

# **Amlib Client Installation Guide**

## **Version 5.3**

**Last Updated: 4 July 2013**

Only for customers installing the Amlib client and setting up a Microsoft SQL Server 2008 R2 or Oracle database. These instructions may also be used for migrating the Amlib client and/or databases to a new server.

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# Amlib Client Installation Guide

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## Support:

Australia: 1300 260 795 (Local call cost in Australia)

### Email:

[support-amlib@oclc.org](mailto:support-amlib@oclc.org)

### Amlib Help Desk (TOPDesk):

<https://servicedesk.oclc.org/tas/public/>

### OCLC Amlib Document Portal:

<https://www.oclc.org/support/services/amlib.en.html>

## Sales:

Australia: 1300 260 795 (Local call cost in Australia)

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[www.oclc.org/en-AU/](http://www.oclc.org/en-AU/)

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## WELCOME

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Welcome to the *Amlib Client 5.3* Installation Guide.

Details on installing other optional components (such as *NetOpacs*, *ZServer* and *DIY Self Issues*) are available in separate module specific Installation Guides.

## OVERVIEW

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The installation of the *Amlib* client involves the following steps:

1. Install the *Amlib Client 5.3* application
2. Install the database server:
  - a. *MS SQL Server 2008 R2*
  - b. *Oracle*
3. Create and configure *Amlib* databases
4. Configure the *Amlib* database connection settings
5. Install *Amlib Client 5.3.x* patches (see separate documentation)

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## BEFORE YOU BEGIN THE INSTALLATION...

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### Read the Installation Notes First

Please carefully read the entire installation guide prior to commencing the actual *Amlib* installation.

If you have any questions please contact: [support-amlib@oclc.org](mailto:support-amlib@oclc.org).

This installation process is for NEW installations only. This documentation should not be used for upgrades. Follow the instructions precisely. If you have any difficulties, please call *OCLC (UK) Ltd* immediately.

### If You Use Gupta (Centura) SQLBase with Amlib (Existing Server Migrations Only)

- *Amlib Client 5.3* **does not** support *Gupta SQLBase*
- You will need to migrate your database software to *SQL Server* (see separate guide)
- For additional information on migrating to *SQL Server*, please contact *Amlib Support*

### Serial Numbers Required for Installation of Amlib Modules

The *Amlib Client 5.3* installation requires a serial number. If you did not receive a serial key for the modules that your library has purchased you should [contact OCLC \(UK\) Limited](#) before commencing the installation.

## Frequently Asked Questions

### Question: How much space do I need to have on my server?

- This will vary from library to library, depending on the number of bibliographic records to be held in the database. Generally libraries should ensure they have at least 5 Gb free space on their database server

### Question: Do I need to have a completed backup of my system before proceeding? (Server Migrations Only)

- Yes. *OCLC (UK) Ltd* recommends that the library verify that it has an up-to-date backup of its database (for example: from the previous night) before installing any updates. You should also make sure that your tape backup includes a backup of your *Amlib* client folder (for example: **C:\Amlib**).

### Question: Do all users need to be logged out of *Amlib*? (Server Migrations Only)

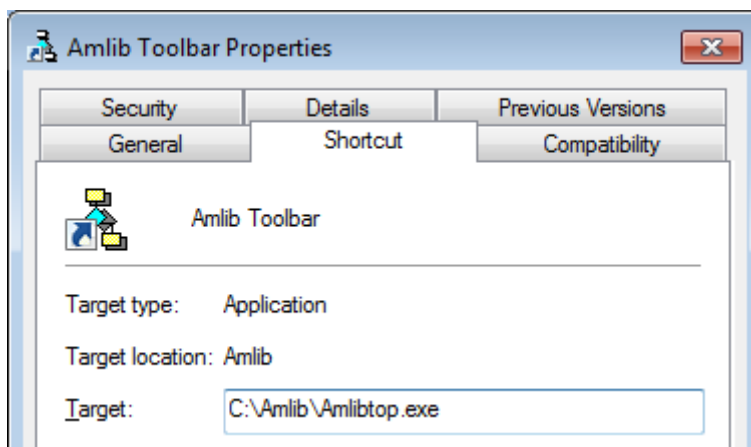
- Yes. All users should be completely logged out from all *Amlib* client modules
- Libraries using the *NetOpacs* module should ensure that this program is also shutdown

### Question: Can OCLC (UK) Ltd install *Amlib* for me?

- Yes. *OCLC (UK) Ltd* can arrange for the onsite installation for a small fee

### Question: How do I know whether *Amlib* is loaded from my local PC? (Server Migrations Only)

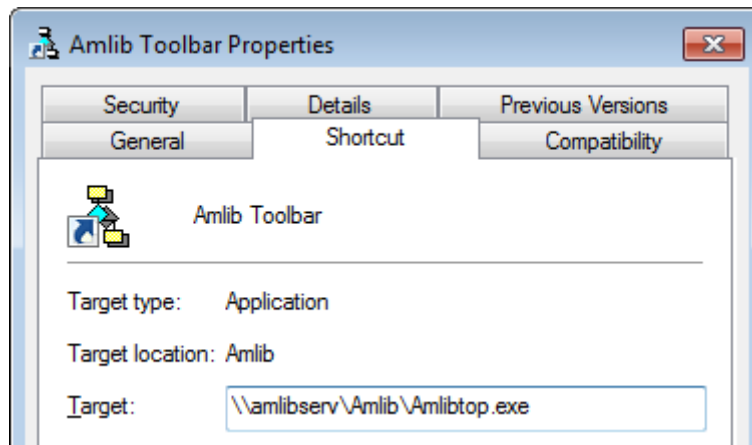
1. Right-click on the *Amlib* icon on your desktop and select **Properties** – the Amlib Toolbar Properties window will display
2. The Target field will show you where your *Amlib* is installed:
  - a. If it has something like **C:\Amlib** (or **D:\Amlib**, **E:\Amlib** depending on the hard drives in your computer) then it is installed locally



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- b. If it starts with two back slashes (\\) and then a name or IP address, it is installed on a server:



3. If you are having trouble identifying where *Amlib* is installed please contact your IT Department or **Amlib Support** for assistance



## AMLIB RDBMS DATABASE STRUCTURE

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### Database Structure for Microsoft SQL Server (MSSQL)

Within any one *Amlib* installation there is the facility to configure up to five (5) separate database areas, which include:

1. Circulation Database (**LIB** suffix): Item, borrower and circulation data
2. Catalogue Database (**CAT** suffix): Catalogue and authority data
3. Parameter Database (**LOCAL** suffix): System parameters (for example: loan settings)
4. Statistics Database (**STATS** suffix): Statistics
5. Web Database (**WEB** suffix): Web results

*Amlib* then uses a two-character prefix to designate whether the database is a **Live**, **Test** or other (user-defined) database – for example:

- **AM** (**Live** database prefix)
- **TE** (**Test** database prefix)

Therefore the databases required for the **Live** and **Test** environments using *MSSQL* would be:

#### Live Environment Databases

- **AMCAT**
- **AMLIB**
- **AMLOCAL**
- **AMSTATS**
- **AMWEB**

#### Test Environment Databases

- **TECAT**
- **TELIB**
- **TELOCAL**
- **TESTATS**
- **TEWEB**

**Please Note:** Many existing *Amlib* customers (installed prior to *version 5.x*) have a database structure that consists of four (4) database areas (**AMCAT**, **AMLIB**, **AMLOCAL** and **AMSTATS**), with the data for the **AMWEB** database contained within the **AMCAT** database.

### Database Setup for Oracle

Most libraries where *Amlib* is running on *Oracle* choose to create only one (1) database area with the five (5) databases that normally comprise the **Live** or **Test** environment consolidated into a single “instance”. This is done to reduce the administration and performance overheads by reducing the number of “instances” from 10 (5 for **Live** and 5 for **Test**) to just 2.

So the standard **Live** and **Test** database “instances” created for *Oracle* are:

#### Live Environment Instance

- **AMLIB**

#### Test Environment Instance

- **TELIB**

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## AMLIB SUPPORTED OPERATING SYSTEMS & SYSTEM REQUIREMENTS

### Database Server

<b>Operating System</b>	<ul style="list-style-type: none"><li>• <i>Windows 2000, 2003, 2008</i></li><li>• <i>Linux (and Unix)</i></li></ul>
<b>RDBMS</b>	<ul style="list-style-type: none"><li>• <i>Microsoft SQL Server 2000, 2005, 2008 R2</i></li><li>• <i>Oracle 9i, 10g</i></li></ul>
<b>Memory (RAM)</b>	<ul style="list-style-type: none"><li>• Depends on operating system, volume &amp; RDBMS selected</li><li>• Minimum 2GB RAM for <i>SQL Server</i></li><li>• Minimum 2GB RAM for <i>Oracle</i></li></ul>
<b>Hard Disk</b>	<ul style="list-style-type: none"><li>• Depends on volume. Using multiple Fast SCSI-3 Disk Drives (for example: more SCSI drives provides better performance)</li></ul>
<b>Backup</b>	<ul style="list-style-type: none"><li>• Removable backup device (for example: <b>4mm DAT Tape Drive</b>)</li></ul>

### NetOpacs (Web Opac) Application Web Server

<b>Operating System</b>	<ul style="list-style-type: none"><li>• <i>Windows 2000, 2003, 2008 with IIS pre-installed</i></li></ul>
<b>Memory (RAM)</b>	<ul style="list-style-type: none"><li>• Depends on operating system and volume</li><li>• Minimum 2GB RAM for Windows 2003/2008</li></ul>

**Please Note:** Although NetOpacs can operate on the same Amlib Database Server, it is recommended that medium to large libraries should implement a dedicated NetOpacs Server for maximum performance & security.

### PC Client (for Client Server Modules including Offline)

<b>Operating System</b>	<ul style="list-style-type: none"><li>• <i>Windows XP, 2000, Vista, Windows 7</i></li></ul>
<b>Memory (RAM)</b>	<ul style="list-style-type: none"><li>• Minimum 256 Mb for <i>Windows XP</i></li><li>• Minimum 256 Mb for <i>Windows 2000</i></li><li>• Minimum 1GB for <i>Windows 7</i></li><li>• Minimum 1GB for <i>Windows Vista</i></li></ul>
<b>Display</b>	<ul style="list-style-type: none"><li>• SVGA (800x600) minimum</li></ul>
<b>Web Browser</b>	<ul style="list-style-type: none"><li>• <i>Internet Explorer 7</i> and above (will also work with other JAVA enabled browsers)</li></ul>

- **Important Note:** the above requirements are provided as a general guideline only

## SECTION 1: AMLIB CLIENT INSTALLATION

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### Default Installation Folders

To assist with email support we highly recommend that the default installation folders suggested in the following notes are retained.

For example:

- *Amlib Client* software: **C:\Amlib** (or **D:\Amlib**, **E:\Amlib**)

### Step 1: Log All Users out of Amlib (Server Migrations Only)

- Ensure all users have logged out of the *Amlib* client
- Libraries using *NetOpacs* and *AmlibNet* will need to ensure that the *NetOpacs* and *AmlibNet* program has been shutdown on the web server(s)
- *OCLC (UK) Limited* recommends that the library verify that it has an up-to-date **backup** of its database (for example: from the previous night) before installing any updates

### Step 2: Install the Amlib 5.3 Client

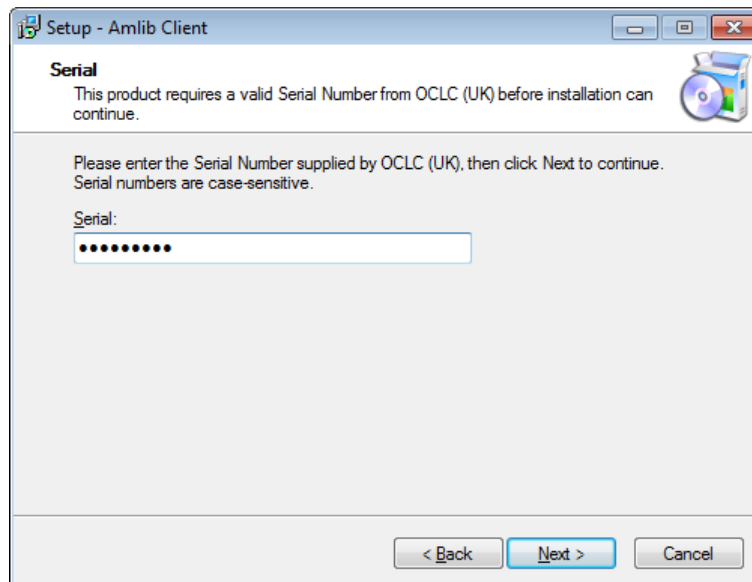
**IMPORTANT:** Please ensure that you have **full read/write** access to the **\Amlib** folder on your server (for example: **C:\Amlib**) and that you are logged in with Administrative Privileges.

1. The *Amlib Client 5.3* installer is available on the OCLC Website, under Setup Programs>Amlib Client:  
<https://www.oclc.org/support/services/amlib/downloads-software-updates/version5-3/setup-programs.en.html>  
(contact *Amlib* support if you require a login to this website)
2. Download the **Amlib53Setup.exe** and save it on your *Amlib* server
3. Double-click the **Amlib53Setup.exe** to launch the installation Wizard – the Setup – Amlib Client screen will open displaying the **Welcome** message:

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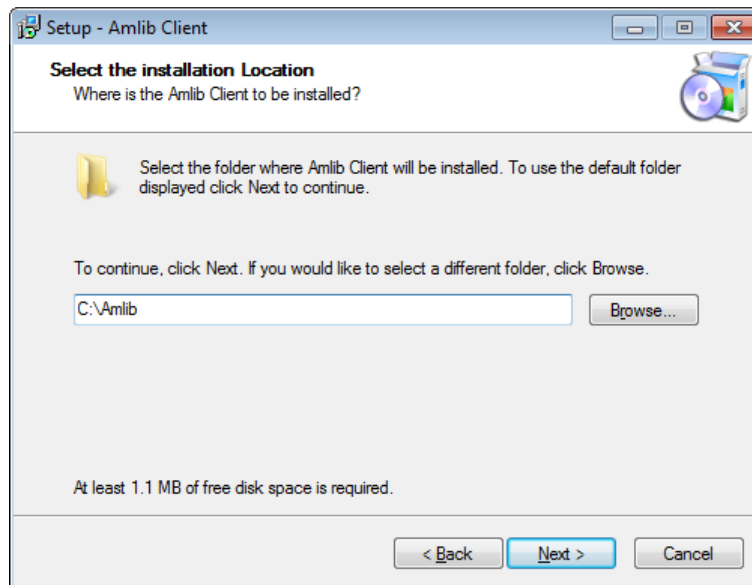
4. Click the **Next** button – the Serial screen will display, prompting you for valid Serial Number:



5. Enter the **Serial Key** supplied by *OCLC (UK) Ltd* (case sensitive!)
6. Click the **Next** button – the Installation Location screen will be displayed:

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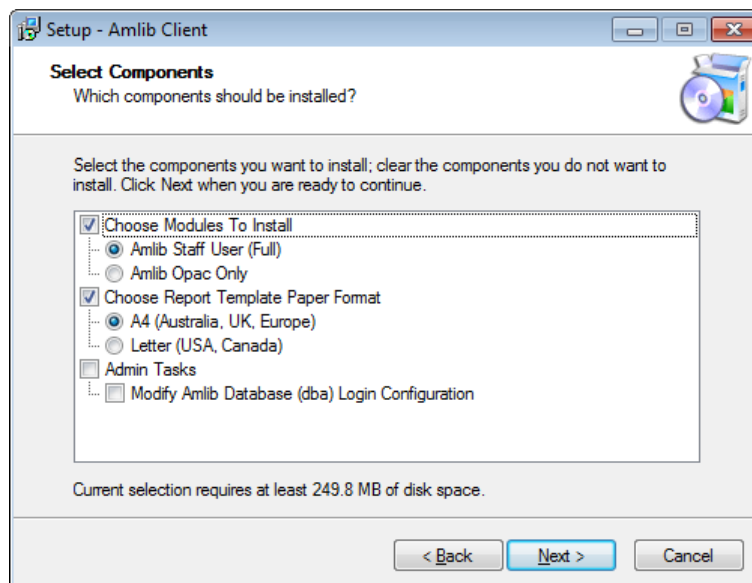
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7. Enter the drive/folder location where you would like to install the *Amlib Client* – we recommend that the *Amlib Client* be installed in **C:\Amlib** (or **D:\Amlib**, etc)

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8. Click the **Next** button – the Select Components window will display:



9. Choose which components should be installed:

a. Modules To Install:

- **Amlib Staff User (Full)** – installs *Amlib* Staff Client (catalogue, circulation, etc.)
- **Amlib Opac Only** – only installs the Amlib Client Server OPAC module (*only select this option if you installing on a Public Access workstation*)

b. Report Template Paper Format:

- **A4 (Australia, UK, Europe)** – installs the *Amlib* report templates formatted for A4 paper type
- **Letter (USA, Canada)** – Installs *Amlib* report templates formatted for Letter paper type

c. Admin Tasks:

- **Modify Amlib Database (dba) Login Configuration** – only select this option if you wish to change the hidden Database login and password to internally connect to the *Amlib* database(s)

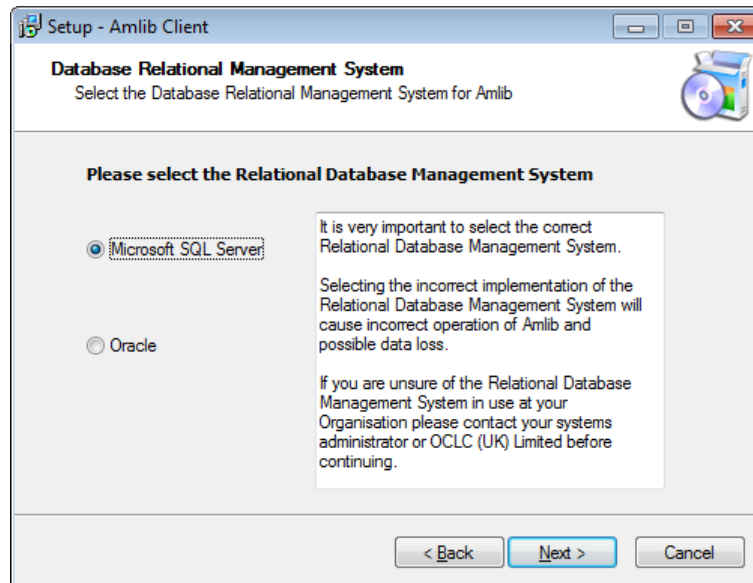
### Database Login and Password

When setting up the *Amlib* databases (**AMCAT**, **AMLIB**, **AMLOCAL**, **AMSTATS**, **AMWEB**, etc), the user can define a series of RDBMS logins which allows the *Amlib Client* (and other components such as the *NetOpacs*) to connect with the *Amlib* databases. The *Amlib Client 5.3* installer configures an (encrypted) default login and password of **SYSADM/SYSADM**.

10. Select options and click the **Next** button

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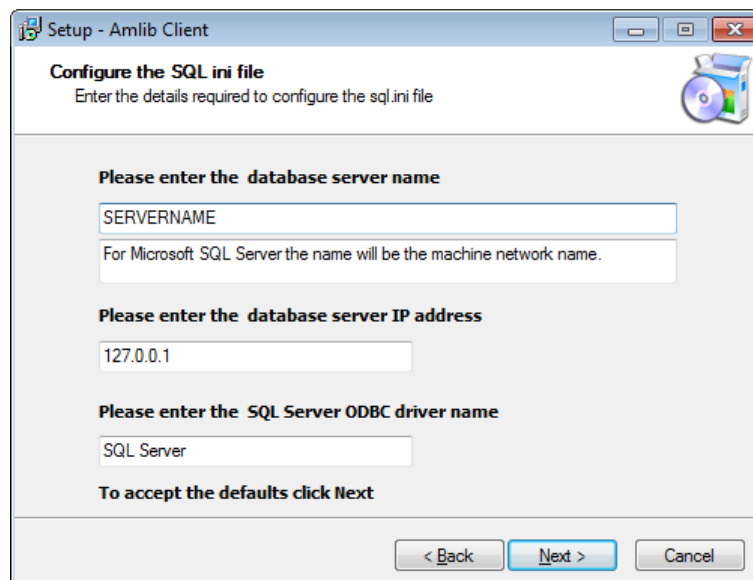
11. The Database Relation Management System (RDBMS) screen will display:



**Please Note:** *Gupta SQLBase* is not supported by *Amlib version 5.3*. Please contact *Amlib Support* if you are migrating a *Gupta SQLBase* database.

12. Please select the RDBMS you are using:

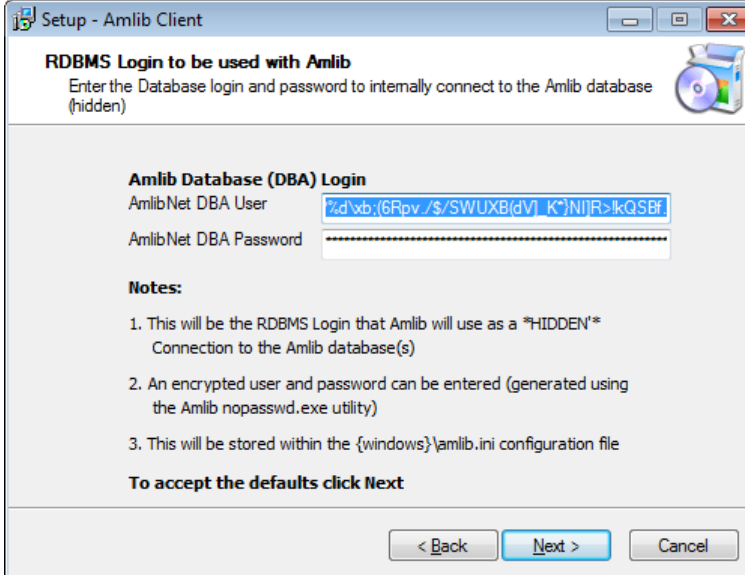
- a. If your library is using *Microsoft SQL Server* for *Amlib*:
  - i. Select the **Microsoft SQL Server** radio button
  - ii. Click the **Next** button – the Configure the SQL ini file screen will display prompting you for additional information:



(The **SQL.ini** file is configuration file containing the pathway information which allows the *Amlib Client* (and other components such as the *NetOpacs*) to connect with the *Amlib* databases)

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- Please enter the (SQL Server) database server name – default display is current local machine name (for example: **tardis**)
  - Please enter the database server IP address– default display is current local machine IP address (for example: **127.0.0.1** for localhost)
  - Please enter the SQL Server ODBC driver name – the driver name is normally **SQL Server** so there is no need to change this field
- iii. Enter options and click the **Next** button
- b. If your library is using *Oracle* for *Amlib*:
- i. Select the **Oracle** radio button
  - ii. Click the **Next** button
13. If you selected **Modify Amlib Database (dba) Login Configuration** at step 9 above, the RDBMS Login to be used with Amlib screen will display :



### Notes:

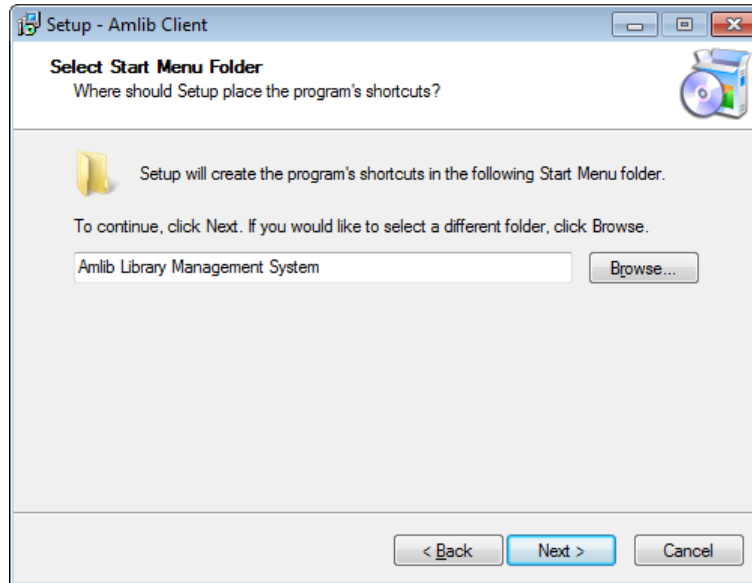
- This will be the RDBMS Login that *Amlib* will use as a \*HIDDEN\* Amlib Database (DBA) Login to connect the *Client* to the database
- An encrypted **User** and **Password** can be entered (generated using the *Amlib nopasswd.exe* utility – see [Appendix B: Generate Encrypted RDBMS Password](#))
- This will be stored within the **{windows}\amlib.ini** configuration file

14. To accept the defaults (for most customers), click the **Next** button



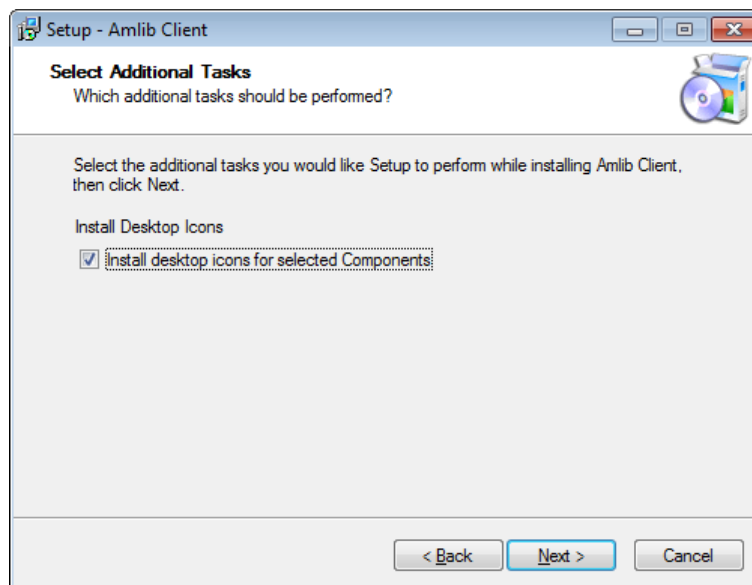
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15. The Select Start Menu Folder screen will display:



16. To accept the default name (for most customers), click the **Next** button

17. The Select Additional Tasks screen will display prompt if you wish to install a desktop icon for the *Amlib Client*:

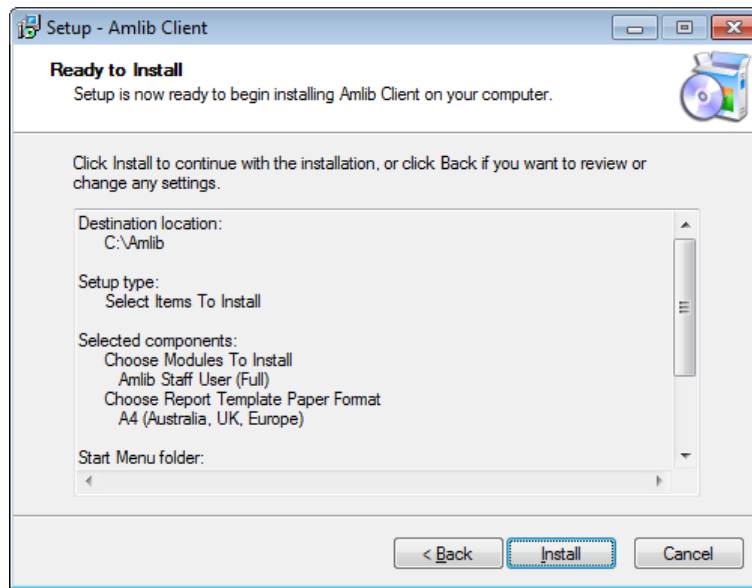


18. (You can unselect Install desktop icons for selected Components if you do not wish to install the *Amlib* icons on the desktop)

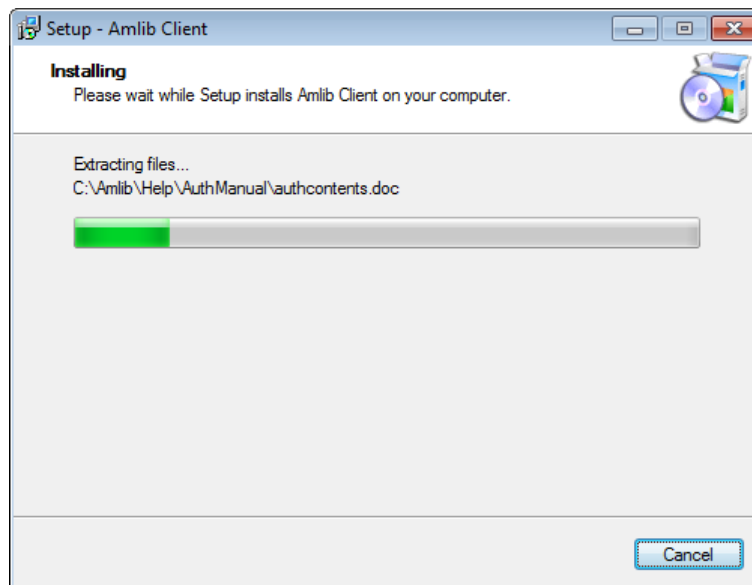
19. Click the **Next** button to continue

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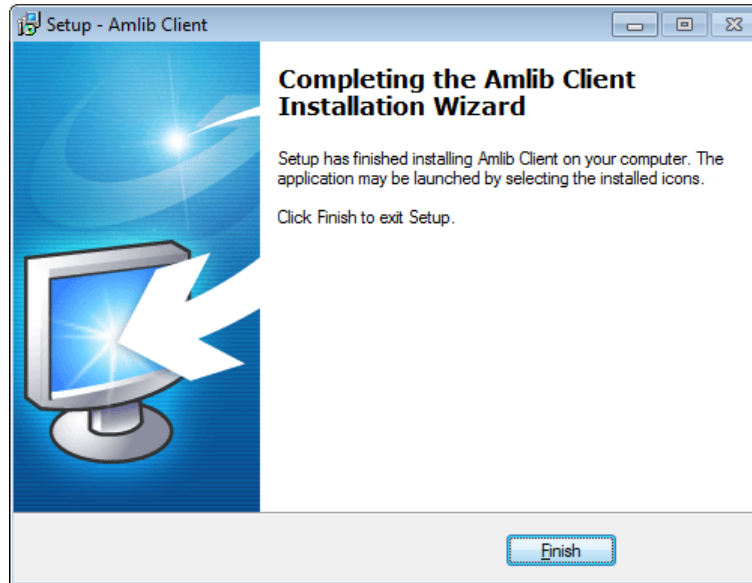
20. The Ready to Install screen will display with a summary of the installation tasks to be performed:



21. Click the **Install** button – the Installing screen will display:



22. When complete click the **Finish** button



23. The setup Wizard will close

Installation of the *Amlib Client 5.3* is now complete.

### Step 3: Icon Utility for Shared Amlib Folder Installation

If you decide to install the *Amlib* client in a shared folder on a central server for access by all client PCs (for example: **L:\Amlib**), each PC needs to have the **\Amlib** folder in the PATH environment (**autoexec.bat** for *Win 98* or Control Panel \ **System \ Environment** for *Win 2000/XP*), as well as having the required *Amlib* icons created.

The *Amlib iconsetup.exe* utility is provided to automate this task:

- **Drive:\Amlib\Utility\Icons\iconsetup.exe**

See separate instructions for **Iconsetup.exe** installation.

## SECTION 2: CREATION OF AMLIB DATABASES

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The next section will provide information of creation of the *Amlib* databases for:

- *Microsoft SQL Server*
- *Oracle 9i*

It is important only to refer to the section that relates to the RDBMS that you are using *Amlib* with.

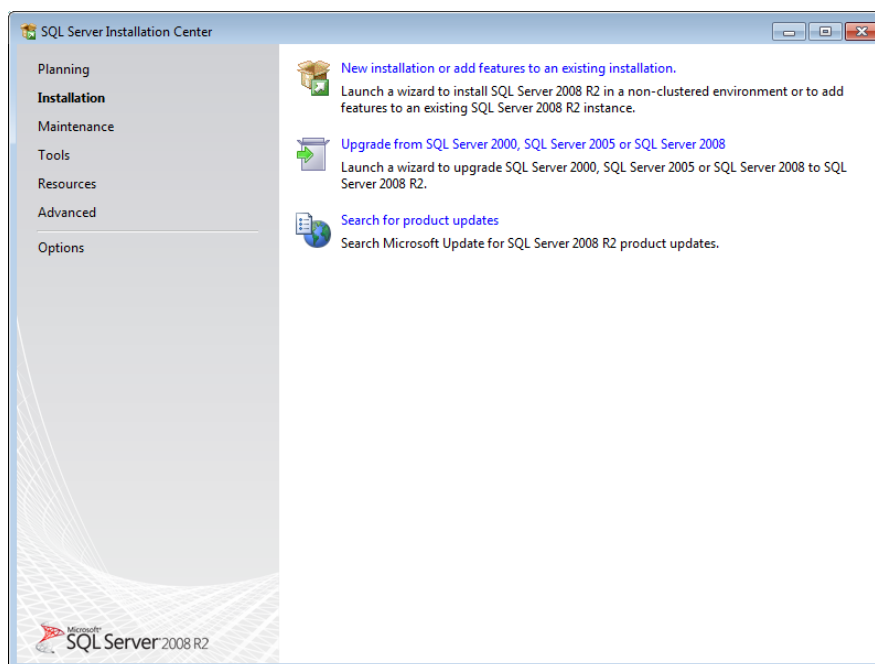
For example: if you are installing *Amlib* on *Microsoft SQL Server 2008 R2* then ignore the section referring to the creation of databases on *Oracle*).

## SECTION 2A: MICROSOFT SQL SERVER 2008 R2 RDBMS

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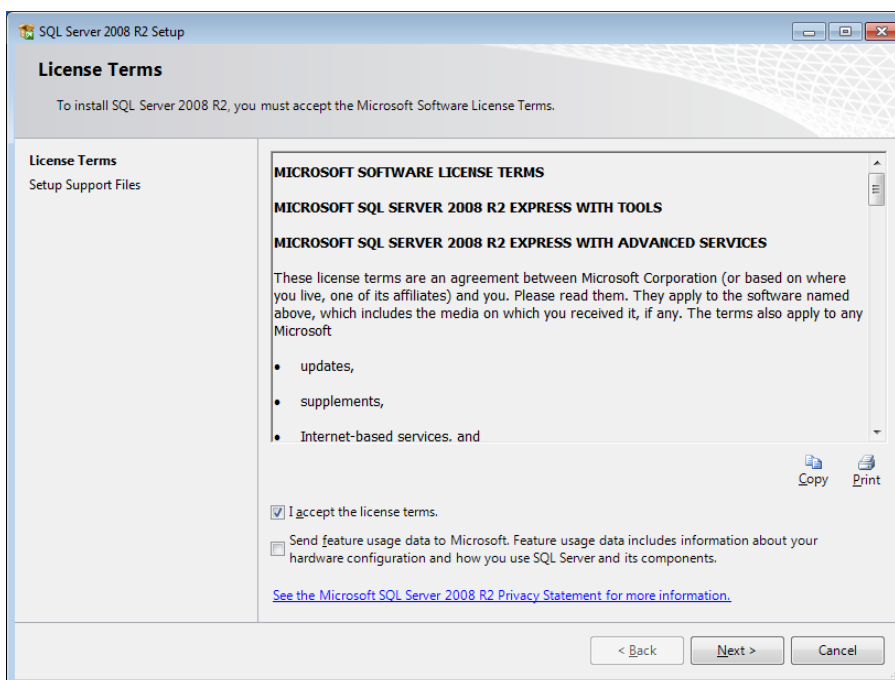
### Step 1: SQL Server 2008 Setup

1. Download the Express (R2) version of SQL Server 2008: **SQLSERVER\_080501-ENU-IA64-EXE** (32-bit server) or **SQLSERVER\_080501-ENU-IA64-EXE** (64-bit) from the *Microsoft Download Center*:
  - <http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=22973>
2. Double-click on the application to launch the installer:

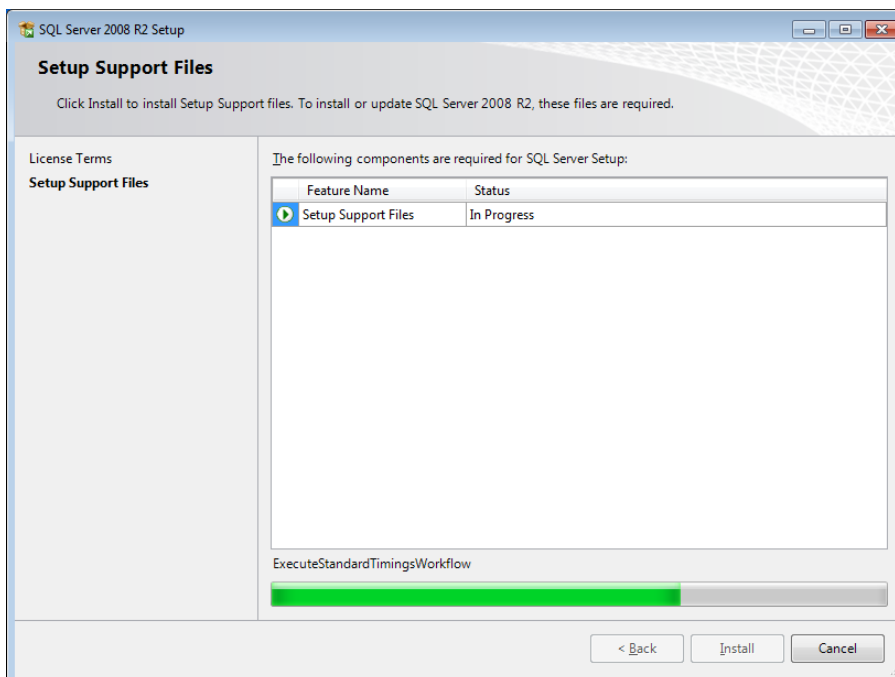


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3. Select the **New installation or add new features to an existing installation** link – the License Terms screen will display:

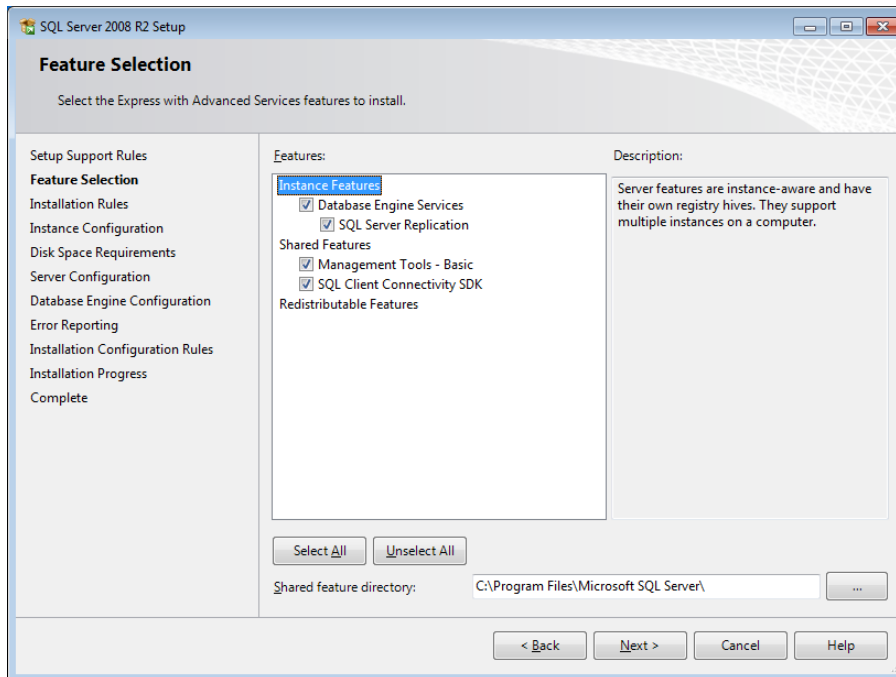


4. **Tick the I accept the license terms** box and click the **Next** button – the Support Files will be installed:

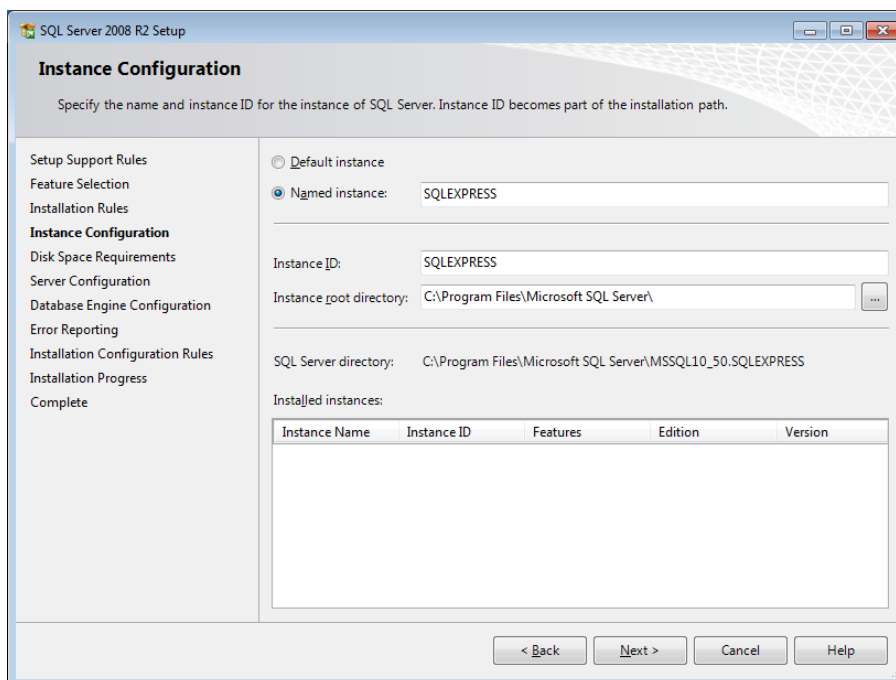


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- Once completed – the Feature Selection screen will display:



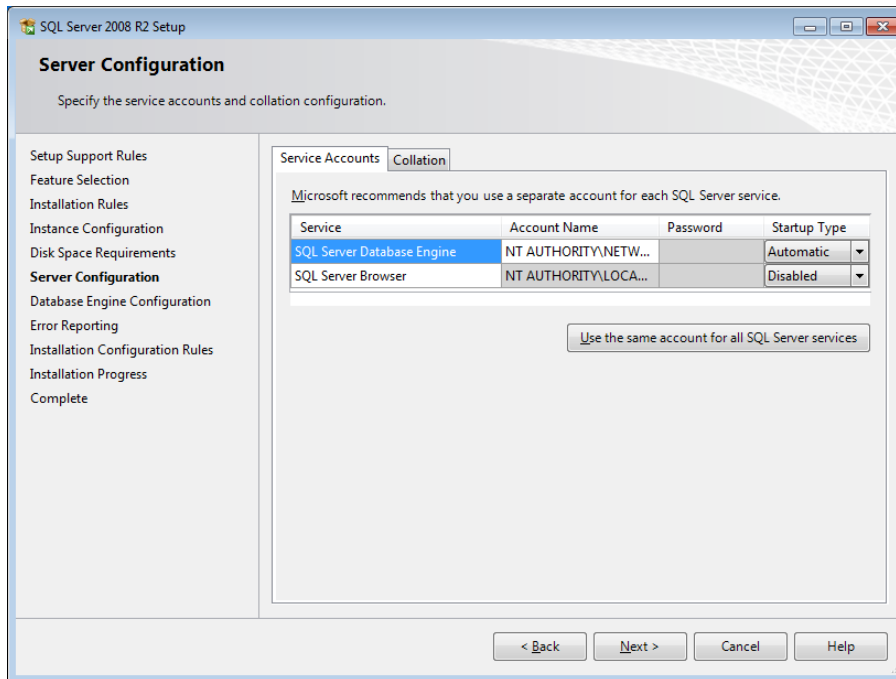
- Click the **Select All** button and then the **Next** button – the Instance Configuration screen will display:



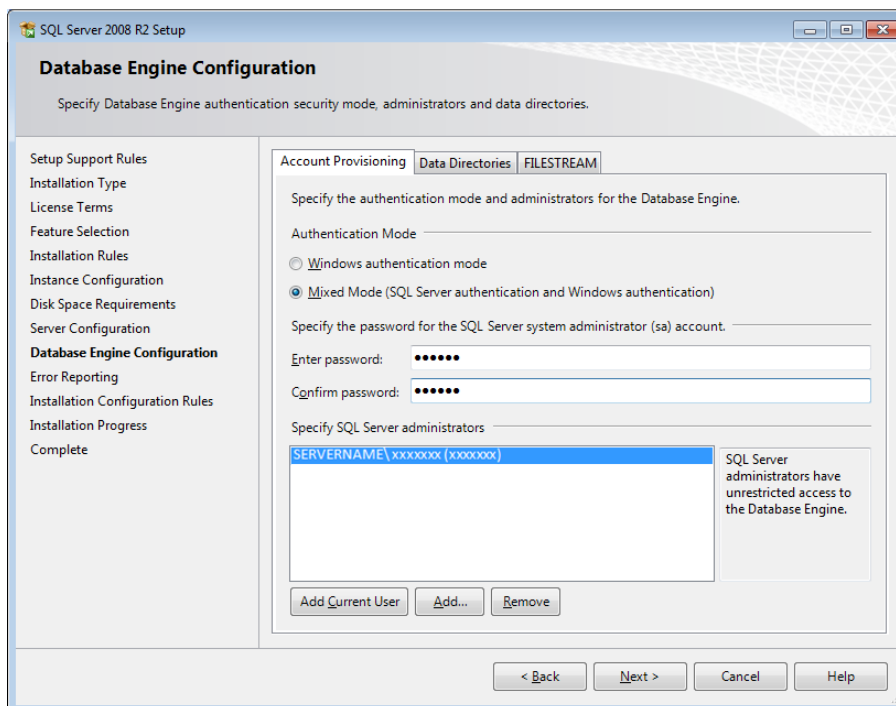
- Type in a Named instance or leave as default: **SQLEXPRESS** and click on the **Next** button

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8. The Server Configuration screen will display:



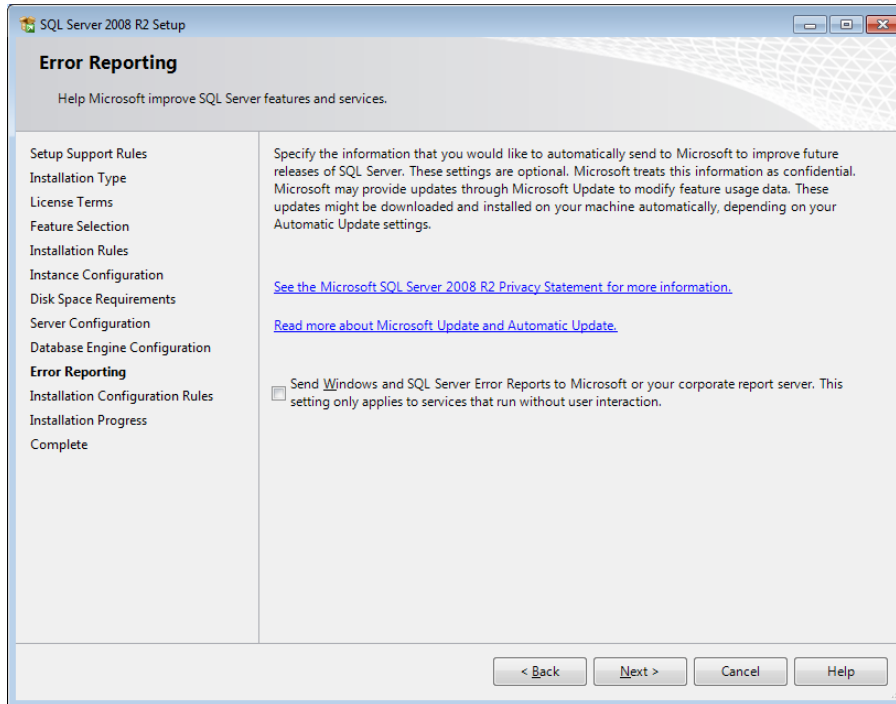
9. Click the **Next** button – the Database Engine Configuration screen will display:



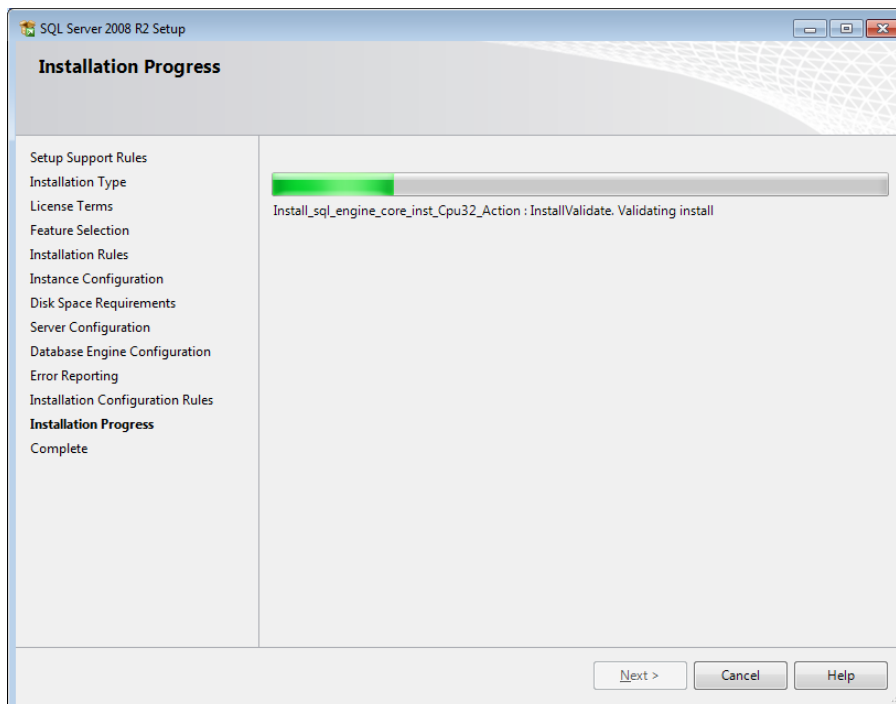
10. **IMPORTANT:** Ensure that the **Mixed Mode (SQL Server authentication and Windows authentication)** radio button is selected
11. Enter password and Confirm password – for example: **SYSADM/SYSADM**  
(Please ensure that you keep a record of this)
12. Click the **Next** button

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13. The Error Reporting screen will display:

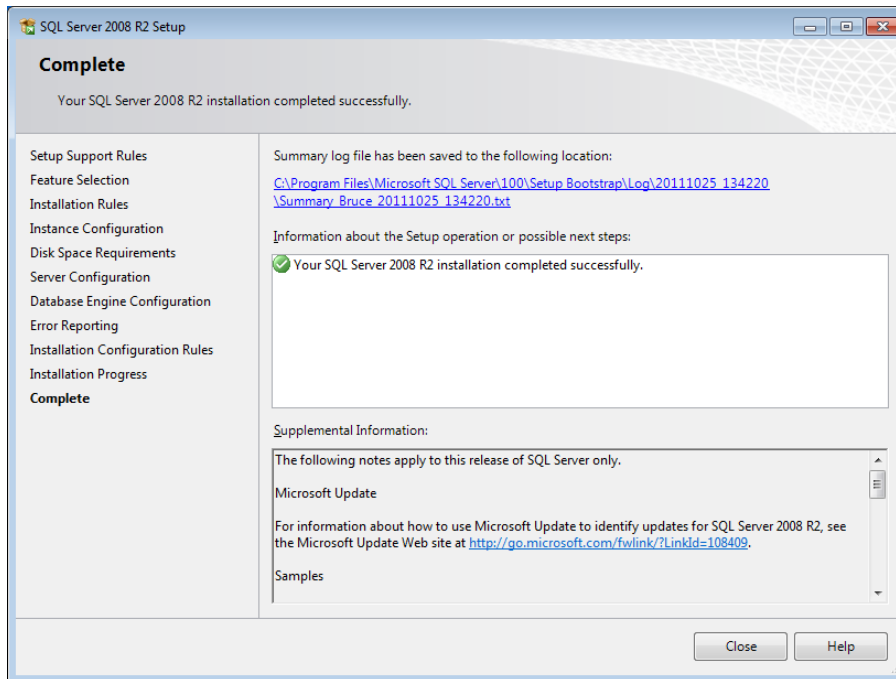


14. Click the **Next** button – the SQL server will begin installing:





15. Once completed, the following screen will display:



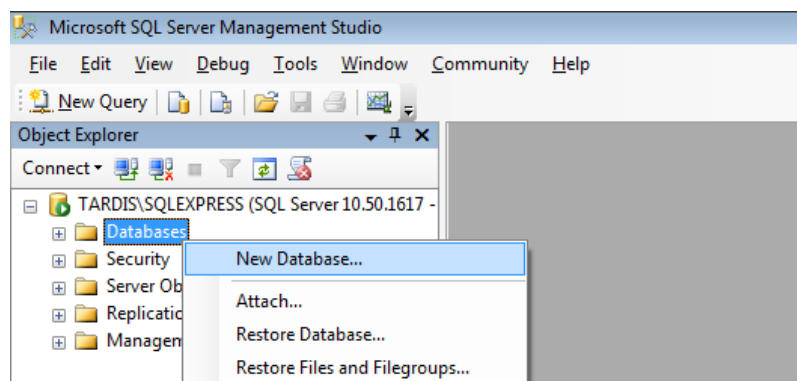
16. Click on the **Close** button

The installation of the *SQL Server 2008 R2* is now complete.

## Step 2: Create the Live Amlib Databases

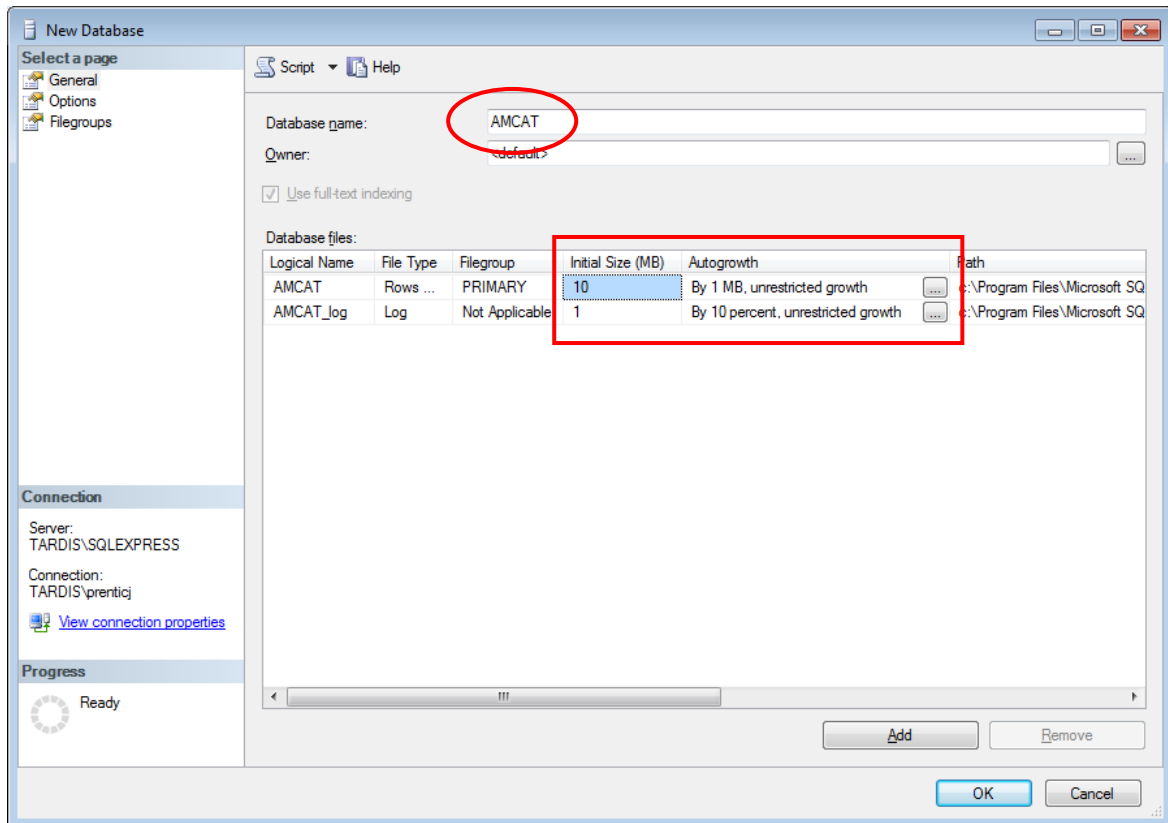
The following notes will assist with the creation of the Live *Amlib* databases in *Microsoft SQL Server 2008 R2*.

1. Launch the *SQL Server Management Studio* (**Start > All Programs > Microsoft SQL Server 2008 R2**)
2. Right-click on the **Databases** folder in the sidebar and select **New Database...**



# Amlib Client Installation Guide

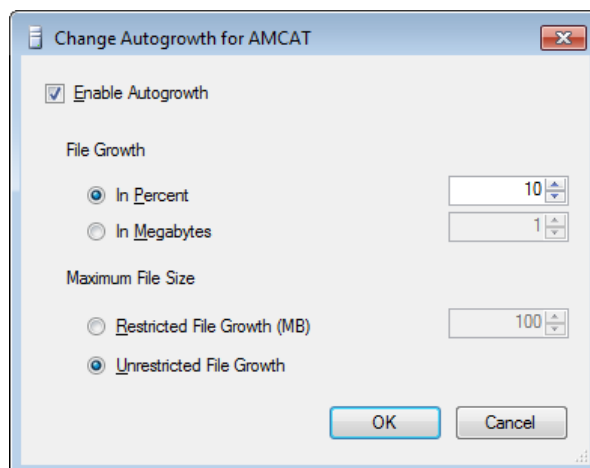
3. The New Database screen will display:



4. Type in the first Database name – for example: **AMCAT**

5. In the Database files section, **AMCAT** row:

- In the Initial Size (MB) column, adjust the initial size from **3** (Mb) to **10** (Mb)
- In the Autogrowth column, click the ... button for the **AMCAT** row – the Change Autogrowth for AMCAT screen will display:



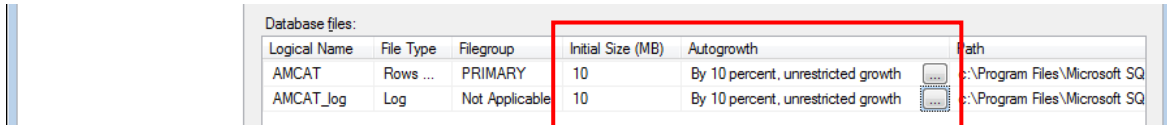
c. Ensure that:

- File Growth = **10 (In Percent)**
- Maximum File Size = **Unrestricted File Growth**

d. Click the **OK** button

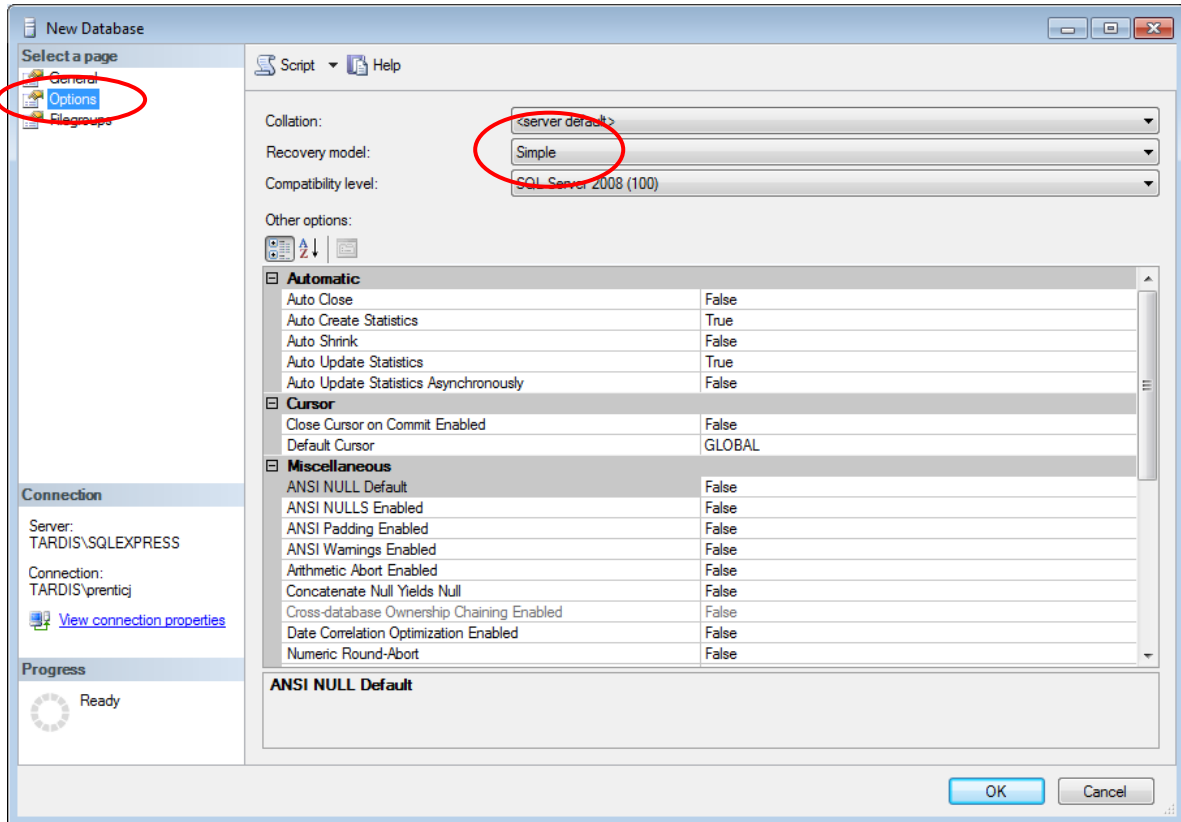
# Amlib Client Installation Guide

6. Repeat step 5 for the **AMCAT\_log** row in the Database files section

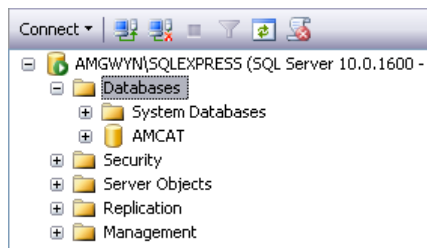


Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth	Path
AMCAT	Rows ...	PRIMARY	10	By 10 percent, unrestricted growth	c:\Program Files\Microsoft SQ
AMCAT_log	Log	Not Applicable	10	By 10 percent, unrestricted growth	c:\Program Files\Microsoft SQ

7. In the sidebar, select the **Options** page, ensure the Recovery model drop-down is set to **Simple** and then click the **OK** button when complete:

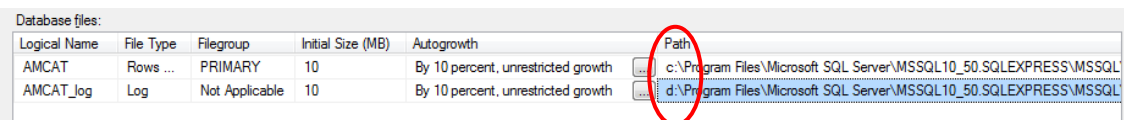


8. If you expand the **Databases** folder you should see your new database listed there:



9. Repeat steps 1 - 7 for your other databases: **AMLIB**, **AMLOCAL**, **AMSTATS** and **AMWEB** (where applicable)

**ADVANCED HINT:** The speed of the writing of files can be increased by splitting the db and log files across separate drives (unnecessary in a RAID setup).



Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth	Path
AMCAT	Rows ...	PRIMARY	10	By 10 percent, unrestricted growth	c:\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS\MSSQL
AMCAT_log	Log	Not Applicable	10	By 10 percent, unrestricted growth	d:\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS\MSSQL

## Step 3: Create the Test Amlib Databases

*Amlib* provides the facility for customers to have a separate **Test** database area for *Amlib* – which is ideal for sites to use in-house for training of new staff without affecting the **Live** database, or to load (and test) new software releases before applying to the production (**Live**) database.

To create a **Test** database for *Amlib* follow above steps **except** for the following changes:

- Database names should be **TECAT, TELIB, TELOCAL, TESTATS** and **TEWEB** (where applicable)

## Step 4: Load Amlib Databases

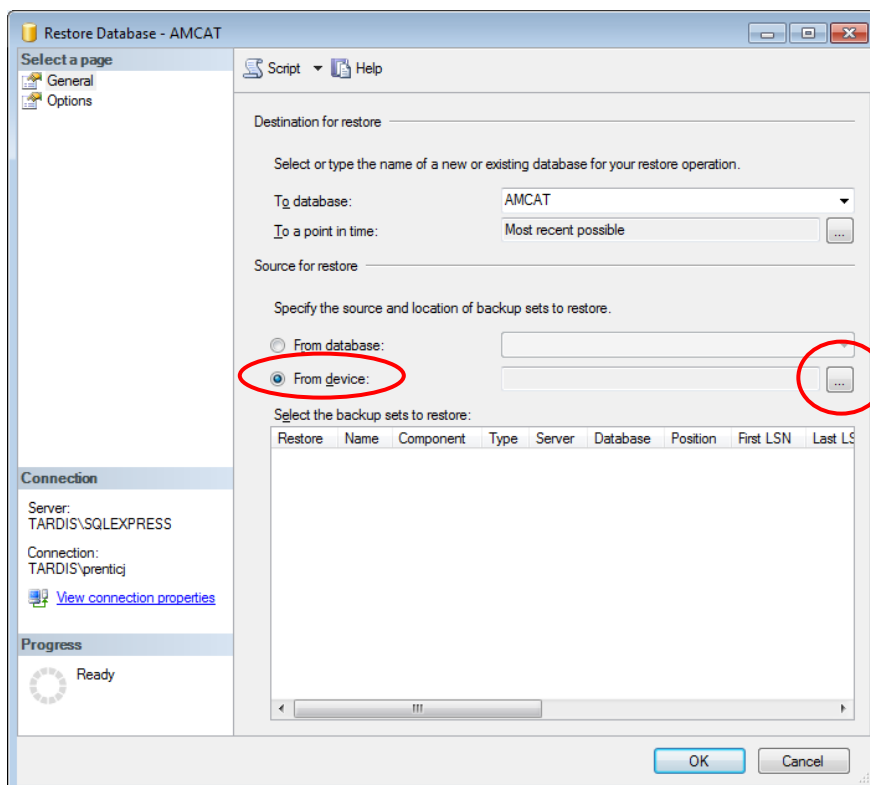
In nearly all instances, a previously configured set of databases will be installed in the *MSSQL* environment. This will either be a set of databases provided by *OCLC (UK) Amlib* following a site conversion, or a set of databases previously backed up on another server (server migrations only).

In some instances, these backed up databases will have been configured for an *Oracle* or *SQLBase* environment and will need to be converted to be compatible with a *SQL Server* environment (see separate instructions).

### Restore Live Databases

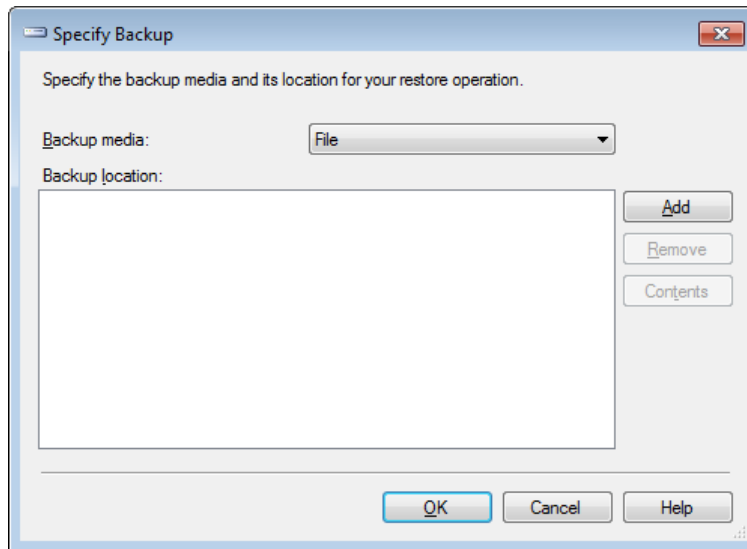
For ease of loading, the databases to be loaded should be copied into the **C:\Program Files\Microsoft SQL Server\MSSQL10\_50.SQLEXPRESS\MSSQL\Backup** folder on the new server.

1. Launch the *SQL Server Management Studio*
2. Expand the Databases selection tree [+]
3. Right-click on the **AMCAT** database and select **Tasks > Restore > Database...** – the Restore Database screen will display:

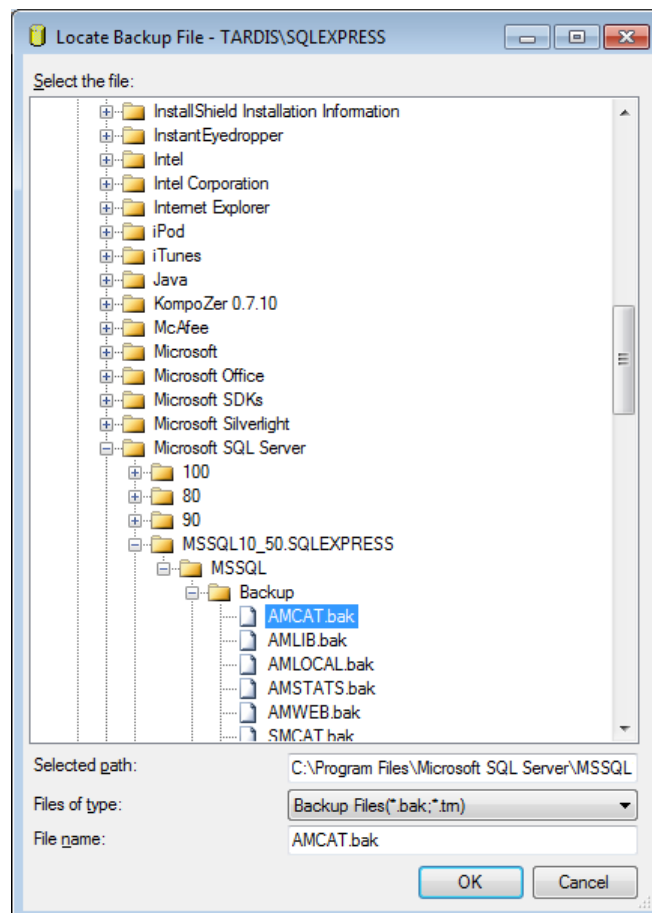


# Amlib Client Installation Guide

4. Select the **From device:** radio button
5. Click the ... (Select Devices) button – the Specify Backup screen will display:



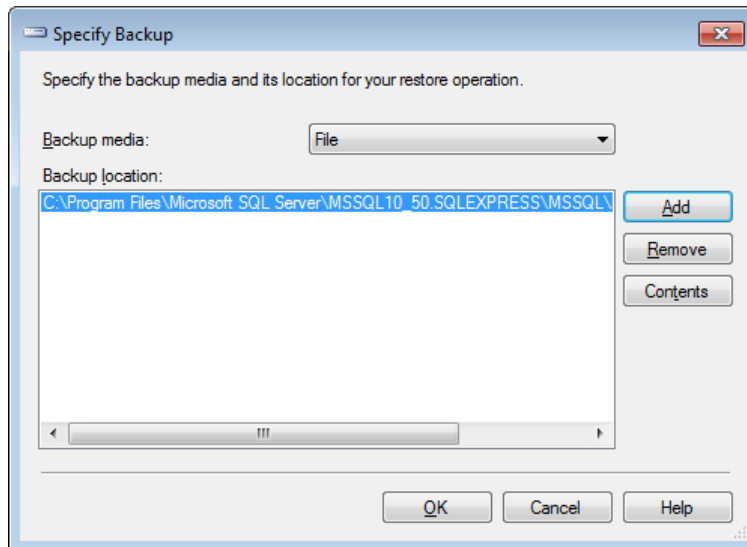
6. Click the **Add** button – the Locate Backup File screen will display:



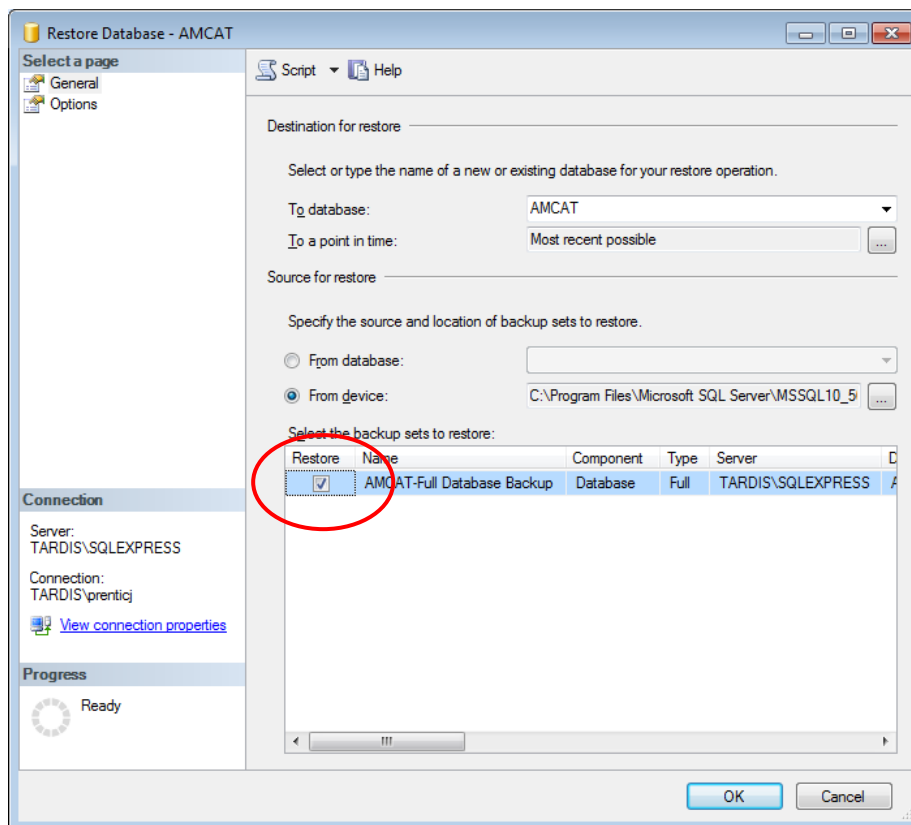
7. Select the corresponding **AMCAT.BAK** file

# Amlib Client Installation Guide

- Click the **OK** button to return to the Specify Backup screen:

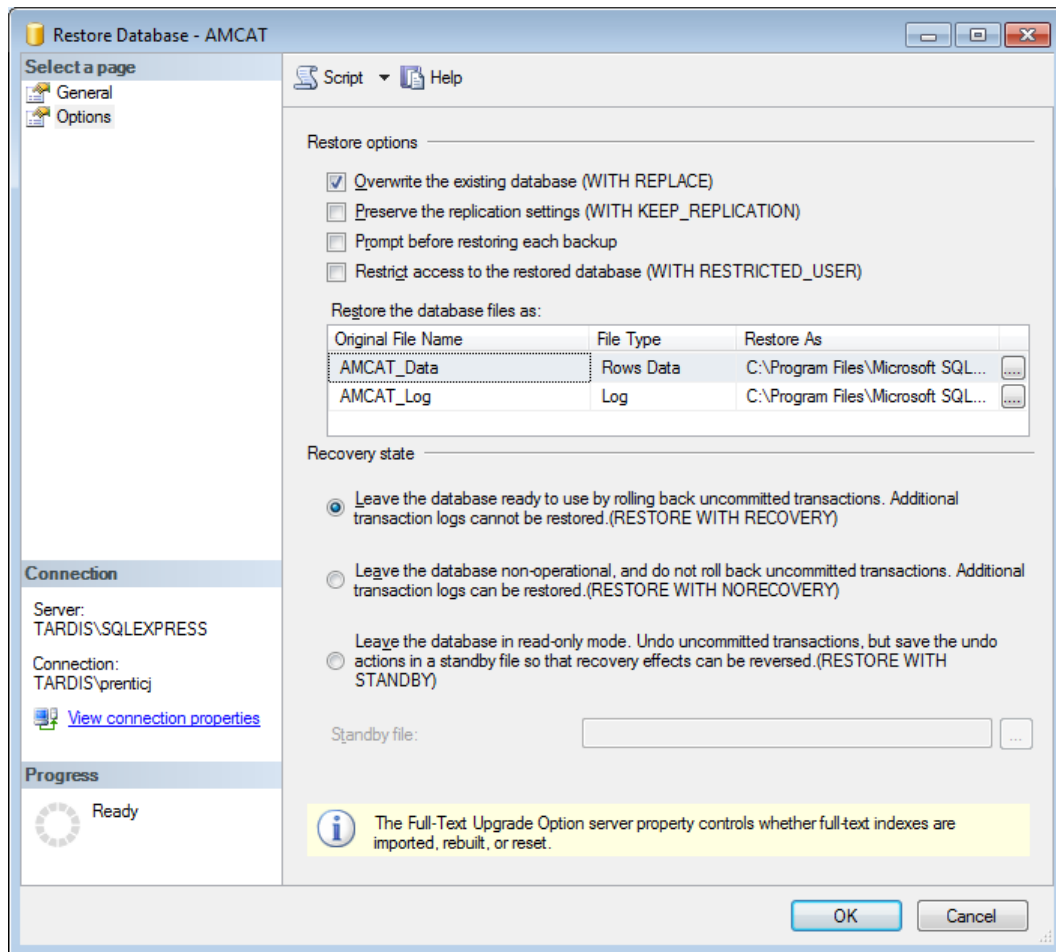


- Click the **OK** button to return to the Restore Database screen:



- Tick the Restore box for the selected database

11. In the left side-bar, select the Options page:



12. Restore options:

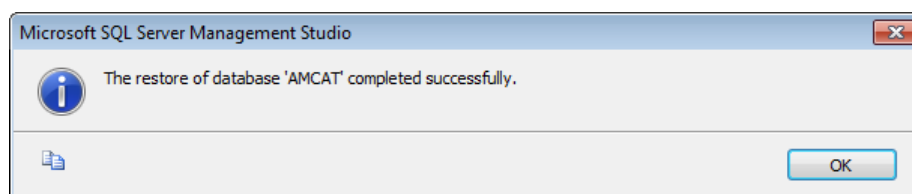
- Select **Overwrite the existing database (WITH REPLACE)**

13. Recovery state:

- Select **Leave the database ready to use by rolling back uncommitted transactions. Additional transaction logs cannot be restored (RESTORE WITH RECOVERY)**

14. Click the **OK** button – the database will be restored

15. The following message will appear when complete: **The restore of the database XXXX completed successfully.**

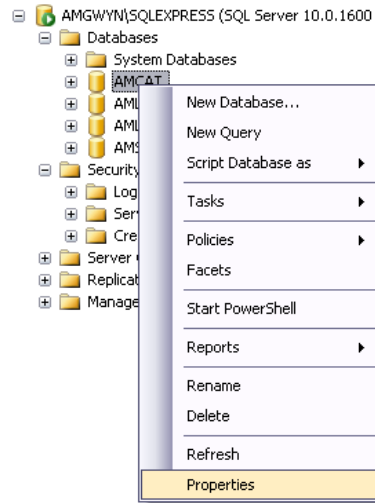


16. Repeat steps 2-15 for all the **AM** databases

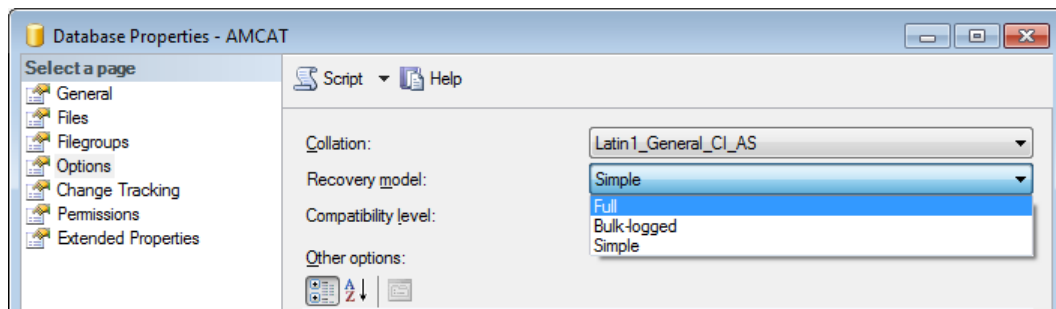
# Amlib Client Installation Guide

## Transaction Logging

1. The final step involves going into *Microsoft SQL Server Management Studio*, right-clicking on your **AMCAT** database and selecting **Properties**:



2. The Database Properties screen will display – in the sidebar, select the **Options** page:



3. In the Recovery model drop down box change the selection to: **Full**
4. Do this for the other databases: **AMLIB**, **AMLOCAL**, **AMSTATS** and **AMWEB** (where installed)



## Step 6: Setup User Security

Once all the databases have been created, you will need to set up the user security logins.

### Clear User Schema

It may be necessary to clear the old user schema first.

1. Click the **New Query** button – this will open up a new SQL Query screen
2. Type (or copy) in the following:

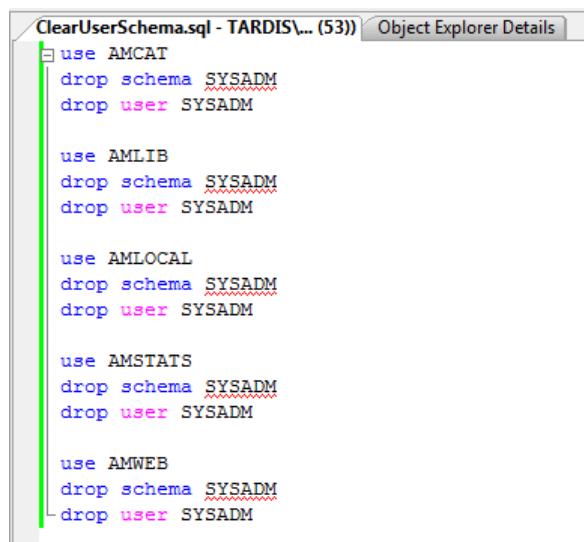
```
use AMCAT
drop schema SYSADM
drop user SYSADM
```

```
use AMLIB
drop schema SYSADM
drop user SYSADM
```

```
use AMLOCAL
drop schema SYSADM
drop user SYSADM
```

```
use AMSTATS
drop schema SYSADM
drop user SYSADM
```

```
use AMWEB
drop schema SYSADM
drop user SYSADM
```

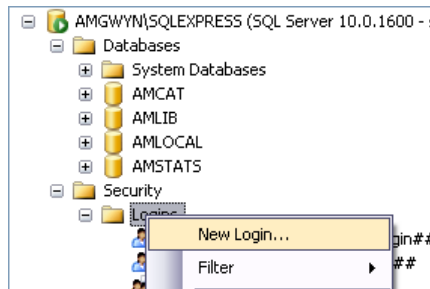


3. Click the **! Execute** button
4. Repeat, replacing **SYSADM** with **NETOPACS**

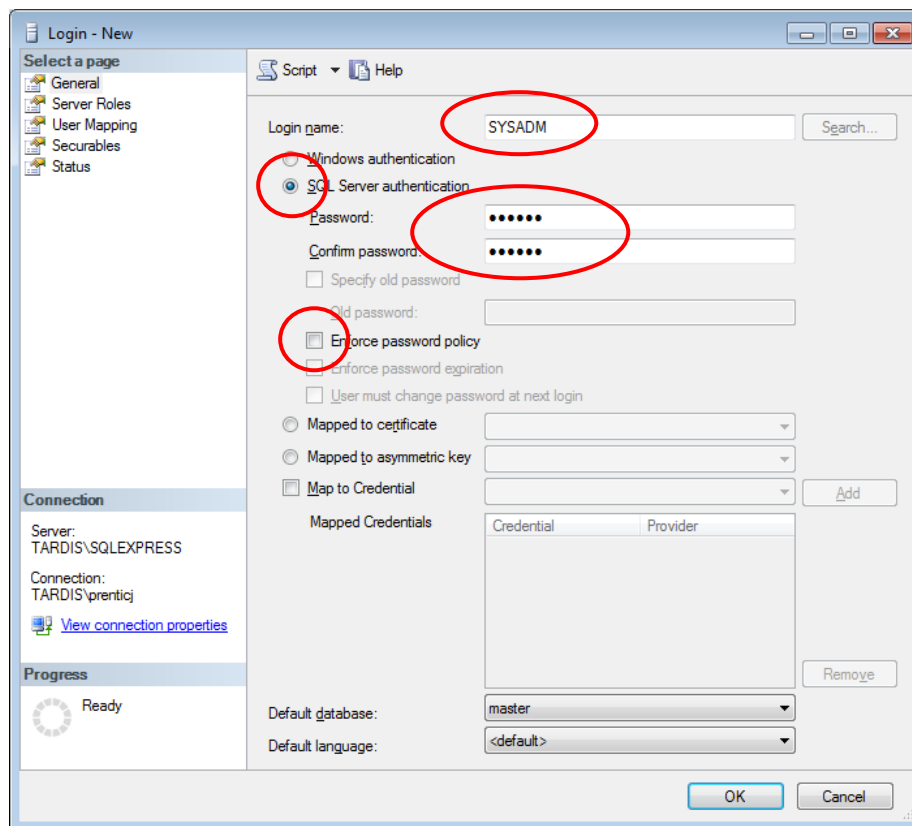
# Amlib Client Installation Guide

## Map User Schema

1. In the sidebar, expand the **Security** folder, right-click on **Logins** folder and select **New Login...**



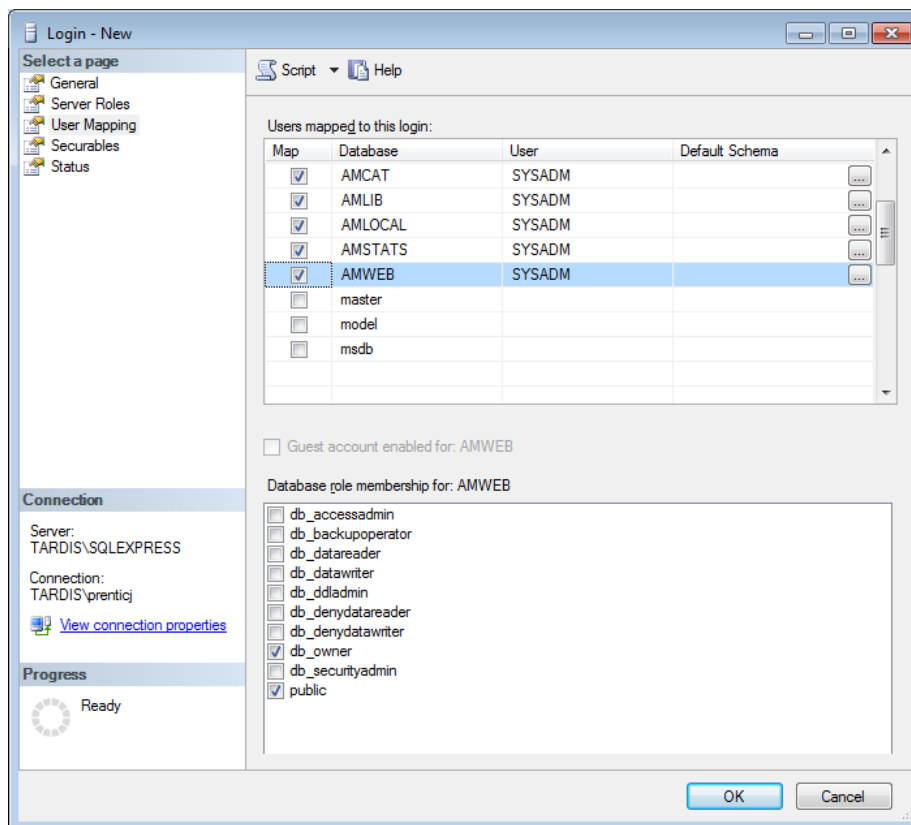
2. The Login - New screen will display:



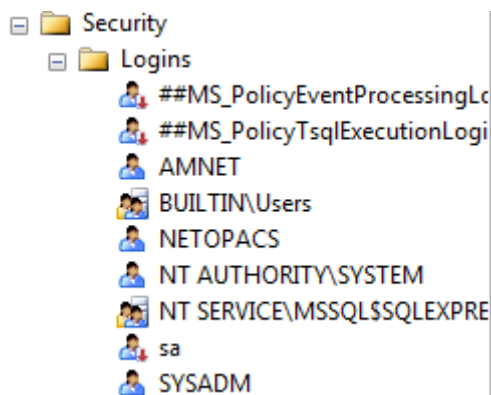
3. On the General page (select from sidebar):
  - a. Select the **SQL Server authentication** radio button
  - b. Enter the following details:
    - i. Login name: **SYSADM**
    - ii. Password: **SYSADM**
    - iii. Confirm password: **SYSADM**
  - c. Deselect the **Enforce password policy** tick box

# Amlib Client Installation Guide

4. On the User Mapping page (select from sidebar):

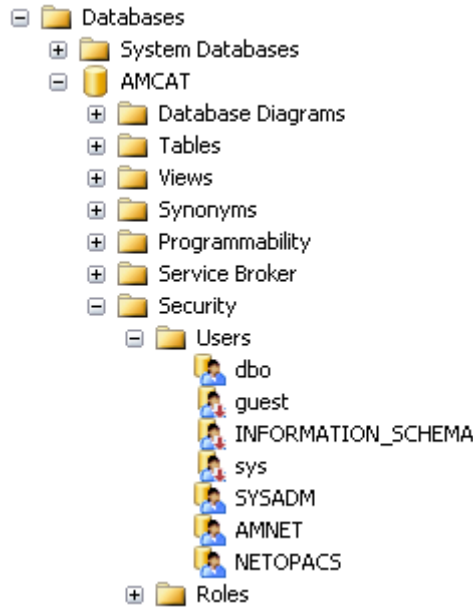


5. In the Map column tick the **AMCAT** database option
6. Then tick the **db\_owner** option in the lower screen
7. Repeat steps 5 and 6 for the **AMLIB**, **AMLOCAL**, **AMSTATS** and **AMWEB** (where installed) databases
8. Click the **OK** button to exit out of this screen
9. Repeat steps 1 – 8 to add in the **NETOPACS** (where the *NetOpacs* are installed) login
10. When you are done, your logins will show under **Security > Logins**:



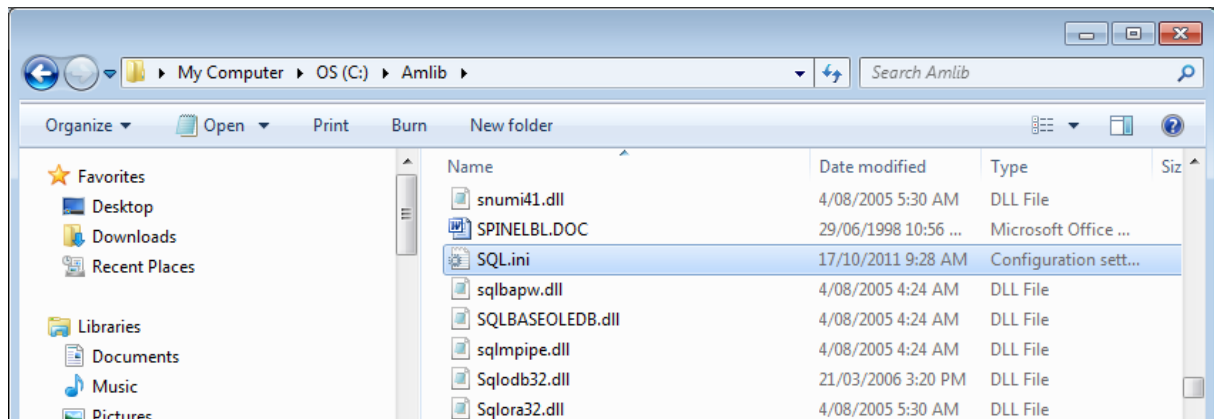
# Amlib Client Installation Guide

These logins should also display under each database > **Security** > **Users**:



## Link the Amlib Client to the Live Database

1. On the *Amlib* server, navigate to your **Amlib** folder and open the **SQL.ini** file in *Notepad*:



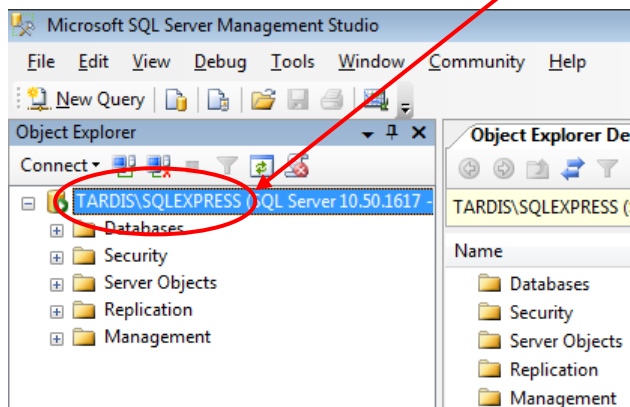
2. Under the heading **[Odbcctr]** enter in the *SQL Server* file paths for the **Live** and **Test** databases:

- REMOTEDBNAME=**AMCAT**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**AMCAT**
- REMOTEDBNAME=**AMLIB**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**AMLIB**
- REMOTEDBNAME=**AMLOCAL**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**AMLOCAL**
- REMOTEDBNAME=**AMSTATS**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**AMSTATS**
- REMOTEDBNAME=**AMWEB**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**AMWEB**
  
- REMOTEDBNAME=**TECAT**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**TECAT**
- REMOTEDBNAME=**TELIB**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**TELIB**
- REMOTEDBNAME=**TELOCAL**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**TELOCAL**
- REMOTEDBNAME=**TESTATS**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**TESTATS**
- REMOTEDBNAME=**TEWEB**,DRIVER=SQL Server;SERVER=**SERVERNAME**\INSTANCENAME;DATABASE=**TEWEB**

\* Replace **SERVERNAME** with the actual *SQL Server* name and **INSTANCENAME** with the actual instance (the default instance name is usually **SQLEXPRESS**). These can be seen when you log into *SQL Server*:

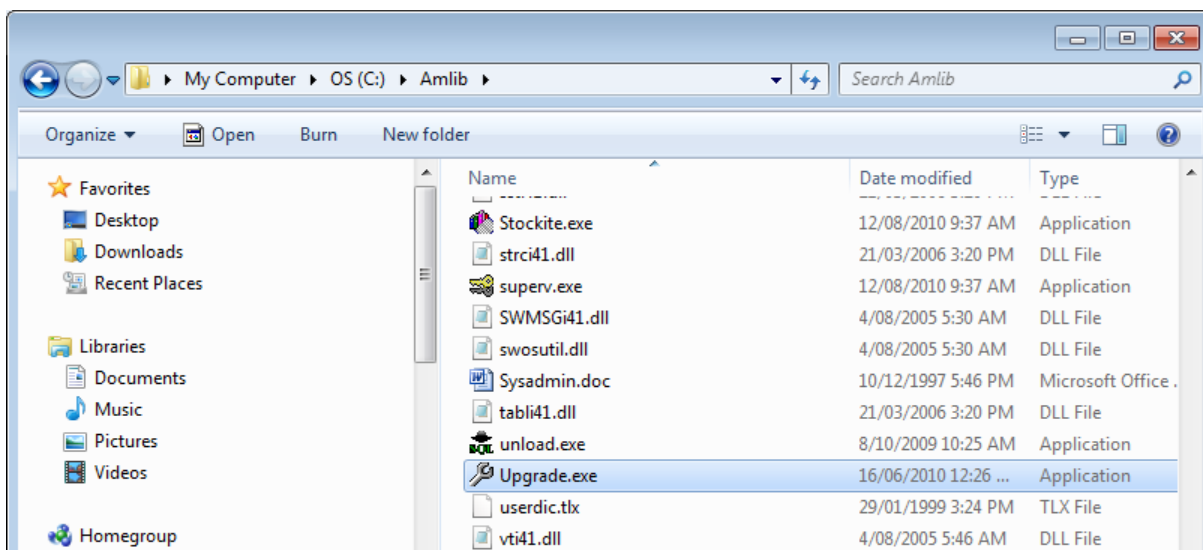
# Amlib Client Installation Guide

```
66 [Odbcrtr]
67 ; The following is for the ODBC / SQLServer router. The DSN keyword will
68 ; be the same as the System Data Source setup in the ODBC32 setup
69 ; in Control Panel
70 longbuffer=20000
71 REMOTEDBNAME=AMCAT, DRIVER=SQL Server; SERVER=SERVERNAME\SQLEXPRESS; DATABASE=AMCAT
72 REMOTEDBNAME=AMLIB, DRIVER=SQL Server; SERVER=TARDIS\SQLEXPRESS; DATABASE=AMLIB
73 REMOTEDBNAME=AMLOCAL, DRIVER=SQL Server; SERVER=TARDIS\SQLEXPRESS; DATABASE=AMLOCAL
74 REMOTEDBNAME=AMSTATS, DRIVER=SQL Server; SERVER=TARDIS\SQLEXPRESS; DATABASE=AMSTATS
75 REMOTEDBNAME=AMWEB, DRIVER=SQL Server; SERVER=TARDIS\SQLEXPRESS; DATABASE=AMWEB
```

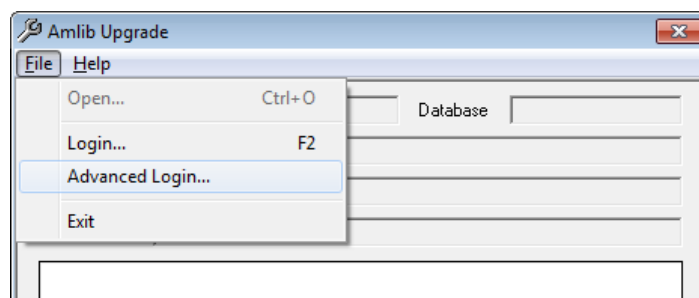


## Verify Connectivity

1. On the *Amlib* server, navigate to your **Amlib** folder
2. Locate and double-click on the **Upgrade.exe** application :

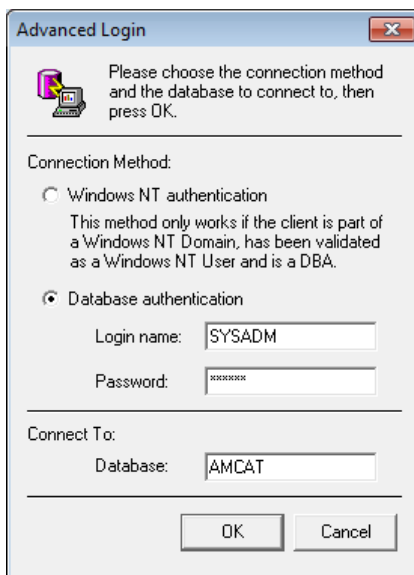


3. The *Amlib Upgrade* application will launch:

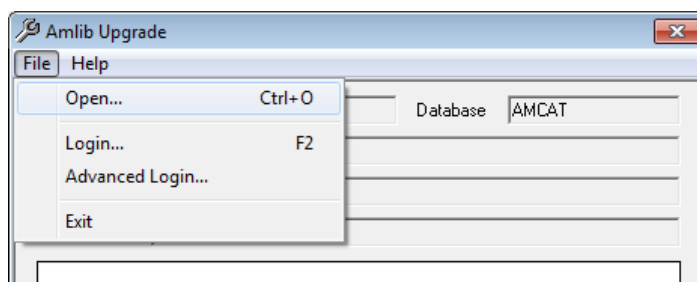


# Amlib Client Installation Guide

4. From the menu, select **File > Advanced Login...** – the Advanced Login prompt will display:



5. Login with **SYSADM/SYSADM**, enter in Database **AMCAT** and click the **OK** button



6. Exit from the **Upgrade.exe** application

## SQL Server: Creating Databases Checklist

**Live Amlib** databases:

- AMCAT**
- AMLIB**
- AMLOCAL**
- AMSTATS**
- AMWEB**

**Test Amlib** databases:

- TECAT**
- TELIB**
- TELOCAL**
- TESTATS**
- TEWEB**

## SECTION 2B: ORACLE RDBMS

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### Step 1: Oracle Configuration Required Before Amlib Installation

Since the installation and configuration of the *Oracle* RDBMS is a complex process *OCLC (UK)* requires that the customer have their *Oracle* Data Base Administrator (DBA) to initially setup the required *Amlib* instances (or databases), rollback, tablespaces, backup and ongoing maintenance.

They are:

#### Create Two (2) Oracle Instances: AMLIB (Live database) and TELIB (Test database)

For libraries using *Microsoft SQL Server* RDBMS *OCLC (UK)* normally recommends create five (5) separate databases for the **Live** database (**AMCAT**, **AMLIB**, **AMLOCAL**, **AMSTATS** and **AMWEB**), but many *Oracle* sites choose to create a single database (instance) only since having five (5) databases creates higher overheads in *Oracle*. This decision will depend on the customer requirements (for example: for a Mobile library for replication of the **AMLIB** tables only).

- Refer to the section "Create Amlib Live and Test Instances for Oracle" for additional information

#### Create Initial Database, Tablespace and Sufficient Rollback Space

Require for both **AMLIB (Live)** and **TELIB (Test)** environment. For the **TELIB** instance a tablespace of 500 Mb will be sufficient. Sizing of the **AMLIB** instance will depend on the customer volume, and available disk space on the server.

Suitable sizing may be: Customer with 100,000 bibliographic records 8 to 10 Gb AMLIB\_DB tablespace, 1 Gb rollback space. Customer with 200,000 bibliographic records 15 to 20 Gb AMLIB\_DB tablespace, 2 Gb rollback space.

- Refer to the section "Create Amlib Live and Test Instances for Oracle" for additional information

#### Install Oracle Client (SQL\*Net or Net8) on each PC

The *Oracle Client* (also known as *SQL\*Net* or *Net8*) needs to be installed on EACH PC workstation that will be using the *Amlib Library Management System*, as well as the web server running the *Amlib NetOpacs* software. *Oracle SQL\*Net* is the *Oracle* client "driver" for *Windows Client Server* applications to seamlessly connect to an *Oracle* database. *Oracle SQL\*Net* should be setup with two database "aliases" (if only using 2 *Oracle* instances) – these are **AMLIB** (which should reference the **AMLIB** instance on the *Oracle* database server) and **TELIB** (which should reference the **TELIB** instance on the *Oracle* database server)

If a customer does not have an *Oracle* DBA available to install, configure and maintain their *Oracle* RDBMS *Amlib* we will be able to provide details of a suitable *Oracle* DBA contractor.

Otherwise we recommend that the customer select the *Microsoft SQL Server* RDBMS.

# Amlib Client Installation Guide

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Task required after installation and conversion to *Amlib*:

## Setup Backup Facilities for Oracle and Database server

Libraries should identify whether to use *Oracle* "Hot" backups (online backups for 24-hour database access) or *Oracle* "Cold" backups (where the database is shutdown before being copied to tape). The type of backup used will also impact on the *Oracle* database setup (for example: allowing for archive log space for online backups).

## Step 2: Oracle Character Set

For *Oracle 8.1.7*, *OCLC (UK)* recommends that the **AMERICAN\_AMERICA.WE8ISO8859P1** character set (8-bit Western European) is used when installing *Oracle* and creating the instances rather than the default US 7-bit ASCII.

If *OCLC (UK)* is providing the data conversion services to the library then the **AMERICAN\_AMERICA.WE8ISO8859P1** character set will provide greater accuracy when loading the converted data files.

For *Oracle 9.2* on *Windows 200x*, *OCLC (UK)* recommends that the **WE8MSWIN1252** character set is used. Please advise *OCLC (UK)* of the *Oracle* character set configured on your server prior to the commencement of the data conversion process.

## Step 3: Create Initial Database, Tablespace and Sufficient Rollback Space

When configuring the **AMLIB** and **TELIB** instances within *Oracle* we recommend the following settings:

### AMLIB Instance

Recommend creating a separate tablespace **AMLIB\_DB** to hold the *Amlib* tables.

Sizing of the **AMLIB\_DB** tablespace will depend on the customer volume, and available disk space on the server.

Suitable sizing may be:

- *Customer with 100,000 bibliographic records 8 to 10 Gb AMLIB\_DB tablespace, 1 Gb rollback space.*
- *Customer with 200,000 bibliographic records 15 to 20 Gb AMLIB\_DB tablespace, 2 Gb rollback space*

During the *Amlib* data load the tablespace **AMLIB\_DB** is assigned as the default tablespace for the *Amlib* tables. Your *Oracle* DBA should ensure that the tablespace of **AMLIB\_DB** and the temporary tablespace (for example: **TEMP**) should be assigned as a **default** to all users created by library system administrators within *Amlib*.

### TELIB Instance

Recommend creating a separate tablespace **AMLIB\_DB** to hold test *Amlib* tables.



# Amlib Client Installation Guide

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For the **TELIB** instance a size of 500 Mb will be sufficient for the **AMLIB\_DB** tablespace.

During the **TELIB** data load the tablespace **AMLIB\_DB** is assigned as the default tablespace for the **Test Amlib** tables.

**IMPORTANT:** However, in many cases the library wish to have the initial trial conversion loaded into the **Test** database. In this case we would recommend creating an **AMLIB\_DB** tablespace of 3 Gb with 200 to 400 Mb Rollback space.

## Other Performance Suggestions

To maximise performance *OCLC (UK)* also suggest:

- Locating *Oracle* database and log files across multiple hard disks as possible (not required if the server is configured for RAID 5)
- Setting the **AMLIB\_DB** tablespace and Rollback logs set to automatically extend in size
- At some stage in the future export the entire **AMLIB** database and recreate/reload to have *Oracle* recalculate and optimise table extents used

## Step 4: Install Oracle Client and Configure SQL\*Net (Net8)

The *Oracle Client* needs to be installed on EACH PC workstation that will be using the *Amlib Library Management System*, as well as the web server running the *Amlib NetOpacs* software.

After installing the *Oracle Client*, *SQL\*Net* (also known as *Net8* in *Oracle version 8*) needs to be configured with the *Amlib Live* and **Test** databases and the address of the *Oracle* database server.

The following is a brief example for configuring the *Oracle Net8 Client* for *Oracle Version 8.1.7*.

1. Select the **Net8 Configuration Assistant** icon from the *Oracle* program group – the *Net 8 Configuration Assistant* will launch:



2. Select **Local Net Service Name configuration** and click the **Next** button

# Amlib Client Installation Guide



3. Select **Add** and click the **Next** button



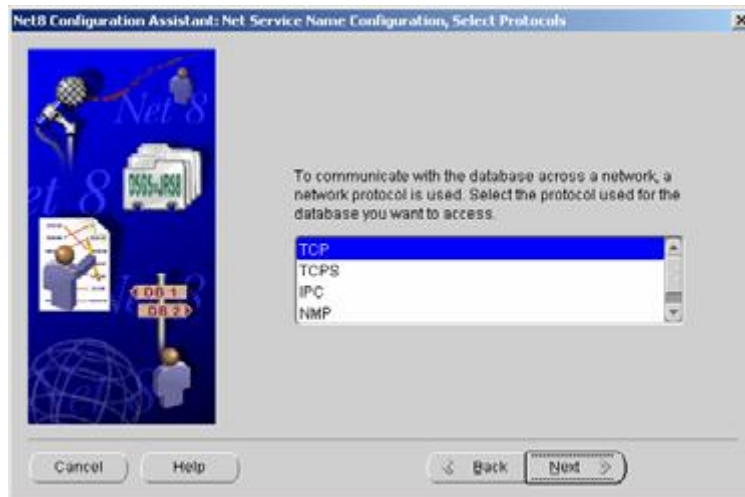
4. Select **Oracle8i database or service** and click the **Next** button



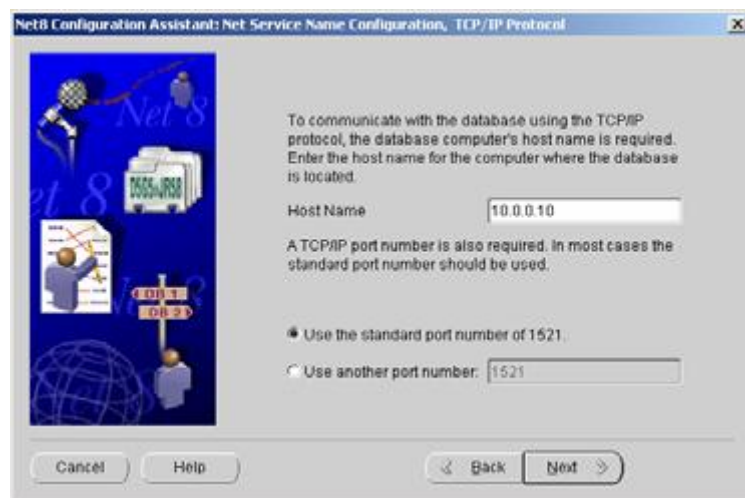
5. Enter a Service Name **AMLIB** and click the **Next** button

**Please Note:** When setting up the **Test** database service name enter a service name of **TELIB**

# Amlib Client Installation Guide



6. Select **TCP** for communication and click the **Next** button



7. Enter the TCP/IP Host Name address of the *Oracle* database server and click the **Next** button  
(Leave the standard port number as **1521** unless your Oracle port number is different)



8. To test that the *Oracle Client* is setup correctly select **Yes, perform a test** and click the **Next** button

9. If test is successful a confirmation message will be displayed: **Connecting...Test successful**



10. Click the **Next** button to Finish

\* Repeat the above configuration process to create a Service Name (or Alias) for the *Amlib Test* database EXCEPT using **TELIB** as the service name

## Step 5: Run SQL\*Plus To Assign Default Tablespace & Create Amlib Logins

Once the *Amlib* instances and tablespaces have been created in *Oracle*, you have to run an “initialisation” SQL script using the *Oracle Sql\*plus* program (or use the *Amlib SQLTalk.exe* utility).

The SQL script provides a number of functions:

- Ensures that the *Oracle Client (SQL\*Net / Net8)* is correctly configured and that *Amlib* will be able to communicate to the *Oracle* database
- Create *Amlib* System Administrator login **SYSADM** – which is also the “owner” of all *Amlib* tables loaded
- Create *NetOpacs* login **NETOPACS** – which also is the owner of any temporary *NetOpacs* created from searches
- Assign the tablespace **AMLIB\_DB** as the default tablespace to **SYSADM** and **NETOPACS**
- Create Initial *Amlib* Logins for libraries (libraries can then creating all required staff logins/passwords using the *Amlib Supervisor* module)

The SQL script makes the following assumptions:

- That the *Oracle* **SYSTEM** dba login has a password of **MANAGER**
- That a tablespace called **AMLIB\_DB** has been created for the **AMLIB** and **TELIB** instances

You will need to alter the sql script if the above assumptions are not applicable for your *Oracle* configuration

- SQL Script File Name: **OracleCreateAmlibLogins.sql**
- Location: **C:\Amlib\Utility\Version 5.1 Database**

# Amlib Client Installation Guide

The contents of the script include:

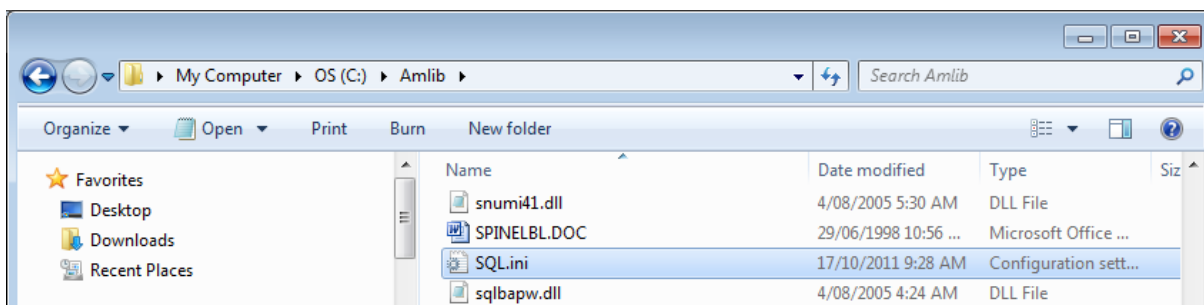
```
CONNECT AMLIB SYSTEM/MANAGER;
GRANT CONNECT TO SYSADM IDENTIFIED BY SYSADM;
GRANT DBA TO SYSADM IDENTIFIED BY SYSADM;
GRANT CONNECT TO NETOPACS IDENTIFIED BY NETOPACS;
GRANT DBA TO NETOPACS;
alter user sysadm identified by sysadm default tablespace amlib_db;
alter user netopacs identified by netopacs default tablespace
amlib_db;
CONNECT TELIB SYSTEM/MANAGER;
GRANT CONNECT TO SYSADM IDENTIFIED BY SYSADM;
GRANT DBA TO SYSADM IDENTIFIED BY SYSADM;
GRANT CONNECT TO NETOPACS IDENTIFIED BY NETOPACS;
GRANT DBA TO NETOPACS;
alter user sysadm identified by sysadm default tablespace amlib_db;
alter user netopacs identified by netopacs default tablespace
amlib_db;
```

## Step 6: Load Amlib Database into Oracle

Once you have created the *Amlib* databases in *Oracle* and installed the *Amlib Client* software, you can load the *Amlib* databases into *Oracle* using the *Amlib Upgrade* program.

## Step 7: Configure SQL.ini Settings

1. On the *Amlib* application server, navigate to your **Amlib** folder and open up the **SQL.ini** file in *Notepad*:



2. Under the heading **[win32client.dll]** ensure that the correct database connector is being used:
  - Oracle: **comdll=sqlora32**
3. If *Oracle* was selected (**comdll=sqlora32**) was selected in the **[win32client.dll]** section then this section is used to determine the *Oracle* database alias used within the *Oracle SQL\*Net* (also known as *Net8 Client*)

Under the heading **[ORAGTWY]** enter in the *Oracle* file path(s) for the **Live** database(s):

- REMOTEDBNAME=AMLIB,@AMLIB
- REMOTEDBNAME=TELIB,@TELIB
- SUBSTITUTE=SYSSQL.,
- SUBSTITUTE=sysssl.,
- longbuffer=900000
- MAPERROR=OFF
- fetchrow=100

The format of this keyword is **remotedbname={[database name],@[SQL\*Net database alias]}**.

## Amlib Client Installation Guide

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```
37 |
38 | ❏ [ORAGTWY]
39 | ;
40 | ; This section is for Oracle Router. The REMOTEDBNAME maps the application's
41 | ; database name to the Oracle SQL*Net connect string. The SUBSTITUTE
42 | ; keyword replaces the first parameter with the second parameter. It is mainly
43 | ; used to replace the user id in a Catalog Command Query. This's only needed
44 | ; when you run Quest against Oracle v7, when you run Quest against Oracle6
45 | ;you must remove or comment this line out.
46 | ;
47 | REMOTEDBNAME=AMLIB,@AMLIB
48 | REMOTEDBNAME=TELIB,@TELIB
49 | SUBSTITUTE=SYSSQL.,
50 | SUBSTITUTE=sysssql.,
51 | longbuffer=900000
52 | MAPERROR=OFF
53 | fetchrow=100
54 |
```

## SECTION 3: BACKUPS

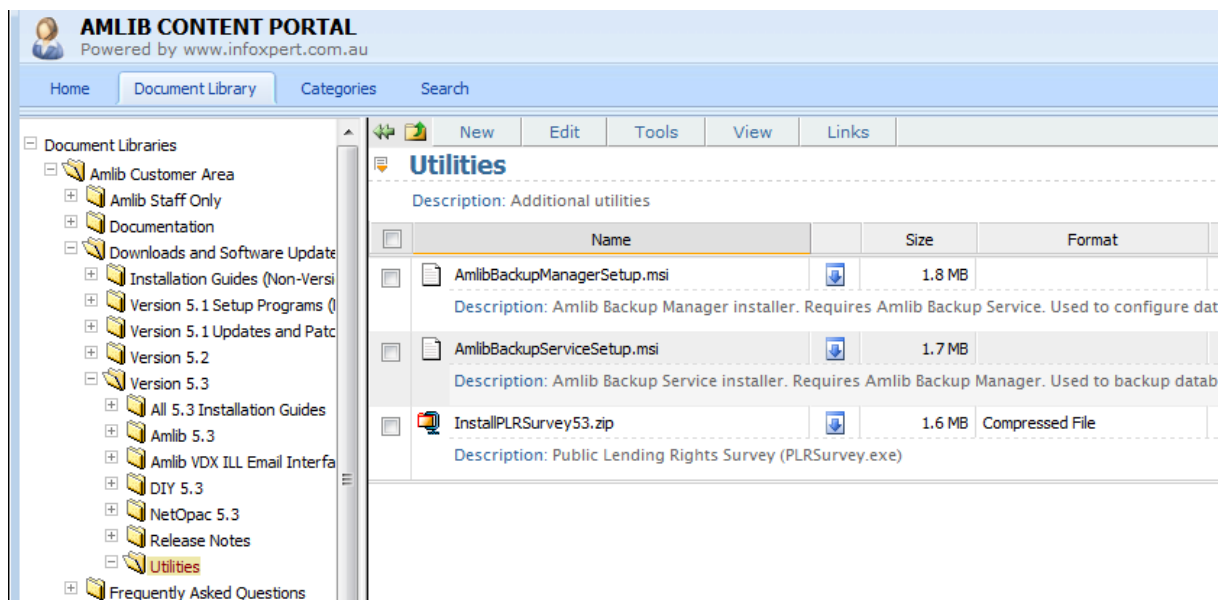
If you are on the free, express edition of *SQL Server 2008 R2* then you do not have access to Management Tools including backups. This part of the document will take you through setting up the backup utility created by *Amlib* for this purpose.

If you do have a version of *SQL Server 2008 R2* with Management Tools then you should be able to follow the *SQL Server 2005 Maintenance Plan* instructions to create backups, or you can follow the instructions below.

### Installation

The files required for download are on the *Amlib Content Portal* under:

- **Amlib Customer Area > Downloads and Software Updates > Version 5.3 > Utilities**

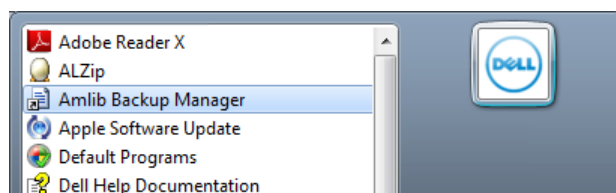


There are two files here:

- **AmlibBackupManagerSetup.msi** (configures the backups)
- **AmlibBackupServiceSetup.msi** (runs the backups)

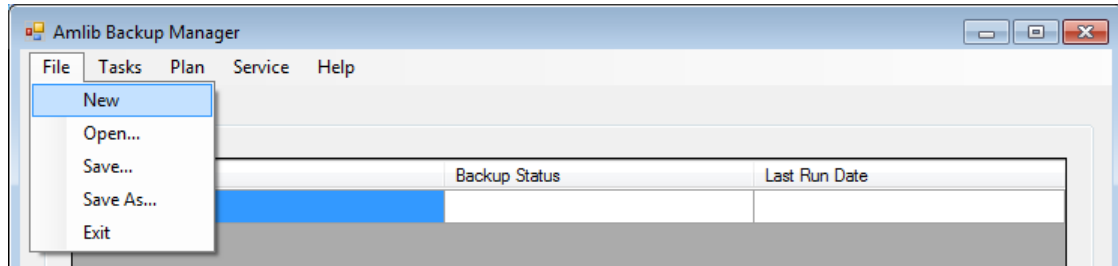
You need to download and install both.

Once installed, you will be able to access the *Amlib Backup Manager* using the shortcut in the **Programs** menu of your **Start** menu:

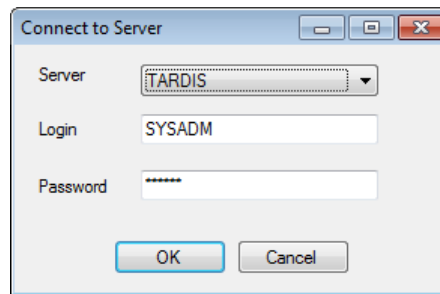


# Amlib Client Installation Guide

1. Launch the *Amlib Backup Manager*:



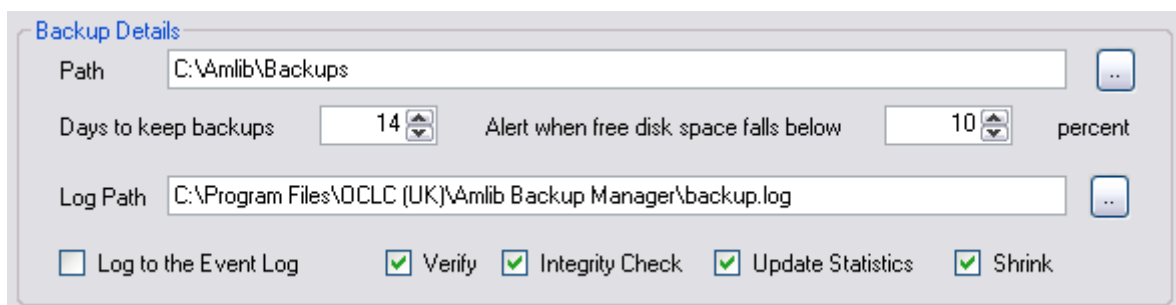
2. From the menu, select **File > New** – the Connect to Server prompt will display:



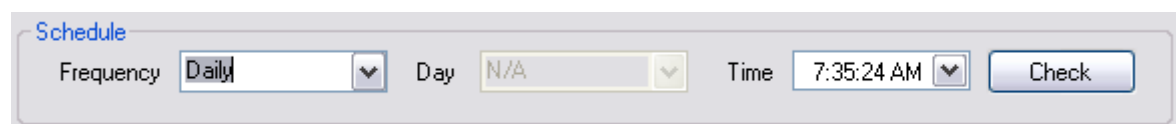
3. Select your Server from the drop-down box and login

**Please Note:** If your server does not appear here, please follow the “Help” documentation from the Help menu at the top of the screen.

4. In the Backup Details section, select the file path where the backups will be stored, input how long you wish backups to be kept and the minimum disk space, enter the file path to store backup logs and tick the boxes to verify the backup, check integrity, update statistics and shrink the disk files:



5. In the Schedule section, enter the scheduling details:





## Amlib Client Installation Guide

6. In the Selected Databases section, move across all databases you wish to backu:

Selected Databases

Databases

master  
model  
msdb  
tempdb

>>

<<

Databases to backup

AMCAT  
AMLIB  
AMLOCAL  
AMSTATS

Add Delete

7. In the Alert Email Configuration section you can set up for an email account to receive a notification of the backup:

Alert Email Configuration

support-amlib@oclc.org

Sender Address gwyn.hannay@oclc.org

SMTP Server brick.oclc.com.au

SMTP Login

SMTP Password

SMTP Port 25

Add Delete

Address to Add

support-amlib@oclc.org

8. To test the plan before it goes ahead, click the **Execute** button down the bottom of the screen:

Running Backup Plan

Execute View Log

OK Cancel

When you have confirmed that your backups are working correctly, you can click the **OK** button to save your backup plan

Inside the **Amlib Backup Service Setup** installation folder (for example: **C:\Program Files\OCLC (UK)\AmlibBackupServiceSetup**) you will have a file called **AmBackupService.cfg**. This file is an XML file which you can open up with *Notepad*.

If you do it will look like this:

```
<?xml version="1.0" encoding="utf-8"?>
<ServerConfig xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <PlanPath>D:\SQL 2008\Plan Backups\TestPlan.cfg</PlanPath>
</ServerConfig>
```

## Amlib Client Installation Guide

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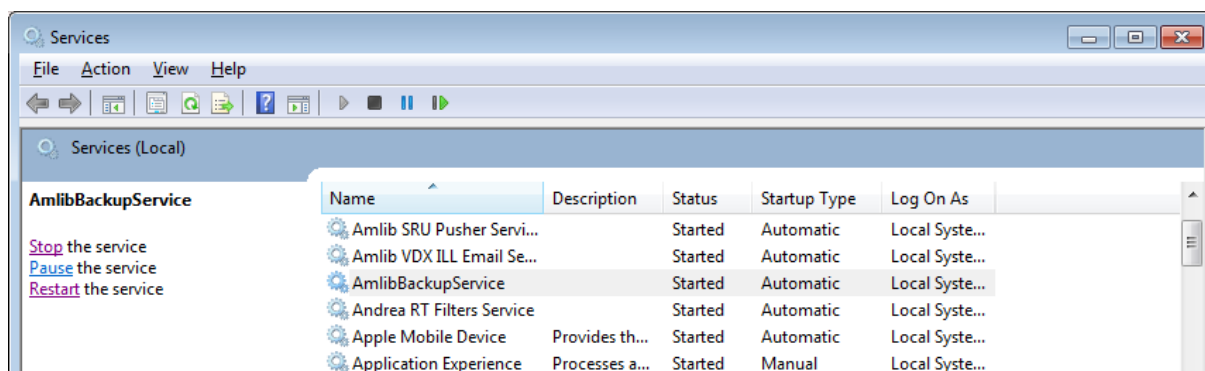
The value you have to change is the path to your backup plan that you just created. I saved my plan at the following address:

- **C:\Program Files\OCLC (UK)\Amlib Backup Manager\AmlibDatabaseBackupPlan.cfg**

Therefore you would change the Amlib Backup service XML file to the following. This tells the service to read the plan at the location specified and act according to the details specified in the plan.

```
<?xml version="1.0" encoding="utf-8"?>
<ServerConfig xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <PlanPath>C:\Program Files\OCLC (UK)\Amlib Backup
Manager\AmlibDatabaseBackupPlan.cfg</PlanPath>
</ServerConfig>
```

Anytime you make changes to any of the XML documents (plan details, plan path), you will need to re-start the Amlib Backup service as it only reads the data in the XML files when first started.



For more information on using this utility, have a look at the documentation under the “Help” menu.

### SECTION 4: INSTALL NETOPACS SERVER SOFTWARE

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After installing *Amlib Client 5.3*, sites can then install their *NetOpacs* and other associated products (where applicable).

- See separate guides for installation details

### SECTION 5: ADVISE OCLC (UK) LTD OF COMPLETION

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To enable *OCLC (UK) Ltd* to verify that the installation has been completed please e-mail the details to:

- [support-amlib@oclc.org](mailto:support-amlib@oclc.org)

## SECTION 6: TROUBLESHOOTING TIPS

The first step in troubleshooting problems that you may be experiencing with *Amlib (Client or NetOpacs)* connecting to the database is to first check the following:

- Can you connect to the *Amlib* database using the *Amlib Client* on the server?
- Can you connect to the *Amlib* database using the *Amlib Client* from another workstation?

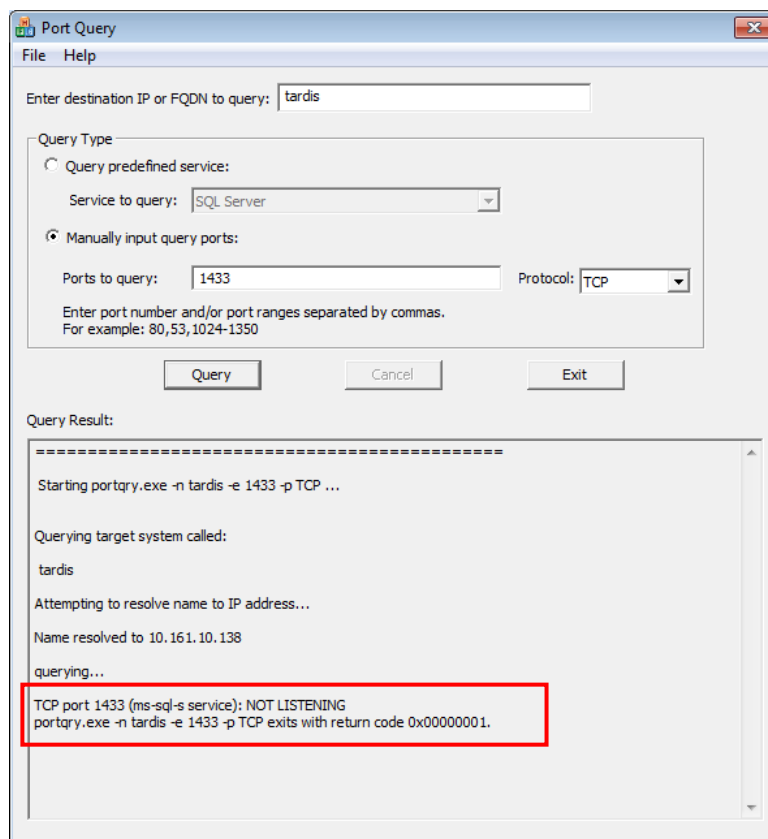
The next step is to try and isolate the problem and ensure that the problem is not due to the hardware, network or firewall.

### Step 1: Check Communication to Database Server using Microsoft Port Query

Microsoft Port Query is an easy to use tool that enables you to test whether you can connect from a Workstation (or Web Server) to the database server, and whether the RDBMS is listening for connection requests.

1. Launch the *Microsoft Port Query* program which will be located:
  - *Amlib Client*: c:\amlib\utility\PortQryUI\portqueryui.exe
  - *NetOpacs*: c:\netopacs\utility\PortQryUI\portqueryui.exe
  - *ZServer*: c:\zserver\utility\PortQryUI\portqueryui.exe

**(Please Note:** Replace c:\amlib or c:\netopacs with the actual path where the applications have been installed)



2. Enter the Destination IP address of database server used when installing *Amlib* (for example: **tardis**, **127.0.0.1**, **localhost**, etc.)

# Amlib Client Installation Guide

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3. **Select** the Manually input query ports option
4. Ports to query:
  - If using *Microsoft SQL Server* enter: **1433**
  - If using *Oracle* enter **1521** (older versions of *Oracle* may be using **1525**)
  - If using *Gupta SQLBase* enter: **2155**
5. Protocol: **TCP**
6. Then click the **Query** button to start the search

## Query Results

1. If the Query result is **LISTENING** (for example: **TCP port 1433 (ms-sql-s service): LISTENING**) then this indicates:
  - The Workstation (or Web Server) can communicate to the database server **OK**
  - You will need to proceed to the next level of *Amlib* troubleshooting to identify the problem you are experiencing
2. If the Query result is **NOT LISTENING** (for example: **TCP port 1433 (ms-sql-s service): NOT LISTENING**) then this indicates:
  - The Workstation (or Web Server) is unable to communicate to the RDBMS on the database server

You should refer this problem to your organisation's database or network administrator to follow up.

Possible reasons why it is unable to communicate to the RDBMS on the database server:

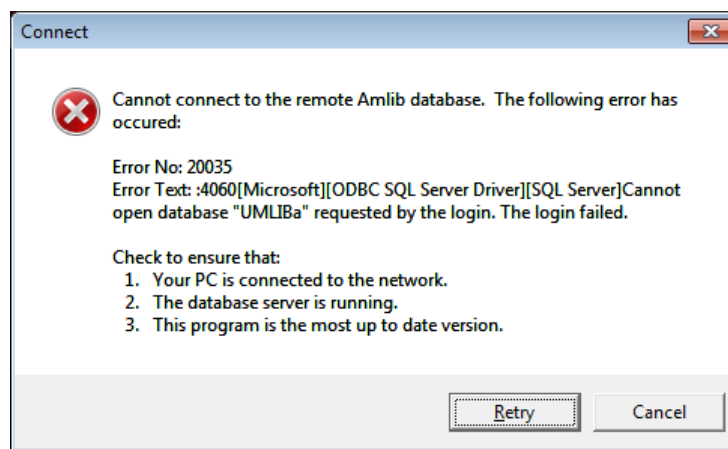
- The database server is not running
- The database server is disconnected from the network
- The workstation (or web server) is disconnected from the network
- There is a problem with the network (for example: switch is faulty, DHCP is not running, etc.) or network configuration
- The RDBMS is not running on the database server (check in Windows Services whether the RDBMS (*Microsoft SQL Server*, *Gupta SQLBase* or *Oracle*) is running)
- The enterprise firewall is preventing connectivity via this Port
- The workstation firewall (for example: *Windows XP Service 2* firewall) is preventing connectivity via this Port
- There a problem with hardware (for example: network card in either database server, workstation or web server)

3. If the Query result is **FILTERED** (for example: **TCP port 1433 (ms-sql-s service): FILTERED**) then this indicates:
  - the enterprise firewall is preventing connectivity via this Port
  - the workstation/server firewall (for example: *Windows XP Service 2* firewall) is preventing connectivity via this Port

You should refer this problem to your organisation's database or network administrator to follow up.

## Step 2: Next Level of Amlib Troubleshooting

### Message **Unable to connect to database**



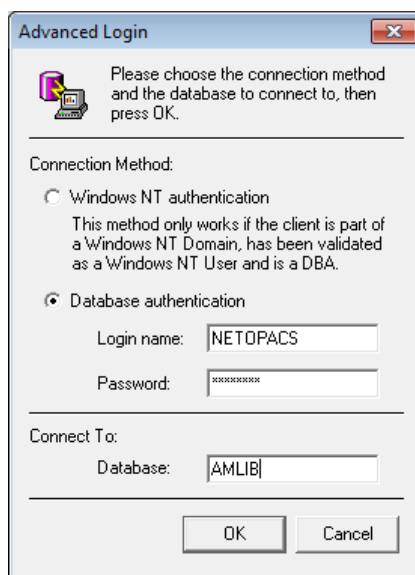
A message **“Cannot connect to database”** is displayed if the PC is unable to connect via the WAN or if *SQLBase* is not running (or if **SQL.ini** is not correctly configured).

The following steps can be used to track down the problem:

1. Review the RDBMS error message displayed on the “cannot connect” screen – for example in the above example refers to **Error No. 20016...SQL Server does not exist....** is a SQL Server error and should be following up with your database administrator (the error number is **not** an *Amlib* error number)
2. Can the PC connect to the database server?
  - Refer to the previous section: [Check Communication to Database Server using Microsoft Port Query](#)
3. If step 2) above is OK, then ensure that you DO NOT have any ODBC Data Sources with the same name as the database (for example: make sure there is NOT an ODBC data source called **AMCAT**, **AMLIB**, **AMLOCAL** or **AMSTATS**)
  - In *Windows*: Go to **Control Panel > Administrative Tools > Data Sources (ODBC)**, and check within the User DSN, System DSN or File DSN tabs
4. If step 3) above is **OK**, then identify whether the **SQL.ini** is correctly configured or whether there is a connection error:
  - To test start the `\amlib\upgrade.exe` SQL interface program:

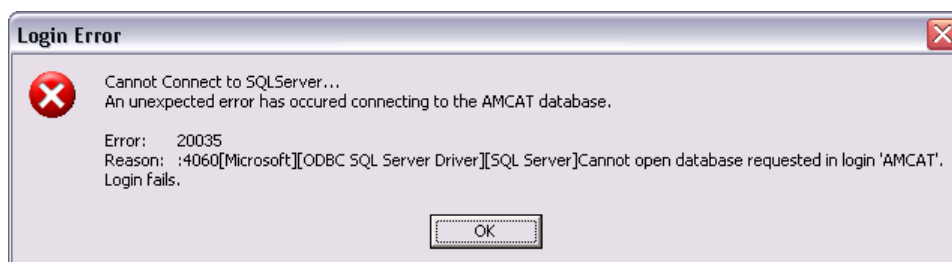
# Amlib Client Installation Guide

- a) From the menu, select **File > Advanced Login** – the Advanced Login prompt will display:



- b) Enter the login of **NETOPACS**, the password (usually **NETOPACS**) and database **AMLIB** and click the **OK** button
- c) If Upgrade is able to connect OK to the selected database and will return to the main Upgrade screen and display the username and database
- d) For *SQL Server* and *SQLBase* RDBMS - repeat the above Advanced Login step for each other database (**AMCAT**, **AMLOCAL** and **AMSTATS**) to see whether the problem is due to being unable to connect to only 1 of the databases

If Upgrade is unable to connect to the selected database then take a detailed copy of the displayed error message (for example: press [**PrtScn**] on your keyboard and paste into a *Word* document) and contact *Amlib Support* for further assistance.

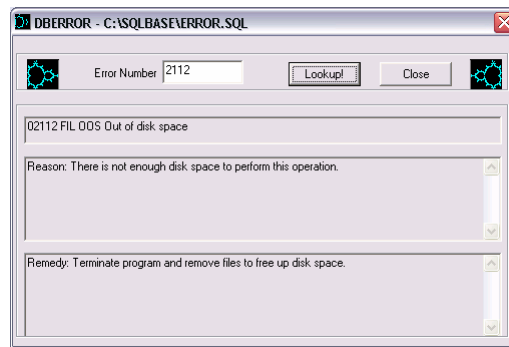


It is also suggested that you take a note of the Error number and research with the RDBMS vendor the explanation and resolution for the Error number:

- For *Microsoft SQL Server*– go to <http://support.microsoft.com>
- For *Oracle* – go to <http://www.oracle.com/support/index.html>
- For *Gupta SQLBase* – On the database server you can use the utility **dberror.exe** located in the **c:\SQLBase** folder to provide more information:

# Amlib Client Installation Guide

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Some of the reasons that the **Upgrade.exe** is unable to connect to the selected database:

- The database does not exist within the RDBMS (for example: if an administrator had deleted the **AMLIB** database)
  - The administrator had moved the *Amlib* databases to another server
  - The database server has insufficient disk space
  - The *Amlib* **SQL.ini** configuration file (located in the **c:\amlib** for the *Amlib Client*, or **c:\netopacs** for the *NetOpacs* module) is not correctly configured – see: [Configure SQL.ini Settings](#) for more information
  - For libraries using *Oracle* RDBMS – the *Oracle Net8 (SQL\*Net)* Client is not correctly configured (using the *Oracle TNSPING* utility on the Workstation to test)
  - For libraries using *Microsoft SQL Server* – an old version of the Windows MDAC (ODBC) drivers are installed
5. If step 4) above is OK, then perhaps the *Amlib* database connection settings held in **{\windows}\amlib.ini** are incorrect (these are different to the *DIY DefaultUser* and **Login** settings)

## Advanced Support Note for Oracle Version 8 Client

### Unable to Retrieve Rows from the Database

*OLC* has identified some problems that some workstations and web servers using *Oracle 8 Net8 (SQL\*Net)* Client and *Amlib*:

- The PCs would “hang” when trying to login to *Amlib* and display a message that it is unable to connect to the database
- When trying to using *SQLTalk* to troubleshoot, you can connect to the database but *SQLTalk* would hang when trying to retrieve rows from any tables (for example: **select \* from borrower**)

Action Taken:

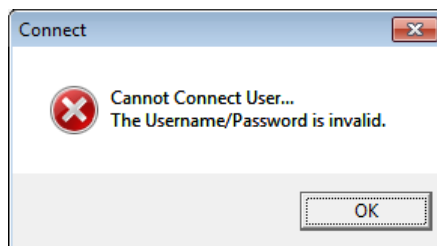
- In the *Windows* registry (**regedit**) within **HKEY\_LOCAL\_MACHINE\SOFTWARE\ORACLE\** create a new *String* value of **ORAOCI** with a value of **ORACIENT8.DLL**
- If problem still occurs rename or remove the file **c:\amlib\OCIW32.DLL** especially since this file will already exist in the *Oracle* Client installation folder..

- Technical Notes from *Centura* using **OCIW32.DLL**:  
*In CTD 1.1.1, the Oracle router utilizes an Oracle DLL named OCIW32.DLL. As the Oracle documentation describes the function of this library, it uses the 'variable' ORAOCI to determine the name of the Oracle client DLL to load. If ORAOCI is not defined, OCIW32 will search through a predefined list of known Oracle client DLL names (most recent to least recent releases) until it either finds one or exhausts the known names and returns an error. The version of OCIW32.DLL that ships with CTD has a predefined list of Oracle client DLL names which predates the release of Oracle 8. If a particular workstation has only Oracle 8 files installed, the Oracle client DLL will not be found; this will have a name like ORA803.DLL. To correct this problem, either delete or rename the OCIW32.DLL that comes with CTD so that the Oracle router will load the OCIW32.DLL released by Oracle which knows about the Oracle 8 client DLL names, or define the variable ORAOCI to point to ORA803.DLL (or whatever name is current). This variable is located in the registry, and the CTD release notes contain instructions on how to locate it and set its value.*

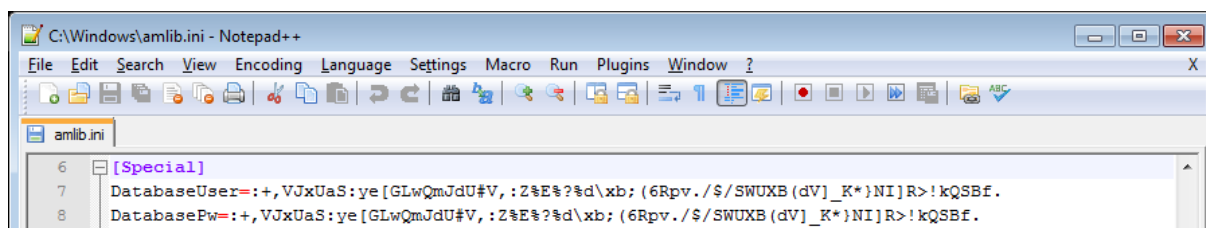


# Amlib Client Installation Guide

## Cannot Connect User



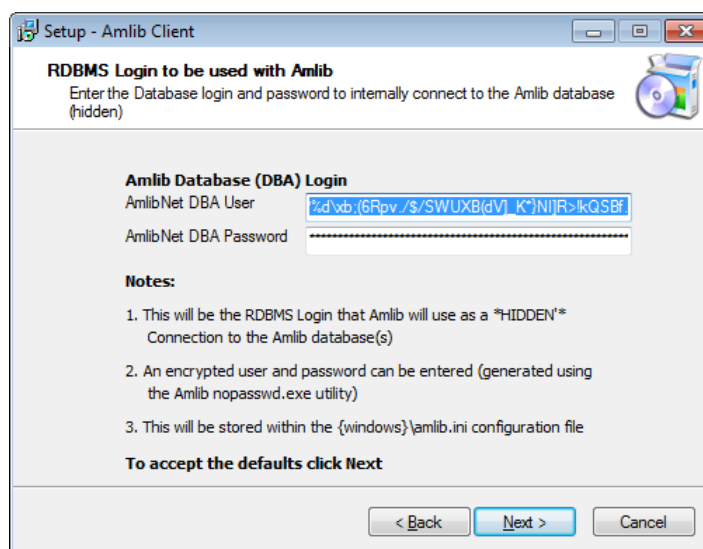
When the *Amlib* client is installed on a *Windows 7* machine, an **amlib.ini** file is placed in the **C:\Windows** (in older machines this may be the **C:\Winnt** folder). This file contains the *SQL Server* login details that allow the *Amlib* client to connect to the *SQL* databases.



Typically the **[Special]** section of the **amlib.ini** file would contain the following information:

- DatabaseUser=:+,VJxUaS:ye[GLwQmJdU#V,:Z%E%?%d\xb;(6Rpv./\$/SWUXB(dV)\_K\*)NI]R>!kQSBf.
- DatabasePw=:+,VJxUaS:ye[GLwQmJdU#V,:Z%E%?%d\xb;(6Rpv./\$/SWUXB(dV)\_K\*)NI]R>!kQSBf.

These settings are encrypted version of the **SYSADM/SYSADM** login (the default RDBMS login used for connecting the *Amlib* client to the *SQL* databases) – which are configured during installation:



Occasionally (due to various permissions issues), the installer is unable to write to the **amlib.ini** file and the **DatabaseUser** and **DatabasePw** settings are left blank:

- DatabaseUser=
- DatabasePw=

# Amlib Client Installation Guide

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If this occurs, the user has several choices:

1. If you wish to use the default **SYSADM/SYSADM** login, you can copy in paste in the following settings (replacing the blank ones in the file):
  - DatabaseUser=:+,VJxUaS:ye[GLwQmJdU#V,:Z%E%?%d\xb;(6Rpv./\$/SWUXB(dV)\_K\*)NI]R>!kQSBf.
  - DatabasePw=:+,VJxUaS:ye[GLwQmJdU#V,:Z%E%?%d\xb;(6Rpv./\$/SWUXB(dV)\_K\*)NI]R>!kQSBf.
2. You can type in the RDBMS login you are using (this login must also have been setup in SQL server against the individual Amlib databases)
3. You can use the **nopassword.exe** application (**C:\Amlib\nopassword.exe**) to generate an encrypted login and copy this into the *Windows amlib.ini* file
  - See: [Appendix B: Generate Encrypted RDBMS Password](#) for further information

**Please Note:** The user may need to adjust the folder and/or file permissions to allow the login details to be written into the **amlib.ini** file.

- See [Appendix D: Edit Access Control](#) for further information

**Addendum:** Under certain exceptional circumstances, a copy of the **amlib.ini** file may also be found in the Users Virtual Store folder:

- C:\Users\User Name\AppData\Local\VirtualStore\Windows\amlib.ini

This also may need to be adjusted.

## APPENDICES

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### Appendix A: Silent Mode Command Line Parameters

The *Amlib Client 5.3* installer features the option to install with silent mode command parameters - ideal if you wish to automatically distribute to *Amlib* staff workstations as part of a login script.

For example:

- **Amlib53Setup.exe /VERYSILENT /SUPPRESSMSGBOXES /NOCANCEL /DIR="C:\Amlib"**

(Installs the *Amlib Client 5.3* silently to the **C:\Amlib** location on the workstation)

Details of available parameters are:

#### **/SILENT, /VERYSILENT**

Instructs Setup to be silent or very silent. When Setup is silent the wizard and the background window are not displayed but the installation progress window is. When a setup is very silent this installation progress window is not displayed. Everything else is normal, so for example: error messages during installation are displayed unless disabled using **/SUPPRESSMSGBOXES**

If a restart is necessary and the **/NORESTART** command isn't used (see below) and Setup is silent, it will display a Reboot now? message box. If it's very silent it will reboot without asking.

#### **/SUPPRESSMSGBOXES**

Instructs Setup to suppress message boxes. Only has an effect when combined with **/SILENT** and **/VERYSILENT**.

The default response in situations where there's a choice is:

- **Yes** in a Keep newer file? situation
- **No** in a File exists, confirm overwrite. situation
- **Abort** in Abort/Retry situations
- **Cancel** in Retry/Cancel situations
- **Yes** (=continue) in a DiskSpaceWarning/DirExists/DirDoesntExist/NoUninstallWarning/ExitSetupMessage/ConfirmUninstall situation
- **Yes** (=restart) in a FinishedRestartMessage/UninstalledAndNeedsRestart situation

5 message boxes are not suppressible:

- The About Setup message box
- The Exit Setup? message box
- The FileNotInDir2 message box displayed when Setup requires a new disk to be inserted and the disk was not found
- Any (error) message box displayed before Setup (or Uninstall) could read the command line parameters
- Any message box displayed by [Code] support function MsgBox.

#### **/NOCANCEL**

Prevents the user from cancelling during the installation process, by disabling the **Cancel** button and ignoring clicks on the **Close** button. Useful along with **/SILENT** or **/VERYSILENT**.

#### **/NORESTART**

Instructs Setup not to reboot even if it's necessary.

#### **/RESTARTEXITCODE=exit code**

Specifies the custom exit code that Setup is to return when a restart is needed. Useful along with **/NORESTART**. Also see Setup Exit Codes.

#### **/DIR="X:\dirname"**

Overrides the default directory name displayed on the Select Destination Location wizard page. A fully qualified pathname must be specified.

#### **/PASSWORD=password**

Specifies the Password (Serial Key) to use.

When an invalid password is specified, this command line parameter is also ignored.

# Amlib Client Installation Guide

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## **/GROUP="folder name"**

Overrides the default folder name displayed on the [Select Start Menu Folder](#) wizard page.

## **/NOICONS**

Instructs Setup to initially check the **Don't create any icons** check box on the [Select Start Menu Folder](#) wizard page.

## **/COMPONENTS="comma separated list of component names"**

Overrides the default components settings. Using this command line parameter causes Setup to automatically select a custom type.

(You will need to contact *Amlib Support* for a complete list of components that are available to choose from, depending on which installer is being used)

## **/TASKS="comma separated list of task names"**

Specifies a list of tasks that should be initially selected or deselected. To deselect a task, prefix its name with a "!" character.

Only the specified tasks (and their children) will be selected; the rest will be deselected. Use the **/MERGETASKS** parameter instead if you want to keep the default set of tasks and only select/deselect some of them.

Examples:

Deselect all tasks, then select the "desktopicon" and "fileassoc" tasks:

```
/TASKS="desktopicon,fileassoc"
```

Deselect all tasks, then select a parent task item, but exclude one of its children:

```
/TASKS="parent,!parent\child"
```

## **/MERGETASKS="comma separated list of task names"**

Like the **/TASKS** parameter, except the specified tasks will be merged with the set of tasks that would have otherwise been selected by default.

If [UsePreviousTasks](#) is set to **yes**, the specified tasks will be selected/deselected after any previous tasks are restored.

Examples:

Keep the default set of selected tasks, but additionally select the "desktopicon" and "fileassoc" tasks:

```
/MERGETASKS="desktopicon,fileassoc"
```

Keep the default set of selected tasks, but deselect the "desktopicon" task:

```
/MERGETASKS="!desktopicon"
```

## **/LOG**

Causes Setup to create a log file in the user's TEMP directory detailing file installation and [Run] actions taken during the installation process. This can be a helpful debugging aid. For example, if you suspect a file isn't being replaced when you believe it should be (or vice versa), the log file will tell you if the file was really skipped, and why.

The log file is created with a unique name based on the current date. (It will not overwrite or append to existing files.)

The information contained in the log file is technical in nature and therefore not intended to be understandable by end users. Nor is it designed to be machine-parseable; the format of the file is subject to change without notice.

## **/LOG="filename"**

Same as **/LOG**, except it allows you to specify a fixed path/filename to use for the log file. If a file with the specified name already exists it will be overwritten. If the file cannot be created, Setup will abort with an error message.

## **/LOADINF="filename"**

Instructs Setup to load the settings from the specified file after having checked the command line. This file can be prepared using the **/SAVEINF=** command as explained below.

Don't forget to use quotes if the filename contains spaces.

## **/SAVEINF="filename"**

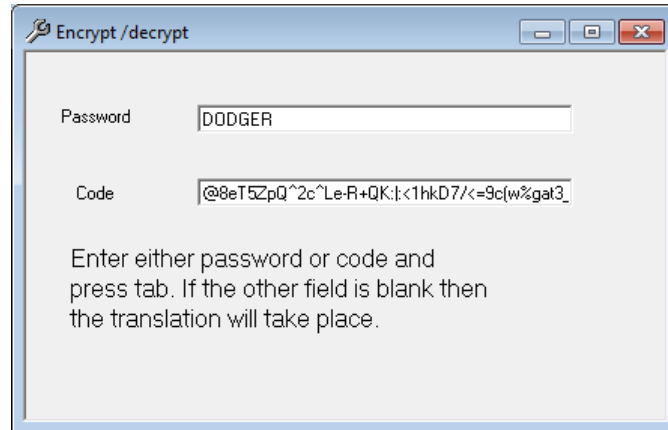
Instructs Setup to save installation settings to the specified file.

Don't forget to use quotes if the filename contains spaces.

## Appendix B: Generate Encrypted RDBMS Password

The **nopasswd.exe** utility is located in the **C:\Amlib** folder after installation.

1. Double-click on the **nopasswd.exe** application to open the Encrypt/decrypt screen will display:



2. Type in the Password (for which you would like to generate an encrypted string) – for example: **DODGER**
3. Press the **<Tab>** key
4. The encrypted password will display in the Code box – for example:  
**@8eT5ZpQ^2c^Le-R+QK:|:<1hkD7/<=9c(w%gat3\_9f\m+u>&;Zo[Y`>H.E6qWqZ\*o."q9**
5. Copy encrypted password for use

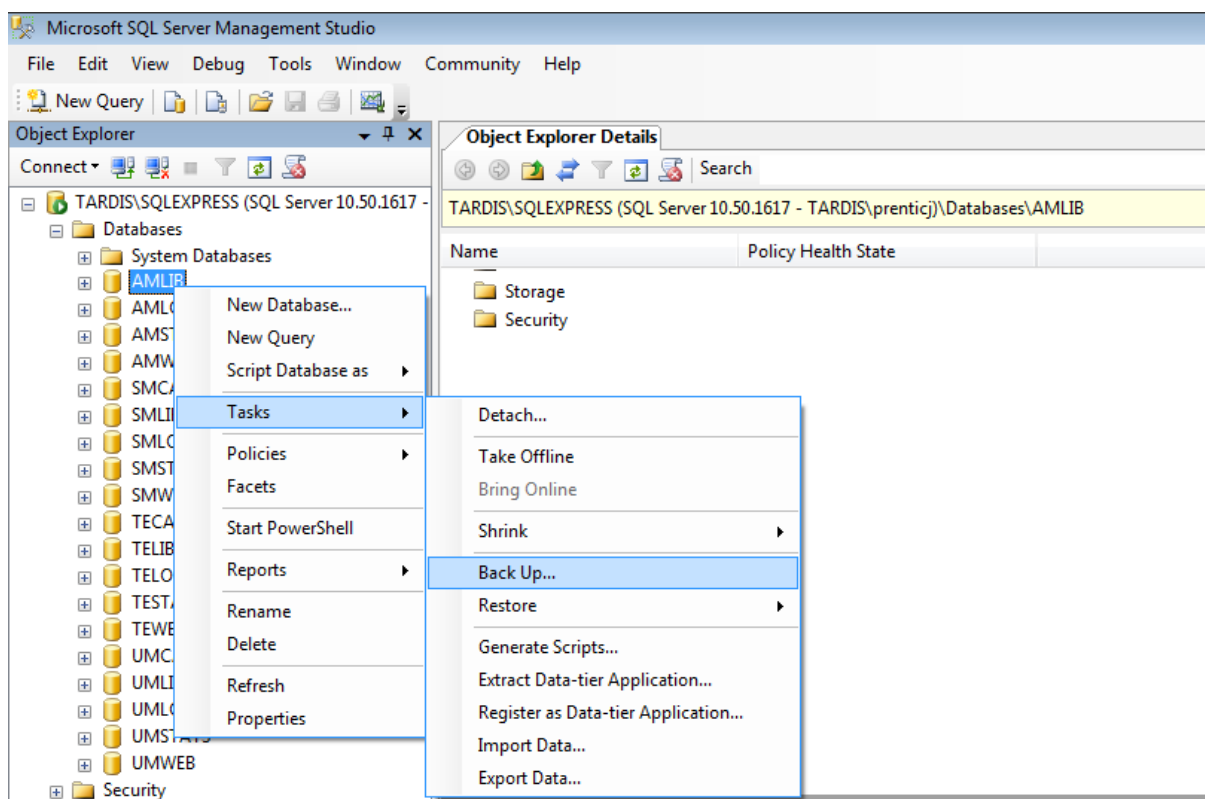
## Appendix C: Backup Existing Live (and Test) Databases (Server Migrations Only)

The following databases must be backed up:

- **AMCAT**
- **AMLIB**
- **AMLOCAL**
- **AMSTATS**
- **AMWEB**

### Backup

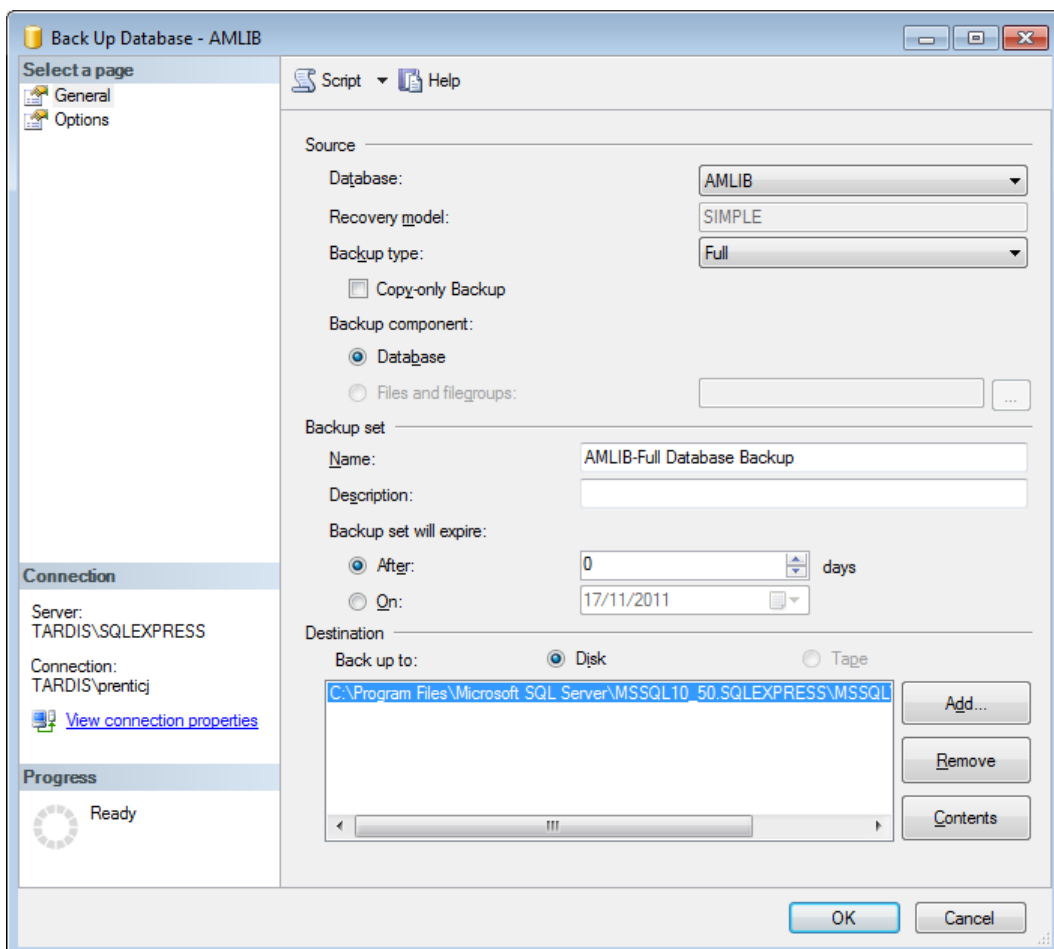
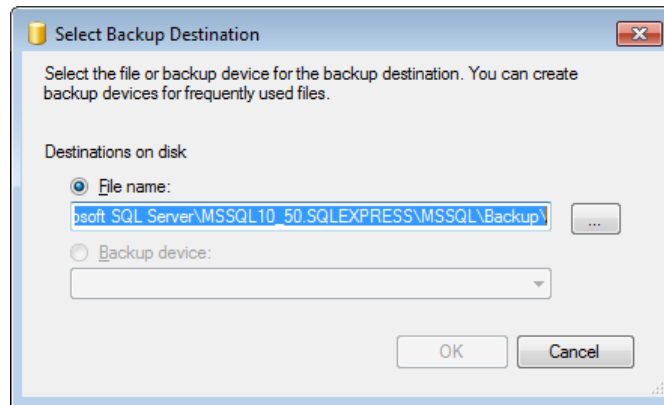
1. Launch *Microsoft SQL Server Management Studio*
2. Expand the Databases selection tree [+]
3. Right-click on the **AMCAT** database and select **Tasks > Back Up...**



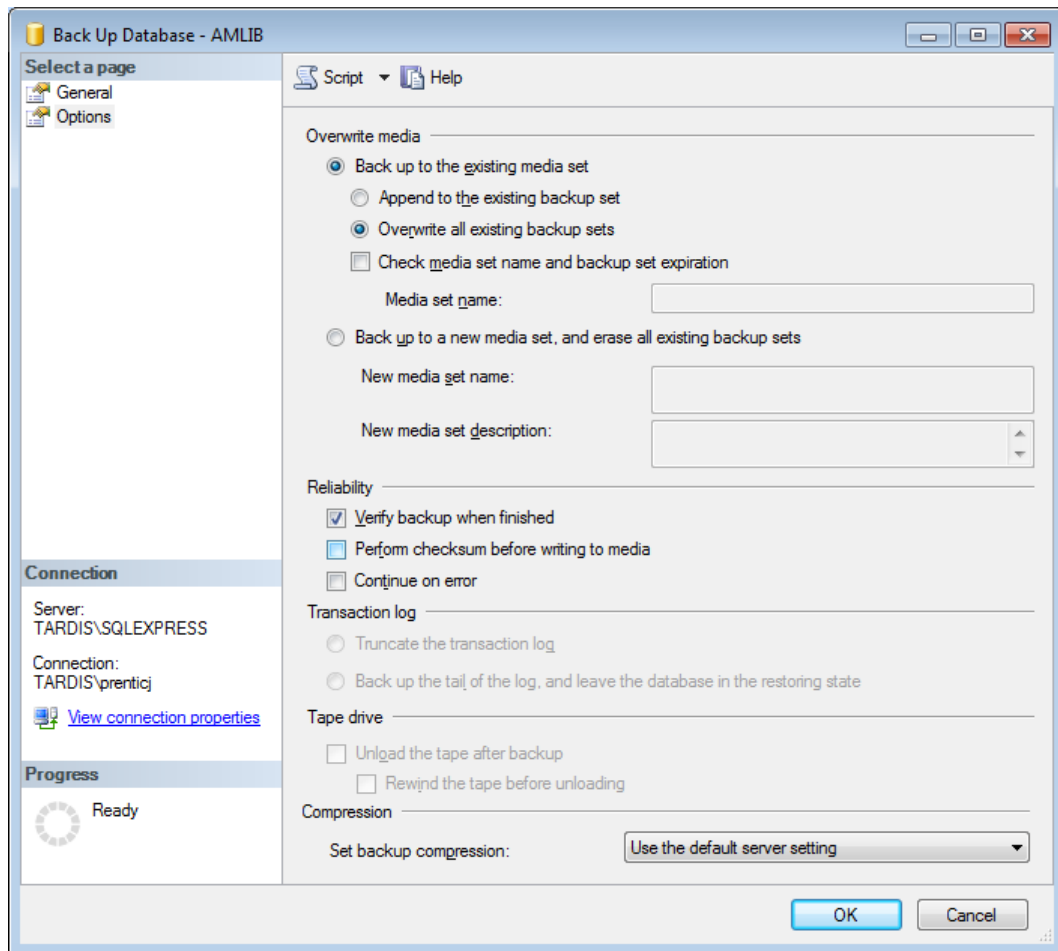
4. The Back Up Database screen will display
5. Select the General page
6. Choose the following options:
  - Source
    - Database: **AMCAT**
    - Backup type: **Full**
  - Destination (can leave as default)
    - Click on the **Add** button to open the Select Backup Destination screen

# Amlib Client Installation Guide

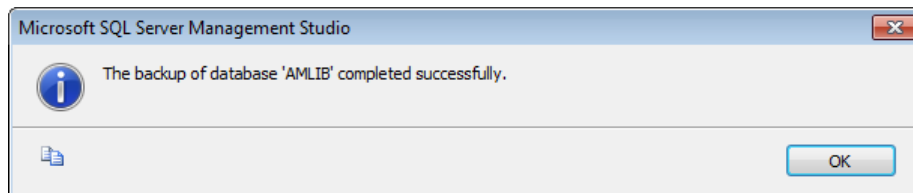
- Click on the ... button to browse to and select a destination
- Click on the **OK** button



7. Select the Options page
8. Choose the following options:
  - Overwrite media:
    - **Overwrite all existing backup sets**
  - Reliability:
    - **Verify backup when finished**



9. Click the **OK** button
10. When complete the following message will appear: **The backup of database 'AMCAT' completed successfully.**



11. Repeat steps 3 – 10 for the **AMLIB**, **AMLOCAL**, **AMSTATS** and **AMWEB** databases

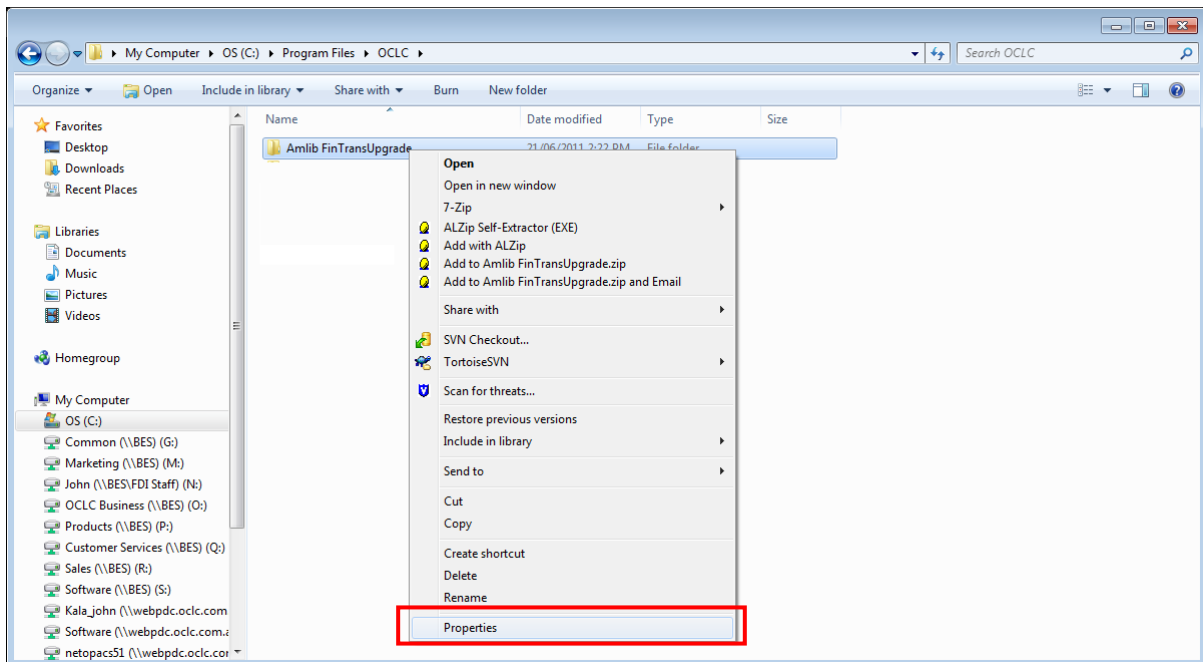


# Amlib Client Installation Guide

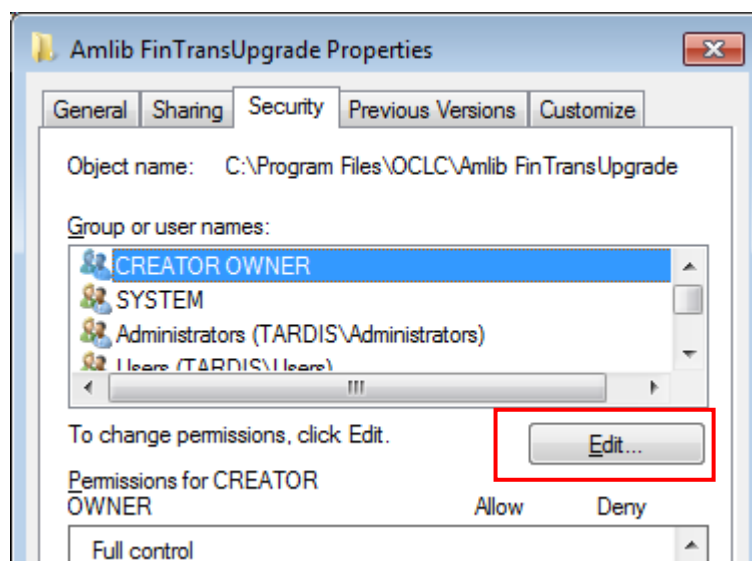
## Appendix D: Edit Access Control

Due to the additional extra security measures on *Windows Server 2008*, *Windows 7* and *Vista*, you may need to edit the installation's access control list settings before being able to customise the **SQL.ini** (and **Amlib.ini**) files.

1. Locate the drive containing the *Amlib Client* – for example **C:\**
2. Right-click on the **Amlib** folder and select **Properties**



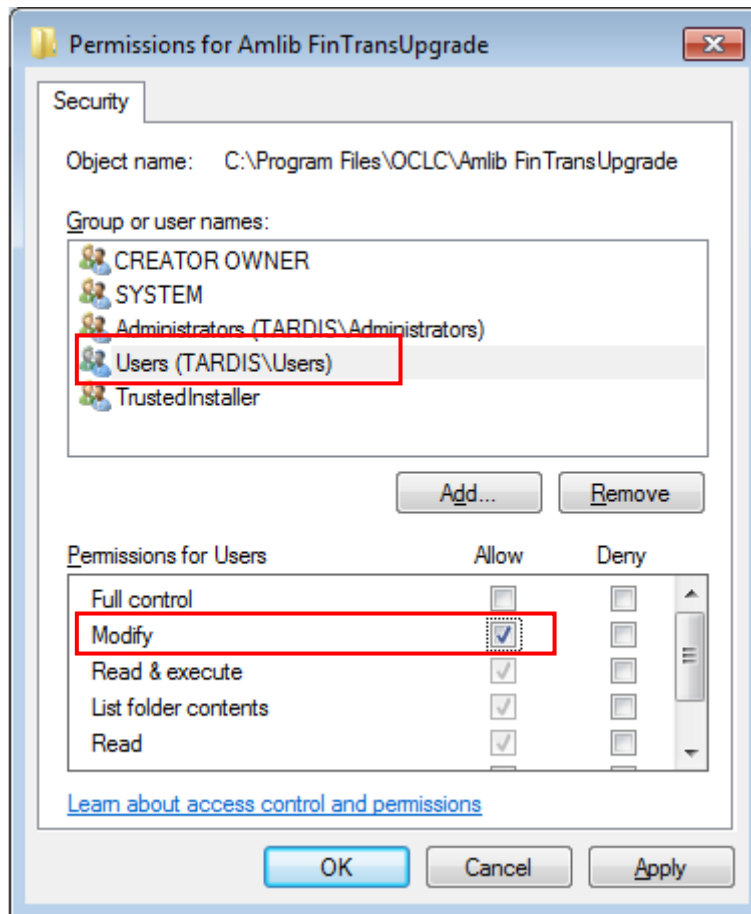
3. The Amlib FinTransUpgrade Properties screen will display
4. Select the Security tab



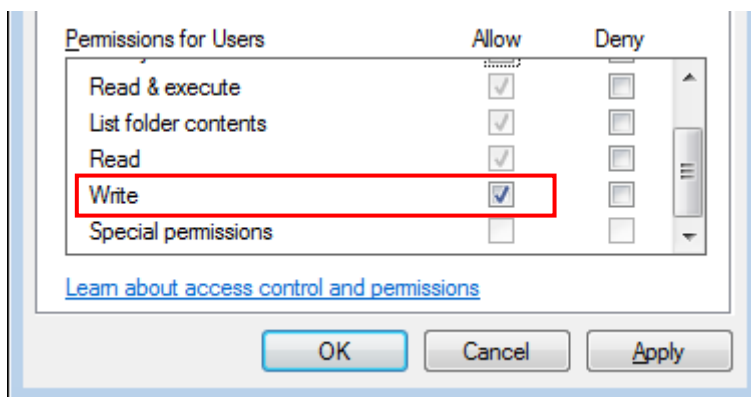
5. Click the **Edit...** button – the Permissions for Amlib FinTransUpgrade screen will display
6. In the Group or user names: pane, click on the **Users** entry

## Amlib Client Installation Guide

- Then in the Permissions for Users pane, **check** the Allow checkbox for the Modify setting – this will give Users the necessary group permission to apply modifications to files and folders in the **FinTransUpgrade** folder:



- This action will automatically **check** the Allow checkbox for the Write setting:



- Click on the **OK** button on the Permissions for Amlib FinTransUpgrade and the Amlib FinTransUpgrade Properties screens to complete the change of permissions