



Sugar Community Edition Installation and Administration Guide Version 5.0



BREAK AWAY

Sugar Community Edition Installation and Administration Guide
Version 5.0, 2007

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Contents

Preface	i
About this Guide.....	i
Audience.....	i
Overview.....	ii
Core Features.....	ii
What's New in 5.0.....	iii
Related Documentation.....	iii
Installing and Upgrading Sugar	1
Installation Prerequisites and Guidelines.....	1
Database Requirements.....	1
Multi-byte Character Storage Support.....	1
Installing Sugar.....	3
Downloading Sugar Files.....	4
Copying Sugar Files to the Web Server.....	4
Using the Sugar Setup Wizard.....	5
Upgrading Sugar.....	20
Administering Sugar	23
Sugar Network.....	23
Sugar Support Portal.....	24
Sugar Updates.....	25
Online Documentation.....	25
System.....	25
System Settings.....	26
Scheduler.....	31
Diagnostic Tool.....	37
Upgrade Wizard.....	39
Locale Settings.....	46
Backups.....	47
Repair.....	48
Currencies.....	49

Module Loader.....	49
Users	52
User Management.....	52
Role Management.....	56
Emails	59
Email Settings.....	60
Inbound Email	64
Manage Email Queue	68
Campaign Email Settings	69
Developer Tools.....	69
Module Builder.....	70
Studio.....	75
Configuring Module Tabs.....	90
Renaming Tabs	91
Configuring Group Tabs.....	93
Creating and Managing Portals	95
Bug Tracker	95
Index	97

Preface

Welcome to Sugar, an open source Customer Relationship Management (CRM) application.

Sugar enables organizations to efficiently organize, populate, and maintain information on all aspects of their customer relationships. It provides integrated management of corporate information on customer accounts and contacts, sales leads and opportunities, plus activities such as calls, meetings, and assigned tasks. The system seamlessly blends all of the functionality required to manage information on many aspects of your business into an intuitive and user-friendly graphical interface.

The system also offers a graphical dashboard to track the sales pipeline, the most successful lead sources, and the month-by-month outcomes for opportunities in the pipeline.

Sugar is based on an open source project, and therefore, advances quickly through the development and contribution of new features by its supporting community.

Welcome to the community!

About this Guide

The *Sugar Community Edition Installation and Administration Guide* is designed for users who are new to Sugar, or to CRM and Web-based applications. This guide introduces you to some basic CRM concepts and helps you get familiar with the Sugar system. It describes how to install and upgrade Sugar and access it through a personal computer and a Web browser to perform a broad range of customer relationship management tasks.

Readers are not required to have any programming or software development knowledge, but should be generally familiar with the use of a personal computer and a Web browser such as Microsoft Internet Explorer or Mozilla Firefox.

Audience

The *Sugar Community Edition Installation and Administration Guide* provides information for users who want to record and track company activities and outcomes.

In addition, this guide provides information for system administrators who manage user access and system configuration.

Overview

Sugar consists of modules, each of which represents a specific functional aspect of CRM such as Accounts, Activities, Leads, and Opportunities. For example, the Accounts module enables you to create and manage customer accounts, and the Activities module enables you to create and manage activities related to accounts, opportunities, etc. These modules are designed to help you manage customer accounts through each step of their lifecycle, starting with generating and qualifying leads to customer support and resolving reported bugs. Because many of these steps are interrelated, each module displays related information. For example, when you view the details of a particular account, the system also displays the related contacts, activities, opportunities, and bugs. You can not only view and edit this information but also create new information.

As an administrator, you have the power to implement access control for these modules. You can customize the look and feel of Sugar across your organization. You can even create new modules if needed. You can also create multiple forums as platforms of discussion on various topics amongst your users and customers.

Core Features

Sales Management

- Lead, Contact and Opportunity Management to share information and pursue new business.
- Account Management to manage all customer interactions in a single location.

Marketing Automation

- Lead Management for tracking and cultivating new leads.
- Email Marketing for touching prospects and customers with relevant offers.
- Campaign Management for tracking campaigns across multiple channels.
- Campaign Reporting to analyze the effectiveness of marketing activities

Collaboration

- Activity Management for emails, tasks, calls, and meetings
- Content Syndication to consolidate third-party information sources.

News Service

- The RSS news feeds module lets you select and manage your favorite news feeds, and display them on your My RSS News Feeds screen.

Administration

- Quickly edit user settings, views and layouts in a single location.

- Customize the application with Sugar Studio so that Sugar meets the exact needs of your company.

Interface Consolidation

The Portal module allows administrators and users to link external web sites and web applications into the Sugar User Interface, enabling Sugar to become a unified information interface for its users.

Sugar is built on established open-source technologies and widely supported industry standards, including the PHP development environment, the MySQL relational database, the Apache or IIS web servers, and the Linux or Windows Server operating systems. The system supports both the LAMP (Linux, Apache, MySQL, PHP) and WIMP (Windows, IIS, MySQL, PHP) platforms.

What's New in 5.0

With each revision of the Sugar software, significant advances are made in both the feature set and usability of the software. Some of the highlights of version 5.0 are detailed below.

Redesigned Emails Module

You can use the new Emails module as an email client to manage your inbound and outbound emails. Sugar supports POP3 and IMAP protocols. Using either of these protocols, you can view and manage emails in your external mail accounts through Sugar. You can send the emails that you compose in Sugar through any of your external mail accounts.

You can add entries from your list of users, contacts, and leads to your email address book.

Redesigned Studio

The User Interface for Studio has been redesigned to enhance usability.

Module Builder

Sugar now provides a Module Builder that you can use to build and edit custom modules quickly and efficiently.

Related Documentation

Refer to the following guide for related information:

- *Sugar Community Edition User Guide*: Describes how to use Sugar modules.

Installing and Upgrading Sugar

This document describes how to install Sugar Community Edition version 5.0. Upgrading to 5.0 from version 4.5.1x is also described.

This document is intended for administrators. After installation, you can create users and perform other administrative tasks in Sugar. See “[Administering Sugar](#)” on page 23 for more information.

Topics are as follows:

- “[Installation Prerequisites and Guidelines](#)” on page 1
- “[Installing Sugar](#)” on page 3
- “[Upgrading Sugar](#)” on page 20

Installation Prerequisites and Guidelines

Before installing Sugar 5.0, ensure that you have the appropriate components installed on your server. See the *Sugar Community Edition Release Notes* for a complete list of the supported software versions.

SugarCRM uses GNU General Public License version 3 for the Sugar Community Edition.

Note: Install the MB String module on your Web server to support multi-byte characters.

Database Requirements

- If you are using MySQL, install version 4.1.2 or higher to use with Sugar 5.0.
- If you are using Microsoft SQL Server, install it and set it up to work with Sugar. For more information, navigate to www.sugarcrm.com/wiki/Sugar_Developer_Wiki/Configuration_and_Installation/Installing_SugarCRM_with_SQL_Server.

Multi-byte Character Storage Support

In order to better support multi-byte character storage with Microsoft SQL Server, you can configure Sugar to use the FreeTDS driver.

If you have already install Sugar version 5.0, then you will need to migrate the application to use the FreeTDS driver. A pre-requisite for migration is that you are using Sugar version 5.0 with SQL Server 2005 on Apache with a PHP version 5.1.x or higher. This means that your current *php.ini* file and *config.php* file for SugarCRM instance should already reflect the necessary changes to run SugarCRM with SQL Server. The assumption is that there is data in the tables with multi-byte character values. You can also choose to create test data from a new 5.0 instance. This can be setup through the installation process by choosing to populate multi-byte character seed data with the installer. For more information, see “[To migrate Sugar to FreeTDS driver](#)”.

To enable Sugar for FreeTDS driver

1. Navigate to http://www.sugarforge.org/frs/?group_id=6.

2. Download the *sugarcrm MB mssql.zip* file listed under Sugar CE 5.0/MSSQL MB Driver.

This zip file contains the necessary *.lib*, *.conf*, and *.dll* files for FreeTDS.

3. Ensure that Sugar is installed on Apache and that you can connect to SQL Server Database V. 2005 from it.
4. Backup the original *php.ini* file and save it at a location from where you can retrieve it if the changes render Apache inoperable.
5. Modify your *php.ini* file to include extension for FreeTDS and comment out the existing *php_mssql.dll* extension as shown below.

```
;extension=php_mssql.dll
extension=php_dblib.dll
```

6. Change the *mssql.charset* value to *utf-8*. If the *mssql.charset* parameter is missing, add it underneath the *default_charset* setting as shown below.

```
;default_charset = "iso-8859-1"
mssql.charset = "utf-8"
```

7. Open the *sugarcrm MB mssql.zip* file and do the following:

- a. Copy the appropriate *php_dblib.dll* to the extensions folder of the PHP installation.

There are three separate folders for three different versions of PHP (5.1.x, 5.2.x, 6.x). The *php_dblib.dll* file is the FreeTDS dynamic link library file. Your extension directory is the value for the *extension_dir* key in the *php.ini* file. Typically, it is located in the *ext* folder. Ensure that you choose the appropriate version of the FreeTDS dynamic link library to use. They are organized according to PHP versions under the Drivers folder.

- b. Place the *freetds.conf* file in the *c:* directory of your Windows operating system.

If the SQL Server instance is listening to connections on a port other than the default (1433), modify the *freetds.conf* file accordingly. Even if your Program Files folder that runs SQL Server or Apache resides in another directory (for example, in *d:* or *e:*), the *freetds.conf* file should still go in the *c:* directory.

- c. Copy *ntwdblib.dll* and *msvcr71.dll* to the *Windows/SYSTEM32* folder for runtime extension support and verify the accuracy of the *ntwdblib.dll* file.

The *msvcr71.dll* file is also included in the *freetds.zip* file and should be copied into the *Windows/SYSTEM32* folder as well. The subdirectories of your Apache installation directory may also contain copies of the *ntwdblib.dll* file. Ensure that the versions of the *ntwdblib.dll* file in those folders match the one you have placed in *Windows/SYSTEM32*. If you are unsure, you may also rename the *ntwdblib.dll* files under the Apache directories to be safe.

8. Restart Apache.
9. From the command line where the *apache.exe* file resides enter the following command from a DOS or SHELL terminal:

```
>apache.exe -k restart
```

Alternatively, use any Apache management tools that you are familiar with to restart the Apache Web server.

The configuration is now complete and you can proceed to the Sugar installation page.

If you have problems connecting to the SQL Server database Express edition during the database configuration installation process, do the following:

- Try alternating the use of the IP Address of the host name with and without an explicit port number. For example:
 - localhost*
 - localhost, 1433*
- In the SQL Server Configuration Manager, enable TCP/IP to communicate with SQL Server.

To migrate Sugar to FreeTDS driver

1. Backup the Sugar database using tools such as the MS SQL Server Management Studio application.

If using this application, do the following:

- a. Log into MS SQL Server Management Studio application.
 - b. Ensure that the SQL Server Agent service is running.
 - c. Select the database you want to copy (Tasks->Copy Database). This will take you to a wizard application that will complete the process of making a backup of the existing database.
2. Run the *upgrade_mssql.php* script in the root directory of the Sugar installation.

Run this file through the Command Line Interface. Ensure that your PATH settings are setup properly to allow for PHP command line execution. Your PHP executable may reference another php.ini file.

If so, check to make sure that the php.ini file used by the command line PHP executable also has the php_mssql.dll extension enabled. Run the command as follows:

```
> php -f upgrade_mssql.php
```

3. Modify php.ini for apache as follows:

```
>cp php.ini php.bak
```

Note: Ensure that you backup your original php.ini file first.

4. Follow the steps outlined in [“To enable Sugar for FreeTDS driver” on page 1](#) starting from Step 5.

Installing Sugar

The process of installing Sugar is as follows:

1. Download Sugar files.

2. Copy the Sugar files to your Web server, check for and set dependencies and requirements.
3. Install Sugar Community Edition with the Sugar Setup Wizard.

Downloading Sugar Files

To download the latest Sugar files:

1. Go to <http://www.sugarcrm.com/>
2. Log in using your Sugar username and enter the password associated with your account.
3. Click on the Downloads Manager link or visit <http://www.sugarcrm.com/sugarshop/downloads.php>.
4. Enter your download key into Download Key field and click **Submit**.
5. Click the *SugarOS-5.0.zip* to download it.

Copying Sugar Files to the Web Server

After you download Sugar, you need to unzip the 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. Common locations for Web root includes:

/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 zip file into your webroot. A directory is automatically created within webroot.
3. Rename this directory at any time.
4. Set permissions on the Sugar files. The following directories, all subdirectories, and files must be made writable by your Web server user:

- o cache
- o custom
- o data
- o modules
- o config.php

The system user that your Web server uses to access files in your Webroot varies depending on your operating system configuration. Common Web server users include:

- o apache (Linux/Apache)
- o nobody (Linux/Apache)
- o IUSR_computerName (Windows/IIS)

If you are unsure of your Web server user, consult your system administrator.

Using the Sugar Setup Wizard

After you copy the Sugar files into your Web root, you can use the Sugar Setup Wizard. The URL `http://<yourServer>/<yourSugarDirectory>/install.php` on your machine corresponds to the Sugar URL that you will use to access the Sugar Setup Wizard.

For example: `http://localhost/Sugar-Full_5.0/install.php`

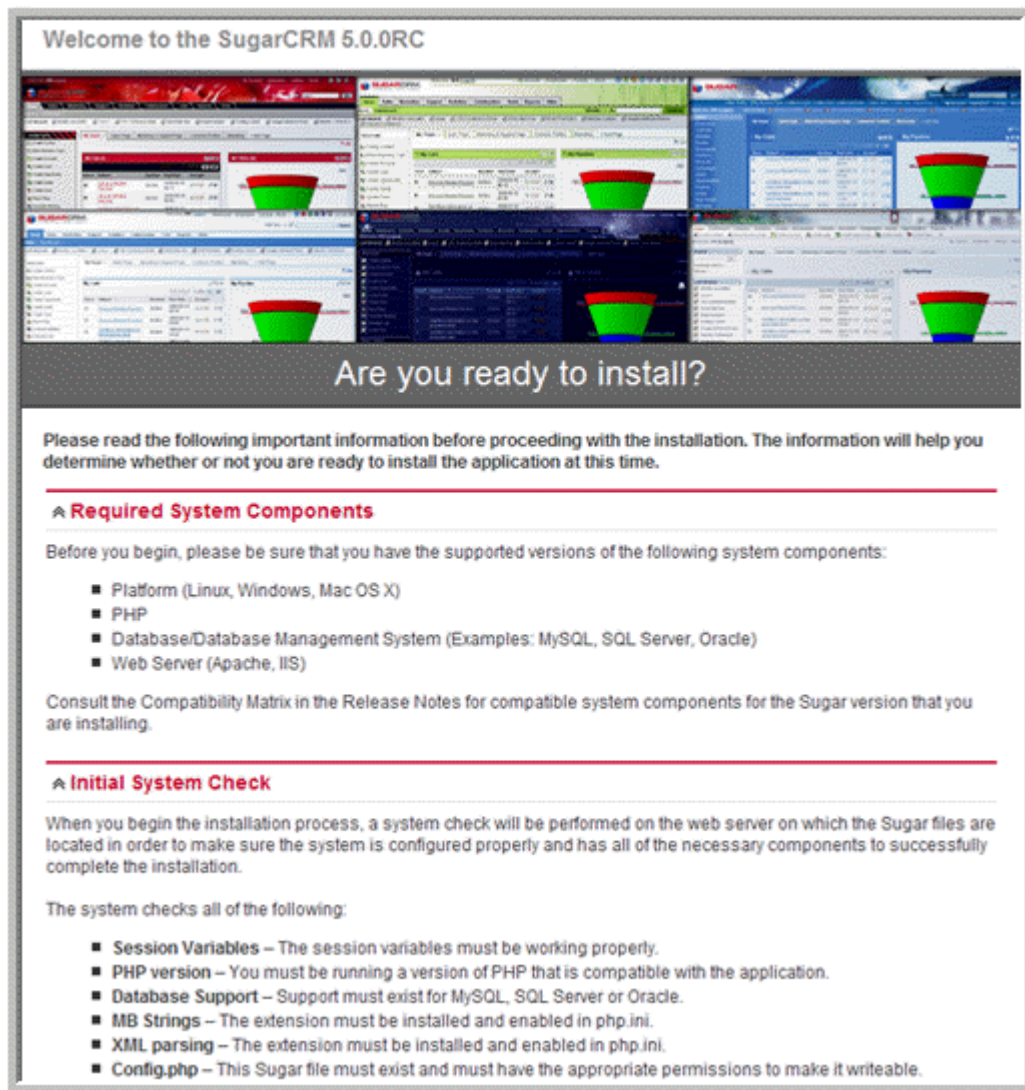
You can perform a typical installation or a custom installation. While typical installation is recommended, you can choose custom installation for the following reasons:

- You do not want to use Admin User as the Sugar database administrator.
- You want to specify the locale settings during installation instead of specifying it after you log into the Sugar application.

To perform a typical installation of Sugar

1. Launch the browser and enter the URL described above.

The Welcome page displays on the screen. This screen lists the requirements to help determine if you can successfully install Sugar. Read this page before proceeding with the installation.



2. Click **Next**.

The Installer displays the Sugar License Agreement screen.

3. Review the license, check “I Accept”, and click **Next**.

Note: The installer checks the system for compatibility and then displays the Installation Options screen. At any time prior to accepting the Confirm Setting menu, you can modify any of your settings. To modify any settings, click the **Back** button to get back to the appropriate screen.

4. Select Typical Install and click **Next**.

The Database Type Selection screen displays next.

Database Type

Specify Database Type

What type of database will be used for the Sugar instance you are about to install?

MySQL (MySQLI detected)
 SQL Server

Back Next

Select the database that is installed on your system and click **Next**. If you select MySQL, the Installer displays the following Database Configuration screen.

Database Configuration

* Required field

Provide Database Name

Name of the database that will contain the data for the Sugar instance you are about to install:

* Database Name

Name of web server or machine (host) on which the database is located:

* Host Name

Provide Database User Information

The username and password of a database administrator who can create database tables and users and who can write to the database is necessary in order to set up the Sugar database.

* Database Administrator Username

Database Admin Password

For security purposes, you can specify an exclusive database user to connect to the Sugar database. This user must be able to write, update and retrieve data on the Sugar database that will be created for this instance. This user can be the database administrator specified above, or you can provide new or existing database user information.

Sugar Database Username

Choose Demo Data

Populate Database with Demo Data?

Back Next

If you select SQL Server, the Installer displays the following screen.

Database Configuration

* Required field

Provide Database Name

Name of the database that will contain the data for the Sugar instance you are about to install:

* Database Name

Name of web server or machine (host) on which the database is located:

* Host Name \ Host Instance \

Provide Database User Information

The username and password of a database administrator who can create database tables and users and who can write to the database is necessary in order to set up the Sugar database.

* Database Administrator Username

Database Admin Password

For security purposes, you can specify an exclusive database user to connect to the Sugar database. This user must be able to write, update and retrieve data on the Sugar database that will be created for this instance. This user can be the database administrator specified above, or you can provide new or existing database user information.

Sugar Database Username

Choose Demo Data

Populate Database with Demo Data?

[Back](#) [Next](#)

If your database server is running on the same machine as your Web server, the host name is typically set to *localhost*. If you do not have a database name or user name, Sugar allows you to create them at this time.

5. Enter the database name. The Installer displays *sugarcrm* as default name for the database but you can specify a new name for the database.
6. Enter a username and password for the database administrator.

The system will use this information to generate a new database user that the Sugar application will use to communicate with the database. This new user information will be displayed under “System Credentials” on the Summary page at the end of the installation process.

For My SQL and SQL Server database, by default, Sugar selects the Admin User as the database administrator. But you can specify a different user as the database administrator. To select an existing user, select **Provide existing user**. To create a new database user, select **Define user to create**. Enter the database user name and password in the fields that display below. Reenter the password to confirm it.

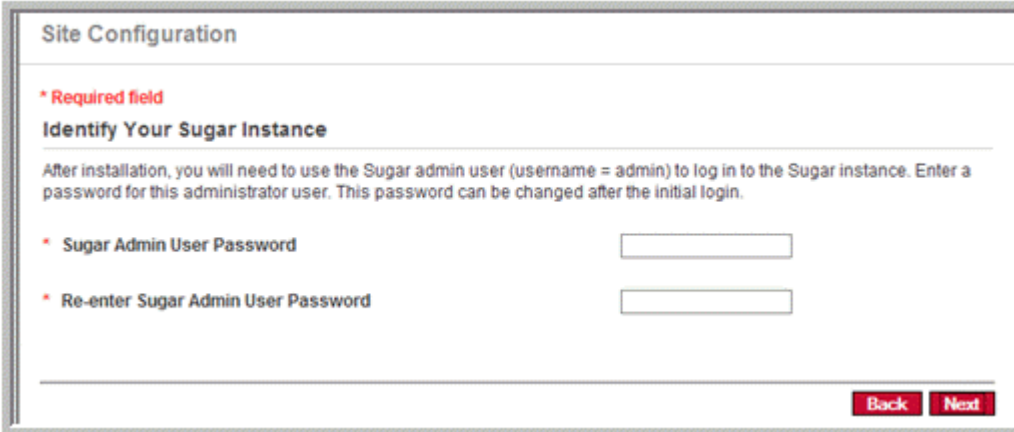
7. From the Demo Data drop-down list, select **Yes** to specify that you want to populate the database with the Sugar Demo data. Or else, select **No**.

The system verifies the database credentials. If you chose to install Demo data when it already exists from a previous installation, the system asks you to confirm if it is OK to drop current tables.

8. Click **Accept** to drop current tables or else click **Cancel** and select **No** from the Demo Data drop-down list.
9. Click **Next**.

The Installer validates the credentials of the specified administrator. If a database with the specified name already exists, it displays a dialog box asking you to either accept the database name or choose a new database. Click **Accept** to accept the database or else click **Cancel** and enter a new name in the Database Name field.

The Site Configuration screen displays on the page.



The screenshot shows a web-based configuration window titled "Site Configuration". Below the title is a red asterisk and the text "* Required field". The main heading is "Identify Your Sugar Instance". Below this heading is a horizontal line, followed by a paragraph of instructions: "After installation, you will need to use the Sugar admin user (username = admin) to log in to the Sugar instance. Enter a password for this administrator user. This password can be changed after the initial login." There are two input fields: the first is labeled "* Sugar Admin User Password" and the second is labeled "* Re-enter Sugar Admin User Password". At the bottom right of the form are two buttons: "Back" and "Next".

10. Enter a password for the Sugar administrator, re-enter it to confirm the password, and click **Next**.

The Installer displays the Locale Settings screen which lists the default settings for your locale.

Locale Settings

Customize Locale Settings

The specified locale settings will be reflected globally within the Sugar instance.

User Interface

Default Date Format: 12/23/2006

Default Time Format: 11:00pm

Currency Settings

Default Currency: US Dollars \$ USD

Significant Digits: 2

1000s Separator:

Decimal Separator:

Example: \$123,456,789.00

[Back](#) [Next](#)

11. Accept the default values or change them as needed.
12. Click **Next**.

The Installer displays the Confirm Settings screen. This screen displays a summary of the settings that you specified.

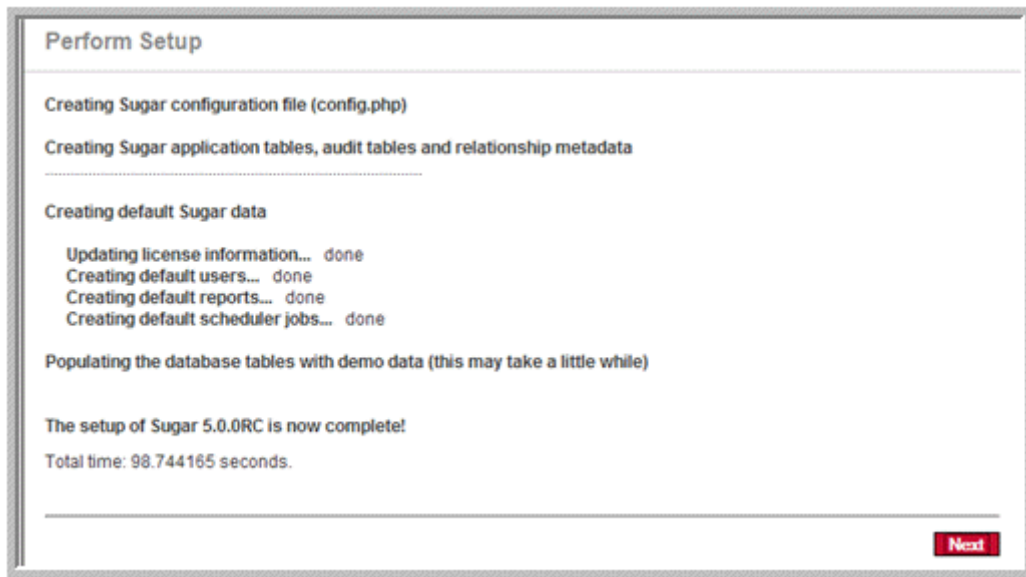
Confirm Settings	
Database Configuration	
Database Type	mysql
Database Name	sugarcrm (will not be created)
Database Administrator Username	root
Populate Database with Demo Data?	Yes
Drop Tables	Yes
Locale Settings	
Default Date Format	12/23/2006
Default Time Format	11:00pm
Default Currency	US Dollars
Currency Symbol	\$
Currency Code (ISO 4217)	USD
Significant Digits	2
1000s Separator	.
Decimal Separator	.
System Credentials	
Sugar Database Username	root
Sugar Database User Password	(hidden)

13. If you want a printout for your records, click **Print Summary**.

To include the database password and the Sugar password in the printout, click **Show Passwords** and then click **Print Summary**. When you click **Show Passwords**, the system displays the passwords and changes the button name to **Hide Passwords**. You can click this button to hide the passwords again.

14. To begin the installation process, click **Install**.

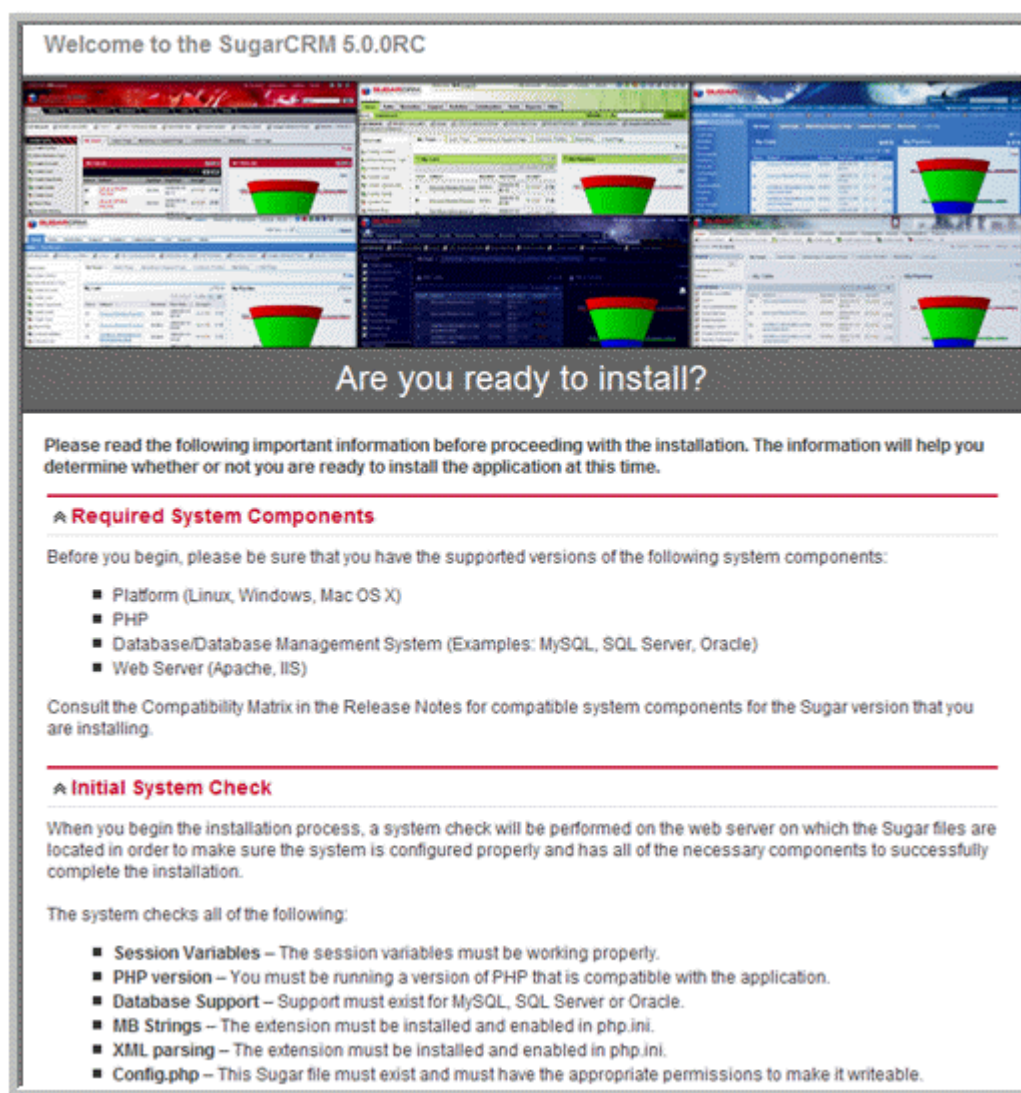
The Perform Setup page displays the installation progress on the screen.



15. When the setup is complete, click **Next**.
16. The Installer displays the Registration page on the screen.
Registration is optional.
17. To register your Sugar instance with SugarCRM, enter the necessary information and click **Send Registration**; or else click **No Thanks** to skip registration.
The Sugar log-in page displays on the screen. You can now log into Sugar with the username and password that you specified during installation.

To perform a custom installation of Sugar

1. Launch the browser and enter the URL described above.
The Welcome page displays on the screen. This screen lists the requirements to help determine if you can successfully install Sugar. Read this page before proceeding with the installation.



2. Click **Next**.

The Installer displays the Sugar License Agreement screen.

3. Review the license, check “I Accept”, and click **Next**.

The installer checks the system for compatibility and then displays the Installation Options screen

Select **Custom Install** and click **Next**.

Installation Options

Enter Download Key

The key is required for general application functionality, but it is not required for installation. You do not need to enter the key at this time, but you will need to provide the key after you have installed the application.

The Installer displays the Database Type Selection screen.

Database Type

Specify Database Type

What type of database will be used for the Sugar instance you are about to install?

MySQL (MySQLi detected)

SQL Server

4. Select the database of your choice and click **Next**.

If you select MySQL, the Installer displays the following Database Configuration screen.

Database Configuration

*** Required field**

Provide Database Name

Name of the database that will contain the data for the Sugar instance you are about to install:

* Database Name

Name of web server or machine (host) on which the database is located:

* Host Name

Provide Database User Information

The username and password of a database administrator who can create database tables and users and who can write to the database is necessary in order to set up the Sugar database.

* Database Administrator Username

Database Admin Password

For security purposes, you can specify an exclusive database user to connect to the Sugar database. This user must be able to write, update and retrieve data on the Sugar database that will be created for this instance. This user can be the database administrator specified above, or you can provide new or existing database user information.

Sugar Database Username

Choose Demo Data

Populate Database with Demo Data?

If you select SQL Server, the Installer displays the following Database Configuration screen.

Database Configuration

* Required field

Provide Database Name

Name of the database that will contain the data for the Sugar instance you are about to install:

* Database Name

Name of web server or machine (host) on which the database is located:

* Host Name \ Host Instance

Provide Database User Information

The username and password of a database administrator who can create database tables and users and who can write to the database is necessary in order to set up the Sugar database.

* Database Administrator Username

Database Admin Password

For security purposes, you can specify an exclusive database user to connect to the Sugar database. This user must be able to write, update and retrieve data on the Sugar database that will be created for this instance. This user can be the database administrator specified above, or you can provide new or existing database user information.

Sugar Database Username

Choose Demo Data

Populate Database with Demo Data?

[Back](#) [Next](#)

5. Enter the database name.

The Installer displays *sugarcrm* as default name for the database but you can specify a new name for the database.

6. Enter a username and password for the database administrator.

The system will use this information to generate a new database user that the Sugar application will use to communicate with the database. This new user information will be displayed under “System Credentials” on the Summary page at the end of the installation process.

Sugar selects the Admin User as the database administrator. But you can specify a different user. To select an existing user, select **Provide existing user**. To create a new database user, select **Define user to create**. Enter the database user name and password in the fields that display below. Reenter the password to confirm it.

7. Select **Yes** from the Demo Data drop-down list to specify that you want to populate the database with the Sugar Demo data. Or else, accept No as the default value.

The system verifies the database credentials. If you chose to install Demo data when it already exists from a previous installation, the system asks you to confirm if it is OK to drop current tables.

8. Click **Accept** to drop current tables or else click **Cancel** and select **No** from the Demo Data drop-down list.
9. Click **Next**.

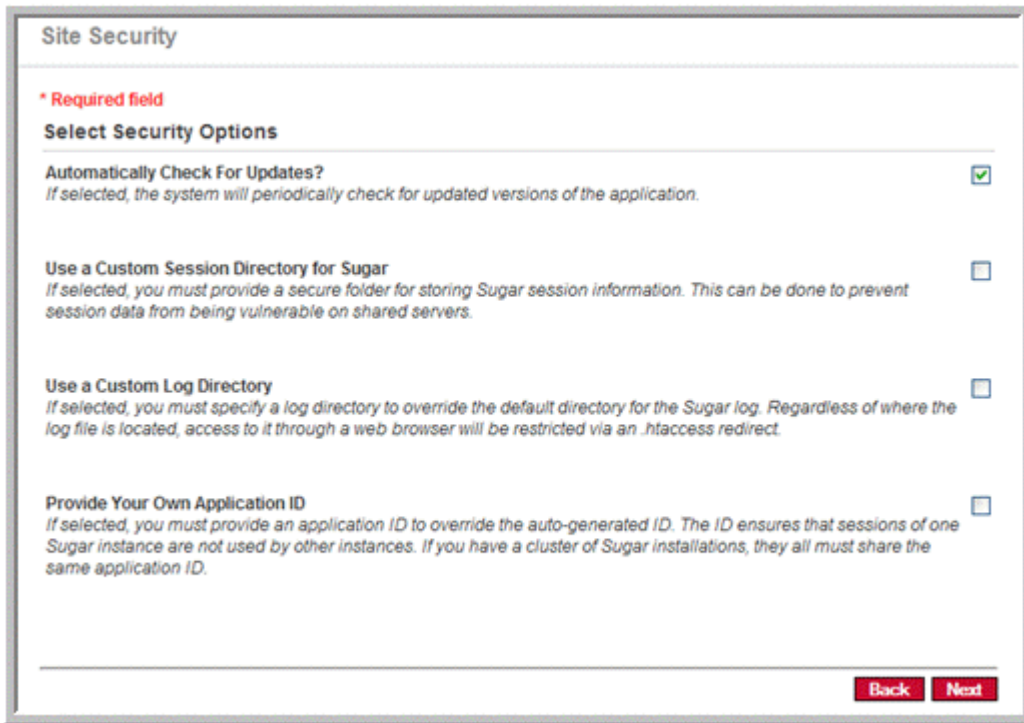
The Site Configuration screen displays on the page.

The screenshot shows the 'Site Configuration' screen. At the top, it says 'Site Configuration' and 'Required field'. Below that, it says 'Identify Your Sugar Instance'. The instructions state: 'Enter the URL that will be used to access the Sugar instance after installation. The URL will also be used as a base for the URLs in the Sugar application pages. The URL should include the web server or machine name or IP address.' There is a text input field for 'URL of Sugar Instance' with the value 'http://localhost/SugarEnt-Full-5.0.0RC'. Below that, it says 'Enter a name for your system. This name will be displayed in the browser title bar when users visit the Sugar application.' There is a text input field for 'System Name' with the value 'SugarCRM'. Below that, it says 'After installation, you will need to use the Sugar admin user (username = admin) to log in to the Sugar instance. Enter a password for this administrator user. This password can be changed after the initial login.' There are two text input fields for 'Sugar Admin User Password' and 'Re-enter Sugar Admin User Password'. At the bottom right, there are 'Back' and 'Next' buttons.

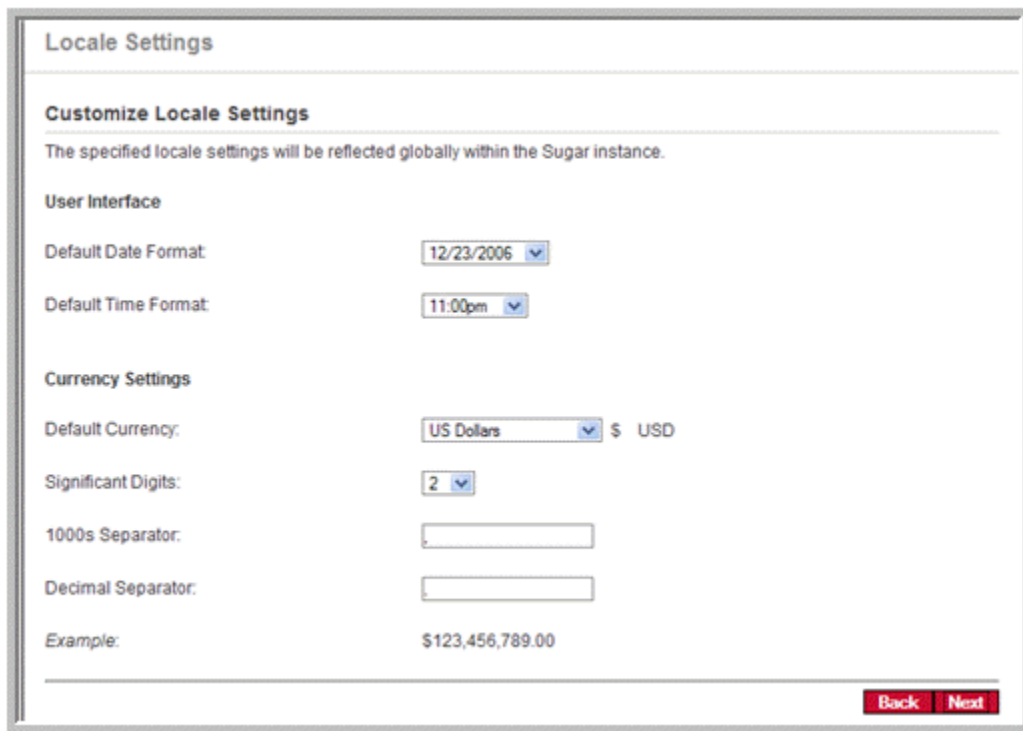
10. Enter a password for the Sugar administrator, re-enter it to confirm the password, and click **Next**.

The Site Security screen displays on the page.

11. Select the security options of your choice and specify the necessary information in the appropriate fields.



The Installer displays the Locale Settings screen.



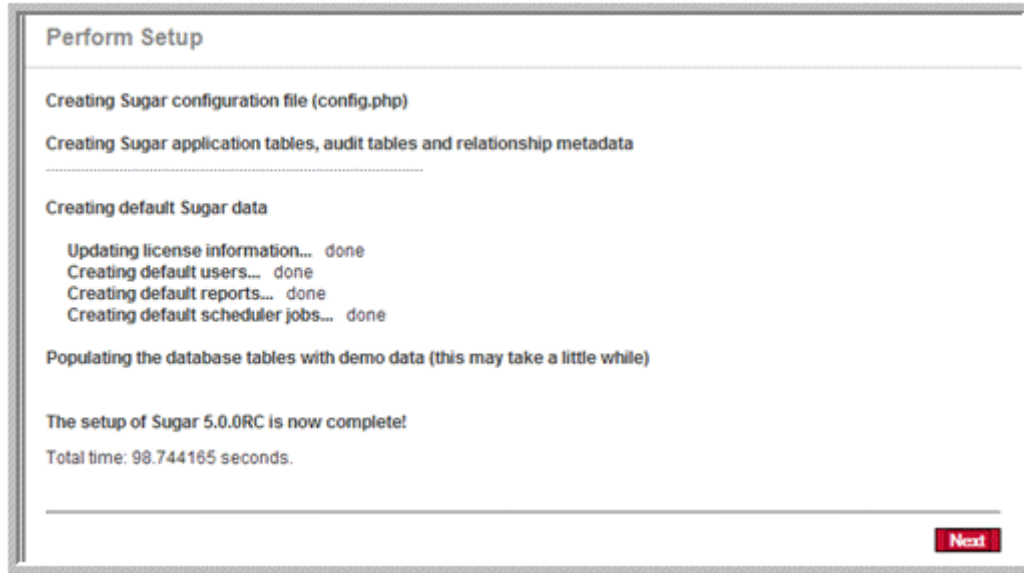
12. Accept the default values or change them as necessary and click Next.

The Installer displays the Confirm Settings screen. This screen displays a summary of the settings that you specified.

Confirm Settings	
Database Configuration	
Database Type	mysql
Database Name	sugarcrm (will not be created)
Database Administrator Username	root
Populate Database with Demo Data?	Yes
Drop Tables	Yes
Locale Settings	
Default Date Format	12/23/2006
Default Time Format	11:00pm
Default Currency	US Dollars
Currency Symbol	\$
Currency Code (ISO 4217)	USD
Significant Digits	2
1000s Separator	,
Decimal Separator	.
System Credentials	
Sugar Database Username	root
Sugar Database User Password	(hidden)

13. Click **Install**.

The Perform Setup page displays the installation progress on the screen.



14. When the setup is complete, click **Next**.
15. The Installer displays the **Registration** page on the screen.
Registration is optional.
16. To register your Sugar instance with SugarCRM, enter the necessary information and click **Send Registration**; or else click **No Thanks** to skip registration.
The Sugar log-in page displays on the screen. You can now log into Sugar with the username and password that you specified during installation.

Upgrading Sugar

This section describes how to upgrade from Sugar version 4.5.1 to version 5.0. It is recommended that you run the upgrade process on a copy of your production system.

Important Upgrade Information

- Backup your system before beginning the upgrade process. It is imperative to backup your current Sugar directory and database.
- The Upgrade Wizard is the only supported method for upgrading to Sugar 5.0. The Upgrade Wizard includes critical upgrade logic as well as the SQL commands needed to upgrade to Sugar 5.0. Attempting to manually upgrade by simply replacing files and running the upgrade SQL is not supported.

On MYSQL, the upgrade process will change the data types of three columns (Description, Description_HTML, and Raw_Source) in the Emails table. Therefore, depending on the size of your Email table and the abilities of your database server the upgrade may take longer than usual.

- The process of upgrading can take up to an hour. If you are using the IIS Web server, you need to ensure that the CGI application does not time out. To do this,

on IIS, set the CGI script timeout to more than 300 seconds, which is the default value.

- Before upgrading, navigate to the *php.ini* file on your system and change the *post_max_size* and *upload_max_filesize* settings to more than 20MB. Restart Apache and then begin the upgrade process.
- If you have implemented Campaign Management in your 4.5.1 release, you must ensure that queued emails from existing email marketing campaigns have run to completion before upgrading to 5.0. Navigate to Admin > Manage Email Queue to check whether the queue is empty. If any items are in the queue, click **Send Queued Campaign Emails** to process those items.

To upgrade to Sugar 5.0

1. Download the *SugarCE-Upgrade-4.5.1-to-5.0.0.zip* file.
2. Log into your existing Sugar application as the administrator and click on the **admin** option at the right-hand corner of the page.
3. In the Systems panel of the Administration Home page, click **Upgrade Wizard**, and follow the steps outlined in [“Upgrading Sugar” on page 40](#).
4. In the Systems panel of the Administration Home page, click **Repair** and select the Rebuild Relationship and Rebuild Extensions options to perform these actions.
5. If you unchecked any files to prevent the Upgrade Wizard from overwriting then manually merge the files by extracting the skipped file from the patch zip file. Merge the file that was installed in the Sugar application directory.

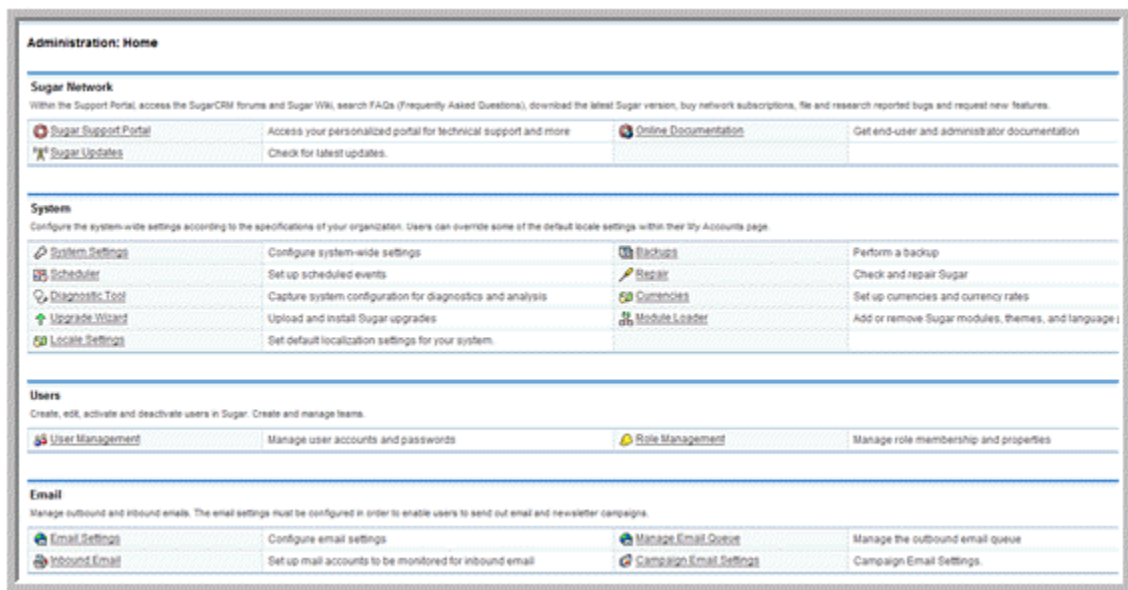
Administering Sugar

This document describes the various tasks that Sugar administrators must perform.

Topics include:

- [“Sugar Network” on page 23](#)
- [“System” on page 25](#)
- [“Users” on page 52](#)
- [“Emails” on page 59](#)
- [“Developer Tools” on page 69](#)
- [“Bug Tracker” on page 95](#)

When you log in as administrator, the Admin link displays at the top right. Click this link to view the Administration page.



This page displays several sub-panels that group tasks according to the area of administration.

Sugar Network

This sub-panel includes options to access the Sugar support, view license information, and download the latest Sugar versions and documentation.

Sugar Support Portal

Use this option to access the SugarCRM forums, search FAQs (Frequently Asked Questions), download the latest Sugar version, buy network subscription, log into the network, file bugs, research reported bugs, and request new features.

Administration: Sugar Support Portal

Welcome, sujatal

The SugarCRM Support Portal is the online case submission portal where you can easily get in contact with the Sugar Support team as well as find other support resources. All [Support Authorized Contacts](#) have access to the SugarCRM Support Portal.

Sugar University News

07/31 [Sugar Best Practices Series](#)
Register Now! These upcoming learning sessions focus on Sugar best practices: Aug 14: Sugar Best Practices for Collaboration; Sept 10: Sugar Best Practices for Tuning Production Systems...and more!

07/30 [Register Now for Summer Workshops!](#)
Upcoming Sugar University Workshops: August 2: Using Sugar Studio; August 7: Email Campaign Management; August 16: Creating Effective Workflows

07/30 [Upcoming Classroom Training: New York and Miami](#)
Register now for Sugar Administrator Fundamentals - a two-day class for new and existing Sugar administrators. Space is limited. August 23-24 in New York, NY; September 27-28 in Miami, FL
[More courses](#)

Quick Help

- What are the different levels of support?
- What is a support authorized contact?
- When do I submit a support case versus a bug report?

[View All Support FAQs](#)

Support Resources

Getting Started with Sugar
Quick step-by-step guides to help set up your Sugar application.
[Sugar On-Demand](#) | [Sugar On-Site](#)

Support FAQs
Answers for the most common questions for new customers using the commercial Sugar software.
[Getting Started](#) | [Technical Support](#) | [Training](#)

Sugar University
Work through a [self-paced training curriculum](#) or sign up for an upcoming [instructor-led training](#) session.

Documentation

- [Sugar Enterprise](#)
- [Sugar Professional](#)
- [Sugar Open Source](#)

Activate Support Portal Login
If you have recently purchased a subscription to Sugar Enterprise, Sugar Professional or Sugar Network, you may need to first [activate your Support Portal login](#).

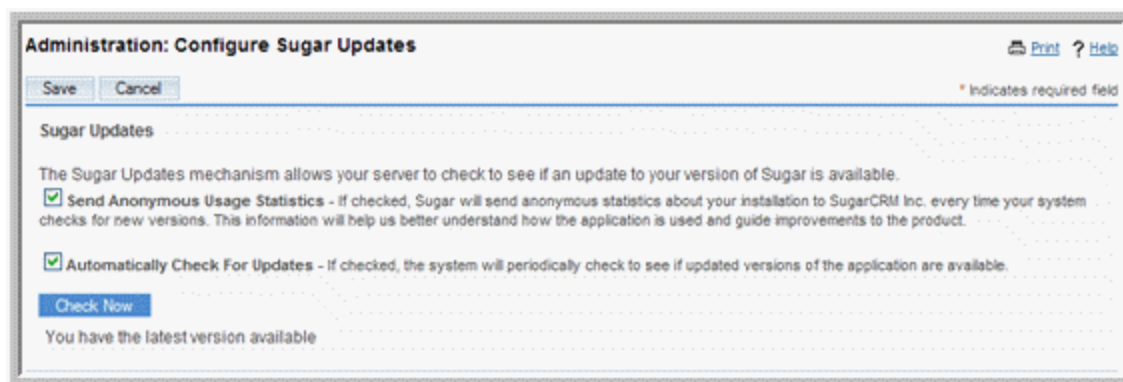
Using Sugar Open Source?
[Buy a Sugar Network subscription](#)
Sugar Network customers receive support from the SugarCRM Support team, access to the Sugar University paid content as well as Sugar Plug-Ins for Microsoft Outlook, Microsoft Word and Mozilla Thunderbird.
[Learn more](#)

Available for SugarCRM customers only:

The SugarCRM forums cover discussions on a broad range of topics such as application previews, Sugar plug-ins for Microsoft Outlook and Microsoft Word, and localization. If you want to participate in the discussions, you will need to register your organization with SugarCRM, Inc. However, you can view postings on any of the forums without registering your organization.

Sugar Updates

Use this option to check automatically or manually for Sugar updates. By default, the option to automatically check for updates is enabled.



If you choose to check for Sugar updates automatically, you will be notified when new Sugar versions or updates are available.

To perform a manual check, uncheck the **Automatically Check for Updates** option and click **Check Now**. If you already have the latest version, the message “You have the latest version available” displays at the bottom of the panel.

Online Documentation

Use this option to view and download PDF copies of available Sugar documentation on installing and using the application and plug-ins.

System

The options listed under this section allow you to configure system-wide settings that apply to all users in your organization. However, users can override some default settings, such as the default date format, by specifying different settings in their My Accounts page.

System Settings

Use this option to configure the system-wide settings according to your organization's specifications. Users can override some default settings, such as the date format, on their My Accounts page

User Interface

Use this sub-panel to configure the user interface.

1. Configure the following fields:

Listview items per page. Enter the maximum number of records you want displayed in the list view. The system paginates lists that contain more than the specified number of records.

Display server response times. By default, the footer on every page displays the time taken to respond when users attempt to perform an action, such as logging in or opening an item, in Sugar. Deselect this box if you do not want to display the response time.

Prevent user customizable Homepage layout. Select this box if you want to prevent users from customizing their Home page layout.

Maximum number of Dashlets on Homepage. Enter the maximum number of dashlets you want displayed on the Home page. Users will not be able to add more than the number of dashlets that you specify. The default value is 10.

Subpanel items per page. Enter the maximum number of records you want displayed in the list view. The system paginates lists that contain more than the specified number of records.

Display tabs on login screen. By default, the Login page displays the Sugar module tabs on the Login page. Deselect this box if you do not want to display these tabs on the Login page.

Prevent user customizable subpanel layout. Select this box if you want to prevent users from customizing their detail page layout.

Show Full Name (not Login). Select this box if you want the full name for users displayed instead of their login names.

2. To save the settings, click **Save**.
3. To restore the default settings, click **Restore**; to exit the page without saving your changes, click **Cancel**.

Logos

You can upload your organization's logo to display in the Sugar User Interface .

To upload logos

1. Configure any of the following fields:

Current logo in use. Displays your current organization's logo that displays in the User Interface.

Upload new logo (212x40). Enter the path to the location of the logo that you want to upload from your local machine. Or, click **Browse** to navigate to the location of the logo on your local machine. The dimension should be 212 X 40, with the standard transparent background color, in PNG format.

2. To save the settings, click **Save**.
3. To restore the previous settings, click **Restore**; to exit the System Settings page without saving your changes, click **Cancel**.

LDAP and Active Directory Authentication Support

If your organization has implemented LDAP or Active Directory authentication, you can also enable authentication in Sugar. When your users attempt to log into Sugar, the application authenticates them against your LDAP directory or Active Directory. If authentication is successful, the user is allowed to log into Sugar. If you are using LDAP with SOAP, you will need to specify the encryption key for the system and forward the key to your users.

If your users are using the Sugar Plug-in for Microsoft Outlook, they will need to enter this key number in Outlook. The Sugar Plug-in for Microsoft Outlook uses this key to encrypt user passwords before forwarding them to Sugar for authentication. Sugar decrypts the password with the same key and forwards the user names and passwords

to the LDAP server for authentication. If authentication is successful, the users are allowed to access Sugar through the Sugar Plug-in for Microsoft Outlook.

To enable authentication

1. In the LDAP Authentication Support sub-panel, select the **Enable LDAP** box and enter the following information:
 - Server.** Enter the LDAP server name.
 - Port Number.** Enter the server's port number.
 - Base DN.** Enter the base DN name.
 - Bind Attribute.** Enter the attribute name that is used to bind the user's name in LDAP.
 - Login attribute.** Enter the attribute name that is used to search for the user in LDAP.
 - Authenticated User.** Enter the user name.
 - Authenticated Password.** Enter the user's password.
 - Auto Create Users.** Select this option check the Sugar database for the user name and add it if it does not exist in the database.
 - Encryption Key.** If you are using LDAP with SOAP, enter the encryption key to encrypt user passwords in the Sugar Plug-in for Microsoft Outlook.
2. To save the settings, click **Save**.
3. To restore the previous settings, click **Restore**.
4. To exit the System Settings page without saving your changes, click **Cancel**.

Proxy Settings

If you are using a proxy server to connect to the Internet, you will need to enter the information here to allow the system to check for Sugar updates.

1. Configure the following fields:
 - Use proxy server.** If you want to connect to the Internet through a proxy server, select this option.

The system displays fields to specify the proxy host and port number.
 - Proxy Host.** Enter the name of the proxy server host
 - Port.** Enter the port number for the proxy host.
 - Authentication.** Select this box if you want to enable proxy authentication to allow Sugar to connect to the company's proxy server.
 - User Name.** Enter the user name.
 - Password.** Enter a password for the user.
2. To save the settings, click **Save**.
3. To restore the previous settings, click **Restore**.
4. To exit the System Settings page without saving your changes, click **Cancel**.

Customer Self-Service Portal

Select this option to integrate your organization's self-service portal with Sugar. This enables your customers to access your Sugar records such as Notes and Cases.

1. Select the **Enable self-service portal integration** box.
2. To save the setting, click **Save**.
3. To restore the previous setting, click **Restore**.
4. To exit the System Settings page without saving your changes, click **Cancel**.

SkypeOut

Select this option to allow users to make calls through Skype.

To enable Skype

1. Select the **Enable SkypeOut integration** box.
2. To save the setting, click **Save**.
3. To restore the previous setting, click **Restore**.
4. To exit the System Settings page without saving your changes, click **Cancel**.

Mail Merge

If you have installed the Sugar Plug-in for Microsoft Word, this option allows you to perform a mail merge with Word documents. For example, you can merge contact information from Sugar with form letters created in Microsoft Word.

1. Select the **Enable mail merge** box.
2. To save the setting, click **Save**.
3. To restore the previous setting, click **Restore**.
4. To exit the System Settings page without saving your changes, click **Cancel**.

Export

Use this panel to specify export settings such as the delimiter used to separate data in export files and the default character set used to export data from Sugar. The settings you specify here apply to all users in the organization. However, users can define a different default export character set on their My Account page to export data from Sugar.

This character encoding is also used when importing data into Sugar.

By default, Sugar uses UTF-8 to store data and CP1252 to export data. For locales that use character encoding other than CP1252, you must specify the appropriate default character set. This ensures that the character set used by the Sugar system to create the exported file is mapped to the correct character set on the user's machine. For example, MS Windows uses SJIS in Japan. So, for users in this locale, you will need to select SJIS as the default export character set.

By default, both users and administrators can export files from Sugar. However, you can prevent users from exporting files.

To export files

1. Set the following options:

Delimiter. Specify the delimiter, such as a comma or a period, to use while exporting data.

Default Export Character Set. The default is CP 1252. For locales other than US and Western Europe, select the appropriate character set from the drop-down list.

Disable export. Select this option if you want to prevent users and administrators from exporting data export.

Admin export only. Select this option if you want to allow only administrators to export data.

2. To save the settings, click **Save**.
3. To restore the previous settings, click **Restore**; to exit the System Settings page without saving your changes, click **Cancel**.

Advanced

1. Select any of the following advanced configuration options:

Validate user IP address: Select this option to validate, for security purposes, the IP addresses of users who log into Sugar.

Log slow queries. Select this option to log the system's slow responses to user queries in the *sugarcrm.log* file. This information is for performance tuning investigation.

Maximum upload size. Enter the maximum file size, in KB, that users are allowed to upload.

Note: The upload size is also dependent on PHP's upload settings.

Portal Session Timeout. Enter the maximum time, in seconds, for a SugarPortal session. The session will timeout when the time limit is reached.

Log memory usage. Select this option to record memory usage in the *sugarcrm.log* file.

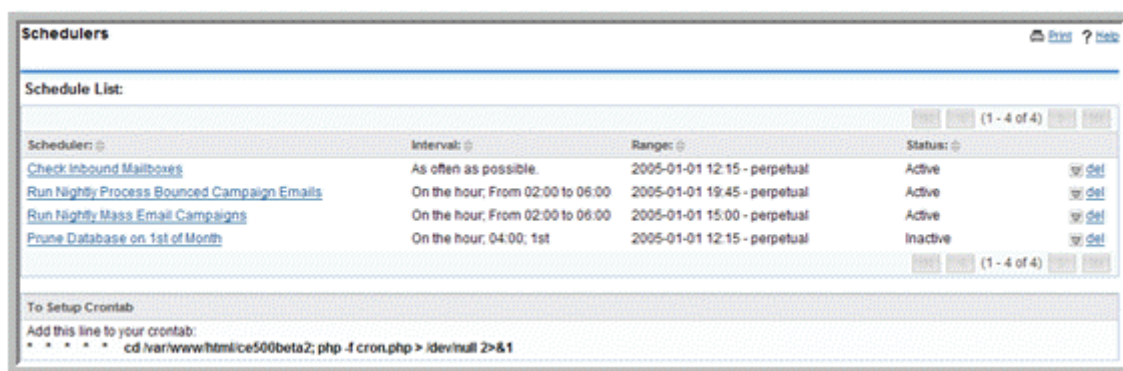
Slow query time threshold. Specify the threshold, in milliseconds, that defines slow queries. Queries that take longer than the threshold time are logged in the *sugarcrm.log* file. This information is for performance-tuning investigation.

Display stack trace of errors. When you select this option, if an error occurs when users are running the application, the system displays where the error occurred in the application's stack trace. This information is for debugging purposes.

2. To save the settings, click **Save**.
3. To restore the previous settings, click **Restore**; to exit the System Settings page without saving your changes, click **Cancel**.

Scheduler

Use this option to schedule jobs such as dispatching campaign emails.



The Scheduler integrates with external UNIX systems and Windows systems to run jobs that are scheduled through those systems. You can schedule the following types of jobs:

Check Inbound Mail Accounts. This job monitors inbound emails in active mail accounts that you set up using the Inbound Email option in the Email panel of the Admin page.

Run Nightly Process Bounced Campaign Emails. This job polls any mail account in which, the “Possible Actions” parameter is set to “Bounce Handling”. This is an essential component of monitoring mass email campaigns.

Run Nightly Mass Email Campaigns. This job processes the outbound email queue for your organization’s mass campaign Emails.

Prune Database on 1st of Month. This job reads all the tables in your Sugar database, finds records that have been soft-deleted (deleted = 1), creates a large SQL file, and physically deletes those records on the 1st of every month. It is mostly a performance job, and is not essential to the use of Sugar. The backup files are placed in *cache/backups* with time-stamped filenames.

Configuring Settings for Scheduler Jobs

For UNIX and Linux systems, you will need to add a new Cronjob to your Crontab. For Microsoft Windows, you can use the Task Scheduler.

Unix and Linux Systems

To add a new cronjob to your crontab

1. At the command prompt, type `crontab -e`.
2. Enter the following line to your crontab:

```
* * * * * cd /path/to/sugar/crm; php -f cron.php > /dev/null 2>&1
```

3. Ensure that the `/path/to/` is correct for your instance.
4. Save your changes and close.

If you encounter problems, do the following:

1. Determine who the Apache server runs as.

In a properly configured virtual host environment provided by your host, Apache will run as your Login user ID for files in your virtual directory. If you are unsure, contact the Customer Service department for your host.

- a. Search for a file named *httpd.conf*. Typically, this file is located in the */etc* folder. It will vary with the distribution.
- b. Open the file using a text editor and locate a line that starts with “User”. The word(s) that follow it directly is the name of the User that Apache will run as on your system.

2. Determine the capabilities of your PHP installation.

The Sugar Scheduler is designed to work with PHP and its extensions; specifically the database connector, the IMAP libraries, and the cURL libraries.

Ensure that the PHP binary (php-cli or just php) is available and has those libraries available.

Search for the PHP binary as follows:

- a. Type `which php`. On most correctly configured PHP installations, you will find the binary in */usr/bin* or */usr/local/bin*. If so, move on to Step 3.
Or
- b. Type `find / -name php`. Typically, this command will return a long list. Parse through the list to find an executable file named *php*.
- c. If you cannot find the PHP binary, scroll down to the *Troubleshooting Tips* at the end of this section and read item No. 2.

3. Create a *cronjob* for the Apache user

- a. Type `crontab -e -u [the Apache user]`.
- b. Enter the following line to your crontab:

```
* * * * * cd /path/to/sugar/crm; php -f cron.php > /dev/null 2&>1
```

- c. To fine tune this job, change the first two “*”. The first is the “Minutes” value, the second is the “Hours” value.

For example, to run the cronjob every 3 minutes, enter:

```
*/3 * * * * cd /path/to/sugar/crm; php -f cron.php > /dev/null 2&>1
```

4. Test the crontab line as follows to confirm that your system is ready to run:

- a. At a terminal prompt, copy and paste the command for your cronjob, and run it; the logic here is that if the command will execute successfully when run manually, the crontab will be able to execute successfully as well.
- b. If your cronjob looks as follows:


```
* * * * * cd /var/www/html/sugarcrm; php -f cron.php > /dev/null 2&>1
```

 type the command from "cd.." to "2&>1" into a terminal and press Enter.
- c. If any errors occur, refer to **“Troubleshooting Tips” on page 35**.

5. Save your changes and close.

Microsoft Windows (2000, XP, Server) Systems

Set up the Windows batch file as follows:

1. Create a batch file that will execute all the necessary commands.
2. Enter the following paths in the batch file:
 - o `cd c:\path\to\your\sugarinstance`
This folder should contain the *cron.php* file.
 - o `c:\path\to\your\php.exe -c c:\windows\php.ini -f cron.php`
3. Run the batch file from a command prompt to ensure that the output has no errors.
4. If you encounter problems, do the following:
 - a. Determine which PHP binary to use based on your PHP version.

PHP 4.x

If your system has a 4.x version of PHP, the PHP-CGI binary is named *php.exe* and is typically located in the root folder of your PHP install folder. To allow it to interact with the dynamic libraries, specify the location of the *php.ini* file. This can vary from system to system. If you are unsure, assuming that *php.exe* is located in *c:\php*, enter the following command at the command prompt:

```
c:\php\php.exe -r phpinfo();
```

The system will identify the *php.ini* file and its location.

PHP 5.x

If your system has a 5.x version of PHP, the PHP-CGI binary is named *php-cgi.exe* (not *php-cli.exe*) and is typically located in the root folder of your PHP install folder. To allow it to interact with the dynamic libraries, specify the location of the *php.ini* file. This can vary from system to system. If you are unsure, enter the command described above.

The system will identify the *php.ini* file and its location.

5. Create the batch file.
 - a. Click Scheduler in the Systems panel of the Admin page.
At the bottom of the default screen, you will see the contents of the commands you need to add to a batch file.
 - b. Open *notepad.exe*, copy and paste what Sugar's recommendation into a blank file.
 - c. Change the Save As Type to "dropdown to All Files *.*." and save it as a .bat file.

Note: Remember that this is only a recommendation, and may not work for your particular instance. Pay attention to the folder paths as they are often the cause for problems with the Scheduler.

6. Test the batch file.

- a. From the command prompt, navigate to the folder where you saved the batch file.
 - b. Enter the full name of the batch file to execute it.
 - c. Note and correct any reported errors, usually related to paths that cannot be found.
7. Create a scheduled task.
- a. Click **Start** and navigate to Control Panel/Scheduled Tasks/Add Scheduled Task.
 - b. Go through the Wizard, browse to the batch file you just created, and select it.
 - c. Schedule a daily job, and ensure that you select **Open advanced properties for this task when I click finish**.
 - d. On the Advanced Properties page, navigate to the Schedule tab and then click **Advanced**.
 - e. Check off Repeat task to enable the fields below it, and select **Every Minute** or specify the interval you think is appropriate.
8. Save your changes and close the Wizard.

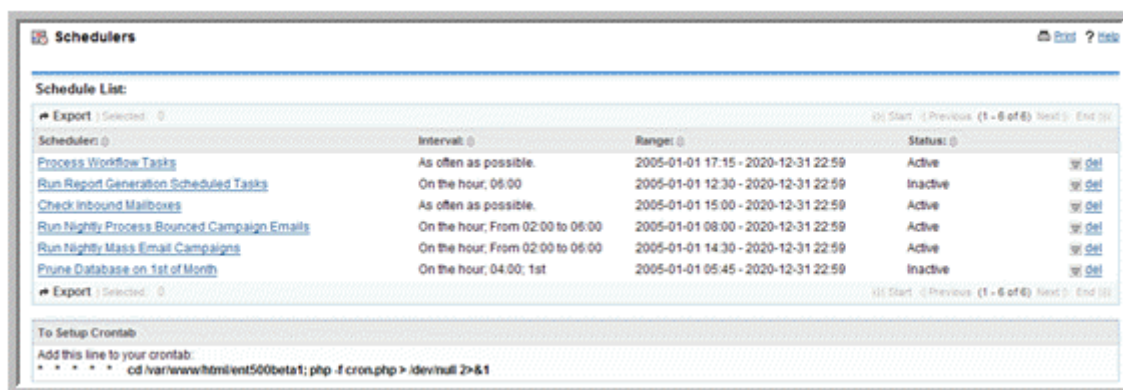
To schedule a job

1. In the Shortcuts menu of the Scheduler home page, click **Create Scheduler**.
2. In the Basic Setup sub-panel, enter the following information:
 - Job Name.** Enter a name for the job.
 - Status.** From the drop-down list, select **Active** to run the job at the specified intervals; select **Inactive** if you only want to save the job schedule information but not run the job.
 - Job.** Select a job from the drop-down list. The OR field is not used.
 - Interval.** Specify the time interval to check for new scheduled jobs. The default is every one minute daily.
3. For advanced options, click the **Advanced Options** link below the Job field. The Advanced Options sub-panel displays below.
4. Enter information for the following fields:
 - Execute If Missed.** Select this box to run any jobs that the scheduler missed.
 - Date & Time Start.** Click the Calendar icon and select the start date for the job; select the time, in hours and minutes, from the adjacent drop-down list.
 - Date & Time End.** Click the Calendar icon and select the end date for the job; select the time, in hours and minutes, from the adjacent drop-down list.
 - Active From.** From the drop-down list, select the time, in hours and minutes, when the job becomes active.
 - Active To.** From the drop-down list, select the time, in hours and minutes, when the job becomes inactive.
5. Click **Save** to create the job; click **Cancel** to exit the page without creating the job.

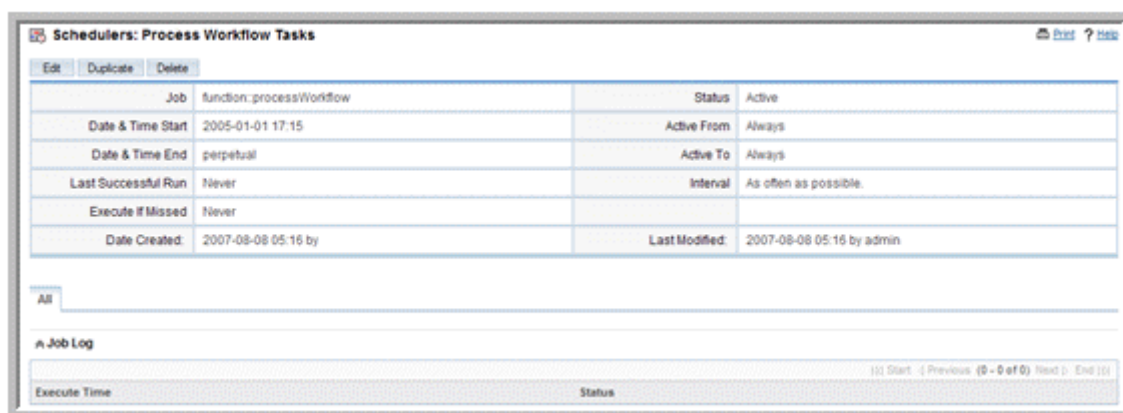
To manage scheduled jobs

1. In the System sub-panel of the Admin page, click **Scheduler**.

The Schedule List page displays on the page.



2. Select any job from the job list to view its settings or the Job log. You can edit, duplicate, or delete the settings. You can also delete a job by clicking the del icon corresponding to the job in the Schedule list.



3. To edit the settings, click **Edit**.
4. Make the necessary changes and click **Save** to update the settings; click **Cancel** to exit the page without saving your changes.

Troubleshooting Tips

Linux

1. The Sugar Scheduler fails to run even though the *cron.log* file shows that the crontab is triggering the new job.
 - o The Apache user's PATH does not include the location of the PHP binary.
 - Change the crontab entry to include the FULL path to the PHP binary as shown below:

```
* * * * * /usr/local/bin/php -f cron.php > /dev/null 2>&1
```

- The Apache user's PATH does not include the location of the *php.ini* file, and thus the external libraries (such as *mod_mysql* and *mod_imap*) are unavailable at run time.
 - Change the crontab entry to include a PHP switch to explicitly define a *php.ini* to use as shown below.


```
* * * * * php -c /path/to/your/php.ini -f cron.php > /dev/null 2&>1"
```
- 2. No PHP binary found or it is broken.
 - Change the mechanism by which your cronjob calls Sugar's *cron.php*.
 - Determine if this is an option at this time by finding either “curl” or “wget” on your system. This is done with the commands “which curl” and “which wget”.

If you use *cURL*, your crontab entry should look as follows:

```
* * * * * curl --silent http://yourdomain/your糖arcrminstance/cron.php
```

If you use *wget*, your crontab entry should look like:

```
* * * * * wget -q http://yourdomain/your糖arcrminstance/cron.php
```

Note: Both *curl* and *wget* have numerous switches that do not always map to different versions on different platforms. Experiment in the terminal until you find the “perfect” line, and add it as the line for your crontab entry.

Windows.

1. The most common problem is that the PHP binary does not have the proper libraries available at run time. As a result, it cannot make calls to your database or to your email server. To force PHP to be aware of these libraries, it needs to access the *php.ini* file, which in turn tells it where to find everything that is available.
 - a. Locate the *php.ini* file: if you are unsure, run the following command:


```
phpinfo();
```

The system identifies the *php.ini* file and its location.
2. The second most common breakage is incorrect paths to the extensions that PHP needs; a map is useless if the information is bad.
 - a. Open *php.ini* in your favorite text editor.
 - b. Find the section named “Paths and Directories”.
 - c. The pertinent entry is “*extension_dir*”.
 - d. Keeping in mind that this file piggybacks on Window's \$PATH\$ variable, double-check the paths listed.
 - e. Correct any errors - sometimes giving an absolute path solves hard-to-diagnose problems, for example, full path listing from c:\... onwards.

Necessary extensions are disabled.
 - f. Open your *php.ini* file in a text editor.
 - g. Find the section named “Dynamic Extensions”.

- h. Scroll to the Windows-specific list.
- i. Make sure that the necessary extensions are uncommented (no “;” preceding the line). The bare minimum for Sugar Scheduler to run is to have `php_curl`, your database connector, typically `php_mysql` (for PHP5), and `php_imap`.
- j. Test the batch file again.

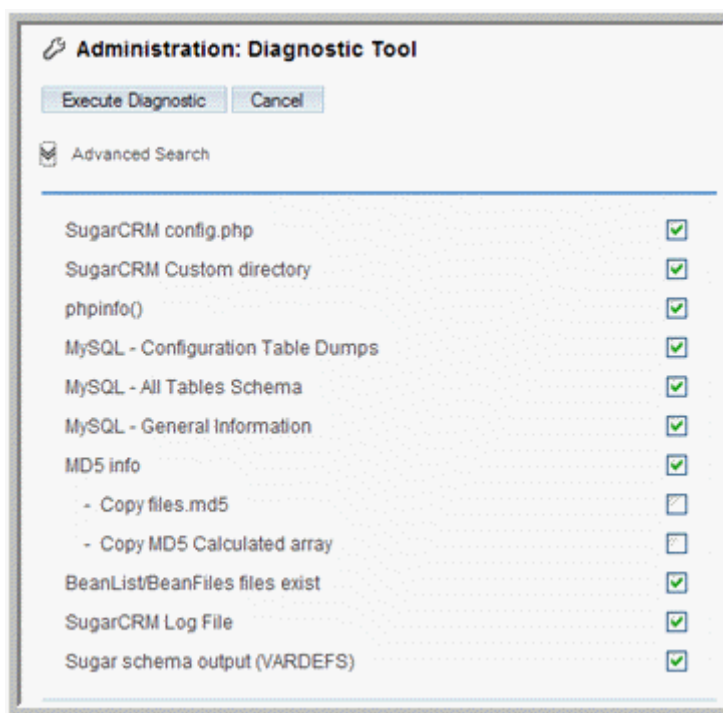
Diagnostic Tool

Use this option to capture system configuration for diagnostics and analysis. The diagnostic tool pulls up system information and stores it in a zip file on the server for download. When you send a help request to Customer Support, you can attach the file because it summarizes all the basic information required to resolve the problem.

To capture system configuration

1. On the Diagnostic Tool page, click **Execute Diagnostic** to run the tool.
2. To capture specific configuration information, click the **Advanced** link below the **Execute Diagnostic** button.

The system displays a list of system configuration files. By default, the system captures configuration information for all the selected files.



The system performs the following actions of these files:

SugarCRM Config.php - Copies the *config.php* file from the root directory after replacing the DB password with asterisk for security purposes.

SugarCRM Custom directory - Copies the custom directory to a Zip file to enable Customer Support to know what has been customized through the Layout Editor.

phpinfo() - Executes `phpinfo` and stores it in a file.

MySQL - Configuration Table Dumps - copies a few tables from the database and replaces sensitive information with asterisk for security purposes.

MySQL - All Tables Schema - writes the schema for all tables to an HTML file.

MySQL - General Information - Pulls up some general information, like MySQL version, character sets, etc.

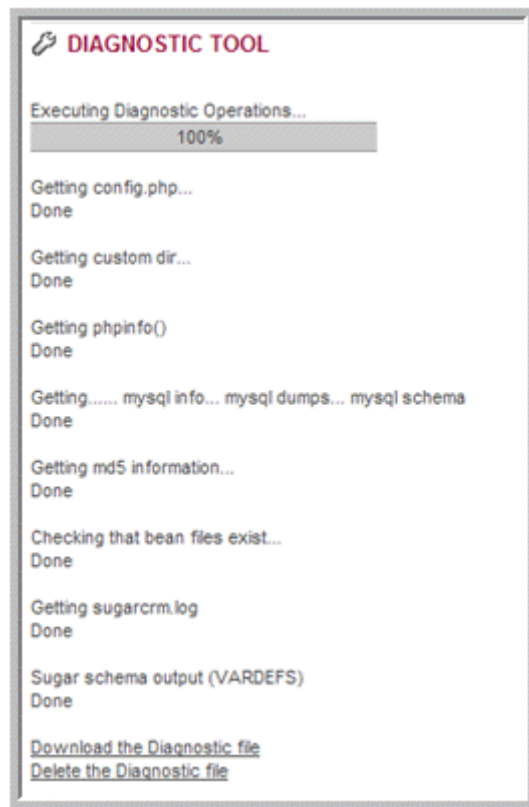
MD5 info - Runs md5 checks on all files in the sugar directory and compares it against a stock Sugar installation's md5s. This enables Customer Support to learn which, if any, files have been manually customized.

BeanList/BeanFiles files exist - If a custom module has been loaded, and the author did not define these references correctly, it can cause problems. This action checks all the references to ensure they are correct.

SugarCRM Log file - copies the log file.

Sugar schema output (VARDEFS) - copies the Sugar database schema.

3. Deselect the ones you do not want to view and then click **Execute Diagnostic**.
The system creates a Zip file that contains the captured configuration information.



4. To view the file, click the **Download the Diagnostic file** link at the bottom of the page; to delete the file, click the **Delete the Diagnostic file** link.
5. If you choose to download the file, the File Download dialog box displays on the page. To view its contents, click **Open**, and click the file you want to view. To save the Zip file contents, click **Save**, and select a location on your local machine.

Upgrade Wizard

The Upgrade Wizard provides a quick way to upload and install new Sugar versions as well as upgrade existing ones.

Note: Before using the Upgrade Wizard, ensure that the *config.php* file for your installation is writable.

The Sugar 5.0 database schema has significant changes that may impact existing code customizations when you upgrade the application. These schema changes are described below. Your options to handle existing code customizations are also described later in this section.

Schema Modifications

Sugar version 5.0 has implemented schema changes to ensure consistency, unifying several data types such as the Boolean and Date/Time data types. Additionally, new email functionality has necessitated significant schema changes. These changes may impact existing code customizations during the upgrade process.

Schema changes are as follows:

- The Email address has been refactored in version 5.0 to remove email addresses within major modules and introduce a separate email table linked back to major modules. This provides for unlimited email addresses rather than a fixed set. The following modules are affected by this change:
 - Accounts
 - Contacts
 - Leads
 - Targets
- The following tables are impacted by the unifying of date-time data types:
 - calls
 - email_marketing
 - meetings
 - project_task
 - tasks
- The following tables are impacted by the Boolean data type change:
 - project_task
 - tasks

Code Customizations

During the upgrade process, Sugar automatically converts all customizations implemented through Studio and upgrades the schema. The Upgrade Wizard archives your code customizations in the *modules/<CustomModules>/pre_500* directory where *CustomModules* is the name of your customized module folder.

After completing the upgrade, it is recommended that you re-implement your code customizations in version 5.0. However, to ease the transition from version 4.5.1 to version 5.0, Sugar provides a *compatibility mode*. Initially, you can use the compatibility mode to run version 4.5.1-implemented code customizations in version 5.0 until you can re-implement the code customizations in 5.0.

You need not handle all customized modules in the same manner. You can run some modules in compatibility mode and re-implement others in Sugar 5.0.

Running a module in compatibility mode has the following limitations:

- You cannot edit the module using Studio in version 5.0.
- The 5.0 schema modifications will need to be addressed even for code running under compatibility mode.
- SugarCRM Inc. will not provide patches to modules running in compatibility mode.
- SugarCRM Inc. will not support the compatibility mode indefinitely.

To run customized modules in compatibility mode

1. Move the files currently residing in the custom module directory into the `.500` directory. This is a new directory that is created during the upgrade to archive the base 5.0 version for safekeeping.

When you apply subsequent Sugar patches to 5.x code, the Upgrade Wizard will detect the existence of this archive folder and apply the patch accordingly, thus maintaining the integrity of the 5.x version of your module running in compatibility mode.

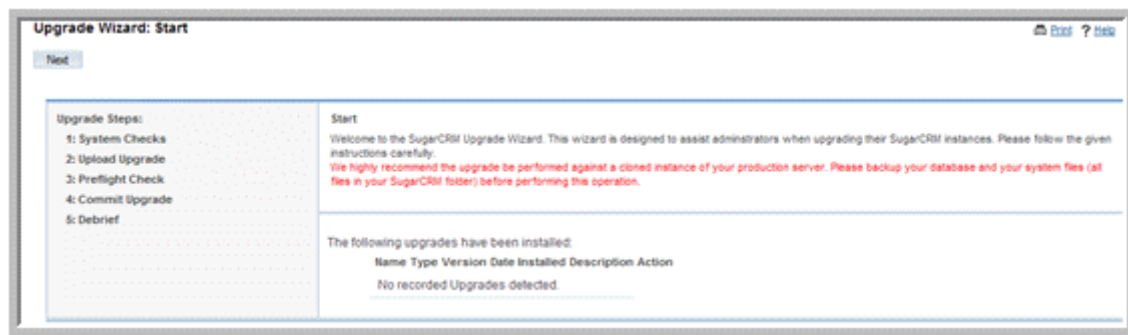
2. Copy your customization files from the `.pre_500` directory to the custom module directory.
3. Adjust your code as required to account for the 5.0 schema modifications.

Upgrading Sugar

You can obtain the Sugar upgrade .zip file from Sugar Exchange or from your local machine.

To upgrade your Sugar application from Sugar Exchange

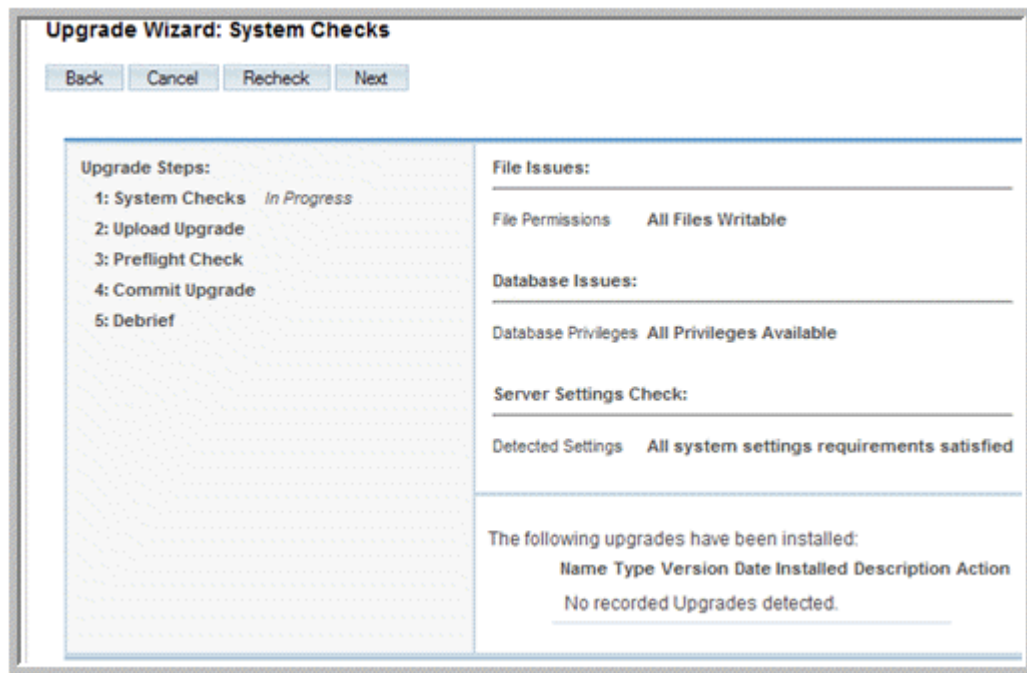
1. Click the **Upgrade Wizard** option on the Administration page.



The Upgrade Wizard screen displays on the page.

2. Click **Next**.

The System Checks screen displays on the page.



Upgrade Wizard: System Checks

Back Cancel Recheck Next

Upgrade Steps:

- 1: System Checks *In Progress*
- 2: Upload Upgrade
- 3: Preflight Check
- 4: Commit Upgrade
- 5: Debrief

File Issues:

File Permissions All Files Writable

Database Issues:

Database Privileges All Privileges Available

Server Settings Check:

Detected Settings All system settings requirements satisfied

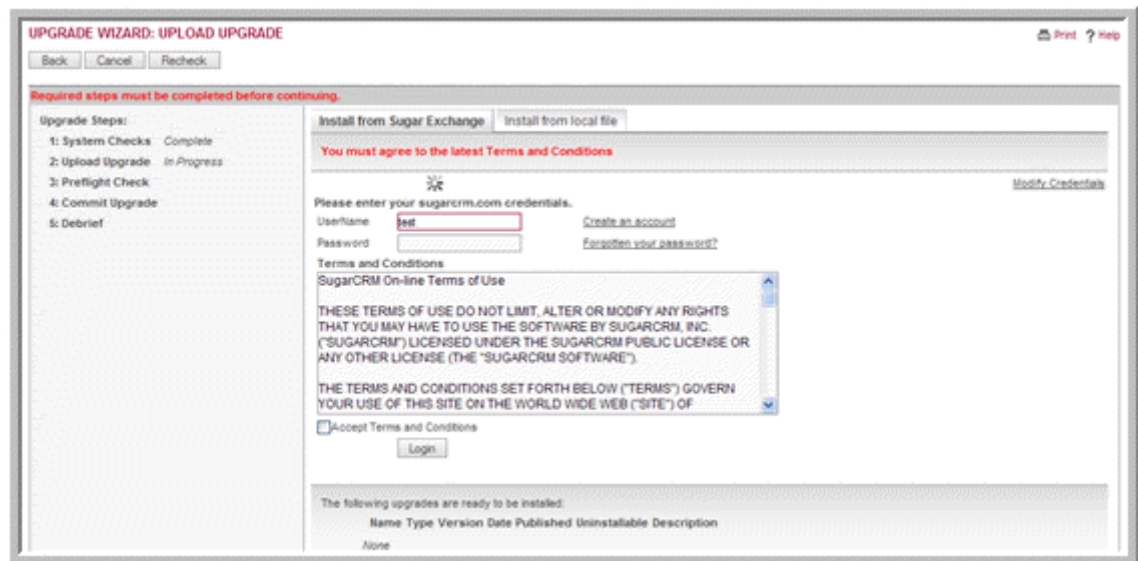
The following upgrades have been installed:

Name	Type	Version	Date Installed	Description	Action
No recorded Upgrades detected.					

If the check finds no errors, the status of System Checks changes to Complete.

3. Click **Next**.

The Upload Upgrade screen displays on the page.



UPGRADE WIZARD: UPLOAD UPGRADE

Back Cancel Recheck Print Help

Required steps must be completed before continuing.

Upgrade Steps:

- 1: System Checks Complete
- 2: Upload Upgrade *In Progress*
- 3: Preflight Check
- 4: Commit Upgrade
- 5: Debrief

Install from Sugar Exchange Install from local file

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Please enter your sugarcrm.com credentials.

Username test Create an account

Password Password forgotten your password?

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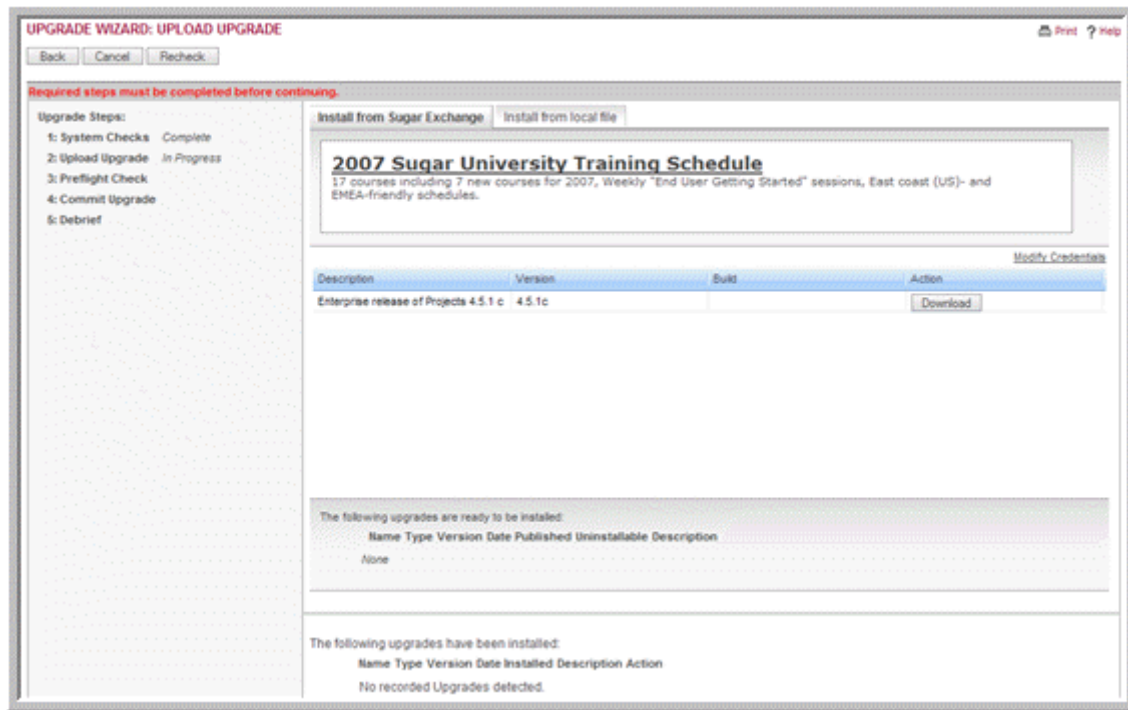
Login

The following upgrades are ready to be installed:

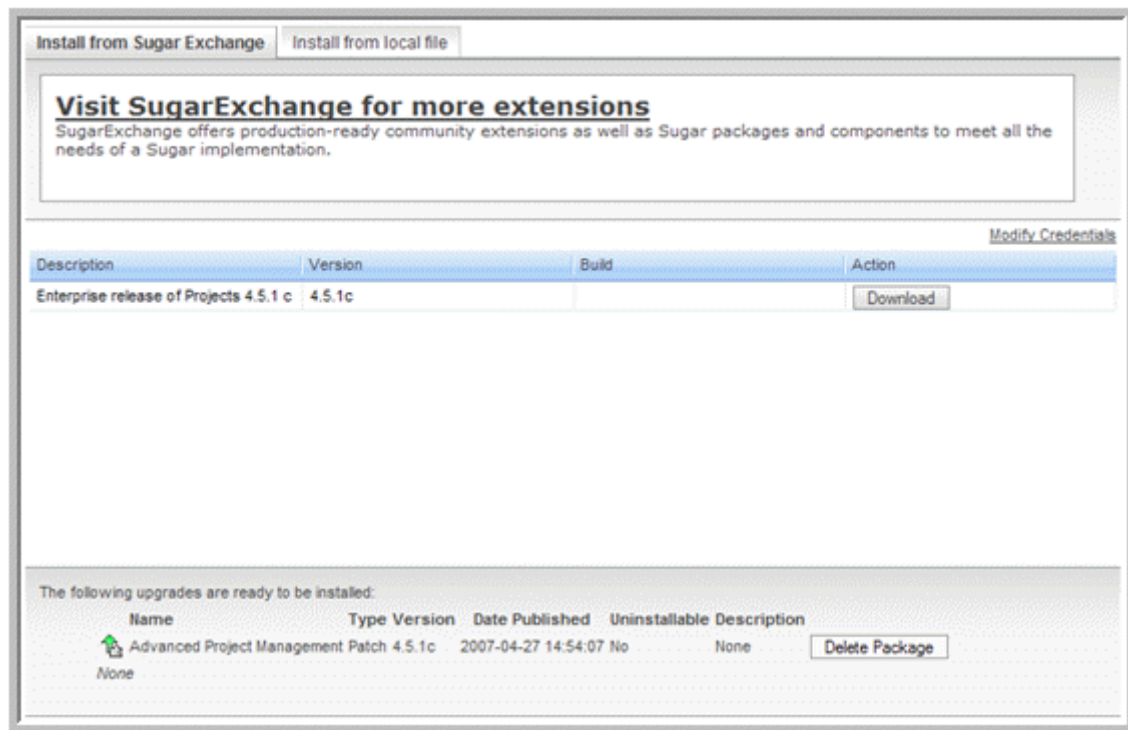
Name	Type	Version	Date Published	Uninstallable	Description
None					

4. To install from the Sugar server, on the Install from Sugar Exchange tab enter your user name and password, accept the license agreement, and click **Login**.

If authentication is successful, the system lists available packages on the page.

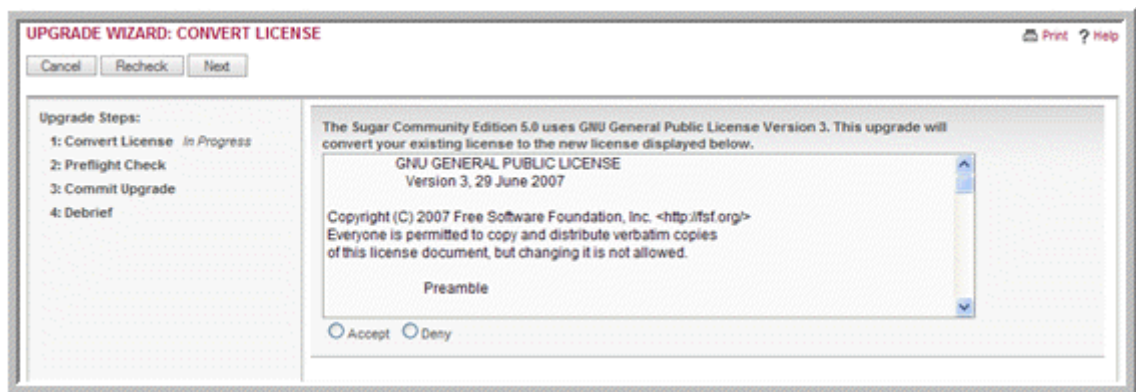
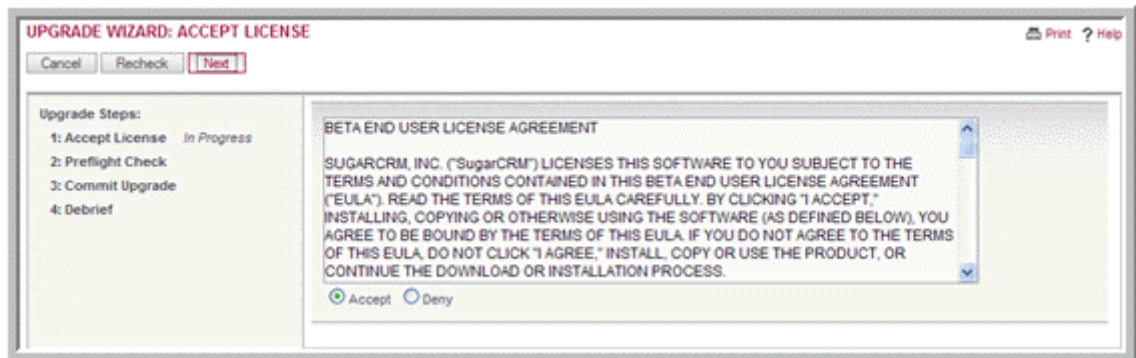


- To install a package, click the corresponding **Download** button. The system downloads the package and displays it below.

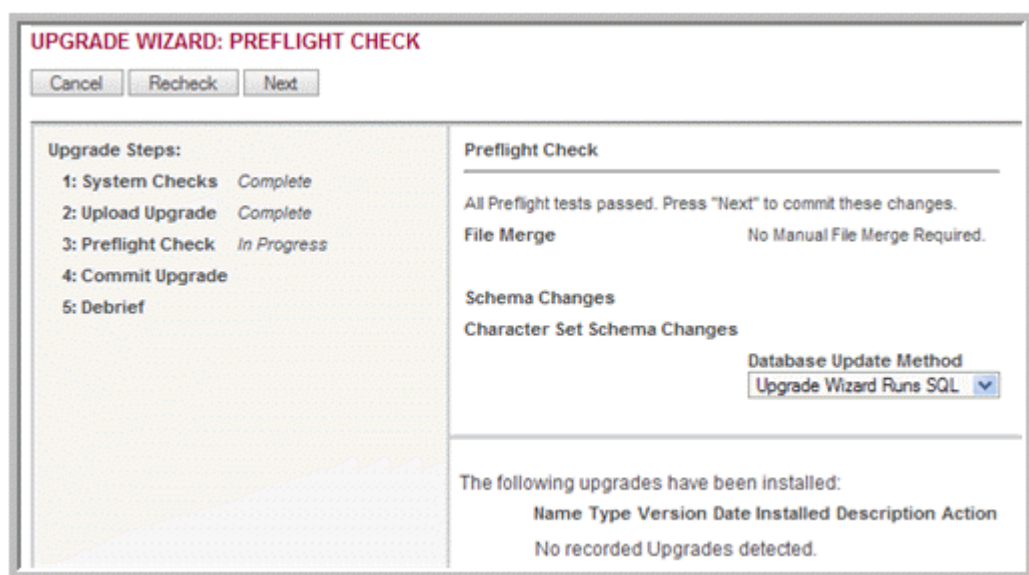


- Click **Next**.

The Accept License page displays on the screen. For the Sugar Community Edition, SugarCRM uses the GNU General Public License version 3. The upgrade will convert your existing license to the GNU license.



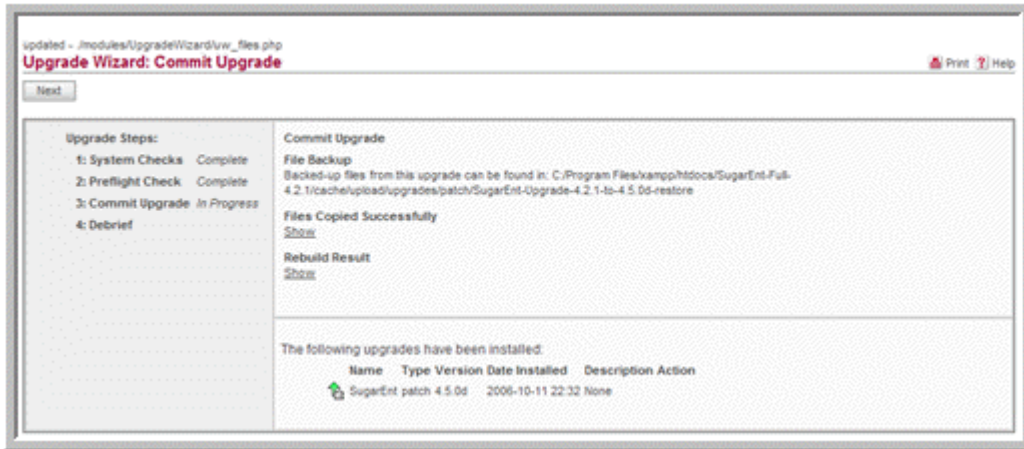
7. Click **Accept** to convert your existing license to the GNU license and click **Next**. The Preflight Check screen displays on the page.



By default, the Upgrade Wizard Runs SQL option is selected as the database update method. If you ran the SQL queries manually, select **Manual SQL Queries** from the Database Update Method drop-down list and select the **Check when SQL has been manually run** box.

8. Click **Next**.

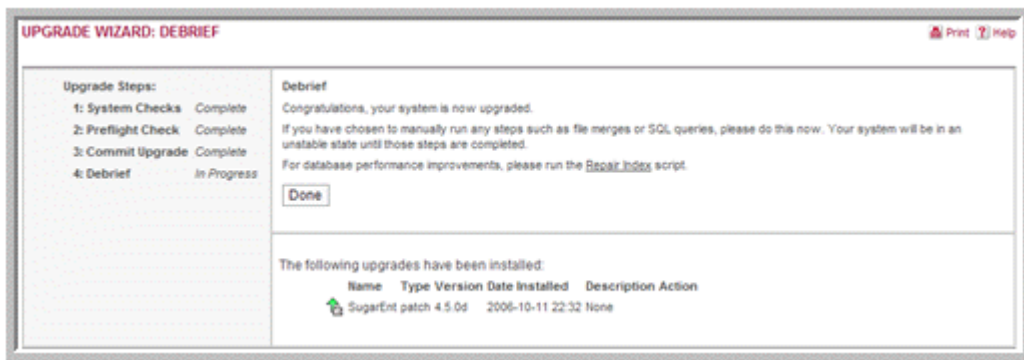
The Commit Upgrade screen displays on the page.



Optionally, you can click **Show** to see a list of files that were copied and the rebuild results.

9. Click **Next**.

The Debrief screen confirms that the upgrade has been installed.



10. Click **Done**.

The upgrade is now complete.

To upgrade your Sugar application from your local machine

1. Follow steps 1 and 2 of **“To upgrade your Sugar application from Sugar Exchange” on page 40**.

- To install a package that you downloaded to your local machine, click the **Install from local file** tab.

- Click **Browse** to navigate to the location of the upgrade zip file
- Click **Upload Upgrade** to upload the package to the Sugar application.
The system displays the package to be installed.
- Click **Next**.
- Follow the process described from Step 6 of [“To upgrade your Sugar application from Sugar Exchange” on page 40.](#)

Locale Settings

Use this option to set system-wide default formats for date, time, language, name, and currency. If you are using MySQL, you can also specify the collation order for records in the application.

User Interface

Default Date Format. From the drop-down list, select a date format for all records. Users can override the default format by setting a different date format in their My Account page.

Default Time Format. From the drop-down list, select a time format to display in all records such as Cases. Users can override the default format by setting a different time format in their My Account page.

Default Language. From the drop-down list, select the default language for the Sugar User Interface. Users can select a different language from the login page, provided they have installed the appropriate language pack.

Default Name Format. Enter the default salutation and name format to display in list views and detail views. You can specify any combination of salutation first name, and last name. For example: Mr. John Smith, Mr. Smith, or John Smith. Users can override the default format by setting a different time format in their My Account page.

To save the settings, click **Save**.

To restore the previous settings, click **Restore**; to exit the System Settings page without saving your changes, click **Cancel**.

Default Currency

Select this option if you want to override the default currency that you set during installation. Users can override the default currency that you specify on their My Account page.

Currency. Enter the name of the currency that your organization uses to conduct business.

Currency symbol. Enter the symbol for the currency.

ISO 4217 Currency Code. Enter the ISO code for the currency.

1000s Separator. Specify a delimiter to separate thousands when users specify a numeric value for the amount.

Decimal Symbol. Specify a default decimal symbol.

Database Collation

This sub-panel displays only if you are using the MYSQL database. You can select the desired collation order from the drop-down list. The default is `utf8_general_ci`.

To save the settings, click **Save**; to exit the page without saving your changes, click **Cancel**.

Backups

Use this option to backup the Sugar configuration files. Note that this option does not backup the database.

To backup Sugar configuration files

1. Click the **Backups** option in the System sub-panel on the Admin page.

Administration: Backups

This purpose of this tool is to assist in creating backups of the Sugar application files. To backup your Sugar application files as a zip file, enter the following information:

Directory:
Must be writable by Sugar

Filename:

2. In the Directory field, specify a directory that is writable by the same user as the Apache process.
3. In the Filename field, enter a file name for the Zip file including the `.zip` extension.
4. To ensure that backup can be performed, click **Confirm Settings**.
5. Click **Run Backup** to create the `.zip` file of your Sugar application files.

Note: To backup your database information, refer to your database vendor's documentation.

Repair

Use this option to upgrade and rebuild data from a previous version of Sugar for the current version of the program. You also use this option to convert a Sugar installation to offline mode.

Repair	
Opportunities	Upgrade currency amounts in Opportunities
Quick Repair and Rebuild	Repair and rebuild DB, Extensions, Vardefs, Dashlets etc. for selected module(s)
Repair Database	Repair database based on values defined in vardefs
Expand Column Width	Expand certain char, varchar and text columns in database (MSSQL ONLY)
Clear Chart Data Cache	Removes cached data files used by charts.
Clear Template Data Cache	Removes cached template files.
Clear Vardefs Data Cache	Removes vardefs from the cache
Rebuild .htaccess file	Rebuilds .htaccess to limit access to certain files directly.
Rebuild Audit	Rebuilds audit table.
Rebuild Config File	Rebuild config.php by updating version and adding defaults when not explicitly declared.
Rebuild Extensions	Rebuild extensions including extended vardefs, language packs, menus, and administration
Rebuild Relationships	Rebuilds relationship meta data and drops the cache file.
Rebuild Schedulers	Rebuild your out-of-the-box Scheduler Jobs.
Rebuild Dashlets	Rebuild the Dashlets cache file.
Rebuild Javascript Languages	Rebuild javascript versions of language files
Rebuild JS Compressed Files	Copy original Full JS Source files and replace existing compressed JS files.
Rebuild Minified JS Files	Copy original Full JS Source Files and minify them, then replace existing compressed files.
Repair JS Files	Compress Existing JS files, will include any changes made, but will not overwrite original JS Source files.
Repair Roles	Repairs Roles adding all new modules that support Access Controls as well as adding any new Access Controls to existing modules.

The upgrade options include:

Opportunities: Controls how currency fields within opportunities are upgraded. This is needed to support an internationalized currency capability, which stores the currency type separately from the amount.

Upgrade Custom Labels: Upgrades the format of the custom field labels in every language file.

Upgrade Studio: Upgrades Studio to incorporate functionality such as rearranging fields to reconfigure a module's layout.

Apply Daylight Savings Time Fix: Updates the time handling functionality for MySQL databases. This step is mandatory.

Repair Database: This option is applicable to MYSQL databases only. It repairs your Sugar database based on values defined in Vardefs. You can choose to display the SQL that will be executed on the screen, export it, or execute it.

Repair Entry Points: Run this script if you receive a 'Not A Valid Entry Point' error.

Clear Chart Data Cache: Removes cached data files that charts use.

Rebuild .htaccess file: Rebuilds the *.htaccess* file to limit access to certain files directly.

Rebuild Audit: Rebuilds the audit table.

Rebuild Config File: Rebuilds the *config.php* file by updating the version and adding defaults when not explicitly declared.

Rebuild Extensions: Rebuilds extensions including extended vardefs, language packs, menus, and administration

Rebuild Relationships: Rebuilds relationship metadata and drops the cache file.

Rebuild Schedulers: Rebuilds your out-of-the-box Scheduler Jobs.

Rebuild Dashlets: Rebuilds the Dashlets cache file.

Rebuild Javascript Languages: Rebuilds Javascript versions of language files.

Repair Roles: Repairs roles by adding all new modules that support access control as well as any new access controls to existing modules.

Repair Indexes: Validates and, optionally, repairs database indexes against definitions in *vardef* files.

Currencies

Use this option to specify a default currency and the rate.

The screenshot shows a web interface titled "Currencies". At the top, there is a table with the following data:

Currency Name	ISO 4217 Code	Currency Symbol	Conversion Rate	Status
US Dollar	USD	\$	1.000000000	Active
Euro	EUR	€	0.900000000	Active

Below the table is a "Currency" form with the following fields:

- Currency Name:
- Conversion Rate:
- Status:
- ISO 4217 Code:
- Currency Symbol:

There are "Save" and "Clear" buttons at the top of the form area.

For each new currency that you define, enter the name, symbol (for example, \$), conversion rate to the US \$, and the currency code (such as CDN for the Canadian dollar). Note that each user can select his default currency in the User Management screen.

Note: To display the Euro symbol in charts, you will need to install Macromedia Flash8.

Module Loader

Use the Module Loader to install Sugar modules, custom modules, upgrades, language packs, dashlets, and themes from Sugar Exchange.

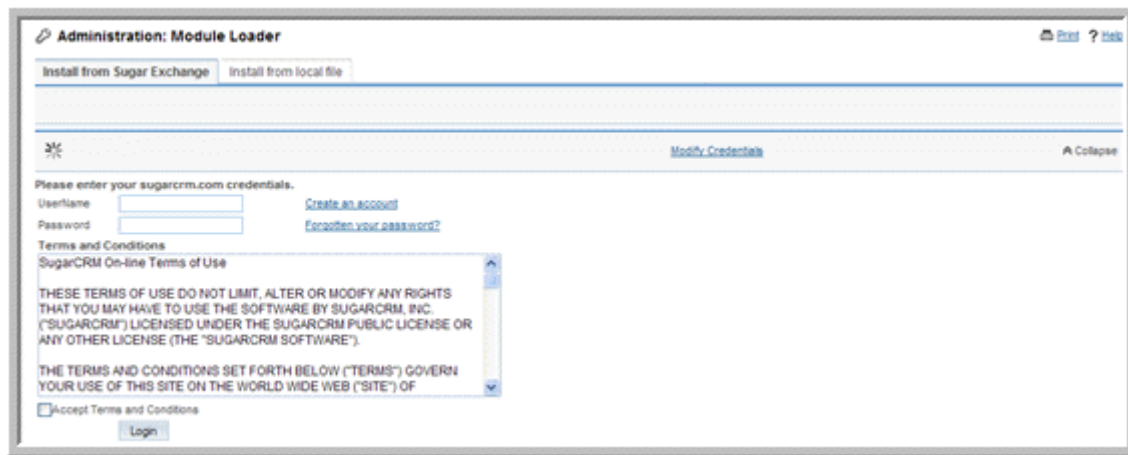
You can install a module directly from Sugar Exchange to your Sugar application. You can also upload a module from Sugar Exchange to your local machine and then upload it from your local machine to your Sugar application at a later date. When you install a module directly from Sugar Exchange, you can check for the latest version.

You create custom modules in the Module Builder. A custom module is contained within a package. You save packages as a zip file on your local machine and then use the Module Loader to upload them into Sugar. For more information on creating packages, see **“Module Builder” on page 70**.

You can also use the Module Loader to uninstall packages that you deleted in the Module Builder.

To install a module from Sugar Exchange

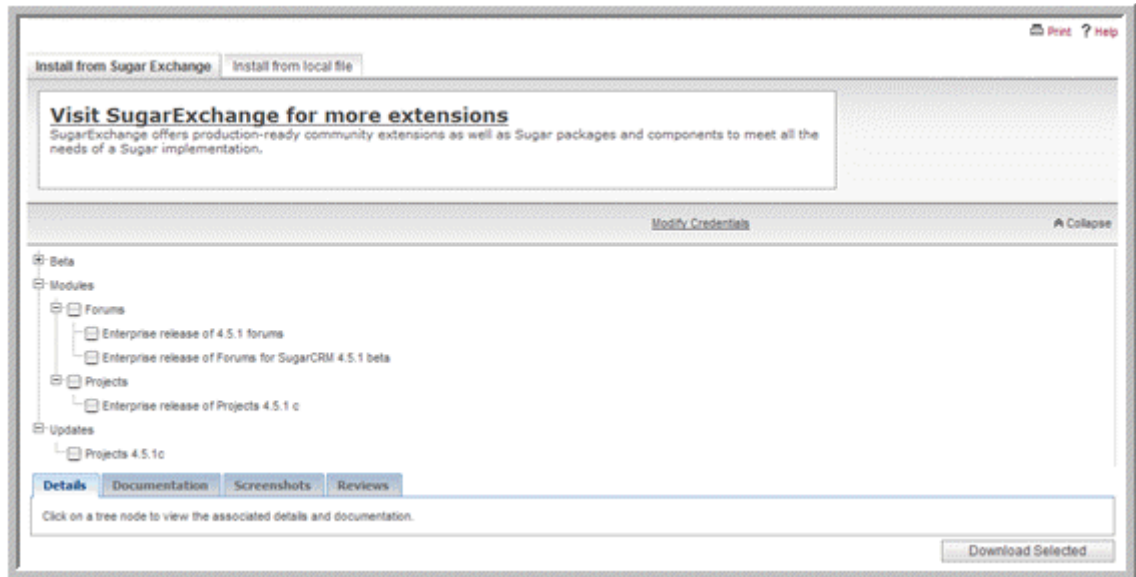
1. On the System sub-panel of the Administration Home page, click **Module Loader**.
The Module Loader Home page displays on the screen.



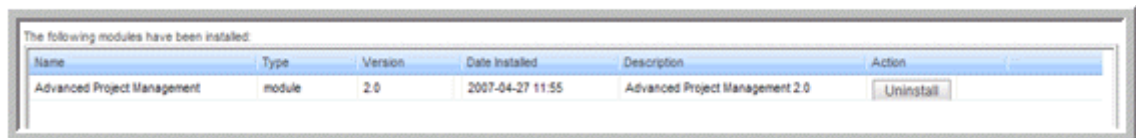
If you need to register with SugarCRM, Inc. to obtain a user name and password to log into the system, click the **Create an account** link. If you have already registered but do not remember your password, click the **Forgotten your password?** link to receive a new password.

2. Enter your user name and password, accept the license agreement, and click **Login**.

If the login is successful, the system displays Sugar packages and extensions that are available for download.



- Click the Plus sign (+) next to **Modules**.
The available modules and updates display below
- Select the module that you want to install.
- Click **Download Selected** and click **OK** to confirm your decision.
The downloaded module display below.



- To install the module, click **Install**; to remove the module, click **Uninstall**.

To install a module from your local machine

- Select the **Install From Local File** tab.

- In the Upload a module field, enter the path to the module or click **Browse** to navigate to the location of the module's .zip file.

- Click **Upload**.
The uploaded module displays on the Install from Sugar Exchange tab.
- Click **Install** to unzip the module file.
The Module Loader unzips the Module file and displays a message stating that the module is ready to be installed.
- Click **Commit** to install the module.
If the installation is successful, the system displays a message stating that the module installed successfully.
- To go back to the Module Loader page, click **Back to the Module Loader**.
The new module is listed on the page.

To uninstall a module

- To uninstall the module, click **Delete Package**.
The system displays a message stating that the module is ready to be uninstalled.
- Click **Commit** to uninstall the module.
The module is removed from Sugar.

Users

Use this sub-panel to manage users, and roles for your organization.

User Management

Use the User Management option to create, edit, activate, and deactivate users in Sugar. You can create an end-user, an administrator, a group user, or a portal-only user.

A *Sugar-user* can access and use Sugar modules but does not have administrative privileges.

An *administrator* has administrative privileges in Sugar to perform tasks such as creating users.

A *group user* is a bucket that you use to assign inbound emails. For example, you can create a group user named Support to handle customer support issues. You can then distribute them to the appropriate users from the group inbox. You can create a group user with the User Management option or when you create a group for inbound emails as described in **“Inbound Email” on page 64**.

A *portal-only user* is a user who can log into portals created in Sugar but cannot log into the Sugar application.

When you create a user, by default, the system creates a Sugar user unless you specify Administrator, Group User, or Portal Only User.

You can activate the Offline Client status for any user to allow that individual to use the Sugar application on their local machines without connecting to the Sugar server. For more information on the Offline Client, see the *Sugar Offline Client Installation Guide*.

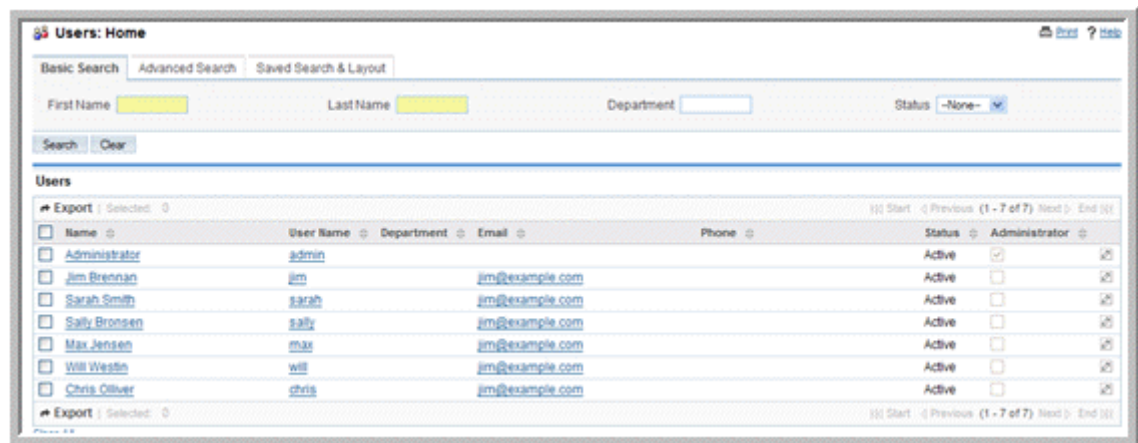
After you create an end-user, administrator, or portal-only user, the user name displays in the users list on the Users Home page and the employees list on the Employees Home page. Group user names display in the users list as group users and does not display in the employees list.

You assign users to roles depending on the tasks they perform for the organization.

Note: You cannot delete users but you can deactivate them.

To create a user

1. In the Users sub-panel of the Administration Home page, click **User Management**.



The Users Home page displays on the page.

- In the Shortcuts menu, click **Create New User**.

- On the Users page, enter the following information:
 - In the top sub-panel, enter the user name, the login name and password, and the user status.
 - In the User Settings sub-panel, select the appropriate option to specify whether the user is an administrator, an end-user, a group user, or a portal-only user. If you do not select any of these options, the system creates an end-user.
 You can enable email notifications to the user when a record is assigned to that person. You can also enable automatic reminders for upcoming meetings and calls. If the user has access to the Sugar Plug-in for Microsoft Word, you can enable the Mail Merge option.
 - The Locale Settings sub-panel displays the default values for the date and time format, the time zone, decimal symbol, and currency values as specified on the System Settings page. However, you can change these values for individual users if necessary.
 - In the User Information sub-panel, specify whether the user is still active, terminated, or on a leave of absence, the title, department, phone numbers, IM (Instant Messenger) type and ID. You can add comments in the Notes field, if necessary.
 - In the Address Information sub-panel, specify the user's home address.
 - In the Calendar Options sub-panel, you can enter a Publish Key to prevent others from publishing the user's calendar without authorization.

- g. In the **Layout Options** sub-panel, you can limit access to Sugar modules by granting the user access only to specific modules, depending on the tasks that the user needs to perform. By default, the user has access to all the modules. To hide a module from the user's view, move the module tab to the **Hide Tabs** list using the arrow buttons. Similarly, to display a module to a user, move it from the **Hide Tabs** list to the **Display Tabs** list.

To apply these settings to all users, move the modules from the **Hide Tabs** list to the **Remove Tabs** list.

To move up a module, select the module in the **Display Tabs** list and click the up arrow; to move down the module, click the down arrow.

Use the **Number of tabs** box to specify the maximum number of module tabs to display in the User Interface. Similarly, specify your preference for number of sub-tabs, sub-panel tabs, and sub-panel links. You can also specify the placement of the **Last Viewed** links and the **Shortcuts** menu.

From the **Navigation Paradigm** drop-down list, select **Modules** if you want each module to be displayed as a separate tab, or select **Grouped Modules** to group them into categories such as **Sales**, **Marketing**, and **Collaboration**.

- h. In the **Email Options** sub-panel, you can set one or more email addresses for the user's mail accounts. You can further specify whether an email address is the user's primary email address or whether it will be used for an automated response to emails. You will also need to specify an email client from the drop-down list. For more information on setting up and configuring emails, see the *Sugar Community Edition User Guide*.
4. To create the user, click **Save**; click **Cancel** to exit the page without saving your changes.
 5. To change the user password, click **Change Password**, enter the new password, and save it.

After you create the user, the system adds the user name to the user list on the **Users Home** page. You can now assign the user to roles.

To assign roles to a user

1. Select the user from the **Users** list to view the detail page.
2. To assign a role to the user, click **Select** in the **Roles** sub-panel and select one or more roles that you want to assign to the user.

The user is assigned to the role and the role is now listed in the **Roles** sub-panel.

To manage user information

3. To update the status of some or all users, use the **Mass Update** panel on the **Users Home** page as described in "Editing and Deleting Multiple Records in the *Sugar Community Edition User Guide*."
4. To view a user's details, click the user's name in the **Users** list.
5. To edit user details, click **Edit** on the detail page, change the information as needed, and click **Save**.

6. To duplicate the user details, on the detail page, click **Duplicate**, edit the information as necessary, and click **Save**.
7. To change the user password, click **Edit** on the detail page and then click **Change Password**. Enter the new password, and click **Save**.

Role Management

A role defines a set of permissions to perform actions such as viewing, editing, and deleting information. By default, user have access to all Sugar modules. If you want to restrict access to some modules you will need to create roles. Roles enable you to control user actions in Sugar by restricting access to modules. For example, if you want to prevent engineers in your organization from having access to the Opportunities module, you can create a role that restricts access to this module. When you assign this role to an engineer, that individual will no longer be able to access the Opportunities module. Or, you may want to assign junior sales representatives to a role that allows them to view and edit opportunities, accounts, and contacts but prevents them from deleting these records.

Users are affected only if roles that are assigned to them. That is, users who are not assigned a role can, by default, access and take any action in any module. Each user can be assigned zero, one, or multiple roles. Each role can be assigned to zero, one, or multiple users.

An Admin user, by default, has administrator rights for all modules and records. These privileges cannot be restricted with roles.

All changes to roles such as changing role definitions, assigning, or revoking roles take effect upon a new login session after the change has been made.

Creating Roles

When you create a role, you specify the modules that the role can access, the user type such as end-user or administrator, and the actions that they can perform.

Access Type options are as follows:

- **Enabled:** permits the user to view the module.
- **Disabled:** hides the module from the user's view.
- **Not Set:** leaves the setting unchanged.

User Type options are as follows:

- **Normal:** specifies end-user privileges in the module.
- **Admin:** specifies administrator privileges in the module.
- **Not Set:** leaves the setting unchanged.

Privileges are as follows:

- **Delete:** Delete records in the module. If None is selected, the Delete button is disabled on the detail page.
- **Edit:** Users can edit records in the module. If None is selected, the Edit button is disabled on the detail page. Additionally, the user cannot use the **Mass Update** panel to update records for the module.

- **Export:** Export record data in the module. The Export link located at the top of List Views is removed when this privilege is not available to the user.
- **Import:** Import record data in the module. The Import link in the navigation bar does not appear when this privilege is not available.
- **List:** Users can view list of records in the module or in a sub-panel but cannot edit them. Users are unable to access the module's list view when this privilege is not available.
- **View:** Users can view the detail page of records in the module.

Action options are as follows:

- **All:** all users who are assigned to the role can perform the action.
- **Owner:** Only the user who is assigned to the record can perform the action. If there is no assigned user, then the user who created the record can perform the action.
- **None:** prevents all users assigned to the role from performing the action.
- **Not Set:** leaves the setting unchanged.

When a user is assigned multiple roles, the roles definitions are merged and the more restrictive settings prevail. For example, if a user is assigned to two roles pertaining to one module where one role grants administrator access and the other grants end-user access, then user has only end-user access. In this case, the end-user access overrides the role with the administrative access because it is more restrictive.

A special case is the “Not Set” value in a role definition. You can use “Not Set” to ensure that a role does not affect a particular setting. This allows simple roles to be constructed and then combined to achieve the desired security level.

For example, if users are assigned to both the following roles:

Role A, where User Type = Admin and Export (action) = None

Role B, where User Type = Normal and Export (action) = All

Then, users can only see records that are assigned to them. And, they cannot export data.

If you change the User Type to Not Set:

Role A, where User Type = Admin and Export (action) = All

Role B, where User Type = Not Set and Export (action) = None

Then, the user can see all records in the module but cannot export data.

To create a role

1. In the Shortcuts menu of the Roles Home page, click **Create Role**.

2. Enter a name and description for the role.

All the Sugar modules along with the associated properties and actions are listed below in table format. You use this table to disable/enable modules or grant/deny permissions to perform specific actions.
3. Click **Save** to create the role.

The Edit View of the role displays a list of available modules along with the action type.
4. To specify access to a module, double-click the **Access** field corresponding to that module, and from the drop-down list, select **Enabled**; to deny access to the module, select **Disabled**.
5. To specify the user type, double-click the **User Type** field corresponding to the module and select **Normal** to specify end-user privileges or **Admin** to specify administrator privileges.
6. To set role permissions for a module, such as editing or deleting records, double-click the appropriate **Action** field corresponding to the module, and select one of the following:
 - All: allows all users of the specified user type to delete a record in the module.
 - Owner: allows only the record owner to delete the record.
 - None. Prevents all users of the specified user type from deleting records in the module.

Actions are as follows:

 - **Delete**: Delete records in the module. If **None** is selected, the **Delete** button is disabled on the detail page.
 - **Edit**: Edit records in the module. If **None** is selected, the **Edit** button is disabled on the detail page. Additionally, the user cannot use the **Mass Update** panel to update records for the module.
 - **Export**: Export record data in the module. The **Export** link located at the top of List views is removed when this privilege is not available to the user.

- **Import:** Import record data in the module. The **Import** link in the navigation bar does not appear when this privilege is not available.
 - **List:** List views of records in the module. The user is unable to access the module's list view when this privilege is not available.
 - **View:** View records in the module. The user is unable to access the module detail view when this privilege is not available.
7. To create the role, click **Save**; click **Cancel** to exit the page without saving your changes.

Note: To restrict actions such as editing and deleting records, you will need to set access control at the module level.

To assign users to a role

1. In the role's Edit View, scroll down to the Users sub-panel and click **Select**.
2. Select users from the Users list and click **Select** again.

The system assigns the selected users to the role.

You can also assign users to a role in the **User Settings** sub-panel of the **User Management** page.

3. Click **Save**.

To manage roles

1. To view the role details, click the role name on the **Role** home page.
2. To edit the role, on the detail page, click **Edit**, revise the information, and click **Save**.
3. To duplicate the role, on the detail page, click **Duplicate**, and then click **Save**.
4. To delete the role, on the detail page, click **Delete**.
5. To view access permissions for a specific user, in the **Shortcuts** menu, select **List Roles by User** and select the user from the adjacent drop-down list.
6. To remove a user, in the **Users** sub-panel, click the **rem** icon corresponding to the user name.

To view roles for a user

1. In the **Shortcuts** menu of the **Roles** home page, click **List Roles by User**.
2. Select the user from the drop-down list.

The system displays details of the user's privileges for each module. You cannot change any of the privileges because they are associated with the role.

Emails

Use this sub-panel to manage inbound and outbound emails for your organization. The **Email** panel on the **Administration** page displays options to configure mail settings, setup mail accounts to route inbound emails, and manage the email queue.

Email Settings

Use this option to set the default settings for outbound and inbound emails.

For outbound emails, this includes the following:

- Default notification settings that specify the “From” name and address for notification emails that you send users when you assign a record to them.
- The defaults for the Mail Transfer Agent, email format, and the email client for outbound emails.

From the Emails module, users can override some mail settings that you configure on this page such as the character set used when composing emails.

For inbound emails, you can specify the security settings to prevent compromising your system.

You can select tags, such as applets and frames, that you want stripped from incoming emails. When you do this, the system checks incoming emails for the specified tags and removes them before displaying the email in the application. The email is stored in the Sugar database, so you can choose to preserve the raw email source in the database without stripping any of the specified tags. However, note this action may compromise your system.

To configure email settings from the Administration page

1. In the Email Settings sub-panel of the Administration page, click **Email Settings**.

Email Settings: Configure

Save Cancel

* Indicates required field

Email Notification Options

"From" Name: * SugarCRM

"From" Address: * do_not_reply@example.com

Notifications on? Sends notification emails when records are assigned

Send notifications by default for new users?

Send notification from assigning user's e-mail address?

Save Outbound Raw Emails * Yes No

Mail Transfer Agent: sendmail

User Email Defaults

Compose email messages in this format: HTML Email

Compose email using this client: SugarCRM Mail Client

Compose email messages in this character set: UTF-8

Delete related Notes & attachment files with deleted Emails:

Email Security Settings

Check the following that should NOT be allowed in via InboundEmail or displayed in the Emails module.

Preserve raw email source, including potentially harmful content. This option will only preserve raw messages in the database, it will not let unfiltered content through the SugarCRM UI. **This may lead to a compromise of your system.**

Toggle All Options

Select Outlook default minimum security precautions (errors on the side of correct display).

<input checked="" type="checkbox"/> <applet> Applet tag	<input checked="" type="checkbox"/> <base> Base tag
<input checked="" type="checkbox"/> <embed> Embed tag	<input checked="" type="checkbox"/> <form> Form tag
<input checked="" type="checkbox"/> <frame> Frame tag	<input checked="" type="checkbox"/> <frameset> Frameset tag
<input checked="" type="checkbox"/> <iframe> iFrame tag	<input checked="" type="checkbox"/> <import> Import tag
<input checked="" type="checkbox"/> <layer> Layer tag	<input checked="" type="checkbox"/> <link> Link tag
<input checked="" type="checkbox"/> <object> Object tag	<input type="checkbox"/> <style> Style tag
<input checked="" type="checkbox"/> <xmp> Xmp tag	

Save Cancel

1. In the Email Notification Options sub-panel, enter information for the following fields:
 - From Name.** Enter the name of the sender.
 - From Address.** Enter the sender's address.
 - Save Outbound Raw Emails.** If you want to save copies of outbound emails in the Sugar database, select **Yes**. By default, it is set to **No**.
 - Notifications on?** Select this option to send an email notification to users when a record is assigned to them.
 - Send Notifications by default for new users?** Select this option to send an email notification to new users when you create their record in the User Management page.
 - Send Notifications from assigning user's email address?** Select this option to send notifications from the email address of the user when responding to an assigned task.
 - Mail Transfer Agent.** From the drop-down list, select either Sendmail or SMTP as the Mail Transfer Agent for your outbound emails.
If you select SMTP, enter the following information:
 - SMTP Server.** Enter the SMTP mail server's address.
 - SMTP Port.** Enter the mail server's port number.
 - To add Google's Gmail server, click **Pre-fill Gmail Defaults**. The system fills in the SMTP Server and SMTP Port fields with the Gmail server address and port number respectively.
 - Enable SMTP over SSL.** Select this option if you are using the POP3 protocol and the mail server requires SSL.
 - Use SMTP Authentication.** Select this option if the mail server requires authentication to send out the email.
 - SMTP Username.** Enter your username for the email account.
 - SMTP Password.** Enter your password for the email account.
2. In the User Email Defaults sub-panel, select the following information:
 - Compose email messages in this format:** Select HTML email or Plain Text Email from the drop-down list.
 - Compose email using this client:** The default is the SugarCRM mail client, but you can select an external mail client such as Microsoft Outlook.
 - Compose email messages in this character set:** Select the appropriate character set from the drop-down list. The default character set is ISO-8859-1.
 - Delete related Notes & attachment files with deleted Emails:** Select this box to delete notes and attachments that are related to the deleted emails.
3. In the Email Security Settings sub-panel, specify the following information:
 - Preserve raw email source.** Select this option if you want to preserve the email source in the database without stripping the selected tags.

Toggle all options. Check this box to strip all the listed tags from inbound emails. To strip some of the listed tags, you can uncheck this box and then select individual tags.

Outlook Defaults. Select this option if you do not want to strip the Style tag, which is used by Outlook.

4. **Append Disclosure Message to Every Email.** To append a notice regarding confidentiality with the email, select the box. You can use the default disclosure that displays in the field below or you can edit it as necessary.
5. To save your email settings, click **Save**; click **Cancel** to exit the page without saving your changes.

Configuring Email Settings for Campaigns

You can also specify email settings for campaigns from the Campaigns module.

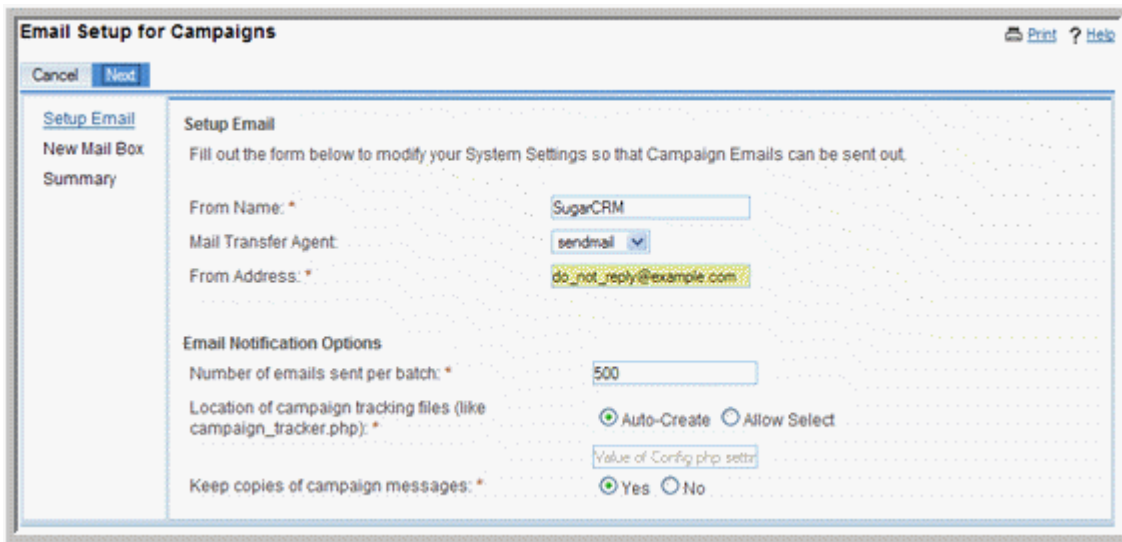
By default, the system stores copies of the campaign email that was sent to each target in the Sugar database. As a result, the database contains duplicate copies of the same email. This not only takes up space but also slows down performance. To enhance performance, you now have the option of storing only one campaign email in the Sugar database. You can map this email to all the campaign targets instead of storing duplicate copies for each target. You can set this option when you configure the email settings from the Campaigns module. However, when you select this option, you will lose some information such as the timestamp. The target's detail page displays a list of emails sent to the target

For information on campaigns, see the *Sugar Community Edition User Guide*.

To configure email settings from the Campaigns module

1. Log into Sugar as the administrator.
2. In the Shortcuts menu of the Campaigns Home page, click **Email Setup**.

The Email Setup for Campaigns page displays on the page.



3. In the Setup Email section, enter the following information:

From Name. Enter the name of the sender.

Mail Transfer Agent. From the drop-down list, select either sendmail or SMTP as the protocol.

From Address. Enter the email address of the sender.

If you select SMTP, enter the following information:

SMTP Server. Enter the name of the SMTP server.

SMTP Port. Enter the SMTP port number.

SMTP Password. Enter the SMTP password.

Use SMTP Authentication. Select this box to use SMTP authentication.

SMTP Username. Enter the SMTP user name.

In the Email Notification Options section, enter the following information:

Number of emails sent per batch. Enter the maximum number of emails to send per batch.

Location of campaign tracking files. To specify where the campaign tracking files should be saved, choose **Allow Select** and enter the path to the location in the field below. To save it in the Web root directory on your local machine, choose **Auto-Create**.

Keep copies of campaign messages. To save a copy of campaign message in the Sugar database, select **Yes**. If not, select **No**.

4. Click **Next**.

The New Mail Box page displays on the page.

1. Select **Create New Mail Account** to create a mail account to receive bounced emails.
2. Enter the mail account information as described in **“To set up a new mail account for inbound emails” on page 65** and click **Next**.

The system displays a summary page that lists the specified settings.

3. Click **Save** to save the settings and create a bounce-handling inbox; to navigate back to the previous screen, click **Back**; to go back to the Campaigns Home page without saving any of the specified information, click **Cancel**.

Inbound Email

Use this option to monitor and manage emails that your organization receives. You can create Group mail accounts, such as *support@example.com* or *sales@example.com*. A *group* is a bucket to collect and distribute emails to one or more users. To create a group, you need to create a group user as described in **“Users” on page 52**.

When your organization receives emails that do not reference existing Sugar records, you can route them to a group mail account. You can parse these emails and associate them with the appropriate Sugar records. For example, you can associate an email with a case ID.

For each Group mail account, you can set up an action for emails that are routed to there. For example, you can create a bug from an email. You or other users can subsequently distribute emails in the group mail account to specific individuals.

You can also create Group folders. These are folders within Sugar that can be shared among users. You can also map a Group folder to a Group mail account to automatically import emails into Sugar through the Job Scheduler.

Make a decision on whether to use Group mail accounts, Group folders, or both, based on the recommendations below:

Group Mail Account	Group Folder
<p>Can import emails manually into the Sugar database as needed.</p> <p>This option is recommended if:</p> <ul style="list-style-type: none"> • The mail server does not have a powerful spam filter and you want to avoid importing spam emails. • You do not have enough database storage space to store a large number of emails. 	<p>Can import emails into the Sugar database automatically through a batch process.</p> <p>This option is recommended if:</p> <ul style="list-style-type: none"> • The mail server has a powerful spam filter to help you prevent importing spam emails. • You have enough database storage space to store a large number of emails.

You can schedule a job to periodically monitor Group mail accounts for new emails and distribute them. For more information on scheduling jobs, see **“Scheduler” on page 31**.

When you click the Inbound Email option on the Administration Home page, the following screen displays on the page.

Case Macro. This field links an email with a specific case number. When users send an email from the detail page of a case, the case number appears in the Subject field of the email. To customize the subject line, you can replace “CASE” with any text of your choice. This value will be automatically entered in the subject when composing an email from the Detail View of a case.

Save Raw Source. Select **Yes** to preserve the raw email source in the database without stripping any of the specified tags. For more information, see [“Email Settings” on page 60](#).

Number of Auto-responses. Use this field to specify the maximum number of automated responses to send to a specific email address during a period of 24 hours. This prevents an endless loop in the event that you email a person who has set up an out-of-office responder. If not, when Sugar receives the automated response, the system responds with automated response, thus causing an endless loop.

To set up a new mail account for inbound emails

1. In the Shortcuts menu of the Inbound Email home page, click **Monitor New Mail Account**.

The Inbound Email Setup page displays on the screen.

Inbound Email Setup: ? Help

Save Cancel Test Settings * Indicates required field

Basic Setup

Name: * Status: Active

Mail Server Address: * User Name: * qa1@sugarcrm.com

Mail Server Protocol: * --None-- Mail Server Port: * Password: *

Use SSL: Leave Messages On Server: Import Only Since Last Check:

Email Handling Options

Possible Actions: Create [Any] "From" Name: Default: SugarCRM

Assign To Group: --Create Mailbox Group On Save-- "From" Address: Default: do_not_reply@example.com

Auto-Reply Template: --None-- Create "Reply-to" Name:

No Auto-reply to Domain: "Reply-to" Address:

2. In the Basic Setup sub-panel, enter information for the following fields:
 - Name.** Enter the user's name, or an alternate name for the mail account.
 - Mail Server Address.** Enter the address of the external mail server.
 - Mail Server Protocol.** From the drop-down list, select either IMAP or POP3.
 - Mail Server Port.** Enter the server port number.
 - Status.** From the drop-down list, select the user status.
 - User Name.** Enter the user name.
 - Password.** Enter the user password.
 - Monitored Folder.** Select a folder from the drop-down list. From the Emails module, users will be able to view emails in the monitored folder. The default value is "Inbox".
 - Use SSL.** Select this box to use Secure Socket Layer (SSL) when connecting to the mail server.
3. In the Email Handling Options sub-panel, enter information for the following fields:
 - Possible Actions.** From the drop-down list, specify the action that the user is permitted to perform. To permit all actions, select **Create [Any]**.

If you run campaigns and want to create an inbox to route bounced campaign emails, select **Bounce Handling**. You can create a bounce-handling inbox separately for each campaign or you can create one that is common to all campaigns. The system tags every bounced campaign email with a unique identifier that enables you to identify the campaign.

Assign To Group. From the drop-down list, select an existing email group or elect to create a group when you save the inbox.

Auto-Reply Template. From the drop-down list, select an existing email template.

“From” Name. Enter the name of the user who is sending out the email.

“From” Address. Enter the email address of the user.

“Reply-to” Name. Enter a name to receive bounced emails.

“Reply-to” Address. Enter an email address for bounced emails.

No Auto-reply to Domain. To exclude a domain from receiving the automatic email response, enter the domain name.

It is common to specify your organization’s domain to prevent auto-replies from being sent to your organization’s members.

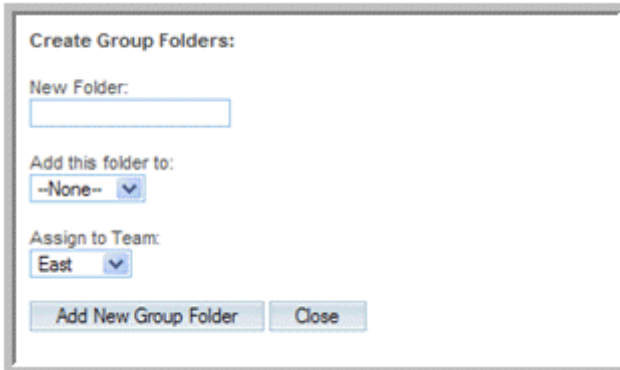
Assign to Group Folder. To route emails to an existing group folder, select an existing one from the drop-down list or create a new folder as described in **“To create a Group folder”**.

4. Click **Test Settings** to ensure that the settings are accurate.
5. Click **Save** to save the settings.

The system creates the mail account and displays its detail page.

To create a Group folder

1. Click the **Create** button adjacent to the Assign to Group Folder drop-down list. The Create Group Folders dialog box displays on the screen.



The screenshot shows a dialog box titled "Create Group Folders:". It has three main sections: "New Folder:" with an empty text input field; "Add this folder to:" with a dropdown menu showing "-None-"; and "Assign to Team:" with a dropdown menu showing "East". At the bottom of the dialog are two buttons: "Add New Group Folder" and "Close".

2. Enter the following information:

New Folder. Enter a name for the Group folder.

Add this folder to. If this is the first group folder that you are creating, select **None**. If you already have one or more group folders and want to create a sub-folder, select the parent folder from the drop-down list.

Assign to Group. Select a group from the drop-down list.

3. Click **Add New Group Folder** to create the folder.

The new folder displays in the Assign to Group Folders drop-down list. An Edit link displays next to the Create button. Click this link to edit the folder, if needed.

To manage monitored mail accounts

1. To view the details of a mail account, click its name in the Inbound Email home page.
2. To edit the account, click **Edit**, revise the information, and click **Save**.
3. To duplicate the account, click **Duplicate**.

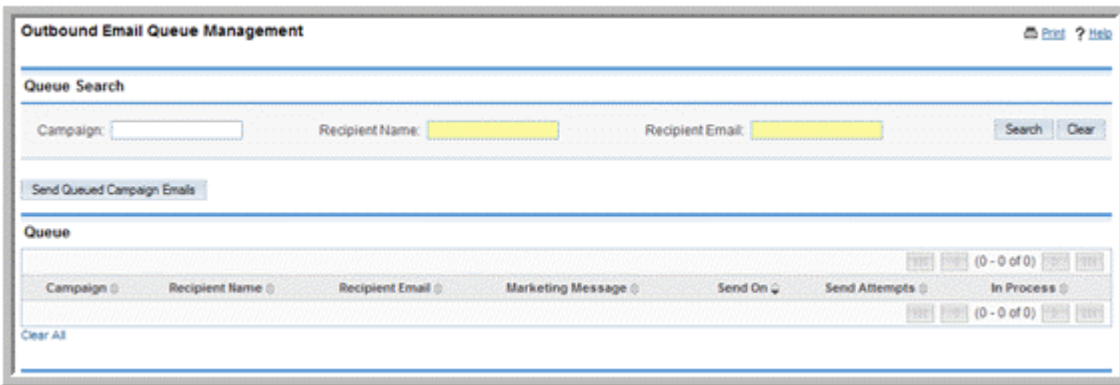
The system creates a new mail account and displays the Edit page. You can edit the details and click **Save** to create a new account.

4. To delete a mail account, select it and click **Delete**; to delete multiple mail accounts, select them on the Inbound Email home page and click **Delete**.

Manage Email Queue

Use this option to view, send, and delete mass campaign emails that are in the queue for dispatch. The system sends out the email only after the start date/time has passed. After a campaign email has been processed, you can view its status in the Campaign module. The system tracks statistics such as the send date and number of times an email delivery was attempted.

Use the Scheduler to run nightly mass email campaigns as well as monitor bounced campaign emails. For more information on scheduling email mailings, see [“Scheduler” on page 31](#).



To manage queued emails

1. To send out campaign emails, select the campaign in the Queue sub-panel below and click **Send Queued Campaign Emails**.
You can select more than one campaign at a time.
2. To delete campaign emails, select the campaign in the Queue sub-panel below and click **Delete**; click **OK** to confirm the deletion.
3. To search for a specific campaign, enter the campaign name, or recipient name, or recipient address in the Search fields above and click **Search**; click **Clear** to clear the search fields.

Campaign Email Settings

Use this option to specify outbound email settings for email campaigns.

Campaign Email Settings: Configure

Outbound Email Options

Number of emails sent per batch: *

Location of campaign tracking files (like campaign_tracker.php) * Default User Defined

Value of Config.php setting

Keep copies of campaign messages: * Yes No

Save Cancel

To specify campaign email settings

1. **Number of emails sent per batch.** Enter the number of campaign emails to send out in a batch every time the scheduled job runs.
2. **Location of campaign tracking files.** You can specify the location of campaign tracking files in this panel. Campaign tracking files log the responses from the campaign targets.

If you are running Sugar on an external network, select **Default** and accept the default location.

If you are running Sugar on your internal network (for example, *http://privatemachine/sugar/index.php*), move *Campaign_tracker2.php*, *Removeme.php*, and *image.php* files from the Sugar root directory to a directory on your public Website (for example, *http://mycompany.com*) so that you can track the responses of your campaign targets. To specify the location of these campaign tracking files, select **User Defined** and enter the path in the field below.

When a target opens the campaign email or clicks an embedded image, the action is logged in the *Campaign_tracker2.php* file or the *image.php* file respectively. When a target opts out of the campaign, the action is logged in the *Removeme.php* file.

3. **Keep copies of campaign messages.** Specify whether you want to store a copy of every email that is sent out to the campaign targets or if you want to keep only one copy. Select **Yes** to keep copies of every email. The default is **No**.

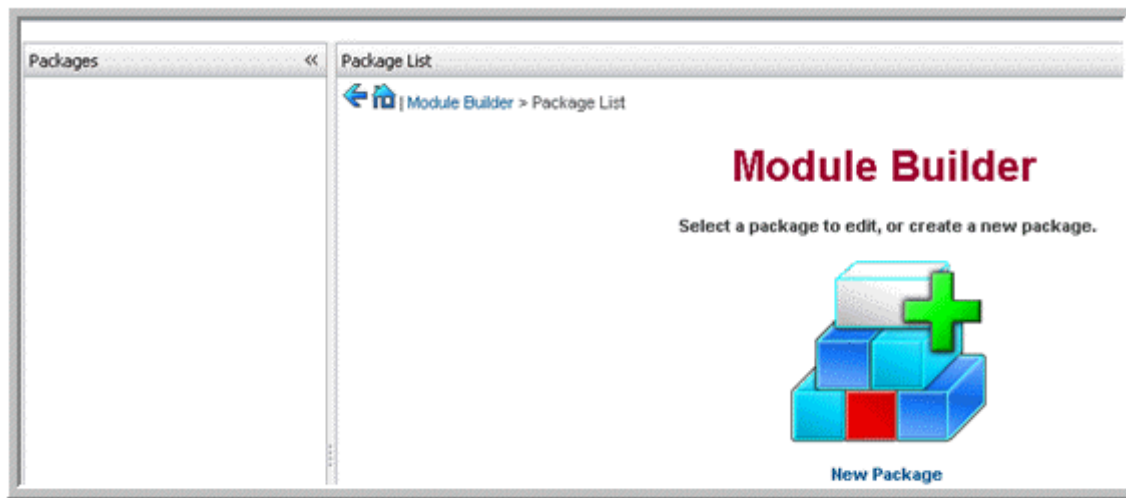
Developer Tools

The Developer tools sub-panel displays options to build new modules and customize existing ones. The Module Builder enables you to build custom modules and Studio enables you to customize existing modules.

After you build a module, use the Module Loader to install it in Sugar. For more information, see [“Module Loader” on page 49](#).

Module Builder

Use the Module Builder to create custom modules.



The process of creating a custom module is as follows:

1. Create a package to house the new module. You can create one or more modules for the package.
2. Create a module using one of the following templates that Sugar provides for you.
 - Basic.** This template provides basic fields such as ID, date entered, and created by. Use this template to create a module from scratch.
 - Company.** This template provides organization-specific fields such as company name, industry, and billing address. Use this template to create a module that is similar to the Accounts module.
 - Person.** This template provides individual-specific fields such as salutation, title, name, address, and phone number. Use this template to create a module that is similar to the Contacts or Leads module.
 - Issue.** This template provides case and bug-specific fields such as ID, description, and created-by. Use this template to create a module that is similar to the Cases or Bug Tracker module.
3. Customize existing fields and labels from the selected template and create new fields as needed.

Note: You cannot edit the default fields in the selected template but you can duplicate them and save them as new fields to customize them.

4. Customize page layouts for List View, Edit View, Detail View, and Search fields if needed.
5. Create relationships between the new module and other modules.
6. Save the package and distribute it.

You can choose one of the following option to distribute the package:

- **Publish.** This option is designed for distribution to specific users or customers. The system creates a zip file, which you can save on your local machine. You can then email it to one or more individuals who can use the Module Loader to upload the zip file into their Sugar instance.
Through Studio, you can add or remove fields and make other changes to a published module.
- **Deploy.** This option is designed to install the custom module on your Sugar instance and make it available to all users in your organization. Through Studio, you can add or remove fields and make other changes to a deployed module.
- **Export.** This option is designed for distribution to developers. The system creates a zip file, which you can save on your local machine and email to other developers. Using the Module Loader, developers can install it on their Sugar instance and further customize it as needed. The package is visible only in Module Builder and, hence, only developers can access it.

Sugar modules have multiple relationships with other modules. Therefore, when you create a module, you must define its relationship with one or more modules. For more information, see [“Creating Relationships” on page 74](#).

To create a package

1. In the Developer Tools sub-panel, click **Module Builder** to view the Module Builder page.
2. Click **New Package**.

The Package page displays on the screen.

3. Enter a name for the package and click **Save**.

The system refreshes the page and displays options to duplicate, publish, deploy, export, and delete the package.

4. Enter information for the following fields:
Author. Enter your name as the creator of the package.

Key. Enter an alphanumeric key to distinguish modules with similar names. The system will prefix all class names, directories and tables names with this key.

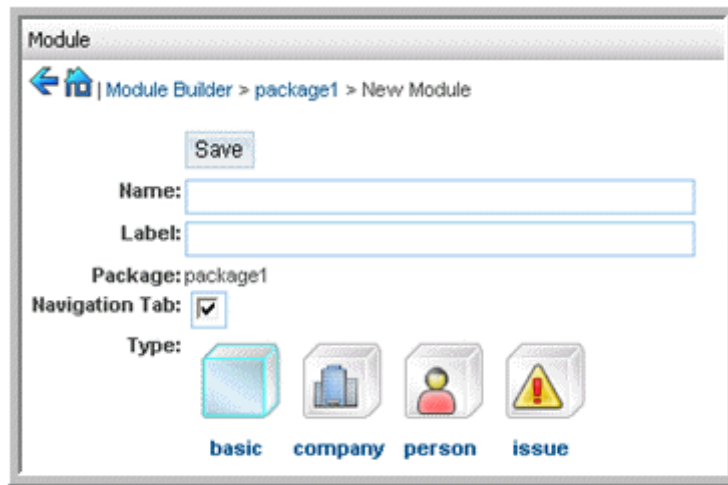
Description. Enter a brief description of the package.

5. Click **Save** to create the package.
6. Click **Duplicate** to create a copy of the package.
The system appends a “1” to the package name and saves it as a new package.
7. Click **Publish** to save the package as a zip file.
8. Click **Deploy** to deploy the package on your Sugar instance.
9. Click **Export** to save the package as a zip file.
10. Click **Delete** to delete the package.

To create a module

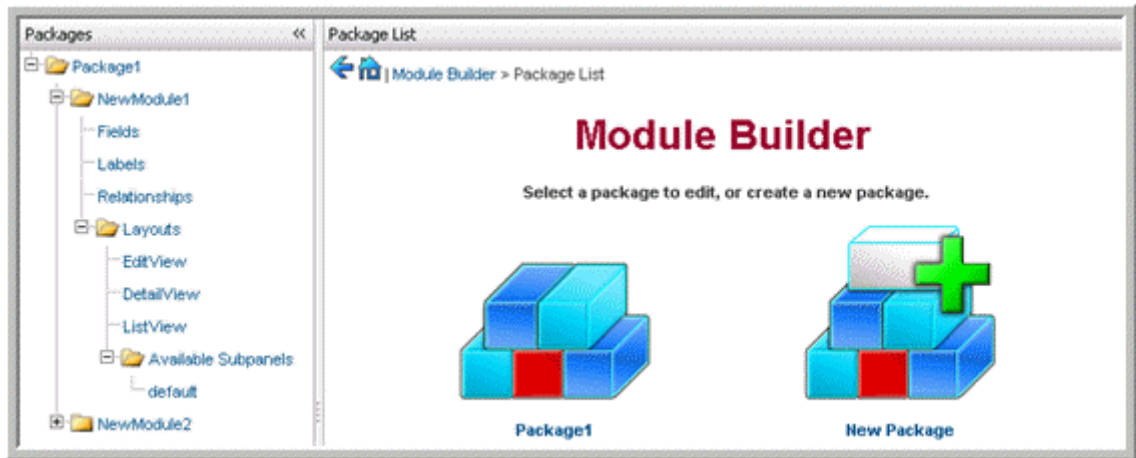
1. Click the **New Module** icon on the Package page.

The Module page displays



2. Enter information for the following fields:
 - Name.** Enter a name for the module.
 - Label.** Enter a name for the module that you want displayed in the Sugar User Interface.
 - Package.** The name of the package associated with this module displays on the page.
 - Navigation Tab.** By default, this option is enabled to create a tab for the module that is identical to other Sugar module tabs.
 - Type.** Click a template to select it for your module
3. Click **Save** to save the module and add it to the package.

The system refreshes the page to display the selected template. The new module is nested within the package listed in the Packages panel on the Module Builder home page.

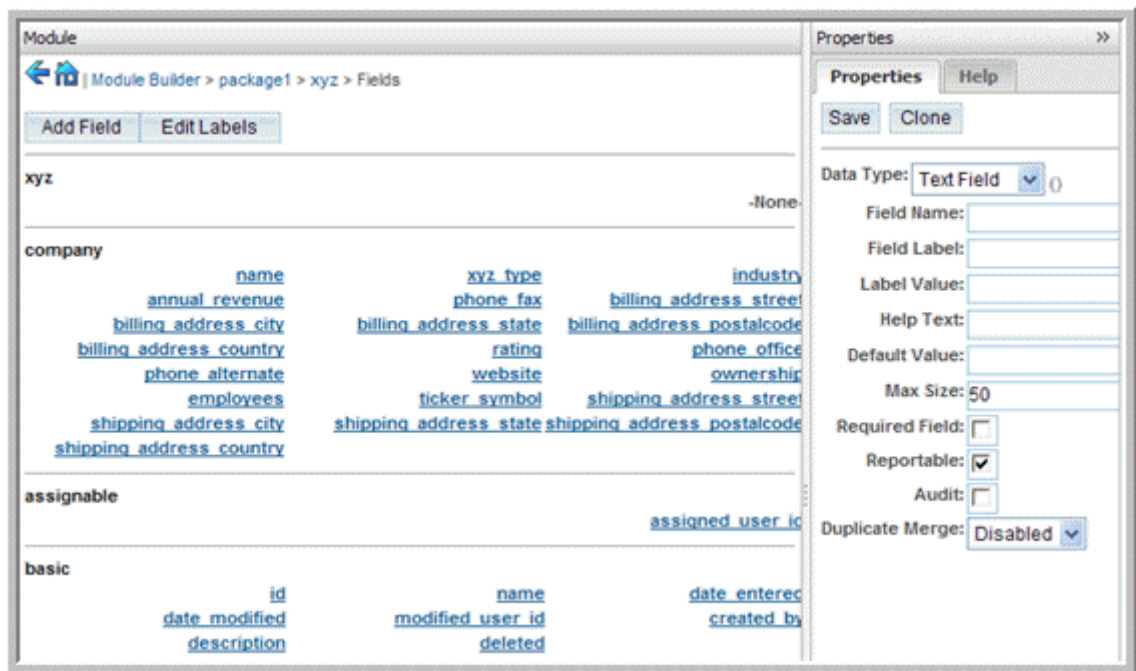


You can now view the fields available in the template, add new fields to your module, and create relationships with other Sugar modules.

To view and create fields

1. In the Packages panel of the Module Builder home page, select the module from the package and click **Fields**.

The system displays the default fields available in the template.



2. To view an existing field, click its name and view its properties in the right panel. You cannot edit the default fields. You can, however, edit and delete.

3. To add a new field, click **Add Field** and enter the information as described in **“To add custom fields” on page 77**.
4. Click **Save** to create the new field.
The new field is now listed underneath the module name.

To view and edit page layouts

1. In the module, click View Layouts.
2. Select the page layout that you want to edit.
You can edit List View, Detail View, Edit View, and Search.
3. Edit the layout as described in **“Editing the Page Layout” on page 84**.

Creating Relationships

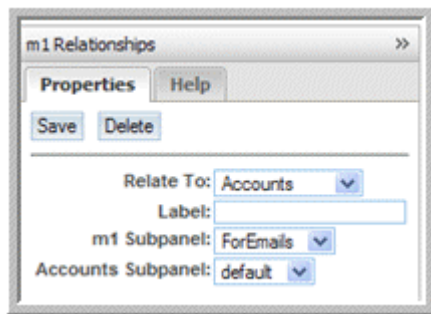
Sugar modules have multiple relationships with other modules. Therefore, when you create a module, you must define its relationship with one or more modules. For example, Accounts is related to Contacts, Leads, Opportunities, and several other modules. Related records from these modules display in sub-panels on an account’s detail page. Therefore, when you create a module, you must define its relationship with one or more modules. You create one relationship at a time.

When you create a relationship, you are also selecting the *type* of information that you want to display. For example, when you create a relationship with the Contacts module, you can choose contacts for opportunities or accounts. Therefore the relationship type varies depending on the module with which you create the relationship.

Similarly, you can specify the modules in which you want to display the custom module as a sub-panel.

To view and create relationships

1. On the module’s page, click **View Relationships**.
Existing relationships display on the page.
2. To create a relationship, click **Add Relationship**.
The relationship fields display in the Properties tab in the right panel.



3. Enter information for the following fields:

Relate to. From the drop-down list, select the module you want to associate with your custom module.

Label. Enter a name of the relationship.

Subpanel. From the first drop-down list, select **Default** if you want to display the associated module as a sub-panel on the detail page of the custom module.

From the second drop-down list, select **Default** if you want to display the custom module as a sub-panel on the detail page of the related module. If not, select a specific module. The sub-panel options varies depending on the module that you associate with your custom module.

4. Click **Save** to create the relationship.

The new relationship displays under the Add Relationship button in the middle panel.

To distribute a package

1. In Module Builder, select the package and click **Publish, Deploy, or Export**.

When you select Publish or Export, the system saves it as a zip file that you can export to your local machine and distribute as needed. When you select Deploy, the system installs all the custom modules in the package on your Sugar instance.

2. When you choose Publish or Export, select **Save to Disk** and click **OK**.

Use the Module Loader to upload the file from your machine into Sugar and install the module. For more information, see [“Module Loader” on page 49](#).

Deleting Packages

You can delete a package if necessary. When you delete a package, all the files that it contains are also deleted. If you delete a package after it has been installed, you can uninstall it after deletion using the Module Loader. When you uninstall a package, you have the option of retaining or removing the database tables.

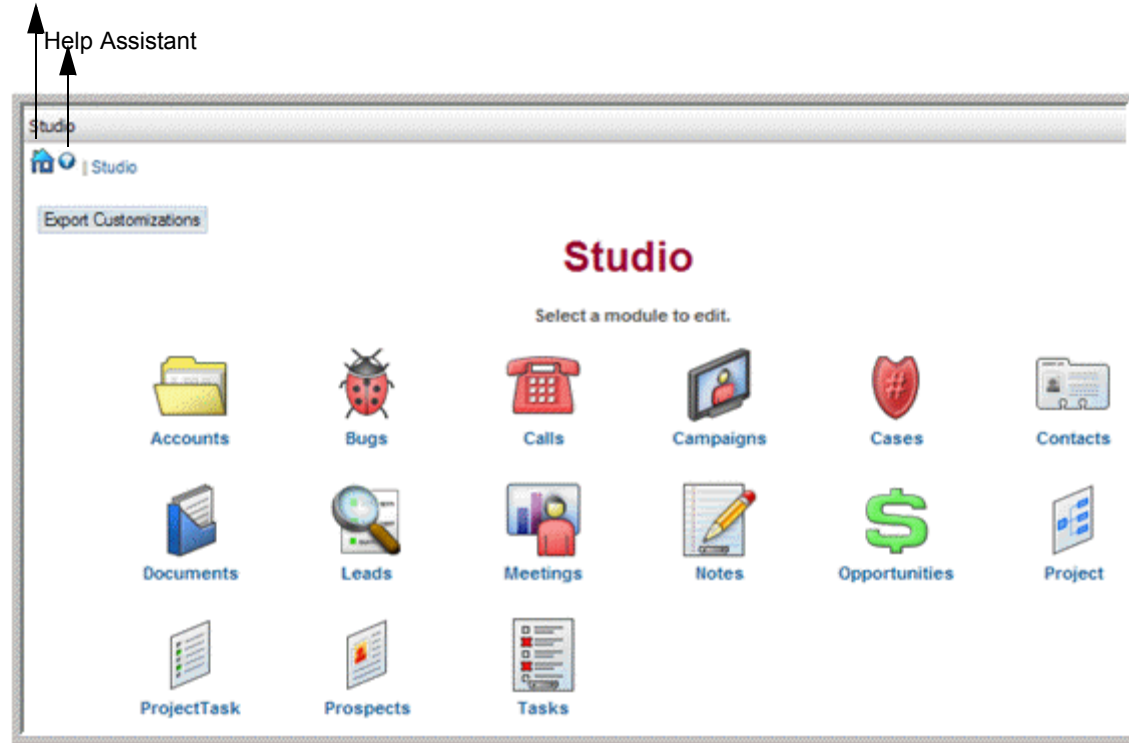
You do not need to delete a package before you install a newer version. The files from the new version will override any existing files from the earlier package.

Studio

Studio enables you to customize modules by adding new fields, editing existing fields, field labels, page layouts, sub-panels, and Quick Create forms. You can export a

customized module to your local machine and upload in into Sugar using the Module Loader.

Developer Tools Homepage



Users can use their My Account page to override some of the configurations that the administrator makes in Studio. For more information, see “Setting Your Preferences” in the *Sugar Community Edition User Guide*.

The Studio home page displays a list of existing modules in the left panel. These include the default Sugar modules as well as any custom modules that you create. The associated fields, labels, layouts, and sub-panels for each module are grouped within the module. You can click the Plus sign (+) preceding the module name to view them. The right panel displays the same information in the form of icons. You can click a module in either panel to drill down to its fields, labels, layouts, and sub-panels.

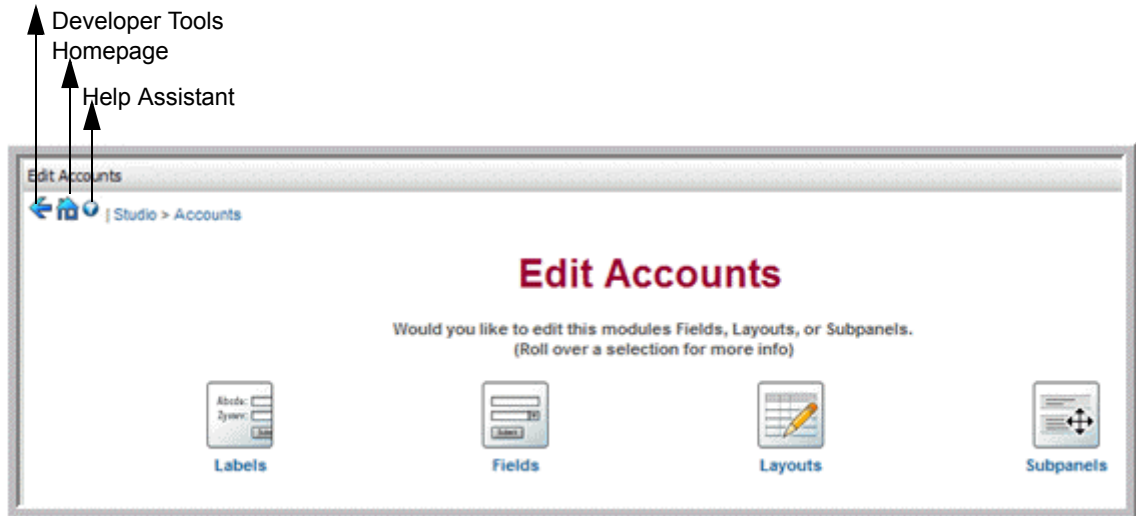
Editing a Module

You can add and edit custom fields, drop-down lists, and field labels. You can also edit the default layout and sub-panels. After you complete editing the module, the updated version will not be available to other users until you publish it. You can use Studio to make changes to a published module.

To edit a module

1. In Studio, select the module that you want to edit.

Back Button



The screen above illustrates the Accounts module.

2. Select from the following options:

Labels: Select this option to edit field labels. For more information, see [“Editing Field Labels” on page 83](#).

Fields: Select this option to create and edit custom fields. For more information, see [“To add custom fields” on page 77](#). Select this option to edit and create drop-down lists. For more information, see [“Creating and Managing Drop-down Lists” on page 80](#).

Layouts: Select this option to edit the List View, Detail View, Edit View, Search form, and Quick Create form. For more information, see [“Editing the Page Layout” on page 84](#).

Subpanels: Select this option to edit one or more of the module’s sub-panels. For more information, see [“To edit a sub-panel” on page 87](#).

3. Click **Save** to save your changes.

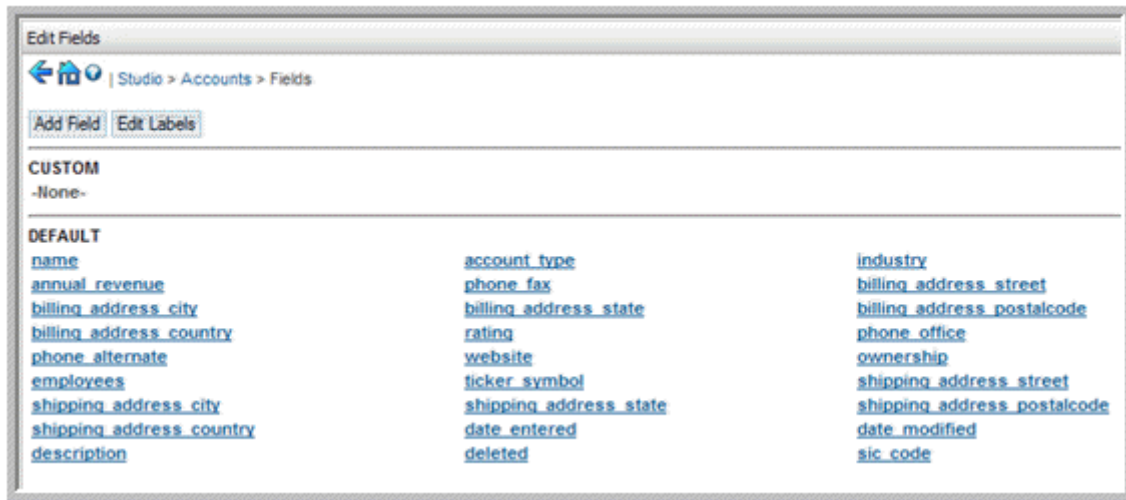
Creating and Managing Custom Fields

You can add custom fields to any module in Sugar. When you add a custom field, the application adds the field to the appropriate database table and stores the generated metadata. You can then add the fields to the desired layout, such as Edit View and Detail View. When you create a custom module, you can create fields in the Module Builder. After you publish the module in Sugar, you can edit it further in Studio.

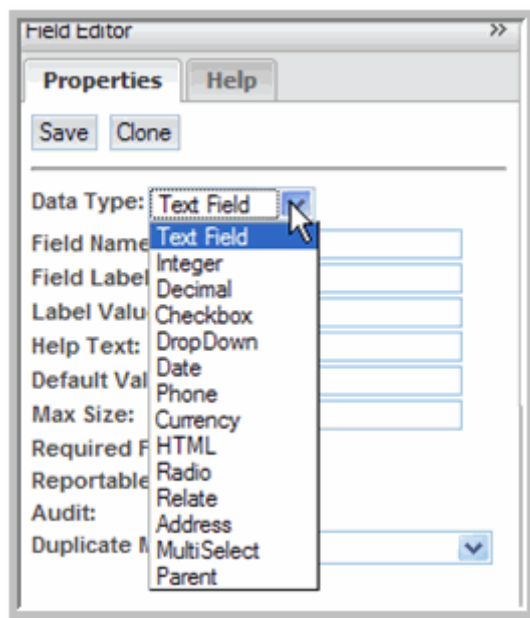
To add custom fields

1. To add a new custom field to a module, select the module and then click **Fields**.

The page displays the current default fields that Sugar provides as well as any existing custom fields. It displays the Field Editor in the right panel.



The field types that you can create are shown on the screen below:



The information that you need to specify varies depending on the selected data type. First, select the module in which to add custom fields. Then you can define field properties for the new field. You can edit and delete custom fields.

2. In the Field Editor, enter values for the following:

Data Type. From the drop-down list, select one of the data types listed below.

- **Text Field.** Creates a text field for fields such as first name and last name.
- **Integer.** Creates a field to specify positive or negative numbers. You can specify a range with the min and max value fields.
- **Decimal.** Creates a field to specify the precision past the decimal point.
- **Checkbox.** Creates a checkbox.

- **DropDown.** Creates a drop-down list. For more information on drop-down lists, see [“Creating and Managing Drop-down Lists” on page 80](#).
- **Date.** Creates a field to enter a date.
- **Phone.** Creates a field to enter a phone number.
- **Currency.** Creates a field to enter an currency. The system automatically creates a field of the currency type if the field does not exist.
- **HTML.** Creates an HTML field to add HTML snippets.
- **Radio.** Creates a radio button.
- **Relate.** Creates a field to associate the record with another record.
- **Address.** Creates fields for street, city, postal, state, country.
- **MultiSelect.** Creates a drop-down list to select multiple values.

Note: You cannot create a MultiSelect field in the Module Builder.

- **Parent.** This data type displays only if the module does not currently contain a Parent field. Creates a drop-down list to specify a parent module for a one-to-one parent-child relationship.

Depending on the data type that you select, you will need to specify values for some of the fields listed below.

- **Field Name.** Enter a name for the field. The system adds it to the Sugar database.
- **Field Label.** The system automatically creates and displays the field label that will be added to the database.
- **Label Value.** The system uses the field name as the label value. You can enter a new value if needed.
- **Help Text.** Enter descriptive text for the field. This text displays when the user points the cursor at the field.
- **HTML.** This box display when you select the HTML data type. Enter the HTML code in this box.
- **Default Value.** Enter a default value for the field, if necessary.
- **Max Size.** Enter the maximum number of characters that the field can contain.
- **Mass Update.** This box displays when you select the DropDown data type or the Date data type. For information on creating a drop-down list, see [“To create a drop-down list” on page 81](#).
- **Min Value.** This field displays if you select the Integer data type. Enter a minimum value during data input.
- **Max Value.** This field displays when you select the Integer data type. Enter a maximum value during data input.
- **Precision.** This field displays when you select the Decimal data type. Enter the number of digits you want to express the precision for the fractional part of the number.

- **Required Field.** Check this box to specify that users must enter a value for the field.
 - **Audit.** Check this box to display field values when a user clicks the **View Audit Log** link.
 - **Duplicate Merge.** From the drop-down list, specify one of the following options for the Duplicate Merge functionality on a record's detail page.
 - **Enabled:** The field can be used as a filter, and will be a default filter field.
 - **Disabled:** This field cannot be selected as a filter.
 - **In filter:** This field will be available to be used as a default filter.
 - **Default Selected Filter:** This is a filter field by default.
 - **In Filter Only:** This field can be selected as a filter to search for identical fields during a duplicate merge operation. However, you cannot merge the values into a single field.
3. Click **Save** to create the field.

The new field is listed in the Custom section. The system appends the field name with ‘_c’ to indicate that it is a custom field.

To edit and manage fields

1. To edit a field, select it from the list to display its details in the Field Editor.
2. Make the necessary changes and click **Save**.
3. To duplicate the field, click **Clone**, enter a new name, and click **Save**.
4. To delete the field, click **Delete**.
5. Click **Save** to update the field.

Creating and Managing Drop-down Lists

Most modules display at least one drop-down list consisting of several values that users can choose from. For example, when users creates an account, they can choose a specific industry type and an account type from their respective drop-down lists.

As the administrator, you can create and edit values in all of the drop-down boxes in the system to suit your organization's needs. You can also create new drop-down lists for a module.

To create a drop-down list

1. From the Data Type drop-down list in the Field Editor panel, select **DropDown**.

The screenshot shows the 'Field Editor' dialog box with the following configuration:

- Data Type:** DropDown (selected in a dropdown menu)
- Field Name:** [Empty text box]
- Field Label:** [Empty text box]
- Help Text:** [Empty text box]
- Drop Down List:** account_type_dom (text input)
- Buttons:** Edit, Add
- Default Value:** [Empty dropdown menu]
- Mass Update:**
- Required Field:**
- Reportable:**
- Audit:**
- Duplicate Merge:** [Empty dropdown menu]
- Buttons:** New, Save

2. Enter values for the following fields:

Field Name. Enter a name for the drop-down list.

Field Label. Enter a label name for the field to display in Sugar.

Help Text. Enter descriptive text for the field. This text displays when the user points the cursor at the field.

Drop Down List. To create a new list, do the following:

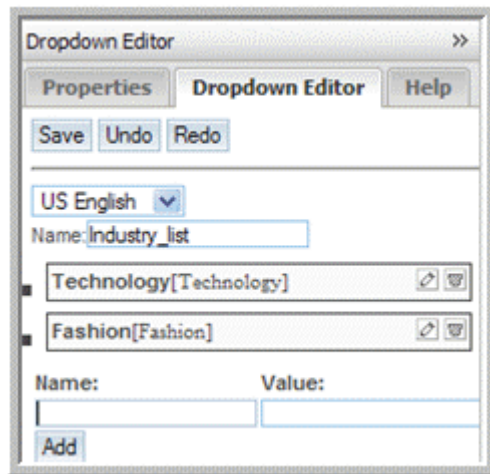
- a. Click **Add**.

The system displays the Dropdown Editor.

- b. In the Name field, enter a label for the drop-down list.

- c. In the Name field below, enter a name and its value.

The name displays in the User Interface and its value is stored in the Sugar database.



- d. To edit a name or its value, click the **Edit** icon; to delete them, click the **Delete** icon.
- e. To add additional parameters, click **Add**.
- f. Click **Save** to save the list.

The system displays the new drop-down list on the Properties tab.

- g. To undo your changes, click **Undo**.
- h. To redo your changes, click **Redo**
- i. On the Properties tab, click **Save** to save the drop-down list.

The new drop-down list displays under the module name in the center panel.

To use an existing drop-down list, do the following:

- a. Select an existing drop-down field listed under the module.
- b. In the Field Editor, click **Edit**.
The existing names and values display in the list.
- c. To change a value, click the corresponding Edit icon and enter the new value.
- d. To remove a name and its value, click the corresponding Delete icon.
- e. To add new values and labels, click **Add**.
- f. Click **Save** to save your changes.
- g. To undo your changes, click **Undo**.
- h. To redo your changes, click **Redo**.
- i. On the Properties tab, click **Save** to save your changes.

Default Value. Select a value from the drop-down list as the default for this drop-down list.

Mass Update. Checkmark this box to enable users to use the Mass Update functionality to update this field value.

Required Field. Checkmark this box to make this a required field.

Audit. Check this box to display field values when a user clicks the **View Audit Log** link.

Duplicate Merge. From the drop-down list, specify one of the following for the duplicate record merging functionality in modules such as contacts and accounts:

Disabled: This field cannot be used to merge records.

Enabled: This field can be used to merge records.

In filter: This field can be used as a filter when merging records.

Default selected filter: This field is the default filter when merging records.

Filter only: This field can be used only as a filter to merge records.

Editing Field Labels

Every field in a module has an label that displays in the Sugar User Interface. You can change the default field labels for all the language packs that you have installed.

To change field labels

1. Select the module and click **Labels**.

A list of existing database fields and the labels to which they are mapped displays on the page.

The screenshot shows the 'Edit Labels' window with the following fields and values:

Language:	US English
db_name:	LBL_LIST_ACCOUNT_NAME
db_website:	LBL_LIST_WEBSITE
db_billing_address_city:	LBL_LIST_CITY
LBL_CHARTS:	Charts
LBL_DEFAULT:	Views
LBL_MISC:	Misc
LBL_UTILS:	Utils

2. If you want to select a different language pack, select the appropriate one from the list of pre-installed language packs in the Language drop-down menu.
3. Select the label that you want to edit and enter the new name.
4. Click **Save**.
5. To navigate back to a different module or to Studio, click the appropriate breadcrumb above the Save button.

Editing the Page Layout

You can edit the page layout for List View, Detail View, Edit View, Search form, and Quick Create form. You can remove existing fields and add new ones to a view. You can also rearrange existing fields to change the current layout.



When you select List View, the system displays separate columns of fields that are currently displayed in the view, fields that are available for display, and hidden fields. You can click and drag a field from one column to the other depending on what you want to display to users.

When you select Edit View or Detail View, the system displays the separate sections of the current layout, along with the fields under each section. You can click and drag a field to a different location within the layout.

In Edit View, you can also change the order in which the user can tab from field to field on a page. For example, when users create a new account, they can tab from the Account Name field to the Website field and so on. You can change the tabbing order so that users tab from Account Name to Email.

The Quick Create form, which is the same as the Edit View, enables users to create a related record from the detail page of a record. For example, you can create a contact from the Contacts sub-panel on an account's detail page. In Studio, you can shorten the Quick Create form by removing some fields. You can also add additional fields, if necessary.

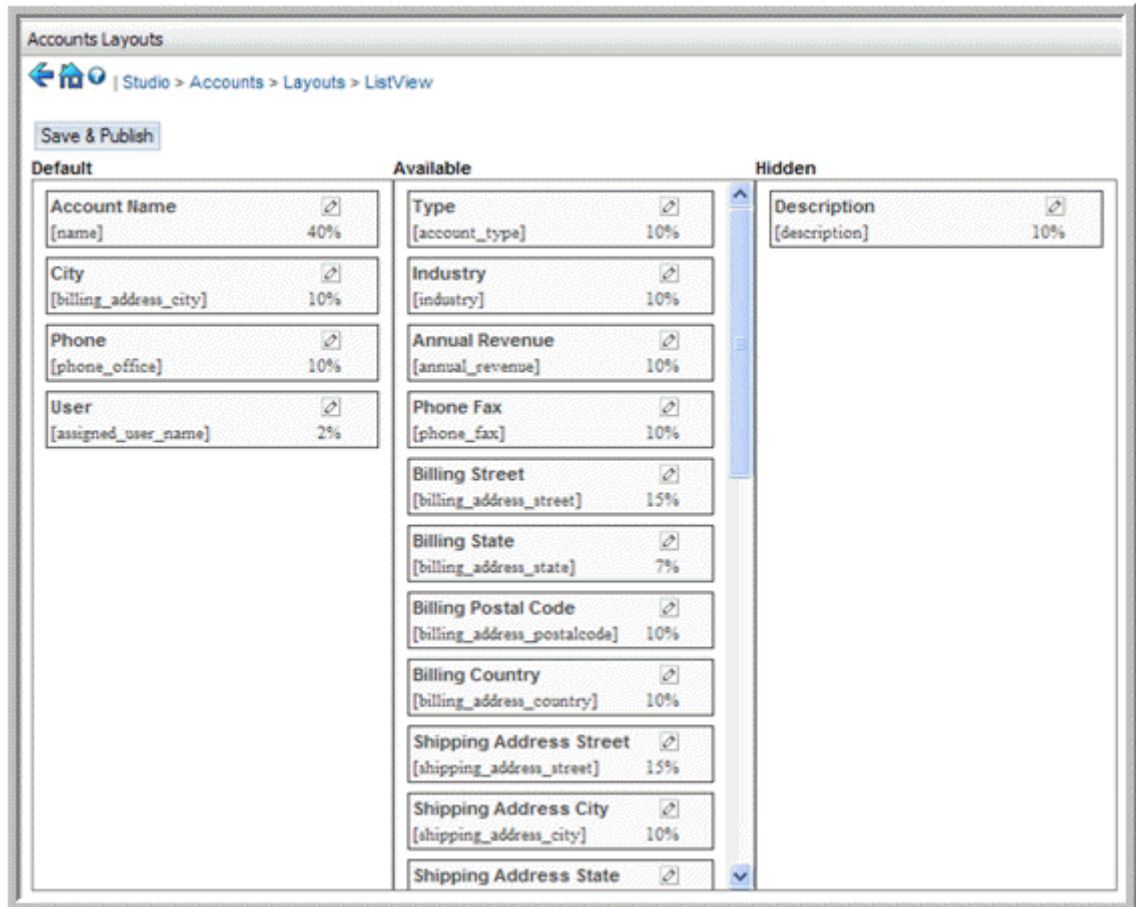
The breadcrumbs to navigate back to Studio display above. The Toolbox provides space to store fields that you remove from a view. It also provides new rows to add to the view and a list of available fields that you can add.

To edit List View

1. Select **Layouts** and then select **List View**.

The List View page displays on the screen. The Default column lists fields that are currently displayed in the User Interface. The Available column lists fields that are available to users through advanced search. Users can search for and add any of

these fields that they want to view in the search results. The Hidden column lists fields that you want to hide from users when they perform an advanced search.



- To display a field in List View, select and drag the field from the Available or Hidden columns and drop it into the Default column.
- To remove a field from List View, select and drag the field from the Default column and drop it in the Available column.
- To hide a field from users, drag it from the Default or Available column and drop it in the Hidden column.
- Click **Save & Publish** to display the updated List View in the User Interface.

To edit Detail View, Edit View, and Quick Create forms

- Select **Layouts**.
- Select Detail View, Edit View, or Quick Create as appropriate.
- The Edit View page is shown below. To remove an existing field, drag it to the Recycling bin.
The field is removed from the view but is not deleted from the system.
- To replace an existing row in the view with another one, drag the new field from Available Fields and drop it on the field that you want to replace.

5. To add placeholders for additional fields, drag the empty row under **New Row** and drop it into the view. You can then drag a field from the **Available Fields** into the empty row.
6. To create a new panel, drag the empty row under **New Panel** and drop in into the view.
You can then create a label for the panel and add field.
7. To edit a field name, select the **Edit** icon first. Then click within the field, select the current name and replace it with the new name.
8. To move a field to a different location, point your cursor at the field name, hold down the mouse button, and drag it to the desired location on the page.
9. To add a custom field, click the **Add Custom Field** button and follow the process described in **“To add custom fields” on page 77**.
10. To edit the tabbing order, in Edit View, click **Edit Tabbing Order**.
The tabbing order for each field is represented by numbers such as 1, 2, and 3. You can change one or more numbers to change the order in which users tab to those fields.
11. Click **Save** to save your changes.
12. Click **Save & Publish** to display the updated view in the Sugar User Interface.

To edit the Search form

1. In Layouts, click **Search**.
2. To edit the Basic Search form, click **Basic Form**; to edit the Advanced Search form, click **Advanced Form**.

The fields in the current Search form are listed in the Default column and the available fields are listed in the Hidden column.



- To remove an existing field from the search form, drag it from the Default list to the Hidden list.
- To add a field to the search form, drag it from Hidden column to the Default column.
- To save your changes, click **Save & Publish**.

Editing Sub-Panels

Every module's Detail View and Edit View display sub-panels listing related records from other modules. You can add or remove fields for these sub-panels depending on the information that you want to display to users.

To edit a sub-panel

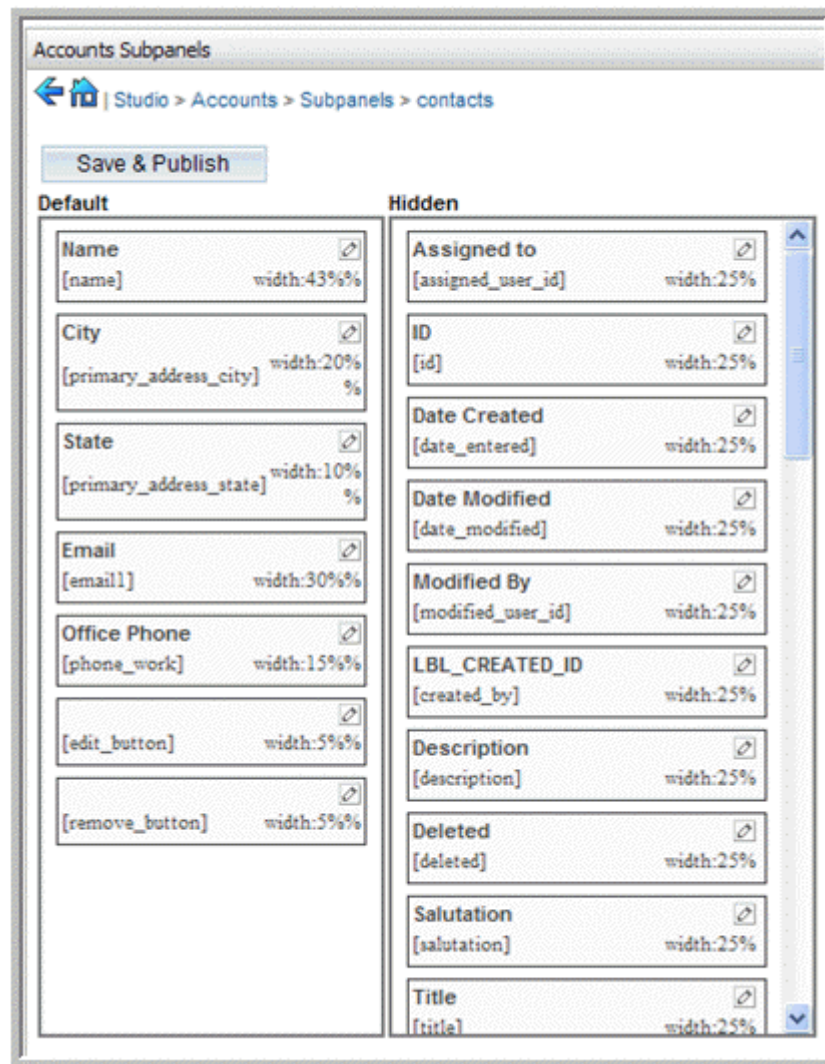
- Select the module and then click **Subpanels**.

The sub-panels for the selected module displays on the page.



2. Select the sub-panel that you want to edit.

The page displays the list of default fields and a list of fields that are available for display.



3. To add a field to the sub-panel, select it from the Hidden column and drag it to the Default column.
4. To remove a field from the sub-panel, select it from the Default column and drag it to the Hidden column.
5. To save and display your changes in the module, click **Save & Publish**.

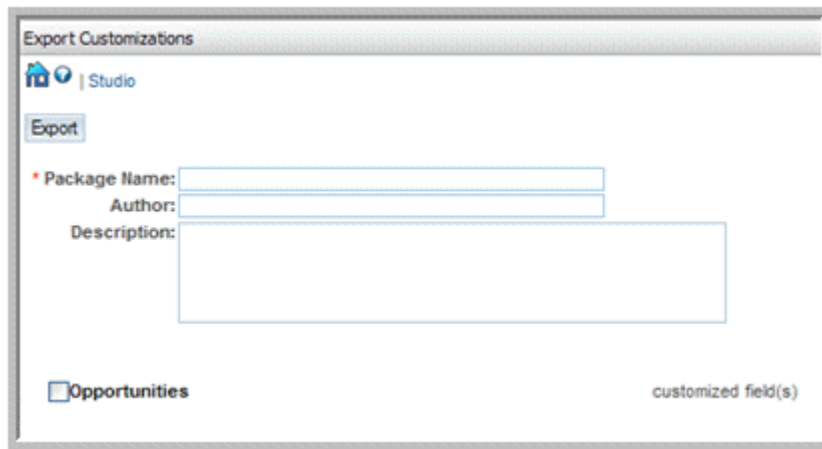
Publishing Customized Modules

To publish a module after you customize it in Studio, you will need to export it as a zip file to your local machine and then upload it from your machine into Sugar using the Module Loader.

To publish a customized module

1. On the Studio home page, click **Export Customizations**.

The Export Customizations page displays the customized modules and indicates the area of customization. The screen shown below indicates that Opportunities module contains one or more customized fields.



2. Enter the following information:
 - Package Name.** Enter a name for the export package. The package will contain the customized modules that you select.
 - Author.** Enter your name as the author.
 - Description.** Enter a brief description of the package.
 3. Select the modules that you want to export.
 4. Click **Export**.
 - The system creates a zip file and displays a dialog box that allows you to open the file or save it to a disk.
 5. Select **Save to Disk** and click **OK**.
 - On MS Windows, the system saves it in the Downloads directory.
- You can upload the file into Sugar using the Module Loader. For more information, see [“Module Loader” on page 49](#).
6. To remove an existing field, drag it to the Recycling bin.
 - The field is removed from the view but is not deleted from the system.
 7. To replace an existing row in the view with another one, drag the new field from the left panel and drop it on the field that you want to replace.
 8. To add placeholders for additional fields, drag **New Row** and drop it into the view. You can then drag a field from the **Available Fields** into the empty row.
 9. Click **Save** to save your changes.
 10. Click **Save and Deploy** to make it available to all users in your organization.

Configuring Module Tabs

By default, all the module tabs are displayed when a user logs into Sugar. However, you can choose which module tabs to display when users log into Sugar. You can also choose the order in which these tabs are arranged in the Sugar User Interface.

By default, users can also configure module tabs on their My Account page. However, the user cannot add back module tabs that the administrator removed from the system. Administrators can deselect the Allow users to configure tabs check box if they do not want users to make any changes.

Note: You cannot hide the Home tab.

To configure module tabs

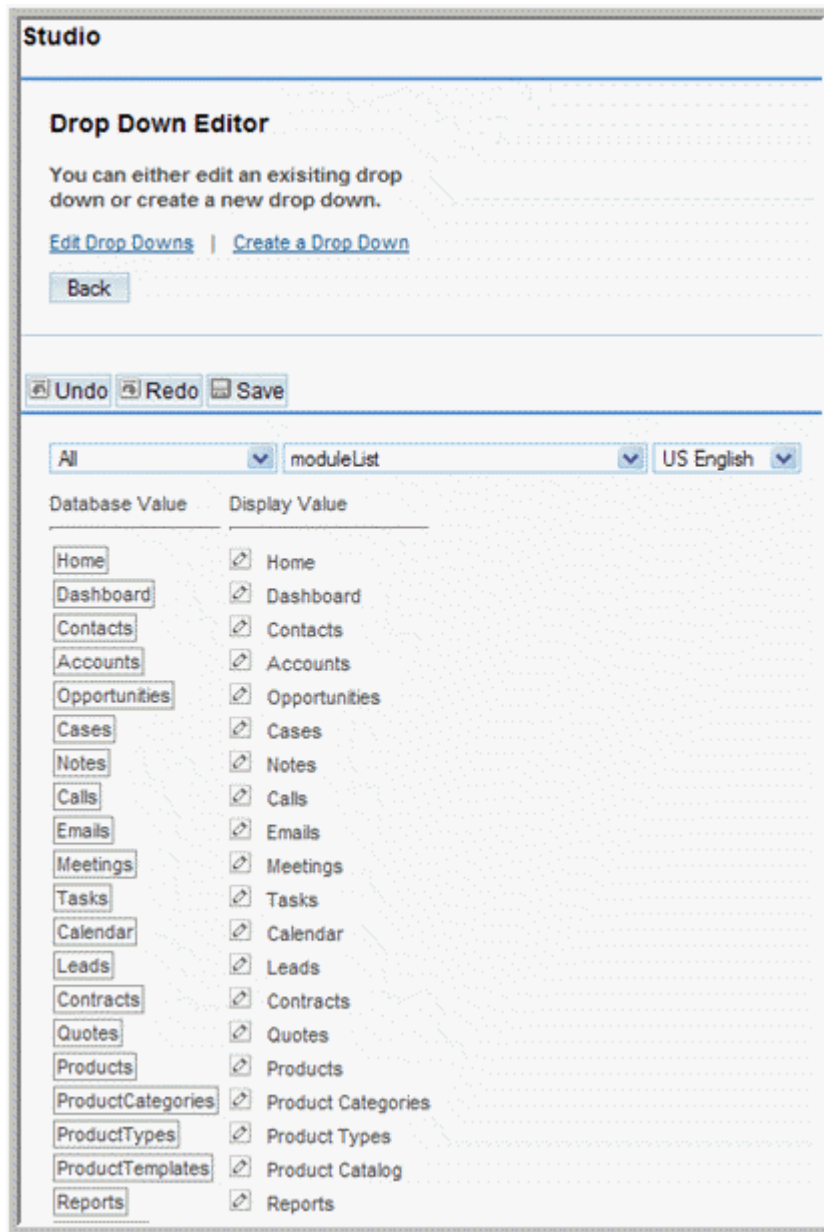
1. In Studio, select **Configure Tabs**.
The Configure Tabs page displays all the tabs in the Display Tabs list.
2. To hide a tab, select it in the Display Tabs column and, using the Right arrow (>) button, move it to the Hide Tabs column.
3. To rearrange the order in which the tabs are displayed, use the Up and Down arrows.
4. To disallow users from configuring the tabs, deselect the Allow users to configure tabs option.
5. Click **Save** to save the configuration; click **Cancel** to exit the page without saving your changes.

Renaming Tabs

You can rename the module tabs that display in Sugar.

To rename tabs

1. In Studio, select **Rename Tabs**.



The tab labels and the corresponding database table keys display on the page. From the three drop-down lists displayed above the tab labels, you can select the module, a corresponding drop-down list, and the language to display the tab. By default, all the available drop-down lists in the system are displayed.

To view a drop-down list that is specific to a module, select the module from the drop-down list above the Database Key column and then select one of the related lists from the adjacent drop-down list.

2. Click the label that you want to edit and replace it with the new value.

3. Click **Save** to save your changes; click **Undo** to revert to the previous value; click **Redo** to go back to your change.

Configuring Group Tabs

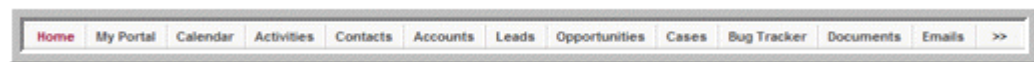
By default, the system displays individual module tabs when users log into Sugar. However, you can use the Configure Group Tab option to organize these individual tabs under group tabs. For example, you can group contacts, leads, and opportunities under Sales. You can add the same module to multiple group tabs. For example, Contacts can be part of Sales as well as Marketing. When users click a group tab, they can access the module tabs associated with it.

Note: Only the Sugar theme supports the Configure Group Tab option.

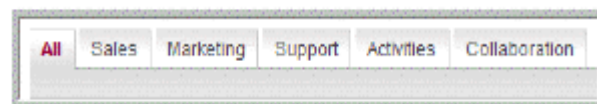
The system provides following group tabs:

- Home
- Sales
- Marketing
- Support
- Activities
- Collaboration
- Tools

The following screenshot illustrates individual module tabs.



The following screenshot illustrates group tabs and the module tabs grouped under the Sales group tab.



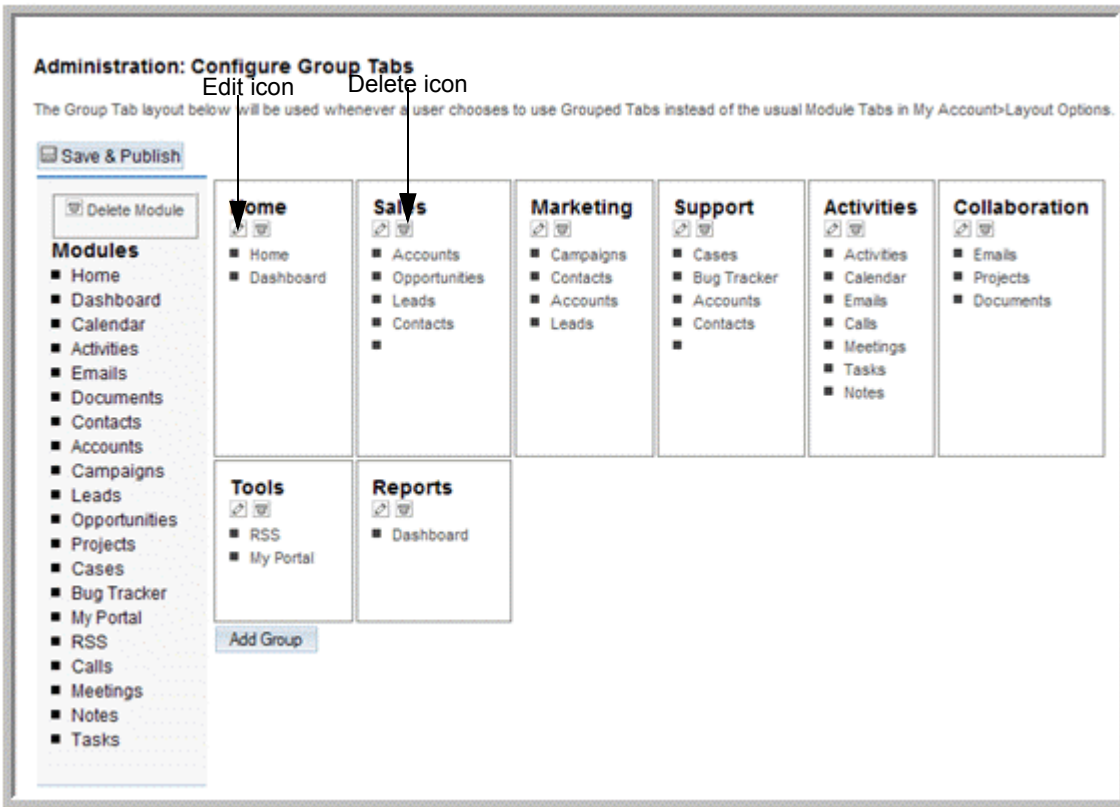
You can change the labels for any of these tabs and also add new group tabs, if needed.

Users have the ability to change to grouped tab or ungrouped tab configuration on their My Account page.

To configure and manage group tabs

1. In Studio, click **Configure Group Tabs**.

The default group tabs display on the page. The associated module tabs are listed below each group tab



2. To edit the name of a group tab, click the **Edit icon**, enter the new name in the text field, and click **Save**.
The group tab displays the new name.
3. To remove a module tab from a group tab, place the cursor on the name and drag it to the **Delete Module** box on the left.
The module no longer displays under the group tab.
4. To add a module to a group tab, select it from the **Modules** list on the left, drag it, and place it just below the **Edit** and **Delete** icons.
Under a group tab, you can rearrange the order of the module tabs by selecting a tab name and dragging it to a different location in the list.
5. To save your changes and make it available for users in the Sugar User Interface, click **Save & Publish**.

To add a new group tab

1. Click **Add Group**.
A **New Group** box displays on the page.
2. To name the new group tab, click the **Edit icon**, enter the name in the text field, and click **Save**.

3. To add a module tab under the new group tab, select it from the Modules list and drop it in the group, below the Edit and Delete icons.
4. To save your changes and make it available for users in the Sugar User Interface, click **Save & Publish**.

Creating and Managing Portals

Adding portal sites in Sugar enables the system to provide a single interface for multiple applications and Web sites. You can add new module tabs that can link to any Website you choose, thus enabling Sugar to become a single interface focus for its users. This is commonly used to include emails, forums, or other Web-based applications.

A portal site can be either of two types: Personal or Global. While both administrators and users can create portals, there are some differences that are noted below:

- Users can only create personal portals that are not shared with other users, while administrators can create both personal and global portals. Global portals can be viewed by all users in the organization.
- Users can display portal sites only in the Shortcuts menu, but administrators can display portals as a tab and in the Shortcuts menu.
- Any personal portal that a user creates is listed on the administrator's Portal Home page, but an administrator's personal portal is not listed on users' Portal Home page.

For information on creating a portal, see *Sugar Community Edition User Guide*.

Bug Tracker

Use this sub-panel to maintain a list of releases for your product. This list will be available in the Release drop-down box that is displayed when reporting a new bug in the Bug Tracker module.

To create a release

1. On the Administration Home page, click **Releases** in the Bug Tracker sub-panel.
2. On the Releases Home page, click **Create**.

The screenshot displays the 'Releases: Home' interface. At the top, there is a 'Release List' section with a 'Create' button. Below this is a table with columns for 'Release', 'Status', and 'Order'. The table is currently empty, showing '(0 - 0 of 0)'. Below the table is a 'Release:' form with fields for 'Release version', 'Status' (set to 'Active'), and 'Order' (set to '1').

3. In the **Release** sub-panel that displays below the list, enter information for the following fields:
 - Release Version.** Enter the version number of the release.
 - Status.** From the drop-down list, select **Active** to display the name in the Release drop-down list.
 - Order.** Enter a number to specify the order in which the release is displayed in the drop-down list.
4. To add the release to the list, click **Save**.
5. To add another release to the list, click **Save and Create New**.

Index

B

bug tracker
releases, creating 95

C

campaigns
email settings 69
configuration, backing up 47
currencies, defining 49

D

Developer Tools 69
drop-down lists
creating 80
managing 80

E

emails
queue, managing 68
settings, configuring 59
export
modules, description 70

F

fields, creating 77
FreeTDS driver, enabling 1

G

group tabs, configuring 93

I

inbound emails
managing 64

L

locale settings
configuring 46

M

Module
drop-down list, creating 80
editing 76
tab, configuring 90
tab, renaming 91
module loader
using 49
modules
custom, distribution options 70
customized, publishing 89
deploy, description, modules
export, description 70
publish, description 70

P

portals
creating 95

Q

Quick Create form
description 84

R

repair option 48
roles, managing 56

S

scheduler
troubleshooting tips 35
Studio 75
layouts, changing tabbing order 84, 86
modules, publishing 89
Sugar
about i
configuration, backing up 47
core features ii
data, upgrading and rebuilding 48
documentation, accessing 25

- email settings, configuring 59
- fields, managing 77
- installation, custom 12
- installation, typical 5
- installing 3
- installing, prerequisites and guidelines 1
- locale settings 46
- page layout, editing 84
- roles, managing 56
- updates, checking for 25
- upgrading 39
- user interface, configuring 26
- users, managing 52
- SugarCRM forums, about 24
- system administration
 - bug tracker module, configuring 95
 - configuring, advanced 30
 - custom modules, uploading 49
 - database collation, specifying 47
 - default currency, specifying 46
 - export, configuring 29
 - logos, uploading 27
 - mail merge, enabling 29
 - proxy settings, configuring 28
 - scheduler, configuring 31
 - Skype, enabling 29
 - sugar network, configuring options 23
 - system settings, configuring 26
- system configuration
 - diagnostics 37

U

- upgrade wizard, using 39
- user interface
 - configuring 26
- users
 - roles, assigning 55
- users, managing 52