



Sugar Community Edition Installation and Administration Guide

Version 5.5 Beta 1

Sugar Community Edition Installation and Administration Guide
Version 5.5 Beta 1, 2009

Copyright © 2004-2009 SugarCRM Inc.

www.sugarcrm.com

This document is subject to change without notice.

License

This work is licensed under the Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License (“License”). To view a copy of this license, visit <http://www.creativecommons.org/licenses/by-nc-nd/3.0/> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

Disclaimer

Your Warranty, Limitations of liability and Indemnity are expressly stated in the License. Please refer to the License for the specific language governing these rights and limitations

Trademarks

All SugarCRM logos in this document are registered trademarks of SugarCRM Inc. See the SugarCRM trademark policies at <http://www.sugarcrm.com/crm/open-source/trademark-information.html> for more information on how SugarCRM trademarks can be used.

Contents

Preface	i
About this Guide.....	i
Audience.....	i
Overview	ii
Core Features.....	ii
What's New in 5.5.....	iii
Related Documentation	iii
1 Installing Sugar	1
Installation Prerequisites and Guidelines	1
Memory Requirements.....	1
Database Requirements.....	1
Multi-byte Character Storage Support	2
Securing Your Sugar Installation	4
Installation Process.....	6
Downloading Sugar Files	6
Copying Sugar Files to the Web Server.....	7
Using the Sugar Setup Wizard	7
2 Administering Sugar	23
Sugar Network.....	24
Sugar Support Portal	25
Sugar Updates	25
Online Documentation	26
System	26
System Settings	26
Scheduler.....	32
Diagnostic Tool	38
Upgrade Wizard	40
Backups	40
Repair	42
Currencies.....	44

Locale Settings.....	44
Sugar Feed Settings	46
Theme Settings	47
Connector Settings.....	48
Users	51
User Management.....	51
Role Management.....	55
Password Management	58
Emails	62
Email Settings.....	62
Inbound Email	67
Manage Email Queue	73
Campaign Email Settings	74
Developer Tools.....	75
Module Builder.....	75
Studio.....	80
Dropdown Editor	92
Edit Sub-Panels.....	94
Create Relationships.....	95
Module Loader.....	99
Configure Module Tabs.....	101
Rename Module Tabs	102
Configure Group Tabs	103
Create and Manage Sites	105
Bug Tracker	105
Create Employees	106
Advanced Configuration Options	108
Locking Down Upgrade Wizard, Module Builder, and Backups.....	108
Restricting the Module Loader	108
Limiting System Resources	109
Configuring Default Permissions for Sugar Files on Linux	109
Index	111

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 My 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 5.5

With each revision of the Sugar software, significant advances are made in both the feature set and usability of the software. Sugar 5.5 offers the following new feature:

Password Management

The Password Management feature enables system administrators to create and manage system-generated passwords and password rules for users.

Related Documentation

Refer to the following guide for related information:

- *Sugar Community Edition User Guide*: Describes how to use Sugar modules.
- *Sugar Upgrade Guide*: Describes how to upgrade to the latest version of Sugar application.

Chapter 1

Installing Sugar

This chapter describes how to install Sugar Community Edition version 5.5. This chapter is intended for administrators. After installation, you can create users and perform other administrative tasks in Sugar.

Topics are as follows:

- [“Installation Prerequisites and Guidelines” on page 1](#)
- [“Installation Process” on page 6](#)

Installation Prerequisites and Guidelines

Before installing Sugar 5.5, 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.

Memory Requirements

Increase the value of the `memory_limit` parameter in the *php.ini* file as follows:

- MySQL Server: 40M or higher
- MS SQL Server: 40M or higher

Database Requirements

- If you are using MySQL, install version 5.0 or higher to use with Sugar 5.5.
- If you are using Microsoft SQL Server, you need to download the SQL Server Driver for PHP from Microsoft and extract the contents to the `/ext` directory of the PHP installation. Then add the following line in *php.ini* to enable it:

```
extension=php_sqlsrv_ts.dll ; substitute with  
php_sqlsrv.dll if using that dll instead
```

The driver also requires you to install the Microsoft SQL Server Native Client on the web server. Install the version for SQL Server 2005 even if you are installing on SQL Server 2008.

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 installed Sugar version 5.5, 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 5.5 with SQL Server 2005 on Apache with a PHP version 5.1.0 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 5.5 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 5.5/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 2](#) starting from modifying your *php.ini* file as detailed in Step 5.

Securing Your Sugar Installation

To ensure your Sugar installation is secure from unauthorized access, it is recommended that you configure the system as described below.

Apache

Before you install Sugar, set `AllowOverride` to `All` for the Sugar installation directory in the *httpd.conf* file. After you install Sugar, a *.htaccess* file is created in your Sugar installation directory. This file contains the following content:

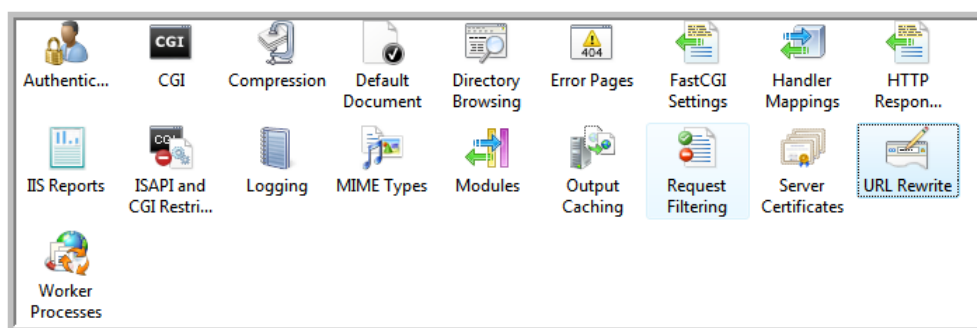
```
# BEGIN SUGARCRM RESTRICTIONS
RedirectMatch 403 (?i)^.*\.log$
RedirectMatch 403 (?i)/+not_imported_.*\.txt
RedirectMatch 403 (?i)/
+(soap|cache|xtemplate|data|examples|include|log4php|metadat
a|modules)/+.*\. (php|tpl)
RedirectMatch 403 (?i)/+emailmandelivery\.php
RedirectMatch 403 (?i)/+cache/+upload
# END SUGARCRM RESTRICTIONS
```

To test the validity of these restrictions, access the *sugarcrm.log* through the browser to ensure that `error #403` is displayed. If not, check your Apache configuration to ensure that *htaccess* is enabled. For more information, check the Apache documentation.

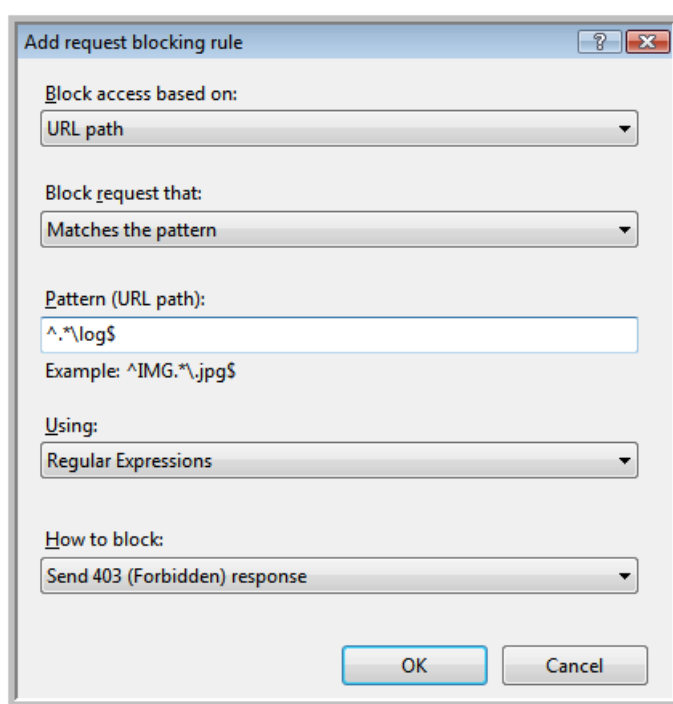
IIS

For IIS, you must create rules that specify the conditions to prevent unauthorized access as follows:

1. From the control panel, navigate to Administrative Tools/IIS Manager
2. Select the URL Rewrite option.



3. Click **Add Rules** and select **Request blocking**.



4. Ensure that you specify **Regular Expressions** in the Using field and **Send 403 (Forbidden) response** in the How to block field.
5. Add the following rules to block requests from URLs that match the following patterns:
 - a. ^.*\log\$
 - b. /(soap|cache|template|data|examples|include|log4php|metadata|modules)/+.*\.(php|tpl)
 - c. ?+not_imported_.*\txt
 - d. /+emaildelivery\php

e. `/+cache/+upload`

Edit Rule

Requested URL: Matches the pattern Using: Regular Expressions

Pattern: Test pattern...

☒ Ignore Case

Conditions

Logical Grouping: Match Any

Input	Type	Pattern
{URL}	Matches the pattern	^.*\\.log\$
{URL}	Matches the pattern	/+(soap cache template data...
{URL}	Matches the pattern	/+not_imported_.*\\.txt
{URL}	Matches the pattern	/+emailmandelivery\\.php
{URL}	Matches the pattern	/+cache/+upload

Add... Edit... Remove Move Up Move Down

Action

Action Type: Custom Response

Action properties

Status code:

Note: Sugar creates a *web.config* file for IIS 7 during the installation process. This file performs the same function as the *.htaccess* file. To ensure that *web.config* is functioning correctly, attempt to access the *sugarcrm.log* file through the browser. If you can access the log file, perform the procedure described above to prevent unauthorized access to your Sugar installation.

Installation Process

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. Navigate to *Support & Training/Support Portal* or visit <http://www.sugarcrm.com/sugarshop/downloads.php>.
3. Log in using your Sugar user name and enter the password associated with your account.

4. Click Download Purchased Software.
5. On the Download Manager page, enter your download key into Download Key field and click **Submit**.
6. Click *SugarCE-5.5.0beta 1.zip* to download the file.

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:
 - cache
 - custom
 - data
 - modules
 - 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:

- apache (Linux/Apache)
- nobody (Linux/Apache)
- 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 Sugar URL *http://<yourServer>/<yourSugarDirectory>/install.php* is the URL that you will use to access the Sugar Setup Wizard.

For example: *http://localhost/Sugar-Full_5.5.0/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 the same Database 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.

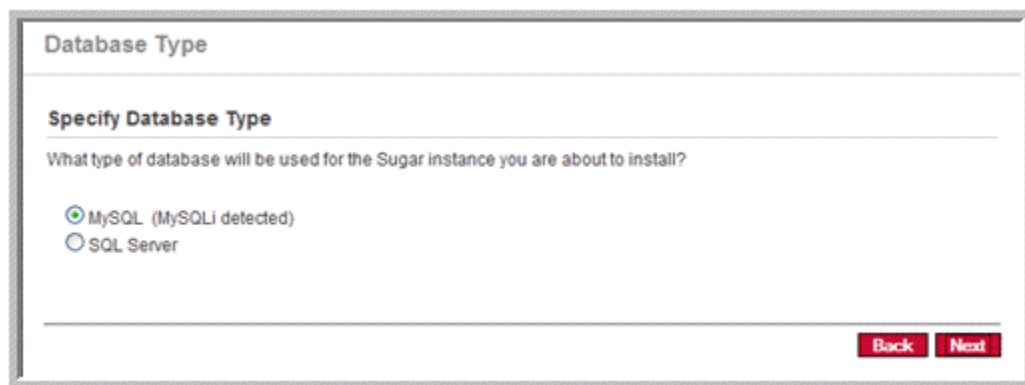
3. Review the license, check “I Accept”, and click **Next**.

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

Note: At any time prior to clicking **Install** in 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 screen displays next.



5. Select the database that is installed on your system and click **Next**.

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

The screenshot shows a window titled "Database Configuration". It contains several sections for setting up a MySQL database. The first section, "Provide Database Name", includes a text field for the database name (containing "sugarcrm") and a text field for the host name (containing "localhost"). The second section, "Provide Database User Information", includes text fields for the database administrator username and password, and a dropdown menu for the Sugar Database Username (set to "Same as Admin User"). The third section, "Choose Demo Data", includes a dropdown menu for "Populate Database with Demo Data?" (set to "No"). At the bottom right, there are "Back" and "Next" buttons.

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**

6. Enter the database name. The Installer displays *sugarcrm* as the default name for the database, but you can specify a new name for the database.
7. For My SQL and SQL Server, enter the Host Name or the Host Instance.
8. Enter the username and password for the Database Administrator. Then, specify the Sugar Database Username.

If your database server is running on the same machine as your Web server, the host name is, by default, set to *localhost*.

Ensure that the Database Administrator you specify has the permissions to create and write to the Sugar database.

For My SQL and SQL Server, by default, the Installer selects the Admin User as the Sugar Database User. The Sugar application uses the Sugar Database User to communicate with the Sugar database. But, at this time, you can create a different Sugar Database user.

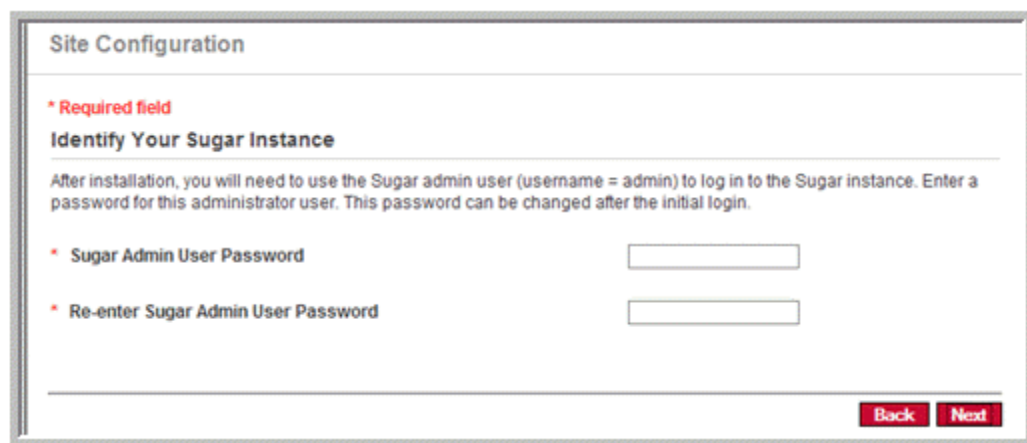
To select an existing user, select **Provide existing user** from the Sugar Database Username drop-down list. To create a new Sugar Database user, select **Define user** to create. Enter the database user name and password in the fields that display below. Reenter the password to confirm it. This new user information will display under “System Credentials” on the Confirm Settings page at the end of the installation process.

9. 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**.
10. 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. If you use an existing database name, the database tables will be dropped.

11. 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 'Site Configuration' window. At the top, it says 'Site Configuration'. Below that, a red asterisk indicates a 'Required field'. The section is titled 'Identify Your Sugar Instance'. A paragraph of text explains that after installation, the user will need to use the Sugar admin user (username = admin) to log in, and that the password can be changed after the initial login. There are two input fields: 'Sugar Admin User Password' and 'Re-enter Sugar Admin User Password'. At the bottom right, there are two buttons: 'Back' and 'Next'.

12. Enter a password for the Sugar admin user, 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

Default Language: US English

Default Name Format: s f l Dr. David Livingstone
s = salutation
f = first name
l = last name

Outbound Email Settings

Character Set most commonly used in your locale: UTF-8

Import/Export Settings

Character Set for Import/Export
(Email, .csv, vCard, PDF, data import): UTF-8

13. Accept the default values or change them as needed.
14. 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)

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

To include the database user password and the Sugar admin 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.

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

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

17. When the setup is complete, click **Next**.

18. The Installer displays the Registration page on the screen.

Registration is optional.

19. 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.

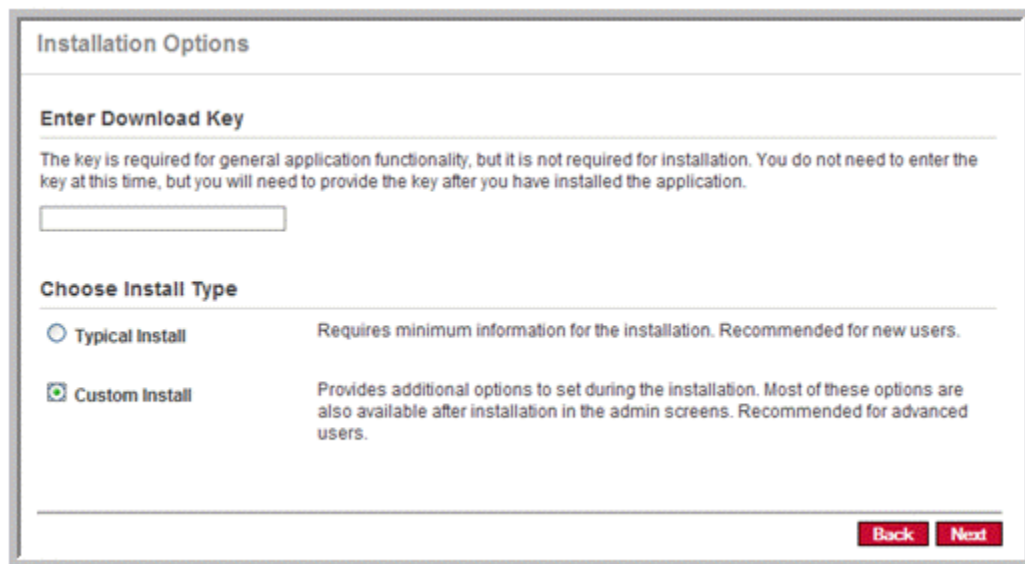
2. Click **Next**.

The Installer displays the Sugar License Agreement screen.

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

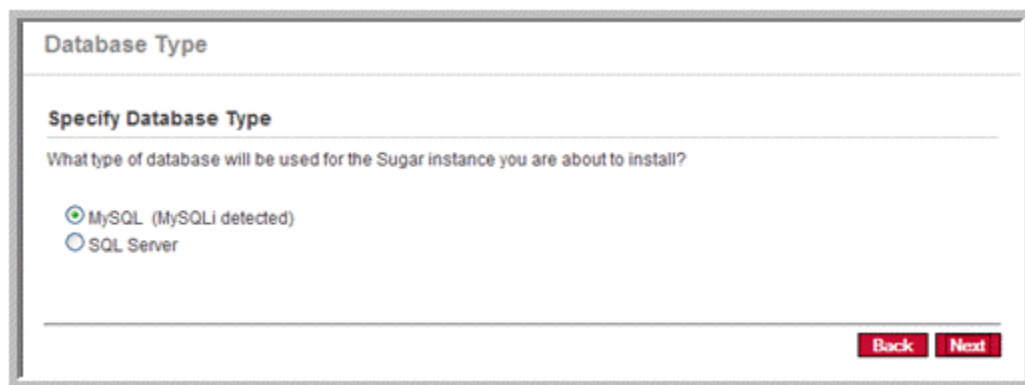
The installer checks the system for compatibility and then displays the Installation Options screen

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



The screenshot shows the 'Installation Options' window. It has a title bar and a header 'Installation Options'. Below the header is a section titled 'Enter Download Key' with a text box and a note: '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.' Below this is a section titled 'Choose Install Type' with two radio button options: 'Typical Install' (described as 'Requires minimum information for the installation. Recommended for new users.') and 'Custom Install' (described as 'Provides additional options to set during the installation. Most of these options are also available after installation in the admin screens. Recommended for advanced users.'). At the bottom right are 'Back' and 'Next' buttons.

The Installer displays the Database Type screen.



The screenshot shows the 'Database Type' window. It has a title bar and a header 'Database Type'. Below the header is a section titled 'Specify Database Type' with a question: 'What type of database will be used for the Sugar instance you are about to install?'. There are two radio button options: 'MySQL (MySQLi detected)' (which is selected) and 'SQL Server'. At the bottom right are 'Back' and 'Next' buttons.

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

sugarcrm

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

* Host Name

localhost

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

Same as Admin User

Choose Demo Data

Populate Database with Demo Data?

No

BackNext

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. For My SQL and SQL Server, enter the Host Name or the Host Instance.

If your database server is running on the same machine as your Web server, the host name is, by default, set to *localhost*.

7. Enter the username and password for the Database Administrator. Then, specify the Sugar Database Username.

Ensure that the Database Administrator you specify has the permissions to create and write to the Sugar database.

For My SQL and SQL Server, by default, the Installer selects the Admin User as the Sugar Database User. The Sugar application uses the Sugar Database User to

communicate with the Sugar database. But, at this time, you can create a different Sugar Database user.

To select an existing user, select **Provide existing user** from the Sugar Database Username drop-down list. To create a new Sugar 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. This new user information will display under “System Credentials” on the Confirm Settings page at the end of the installation process.

8. 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.
9. Click **Next**.
10. Click **Accept** to drop current tables or else click **Cancel** and specify a new database name.
11. Click **Next**.

The Site Configuration screen displays on the page.

The screenshot shows the 'Site Configuration' window. It has a title bar and a header 'Site Configuration'. Below the header, there is a red asterisk and the text '* Required field'. The main section is titled 'Identify Your Sugar Instance'. It contains the following fields and instructions:

- URL of Sugar Instance**: A text box containing 'http://localhost/SugarFull-5.2.0'. Above it, the instruction says: '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.'
- System Name**: A text box containing 'SugarCRM'. Above it, the instruction says: 'Enter a name for your system. This name will be displayed in the browser title bar when users visit the Sugar application.'
- Sugar Admin User Password**: A password field (indicated by a dot icon) for the admin password.
- Re-enter Sugar Admin User Password**: A second password field for confirmation.

At the bottom right, there are two red buttons: 'Back' and 'Next'.

12. Enter the URL of your Sugar instance.
13. Enter a name for your system to display to users on the Sugar application’s browser title bar.
14. Enter a password for the Sugar administrator, re-enter it to confirm the password, and click **Next**.

The Site Security screen displays the security options on the page.

Site Security

*** Required field**

Select Security Options

Automatically Check For Updates? ☒
If selected, the system will periodically check for updated versions of the application.

Use a Custom Session Directory for Sugar ☐
If selected, you must provide a secure folder for storing Sugar session information. This can be done to prevent session data from being vulnerable on shared servers.

Use a Custom Log Directory ☐
If selected, you must specify a log directory to override the default directory for the Sugar log. Regardless of where the log file is located, access to it through a web browser will be restricted via an .htaccess redirect.

Provide Your Own Application ID ☐
If selected, you must provide an application ID to override the auto-generated ID. The ID ensures that sessions of one Sugar instance are not used by other instances. If you have a cluster of Sugar installations, they all must share the same application ID.

Back **Next**

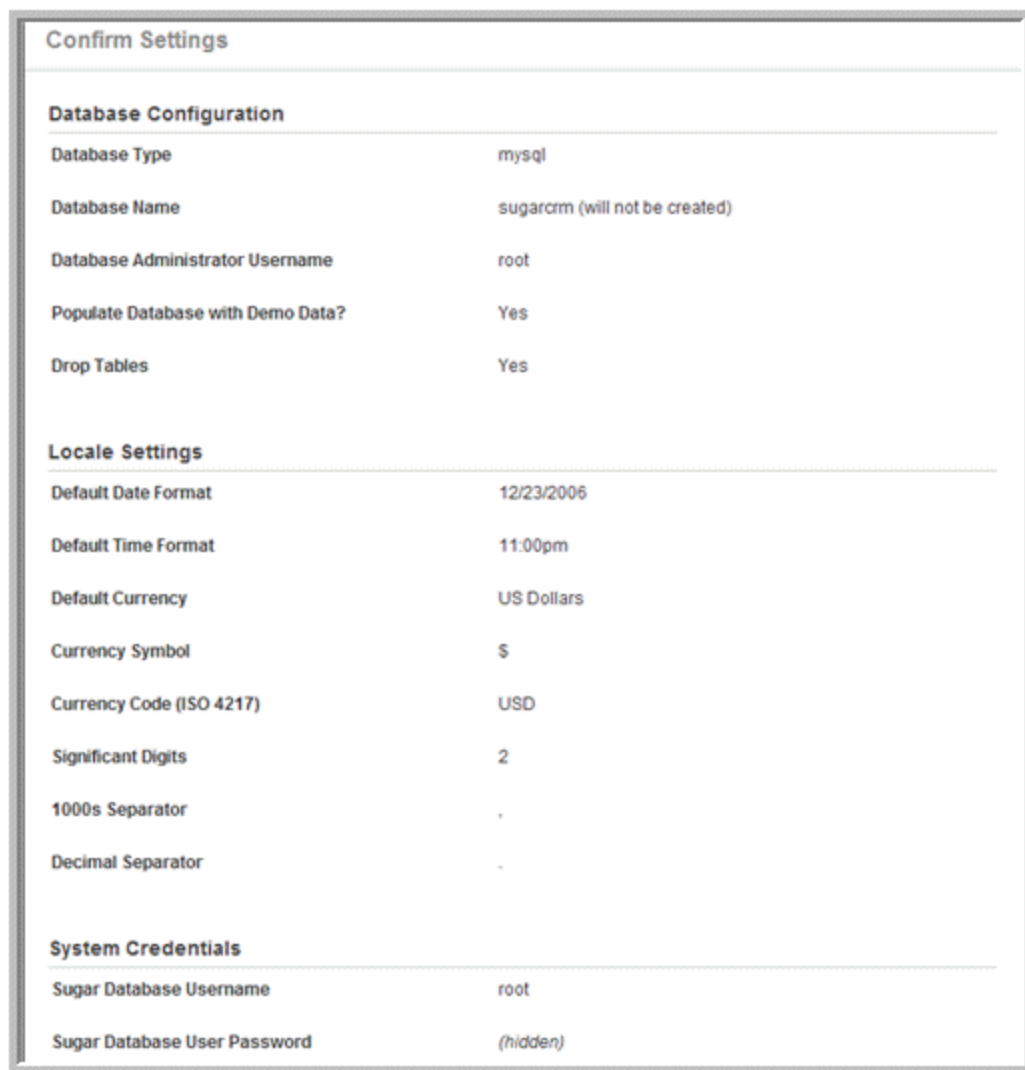
15. Select the security options of your choice and specify the necessary information in the appropriate fields.
16. Click **Next**.

The Installer displays the Locale Settings screen.

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

After installation, you can update this information from the Administration Home page in Sugar.

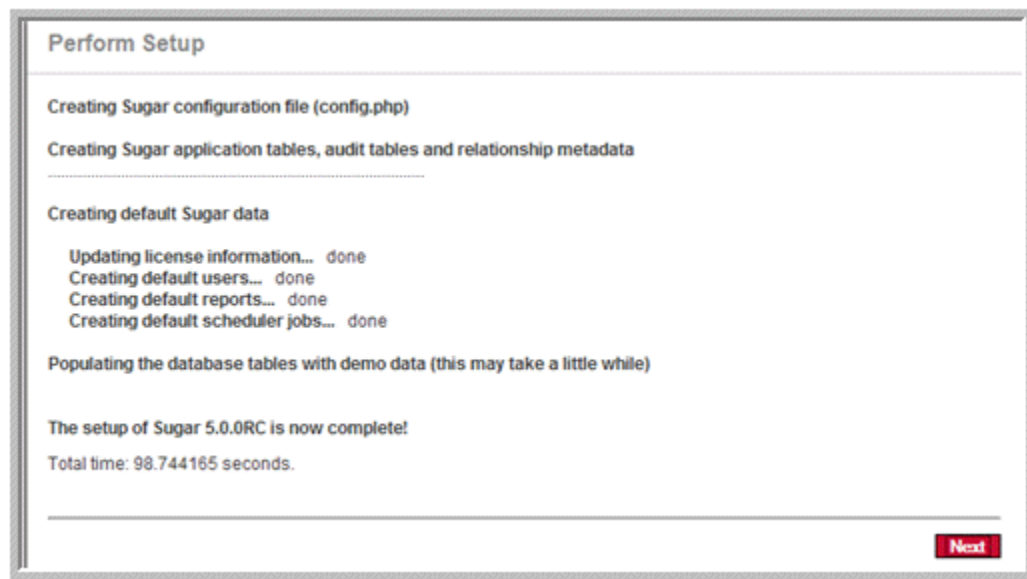
The Installer displays the Confirm Settings screen. This screen displays a summary of the settings that you specified.



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)

18. To include the database user password and the Sugar admin password in the printout, click **Show Passwords** and then click **Print Summary**.
19. To begin the installation process, click **Install**.

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



20. When the setup is complete, click **Next**.
21. The Installer displays the Registration page on the screen.
Registration is optional.
22. 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.

Chapter 2

Administering Sugar

This chapter describes how Sugar administrators can configure Sugar to meet their organization's requirements.

Topics include:

- [“Sugar Network” on page 24](#)
- [“System” on page 26](#)
- [“Users” on page 51](#)
- [“Emails” on page 62](#)
- [“Developer Tools” on page 75](#)
- [“Bug Tracker” on page 106](#)
- [“Create Employees” on page 107](#)
- [“Advanced Configuration Options” on page 109](#)

A Sugar user can be a System Administrator or a user with or without module-specific administration or developer privileges.

A System Administrator has full access to all Sugar records and full control over administering and developing the application.

Module administration privileges allow users to have administrator access to records or to have control over the customization and administration of the modules. The System Administrator can grant this type of access to a user to allow the individual to manage a specific module. For more information, see [“Role Management” on](#)

page 55. When you log in as administrator, the Admin link displays at the top right. Click this link to view the Administration page.

Sugar Network
 Within the Support Portal, access the SugarCRM forums and Sugar Wiki, search FAQs (Frequently Asked Questions), download the latest Sugar version, buy network subscriptions, file and research reported bugs and request new features.

Sugar Support Portal	Access your personalized portal for technical support and more	Online Documentation	Get end-user and administrator documentation
Sugar Updates	Check for latest version		

System
 Configure the system-wide settings according to the specifications of your organization. Users can override some of the default locale settings within their My Accounts page.

System Settings	Configure system-wide settings	Backups	Perform a backup
Scheduler	Set up scheduled events	Repair	Check and repair Sugar
Diagnostic Tool	Capture system configuration for diagnostics and analysis	Currencies	Set up currencies and currency rates
Upgrade Wizard	Upload and install Sugar upgrades	Locale Settings	Set default localization settings for your system
Tracker Settings	Enable/Disable tracking	Sugar Feed Settings	Enable User Feed and select modules to post updates
Connector Settings	Manage connector settings	Themes Settings	Select themes to disable from being selected by the user

Users
 Create, edit, activate and deactivate users in Sugar. Create and manage teams.

User Management	Manage user accounts and passwords	Role Management	Manage role membership and properties
Password Management	Manage password settings		

Email
 Manage outbound and inbound emails. The email settings must be configured in order to enable users to send out email and newsletter campaigns.

Email Settings	Configure email settings	Inbound Email	Set up mail accounts to be monitored for inbound email
--------------------------------	--------------------------	-------------------------------	--

This page displays several sections that group tasks according to the area of administration.

Sugar Network

This section 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 Print ? Help

If you are a current SugarCRM customer seeking assistance with SugarCRM software, please provide your SugarCRM.com login to access your personalized support services.

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.

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 Community Edition](#)

Customer Login

User name: ☒ Remember me

Password:

[Forgotten your password?](#)

[Create a new account](#)

Please login above to access the following support resources available only for SugarCRM customers:

- ☐ Submit technical support questions, sales quote requests, project discussions, etc.
- ☐ Download the software packages included in your Sugar subscription
- ☐ Review your past Sugar Store orders

The SugarCRM forums cover discussions on a broad range of topics such as setting up the Sugar application and FAQs (Frequently Asked Questions). 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 Sugar 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.

Administration: Configure Sugar Updates Print ? Help

* Indicates required field

Sugar Updates

The Sugar Updates mechanism allows your server to check to see if an update to your version of Sugar is available.

☒ **Send Anonymous Usage Statistics** - If checked, Sugar will send anonymous statistics about your installation to SugarCRM Inc. every time your system checks for new versions. This information will help us better understand how the application is used and guide improvements to the product.

☒ **Automatically Check For Updates** - If checked, the system will periodically check to see if updated versions of the application are available.

You have the latest version available

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 documentation on installing and using the Sugar 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.

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 datetime format, on their My Accounts page.


System Settings: ? Help


Save Restore Cancel

User Interface

Listview items per page:	<input type="text" value="20"/>	Subpanel items per page:	<input type="text" value="10"/>
Display server response times:	<input checked="" type="checkbox"/>	Display tabs on login screen:	<input checked="" type="checkbox"/>
Prevent user customizable Homepage layout:	<input type="checkbox"/>	Prevent user customizable subpanel layout:	<input type="checkbox"/>
Maximum number of Sugar Dashlets on Homepage:	<input type="text" value="15"/>	Show Full Name (not Login):	<input type="checkbox"/>
System Name:	<input type="text" value="Honey-B SugarCRM E"/>		

Logos

Current logo: 

Upload new logo: 

LDAP Authentication Support

Enable LDAP ☐

User Interface

Use this section to configure the user interface.

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 moving Sugar Dashlets on the Home page. However, users can still create additional Sugar Dashlets.

Maximum number of Sugar Dashlets on Homepage. Enter the maximum number of Sugar Dashlets you want displayed on the Home page. Users will not be able to add more than the number of Sugar Dashlets that you specify. The default value is 15.

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 dragging and dropping sub-panels to a different location in their Detail View layout.

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

System Name. This field displays your system name.

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

Upload new logo. 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 or JPG 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 web, 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 web 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**.

SkypeOut

Select this option to allow users to click a phone number field to make calls through Skype.

To enable Skype

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

Mail Merge

If your users have installed the Sugar Plug-in for Microsoft Word, this option allows them to perform a mail merge with Word documents. For example, you can merge contact information from Sugar with form letters created in Microsoft Word. The Mail Merge link displays at the top of a List View.

Note: Users must also select the Mail Merge option on their My Account page.

1. Select the **Enable mail merge** box.
2. To save the setting, click **Save**.
To restore the previous setting, 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:** For security purposes, select this option to validate 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 bytes, 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. If you have enabled the Tracker Queries option on the Tracker Settings page, you can run the pre-defined Slow Queries report to view slow queries.

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.

Developer Mode. Select this option to disable caching so that you can immediately view changes made to language, vardefs, and template files.

vCal Updates Time Period. Select this option to specify the number of months in advance of the current date that Free/Busy information for calls and meetings is published. The minimum value is one month, and the maximum value is 12 months. To turn off Free/Busy publishing, enter "0".

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**.

Logger Settings

The Sugar Logger logs events that occur in the Sugar application. By default, the logs are written to *sugarcrm.log* in the Sugar root directory.

When you upgrade to Sugar 5.5, Sugar automatically parses your Logger settings from the *log4.php* properties file of your previous Sugar version and populates the Logger Settings sub-panel with the information.

You can, however, change the settings if necessary.

The logging levels are as follows:

- **debug:** Logs events that would help to debug the application.
- **info:** Logs informational messages.
- **warn:** Logs potentially harmful events.
- **error:** Logs error events in the application.
- **fatal:** Logs severe error events that leads the application to abort. This is the default level.
- **security.** Logs events that may compromise the security of the application.

- **off.** The logger will not log any events.

When you specify a logging level, the system will create log files for the specified level as well as higher levels. For example, if you specify 'Error', the system creates log files for 'error', 'fatal', and 'security'.

The screenshot shows a 'Logger Settings' window with the following fields and controls:

- Log File Name:** A text input field.
- Extension:** A text input field.
- Append after filename:** A dropdown menu currently showing 'Month_Year'.
- Maximum log size:** A text input field.
- Default date format:** A text input field.
- Log Level:** A dropdown menu currently showing 'Debug'.
- Maximum number of logs (before rolling):** A text input field.

To configure Logger settings

1. In the Logger Settings panel, enter the following information:

Log File Name. Specify a name for the log file.

Extension. Enter the file extension. The default is .log.

Append After File Name. From the drop-down list, select a time period to append to the file name. This makes it easier to identify the log that you want to view.

Maximum Log Size. Specify the maximum size of the log file in MegaBytes (MB). The default is 10MB.

Log Level. From the drop-down list, select the event level that you want to capture in the log file. The default is fatal.

Default Date Format. Enter the default date format for the log file. This format must be supported by [strftime](#). The default is %c.

Maximum Number of Logs. Specify the maximum number of log files to save. When the number of log files exceed this limit, Sugar deletes the log file that was created first. The default is 10 logs.

Configure Log Settings. Select this option from the Shortcuts menu to view the system log.

The screenshot shows a log viewer interface with the following elements:

- Buttons: All, Mark Point, Refresh From Mark, Next>>
- Search: A text input field.
- Reg Exp: A checkbox.
- Ignore Self: A checkbox.

To configure log settings

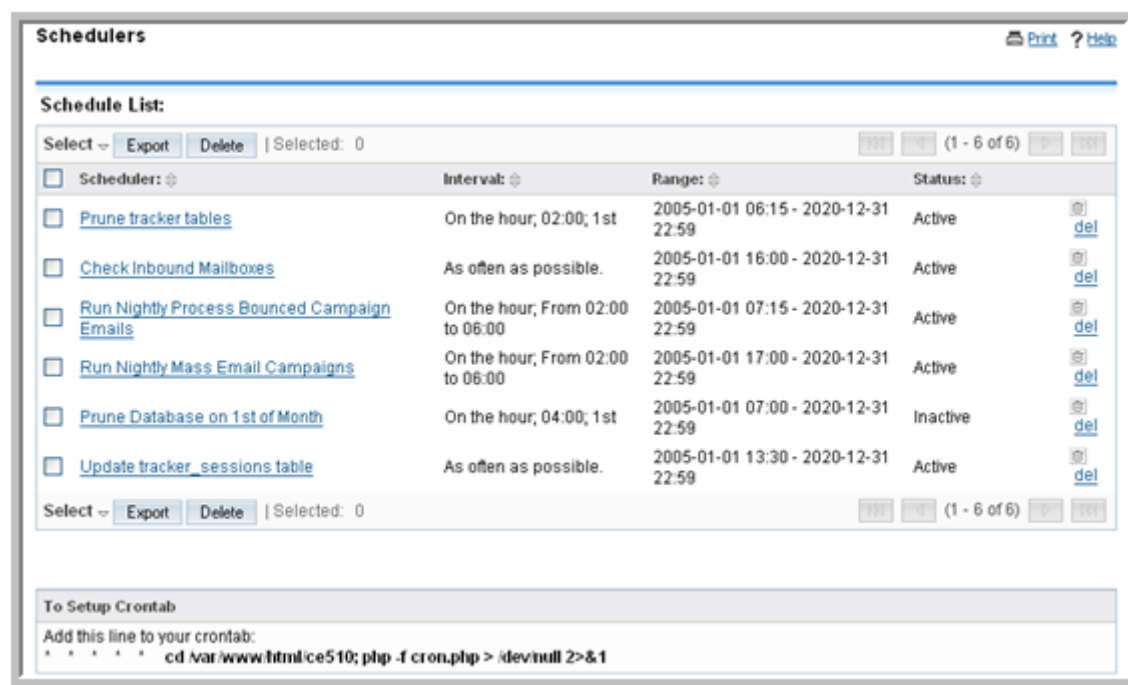
1. Click **All** to view the whole log.
2. Click **Mark Point** to show the log from that point onward. When you click **Refresh From Mark**, the log displays actions that occurred since the time you clicked Mark Point.

- To search the log by keyword, enter it in the Search box; to search the log by a regular expression, enter it in the Search box and check the **Reg Exp** box. Press **Enter** on your keyboard to search the log.

Note: The Ignore Self field is not used.

Scheduler

Use this option to schedule jobs such as monitoring email in-boxes and 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:

Prune Tracker Tables. This job deletes older activity data.

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.

Update Tracker Session Tables. This job sets the status of timed-out sessions.

Configuring Settings for Scheduler Jobs

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

Unix and Linux Systems

To add a new cron job to your crontab

1. At the command prompt, type `crontab -e`.
2. Add the following line to your crontab using the full path to the PHP directory in your Sugar installation:

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

where:

path/to/sugar is the path to where your Sugar installation resides.

path/to/php is the path to the PHP installation that you want to use.

path/to/php.ini is the path to the PHP configuration file that you want to use.

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


```
* * * * * cd /path/to/sugar; php -f cron.php > /dev/null 2>&
```
 - 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 cron job every three minutes, enter:

```
"*/3 * * * * cd /path/to/sugar; 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 cron job, 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 cron job looks as follows:


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

Enter the command from "cd.." to "2>&1" into a terminal and press **Enter**.
 - c. If any errors occur, refer to **“Troubleshooting Tips” on page 37**.
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\Sugarinstance`
where *SugarInstance* is your Sugar installation.
This folder should contain the *cron.php* file.
 - o `c:\path\to\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: This is only a recommendation. It may not work for your particular instance. Check the folder paths because 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.

- For advanced options, click the **Advanced Options** link below the Job field.

The Advanced Options sub-panel displays below.

- 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.

- Click **Save** to create the job; click **Cancel** to exit the page without creating the job.
- To export one or more scheduler definitions in a .csv file format to a local machine, select them from the list and click **Export**.

To manage scheduled jobs

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

The Schedule List page displays on the page.

- 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.

Schedulers: Process Workflow Tasks			
Edit Duplicate Delete			
Job	function::processWorkflow	Status	Active
Date & Time Start	2005-01-01 09:45	Active From	Always
Date & Time End	perpetual	Active To	Always
Last Successful Run	Never	Interval	As often as possible.
Execute If Missed	Never		
Date Created:	2009-03-23 10:08 by	Last Modified:	2009-03-23 10:08 by admin
All Other			
Job Log			
Execute Time		Status:	

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
```
 - o 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/php.ini -f cron.php > /dev/null 2>&1"
```
 2. No PHP binary found or it is broken.
 - o Change the mechanism by which your cron job 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://Domain/sugarInstance/cron.php
```

where *Domain* is the website where your Sugar installation resides, and *sugarInstance* is your Sugar installation.

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

```
* * * * * wget -q http://Domain/sugarInstance/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.

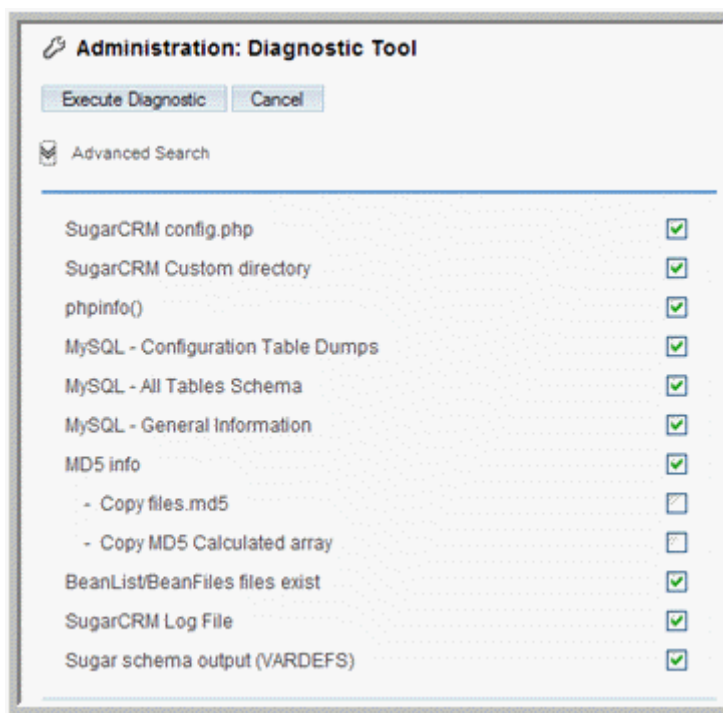
Diagnostic Tool

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.

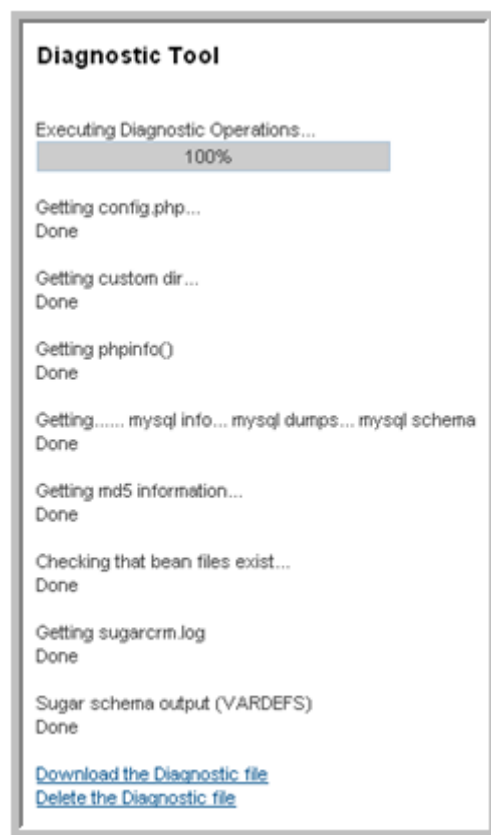
BeanList/BeanFiles files exist - If a custom module has been loaded, and the author did not define these references correctly, it can cause problems. This action checks all the references to ensure they are correct.

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

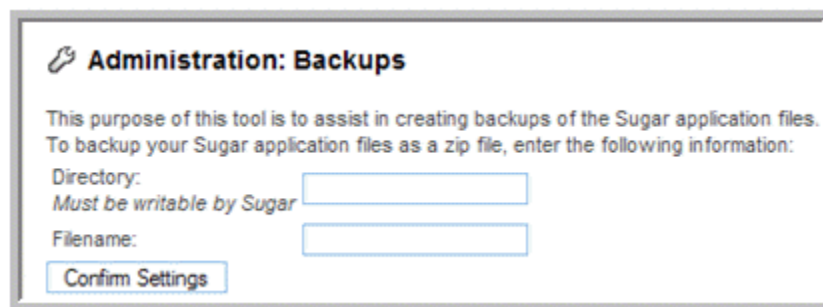
When you obtain the Sugar upgrade zip file from Sugar, you can save it to your local machine and upload it into Sugar using the Upgrade Wizard. For more information, see the *Sugar Upgrade Guide*.

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.












The screenshot shows a web interface titled "Administration: Backups". It contains a text box explaining the tool's purpose: "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:". Below this, there are two input fields: "Directory:" with a subtext "Must be writable by Sugar" and "Filename:". A "Confirm Settings" button is located at the bottom left of the form.

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	
 Quick Repair and Rebuild	Repairs and rebuilds DB, Extensions, Vardefs, Sugar Dashlets etc. for selected module(s)
 Repair Database	Repairs database based on values defined in vardefs
 Expand Column Width	Expands 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 Theme Cache	Removes cached data files used by themes
 Clear Vardefs Data Cache	Removes vardefs from the cache
 Clear Unified Search Cache	Removes unified_search_modules.php from the cache
 Rebuild .htaccess File	Rebuilds .htaccess to limit access to certain files directly
 Rebuild Audit	Rebuilds audit table
 Rebuild Config File	Rebuilds config.php by updating 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 out-of-the-box Scheduler Jobs

The upgrade options include:

Quick Repair and Rebuild: Repairs and rebuilds the database, extensions, vardefs, Sugar Dashlets, and so on for selected modules. Click this option, select the modules you want to repair, and click **Repair**. You also use this option to clear any custom Sugar Feed link types from the cache.

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

Expand Column Width. For MSSQL, expands certain char, varchar and text columns in database.

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

Clear Template Data Cache: Removes cached template files. Click this option, select the modules you want to repair, and click **Repair**.

Clear Vardefs Data Cache: Removes vardefs from the cache. Click this option, select the modules you want to repair, and click **Repair**.

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. Click this option to check the file and if, necessary, click **Rebuild**.

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. Click this option and then click **Rebuild**.

Rebuild Sugar Dashlets: Rebuilds the cache file for Sugar Dashlets.

Rebuild Javascript Languages: Rebuilds Javascript versions of language files.

Rebuild JS Compressed Files: Copies original Full JS Source files and replaces existing compressed JS files.

Rebuild JS Grouping Files: Re-concatenates and overwrites existing group files with latest versions of group files.

Rebuild Minified JS Files: Copies original Full JS Source Files and minifies them, then replaces existing compressed files.

Repair JS Files: Compresses Existing JS files - includes any changes made, but does not overwrite original JS Source files.

Repair Non-Lowercased Fields: Repairs mixed-case custom tables and metadata files to fix issues where code expects lowercase field names.

Repair Expression Engine Plugins. Rebuilds the expression engine Javascript and PHP cache 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.

Repair Inbound Email Accounts: Repairs Inbound Email accounts and encrypts account passwords.

Remove XSS: Removes XSS Vulnerabilities from the database. Click this option, select a module, and click **Execute**. If any XSS strings are found, the system lists them in the Object(s) found field below.

Repair Activities: Repairs Activities (Calls, Meetings) end dates.

Enable/Disable Seed Users: Enables or disables seed users populated during demo installation. Click this option, and if the seed users are enabled, click **Deactivate** to disable them. If the seed users are disabled, click **Activate** to enable them.

Currencies

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

Currencies

Currency Name	ISO 4217 Code	Currency Symbol	Conversion Rate	Status
US Dollar	USD	\$	1.0000000000	Active
Euro	EUR	€	0.9000000000	Active

Currency

Save Clear

Currency Name: * ISO 4217 Code: *

Conversion Rate: * Currency Symbol: *

Status: *

For each new currency that you define, enter the name, symbol (for example, \$), conversion rate to the US \$, the currency code (such as CDN for the Canadian dollar). Set the Status to Inactive if you do not want users to use this currency for transactions.

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

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.

System Locale Settings: [Print](#) [?](#) [Help](#)

Save Cancel

User Interface

Default Date Format: Default Time Format:

Default Language:

Default Name Format: Example:

"s" Salutation
"f" First Name
"l" Last Name

Default Currency

Currency: Currency Symbol:

ISO 4217 Currency Code: 1000s Separator:

Decimal Symbol:

Export Settings

Export Delimiter: Default Export Character Set: Disable export: ☐ Admin export only: ☐

Database Collation

Collation:

Save Cancel

Theme:

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.

Default Currency. Use this sub-panel to override the default currency that you set during installation. On the My Accounts page, users can override the default currency that you specify in this panel.

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.

Export Settings

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 and export data. For locales that use character encoding other than UTF-8, 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.

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

Default Export Character Set. The default is UTF-8. 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 end users and users with administrative privileges from exporting data.

Admin export only. Select this option to allow only users with administrative privileges to export data.

Database Collation

This sub-panel displays only if you are using the MySQL database. This setting manages the connection layer between SugarCRM and your MySQL database, and should be set to match the collation of your database tables. You can select the desired collation order from the drop-down list. The default is `utf8_general_ci`. Changing this setting will not alter your existing tables, and all new tables created after this change will inherit the “collation setting” name.

CAUTION: The database will return errors if you run queries against multiple tables, and if tables in the query have a different collation.

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

Sugar Feed Settings

Select this option to enable the Sugar Feed functionality for your organization. Sugar Feed enables users to be informed as soon as any user creates a new contact, lead, opportunity, or case. Users are also notified of status updates when a lead is converted, when a case is closed, and when an opportunity is closed. When a user performs any of these actions, Sugar displays a message in the My Sugar Feed dashlet on the Home page.

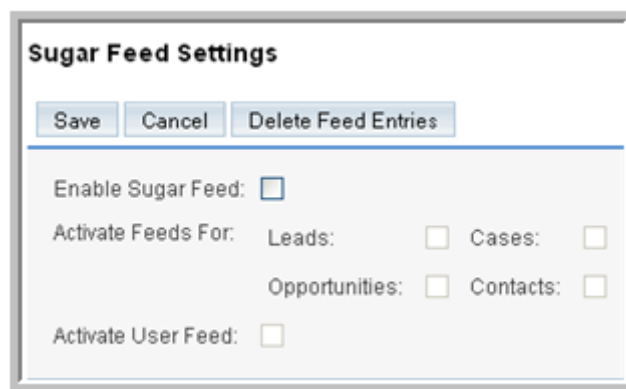
You can activate Sugar Feed for one or more of the following modules: Leads, Cases, Opportunities, and Contacts.

Additionally, you can enable User Feed to allow users to post status updates, external links, images, and YouTube videos. Your organization can also create custom link types.

To enable and manage Sugar Feeds

1. In the System sub-panel, click **Sugar Feed Settings**.

The Sugar Feed Settings page displays on the screen

The image shows a 'Sugar Feed Settings' dialog box. At the top, there are three buttons: 'Save', 'Cancel', and 'Delete Feed Entries'. Below these buttons, there are several settings with checkboxes. The first is 'Enable Sugar Feed:' with an unchecked checkbox. Below that is 'Activate Feeds For:' followed by four options: 'Leads:' with an unchecked checkbox, 'Cases:' with an unchecked checkbox, 'Opportunities:' with an unchecked checkbox, and 'Contacts:' with an unchecked checkbox. At the bottom is 'Activate User Feed:' with an unchecked checkbox.

2. To enable this functionality for users in your organization, select **Enable Sugar Feed**.
3. To enable users to post status updates, images, links, and YouTube video, select **Activate User Feed**.
4. To activate Sugar Feed for a module, select the checkbox appropriate for the module.
5. Click **Save**.
6. To delete all existing entries in the Feed, click **Delete Feed Entries** and click **OK** to confirm your action.

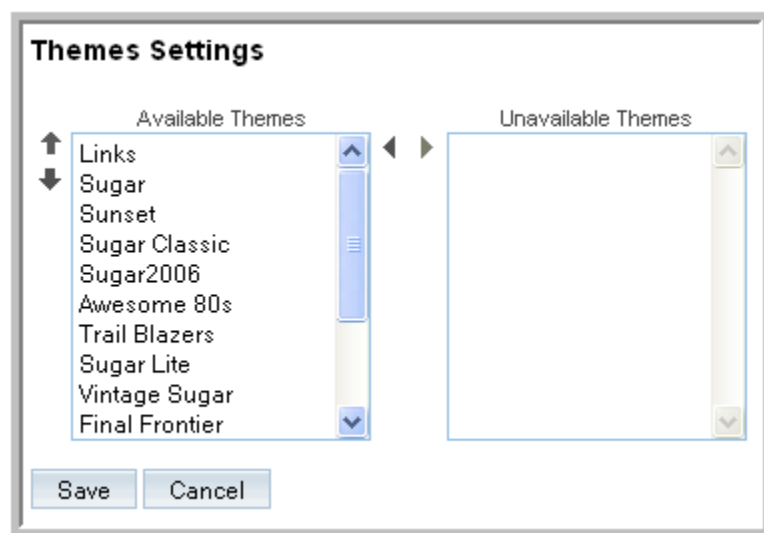
Sugar Feed entries for images, links, and YouTube videos are automatically deleted after two weeks. If you add custom link types, you can clear them from the cache using the Repair - Quick Repair and Rebuild option.

Theme Settings

Use this option to manage Sugar themes for your organization. You can enable and disable Sugar themes. Users will be able to view and use only enabled themes. By default, all themes are available to users.

To manage themes

1. In the System section of the Administration Home page, click **Themes Settings**.
The Themes Settings page displays on the screen.



2. To disable a theme, click the Right arrow to move it from the Available Themes list to the Unavailable Themes list; to enable a theme, click the Left arrow to move it from the Unavailable Themes list to the Available Themes list.
3. Click **Save** to save your changes; click **Cancel** to exit the page without saving your changes.

Sugar displays only enabled themes in the Theme drop-down list from which users make their selection.

Connector Settings

Use this option to manage connectors to external data sources. When you enable connectors for a Sugar module, users can search external data sources for new information from within a Sugar record in the module. Users can view the external data or merge it with the existing information in the Sugar record. For example, they can update addresses and phone numbers for an account. For information on merging data, see the *Sugar Community Edition User Guide*.

Though you can enable connectors for any standard module or custom module that displays in Studio, they are designed for company-type or person-type modules such as Accounts, Leads, and Contacts. The module must also have a standard Detail View layout. For example, though the Knowledge Base module is listed in Studio, you cannot enable connectors for it because it does not have a standard Detail View layout.

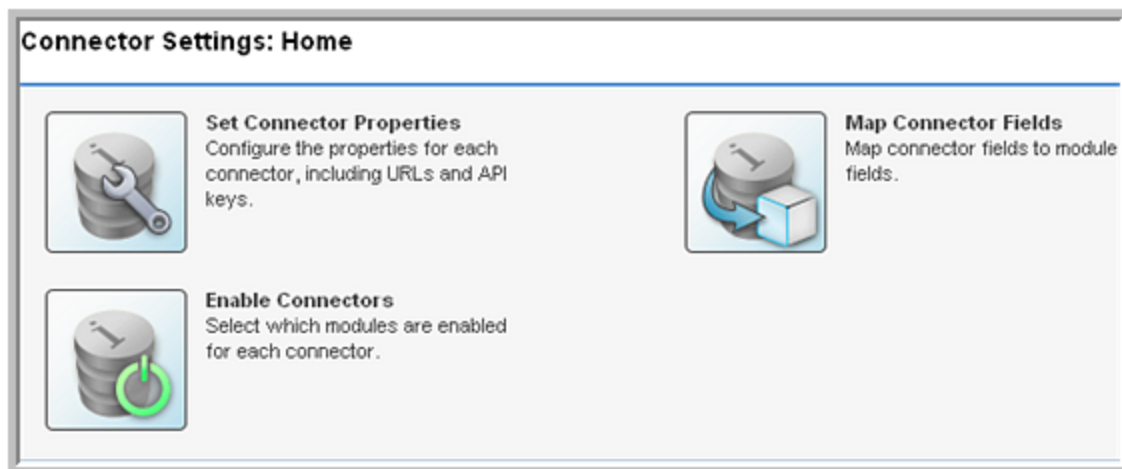
Sugar provides a connector to LinkedIn. Developers in your organization can create connectors to other data sources, and you can upload them into Sugar using the Module Loader. You can also search for other available connectors on Sugar Forge at <http://www.sugarforge.com> and Sugar Exchange at <http://www.sugarexchange.com>.

You can also map connector fields to fields in Sugar as described in **“Mapping Connector Fields” on page 50**.

To configure connector properties

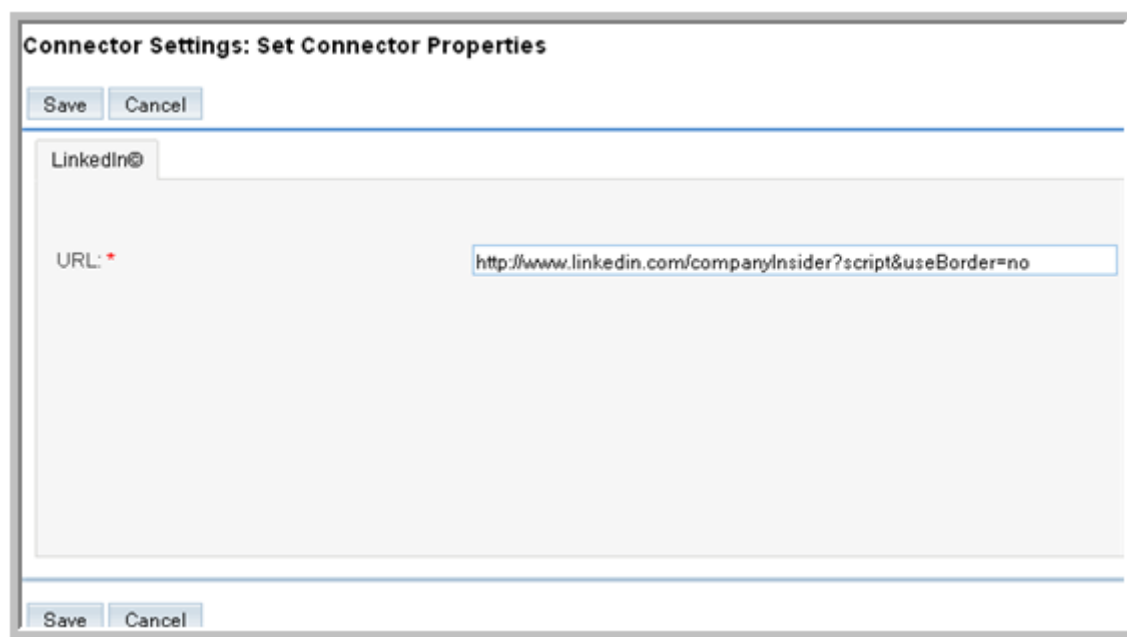
1. In the Systems section of the Administration Home page, click **Connector Settings**.

The Connector Settings page displays on the screen.



1. Click **Set Connector Properties**.

The Set Connector Properties page displays tab for the connector that Sugar provides. Tabs for any other connectors that you install also display on this page.

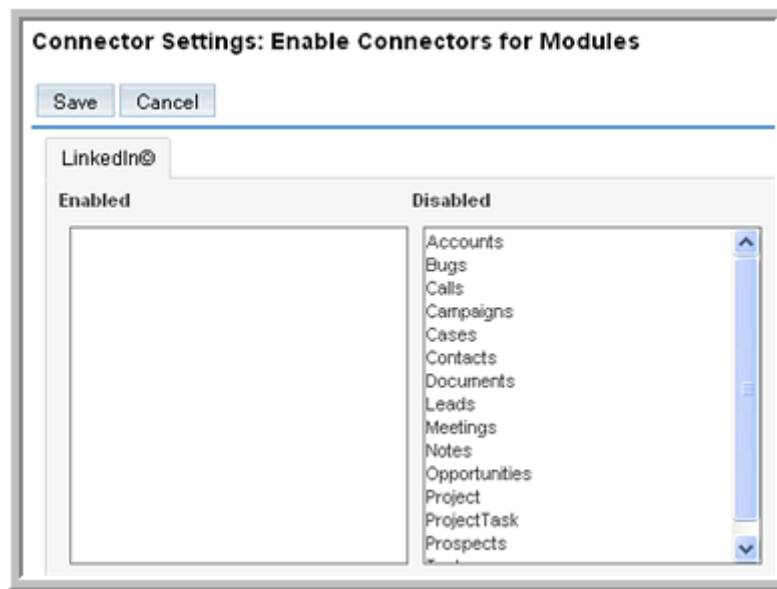


2. If a connector's URL has changed, enter the new URL in the appropriate field.
3. Click **Save** to add the settings; to exit the page without saving the changes, click **Cancel**.

To enable or disable connectors

1. On the Connector Settings page, click **Enable Connectors**.

This page displays tabs for the available data source connectors. Each tab displays a column for connector-enabled modules and a column for connector-disabled modules. By default, connectors are disabled for all modules.



2. To enable a connector for a module, on the connector tab, drag the module from the Disabled list to the Enabled list.
To disable a connector for a module, on the connector tab, drag the module from the Enabled list to the Disabled list.
3. Click **Save** to saving the settings.

Mapping Connector Fields

You can map connector fields to fields in a Sugar module to determine which fields display the pop-up window for the data source. For example, a mapped field for LinkedIn displays the LinkedIn icon. When users point the cursor at this icon, a pop-up window displays the LinkedIn data for the field.

To map connector fields

1. On the Connector Settings page, click **Map Connector Fields**.

Each connector tab displays a list of fields in the connector and a corresponding drop-down list of fields in connector-enabled Sugar modules.

2. To change a default mapping or to add a new mapping, select the Sugar field from the drop-down list corresponding to the field in the connector.
 3. Click **Save** to save the mappings.
- Sugar uses these field mappings when merging data.

Users

Use this section 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 a Regular User, a System Administrator, a Group User, or a Portal-only user. When you create a user, by default, the system creates a Regular user unless you specify the User type.

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

A *System Administrator* is a user who has administrative privileges in Sugar to perform tasks such as creating users. The System Administrator has the rights to access all modules and records.

A *Group User* is a bucket that is used for inbound emails, and does not count toward the number of Sugar licenses that you purchase for your organization. For example, when you create a group mail account for Support, a group user named Support is created to handle customer support issues. Users can then distribute the emails to other users from the group inbox. Users 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 67](#).

A *Portal Only User* is used by portals created in Sugar to access the system. Portal users do not count towards the number of Sugar licenses that you purchase for your organization.

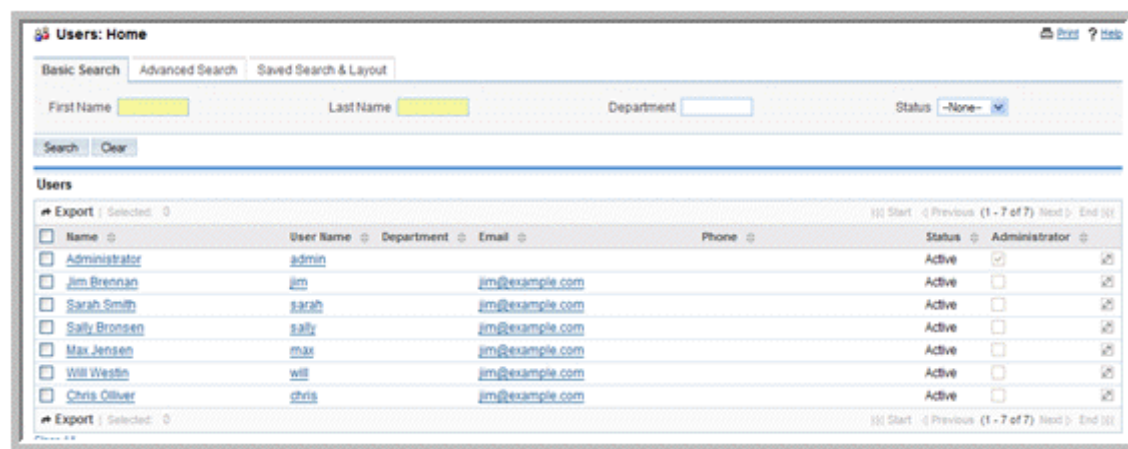
After you create a Regular user, administrator, or portal-only user, the user name displays in the list on the Users Home page and the employees list on the Employees Home page. Group user names display in the users list as group users and do not display in the employees list.

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

Note: You cannot delete users but you can deactivate them. Inactive users do not count towards the number of Sugar licenses you purchase for your organization.

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.

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

Users: ()

Save Cancel

User Name * First Name

Status * Active Last Name *

User Type Regular User User can access modules and records based on team security and roles.

Email Options *

☐ Primary ☐ Reply-to

[+ Add Address](#)

Email client: System Default Mail Client

User Information

Employee Status Active

Title

Department

Reports to

Office Phone

Mobile

Other Phone

3. On the Users page, enter the following information:
 - a. In the top section, enter the user's name, user type, and current status. If you do not select a user type, the system creates a Regular user.
 - b. In the Email Options section, 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 email. 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*.
 - c. In the User Information section, specify information such as the user's current status; the user's title, department, phone numbers, IM (Instant Messenger) type, and home address. You can add additional comments in the Notes field.
 - d. In the User Settings section, 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.
 - e. In the Layout Options section, 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 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.

To use a module's icon, if one exists, as the website icon, checkmark **Use module icon as browser favicon**.

- f. The **Locale Settings** section 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.
 - g. In the **Calendar Options** section, you can enter a **Publish Key** to prevent others from publishing the user's calendar without authorization.
4. To create the user, click **Save**; click **Cancel** to exit the page without saving your changes.

When you create the user, Sugar sends a system-generated password to the user. For information on password management, see [“Password Management” on page 58](#).

The system adds the user name to the **Users** list on the **Users Home** page and to the **Employees** list on the **Employees 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, scroll down the page, click **Select** in the **Roles** section 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

- 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*.”
- To view a user's details, click the user's name in the **Users** list.
- To send a new system-generated password to a user, in the record's **Detail View**, click **Send New Password**.
- To edit user details, click **Edit** on the detail page, change the information as needed, and click **Save**.
- To duplicate the user details, on the detail page, click **Duplicate**, edit the information as necessary, and click **Save**. The following field values are not duplicated: Publish key, Layout options, Email addresses, User settings, and Locale settings.

- To import user data, click **Import**. For more information on importing data see the *Sugar Community Edition User Guide*.
- If you re-configured your User Preferences settings, Homepage, or Dashboard, and you want to reset it to default values, click the appropriate button in the Detail View.

Role Management

Roles control user actions on records, whereas teams control record data access.

A role defines a set of permissions to perform actions such as viewing, editing, and deleting information. You can control user actions by restricting access to modules and module fields to users who are assigned to certain roles.

Users are affected by roles only if they are assigned to roles. That is, users who are not assigned a role can, by default, access and take any action in any module. Users can have multiple roles assigned to them, and a role can be assigned to multiple users.

For example, if you want to prevent a group of users in your organization from accessing the Opportunities module, you can create a role that restricts access to this module. When you assign this role to an engineer, the 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.

Note: A System Administrator has the right to access all modules and records. You cannot use roles to restrict this privilege.

Creating Roles

When you create a role, you specify whether access is permitted or not, the modules that the role can access, the access type such as Normal (for Regular users) or administrator, and the actions that they can perform.

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 a module where one role grants administrator access and the other grants Regular User access, then user has only Regular User access because it is more restrictive.

Not Set: 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 Access Type = Admin and Export (action) = None

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

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

If you change the Access Type to Not Set:

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

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

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

When new roles are created, the default value of Access, User Type, and Operations is Not Set. Not Set serves as a placeholder for permissions that can be applied. However, there are permissions in the drop-down list for each role option that are synonymous with Not Set.

The default value of Not Set applies a permission to each role option as follows:

Access: Not Set = Enabled

User Type: Not Set = Normal

Function (Delete, Edit, etc): Not Set = All

Access 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. This setting is discussed in more detail later in this section.

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.

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 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 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 access 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 access 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.
6. To create the role, click **Save**; click **Cancel** to exit the page without saving your changes.

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.

The system assigns the selected users to the role and displays the user name in the Users sub-panel of the Roles page. Alternatively, you can also assign users to a role in the User Settings sub-panel of the User Management page. Role restrictions do not apply to Admin users.

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 access control information, on the detail page, click **Duplicate**, enter a new name for the role, and then click **Save**. Note that the users list associated with the role is not duplicated.
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 Remove (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 page displays details of the user's privileges for each module. The restrictions are then merged and the more restrictive settings across all roles are assigned to the user. You cannot change any of the privileges because they are associated with the role.

Password Management

As a System Administrator, you can use the Password Management option to create and manage system-generated passwords and password rules for users.

System-generated passwords are automatically sent to new users when system administrators create new user records. New Users need to use the system-generated password in order to submit a new password and log in to Sugar for the first time. You

can create and manage email templates to send users system-generated passwords, and links to reset user-generated passwords.

You can specify the minimum and maximum number of characters that user-generated passwords can contain. You can also specify other requirements such as uppercase and lowercase characters, numbers, and special characters in passwords.

For security purposes, you can set an expiration date for user-generated passwords. Password expiration dates apply to both user-generated password and system-generated passwords. When the passwords expire, you can send users a system-generated link to the page where they can reset their passwords. You can also set an expiration date for these page links.

You can also enable the Login Lockout feature to lock users out of the system after a specified number of failed login attempts. The system restores the ability to log in after the specified time interval has elapsed.

You can create password rules using regular expressions to specify characters and words that are not permitted in user-generated passwords. These rules display in the Change Password section of the My Account page. Users will have to adhere to these rules to successfully change their passwords.

When you enable new password rules, they apply only to new passwords. Existing passwords will work even if they do not meet the requirements of the new password rules. When users attempt to reset their password using the Forgot Password feature or on their My Account page, they will need to create a password that meets the criteria of the new password rules.

As an additional precaution, you can enable captcha validation to prevent automated programs from gaining unauthorized access to user accounts. To use captcha validation in Sugar, you will need to create an account with reCAPTCHA for your organization and obtain a public key and private key for your Sugar instance. You will need to enter these keys on the Password Management page. Navigate to the reCAPTCHA website at <http://recaptcha.net/> and create the account.

When you enable captcha validation, the Captcha image displays in the Sugar Login window when a user clicks the Forgot Password link. The user must submit the characters from the image in order to receive the link to reset the password.

To specify and manage password settings

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

The Password Management page displays on the screen.

Password Management

Save Cancel

Password Requirements

Minimum Length: Maximum Length:

Must contain one upper case letter (A-Z): ☒ Must contain one lower case letter (a-z): ☐

Must contain one number (0-9): ☐ Must contain one of the following special characters (~, !, @, #, \$, %, ^, &, *, (,), _ , +, -, =, {, }, |, ~): ☐

Regex Requirement: Regex Description:

Email Templates

When System Administrator sends a new system-generated password to user: System-generated password email

When system sends user a system-generated link to reset password: Forgot Password email

Generated Link Expiration

☐ None ☒ Link Expires in: 30 Minutes

User-Generated Password Expiration

☒ None ☐ Password Expires in: Days ☐ Password Expires after logins.

Login Lockout

☒ None ☐ Lockout users after un-successful login attempts.

Captcha Validation

Enable Captcha validations ☐

Save Cancel

- You can specify information in the following sections:

Password Requirements. In this section, you can enter the minimum and maximum number of characters that passwords can contain. You can also specify more detailed requirements, such as uppercase and lowercase characters, numbers, and special characters that the password can contain.

To enforce password rules, you can use regular expressions. In the **Regex Requirement** field, enter specific characters and words that are not permitted in passwords. In the **Regex Description** field, you can enter a brief description of the Regex expression.

Some examples of regular expressions in password rules are listed below:

- Sugar - The password cannot contain the word “Sugar”.
- `([A-Za-z0-9])\1` - The password cannot repeat a letter or number consecutively; for example, “AA” or “88”.
- `([a-zA-Z]){4,}` - The password cannot repeat any two consecutive letters. Repeat characters or letters must be separated by a number or a special character such as “%”.
- `[\t]` - The password cannot contain spaces and tabs.
- `[@#\$]` - The password cannot contain @, #, or \$.

Email Templates. In this section, you can create and manage templates to send system-generated passwords and links to reset passwords to users.

You send out system-generated passwords to new users to allow them to log into the application and create new passwords. Users who forget their password can click **Forgot Password?** in the Login window and submit their username and email address. The system automatically sends them a link to the page where they can reset their password.

To create an email template to send out system-generated passwords, select **System-generated password email** from the drop-down list and click **Create**. To create an email template to send a link to users who forgot their passwords, select **Forgot Password** email from the drop-down list, and click **Create**.

For information on creating and editing email templates, see “Creating Email Templates” in the *Sugar Community Edition User Guide*.

Generated Link Expiration. In this section, you can specify one of the following options to manage the system-generated link that allows users to reset their passwords.

None. The system-generated link to reset passwords does not expire.

Link Expires in. The time period, in minutes, hours, or days, when the link remains active.

User-Generated Password Expiration. In this section, you can select one of the following options:

None. The password never expires.

Password Expires in. The time period, in days, weeks, and months, after which the password expires.

Password Expires after how many login attempts? The number of times a user can log into Sugar. When this number is met, the password expires and the user must specify a new password.

The last two options listed above ensure that users change their passwords periodically for the security of your Sugar application.

Login Lockout. In this section, you can specify whether user-generated passwords expire or not. If you choose to force users to change passwords, you can choose a time period or the number of logins.

To specify a time interval, select **Password Expires in**, enter the number and select days, weeks, or months from the adjoining drop-down list.

To specify the number of logins, select **Password expires after** and enter the number in the adjoining field.

Captcha Validation. In this section, you can enable captcha validation for additional security.

- a. Select the **Enable Captcha Validations** checkbox.
The Public key and Private key fields display below.
- b. Enter the Public key and the Private key that you received from reCAPTCHA for your Sugar instance in the appropriate fields.

3. Click **Save** to save the settings; click **Cancel** to exit the page without saving the settings.

Emails

Use this section 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 are sent to users when record are assigned to them.
- The defaults for the Mail Transfer Agent, email format, and the email client for outbound emails.

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

For inbound emails, you can specify whether you want to preserve emails’ raw source or not. Not preserving the raw source prevents 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, 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 Print ?

Save Cancel * Indicates required

Email Notification Options

"From" Name: * SugarCRM

"From" Address: * do_not_reply@example.cc

Save Outbound Raw Emails * ☐ Yes ☒ No

Mail Transfer Agent: SMTP [Prefill Email Defaults](#)

SMTP Server: *

Use SMTP Authentication? ☒

SMTP Username: * admin

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? ☐

SMTP Port: * 25

Enable SMTP over SSL or TLS: TLS

SMTP Password: *

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 & attachments 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 compromise your system.*

2. 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.

Notifications on? Select this option to send an email notification to users when a record for any of the following modules is assigned to them:

- Accounts
- Contacts
- Opportunities
- Leads
- Meetings
- Calls
- Tasks
- Cases
- Bugs
- Quotas
- Campaigns

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 record.

Save Outbound Raw Emails. Select **Yes** to preserve the email source in the database; or else select **No**.

Mail Transfer Agent. From the drop-down list, select either Sendmail or SMTP as the Mail Transfer Agent for your outbound emails.

For SMTP, enter the following information:

SMTP Server. Enter the SMTP mail server's address.

SMTP Port. Enter the mail server's port number.

Use SMTP Authentication? Select this option if the mail server requires authentication to send out the email; enter your username and password for the email account in the **SMTP Username** field and the **SMTP Password** field respectively.

Enable SMTP over SSL or TLS. Select this option if you are using the POP3 protocol and the mail server requires SSL or TLS.

To add Google's Gmail server, click **Prefill Gmail Defaults**. The system fills in the SMTP Server and SMTP Port fields with the Gmail server address and port number respectively.

3. 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 UTF-8.

Delete related Notes & attachment files with deleted Emails: Select this box to delete notes and attachments that are related to the deleted emails.

4. In the Email Security Settings sub-panel, specify the following information:

Preserve Raw Email Source. Select this option to preserve raw messages in the database but prevent unfiltered content through the Sugar User Interface.

Note: If you want to preserve the raw source of incoming emails, ensure that you select that option on the Inbound Email page as well. In case of a conflict, the option you select on the Inbound Email page will override your selection on the Emails Settings page.

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.

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

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 specify settings for email campaigns from the Campaigns module or from the Administration Home page.

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.

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

To configure settings for email campaigns from Emails module

1. To configure email settings from the Campaigns module, log into Sugar as the administrator, and click **Email Setup** in the Shortcuts menu of the Campaigns Home page.

The screenshot below displays the Email Setup for Campaigns page in the Campaigns module.

Email Setup for Campaigns

Cancel Next

Setup Email

New Mail Account
Summary

Fill out the form below to modify your system settings so that campaign emails can be sent out.

From Name: * SugarCRM

Mail Transfer Agent: SMTP

From Address: * do_not_reply@example.cc

SMTP Server *

SMTP Port * 25

Use SMTP Authentication? ☐

Enable SMTP over SSL or TLS: --None--

Email Notification Options

Number of emails sent per batch: * 500

Location of campaign tracking files (like campaign_tracker.php): * ☒ Auto-Create ☐ Allow Select

Value of Config.php \$keep_copies: ☐ Yes ☒ No

Keep copies of campaign messages: * ☐ [?](#)

2. The Setup Email section, displays the default values for the following. You can enter new values, if needed:

From Name. The name of the sender.

Mail Transfer Agent. Select either SMTP or sendmail as the default protocol.

From Address. The email address for the sender.

Note: The name, address, and Mail Transfer Agent values that display on this page reflect the default values set on the Email Settings page. These values do not display on the Campaign Email Settings page that you access from the Administration Home page. Any changes that you make to the information on this page will be reflected in the Email Settings page.

For SMTP, enter the following information:

SMTP Server. Enter the name of the SMTP server.

SMTP Port. Enter the SMTP port number.

Use SMTP Authentication. To use SMTP authentication, check this box and enter information in the following fields:

SMTP Username. Enter the SMTP user name.

SMTP Password. Enter the SMTP password.

Enable SMTP over SSL or TLS: Select either SSL or TLS from the drop-down list.

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. Campaign tracking files log responses from campaign targets. If you are running Sugar on an external network, select **Auto Create** and accept the default location.

However, if your Sugar instance is behind a firewall, then choose **Allow Select** and specify the path to your external Web server in the field below. Ensure that you create three custom files with the same name as the campaign tracking files, namely, *campaign_tracker/2.php*, *removeme.php*, and *image.php* and place them in the path to your external Web server. These files must point to the original campaign tracking files in your Sugar instance.

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

3. Click **Next**.

The page displays the Bounce Handling mail account, if one already exists. If not, the screen displays the New Mail Box form, which you can use to create a Bounce Handling mail account.

The screenshot shows the 'Email Setup for Campaigns' window. On the left is a sidebar with links: 'Setup Email', 'New Mail Box' (selected), and 'Summary'. The main area is titled 'New Mail Box' and contains a message: 'No mail accounts with bounce handling were detected, please create a new one below...'. Below this is a checkbox labeled 'Create New Mail Account' which is checked. The form has two columns of fields:

Mail Account Name *	SugarCRM	"From" Address:	do_not_reply@example.com
Mail Server Address *		User Name *	do_not_reply@example.com
Mail Server Protocol *	-None- N	Password *	*****
Mail Server Port *		Monitored Folder *	INBOX

4. Select **Create New Mail Account** to create a mail account to receive bounced emails.
5. Enter the mail account information as described in **“To set up a Group mail account” on page 69** and click **Next**.

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

6. 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**.

To configure campaign email settings from the Administration Home page, see **“Email Settings” on page 62** and **“Campaign Email Settings” on page 74**.

Inbound Email

Use this option to create a Group mail account to view emails from an external email server and share them with multiple users for necessary action. When you receive emails that are addressed to your organization but not to any particular user, you can route it to a Group mail account such as *support@example.com* or *sales@example.com*. Users can subsequently distribute emails in the Group mail account to other users.

Using Group Folders. You can create a stand-alone Group folder in the Emails module that not associated with a Group mail account. You can manually move emails from an external email server into the group folder and distribute them among users. However, in order to automatically import emails into Sugar and route them to a Group folder, you must associate a Group mail account with the Group folder. When you associate a Group mail account with a Group folder, you can specify an action to generate cases from imported emails and automatically assign them to users for resolution.

Typically, you create group folders in the Emails module as described in **“To create and edit Group folders from the Emails module” on page 72**. However, you can create a Group folder and associate it with a Group mail account from the Inbound Email Setup page when you create or edit the account.

To help make a decision on whether to use Group mail accounts, Group folders, or both, use the recommendations listed below. For more information on Group folders, see “Email Folders” in the *Sugar Community Edition User Guide*.

Group Mail Account without Group Folder	Group Mail Account with Group Folder
<p>Can import emails manually from the mail server 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. • If you are creating the account to store bounced campaign emails. 	<p>Can import emails from the mail server into the Sugar database automatically through a batch process. The emails are automatically deleted from the mail server.</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. • If you are creating the account to automatically create cases and assign them to users.

Creating Cases from Emails. Sugar can automatically generate cases from inbound emails. However, in order to do this, you must associate the Group folder with a Group mail account and select the “Create Case” action. When the case is created, it is assigned to a user and an email notification is sent out to that individual. The email’s Subject line is copied to the case’s Subject line and the body is copied as the case description. The email for which the case was created is also listed in the History sub-panel of the case’s Detail View.

Optionally, you can use the Create Case Reply template to set up an automated response notifying senders that a case has been created to resolve their issue. The email contains the number of the newly created case in the Subject line. The case number format follows the Case Macro setting.

You can also use the Auto-reply template to automatically notify senders that you received their email.

To configure inbound emails

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

Inbound Email: Home Print ? Help

Save

Case Macro: Set the macro which will be parsed and used to link imported email to a Case. Set this to any value, but preserve the "%f".

Save Raw Source: ☐ Yes ☒ No Select "Yes" if you would like to preserve the raw source for each imported email. Large attachments can cause failures with conservatively or incorrectly configured databases.

Number of Auto-responses: Set the maximum number of auto-responses to send to a unique email address during a period of 24 hours.

Inbound Email

Name:	Mailbox Usage	Mail Server:	Status:

[Clear All](#)

Mass Update

Update

Delete Read Emails After Import:

LBL_IS_PERSONAL:

2. Specify the following information:

Case Macro. This field imports an email and associates it with a case based on the Subject line. When users send an email from the detail page of a case, the case number appears in the Subject field of the email. The Case Macro field displays the default Case Macro string. To customize it, you can change CASE to a different word but you must preserve the rest of the string.

Save Raw Source. Select **Yes** to preserve the raw email source for imported emails in the database without stripping any of the specified tags. For more information, see [“Email Settings” on page 62](#).

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 the email recipient has set up an out-of-office responder. If not, when Sugar receives the automated response, it responds with automated response, thus causing an endless loop.

3. Click **Save**.

To set up a Group mail account

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:

Save Cancel Test Settings

Basic Setup

Name: *

Mail Server Address: *

Mail Server Protocol: * IMAP

Mail Server Port: * 143

Use SSL: ☐

Status: Active

User Name: *

Password: *

Monitored Folders: * INBOX

Trash Folder: *

Sent Folder:

Email Handling Options

Assign To Group Folder: None-

Possible Actions: None-

Auto-Reply Template: None-

No auto-reply to this domain:

"From" Name: *

"From" Address: Default: do_not_reply@example.com

"Reply-to" Name:

"Reply-to" Address:

- 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.

When you select IMAP, additional fields display on the screen to select a Monitored folder, a Trash folder, and a Sent folder.

Monitored Folders. Click **Select** and select the folders that you want users to be able to access from the Emails module. The default folder is "Inbox". To select multiple folders, hold down the Shift key or the Ctrl key. When you create an account for an external mail account such as Yahoo or Google, you must ensure that you are using their mail server protocol.

Note: If you use the default "Inbox" folder value to access a Google mail account, you will be able to view emails in all the folders in your Google mail account because Google does not have a folder named Inbox. To view only specific folders from your Google mail account, ensure that you select them in the Monitored Folders list.

Trash Folder. Click **Get Trash Folder** to add a trash folder to the Emails module. Select the Trash folder from the Folders' list, and click **OK**.

Sent Folder. Click **Get Sent Folder** to add a folder to store outbound emails in the Emails module. Select the folder from the Folders' list, and click **OK**.

Mail Server Port. Enter the server port number.

Status. From the drop-down list, select **Active** to activate the Group mail account or **Inactive** to deactivate it. Users cannot view emails from a deactivated account.

User Name. Enter the username to access the mail server.

Password. Enter the user's password.

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:

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. You can also create Group folders from the Emails module as described in [“To create and edit Group folders from the Emails module” on page 72](#)

Possible Actions. Optionally, you can select an action that the user is permitted to perform.

Select **Create Case** to automatically create cases from inbound emails. When you select this option, you will need to specify how the emails are distributed in the Distribution Method field.

Select **Bounce Handling** to create an inbox to route bounced campaign emails. 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.

Distribution Method. This field, which displays only when you select the Create Case option, allows you to select Round-Robin or Least-Busy. With the Round-Robin option, the system distributes cases evenly amongst all users. With the Least-Busy option, the system distributes cases to the least busy user assigned to the Group folder.

Create Case Reply Template. This field displays only when you select the Create Case option. You can use the Create Case Reply template to set up an automated response notifying email senders that a case has been created to resolve their issue. The response contains the system-generated case number in the subject line of the email. The body of the email for which the case was created displays below the template text.

Auto-Reply Template. Use this template to set up an automated response notifying email senders that you received their email. From the drop-down list, select an existing template, or click **Create** to create a new one.

If both templates are selected, Sugar will respond to the sender with the Create Case Reply template instead of the Auto-Reply template.

For information on creating email templates, see “Creating Email Templates” in the *Sugar Community Edition User Guide*.

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.

Leave Messages on Server. This option, which applies to imported emails, displays only when you select a Group folder. Select **Yes** if you do not want to delete the emails from the external server when you import them into Sugar. Select **No** if you want to delete emails from the external server.

Note: If you choose to use the Leave Messages on Server option, it is recommended that you use the IMAP protocol because this option is not known to work successfully with the POP3 protocol.

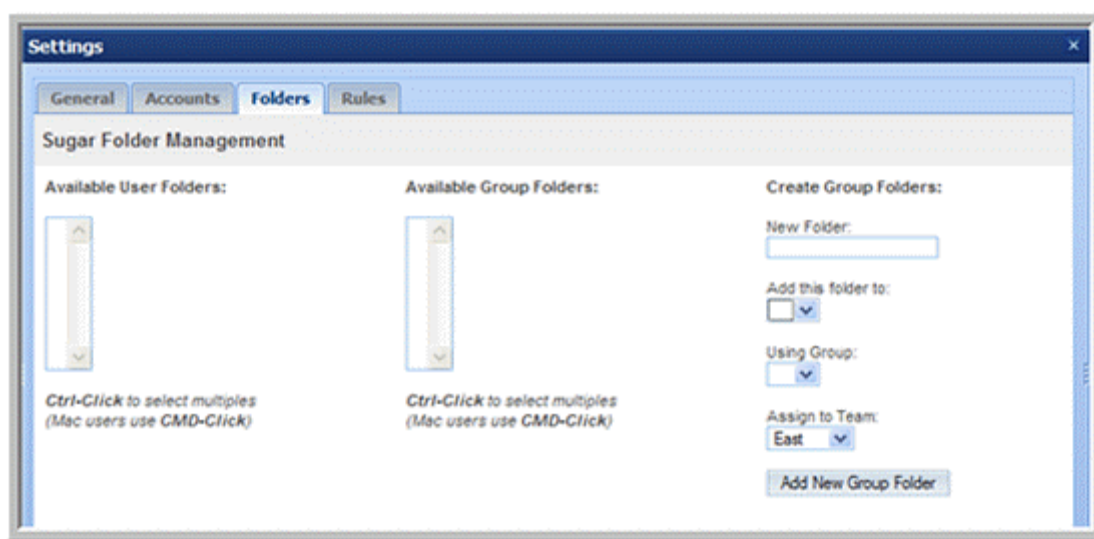
4. Click **Test Settings** to ensure that the settings are accurate.
5. Click **Save** to save the settings.

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

To create and edit Group folders from the Emails module

1. In the Emails module, click **Settings**.
2. In the Settings window, click the **Folders** tab.

Existing user folders and Group folders display on this tab.



3. Beneath the Edit Group Folder drop-down list, enter information for the following fields:

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.

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

The new folder displays in the Assign to Group Folders drop-down list.

To edit a Group folder

1. To edit a Group folder from the Emails module, select it from the Edit Group Folder drop-down list in the Settings window, make the necessary changes, and click **Save**.
2. To edit a Group folder from the Inbound Email Home page, in the Edit View of the associated Group mail account, click the **Edit** button adjacent to the Assign to Group Folder field; make the necessary changes, and click **Save**.

To manage monitored mail accounts

- To view the details of a mail account, click its name in the Inbound Email home page.
- To edit the account, click **Edit**, revise the information, and click **Save**.
- 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.
- 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 Sent 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 32](#).

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

Keep copies of campaign messages: * ☐ Yes ☒ No

Value of Config.php setting

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**.

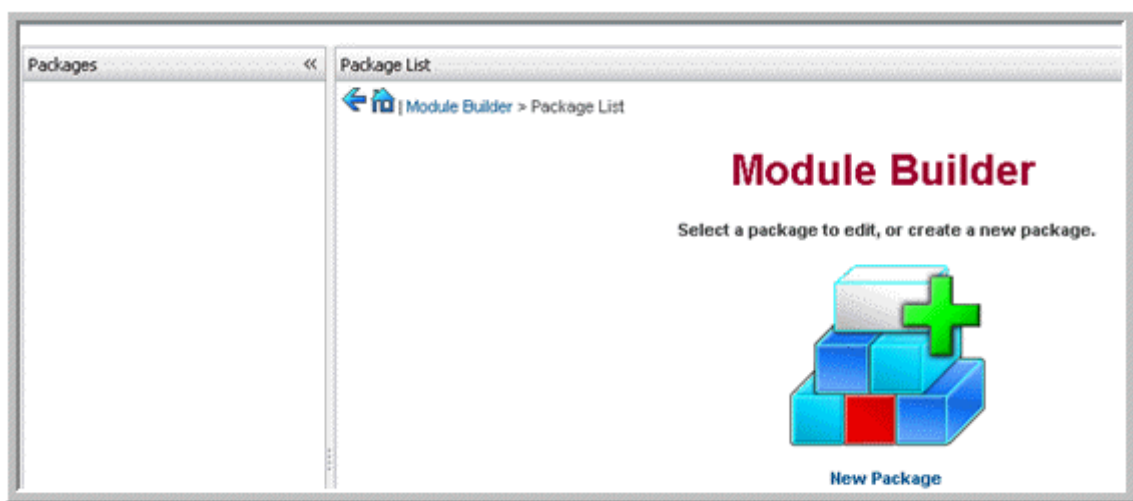
Developer Tools

The Developer tools section 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. To create relationships between modules, see [“Create Relationships” on page 95](#).

After you build a module in Module Builder, you can deploy the module directly within the current instance or you can use the Module Loader to install it in another Sugar instance. For more information, see [“Module Loader” on page 99](#).

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 within a 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.

File. This template provides document-specific fields such as File Name and Document Type. Use this template to create a module that is similar to the Documents 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 module or Bug Tracker 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 module or the Leads module.

Sale. This template provides opportunity-specific fields such as Lead-Source and Probability. Use this template to create a module that is similar to the Opportunities module.

3. Create new fields, if necessary. You can also rename default fields from the template.

Note: Apart from field names, you cannot edit other field properties in a template. However, you can duplicate the fields and save them with a different name to customize them. You can choose which fields appear in the module layouts.

4. Customize page layouts for List View, Edit View, Detail View, Sub-panels, Search form, and Sugar Dashlets, if necessary.
5. Create relationships between the new module and other modules, if needed. A Sugar module, typically, has multiple relationships with other Sugar modules. When you create a custom module, you can define its relationship with other Sugar modules.
6. Save the package and distribute it.

You can choose one of the following options 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.
After the module is installed 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 users in your organization. After deployment, if needed, you can make further changes to the module in Module Builder and deploy it again to update the installed module.

You can also add or remove fields and make other changes to a deployed module through Studio. However, note that if you change a deployed custom module in Studio and then re-deploy it from Module Builder, the following information will be lost:

- Custom field labels will be lost and, hence, will not display in the page layouts even though the custom fields and the associated data exist in the database.
 - The layouts for the custom module will be lost and will have to be created again. If you created custom fields in Studio and added them to the layouts prior to re-deployment, you will have to add them again to the layouts in Module Builder.
 - Custom relationships will be lost. The relationship tables and relationships between records that are stored in those tables are deleted from the database.
- **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 customize it further in Module Builder if necessary. The

package is visible only in Module Builder and, hence, only administrators can access it until it has been deployed.

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.

The screenshot shows a web interface titled 'Package'. At the top, there are navigation icons and the text 'Module Builder > p1'. Below this is a row of buttons: Save, Duplicate, Publish, Deploy, Export, and Delete. The form contains the following fields: 'Name: Package1', 'Author:' (empty), 'Key: s1', and 'Description:' (empty text area). Below the form, it displays 'Last Modified: 2007-10-10 23:27:31' and a 'Modules:' section with a green plus icon and the text 'New Module'.

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; to delete the package, click **Delete**.
6. After you save the package, if you want to create a copy, click **Duplicate**.
The system appends a “1” to the package name and saves it as a new package.
7. To publish the package after saving it, click **Publish**.
8. To deploy the package on your Sugar instance after saving it, click **Deploy**.
9. Click **Export** to save the package as a zip file on your local machine.

To create a module

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

The Module page displays on the screen

2. Enter information for the following fields:

Module Name. Enter a name for the module.

Label. Enter a name for the module that you want displayed in the Sugar User Interface.

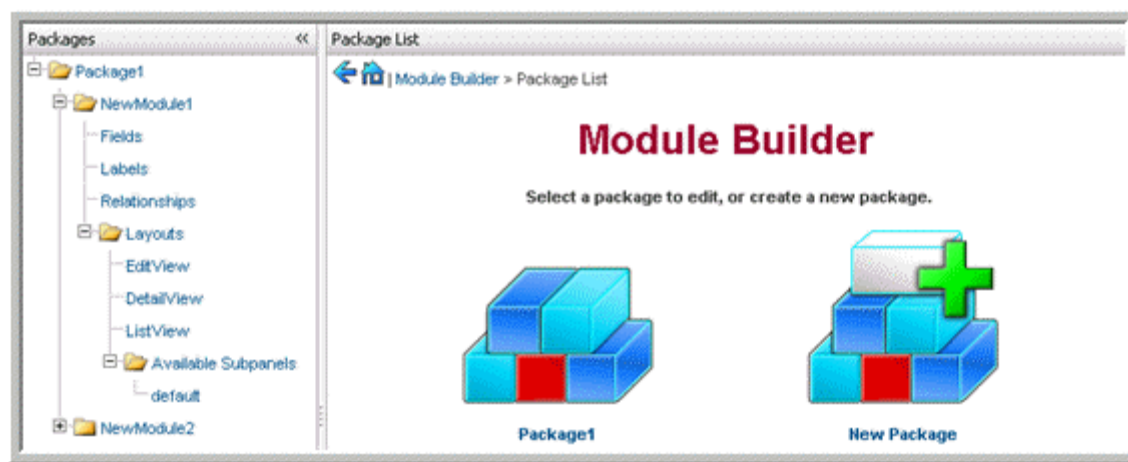
Importing. Selecting this option to allow data import into the module.

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.



The Packages panel on the left lists all the modules you create within a package. Default fields, labels, layouts, sub-panels, and relationships from the selected template are nested under the module. You can click them to view their details. You can also edit the default layouts, add new fields, and create relationships with other Sugar modules.

For information on customizing a layout or the Search form, see [“Editing the Layouts” on page 86](#). For information on creating new fields, see [“To add custom fields” on page 82](#). For information on defining relationships, see [“Create Relationships” on page 95](#).

To edit Sugar Dashlets

1. On the custom module page, click **View Layouts**. Alternatively, click **Layouts** in the Packages panel on the left.



2. Click **Sugar Dashlet**.
You can edit the List View and the Search form for Sugar Dashlets.
3. To edit the List View, click **Sugar Dashlet List View** and follow the procedure described in [“To edit List View” on page 87](#).
To edit the Search form, click **Sugar Dashlet Search** and follow the procedure described in [“To edit the Search form” on page 89](#).

To distribute or install 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 99](#).

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 deployed, you can uninstall the deployed package 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. That is, any updates that you made to the package before re-deploying will override 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 another Sugar instance using the Module Loader.



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 have been deployed. 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.

The bottom of the page displays buttons to the Developer Tools' Home, Studio, Module Builder, and the Dropdown Editor.

Editing a Module

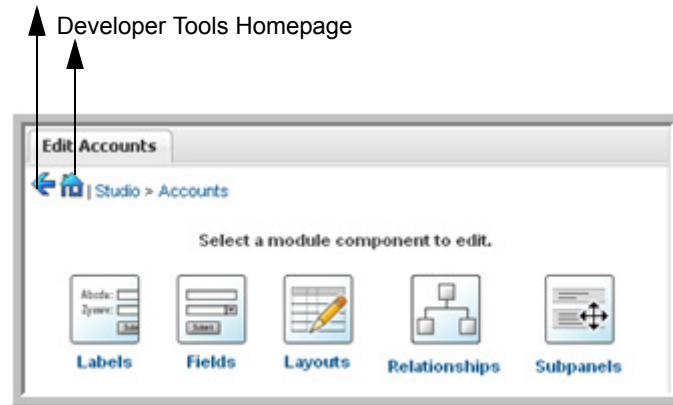
You can create and edit custom fields, drop-down lists, and field labels. You can also edit the default layout and sub-panels. After you complete editing the module, the updated version will not be available to other users until you publish it. You can use Studio to make changes to a published module.

Note: If you make changes to fields and layouts of a custom module in Studio, some information will be lost if the module is re-deployed from the Module Builder. For more information, see the description of “Deploy” in [“Module Builder” on page 75](#)

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 81](#).

Fields: Select this option to create and edit custom fields. For more information, see [“To add custom fields” on page 82](#). Select this option to edit and create drop-down lists. For more information, see [“Dropdown Editor” on page 92](#).

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 Layouts” on page 86](#).

Relationships: Select this option to view existing relationships and create new ones between modules. After you create a relationship, you will need to deploy it to make it available to users. For more information, see [“Create Relationships” on page 95](#).

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 94](#).

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

Editing Field Labels

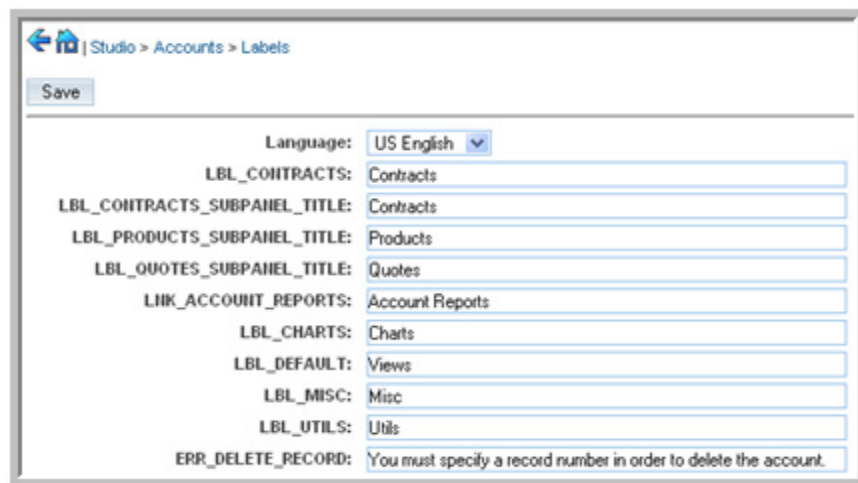
You can edit field labels, button labels, link labels, module titles, and pop-up window messages using the Label editor. You can also change the default field labels for all the language packs that you have installed. Every module list displays the database fields and the labels they map to in the user interface.

Using the Label Editor instead of the Layout Editor to edit multiple labels for a module reduces the time to make the edits.

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.



Studio > Accounts > Labels

Save

Language: US English

LBL_CONTRACTS:	Contracts
LBL_CONTRACTS_SUBPANEL_TITLE:	Contracts
LBL_PRODUCTS_SUBPANEL_TITLE:	Products
LBL_QUOTES_SUBPANEL_TITLE:	Quotes
LBL_ACCOUNT_REPORTS:	Account Reports
LBL_CHARTS:	Charts
LBL_DEFAULT:	Views
LBL_MISC:	Misc
LBL_UTILS:	Utils
ERR_DELETE_RECORD:	You must specify a record number in order to delete the account.

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.

Creating and Managing Custom Fields

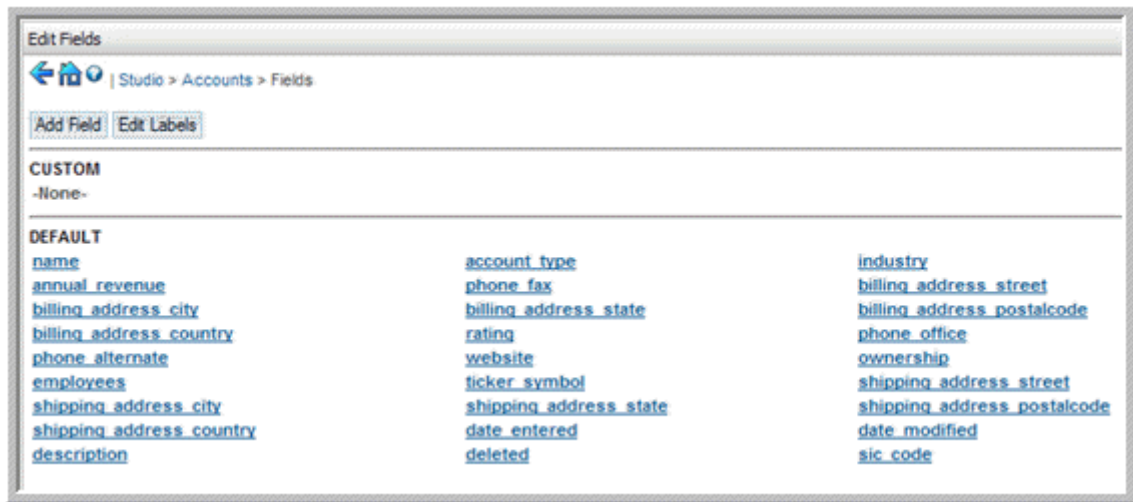
You can add custom fields to any module in Sugar. When you add a custom field, the application adds the field to the appropriate database table and stores the generated metadata. You can then add the fields to the desired layout, such as Edit View and Detail View. For custom modules, you can create fields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

Note: After you create a custom field, you cannot edit its name or data type.

To add custom fields

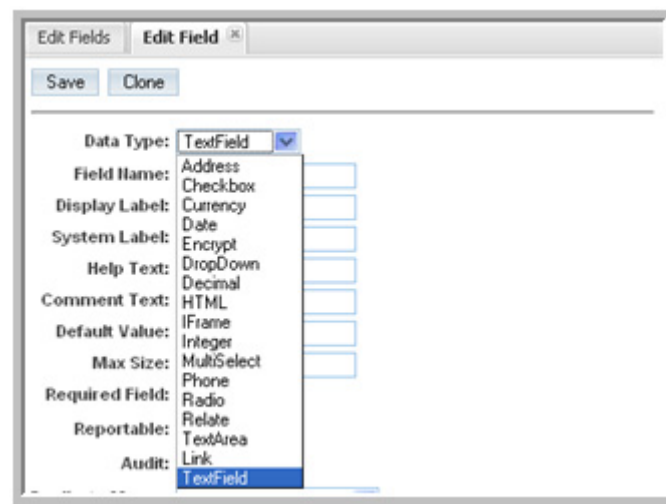
1. To add a new custom field to a module, select the module and click **Fields**.

The page displays the current default fields that Sugar provides as well as any existing custom fields.



2. Click **Add Fields**.

The Field Editor displays the field types as shown below:



The information that you need to specify varies depending on the selected data type.

3. 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.
- **Address.** Creates fields for street, city, postal, state, and country.
- **Checkbox.** Creates a checkbox for data fields with a Yes/No action; users can click the checkbox to turn on or turn off the action.
- **Currency.** Creates a field to enter an currency. The system automatically creates a field of the currency type if the field does not exist.
- **Date.** Creates a field to enter a date.

- **Encrypt.** Creates a field, for example, a Password field, whose value is stored in an encrypted format in the Sugar database. Sugar uses Blowfish encryption to encrypt passwords.
- **DropDown.** Creates a drop-down list. For more information on drop-down lists, see [“DropDown Editor” on page 92](#).
- **Decimal.** Creates a field to specify the precision past the decimal point.
- **HTML.** Creates static HTML-formatted text to display in record views.
- **IFrame.** Creates an IFrame field. For more information, see [“Embedding Links and IFrames in a Layout” on page 91](#).
- **Integer.** Creates a field to specify positive or negative numbers. You can specify a range with the min and max value fields.
- **MultiSelect.** Creates a drop-down list of values. Users can select one or more values from the list.
- **Flex Relate.** Creates a drop-down list from which you can associate a related record. Because you can add only one Flex Relate field to a module, this option does not display in the Data Type drop-down list if you attempt to add it to a module that already contains a Flex Relate field.
- **Phone.** Creates a field to enter a phone number.
- **Radio.** Creates a radio button.
- **Relate.** Creates a field to associate a record with another record as a one-way relationship. You can add multiple Relate fields to a module.
- **Text Area.** Creates a field for a block of text.
- **Text Field.** Creates a text field for data such as name and phone number.
- **Link.** Creates a field that links to a URL. For more information, see [“Embedding Links and IFrames in a Layout” on page 91](#).

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. Do not use spaces or special characters.
- **Display Label.** The system uses the field name as the label that will display in the Sugar User Interface. You can enter a new value if needed.
- **System Label.** The system label for field autopopulates the value. This is how it displays in the module’s Edit Labels page in Studio. 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. Regular users cannot view this text.
- **Comment Text.** Enter additional comments, if needed, about the field.
- **Default Value.** Enter a default value for the field, if necessary.
- **HTML.** This box displays when you select the HTML data type. Enter the HTML code in this box.
- **Max Size.** Enter the maximum number of characters that users can enter in the field. This is for text data fields.

- **Mass Update.** This box displays when you select the DropDown data type or the Date data type. Adds the field to the module's Mass Update section in the detail view.
 - **Drop Down List.** For DropDown, MultiSelect, and Radio field datatypes. For information on creating a drop-down list, see [“To create a drop-down field” on page 92](#).
 - **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 a number to specify the number of digits to the right of the decimal point.
 - **Required Field.** Check this box to specify that users must enter a value for the field when creating a record.
 - **Audit.** Check this box to display field values when a user clicks the **View Audit Log** link.
 - **Importable.** From the drop-down list, select one of the following:
 - Select **Yes** to enable users to import a value into the field.
 - Select **No** to prevent users from importing a value into the field.
 - Select **Required** to make it a required field during import.
 - **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.
 - 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.
4. 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. You can now add the field to the desired layout of a module.

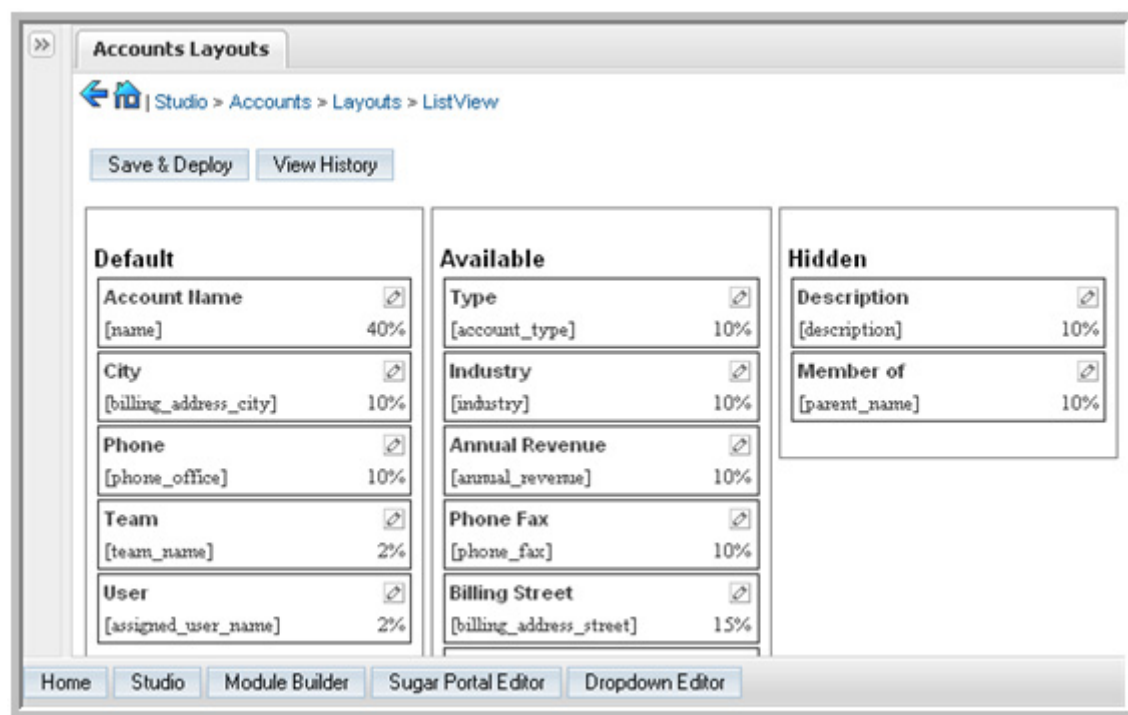
To manage fields

- To edit a field, select it from the list to display its details in the Field Editor; make the necessary changes and click **Save**. The Field Editor allows you to edit some properties of custom fields and change the display label of default fields. The Edit Fields page displays custom fields in the Custom section and default fields in the Default section.
- To duplicate the field, click **Clone**, enter a new name, and click **Save**.
- To delete the field, click **Delete**. You must also remove the field from any layout to which it was added.

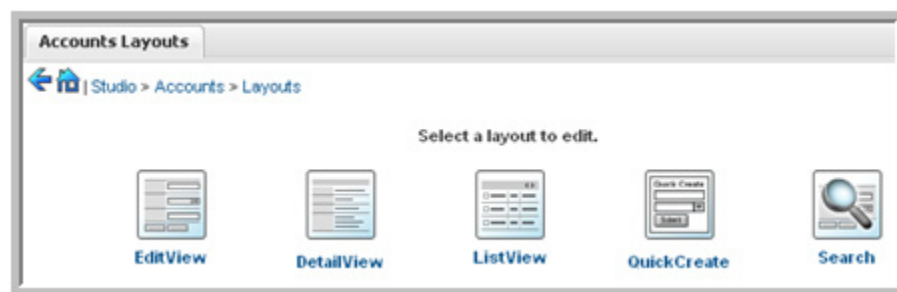
Editing the Layouts

You can edit the layouts for List View, Detail View, Edit View, sub-panels, Search form, and Quick Create form. You can remove existing fields and add new ones to a layout. You can also rearrange the current layout and change the tabbing order of the fields.

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 various sections of the current layout, along with the fields in each section. You can click and drag a field to a different location within the layout.



The Quick Create form 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 customize the Quick Create form by removing some fields. You can also add additional fields, if necessary.

In the Edit View, Detail View, and Quick Create forms, 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 to so that users tab from Account Name to email.

The breadcrumbs to navigate back to Studio display above. The Toolbox stores fields that are not currently displayed in the layout. 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 do not want users to view when they perform an advanced search.

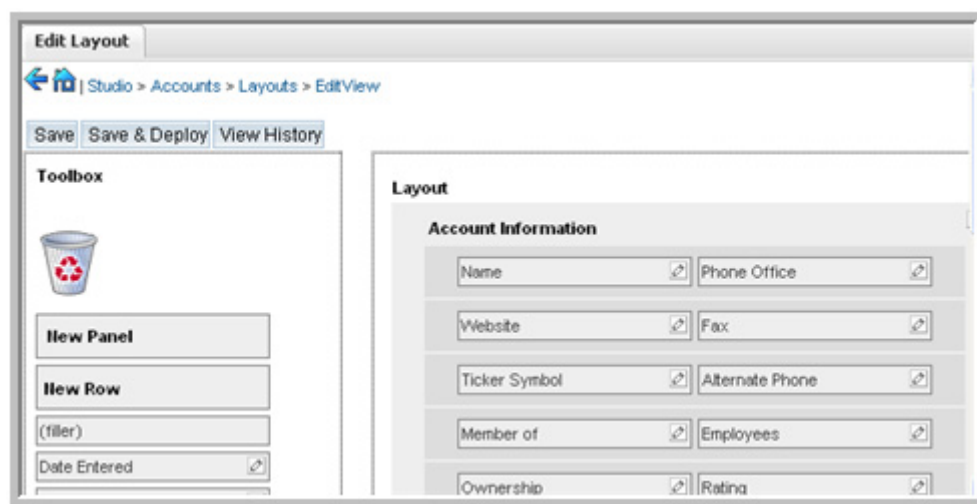
Default	Available	Hidden
Account Name [name] 40%	Type [account_type] 10%	Description [description] 10%
City [billing_address_city] 10%	Industry [industry] 10%	Member of [account_name] 10%
Phone [phone_office] 10%	Annual Revenue [annual_revenue] 10%	Member of [parent_name] 10%
Team [team_name] 2%	Phone Fax [phone_fax] 10%	
Home [home_phone] 10%	Billing Street [billing_street] 10%	

2. 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.
3. To remove a field from List View, select and drag the field from the Default column and drop it in the Available column.
4. To hide a field from users, drag it from the Default or Available column and drop it in the Hidden column.
5. Click **Save & Deploy** to display the updated List View in the User Interface.
6. Click **View History** to view a list of previous changes along with the date and time of each change.
 - a. To preview the changes made at a particular time, click the adjacent **Preview** button.
 - b. To restore the previous version of the List View, click the adjacent **Restore** button.

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

1. Select the module in Studio.
2. Select **Layouts** from the list of module components.
3. Select Detail View, Edit View, or Quick Create as appropriate.

The Edit View page is shown below.



4. To remove an existing field, drag it to the Recycling Bin icon in the Toolbox.
The field is removed from the layout but is not deleted from the system.
5. To replace an existing row in the layout with another one, drag the new field from Available Fields and drop it on the field that you want to replace.
6. To add placeholders for additional fields or to replace fields with blank fields, drag the filler row under New Row and drop it into the view. You can then drag a field from the Toolbox into the filler row.
7. To create a new panel or a new row, drag New Panel or New Row into the Current Layout.
A new panel or a new row contain two blanks fields. To add additional fields to the panel or row, drag New Panel or New Row into the panel.
8. To enter or edit a field label, click the **Edit** icon within the field and enter the label in the Properties panel; click **Save** to create the label.
9. To move a field to a different location, drag it to the desired location on the page.
10. To edit the tabbing order, click the **Edit** icon within the field and enter a numeric value in the Tab Order field of the Properties panel; click **Save**.
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 & Deploy** to display the updated view in the Sugar User Interface.
13. Click **View History** to view a list of previous changes along with the date and time of each change.

- a. To preview the changes made at a particular time, click the adjacent **Preview** button.
- b. To restore the previous version of the view, click the adjacent **Restore** button.

To edit the Search form

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

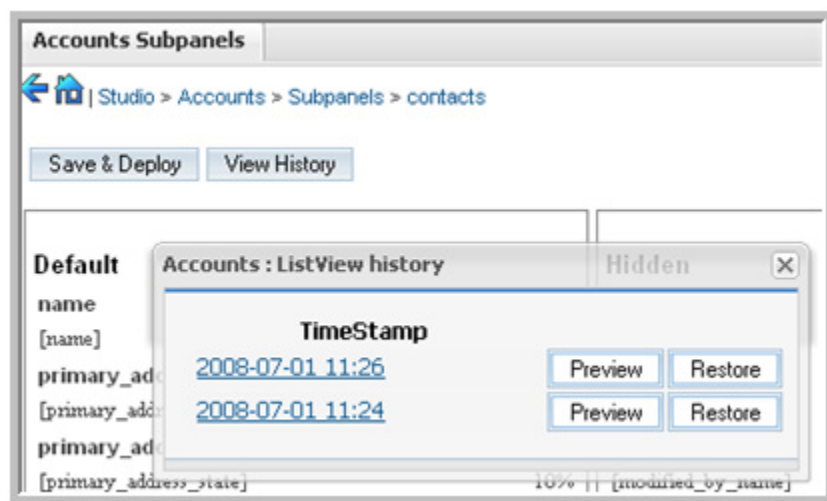
The fields in the current Search form are listed in the **Default** column and the available fields are listed in the **Hidden** column.

Default	Hidden
name [name] %	Date Entered [date_entered] 10%
billing_address_city [billing_address_city] %	Date Modified [date_modified] 10%
phone_office [phone_office] %	LBL_MODIFIED_NAME [modified_by_name] 10%
Billing Address [address_street] %	Created by [created_by_name] 10%

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

To preview and restore changes

1. Click **View History** to view a list of timestamps for changes that were made to a layout, a Search form, or a sub-panel.



2. To preview the changes for a timestamp, click the adjacent **Preview** button.
The Preview page provides a Restore button that you can use to restore the layout. Alternatively, click a timestamp to restore the layout that existed before the changes made at that time.

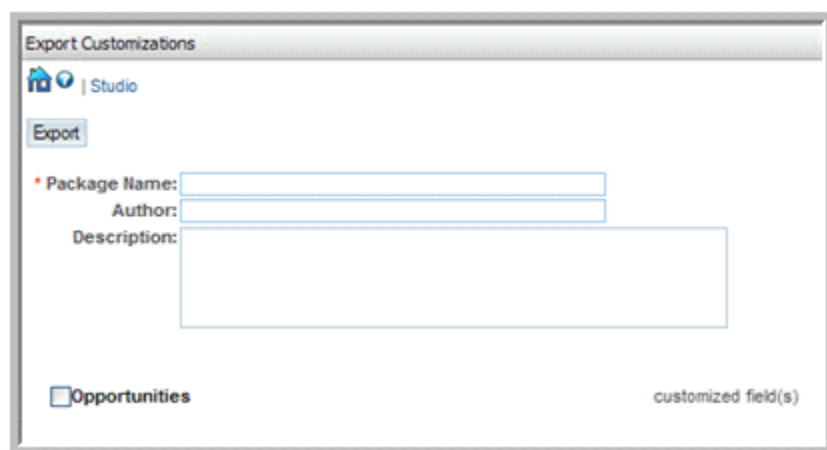
Publishing Customized Modules

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 99](#).

Embedding Links and IFrames in a Layout

A Link field allows you to store a URL in a record such as a customer's Website or a link to a related internal or external system. The URL can either be entered as a normal field in an edit view, or it can be dynamically generated based on other fields in the record.

For example, you could automatically generate a link to a google map of an accounts address. To do this, click the **Generate URL** check box and insert the following in the Default Value field:

```
http://maps.google.com/?q=
```

Next, select `billing_address_postalcode` from the drop down above the Default Value field and click the **Insert Field** button.

The default value now reads:

```
http://maps.google.com/?q={billing_address_postalcode}
```

You can also embed a view of the Website itself in the layout rather than as a link by using the IFrame field. IFrames support regular URLs as well as generated URLs.

You cannot edit generated URLs in a record's Edit View. You can only change them in the Module Builder or Studio. You can edit regular URLs in a record's Edit view.

To embed a manually entered URL

1. From the Data Type drop-down list, select **IFrame** or **Link**.
2. Enter a name for the field.
3. Enter the desired max size.
4. If using an IFrame, enter the desired height in pixels for the view.
5. Click **Save** to create the field.

To embed a dynamically generated URL

1. From the Data Type drop-down list, select **IFrame** or **Link**.
2. Enter a name for the field
3. Click the **Generate URL** checkbox.
4. Insert the base URL into the Default Value field.
5. Select a field you wish to include in the URL from the dropdown and click **Insert Field**.
6. Click **Save** to create the field.

Dropdown Editor

Most modules display at least one drop-down field containing a list of values from which users can make a choice. For example, when users create an account, they can choose a specific industry type and an account type in the respective drop-down fields.

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

To create a drop-down field

1. In the Developer Tools section of the Administration home page, select **Dropdown Editor**; alternatively, on the Studio home page, click the **Dropdown Editor** tab at the bottom of the page. You can also add a drop-down list in the process of creating a custom field with a DropDown data type in Studio.

The Dropdown Editor page displays, with a list of all existing drop-downs in the left dropdown pane and the middle Dropdown Editor pane.

2. Click **Add Dropdown**.

Fields to add a new drop-down list display in the Edit Dropdown tab.

3. The Name field displays the name that you specified. The system automatically appends `_list` to your drop-down name to identify the data type in the database. You can use your own data type naming convention if desired
4. From the Language drop-down list, select a pre-installed language pack of your choice.
5. In the Item Name field, enter a name to create a drop-down value.
6. This is the name that is saved in the Sugar database.
7. In the Display Label field, enter a label name for the drop-down value.
This is the label that displays in the User Interface
8. Click **Add**.
The item name displays above the Item Name field. This is the name that displays in the User Interface. To add additional items, click **Add** and repeat the process.
9. To display the items in ascending order, click **Sort Ascending**; to display them in descending order, click **Sort Descending**.
10. Click **Save** to save the drop-down list.
The list displays in the Drop Down list drop-down on the Edit Field tab of a module.

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

1. Select an existing drop-down field from the Dropdown Editor.
2. To change an item's display label, click the corresponding **Edit** icon and enter the new label.
3. To remove an item, click the corresponding **Delete** icon.
4. To add a new item, enter the item name and display label in the fields below; to add additional items, click **Add** and enter values for the next item.

- Click **Save** to save your changes; to undo your changes, click **Undo**; to redo your changes, click **Redo**.

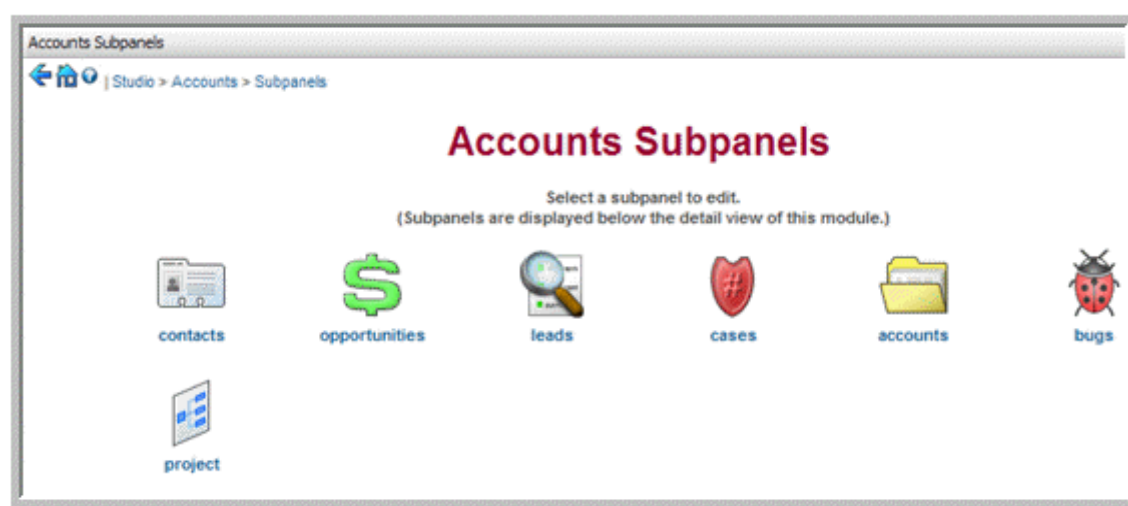
Edit Sub-Panels

Every record's Detail 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

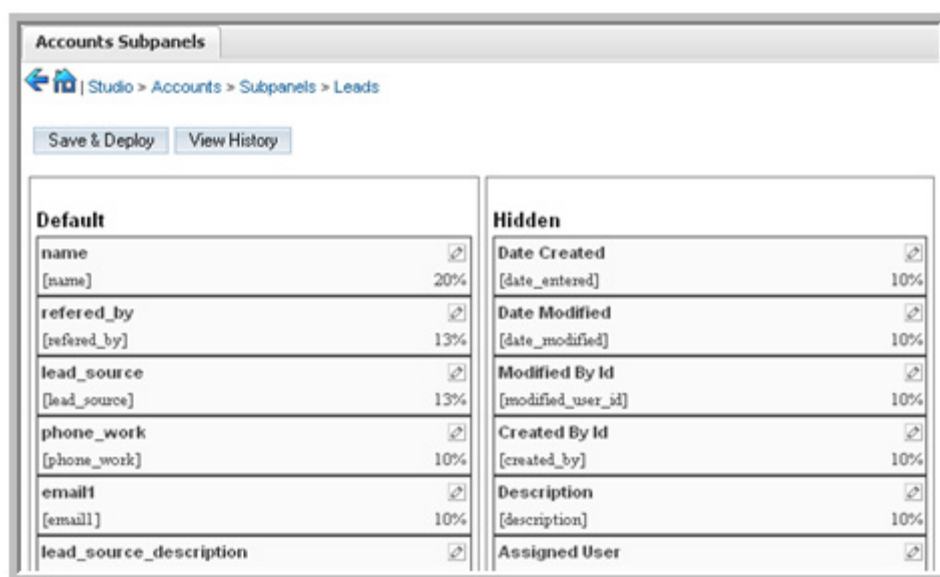
- Select the module and then click **Subpanels**.

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



- 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 & Deploy**.
6. To view a list of timestamps for changes that were made to the sub-panel, click **View History**. For more information, see [“To preview and restore changes” on page 90](#).

Create Relationships

Typically, a Sugar module has relationships with other Sugar modules. For example, Accounts is related to Contacts, Leads, Opportunities, and several other modules. Related records from these modules display in fields or sub-panels on an account’s detail page. You cannot edit these pre-defined relationships.

In Module Builder, you can create relationships between undeployed modules, and between undeployed modules and deployed modules. However, you cannot create relationships between deployed modules. If you want to change a relationship after you have deployed the module, you can redefine or delete the relationship and then re-deploy the module package.

In Studio, you can create relationships only between deployed modules. After you deploy a relationship in Studio, you cannot change it.

You create one relationship at a time from the Relationship Editor. When you create a relationship for a module, it is considered to be the primary module and the module that you relate it with is the related module. Depending on the relationship type, the relationship is expressed with sub-panels and related-to fields. When you create a new relationship between two modules, the system automatically creates the necessary sub-panels, related-to fields, and metadata relationships.

Note: It is recommended that you use a Relate field to create a one-way relationship between modules. To create a two-way relationship between modules, use the Relationship Editor.

You can also create a relationship between a module and itself. In this case, the relationship becomes a parent-child relationship. For example, you can create a relationship from Accounts to Accounts in order to create sub-accounts within the primary account.

In Module Builder, you can select Activities as the related module but not its sub-modules such as Tasks, Calls, and Meetings. The relationship is automatically reflected in these sub-modules.

In Studio, you can select a sub-module of Activities when you create a relationship. So, when you select Activities as a related module in the Module Builder, you can use Studio to further define the relationship for its sub-modules.

Relationship Types. The relationship types are as follows:

One-to-one: Records in the primary module and the related module are uniquely related to each other. For example, an account can be associated with only one contact and a contact can be associated with only one account. This account value will display in the contact's Detail View and the contact value will display on the account's Detail View.

One-to-many: A record in the primary module can have relationships with many records in the related module. For example, an account can be associated with many contacts, and many contacts can be associated with the same account. The Detail View of the primary module will display a sub-panel for the related module, and the Detail View of the related module will display a Related-to field containing a link to the related record.

Many-to-one: Records in the primary module can have a relationship with one record in the related module. For example, an account can be associated with one contact. The Detail View of the primary module will display a field for the related module from which you can select a record, and the Detail View of the related module will show a sub-panel for the primary module from which you can create or select records.

Many-to-many: In this relationship, records in both the primary module and the related module can have relationships with multiple records in each module. For example, an account can be associated with many bugs, and a bug can be associated with many accounts. The Accounts Detail View will display a Bugs sub-panel. Similarly, the Bugs Detail View will display an Accounts sub-panel.

The type of relationship that you can create depends on your choice of primary and related modules. This is because only a module with sub-panels can have a one-to-many or a many-to-many relationship with another module. A sub-panel is needed to show all the related records from the other module.

For example, with Accounts as the primary module and Knowledge Base as the related module, you can create only a one-to-one relationship between them. This is because Knowledge Base lacks a sub-panel and, therefore, Accounts cannot display related records from Knowledge Base. However, if Knowledge Base is the primary module and Accounts is the related module, you can create a one-to-many relationship between them because Accounts has sub-panels and, therefore, Knowledge Base can display related records from Accounts.

If you are creating a relationship between a custom module and a Sugar module, then you can choose any relationship type because all custom module types include at least one sub-panel.

Sub-panel Types. Sugar provides many sub-panel types for your use. When you create a relationship that involves sub-panels, Sugar displays all sub-panel types available for that module for your selection. A sub-panel can display different sets of fields depending on the primary module to which it is related. For example, there are several different types of Contacts sub-panels. The Contacts sub-panel that appears under Accounts contains different fields than the Contacts sub-panel that appears under Cases.

The Default type of sub-panel contains the most commonly used fields in the module. Every module has a Default type that contains a set of fields to display as a sub-panel.

Select **Default** if you want to display the most commonly used fields in the sub-panel in the relationship that you create.

For example, if you create a one-to-many type of relationship between Calls and Accounts, you can select a sub-panel type for the Accounts sub-panel in the Calls Detail View. To use a sub-panel consisting of the most commonly used fields from Accounts, select the **Default** sub-panel type; to use the Accounts sub-panel from the email's Detail View, select **ForEmails**.

You can create relationships in Module Builder as well as in Studio. However, there are some differences, which are noted in the table below:

Relationship in Module Builder	Relationships in Studio
You can create relationships with other Sugar modules as well as other modules within any undeployed package.	In Studio, you can create relationships only between deployed modules.
If you want to change a relationship after you have deployed the module, you can redefine or delete the relationship and then re-deploy the module package.	You cannot change a relationship after you deploy it.
You can select Activities as the related module but not its sub-modules such as Tasks, Calls, and Meetings. But the relationship is automatically reflected in these sub-modules.	You can select a sub-module of Activities when you create a relationship. So, when you select Activities as a related module in the Module Builder, you can use Studio to further define the relationship for its sub-modules.

To create a relationship in Module Builder

1. Click the custom module to view its details.
2. Click **View Relationships**.
Existing relationships, if any, display on the page.
3. Click **Add Relationship**.
4. Select the relationship from the Type drop-down list.

If you select a **One-to-One** relationship, you can choose a related module. The related module displays as a field in the primary module, and the primary module displays as a field in the related module.

If you select a One-to-Many relationship, you can select a related module. Sub-panels of the related modules display on the detail page of the primary module. The sub-panel options vary depending on the related module that you select.

If you select a Many-to-One relationship, you can select a related module. The Detail View of the related module displays a sub-panel for the primary module.

If you select a Many-to-Many relationship, you can select sub-panels for the primary module as well as the related module.

5. From **Related Module** drop-down list, select the module you want to relate to the primary module.
6. From the Subpanel field for the related module, select the sub-panel type that you want displayed on the detail page of the primary module.
7. From the Subpanel field for the primary module, select the sub-panel that you want displayed on the detail page of the related module.
8. Click **Save** to create the relationship.

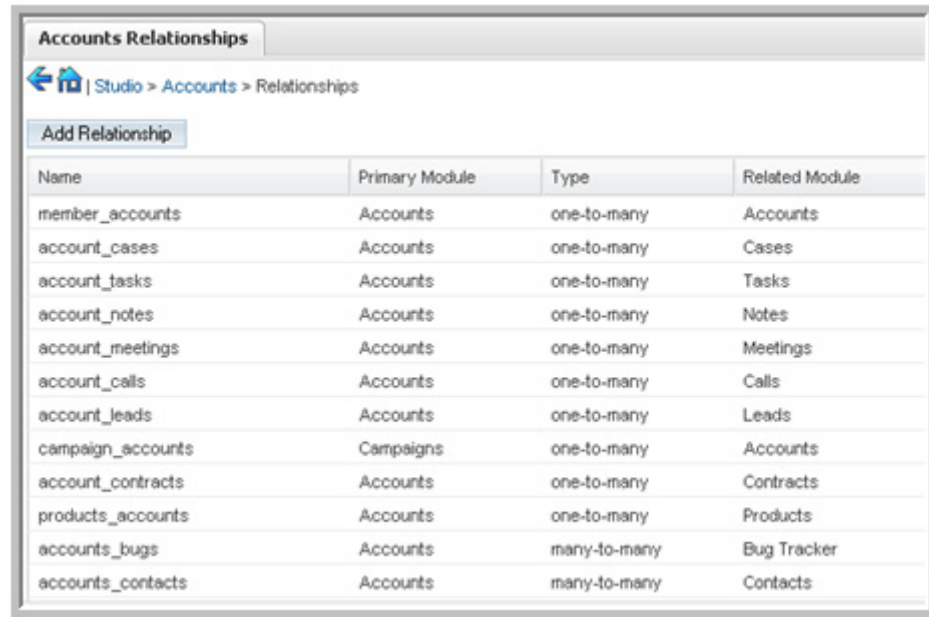
The new relationship displays under the Add Relationship button in the middle panel. It is appended with an asterisk to denote that it is a custom relationship.

To create a relationship in Studio

1. Select the module in Studio and click **Relationships**.

A list of existing relationships for the primary module display on the page.

The screenshot below displays existing relationships for the Accounts module.



Name	Primary Module	Type	Related Module
member_accounts	Accounts	one-to-many	Accounts
account_cases	Accounts	one-to-many	Cases
account_tasks	Accounts	one-to-many	Tasks
account_notes	Accounts	one-to-many	Notes
account_meetings	Accounts	one-to-many	Meetings
account_calls	Accounts	one-to-many	Calls
account_leads	Accounts	one-to-many	Leads
campaign_accounts	Campaigns	one-to-many	Accounts
account_contracts	Accounts	one-to-many	Contracts
products_accounts	Accounts	one-to-many	Products
accounts_bugs	Accounts	many-to-many	Bug Tracker
accounts_contacts	Accounts	many-to-many	Contacts

- To create a relationship, click **Add Relationship**.
The Relationship Editor displays on the page.
- Follow the process described in [“To create a relationship in Module Builder” on page 97](#).

To manage a relationship

- To edit a relationship, in Module Builder, click its name in the Relationships list and make the necessary changes in the Edit Relationship tab and save it.
You cannot edit or delete relationships in Studio.
- To delete a relationship, click **Delete**.

Module Loader

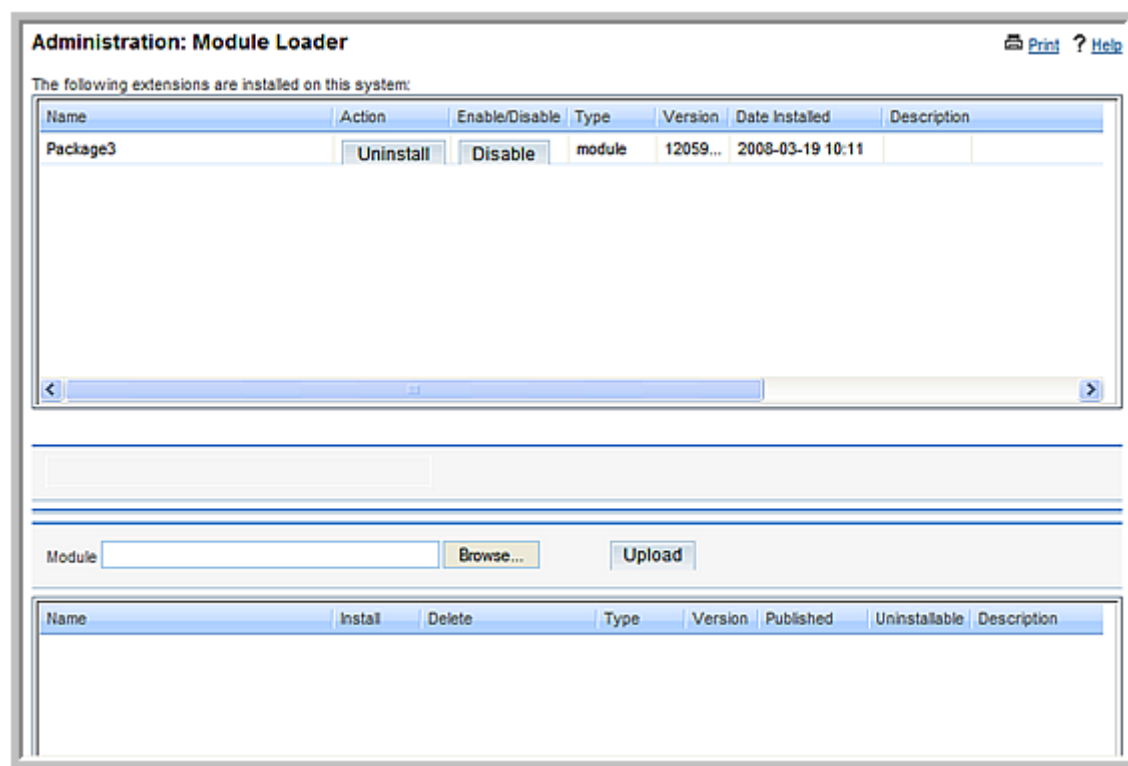
Use the Module Loader to install Sugar modules, custom modules, upgrades, language packs, Sugar Dashlets, and themes.

You can create custom modules in the Module Builder. A custom module is contained within a package. When you deploy the package, it becomes available to other users in your organization. When you publish or export the package, you can save it 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 75](#).

If you delete a package in Module Builder after it is already installed or deployed, you can uninstall the deployed module in the Module Loader. You can also disable installed modules through the Module Loader.

To install a module

1. In the System sub-panel of the Administration Home page, click **Module Loader**.
If you deployed the package, it is listed in the top panel and has already been made available to other users in your organization. You can uninstall it or disable it by clicking the appropriate button.
2. Click **Browse** to navigate to the location of the module's .zip file on your local machine.



3. Select the file and then click **Open**.
The path to the zip file displays in the Module field.
4. Click **Upload**.
The uploaded module displays in the bottom panel.
5. Click **Install**.
The license agreement displays on the screen.
6. Select **Accept** to accept the agreement and then click **Commit** to install the module.
If the installation is successful, the system displays a message stating that the module installed successfully.
7. To go back to the Module Loader page, click **Back to the Module Loader**.
The new module tab is now visible to all users.

To disable and enable a module

1. To disable a module, click the **Disable** button adjacent to the module's name.
The Sugar License Agreement displays on the page.
2. Click **Accept** to accept the agreement.
3. Click **Commit**.
After the module has been disabled, Sugar displays a message stating that the module has been disabled.
4. Click **Back to Module Loader**.
The Enable button displays adjacent to the module's name.
5. To enable the module, click **Enable**.

To uninstall a module

1. In the Module Loader, click the **Uninstall** button corresponding to the module's name.
The system displays a message stating that the module is ready to be uninstalled and displays options to remove or retain the database tables that were created for the new module.
2. To remove the tables from the database, select **Remove Tables**; if not, select **Do Not Remove Tables**.
3. Click **Commit** to uninstall the module; click **Cancel** to retain the module.
The module is removed from Sugar.
4. 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.
5. 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.
6. 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.
7. Click **Save** to save your changes.
8. Click **Save and Deploy** to make it available to all users in your organization.

Configure 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 rename and reorder the module tabs as desired.

Users can configure module tabs on their My Account page., but they cannot display module tabs that the administrator hides from their view.

Note: You cannot hide the Home tab.

To configure module tabs

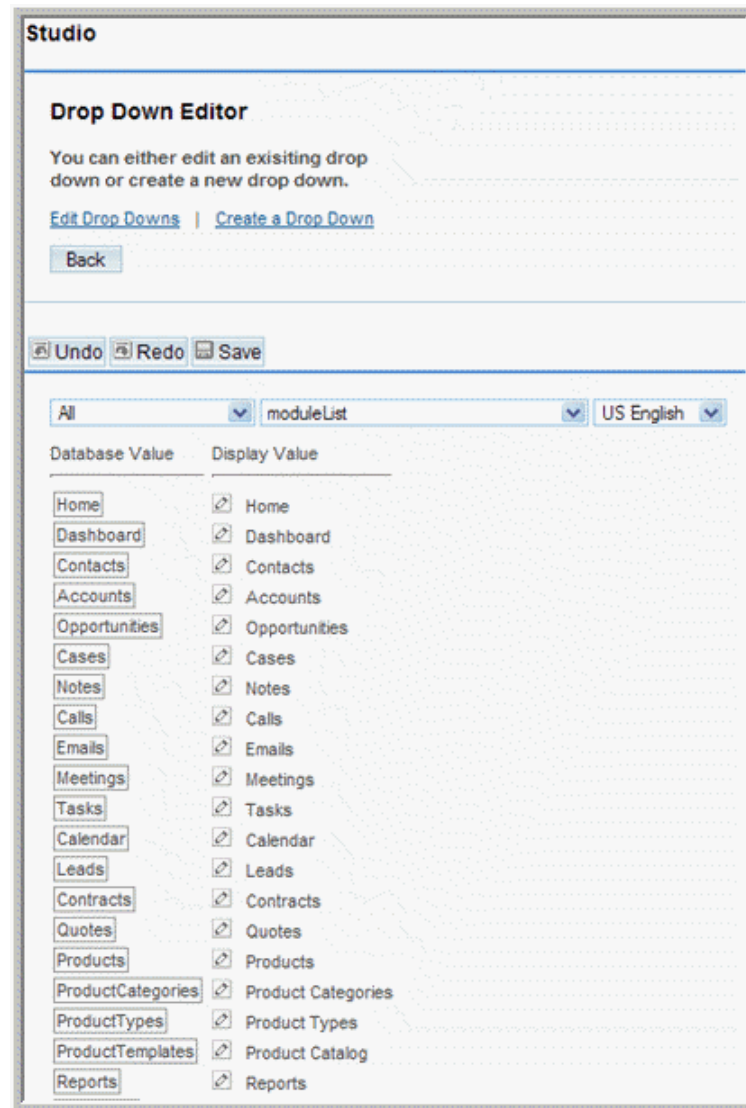
1. In Developer Tools, select **Configure Tabs**.
The Configure Tabs page displays all the tabs in the Display Tabs list.
2. To hide a tab, select it in the Display Tabs column, and drag and drop it into the Hide Tabs column.
3. To rearrange the order in which the tabs are displayed, drag and drop the tabs to the desired positions.
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.

Rename Module Tabs

You can rename the module tabs that display in Sugar.

To rename tabs

1. In Developer Tools, select **Rename Tabs**.



The tab labels and the corresponding database values display on the page. From the drop-down list displayed above the tab labels, you can select the language to display the tab.

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.

Configure 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 specific individual tabs as a group tab. For example, you can group contacts, leads, and opportunities under Sales and cases, bug tracker, under Support. 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 Activities group tab.



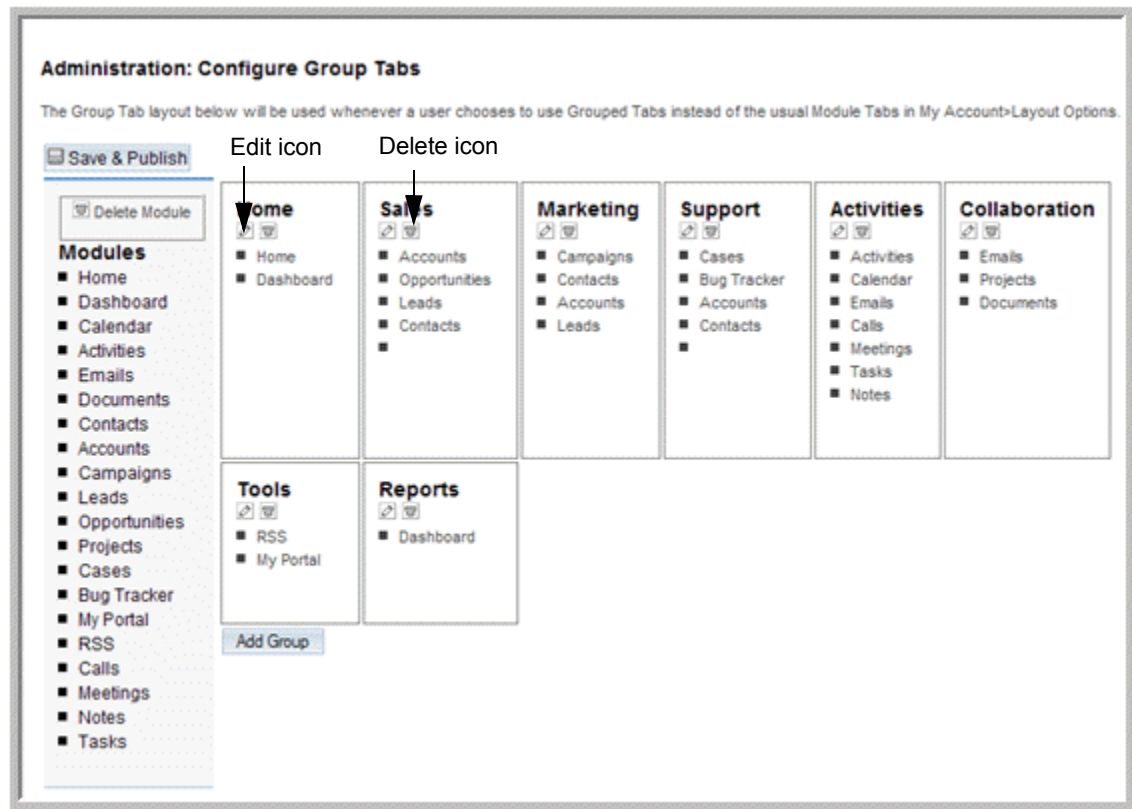
You can change the labels for any of these tabs and also add new group tabs, if needed.

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 Developer Tools, click **Configure Group Tabs**.

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



- 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.

- 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.

- 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.

- To save your changes and make it available for users in the Sugar User Interface, click **Save & Deploy**.

To add a new group tab

- Click **Add Group**.

A New Group box displays on the page.

- 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.

To save your changes and make it available for users in the Sugar User Interface, click **Save & Deploy**.

Create and Manage Sites

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

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

For information on creating a site, see the *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's a 'Release List' section with a 'Create' button. Below it, a table header shows 'Release', 'Status', and 'Order'. The table body is currently empty, with a '(0 - 0 of 0)' indicator. Below the table, there's a 'Release:' section with three fields: 'Release version' (a text input), 'Status' (a dropdown menu set to 'Active'), and 'Order' (a text input set to '1'). Each field has a small instruction: 'Set status to inactive to remove this release from the Release dropdown lists' for Status, and 'Set the order this release will appear in the Release dropdown lists' for Order. There are also 'Save' and 'Save & Create New' buttons at the top of the form.

- 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.
- To add the release to the list, click **Save**.
- To add another release to the list, click **Save and Create New**.

Create Employees

As an administrator, you can create and manage employee records. When you create an employee record, it is automatically added to the Employees list as well as the Users list.

To create an employee

- Log into Sugar as an administrator.
- Click the **Employees** link located at the top right-hand corner of the page.
- In the Shortcuts menu of the Employees Home page, click **Create Employee**.

- On the Employees page, enter information for the following fields:
First Name. Enter the employee's first name.

Last Name. Enter the employee's last name.

Employee Status. From the drop-down list, select one of the following:

Active: Select this option to specify a current employee of your organization.

Terminated: Select this option if the employee is no longer working for your organization.

Leave of Absence: Select this option if the employee is going to be absent from work for an extended period of time.

Title. Enter the employee's official title.

Department. Enter the name of the department to which the employee belongs.

Reports to. Enter the name of the employee's supervisor.

Office Phone. Enter the employee's office phone number.

Mobile. Enter the employee's cell phone number.

Other. Enter an alternative phone number for the employee, if any.

Fax. Enter the fax number for the employee.

Email. Enter the email address for the employee.

Home Phone. Enter the home phone number for the employee.

Other Email. Enter an alternative email address for the employee, if any.

IM Type. From the drop-down list, select the type of Instant Messenger service that the employee has.

IM Name. Enter the employee's user name for the IM service.

Notes. Enter any comments concerning the employee.

Primary Address. Enter the employee's primary address.

City. Enter the name of the city.

State. Enter the name of the State.

Postal Code. Enter the zip code of the address.

Country. Enter the name of the country.

5. Click **Save** to create the employee record; click **Cancel** to exit the page without saving your changes.

You can now view the record in the Employees List View as well as the Users List View.

To manage employee records

- To search for an employee, use the **Search** sub-panel located above the Employees list.
- To view an employee's details such as the title and contact information, click the employee name in the List View.
- To email an employee, click the user's email address in the List View.
- To export employee records, select them from the list, click **Export** and follow the process detailed in "Exporting Data" in the *SugarCommunity Edition User Guide*.

- To edit the status of multiple employees, use the **Mass Update** panel as described in “Editing and Deleting Multiple Records” in the *Sugar Community Edition User Guide*.
- To edit an employee’s record, on the detail page, click **Edit**, update the information, and click **Save**.
- To duplicate a record, on the detail page, click **Duplicate**, modify the information if needed, and click **Save**. Duplication is a convenient way of creating a new employee. You can change the information in the duplicate record to create the new employee.

Note: You cannot delete an employee record.

- To go back to the Employees Home page from a detail page, click **Employees** in the Shortcuts menu.

Advanced Configuration Options

The advanced configuration options listed below enable you to exercise tighter control over user actions in your Sugar instances.

Locking Down Upgrade Wizard, Module Builder, and Backups

If you are managing multiple instances of the Sugar application, you can maintain complete control over the Sugar instances by preventing users with administrative privileges from making any changes. To do this, you can lock down the Upgrade Wizard, Module Builder, and Backups.

To lock down the Upgrade Wizard, Module Builder, and Backups

1. Navigate to the `config.php` file in the Sugar root directory.
2. Set the following parameter as shown below:

```
$sugar_config['admin_access_control']=true
```
3. Save the file.

Restricting the Module Loader

To ensure that users with administrative privileges do not load sub-standard custom modules into Sugar, you can restrict the Module Loader to a specific directory that you control. This allows you to check modules before they are loaded into Sugar.

To restrict the Module Loader

1. Navigate to the `config.php` file in the Sugar root directory.
2. Set the following parameters as shown below:

```
$use_common_ml_dir=true  
$common_ml_dir='ml directory'
```

where *m1 directory* is the name of the directory from which module will be loaded into Sugar.

3. Save the file.

Limiting System Resources

By default, any request or post that runs more than 1000 queries is terminated. For reports, export, import, administration, and synchronization, a maximum queries allowed is 50,000 per request. This prevents user-initiated processes from taking up too many system resources. You can change these settings as desired in the *config.php* file.

Configuring Default Permissions for Sugar Files on Linux

If you are running Sugar on Linux platform, you can control ownership and accessibility to all Sugar files and folders by configuring default user and group permissions.

The following is an example of setting Read, Write, and Execute permissions for the Apache user and the Apache group on Centos operating system:

```
'default_permissions' => array(
    'dir_mode' => 02770,
    'file_mode' => 0660,
    'chown' => 'apache',
    'chgrp' => 'apache',),
```

For *dir_mode*, you may see a value of 1528, which is the decimal equivalent of the octal value 02770. For *file_mode* you may see a value of 432 which is the decimal equivalent of octal value 0660.

Index

B

bug tracker
 releases, creating [105](#)

C

campaigns
 email settings [74](#)
configuration, backing up [40](#)
connector
 fields, mapping [50](#)
 settings, configure [48](#)
currencies, defining [44](#)

D

Developer Tools [75](#)
drop-down lists
 creating [92](#)
 managing [92](#)

E

emails
 queue, managing [73](#)
 settings, configuring [62](#)
employees
 creating [106](#)
 managing [107](#)
export
 modules, description [76](#)

F

fields
 IFrames, embedding [91](#)
 links, embedding [91](#)
fields, creating [82](#)
FreeTDS driver, enabling [2](#)

G

group tabs, configuring [103](#)

I

inbound emails
 managing [67](#)

L

locale settings
 configuring [44](#)
log
 settings, configure [31](#)

M

Module
 drop-down list, creating [92](#)
 editing [80](#)
 tab, configuring [101](#)
 tab, renaming [102](#)
module loader
 using [99](#)
modules
 custom, distribution options [76](#)
 customized, publishing [90](#)
 deploy, description, modules
 export, description [76](#)
 disabling, enabling [100](#)
 publish, description [76](#)
 uninstalling [101](#)

Q

Quick Create form
 description [86](#)

R

repair option [42](#)
roles, managing [55](#)

S

scheduler
 troubleshooting tips [37](#)
sites, creating and managing [105](#)

- Studio 80
 - layouts, changing tabbing order 88
 - modules, publishing 90
- Sugar
 - about i
 - configuration, backing up 40
 - core features ii
 - data, upgrading and rebuilding 42
 - documentation, accessing 26
 - email settings, configuring 62
 - fields, managing 82
 - installation, custom 14
 - installation, typical 8
 - installing, prerequisites and guidelines 1
 - locale settings 44
 - page layout, editing 86
 - roles, managing 55
 - updates, checking for 25
 - user interface, configuring 26
 - users, managing 51
- Sugar Feed
 - settings, configure 46
- SugarCRM forums, about 25
- system administration
 - bug tracker module, configuring 105
 - configuring, advanced 29
 - custom modules, uploading 99
 - database collation, specifying 46
 - default currency, specifying 44, 45
 - default formats, specifying 45
 - export, configuring 45
 - logos, uploading 27
 - mail merge, enabling 29
 - proxy settings, configuring 28
 - scheduler, configuring 32
 - Skype, enabling 29
 - sugar network, configuring options 24
 - system settings, configuring 26
- system configuration
 - diagnostics 38
- T**
- Themes, managing 47
- U**
- user interface
 - configuring 26
- users
 - roles, assigning 54
- users, managing 51