OCLC Amlib
Library Management System

OpenOPAC Installation/ Upgrade Guide

- For Oracle & SQL Server

Version 6.3

Last Updated: 17 July 2017

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OCLC Topdesk :
https://oclc.topdesk.net/tas/public/login/form

OCLC Amlib Support Documentation:
https://www.oclc.org/support/services/amlib.en.html

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WELCOME

Welcome to the *OpenOPAC 6.3* Installation Guide.

Details on installing other components (such as the *Amlib Client*, *ZServer* , OpenOPAC , OpenReports and *SIP2 Manager & Services*) are available in separate module specific Installation Guides.

OVERVIEW

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

1. Pre-requisites – NOTE: if installing from an Older Version of OpenOPAC, ensure the Variables.less file is set to Read-only. See Page 6/7
2. Install OpenOPAC
3. Configure *OpenOPAC [Marc fields]*
4. *Upload catalogue records*
5. Configure styling and behaviour
6. It can be installed on the Amlib server, NetOpac server or a separate server depending whether it's to be for internal use or external use

BEFORE YOU BEGIN THE INSTALLATION…

*Before Installing **OpenOPAC** you **must have** upgraded to or installed **Amlib 6.3** your server.*

Read the Installation Notes First

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

If you have any questions please log a support call on TOPdesk
https://oclc.topdesk.net/tas/public/login/form

If you do not know your TOPdesk login please email support-anz@oclc.org and we will send it to you.

Serial Numbers Required for Installation of Amlib Modules

The *OpenOPAC 6.3* installation requires a serial key. Your library is covered for installation & use of OpenOPAC by your Library's Amlib NetOpac licence. Please contact Amlib Support via Topdesk https://oclc.topdesk.net/tas/public/login/form before commencing the installation to receive this serial key.

If you are upgrading you will not need a new serial key, as the program will now detect if one was already supplied previously.

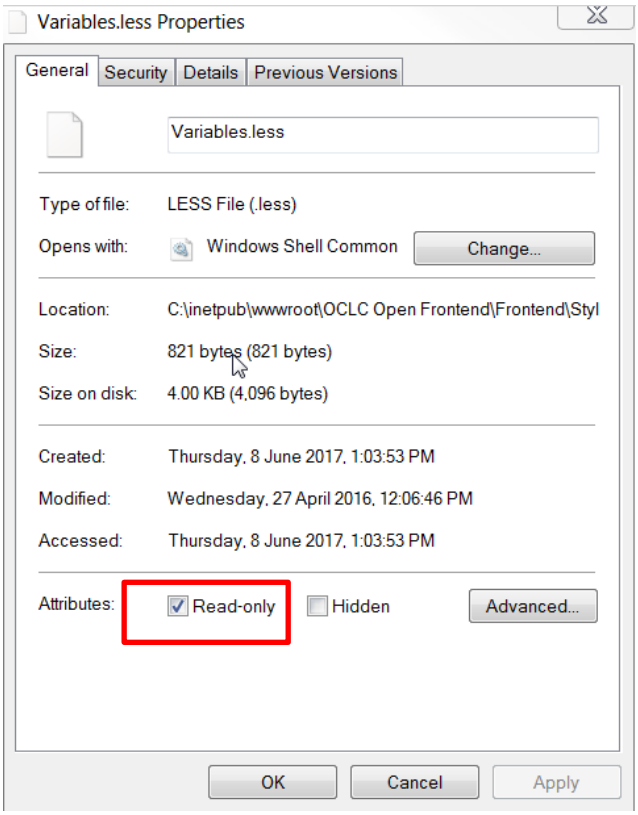
OPENOPAC SUPPORTED OPERATING SYSTEMS & SYSTEM REQUIREMENTS

Operating System	• Windows Server 2008, 2008 R2, 2012 • Windows 7, Windows 8.0 & 8.1, Windows 10 • *Linux* (and *Unix*)
.Net Framework	• *4.6 or higher including Web Server (IIS) Support and HTTP Activation*
IIS	• 6.1 or later with ASP.net support installed
Memory (RAM)	• Minimum 4GB
Hard Disk	• Minimum 40GB depending on the size of the catalogue
Browser	• IE 11 or higher • Chrome, Firefox • Safari 5.1.7 or higher
JavaScript	• Must be activated
Cookies	• Must be activated • Automatic mobile device detection does not work without cookies. When cookies are disabled, the site can't store culture information [e.g. the language that is selected, and the date settings] and the login information is stored in a way that is considered to be unsafe.
	• Note: OpenOPAC can operate on the same Amlib Database Server, it is recommended that medium to large libraries should implement a dedicated Web Server for maximum performance & security.

If upgrading from on Older Version of OpenOPAC

IMPORTANT : Before starting OpenOpac 6.3 upgrade from older version you need to untick the "Read-only" attributes check box for the "Variables.less" file which is under directory

C:\inetpub\wwwroot\OCLC Open Frontend\Frontend\Styles



- **Right select on Variables.less file**
- **select on Properties**
- **untick the "Read-only" checkbox**
- **select OK.**

SECTION 1: PRE-REQUISITES

If not installed already you must first install **.NET Framework Full version 4.0 or later and Java runtime version 6.3 or later**.

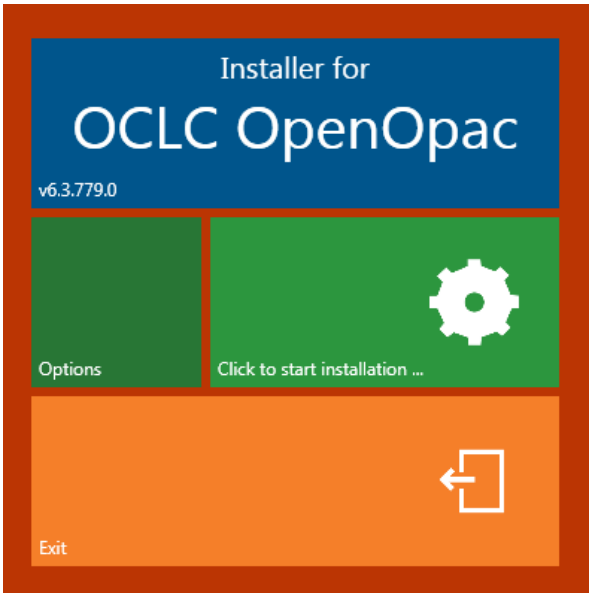
IIS with **ASP.NET** support must also be installed. For information on how to complete this please see **Appendix A and B.**

SECTION 2: INSTALL OR UPGRADE OPENOPAC

This installer can be used as a new install for OpenOPAC or as an upgrade to your current version of OpenOPAC, as long as you are already on version 6.2 of OpenOPAC. The installation/upgrade for OpenOPAC Software can all be found in the Version 6.3 folder, here under the 'Set up Programs' tab in the Amlib support section on the OCLC.org website.

Install OCLC OpenOPAC

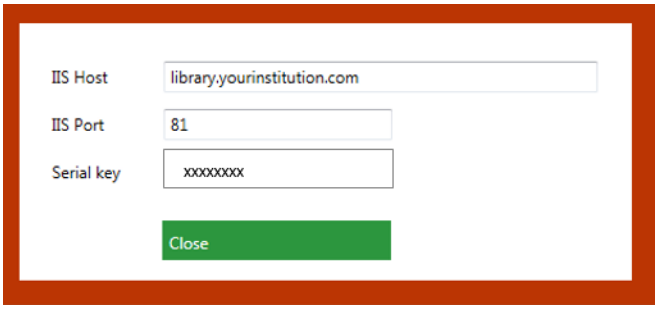
1. Run the installer OCLC.OPEN.FrontendSetup.exe
2. The Installer for OpenOPAC main view will display



3. For New installations - Select **Options** - the Options view will display [see steps 4-7] [** If this is an upgrade, the installer will detect your previous settings – therefore you can skip all steps in Section 2 & 3 - just select Exit, once installer has completed – then begin to use your upgraded version]

4. Enter the **IIS host** name, this should be the host name of the server/computer or if it is only to be accessed via network or a public domain name e.g.: http://library.yourinstitution.com
5. Enter the **IIS port** number you have assigned to OpenOPAC.
   Note: *if you have instances of NetOpac or OPENReports installed ensure there are no confusion between the port numbers. Each application will need its own port number*

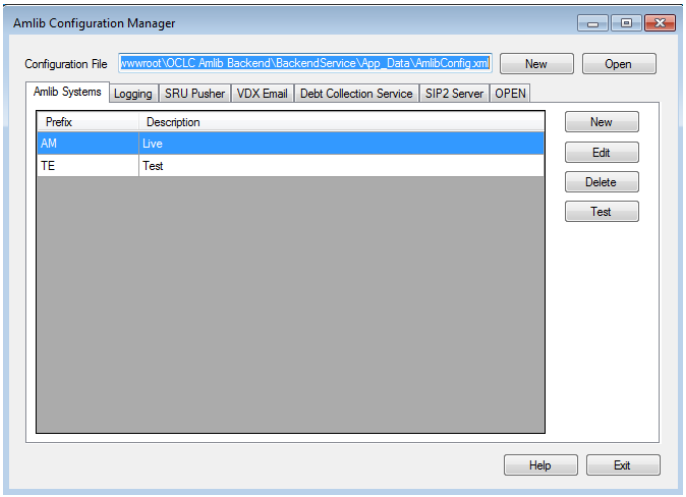
6. Enter your **Serial Number** provided by OCLC if this is a new install.



7. Select **Close** – the installer main view will display with the option to start the installation process enabled:
8. The Installer for OpenOPAC main view select **Select to start installation** – the installation will commence
9. A browser window will load. Minimise it as it will be needed later

Setup SQL Database Connection

10. The **Amlib Configuration Manager** should open automatically



11. The **AM** and **TE** databases will display as default

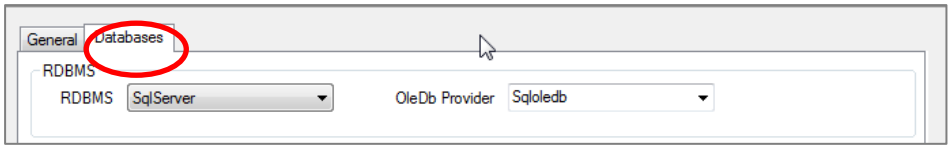
- **Please Note:** This configuration automatically has the **AM** [Live] and **TE** [Test] databases defined [but not set]

12. In the Amlib Systems tab, highlight the **Live** or **Test** database connector and Select the **Edit** button – the System Editor will open

13. If your database prefix is not '**AM**' add a new connector by selecting the **New** button. On the General tab, enter the **Prefix** and a **Description**, otherwise continue with **step 6**

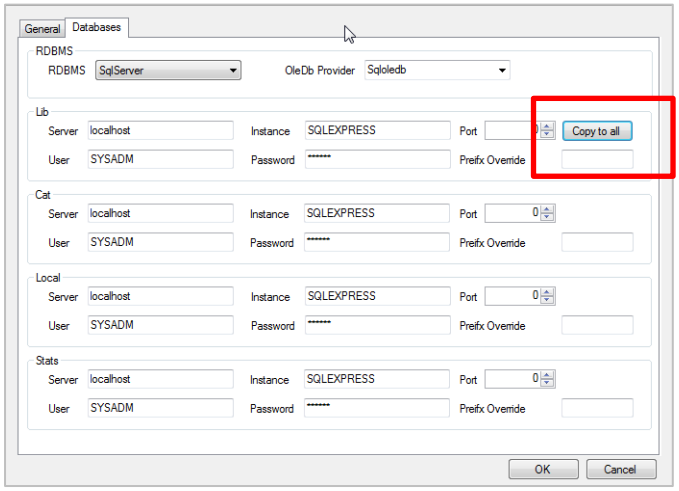
14. On the Databases tab, enter the following details:

- Choose the details for the **RDBMS** and **OleDbProvider** from the drop-down boxes either **SQLserver** OR **Oracle**



15. Enter the details for the Lib database for **SQL databases**

- Server – enter the name of the **Server** running your *Amlib* databases
- Instance – enter an **Instance**
  (only if required – otherwise leave as **Default**, an example would be SQLEXPRESS or ORAxxx)
- Port – enter a **Port number** (if required – otherwise leave as **0** [for unused])
- User – enter the **Username** for the database connection
- Password – enter the **Password** for the database connection – the username and password should be the same as that the login for your other *Amlib* databases. **SYSADM/SYSADM** is the default login for most *Amlib* database setups unless it's been changed by the site.
- Select the **Copy to all** button to copy the details to the other database fields

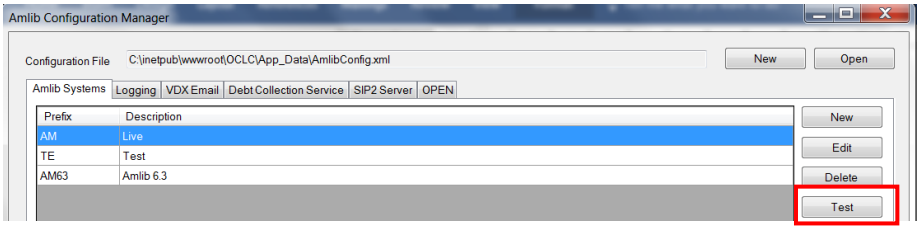


7. Select the **OK** button once complete – the System Editor window will close

Testing

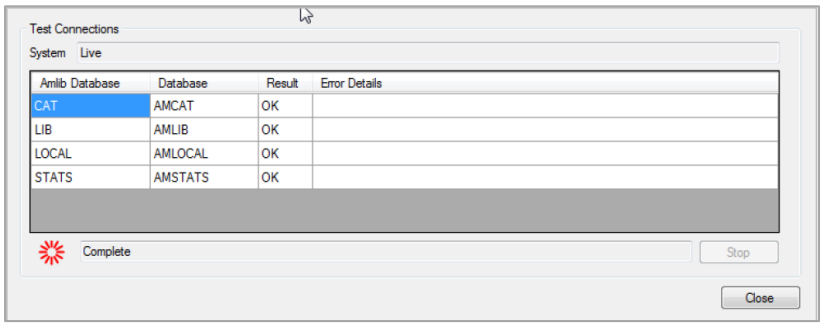
Once complete, the connection can be tested:

1. Highlight the relevant database – for example: **AM** – and Select the **Test** button

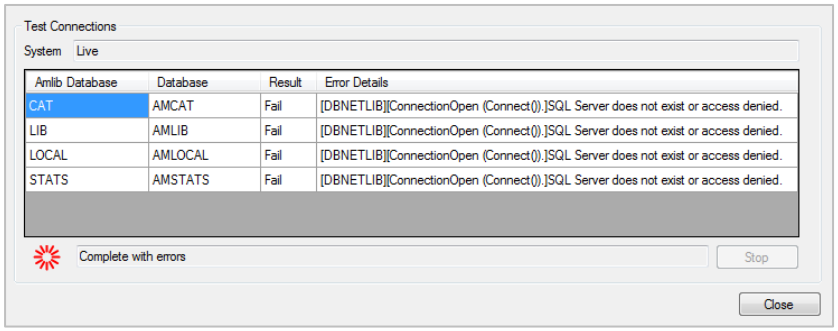


The **Test Connections** window will display with the result – if errors occur, the reason will display in the **Error Details** column:

Test **successful** – all Results = **OK**:



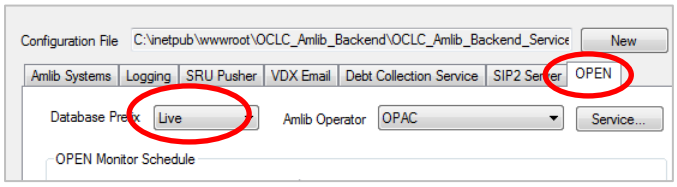
Test **unsuccessful** - all Results = **Fail** with Error Details shown, Use the error details to guide you and go back and check your configuration:



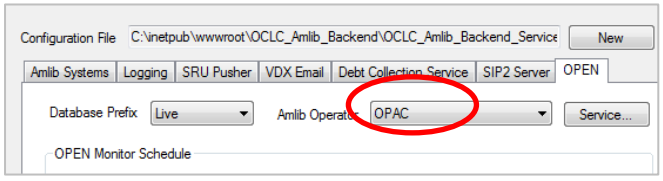
2. Select the **Close** button to close the **Test Connections** screen

Configuring the Connection for OPEN

1. Select the **OPEN** tab
2. Select the **Database prefix** for the one that has been configured



3. Select an **Amlib Operator** for example, **OPAC**, **STAFF** [depending on how it's been setup], any operator that has been setup by yourselves.

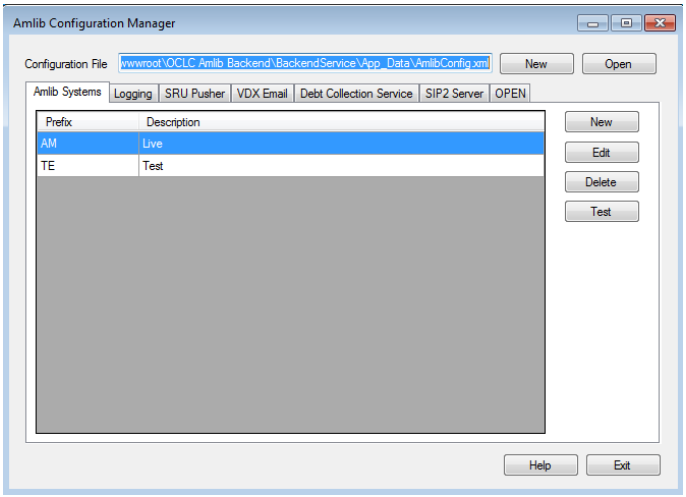


4.. Select Save

5.. Select Exit

Setup Oracle Database Connection

15. The **Amlib Configuration Manager** should open automatically



16. The **AM** and **TE** databases will display as default

    - **Please Note:** This configuration automatically has the **AM** [Live] and **TE** [Test] databases defined [but not set]

17. In the Amlib Systems tab, highlight the **Live** or **Test** database connector and Select the **Edit** button – the System Editor will open

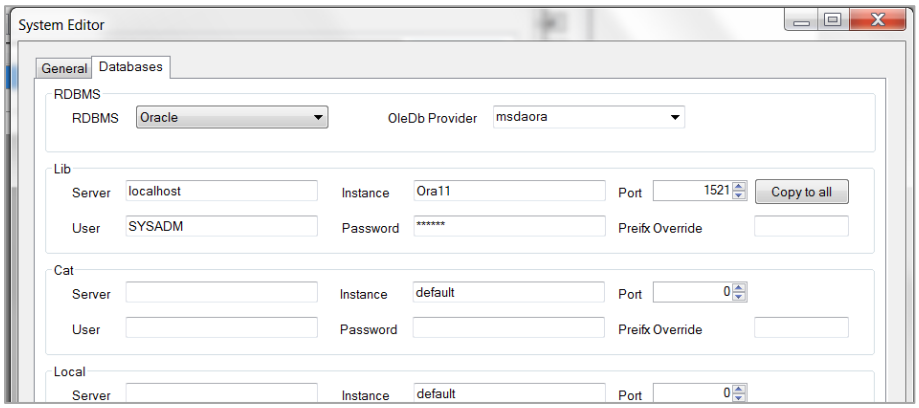
18. If your database prefix is not '**AM**' add a new connector by selecting the **New** button. On the General tab, enter the **Prefix** and a **Description**, otherwise continue with **step 6**

19. On the Databases tab, enter the following details:

    - Choose the details for the **RDBMS** and **OleDbProvider** from the drop-down boxes and select

    - Enter the details for the Lib database for the **Oracle database**

- Server – enter the name of the **Server** running your *Amlib* databases
- Instance – enter an **Instance**
  (only if required – otherwise leave as **Default**, an example would be ORAxxx)
- Port – enter a **Port number** (if required – otherwise leave as **0** [for unused])
- User – enter the **Username** for the database connection
- Password – enter the **Password** for the database connection – the username and password should be the same as that the login for your other *Amlib* databases. **SYSADM/SYSADM** is the default login for most *Amlib* database setups unless it's been changed by the site.
- As there is only one database in Oracle you do not need to use the **Copy to all** button, to copy these settings to the other fields below.

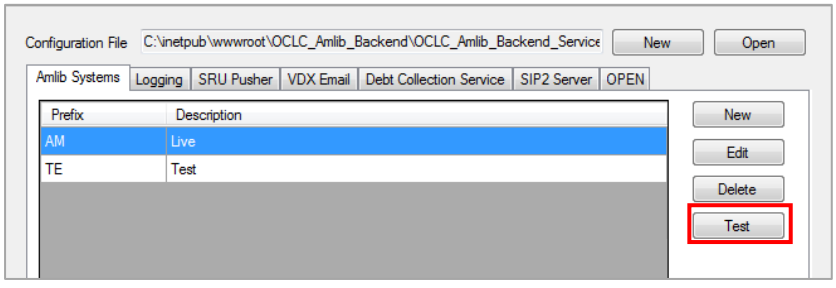


- Select the **OK** button once complete – the System Editor window will close

Testing

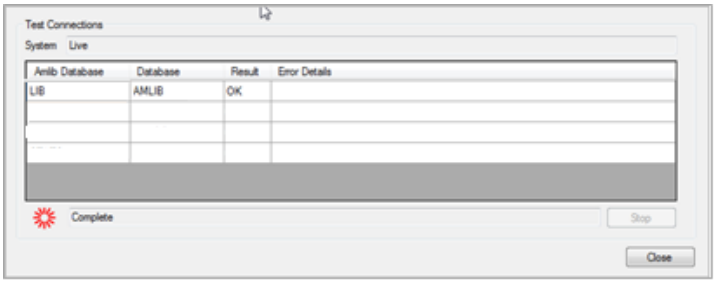
Once complete, the connection can be tested:

3. Highlight the relevant database – for example: **AM** – and Select the **Test** button



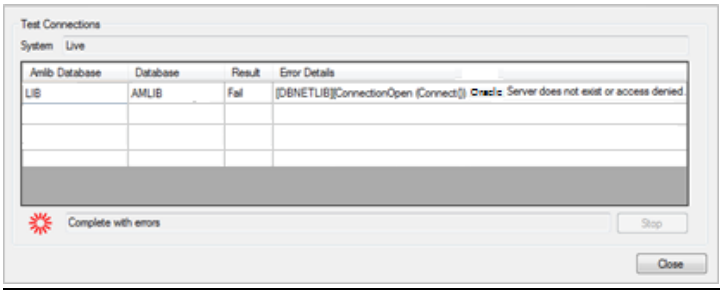
The **Test Connections** window will display with the result – if errors occur, the reason will display in the **Error Details** column:

Test **successful** – all Results = **OK**:



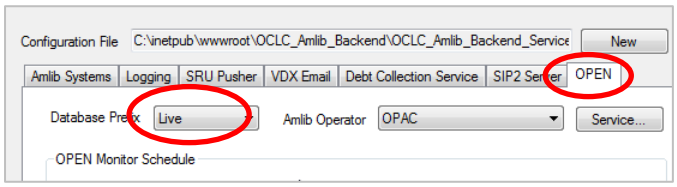
Test **unsuccessful** - all Results = **Fail** with Error Details shown, Use the error details to guide you and go back and check your configuration:

4. Select the **Close** button to close the **Test Connections** screen

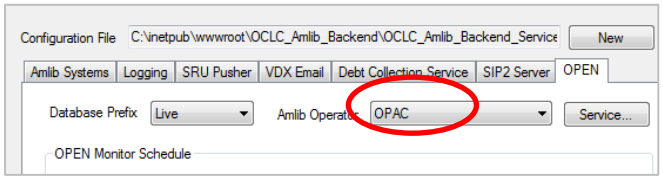


Configuring the Connection for OPEN

4. Select the **OPEN** tab
5. Select the **Database prefix** for the one that has been configured



6. Select an **Amlib Operator** for example, **OPAC**, **STAFF** [depending on how it's been setup], any operator that has been setup by yourselves.

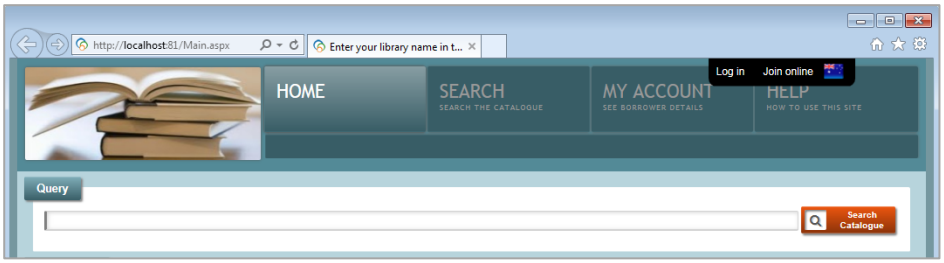


4.. Select Save

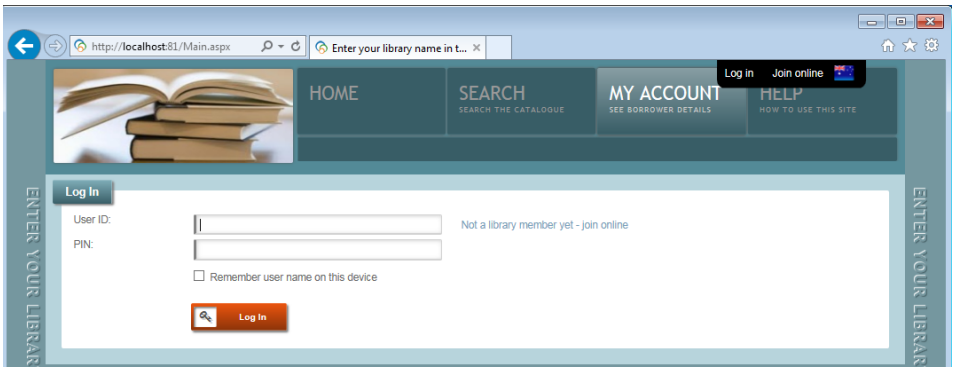
5.. Select Exit

SECTION 3: CONFIGURE OPEN

1. Open the browser window that you minimised before - the address will be http://servername:81/Main.aspx. The search will not return any items because the database is not filled with catalogues yet. You can also test external or network access by navigating to the hostname entered in step 4 of page 8. e.g. http://library.yourinstitution.com



2. To Log in as the administrator



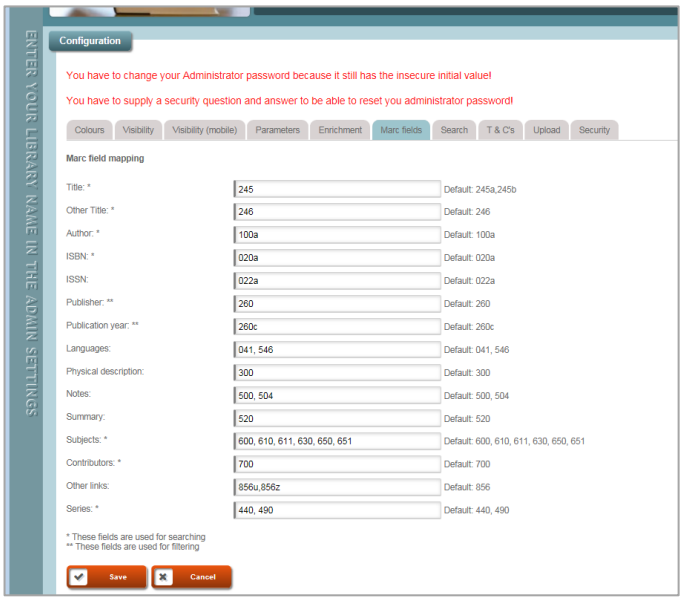
Select > **Log In**
Username: Administrator
Password: 1234 [this is the default PIN, but we recommend the Librarian changes this PIN after installation is complete]

If you are upgrading you may wish to set up your home page, if you did not do this before – please see the New user/ training guide for OpenOPAC on how to do this.

- You may wish to log in as Administrator and setup any new settings in configuration that have been added into this version - see the Amlib 6.3 Release Notes

Go to the **Configuration tab** > select **Marc Fields** > then set them and select > **SAVE**

The Librarian will need to set up these marc tags, before you can do the initial load.



3. Start the **Upload** Data process. You can start them from the **Upload Tab**. Try one Catalogue item upload first. Please specify a valid catalogue ID before you start the upload process.
   Please note that the stock item must be set to Opac? = Y and the catalogue must be set to Opac View Restriction = N. The Librarian will be able to assist with these settings.

4. Select on the **Upload** tab and enter a valid catalogue reference number from Amlib and try uploading one catalogue [must do this TEST first to ensure all is correct]

Please wait while the process executes

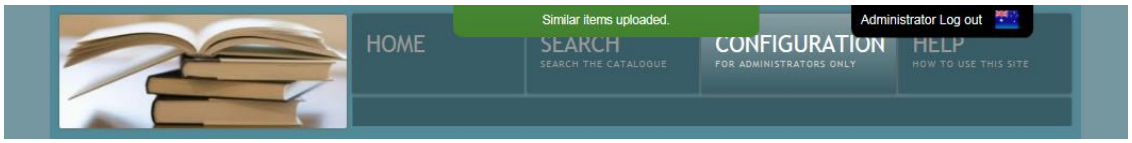
The process will notify on success

5. Start the upload of **Upload all Catalogues**

If everything completed successfully the process to upload all catalogue items can be started. This may take between 10 and 60 minutes, depending on the number of catalogue records and the performance of the server. *[If you cannot complete the 'Upload all Catalogues', because it stops or you get an error message before it completes, please take a screenshot of the error and contact support-anz@oclc.org or call 1300 260 795 for advice on how this can be resolved.]*

6. Start the upload of **Master data** (takes about 2 minutes)

7. Start the upload of **Suggestions** (about 15 - 20 minutes)



8. Open is now configured and ready for use – with its default settings

9. Librarians will then need to log in as an **Administrator** on OpenOPAC and set up their own Configurations for Open, its theme colours, image, Library name, searches, the screen displays and all the settings required for their library. The configuration guide & The Creating new themes and logos for Open OPAC are available in the OCLC Downloads and Software Updates section, Version 6.3 to help you configure your OpenOPAC.

10. **If you wish to use the NEW Front page option:** This needs to be setup when logged in as the **Administrator** > **Configuration** > **Custom text** tab. This will appear under your Home page before a search is conducted.

    - You can include an image of your library or maybe a location map
    - Details about your library & you're opening hours
    - Contact details
    - Other links to social media you may like your patrons to use

Options:

11. If you decide to use SSL transport security, you have to create the according binding in IIS and connect a valid certificate with the binding. Client certificates are not necessary.

12. If you want to use **net.tcp** as protocol for communication between the internal web services, you have to enable **net.tcp** on the virtual directory and enable **net.tcp** in the bindings of the web site (Not the virtual directory).

13. If this doesn't work check if **net.tcp** is installed with the windows version you are using (go to your installed Windows Features - in Control Panel / Programs and Features / turn Windows Features on or off) and check you have activated 'Windows Communication Foundation Non-HTTP Activation' (found under 'Microsoft .NET Framework 3.5 / 4.0 or higher')

SECTION 4: TROUBLESHOOTING

What do I need to check if none of the pages from OpenOPAC can be accessed?

There is 1 potential area that may need attention:

- **IIS:** There may be an issue with IIS or its configuration. This is less likely and once again troubleshooting will depend on the error received.

Where do I need to check when OpenOPAC is not working correctly?

- Restart IIS
- Send log file to Via Topdesk support call at https://oclc.topdesk.net/tas/public/login/form [Log files are found here: :**\inetpub\wwwroot\OCLC \OclcLogFiles**]
- Go to the Configuration area > upload tab and re-set the memory [This clears all cached values, effectively causing the values being reread from Amlib. Values like master data, circulation settings, parameters etc.]

When do I need to use the Reset Memory or Save functions?

- **Select Save** As part of the initial configuration and when you have re-uploaded metadata or suggestions or changed catalogues

- **Select Reset memor**y when supervisor/ parameter changes in the Amlib client have been made, so the changes will be sent and updated to OpenOPAC.

I cannot complete '*Upload all Catalogues'* when doing the Initial Load, because it stops or an error message displays before it fully completes …

- There could be an issue with your tables or indexes in the database, please log a support call on TOPdesk and attach a screen shot of the error message. If you do not know your TOPdesk login please email support-anz@oclc.org and we will send it to you

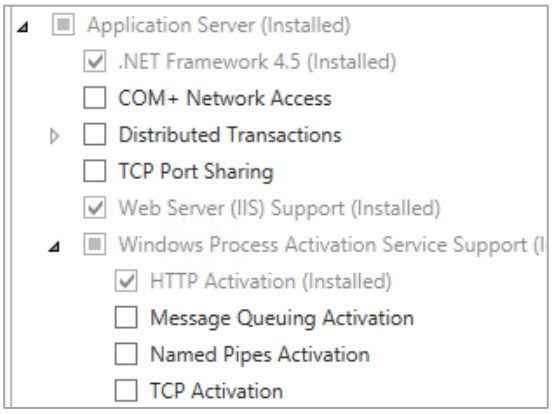
How do I ensure parameter changes I make in Amlib are transferred to OpenOPAC [such as supervisor or loan parameter settings]?

- Log in as Administrator > select configuration > Upload tab > and then select the correct option according to what you are updating [see the configuration guide – in the ' Which CHANGES ARE INSTANTANEOUS and which ARE NOT' section of the guide]

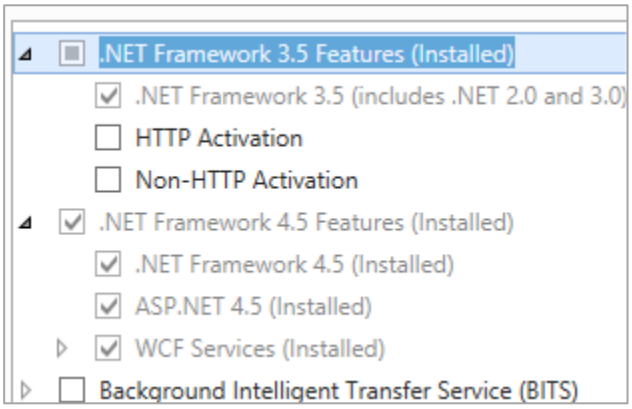
APPENDIX A: INSTALLATION OF REQUIRED .NET COMPONENTS

Windows Server 2012

1. On the **Start** page, Select the **Server Manager** Tile, and then select **OK**.
2. In **Server Manager**, select **Dashboard**, and Select **Add roles and features**.
3. In the **Add Roles and Features Wizard**, on the **Before you begin** page, Select **Next**.
4. On the **Select installation type** page, select Role-based or feature-based installation, and Select **Next**.
5. On the **Select destination server** page, select **a server from the server pool**, select your server, and Select **Next**.
6. On the **Select server roles** page, expand **Application Server** and ensure the following is installed:



7. On the next page make sure the following are installed:



8. Confirm and finalise installation, please note that you may require the Windows Server 2012 installation media to complete this installation

Windows Server 2008

Please run the .NET installer provided with the OpenOPAC installers.

APPENDIX B: INSTALLATION/CONFIGURATION OF IIS

Install IIS with .NET support on Windows Server 2012

1. On the **Start** page, Select the **Server Manager** Tile, and then select **OK**.
2. In **Server Manager**, select **Dashboard**, and Select **Add roles and features**.
3. In the **Add Roles and Features Wizard**, on the **Before you begin** page, Select **Next**.
4. On the **Select installation type** page, select Role-based or feature-based installation, and Select **Next**.
5. On the **Select destination server** page, select **Select a server from the server pool**, select your server, and Select **Next**.
6. On the **Select server roles** page, select **Web Server (IIS)**, and Select **Next**.
7. On the **Select features** page, Select **Next**.
8. On the **Web Server Role (IIS)** page, Select **Next**.
9. On the **Select role services** page, note the preselected role services that are installed by default, expand the **Application Development** node, and then select **ASP.NET 4.5**. (If you installed **.NET 3.5**, select **ASP.NET 3.5** also.)
10. On the **Summary of Features to install** page, confirm your selections, and then Select **Install**.
11. In the **Add features that are required for ASP.NET 4.5?** box, Select **Add Features**.

    - The following additional features are added:
12. **.NET Extensibility 4.5**
13. **ISAPI Extensions**
14. **ISAPI Filters**
15. **.NET Extensibility 3.5** (If **ASP.NET 3.5** was selected)
16. Select **Next**.
17. On the **Confirm installation selections** page, Select **Install**.
18. On the **Installation progress** page, confirm that your installation of the Web Server (IIS) role and required role services completed successfully, and then select **Close**.
19. To verify that IIS installed successfully, type the following into a web browser:
    http://localhost
    The default IIS Welcome page is displayed.

Install IIS with .NET support on Windows Server 2008 or 2008 R2

1. Select **Start**, point to **Administrative Tools**, and then Select **Server Manager**.
2. In **Roles Summary**, Select **Add Roles**.
3. Use the **Add Roles Wizard** to add the **Web server** role.
4. On the **Select Role Services** page, note the preselected role services that are installed by default, and then select the following additional role services:
    - **ASP.NET**
    - **.NET Extensibility**
    - **Request Filtering**
    - **ISAPI**
    - **ISAPI Extensions**
5. On the **Summary of Features to install** page, confirm your selections, and then Select **Install**.
6. On the **Installation Results** page, confirm that your installation of the Web Server (IIS) role and required role services completed successfully, and then select **Close**.
7. To verify that IIS installed successfully, type the following into a Web browser:
   http://localhost
   You should see the default IIS Welcome page.

Install IIS with .NET support on Windows 7 and Windows Vista

1. Select **Start**, and then Select **Control Panel**.
2. In **Control Panel**, Select **Programs**, and then Select **Turn Windows features on or off**.
3. In the **Windows Features** dialog box, Select **Internet Information Services** to install the default features, and then select the following additional features:
    - **ASP.NET**
    - **.NET Extensibility**
    - **Request Filtering**
    - **ISAPI**
    - **ISAPI Extensions**
4. Select **OK** to close the **Windows Features** dialog box.

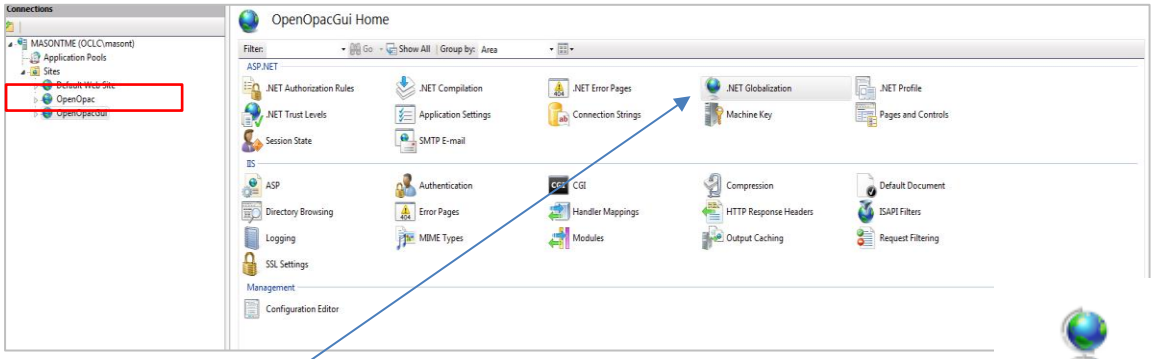
5. To verify that IIS installed successfully, type the following into a Web browser:
   http://localhost
   You should see the default IIS Welcome page.

APPENDIX C: LANGUAGE AND DATE CONTROL OF BROWSERS VIA IIS SETTINGS]

To control the language setting of all your browsers in your institution /library who are accessing the OpenOPAC, you will need to change 2 settings in IIS [Internet Information Services manager]

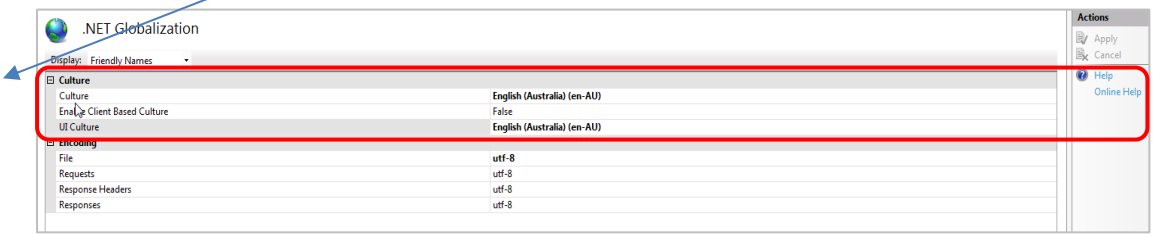
Open IIS7

Highlight **OpenOpacGui** in your sites folder on the left

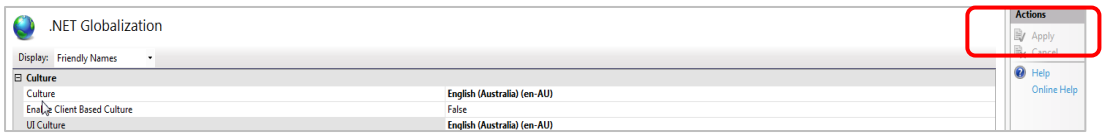


Select **Net.Globalisation** from the ASP.NET box under **OpenOpacGui** home Page

There will be a drop down menu besides **Culture** and **UI Culture**



Change both of these **to English (Australia) (en-AU)** and then select **Apply** in the top right hand corner.



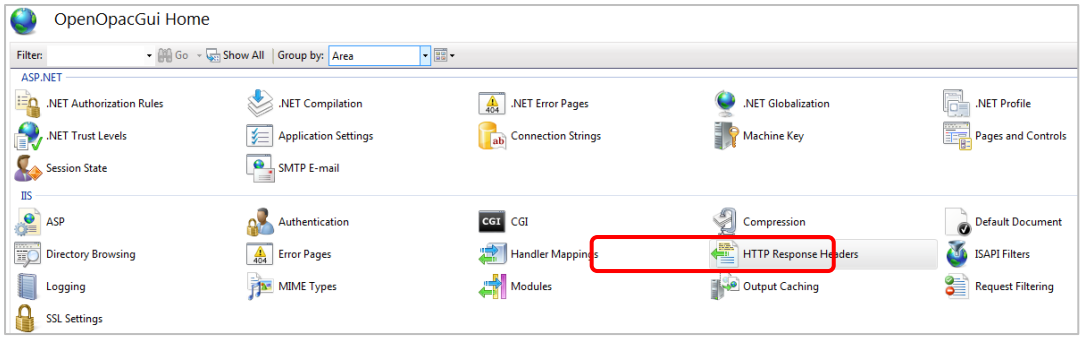
This will ensure that the flag in the top right hand corner of your browser when you access the OpenOPAC will always be the Australian flag. This setting appears to affect Chrome, Firefox and IE.

APPENDIX D: FORCING COMPATIBILITY MODE TO BE TURNED OFF IN IIS7

If OpenOPAC is opening in Compatibility Mode when using Internet Explorer it can be **turned off** via IIS. This is recommended if external users are accessing the website and having Compatibility Mode issues.

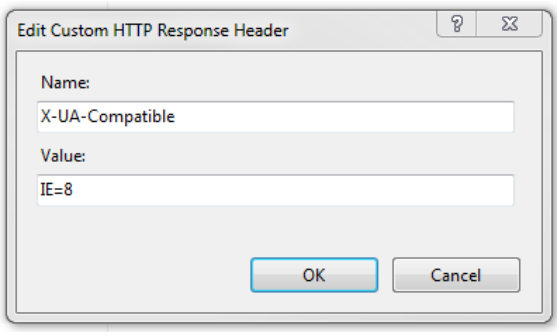
IIS 7 and IE 7 -9

1. Open IIS [Internet information Service Manager]
2. Highlight OpenOPACGui
3. Select HTTP Response Headers from under OpenOPACGui home page



4. Select **Add** on right –top hand side

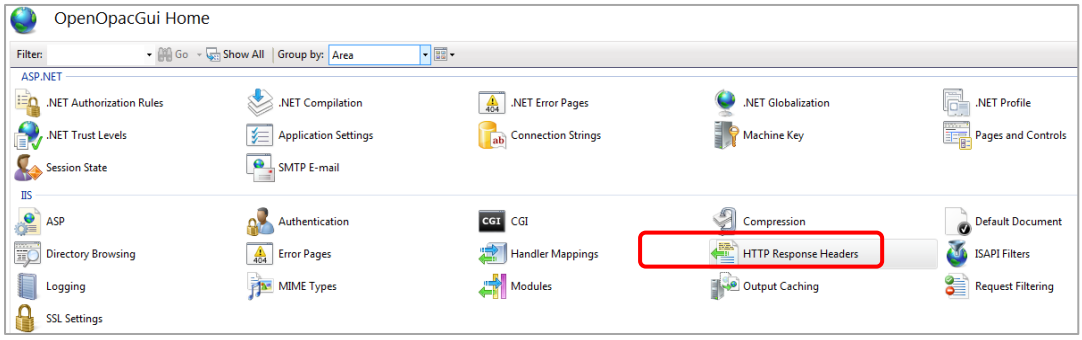
5. A pop-up box labelled **Add Customer HTTP Response Header** will appear



6. Type in **X-UA-Compatible** In the Name field
7. Type in **IE=8** Value field
8. Then select **OK**
9. This will cause **IIS** to open in Internet Explorer to display OpenOPAC as if it was Internet on Explorer 8.

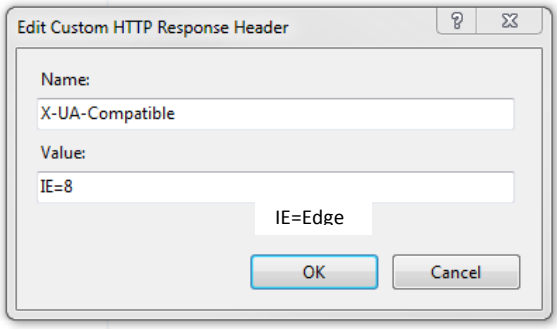
IIS 7 and IE 10 -11

1. Open IIS [Internet information Service Manager]
2. Highlight OpenOPACGui
3. Select HTTP Response Headers from under OpenOPACGui home page



4. Select **Add** on right –top hand side

5. A pop-up box labelled **Add Customer HTTP Response Header** will appear



6. Type in **X-UA-Compatible** In the Name field
7. Type in **IE=EDGE** Value field
8. Then select **OK**
9. This will cause **IIS** to open in Internet Explorer to display OpenOPAC with compatibility mode turned off [Warning **Edge** is sometimes unstable and is considered the setting for non-production sites, if you have any issues using this setting, then try IE=8 as the value instead]

APPENDIX E: TO HAVE A PUBLIC [EXTERNAL] FACING OPENOPAC

So that you OpenOPAC can be accessed from a webpage [publically] such as a council site or maybe a school website. There are two choices depending on how your network is set up, what is accessible and what is not and what your institutions preference is.

OpenOPAC can be installed anywhere on your Network, it does not need to be installed on your Amlib server or even on an Internal server, as long as OpenOPAC has access to the Amlib databases that is all that is required for it to run. Some clients will install this program on a Web-Server or in a De-militarized zone [DMZ] so it can be accessed by all anywhere. While others prefer to have their own internal set up.

If it has been installed on an Internal Server that has other important resources on it that you don't want public to access, but is fine for library to use. Then we suggest you set up a second install of OpenOPAC on a Web-server that can be accessed by the public.

If you want to set up a second install Of OpenOPAC for this purpose, so they can be accessed publically on a council or school web-page/site

If installing on a web-server or in a De-militarized zone (DMZ) only

1. Install OpenOPAC on a web server or in a De-militarized zone (DMZ)
2. Install it on a different port from the default HTML port 80 - such as port 81
3. Ensure you put in the correct Hostname for this webserver when installing for the Hostname
4. Ensure that port 1433 is open on the webserver [for two-way traffic] – so it can access the Amlib databases – this is the only access OpenOPAC needs (everything else can be locked down and not accessible)

5. If using an enrichment provider such as Amazon.com or Syndetics etc. You will need to ensure that this web-server allows access to these sites by either adding them as exceptions to the firewall rules or add them as trusted sites. Otherwise images and content will not appear.

6. Also either have pop-up blockers turned off or sites such as https://www.librarything.com/ or http://www.syndetics.com/ enter them as exceptions to the pop-up blocker rule or add as trusted sites

You will need to do the following if this is a Second Install of OpenOPAC:

1. Install another OpenOPAC on a web server or in a De-militarized zone (DMZ)
2. Install it on a different port 83 to your internal one
3. Ensure you put in the correct Hostname for this webserver when installing for the Hostname
4. Ensure that port 1433 is open on the webserver [for two-way traffic] – so it can access the Amlib databases – this is the only access OpenOPAC needs (everything else can be locked down and not accessible)

5. If Library is using an enrichment provider such as Amazon.com or Syndetics etc. You will need to ensure that this web-server allows access to these sites by either adding them as exceptions to the firewall rules or adding them as trusted sites. Otherwise images and content will not appear.

6. Also either have pop-up blockers turned off or sites such as https://www.librarything.com/ or http://www.syndetics.com/ enter them as exceptions to the pop-up blocker rule or add as trusted sites

7. Then configure it the same as their internal one was configured
6. Load all catalogues etc…..
7. This **new URL** can put as a hyperlink on their council /library website that will go straight to OpenOPAC – giving them public access which is what it sounds like they thought they were getting