

# 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.

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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 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 4 and 5
2. CentOS versions 4 and 5
3. Fedora versions 11 and 12

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:

[http://www.amberdms.com/?cms=opensource\\_billing\\_download](http://www.amberdms.com/?cms=opensource_billing_download)

## 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](http://www.amberdms.com/billing) or email [sales@amberdms.com](mailto: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](mailto:support@amberdms.com) with any questions.

## 3. RHEL / CentOS 4 Installation

The following instructions detail the correct method of installing ABS onto RHEL 4 or CentOS 4 servers.

### 3.1. Important Notices

#### 3.1.1. PHP 4 LIMITATIONS

RHEL 4 ships with older versions of *PHP* and *TeX*. 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.
3. PDFs are limited to the latin9 charset and can not produce PDFs with the UTF8 charset.

If you require these features, Amberdms recommends upgrading to a newer release of RHEL 5 or backporting versions of PHP and TeX required.

#### 3.1.2. SELINUX

By default, RHEL 4 has SELinux enabled, unfortunately the default policies shipped by RedHat prevent the generation of RPMs using pdflatex from apache.

The version of SELinux with RHEL 4 is too old to support loadable policy modules, however instructions are provided if you wish to adjust your SELinux policy manually to support ABS.

### 3.2. 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, saving the hassles of download and solving dependencies – see the installation section below for details.

## 3.3. Installation Instructions

### 3.3.1. APPLICATION INSTALLATION

Amberdms has provided a yum repository to make installation and upgrading of the Amberdms Billing System as simple as possible.

To install the Amberdms Billing System, first 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
```

And then install the Amberdms Billing System by running:

```
$ 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_billing_system_EL4.repo` and adding “enabled=0” to the bottom of the file, to disable automatically upgrading using the repository.

### 3.3.2. SELINUX (OPTIONAL)

If you have SELinux in “enforcing” mode (check with “getenforce” command) you will need to adjust the policy in order to allow the Amberdms Billing System to generate PDFs from within Apache.

Unfortunately the version of SELinux shipped with RHEL 4 doesn't support loadable policy modules, however if you require SELinux support, you can make adjustments to the policies yourself by running the following commands:

```
yum install -y selinux-policy-targeted-sources  
  
cat > /etc/selinux/targeted/src/policy/domains/misc/amberdms_billing_system.te << "EOF"  
  
# Allow apache to access tetex fonts and binaries, this is required  
# to allow the Amberdms Billing System to run.  
  
allow httpd_sys_script_t tetex_data_t:dir { getattr read search write };  
allow httpd_sys_script_t tetex_data_t:file { getattr read };  
allow httpd_sys_script_t tmp_t:file getattr;  
allow httpd_sys_script_t var_lib_t:dir getattr;  
allow httpd_sys_script_t var_t:dir getattr;  
  
EOF  
  
cd /etc/selinux/targeted/src/policy  
make load
```

If you have any problems adjusting SELinux policies for ABS, contact [support@amberdms.com](mailto:support@amberdms.com) for assistance.

### 3.3.3. 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, creates a user account in MySQL and write the configuration file for you.

### **3.3.4. 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](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 --enablerepo=amberdms-bs-el4 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.

## 4. RHEL 5 / CentOS 5

### 4.1. Important Notices

#### 4.1.1. 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.

If this feature is important to you, Amberdms supplies a newer version of PHP for the RHEL 5 platform that you can optionally upgrade to if desired.

#### 4.1.2. 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.

### 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 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.

### 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 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 wish to prevent automated upgrades, you can do so by editing /etc/yum.repos.d/amberdms\_billing\_system\_EL5.repo and adding “enabled=0” to the bottom of the file, to disable automatically upgrading using the repository.

### 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](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.**

### 4.3.4. 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.x. 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.**

## 4.4. 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. Fedora 11

### 5.1. Important Notices

#### 5.1.1. SUPPORT LIFE

The Amberdms Billing System is fully featured on Fedora 11, the only issue to consider is the fact that Fedora has a short support life, typically 12 months in total – if you are deploying Fedora to a server, you will need to look at upgrading the OS yearly to stay current with security updates.

Amberdms's support for this operating system will cease when the upstream developers (Fedora Project) cease their support of it.

#### 5.1.2. SELINUX

By default, Fedora 11 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.

### 5.2. Dependencies

The following RPM packages need to be installed from the Fedora Everything repository (enabled by default):

- httpd
- mod\_ssl
- php
- php-mysql
- php-soap
- php-pear-Mail
- php-pear-Mail-Mime
- texlive-latex
- mysql-server
- perl (for installation utility only)
- perl-DBD-MySQL (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 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/fedora/11/billing\_system/amberdms\_billing\_system\_f11.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_billing_system_f11.repo` and adding “`enabled=0`” to the bottom of the file, to disable automatically upgrading using the repository.

### 5.3.2. 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.

### 5.3.3. 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](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 RPM, the application files and database will both be updated, simply by running:

```
$ yum --enablerepo=amberdms-bs-f11 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.

## 6. Fedora 12

### 6.1. Important Notices

#### 6.1.1. SUPPORT LIFE

The Amberdms Billing System is fully featured on Fedora 12, the only issue to consider is the fact that Fedora has a short support life, typically 12 months in total – if you are deploying Fedora to a server, you will need to look at upgrading the OS yearly to stay current with security updates.

Amberdms's support for this operating system will cease when the upstream developers (Fedora Project) cease their support of it.

#### 6.1.2. SELINUX

By default, Fedora 12 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.

### 6.2. Dependencies

The following RPM packages need to be installed from the Fedora Everything repository (enabled by default):

- httpd
- mod\_ssl
- php
- php-mysql
- php-soap
- php-pear-Mail
- php-pear-Mail-Mime
- texlive-latex
- mysql-server
- perl (for installation utility only)
- perl-DBD-MySQL (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 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/fedora/11/billing\_system/amberdms\_billing\_system\_f11.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_billing_system_f11.repo` and adding “`enabled=0`” to the bottom of the file, to disable automatically upgrading using the repository.

### 6.3.2. 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.

### 6.3.3. 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](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 RPM, the application files and database will both be updated, simply by running:

```
$ yum --enablerepo=amberdms-bs-f11 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.