

**Amlib** Library Management System

# Amlib Client 5.4 Installation Guide

Version 5.4

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## WELCOME

Welcome to the Amlib Client 5.4 Installation Guide for new installations of Amlib (not for upgrades).

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

#### OVERVIEW

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

- 1. Install the *Amlib Client 5.4* application
- 2. Install the database server:
  - a. MS SQL Server 2008 R2 (Appendix C)
  - b. Oracle
- 3. Create and configure *Amlib* databases
- 4. Configure the *Amlib* database connection settings
- 5. Install Amlib Client 5.4.x patches (where applicable, see separate documentation)

## BEFORE YOU BEGIN THE INSTALLATION...

#### 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 log a TOPdesk request at <u>https://servicedesk.oclc.org/tas/public/index.jsp</u>. If you do not know your TOPdesk login please email <u>support-amlib@oclc.org</u> and we will send it to you.

This installation process is for NEW installations only. This documentation should **NOT** be used for upgrades. Follow the instructions precisely

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

- Amlib Client 5.4 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 5.4* installation requires a serial number. You must contact Amlib Support via TOPdesk to receive your serial keys for the modules that your library has purchased.

## AMLIB SUPPORTED OPERATING SYSTEMS & SYSTEM REQUIREMENTS

#### **Database Server**

Operating System	<ul> <li>Windows 2003, 2008 (R2)</li> <li>Linux (and Unix)</li> </ul>
RDBMS	Microsoft SQL Server 2005, 2008 (R2)
	• Oracle 9i, 10g, 11gR2
Memory (RAM)	<ul> <li>Depends on operating system, volume &amp; RDBMS selected</li> <li>Minimum 2GB RAM for SQL Server</li> </ul>
	Minimum 2GB RAM for <i>Oracle</i>
Hard Disk	• Depends on volume. Using multiple Fast SCSI-3 Disk Drives (for example: more SCSI drives provides better performance)
Backup	Removable backup device (for example: 4mm DAT Tape Drive)

## NetOpacs (Web Opac) Application Web Server

Operating System	Windows 2003, 2008 with IIS pre-installed
Memory (RAM)	<ul> <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)

Operating System	Windows XP, Vista, Windows 7
Memory (RAM)	<ul> <li>Minimum 256 Mb for <i>Windows XP</i></li> <li>Minimum 1GB for <i>Windows 7</i></li> <li>Minimum 1GB for <i>Windows Vista</i></li> </ul>
Display	• SVGA (800x600) minimum
Web Browser	Internet Explorer 7 and above (will also work with other JAVA enabled browsers)

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

## SECTION 1: AMLIB CLIENT INSTALLATION

## **Default Installation Folders**

To assist with 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* will need to ensure that the *NetOpacs* 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 5.4 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 <u>Administrative Privileges</u>.

- The Amlib Client 5.4 installer is available on the OCLC Website, under <u>Setup Programs>Amlib</u> <u>Client:</u> <u>https://www.oclc.org/support/services/amlib/downloads-software-updates/version5-4/setup-programs.en.html</u> (contact Amlib support if you require a login to this website)
- 2. Download the Amlib54Setup.exe and save it on your Amlib server
- 3. Double-click the **Amlib54Setup.exe** to launch the installation Wizard the <u>Setup Amlib</u> <u>Client</u> screen will open displaying the **Welcome** message:



4. Click the **Next** button – the <u>Serial</u> screen will display, prompting you for a valid <u>Serial</u> Number:

🔂 Setup - Amlib Client	- • •
Serial This product requires a valid Serial Number from OCLC (UK) before installat continue.	tion can
Please enter the Serial Number supplied by OCLC (UK), then click Next to Serial numbers are case-sensitive.	continue.
Serial:	
•••••	
< <u>B</u> ack <u>N</u> ext >	Cancel

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

😼 Setup - Amlib Client	- • •
Select the installation Location Where is the Amlib Client to be installed?	õ
Select the folder where Amlib Client will be installed. To use the d displayed click Next to continue.	efault folder
To continue, click Next. If you would like to select a different folder, click E	
C. VYIIID	Browse
At least 1.1 MB of free disk space is required.	
< <u>B</u> ack <u>N</u> ext >	Cancel

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)

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

弲号 Setup - Amlib Client	
Select Components Which components should be installed?	õ
Select the components you want to install; clear the components you do n install. Click Next when you are ready to continue.	ot want to
Choose Modules To Install  Choose Report Template Paper Format  Choose Report Templa	
Current selection requires at least 155.5 MB of disk space.	
< <u>B</u> ack <u>N</u> ext >	Cancel

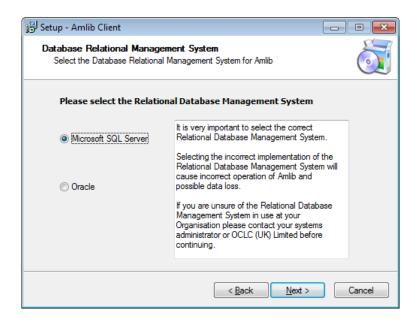
- 9. <u>Choose</u> which components should be installed:
  - a. Modules To Install:
    - Amlib Staff User (Full) installs Amlib Staff Client (catalogue, circulation, etc.)
    - Amlib Opac Only only installs the Amlib Client Server OPAC module (*only* select this option if you installing on a Public Access workstation)
  - b. <u>Report Template Paper Format</u>:
    - A4 (Australia, UK, Europe) installs the *Amlib* report templates formatted for A4 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 5.4* installer configures an (encrypted) default login and password of SYSADM/SYSADM.

10. Select options and click the Next button

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



**Please Note:** *Gupta SQLBase* is not supported by *Amlib version 5.4*. 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 <u>Configure the SQL ini file</u> screen will display prompting you for additional information:

🔂 Setup - Amlib Client	
Configure the SQL ini file Enter the details required to configure the sql.ini file	<b>T</b>
Please enter the database server name	
SERVERNAMEVINSTANCE	
For Microsoft SQL Server the name will be the machine network name.	
Please enter the database server IP address	
Please enter the SQL Server ODBC driver name	
SQL Server	
To accept the defaults click Next	
< <u>B</u> ack <u>N</u> ext >	Cancel

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

- <u>Please enter the (SQL Server) database server name</u> default display is current local machine name (for example: **tardis**)
- <u>Please enter the database server IP address</u>- default display is current local machine IP address (for example: **127.0.0.1** for localhost)
- <u>Please enter the SQL Server ODBC driver name</u> 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 <u>RDBMS Login to be used with Amlib</u> screen will display :

🔁 Setup - Amlib Client	
RDBMS Login to be used with A Enterthe Database login and passw (hidden)	mlib vord to internally connect to the Amlib database
<b>Amlib Database (DBA)</b> AmlibNet DBA User AmlibNet DBA Password	Login [%d\xb;(6Rpv:/\$/SWUXB(dV]_K*)NI]R>!kQSBf 
Notes:	
1. This will be the RDBMS L Connection to the Amlib	ogin that Amlib will use as a *HIDDEN'* o database(s)
2. An encrypted user and the Amlib nopasswd.ex	password can be entered (generated using e utility)
3. This will be stored within	the {windows}\amlib.ini configuration file
To accept the defaults	click Next
	< <u>Back</u> <u>N</u> ext > Cancel

#### 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 <u>Appendix B: Generate Encrypted RDBMS Password</u>)
- This will be stored within the **{windows}\amlib.ini** configuration file

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

15. The <u>Select Start Menu Folder</u> screen will display:

15 Setup - Amlib Client	- • ×
Select Start Menu Folder Where should Setup place the program's shortcuts?	õ
Setup will create the program's shortcuts in the following Start M To continue, click Next. If you would like to select a different folder, click	
Amlib Library Management System	Browse
< <u>Back</u> Next >	Cancel

- 16. To accept the default name (for most customers), click the Next button
- 17. The <u>Select Additional Tasks</u> screen will display prompt if you wish to install a desktop icon for the *Amlib Client*:

追 Setup - Amlib Client	- • -
Select Additional Tasks Which additional tasks should be performed?	õ
Select the additional tasks you would like Setup to perform while installing then click Next.	Amlib Client,
Install Desktop Icons	
Install desktop icons for selected Components	
< <u>B</u> ack <u>N</u> ext >	Cancel

- 18. (You can unselect <u>Install desktop icons for selected Components</u> if you do not wish to install the *Amlib* icons on the desktop)
- 19. Click the **Next** button to continue

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

📳 Setup - Amlib Client	- • -
Ready to Install Setup is now ready to begin installing Amlib Client on your computer.	
Click Install to continue with the installation, or click Back if you want to re change any settings.	eview or
Destination location: C:\Amlib	^
Setup type: Select Items To Install	Е
Selected components: Choose Modules To Install Amlib Staff User (Full) Choose Report Template Paper Format A4 (Australia, UK, Europe)	
Start Menu folder:	+
	F
< <u>B</u> ack Install	Cancel

- 21. Click the **Install** button the <u>Installing</u> screen will display
- 22. When complete click the Finish button
- 23. The setup Wizard will close

Installation of the Amlib Client 5.4 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

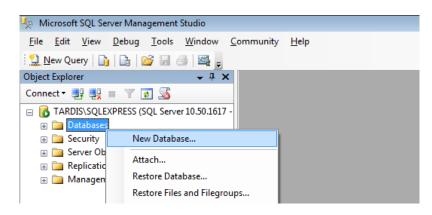
See separate instructions for **Iconsetup.exe** installation.

## SECTION 2: CREATING AND LOADING DATABASES

#### Step 1: Create the Live Amlib Databases

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

- 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...



#### 1. The <u>New Database</u> screen will display:

🚦 New Database						
Select a page	🔄 Script 👻 🛐	Help	$\sim$			
Poptions Filegroups	Database <u>n</u> ame:		AMCAT	)		
	<u>O</u> wner: √ <u>U</u> se full-text in	ndexing				
	Database <u>fi</u> les:					
	Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth	fath
	AMCAT	Rows	PRIMARY	10	By 1 MB, unrestricted growth	c:\Program Files\Microsoft SQ
	AMCAT_log	Log	Not Applicable	1	By 10 percent, unrestricted growth	c:\Program Files\Microsoft SQ
Connection						
Server: TARDIS\SQLEXPRESS Connection:						
TARDIS\prenticj						
View connection properties						
Progress						
Ready	٠				Add	► <u>R</u> emove
						OK Cancel

2. Type in the first Database name - for example: AMCAT

- 3. In the Database files section, AMCAT row:
  - a. In the Initial Size (MB) column, adjust the initial size from 3 (Mb) to 10 (Mb)
  - b. In the <u>Autogrowth</u> column, click the ... button for the **AMCAT** row the <u>Change</u> <u>Autogrowth for AMCAT</u> screen will display:

🗄 Change Autogrowth for AMCAT	×
☑ Enable Autogrowth	
File Growth	
In Percent	10 🚔
In <u>M</u> egabytes	1
Maximum File Size	
<u>R</u> estricted File Growth (MB)	100 🚔
Unrestricted File Growth	
	OK Cancel

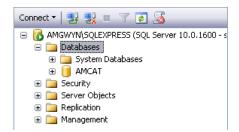
- c. Ensure that:
  - i. <u>File Growth</u> = 10 (In Percent)
  - ii. <u>Maximum File Size</u> = Unrestricted File Growth
- d. Click the **OK** button
- 4. Repeat step 5 for the AMCAT\_log row in the Database files section

Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth	ath
AMCAT	Rows	PRIMARY	10	By 10 percent, unrestricted growth	::\Program Files\Microsoft S
AMCAT log	Log	Not Applicable	10	By 10 percent, unrestricted growth	 ::\Program Files\Microsoft S

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

📙 New Database						
Select a page	Script 🔻 🚺 Help					
Options Filegroups	Collation:					
	Recovery model: Simple					
	Compatibility level: Sut Server 24					
	Other options:					
	Automatic	*				
	Auto Close	False				
	Auto Create Statistics	True				
	Auto Shrink	False				
	Auto Update Statistics	True				
	Auto Update Statistics Asynchronously	False 😑				
	Cursor					
	Close Cursor on Commit Enabled	False				
	Default Cursor	GLOBAL				
	Miscellaneous					
Connection	ANSI NULL Default	False				
	ANSI NULLS Enabled	False				
Server:	ANSI Padding Enabled	False				
TARDIS\SQLEXPRESS	ANSI Warnings Enabled	False				
Connection:	Arithmetic Abort Enabled	False				
TARDIS\prenticj	Concatenate Null Yields Null	False				
I View connection properties	Cross-database Ownership Chaining Enabled	False				
	Date Correlation Optimization Enabled	False				
-	Numeric Round-Abort	False 👻				
Progress Ready	ANSI NULL Default	· · · · · · · · · · · · · · · · · · ·				
		OK Cancel				

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



7. 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).

Database files:						•
Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth	1	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).

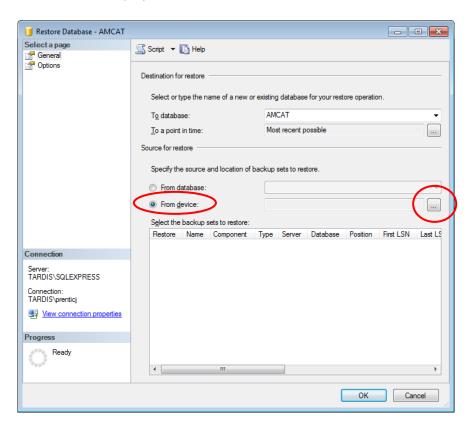
In some instances, these backed up databases will have been configured for an *Oracle* or *SQLBase* environment and will need to be converted to be compatible with a *SQL Server* environment (see separate instructions).

#### **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 <u>Databases</u> selection tree [+]

3. Right-click on the **AMCAT** database and select **Tasks** > **Restore** > **Database...** – the <u>Restore</u> <u>Database</u> screen\_will display:



- 1. Select the From device: radio button
- 2. Click the ... (Select Devices)button the Specify Backup screen will display:

📟 Specify Backup	×
Specify the backup media a	nd its location for your restore operation.
Backup media:	File •
Backup location:	
	Add
	Remove
	Contents
	QK Cancel Help

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

Uccate Backup File - TARDIS	SQLEXPRESS
Select the file:	
InstallShield Install     InstallShield Install     InstantEyedropper     Intel     Intel     Intel     Intel     Intel     Intel     Internet Explorer     Internet Explor	t ver .SQLEXPRESS
🖬 AI	MLOCAL.bak
IA 🚺 🚺 AI	MSTATS.bak MWEB.bak
	MCAT bak
Selected path:	C:\Program Files\Microsoft SQL Server\MSSQL
Files of type:	Backup Files(*.bak;*.tm)
File <u>n</u> ame:	AMCAT.bak
	OK Cancel

- 4. Select the corresponding AMCAT.BAK file
- 5. Click the **OK** button to return to the <u>Specify Backup</u> screen:

📼 Specify Backup	
Specify the backup media and its lo	cation for your restore operation.
<u>B</u> ackup media:	File
Backup location:	
C:\Program Files\Microsoft SQL Set	rver\MSSQL10_50.SQLEXPRESS\MSSQL\
	Remove
	Contents
•	4
	OK Cancel Help

6. Click the **OK** button to return to the <u>Restore Database</u> screen:

🧻 Restore Database - AMCAT						• <b>x</b>
Select a page	🔄 Script 🔻 📑 Help					
General Monopolarity of the second secon	Destination for restore	of a new or existing	database for yo	ur restor	e operation.	
	T <u>o</u> database:	AMC	AT			•
	To a point in time:	Most	recent possible	;		
	Source for restore					
	Specify the source and	location of backup se	ets to restore.			
	○ From database:					Ŧ
	• From <u>d</u> evice:	C:\Pr	ogram Files\Mid	crosoft S	QL Server\MSSQL10_	5
	Select the backup sets	to restore:				
	Restore Name		Component	Туре	Server	D
Connection	AMCAT-Fu	II Database Backup	Database	Full	TARDIS\SQLEXPRI	ESS F
Server: TARDIS\SQLEXPRESS Connection: TARDIS\prenticj Wew connection properties						
Progress						
Ready	< III					*
					OK Can	ncel

- 7. Tick the <u>Restore</u> box for the selected database
- 8. Click the **OK** button to return to the <u>Specify Backup</u> screen:

📼 Specify Backup		×
Specify the backup media and its lo	cation for your restore operation.	
Backup media:	File	
Backup location:		
C:\Program Files\Microsoft SQL Se	rver\MSSQL10_50.SQLEXPRESS\MSSQL\	<u>A</u> dd
		Remove
		Contents
•	•	
	OK Cancel	Help

9. Click the **OK** button to return to the <u>Restore Database</u> screen:

🧻 Restore Database - AMCAT							
Select a page	🔄 Script 👻 🎼 Help						
Options	Destination for restore						
	Select or type the name of a new or existing database for your restore operation.						
	T <u>o</u> database:	AMC/	AT		▼		
	<u>T</u> o a point in time:	Most	recent possible				
	Source for restore						
	Specify the source and location	n of backup se	ets to restore.				
	From database:				<b>•</b>		
	• From <u>d</u> evice:	C:\Pr	ogram Files\Mid	crosoft S	QL Server\MSSQL10_5		
	Select the backup sets to resto	re:					
	Restore Name	ano Paokun	Component Database	Type Full	Server D TARDIS\SQLEXPRESS A		
Connection		ase backup	Dalabase	ruii	TANDIS (SQLEAF NESS 7		
Server: TARDIS\SQLEXPRESS							
Connection: TARDIS\prenticj							
View connection properties							
Progress							
Ready	< <u> </u>				4		
					OK Cancel		

- 10. Tick the  $\underline{Restore}$  box for the selected database
- 11. In the left side-bar, select the Options page:

🧻 Restore Database - AMCAT								
Select a page	Script 🔻 📑 Help							
General								
	Restore options							
	✓ Overwrite the existing database (WITH REPLACE)							
	Preserve the replication settings (WITH KEEP_REPLICATION)							
	Prompt before restoring each backup							
	Restrict access to the res	tored database (WITH R	ESTRICTED_USER)					
	Re <u>s</u> tore the database files as	3:						
	Original File Name	File Type	Restore As					
	AMCAT_Data	Rows Data	C:\Program Files\Microsoft SQL					
	AMCAT_Log	Log	C:\Program Files\Microsoft SQL					
	Recovery state <u>Leave the database read</u> transaction logs cannot b	y to use by rolling back u e restored.(RESTORE W	ncommitted transactions. Additional ITH RECOVERY)					
Connection	Leave the database non- transaction logs can be re		bll back uncommitted transactions. Additional					
Server: TARDIS\SQLEXPRESS Connection: TARDIS\prenticj	Lea <u>v</u> e the database in re	ad-only mode. Undo unco	ommitted transactions, but save the undo an be reversed.(RESTORE WITH					
View connection properties	S <u>t</u> andby file:							
Progress								
Ready	The Full-Text Upgrade imported, rebuilt, or res		ontrols whether full-text indexes are					
			OK Cancel					

#### 12. Restore options:

- Select Overwrite the existing database (WITH REPLACE)
- 13. <u>Recovery state</u>:
  - 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.**

Microsoft	SQL Server Management Studio	<b>X</b>
1	The restore of database 'AMCAT' completed successfully.	
L)		ОК

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

Ξ

#### **Transaction Logging**

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

🐻 AMGWYN\S 🖃 🚞 Databas	ESS (SQL Server 10.0.1	.600 -
	 tabases New Database New Query Script Database as Tasks Policies Facets Start PowerShell Reports Rename Delete Refresh	• •
	Properties	

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

🥑 Database Properties - AMCA	т	
Select a page	Script 🔻 🚺 Help	
<ul> <li>Files</li> <li>Filegroups</li> <li>Options</li> <li>Change Tracking</li> <li>Permissions</li> <li>Extended Properties</li> </ul>	<u>C</u> ollation: Recovery <u>m</u> odel: Compatibility <u>l</u> evel: <u>O</u> ther options: 2↓ ↓	Latin 1_General_CI_AS ▼ Simple ▼ Full Bulk-logged Simple

- 3. In the <u>Recovery model</u> 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 ClearUserSchema.sql - TARDIS\... (53)) Object Explorer Details Juse 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

## Map User Schema

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

😑 🐻 AMGWYN\SQLEXPRESS (SQL Server 10.0.1600 - s						
🖃 🚞 Databases						
🕀 🚞 System Databases						
🗉 间 AMCAT						
🕀 间 AMLIB						
🕀 间 AMLOCAL						
🕀 🧻 AMSTATS						
🖃 🚞 Security						
New Login gin##						
Filter 🕨 ##						

2. The Login - New screen will display:

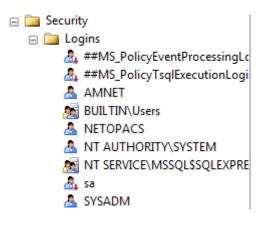
🚦 Login - New			
Select a page	🖾 Script 🔻 📑 Help		
Server Roles User Mapping Securables Status	Login <u>n</u> ame:	SYSADM	S <u>e</u> arch
Status	SQL Server authentication Password:		
	– <u>C</u> onfirm password		
	Specify old password		
	Enforce password policy     Conforce password expiration		
	User must change passw	vord at next login	
	Mapped to certificate		<b>V</b>
	Mapped to asymmetric key		<b>v</b>
Connection	Map to Credential		▼ <u>A</u> dd
Server: TARDIS\SQLEXPRESS	Mapped Credentials	Credential Provider	
Connection: TARDIS\prenticj			
View connection properties			
Progress			Remove
Ready	Default <u>d</u> atabase:	master	-
~45 <b>~</b>	Default language:	<default></default>	•
		ок	Cancel

- 3. On the <u>General</u> 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

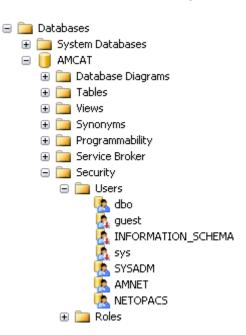
4. On the <u>User Mapping</u> page (select from sidebar):

Select a page	C Script	👻 📑 Help		
General				
Parties Server Roles	Lleare ma	apped to this login:		
Securables	Map	Database	User	Default Schema
🚰 Status		AMCAT	SYSADM	
		AMLIB	SYSADM	
		AMLOCAL	SYSADM	
		AMSTATS	SYSADM	
		AMWEB	SYSADM	
		master		
		model		
		msdb		
	Gues	t account enabled for	AMWEB	
Connection		t account enabled for e <u>r</u> ole membership for:		
	Database	e <u>r</u> ole membership for: ccessadmin		
Connection Server: TARDIS/SQLEXPRESS	Database	e <u>r</u> ole membership for: ccessadmin ackupoperator		
Server: TARDIS\SQLEXPRESS	Database	e <u>r</u> ole membership for: ccessadmin ackupoperator latareader		
Server:	Database db_a db_b db_d db_d	e <u>r</u> ole membership for: ccessadmin ackupoperator		
TARDIS\SQLEXPRESS Connection: TARDIS\prenticj	Database db_a db_b db_d db_d db_d db_d	e role membership for: ccessadmin ackupoperator atareader latawriter dladmin lenydatareader		
Server: TARDIS\SQLEXPRESS Connection:	Database db_a db_b db_d db_d db_d db_d db_d db_d	e role membership for: ccessadmin ackupoperator atareader atawriter dladmin enydatareader enydatawriter		
Server: TARDIS\SQLEXPRESS Connection: TARDIS\prenticj View connection properties	Databasu db_a db_b db_d db_d db_d db_d db_d db_d	e tole membership for: ccessadmin ackupoperator atareader atawriter dladmin enydatareader enydatawriter wmer		
Server: TARDIS\SQLEXPRESS Connection: TARDIS\prenticj View connection properties Progress	Databasu db_a db_b db_d db_d db_d db_d db_d db_d	e tole membership for: ccessadmin ackupoperator latareader atawriter dladmin enydatareader enydatareader enydatareader winer ecurityadmin		
Server: TARDIS\SQLEXPRESS Connection: TARDIS\prenticj View connection properties	Databasu db_a db_b db_d db_d db_d db_d db_d db_d	e tole membership for: ccessadmin ackupoperator latareader atawriter dladmin enydatareader enydatareader enydatareader winer ecurityadmin		
Server: TARDIS\SQLEXPRESS Connection: TARDIS\prenticj View connection properties Progress	Databasu db_a db_b db_d db_d db_d db_d db_d db_d	e tole membership for: ccessadmin ackupoperator latareader atawriter dladmin enydatareader enydatareader enydatareader winer ecurityadmin		
Server: TARDIS\SQLEXPRESS Connection: TARDIS\prenticj View connection properties Progress	Databasu db_a db_b db_d db_d db_d db_d db_d db_d	e tole membership for: ccessadmin ackupoperator latareader atawriter dladmin enydatareader enydatareader enydatareader winer ecurityadmin		

- 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**:



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



#### Link the Amlib Client to the Live Database

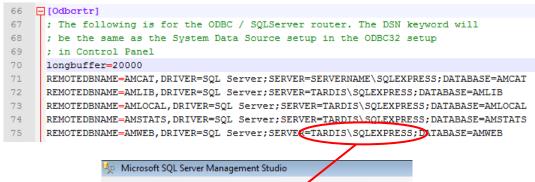
1. On the Amlib server, navigate to your Amlib folder and open up the SQL.ini file in Notepad:

G v 📔 🕨 My Computer 🕨 OS (C	:) ► Amli	b <b>&gt;</b>	<ul> <li>✓ 4 Search Amlib</li> </ul>		×
Organize 🔻 🦳 Open 💌 Print	Burn	New folder		i=	0
🔆 Favorites	<u>^</u>	Name	Date modified	Туре	Siz 🔦
Desktop	-	snumi41.dll	4/08/2005 5:30 AM	DLL File	
Downloads		SPINELBL.DOC	29/06/1998 10:56	Microsoft Office	
🕮 Recent Places		🗑 SQL.ini	17/10/2011 9:28 AM	Configuration sett	
		sqlbapw.dll	4/08/2005 4:24 AM	DLL File	
🥃 Libraries		SQLBASEOLEDB.dll	4/08/2005 4:24 AM	DLL File	
Documents		sqlmpipe.dll	4/08/2005 4:24 AM	DLL File	
J Music		Sqlodb32.dll	21/03/2006 3:20 PM	DLL File	
Pictures		Sqlora32.dll	4/08/2005 5:30 AM	DLL File	

- 2. Under the heading **[Odbcrtr]** 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 5.4 Installation Guide



Microsoft SQL Server Management Studio	
<u>File E</u> dit <u>V</u> iew <u>D</u> ebug <u>T</u> ools <u>W</u> indow <u>C</u>	ommunity <u>H</u> elp
🗄 🎦 New Query   🛅   🕞   🗁 🗐 🎒 🥃	
Object Explorer 🗸 🗸 🗙	Object Explorer De
Conpect - 📑 📑 📑 🛃	6 6 🖬 🥏 🍸
GARDIS\SQLEXPRESS (SQL Server 10.50.1617 -	TARDIS\SQLEXPRESS (
🕀 🚞 Databases	
🕀 🧰 Security	Name
🕀 🧰 Server Objects	🚞 Databases
🕀 🧰 Replication	🚞 Security
🕀 🚞 Management	Server Objects
	Replication
	🚞 Management

#### Verify Connectivity

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

🕽 🔵 🗢 🕌 🕨 My Computer	▶ OS (C:) ▶ Am	lib 🕨	<b>- - - + + + + + + + + + +</b>	Search Amlib	
Organize 👻 💼 Open 🛛 I	Burn New fold	ler		-	= <b>-</b> 🗔 🧯
🔆 Favorites	•	Name		Date modified	Туре
📃 Desktop		🕐 Stockite.exe		12/08/2010 9:37 AM	Application
🚺 Downloads		strci41.dll		21/03/2006 3:20 PM	DLL File
📃 Recent Places	=	🖼 superv.exe		12/08/2010 9:37 AM	Application
		SWMSGi41.dll		4/08/2005 5:30 AM	DLL File
🥽 Libraries		swosutil.dll		4/08/2005 5:30 AM	DLL File
Documents		👜 Sysadmin.doc		10/12/1997 5:46 PM	Microsoft Office
👌 Music		tabli41.dll		21/03/2006 3:20 PM	DLL File
Pictures		💼 unload.exe		8/10/2009 10:25 AM	Application
😸 Videos		🔑 Upgrade.exe		16/06/2010 12:26	Application
		userdic.tlx		29/01/1999 3:24 PM	TLX File
🍓 Homegroup		vti41.dll		4/08/2005 5:46 AM	DLL File

3. The Amlib Upgrade application will launch:

<u>F</u> ile	mlib Upgrade <u>H</u> elp		
	Open	Ctrl+0	Database
	Login	F2	,
	Advanced Login		
	Exit		

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

Advanced Login								
Please choose the connection method and the database to connect to, then press OK.								
Connection Method:								
This method only works if the client is part of a Windows NT Domain, has been validated as a Windows NT User and is a DBA.								
O Database authentication								
Login name: SYSADM								
Password:								
Connect To:								
Database: AMCAT								
OK Cancel								

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

∕µ A File	mlib Upgrade Help			×
	Open	Ctrl+0	Database AMCAT	_
	Login Advanced Login	F2		_
	Exit			_

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

## SECTION 2B: ORACLE RDBMS

## 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 an 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.

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 with 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.

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 an 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.

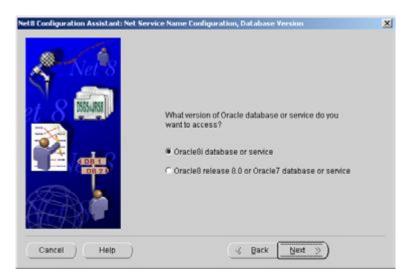
1. Select the **Net8 Configuration Assistant** icon from the *Oracle* program group – the *Net 8 Configuration Assistant* will launch:



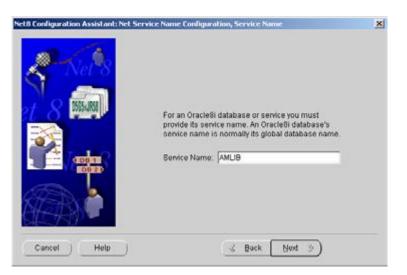
2. Select Local Net Service Name configuration and click the Next button



3. Select Add and click the Next button



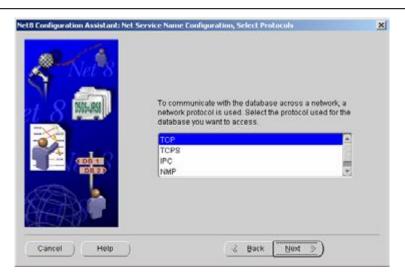
4. Select Oracle8i database or service and click the Next button



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 5.4 Installation Guide



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

Net8 Configuration Assistant: Ne	t Service Name Configurat	ion, TCP/IP Protocol	×
	protocol, the databa	th the database using the TCP/IP ise computer's host name is required. If on the computer where the database	
	Host Name	10.0.0.10	
	A TCPRP port numb standard port numb	er is also required. In most cases the er should be used.	
	. Use the standard	port number of 1521	
	C Use another port	number: [1521	
Cancel Help		⊴ Back Next >)	

7. Enter the TCP/IP <u>Host Name</u> address of the *Oracle* database server and click the **Next** button (*Leave the <u>standard port number</u> 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:

- a. Ensures that the Oracle Client (SQL\*Net / Net8) is correctly configured and that Amlib will be able to communicate to the Oracle database
- b. Create *Amlib* System Administrator login **SYSADM** which is also the "owner" of all *Amlib* tables loaded
- c. Create *NetOpacs* login **NETOPACS** which also is the owner of any temporary *NetOpacs* created from searches
- d. Assign the tablespace AMLIB\_DB as the default tablespace to SYSADM and NETOPACS
- e. 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

#### 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*:

	(C:) 🕨 Aml	ib 🕨	•	Search Amlib		×
Organize 🔻 🧻 Open 💌 Prin	t Burn	New folder			:≕ ▼ 🚺	0
☆ Favorites		Name	^	Date modified	Туре	Siz 🔺
Desktop	E	📄 snumi41.dll		4/08/2005 5:30 AM	DLL File	
Downloads	=	SPINELBL.DOC		29/06/1998 10:56	Microsoft Office	
🖫 Recent Places		🗿 SQL.ini		17/10/2011 9:28 AM	Configuration sett	
		📄 sqlbapw.dll		4/08/2005 4:24 AM	DLL File	

- 2. Under the heading [win32client.dll] ensure that the correct database connector is being used:
  - Oracle: comdll=sqlora32
- 3. If *Oracle* was selected (**commdll=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=syssql.,
- longbuffer=900000
- MAPERROR=OFF
- fetchrow=100

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

37	L
38	[ORAGTWY]
39	1 · · · · · · · · · · · · · · · · · · ·
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=syssql.,
51	longbuffer=900000
52	MAPERROR=OFF
53	fetchrow=100
54	L

## **SECTION 3: BACKUPS**

This is relevant to users that are running on Microsoft SQL Server.

In all versions of SQL Server there are two recovery models for databases, Simple and Full. The main difference is how many of the transactions are logged for recovery purposes. If customers are happy to be able to go as far back as their latest complete backup then Simple recovery more will suffice and the log sizes will be managed by SQL Server. If point-in-time recovery is required then Full recovery must be used, in this mode in order for the logs to be cleared they must first be backed up.

For the full version of SQL server please download the **SQL Server 2008 Maintence Plan** PDF guide, under <u>Database Backup and Log Files</u>:

https://www.oclc.org/support/services/amlib/documentation/technical-documents.en.html

One of the functionalities that is not included with an Express version of SQL Server is the SQL Server Agent which is used in scheduling and managing maintenance plans. This leaves two options for scheduling database backups and maintenance:

- Use the Amlib Backup management utility. This requires at least .NET 3.5 to be installed on the machine that will run the backups. Windows Server 2000 does not support the .NET framework, therefore any customer running Server 2000 will need to implement option 2.
- 2. Use windows task scheduler to run a batch file and SQL script

The Amlib Backup management utility installer and guide is available from the OCLC Website.

Amlib Backup Manager Installation Guide, under Database Backup and Log Files: https://www.oclc.org/support/services/amlib/documentation/technical-documents.en.html

Amlib Backup Manager Installation Setup, under <u>Download and Software Updates>Utilities</u>: <u>https://www.oclc.org/support/services/amlib/downloads-software-updates/utilities.en.html</u>

The batch file, SQL script and documentation can also be downloaded from the following locations.

**SQL Script Backup Guides,** under <u>Database Backup and Log Files</u>: <u>https://www.oclc.org/support/services/amlib/documentation/technical-documents.en.html</u>

**Backup Scripts for SQL Server 2005 script**, under <u>Download and Software Updates>Utilities</u>: <u>https://www.oclc.org/support/services/amlib/downloads-software-updates/utilities.en.html</u>

**Backup Scripts for SQL Server 2008 script**, under <u>Download and Software Updates>Utilities</u>: <u>https://www.oclc.org/support/services/amlib/downloads-software-updates/utilities.en.html</u>

If you require your username and password please contact the support helpdesk.

## SECTION 4: 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)

Port Query	->
ile Help	
Enter destination IP or FQDN to query: tardis	
_Query Type	
C Query predefined service:	
Service to query: SQL Server	
• Manually input query ports:	
Ports to query: 1433 Protocol: TCP	
Enter port number and/or port ranges separated by commas.	
For example: 80,53,1024-1350	
Query Cancel Exit	
Query Result:	
	í
Starting portqry.exe -n tardis -e 1433 -p TCP	
Querying target system called:	
tardis	
Attempting to resolve name to IP address	
Name resolved to 10.161.10.138	
querying	
TCP port 1433 (ms.sql.s service): NOT LISTENING	
TCP port 1433 (ms-sql-s service): NOT LISTENING portqry.exe -n tardis -e 1433 -p TCP exits with return code 0x00000001.	

- 2. Enter the <u>Destination IP</u> address of database server used when installing *Amlib* (for example: tardis, 127.0.0.1, localhost, etc.)
- 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)
- 5. <u>Protocol</u>: **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* 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

Connect		×
8	Cannot connect to the remote Amlib database. The following error has occured: Error No: 20035 Error Text: :4060[Microsoft][ODBC SQL Server Driver][SQL Server]Cannot open database "UMLIBa" requested by the login. The login failed. Check to ensure that: 1. Your PC is connected to the network. 2. The database server is running. 3. This program is the most up to date version.	
	Cance	

A message "Cannot connect to database" is displayed if the PC is unable to connect via the WAN (or if SQL.ini is not correctly configured).

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

- 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: <u>Check Communication to Database Server using</u> <u>Microsoft Port Query</u>
- 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 <u>User DSN</u>, <u>System DSN</u> or <u>File DSN</u> 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:
    - a) From the menu, select File > Advanced Login the Advanced Login prompt will display:

Advanced Login			
Please choose the connection method and the database to connect to, then press OK.			
Connection Method:			
C Windows NT authentication This method only works if the client is part of a Windows NT Domain, has been validated as a Windows NT User and is a DBA.			
O Database authentication			
Login name: NETOPACS			
Password:			
Connect To:			
Database: AMLIB			
OK Cancel			

- 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* 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

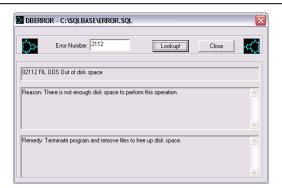
If Upgrade is unable to connect to the selected database then take a detailed copy of the displayed error message (for example: press [**PrtScn**] on your keyboard and paste into a *Word* document) and contact *Amlib Support* for further assistance.

ĺ	Login Error 🛛				
	Cannot Connect to SQLServer An unexpected error has occured connecting to the AMCAT database.				
	Error: 20035 Reason: :4060[Microsoft][ODBC SQL Server Driver][SQL Server]Cannot open database requested in login 'AMCAT'. Login fails.				

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 <u>http://www.oracle.com/support/index.html</u>

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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: <u>Configure</u> <u>SQL.ini Settings</u> 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
- 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

OCLC 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 ORACLIENT8.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.

### 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.

C:\Windows\amlib.ini - Notepad++	
<u>File E</u> dit <u>S</u> earch <u>V</u> iew Encoding <u>L</u> anguage Se <u>t</u> tings Macro Run Plugins <u>W</u> indow <u>?</u>	Х
	ac.
😑 amlibini	
6 [Special]	A .
7       DatabaseUser=:+,VJxUaS:ye[GLwQmJdU#V,:Z%E%?%d\xb;(6Rpv./\$/SWUXB(dV]_K*}NI]R>!kQSBf.         8       DatabasePw=:+,VJxUaS:ye[GLwQmJdU#V,:Z%E%?%d\xb;(6Rpv./\$/SWUXB(dV]_K*}NI]R>!kQSBf.	

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:

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🖟 Setup - Amlib Client	- • 💌			
RDBMS Login to be used with Amlib Enter the Database login and password to internally connect to the Amlib database (hidden)				
Amlib Database (DBA) Logi AmlibNet DBA User AmlibNet DBA Password	n ds:(6Rpv./\$/SWUXB(dV]_K*)NI]R>lkQSB[			
Notes:				
1. This will be the RDBMS Login t Connection to the Amlib data	that Amlib will use as a *HIDDEN'* abase(s)			
	<ol><li>An encrypted user and password can be entered (generated using the Amlib nopasswd.exe utility)</li></ol>			
3. This will be stored within the	{windows}\amlib.ini configuration file			
To accept the defaults click Next				
	< <u>B</u> ack <u>N</u> ext > Cancel			

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=

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

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.

# 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 remote 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 <u>Amlib Toolbar</u> <u>Properties</u> window will display
- 2. The <u>Target</u> 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

Amlib Toolbar Properties				
Security	Details	Previous Versions		
General	Shortcut	Compatibility		
Amlib	Amlib Toolbar			
Target type: Ap	Target type: Application			
Target location: Amlib				
Target: C:	\Amlib\Amlibtop.exe	•		

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

🛃 Amlib Toolbar Properties 📃 📈				
Security	Details	Previous Versions		
General	Shortcut	Compatibility		
	Amlib Toolbar Target type: Application			
Target location: Amlib				
Target:	Target: \\amlibserv\Amlib\Amlibtop.exe			

# Amlib Client 5.4 Installation Guide

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

# 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):
- 2. Catalogue Database (CAT suffix):
- 3. Parameter Database (LOCAL suffix):
- 4. Statistics Database (STATS suffix):
- 5. Web Database (WEB suffix):
- Item, borrower and circulation data Catalogue and authority data

System parameters (for example: loan settings)

- Statistics
- 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

Test Environment Instance

AMLIB

TELIB

### APPENDICES

### Appendix A: Silent Mode Command Line Parameters

The *Amlib Client 5.4* 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 5.4 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 <u>very silent</u> 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 <u>Reboot now?</u> 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 <u>Abort/Retry</u> situations
- Cancel in <u>Retry/Cancel</u> situations
- Yes (=continue) in a <u>DiskSpaceWarning/DirExists/DirDoesntExist/NoUninstallWarning/ExitSetupMessage/ConfirmUninstall</u>
   situation
- Yes (=restart) in a <u>FinishedRestartMessage/UninstalledAndNeedsRestart</u> situation

5 message boxes are not suppressible:

- The <u>About Setup</u> message box
- The <u>Exit Setup?</u> 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.

#### /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 <u>UsePreviousTasks</u> 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 <u>Encrypt/decrypt</u> screen will display:

/ Encrypt / decry	ot 🛛 🕞 🛋 🖉	
Password	DODGER	
Code	@8eT5ZpQ^2c^Le-R+QK:;:<1hkD7/<=9c(w%gat3_	
press tab.	er password or code and If the other field is blank then ation will take place.	

- 2. Type in the <u>Password</u> (for which you would like to generate an encrypted string) for example: **DODGER**
- 3. Press the **<Tab>** key
- The encrypted password will display in the <u>Code</u> 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: MICROSOFT SQL SERVER 2008 R2 install

# Step 1: SQL Server 2008 Setup

- 1. Download the Express (R2) version of SQL Server 2008: **SQLEXPRWT\_x86\_ENU.exe** (32-bit server) or **SQLEXPRWT\_x64\_ENU.exe** (64-bit) from the *Microsoft Download Center*:
  - <a href="http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=22973">http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=22973</a>
- 2. Double-click on the application to launch the installer:

SQL Server Installation Center			
Planning	New installation or add features to an existing installation. Launch a wizard to install SQL Server 2008 R2 in a non-clustered environment or to add features to an existing SQL Server 2008 R2 instance.		
Maintenance Tools Resources Advanced Options	Upgrade from SQL Server 2000, SQL Server 2005 or SQL Server 2008 Launch a wizard to upgrade SQL Server 2000, SQL Server 2005 or SQL Server 2008 to SQL Server 2008 R2. Search for product updates Search Microsoft Update for SQL Server 2008 R2 product updates.		
SQL Server 2008 R2			

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

📸 SQL Server 2008 R2 Setup	
License Terms To install SQL Server 2008 R2, you	must accept the Microsoft Software License Terms.
License Terms Setup Support Files	MICROSOFT SOFTWARE LICENSE TERMS MICROSOFT SQL SERVER 2008 R2 EXPRESS WITH TOOLS MICROSOFT SQL SERVER 2008 R2 EXPRESS WITH ADVANCED SERVICES These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft • updates, • supplements,
	Internet-based services, and     Copy     I accept the license terms.     Send feature usage data to Microsoft. Feature usage data includes information about your hardware configuration and how you use SQL Server and its components.     See the Microsoft SQL Server 2008 R2 Privacy Statement for more information.
	< <u>B</u> ack <u>N</u> ext > Cancel

4. **Tick** the <u>Laccept the license</u> terms box and click the **Next** button – the <u>Support Files</u> will be installed:

髋 SQL Server 2008 R2 Setup			
Setup Support Files			
Click Install to install Setup S	upport files. To install or update SQL	Server 2008 R2, these files are required.	
			2236222
License Terms		re required for SQL Server Setup:	
Setup Support Files	Feature Name	Status	
	Setup Support Files	In Progress	
	ExecuteStandardTimingsWor	uffann	
	Executestandard miningswor	KIIOW	
		< <u>B</u> ack	Install Cancel

5. Once completed – the Feature Selection screen will display:

髋 SQL Server 2008 R2 Setup		
Feature Selection Select the Express with Advanced	Services features to install.	
Setup Support Rules Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error Reporting Installation Configuration Rules Installation Progress Complete	Eeatures: Totance Features Solution Shared Features Management Tools - Basic Solution Shared Features Solution Connectivity SDK Redistributable Features Select All Shared feature directory: C\Program Files\Mice	Description: Server features are instance-aware and have their own registry hives. They support multiple instances on a computer.
	< <u>B</u> ack	Next > Cancel Help

 Click the Select All button and then the Next button – the <u>Instance Configuration</u> screen will display:

Instance Configuration         Setup Support Rules         Feature Selection         Installation Rules         Instance Configuration         Disk Space Requirements         Server Configuration         Database Engine Configuration         Installation Rules         Instance ID:         SQLEXPRESS         Instance ID:         SQLEXPRESS         Instance ID:         SQLEXPRESS         Instance ID:         SQL Server directory:         CAProgram Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS         Installation Progress         Complete	📸 SQL Server 2008 R2 Setup					- • •
Setup Support Rules <ul> <li>Default instance</li> <li>Reature Selection</li> <li>Installation Rules</li> </ul> Installation Rules <ul> <li>Named instance:</li> <li>SQLEXPRESS</li> <li>Instance Configuration</li> <li>Disk Space Requirements</li> <li>Instance [D:</li> <li>SQLEXPRESS</li> <li>Server Configuration</li> <li>Instance goot directory:</li> <li>C\Program Files\Microsoft SQL Server\</li> <li>Installation Configuration Rules</li> <li>Installation Configuration Rules</li> <li>SQL Server directory:</li> <li>C\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS</li> <li>Installed instances:</li> </ul>	Instance Configuration					
Feature Selection       Installation Rules         Installation Rules       Instance Configuration         Disk Space Requirements       Instance ID:         Server Configuration       Instance root directory:         Database Engine Configuration       Instance root directory:         Error Reporting       Installation Configuration Rules         Installation Progress       SQL Server directory:         Complete       Installed instances:	Specify the name and instance I	ID for the instance of SQL Se	erver. Instance II	) becomes part of th	e installation path.	
Installation Rules <ul> <li>Named instance:</li> <li>SQLEXPRESS</li> </ul> Installation Rules <ul> <li>Instance Configuration</li> <li>Disk Space Requirements</li> <li>Instance ID:</li> <li>SQLEXPRESS</li> </ul> <ul> <li>SQLEXPRESS</li> <li>C\Program Files\Microsoft SQL Server\</li> <li>Installation Configuration Rules</li> <li>SQL Server directory:</li> <li>C\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS</li> <li>Installation Progress</li> <li>Complete</li> <li>Installed instances:</li> </ul>		© <u>D</u> efault instance				
Disk Space Requirements     Instance [D:     SQLEXPRESS       Server Configuration     Instance [oot directory:     C:\Program Files\Microsoft SQL Server\       Database Engine Configuration     Instance [oot directory:     C:\Program Files\Microsoft SQL Server\       Error Reporting		Named instance:	SQLEXPRESS			
Server Configuration     Instance p.     SQLEAR ICGS       Database Engine Configuration     Instance goot directory:     C:\Program Files\Microsoft SQL Server\       Error Reporting        Installation Configuration Rules     SQL Server directory:     C:\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS       Installation Progress     Installed instances:						
Database Engine Configuration     Instance root directory:     C\Program Files\Microsoft SQL Server\       Error Reporting     Installation Configuration Rules       Installation Progress     SQL Server directory:     C:\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS       Complete     Installed instances:		Instance <u>I</u> D:	SQLEXPRESS			
Installation Configuration Rules     SQL Server directory:     C\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS       Installation Progress     Installed instances:	-	Instance <u>r</u> oot directory:	C:\Program F	iles\Microsoft SQL S	erver\	
Instance Name Instance ID Features Edition Version	Installation Configuration Rules Installation Progress		C:\Program F	iles\Microsoft SQL Se	erver\MSSQL10_50.SC	QLEXPRESS
		Instance Name	Instance ID	Features	Edition	Version
< Back Next > Cancel Help				< Back	Next > Can	cel Help

7. Type in a <u>Named instance</u> or leave as default: **SQLEXPRESS** and click on the **Next** button

8. The Server Configuration screen will display:

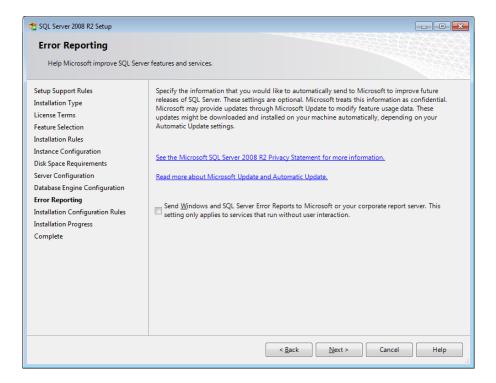
🚼 SQL Server 2008 R2 Setup					•
Server Configuration					
Specify the service accounts and o	collation configuration.				
Setup Support Rules Feature Selection Installation Rules	Service Accounts Collation	use a separate account for ea	ch SQL Server s	ervice.	
Instance Configuration	Service	Account Name	Password	Startup Type	e
Disk Space Requirements	SQL Server Database Engine	NT AUTHORITY\NETW		Automatic	-
Server Configuration	SQL Server Browser	NT AUTHORITY\LOCA		Disabled	-
Installation Progress Complete					
		< <u>B</u> ack <u>N</u> ext >	Can	cel He	elp

9. Click the **Next** button – the <u>Database Engine Configuration</u> screen will display:

🐮 SQL Server 2008 R2 Setup		
Database Engine Config Specify Database Engine authent	uration ication security mode, administrators and data directories.	
Setup Support Rules Installation Type License Terms Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration <b>Database Engine Configuration</b> Error Reporting Installation Configuration Rules Installation Progress Complete	Account Provisioning       Data Directories       FILESTREAM         Specify the authentication mode and administrators for the Data         Authentication Mode	tication)
	< Back Next >	Cancel Help

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

13. The Error Reporting screen will display:



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

📆 SQL Server 2008 R2 Setup	
Installation Progress	
Setup Support Rules Installation Type License Terms Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error Reporting Installation Configuration Rules Installation Progress Complete	Install_sql_engine_core_inst_Cpu32_Action : InstallValidate. Validating install
	Next > Cancel Help

15. Once completed, the following screen will display:

📸 SQL Server 2008 R2 Setup		×
Complete		
Your SQL Server 2008 R2 installa	tion completed successfully.	
Setup Support Rules Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error Reporting Installation Configuration Rules Installation Progress Complete	Summary log file has been saved to the following location: <u>C:\Program Files\Microsoft SQL Server\100\Setup Bootstrap\Log\20111025 134220</u> <u>\Summary Bruce 20111025 134220.txt</u> Information about the Setup operation or possible next steps: Vour SQL Server 2008 R2 installation completed successfully.	
	Supplemental Information:           The following notes apply to this release of SQL Server only.           Microsoft Update           For information about how to use Microsoft Update to identify updates for SQL Server 2008 R2, see the Microsoft Update Web site at <a href="http://go.microsoft.com/fwlink/?Linkld=108409">http://go.microsoft.com/fwlink/?Linkld=108409</a> .           Samples	4
	Close	

16. Click on the **Close** button

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