

Copyright © 2006

Pakistan Software Export Board (G) Limited
Ministry of Information Technology
Government of Pakistan

Printing

Artland Communications, Lahore. September 2006

Published by

Pakistan Software Export Board

The Funding Agency

This open source toolkit is funded by the Open Source Resource Center (OSRC) project of the Pakistan Software Export Board (PSEB). PSEB is the entity within Government charged with the task of enhancing exports of software and IT enabled services (ITES) from Pakistan. PSEB is a guarantee limited company totally owned and funded by the Government of Pakistan. Any questions or comments about this toolkit may be directed to PSEB Islamabad at 92-51-111-333-666 or through e-mail at osrc@pseb.org.pk.

Disclaimer

This toolkit is published by the PSEB for members of the IT industry and the public-at-large. The toolkit's compilers, or the editor, are not responsible, in any way possible, for the errors/omissions of this toolkit. The OSRC does not accept any liability for any direct and consequential use of this toolkit or its contents. The contents of this toolkit may be distributed only subject to the terms and conditions set forth in the Open Publication License v 1.0 or later. The latest version is presently available at <http://opencontent.org/openpub/>

www.bzupages.com

www.bzupages.com

TABLE OF CONTENTS

INTRODUCTION.....	1
CONTENT MANAGEMENT SYSTEMS.....	2
1. ABOUT DRUPAL.....	3
1.1. <i>Is Drupal right for you?</i>	3
1.2. <i>System Requirements</i>	5
1.3. <i>Installing Drupal, modules and themes</i>	5
1.3.1. Download Drupal.....	5
1.3.2. Create The Drupal Database.....	6
1.3.3. Load The Drupal Database Schema.....	6
1.3.4. Connecting Drupal.....	7
1.3.5. Configure Drupal.....	8
1.3.6. Cron Tasks.....	8
1.3.7. Drupal Administration.....	8
1.3.8. Customizing Your Theme(S).....	8
1.3.9. Upgrading.....	8
1.4. <i>Modules in Drupal</i>	9
2. ABOUT MAMBO.....	11
2.1. <i>Is Mambo right for you?</i>	11
2.2. <i>System Requirements</i>	11
2.3. <i>Server Configuration</i>	12
2.4. <i>Installing Mambo</i>	12
2.4.1. Download Mambo.....	12
2.4.2. Create The Mambo Database.....	12
2.4.3. Web Installer.....	13
2.4.4. Configure Mambo.....	13
2.4.5. Mambo Administration.....	13
2.4.6. Upgrading.....	13
2.5. <i>Modules in Mambo</i>	14
2.6. <i>What is MamboXchange?</i>	15
2.7. <i>Support and professional services</i>	15
3. XOOPS: AN OVERVIEW.....	16
3.1. <i>Is Xoops right for you?</i>	16
3.2. <i>System Requirements</i>	16
3.3. <i>SERVER CONFIGURATION</i>	16
3.4. <i>Installing and Configuring</i>	16
3.4.1. Download Xoops.....	16
3.4.2. Create the Xoops Database.....	17
3.4.3. Web Installer.....	17
3.4.4. Configure Xoops.....	17
3.4.5. Xoops Administration.....	17
3.4.6. Upgrading.....	18
3.5. <i>Modules in XOOPS</i>	18
3.6. <i>Support and professional services</i>	18
CUSTOMER RELATIONSHIP MANAGEMENT.....	19
1. ABOUT SUGARCRM.....	20
1.1. <i>System Requirements</i>	20
1.2. <i>Installing and Configuring Sugar Suite</i>	20
1.2.1. Download the Sugar Files.....	20
1.2.2. Copy Sugar Files to Web Server.....	20
1.2.3. Install Sugar with the Sugar Installation Wizard.....	21
1.2.4. Database Configuration.....	22
1.2.5. Site Configuration.....	23
1.2.6. Log into Sugar.....	23
1.3. <i>Upgrading Sugar Suite</i>	23
1.3.1. Important Upgrade Information.....	23
1.4. <i>Support and professional services</i>	24
ENTERPRISE RESOURCE PLANNING.....	25
1. COMPIERE: OVERVIEW.....	26
1.1. <i>Installing and Running Compiere</i>	26

1.1.1 Installing Oracle 10g (Installing the Database).....	26
1.1.2. Installing Java JDK.....	27
1.1.3. Downloading and extracting Compiere.....	27
1.1.4. Server setup/Install (setup properties to run server).....	27
1.1.5. Setup the Database.....	29
1.1.6. Start Server.....	29
1.1.7. Setup client.....	29
1.2. <i>Compiere Users List</i>	31
1.3. <i>References</i>	31
2. SEQUOIA ERP: OVERVIEW.....	32
2.1. <i>Framework</i>	32
2.2. <i>Downloading Sequoia ERP</i>	32
2.3. <i>Installing Sequoia ERP</i>	32
2.3.1. JDK Requirements.....	32
2.3.2. Installation.....	33
2.3.3. Starting Sequoia ERP onLinux.....	33
2.3.4. Starting Sequoia ERP onMS Windows.....	33
2.3.5. Accessing the Server.....	34
2.3.6. Signing In.....	34
2.3.7. MySQL Database for Sequoia ERP.....	34
2.3.8. MySQL Datasource in Sequoia ERP.....	35
2.4. <i>References</i>	35

Introduction

This open source toolkit has been developed by the Open Source Resource Center (OSRC), a project of the Ministry of Information Technology (MoIT). This toolkit contains step-by-step manuals related to open source applications for databases, application servers, desktop applications, office productivity suites, Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) software, and open source desktop applications for the Microsoft Windows platform. A set of CDs, including some Linux distributions and other applications, forms an integral part of this open source toolkit.

I would like to thank the OSRC team, including Mr. Abubakar Shoaib, Mr. Iftikhar Ahmad, Mr. Muhammad Hammmad, Mr. Muazzam Ali, Mr. Sher Shah Farooq, and Mr. Qandeel Aslam, who have compiled this toolkit; and Miss Seema Javed Amin, who has edited it. The OSRC would especially wish to thank PSEB's Director (Projects) Mr. Nasir Khan Afridi, Former Project Manger(OSRC) Mr. Osman Haq and Ministry of Information Technology's Member (IT) Mr. M. Tariq Badsha for their generous moral support, without which this toolkit would never have been completed.

This is the first edition of this toolkit, and the OSRC hopes to continue to improve it with the help of your feedback and comments.

Sufyan Kakakhel

Open Source Resource Center,
Pakistan Software Export Board,
2nd Floor, ETC, Agha Khan Road, F-5,
Islamabad, Pakistan.
Ph: +92-51-9208748
Fax: +92-51-9204075
Email: skakakhel@pseb.org.pk
<http://www.osrc.org.pk>

Content Management Systems

1. About Drupal

Drupal is software that allows an individual or a community of users to easily publish, manage and organize a great variety of content on a website. Tens of thousands of people and organizations have used Drupal to set up a variety of different kinds of websites, including:

- Aficionado websites
- Community web portals and discussion sites
- Corporate websites/intranet portals
- E-commerce applications
- Personal websites
- Resource directories

Drupal includes features capable of enabling, among others:

- Blogs
- Collaborative authoring environments
- Content management systems
- File uploads and download
- Forums
- Newsletters
- Picture galleries

Drupal is open source software licensed under the GPL, and is maintained and developed by a community of thousands of users and developers. Drupal is free to download and use.

1.1. Is Drupal right for you?

Drupal is a highly configurable and modular content management system. Before you can answer if Drupal is right for you, consider asking yourself the following questions:

- Which type of Drupal user are you?
- What are your needs?

A list of common user types followed by Drupal features is given below. If the features meet your needs and you have the skill-set required to implement them, Drupal might be the perfect system for you.

I'm a **Blogger** and I need...

- single- and/or multi-user blogs
- to categorize content
- commenting
- trackbacks
- custom style and layout using sample or custom themes
- image and/or other media support using contributed modules (i.e., plug-ins)

Skills needed: end-user, administrator

I'm evaluating Drupal for my **organization/company** and we need...

- customizable user roles and permissions
- robust security model
- scalability
- to configure and extend functionality to meet specific business needs
- a support infrastructure (documentation, community, etc.)
- to categorize content
- additional features/functionality

Skills needed: evaluator, end-user

I'm a **community organizer** and I need...

- community members to easily share ideas (blogs, forum, files, etc.)

- members to have tools to help them self-organize
- a site that can evolve as the community evolves (keeping up with the state-of-the-art technology of interactive websites)
- a support infrastructure (documentation, community, etc.)
- customizable user roles and permissions
- a site that is safe on the web (security, spam, trolls, etc.)
- a special distribution of Drupal and contributed modules that come preconfigured with community relationship management tools like [CivicSpace](#).

Skills needed: evaluator, end-user, administrator, site developer (to some extent)

I'm a **small business owner** and I need...

- to set up the site myself
- custom style and layout using sample/custom themes
- customizable user roles and permissions
- a system that is scalable and adaptable to the needs of my changing business
- to categorize content
- a support infrastructure (documentation, community, etc.)
- e-commerce support for
 - shopping carts
 - premium paid content subscriptions
- to configure and extend functionality to meet specific business needs

Skills needed: evaluator, end-user, administrator, site developer (to a limited extent)

I **build or design websites** for clients and I need...

- to create a custom look and feel with my own themes
- additional features/functionality
- to easily provide support to my clients
- access to a community of designers and developers

Skills needed: evaluator, administrator, site developer, developer (to some extent)

I'm a **programmer** and I need...

- a robust, well-designed, modular system that I can customize and extend
- well documented APIs
- system and architecture documentation and coding standards
- access to a community of other developers
- a rich feature list

Skills needed: administrator, programmer

Do you know what type of Drupal user you want to be? If you do, review the skill sets below to see what you'll need in order to get started:

- ***Evaluator:*** Familiar with web terminology and concepts.
- ***End-user:*** Familiar with browsing, clicking, submitting web pages, selecting options.
- ***Administrator:*** Manage roles, select themes, categorize web pages (content), configure module settings, install and upgrade software and databases, apply security fixes.
- ***Site designer/developer:*** Install software, design style and layout (with Cascading Style Sheets (CSS) and minimal PHP), build and deploy websites, evaluate contributed modules, work with LAMP.
- ***Programmer:*** Program in PHP, administer databases, program through a well-defined API, design database objects, evaluate existing solutions and apply patches, collaborate with other developers

1.2. System Requirements

1. A web server that can execute PHP scripts
 - Recommended: Apache. Development takes place using version 1.3.x; it has been successfully tested with version 2.0.x.
 - Optional: IIS. Drupal is being developed with IIS compatibility in mind, and IIS is reported to be working well with it.
2. PHP
 - As of Drupal 4.6, the CMS requires PHP version 4.3.3+ (PHP 5 is supported for the 4.6 release). Drupal 4.2 to 4.5.2 inclusive require PHP version 4.1+. Older versions of Drupal will run on PHP 4.0.6+. It is recommended that you use the latest version of PHP 4.x.
 - PHP XML extension (for bloggerapi, Drupal, jabber, and ping modules). This extension is enabled by default in a standard PHP installation; the Windows version of PHP has built-in support for this extension.
 - A PHP memory of 8MB for a Drupal core installation. If you install additional contributed modules you may need to raise your PHP allowed memory.
 - PHP requires the following configuration directives for Drupal to work:
 - session.save_handler: user
 - In addition, the following settings are recommended:
 - session.cache_limiter: none
 - (We only mention directives that differ from the default [php.ini-dist](#) / [php.ini-recommended](#) starting with PHP 4.0.6)
 - These settings are contained in the default .htaccess file that ships with Drupal, so you shouldn't need to set them explicitly. Note, however, that setting PHP configuration options from .htaccess only works:
 - with Apache (or a compatible web server),
 - if the .htaccess file is actually read, i.e. AllowOverride is not None,
 - if PHP is installed as an Apache module.
 - Using a PEAR-supported Database requires (of course) PEAR to be installed.
3. A PHP-supported Database Server
 - Recommended: MySQL, v3.23.17 or newer. MySQL 4 is a good option.
 - Drupal makes use of features not available on some inexpensive hosting plans, like LOCK TABLE
 - Working well since 4.7: PostgreSQL, version 7.3 or newer (7.2 will probably work too, but you'll get some errors when updating from 4.6).

1.3. Installing Drupal, modules and themes

Installing Drupal, new modules and themes involves roughly the same process; once you become familiar with it, you can repeat it as and when required.

After you successfully install Drupal, you will want to perform some basic site configuration, starting with the "Settings" menu.

Installing and configuring your site forms only a part of your responsibilities. Remember to backup, test and maintain it as well.

The installation information is placed in the file INSTALL.txt. Major steps include:
CONTENTS OF THIS FILE

- * Requirements
- * Optional requirements
- * Installation
 - Drupal administration
 - Customizing your theme(s)
- * Upgrading
- * More information

1.3.1. Download Drupal

You can obtain the latest Drupal release available from its official website at <http://drupal.org/>. The files are in .tar.gz format and can be extracted using most compression tools. On a typical UNIX command line, type:

```
wget http://drupal.org/files/projects/drupal-x.x.x.tar.gz  
tar -zxvf drupal-x.x.x.tar.gz
```

This will create a new directory drupal-x.x.x/ containing all Drupal files and directories. Move the contents of that directory into a directory within your web server's document root or your public HTML directory:

```
mv drupal-x.x.x/* drupal-x.x.x/.htaccess /var/www/html
```

1.3.2. Create The Drupal Database

This step is only necessary if you don't already have a database set-up (e.g. by your host). If you control your databases through a web-based control panel, check its documentation for creating databases, as the following instructions are for the command-line only.

These instructions are for MySQL. If you are using another database, check its documentation. In the following examples, 'dba_user' is an example MySQL user which has the CREATE and GRANT privileges. Use an appropriate user name for your system.

Create a new database for your Drupal site (here, 'drupal' is the name of the new database):

```
mysqladmin -u dba_user -p create drupal
```

MySQL will prompt you for the 'dba_user' database password and then create the initial database files. You must then login and set the access database rights:

```
mysql -u dba_user -p
```

You will again be asked for the 'dba_user' database password. At the MySQL prompt, enter the following command:

```
GRANT ALL PRIVILEGES ON drupal.*  
TO nobody@localhost IDENTIFIED BY 'password';
```

where:

- 'drupal' is the name of your database
- 'nobody@localhost' is the username of your webserver MySQL account
- 'password' is the password required to log in as the MySQL user

If successful, MySQL will reply with:

```
Query OK, 0 rows affected
```

To activate the new permissions you must enter the command:

```
Flush privileges;
```

and then enter 'q' to exit MySQL.

1.3.3. Load The Drupal Database Schema

Once you have a database, you must load the required tables into it. If you use a web-based control panel, you should be able to upload the file 'database.mysql' from Drupal's 'database' directory and run it directly as SQL commands.

From the command line, type (again, replacing 'nobody' and 'drupal' with your MySQL username and the name of your database):

```
mysql -u nobody -p drupal < database/database.mysql
```

1.3.4. Connecting Drupal

The default configuration can be found in the 'sites/default/settings.php' file within your Drupal installation. Before you can run Drupal, you must set the database URL and the base URL to the website. Open the configuration file and edit the \$db_url line to match the database defined in the previous steps:

```
$db_url = "mysql://username:password@localhost/database";
```

where 'username', 'password', 'localhost' and 'database' are the username, password, host and database name for your set up.

Set \$base_url to match the address to your Drupal site:

```
$base_url = "http://www.example.com";
```

In addition, a single Drupal installation can host several Drupal-powered sites, each with its own individual configuration.

Additional site configurations are created in sub-directories within the 'sites' directory. Each sub-directory must have a 'settings.php' file which specifies the configuration settings. The easiest way to create additional sites is to copy the 'default' directory and modify the 'settings.php' file as and when appropriate. The new directory's name is constructed from the site's URL. The configuration for www.example.com could be in 'sites/example.com/settings.php' (note that 'www.' should be omitted if users can access your site at <http://example.com/>).

Each site does not have to have a different domain. You can use sub-domains and sub-directories for Drupal sites as well. For example, example.com, sub.example.com, and sub.example.com/site3 can all be defined as independent Drupal sites. The setup for a configuration such as this would look like the following:

```
sites/default/settings.php  
sites/example.com/settings.php  
sites/sub.example.com/settings.php  
sites/sub.example.com.site3/settings.php
```

When searching for a site configuration (for example, www.sub.example.com/site3/), Drupal will search for configuration files in the following order, using the first configuration it finds:

```
sites/www.sub.example.com.site3/settings.php  
sites/sub.example.com.site3/settings.php  
sites/example.com.site3/settings.php  
sites/www.sub.example.com/settings.php  
sites/sub.example.com/settings.php  
sites/example.com/settings.php  
sites/default/settings.php
```

If you are installing on a non-standard port number, the ':' is replaced by a '.'. For example, <http://www.drupal.org:8080/mysite/test/> could be loaded from:

```
sites/www.drupal.org.8080.mysite.test/.
```

Each site configuration can have its own site-specific modules and themes that will be made available in addition to those installed in the standard 'modules' and 'themes' directories. To use site-specific modules or themes, simply create a 'modules' or 'themes' directory within the site configuration directory. For example, if sub.example.com has a custom theme and a custom module that should not be accessible to other sites, the setup would look like this:

```
sites/sub.example.com/:
```

settings.php
themes/custom_theme
modules/custom_module

1.3.5. Configure Drupal

You should consider creating a "files" sub-directory in your Drupal installation directory. This sub-directory stores files such as custom logos, user avatars, and other media associated with your new site. The sub-directory requires "read and write" permission by the Drupal server process. You can change the name of this sub-directory at "Administer > Settings > File system settings".

You can now launch your browser and point it towards your Drupal site. Create an account and a login. The first account will automatically become the main administrator account with total control.

1.3.6. Cron Tasks

Many Drupal modules (such as the search functionality) have periodic tasks that must be triggered by a cron job. To activate these tasks, call the cron page by visiting

<http://www.example.com/cron.php> --

This will pass control to the modules and the modules will decide if and what they must do.

Most systems support the crontab utility for scheduling tasks like this. The following example crontab line will activate the cron tasks automatically on the hour:

*0 * * * * wget -O - -q <http://www.example.com/cron.php>*

More information about cron scripts is available in the admin help pages and in the Drupal handbook at <http://drupal.org/>. Example scripts can be found in the scripts/directory.

1.3.7. Drupal Administration

Upon new installation, your Drupal website defaults to a very basic configuration with only a few active modules, one theme, and no user access rights.

Use your administration panel to enable and configure services. For example, set some general settings for your site with "Administer > Settings". Enable modules via "Administer > Modules". User permissions can be set with "Administer > Users > Configure > Permissions".

1.3.8. Customizing Your Theme(S)

Now that your server is running smoothly, you will want to customize the look of your site. Several sample themes are included in the Drupal installation and more can be downloaded from <http://drupal.org/>.

Customizing each theme depends on the theme engine. Each theme generally contains a PHP file themename.theme which defines a function header () that can be changed to reference your own logos.

Most themes also contain style sheets to tune the colors and layouts.

1.3.9. Upgrading

1. Backup your database and Drupal directory - especially your configuration file - in 'sites/default/settings.php'.
2. Log on as the user with user ID 1.

3. Remove all the old Drupal files then unpack the new Drupal files into the directory that you run Drupal from.
4. Modify the new configuration file to make sure it has the latest and correct information.
5. Run update.php by visiting <http://www.example.com/update.php>.

1.4. Modules in Drupal

Modules are plug-ins for Drupal that extend its core functionality. Modules can automatically be temporarily disabled to reduce server load when your site becomes extremely busy by enabling the throttle.module and checking throttle. The auto-throttle functionality must be enabled on the throttle configuration page after having enabled the throttle module.

Name	Description
Aggregator	Aggregates syndicated content (RSS and RDF feeds).
Archive	Displays a calendar for navigating older content.
Block	Controls the boxes that are displayed around the main content.
Blog	Enables keeping an easily and regularly updated web page or a blog.
Blogapi	Allows users to post content using applications that support XML-RPC blog APIs.
Book	Allows users to collaboratively author a book.
Comment	Allows users to comment on and discuss published content.
Contact	Enables the use of personal contact forms.
Drupal	Lets users log in using a Drupal ID and can notify a central server about your site.
Filter	Handles the filtering of content in preparation for display.
Forum	Enables threaded discussions about general topics.
Help	Manages the display of online help.
Legacy	Provides legacy handlers for upgrades from older Drupal installations.
Locale	Enables the translation of the user interface to languages other than English.
Menu	Allows administrators to customize the site navigation menu.
Node	Allows content to be submitted to the site and displayed on pages.
Page	Enables the creation of pages that can be added to the navigation system.
Path	Allows users to rename URLs.
Ping	Alerts other sites when your site has been updated.
Poll	Allows your site to capture votes on different topics in the form of multiple-choice questions.
Profile	Supports configurable user profiles.
Queue	Allows content to be moderated by the community.
Search	Enables site-wide keyword searching.

Statistics	Logs access statistics for your site.
Story	Allows users to submit stories, articles or similar content.
System	Handles general site configuration for administrators.
Taxonomy	Enables the categorization of content.
Throttle	Handles the auto-throttling mechanism, to control site congestion.
Tracker	Enables tracking of recent posts for users.
Upload	Allows users to upload and attach files to content.
User	Manages the user registration and login system.
Watchdog	Logs and records system events.

2. About Mambo

Mambo is a Content Management System (CMS). It is the engine behind your website that simplifies the creation, management, and sharing of content. Mambo is Open Source Initiative-certified software. It is free-of-charge and is governed by the General Public License (GPL). Mambo supports a number of options which allow you to change the display of the content on your website, enabling you to achieve a personalized look and feel without having to modify the template file.

2.1. Is Mambo right for you?

Mambo is a highly configurable, and modular, content management system. Before you can answer if Mambo is right for you, consider a couple of questions:

How do you determine which CMS is best for you?

A number of websites can help you determine the answer to this question:

- MamboXchange: <http://mamboxchange.com/>
- CMS Matrix: <http://www.cmsmatrix.org/> is a website where you can make side-by-side comparisons of many of the most popular and lesser-known systems
- OpenSourceCMS: <http://www.opensourcecms.com/> is a website that has many demos running on a large number of systems

But is trying out the demos and having a "nice feeling" about a system really enough?

The answer is probably 'no'. You need to ask yourself a number of other questions in order to ensure that when you invest your time and resources in committing to a system, you will receive a profitable return:

- Does an active development team exist to support the core framework?
- Does a resourceful developer community exist to provide custom add-ons, templates, etc?
- Does a knowledgeable user community exist to provide help and support, and to provide the momentum for continued development?

Mambo has all three.

To help you compare various systems, observe at the following guidelines:

1. Ensure that you are using the latest version (<http://mamboxchange.com/projects/mambo/>)
2. Remain updated via quality community sites supporting custom development and news (<http://mamboxchange.com/> or work through the results of a web search for 'Mambo CMS').
3. Visit forums or other communication networks which allow users to get help and share ideas (<http://forum.mamboserver.com/>).

Mambo, while a great CMS, is by no means perfect. But it is evolving, and constantly improving.

2.2. System Requirements

First, you must have the base environment for Mambo. Mambo has been tested on Linux, Free BSD, Mac OS X and Windows NT/2000/XP. Linux or one of the BSDs is recommended, but any hardware that can run the three pieces of software listed below is acceptable:

- Apache: <http://www.apache.org>
- MySQL: <http://www.mysql.com>
- PHP (version 4.1.2 or higher): <http://www.php.net>

Several bundled distributions of Apache/MySQL/PHP are available at <http://sourceforge.net/>

2.3. Server Configuration

Ensure that PHP has been compiled with support for MySQL and Zlib in order to successfully run Mambo. Mambo works well on an IIS server. Apache is recommended for running Mambo on Windows.

Optional Components

If you want support for SEF URLs, you'll need mod_rewrite and the ability to use local .htaccess files.

2.4. Installing Mambo

Installing Mambo, new modules and themes involves roughly the same process; once you become familiar with it, you can repeat it as and when required.

After you successfully install Mambo, you will want to perform some basic site configuration, starting with the "Settings" menu.

Installing and configuring your site forms only a part of your responsibilities. Remember to backup, test and maintain it as well.

The installation information is placed in the file INSTALL.php. Major steps include:

2.4.1. Download Mambo

Obtain the latest Mambo release from <http://mamboxchange.com/projects/mambo>

Copy the tar.gz file into a working directory

```
$ cp MamboVx.x.x-Stable.tar.gz /tmp/Mambo
```

Change to the working directory

```
$ cd /tmp/Mambo
```

Extract the files

```
$ tar -zxvf MamboVx.x.x-Stable.tar.gz
```

This will extract all Mambo files and directories. Move the contents of that directory into a directory within your web server's document root or your public HTML directory

```
$ mv /tmp/Mambo/* /var/www/html
```

Alternatively, if you downloaded the file to your computer and unpacked it locally, use a FTP program to upload all files to your server. Make sure all PHP, HTML, CSS and JS files are sent in ASCII mode and image files (GIF, JPG, PNG) in BINARY mode.

2.4.2. Create The Mambo Database

Mambo currently works only with MySQL. In the following examples, "db_user" is an example MySQL user which has the CREATE and GRANT privileges. You will need to use an appropriate user name for your system.

Create a new database for your Mambo site

```
$ mysqladmin -u db_user -p create Mambo
```

MySQL will prompt you for the 'db_user' database password and then create the initial database files. Login and set the access database rights

```
$ mysql -u db_user -p
```

You will again be asked for the 'db_user' database password. At the MySQL prompt, enter the following command:

```
GRANT ALL PRIVILEGES ON Mambo.*  
TO nobody@localhost IDENTIFIED BY 'password';
```

where:

- 'Mambo' is the name of your database
- 'nobody@localhost' is the userid of your webserver MySQL account
- 'password' is the password required to log in as the MySQL user

If successful, MySQL will reply with

Query OK, 0 rows affected

To activate the new permissions you must enter the command

flush privileges;

and then enter '\q' to exit MySQL.

Alternatively, you can use your web control panel, or phpMyAdmin, to create a database for Mambo.

2.4.3. Web Installer

Direct your web browser to <http://www.mysite.com> where the Mambo web-based installer will guide you through the rest of the installation.

2.4.4. Configure Mambo

Launch your browser and point it to your Mambo site

<http://www.mysite.com> -> Main Site

<http://www.mysite.com/administrator> -> Admin

Log into Admin using the username 'admin' along with the password that was generated or which you chose during the web-based installation.

2.4.5. Mambo Administration

Upon new installation, your Mambo website defaults to a very basic configuration, with only a few active Components, Modules and Templates (CMTs).

Use Admin to install and configure additional CMTs, add users, and select your default language, etc.

Note: Additional community-contributed CMTs and languages are available at <http://mamboxchange.com/>.

2.4.6. Upgrading

This is the recommended upgrade procedure for your existing 4.5 (1.0.9) site:

- Backup your database. Use the built-in database backup facility or phpMyAdmin.
- Backup your website files.
- Do not proceed any further till you have completed steps 1 and 2.
- Download the Mambo 4.5.1 distribution, and unpack it into a new directory under your web server root.
- Apply the upgrade script from the /installation/sql directory. If this takes place successfully, delete the /installation directory.
- Rename the configuration-dist.php to configuration.php. Copy the database connector values from your existing site's configuration.php file. The minimum values you will need to copy over are:

\$mosConfig_host
\$mosConfig_user
\$mosConfig_password
\$mosConfig_d
\$mosConfig_dbprefix

Set \$mosConfig_absolute_path and \$mosConfig_live_site accordingly for the 4.5.1 test files and site.

- Open the new 4.5.1 site in your web browser and see if it works. You may experience errors because of missing modules; don't worry about them at this stage.
- Copy any third party modules, mambots, components and administrator components to the new site:

components/com_XXXX
administrator/components/com_XXXX
modules/mod_XXXX
templates/XXXX
mambots/mosXXXX (but not moscode.*, mosimage.* or mospaging.*)
*** Where XXXX is the name of the component, module, template or mambot.**

Do not overwrite the Components, Modules, Templates or Mambots provided with 4.5.1.

- Try your site again. If it works smoothly, proceed to step 10.
- Login into administration and edit the global configuration values suitable for your site.
- If it works smoothly, move the 4.5.1 directory over to your main site. Do not forget to change \$mosConfig_absolute_path and \$mosConfig_live_site.

2.5. Modules in Mambo

Modules are plug-ins for Mambo; they extend its core functionality. The titles for each module are the default titles set at the time of Mambo's release. These titles may be renamed or translated to suit your needs.

Name	Description
Archive	Shows a linked list of the calendar months which contain archived items
Latest News	Shows a list of the most recently published items that are still current
Login Form	Displays a Username and Password login form
Main Menu	Displays the Main Menu (default name)
Popular	Shows a list of the currently published items that have been viewed the most - determined by the number of times the page has been viewed.
Newsflash	Randomly selects one of the published items from a category each time a page is refreshed.
Who's Online	Displays the number of anonymous users (guests) and registered users
Polls	The Polls module compliments the Polls component. It is used to display the configured polls
Random Image	Displays a randomly selected image from a designated folder/directory
Related Items	Displays other content items that are related to the item currently displayed
Syndicate	Displays a syndication link for the content listed on the Frontpage Manager
Sections	Shows a list of all sections configured in your database
Statistics	Shows information about your server installation and statistics about the website, members, number of content in your database, and the number of web links that you provide
User	The User module is a custom module created when clicking the 'New' icon in the Module Manager
Template Chooser	Allows the user (visitor) to change the template on the fly from the front-end via a drop-down selection list
Wrapper	The Wrapper Module wraps an external Web page into your site. The external Web page is inserted as an 'inline frame' (also known as an I-frame) into your template

2.6. What is MamboXchange?

MamboXchange.com has been established as a free development and distribution environment for the Mambo community to host components, templates, plug-ins, modules and anything related to Mambo.

The objective of MamboXchange is to provide users and developers with a free project management and download environment for Mambo-related projects. Whether you have developed a component, written a module, forged a mosbot or designed a template, you can share it with like-minded enthusiasts worldwide by placing it on MamboXchange.

MamboXchange will allow you to efficiently run and manage your own projects by providing access to CVS, forums, bug trackers, documentation manager, task lists, surveys, documentation, news and a file release system. Simply register at the site, create a project and start uploading your files today.

2.7. Support and professional services

There are many ways to get support for your Mambo-based project or site:

- Browse the online documentation at <http://help.mamboserver.com/>
- Search the forum discussions at <http://forum.mamboserver.com/>, and post questions
- Keep up with the latest developments by visiting <http://news.mamboserver.com/>

For new releases visit <http://mamboxchange.com/>

3. Xoops: An Overview

XOOPS is an acronym for “eXtensible Object Oriented Portal System”. It is an easy-to-use dynamic web Content Management System (CMS) written in PHP. XOOPS is an ideal tool for developing small to large dynamic community websites, intra-company portals, corporate portals, weblogs and much more.

XOOPS is released under the terms of the GNU General Public License (GPL) and is free to use and modify. It can be freely redistributed as long as the user abides by the distribution terms of the GPL.

3.1. Is Xoops right for you?

Xoops is a highly configurable, modular content management system. Before you can answer if Xoops is the right CMS for you, consider a couple of questions:

How do you determine which CMS is best for you?

A number of websites can help you answer this question:

- CMS Matrix (www.cmsmatrix.org) contains side-by-side comparisons of many of the most popular and lesser-known systems
- Open Source CMS (www.opensourcecms.com) showcases running demos and a large number of systems
- But is trying out the demos and getting a "nice feeling" about a system enough?
- The answer is probably 'no'. You will need to ask a number of other questions to ensure that when you invest your time and resources in committing to a system, you receive a profitable return:
- Does an active developer community exist for this CMS (to provide custom add-ons, templates, etc.)?
- Does a user community exist for this CMS (to provide help, support and the momentum required for continued development)?

3.2. System Requirements

Linux or one of the BSDs is recommended. Generally, the computer must be capable of running the following software:

- Apache: <http://www.apache.org>
- MySQL: <http://www.mysql.com>
- PHP (Version 4.1.0 or higher): <http://www.php.net>

Several bundled distributions of Apache/MySQL/PHP are currently available at sourceforge.net

3.3. SERVER CONFIGURATION

Ensure that PHP has been compiled with support for MySQL in order to successfully run Xoops.

3.4. Installing and Configuring

The installation information is placed in the file INSTALL.html. Major steps include:

3.4.1. Download Xoops

Get the latest Xoops release from it official website at <http://www.xoops.org/modules/core/>
Copy the tar.gz file into a working directory:

```
$ cp xoopsVx.x.x-.tar.gz /tmp/Xoops
```

Change to the working directory:

```
$ cd /tmp/Xoops
```

Extract the files:

```
$ tar -zxvf xoopsVx.x.x.tar.gz
```

This will extract all Xoops files and directories. Move the contents of that directory into a directory within your web server's document root or your public HTML directory:

```
$ mv /tmp/Xoops/* /var/www/html
```

Alternatively, if you downloaded the file to your computer and unpacked it locally, use an FTP program to upload all files to your server. Make sure all PHP, HTML, CSS and JS files are sent in ASCII mode and image files (GIF, JPG, PNG) in BINARY mode.

3.4.2. Create the Xoops Database

Xoops currently works only with MySQL. In the following examples, "db_user" is an example MySQL user which has the CREATE and GRANT privileges. You will need to use an appropriate user name for your system.

Create a new database for your Xoops site:

```
$ mysqladmin -u db_user -p create Xoops
```

MySQL will prompt for the 'db_user' database password and then create the initial database files. Login and set the access database rights:

```
$ mysql -u db_user -p
```

You will again be asked for the 'db_user' database password. At the MySQL prompt, enter the following command:

```
GRANT ALL PRIVILEGES ON Xoops.*  
TO nobody@localhost IDENTIFIED BY 'password';
```

where:

- 'Xoops' is the name of your database
- 'nobody@localhost' is the userid of your webserver MySQL account
- 'password' is the password required to log in as the MySQL user

If successful, MySQL will reply with

```
Query OK, 0 rows affected
```

In order to activate the new permissions, you must enter the command

```
flush privileges;  
and then enter 'q' to exit MySQL.
```

You can also use your web control panel or phpMyAdmin to create a database for Xoops.

3.4.3. Web Installer

Point your web browser to <http://www.mysite.com/install/>. The Xoops web-based installer will guide you through the rest of the installation.

3.4.4. Configure Xoops

You can now launch your browser and point it to your Xoops site, e.g.:

```
http://www.mysite.com -> Main Site
```

You can log into Admin using the username 'admin' along with the password that was generated, or the one which you chose during the web-based installation.

3.4.5. Xoops Administration

After a new installation, your Xoops website defaults to a very basic configuration. Use Admin to install and configure different modules, set preferences, and much more.

3.4.6. Upgrading

- Backup your database. Use the built-in database backup facility or phpMyAdmin.
- Backup your website files.
- Do not proceed any further until you have completed the backups.
- Download the Xoops update release and unpack it into a new directory under your web server root.
- Apply the upgrade script from the /install directory. If this process concludes successfully, delete the /install directory.
- Open the new site in your web browser and see if it works. At this stage, don't worry if you experience errors because of missing modules.
- Login into administration and edit the preferences to suit your site.

3.5. Modules in XOOPS

Modules are plug-ins for Xoops that extend its core functionality.

Name	Description
Banners	Displays a list of banners
Blocks	Used to manage blocks and their appearance
Groups	Shows a list of groups
Images	Manage images lying in different categories for groups
Modules	Shows a list of modules
Preferences	Used to edit website preferences
Smilies	Displays a list of smilies
User Ranks	Manage user ranks and settings
Edit user	Add and edit users in different groups
Find Users	Find a user by username, email, etc.
Mail Users	Send an email to a user
Avatar	Used to manage users' graphical images
Templates	Allows the admin to change the template of the website

3.6. Support and professional services

There are many ways to obtain support for your Xoops-based project or website:

- Browse the online documentation at <http://www.xoops.org>.
- Search the forum discussions at <http://www.xoops.org/modules/newbb/> and post your questions.
- Keep up with the latest developments by visiting <http://xoops.org/modules/news/>

Customer Relationship Management

1. About SugarCRM

SugarCRM is the world's leading provider of commercial open source Customer Relationship Management (CRM) software for companies of all sizes. SugarCRM develops solutions by actively engaging the CRM community, consisting of users, customers, developers and experts, and incorporates their needs, opinions and experiences into the solution. SugarCRM's Sugar Suite easily adapts to any business environment by offering a more flexible, cost-effective alternative to proprietary applications. The Sugar Suite's open source architecture allows companies to more easily customize and integrate customer-facing business processes in order to build and maintain more profitable relationships.

1.1. System Requirements

The SugarCRM application suite runs easily in single-user mode on either a Macintosh or a PC with as little as 256 MB of memory. On more current server technology, such as a dual Xeon Hyper-Threaded 3.0 GHz processor with 3GB of memory, the SugarCRM application suite is able to serve hundreds of concurrent users on a single machine. The application, however, performs best on a dedicated Linux server. The recommended application requirements include:

Operating System:	Linux, Windows 2000/XP, UNIX, BSD, or Mac OS X
Web Server:	Apache, IIS, and other web servers that supports PHP
Database:	MySQL version 4.0.x or 4.1.x (best 4.0.23)
Language:	PHP versions 4.2.X or 4.3.X (best 4.3.10) or 5.X

Use any web browser to view the Sugar Suite user interface.

1.2. Installing and Configuring Sugar Suite

In order to install Sugar Suite 4.0:

1.2.1. Download the Sugar Files

Download the latest Sugar Suite files from <http://www.sugarforge.org/content/downloads/>. Click on the "Full Installation Packages - SugarCRM 4.0 Stable" link.

1.2.2. Copy Sugar Files to Web Server

Unzip the Sugar files and set permissions.

1. Locate your webroot directory on your web server. This is the directory on your web server where publicly accessible files are made available by your web server. The most common locations for webroot include:
 - /var/www/html/ (Linux/Apache)
 - C:\inetpub\wwwroot\ (Windows/IIS)
 - C:\Program Files\Apache Group\Apache\htdocs\ (Windows/Apache)
 - /Library/Web server/Documents/ (MacOS X/Apache)
2. Unzip the Sugar Suite zip file into your webroot. A directory is automatically created within webroot.
3. Renaming this directory is optional.
4. Set permissions on your Sugar files. The following directories, all sub-directories, and files must be made writable by your web server user:
 - cache**
 - custom**
 - data**
 - modules**
 - config.php**

The system user that your web server uses to access files in your webroot varies, depending on your operating system's configuration. Common web server users include:

- Apache (Linux/Apache)
- Nobody (Linux/Apache)
- IUSR_computerName (Windows/IIS)

If you are unsure about your web server user, consult with your system administrator.

1.2.3. Install Sugar with the Sugar Installation Wizard

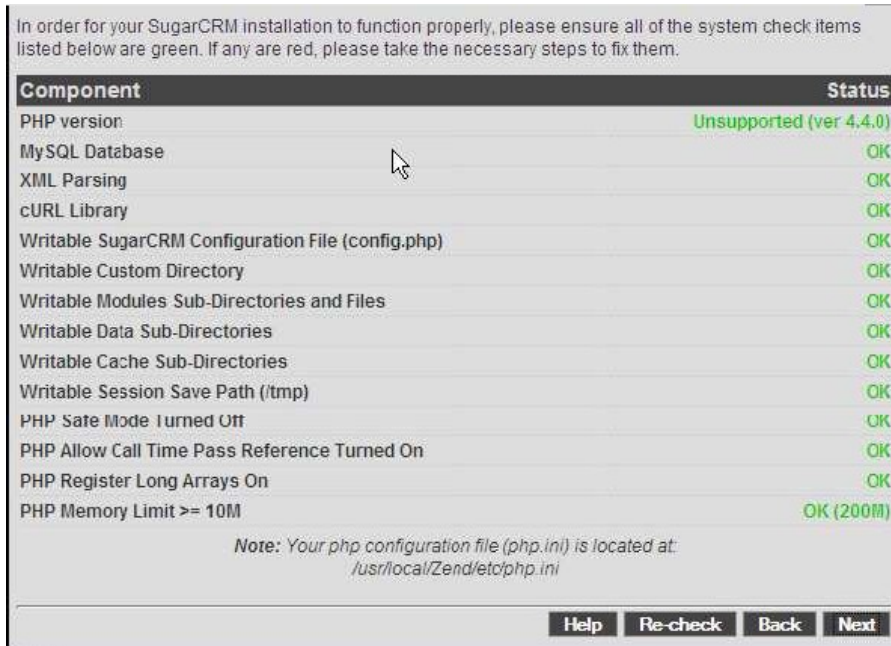
Once you've copied the Sugar files into your webroot, you can begin to use the Sugar Installation Wizard. The `http://<yourServer >/ <yourSugarDirectory > /` directory on your server now corresponds to the Sugar URL that you will use to access the Installation Wizard. You should now be redirected to the Installation Wizard. Click "Start" to begin.

Note: You can modify any of your settings at any time prior to accepting the Confirm Setting menu. To modify any settings, click the Back button.

1. License Acceptance: Review the Sugar Public License and check "I Accept" to continue. Click Next when you are finished.
2. System Check Acceptance: Sugar checks a number of dependencies and system requirements. If all these checks pass successfully, you will be allowed to click Next.
3. Database Configuration: Sugar configures its database information. You may also choose to populate demo data in this step.
4. Site Configuration: Set your Sugar URL, admin password, and other miscellaneous options.
5. Confirm Settings: Review the settings you provided to the Installation Wizard. To change any settings, click the Back button to visit previous steps. Note that you will not be able to modify any of your settings after this point. Click Next to perform the setup.
6. Installation Log: Sugar attempts to install itself with the settings you have provided. The following occurs:
 - a. The configuration file `config.php` is created. If the file can't be created due to a file permissions issue, then the `config.php` file contents are printed on the screen. Cut and paste these values directly into your `config.php` file.
 - b. The primary database tables are created.
 - c. The relationship tables are added and the demo data (if applicable) is installed.
7. After you install, the system prevents inadvertent re-installation. To re-install, change the `installer_locked` setting in the `config.php` file. Click Next to continue.
8. Registration: Registration is optional. After clicking Send Registration, you should be redirected to the log in screen. If you choose not to register, click Finish to proceed to the log in screen.

System Check Acceptance

Dependencies and system requirements checks are conducted by Sugar as part of the installation process. If all of these checks pass successfully, you will be allowed to click Next and proceed to the next step.



Note: Your database must be configured to work with PHP.

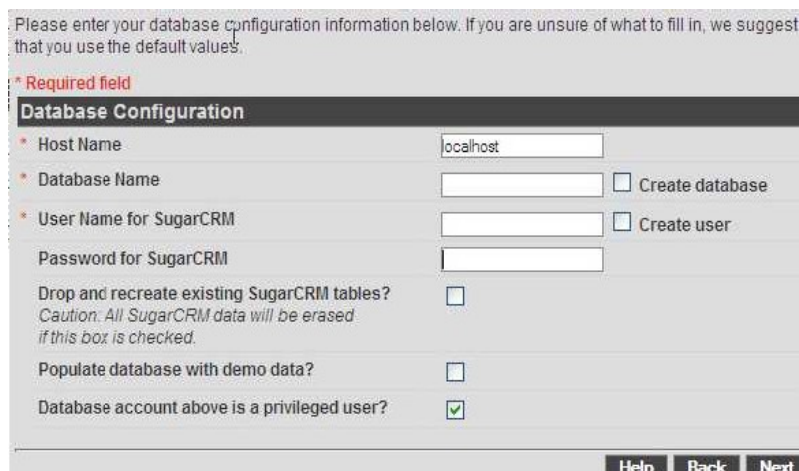
- The cURL Library must be included in your PHP installation.
- The session_save_path setting is defined in your php.ini file.
- The memory_limit setting value (php.ini file) does not apply to Windows.

The following dependencies and system requirement checks are carried out by Sugar:

These components represent the items that are required for installation. If any components are not set correctly or available, cancel out of the installation and correct the dependency.

1.2.4. Database Configuration

The Database Configuration menu allows you to specify your database information, including the option to populate the database with demo data.



The host name is typically set to localhost if your database server is running on the same machine as your web server. If you do not have a database name or user name, Sugar allows you to create them at this time. Ensure that the user has administrative privileges.

1.2.5. Site Configuration

The Site Configuration menu allows you to set options specific to the Sugar installation, such as enabling Sugar updates, and setting up advanced site security. The URL setting is your Sugar URL. Normally the default value is used. In order to customize your session directory, log directory, and application Id, uncheck the advanced site security box. A supplemental menu appears below the check box for the advanced site security settings.

Please enter your site configuration information below. If you are unsure of the fields, we suggest that you use the default values:

* Required field

Site Configuration

* URL

* SugarCRM admin password
Caution: This will override the admin password of any previous installation.

* Re-type SugarCRM admin password

Sugar Updates Config

Enable Sugar updates?
When this is enabled your system will periodically send SugarCRM Inc. anonymous statistics about your installation that will help us understand usage patterns and improve the product. In return for this information, administrators will receive update notices when new versions or updates are available.

Advanced Site Security

Use defaults?

Help **Back** **Next**

1.2.6. Log into Sugar

You may log into Sugar with the username admin and the password that you provided to the Installation Wizard (see SugarCRM Admin Password). After successfully logging in, you can configure users and perform other administrative tasks.

1.3. Upgrading Sugar Suite

It is recommended that you run the upgrade process on a copy of your production system. You must be on Sugar Suite version 4.0.1 before upgrading to 4.0.1a.

1.3.1. Important Upgrade Information

Please read these important notes prior to starting your upgrade.

- Note: If your system prevents your web server from writing to the system temp directory (e.g., "C:\windows\temp" on Windows or /var/tmp on Linux), upgrading to 4.0.1a may result in a file permissions error. Please visit the Sugar Forums at <http://www.sugarcrm.com/forums/showthread.php?p=28613#post28613> to obtain a patch that allows the 4.0.1a upgrade to proceed without error. This patch consists of two PHP files that must be applied before performing the 4.0.1a upgrade. More information about the patch is contained in the above-mentioned forum's post.
- The Upgrade Wizard is the only supported method for upgrading to Sugar Suite 4.0.1a. The Upgrade Wizard includes critical upgrade logic as well as the SQL commands needed to upgrade to Sugar Suite 4.0.1a.

- Attempting to manually upgrade by simply replacing files and running the upgrade SQL will not work and is not supported. You must use the Upgrade Wizard.
- Backup your system first. It is imperative that you perform a backup of your current Sugar directory and your database before beginning the upgrade process.

1.4. Support and professional services

There are many ways to get support for your SugarCRM-based project or site.

- Download the SugarCRM demo from its official website at <http://www.sugarcrm.com/crm/demo/sugar-suite.html>
- Search the forum discussions at <http://www.sugarcrm.com/forums/>, and post your own questions
- Buy the product at <http://www.sugarcrm.com/sugarshop/home.php>

Enterprise Resource Planning

1. Compiere: Overview

Compiere is open source Enterprise Resource Planning (ERP) software. ERP applications typically consist of modules such as marketing and sales, field service, production, inventory control, procurement, distribution, human resources, finance and accounting.

Compiere is not designed for large enterprise software, but it is good for small businesses, and is easy to install.

Oracle's database, 10g, and Java must already be installed before Compiere can be installed on the server.

1.1. Installing and Running Compiere

Compiere's installation and running includes the following steps:

- Installing the Database
- Installing JDK
- Downloading and extracting Compiere
- Server setup/Install (setup properties to run server)
- Setup the Database (Import and setup Oracle database for Compiere)
- Start Server
- Setup client
- Start client (username and passwords)

1.1.1 Installing Oracle 10g (Installing the Database)

This Oracle 10g database is available free for downloading from its official website. It is free for evaluation, not distribution:

<http://www.oracle.com/technology/software/products/database/oracle10g/index.html>

Oracle has also released a new small footprint of the Oracle 10g database. Entitled the Oracle Database 10g Express Edition, it is free for development, deployment and distribution under the Oracle license. The Express Edition is primarily used for the development of single user applications on Java, .NET or PHP. It can also help entry-level database administrators when they start working on an Oracle database:

<http://www.oracle.com/technology/products/database/xe/index.html>

For the purposes of this manual, the Oracle Database 10g Express Edition has been used to install Compiere. You can download it for both Windows and Linux platforms.

The installation file looks like this:

```
$ oracle-xe-10.2.0.1-0.1.i386.rpm
```

Download and install the Oracle Database 10g Express Edition.

```
$ rpm -i oracle-xe-10.2.0.1-0.1.i386.rpm
```

After installation, configure the Oracle database with the following command:

```
$ /etc/init.d/oracle-xe configure
```

Add the following line into the `/etc/profile` file, so that each time you logon, the Oracle settings run automatically.

```
$ gedit /etc/profile
```

opens the profile file. Add the following line in the end:

```
./usr/lib/oracle/x64/app/oracle/product/10.2.0/server/bin/oracle_env.sh
```

Save and exit, Type

```
$ source /etc/profile
```

This command will load the profile settings.

1.1.2. Installing Java JDK

Download and install the Sun Java JDK for Compiere installation, available at <http://java.sun.com/>. If you have installed any other JDKs, please uninstall them before installing Compiere. You can check this by typing:

```
$ rpm -qa | grep java
```

For JDK, installation starts with the following command:

```
./jdk-1_5_0_06-linux-i586.bin
```

Edit the profile and then add path settings into it:

```
$ gedit /etc/profile
```

Add the following lines:

```
-----  
PATH=/opt/jdk1.5.0_06/bin:/usr/lib/oracle/x64/app/oracle/product/10.2.0/server/bin:$PATH  
CLASSPATH=.:$CLASSPATH  
  
JAVA_HOME=/opt/jdk1.5.0_06:$JAVA_HOME  
-----
```

1.1.3. Downloading and extracting Compiere

Compiere_253a.tar.gz has been downloaded for the purposes of this manual:

<http://www.compiere.org/download/index.html>

After downloading, un-extract Compiere to your preferred location.

Enter the /opt/ directory

```
$ cd /opt/
```

and type following command:

```
$ tar xvfz Compiere_253a.tar.gz
```

The Compiere directory is now available on /opt/Compiere2

1.1.4. Server setup/Install (setup properties to run server)

Before running the Compiere server, configure the properties that will be used in running it. These properties are setup by a built-in server setup tool.

Enter the Compiere installation directory and run the following command:

```
$ cd Compiere2
```

```
$ ./RUN_setup.sh
```

If you get an access permissions error, use the following command to give read and write permissions to the setup Oct 23, 2005 1:08:53 PM PKT Process_Requisition:

```
Oct 23, 2005 1:08:53 PM PKT Process_Requisition: 101 - GardenUser: Total Lines=23.75 (#1)
```

```
Oct 23, 2005 1:08:54 PM PKT Process_Requisition: 101 - GardenUser: Total Lines=23.75 (#1)
```

```
Oct 23, 2005 1:08:54 PM PKT Open Requisitions:
```

```
Oct 23, 2005 1:08:58 PM PKT Verify completed Refile
```

```
$ chmod 777 RUN_setup.sh
```

and run the Compiere setup file again

```
$ ./RUN_setup.sh
```

Setup and run the dialog for setting the Compiere setup properties.

Enter all the values and then run the test. If it is successful? save the properties and exit.

Some specific properties to set:

KeyStore password: Enter your chosen password in the Compiere setup.

Application Server: Enter an IP address or domain name to which the JBoss server should run

Database Server: Enter an IP address or domain name to where the Oracle server is running

Database Name: The instance of the Oracle database that is running on the server

System Password: The password of the system

Database User: The database user (system if you are using Oracle Express Edition)

Database Password: The password of the database while you are installing it

Mail Server: The email server that you are using (you must provide an email server or setup if you don't have it already)

Admin Email: The email address of the admin user

Main user: The username of the email user

Mail Password: The password of the email user

After setting all the properties, test them. If each property test is successful, save it. All the properties will be saved in a properties file that will be used while running the Compiere server.

The server's installation will now start automatically in a background window. You will be prompted after the setup has been completed successfully.

Compile the Compiere server according to the settings that you have provided to it.

1.1.5. Setup the Database

Enter the COMPIERE_HOME/Utils directory and run the following script:

```
$. /RUN_ImportCompiere.sh
```

This script will import the database.

Run the following command into the Utils directory:

```
$. /RUN_Env.sh
```

1.1.6. Start Server

Start the **Compiere** server. Enter COMPIERE_HOME/Utils and run the following command:

```
$. /RUN_Server2.sh
```

Start the server, and open another shell window to setup and run the client.

1.1.7. Setup client

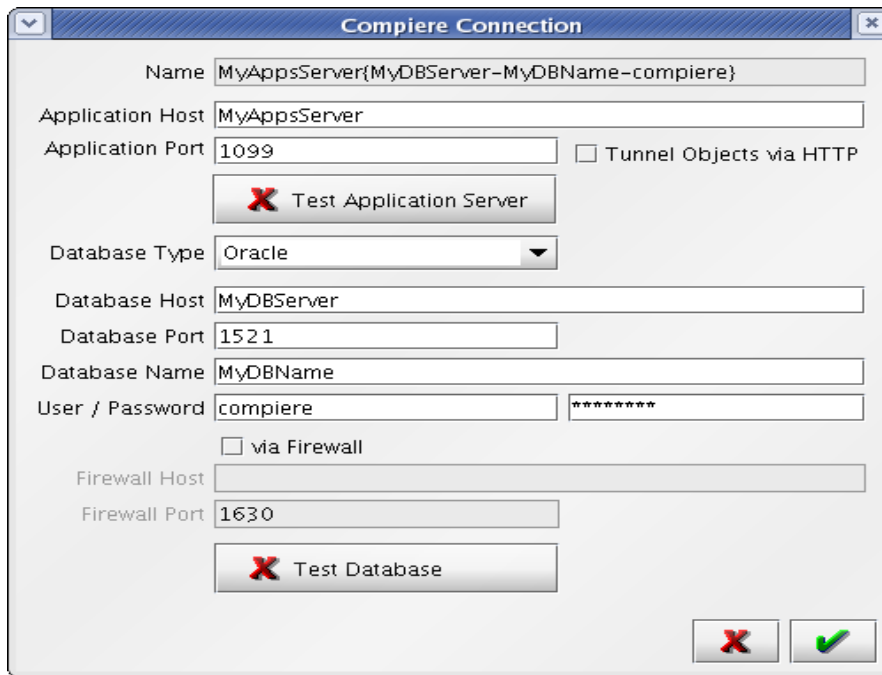
Enter COMPIERE_HOME/ and run the following command to setup the Compiere client:

```
$. /RUN_Compiere2.sh
```

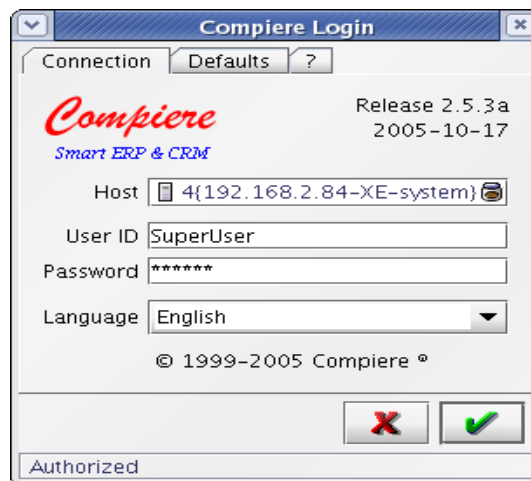
This will open a license dialog. Accept the license and proceed further.

The next screen will be the Compiere client properties setup screen.

Enter the properties which you entered into the server setup if you are on same machine. If not, enter the appropriate setup properties into the setup client.

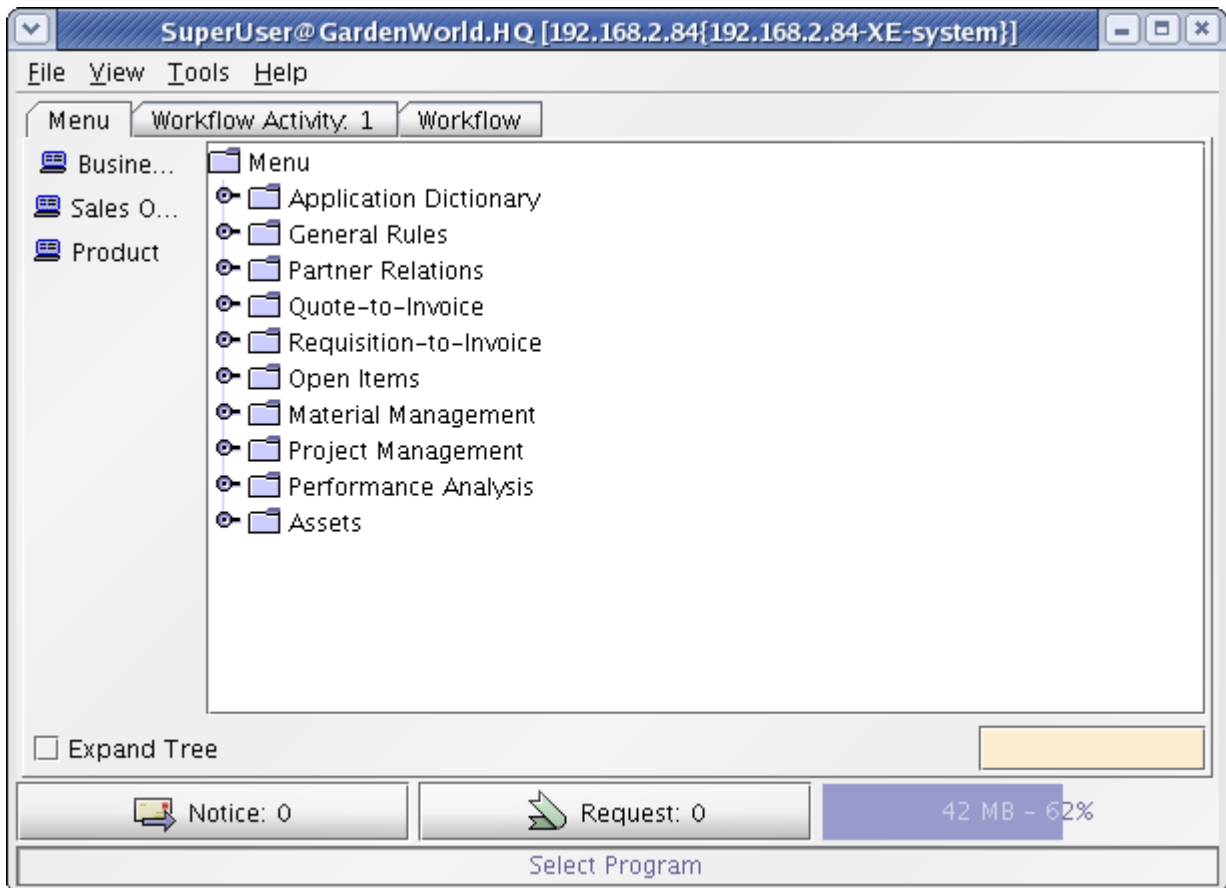


After setting the Compiere client properties, login into the Compiere client login dialog



1.1.8. Start client

After logging in, the Compiere client screen appears.



1.2. Compiere Users List

The Compiere application provides for the following application users:

User Name	Password	Role	Description
System	System	System Administrator	The system administrator (cannot access application data)
SuperUser	System	- all -	The SuperUser has all roles and an access to system administration and application data
GardenAdmin	GardenAdmin	GardenWorld Admin	Example client administrator
GardenUser	GardenUser	GardenWorld User	Example user

Compiere's usernames and passwords are case sensitive.

1.3. References

- Compiere: <http://www.compiere.org/> or <http://www.compiere.com/>

2. Sequoia ERP: Overview

Sequoia ERP is Java-based open source. Its many features offer greater development flexibility to its users. It includes Model View Controller (MVC) architecture for development to enable less programming and coding effort.

Sequoia ERP is pre-configured with the HSQL database, and it has pre-configured application server containers. Sequoia ERP's architecture is based on The Open for Business Project. For more details, please visit <http://www.ofbiz.org/>.

2.1. Framework



2.2. Downloading Sequoia ERP

Sequoia ERP is available at

http://sequoiaerp.org/index.php?option=com_content&task=blogcategory&id=28&Itemid=56

Select Sequoia ERP Version 0.8 for all platforms:

[sequoiaerp-0.8.3-all-platforms.zip](#)

2.3. Installing Sequoia ERP

Unzip Sequoia ERP in your chosen folder.

2.3.1. JDK Requirements

You require JDK 1.4.2 for Sequoia ERP. It can be downloaded from <http://java.sun.com/>.

Note: You must use the JDK by Sun Microsystems. Use Java 1.4.2, not 1.3 or 1.5. Check the JDK version by typing the following command:

```
$ java -version
```

The results should be:

2.3.2. Installation

Install Apache Ant 1.6 or later for Sequoia's recompilation. Recompilation is needed sometimes because pre-compiled files do not run on different build versions of JDK 1.4.2.

2.3.3. Starting Sequoia ERP on Linux

If you are using a UNIX/Linux system, make the start-up scripts executable:

```
$ cd sequoiaerp  
$ chmod u+x startofbiz.sh  
$ chmod u+x stopofbiz.sh
```

After installing JDK, set the JDK path in the profile file in /etc/profile or .bashrc file, as given below:

```
$ export JAVA_HOME=/usr/java/j2sdk1.4.2_10/
```

To start the Sequoia ERP server, type:

```
$ ./startofbiz.sh
```

The server is started as a background process, and the logs are piped to a file called "console.log" in the logs/ sub-directory. To see the logs, type:

```
$ tail -f logs/console.log
```

To stop the Sequoia ERP server, type:

```
$ ./stopofbiz.sh
```

To start the Point of Sales terminal, instead of using startofbiz.sh and stopofbiz.sh, use:

```
$ java -jar ofbiz.jar -pos
```

2.3.4. Starting Sequoia ERP on MS Windows

Extract Sequoia ERP in the directory, with no spaces in between:

```
C:\SequoiaERP
```

Sequoia ERP requires different ports when running on MS Windows. If you have installed any virus scanner, or enabled a firewall, disable them first in order to run Sequoia ERP.

Set the JAVA_HOME environment variable before running Sequoia ERP.

```
C:> set JAVA_HOME=c:\java_1.4.2
```

Open the command prompt window by typing cmd in the Run window. Start -> Run, type cmd and press the Enter key.

Enter the Sequoia ERP folder:

```
C:> cd c:\sequoiaerp
```

Run the batch file:

```
C:\sequoiaerp> startofbiz.bat
```

To start the Point of Sales terminal:

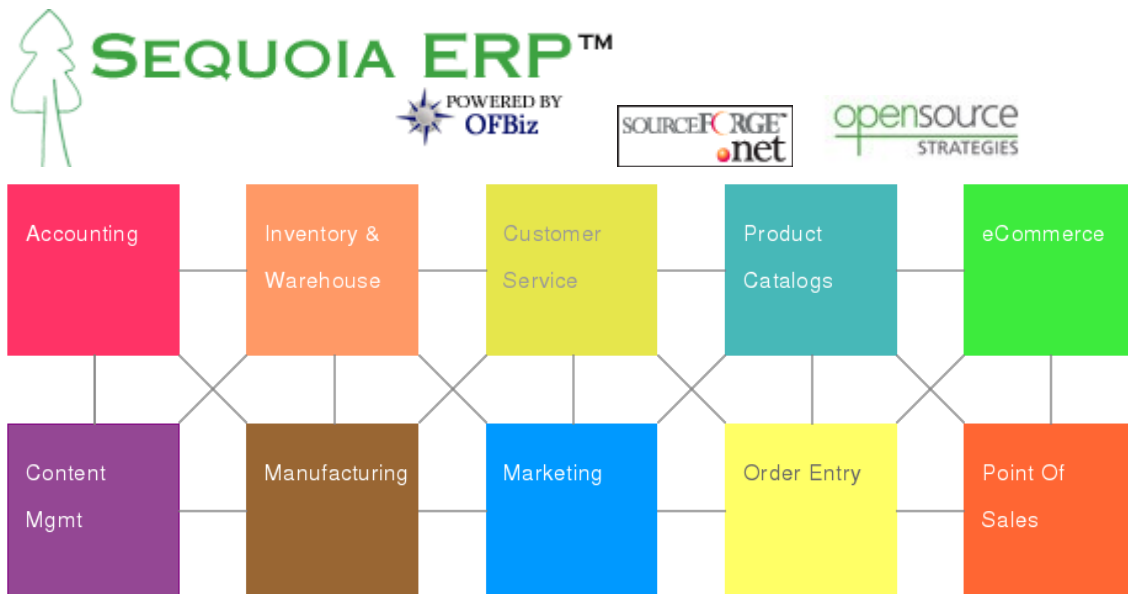
```
C:\sequoiaerp> java -jar ofbiz.jar -pos
```

2.3.5. Accessing the Server

In order to access the Sequoia ERP server, open any browser and type:

```
http://localhost:8080/
```

You should see the Sequoia ERP applications menu displayed in your browser, which shows you all the available applications:



Click on a box to access any application except Point of Sales.

The Point of Sales application must be started from the command line. For more details, visit http://www.sequoiaerp.org/index.php?option=com_content&task=blogcategory&id=24&Itemid=48

You can now click on the application you wish to access.

2.3.6. Signing In

For back-end web applications, such as catalog, order, manufacturing, and facility managers, use the username "admin" and the password "ofbiz".

For the eCommerce online store application, use the username "DemoCustomer" and the password "ofbiz".

For the Point of Sales application, use the username "1" and the password "1" for a manager, and the username "2" and the password "2" for a cashier.

2.3.7. MySQL Database for Sequoia ERP

Install MySQL first in order to install Sequoia ERP with MySQL. Please consult the process for installing MySQL in this manual. After installing MySQL, create a database for Sequoia ERP.

In order to create a MySQL database, access it with the following command:

```
$ mysql -u root -h 127.0.0.1 -p <root-password>
```

Create the database:

```
mysql> create database sequoia;  
mysql> create user sequoia;  
mysql> grant all privileges on sequoia.* to 'sequoia'@'localhost' identified by  
'sequoia-password' with grant option;
```

Quit the MySQL client, and try to access the Sequoia database with your Sequoia user:

```
$ mysql -h 127.0.0.1 -u sequoia -p <sequoia-password>  
mysql> use sequoia;
```

2.3.8. MySQL Datasource in Sequoia ERP

Download the [MySQL JDBC driver](#) which is compatible with your version of MySQL, and copy it into framework/entity/lib/jdbc.

Go to your Sequoia ERP and make the following changes to a file called framework/entity/config/entityengine.xml:

- Change the "datasource-name" attribute under the <delegator name="default"...> to "localmysql"
- Look for <datasource name="localmysql"...> further down
- Change the "jdbc-uri" under "localmysql" to "jdbc:mysql://127.0.0.1/sequoia?autoReconnect=true"
- Change the "jdbc-username" to "sequoia"
- Change the "jdbc-password" to the password you chose above

Stop Sequoia ERP. Reload the seed data into the new MySQL database by typing the following command from the Sequoia ERP directory:

```
$ java -jar ofbiz.jar -install
```

Sequoia ERP is now ready to use.

2.4. References

- Sequoia ERP: <http://www.sequoiaerp.org/>