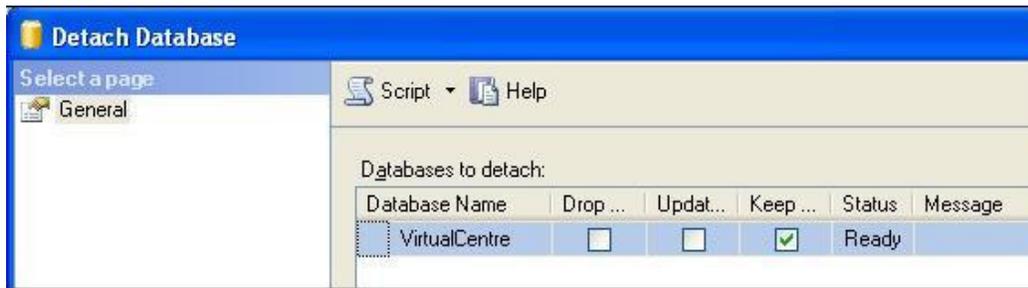
**Note:**

Before proceeding to the next step you should confirm that there are no users or services connected to this database, otherwise it will fail. (if you have followed this guide in the correct order, you should already have stopped all the Virtual Centre services, just confirm there are no other users connected to the Database)

- Right-Click your Virtual Centre Database -> Select Tasks -> Detach...



7. At the Detach Database window leave all defaults -> Click OK



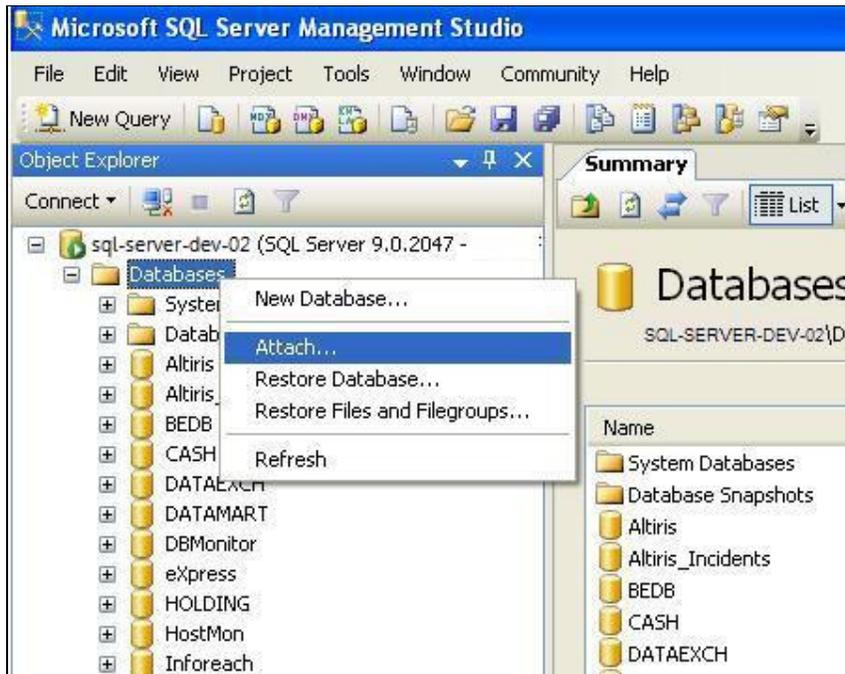
### **Copy Database Files to Destination Server**

There are many methods to achieve the same result of copying the .MDF and .LDF files to the destination server. I chose to explain this method by physically connecting to the Source server and then opening a UNC path to the Destination server, however, you can do this anyway you prefer

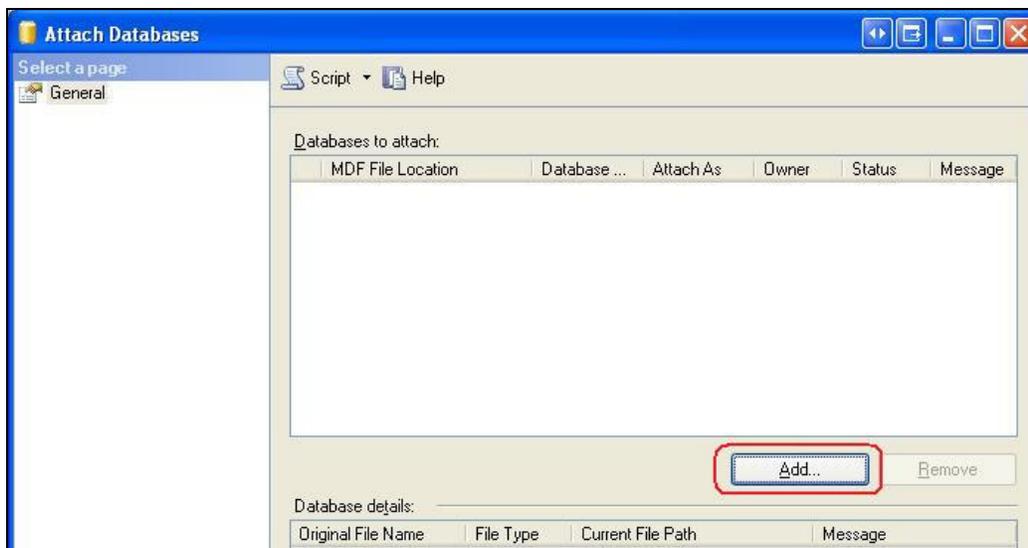
1. Log onto the Source SQL Server that you just detached the database from
2. Open **Windows Explorer**
3. Locate the files from the location you made a note of earlier
4. **Copy** both the **.MDF** and **.LDF** files
5. Click **Start -> Run**
6. Type in the UNC path to the Destination servers folder location that you store your SQL Server data files in, i.e. \\SQL-SERVER-DEV-02\\\$\\Microsoft SQL Server\\MSSQL.1\\MSSQL\\Data
7. When the window opens, **Paste** the files in it
8. Log out the SQL Server

## Attach the Database

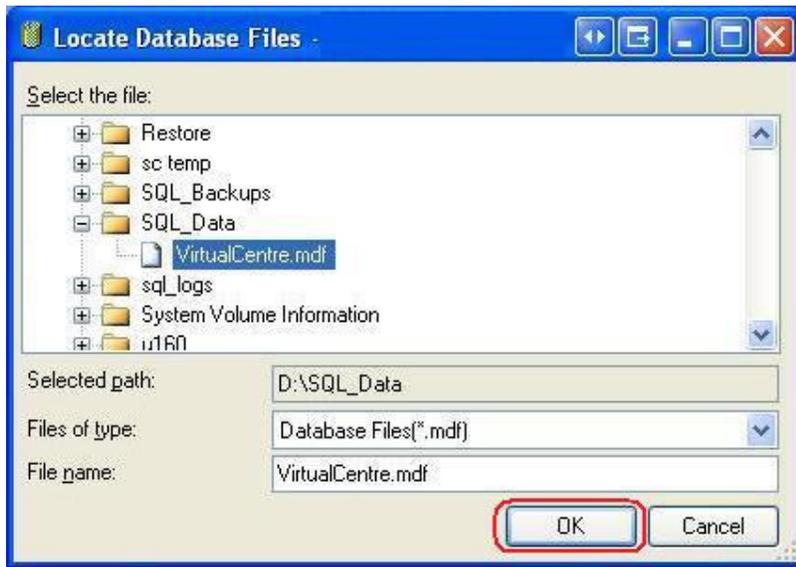
1. Go back to the SQL Server Management Studio
2. Connect to the destination SQL Server
3. **Right-Click** on **Databases** -> **Attach...**



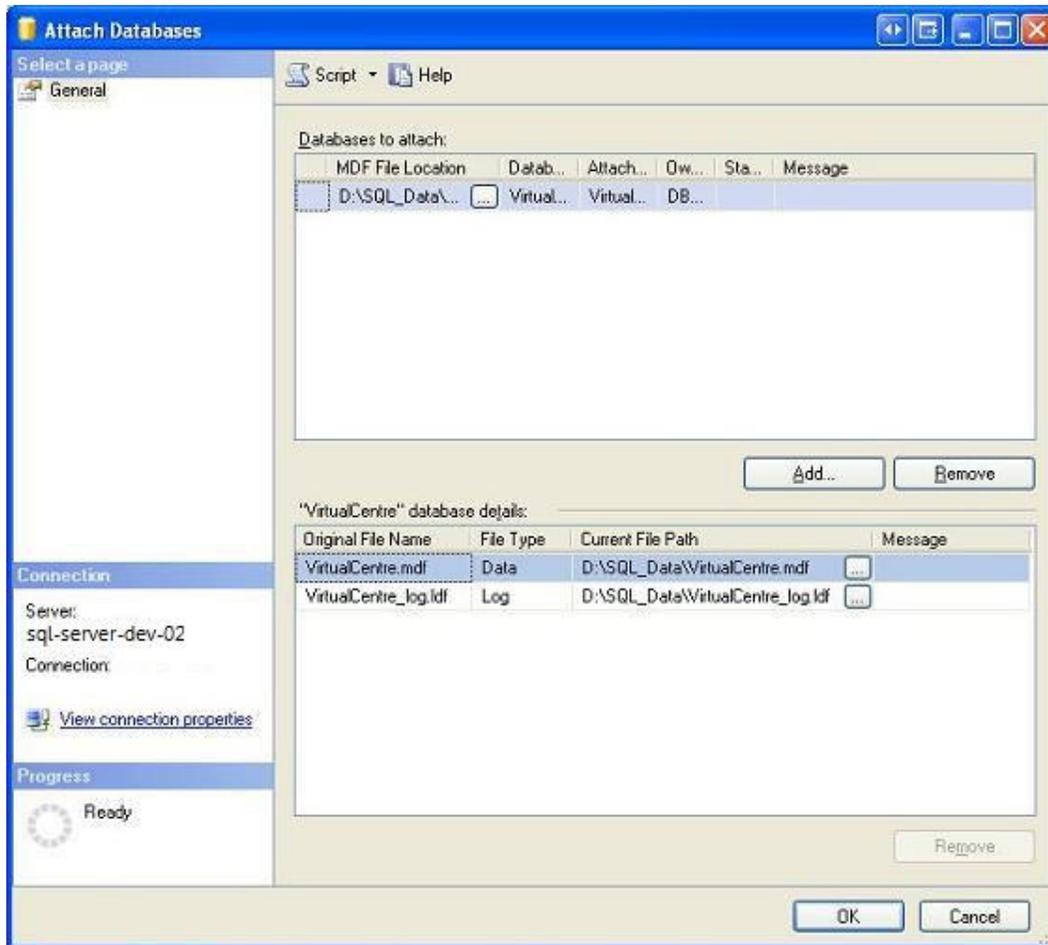
4. At the Attach Database window -> Click **Add**



5. At the Locate Database Files window -> Locate the .MDF file you copied over and select it -> Click OK

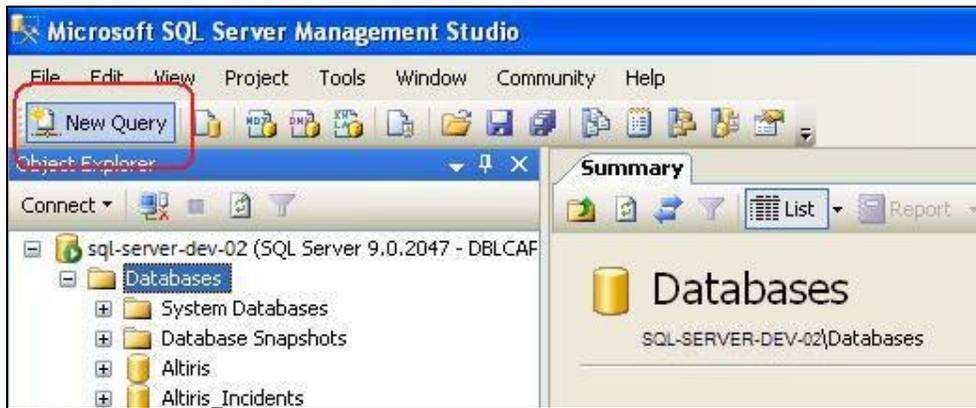


6. This takes you back to the Attach Databases window

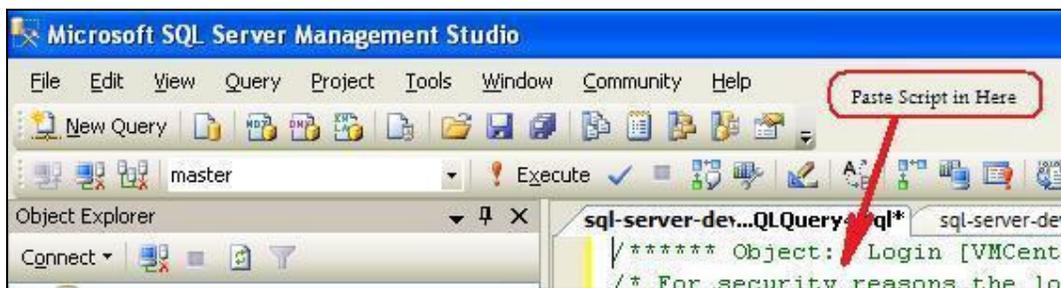


7. Click OK

8. Back at the main Management window click on the **New Query** button



9. Paste in the Script you copied to notepad earlier



10. Click on the little **Green Tick** icon in the toolbar to confirm the script is correct

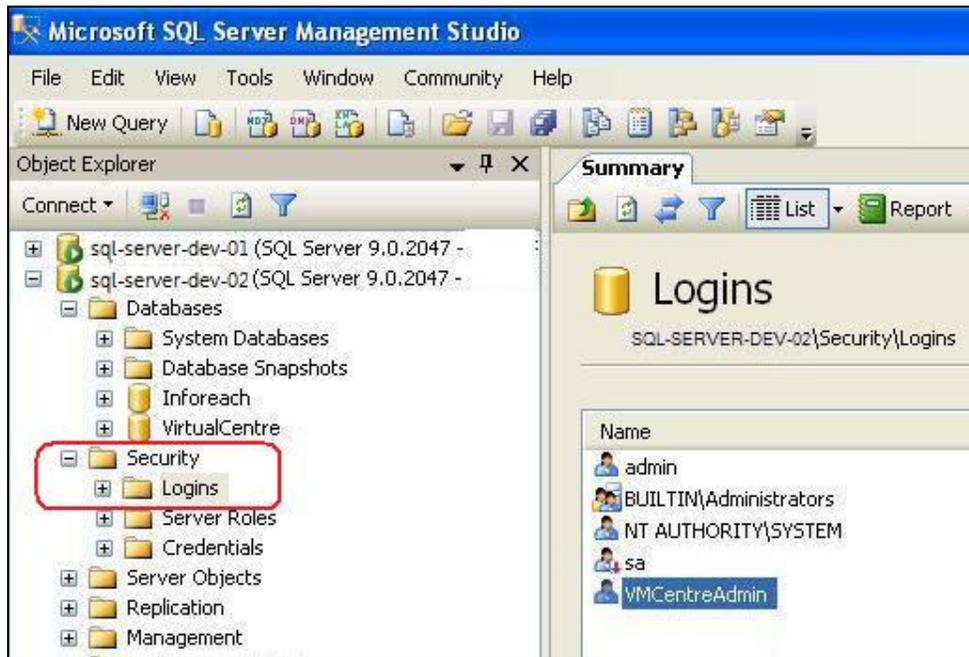


11. Click **!Execute** icon in the toolbar

This creates your account from the previous database but it is disabled and has a randomly generated password which we will change in the next steps



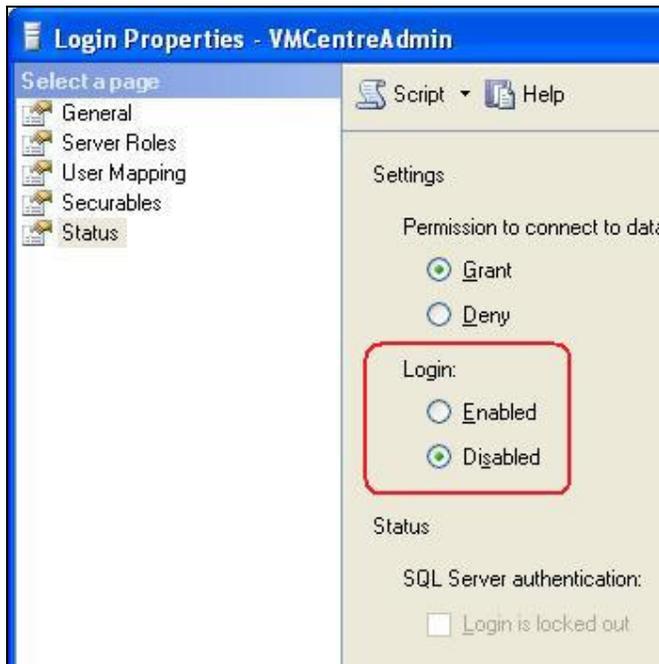
12. Navigate to **Security** -> **Logins** -> Double-Click your account name



13. At the login Properties window select **General** on the left -> Set the password exactly as it was originally and re-type it



14. Select **Status** on the left -> Change the Login to **Enabled**

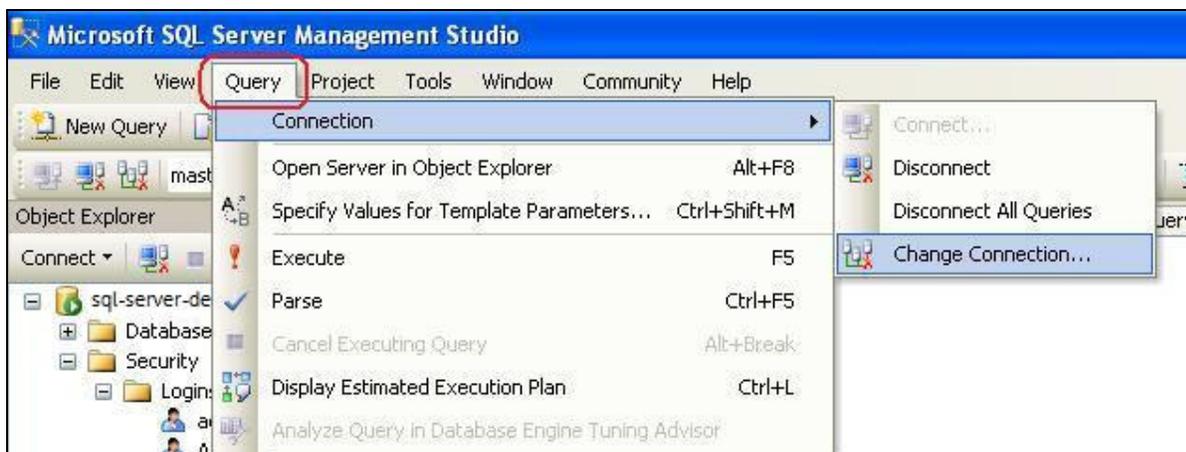


15. Click **OK**

We will now test that the user account can authenticate ok

16. Click anywhere inside the Query window if it is still open, otherwise click the New Query button again

17. Click on **Query** on the Menu bar -> **Connection** -> **Change Connection**



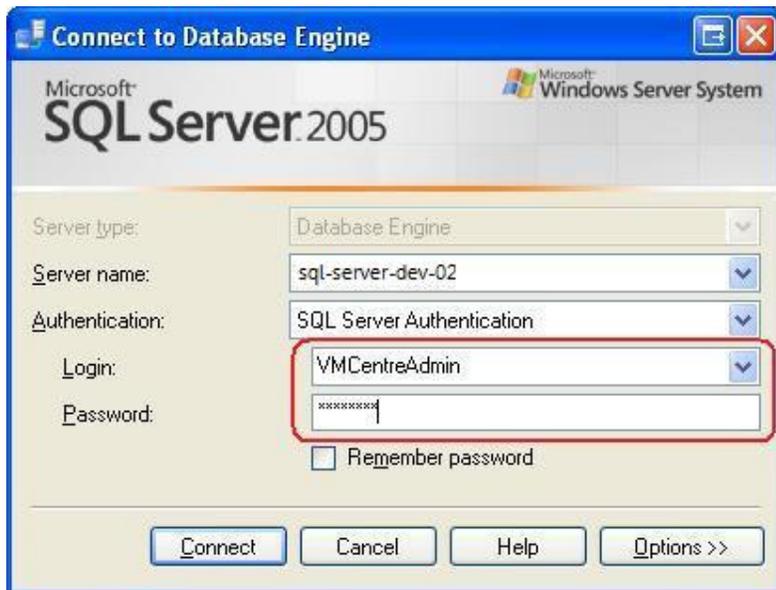
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- 18. Under Server Name type the Destination Server name
- 19. Under Authentication select **SQL Server Authentication**



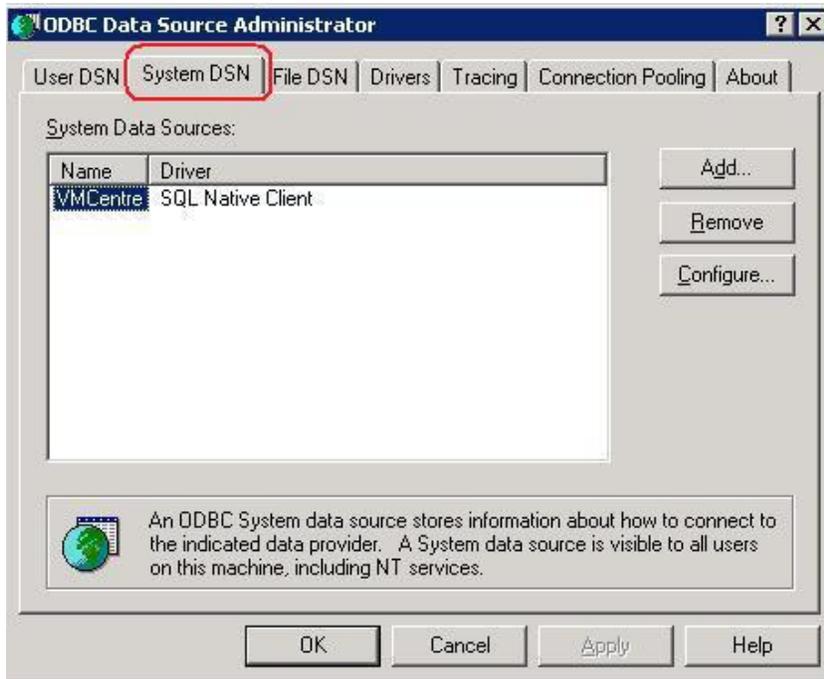
- 20. Enter the Username and Password
- 21. Click Connect to confirm the account works ok



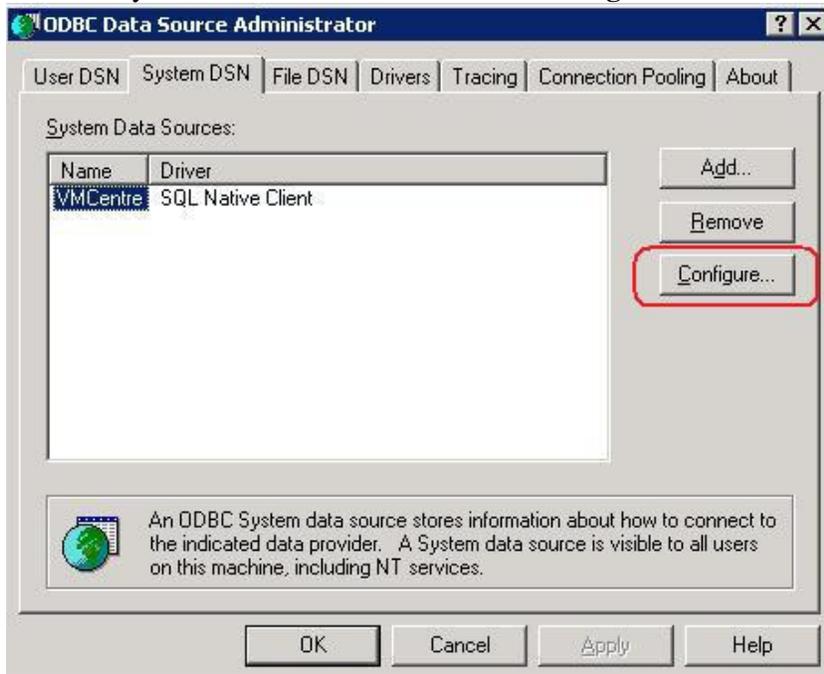
## ODBC Steps

### Reconfigure the ODBC Settings

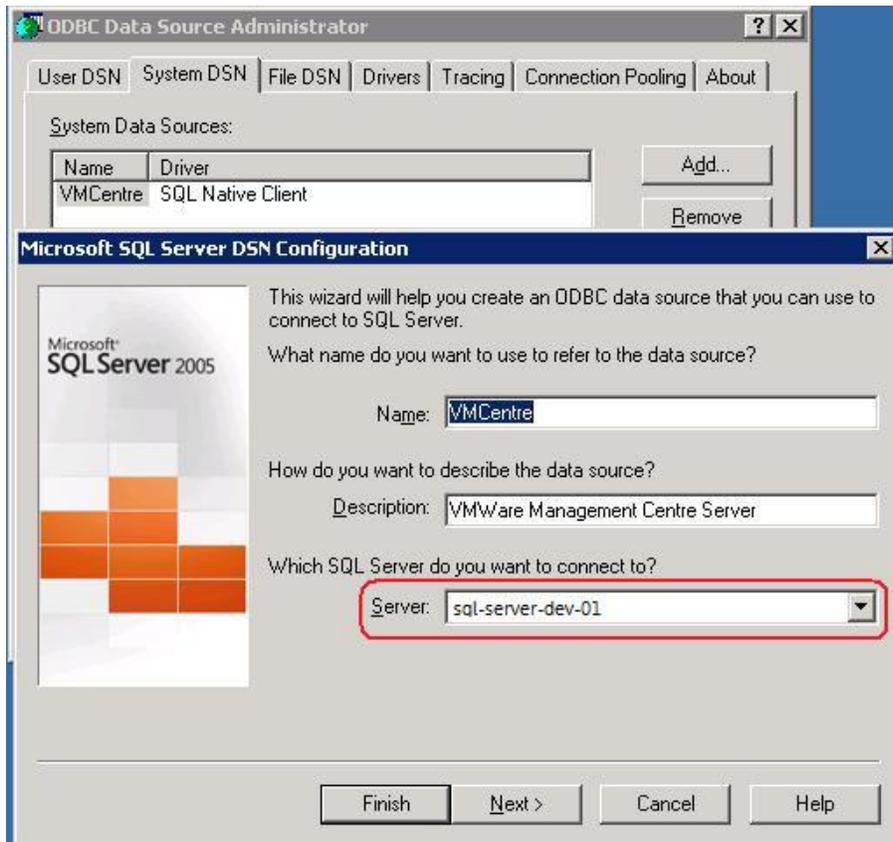
1. Log into your Virtual Centre Server
2. Click **Start -> Control Panel -> Administrative Tools -> Data Sources (ODBC)**
3. When the ODBC Data Source Administrator window appears, click the **System DSN** tab



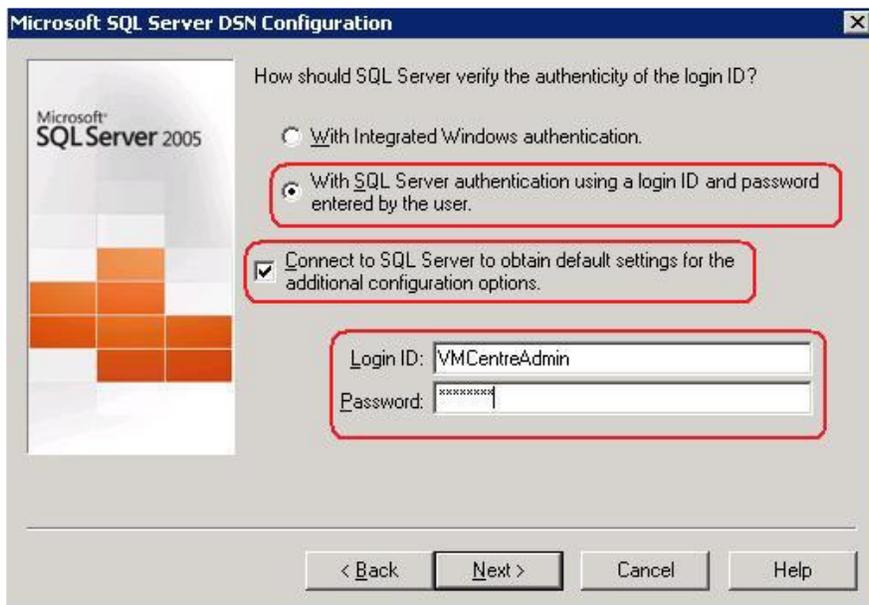
4. Select your Data Source Name -> Click **Configure**



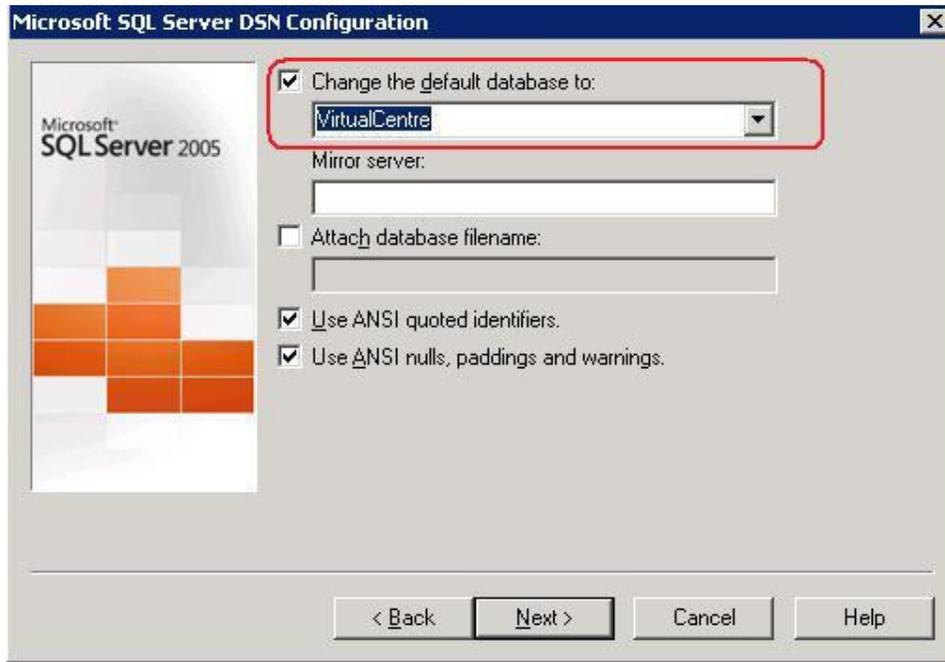
5. Change the Server name to your Destination Server: (the other settings should already be correct)



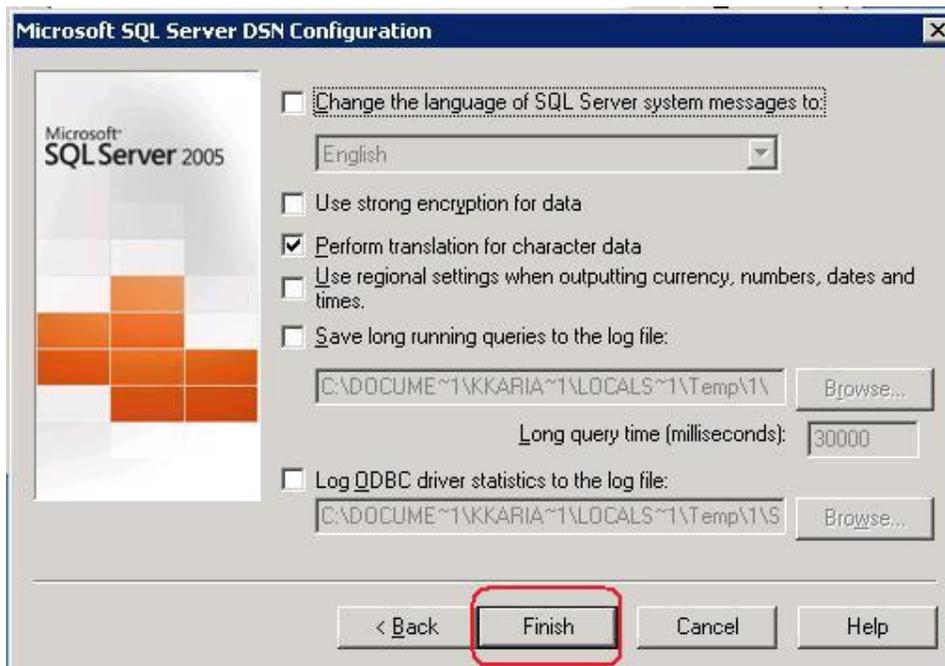
6. Click **Next**
7. Select **With SQL Server Authentication...**
8. Check the **Connect to SQL Server to obtain default settings...**
  - a. Login ID = **<your username>**
  - b. Password = **<your password>**



- 9. Click **Next**
- 10. Check the **Change the default database to**
- 11. From the list, Select your VirtualCentre Database

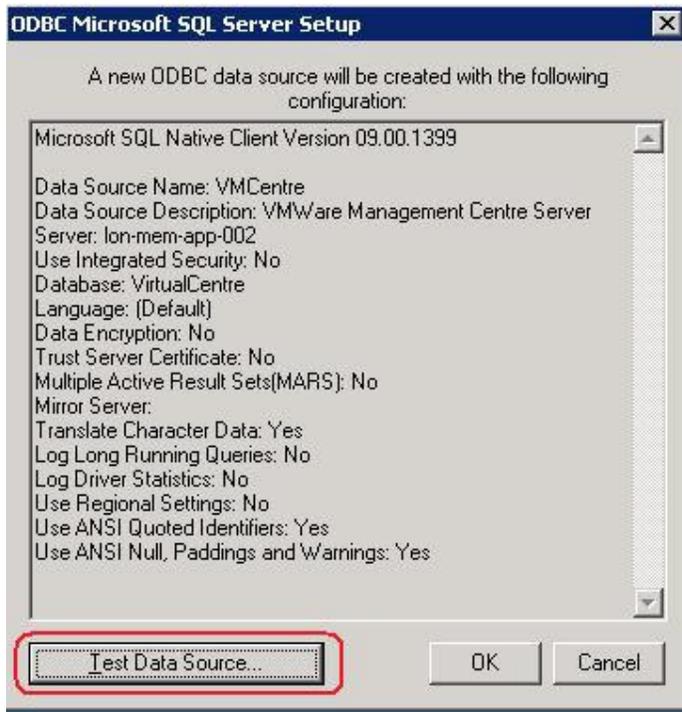


- 12. Leave all other settings as default
- 13. Click **Next**
- 14. Leave all settings as default

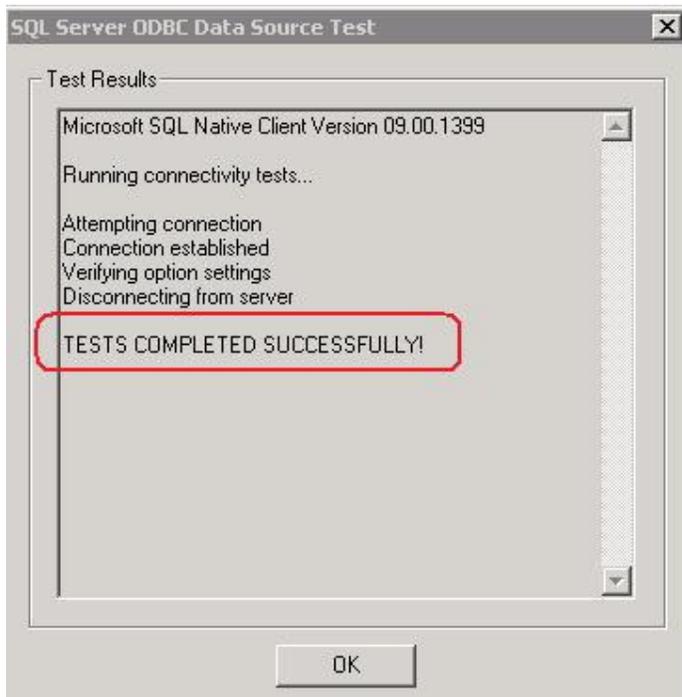


- 15. Click **Finish**

16. Click the **Test Data Source** button to check if all settings are correct



17. If all settings are correct you should see the *Tests Completed Successfully* message



18. Click **OK**

## Final Steps

### Start the Virtual Centre Server Services

**Note:** This is the reverse of the stopping services process above. If you disabled any services, then set them back to their original start-up settings

1. Select **Start > Control Panel > Administrative Tools > Services**
2. **Right-click** the **VMware License Server**, choose **Start**, and wait for it to Start
3. Repeat step 2 for the following services:
  - a. **VMware Infrastructure Web Access**
  - b. **VMware Capacity Planner Service**
  - c. **VMware Converter Enterprise Service**
  - d. **VMware Update Manager Service**
  - e. **VMware VirtualCenter Server**
4. Close the Services dialog box

### Log into Virtual Centre

1. Log into your Virtual Centre Server
2. Open VMWare Infrastructure Client (VIClient)



3. Providing everything went smoothly, you should be presented with a log on box



4. Log in with the normal details
5. Confirm that all Hosts and Guests are visible and everything else is working as expected