

Steve Rubenstein's Recurring Billing Installation Manual

Version 1.1

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This document walks you through the process of installing the billing system on your own server. It assumes that you already have ColdFusion MX 6.1, Railo or OpenBD installed and a database – either Microsoft SQL Server 2005 (or later) or MySQL 4.1 (or later) databases.

1. Unzip the Billing zip file
2. Copy “billing” directory to your webserver public directory. You may rename the directory whatever you want. The directory may be a sub-directory. The directory and files must have execute permission. The “c” subdirectory must have write permission for the purpose of updating headers and footers, and uploading images.
3. Move the billing/importExportTemp subdirectory to a non-public directory on your server, i.e., a server that is not accessible via the Web. This directory is used to temporarily store uploaded files and export files. This directory must have read and write permission as the system will be creating sub-directories, creating files, reading files and deleting files in this directory. You can rename this directory to any valid directory name. You will be asked for the directory path and name in the initialization script.
4. Create a new database in either Microsoft SQL Server or MySQL, or determine an existing database that you will be using. Note: All billing table names begin with an “av” prefix to ensure they do not conflict with tables in your existing database.

If using Microsoft SQL Server, use the included SQL file to generate the database by doing the following:

- a. Open Enterprise Manager and open the database you will be using for the billing system.
- b. Click Tools: SQL Query Analyzer.
- c. Open RubensteinBillingSQL.sql file.
- d. If not already selected, select the database to be used for the billing system.
- e. Execute the query by clicking the green right-hand arrow that resembles a play button. Depending on your database server and the size of your existing database, the query may take as much as a few minutes to run. Do not interrupt it.

If using MySQL, simply copy the files in the BillingMySQL directory to the data directory for the particular MySQL database you will be using. There is no need to run any SQL scripts. If running MySQL on Linux, be sure to grant the necessary permissions to the database files. This should not be necessary on Windows, but Linux is much crankier about file permissions.

Generally, granting 777 (read/write/execute) works, but ask your database administrator if this is necessary for your particular server.

5. Log into the ColdFusion Administrator. Click on Mail in the Server Settings section. If there is not already a Mail Server specified, please enter your mail server now. The system uses the mail server specified in the ColdFusion Administrator for sending emails. (ColdFusion also gets cranky if there is no default mail server specified.)
6. In the ColdFusion Administrator, click on Mappings in the Server Settings section. Add a mapping named “billingWebroot” that points to your “billing” directory on your webserver. You may name this mapping whatever you want as long as you enter the correct mapping name when initializing the system.
7. In the ColdFusion Administrator, click on Data Sources under Data & Services.
 - a. Enter your Data Source name, such as “Billing”. In general, you should avoid spaces and non-alphanumeric characters in the datasource name.
 - b. Select your database type (Microsoft SQL Server or MySQL) from the Driver list.
 - c. Click the “Add” button.
 - d. Enter the name of the database, the server name/address, and the username and password necessary to access the database, if applicable.
 - e. Click the “Submit” button to create the datasource. ColdFusion will display a message indicating whether the datasource was successfully created. If successful, you may log out of the ColdFusion Administrator.
8. You are now ready to initialize the system. To do so, open your browser and enter the URL to the “billing” directory, and then call the initialize.cfm script, e.g.,:

<http://www.yourdomain.com/billing/initialize.cfm>

The initialization script will walk you through the rest of the installation instructions. There are 6 steps, but only 2 require any input. The rest simply perform some processing or queries, and then ask you to click to continue. The 6 steps are:

- a. Application Variables – Enter the configuration information for your system, including file path, URL, datasource, and other pertinent fields.
- b. Permissions – Inserts all permissions into the database. No input required.
- c. Primary Targets – Inserts the list of primary targets into the database. No input required. (A primary target is a thing such as a company, user or invoice.)
- d. Export Options – Inserts the tables, fields and queries that can be customized for export.
- e. Scheduled Scripts Plus – Inserts into the database the initial content headers and footers that can be customized, the default invoice/receipt templates, the supported merchant processors and the scheduled scripts. *

- f. Master User - Enter the company name, company directory, username and password for the master user of the system. The master user is granted full permissions, although the permissions can be modified. **

* The scheduled scripts are also added to the ColdFusion Scheduler. We have set default intervals for how often these scripts are run, but you can change the settings via the Billing Admin screens by going to Setup and then clicking on Scheduled Scripts. The most important scripts to consider are the scripts that process scheduled payments and process subscriptions, i.e., generate invoices. Both scripts are set to run every 5 minutes, but only process a single payment or company at a time. You may need to run these scripts more often or you may want to tweak them to process more than one payment/company at a time. The scheduled scripts are listed at the end of this document.

** The company directory is the subdirectory where your header and footer files are stored with the “c” directory, and the subdirectory where the temporary import and export files are stored in the “importExportTemp” directory.

9. Log into the billing system by going to the billing/admin directory.
<https://www.yourdomain.com/billing/admin/index.cfm>

It will take a few seconds for the login page to display as the system initializes all of the application variables for the first time. They are stored in memory, so this only needs to be done once, or whenever ColdFusion or the server is restarted. Log in as the “master” user with the username and password set during initialization.

10. Delete the initialize.cfm file and the include/initialize directory from your server.
 Technically, you can leave the initialize directory on the server since it cannot be access directly via a URL, but we do not recommend it.
11. Below is the list of the scheduled script that should have been added to your Scheduled Tasks in the CF Administrator. Note that all scheduled scripts are in the `scheduled` directory and must include `?IamTheScheduler=True` appended to the URL to prevent someone from calling them randomly.

| Task Name | Frequency | URL |
|--------------------------------------------------------------------------|-------------------|-----------------------------------------------|
| Billing - Delete Old Temp Files | Daily at 12:41 am | sched_deleteTempFiles.cfm |
| Billing - Update Custom Price Availability Status | Daily at 12:12 am | sched_updatePriceStatus.cfm |
| Billing - Update Product Category Listing Status | Daily at 12:06 am | sched_updateProductCategoryStatus_dateEnd.cfm |
| Billing - Update Product Date Availability Status | Daily at 12:09 am | sched_updateProductIsDateAvailable.cfm |
| Billing - Update Sales Commission Finalized for Period-Based Commissions | Daily at 12:22 am | sched_updateSalesCommissionFinalized.cfm |

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|-------------------------------------------------------|------------------------------------------|---------------------------------------|
| Billing - Delete Failed Login Attempts | Daily every 4 hours starting at 12:30 am | sched_deleteLoginAttempt.cfm |
| Billing - Delete Timed-Out Web Services Sessions | Daily every 2 hours starting at 12:15 am | sched_deleteWebServiceSessions.cfm |
| Billing - Process Scheduled Payments | Daily every 5 min's starting at 12:02 am | sched_processPaymentScheduled.cfm |
| Billing - Process Subscriptions and Generate Invoices | Daily every 5 min's starting at 12:00 am | sched_generateSubscriptionInvoice.cfm |