

Amberdms Billing System Installation Guide

This document includes all the information required to install, upgrade and configure the Amberdms Billing System.

This information only applies to users running the Amberdms Billing System on their own servers - if you are a customer of the Amberdms Billing System Hosted Service, you do not need this document.

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1. Introduction

The Amberdms Billing System is a powerful, user friendly, open-source billing system designed for small and medium businesses fully open source under the AGPL software license.

The Amberdms Billing System includes the following features:

Accounting

- Provides full double-entry accounting.
- Simple UI makes it easy to create invoices and handle finances
- Ability to export information to CSV or PDF formats

Time Keeping

- Provides timesheet features to allow employees to keep track of hours spent on different projects.
- Easy interface allows you to generate invoices from the hours entered.
- The easy UI and full integration between timekeeping and invoicing features mean you'll never forget to bill customers for hours worked

Service Billing & Management

- Capable of performing regular service billing
- Supports usage-based billing, making the Amberdms Billing System ideal for ISPs or hosting providers.
- Sample code supplied to collect usage information from a variety of applications.

Developer Friendly

- Fully open source product, licensed under the GNU AGPL. This allows you to customise the product to suit your requirements - or take advantage of our commercial developer services and have Amberdms do all the development work for you.
- Easy 3rd party integration via a fully documented SOAP API.

Commercial Backing

- High-availability geo-redundant hosted services available from Amberdms, eliminating the need for you to run your own servers and worry about backups and upgrades.
- Commercial support packages available from Amberdms.
- Customisation services available at fixed-price quotes.

This document provides information on how to install the Amberdms Billing System onto your own servers. If you are looking for information on using or configuring the Amberdms Billing System, please read the User Guide documentation instead.

Note: The information in this document does not apply to users of Amberdm's Hosted Service – this document is only useful for users running their own Amberdms Billing System servers.

2. Application Requirements

Amberdms supports the Amberdms Billing System on any of the following platforms:

1. RHEL 4 & CentOS 4
2. RHEL 5 & CentOS 5

For information about installing the Amberdms Billing System on any of the supported platforms, skip down to “*Supported Platform Installation Instructions*”.

Note: For future product releases we plan support for the following platforms:

1. Ubuntu
2. Debian
3. Fedora

For installation on any other platforms, please read the following information detailing the application requirements.

2.1. Operating System

The Amberdms Billing System should run on any standard Linux distribution. Amberdms tests all our products with x86 and x86_64 servers, however the program should run flawlessly on any architecture capable of running PHP.

Note: The Amberdms Billing System has not been tested on any platforms other than Linux and may have unexpected behaviour on different operating systems such as Microsoft Windows or MacOS Server.

2.2. PHP Version Requirements

Amberdms recommend running this application with PHP versions 5.2.0 and higher. To better support our customers running on older platforms, you are able to run this product with older PHP releases, but some features will not be available.

Note: The Amberdms Billing System will not work with any version of PHP older than PHP 4.

2.2.1. PHP VERSION 4

Under PHP 4 all features except the following are supported:

1. User-specific timezones are not supported. All users are limited to using the default server timezone.
2. The SOAP API is not supported.

2.2.2. PHP VERSION 5.0.0 -> 5.2.0

Under PHP 5 up till 5.2.0, all the features except the following are supported:

1. User-specific timezones are not supported. All users are limited to using the default server timezone.

2.2.3. PHP VERSION 5.2.0+

Under PHP 5.2.0 and above, all feature of the Amberdms Billing System are fully supported.

2.3. Additional Requirements

The following other applications are required:

2.3.1. MYSQL SERVER

The Amberdms Billing System required MySQL server version 4 or above with MyISAM support enabled.

2.3.2. PDFLATEX (OPTIONAL)

In order to be able to generate PDF versions of invoices and reports, PDFLatex must be installed along with it's font packaged. It is possible to run the Amberdms Billing System without this program, but PDF generation will not work.

PDFLatex is typically distributed as part of TeTex.

2.3.3. PHP MODULES (OPTIONAL)

The following modules are required for PHP to allow generation of emails by the Amberdms Billing System:

1. PHP Mail Module
2. PHP Mail:Mime Module

Both of these modules can be downloaded by pear or they may be already included in your distributions repository.

3. Supported Platform Installation Instructions

The following platforms are supported by Amberdms and any customers of the Amberdms Billing System Subscription Service can get free unlimited technical support for any issues whilst installing on these platforms.

3.1. RHEL 4 / CentOS 4

3.1.1. LIMITATIONS

RHEL 4 ships with PHP version 4. This limits the feature set of the Amberdms Billing System and means that the following features are not enabled or supported:

1. User-specific timezones are not supported. All users are limited to using the default server timezone.
2. The SOAP API is not supported.

If you require these features, you will need to upgrade to RHEL 5 or backport a newer PHP version.

3.1.2. DEPENDENCIES

The following RPM packages need to be installed from the official distribution repository:

- httpd
- mod_ssl
- php
- php-mysql
- php-pear
- tetex-latex
- mysql-server
- perl (for installation utility only)
- perl-DBD-MySQL (for installation utility only)

The additional PHP modules are required to support emailing of invoices/quotes to customers. These packages are not distributed with RHEL 4 and will need to be downloaded additionally.

- php-pear-mail_mime

Amberdms provide a yum repository which can install all these packages for you when you install the Amberdms Billing System – see the installation section below.

3.1.3. APPLICATION INSTALLATION

The best method to install the Amberdms Billing System is to setup the Amberdms Yum Repository and install the *amberdms-bs* RPM package.

Install the yum repository with:

```
$ cd /etc/yum.repos.d/  
$ wget https://www.amberdms.com/repo/packages/rhel/4/billing\_system/amberdms\_billing\_system\_EL4.repo
```

Install the Amberdms Billing System with:

```
$ yum install amberdms-bs
```

By using the yum repository, you will automatically receive updates to our product and all dependencies will be automatically resolved.

If you would prefer not to use yum, you can manually download our RHEL 4 RPMs from:
https://www.amberdms.com/repo/packages/rhel/4/billing_system/

3.1.4. DATABASE INSTALLATION

Note: If you have only just installed the MySQL database, you should set a root password for security. To configure a root password, run the following commands:

```
$ /usr/bin/mysqladmin -u root password 'NEWPASSWORD' -p
$ /usr/bin/mysqladmin -u root -h $HOSTNAME password 'NEWPASSWORD'
```

Once the Amberdms Billing System has been installed, you will need to install a MySQL database and setup a user for the billing system to use.

Amberdms has developed a utility to make it quick and easy to install the database. Just run:
\$ cd /usr/share/amberdms/billing_system/help/resources/; ./autoinstall.pl

This script will install the database, create a user account in MySQL and write the configuration file for you.

3.1.5. ACCESS THE BILLING SYSTEM

The Amberdms Billing System is now installed – to begin using it, use your web browser to access:
https://example.com/billing_system

The default login account is:

Username: setup
Password: setup123

Once logged in, you can change your password using the options page.

For further information, including information on configuring program options, please read the Amberdms Billing System User Guide.

3.2. RHEL 5 / CentOS 5

3.2.1. LIMITATIONS

RHEL 5 ships with PHP 5.1.6. This limits the feature set of the Amberdms Billing System and means that the following features are not enabled or supported:

1. User-specific timezones are not supported. All users are limited to using the default server timezone.

Amberdms supplies a newer version of PHP which you can upgrade to if the timezone feature is important to you.

3.2.2. DEPENDENCIES

The following RPM packages need to be installed from the official distribution repository:

- httpd
- mod_ssl
- php
- php-mysql
- php-soap
- tetex-latex
- mysql-server
- perl (for installation utility only)
- perl-DBD-MySQL (for installation utility only)

The additional PHP modules are required to support emailing of invoices/quotes to customers. These packages are not distributed with RHEL 5 and will need to be downloaded additionally.

- php-pear-Mail-Mime

Amberdms provide a yum repository which can install all these packages for you when you install the Amberdms Billing System – see the installation section below.

3.2.3. APPLICATION INSTALLATION

The best method to install the Amberdms Billing System is to setup the Amberdms Yum Repository and install the *amberdms-bs* RPM package.

Install the yum repository with:

```
$ cd /etc/yum.repos.d/  
$ wget https://www.amberdms.com/repo/packages/rhel/5/billing\_system/amberdms\_billing\_system\_EL5.repo
```

Install the Amberdms Billing System with:

```
$ yum install amberdms-bs
```

By using the yum repository, you will automatically receive updates to our product and all dependencies will be automatically resolved.

If you would prefer not to use yum, you can manually download our RHEL 5 RPMs from:

https://www.amberdms.com/repo/packages/rhel/5/billing_system/

3.2.4. DATABASE INSTALLATION

Note: If you have only just installed the MySQL database, you should set a root password for security. To configure a root password, run the following commands:

```
$ /usr/bin/mysqladmin -u root password 'NEWPASSWORD' -p  
$ /usr/bin/mysqladmin -u root -h $HOSTNAME password 'NEWPASSWORD'
```

Once the Amberdms Billing System has been installed, you will need to install a MySQL database and setup a user for the billing system to use.

Amberdms has developed a utility to make it quick and easy to install the database. Just run:

```
$ cd /usr/share/amberdms/billing_system/help/resources/; ./autoinstall.pl
```


This script will install the database, create a user account in MySQL and write the configuration file for you.

3.2.5. ACCESS THE BILLING SYSTEM

The Amberdms Billing System is now installed – to begin using it, use your web browser to access:

https://example.com/billing_system

The default login account is:

Username: setup
Password: setup123

Once logged in, you can change your password using the options page.

For further information, including information on configuring program options, please read the Amberdms Billing System User Guide.

3.2.6. UPGRADING PHP

If you want to enable the user-specific timezone feature, you need to upgrade from PHP 5.1.6 to PHP 5.2.0. Amberdms provides RPMs for i386 and x86_64 platforms for your use.

To upgrade to Amberdms's supplied version of PHP edit the /etc/yum.repos.d/amberdms_billing_system_EL5.repo file and comment out the following line:

```
exclude=php*
```

Then update your PHP version with:

```
$ yum update
```

Note: Amberdms does not guarantee that upgrading to this newer PHP version will not cause any problems to any other PHP-based programs on your server. Check that your applications are compatible with the latest PHP release before upgrading.

4. Manual Installation

If you are installing the Amberdms Billing System on an unsupported platform, you have two options:

1. If the OS is RPM-based, you may be able to use the RHEL RPMs.
2. Manual Installation.

Note: Amberdms will not provide free technical support for users deploying the Amberdms Billing System on unsupported platforms.

4.1. Requirements

Make sure all the application requirements are satisfied, as per the “*Application Requirements*” section of this documentation.

4.2. Application Installation

The Amberdms Billing System can be run from wherever you unpack it to – eg: /var/www/html/.

You will need to do the following:

1. Configure Apache correctly.
2. Copy include/sample_config.php to include/config-settings.php and make required configuration changes.
3. Copy help/resources/amberdms-bs-cron to /etc/cron.d/amberdms-bs and adjust to the correct file paths.

4.3. Database Installation

The latest database schema can be found in help/resources/schmea/version_*_install.sql.

1. Import the most recent schema file into your MySQL database.
2. If desired, create a user to limit access by the Amberdms Billing System to just the billing_system database.
3. Configure MySQL settings in include/config-settings.php

4.4. Access the Billing System

The Amberdms Billing System is now installed – to begin using it, use your web browser to access:

https://example.com/billing_system

The default login account is:

Username: setup
Password: setup123

Once logged in, you can change your password using the options page.

For further information, including information on configuring program options, please read the Amberdms Billing System User Guide.

5. Upgrading

Upgrading to new releases of the Amberdms Billing System is very easy. You can upgrade from any version to any newer version and it is OK to skip releases when upgrading.

Before performing any upgrade, it is highly recommended that you:

1. **Backup your MySQL database.**
2. **Read through the release notes.**

5.1. Upgrading using RPM

If you have installed the Amberdms Billing System from RPM on a supported platform, the database will be upgrade when you upgrade the RPM itself.

5.1.1. MANUAL RPM UPGRADE

If you do not use the Amberdms yum repository, download the suitable RPM from:
<https://www.amberdms.com/repo/packages/>

And install with:

```
$ rpm -Uvh amberdms-bs
```

The MySQL database will be automatically upgraded when the RPM installs.

Once the SQL upgrade as been completed, you will be able to login to the billing system. If the upgrade is unsuccessful, users will be unable to login to prevent unexpected behaviour of the billing system.

5.1.2. UPGRADE USING YUM

If you have configured your server to use the Amberdms yum repositories, you can simply upgrade with:

```
$ yum update amberdms-bs
```

The MySQL database will be automatically upgraded when the RPM installs.

Once the SQL upgrade has been completed, you will be able to login to the billing system. If the upgrade is unsuccessful, users will be unable to login to prevent unexpected behaviour of the billing system.

5.2. Upgrading Manually

To upgrade manually, unpack the application files to the desired location and then run the schema_update utility to upgrade the MySQL database.

```
$ help/resources/schema_update.pl -s help/schema/ -c include/config-settings.php -v
```

The key options are:

- s Location of the help/schema/ directory.
- c Location of the configuration file.
- v Verbose – details the actions taken.

Once the SQL upgrade has been completed, you will be able to login to the billing system. If the upgrade is unsuccessful, users will be unable to login to prevent unexpected behaviour of the billing system.