OCLC Amlib

Library Management System

NetOpacs 5.4 Installation Guide

Version 5.4

Last Updated: 9 October 2013

© 2013 OCLC (UK) Ltd

ALL RIGHTS RESERVED. Permission is granted to electronically copy and to print in hard copy portions of this document for training purposes by licensed users of the Amlib Library Management System. Any other uses – including reproduction for purposes other than those noted above, modification, distribution, republication, transmission, re-transmission, modification, or public showing – without the prior written permission of *OCLC (UK) Ltd* – is strictly prohibited.

Support:

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

Fax: +61 (0) 3 9929 0801
Email: sales-amlib@oclc.org

www.oclc.org/en-AU/

TABLE OF CONTENTS_Toc341261633

WELCOME 5
OVERVIEW 5
BEFORE YOU BEGIN THE INSTALLATION 5
Read the Installation Notes First 5
Serial Numbers Required for Installation of Amlib Modules 5
Frequently Asked Questions 5
AMLIB SUPPORTED OPERATING SYSTEMS & SYSTEM REQUIREMENTS 7
Database Server 7
NetOpacs (Web Opac) Application Web Server 7
PC Client (for Client Server Modules including Offline) 7
IIS Requirements 7
SECTION 1: NETOPACS CLIENT INSTALLATION 8
Default Installation Folders 8
Step 1: Shutdown the Old NetOpacs (Server Migrations Only) 8
Step 2: Install the NetOpacs 5.4 Client 10
SECTION 2: NETOPACS CONNECTION SETTINGS CONFIGURATION 15
Step 1: NetOpacs Amlib.ini Settings 15
Step 2: NetOpacs SQL.ini Settings 18
SQL Server Users 18
Oracle Users 19
SECTION 3: WEBCONSOLE CONFIGURATION 20
SECTION 4: SETUP NETOPAC PAGES 23
Location of NetOpac Pages 23
Step 1: Copy the NetOpac Web Pages 23
Step 2: Amlibweb Virtual Directory Files 24
SECTION 5: COMPILE THE NETOPAC PAGES 26
Step 1: Compile the NetOpac Pages 26
Step 2: Restart the NetOpac WebConsole (Non-Service Installations Only) 27
SECTION 6: FIREDAEMON OEM SERVICE MANAGER INSTALLATION 28
SECTION 7: FIREDAEMON OEM SERVICE MANAGER CONFIGURATION 31
Step 1: Create the NetOpacs Service Instance 31
Step 2: Start the NetOpacs as a Service 32
Step 3: Test Access to NetOpacs “Pages” via Browser 32

Step 4: Check Communications to Database Server 33
SECTION 8: TROUBLESHOOTING TIPS 34
Step 1: Check Communication to Database Server using Microsoft Port Query 34
Query Results 35
Step 2: Next Level of Amlib Troubleshooting 36
APPENDICES 39
Appendix A: Install IIS on Windows 7 or Vista 39
Note on Configuring NetOpacs on 64-bit Windows Machine 41
Appendix B: IIS Virtual Directory Configuration 44
IIS 6.0 44
IIS 7.0 48
Appendix C: Setup SQL Server User Security 55
Clear User Schema 55
Map User Schema 56
Appendix D: Running the Amlib Icon Setup Facility 58
Option 1: Access the Programs from the Server 59
Option 2: Install the Amlib programs from the PC 59
Appendix E: Configure a WEB Location in Amlib 63
Setup a Web Location 63
Web Location Settings 63
Appendix F: Install .NET Framework 65
Appendix G: Install a Additional Instance of the NetOpacs 66
IIS5.0/6.0 67
IIS7.0 69
Appendix I: Edit Access Control 75

WELCOME

Welcome to the *NetOpacs 5.4* Installation Guide.

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

OVERVIEW

The installation of the *NetOpacs* involves the following steps:

1. Install the *Amlib NetOpacs 5.4* application
2. Configure the *Amlib NetOpacs* connection settings
3. Configure the *NetOpacs WebConsole*
4. Install the *FireDaemon Service Manager*
5. Configure the *FireDaemon Service Manager*
6. Start the *Amlib NetOpacs* as a Service

BEFORE YOU BEGIN THE INSTALLATION…

Read the Installation Notes First

Please carefully read the entire installation guide prior to commencing the actual *NetOpacs* release update.

If you have any questions please log a support call on TOPdesk at https://servicedesk.oclc.org/tas/public/index.jsp . If you do not know your TOPdesk login please email support-amlib@oclc.org and we will send it to you.

Serial Numbers Required for Installation of Amlib Modules

The *Amlib NetOpacs 5.4* 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. Generally libraries should ensure they have at least 5 Gb free space on their database server

Question: Do I need to install IIS?

- Yes. *Windows* must be installed with full *IIS* (see Appendices for more details)

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 you backup your *Amlib NetOpacs* folder (for example: **C:\Netopacs**)

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

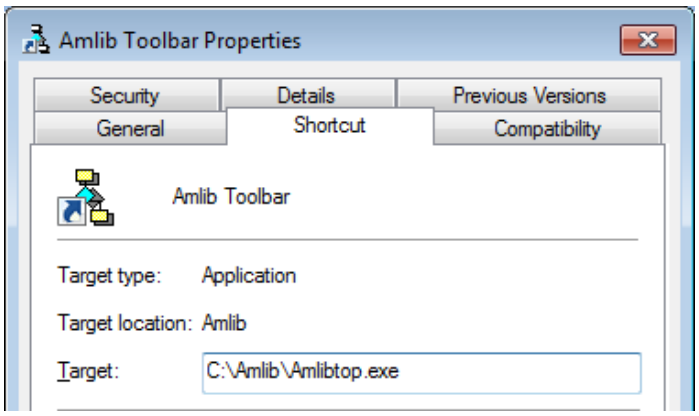
- Yes. All users should be completely logged out from all *Amlib* client modules
- The *NetOpacs* WebConsole should also be shutdown

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

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

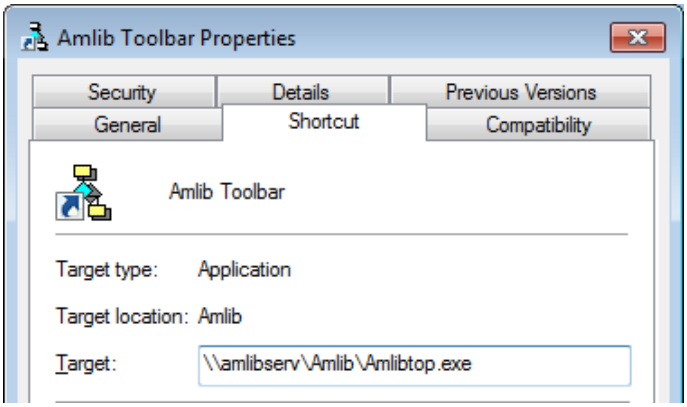
Question: How do I know whether *Amlib* is loaded locally on my NetOpacs server?

- Right-click on the *Amlib* icon on your desktop and select **Properties** – the Amlib Toolbar Properties window will display
- 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



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

- If you are having trouble identifying where *Amlib* is installed please contact your IT department or **Amlib Support** for assistance



AMLIB SUPPORTED OPERATING SYSTEMS & SYSTEM REQUIREMENTS

Database Server

Operating System	• *Windows 2000*, *2003*, *2008* • *Linux* (and *Unix*)
RDBMS	• *Microsoft SQL Server 2000*, *2005*, *2008 R2* • *Oracle 9i*, 1*0g*
Memory (RAM)	• Depends on operating system, volume & RDBMS selected • Minimum 2GB RAM for *SQL Server* • Minimum 2GB RAM for *Oracle*
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 2000*, *2003*, *2008* with *IIS* pre-installed
Memory (RAM)	• Depends on operating system and volume • Minimum 2GB RAM for *Windows 2003*/*2008*

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*, *2000*, *Vista*, *Windows 7*
Memory (RAM)	• Minimum 256 Mb for *Windows XP* • Minimum 256 Mb for *Windows 2000* • Minimum 1GB for *Windows 7* • Minimum 1GB for *Windows Vista*
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

IIS Requirements

The following features/service roles will be required prior to NetOpacs installation:

- IIS Management Compatibility (IIS 6 Compatibility) and all sub items
- ISAPI Extensions

SECTION 1: NETOPACS CLIENT INSTALLATION

Please Note: This process is only for libraries that have purchased this optional module.

Depending on the library configuration the *Amlib NetOpacs* module will either be installed on the library database server (generally most school libraries) OR will be installed on a separate web server (generally public and all other libraries).

The advantages of installing on a separate web server rather than on the database server are:

- increased security by preventing external access to the database server
- increased performance with separate server dedicated to handle *NetOpacs* processing requirements

Before installing *NetOpacs* on your server you will need to ensure that *Microsoft IIS* components (*Internet Information Services*) have been installed within your *Windows* server environment.

For most *Windows* operating systems *IIS* is not installed by default. To check whether *IIS* has been installed on your server, see: Appendix A: Install IIS on Windows 7 or Vista.

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:

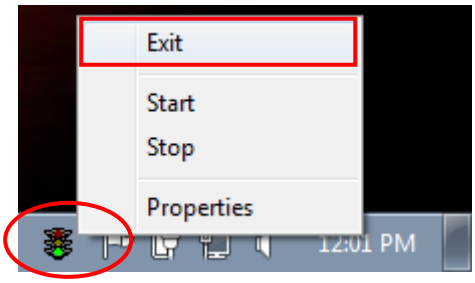
- *Amlib NetOpacs* software: **C:\Netopacs** (or **D:\Netopacs**, **E:\Netopacs**)

Step 1: Shutdown the Old NetOpacs (Server Migrations Only)

It is important that before installing the new *NetOpacs* release software that the *NetOpacs* WebConsole is shutdown (including all *NetOpacs* processes). Alternatively, if you may be running your *NetOpacs* as a Service or using a Service Manager to run your *NetOpacs* (for example: *FireDaemon*) then you should stop your *NetOpac* processes in the Manager.

To shut down your *NetOpacs* (run via the WebConsole)

1. On your *NetOpacs* server, right-click on the *NetOpacs* WebConsole "traffic lights" in your Windows system tray at the bottom-right of the screen and select **Exit**:

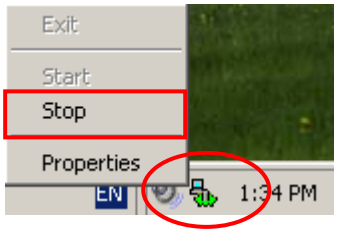


2. The “traffic lights” and all *NetOpacs* icons on the Windows taskbar will disappear once *NetOpacs* has successfully shutdown

To shut down your *NetOpacs* (run as a service)

If your server has the *Amlib* Web Monitor icon (icon is a PC with “cog”) in your Windows “tray it means that *NetOpacs* has been installed as a service.

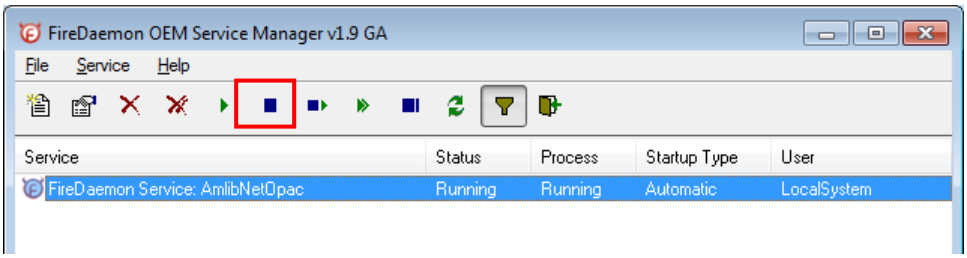
1. On your *NetOpacs* server, stop the *NetOpacs* service either by a right-clicking on the *Amlib* Web Monitor and choosing **Stop**, or via the Windows Services screen:



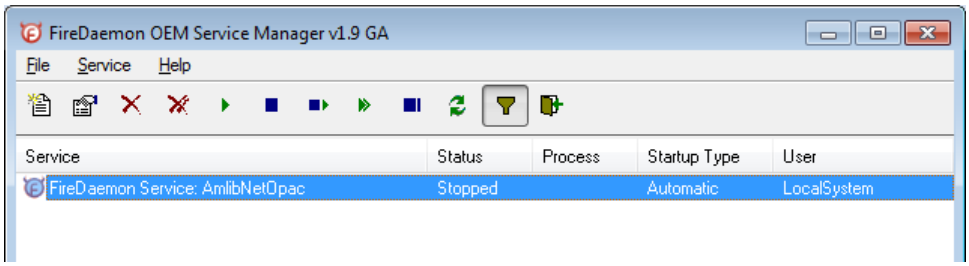
To shut down your *NetOpacs* (run via a Service Manager – for example: *FireDaemon*)

If your web server has neither the “traffic light” nor “cog icon” in the system tray, the *NetOpacs* may be running as a *FireDaemon* service.

1. On your *NetOpacs* server, go to **Start** > **All Programs** > **FireDaemon OEM** > **FireDaemon Service Manager** – the FireDaemon OEM Service Manager screen will display:



2. Highlight the *Amlib NetOpacs* service and click the **Stop** button



Step 2: Install the NetOpacs 5.4 Client

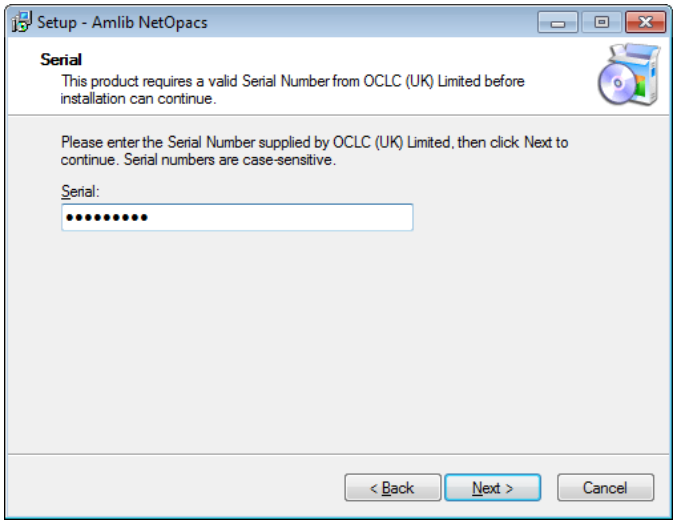
***IMPORTANT**: Please ensure that you have **full read/write** access to the **\NetOpacs** folder on your server (for example: **C:\NetOpacs**) and that you are logged in with Administrative Privileges.*

1. The *NetOpacs 5.4* installer is available on the OCLC Website, under Setup Programs>NetOpacs: https://www.oclc.org/support/services/amlib/downloads-software-updates/version5-4/setup-programs.en.html (contact *Amlib* support if you require a login to this website)

2. Download the **NetOpacs54Setup.exe** and save it on your *Amlib NetOpacs* server

3. Double-click the **NetOpacs54Setup.exe** to launch the installation Wizard – the Setup – Amlib NetOpacs screen will open displaying the **Welcome** message

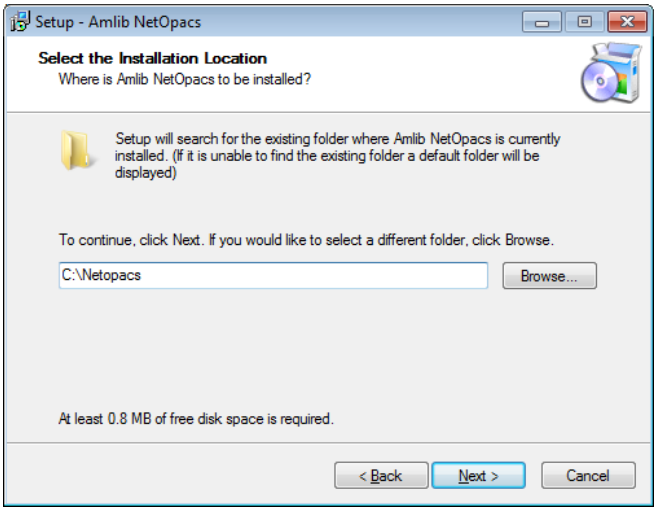
3. Click the **Next** button – the Serial screen will display, prompting you for valid Serial Number:



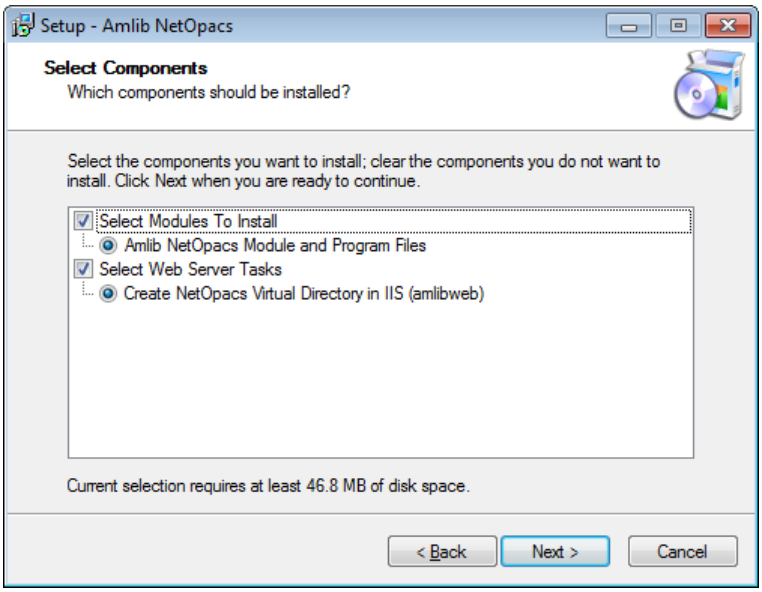
4. Enter the **Serial Key** supplied by *OCLC (UK) Limited* (case sensitive!) then

5. Click the **Next** button – the Installation Location screen will display

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



7. Click the **Next** button – the Select Components screen will display:



8. Choose which components should be installed:

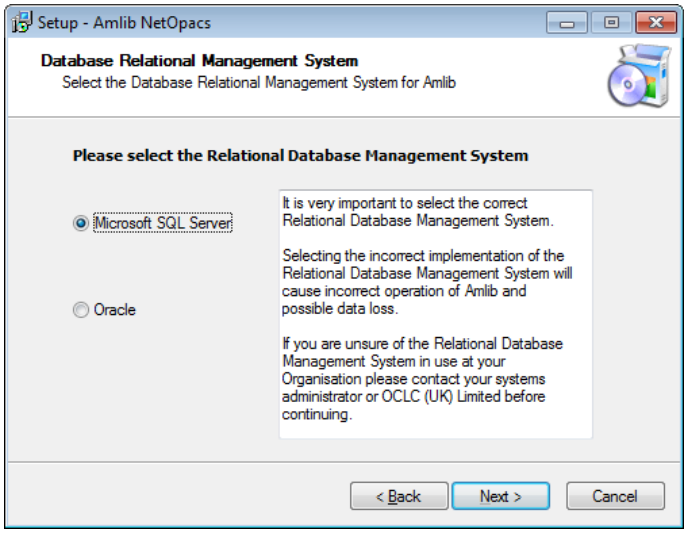
   a. Select Modules To Install:

      - **Amlib NetOpacs Module and Program Files**

   b. Select Web Server Tasks:

      - **Create NetOpacs Virtual Directory in IIS (amlibweb)**
        (DO NOT select this option if you are reinstalling the *NetOpacs Client* and the **Amlibweb** virtual folder already exists)
        Please Note: see Appendix B: IIS Virtual Folder Configuration if you would like to manually configure the virtual folder (or would like to create an additional virtual folder)

9. Select ALL options and click the **Next** button – the Database Relation Management System (RDBMS) screen will display:



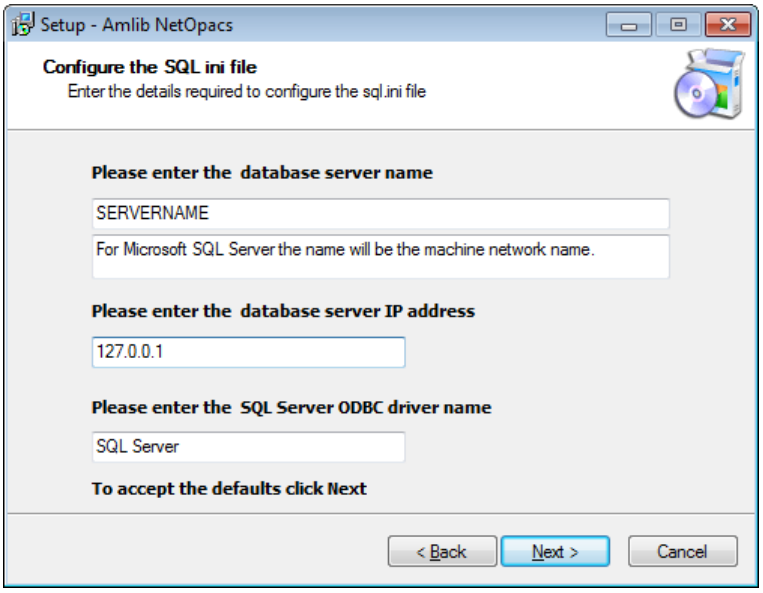
Please Note: *Gupta SQLBase* is not supported by *Amlib version 5.4*.

10. 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 NetOpacs Client* to connect with the *Amlib* databases)

- 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

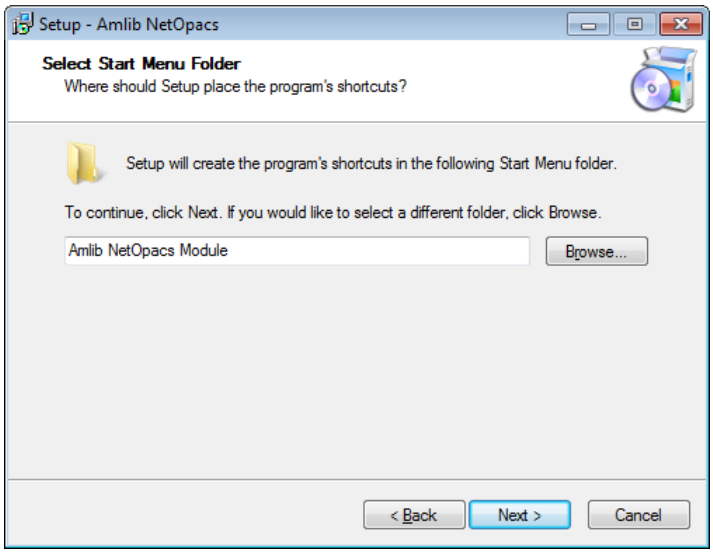
        iii. Enter options and click the **Next** button

    b. If your library is using *Oracle* for *Amlib*:

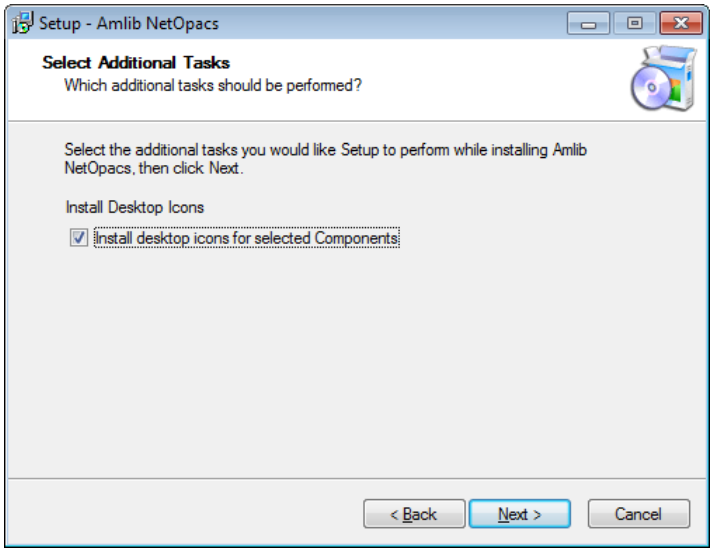
        i. Select the **Oracle** radio button

        ii. Click the **Next** button

11. The Select Start Menu Folder screen will display:

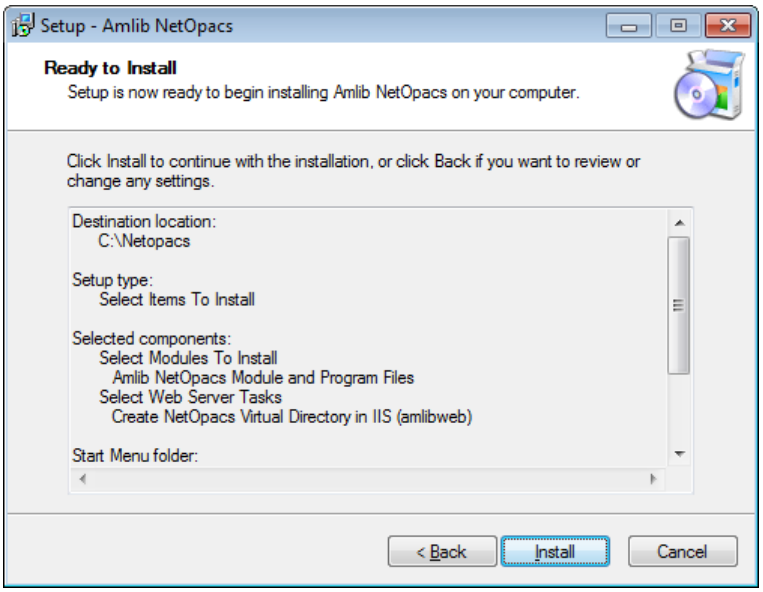


12. To accept the default name (for most customers), click the **Next** button – the Select Additional Tasks screen will display, prompting if you wish to install a desktop icon for the *Amlib Client*:



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

14. Click the **Next** button to continue – the Ready to Install screen will display with a summary of the installation tasks to be performed:



15. Click the **Install** button – the Installing screen will display:
16. Once the installation is complete, click the **Finish** button
17. The setup Wizard will close

Installation of the *Amlib 5.4 NetOpacs* is now complete.

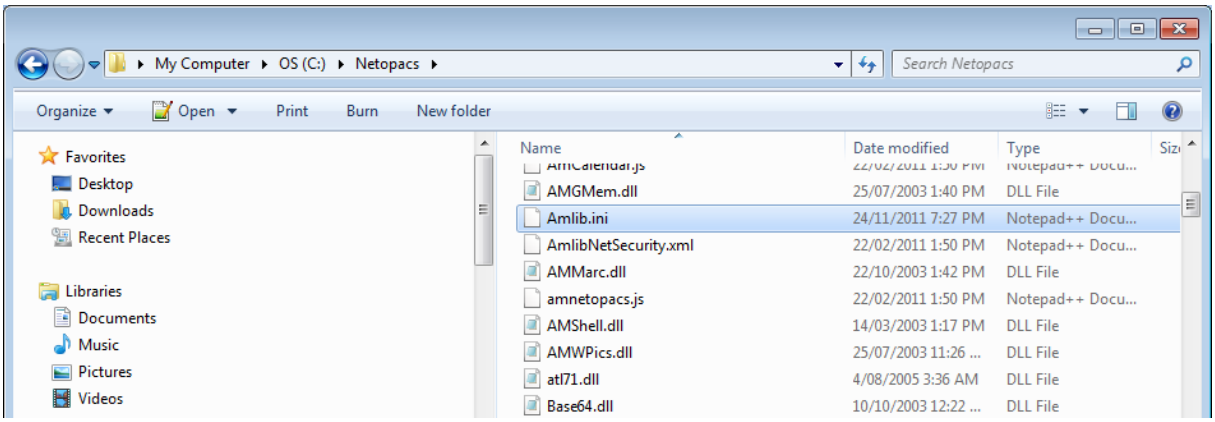
Notes (Server Migrations Only)

For libraries who have configured their web server with multiple *NetOpacs* installation folders on the one server (for example: have *NetOpacs* installed in **c:\Netopacs** and **c:\Netopacs2**) will need to repeat the installation steps 3 – 15 for each additional *NetOpacs* folder, remembering to change the name of the Installation Location at step 6.

SECTION 2: NETOPACS CONNECTION SETTINGS CONFIGURATION

Step 1: NetOpacs Amlib.ini Settings

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



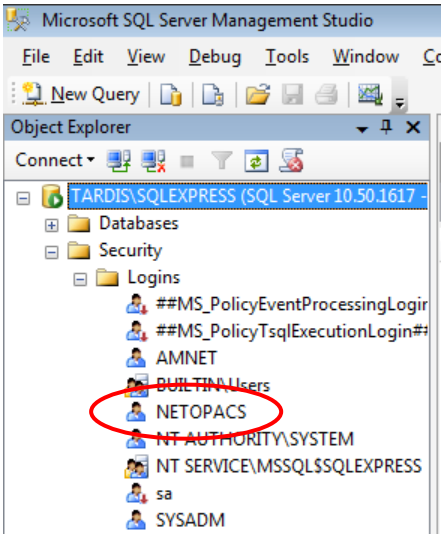
2. Under the heading **[NetOpacs]** the following settings will need to be verified:

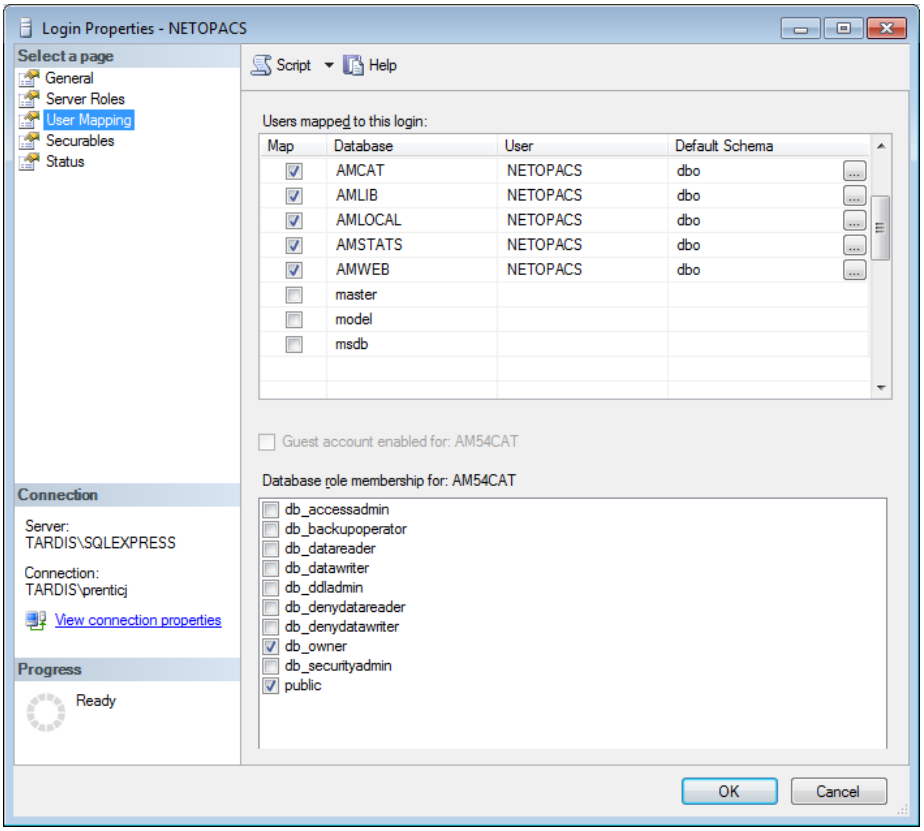
   a. SQL Databases: this should match the name of the Live (or production) databases set up in *SQL Server* (these databases utilise a default **AM** prefix):

   - **DatabaseLib=Amlib**
   - **DatabaseCat=Amcat**
   - **DatabaseLocal=Amlocal**
   - **DatabaseStats=Amstats**
   - **DatabaseWeb=Amweb**

Please Note: Most *Amlib* customers prior to 2007 will need to configure this as **DatabaseWeb=Amcat** if they do not have an **AMWEB** database.

   b. SQL Databases Login: this should utilise the **NETOPACS** Login previously setup in your *SQL Server* – this Login MUST be mapped to ALL the *Amlib* SQL databases with db_owner role membership (see Appendix C: Setup SQL Server User Security for more information):

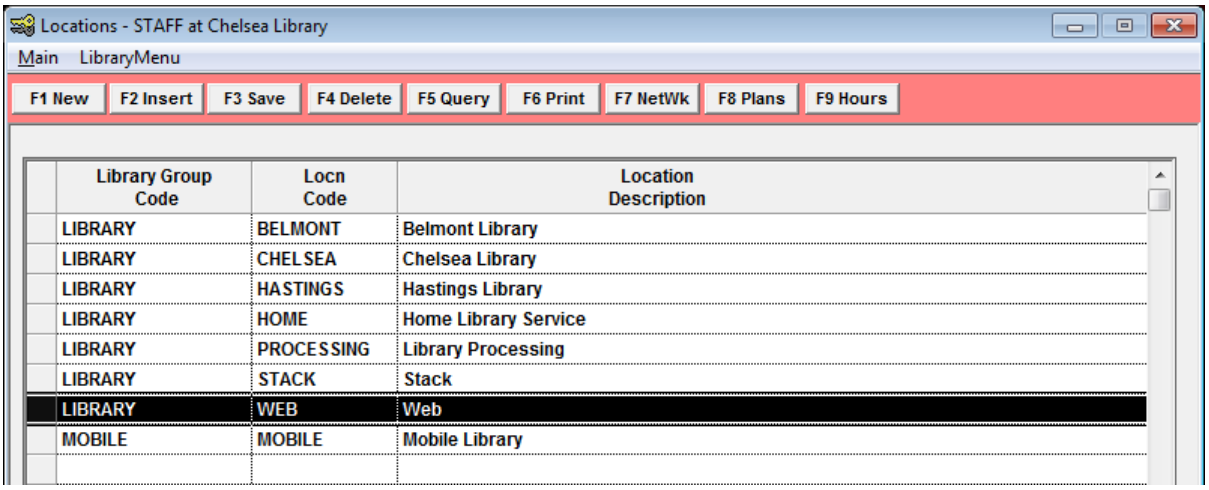




- **DatabaseUser =NETOPACS**
- **DatabasePw=NETOPACS**

Please Note: It is possible to utilise the **SYSADM** Login in place of the **NETOPACS** Login, or the user can define (and use) their own SQL Server Login.

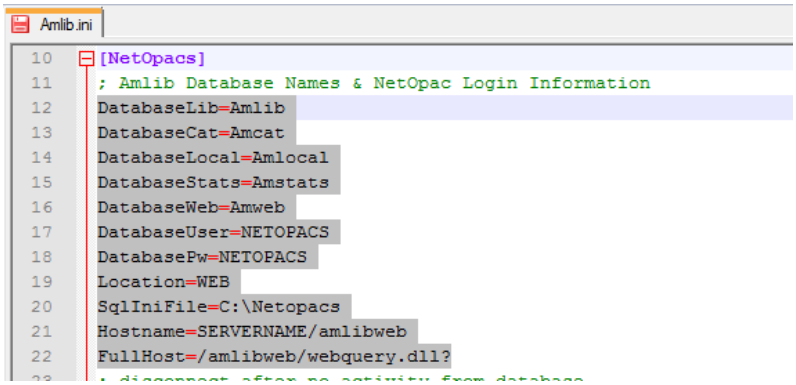
c. Location: this should utilise the **WEB** Location previously setup in your *Amlib* client (see Appendix E: Configure a WEB Location in Amlib for more information):



- **Location=WEB**

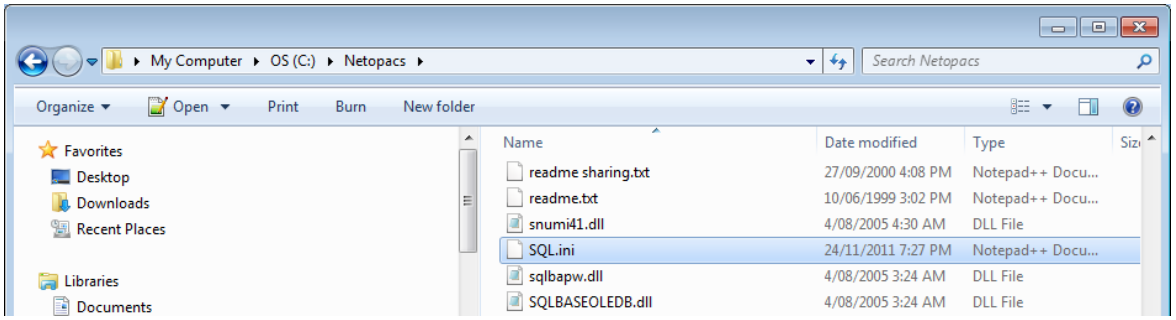
Please Note: It is possible to utilise a different (branch) Location in place of the **WEB** Location (for example: **LIB** or **CHELSEA**). The use of a separate **WEB** Location is so that a unique set of loan rules can be configured for *NetOpac* users.

d. **Hostname={**name or TCP/IP address of webserver**}/amlibweb**
For example: **Hostname=localhost/amlibweb**
or **Hostname=tardis/amlibweb**
or **Hostname=203.192.150.3/amlibweb**



Step 2: NetOpacs SQL.ini Settings

1. On the *NetOpacs* server, navigate to your **Netopacs** 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:
    a. SQL Server: **comdll=sqlodb32**
    b. Oracle: **comdll=sqlora32**
    c. SQL Base (no longer in use in *Amlib 5.4*): **comdll=sqlws32**

```
26  [win32client.dll]
27  ;Server
28  comdll=sqlodb32
29  ;Base
30  ;comdll=sqlws32
31  ;Oracle
32  ;comdll=sqlora32
```

SQL Server Users

Under the heading **[Odbcrtr]** enter in the *SQL Server* file paths for the **Live** databases:

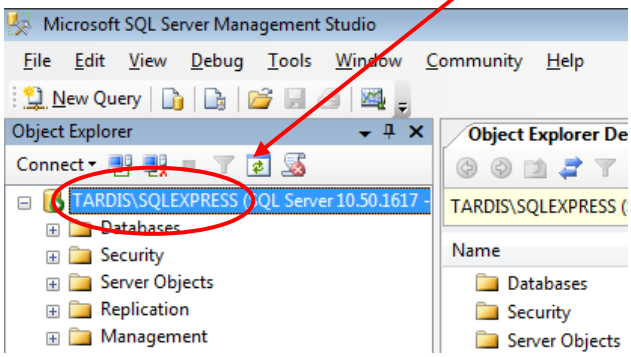
- REMOTEDBNAME=**AMCAT**,DRIVER=SQL Server;SERVER=**SERVERNAME\INSTANCENAME**;DATABASE=**AMCAT**
- REMOTEDBNAME=**AMLIB**,DRIVER=SQL Server;SERVER=**SERVERNAME\INSTANCENAME**;DATABASE=**AMLIB**
- REMOTEDBNAME=**AMLOCAL**,DRIVER=SQL Server;SERVER=**SERVERNAME\INSTANCENAME**;DATABASE=**AMLOCAL**
- REMOTEDBNAME=**AMSTATS**,DRIVER=SQL Server;SERVER=**SERVERNAME\INSTANCENAME**;DATABASE=**AMSTATS**
- REMOTEDBNAME=**AMWEB**,DRIVER=SQL Server;SERVER=**SERVERNAME\INSTANCENAME**;DATABASE=**AMWEB**

If there is ";NETWORK=dbmssocn;ADDRESS=*ipaddress*" on the end of each line please remove it

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*:

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



HINT: It is possible to open the **Amlib** folder **SQL.ini** file in *Notepad* and copy (and paste) the same settings from within that file.

Oracle Users

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]}**.

```
[ORAGTWY]
;
; This section is for Oracle Router. The REMOTEDBNAME maps the application's
; database name to the Oracle SQL*Net connect string. The SUBSTITUTE
; keyword replaces the first parameter with the second parameter. It is mainly
; used to replace the user id in a Catalog Command Query. This's only needed
; when you run Quest against Oracle v7, when you run Quest against Oracle6
;you must remove or comment this line out.
;
REMOTEDBNAME=AMLIB,@AMLIB
REMOTEDBNAME=TELIB,@TELIB
SUBSTITUTE=SYSSQL.,
SUBSTITUTE=syssql.,
longbuffer=900000
MAPERROR=OFF
fetchrow=100
```

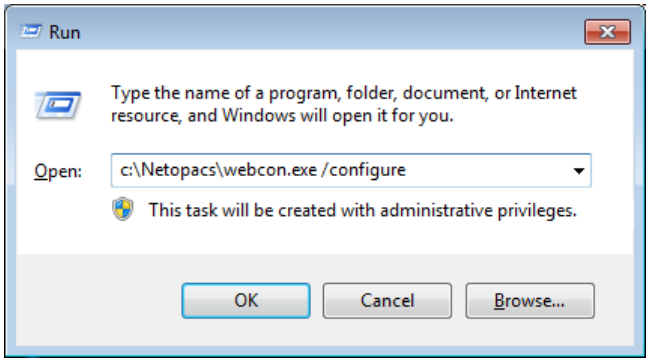
SECTION 3: WEBCONSOLE CONFIGURATION

After installation, the *NetOpacs WebConsole* requires some additional configuration via the *WebConsole* application interface.

1. Install *FireDaemon* which can be located within the *NetOpacs* installation directory:

Drive:\Netopacs\Utility\ firedmn_setup.exe – for example: **C:\Netopacs\ Utility\ firedmn_setup.exe**

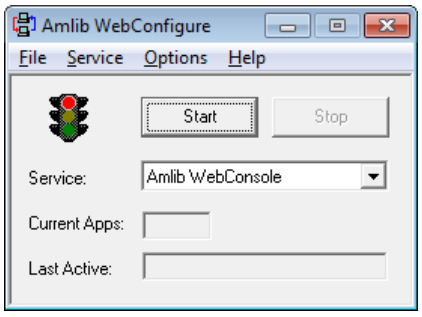
2. Continue the installation with all default settings. Also answer **Yes** to the two prompts during the installation. After the installation is complete, if possible restart the server.
3. From the *Start* menu, select the **Run...** command (or type **run** in the Search programs and files box and press <enter>) – the Run prompt will display:



4. Type in the path to open the WebConsole in the following format:

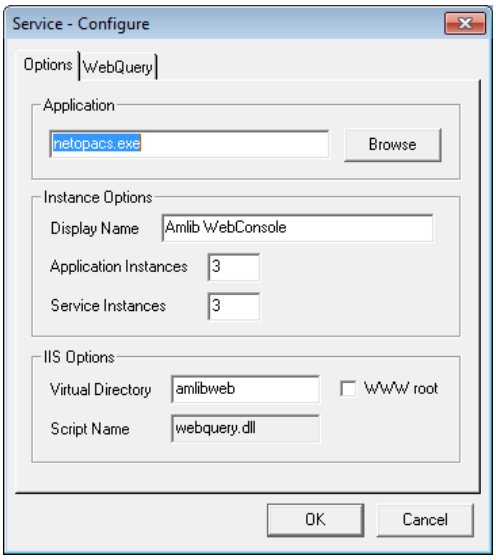
Drive:\Netopacs\webcon.exe /configure – for example: **C:\Netopacs\webcon.exe /configure**

5. The Amlib WebConfigure screen will display with:

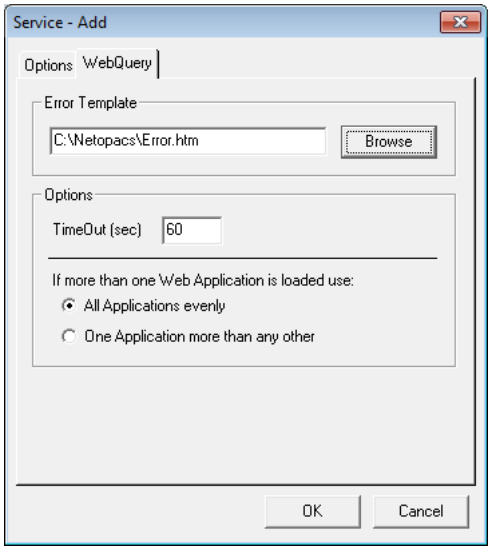


6. From the menu, select **Service** > **Configure**

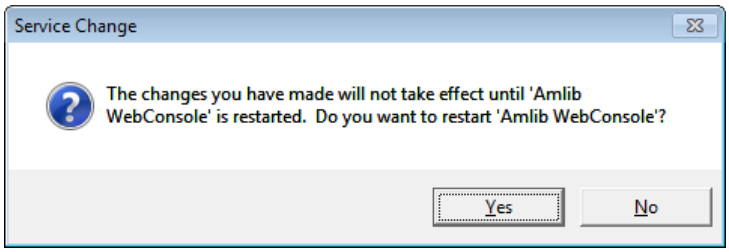
7. The Service – Configure screen will display:



8. Ensure the following field settings are selected:
    a. Application: **netopacs.exe**
    b. Display Name: **Amlib WebConsole** – this can be changed to be something more appropriate – for example: **Senior Library NetOpacs**
    c. Application Instances: number of instances when running the *NetOpacs* as an application (multiple instances allows for multiple simultaneous transactions – public libraries should change the number to **5** or more; libraries with only one *NetOpacs* terminal can change to **1;** Recommended **3**)
    d. Service Instances: number of instances when running the *NetOpacs* as a service
    e. Virtual Directory: **amlibweb** (this is the default *IIS* virtual directory name) – it is possible to setup the *IIS* virtual directory as part of the *NetOpacs* installation – see Section 1: Step 2.8)
    f. Script Name: **webquery.dll**
9. Now select the **WebQuery** tab – the WebQuery screen will display:



10. Ensure the parameters settings are correct with the following field settings:
    a. Error Template: **C:\Netopacs\Error.htm** (if the *NetOpacs* have been installed anywhere other than the default location, you may need to click the **Browse** button and navigate to the location where the **Error.htm** is held and select it)
    b. TimeOut: default = **60** seconds. This can changed to a higher value if necessary.
    c. If more than one Web Application is loaded use: select **All Applications evenly**
11. Click the **OK** button – a prompt with the following message will display:
    The changes you have made will not take effect until 'Amlib WebConsole' is restarted. Do you want to restart 'Amlib WebConsole'?



12. Click the **Yes** button

Configure NetOpacs as a FireDaemon Service

We recommend that *NetOpacs* is configured as a *FireDaemon* Service. This is covered in **Section 6.**

SECTION 4: SETUP NETOPAC PAGES

Location of NetOpac Pages

Most libraries will be running one (or more) set(s) of ***customised*** *NetOpacs* pages. These pages (and the associated image, *CSS* and *JavaScript* files) are usually located in the **Netopacs/Samples** folder on the *NetOpacs* server – for example:

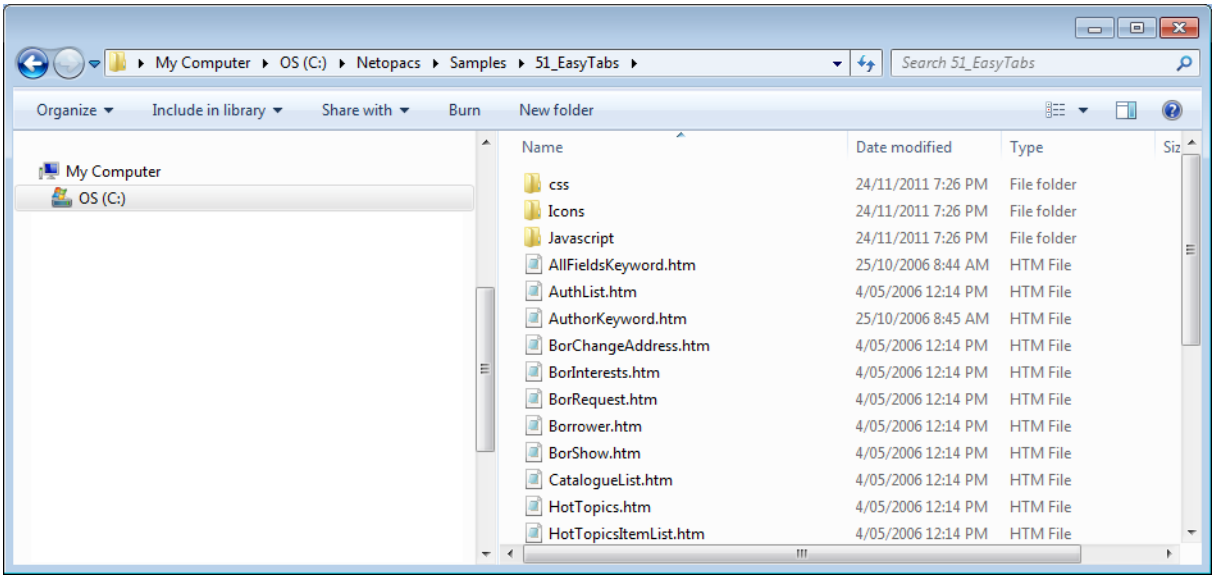
- **C:\Netopacs\Samples\A99_NewStyle** or
- **C:\Netopacs\Samples\oclcweb**

Some libraries may have their *NetOpacs* pages located in an entirely separate folder – for example:

- **C:\Netopacs\Live\oclcweb**

A typical *NetOpac* web older will contain a set of pages (and folders) as follows:

- **css** folder
- **Icons** folder
- **Javascript** folder
- **Webpics** folder
- **.htm** files (web pages)
- **.ini** configuration file



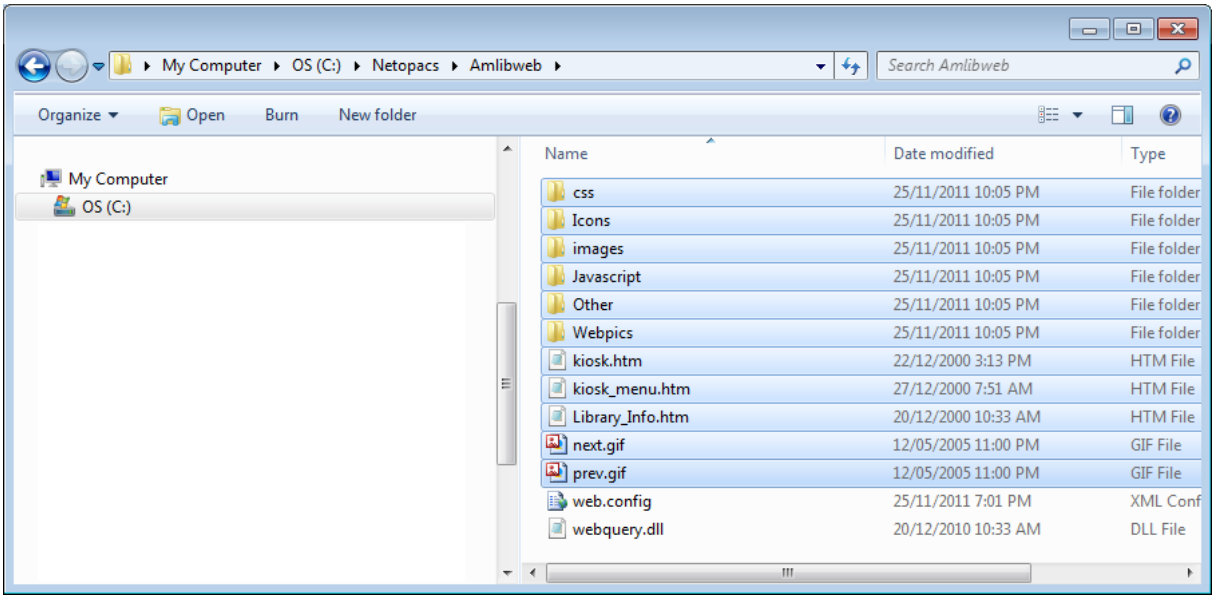
Step 1: Copy the NetOpac Web Pages

1. On the (old) *NetOpacs* server, navigate to the folder containing your current *NetOpacs* pages and make a copy of the folder (and its contents) [*Server Migrations Only*]
2. On the (new) *NetOpacs* server, paste in the folder containing your *NetOpac* pages (and its contents) into the **NetOpacs/Samples** folder

Step 2: Amlibweb Virtual Directory Files

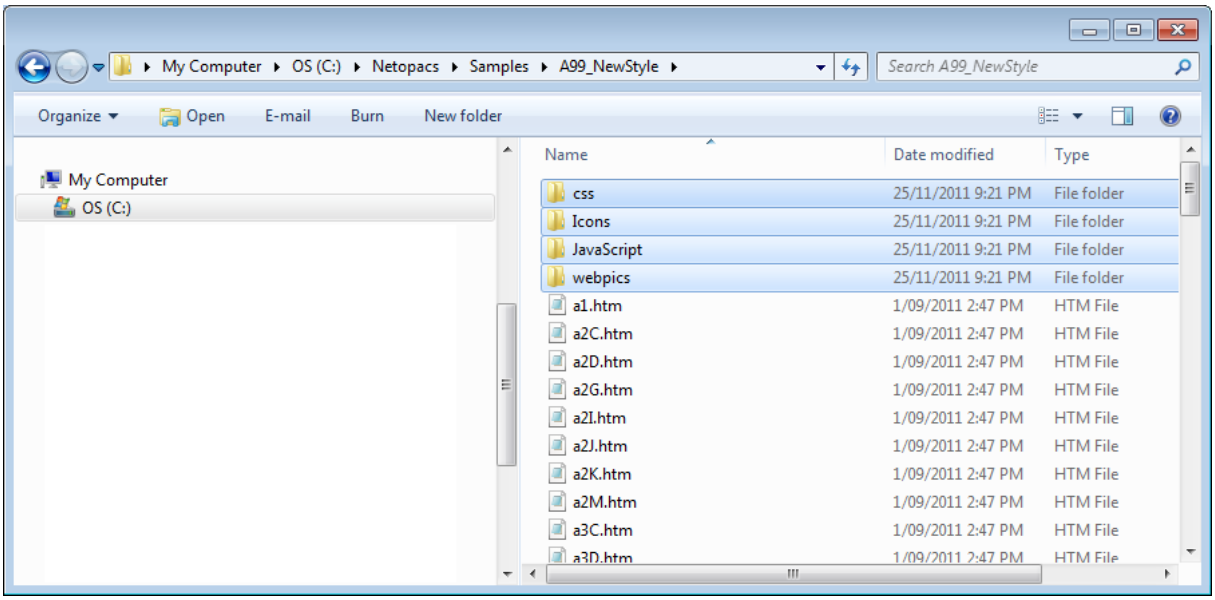
As part of the *NetOpacs* client installation, an **Amlibweb** virtual directory folder will installed in the **NetOpacs** folder (for example: **C:/Netopacs/Amlibweb**). This is the folder that *IIS* uses foundation of the *NetOpacs* web site. As such, it needs to contain a copy of any files being referred to by these pages. The **Amlibweb** folder also contains the **webquery.dll** file, which essentially "powers" many of the *NetOpac* operations and is called by the **netopacs.exe** to execute certain operations.

1. Navigate to the **Amlibweb** virtual folder on your *NetOpac* server (for example: **C:/Netopacs/Amlibweb**)



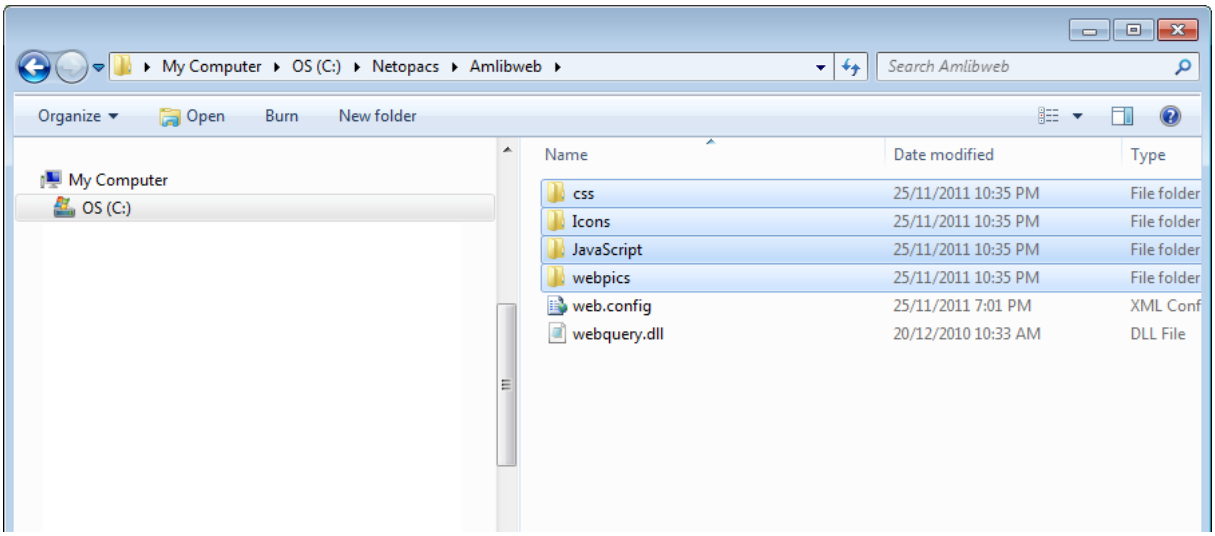
2. Highlight all existing files (EXCEPT the **webquery.dll** and the **web.config** files) and DELETE them

3. Navigate to the folder containing your *NetOpac* pages (and its contents) in the **NetOpacs/Samples** folder (for example: **C:/Netopacs/Samples/A99_NewStyle**)



4. **Copy** all folders and any non **.htm** file (excepting the **.ini** configuration file)

5. Navigate back to the **Amlibweb** virtual directory folder



6. Paste in the previously copied folders (and files) from the *NetOpac* pages folder

The *NetOpac* pages are now ready to be compiled.

SECTION 5: COMPILE THE NETOPAC PAGES

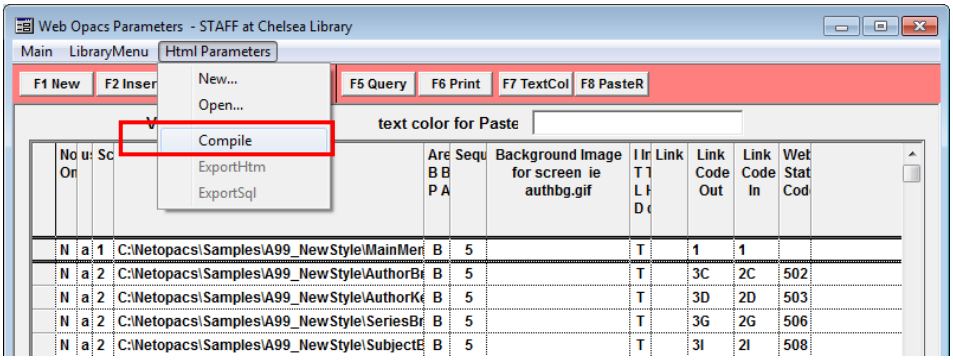
Step 1: Compile the NetOpac Pages

Before starting the *Amlib NetOpacs* module you will need to load (compile) a set of *NetOpac* web pages (search screens, result lists, etc.).

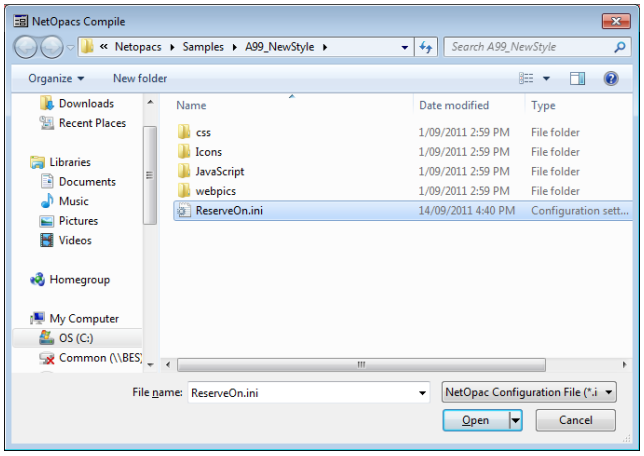
If the *NetOpacs* have been setup on a separate server to the *Amlib* client application files, then access to the *Amlib* client will need to be setup and configured by running the **IconSetup.exe** – see Appendix D: Running the Amlib Icon Setup Facility). Alternatively, the *Amlib* client application can be installed (and configured) locally on the *NetOpacs* server (see separate *Amlib* client installation instructions).

WARNING: Do not attempt to compile the *NetOpac* pages from the *Amlib* application server (if installed separately) or from a client PC, as the filepaths of the compiled pages will be incorrect.

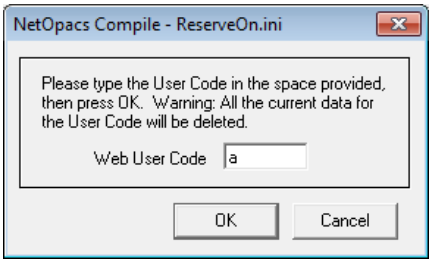
1. On the *NetOpacs* server, launch the *Amlib* client
2. Go to **Main** > **Supervisor** > **WebParams** – the Web Opacs Parameters screen will display
3. From the menu, select **Html Parameters** > **Compile**



4. The Net Opacs Compile screen will display – navigate to the folder containing your *NetOpacs* pages (this folder is usually contained in the **Netopacs/Samples** folder on the *NetOpacs* server– for example: **C:\Netopacs\Samples\A99_NewStyle**)
5. You will find an **.ini** configuration file. Most recent *NetOpac* installations will have **.ini** file called **Item_Result.ini** – if this is the case, then select that. Alternative names include **ReserveOn.ini** and **ReserveOff.ini**. Then click on the **Open** button.



6. You will then be asked to type in a Web User Code. This code denotes your *NetOpac* instance. If you are running more than one set of NetOpac pages (for example: a *junior* and *senior* set of pages) then you will be using more than one code. Typically, the first instance is designated **a** and the second **b** and so on. If you have only one set of pages, then just type in **a**.



7. Click on the **OK** button
8. *Amlib* will now compile these pages (and the **amlib.ini** file) – once complete, a prompt with the following message will display: **All the Web Parameters have been created.**

Step 2: Restart the NetOpac WebConsole (Non-Service Installations Only)

Once the compile is complete, you will need to restart the *NetOpac WebConsole*.

To restart the WebConsole:

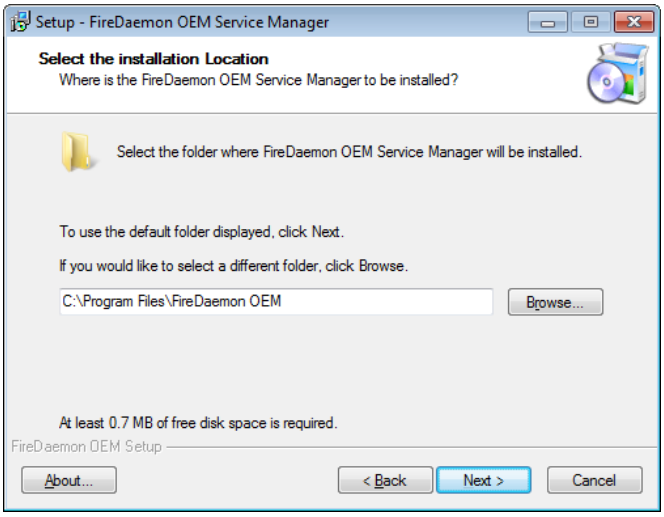
1. Now the WebConsole is probably already running, so maximise the WebConsole window
2. You will then need to reload it using the code you entered at step 6. So in the Style box, type the code you used at step 6 (leave as '**a**' if you compiled as '**a**') and then press the orange **ReLoad** button. That will take a few seconds and then it will be ready to test.
3. The WebConsole has now been restarted

SECTION 6: FIREDAEMON OEM SERVICE MANAGER INSTALLATION

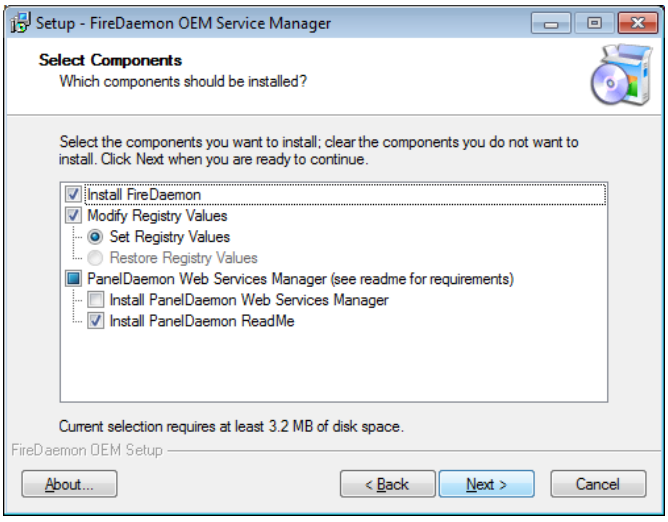
IMPORTANT: Please ensure that you have **full read/write** access to the **\Program Files** folder on your server (for example: **C:\ Program Files**) and that you are logged in with Administrative Privileges.

Please ensure that you have the latest version of the *.NET Framework* installed prior to beginning installation of *FireDaemon* – see: Appendix F: Install .NET Framework for more information

1. The *FireDaemon* installer can be found in the **NetOpacs/Utility** folder – for example: **C:\Netopacs\Utility**
2. Double-click the **firedmn_setup.exe** to launch the installation Wizard – the Setup – FireDaemon OEM Service Manager screen will open displaying the **Welcome** message
3. Click the **Next** button – the Installation Location screen will display:



4. Enter the drive/folder location where you would like to install *FireDaemon* – we recommend that the *FireDaemon* be installed in **C:\Program Files\FireDaemon OEMB and** click the **Next** button
5. The Select Components screen will display:



6. Choose which components should be installed:

    a. **Install FireDaemon**

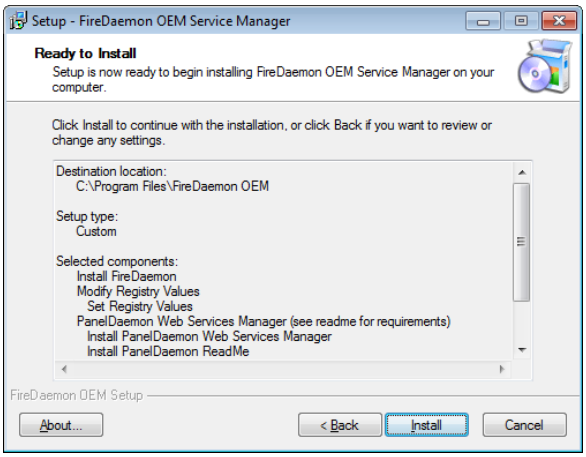
    b. Modify Registry Values:

        - **Set Registry Values**

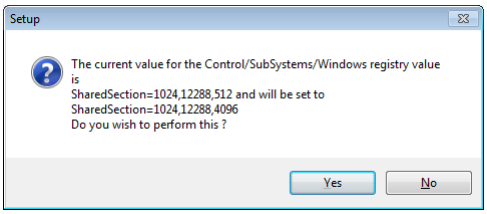
    c. PanelDaemon Web Services Manager:

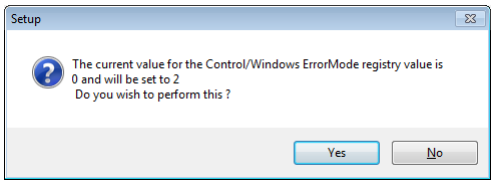
        - **Install PanelDaemon Web Services Manager**
        - **Install PanelDaemon ReadMe**

7. Select ALL options and click the **Next** button – the Select Start Menu Folder screen will display
8. To accept the default name (for most customers), click the **Next** button
9. The Ready to Install screen will display with a summary of the installation tasks to be performed:



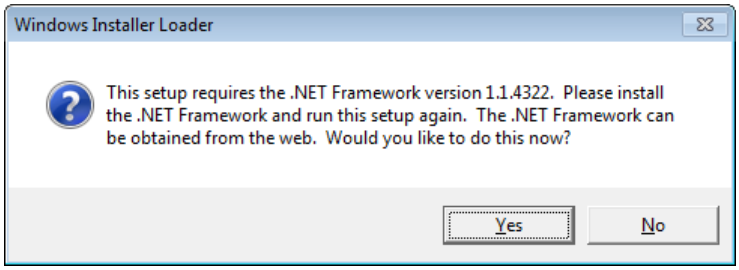
10. Click the **Install** button – two Setup prompts may display:



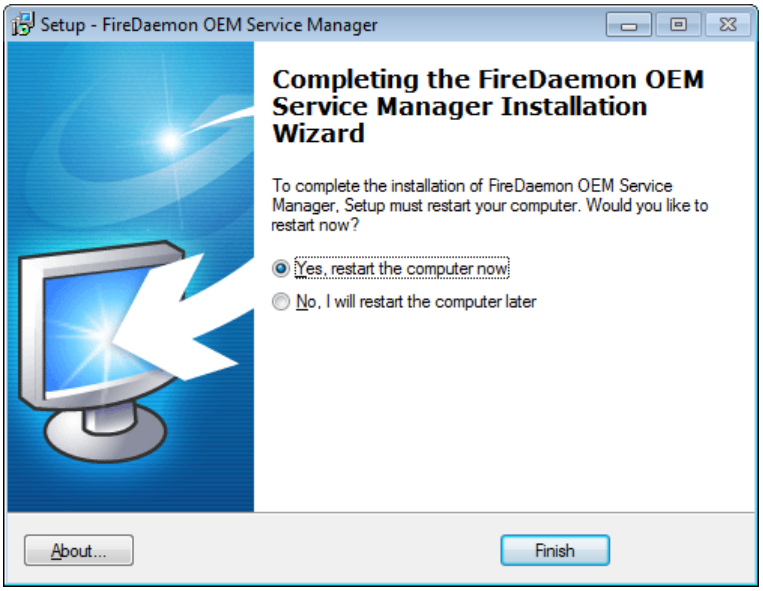


11. Click the **Yes** button both times – the Installing screen will display

12. If the latest version of the .NET Framework is not installed, a prompt with the following message will display: **This setup requires the .NET Framework 1.1.4322. Please install the .NET Framework and run this script again. The .NET Framework can be obtained from the web. Would you like to do this now?**



13. Click the **Yes** button
14. Once the installation is complete, you will be prompted to restart the computer – select the **Yes, restart the computer now** option and click the **Finish** button



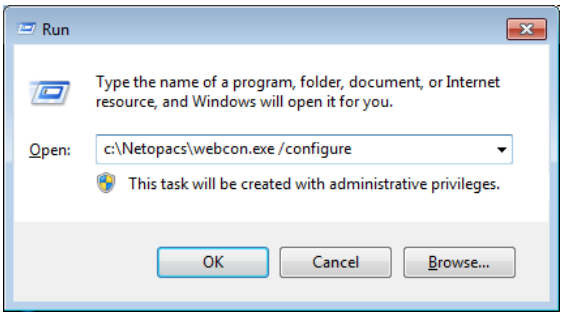
15. To complete the installation of *FireDaemon*, the machine will have to be restarted – select the **Yes, restart the computer now** option and click the **Finish** button
    NB: A restart it not always required but is recommended.
16. The setup Wizard will close and the machine will restart

Installation of the *FireDaemon* application is now complete.

SECTION 7: FIREDAEMON OEM SERVICE MANAGER CONFIGURATION

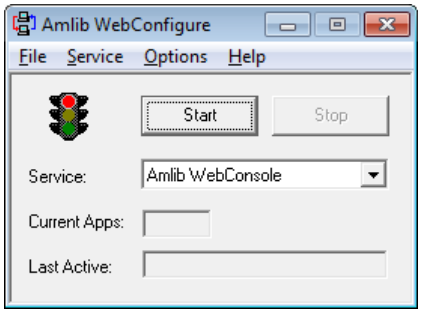
Step 1: Create the NetOpacs Service Instance

1. From the *Start* menu, select the **Run...** command (or type **run** in the Search programs and files box and press <enter>) – the Run prompt will display:

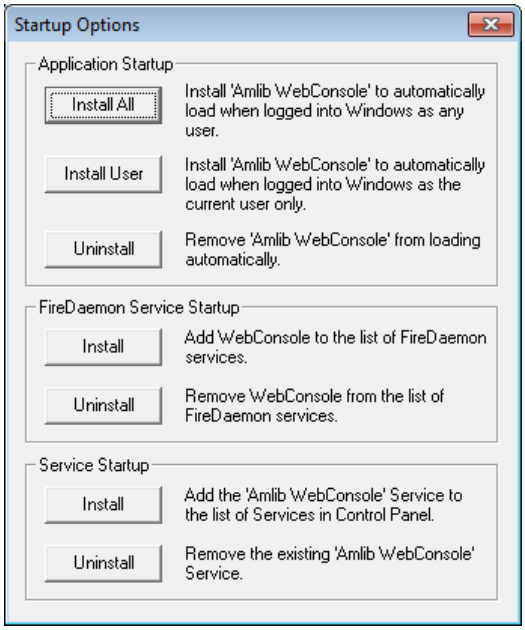


2. Type in the path to open the WebConsole in the following format: **Drive:\Netopacs\webcon.exe /configure** – for example: **C:\Netopacs\webcon.exe /configure**

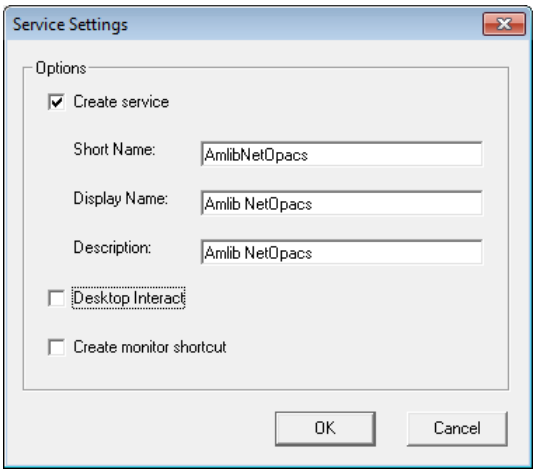
3. The Amlib WebConfigure screen will display with:



4. From the menu, select **Options** > **Startup...** – the Startup Options screen will display:



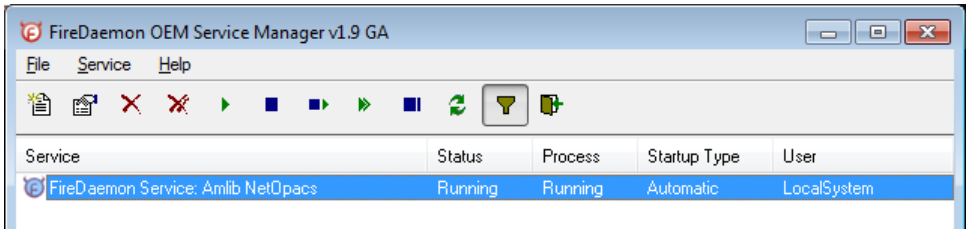
5. In the FireDaemon Service Startup section, click the **Install** button – the Service Settings screen will display:



6. Enter the following settings:
    a. Create service = **ticked**
    b. Short Name – for example: AmlibNetOpacs
    c. Display Name – for example: **Amlib NetOpacs** or **Senior Library NetOpacs**, etc
    d. Description: enter a description
    e. **Untick** the Desktop Interact option – this will allow the service to run without opening the *WebConsole* (as it does when running as an application)
    f. **Untick** the Create monitor shortcut – there should already be a shortcut on the desktop
7. Click the **OK** button – the *NetOpacs* will be installed as a service in the *FireDaemon OEM*
8. Once completed, a prompt will display with the following message:
   The service has been installed.
9. Click the **OK** button

Step 2: Start the NetOpacs as a Service

1. Open the Service manager from your Programs listing:



2. Select the **Net Opacs WebConsole**, click on the **start** button
3. The service has now been started

Step 3: Test Access to NetOpacs "Pages" via Browser

To access the *NetOpacs* Main Menu using a web browser use the address stored in the **Fullhost** field within **\Netopacs\amlib.ini** configuration file.

For example:

- **http://localhost/amlibweb/WebQuery.dll?**

Or if the default document of **webquery.dll** has been defined in the previous section you will only need to enter:

- **http://localhost/amlibweb**

Step 4: Check Communications to Database Server

Before starting the *NetOpacs WebConsole* or *FireDaemon Service* you may wish to confirm that the *NetOpacs* server can communicate to the *Amlib* database server. To test the communications to the Amlib database server you can try:

- *Windows* "Ping" command. At the NT command (DOS) prompt type: **ping {server address}** – for example: **ping 10.0.0.10**
  Please Note: your firewall settings may prevent ping commands
- Simply perform a search using the *NetOpacs*!

SECTION 8: 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.

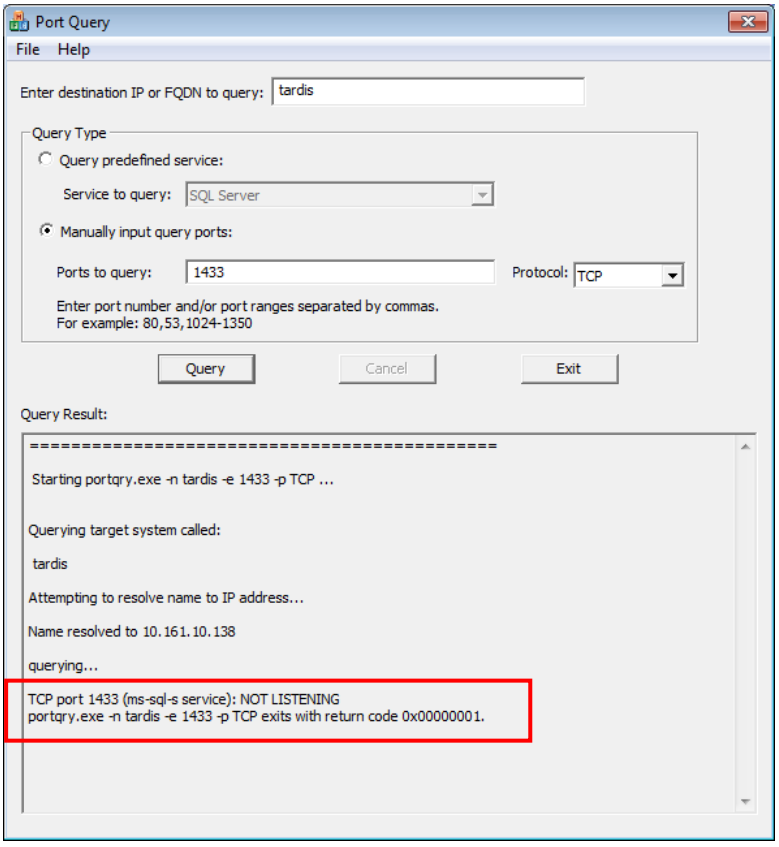
Step 1: Check Communication to Database Server using Microsoft Port Query

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:

    - *NetOpacs*: c:\netopacs\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.)

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. 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* 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**)

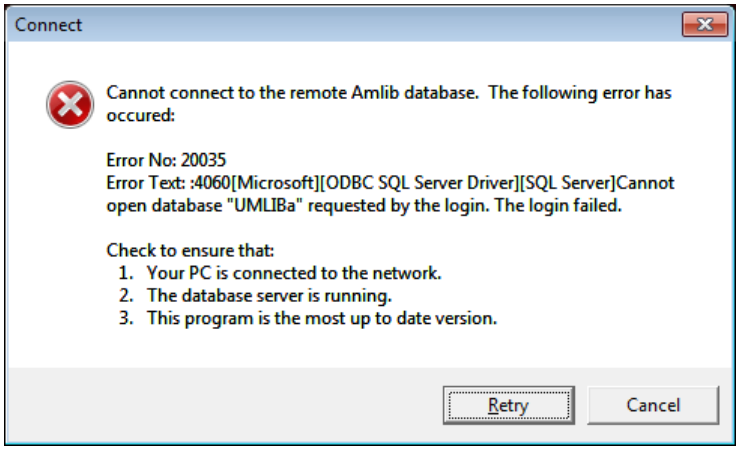
then this indicates:

- 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**

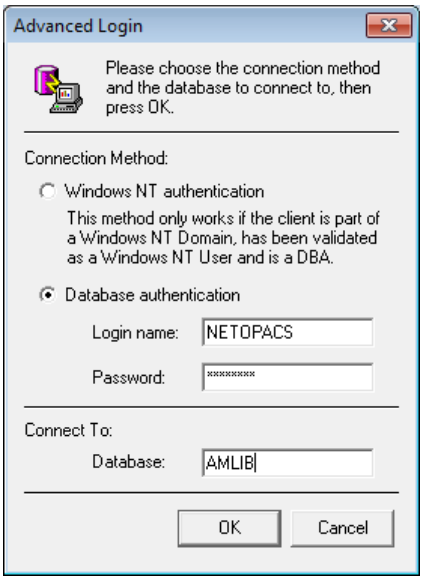


A message *"***Cannot connect to database***"* is displayed if the PC is unable to connect via the WAN (or if **SQL.ini** is not correctly configured).

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:

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

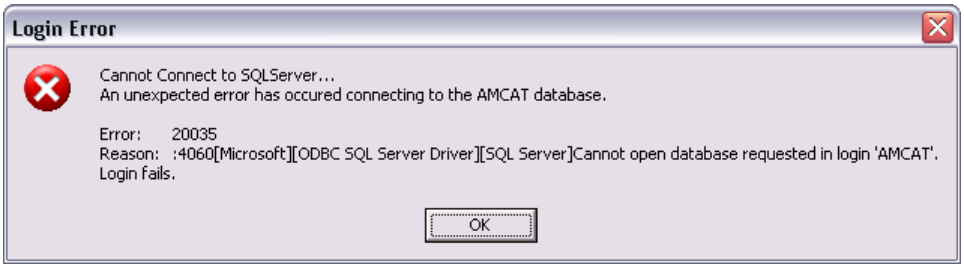


b) Enter the login of **NETOPACS**, the password (usually **NETOPACS**) and database **AMLIB** and click the **OK** button

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* 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

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:\netopacs** for the *NetOpacs* module) is not correctly configured – see: NetOpacs 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

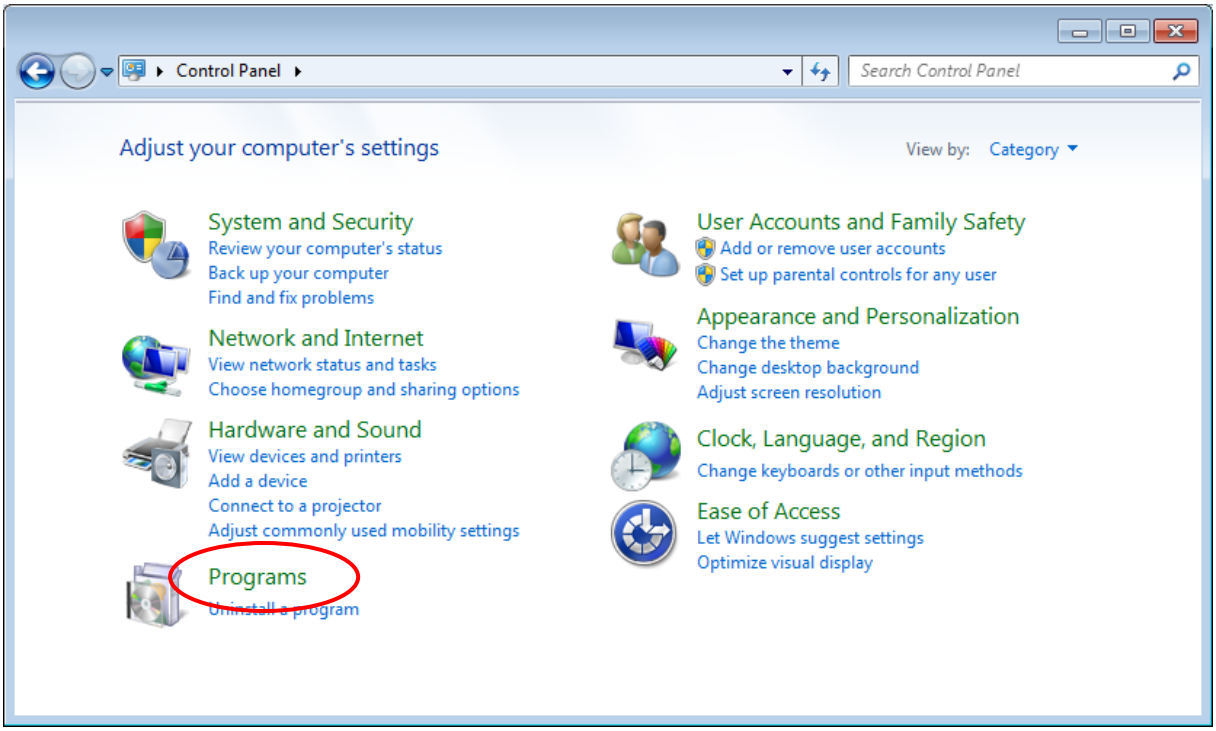
5. If step 4) above is OK, then perhaps the *Amlib* database connection settings held in **\{windows}\amlib.ini** are incorrect (these are different to the *DIY* **DefaultUser** and **Login** settings)

APPENDICES

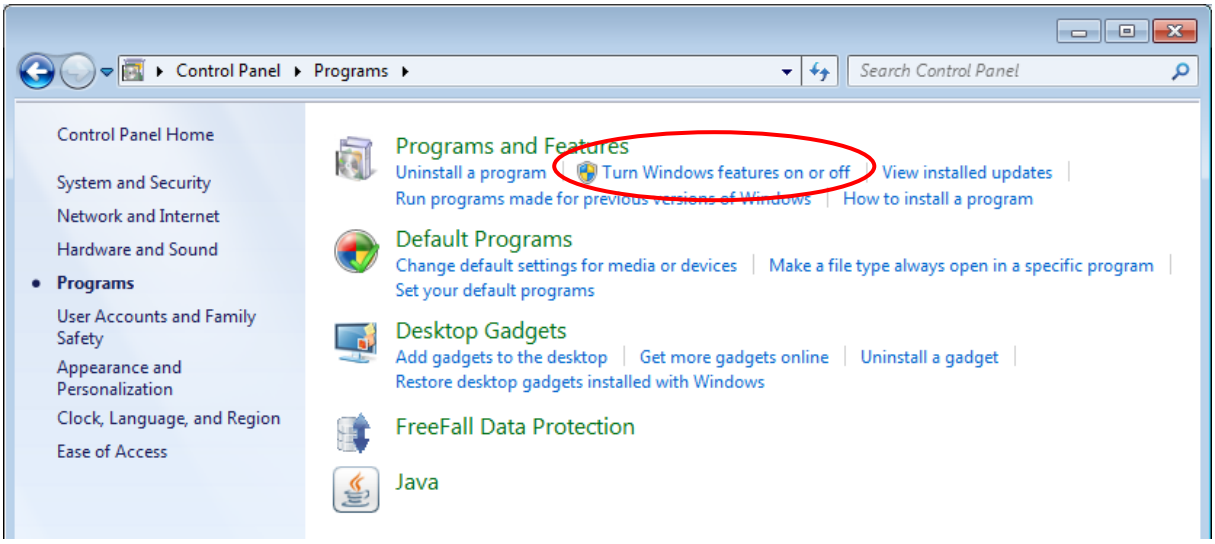
Appendix A: Install IIS on Windows 7 or Vista

Before installing your NetOpacs, you will need to ensure that the *NetOpacs* server is running *Internet Information Services* (*IIS*).

1. From the **Start** menu, select **Control Panel** – the Control Panel screen will display:

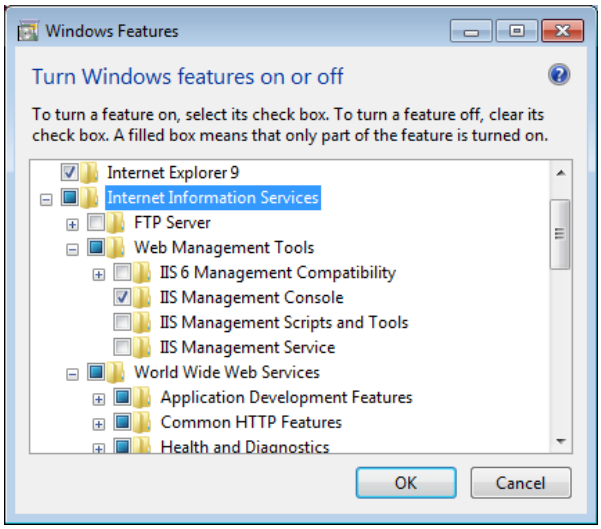


2. Select the **Programs** link – the Programs screen will display:



3. Select the **Turn Windows features on or off** link

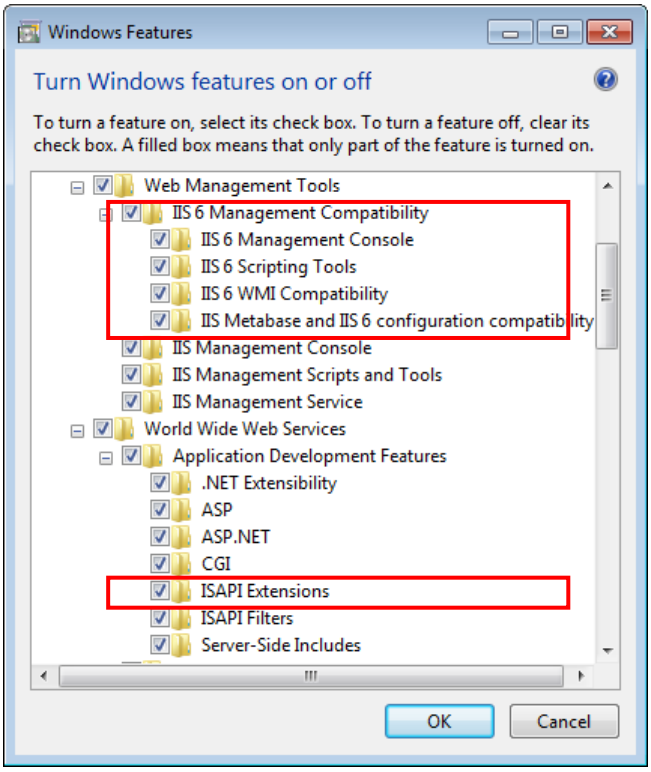
4. The Turn Windows Features On or Off screen will display:



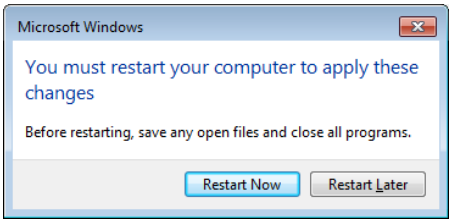
5. If you expand the Internet Information Services tree node, you can see that there are a lot of options beneath it:

   a. In the Web Management Tools section, ensure **IIS Management Compatibility** is **checked**, including ALL its sub items

   b. In the World Wide Web Services/Application Development Features section, ensure **ISAPI Extensions** is **checked**



6. Once complete, click the **OK** button – *IIS* will then be installed
7. Once complete, a prompt will display with the following message: **You must restart the computer to apply these changes**



8. Click the **Restart Now** button

Once restarted, when you navigate in your browser to localhost, you'll see the new default page:

Note on Configuring NetOpacs on 64-bit Windows Machine

If a site is using the 64-bit version of *Windows 2003* or above you will need to implement some additional configuration changes within *Windows* to support running 32-bit applications (the *NetOpacs* are a 32-bit application) on 64-bit *Windows* machine.

The following information is from the *Microsoft TechNet* article located at:

- http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/0aafb9a0-1b1c-4a39-ac9a-994adc902485.mspx

  Windows Server 2003TM, *Service Pack 1* enables *IIS 6.0* to run 32-bit web applications on 64-bit *Windows* using the Windows-32-on-Windows-64 (WOW64) compatibility layer. *IIS 6.0* using WOW64 is intended to run 32-bit personal productivity applications needed by software developers and administrators, including 32-bit *Internet Information Services* (*IIS*) Web applications. On 64-bit *Windows*, 32-bit processes cannot load 64-bit DLLs, and 64-bit processes cannot load 32-bit DLLs. If you plan to run 32-bit applications on 64-bit *Windows*, you must configure *IIS* to create 32-bit worker processes. Once you have configured *IIS* to create 32-bit worker processes, you can run the following types of *IIS* applications on 64-bit *Windows*:

  - Internet Server API (ISAPI) extensions
  - ISAPI filters
  - Active Server Page (ASP) applications
  - ASP.NET applications

  IIS can, by default, launch *Common Gateway Interface* (*CGI*) applications on 64-bit *Windows*, because *CGI* applications run in a separate process.

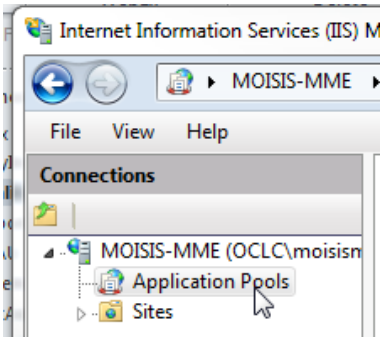
Configuring IIS to run 32-bit Web applications on 64-bit Windows:

Before you configure *IIS* to run 32-bit applications on 64-bit *Windows*, note the following:

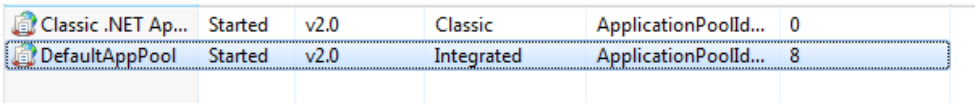
- *IIS* only supports 32bit worker processes in Worker Process Isolation mode on 64-bit *Windows*
- On 64-bit *Windows*, the *World Wide Web Publishing* service can run 32-bit and 64-bit worker processes. Other *IIS* services like the *IIS* Admin service, the SMTP service, the NNTP service, and the FTP service run 64-bit processes only
- On 64-bit *Windows*, the *World Wide Web Publishing* service does not support running 32-bit and 64-bit worker processes concurrently on the same server

To enable IIS to run the NetOpacs on a 64-bit Windows Machine:

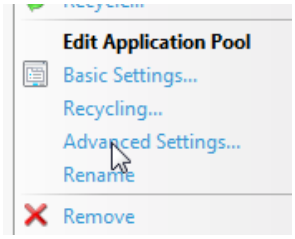
1. From the *Start* menu, select **Administrative Tools** >**Internet Information Services (IIS) Manager** or type **iis** in the Search programs and files box and press <enter> and select **Internet Information Services (IIS) Manager**
2. Expand the server listing > click on Application Pools



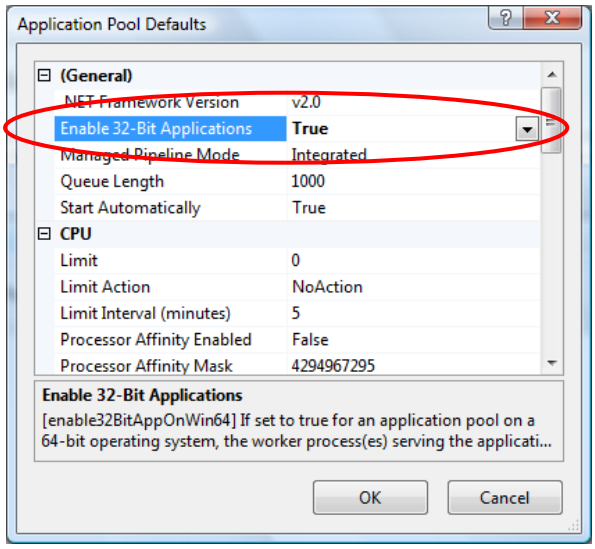
3. Click on the site's application pool to select it. The default pool for NetOpacs is **DefaultAppPool**



4.
5. In the right hand column, click on Edit Application Pool > Advanced Settings…

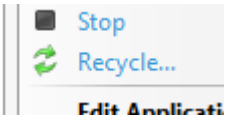


6. In the popup, go to General> Enable 32 bit Applications > change to "**True**"



7. Click **OK**

8. In the right hand column, click on Application Pool Tasks > Recycle… (or you can stop and start the app pool, if you prefer)



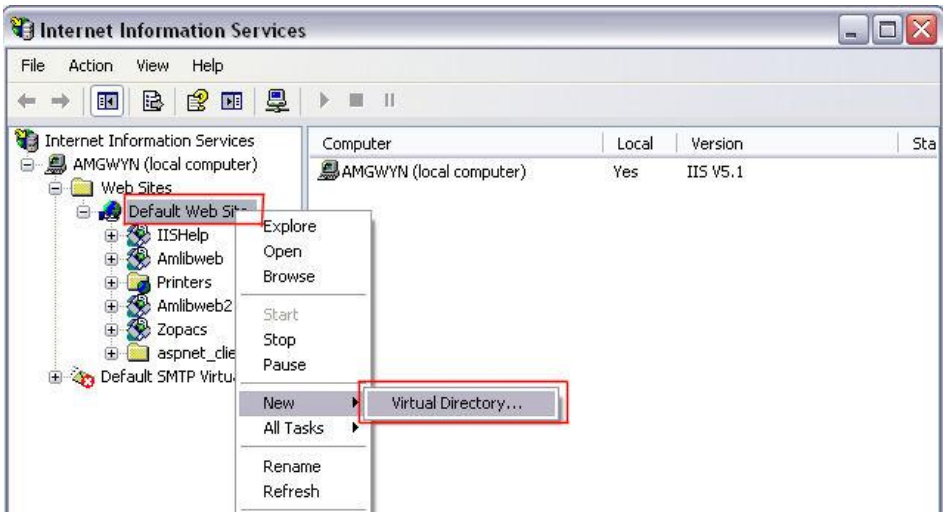
Appendix B: IIS Virtual Directory Configuration

IIS 6.0

Please Note: This example uses **Amlibweb3** where normally it would be **Amlibweb2** (if creating a *second* (**b**) instance). **Amlibweb3** would be used to create a *third* (**c**) instance, etc.

Creating the Virtual Directory

1. From the *Start* menu, select **Administrative Tools** >**Internet Information Services (IIS) Manager** or type **iis** in the Search programs and files box and press <enter> and select **Internet Information Services (IIS) Manager**
2. Expand the **[Server]** > **Sites** > **[Web Site]** tree, where **[Server]** and **[Web Site]** refer to the appropriate server name and web site name
3. Right-click the appropriate web site (for example: **Default Web Site**) and choose **New** > **Virtual Directory...**



4. The Virtual Directory Creation Wizard screen will display
5. Click the **Next** button to continue

6. The Virtual Directory Alias screen will display:

7. Enter the following:

   - Alias: which will be the same as the name given to your virtual directory folder created at step 1 (usually **Amlibweb2**, although in this example, **Amlibweb3**)

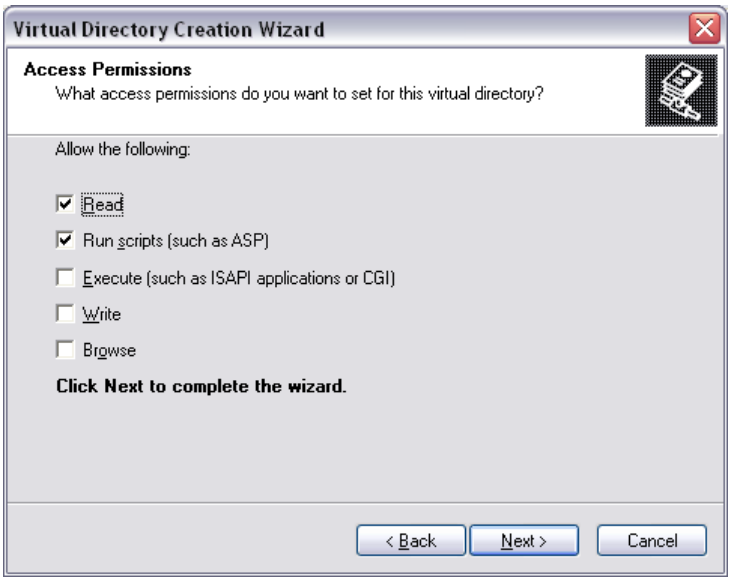
8. Click the **Next** button – the Web Site Content Directory screen will display:

9. Enter the following:

   - Directory: click on the **Browse…** button and navigate to the **Netopacs** folder, select the folder created at step 1 (usually **Amlibweb2**, although in this example **Amlibweb3**) and click the **OK** button

10. Click the **Next** button

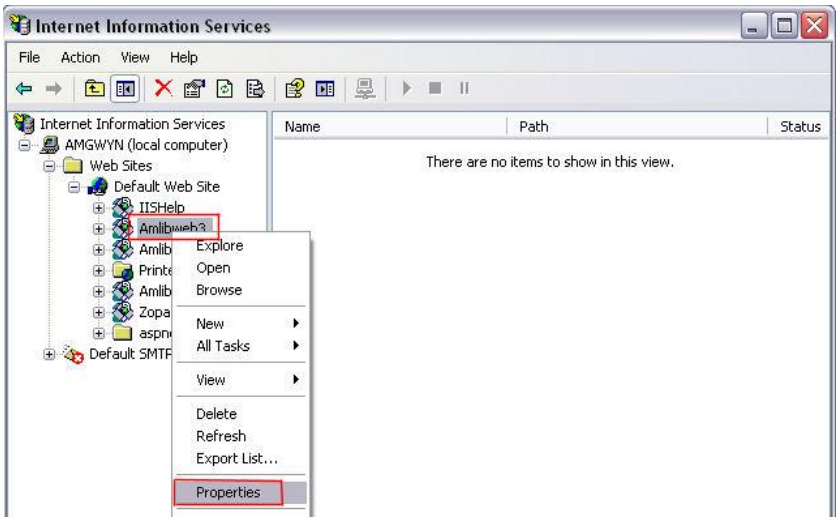
11. The Access Permissions screen will display:



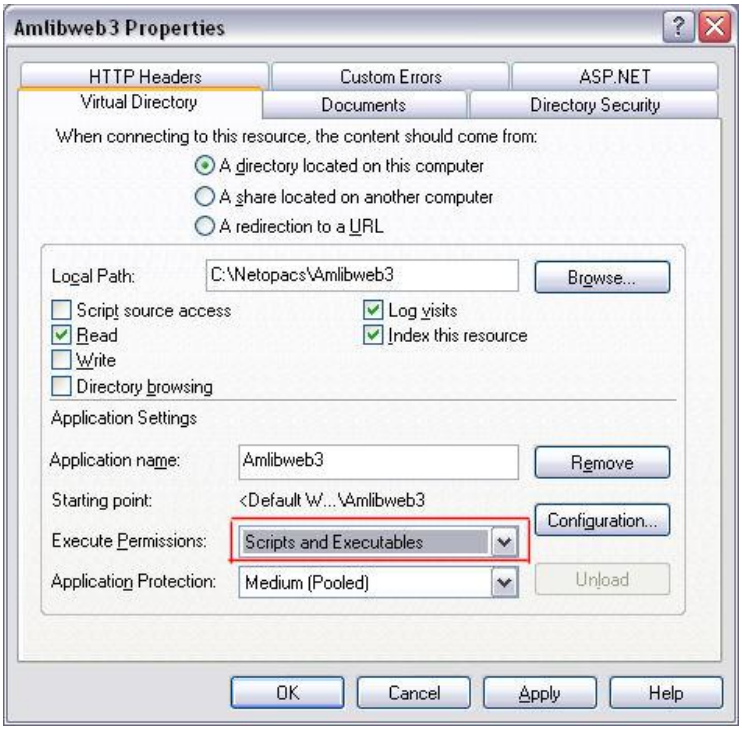
12. Ensure the Read and Run scripts (such as ASP) options are **selected** and click the **Next** button
13. Click the **Finish** button

Adjusting the Settings

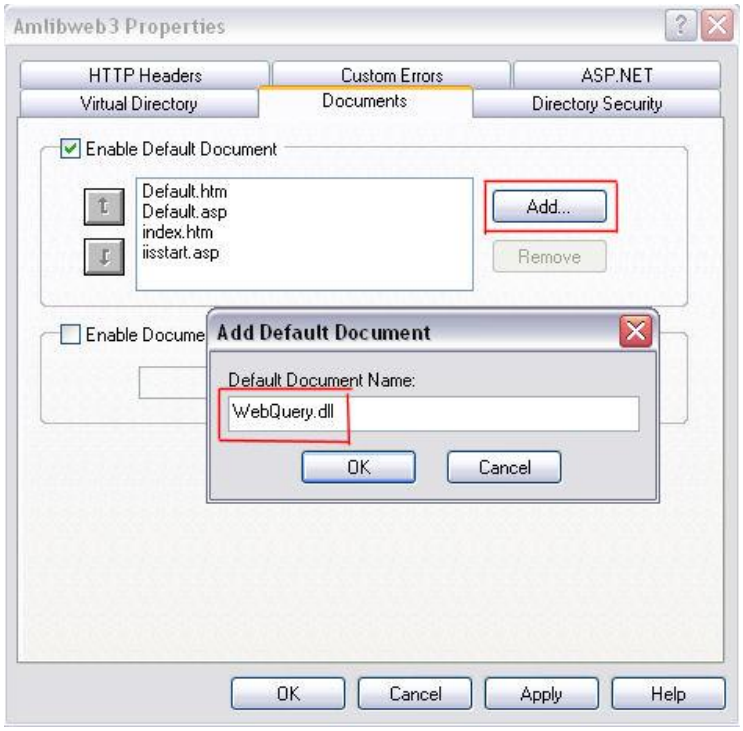
1. Right-click on the virtual directory you have set up (usually **Amlibweb2**, although in this example **Amlibweb3**) and select **Properties**:



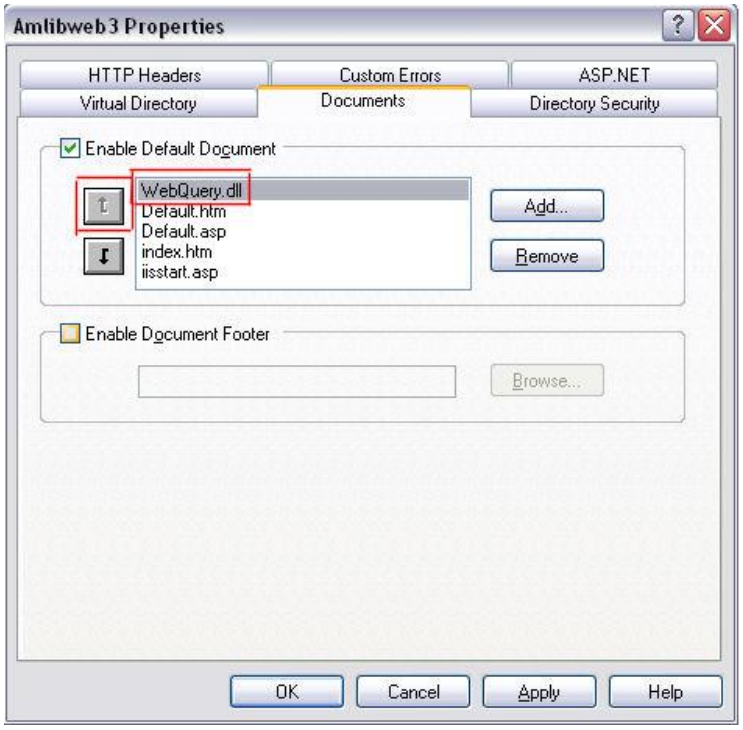
2. The Properties screen will display:



3. On the Virtual Directory tab:
    a. When connecting to this resource, the content should come from: ensure **A directory located on this computer** is selected
    b. Execute Permissions: ensure **Scripts and Executables** is selected
    c. Local Path: this should match the pathway to the virtual directory folder created earlier (for example: **C:/Netopacs/Amlibweb2**, although in this example **C:/Netopacs/Amlibweb3**)
    d. The Read, Log visits and index this resource settings should also be **selected**
4. Select the Documents tab:
    a. Click the **Add…** button – the Add Default Document prompt will display: type in **WebQuery.dll** and click the **OK** button



b. To help save time and system resources, use the arrows at the side to move **WebQuery.dll** to the top of the list:



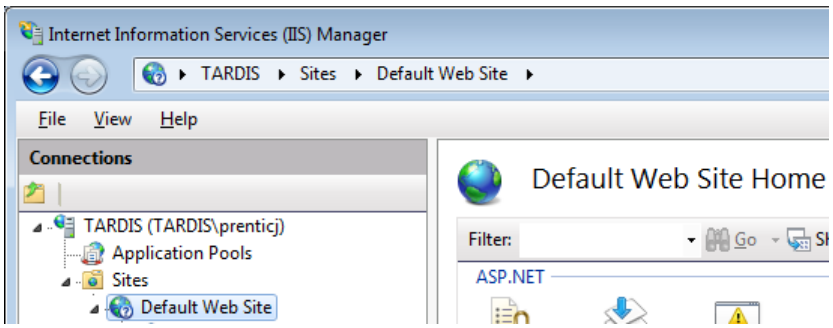
5. Click the **OK** button when complete

Creation and configuration of the virtual directory is now complete.

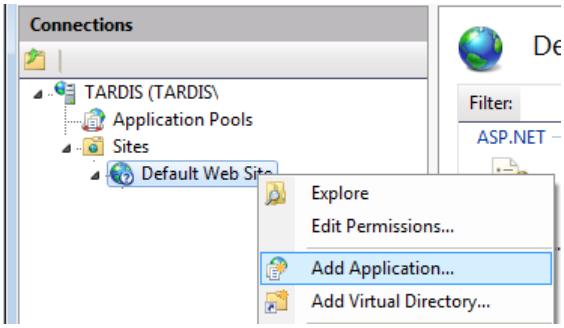
IIS 7.0

Creating the Application

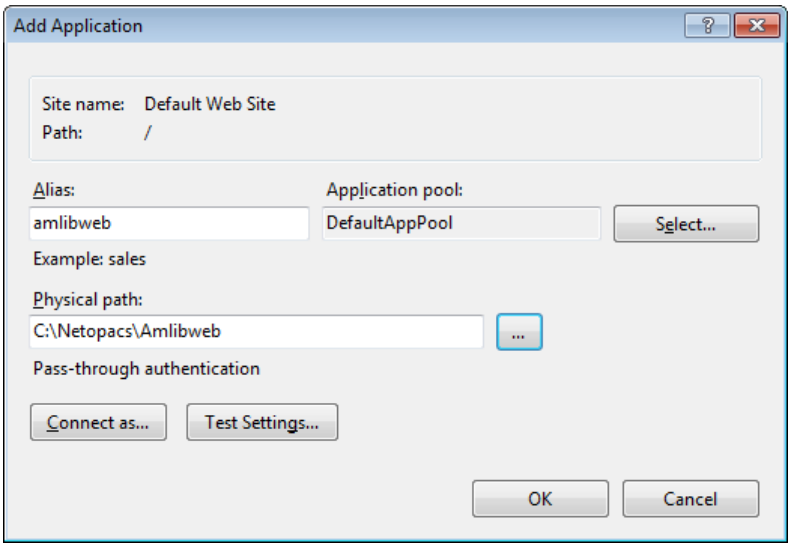
1. From the *Start* menu, select **Administrative Tools** >**Internet Information Services (IIS) Manager** or type **iis** in the Search programs and files box and press <enter> and select **Internet Information Services (IIS) Manager**
2. Expand the **[Server]** > **Sites** > **[Web Site]** tree, where **[Server]** and **[Web Site]** refer to the appropriate server name and web site name:



3. Right-click the appropriate web site (for example: **Default Web Site**) and choose **Add Application...**



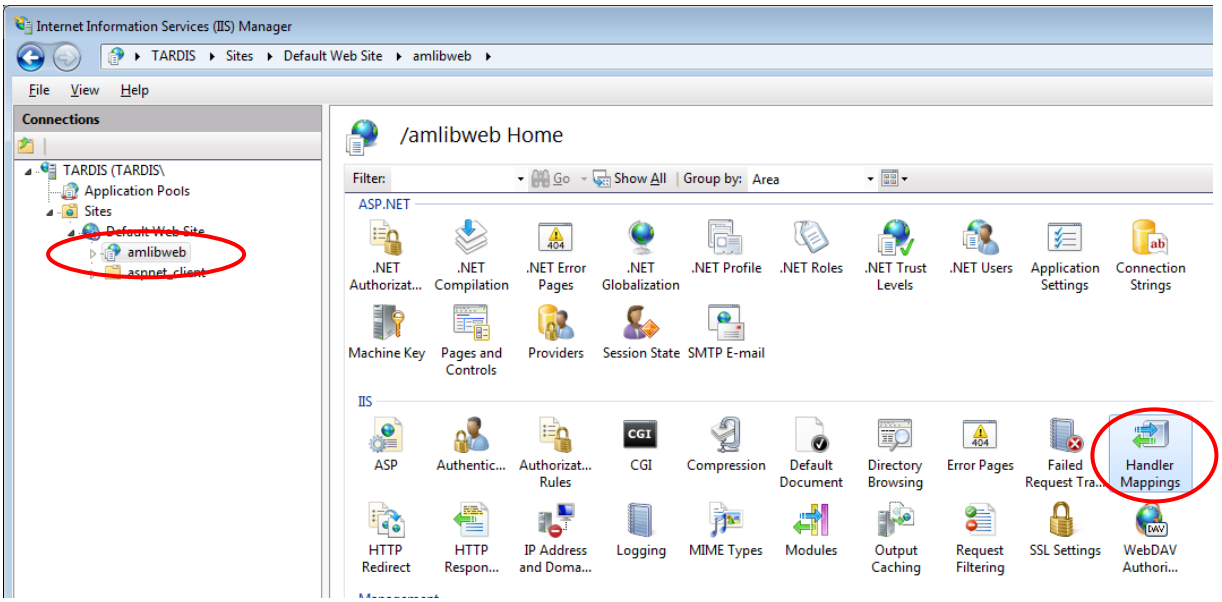
4. The Add Application screen will display:



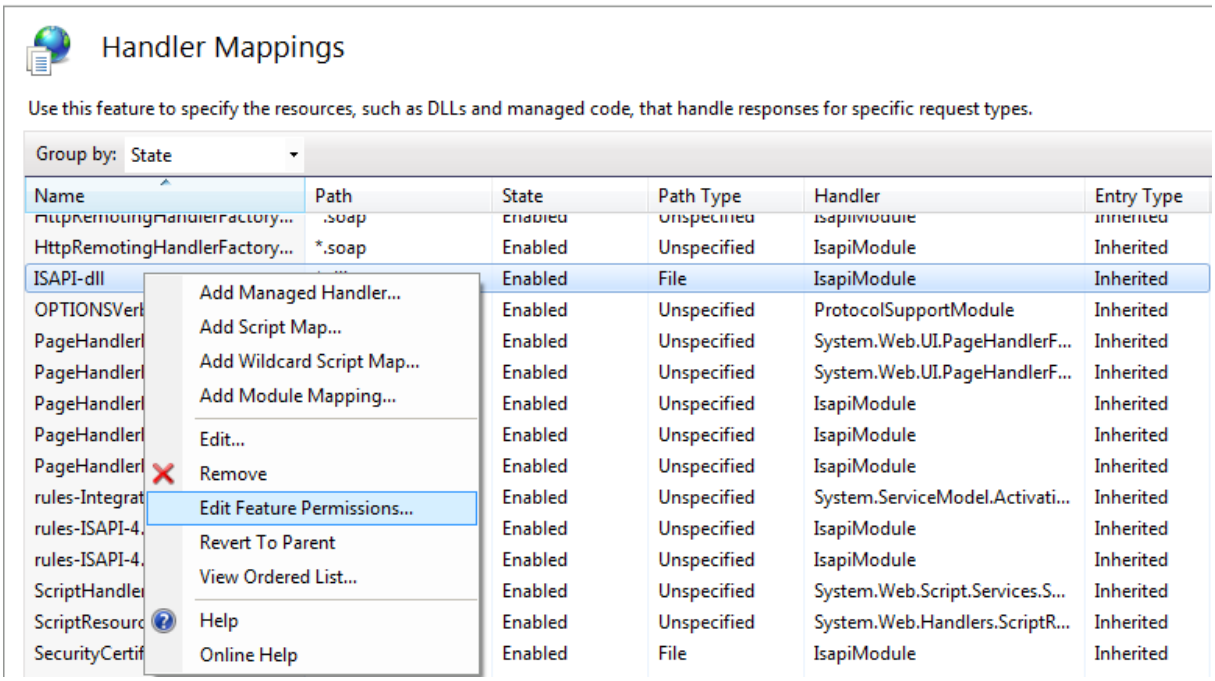
5. Enter the following settings:

   - Alias: **amlibweb** (if setting up a second *NetOpacs* instance, then this will be **Amlibweb2**)
   - Physical path: click the **...** button and navigate to the **Netopacs** virtual directory folder containing the **webquery.dll** file (this will typically be the **Amlibweb** folder – for example: **C: Netopacs\Amlibweb**)
     If setting up a second *NetOpacs* instance, then this will be the **Amlibweb2** folder.

6. Select the newly created application (for example: **amlibweb**) and double-click the **Mapp**ings icon

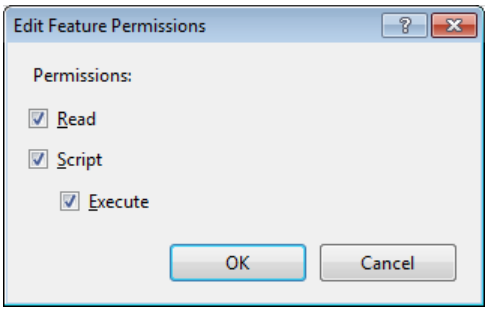


7. The Handler Mappings screen will display:

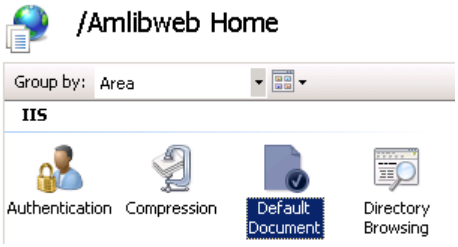


8. Right-click the **ISAPI-dll** item and select **Edit Feature Permissions...**

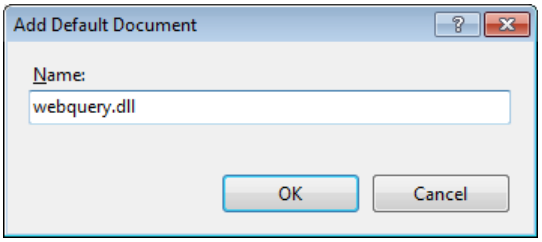
9. The Edit Feature Permissions prompt will display:



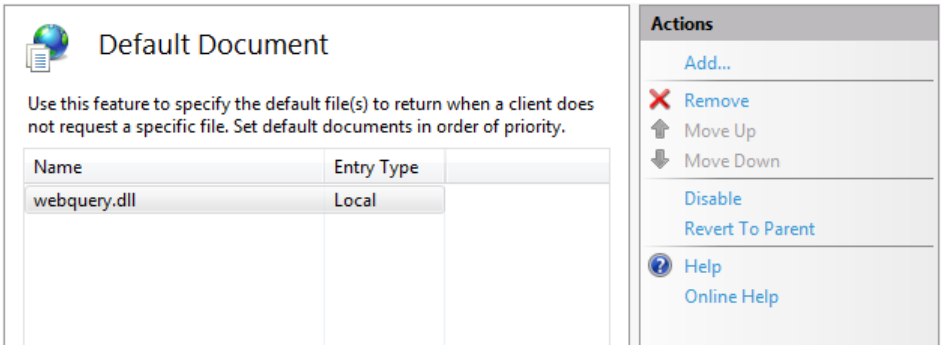
10. **Check** the **Execute** option (**Read** and **Script** should already be selected) and click the **OK** button
11. Re-select the application again and then double-click the **Default Document** icon



12. The Default Document screen will display
13. Click the **Add...** action in the Actions column – the Add Default Document prompt will display:

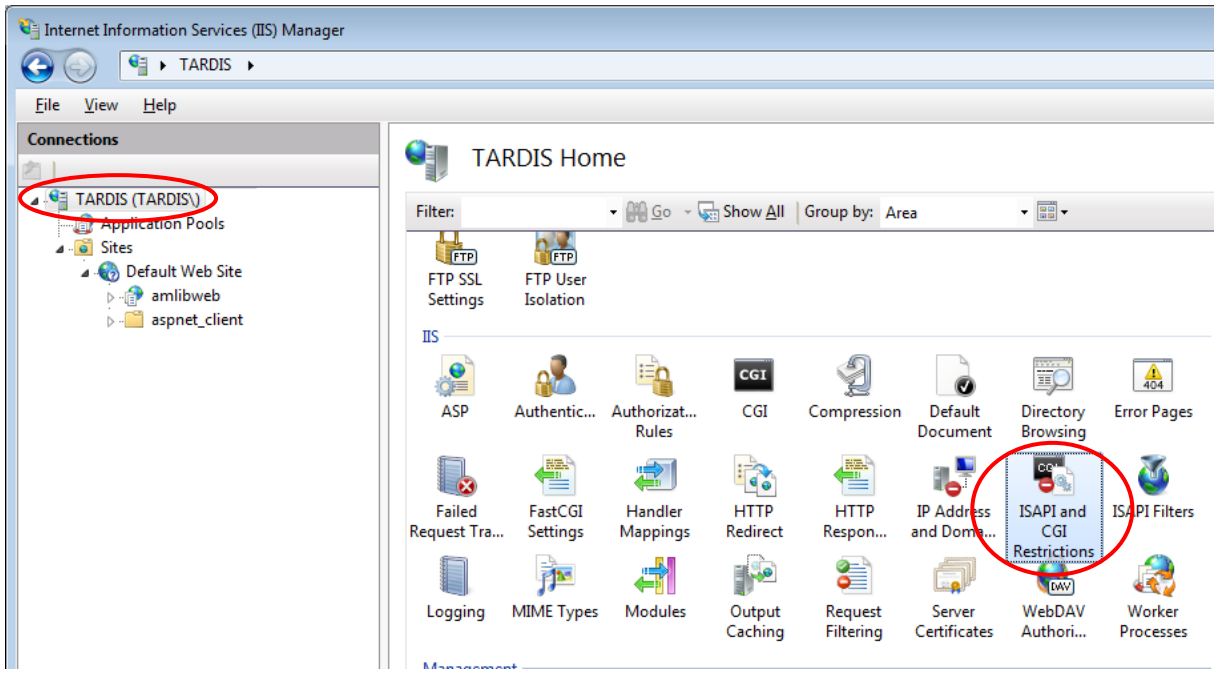


14. Type in **webquery.dll** and click the **OK** button
15. Select and remove all other items
16. If a message indicating the default document feature has been disabled appears in the Actions column, you can click the **Enable** action

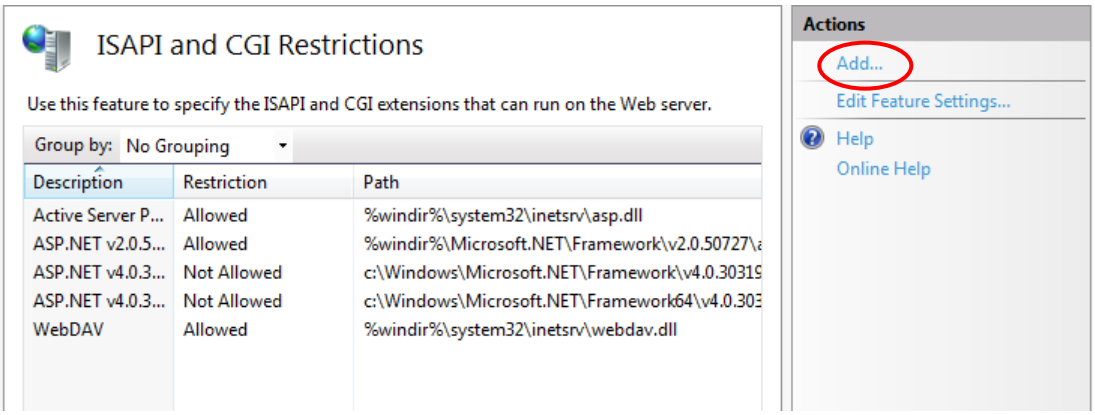


Creating Web Service Extensions

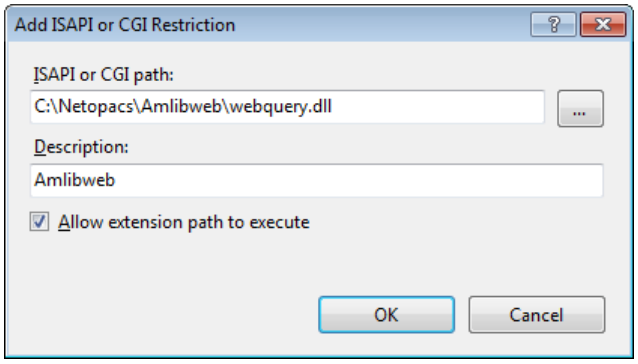
1. Select the server that contains the dlls you want to allow (this will usually be the default server) and double-click the **ISAPI and CGI Restrictions** icon:



2. The ISAPI and CGI Restrictions screen will display:



3. Click **Add...** in the Actions column – the Add ISAPI and CGI Restriction screen will display:



4. Enter the following settings:
    a. ISAP and CGI path: Click the **...** button and navigate to the **Netopacs** directory folder, open the virtual directory folder (this will typically be the **Amlibweb** folder – for example: **C: Netopacs\Amlibweb**) and select the **webquery.dll** file
    b. Description: **Amlibweb** (or **Amlibweb2**, etc)
    c. **Check** the Allow extension path to execute option
5. Click the **OK** button when complete

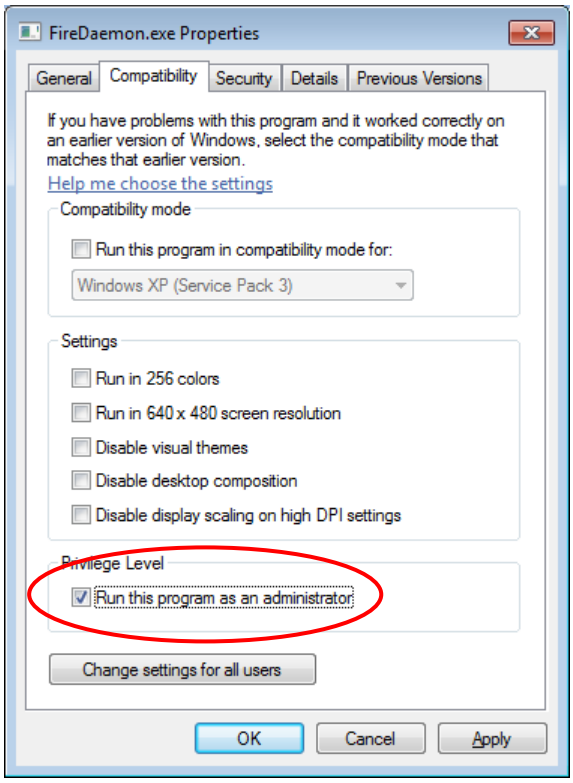
The application has been created and is now able to be executed on the server. The last step is to configure the security settings for all related *NetOpacs* executables.

To run *NetOpacs*, you will have to run it as a service thru *FireDaemon Service Manager*.

Configuring UAC Security

1. For each of the following four files, please do the steps detailed below:
    - **Netopacs.exe** (located in the **C:\Netopacs** folder)
    - **Webcon.exe** (located in the **C:\Netopacs** folder)
    - **FireDaemon.exe** (located in the **C:\Program Files\FireDaemon OEM** folder)
    - **FireDaemonUI.exe** (located in the **C:\Program Files\FireDaemon OEM** folder)

2. Right-click on the file and select **Properties** – the Properties screen will display:



3. Click on the Compatibility tab
4. **Check** the box Run this program as an administrator which is located in the Privilege Level section
5. Click the **OK** button when complete

Appendix C: Setup SQL Server User Security

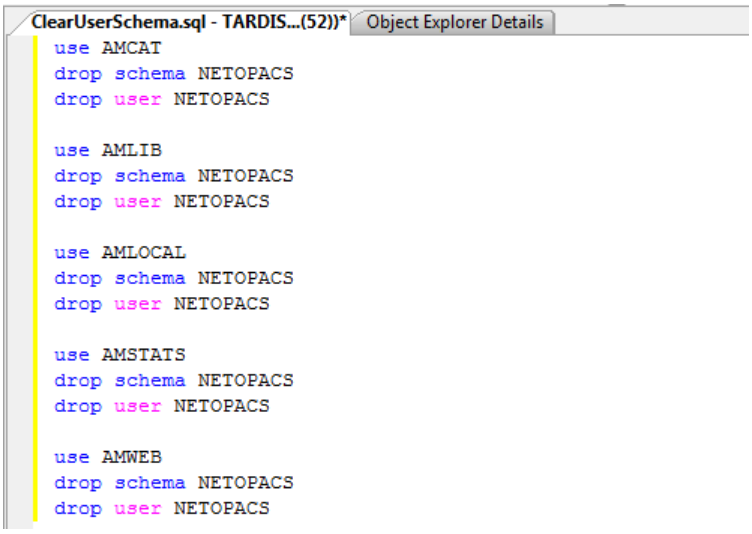
The *NetOpacs* require the setup of a **NETOPACS** Login which will then be associated with the Live (production) SQL databases.

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:

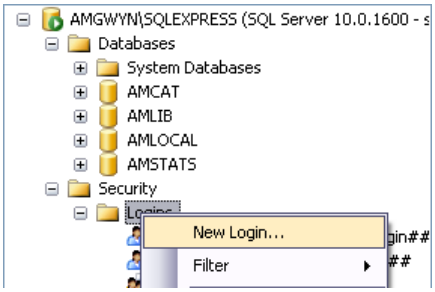
```
use AMCAT
drop schema NETOPACS
drop user NETOPACS

use AMLIB
drop schema NETOPACS
drop user NETOPACS

use AMLOCAL
drop schema NETOPACS
drop user NETOPACS

use AMSTATS
drop schema NETOPACS
drop user NETOPACS

use AMWEB
drop schema NETOPACS
drop user NETOPACS
```



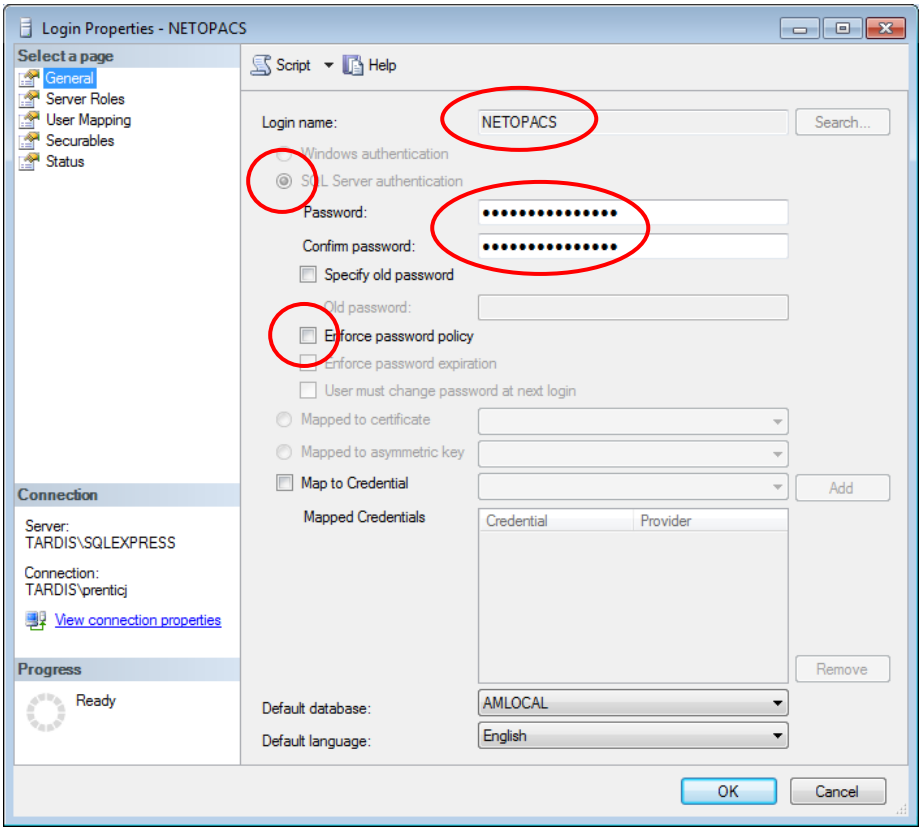
3. Click the ! **Execute** button

Map User Schema

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

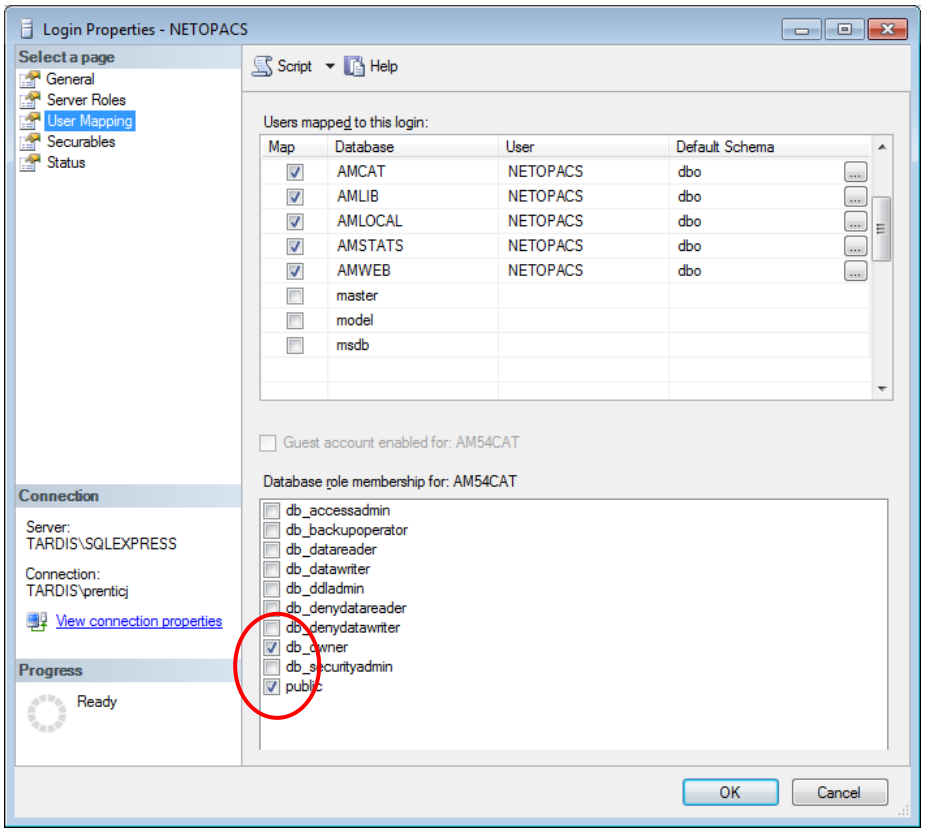


2. The Login - New screen will display:

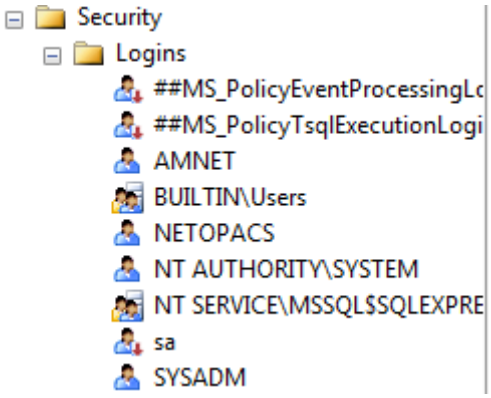


3. On the General page (select from sidebar):
    a. Select the **SQL Server authentication** radio button
    b. Enter the following details:
        i. Login name: **NETOPACS**
        ii. Password: **NETOPACS**
        iii. Confirm password: **NETOPACS**
    c. Deselect the **Enforce password policy**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

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



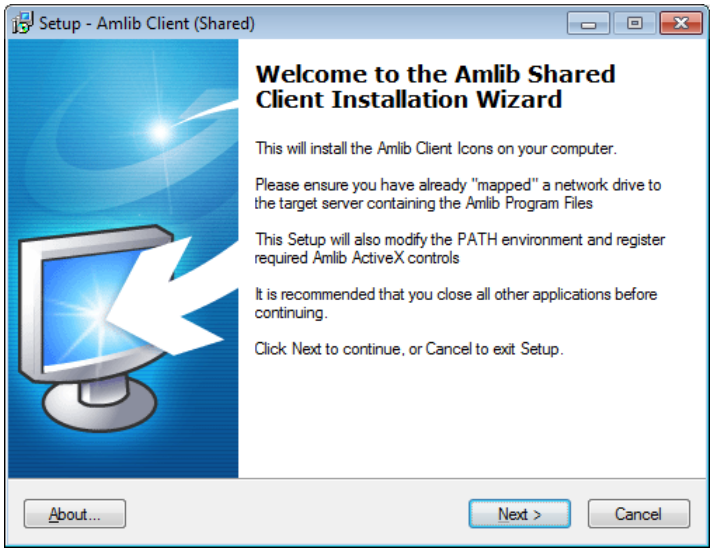
5. In the Map column **tick** the **AMCAT** database option
6. Then tick the **db_owner** option in the lower screen
7. Repeat steps 5 and 6 for the **AMLIB**, **AMLOCAL**, **AMSTATS** and **AMWEB** (where installed) databases
8. Click the **OK** button to exit out of this screen
9. When you are done,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



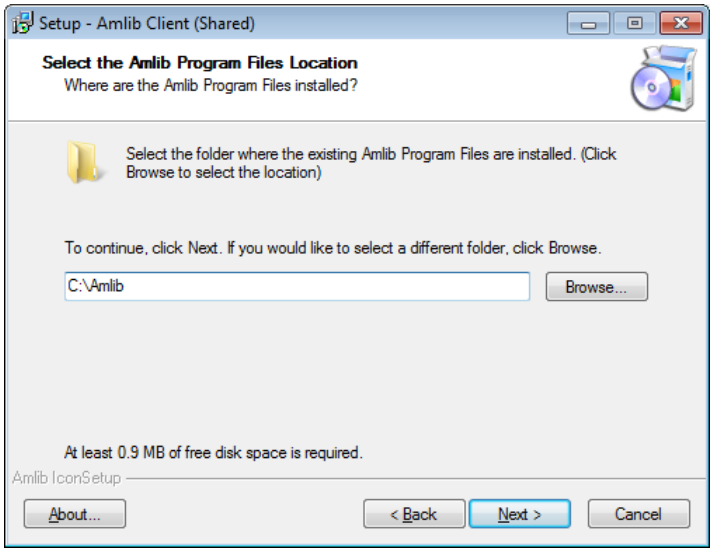
Appendix D: Running the Amlib Icon Setup Facility

This is used to set up PC Icons, set the Database Login, and for installing *Active X*.

1. Locate the Icon Setup application (**IconSetup.exe**) on your *Amlib* server or client PC in the **Drive:\Amlib\Utility\Icons** folder (for example: **C:\Amlib\Utility\Icons** and copy it onto your *NetOpacs* server
2. Double-click on the **IconSetup.exe** to open the Amlib Shared Client Installation Wizard:



3. Click the **Next** button – the Setup screen will display:



4. Enter the filepath (for example: **C:\Amlib** or **F:\Library\Amlib**) to the folder containing the *Amlib* program files or click the **Browse** button and locate the folder (the *Amlib* program files will be located on either a mapped server drive or somewhere on the PC)

Amlib Application Files Location

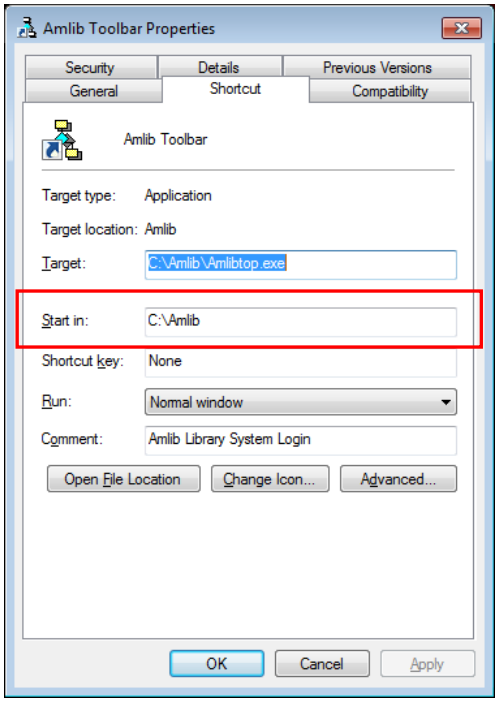
When re-running **Iconsetup.exe** to install a new client, you need to be sure where you are accessing the *Amlib* programs, which will be one of the two following options:

- Access to *Amlib* programs from the Server **or**
- Install the programs locally and access from the new PC

If you are not sure where you currently access the *Amlib* program from you can find out by:

1. Right-click on the *Amlib* Icon of a different *Amlib Client* machine and select **Properties** – the Amlib Toolbar Properties will display
2. On the Shortcut tab, locate the Target field and note the file path

- If the Target point to a different drive – for example a library drive or **I:/ drive** etc then you are most likely accessing *Amlib* from a server: follow **Option 1**
- If the Target file path points to **C:/Amlib/Amlibtop.exe** then you are most likely accessing the program locally installed on the PC – follow **Option 2**

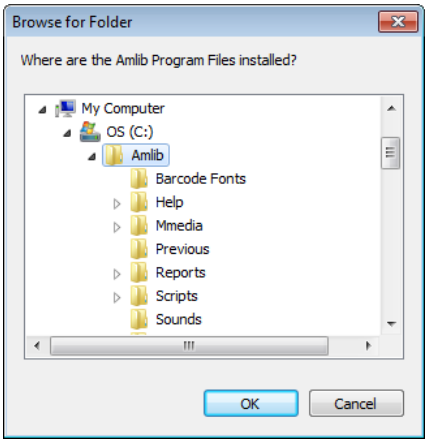


Option 1: Access the Programs from the Server

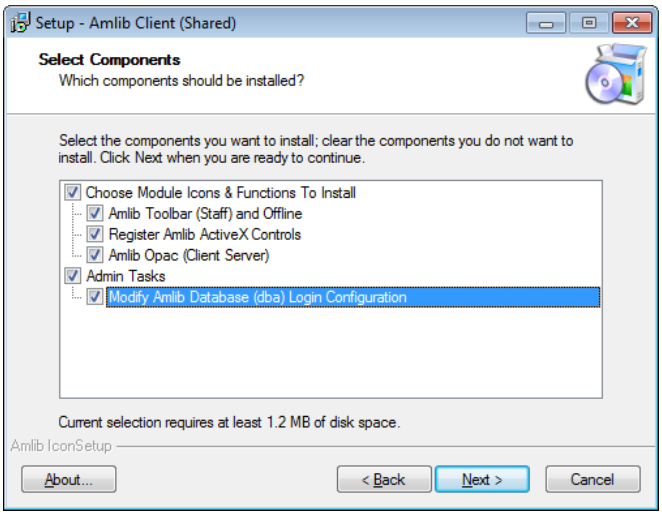
1. In the *Amlib* folder on the server, navigate to **Amlib** > **Utilities** > **Icons** > **Iconsetup.exe**
2. Copy the **Iconsetup.exe** file to the new PC and run the file on the PC as per the instructions above, browsing to the **Amlib folder on the server**

Option 2: Install the Amlib programs from the PC

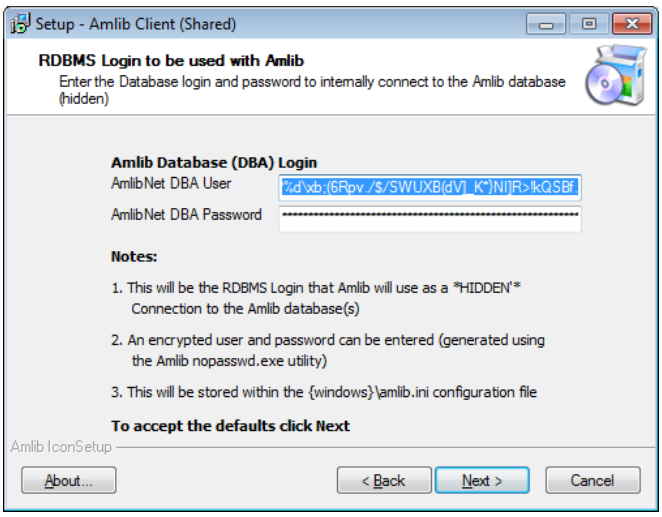
1. Copy the Amlib folder from an **existing PC** that is running *Amlib* (or from the Server). This will ensure that the programs are the version suitable for the Database.
2. Run the **Amlib** > **Utilities** > **Icons** > **Iconsetup.exe file** on the PC and browse to the **Amlib** folder on the local PC where you have just saved it



5. Highlight the folder and click the **OK** button
6. Click **Next** button – the Select Components screen will display:
7. Select (**tick**) the following options:
    - **Choose Module Icons & Functions to Install**
    - **Admin Tasks** (to ensure the Database connection is correct in the *Amlib* configuration file)



8. Click the **Next** button – the RDBMS Login to be used with Amlib screen will display:



a. You will be prompted for a hidden Amlib Database (DBA) Login to connect the *Amlib* SQL database:

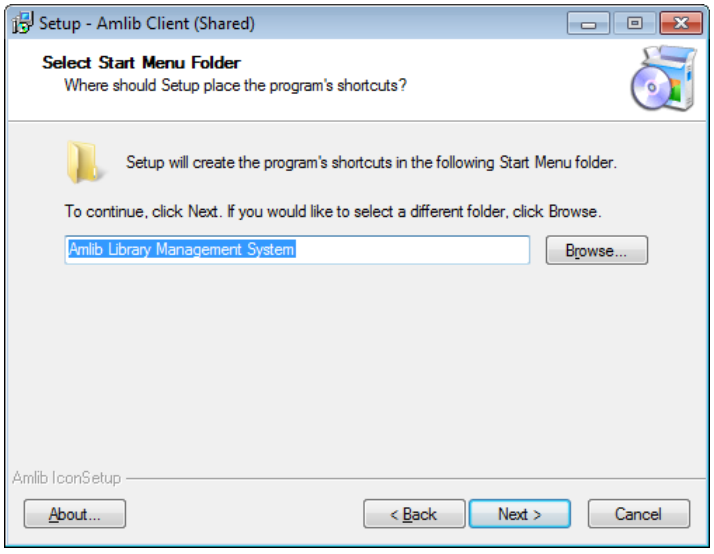
- AmlibNet DBA User
- AmlibNet DBA Password

b. **Please Note:**

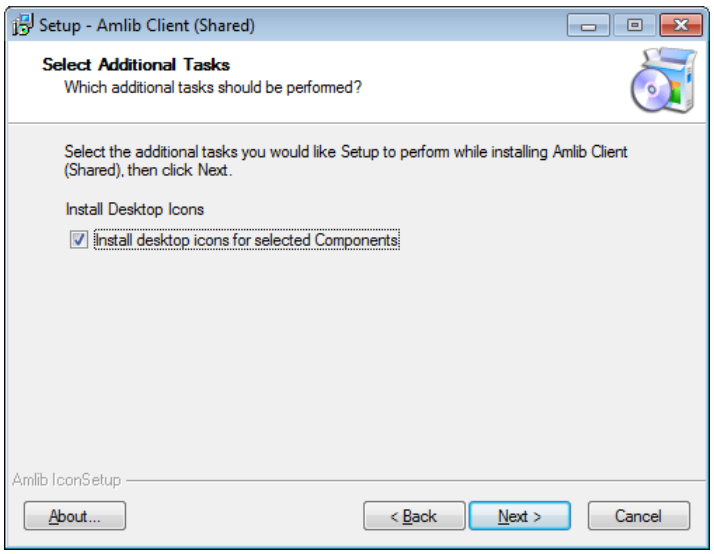
- This will be the *RDBMS* Login that *Amlib* will use as a *HIDDEN* Amlib Database (DBA) Login to connect the *Amlib Client* to the *Amlib* database
- An encrypted User and Password can be entered (generated using the *Amlib* **nopasswd.exe** utility)
- This will be stored in within the **Windows\amlib.ini** configuration file

c. To accept the *defaults*, click the **Next** button (this will be most customers)

17. The Select Start Menu Folder screen will display:

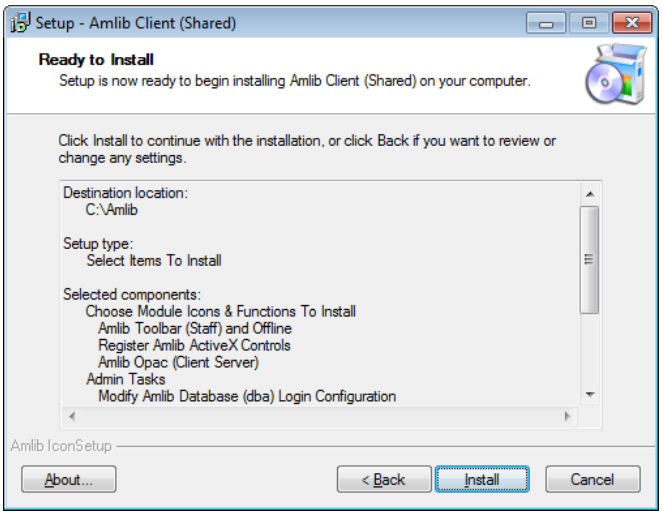


18. Enter a *Start* menu folder name (or leave as **Amlib Library Management System**) and click the **Next** button – the Select Additional Tasks screen will display:

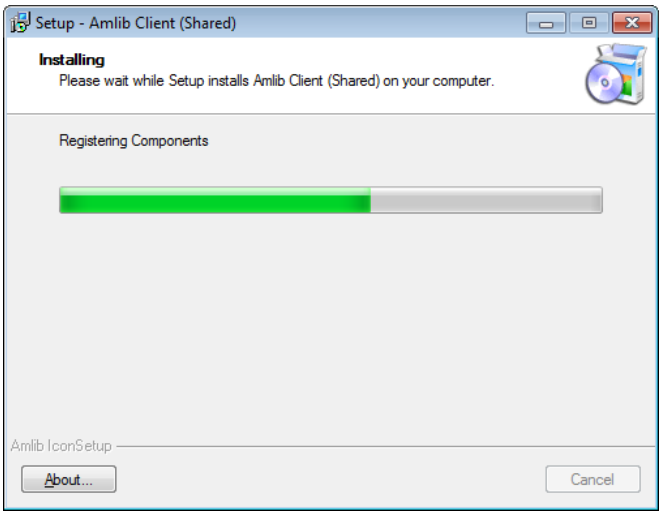


19. Ensure the Install desktop icons for selected Components is **selected**

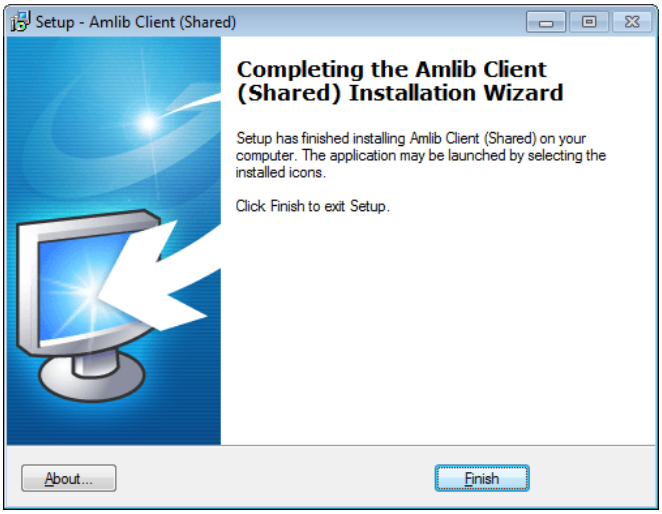
20. Click the **Next** button – the Ready to Install screen will display with a summary of the installation tasks to be performed:



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



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



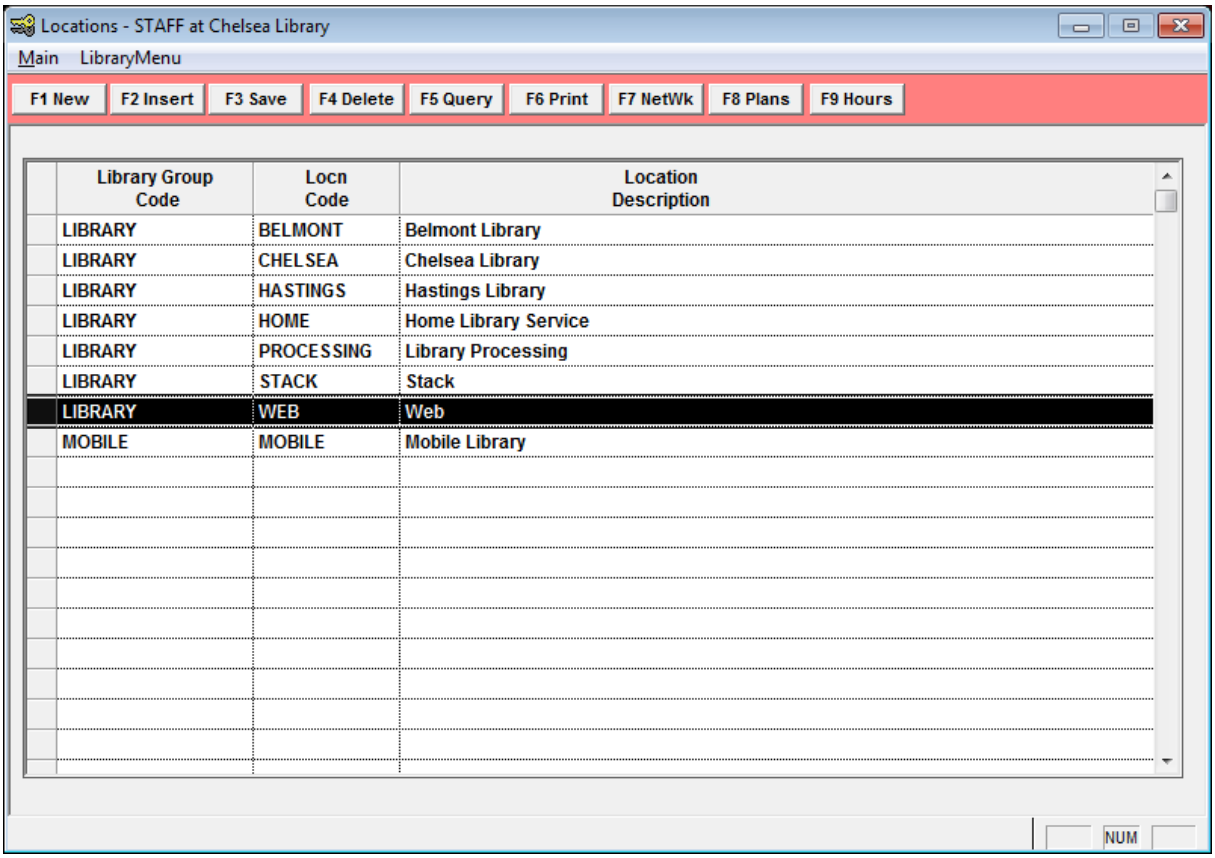
23. The setup Wizard will close

Installation of the *Amlib Client (Shared)* is now complete.

Appendix E: Configure a WEB Location in Amlib

Setup a Web Location

1. Launch the *Amlib* client
2. Go to **Main** > **Supervisor** > **Locations** – the Locations screen will display:

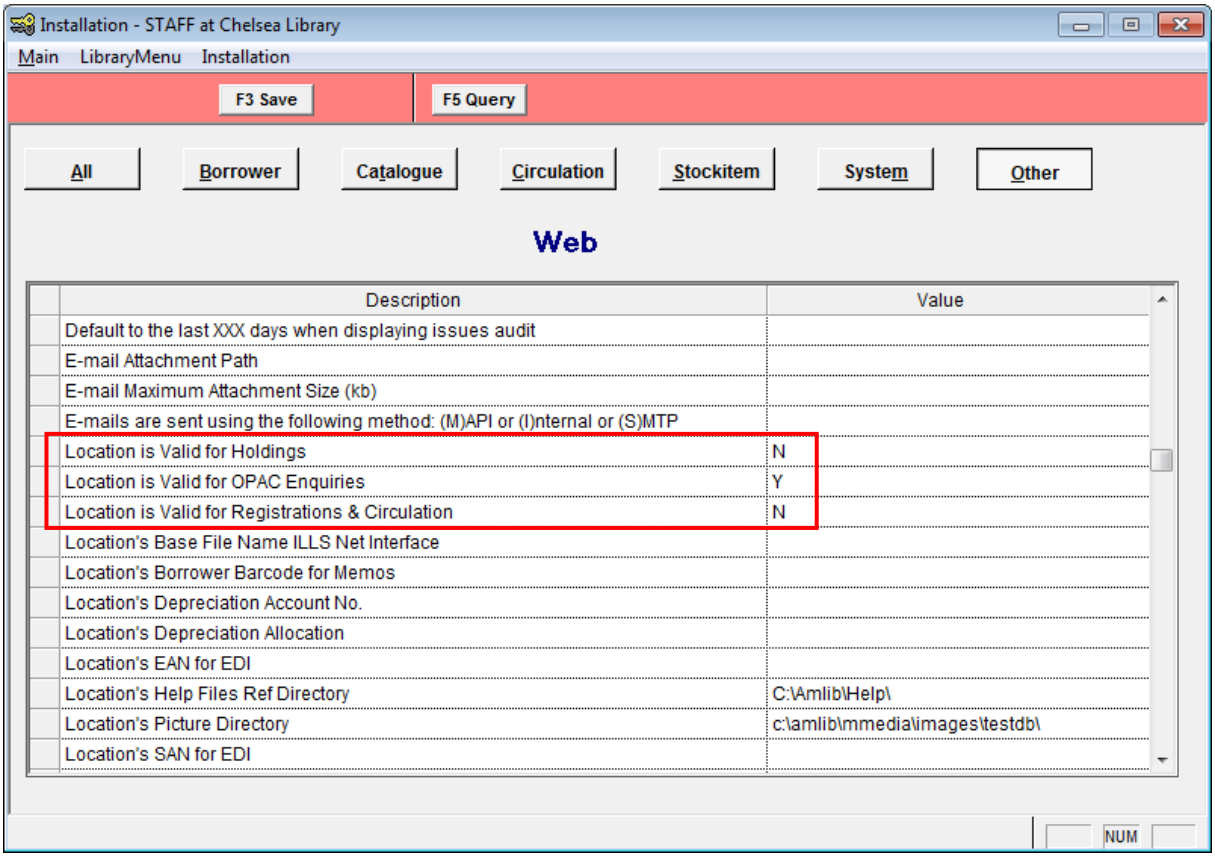


3. Click the **F1 New** or **F2 Insert** button
4. Enter the following details:
    a. Library Group Code = (enter a group code – for example: **LIBRARY**)
    b. Locn Code = **WEB**
    c. Location Description = **Web**
5. Click the **F3 Save** button

Web Location Settings

1. Launch the *Amlib* client
2. Go to **Main** > **Supervisor** > **Installation** – the Installation (DEFAULT) screen will display
3. From the menu, select **Installation** > **Choose Location** – the Location prompt will display
4. Select the **WEB** location and click the **OK** button

5. The Installation (WEB) screen will display
6. Select the **Other** tab

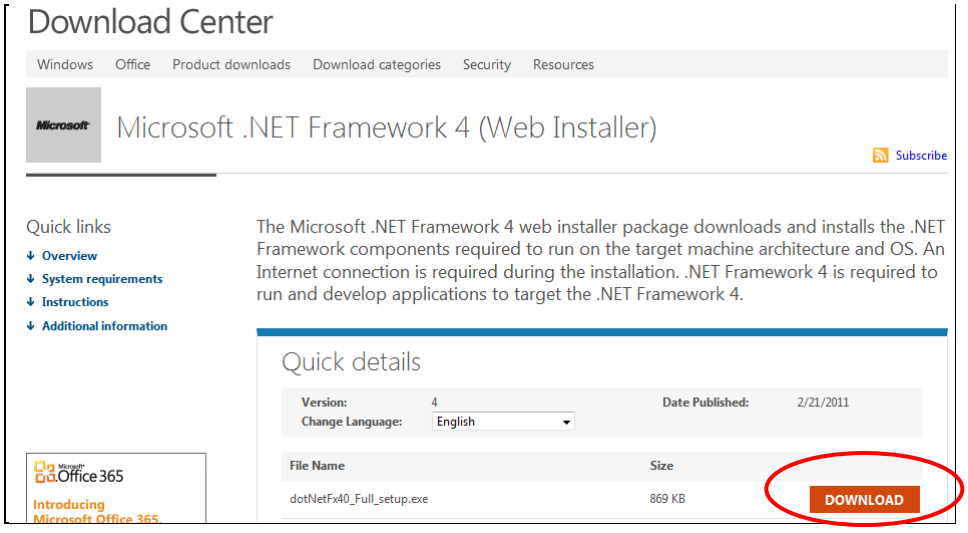


7. Scroll down and enter the following settings:
    a. Location is Valid for Holdings = **N** (some installation may make this **Y**, so as to be able to associate this Location with online holdings)
    b. Location is Valid for OPAC Enquiries = **Y**
    c. Location is Valid for Registrations & Circulation = **N**
8. Click the **F3 Save** button
9. Exit the *Amlib* client for these settings to take effect

Appendix F: Install .NET Framework

1. Open *Internet Explorer*
2. Navigate to the following URL: http://msdn.microsoft.com/en-us/netframework/default.aspx

3. Select the **Download .NET 4** link – the Download Center page will display:



4. Click the **Download** button – the following prompt will display:

5. Click the **Run** button – the **.NET Framework 4** installer will open
6. Follow the remaining prompts to update/repair the *.NET Framework*
7. Click the **Finish** button when complete (and then restart thecomputer)

Appendix G: Install a Additional Instance of the NetOpacs

It is possible to install up to **26** sets (or instances) of *NetOpacs* pages. The following instructions show how to set up a *second* (**b**) instance. However, the same instructions can be used to create *third* (**c**), *fourth* (**d**), etc instances.

Some examples where this may be used:

Example One – Schools:

- *Instance 1* (**a**) runs the **Senior** school *NetOpacs*
- *Instance 2* (**b**) runs the **Junior** school *NetOpacs*

Example Two – Test Pages:

- *Instance 1* (**a**) runs the **public** *NetOpacs*
- *Instance 2* (**b**) runs the **test** *NetOpacs*

Example Three – Internal & External:

- *Instance 1* (**a**) runs the **internal** *NetOpacs*
- *Instance 2* (**b**) runs the **external** *NetOpacs*

The installation of a *second* (or *third*, etc) set of *NetOpacs* involves the following steps:

1. Create a virtual directory folder
2. Setup the *NetOpacs* folder files
3. Create and configure the virtual directory/application in *IIS*
4. Configure the *NetOpacs WebConsole*
5. Configure the *NetOpacs* **Amlib.ini** file
6. Compile the *NetOpacs* pages
7. Restart the *FireDaemon Service Manager*

Please see: **NetOpacs 5.4 (Second Instance) Installation Guide** for further information.

Appendix H: Enabling NetOpacs for Safari

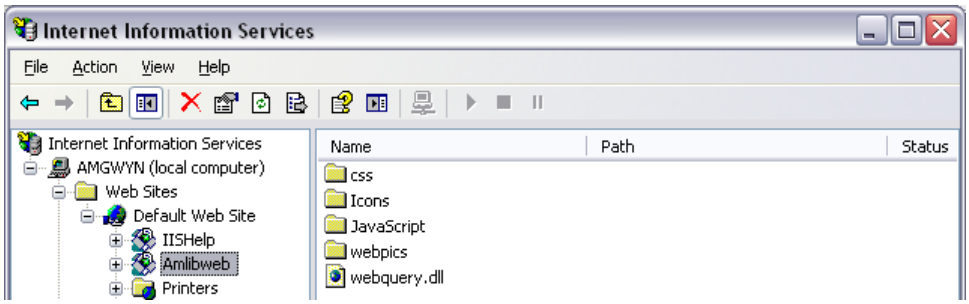
A common error when attempting to access *NetOpacs* from a *Safari* web browser is that the browser attempts to download the **webquery.dll** file rather than open it.

This can be solved in *IIS*.

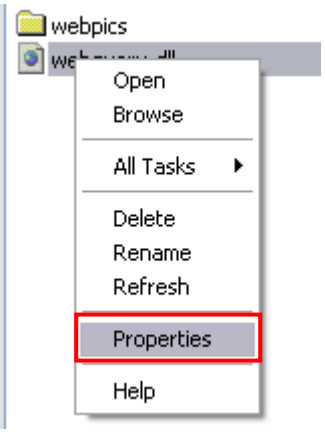
IIS5.0/6.0

Webquery.dll

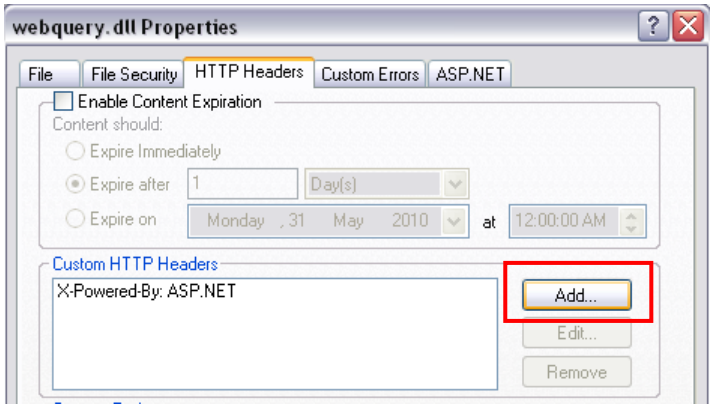
1. Open your Internet Information Services and expand your folders to see the **Amlibweb** virtual directory:



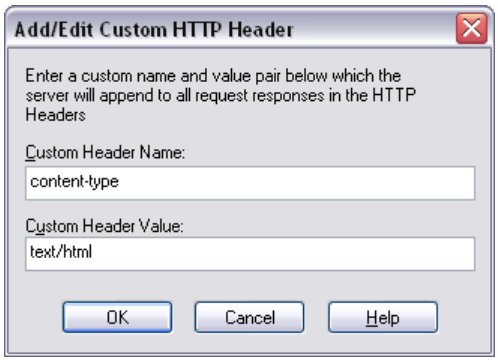
2. Right-click on the **webquery.dll** file and select **Properties**



3. Select the HTTP Headers tab



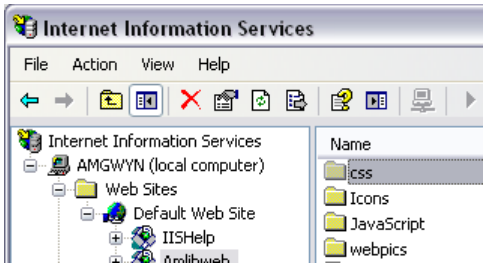
4. In the Custom HTTP Headers section, click on the **Add** button – the Add/Edit Custom HTTP Header screen will display:

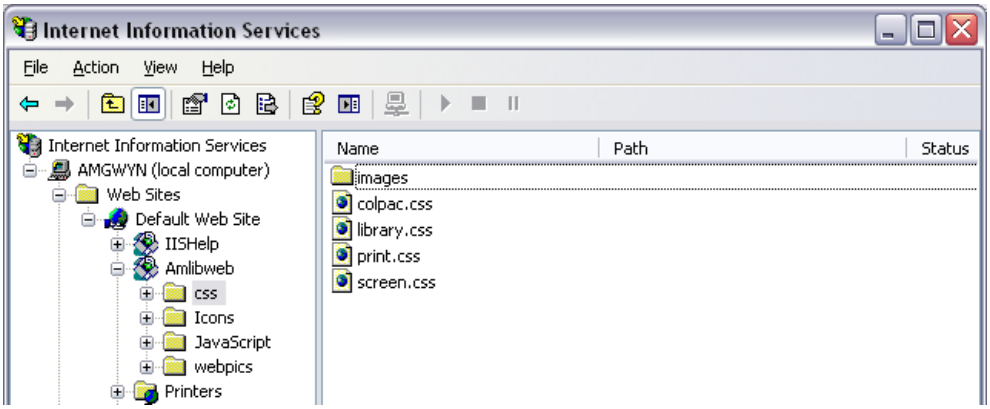


5. Enter the following settings:
    a. Custom Header Name: **content-type**
    b. Custom Header Value: **text/html**
6. Click the **OK** button
7. Click the **Apply** button
8. Click the **OK** button – you should now be back at the main *IIS* screen

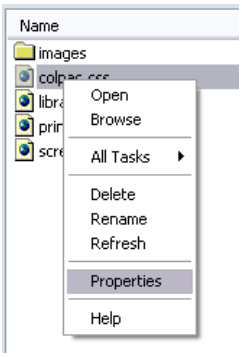
CSS

This will also need to be done to any CSS files you have, which are any files ending in **.css**. You may have some in the **amlibweb** folder, but more commonly you will have a **css** folder that you can open by double-clicking it.

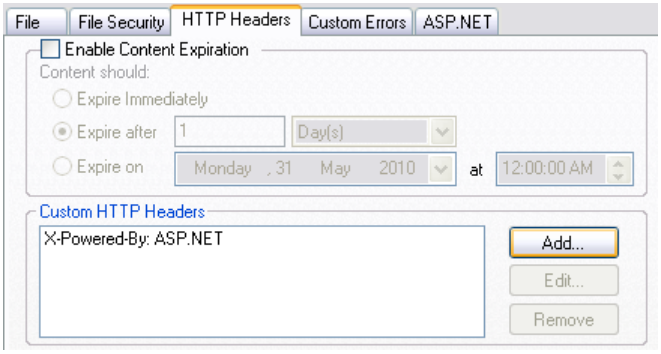




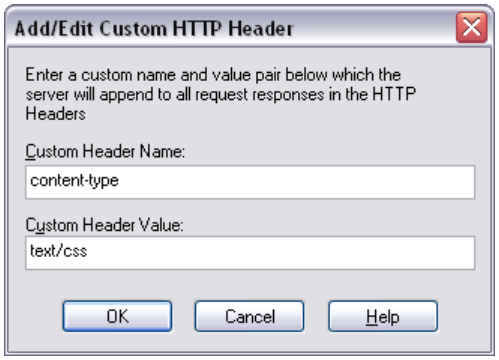
1. As with the above steps, right-click on one of your **css** files and select **Properties**



2. Select the HTTP Headers tab



3. In the Custom HTTP Headers section, click on the **Add** button – the Add/Edit Custom HTTP Header screen will display:



4. Enter the following settings:

    a. Custom Header Name: **content-type**

    b. Custom Header Value: **text/html**

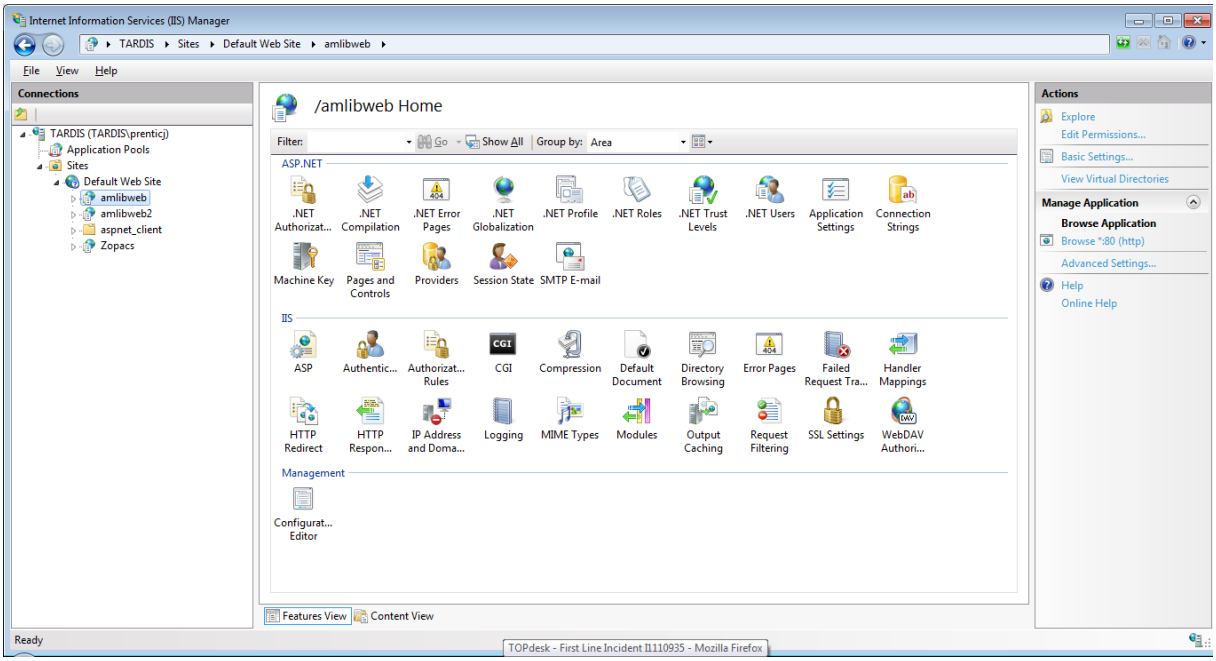
5. Click the **OK** button
6. Click the **Apply** button
7. Click the **OK** button

This will need to be repeated for any other CSS files you have. When you are done, you can exit *IIS* and your *NetOpacs* should now work correctly in *Safari*.

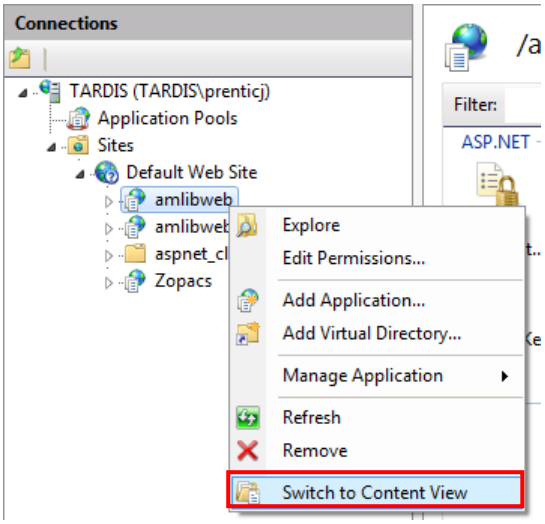
IIS7.0

Webquery.dll

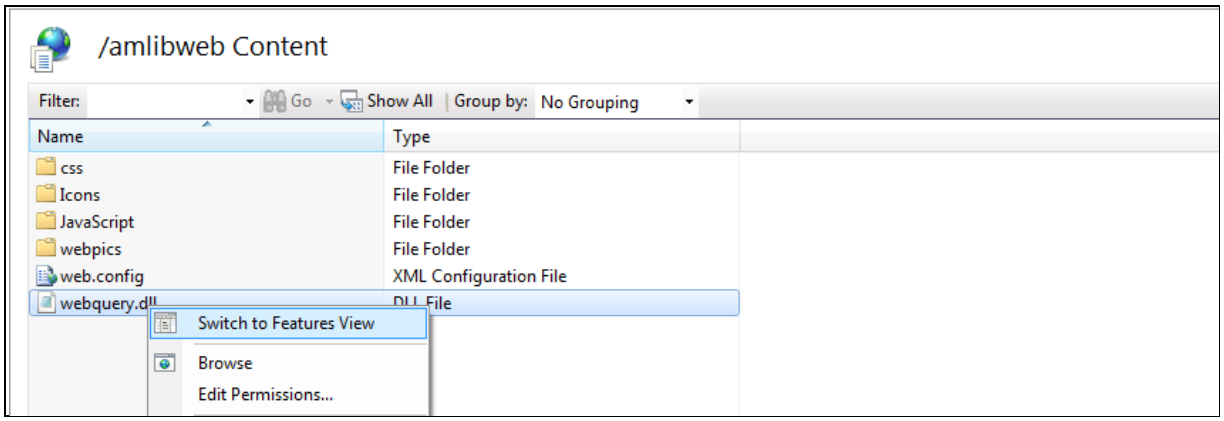
1. Open your Internet Information Services and expand your folders to see the **Amlibweb** virtual directory:



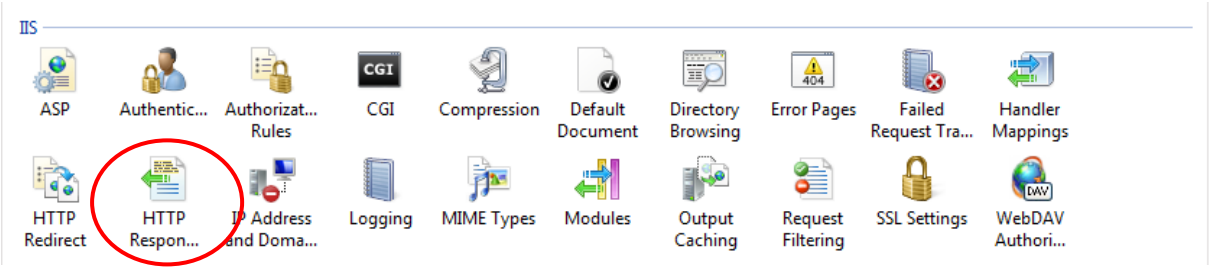
2. Right-click on the **amlibweb** folder and select **Switch to Content View**



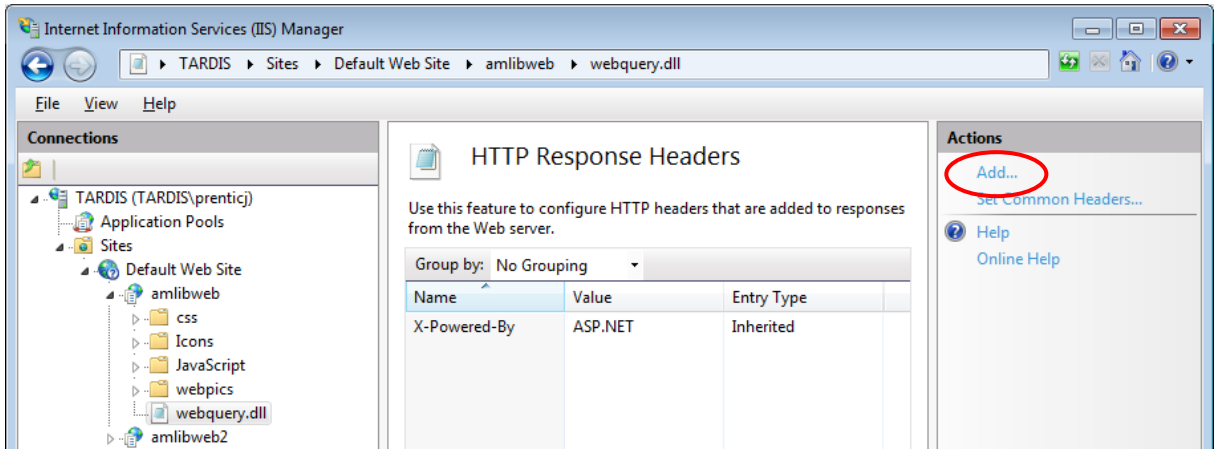
3. Right-click on the **webquery.dll** file and select **Switch to Features View**



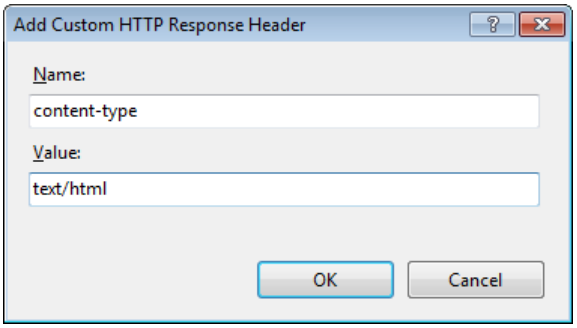
4. In the ISS section, double-click the **HTTP Response Headers** icon:



5. The HTTP Response Headers screen will display:



6. In the Actions section, click on the **Add…** link – the Add Custom HTTP Response Header screen will display:

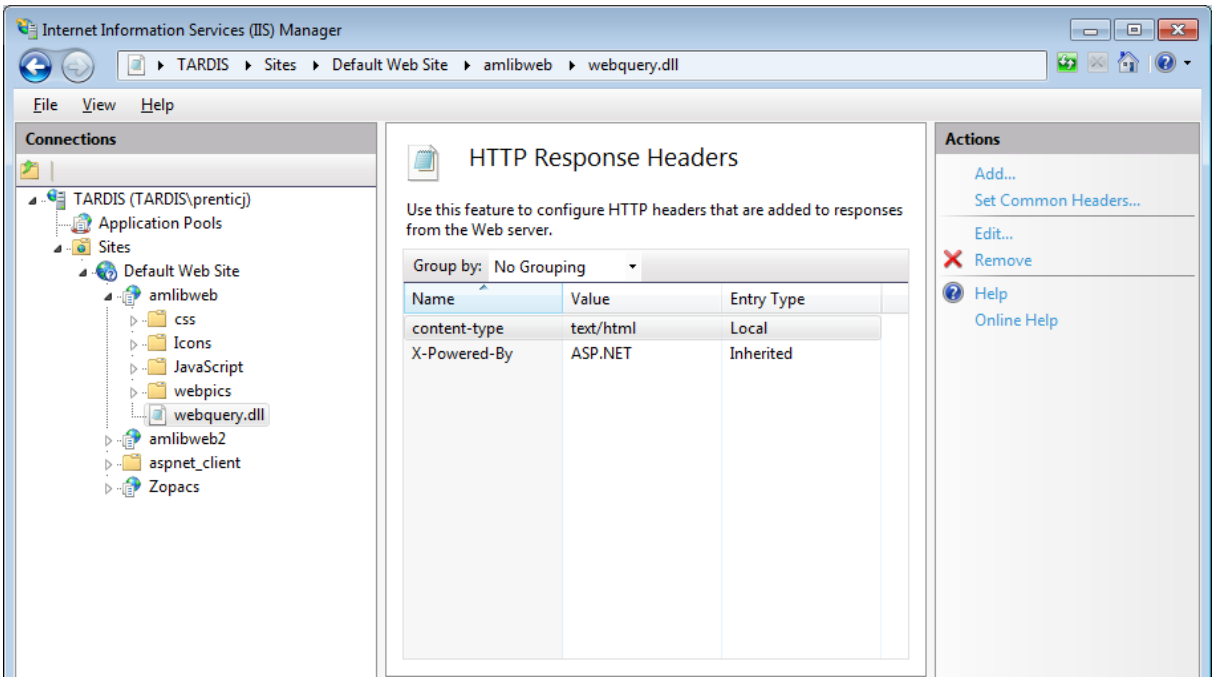


7. Enter the following settings:

a. Name: **content-type**

b. Value: **text/html**

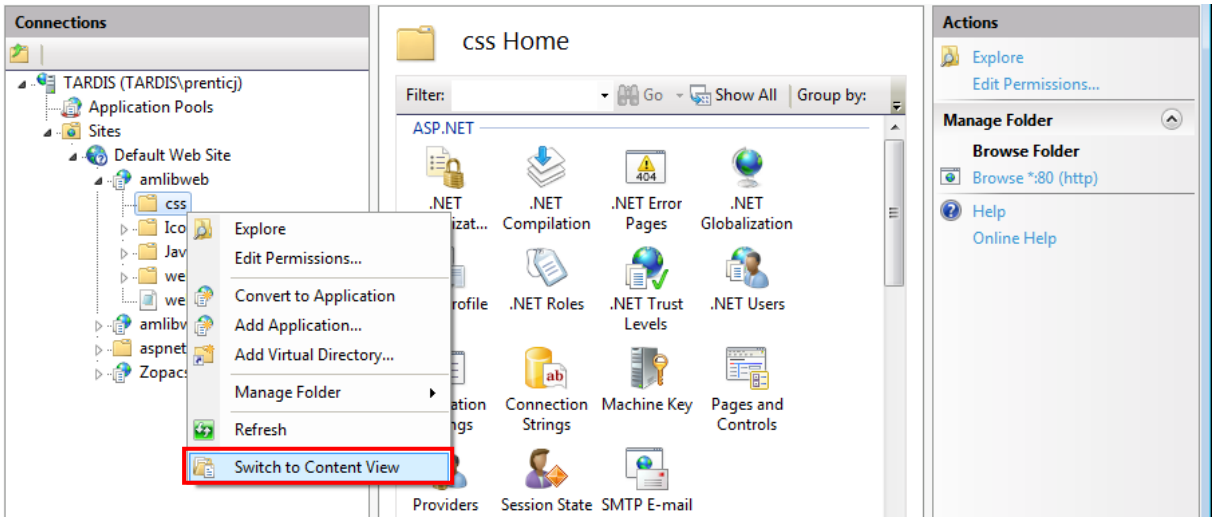
8. Click the **OK** button



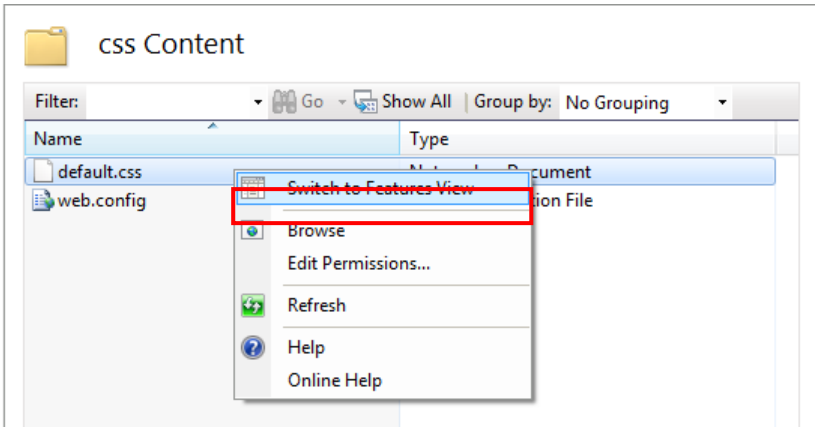
CSS

This will also need to be done to any CSS files you have, which are any files ending in **.css**. You may have some in the **amlibweb** folder, but more commonly you will have a **css** folder.

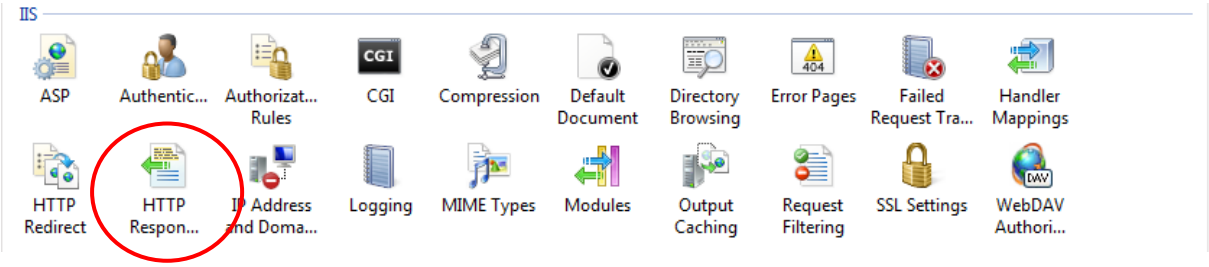
1. Expand the **amlibweb** folder and select the **css** folder
2. Right-click on a **.css** file and select **Switch to Content View**



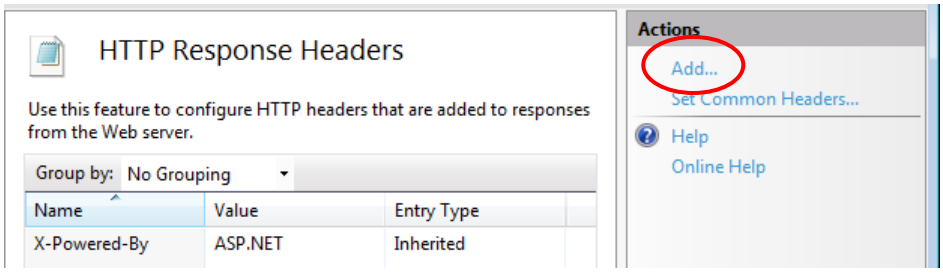
3. Right-click on a **.css** file and select **Switch to Features View**



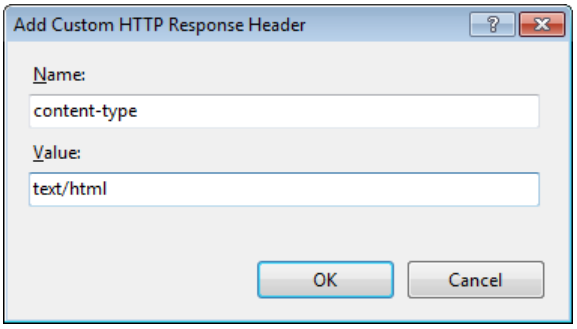
4. In the ISS section, double-click the **HTTP Response Headers** icon:



5. The HTTP Response Headers screen will display:



6. In the Actions section, click on the **Add…** link – the Add Custom HTTP Response Header screen will display:

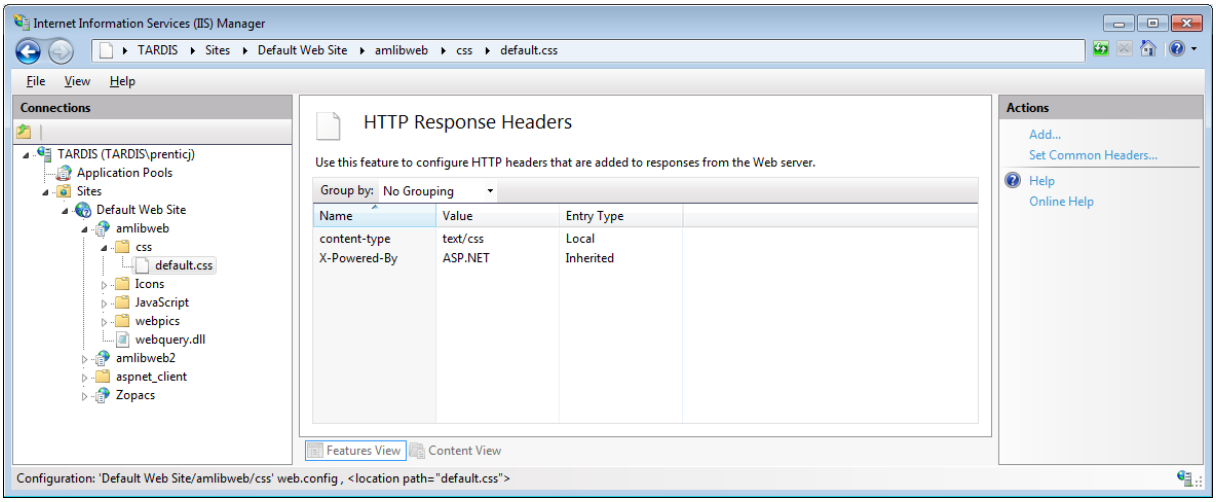


7. Enter the following settings:

   c. Name: **content-type**

   d. Value: **text/html**

8. Click the **OK** button

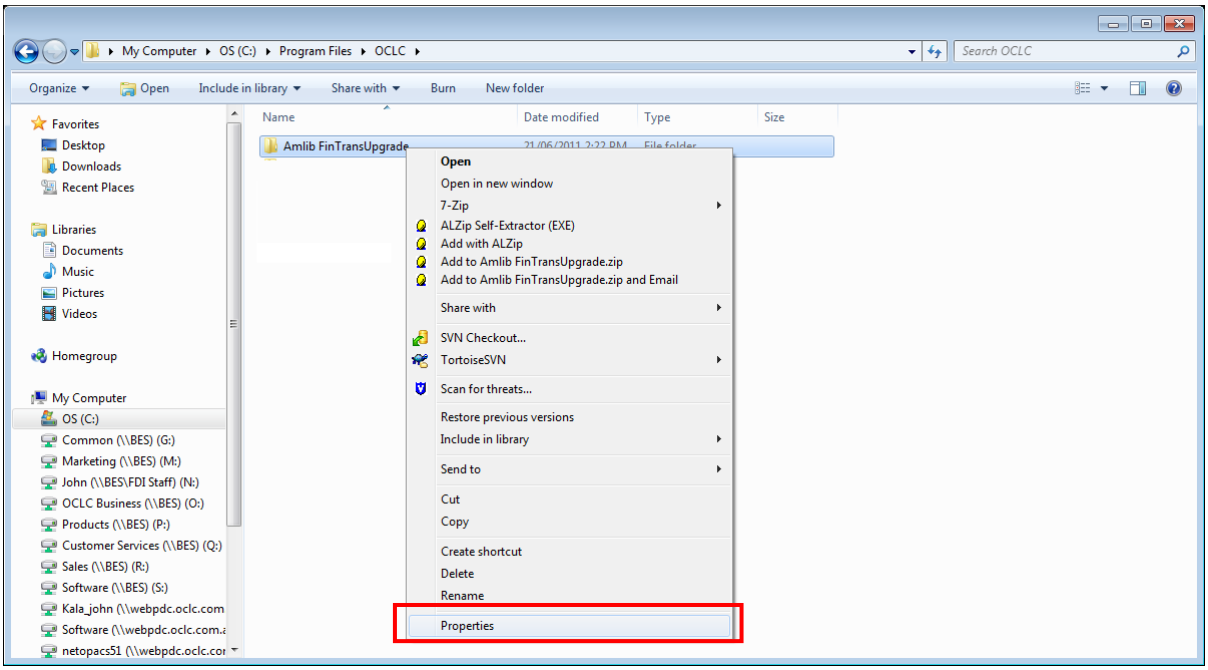


This will need to be repeated for any other CSS files you have. When you are done, you can exit *IIS* and your *NetOpacs* should now work correctly in *Safari*.

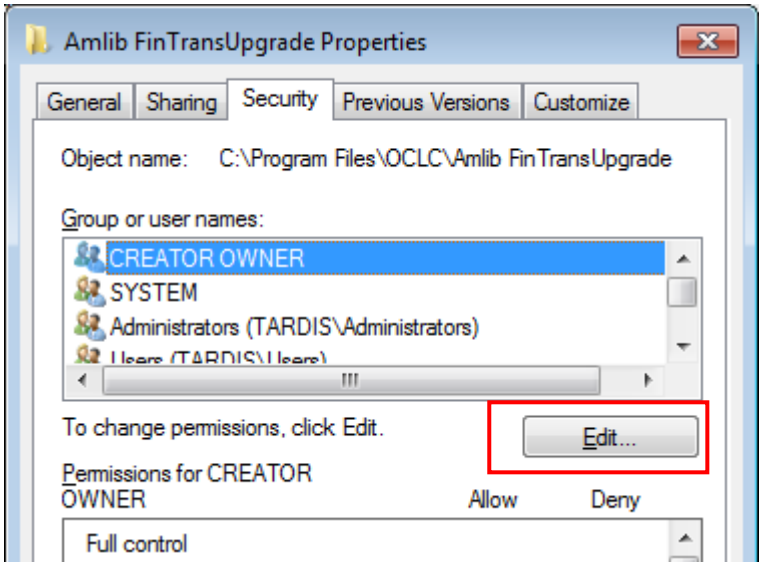
Appendix I: Edit Access Control

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**

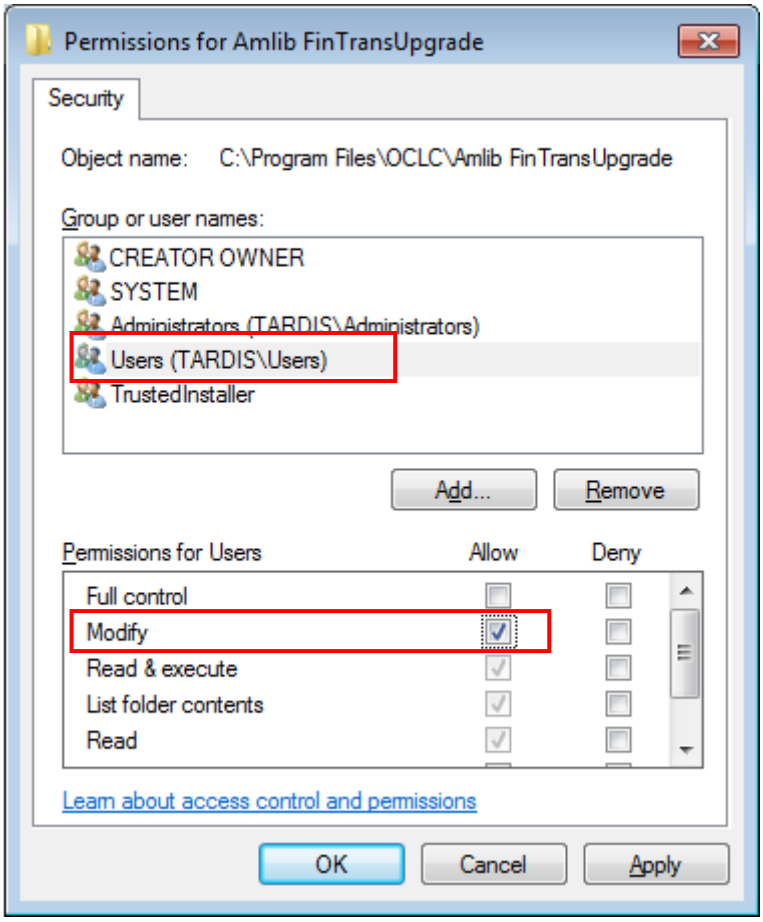


3. The Amlib FinTransUpgrade Properties screen will display
4. Select the Security tab

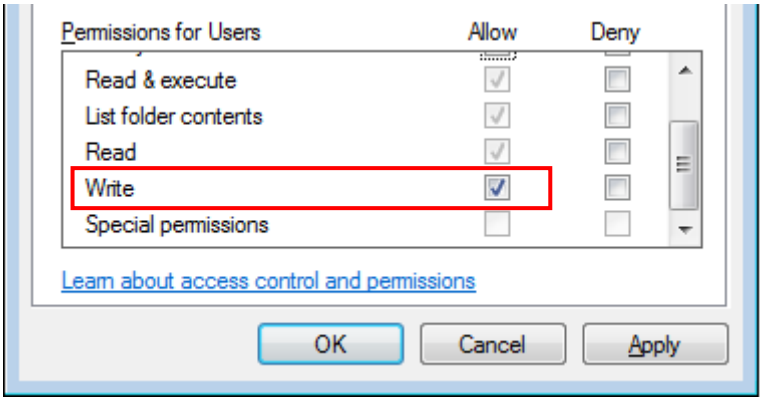


5. Click the **Edit…** button – the Permissions for Amlib FinTransUpgrade screen will display
6. In the Group or user names: pane, click on the **Users** entry

7. 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:



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



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