
How to move a SQL database from one server to another

Guide is applicable to these products:

- * Lucid CoPS, Lucid Rapid, LASS 8-11, LASS 11-15, LADS Plus and Lucid Ability (v6.0x-N)
- * Lucid Exact v1.xx-N
- * Memory Booster v1.2x-N
- * Comprehension Booster v1.3x-N)

Before you begin:

Ensure that you at least file access to your old SQL server instance.

Ensure you have set up your new SQL Server instance along with *SQL Server Management Studio*, which you will need to use later.

Make a note of the two database files you'll be using – see Appendix 1 in this guide.

A quick summary of the steps required:

- 1. Locate old database on old server**
- 2. Copy and then attach database to new server**
- 3. Recreate the Account and Login using a script**
- 4. Recreate the connection string so the software can find the database**

1) Find the database to migrate

First, find where the database files from the old server are located.

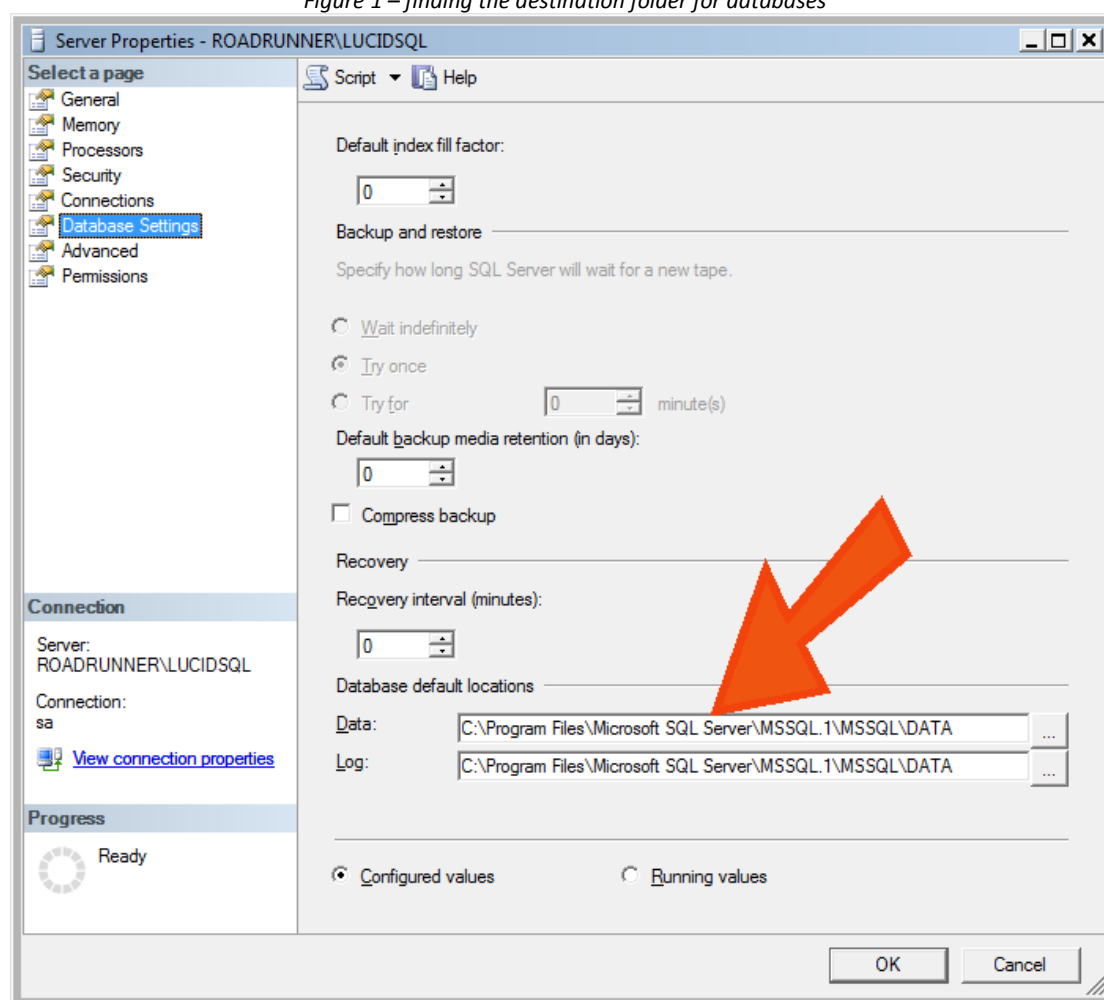
Find the files in two ways:

(A) search on the old server for a specific file e.g. Lucid.mdf or LADS.mdf.

(B) Launch *SQL Server Management Studio* on the old server and connect to the SQL Server instance where the database is.

Right mouse click on the root of the Object Explorer, select *Properties* and then *Database Settings* to view the default location of the database files (see figure 1).

Figure 1 – finding the destination folder for databases



The orange arrow (above) shows the location of the database files.

2) Copy the database and then Attach it.

Launch *SQL Server Management Studio* and connect to the new SQL Server instance.

Find where the database files should be put on the new server by employing the same technique as in Step 1.

Manually copy the two database files into the folder, making sure nobody is using the database on your network before you do so. You may be prevented from copying the files – if so you can stop the *SQL Server* service temporarily (right mouse click on the *SQL Server* instance on the root of *Object Explorer* in *SQL Server Management Studio* and from the menu select **Stop**. To restart the service, select **Start**.

Now you need to attach the new database.

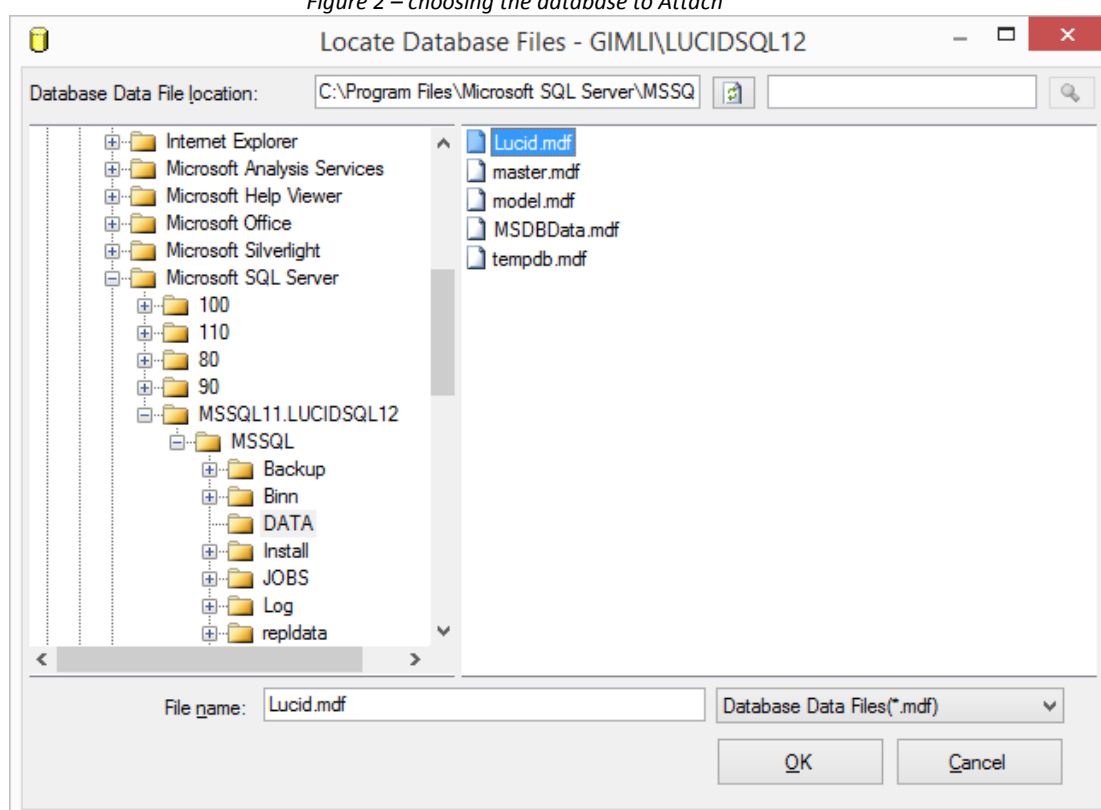
Run *Management Studio* and right mouse click over the *Databases* node.

Select **Attach**.

Select **Add** and choose the mdf file you need, in this example it is *Lucid.mdf* * (see Figure 2).

Select **OK**.

Figure 2 – choosing the database to Attach



* Check which file you need by referring to Appendix 1.

3. Recreate the Lucid Account and Login using a script.

A script is provided to recreate both the Account and Login used by the Lucid software. The script also adds permissions to the database.

The script is shown in full in Appendix 2 at the end of this document.

You can also download it from a web-link below:

www.lucid-research.com/downloads/misc/Lucid_SQL_Account_Rebuilder_Scripts.zip

Only copy the script that services your product or range of products - there are 5 scripts all lumped together but separated by comments.

To run the script, choose *New Query* in *SQL Server Management Studio*.

Paste the script into the window on the right of the screen.

Choose *Execute* from the toolbar.

That's it.

4. Recreate the connection string file used by the Lucid software.

The connection string is an encrypted file which tells the software where the database is and the credentials it needs to attach to it.

Below is an example of a connection string used in SQL Server:

```
Driver={SQL Server Native Client  
10.0};Server=SCH03SERVER\MyInstance;Database=SCH00LDATA;Uid=SchoolUser;Pwd=x6Mx37UaQ;
```

In Lucid's networked products, the connection string is stored encrypted in a small text file called either

server_config_2.dat or
server_configuration.dat,

depending on how old your software is.

Find this file, which is in the folder \Data\ off the application folder, for example:

C:\Program Files\LucidResearch\LASS 11-15 Network\Data

Delete this file – if both files are there delete them both.

Now run the Admin module of the Lucid product; it will detect that the connection string file is missing and will launch the tool which prompts you to recreate it.

See Appendix 3 for more help with using the database tool:

APPENDIX 1

Names of database files used by different Lucid Products

Title	Filenames
LASS 8-11, LASS 11-15, Lucid Rapid, Lucid CoPS and Lucid Ability	Lucid.mdf Lucid_log.ldf
LADS and LADS Plus	LADS.mdf LADS_log.ldf
Lucid Exact	EXACT.mdf EXACT_log.ldf
Comprehension Booster (formerly Reading Booster)	reading_booster.mdf reading_booster_log.ldf
Memory Booster	memory_booster.mdf memory_booster_log.ldf

Note: SQL databases are two parts, with the main file (.mdf) and the transaction log file (.ldf). These must always be together in the same folder.

APPENDIX 2

Scripts to rebuild Lucid product's Account and Login after you've attached the migrated database. Only execute the script you need for your Lucid product, which are number 1 to 5 on the pages which follow.

```

/***** This document contains several separate SQL scripts which should be run in SQL Server Management Studio as a 'New
Query'. *****/
/***** The scripts perform actions on databases used by Lucid products, such as rebuilding a Login which has been manually
deleted *****/
/***** as part of a database migration (in other words, moving a database to a different SQL Server). To use the script copy
the lines *****/
/***** between the comments (like this line) and paste them into a 'New Query' window in SQL Server Management Studio.
*****/
/***** Then click on '!Execute' to run the query.
*****/
/***** If the query is successful you will the line 'Command(s) completed successfully.' in the log below the query window.
*****/
/***** If you see any lines in red they will be errors and the query will not have been completed successfully
*****/
/***** IMPORTANT! Please change the PASSWORD entry between the single quotes (e.g. PASSWORD=N'xxxxx') if you are
not using the **/
/***** default password shown within the scripts *****/

```

```

/***** Script 1 for LUCID database only
*****/
/***** This script can be used for all these Lucid networked products: *****/
/***** Lucid CoPS, Lucid Rapid, LASS 8-11 (or LASS Junior), LASS 11-15 (or LASS Secondary). *****/
*****/

```

```
use [lucid]
```

```
DROP LOGIN [LucidUser]
```

```
GO
```

```
CREATE LOGIN [LucidUser] WITH PASSWORD=N'ZX_123_abZ', DEFAULT_DATABASE=[Lucid], DEFAULT_LANGUAGE=[British],
CHECK_EXPIRATION=OFF, CHECK_POLICY=ON
GO
```

```
ALTER USER [LucidUser] WITH LOGIN=LucidUser
```

```
GO
```

```
EXEC sp_addrolemember N'db_owner', N'LucidUser'
```

```
GO
```

```
EXEC sp_addrolemember N'db_datareader', N'LucidUser'
```

```
GO
```

```
EXEC sp_addrolemember N'db_datawriter', N'LucidUser'
```

```
GO
```

```
/***** Script 2 for LADS database only
*****/
/***** This script can be used for both LADS and LADS Plus
*****/
/*****
*****/
```

```
USE [LADS]
```

```
DROP LOGIN [LADSUser]
```

```
GO
```

```
CREATE LOGIN [LADSUser] WITH PASSWORD=N'ZX_123_abZ', DEFAULT_DATABASE=[LADS], DEFAULT_LANGUAGE=[British],
CHECK_EXPIRATION=OFF, CHECK_POLICY=ON
GO
```

```
ALTER USER [LADSUser] WITH LOGIN=LADSUser
GO
EXEC sp_addrolemember N'db_owner', N'LADSUser'
GO
EXEC sp_addrolemember N'db_datareader', N'LADSUser'
GO
EXEC sp_addrolemember N'db_datawriter', N'LADSUser'
GO
```

```
/***** Script 3 for EXACT database only *****/
/***** This script can be used with Lucid Exact *****/
/*****
*****/
```

```
USE [EXACT]
```

```
DROP LOGIN [ExactUser]
```

```
GO
```

```
CREATE LOGIN [ExactUser] WITH PASSWORD=N'ZX_123_abZ', DEFAULT_DATABASE=[Exact], DEFAULT_LANGUAGE=[British],
CHECK_EXPIRATION=OFF, CHECK_POLICY=ON
GO
```

```
ALTER USER [ExactUser] WITH LOGIN=ExactUser
GO
EXEC sp_addrolemember N'db_owner', N'ExactUser'
GO
EXEC sp_addrolemember N'db_datareader', N'ExactUser'
GO
EXEC sp_addrolemember N'db_datawriter', N'ExactUser'
GO
```

```
/***** Script 4 for Comprehension Booster *****/
/***** This script can be used with Comprehension Booster *****/
/******/
```

```
USE [reading_booster]
```

```
DROP LOGIN [reading_booster_user]
```

```
GO
```

```
CREATE LOGIN [reading_booster_user] WITH PASSWORD=N'ZX_123_abZ', DEFAULT_DATABASE=[reading_booster],
DEFAULT_LANGUAGE=[British], CHECK_EXPIRATION=OFF, CHECK_POLICY=ON
GO
```

```
ALTER USER [reading_booster_user] WITH LOGIN=reading_booster_user
```

```
GO
```

```
EXEC sp_addrolemember N'db_owner', N'reading_booster_user'
```

```
GO
```

```
EXEC sp_addrolemember N'db_datareader', N'reading_booster_user'
```

```
GO
```

```
EXEC sp_addrolemember N'db_datawriter', N'reading_booster_user'
```

```
GO
```

```
/***** Script 5 for Memory Booster, whose database is called memory_booster *****/
/***** This script can be used with Memory Booster *****/
/******/
```

```
USE [memory_booster]
```

```
DROP LOGIN [MemoryBoosterUser]
```

```
GO
```

```
CREATE LOGIN [MemoryBoosterUser] WITH PASSWORD=N'ZX_123_abZ', DEFAULT_DATABASE=[memory_booster],
DEFAULT_LANGUAGE=[British], CHECK_EXPIRATION=OFF, CHECK_POLICY=ON
GO
```

```
ALTER USER [MemoryBoosterUser] WITH LOGIN=MemoryBoosterUser
```

```
GO
```

```
EXEC sp_addrolemember N'db_owner', N'MemoryBoosterUser'
```

```
GO
```

```
EXEC sp_addrolemember N'db_datareader', N'MemoryBoosterUser'
```

```
GO
```

```
EXEC sp_addrolemember N'db_datawriter', N'MemoryBoosterUser'
```

```
GO
```

```
/***** END OF SCRIPTS *****/
```


APPENDIX 3

Using the Database Installer Tool to recreate the connection string file

Begin by launching the tool which can be found in the \Data\ folder off the application folder.

Lucid.Applications.DatabaseInstaller.exe

After launching this exe file you will see the selections panel below.

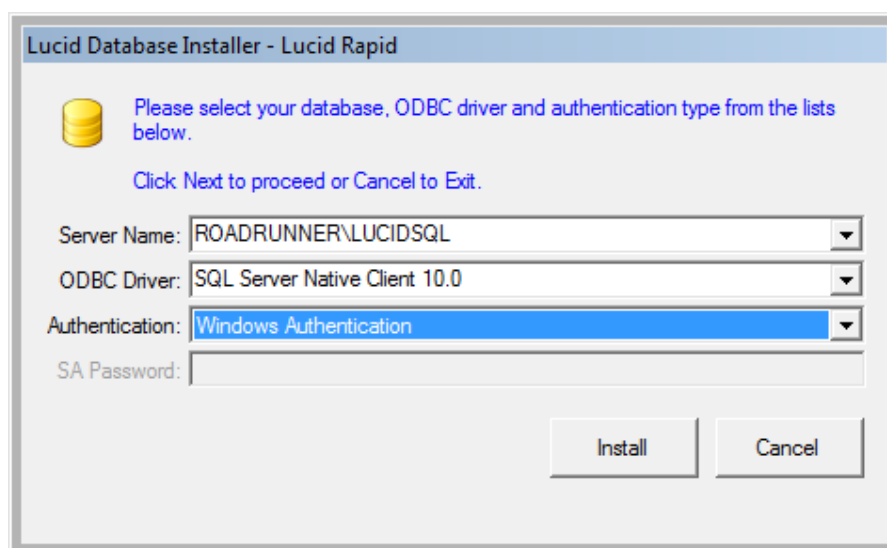
You need to choose the SQL Server Name (including instance name after the backslash if appropriate) and the ODBC driver.

If using SQL Server 2005 choose the driver: *SQL Native Client*

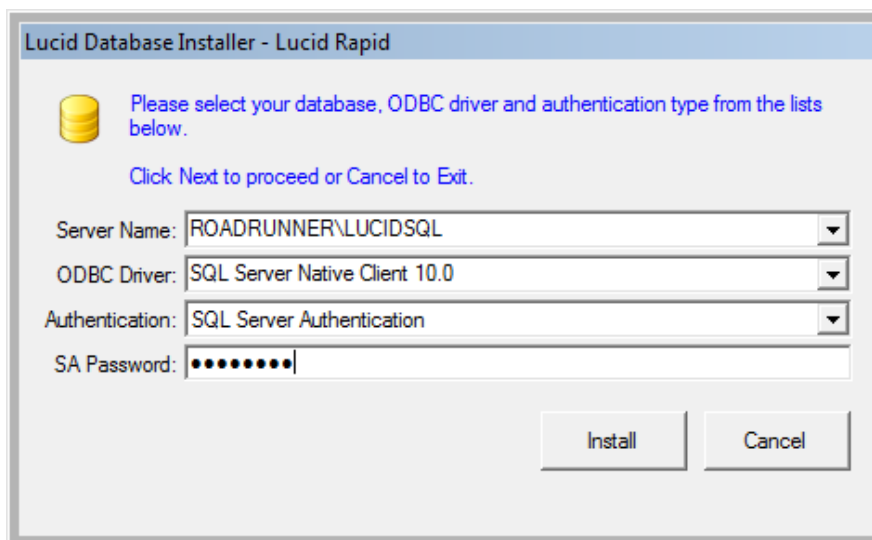
If using SQL Server 2008 choose the driver: *SQL Server Native Client 10.0*

If using SQL Server 2012 choose the driver: *SQL Server Native Client 11.0*

If you wish to use Windows Authentication for SQL Server, choose that option and then click on **Install**.



If you wish to use SQL Server (Mixed Mode) Authentication you need to enter the 'sa' administrator account password. Then click **Install** to proceed.



Lucid Database Installer - Lucid Rapid

Please select your database, ODBC driver and authentication type from the lists below.

Click Next to proceed or Cancel to Exit.

Server Name: ROADRUNNER\LUCIDSQL

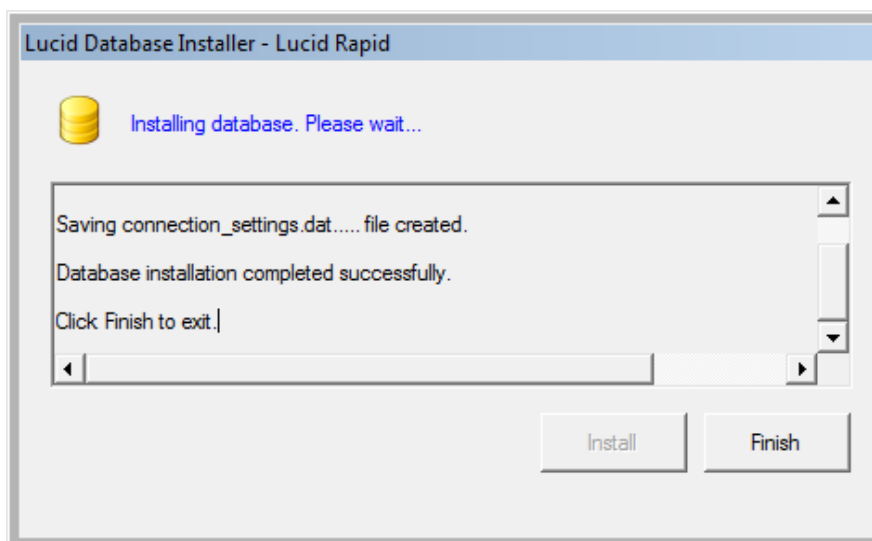
ODBC Driver: SQL Server Native Client 10.0

Authentication: SQL Server Authentication

SA Password: [masked]

Install Cancel

Any feedback (or possible errors) during installation will be shown in the scrollable text window. If the database has been installed already, the tool will detect this and leave it alone, simply creating the connection string file if necessary. Click **Finish** to exit the tool.



Lucid Database Installer - Lucid Rapid

Installing database. Please wait...

Saving connection_settings.dat.... file created.
Database installation completed successfully.
Click Finish to exit.

Install Finish



If you think you may have incorrectly configured the *Database Installer Tool*, for instance, you get long error messages when running the Lucid software, you can start again by manually deleting the file **server_configuration.dat** in the folder called `\Data` off the application folder. This file contains an encrypted connection string used by the software to connect to the Lucid database. Then run your Lucid application again and this will launch the database tool again.