

ABS Supported OS Installation Guide

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

For installing onto non supported operating systems, please refer to the manual installation guide.

Copyright 2013 Amberdms Ltd

This document is licensed under the GNU AGPL software license as per the Amberdms Billing System application.

Version 10 June 2013 for Amberdms Billing System 2.0.0

Table of Contents

1. Introduction.....	3
2. Important Notices.....	4
2.1. Avoid Shared Hosting.....	4
2.2. Phone Home Disclaimer.....	4
3. RHEL 5 / CentOS 5.....	5
3.1. Important Notices.....	5
3.1.1. PHP 5.1.6 Limitations.....	5
3.1.2. SELinux.....	5
3.2. Dependencies.....	5
3.3. Installation Instructions.....	6
3.3.1. Application Installation.....	6
3.3.2. Database Installation.....	6
3.3.3. Access the Billing System.....	6
3.4. Upgrade Instructions.....	7
4. RHEL 6 / CentOS 6.....	8
4.1. Important Notices.....	8
4.1.1. SELinux.....	8
4.2. Dependencies.....	8
4.3. Installation Instructions.....	8
4.3.1. Application Installation.....	8
4.3.2. Database Installation.....	9
4.3.3. Access the Billing System.....	9
4.4. Upgrade Instructions.....	9
5. Ubuntu 12.04 LTS.....	10
5.1. Important Notices.....	10
5.1.1. Support Life.....	10
5.1.2. AppArmor.....	10
5.1.3. SELinux.....	10
5.2. Dependencies.....	10
5.3. Installation Instructions.....	10
5.3.1. Application Installation.....	10
5.3.2. SSL Configuration.....	11
5.3.3. Database Installation.....	11
5.3.4. Access the Billing System.....	11
5.4. Upgrade Instructions.....	11
6. Debian Stable 7.0 (Wheezy).....	13
6.1. Important Notices.....	13
6.1.1. Support Life.....	13
6.2. Dependencies.....	13
6.3. Installation Instructions.....	13
6.3.1. Application Installation.....	13
6.3.2. SSL Configuration.....	13
6.3.3. Database Installation.....	14
6.3.4. Access the Billing System.....	14
6.4. Upgrade Instructions.....	14

1. Introduction

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

This guide details the steps to install the Amberdms Billing System onto your own servers when running an officially supported platform.

As of this document release, the following is the list of officially supported platforms:

1. RHEL versions 5, and 6
2. CentOS versions 5 and 6
3. Ubuntu 12.04 LTS (Precise)
4. Debian Stable 7.0 (Wheezy)

The following platforms are NOT supported, but should work with the packages for the similar supported systems:

1. Fedora (Try RHEL/CentOS instructions)
2. Debian Testing (Try stable packages)
3. Ubuntu non-LTS releases (Try most recent LTS package)

The following platforms were previously supported, but are no longer supported as of version 2.0.0:

1. RHEL 4 [not supported]
2. CentOS 4 [not supported]
3. Ubuntu 10.04 LTS [not supported]

If your platform is not listed above, please refer to our manual installation guide for information on how to install manually. ABS will work on most unix operating systems, but may require a bit of tweaking.

If you are looking for user documentation or developer information, check out the full list of manuals online at:

<https://projects.jethrocarr.com/p/oss-amberdms-bs/doc/>

2. Important Notices

2.1. Avoid Shared Hosting

The install instructions in this document are designed for users running their own servers or virtual machines and assumes root access to the system with privileges to install packages as desired as well as SELinux policies.

Amberdms does not recommend or support installing on “Shared Hosting” providers, these providers often have restricted PHP's features and prevent installation of components such as pdflatex or SELinux policies causing undesirable and broken application behaviour.

If you wish to avoid the cost of a virtual machine or dedicated server, consider signing up for Amberdms's hosted platform instead, this will provide a low cost and reliable, managed platform. For more details, please visit www.amberdms.com/billing or email sales@amberdms.com

2.2. Phone Home Disclaimer

Before installing, please be aware that the Amberdms Billing System includes a phone home feature, used to send back a few details to Amberdms so that we can better work out the needs and requirements of our user base.

This information is anonymous and is only used so that we can provide better services and make better development decisions to meet the needs of our user base.

We believe in openness and privacy, so below is a list of all the information that gets sent to Amberdms:

		Information Sent	What we use it for
		Amberdms Billing System version	To see how quickly users update and if older versions remain in use for significant time.
		OS and webserver version.	Allows us to decide what platforms to officially support and make packaging tools for easier deployment for our users.
1.		PHP version	By knowing the common versions of PHP used, we can make logical decisions on what versions to test with and how long to support older releases for.
2.		Subscription ID	Used to differentiate between our paid and open source customers.

In future, this feature will be extended to check for updates as well, to inform administrators when there is a new version of the software available (with security or bug fixes).

If you wish to disable the phone home feature, you can do so once installed, by logging in as an administrator, going to the control panel and then disabling the “PHONE_HOME” option (although it means a lot to us if you didn't).

If you have any concerns regarding this feature and Amberdms's commitment to privacy, please feel welcome to email support@amberdms.com with any questions.

3. RHEL 5 / CentOS 5

3.1. Important Notices

3.1.1. PHP 5.1.6 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.

By default Amberdms ships a newer version of PHP for CentOS 5 – if this new version is undesirable, you can simply disabled the amberdms-updates repo before installing the amberdms-bs package.

Warning: There is no guarantee that this newer PHP version is 100% compatible with other applications on your system using PHP. It is recommended you run the Amberdms Billing System in it's own dedicated virtual machine.

3.1.2. SELINUX

By default, RHEL 5 has SELinux enabled, this tends to interfere with PDF generation in ABS. To resolve this, the install RPM will automatically install policy modules to enable correct operation when SELinux is in enforcing mode.

3.2. 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 generation of PDFs and 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
- wkhtmltopdf

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.

3.3. Installation Instructions

3.3.1. 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 http://repos.jethrocarr.com/config/centos/5/amberdms-c5-public.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 wish to prevent automated upgrades, you can do so by editing */etc/yum.repos.d/amberdms-c5-public.repo* and changing *enabled=1*, to *enabled=0* to disable each repo.

3.3.2. 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.

3.3.3. 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 you login, please change your password immediately.

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

3.4. Upgrade Instructions

Upgrading to new releases is very easy, by upgrading the RPM, the application files and database will both be updated, simply by running:

```
$ yum upgrade amberdms-bs
```

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.

You should already have a backup procedure in-place on your server, however it is advised to create an additional backup before upgrading by logging into the Amberdms Billing System as an administrator and going Admin -> Database Backup.

4. RHEL 6 / CentOS 6

4.1. Important Notices

4.1.1. SELINUX

By default, RHEL 6 has SELinux enabled, this tends to interfere with PDF generation in ABS. To resolve this, the install RPM will automatically install policy modules to enable correct operation when SELinux is in enforcing mode.

4.2. 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 generation of PDFs and emailing of invoices/quotes to customers. These packages are not distributed with RHEL 6 and will need to be downloaded additionally.

- php-pear-Mail-Mime
- wkhtmltopdf

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.

4.3. Installation Instructions

4.3.1. 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 http://repos.jethrocarr.com/config/centos/6/amberdms-c6-public.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 wish to prevent automated upgrades, you can do so by editing `/etc/yum.repos.d/amberdms-c6-public.repo` and changing `enabled=1`, to `enabled=0`.

4.3.2. 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.

4.3.3. 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 you login, please change your password immediately.

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

4.4. Upgrade Instructions

Upgrading to new releases is very easy, by upgrading the RPM, the application files and database will both be updated, simply by running:

```
$ yum --enablerepo=amberdms-bs-el5 update amberdms-bs
```

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.

You should already have a backup procedure in-place on your server, however it is advised to create an additional backup before upgrading by logging into the Amberdms Billing System as an administrator and going Admin -> Database Backup.

5. Ubuntu 12.04 LTS

5.1. Important Notices

5.1.1. SUPPORT LIFE

Amberdms will maintain support for running the Amberdms Billing System on Ubuntu 12.04 LTS until the majority of our user base has moved onto a newer release.

5.1.2. APPARMOR

The Amberdms Billing System will work correctly on a standard Ubuntu AppArmor configuration.

5.1.3. SELINUX

At this stage we do not support running the Amberdms Billing System on Ubuntu virtual machines where SELinux is enabled due to issues with LaTeX PDF generation when running with these security features. SELinux is not enabled by default so this is unlikely to affect most users.

5.2. Dependencies

The following packages need to be installed from the Ubuntu repositories:

- mysql-server
- php5-mysql
- php5-curl
- php-soap
- php-mail
- php-mail-mime
- texlive-latex-recommended
- texlive-latex-base
- texlive-fonts-recommended
- wkhtmltopdf
- libdbd-mysql-perl (for installation utility only)

No third party packages need to be installed.

5.3. Installation Instructions

5.3.1. APPLICATION INSTALLATION

The best method to install the Amberdms Billing System is to setup the Amberdms Ubuntu APT repository onto your computer and install via apt-get. By using the APT repository you will automatically receive updates to our products and all dependencies will be automatically resolved including any additional dependencies not normally shipped with Ubuntu.

```
$ sudo wget -q http://repos.jethrocarr.com/repos.jethrocarr.com\_signingkey.gpg -O-  
| apt-key add -  
$ sudo wget http://repos.jethrocarr.com/config/ubuntu/precise\_jethrocarr.list -O  
/etc/apt/sources.list.d/jethrocarr.list
```

Install the Amberdms Billing System with:

```
$ apt-get update
$ apt-get install amberdms-bs
```

5.3.2. SSL CONFIGURATION

Once installed you will need to enable SSL for your webserver (if not done so already). You can do a default setup of a SSL virtual host if needed with the following commands:

```
$ a2enmod ssl
$ a2ensite default-ssl
$ service apache2 restart
```

You will want to adjust /etc/apache2/sites-enabled/default-ssl with your own SSL certificates if deploying into a production environment.

If SSL is not installed, common problems will be an inability to access the web application as ABS enforces the use of SSL.

5.3.3. DATABASE INSTALLATION

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.

5.3.4. 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.

5.4. Upgrade Instructions

Upgrading to new releases is very easy, by upgrading the application via apt-get, both the application files and database will be updated, simply by running:

```
$ apt-get update
$ apt-get upgrade
```

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.

You should already have a backup procedure in-place on your server, however it is advised to create an additional backup before

upgrading by logging into the Amberdms Billing System as an administrator and going *Admin -> Database Backup*.

6. Debian Stable 7.0 (Wheezy)

6.1. Important Notices

6.1.1. SUPPORT LIFE

Amberdms will maintain support for running the Amberdms Billing System on Debian Stable 7.0 (Wheezy) until the next Debian Stable release is made.

6.2. Dependencies

The following packages need to be installed from the Debian repositories:

- mysql-server
- php5-mysql
- php5-curl
- php-soap
- php-mail
- php-mail-mime
- texlive-latex-recommended
- texlive-latex-base
- texlive-fonts-recommended
- wkhtmltopdf
- libdbd-mysql-perl (for installation utility only)

No third party packages need to be installed.

6.3. Installation Instructions

6.3.1. APPLICATION INSTALLATION

The best method to install the Amberdms Billing System is to setup the Amberdms Ubuntu APT repository onto your computer and install via apt-get. By using the APT repository you will automatically receive updates to our products and all dependencies will be automatically resolved including any additional dependencies not normally shipped with Debian.

```
$ wget -q http://repos.jethrocarr.com/repos.jethrocarr.com_signingkey.gpg -O- |  
apt-key add -  
$ wget http://repos.jethrocarr.com/config/debian/wheezy_jethrocarr.list -O  
/etc/apt/sources.list.d/jethrocarr.list
```

Install the Amberdms Billing System with:

```
$ apt-get update  
$ apt-get install amberdms-bs
```

6.3.2. SSL CONFIGURATION

Once installed you will need to enable SSL for your webserver (if not done so already). You can do a default setup of a SSL virtual host if needed with the following commands:

```
$ a2enmod ssl  
$ a2ensite default-ssl
```

```
$ service apache2 restart
```

You will want to adjust `/etc/apache2/sites-enabled/default-ssl` with your own SSL certificates if deploying into a production environment.

If SSL is not installed, common problems will be an inability to access the web application as ABS enforces the use of SSL.

6.3.3. DATABASE INSTALLATION

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.

6.3.4. 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.

6.4. Upgrade Instructions

Upgrading to new releases is very easy, by upgrading the application via apt-get, both the application files and database will be updated, simply by running:

```
$ apt-get update  
$ apt-get upgrade
```

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.

You should already have a backup procedure in-place on your server, however it is advised to create an additional backup before upgrading by logging into the Amberdms Billing System as an administrator and going *Admin -> Database Backup*.