

Installation Manual.XIGL00



XIGLOO Library Automation Module
for IGL00

Main site: <http://sourceforge.net>
Discussion Forum: <http://groups.yahoo.com/group/ics-isis>, http://groups.yahoo.com/group/the_ics

XIGL00

Installation Manual

About

This documentation is written by Arie Nugraha.

Section 1 : Introduction

XIGL00 is an add-on library automation module for IGL00. XIGL00 combine your CDS/ISIS database and MySQL database to create full library automation system. ISIS database handle the bibliographic database with its indexing and MySQL handle the membership, transaction system and also reporting system.

Same with IGL00, XIGL00 is an Open Source application released under GPL License. You are free to use and modify it. To learn more and understand about GPL License please take your time to read GPL License file bundled with each release of IGL00.

What is Open Source?

Open Source is a catchall term, describing several parts of the Free Software licence movement. Here are some organizations that have contributed to defining Open Source licences:

- The Free Software Foundation: <http://www.fsf.org/>
- The GNU Project (GNU's Not Unix): <http://www.gnu.org/>
- The Open Source Initiative: <http://www.opensource.org/>

Benefits on using XIGL00

- If you have already ISIS database and want to circulate it, there is no need to migrate your existing bibliographic records in ISIS to other database! you can use it right away in XIGL00!! (with a little tweak)
- XIGL00 is Open Source and released under GPL License! No need to worry about proprietary licenses thing!
- XIGL00 is developed 100% above Open Source technologies such as PHP, PHP-Openisis and MySQL database server. No proprietary or commercial technologies involved!

XIGL00 Features

- Library Transactional system for collection loan and return.
- Library Membership
- Simple library statistical
- Modifiable membership rules with Membership Types
- Automatic overdue calculation based on Membership Types
- Multi database for transaction

Known Problems on Windows OS

- XIGL00 is unstable when PHP is installed as an Apache modules, so we recommend you to use PHP installed as a CGI Binary on Windows OS. The known problem is you cant open WINISIS when you already open XIGL00 and collection/item title cant be displayed. We suspect this is happen due to **PHP-Openisis extension**.

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Section 2 : Requirements and installation

System Requirements

It is assumed that you have your PHP installed. In Windows operating system, make sure that your PHP installation is at least version 4.3.2. If you haven't install PHP yet, then you should download the latest php4 it at PHP official site at <http://www.php.net>. On Linux/UNIX system you can use either php4 or php5 as long you have php source code distribution and then compile the PHP-openisis extension with it.

You also must already install **IGL00 release.5** on your web server. For complete instructions on how to install IGL00 release.5 and PHP-openisis extension please read IGL00 release 5 official manual (also can be downloaded at sourceforge.net).

Be sure that **MySQL Server** is already installed in your system or web hosting. MySQL 4.1.X is recommended and you can download it at <http://www.mysql.com>. Be sure you have database creation privileges on MySQL, or you have mysql **root** user privileges. To make you easier in administrating the MySQL database, we suggest you to install the **phpMyAdmin** (can be downloaded in their official website at <http://www.phpmyadmin.net> or sourceforge.net). If you never touch **MySQL** or other **Relational Database Management System (RDBMS)** before, now is the right time to learn it!

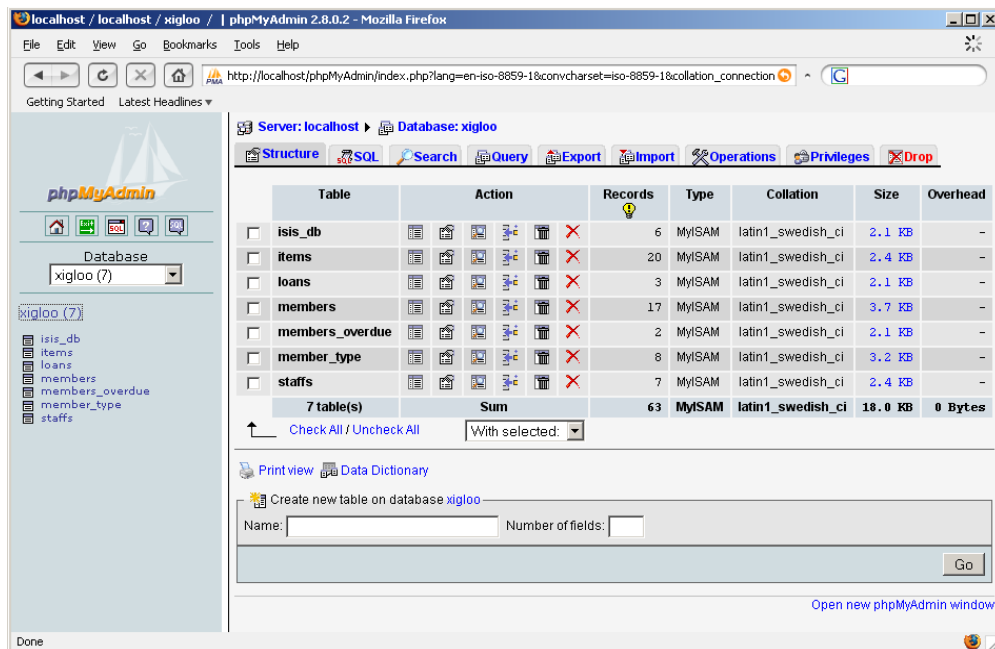


Fig. 01. phpMyAdmin to make database administration easier

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Installing XIGL00

- Download the XIGL00 zip or tar.gz release from sourceforge.net
- Extract the distribution file and place the **xmods** folder inside your previous IGL00 Release.5 installation. Assume you already have IGL00 Release.5 installed on `/var/www/html/igloo5` or `C:\Apache2\htdocs\igloo5`, copy or move the **xmods** folder under that directory
- Go to **xmods** directory and then move/cut **simbio** directory to IGL00 base directory at `/var/www/html/igloo5/` or `C:\Apache2\htdocs\igloo5\` (replacing previous simbio dir)
- Go to **xmods** directory again and then move/cut **green_sky** directory to IGL00 template directory at `/var/www/html/igloo5/template` or `C:\Apache2\htdocs\igloo5\template`
- Go to **xmods** directory again and then move/cut **xlogin.php** to IGL00 5 base directory
- The next step is to make XIGL00 database in MySQL Server
- After XIGL00 database is created, we need to tweak our ISIS database a little

Installing XIGL00 Database on MySQL

To make XIGL00 works we need to create a database on MySQL database. The database name is XIGL00. To create database on MySQL database you must have a privileges to create a database in MySQL first. On Linux/UNIX system open the **console** and then do this action below :

```
dicarve@localhost#mysql -u yourusername -p
```

In Windows system, you should open the **MS-DOS prompt** or **command prompt** (on Windows NT, 2000 and XP). Inside the command prompt, change your working directory to MySQL **bin** directory. If you install mysql in `C:\Program Files\MySQL 4.1\` then you should invoke this command inside the command prompt :

```
C:\>cd C:\Program Files\MySQL 4.1\bin
C:\Program Files\MySQL 4.1\bin>mysql -u yourusername -p
```

If success you will be entering mysql command line client. Inside mysql command line client execute these SQL queries :

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13 to server version: 4.1.16

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.
mysql>CREATE DATABASE xigloo;
mysql>use xigloo;
mysql>source /var/www/html/igloo5/xmods/xigloo.sql
```

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The previous command will create a database named **xigloo** inside the **MySQL Server** and also dump the xigloo SQL file inside the **xigloo** database. Now xigloo database is already installed on MySQL Server and ready to use.

Installing XIGL00 Database on MySQL with phpMyAdmin

If you have phpMyAdmin installed on your web server, you can easily install xigloo database more easily. We suggest you download and install the latest version because it already fixed many bugs that contained in older releases. Open the phpMyAdmin and create new database with name **xigloo** in phpMyAdmin homepage.

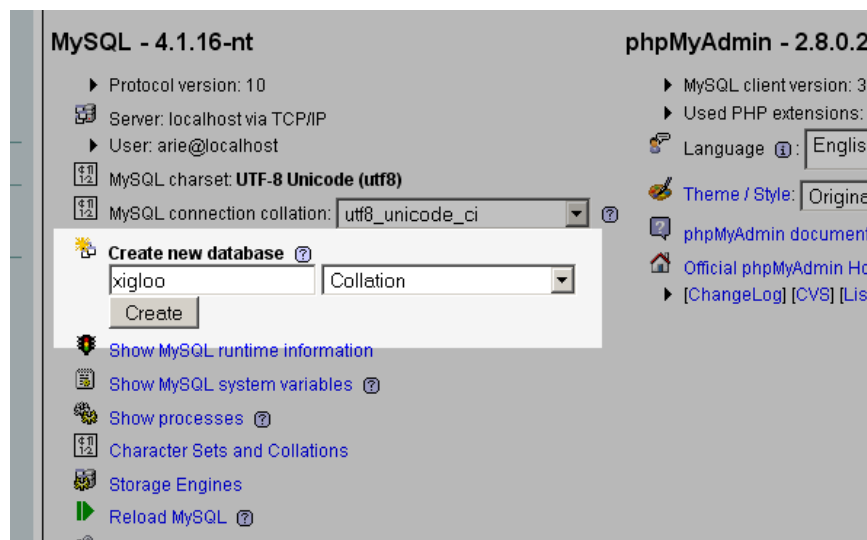


Fig. 02. creating xigloo database using phpMyAdmin

After you create the **xigloo** database, select it using phpMyAdmin database selection menu (on the left side). Inside the xigloo database menu, choose the **Import** menu (on the older phpMyAdmin choose the **SQL** menu).

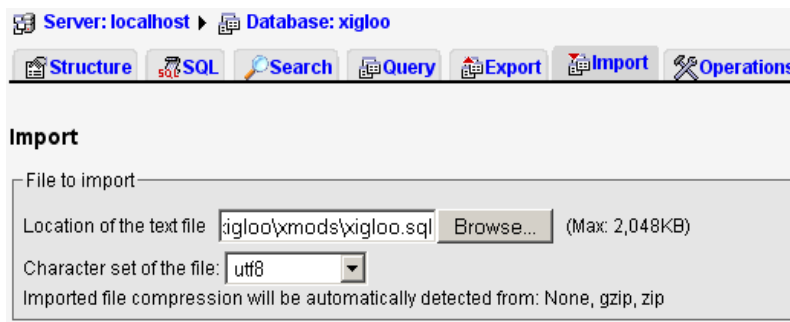


Fig. 03. Dump the xigloo.sql file using phpMyAdmin import menu

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Use the browse button to find the location of xigloo.sql SQL file. After you choose the SQL file push the **Go** button. Now xigloo database is already installed on MySQL Server and ready to use.

Tweaking ISIS database to use with XIGL00

After you create the xigloo database inside MySQL Server, now it is time to tweak your ISIS database a little, so it can be used in XIGL00 for circulation and other things. In this example we will use the CDS database so it can be used in XIGL00 database. This example can also directly applied to your existing database.

- Open your CDS/ISIS application and open the CDS database
- Open your **Field Definition Table (FDT)** editor
- Add additional **item_number** field in **FDT** and give it **900** tag with or without **subfields** (we suggest no need for subfields)

XIGL00 designed with mind that a single bibliographic record can be used for one or more **items**¹. So one bibliographic record will serve for one or more items. XIGL00 default **item_number** tag is **900**, but you can change it as you like if the 900 tag is already used.

- After you change the FDT, the next step is to modify the **Field Selection Table (FST)** so the **item_number** tag can be searched by XIGL00
- Use the "**by <term>**" indexing type, with "**<**" and "**>**" mark (**900 2 V900**).

After we tweak our ISIS database, we then can insert each bibliographic record with collection item number. The **item_number** tag entry will be like this :

```
<00777><00778><00779>
```

above example insert 3 items number. Remember to close each item number with with "**<**" and "**>**" mark.

If you have field that similar to **item_number** field, there is no need to add **item_number** tag in your FDT. You can use that tag for item number and change ***.ini** configuration a little.

¹ Item is our term to describe a physical form of collection which have their own unique number

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IGL00 *.ini database configuration

In your *.ini database configuration search for this line

```
; library automation specific setting
[library_auto]
item_tag = 900
title_tag = 24
```

The **item_tag** value is the item number tag in your ISIS database. If you already assign other tag (for example you already assign tag **923** and not **900**) for item number then change **item_tag** value to **923**. You also must assign value to **title_tag**, because it is needed for XIGL00 to show item title (default title tag for cds database is **24**). If title tag in your ISIS database is **245**, then you must change the **title_tag** value to 245.

XIGL00 configuration file

Two variables must be specified inside XIGL00 configuration file, **xigloo_setting.inc.php**. Those variables are :

```
$setting['mydb']['user'] = 'root';
$setting['mydb']['password'] = '';
```

change the value according to your MySQL user and password, so XIGL00 can communicate with MySQL database smoothly. Please note that this password is different from XIGL00 user and password which is used by library sraff for entering XIGL00 module.

Section 3 : XIGL00 setup

To start using XIGL00 you must first have a registered username and password in XIGL00 staffs database. After you have a registered username and password in staffs database, then you can login to XIGL00 by pointing your browser to <http://localhost/igloo5/xlogin.php>



Fig. 04. Insert your registered username and password in xlogin page

But before doing that, we need to setup our XIGL00 a little. To setup our XIGL00 we must enter administrator username and password in xlogin page. The default administrator username of XIGL00 is **root** and the password is **root123** (you can change it later). Inside the **setup mode/administrator mode** (whatever you may call it), you can add, remove and changing XIGL00 staffs data. You can also add, remove and changing XIGL00 membership types/rules. Last but not least you can add, remove ISIS database to use in XIGL00.

Staff Manager

Staff manager lets you adding, removing or editing XIGL00 staffs data. Adding staffs means you give other library staff privileges to enter XIGL00 library automation system. You can add unlimited number of library staff in XIGL00. To add library staff, click on **Add New Staff** links. You will be taken to staff data entry form. Fill all the fields and remember :

- Staff ID **can't be changed** once it is entered to database
- Staff Name will be **username** for XIGL00 login page

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- Password field characters is case sensitive and will be encrypted

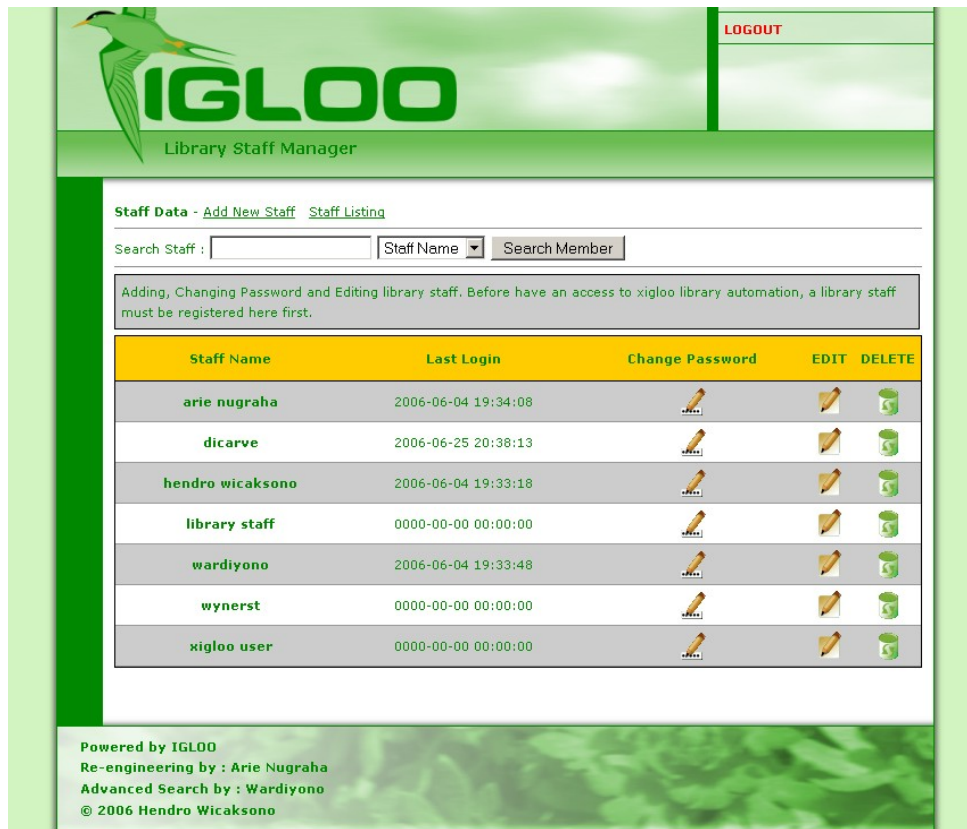


Fig. 05. Library staff manager to add, remove staffs data

Membership Type Manager

Members type manager lets you add, remove membership types/rules. In other words it lets you classify membership, in which each membership type will affect how many item they can borrow, how many days item can be borrowed, how much overdue fee for each days when they loan is already overdue and many more. Fill all the fields and remember :

- Membership type name should be short such as **Standard, Premium, Gold** etc
- Membership periode units is in days (default is 365 days or 1 year)
- Maximum loan is number how many item they can borrow
- Loan periode define how long (in days), members can borrow an item
- Reborrow times is number how they can re-borrow collection
- Overdue charge per day is overdue fee

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ISIS Database for Library Automation

You must register all your ISIS database that want to be used in XIGL00 in here. For example, if you want to use **cds** database in library automation and lets library member borrow it you must register it. Some point to remember :

- ISIS Database Name must be same with your *.ini file name (same character case to). If your *.ini file for **cds** database is **cds.ini** then you give **cds** for ISIS Database Name field.

Changing Administrator password and username

To change XIGL00 administrator password and username open the XIGL00 main configuration file, **xigloo_setting.inc.php** located in **xmods** directory. Search for these line and change it to your suit :

```
$setting['adm']['user'] = 'root';  
$setting['adm']['passwd'] = 'ff9830c42660c1dd1942844f8069b74a';
```

Change it for example :

```
$setting['adm']['user'] = 'dicarve';  
$setting['adm']['passwd'] = 'ff9830c42660c1dd1942844f8069b74a';
```

To change the password hash XIGL00 provide **hash.php** page to generate password hash. Logon to XIGL00 as an administrator and point your browser to <http://localhost/xigloo5/xmods/hash.php> and insert your new password in the text fields.

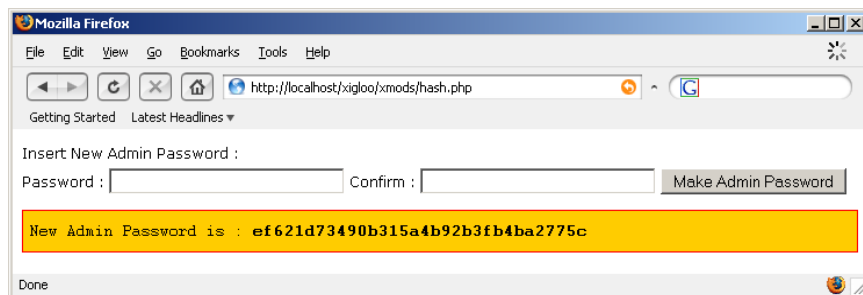


Fig. 06. Generate administrator password hash using hash.php

Copy the hash value (inside the orange box) and paste it as `$setting['adm']['passwd']` value. For security reasons please keep this file in **read only** mode by other user.