

How to use Open Source Software for Manage a Library System – Part 1

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Specification of OSS

01. Free Redistribution
02. Source Code - programmer can modify the program
03. Derived Works - The license must allow modifications and derived works, and must allow them to be distributed under the same terms as the license of the original software
04. No Discrimination Against Persons or Groups
05. No Discrimination Against Fields of Endeavor
06. Distribution of License
07. License Must Not Be Specific to a Product
08. License Must Not Restrict Other Software
09. License Must Be Technology-Neutral

How to Create Library Content Management System with Joomla (OSS)

Joomla is a most usable web based Content Management System in the world. Then we can make suitable library mgt systems using Joomla and its facilities.

Structure of Content Management System as follows

01. Front end and Back end designing facilities are available
02. allow access rights with permission to developer
03. Easy Configuration setting up with simply.
04. Use template and customize own structure.
05. Allow content organization.
06. Use can be without programming knowledge.
07. more than a few database support

- We can download OSS like Joomla from internet...(<http://www.joomla.org/>)
- And PC requires platform software we can download (Apache, MySQL, and PHP) and install first. Ex: - (<http://www.wampserver.com/en/>) further instruction (<http://www.wampserver.com/en/presentation.php>)
- Then extract the Joomla Setup in to the root of our local host
ex:- C://wamp/www/Joomla etc.
- The next step is open the Joomla with wamp or server base platform. We can setup Joomla easy. *Help site* (<http://www.joomla.org/about-joomla/getting-started.html>)
- We can named site is like DIGITAL LIBRARY INFORMATION SYSTEM

Let's Create WCMS for Our Library....

Before you have to know follows.....

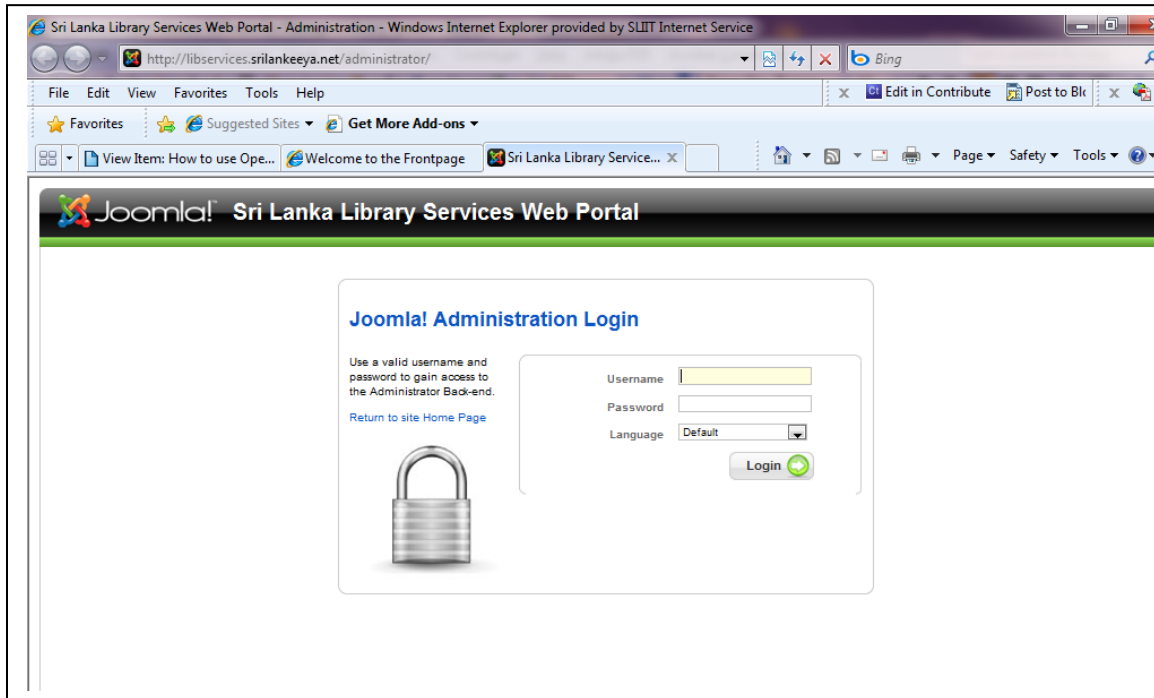
What Is the Frontend and Backend of a Joomla-powered Website?

After you install Joomla, you actually have two sites:

- The public site (commonly called the frontend) that people view at www.yoursite.com
- The administration site (commonly called the backend) whose URL is www.yoursite.com/administrator

While some administration is possible via the frontend of the site, it's most efficient to manage your site through the backend.

When you browse to the backend, you are greeted by a login prompt (Figure 1.1)



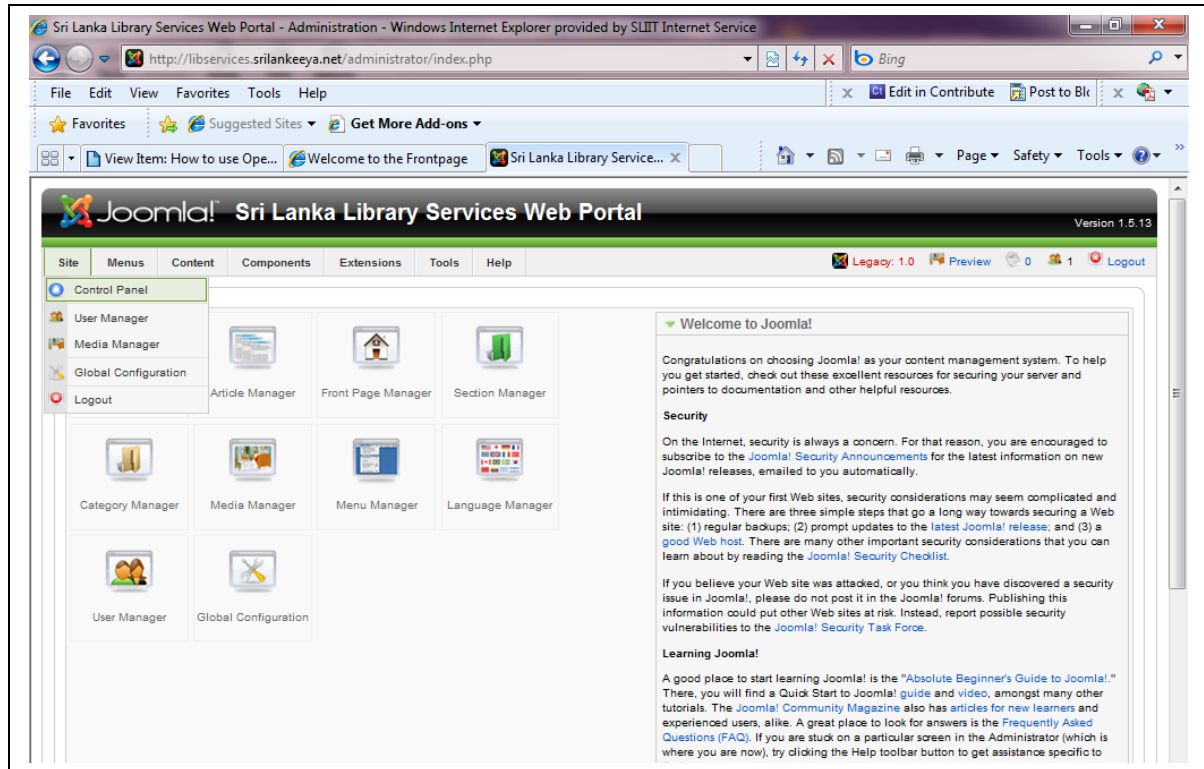
(Figure 1.1) Backend login screen

To get any further, you'll need an administrative password then login backend and can change any content for our preference.

When you installed Joomla, on the final screen, you were asked for an admin password. That is the first account created, and it is given an Access Control Level (ACL) group of Super Administrator. The username is "admin," and the password will be whatever you entered. Assuming you log in with a super administrator account, you'll be presented with the administrative backend of your site. It looks slightly different based on what level of administrator you are.

At the top of the page is a Menu Bar, immediately under that is a Toolbar (in Figure 1.2 it is not visible), and then the large area is the Workspace. The initial page when you first log in to the backend is called the Control Panel.

Administrative Control Panel (Figure 1.2)



User Manager and Access Control Levels

Access Control Levels (ACL) is the grand sounding name given to assigning different functions to different user types. Joomla has nine user levels. You assign these different ACL roles to users through the User Manager in the Site Menu. A list of user types and ACLs can be found in (Table 2.1)

Table 3.1. Joomla Access Control Levels

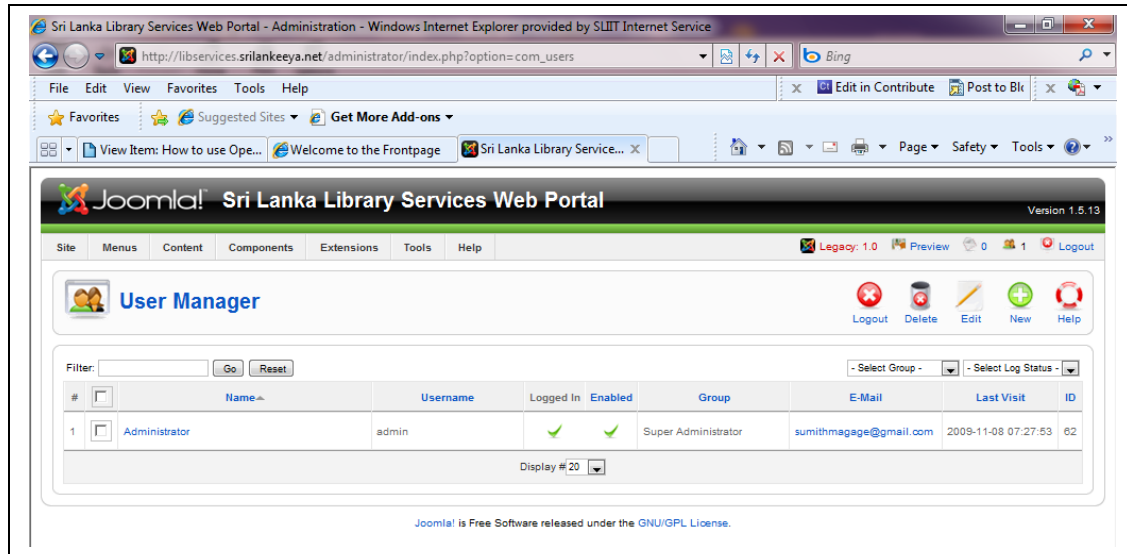
User	Frontend	Backend Functions/Menus
Public Frontend	Browse Only	No Access
Registered	Can view restricted content	No Access
Author	Can create content	No Access
Editor	Can edit content	No Access
Publisher	Can publish content	No Access
Manager	As publisher	Media Manager

Table 3.1. Joomla Access Control Levels

User	Frontend	Backend Functions/Menus
Administrator	As publisher	Menu Manager Content Managers Frontpage Manager Component Manager Help As Manager User Manager Install/Uninstall Extensions Module Manager Plugin Manager Global Checkin As Administrator Configuration Language Manager Template Manager Template Installer Language Installer Mass Mail
Super Administrator	As publisher	

Selecting the User Manager will bring up a table with all the users that have an ACL of registered or higher, including administrators. An example site with just a few users is shown in (Figure 2.1)

(Figure 2.1) User Manager Option can be create user login for library users



Simply put, the User Manager manages users, and only administrators and super administrators can view it.

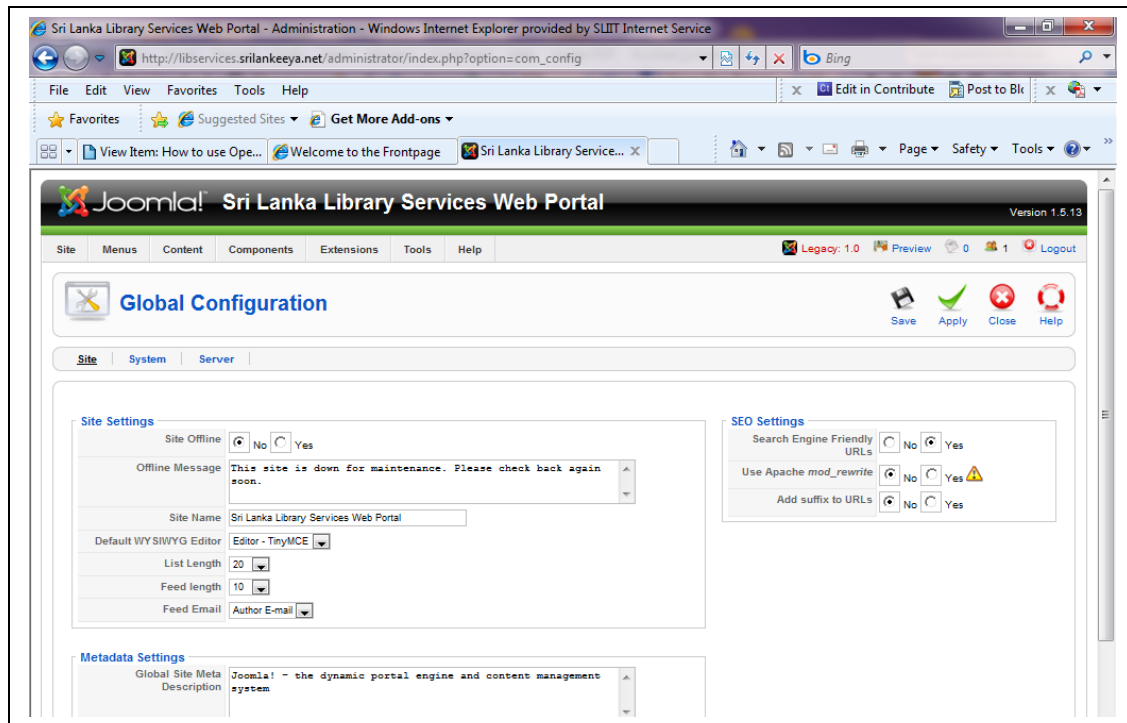
The filter, shown in (Figure 2.1) on the left side, is your search tool for Joomla (it probably should be called "search"). You can enter a name, username, or an email, and it will find all users that have what you typed present in their fields. You can also select a specific group or see only users that are logged in.

You Can Manage Your Home Page Settings.....

Configuration

The Configuration screen is important for your site. It's only available to super administrators and contains critical settings to keep your site running (see Figure 3.1). It was formerly called Global Configuration on the menu but has been shortened on the submenu to just Configuration. The following list describes the three tabs within Configuration.

(Figure 3.1) Global Configuration screen



How Does Joomla Generate Web Pages?

For those new to Joomla, one of the most difficult things to figure out is how content is organized. The relationship between sections, categories, blogs, and tables can be very confusing.

The key to understanding how to organize content is in how Joomla generates pages. I addressed this in detail above "Content Management Systems and an Introduction to Joomla," and am bringing it up again. If you have a firm grasp of PHP-served dynamic pages, you can skip to How Joomla Organizes its Articles, but if part of your brain still harkens back to static HTML pages, it's worth a quick revisiting!

To get a better idea of how a Joomla site can be organized, let's make a sitemap for an imaginary site. It will be for a company called Widget Inc., which sells widgets in both blue and green. This example could easily be generalized into any sort of "brochure" site for a small company.

A sitemap is a standard planning tool used by web designers and is critical for a Joomla website. We can develop as a new Library WCMS using Open Source Software like this.

To be continuing..... (08/11/2009)© Sumithchandra 2009