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# Sugar Professional 7.8 Administration Guide

This guide describes options that enable Sugar administrators to configure the application to meet their organization's requirements.

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### Introduction

#### Overview

Welcome to Sugar - a commercial Customer Relationship Management (CRM) application. Strong relationships are at the core of every organization's success. Sugar brings ease and order to the creation, development, and maintenance of your organization's important relationships.

Sugar consists of interrelated records in modules such as Accounts, Contacts, Opportunities, Cases, Meetings, Emails, etc. and wraps your data in an intuitive user interface which helps make sense of these different elements of your business. Whatever your organization's focus - sales, marketing, support, or other ventures - Sugar's flexible modules bend to align with your business' models and practices. Manage your relationships from inception to fruition and beyond with Sugar's built-in modules and relationships as well as your custom modules and configurations available to Sugar administrators.

## Core Admin Features

- <u>User</u>, Password, Team, and Role management to manipulate user access
- Email management to configure incoming and outgoing system email accounts and behaviors
- System management to control functional aspects and system-wide preferences within Sugar
- PDF Manager to create templates controlling the appearance of generated PDF files
- Studio to tailor existing modules to your organization's needs by adding or modifying fields, relationships, and layouts
- Module Builder to create new, custom modules as needed to fully match your organization's processes

Last Modified: 02/09/2018 02:51pm

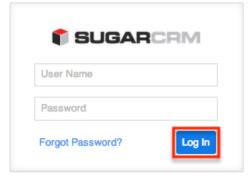
### Admin Wizard

#### Overview

Sugar offers administrators a wide range of configuration options to set up their account. Upon your initial log into Sugar, you will go through configuring some basic settings (i.e. Your Information, Your Locale, etc.) for your user profile. You may skip these steps and configure these settings in your user preferences at a later time. Once your user profile set up is complete, you will be able to navigate to a specific area of Sugar to perform various administrative functions (e.g. importing data, creating users, configuring the application via Studio, etc.) as well.Please note that system administrators can also set up each user's basic settings when creating a user in Sugar. This documentation will cover the various options available when first accessing your Sugar account.

## Login Screen

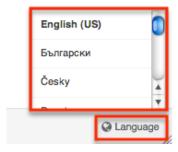
The Sugar login screen is where you enter your login credentials (user name and password) to access your instance. Enter in your instance URL (e.g. https://example.sugarondemand.com) on your web browser to load Sugar's login screen. If you do not know your instance URL or login credentials, please reach out to another system administrator in your organization for assistance. The Admin Wizard will launch upon your first successful log in to Sugar allowing you to configure various system-wide settings as well as some personal settings.



## Language

Users have the option to choose the primary language they want displayed in Sugar by clicking the Language icon on the bottom right of the Login screen. The Language dropdown list will appear allowing you to select the appropriate language you want displayed in your Sugar account. The out-of-the-box default language in Sugar is English (US), but administrators can change the default

language globally via Admin > Locale. For more information on configuring the default language in Sugar, please refer to the Locale section of the System documentation. Once the default language is changed, it will display as the default selection on the login screen for all users. Please note that you will need to select the language you want displayed each time you log in or the default language will display in Sugar. Administrators can also configure what languages are available to select in the Language dropdown list via Admin > Languages. For more information on managing the available languages, please refer to the Languages section of the System documentation.



The following languages are available to display in Sugar:

Albanian	Hungarian
Arabic	Italian
Brazilian Portuguese	Japanese
Bulgarian	Korean
Catalan	Latvian
Chinese (Simplified)	Lithuanian
Chinese (Traditional)	Norwegian
Croatian	Polish
Czech	Portuguese
Danish	Romanian
Dutch	Russian
English (UK)	Serbian
English (US)	Slovak
Estonian	Spanish
Finnish	Spanish (Latin)
French	Swedish
German	Thai
Greek	Turkish
Hebrew	Ukrainian

## Your Information

Once the Admin Wizard is completed, you will have the option to configure some of your personal settings via the User Wizard. The Your Information step is where you can enter key information (i.e. name, email address, and phone) about yourself to be stored in your user profile. Please note that the information you provide on this step can be updated in your user preferences at a later time if desired. For more information on configuring your personal information under user preferences, please refer to the User Profile Tab section of the Getting Started documentation.

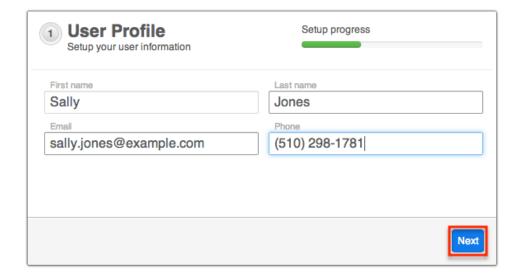
The following options are available to configure your user profile:

• First Name: Enter your first name.

• Last Name: Enter your last name.

• Email Address : Enter your email address.

• Office Phone: Enter your office number.



Please note that all required fields will indicate "Required" in the field and must be completed prior to moving to the next step of the wizard. Once your personal information is entered, click "Next".

# Your Locale

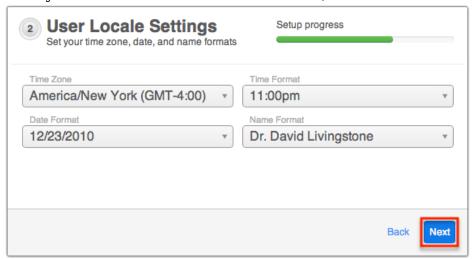
The Your Locale step is where you can configure the date, time, and name format you want displayed in Sugar based on your current geographical location. Please note that the information you provide on this page will override the system locale settings and can be updated in your user preferences at a later time if desired. For

more information on configuring your locale settings, please refer to the Locale Settings section of the Getting Started documentation.

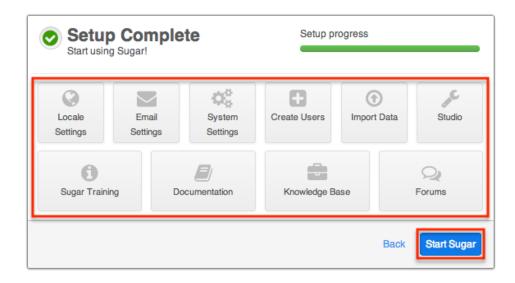
The following options are available to configure your locale settings:

- Time Zone : Select the time zone based on your current location.
- Date Format: Select the format you want the date stamps displayed in Sugar.
- Time Format: Select the format you want the time stamps displayed in Sugar.
- Name Format : Select the format you want the concatenated name fields displayed in Sugar's list view and record view.

Once your locale information is entered, click "Next".



The following page confirms that you are ready to use Sugar and allows you to perform various administrative functions (e.g. importing data, creating users, configuring the application via Studio, etc.). Selecting the action item(s) will take you directly to the specific area of the Admin page to create new users, import data from external sources, etc. Please note that you can click "Start Sugar" to go directly into your Sugar account if you wish to configure these settings at a later time.



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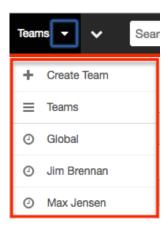
# Team Management

#### Overview

Team Management is used in Sugar to define permissions and groupings for users. These permissions cover what records a user is and is not able to access. Teams are used in conjunction with Roles to form a robust security model for non-admin users in Sugar. Users can use team settings on specific records to allow different users within Sugar the option to view these given records. Team settings can also be used as a form of organization, thereby separating records to be associated to specific teams for better tracking. Teams can be based on departments, geographic regions, or whatever else works best in a given organization.

### Teams Module Tab

The Teams module tab can be accessed by navigating to the Administration page and clicking "Team Management" in the Users section. Once in the Teams list view, you can click the triangle in the Teams module tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of teams you last viewed in the module. Please note that clicking the module tab allows you to access the Teams list view.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Create Team	Opens the edit view to create a new team
Teams	Opens the list view layout to search and display teams

## **Team Types**

From an administrative standpoint, teams will be handled differently based on their types. From a user standpoint, all teams will be treated pretty much the same. Each team type has their own special set of characteristics that aid in defining it. The team types defined as:

- The Global Team
- Standard Teams
- Private Teams

#### The Global Team

The Global team is created automatically when a Sugar instance is created. Global is the default team for all new users, and every user is a member of the team by default. Global is a universal team, so any records associated to the global team will be viewable by the users on this team. The global team is intended to be available for all users and a shared team for all users in Sugar.

Note: You cannot delete the Global team.

#### Standard Teams

Standard Teams can be created by administrators via Team Management. These are to be used throughout Sugar to organize and grant access on organizational specifics to your organization. Standard teams are often broken out into groups by departments, geographical regions, or duties. For example, you may have an East and West team, and also a Sales and Support team.

#### **Private Teams**

For every user that is created in Sugar, a corresponding private team is automatically created in the Teams module. By default, the private team name is the user's first and last name. A private team name will be updated any time the corresponding user's profile is edited and re-saved, even if the change was not made to the user's first or last name. For example, the private team for Jane Smith will be automatically named "Jane Smith". If the administrator edits private team "Jane Smith" to "Jane Smith-HR", and then user Jane Smith later updates the phone number on her user profile, Sugar will revert the private team name back to the user's first and last name, "Jane Smith".

If your organization plans to edit private team names, you must disable the automatic update feature. Navigate to Admin > System Settings and select the checkbox next to "Prevent private team names from inheriting the user's name fields". For more information on this setting, please refer to the System documentation.

Note: Private teams are not deleted in the same method as other teams. For more information on deleting private teams, please review the Deleting Teams section of this guide.

### Team Membership Types

Team memberships are given to users in one of two ways, either by explicit or implicit membership. Regardless of the type, membership will control what records regular users are able to see. Each membership can be granted in different ways and can constitute different functionality. Team membership is represented in the team's detail view, as well as the user's detail view.

Note: Administrators do not adhere to team security and therefore can see all records.

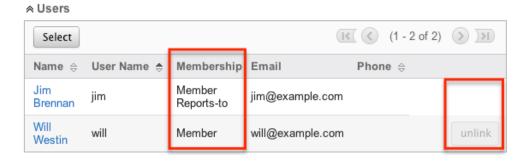
Explicit team membership is forged when the relationship is defined from either

the team's or user's detail view. In addition, explicit relationships are also represented with private team memberships. Explicit memberships, other than private teams, can be removed as necessary from the team's or user's detail view. Explicit memberships will also include membership functionality for actions such as workflows or inbound email.

Implicit team membership is used for record visibility. Implicit membership relies on the "Reports To" field in the User Profile. When one user reports to another, the hierarchy of the "Reports To" field is kept in tact. The user being reported to will inherit the team membership of the subordinate user and be able to see any records on both his or her own team, and the teams of which the subordinate user is a member. The subordinate's teams can either be explicit or implicit teams in this scenario.

Note: Implicit relationships cannot be removed, but the cause for their relationship can be broken by changing the reporting hierarchy.

In the Team's detail view, the user's subpanel will showcase which relationships are explicit and which are implicit. In the "Membership" column of the Users subpanel, the user will either be marked as a "Member", meaning that they are an explicit member, or "Member Reports-to", meaning they are an implicit member. In addition, the users marked with the "Member Reports-to" will not include an "Unlink" button, as they have another user (or users) reporting to them on this team.



# Creating Teams

There are two methods that can be used to create teams in Sugar. These are via the Teams module tab's action list or by duplicating an existing team and then editing it. After initially creating the team, the administrator will need to associate users to the newly created team.

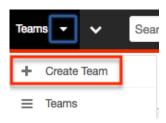
For information on creating Private Teams, please review the Repairing Teams section of this documentation.

### Creating Via Teams Module

The most common way to create a new team is via the Create Team option in the Teams module tab. This opens up the edit view layout which allows you to enter in all the relevant information for the team.

Use the following steps to create a team via the Teams module:

- Navigate to Admin > Team Management.
   Note: The Teams list view will open displaying all existing teams that are currently available.
- 2. Click the triangle in the Teams module tab and select "Create Team".



- 3. Enter a name and description of the team on the edit view screen that you are now presented with. Enter the appropriate values for fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. On the team's detail view, add users that are members of this team.

## Creating Via Duplication

You can also create a new team by duplicating an existing team. The Copy option is useful if the team you are creating has a similar set of members or a similar description to an existing team

Use the following steps to create a team by duplicating an existing record:

- 1. Navigate to a team record's detail view.
- 2. Click the Actions menu and select "Copy".

#### Teams: West



- 3. The displayed edit view is pre-populated with the original team's values. Update the name field, and description if need be, then click "Save".
- 4. On the team's detail view, add any users that are members of this team that are not on the original team, and remove any unwanted users.

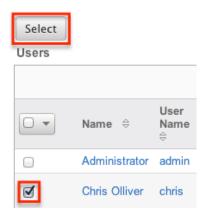
### Adding Users to Teams Via Teams Module

A user has to be associated to a team to be able to view records that are associated to the specific team. Assigning a team is much like any other many to many relationship in Sugar, where many users can be associated to one particular team, and one user can also be assigned to multiple teams. From Team Management, a user can be associated to a team via the Users subpanel at the bottom of the detail view. To associate users to a team, follow the following steps:

- 1. Navigate to Admin > Team Management
- 2. From the Teams list view, select the team that you are working with
- 3. At the bottom of the page, click "Select User" from the Users subpanel



4. Use the popup search menu to search for and select the user(s) you would like to add to this team where you can either click on the user's name or, if selecting multiple users, click their corresponding checkboxes and then click "Select"



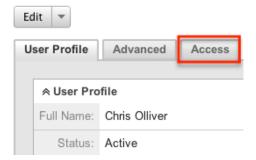
5. After selecting the user(s) the popup search box will close and the user(s) will now be displayed in the Users subpanel for the team to complete the relationship



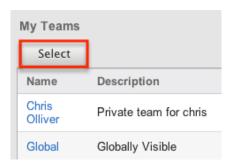
### Adding Users to Teams Via Users Module

A regular user must be associated to a team to be able to view records that are associated to that team. Assigning a team is much like any other many to many relationship in Sugar, where many users can be associated to one particular team, and one user can also be assigned to multiple teams. From User Management, a user can be associated to a team via the user's detail view. For more information on User Management, please refer to the User Management documentation. To associate a team to a user via User Management, follow the following steps:

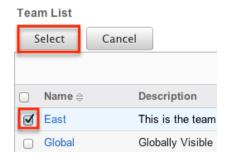
- 1. Navigate to Admin > User Management
- 2. From the Users list view, open the user record that you would like to edit
- 3. From the user's detail view, click on the "Access" tab



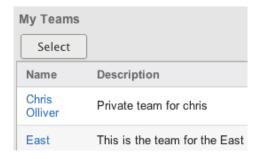
4. Scroll past the role chart to the "My Teams" subpanel and click "Select"



5. Use the popup search menu to search for and select the team(s) you would like to add to this user where you can either click on the team's name or, if selecting multiple teams, click their corresponding checkboxes and then click "Select"



6. After selecting the team(s) the popup search box will close and the team(s) will now be displayed in the My Teams subpanel for the user to complete the relationship



### Viewing Teams

There are various options available for viewing team records in Sugar including via the Teams list view, Teams detail view, Teams Last Viewed menu, from dashlets, and from reports.

## Viewing Via List View

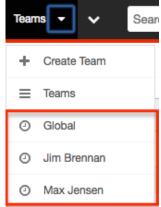
The Teams list view displays all team records meeting the current search criteria. To access the list view, simply navigate to Admin > Team Management. Alternately, if you are looking at a team's detail view, you can click the Teams module tab to return to the list view. You can click the team's name to open the record in detail view. For more information on viewing teams via list view, please refer to the Teams List View section of this documentation.

### Viewing Via Detail View

The Teams detail view displays thorough team information showing the name and description of the team, followed by a subpanel of the users associated to the team. The detail view can be reached by clicking a team's link from anywhere in the application including from the Teams list view. For more information on viewing teams via detail view, please refer to the Teams Detail View section.

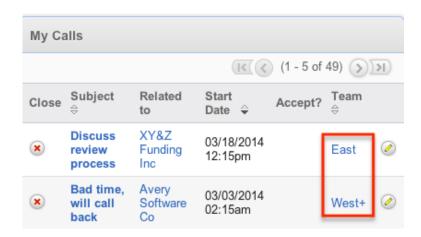
### Viewing Via Recently Viewed

As you access different teams, Sugar will keep track of which teams you have recently viewed. Click the triangle in the Teams module tab to see a list of the 3 records you most recently viewed in the module. Clicking the record's name within the list will open it in detail view.



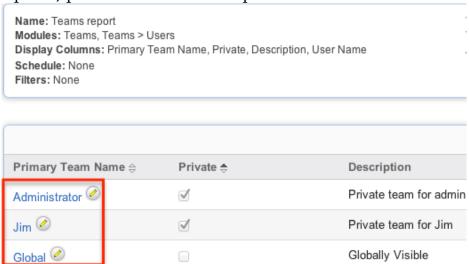
## Viewing Via Dashlets

The Home page displays a collection of Sugar Dashlets which allow users to get a quick view of various records, activities, reports, etc. You can view team information in most module specific dashlets. Clicking a team's name from any dashlet will open the team in detail view. For more information on using dashlets, please refer to the Dashlets section of the Home documentation.



### Viewing Via Reports

Administrators have the option to build, run, and manage reports to gather key data from records within Sugar. When building a report, there are options to either run the report from the Teams module or add links to teams related to the records that are being reported on. Once the report is run, you will be able to view the team record's detail view by clicking the team's name in the report results. Please note that you can only directly access team detail views with Rows and Columns and Summation with Details-type reports as Summation and Matrix-type reports do not include hyperlinks in their display columns. For more information on using reports, please refer to the Reports documentation.



## Searching Teams

The Teams list view search function searches for the name of the team to help you locate records easily and effectively. Once the search is performed, the relevant results will be displayed in the Teams list view below.

The buttons in the search panel have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search
- Clear: Click the Clear button to clear all criteria from the searchable fields

To see all Team records, simply click "Clear" and then "Search" to perform a blank search with no name filter.

Search Teams



Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you can use the wildcard at the beginning of your text as well (e.g. %Administrator). This will pull up any record that has the word "administrator" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used, please refer to the Search documentation.

### Teams List View

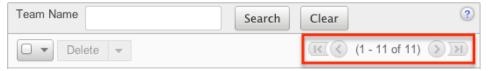
The Teams list view displays all teams meeting the current search criteria, if any. You can view the name and description of each team within the field columns. Click on the name of the team to access the detail view for the team and review the settings further.

## Pagination

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

By default, Sugar displays 20 records per list view page, but administrators can

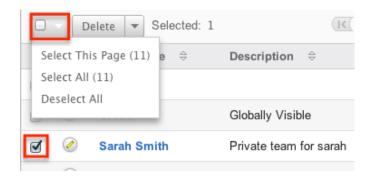
change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide.



#### Checkbox Selection

Teams can be deleted in a mass-delete fashion via the list view by selecting all of the team records. To select individual team records on the Teams list view, mark the checkbox on the left of each row. To select or deselect multiple teams on the list view, use the options in the checkbox dropdown menu:

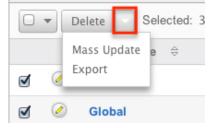
- Select This Page: Selects all records shown on the current page of results
- Select All: Selects all records in the current search results across all pages of results
- Deselect All: Deselects all records that are currently selected



For more information on deleting teams, please refer to the Deleting Teams section of this documentation.

#### **Actions Menu**

The Actions menu to the right of the checkbox dropdown allows you to perform various actions on the currently selected records.

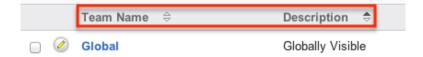


The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Delete	Delete one or more teams at a time
Mass Update	Mass update one or more teams at a time
Export	Export one or more teams to a CSV file

### Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header for either "Name" or "Description". The list view may be sorted by only one column at a time.



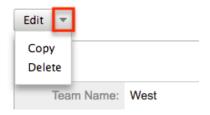
### Teams Detail View

The Teams detail view displays thorough information about the team, as well as the ability to perform most actions related to team management. The detail view also includes a Users subpanel where users can be associated to the team and will therefore take on the team's properties.

#### Actions Menu

The Actions menu on the top left of each team's detail view allows you to perform various actions on the current record. Administrator users can change the action items to be displayed as separate buttons instead of a dropdown menu via Admin > System Settings. For more information on configuring the actions menu, please refer to the System documentation in the Administration guide.

Teams: West



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit the name and description of this team
Сору	Duplicate this team to create a new team
Delete	Delete this team

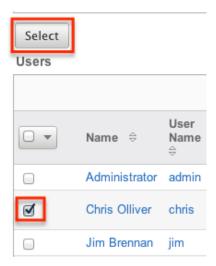
### Users Subpanel

A user has to be associated to a team to be able to take on the team's membership settings. Assigning a user is much like any other many to many relationship in Sugar, where many users can be associated to one particular team, and one user can also be assigned to multiple teams. From Team Management, a user can be associated to a team via the Users subpanel at the bottom of the page. To associate uses to a team, follow the following steps:

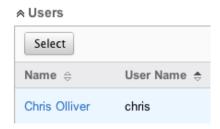
- 1. Navigate to the detail view of the team that you would like to edit.
- 2. At the bottom of the page, click "Select User" from the Users subpanel



3. Use the popup search menu to search for and select the user(s) you would like to add to this team. You can either click on the user's name or, if selecting multiple users, click their corresponding checkbox and then click "Select"



4. After selecting the user(s) the popup search box will close and the user(s) will now be displayed in the Users subpanel for the team to complete the relationship



### Next or Previous Record

On the upper right of the Teams detail view, there are two buttons that allow you to page through each team in the Teams list view's current search results. Clicking the Previous button displays the previous team of the current search results while clicking the Next button displays the next team of the current search results. The text in between shows which team result you are currently viewing within the total number of current results.

Teams: Chris Olliver



# **Editing Teams**

Teams may be edited at any time to update or add information to the record or to edit existing information. You can make changes to existing team records via the Teams detail view and edit view, or from the Users module. Edit view is available within the Teams module and includes the Name and Detail fields.

### Editing Via Detail View

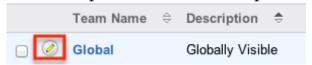
You can edit teams via the detail view by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update either the Name or Description fields, then click "Save" to preserve the changes made.

Teams: Chris Olliver



## Editing Via List View

You can edit teams via the list view by clicking the Pencil icon to the left of each team's name. After clicking the pencil, the window will move to the edit view. Update the necessary fields, then click "Save" to preserve the changes. After saving from the edit view, you will be returned to the detail view for the record that you just updated. Because this method brings you to the edit view, the Name and Description fields can be updated.



## Editing Via Users Module

The users module allows you to see all of the teams associated to a specific user in one place under the "Access" tab. The page will show the "My Teams" subpanel with a list of all of the teams associated to the user. For more information about viewing the teams from the Users module, please review the User Management documentation.

On the "My Teams" subpanel, there is an option to edit the team. After clicking the "Edit" button, the window will move to the edit view. Update the necessary fields,

then click "Save" to preserve the changes. After saving from the edit view, you will be returned to the detail view for the record that you just updated. Because this method brings you to the edit view, only the Name and Description fields can be updated.



## **Deleting Teams**

If a team record is invalid or is no longer being used in your organization's Sugar instance, it may be deleted from either the Teams detail view or list view. Deleting via the detail view allows you to delete a single record while the list view allows for mass deleting multiple records at once. Deleting team records will not delete any related user records and will only remove the relationship.

The exception to this is found when trying to delete any private teams. Private teams are only able to be deleted when the user that the team is for has been deleted. To delete a private team, first delete the user via the user's detail view, following the steps from User Management.

## Deleting Via Detail View

Use the following steps to delete a team via the detail view:

- 1. Navigate to the team record's detail view.
- 2. Select "Delete" from the Actions menu.

Teams: West

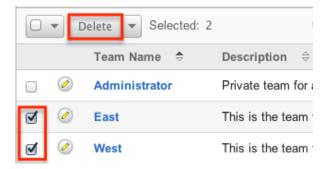


3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

### Deleting Via List View

Use the following steps to delete one or more teams via the list view:

- 1. Navigate to the Teams list view by navigating to Admin > Team Management.
- 2. Use the Search functionality to search to find the Team records you wish to delete.
- 3. Select the desired team records individually or using the checkbox dropdown's options.
- 4. Choose "Delete" from the Actions menu.



5. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

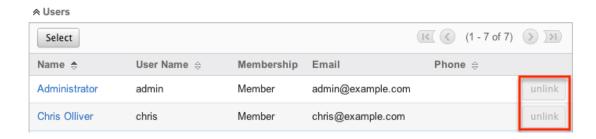
Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of team records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

# Removing Users From Teams

Users can be associated to multiple teams, and one team can also be associated to many users. As changes occur within an organization, there may be times that users need to be removed from specific teams. Breaking the relationship between a team and a user can be done both from the Teams detail view and from the Users detail view. Both modules include a subpanel to represent the relationship to the other module.

To remove a user from a team, use the following steps:

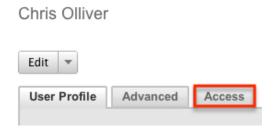
- 1. Navigate to the team record's detail view
- 2. Click "unlink" to the right of the user's row



3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

To remove a team from a user, use the following steps:

- 1. Navigate to the user's detail view
- 2. From the user's detail view, click on the "Access" tab



3. Scroll past the role chart to the "My Teams" subpanel and click "Remove" on the row of the team you would like to remove



4. A pop-up message will display asking for confirmation. Click "Ok" to proceed

## Repairing Teams

Sugar's Repair menu includes two options to administrators to have automated repairs to make improvements to the Team structures and functionality. These processes should not be needed often, and are only used when the necessary changes are to be made. The repair options are as follows:

Type	Description
10	Checks to make sure that all users have associated private teams
1 *	A combination of four different repair functions to rebuild team accesses

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# Role Management

### Overview

Roles in Sugar determine which users can access modules as well as which operations the users are allowed to perform within those modules. When configuring role settings in Sugar, an administrator may choose to enforce restrictions for entire modules or for selected fields on the records in a module, as explained in the following sections. To fully leverage Sugar's security model, both permission types can be used together for a given role and should be considered in conjunction with the Team Management settings used by your organization.

Administrators have the ability to create different roles and assign regular users to the roles. A user can be related to any number of roles, and when multiple roles or role settings are applied, Sugar adheres to a most-restrictive policy to determine the user's appropriate access levels. Administrators cannot be related to roles, as their administrative rights supersede any restrictions imposed by Role Management. For more information on System Administrator users, please review the User Management documentation.

Roles control multiple layers of actions and access for users within Sugar:

- Module-Level Permissions
- Field-Level Permissions

## **Exceptions**

The following modules respond uniquely to role settings in Sugar:

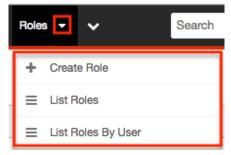
• Forecasts Module: For the Forecasts module, roles will allow or deny access at the module level with no further layers of access. Because the Forecasts module uses data from the Opportunities, Products, Quotas, Worksheet and

Time Period modules, the Forecasts module does not respect the module- or field-level ACLs for those modules. For example, the opportunity data that is shown in the Forecasts module worksheets will be displayed and editable regardless of whether or not the user has access to the Opportunities module or has field-level restrictions in that module.

• Reports Module: Sugar's Reports module does not respect certain field-level role restrictions, meaning that generated reports may display field data for which a user's role is set to restrict visibility.

### Roles Module Tab

The Roles module tab can be accessed by navigating to the Administration page and clicking "Role Management" in the Users section. Once in the Roles list view, you can click the triangle in the Roles module tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of roles you last viewed in the module. Please note that clicking the module tab allows you to access the Roles list view.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Create Role	Opens the edit view to create a new role
List Roles	Opens the list view layout to search and display roles
List Roles By User	Opens a page for viewing each user's access according to their combined roles

## **Creating Roles**

Sugar's roles specify which users can access modules, as well as which operations the users are allowed to perform within those modules. When configuring role settings in Sugar, an administrator may choose to enforce restrictions for entire

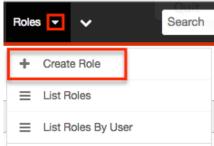
modules or for selected fields on the records in a module, as explained in the following sections. To fully leverage Sugar's security model, both permission types can be used together for a given role and should be considered in conjunction with the team access settings used by your organization.

### Creating Roles via Role Management

The most common way to create a role is via the Create Role option in the Role Management module tab. This opens up the edit view layout which allows you to enter in all the relevant information for the role.

Use the following steps to create a role via Role Management:

- 1. Navigate to Admin > Role Management.
  - Note: The Roles list view will open displaying all existing roles that are currently available.
- 2. Click the triangle in the Roles module tab and select "Create Role".



- 3. Enter the appropriate values for fields in the edit view layout. All required fields will indicate "Required" in the field and must be completed prior to saving.
- 4. On the Role Chart screen, configure the module and field permissions, and assign users to the role.

## Creating Roles via Duplication

You can also create a new role by duplicating an existing role. The duplicate option is useful if the role you are creating has similar information to an existing role.

Use the following steps to create a role by duplicating an existing record:

- 1. Navigate to a role record's detail view.
- 2. Click the Actions menu and select "Duplicate".

### Customer Support Administrator



- 3. The displayed edit view is pre-populated with the original role's values. Update the necessary fields, then click "Save".
- 4. On the Role Chart screen, update the module and field permissions, and assign users to the role.

## Setting Module-Level Permissions

Sugar's Role Chart contains ten columns and has a row for each module down the left-hand side. The columns represent an access level or a type of operation within Sugar, and the corresponding points between the columns and module rows define the role's permission setting for the operation within the given module.

	Access	Access Type	Delete	Edit	Export	Import	List	Mass Update	View
Accounts	Enabled	Admin & Developer	Not Set	Not Set					
Bugs	Enabled	Normal	None	Owner	Not Set	Not Set	Not Set	Not Set	Not Set
Calls	Enabled	Normal	Not Set	Not Set					

To configure or make changes to a role, follow the steps below:

- 1. On the Role Chart, find the intersection of the operation and the module that you would like to adjust and click inside the corresponding table cell.
- 2. A dropdown list displays the options available for that configuration. Select the appropriate security option based on the access and operation definitions



- 3. Repeat steps 1 and 2 for any other fields you would like to change in this module for the current role.
- 4. When complete, click "Save" to secure the changes.

Note: The most restrictive role setting always takes precedence when Sugar has to choose between two or more settings.

The following table explains the Role Chart's components in detail. Please scroll beyond this table for descriptions of each configuration option.

Role Chart Column Header	Configuration Options	Description	Additional Comments
Module (blank header row)	N/A	Identifies which module the row's settings will affect	
Access	<ul> <li>Enabled</li> <li>Not Set</li> <li>Disabled</li> </ul>	Controls access to the entire module for users in this role	When access to a module is disabled, the user is prohibited from viewing any records in this module. They cannot see a tab for the module in the navigation bar, and other module records do not reveal this module's subpanel to the user. For more information, please refer to the Module Access definitions below this table.
Access Type	<ul><li>Normal</li><li>Not Set</li><li>Admin</li><li>Developer</li><li>Admin &amp;</li><li>Developer</li></ul>	For enabled modules, Access Type determines how much control users in this role have over the module	Please refer to the
Delete	<ul><li> All</li><li> Owner</li><li> Not Set</li><li> None</li></ul>	Restricts users from deleting or merging records in this module	Restricting a user's ability to delete records also restricts a user's ability to merge records in the

			module since merging results in deleting one or more records.
Edit	• All • Owner • Not Set • None	Restricts users from editing, creating, or merging records in this module	Although it is labeled "Edit", this role setting also affects the Create functionality because the process of creating a record functions the same way as editing. It also restricts the merge functionality in Sugar, which modifies existing records.
Export	• All • Owner • Not Set • None		This role setting affects usage of the Sugar API, which is the framework used for external connections, such as the Outlook Plug-in. For more information on exporting, please refer to the Export documentation in the Application guide.
Import	• All • Not Set • None	Restricts users from importing data into this module	This role setting affects usage of the Sugar API, which is the framework used for external connections, such as the Outlook Plug-in. For more information on importing, please refer to the Import documentation in

			the Application guide.
List	<ul><li> All</li><li> Owner</li><li> Not Set</li><li> None</li></ul>	Restricts a user's ability to see records in a list view or subpanel	A module's list view is not visible to users where "List" is set to "None".
Mass Update	• All • Not Set • None	Restricts users from using the Mass Update functionality in this module's list view	The Mass Update option is not visible on the list view's Actions menu when "Mass Update" is set to "None". If "List" is set to "None", the Mass Update configuration is inconsequential. To entirely prohibit users in a role from updating many records at once, set "Import" to "None" as well to prevent mass updates via import.
View	• All • Owner • Not Set • None	Restrict access to the record view which displays an individual record's details	When "View" is set to "None", the module's list view displays record's names, but the names are not hyperlinked to their corresponding record views like they are for users with the View permission enabled.  When a module's View setting is "None" or "Owner", the access level for "Edit" and "List" must be set to the same value to

	ensure desired functionality for SugarCRM Mobile and other
	API-based
	applications.

The following sections explain the various configuration options available in the Role Chart.

#### Module Access Definitions

The Access column provides the following options:

- Enabled: The user can access this module in Sugar.
- Not Set: The user is neither restricted nor granted access to this module.
   When permission is "Not Set", the users within this role default to "Enabled" access.
- Disabled: The user cannot access this module, view any of its records, or see any trace of its existence in Sugar.

### Module Access Type Definitions

The Access Type column provides the following options:

- Normal: The user can perform standard functions in this module barring restrictions from other roles or team settings. The user cannot access the Administration functions for this module.
- Not Set: The user is neither restricted nor granted access to this module.
   When permission is "Not Set", users within this role default to "Normal" access.
- Admin: The user is not subject to any Teams restrictions for this module and can view all records, barring other role restrictions. Admin access also forces "All" access for that module's action-related columns (e.g. Edit, Delete, etc.) and supersedes any more restrictive options you may try to choose. For this reason, the row's operation-related columns can remain "Not Set" when the access type is Admin. Please note that the module-level Admin access type does not grant access to the Administration functions for this module.
- Developer: The user has access to the module-specific sections of Studio, Workflow Management, Dropdown Editor, and any other Administration functions that are specific to the module. The user's access to Sugar records is not affected; access remains subject to Teams restrictions and

- action-related role restrictions for this module. For more information on developer tools, please refer to the Developer Tools documentation.
- Admin & Developer: The user is not subject to any Teams restrictions for this module and can access Administration functions for this module. For more information, please refer to the descriptions for the "Admin" and the "Developer" access types above.

For more information on Admin, Developer, and Admin & Developer roles, please refer to the article Understanding Admin and Developer Access in Roles.

### **Record Operation Definitions**

The operation columns (e.g. Edit, Delete, etc.) provide the following configuration options:

- All: The user can perform this action on any and all records that they can access in Sugar per their team memberships.
- Owner: The user can perform this action only if they are the "Assigned To" user on the record.
- Not Set: The user is neither restricted nor granted access to this function. When permission is "Not Set", users within this role default to "All" access.
- None: The user cannot perform this action on any records within this Sugar module.

## **Setting Field-Level Permissions**

Role Management also provides the option to set permissions and restrictions on specific fields within modules. To change the field-level permissions for a role, follow these steps:

- 1. Navigate to Admin > Role Management.
- 2. Create and save a new role or select an existing role to edit.
- 3. On the left side of the screen, click on the name of the module that contains the field(s) you would like to restrict.



4. On the next screen, find the field that you would like to restrict and then click inside the table cell to the right of that field name. In this example, click on the words "Not Set" next to the word "Type" to edit access to the Type field.

Field Permissions



5. From the dropdown list, select a level of field access for this role's members based on the field-access definitions explained below.

Field Permissions



- 6. Repeat steps 4 and 5 for any other fields you would like to change in this module for the current role.
- 7. When complete, click "Save" to secure the changes.

#### Field Access Definitions

- Not Set: The user is neither restricted nor granted access to this field. When permission is "Not Set", users within this role default to "Read/Write" access.
- Read/Write: The user can see the value of this field and can edit it.
- Read/Owner Write: The user can see the value of this field but can only edit the field's value if they are the "Assigned To" user on the record.
- Read Only: The user can see the value of this field but cannot change its value.
- Owner Read/Owner Write: The user can only see and edit this field if they are the "Assigned To" user on the record.
- None: For Sidecar modules, the user can see this field on layouts (e.g. Record View) but cannot see its value. Instead, Sugar displays "No Access" as the field's value. For Legacy modules (e.g. Quotes), the user cannot see the field on any layout. Instead, Sugar displays a blank space on the edit and detail views.

# Assigning Users to Roles

A user must be associated with a role to take on the role's permission settings. Assigning a role is much like any other many-to-many relationship in Sugar, where many users can be associated with any particular role, and one user can also be

assigned to multiple roles.

If a user is assigned to multiple roles, the most restrictive option for each setting is respected. For example, if a user is assigned to two roles, one which restricts Edit access for the Accounts module to "Owner" and the second which restricts editing to "All", the "Owner" setting will be respected. View the Access tab on each user's profile to see the cumulative effect of all of their assigned roles.

### Assigning Roles via Role Management

From Role Management, a user can be related to a role via the Users subpanel at the bottom of the detail view. To relate users to a role, use the following steps:

- 1. Navigate to Admin > Role Management.
- 2. From the Roles list view, select the desired role.
- 3. At the bottom of the page, click "Select User" from the Users subpanel .



4. Use the pop-up search menu to search for and select the user(s) you would like to add to this role where you can either click on the user's name or, if selecting multiple users, click their corresponding checkbox and then click "Select".

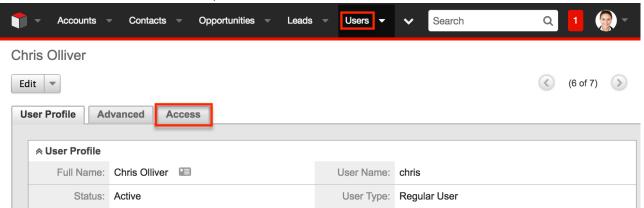


After selecting the user(s), the pop-up search box will close and the user(s) will now be displayed in the Users subpanel for the role to complete the relationship.

## Assigning Roles via User Management

From User Management, a user can be related to a role via the user's detail view. For more information on User Management, please refer to the User Management

- 1. Navigate to Admin > User Management
- 2. From the Users list view, open the user record that you would like to edit
- 3. From the user's detail view, click on the "Access" tab



4. Scroll past the Role Chart to the subpanel for "Roles" and click "Select"



5. Use the pop-up search menu to search for and select the role(s) you would like to add to this user where you can either click on the role's name or, if selecting multiple roles, click the corresponding checkboxes and then click "Select"



After selecting the role(s), the pop-up search box will close and the role(s) will now be displayed in the Roles subpanel for the user to complete the relationship.

## Viewing Roles

There are various options available for viewing role records in Sugar including via the Roles list view, Roles detail view, Roles Recently Viewed menu, the List Roles by User function, and from the Users module.

## Viewing via List View

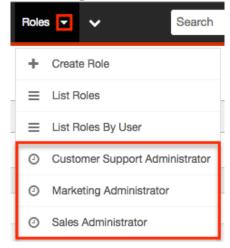
The Roles list view displays all role records meeting the current search criteria. To access the list view, simply navigate Admin > Role Management. Alternately, if you are looking at a role's detail view, you can click the Roles module tab to return to the list view. You can click the role's name to open the record in detail view. For more information on viewing roles via list view, please refer to the Roles List View

### Viewing via Detail View

The Roles detail view is where all of the modifications to the role settings can be made. This page includes the name and description of the role, the chart where module settings can be manipulated, links to the field-level action settings, and the Users subpanel where users can be added to the role. For more information on viewing roles via detail view, please refer to the Roles Detail View section of this documentation.

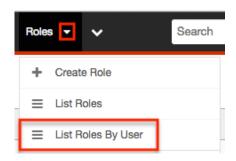
### Viewing via Recently Viewed

As you access different roles, Sugar will keep track of which roles you have recently viewed. Click the triangle in the Roles module tab to see a list of the 3 roles you most recently viewed in the module. Clicking the role's name within the list will open it in detail view.



## Viewing Roles by User

Role Management offers the option to view all roles assigned to specific users. Click the triangle in the Roles module tab and select "List Roles By User" to view these roles.



You will be redirected to the Users module and a screen will appear with a dropdown list with all users' names included. Select the user you would like to view and a chart will show which is a compilation of all of the roles listed for the user in the Roles subpanel, at the bottom of the page.



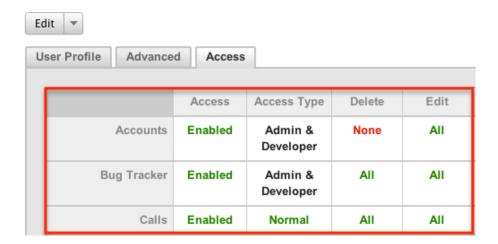
## Viewing via Users Module

User profiles show which roles the user is related to and how the user's roles work together. When viewing a user profile, all role information can be found by navigating to the "Access" tab. For information about accessing the Users module, please refer to the Users documentation.



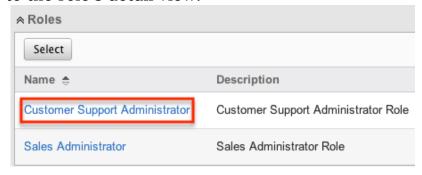
The access tab contains a chart showing all of the modules and actions available in Role Management. This chart is a compilation of all of the roles listed for the user in the Roles subpanel at the bottom of the page.

#### Chris Olliver



When viewing the chart, the most restrictive setting for the specific intersection will take precedence, and will represent the option for the user. Therefore, if the user has two roles assigned, one of which allows him or her to delete a record and another which does not, Sugar will enforce the option where the user cannot delete the record. The table shown in User Management cannot be edited. Instead, the role itself must be edited which will change the setting for any other users related to the role.

To view the role settings from User Management and make any necessary changes, simply click the role's name from the Roles subpanel, which will take you to the role's detail view.



## Searching Roles

The Roles list view search function allows you to search for the name of the role to help you locate records easily and effectively. Once the search is performed, the relevant results will be displayed in the Roles list view below.

The buttons in the search panel have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search
- Clear: Click the Clear button to clear all criteria from the searchable fields

To see all Role records, simply click "Clear" and then "Search" to perform a blank search with no name filter.

Roles



Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you can use the wildcard at the beginning of your text as well (e.g. %Administrator). This will pull up any record that has the word "administrator" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used, please refer to the Search documentation.

### Roles List View

The Roles list view displays all roles that meet the current search criteria (if any). You can view the name and description of each role within the field columns. Click on the name of the role to access the detail view for the role and review the settings further.

## Pagination

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

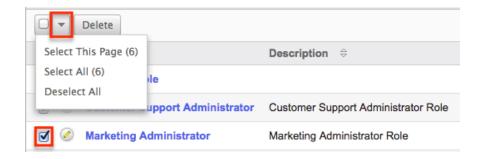
By default, Sugar displays 20 records per list view page, but administrators can change the number of records displayed via the System menu in Admin. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide.



#### Checkbox Selection

Roles can be deleted in a mass-delete fashion via the list view by selecting all of the role records. To select individual role records on the Roles list view, mark the checkbox on the left of each row. To select or deselect multiple roles on the list view, use the options in the checkbox dropdown menu:

- Select This Page: Selects all records shown on the current page of results
- Select All: Selects all records in the current search results across all pages of results
- Deselect All: Deselects all records that are currently selected



For more information on deleting roles, please refer to the Mass Deleting via List View section of this documentation.

## Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header for either "Name" or "Description". The list view may be sorted by only one column at a time.



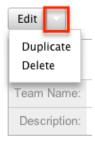
## Roles Detail View

The Roles detail view displays thorough information about the role, as well as the

ability to perform most actions related to role management. It comprises of a chart showing all modules in Sugar and actions that the user can have access to or be restricted from. The detail view also provides links that, when clicked, drill down into each module to make field-level permission changes. Finally, the detail view includes a Users subpanel where users can be related to the role and will, therefore, take on the role's properties.

#### **Actions Menu**

The Actions menu on the top left of each role's detail view allows you to perform various actions on the current record. Administrator users can change the action items to be displayed as separate buttons instead of a dropdown menu via Admin > System Settings. For more information on configuring the actions menu, please refer to the System documentation in the Administration guide.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit the name and description of this role
Duplicate	Duplicate this role to create a new role
Delete	Delete this role

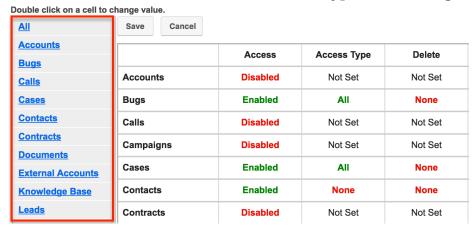
#### Role Chart

The Role Chart comprises of ten columns and a row for each module down the left-hand side. The columns each represent a type of action within Sugar, and the corresponding point between the columns and module roles defines the role's permissions. The role permissions can be updated from the detail view of each role. For an explanation of each action and how to update roles, please review the

	Access	Access Type	Delete	Edit	Export	Import	List	Mass Update	View
Accounts	Enabled	Admin & Developer	None	All	All	None	All	All	All
Bug Tracker	Enabled	Admin & Developer	All	All	All	None	All	All	All

#### Field Permissions

To the left of the Role Chart is a list of hyperlinked Sugar module names:



Click on a module name to access the Field Permissions view for the module. For an explanation of each action and how to update field-level permissions, please review the Setting Field-Level Permissions section of this page.



## Users Subpanel

Beneath the Role Chart, the Users subpanel is available for the Administrator to relate one or more users to the current role. A user must be related to a role to take on the role's permission settings. One user can be related to multiple roles. If a user is related to multiple roles, the most restrictive option for each setting is respected.

To relate users to a role, use the following steps:

- 1. Navigate to the detail view of the role that you would like to edit.
- 2. At the bottom of the page, click "Select User" from the Users subpanel.



3. Use the pop-up search menu to search for and select the user(s) you would

like to add to this role. You can either click on the user's name or, if selecting multiple users, click their corresponding checkbox and then click "Select".



After selecting the user(s), the pop-up search box will close and the user(s) will now be displayed in the Users subpanel for the role to complete the relationship.

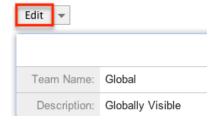
## **Editing Roles**

Roles may be edited at any time to update or add information to the record or to edit the role restrictions. You can make changes to existing role records via the Roles detail view and edit view, depending on the change being made. Changes via the detail view are made directly on the role permission chart. Edit view is available within the Roles module and includes the Name and Detail fields.

## Editing via Detail View

You can edit roles via the detail view by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update either the Name or Description fields, then click "Save" to preserve the changes made.

Teams: Global



Edits to the settings on the role are also performed via the detail view. Below the Name and Description fields, is where you will find the role permission chart. This chart is made up of rows representing the different modules in Sugar, and columns representing each of the action types Sugar users can perform. Edits to this table are made by clicking the box at the intersection of a row and column, which produces a dropdown list of available options. For more information on module

permission changes, please review the information in the Setting Module-Level Permissions section of this documentation.

### Editing via List View

You can edit roles via the list view by clicking the Pencil icon to the left of each role's name. After clicking the pencil, the window will move to the edit view. Update the necessary fields, then click "Save" to preserve the changes. After saving from the edit view, you will be returned to the detail view for the record that you just updated. Because this method brings you to the edit view, only the Name and Description fields can be updated.



### Editing via Users Module

The Users module allows you to see all of the roles related to a specific user in one place under the "Access" tab. The page will show a subpanel with a list of all of the roles related to the user. For more information about viewing the roles from the Users module, please review Viewing via Users Module.

On the "Roles" subpanel, there is an option to edit the role. After clicking the "Edit" button, the window will move to the edit view. Update the necessary fields, then click "Save" to preserve the changes. After saving from the edit view, you will be returned to the detail view for the record that you just updated. Because this method brings you to the edit view, only the Name and Description fields can be updated.



## **Deleting Roles**

If a role record is invalid or is no longer being used in your organization's Sugar instance, it may be deleted from either the Roles detail view or list view. Deleting via the detail view allows you to delete a single record while the list view allows for

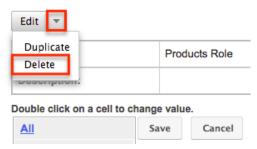
mass deleting multiple records at once. Deleting role records will not delete the related user records and will only remove the relationship.

### Deleting via Detail View

Use the following steps to delete a role via the detail view:

- 1. Navigate to the role record's detail view.
- 2. Select "Delete" from the Actions menu.

Products Role



3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

### Mass Deleting via List View

Use the following steps to delete one or more roles via the list view:

- 1. Navigate to Admin > Role Management.
- 2. Use the search functionality to find the Role records you wish to delete.
- 3. Select the desired role records individually or using the checkbox dropdown's
- 4. Choose "Delete" from the Actions menu.



5. A pop-up message will ask for confirmation. Click "Ok" to proceed.

Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of role records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

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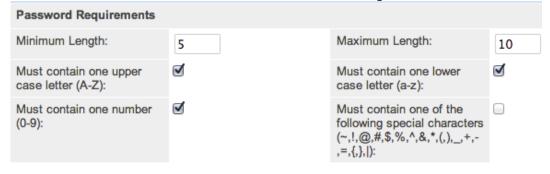
# Password Management

### Overview

Password Management is used to administer requirements and other policies about user passwords in Sugar. Sugar allows administrators to set up system-generated passwords versus manually created passwords for new users, failed login lockout attempts, and configure the email templates used to send password information to users. Password management is not used to change user's passwords, which can be done via their User Profile.

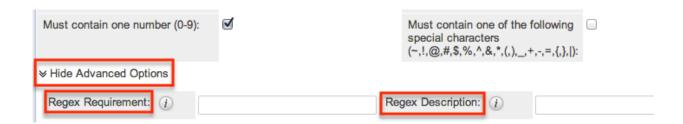
## Password Requirements

The Password Requirements panel lets you configure minimum and maximum lengths of passwords, as well as what characters are required in passwords. Filling in either of the first two fields, Minimum Length and Maximum Length, will force a requirement for your users to have passwords be more than or less than a given amount of characters. Additionally, use any of the four checkboxes to force character requirements on users' passwords. This can force users to include upper case letters, lower case letters, numbers, or special characters in their passwords.



## **Advanced Options**

You can also specify words or other strings that are not allowed in a password, called Regex Requirements. The configurations for Regex Requirements are found in the Advanced Options section of the Password Requirements panel.



To set a Regex Requirement, type in code of characters that are not allowed. In the Regex Description field, write a message to users that will show when they try to edit their passwords, explaining what strings are not allowed. For more information on Regex usage, please review the Regular Expressions website at http://www.regular-expressions.info/.

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

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

## System-Generated Passwords

When enabled, the System-Generated Passwords feature will allow users to receive a randomly generated password via email. This functionality is utilized either when a new user is created or when an administrator activates the Reset Password button in the user's profile.

The two requirements to utilize system-generated passwords are:

- A user has a valid primary email address configured in their User Profile.
- A system outbound email server (SMTP) is configured in Email Settings.

For security reasons, when the System-Generated Passwords feature is enabled, you also have the option to set an expiration for the system-generated password. You can specify when the temporary password expires, either after a certain amount of days, months, or weeks, or after a specified number of logins. Simply click the radio button next to the expiration you would like to use and enter the login or length of time variable as necessary, or click "None" for the password to never expire. Once the temporary password expires, users will see a message upon login, informing them that the password has expired and to create a new password. The user will need to enter the temporary password along with the new password and confirm the password as well.

System-Generated Passwords			
Enable System-Generated Passwords Feature : (i)			
Warning: An SMTP server for outbound emails is not configured in Email Settings. It must be configured in order to send passwords to users. A primary email address is required for each user in order to use this feature.			
System-Generated Password Expiration			
None	Password Expires in 7 day(s) \$ Password Expires upon logins		

### User Reset Password

The forgot password feature allows administrators to enable the Forgot Password link to display in the Sugar login window. If a user does not remember their password, they can click this option, enter their user name and their primary email address in Sugar, and a Reset Password link will be emailed, guiding them through the process to reset their forgotten password. For more information on how a user resets his or her password, please view the Getting Started documentation.

The two requirements to utilize Forgot Password feature are:

- A user has a valid primary email address configured in their User Profile.
- A system outbound email server (SMTP) is configured in Email Settings.

### **CAPTCHA Validation**

As an additional precaution, you can enable CAPTCHA validation to prevent automated programs from gaining unauthorized access to user accounts. When enabled, when a user attempts to use the Forgot Password feature, they will have to confirm a CAPTCHA, in addition to providing their user name and primary email address.



Use the following steps to enable CAPTCHA for the Forgot Password menu:

- 1. Create an account with reCAPTCHA from the reCAPTCHA website at https://www.google.com/recaptcha.
- 2. After creating an account, save your Public Key and Private Key, which will be entered into Sugar.
- 3. In Sugar, navigate to Password Management and the "User Reset Password" panel.
- 4. Click the checkbox to "Enable reCAPTCHA Validations".
- 5. Enter the Public Key and Private Key in the fields provided.



# Honeypot Validations

Honeypots are a nonintrusive method of human form submission confirmation that is more effective than traditional CAPTCHA. Enabling the honeypot validation option will add an invisible input field to the Forgot Password form which only bots reading the HTML will be able to see. When the bots fill in the honeypot field, Sugar knows to disregard the submission since it was not created by a human, thus preventing unauthorized access to your Sugar instance.



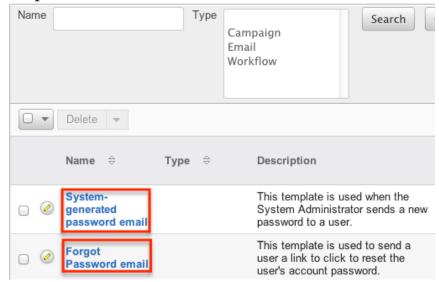
# **Email Templates**

Sugar comes standard with two password templates. One is for the System-Generated Password emails that are sent out, and the other is for the Reset Password email. The templates are editable through Password Management and new ones can also be created. To create a new version of either template, click the Create button on the specific line. To edit the existing template, click the Edit button on the specific line.



Templates can also be viewed via the Emails module by navigating to the Email Templates list view. The templates are easily found as the Type is blank, whereas any other template will be either a Campaign, Email, or Workflow template. For more information on Email Templates, please review the appropriate section of the application guide.

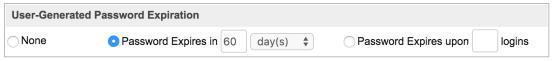
Note: If you choose to create your own templates to send passwords, copy the variables provided in the default template. The variables "\$contact\_user\_link\_guid" from the "Forgot Password Email" and the "\$contact\_user\_user\_hash" and "\$config\_site\_url" are not available from the variable dropdowns when creating the templates.



# **User-Generated Password Expiration**

Sugar can force users to create new passwords after a given period. Admins can configure this for either specific amounts of time in days, weeks, or months, or after a specific amount of logins. To configure a password expiration, select the radio button next to the expiration period you would like to use and enter the

timeframe or amount of logins that the user will be allotted. Once the password expiration is reached, users will see a message upon login, informing them that their password has expired and to create a new password. The user will need to enter their current password along with their new password and confirm the password as well.

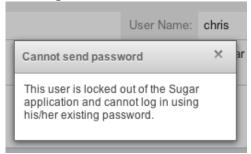


# Login Lockout

To prevent against unauthorized logins, Sugar includes a configurable lockout function. This means that you will define a specific amount of unsuccessful attempts that a user name can be used to log in before the user name will not be able to log in. You also configure a given amount of time before the restriction is listed in either minutes, hours, or days. To configure Login Lockout, click the radio button next to "Lockout users after {blank} unsuccessful login attempts", fill in the maximum number of attempts allowed and define the timeframe.



Note: When a user has been locked out, the user must wait until the given timeframe has passed. The only way to manually allow a user to log back in is by clicking the Reset User Preferences button in the user's profile.



## **External Authentication**

Sugar can respect external authentication protocols (i.e. LDAP and SAML) to give users a seamless login process. LDAP and SAML configuration options are located in the last two panels of the Password Management page. Click the checkbox next to the external authentication type that you would like to enable. Upon selection, the page's contents will refresh and the chosen protocol will supersede any other

Password Management settings.

LDAP Support  Enable LDAP Authentication	
SAML Authentication	
Enable SAML Authentication	

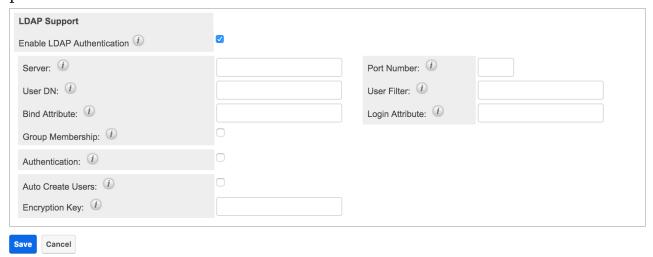
The following sections explain LDAP and SAML options in more detail.

Note: Team Management and Role Management are still taken into account when External Authentication is active.

#### LDAP

Sugar can be configured to accept Lightweight Directory Access Protocol (LDAP) authentication if your organization has implemented LDAP or Active Directory authentication. When users in your system attempt to log into Sugar, the application will authenticate their credentials against your LDAP directory or Active Directory. If authentication is successful, the user is granted access to Sugar. If the authentication is unsuccessful, Sugar will then attempt to verify the provided credentials against its own database of valid user names and passwords.

To configure LDAP, navigate to Admin > Password Management, and click the "Enable LDAP Authentication" checkbox near the bottom of the screen. All other screen options will be removed and you will be presented with a page of only options for LDAP.



Fill in the appropriate options in the following fields, and then click "Save" to commit the changes. We have suggested values for each field, but these may vary depending on your LDAP configuration.

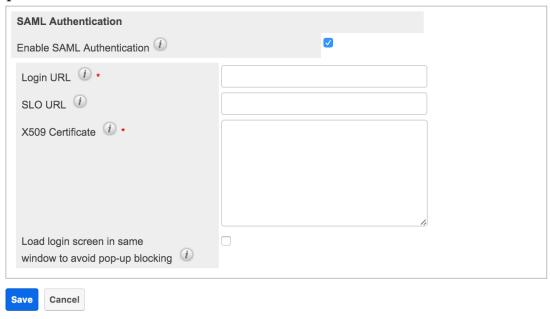
Field	Suggested Values	Description
Authentication	Enter " username@MYSERVER.M YDOMAIN.com" or "domain\\\userfirstname.u serlastname" for the User Name, and the corresponding Password.  Note: The latter username format requires double backslashes after the domain. Sugar will automatically remove one backslash upon Save.	Check this box to enable the User Name and Password fields.  Note: You must add a service account user (read-only access) to your Active Directory to authenticate via Sugar.
Auto Create Users	Typically, this box remains disabled.	Select this checkbox to create the username in the Sugar database if it does not already exist.  Note: When enabled, a Sugar user is created for every LDAP user logging into the application. This will occupy an active Sugar license for each created user.
Bind Attribute	For Active Directory, enter userPrincipalName	A case-sensitive value
Enable LDAP Authentication		Uncheck this box if you would like to disable LDAP in your instance.
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.  Note: The "php_mcrypt" extension must be enabled in the php.ini file.
Group Membership	Group DN : Enter the	Select this checkbox if you

	group DN name	wish to specify that the user is a member of a specific group.
	<ul><li>ou=groups</li><li>dc=example</li><li>dc=com</li></ul>	or come group.
	Group Name : Enter the group name	
	• cn=sugarcrm	
	User Attribute : A unique identifier used to check if the user is a member of the group	
	• uid	
	Group Attribute : The attribute of the group that will be used to filter against the User Attribute	
	MemberUid	
Login Attribute	For Active Directory, enter sAMAccountName	A case-sensitive value
Port Number	389	Enter the port number. 389 is the default port.
Server	MYSERVER.MYDOMAIN.c	Enter the FQDN of your Active Directory Server which should be your Domain Controller.
User DN	ou=people, dc=example, dc=com	Enter the user DN name.
User Filter	is_user_id=1	Enter any additional parameters to apply when authenticating users.

### SAMI.

Sugar can be configured to accept Security Assertion Markup Language (SAML) for single sign-on if it is implemented at your organization. When users in your system attempt to log into Sugar, the application will authenticate them against SAML. If authentication is successful, the user is granted access to Sugar. If the authentication is unsuccessful, Sugar will then attempt to verify the provided credentials against its own database of valid user names and passwords. Sugar supports the use of SAML versions 1.1 and 2.0.

To configure SAML, navigate to Admin > Password Management, and click the "Enable SAML Authentication" checkbox near the bottom of the screen. All other screen options will be removed and you will be presented with a page of only options for SAML.



Fill in the appropriate options in the following fields, and then click "Save" to commit the changes.

- Enable SAML Authentication: Uncheck this box if you would like to disable SAML Authentication in your instance.
- Login URL: Enter the SAML URL for authentication. This is the path to the SAML server to which you are authenticating.
- SLO URL: Enter the Single Logout URL.
- X509 Certificate: Enter the SAML X509 certificate public key.
- Load login screen in same window to avoid pop-up blocking: Enable this option to load the SAML login screen in the current window to prevent pop-up blockers from preventing single sign-on.

If you are using OneLogin, please ensure that only the email address user field is be mapped to Sugar's email address field in OneLogin's parameters configuration. Mapping to other fields such as user name is not supported and may prevent authentication.

Note: You must disable the Forgot Password option if you are using SAML authentication.

## Setting User Passwords

Administrators have the option to manually set or reset user's passwords as need be. Setting a regular user's password is done simply through the Users module via Admin > User Management. This method will vary depending on the System-Generated Passwords option. For more information on changing a user's password from the Users module, please review the Resetting User Passwords section of the Users documentation.

Last Modified: 09/14/2017 10:46am

# User Management

### Overview

The User Management module provides administrators access to create, edit, activate, and deactivate the profiles of all the users in their Sugar instance. This module and underlying settings control each individual's login credentials as well as some personalized settings. During the installation process, Sugar creates one system administrator by default. The system administrator can log in and create additional users, in a variety of capacities, to be able to access Sugar and utilize all of the other CRM functionality. In combination with the role and team security, administrators can fully establish a profile for each user in Sugar.

## **User Types**

There are three different types of users in Sugar: Regular User, System Administrator, and Group User. Each user type has different functions and uses in Sugar which will vary for each instance. Depending on an organization's use of Sugar, not all of these user types will necessarily be used.

Note: Users with an inactive status do not count towards the number of Sugar licenses purchased for the organization. Group Users never count against the

number of Sugar licenses regardless of status.

### Regular User

A regular user is the most common of the user types. A majority of employees of an organization will be regular users. This user can access most Sugar modules and perform most every day-to-day function. Regular users are subject to be restricted in their abilities and what records they can access by an administrator using the Teams and Roles functionalities in Sugar.

Regular Users will appear in the Employees module. To create a Regular User, please review the Regular and Admin Users section of this documentation.

### System Administrator

System Administrator users, or "admins," have all of the abilities and functionality of a regular user, but also have administrative privileges as well. Admins can perform functions such as creating and editing users, editing system wide settings, and have access to diagnostic and troubleshooting tools. In addition, admins can access all modules and records, and are not subject to team or role restrictions. All instances of Sugar require at least one administrator, but it is also recommended to have more than one in case the original admin is unavailable or is no longer with the company.

System Administrators will appear in the Employees module. To create a System Administrator, please review the Regular and Admin Users section of this documentation.

Note: All administrators where the user status is active count as a licensed user.

## Group User

A Group User is a bucket that is used for assigning records to a non-specific user (e.g. Sales, Support) in the organization. Unlike a Regular or System Administrator user, a Group user does not have access to log in to Sugar. Due to this, they do not have the same profile settings available, including the option to set a password. Since Group users cannot log in to Sugar, they do not count against an organization's license count.

Examples of uses for a Group user would be to assign all new leads to a group user named "Sales" or assign all new support cases to "Support" before they are delegated to specific users (e.g., John Smith) in the organization.

Please note that Group users will not appear in the Employees module. For more information on how to create a Group user, please review the Group Users section of this documentation.

### User Fields

The Users module contains a number of stock fields, which are included out-of-the-box with Sugar. The below definitions are suggested meanings for the fields, but many of the fields can be leveraged differently to best meet your organization's needs. System Administrators have the ability to alter, remove, or add fields in the User Profile tab via Admin > Studio, minus a few noted exceptions. For more information on adding or modifying fields, please refer to the Studio documentation in the Administration guide.

The User Profile tab contains the contact information for the user and other important user-specific settings. The User fields are as follows:

Field	Description
Address City	The city of the user's address
Address Country	The country of the user's address
Address Postal Code	The postal code of the user's address
Address State	The state of the user's address
Address Street	The street name and number of the user's address
Avatar	Upload an image to this field to represent the user that will be shown on the Activity Stream and next to the user's name on the navigation bar
Department	The department where this user works
Description	A description or other information about this user
Display Employee Record	Check this box if the user should have an employee record show in the Employees module
Email Address	The user's email addresses, where a primary address is selected to receive email notifications and if this should be a reply to address when using Sugar's outbound email (SMTP) functionality  Note: This field is not editable in studio

Email Client	When clicking on an email address in Sugar, this will determine if Sugar's email editor will open, or if the user's primary email program on this computer (e.g. Microsoft Outlook, Apple Mail, etc.) will open  Note: This field is not editable in studio
Employee Status	The user's employment status in the organization (Active, Terminated, or Leave of Absence)
	Note: The Employee Status and Status fields are managed separately, so consider choosing a new employee status when the Status field changes.
Fax	The user's fax number
First Name	The user's first name
Home Phone	The user's home phone number
IM Name	The user's instant message screen name
IM Type	The user's instant message service type
Last Name	The user's last name
Mobile	The user's mobile phone number
Other Phone	An additional phone number for the user
Reports to	Use this field to select this users manager. The user that this user reports to will become an implicit member of this user's Teams and will also affect forecasting
	Note: This field is not editable in studio
SMTP Password	If an outgoing email server is defined in Admin > Email Settings, the user's SMTP password can be input here to send mail through Sugar
SMTP Username	Note: This field is not editable in studio  If an outgoing email server is defined in Admin > Email Settings, the user's SMTP user name can be input here to send mail through Sugar

	Note: This field is not editable in studio
Status	Making a user inactive will make it so this user cannot log in to Sugar. This will also remove the user from taking a license seat, without having to delete the user. When making a user inactive, the admin is prompted to use the Reassign Records function.
	Note: The Employee Status and Status fields are managed separately, so consider choosing a new employee status when the Status field changes.
Title	The user's job title
User Name	The user name will be what the user logs in to Sugar with on the login page. It will also show for other users when they view fields such as "Assigned to" and "Created By". This is the name that will define the specific user in Sugar and should be unique for every user.
	Note: Spaces may not be included in user names.
User Type	This is where the admin can decide to grant a regular user System Administrator access to Sugar  Note: This field is not editable in studio
Work Phone	The user's work phone number

The Advanced tab in the user's profile includes settings to configure how Sugar will function for that specific user. The fields in the Advanced tab cannot be edited in Studio.

Field	Description
1000s Separator	Select a character to use as a 1000's separator, with an example showing in the "Example" box
System Significant Digits	Define how many digits will appear after the decimal point when the user views a currency field, with an example showing in the "Example" box

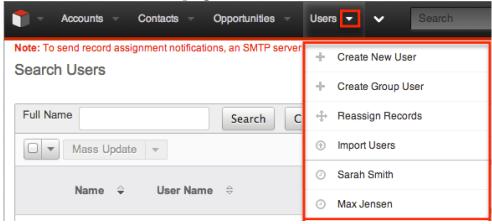
Data Font Size	The default font size of the PDF body when generated by this user
Date Format	How date fields will appear for the user, with the ability to control month, day, and year formatting
Decimal Symbol	Select a character to use as a decimal symbol, with an example showing in the "Example" box
Default Teams	A default team defines the team set when this user creates a record. Whenever this user creates a record, the team is set as the user's default team, similar to how the "Assigned To" field is set to be the created user.  Note: Users can be assigned any
	number of default teams
Export Delimiter	Character or characters used to delimit exported data by this user
First Day of Week	Which day of the week will show as the first day when the user views the Sugar calendar
Font for Footer	Select a font for the footer in PDF documents when generated by this user
Font for Header and Body	Select a font for the header and body of PDF documents when generated by this user
iCal integration URL	URL in which someone can subscribe to the user's Sugar calendar within iCal or other programs that support iCal integrations
Import/Export Character Set	The default character set used for imports, exports, and vCard generation for this user
Main Font Size	The default font size in the PDF header when generated by this user
Name Display Format	How concatenated name fields will appear for the user, with the ability to control first name, last name, and salutation formatting
Notify on Assignment	When this box is checked, the user will

	receive an email notification when a record is assigned to them by another user
	Note: A system outbound mail account must be enabled in Admin > Email Settings
Preferred Currency	Select the user's default currency, with additional currencies able to be defined in Admin > Currencies
Publish at my Location	Used to share free/busy information between Sugar and Microsoft Outlook calendars
Publish Key	Alphanumeric code entered by the user to uniquely identify his or her calendar and populate the iCal integration URL, Publish at my location site, and Search Location
Reminders	This field sets the default reminder settings for calls and meetings created by this user so that when the user creates a call or meeting, the reminder settings will be pre-populated to the configuration defined in this field.
	Popup: Users that are invited to a call or meeting created by this user to receive a browser popup notification for the call or meeting at a given time interval before the activity.
	Email all invitees: Invitees invited to a call or meeting created by this user to receive an email notification for the call or meeting at a given time interval before the activity.
Search Location	Used to share free/busy information between Sugar and Microsoft Outlook calendars
Select Modules for Navigation Bar	The order of the module navigation bar is defined by the order in the Display Modules column and modules listed in the Hide Modules column will not appear in the bar

Show Full Names	When this box is checked, the user will see user's full names ("John Smith") instead of user names ("jsmith") when using Sugar
Show Preferred Currency	Mark the checkbox to convert the base currency to user preferred currency in list views and record views
Time Format	How time fields will appear for the user, with the ability to control hour, minute, and 12 versus 24 hour clock formatting
Time Zone	Select the local time zone for this user based on geographical location  Note: This Time Zone setting only
	applies to modules using the Legacy user interface. Modules using the Sidecar user interface will utilize the browser's time zone.
User Wizard Prompt	Mark the checkbox to have users go through the New User Wizard upon their first login

### Users Module Tab

Administrators can access the Users module tab via Admin > User Management. Click the triangle in the Users module tab to open the Actions menu and Recently Viewed menu. You can also click the Users tab to access the Users list view. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of users you last viewed in the module. For more information on records last viewed, please refer to the Viewing Via Recently Viewed section of this page.



The options in the Actions menu allow you to perform the following types of action:

Option	Description
Create New User	Opens the edit view layout to create a new user
Create Group User	Opens the edit view layout to create a new Group User
Reassign Records	Opens the Reassign Records tool
Import Users	Opens the import wizard to create or update users using external data

## Creating Users

There are various methods for creating new users in Sugar. These are via the users module, duplication, or import. Creating users is an imperative function in Sugar as it allows for other members of your organization to log in to Sugar and access all of your customer data.

# Creating Via Module Tab

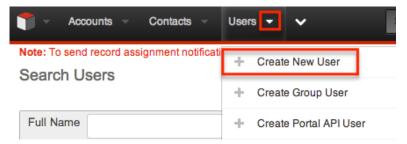
The most common method for creating users in Sugar is via the Users module. The edit view layout opens when creating the user directly from the Users menu and includes all of the relevant fields to create a new user. The fields and options on the Create page will vary depending on the type of user you are creating.

### Regular and Admin Users

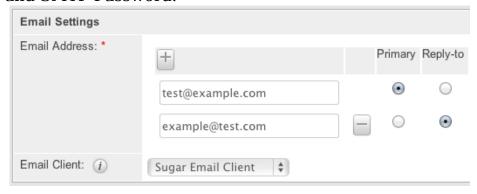
Regular and Admin users are the most common users that will be created in a Sugar instance and contain the most detail and fields compared to the other user types. For more information about the use of Regular and Admin users, please review the Regular User and System Administrator sections of this documentation.

Use the following steps to create a new user:

- 1. Navigate to Admin > User Management.
- 2. Click the triangle in the Users module tab to open the Actions menu and select "Create New User".

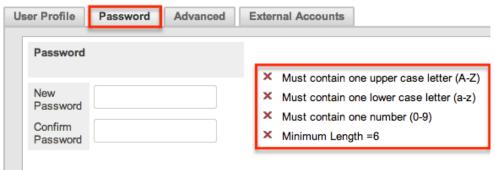


- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving..
  - Enter the following information under the User Profile tab:
    - In "User Profile" enter a user name for this user which will define the specific user in Sugar and should be unique for every user.
       Sugar will default the user to being Active and a Regular User, which can be updated if the user is going to be an administrator.
    - In "Employee Information", contact information and other specific information about the user can be added. This will include phone numbers, contact address, the user's department and job title, and any description information.
    - In "Email Settings" the user's email address or addresses can be added. The email addresses can also be marked as "Primary", meaning that this will be the first email address that shows for the user, and "Reply-to", where automatic notifications from Sugar will be sent. In this section, the user's outbound email client will be selected to default to Sugar or an external program, such as Microsoft Outlook. If a mail server is configured in Admin > Email Settings, additional options will display here for SMTP Username and SMTP Password.



• The Advanced tab includes preference-type settings (User Settings, Layout Options, Locale Settings, PDF Settings, Calendar Options) for the user. These are all specific to the user's account and will not affect system-wide settings or other users. Options such as notify on assignment, date and time formats, time zone, preferred currency, etc. are available to configure under this tab.

4. If the system-generated password feature is not enabled in Password Management, a Password tab will appear to the right of the User Profile tab. The administrator can manually enter a password for the user under this tab and provide it to the user. Please note that the password requirements listed on the right will be checked off as the new password meets the required conditions.



Note: If the system-generated password feature is enabled, this tab will not be available. Instead, a system-generated password will be sent to the user upon completion of the creation process.

5. After entering the necessary information click the Save button.

#### Create



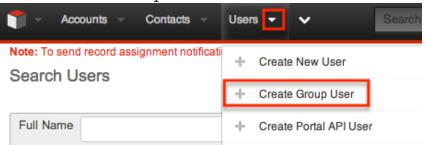
Upon saving, an email will be sent to the user with the user's system generated password (if applicable) and a corresponding Employee record will be created for the user. Once the user is created, the administrator can assign Teams and Roles to the user via the Access tab.

### **Group Users**

A Group user cannot log in to Sugar, but new and existing records can be assigned to the Group user. The Create page for the Group user consists of the User Name, Status, Name, User Type, and Email Address fields. For more information on how to use Group users in Sugar, please review the Group User section of this documentation.

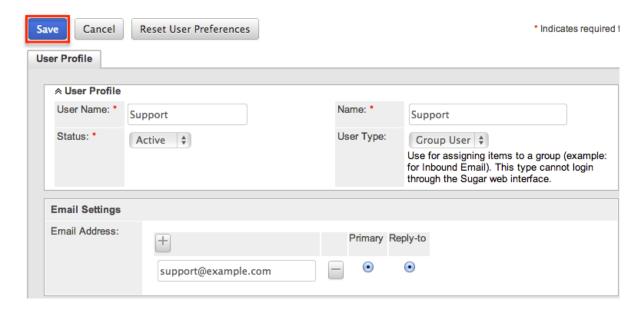
Use the following steps to create a Group user:

1. Click the triangle in the Users module tab to open the Actions menu and select "Create Group User".



- 2. Enter a name and user name (e.g. Support) for this user.
- 3. In the Email Settings section, enter an email address or addresses for the Group user. The group user's primary email address will be marked as "Primary" and you can also mark "Reply-to" if any automatic notifications from Sugar will be sent to this address.
  - Note: If your organization has a group inbox or alias for a team represented by the group inbox, the email address can be added here for all notifications to be sent to the entire team.
- 4. Click "Save" to create the user.

Create



## Creating Via Duplication

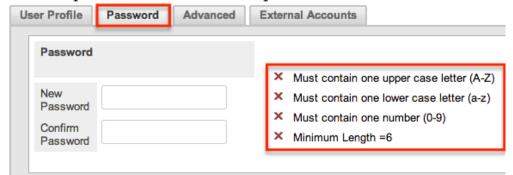
Often, administrators will find themselves in situations where multiple users must be created at once, whether it be when they are first setting up Sugar, a new group of employees are going to be using Sugar, etc. For situations such as these, one user can be configured and additional users can be quickly set up using the Copy option available on the record's detail view. When duplicating a user, all fields are populated from the original record to the duplicated one, except for the User Name field and password fields.

Use the following steps to create a user by duplicating an existing user:

- 1. Navigate to the detail view of the user you would like to duplicate.
- 2. Click the Actions menu and select "Copy".



- 3. The displayed edit view is pre-populated with the original user's values, except for the user name and password.
- 4. Populate the "User Name" for the new user and edit any other fields or preferences to be specific to the new user. Fill in any information for the new user that did not exist on the original user.
- 5. If the system-generated password feature is not enabled in Password Management, a Password tab will appear to the right of the User Profile tab where administrators can manually create a password for the user. Please note that the password requirements listed on the right will be checked off as the new password meets the required conditions.



Note: If the system-generated password feature is enabled, this tab will not be available. Instead, a system-generated password will be sent to the user upon completion of the creation process.

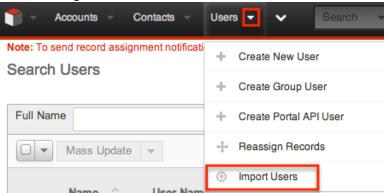
6. Click "Save".

The new user is now created and available for use. This process is applicable for all user types.

## Creating Via Import

The import function in Sugar allows you to push multiple user records into Sugar using a comma (or other character) delimited file instead of creating them one-by-one. Use the following steps to import users via the Import Users option. For more information on importing records to Sugar, please refer to the Import documentation.

1. Click the triangle in the Users module tab to open the Actions menu and select "Import Users".



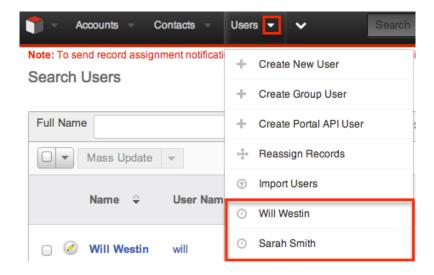
- 2. In Step 1, select the source of the data you are importing. Click "Next".
- 3. In Step 2, select the import file and choose "Create new records only". Click "Next".
- 4. In Step 3, confirm the import file properties. Click "Next".
- 5. In Step 4, confirm the field mappings for the import. Click "Next".
- 6. In Step 5, configure any fields you would like to use for duplicate checking.
- 7. In Step 6, view the import results.
  - The Created Records tab will show all of the new user records.
  - The Duplicates tab will show any records in the file that were detected as a duplicate and thus not imported from the duplicate check in Step 5 of the Import Wizard.
  - The Errors tab will show records that were not imported due to errors detected during import.

## Viewing Users

There are various options available for viewing user records in Sugar including via Users recently viewed, Users list view, Users detail view, dashlets, and reports.

## Viewing Via Recently Viewed

As you work, Sugar will keep track of which users you have recently viewed. Click the Actions menu in the Users module tab to see a list of your most recently viewed users, and click each name to open the user in detail view.



### Viewing Via List View

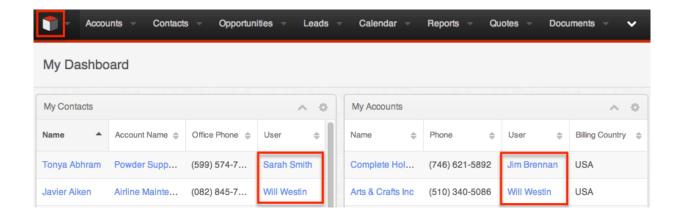
The Users list view displays all user records meeting the current search criteria. To access the list view, navigate to Admin > User Management. While the list view shows key user fields, you can click the user's name to open the record in detail view. For more information on viewing users via list view, please refer to the Users List View section of this documentation.

### Viewing Via Detail View

The Users detail view displays thorough user information including all user fields followed by subpanels of the user's related records belonging to various modules. The detail view also provides the Access tab, which allows Teams and Roles to be added for the user. Any admin user can click a user record's link from anywhere in the application, including from the Users list view to access the user's detail view. For more information on viewing the user's detail view, please refer to the Users Detail View section of this documentation.

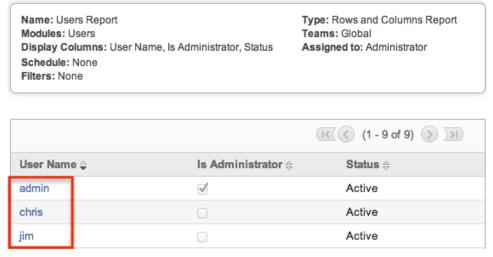
## Viewing Via Dashlets

The Home page displays a collection of Sugar Dashlets which allow users to get a quick view of various records, activities, reports, etc. Clicking a user's name from any dashlet will open the user in detail view and administrators can make changes to the user's profile as necessary. For more information on using dashlets, please refer to the Intelligence Pane documentation.



### Viewing Via Reports

Administrators have the option to build, run, and manage reports to gather key data from records within Sugar. When building a report, you may either create a report based on the Users module or add links to the Users module in a report based on a module related to Users. Once the report is run, you can view the user record's detail view simply by clicking the user's name in the report results. Please note that you can only access user detail views via the Rows and Columns and Summation with Details-type reports as Summation and Matrix-type reports do not include hyperlinks in their display columns. For more information on using reports, please refer to the Reports documentation.



# Searching Users

The Users module's list view includes Basic and Advanced Search functionality to help you locate users easily and effectively. Once the search is performed, the relevant search results will be displayed in the Users list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to pull up all records that include the keyword entered in the search. If you would like to broaden the search, you can

use the "Wildcard" (%) at the beginning of your text as well (e.g. %manager). This will pull up any record that has the word "manager" in the name, regardless of how it starts or ends (e.g. "Department Manager", "Product Manager" or "Project Manager").

For more information on using the various search methods as well as how wildcards are used, please refer to the Search documentation.

### Basic Search

Basic search offers only Full Name as a searchable field. From the Basic search panel, you can click "Advanced Search" to access additional search functionality.

#### Search Users



The buttons available in the Basic Search panel are also available in Advanced Search.

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.

When you run a search, Sugar will return records matching the criteria you typed in the Full Name search box. Once the search is complete, the relevant results will populate in the list view below the search panel. To see all user records, simply click "Clear" and then "Search" to perform a blank search with no filters.

Administrators can also configure what fields appear on the Users Basic Search via Admin > Studio. For more information on editing the Basic Search layout, please refer to the Studio documentation.

### Advanced Search

Advanced Search offers a more in-depth search experience than Basic Search including additional fields, layout options, and saved search capability. From the Advanced search panel, you can click "Basic Search" for simplified searching.

The buttons, checkboxes, and dropdowns available in Advanced Search have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.
- Layout Options: Use the expandable Layout Options section to configure your list view. For more information, please refer to the Layout Options section of the Search documentation.
- Saved Searches: Save, recall, update, and delete searches which you use often. For more information, please refer to the Saved Search section of the Saved Search documentation.

When you run a search, Sugar will return records matching all (as opposed to any) of the fields and checkboxes for which you have given a value. For example, if you select "Is Administrator" as "Yes" and enter in a "First Name" to search, Sugar will only return the user records with a matching first name that are admins. Once the search completes, the relevant results will populate in the list view below the search panel. To see all user records, simply click "Clear" and then "Search" to perform a blank search with no filters.

Administrators can configure what fields appear on the Users Advanced Search via Admin > Studio. For more information on editing the Advanced Search layout, please refer to the Studio documentation.

### Users List View

The Users list view displays all user records meeting the current search criteria. You can view the basic details of each user within the columns of fields.

You have the option to change what fields are displayed in list view by configuring your layout options available in Users Advanced Search. For more information on configuring your list view, please refer to the Layout Options section of the Search

### Checkbox Selection

You can perform actions on user records directly from the list view by first selecting the desired records. To select individual user records on the Users list view, mark the checkbox on the left of each row. To select or de-select multiple user records on the list view, use the options in the checkbox dropdown menu.

- Select This Page: Selects all records shown on the current page of user results.
- Select All: Selects all records in the current search results including all pages

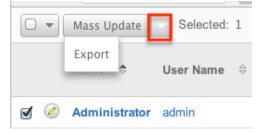
of user results.

• Deselect All: De-selects all records that are currently selected.



### **Actions Menu**

The Actions menu to the right of the checkbox dropdown allows you to perform various actions on the currently selected records.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Mass Update	Mass update one or more users at a time
Export	Export one or more users to a CSV file

### Pagination

List view displays the current search results broken into pages that you can scroll through rather than potentially displaying thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow next and previous buttons can be used to scroll through the records page-by-page. The two double-arrow first and last page buttons allow you to skip to the beginning or the end of your current results.

By default, Sugar displays 20 records per list view page, but administrators can

change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation.



### Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows in the column header. The list view may be sorted by only one column at a time. You can also set a default order-by column using the layout options in Advanced Search to specify which field to automatically sort results by in the list view. For more information on setting a default column sort, please refer to the Layout Options section of the Search documentation.



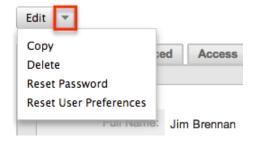
### Users Detail View

The Users detail view displays thorough user information including all user fields which are grouped by default into the User Profile, Advanced, and Access panels. You can also view information from records related to the Users module as subpanels below the detail view. For more detailed information about adding relationships, please refer to the Studio documentation. The detail view can be reached by clicking a user record's link from anywhere in the application including from the Users list view.

Administrators have ability to change what fields are visible in the detail view by configuring the field groupings via Admin > Studio. For more information on editing detail view layouts, please refer to the Studio documentation.

### **Actions Menu**

The Actions menu on the top left of each user's detail view allows you to perform various actions on the current record. Please note that administrators in Sugar can change the action items to be displayed as separate buttons instead of a dropdown menu via Admin > System Settings. For more information on how to configure the actions menu, please refer to the System documentation.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit this user
Сору	Duplicate this user
Delete	Delete this user
Reset Password	Remove the user's current password and email a new one
Reset User Preferences	Revert all user preferences back to system-wide settings

### **Tabs**

The detail view for a user is broken up into multiple tabs to better organize the different fields available in the Users module. Some of the available tabs in the user's profile are "User Profile", "Advanced", and "Access". A Downloads tab is also available when viewing your own profile. For more information on viewing your personal user profile, please review the User Preferences documentation.

### User Profile

The User Profile tab displays information specific to the user such as the user's name, user type, employment status, contact information, etc. Administrators have the ability to configure the User Profile layout via Admin > Studio. For more information on editing the user's profile in the Users module, please refer to the Editing Via Detail View section of this documentation.

### Advanced

The Advanced tab shows information specific to the user's preferences in Sugar. Information such as the user settings, locale settings, PDF settings, etc. can be easily viewed under this tab. Please note that the layout of this tab cannot be edited in Studio. However, you can edit the information under the tab by clicking

the Edit button on the user's detail view. For more information on editing the user's profile, please refer to the Editing Via Detail View section of this documentation.

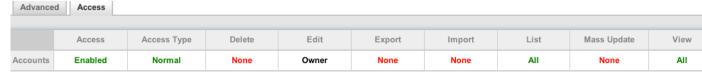
#### Access

The Access tab summarizes the user's Team and Role settings so that it can easily be viewed in one place. The Access table, Roles subpanel, and My Teams subpanel will appear under the tab.

Access Table: The Access table summarizes the set of permissions assigned
to the user and allows you to view the type of access they have along with the
actions (e.g. View, Edit, Delete, etc.) they can perform in Sugar. This table is
very similar to what appears in Admin > Role Management, but this table is
not editable in the Users module.

Note: Users with more than one role assigned will have the more restrictive role setting prevail on the access table. For example, if one role allows the user to delete records in the Contacts module, but the other role does not allow record deletion, the user will not be able to delete records in the Contacts module.

The table will list the modules in rows on the far left with column headers representing the type of action (e.g. Delete, Edit, Export, etc.) users can perform in each module. For more information on role settings, please refer to the Roles documentation.

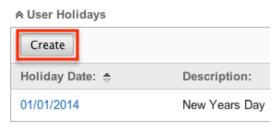


- Roles Subpanel: The Roles subpanel will list all of the roles assigned to the
  user along with the description of each role. Roles work in conjunction with
  teams to form a robust security model for non-admin users in Sugar. Roles
  control three different layers of access for users within Sugar: module, field,
  and action-level access. System administrators can easily assign roles to the
  user as well as remove roles via the Roles subpanel.
- Teams Subpanel: The Teams subpanel will list all of the teams assigned to the user along with the description of each team. The defined permissions determine what records a user is and is not able to access. Teams are used in conjunction with roles to form a robust security model for non-admin users in Sugar. System administrators can easily assign teams to the user as well as remove teams via the My Teams subpanel. For more information on team settings, please refer to the Teams documentation.

# Subpanels

Subpanels can be added to the Users module by creating relationships via Admin > Studio. All available subpanels will appear at the bottom of the user's detail view. For more information on adding relationships, please refer to the Relationships section of the Studio documentation.

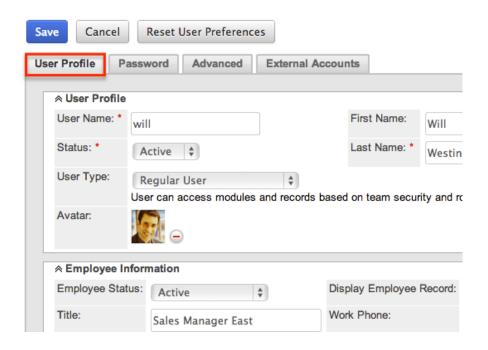
The User Holidays subpanel is the only subpanel available for the Users module out of the box. This subpanel allows administrators to select specific days that the user will not be working. This is used when calculating timing on the projects module. Holidays can be added using the Create button and inputting a date and description of the holiday.



## **Editing Users**

The user's profile can be easily edited by the user or the administrator by clicking the Edit button on the user's detail view. In addition, changes to the user's profile can be made via the Users list view as well by clicking the Pencil icon to the left of the user's name. Editing the user's profile from the detail view and list view, opens the full edit view layout which includes all of the relevant fields that can be updated as necessary.

Will Westin » Edit



### Editing Via Detail View

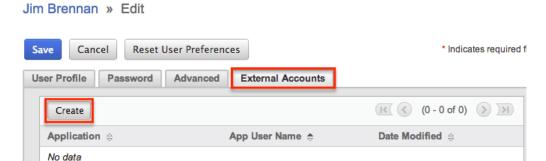
You can edit users by clicking the Edit button on the upper left of the user's detail view. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve the changes made. For more information on the detail view, please refer to the Users Detail View section of this documentation.



#### **External Accounts**

When viewing the edit view of a user, the External Accounts tab appears to the right of the Advanced tab. The External Accounts functionality allows you to connect external applications to Sugar, such as GoToMeeting, Google Drive (Google Docs), and WebEx. To create an external account record, follow the following steps:

- 1. Navigate to the detail view of the user to whom you would like to add the account.
- 2. Click on the External Accounts tab then click "Create".



- 3. Select the application you will be connecting to from the Application dropdown field. The fields available to complete will vary depending on the application (GoToMeeting, Google, WebEx) selected. Please note that additional external applications will appear on the list if they are enabled via Admin > Connectors.
- 4. Enter the necessary information for the external application and click "Connect".

Connect	Cancel		
Application:	GoToMeeting 💠	Status:	Click <b>Connect</b> to connect this account to Sugar.
App User Name: *	jbrennan@example.com	App Password: *	•••••

Should you wish to prevent users from creating external accounts, you can remove

The out of the box connectors perform the following functions:

- GoToMeeting: The GoToMeeting connector allows you to create meetings in Sugar that are tied to your GoToMeeting account and will show as such on your GoToMeeting account. This allows the user to, after creating the Sugar meeting record, start the GoToMeeting directly from within Sugar's Meetings
- Google: The Google connector allows you to create documents within Sugar that, instead of uploading a file to the server hosting Sugar, allows the user to link to an existing Google document from Google Drive or to upload a file to that account. When clicking on a document name in the Documents module or any Documents subpanels, the user will be brought to Google Drive instead of the download being initiated.
- WebEx: The WebEx connector allows you to create meetings in Sugar that
  are tied to your WebEx account and will show as such on your WebEx
  account. This allows the user to, after creating the Sugar meeting record,
  start the WebEx meeting directly from within Sugar's Meetings module.

## Editing Via List View

You can edit users via the list view by clicking the Pencil icon to the left of each user's name. The full edit view layout will open allowing you to make any changes to the user's profile as necessary. Once the user's profile has been updated, click "Save" to preserve the changes. For more information on the list view, please refer to the Users List View section of this documentation.



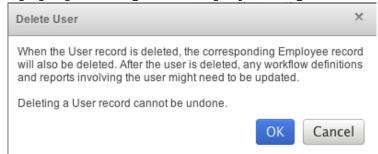
# **Deleting Users**

If a user record is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from the Users detail view. Please note that deleting user records will not delete any related records and will only remove the user from appearing in any lists (e.g. Assigned to) or other records. When a user is no longer

a member of the organization, it is best to deactivate users by changing the Status field to "Inactive" instead of deleting them. This way, any historical information tied to the user will still be available, but the user will no longer be able to log in to Sugar.

Use the following steps to delete a user via the detail view:

- 1. Navigate to the user's detail view via Admin > User Management.
- 2. Select "Delete" from the Actions Menu.
- 3. A pop-up message will display asking for confirmation. Click "OK" to proceed.

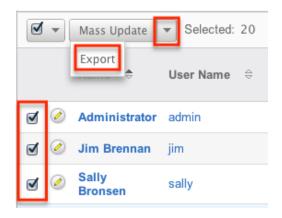


- 4. You will then be presented with the Reassign Records tool. Follow the steps on this page to complete the deletion. For more information on the Reassign Records functionality, please review the Reassigning Records section of this documentation.
- 5. Once your reassignment is complete, the user will be deleted and you can freely navigate around Sugar.

# **Exporting Users**

Sugar's Export option allows users to download all fields for the selected users to their computers as a .CSV (comma-separated values) file. This may be useful when needing to use User data with other software such as Microsoft Excel or to update existing records by exporting, making changes, and then importing the altered users back into Sugar. For more information on updating existing records via import, please refer to the Import documentation.

Users may be exported from the Users list view by selecting "Export" from the Actions menu. User data can also be exported via the Reports module by creating or accessing reports containing specifically chosen fields for users and their related record(s). Please note that only Rows and Columns-type reports have the ability to be exported. For more information on exporting records in Sugar, please refer to the Export documentation.



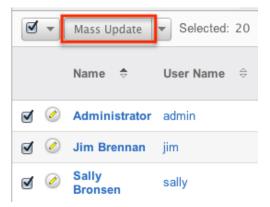
Due to PHP memory limitations on the server, there may be occasions when the application times out while exporting a large number of user records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

## Mass Updating Users

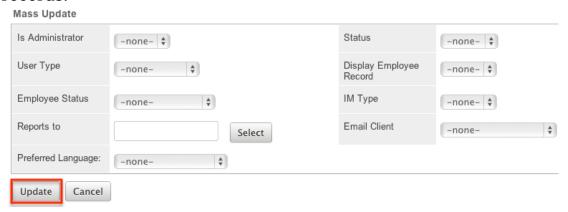
Mass Updating allows users to make the same change to multiple user records at once from the Users list view. Users with administrator or developer level access can control which fields are available to change during mass update via Admin > Studio. Currently, only fields with the data type of date, datetime, dropdown, multiselect, and radio may be altered during a mass update. Due to PHP memory limitations on the server, there may be occasions when the application times out while updating a large number of user records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches. For more information on configuring mass update, please refer to the Studio documentation in the Administration guide.

Use the following steps to mass update user records from the list view:

- 1. Navigate to the Users list view via Admin > User Management.
- 2. Use the list view's Basic or Advanced Search to identify users you wish to modify.
- 3. Select the desired users individually or using the checkbox dropdown's options.
- 4. Choose "Mass Update" from the Actions menu.



- 5. Scroll to the Mass Update panel and set values for the fields you wish to alter.
- 6. Click "Update" to save the changes to all of the currently selected user records.



## Resetting User Preferences

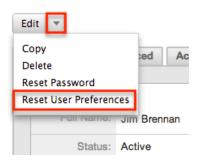
As users make changes while navigating around Sugar, their preferences are stored in the Sugar database. This includes preferences such as sort orders on list view, previous searches on both basic and advanced searches, and settings in the Advanced tab of the user profile. Users can reset their preferences back to the default out-of-the-box settings, which will revert the user's changes made in Sugar. Please note that this action cannot be undone. If the user is currently logged in, the changes will not take effect until the user is logged out and then back in.

Note: Resetting a user's preferences is the only way to allow a user access to Sugar if they have been locked out using the Login Lockout feature in Password Management.

Use the following steps to reset a user's preferences:

- 1. Navigate to the user's detail view via Admin > User Management and select the user (e.g. Jim Brennan) from the list view.
- 2. Select "Reset User Preferences" from the Actions menu.

#### Jim Brennan



3. A pop-up box will appear confirming the reset. Click "OK" to proceed.

### Resetting User Passwords

Administrators have the option to manually set or reset user's passwords as necessary. Setting a regular user's password is done simply through the Users module via Admin > User Management. The method used to reset the password will vary depending on the system-generated password feature in Admin > Password Management.

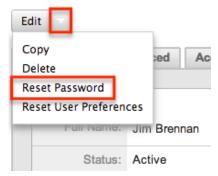
If the option is enabled, there will be a Reset Password option in the Actions menu of the user's detail view. Selecting this option will delete the user's current password and automatically email the user a new system-generated one. Please note that this action cannot be undone.

Note: If the user is currently logged in, the changes will not take effect until the user is logged out and then back in.

Use the following steps to reset a user's password:

- 1. Navigate to the user's detail view via Admin > User Management.
- 2. Select "Reset Password" from the Actions menu.

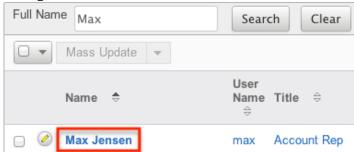
#### Jim Brennan



3. A pop-up box will appear confirming the reset. Click "OK" to proceed.

If the system-generated password feature is disabled in Admin > Password Management, administrators will be able to define a user's password through User Management using the following steps:

1. Navigate to the user's detail view via Admin > User Management.

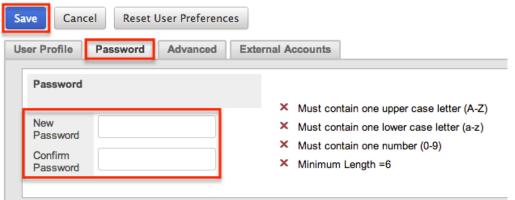


2. Click the Edit button on the upper left of the detail view.

Max Jensen



3. Click the Password tab and enter the new password for the user.



4. Click "Save" to confirm your change and complete the process.

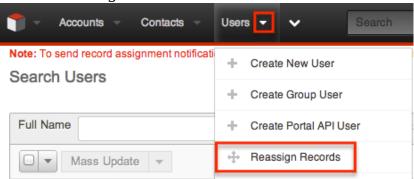
# Reassigning Records

Reassign Records is a tool available in the Users module for administrators to change the Assigned To and Team fields for a specific user's records. This is best used when a user is changing departments, teams, or roles within the organization, or if the user is no longer an employee or using Sugar. The Reassign Records tool is automatically presented when deleting or deactivating a user. Please note that

reassigning records cannot be undone in Sugar.

Use the following steps to reassign records:

- 1. Navigate to the Users module via Admin > User Management.
- 2. Click the triangle in the Users module tab to open the Actions menu and select "Reassign Records".



- 3. Select the user to whom the records are already assigned in the From User field.
- 4. Select the user to whom the records will be assigned to in the To User field. Note: You can select the same user in both fields if you are just changing the team for all of the user's records.
- 5. Select which team(s) the records will be assigned to in the Set Teams to field.
- 6. Select the module(s) you wish to include in the record reassignment. Multiple modules can be selected by holding down the Control key when using a PC or the Command key when using a Mac.



7. Selecting certain modules will display specific filters (e.g. Type) which can be applied to the module. Use these filters if you do not want to include all records assigned to the user.

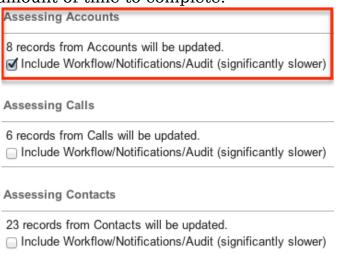
The list of modules and their filter fields are as follows:

Module	Filter Field	
Accounts	Type	
Bugs	Status	
Calls	Status	
Cases	Priority	
	Status	
Opportunities	Sales Stage	
	Туре	
Tasks	Status	

After selecting any filters, click "Next" to access the reassignment summary. If you would like to see a detailed list of the changes that were made, click

"Verbose Output". This list will include a link to the changed records and a summary of changes that were made.

If you would like the changes to show in the Change Log for the changed record, have any relevant workflows fire, or have assignment notifications sent out, please click the Include Workflow/Notifications/Audit checkbox. Note: This process performs a large set of actions at once and may take a long amount of time to complete.



Click "Next" to complete the reassignment.

The final summary page will show how many records were affected and if any errors occurred during the reassignment. Click "Return" to return to the main screen of the Reassigning Records tool.

Processing Contacts			
Update complete: 23 affected			
Return			
Keturn			

Due to PHP memory limitations on the server, there may be occasions when the application times out while reassigning a large number of user records. If you encounter an error when performing this action, we recommend reassigning records in smaller batches via each module's mass update option.

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# Sugar Connect

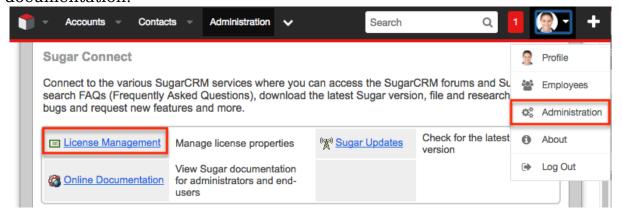
### Overview

The Sugar Connect section of the Administration page allows you to connect to various SugarCRM online resources such as License Management, SugarCRM

Support, Sugar Updates, and Online Documentation. Other than License Management and Sugar Updates, which are only accessible to users with administrator access, Sugar's Support page and online documentation can be accessed by all user's via their Sugar account or directly from the SugarCRM website. This documentation will cover how to manage your Sugar license, check for Sugar updates, as well as access Sugar's support and online documentation page.

## License Management

The License Management page allows administrators to manage their Sugar license properties. You can use this option to manage the Sugar license for your organization and view information such as the download key, expiration date, number of users, etc. System administrators can also edit and re-validate the license via the License Management page. Please note that your commercial edition of Sugar is purchased with a set number of licenses that allow users to access the application. All active system administrator's as well as regular non-admin user's count towards the number of purchased Sugar licenses. For more information on the various user types (i.e. regular user, system administrator, group user, etc.) available in Sugar, please refer to the User Management documentation.



# Download Key

The download key is a 32 digit alphanumeric key that is unique to your Sugar account. The number of user licenses your organization purchased, as well as the subscription expiration date is tied to your download key. Upon purchasing Sugar, you will receive a Welcome email containing your download key information which will need to be entered during installation of the Sugar application. Once the download key is entered in the system, the corresponding information such as the expiration date, number of users, number of offline client licenses, and number of concurrent self-service portal users will automatically populate and be displayed in Admin > License Management.

## Editing the License Key

Although rare, there may be times when system administrators will need to edit their license key via Admin > License Management. For example, if you change your Sugar edition (e.g. Corporate to Professional), a new license key may be generated and provided by SugarCRM. You will need to update the License Management page with the new license key to associate your account to the new Sugar edition.

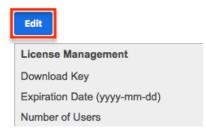
The fields in the License Management panel are as follows:

- Download Key: The download key associated to your Sugar subscription.
- Expiration Date : The date your Sugar license expires.
- Number of Users : The number of users allowed to access Sugar based on the number of purchased licenses.
- Number of Offline Client Licenses: The number of offline clients associated with your license key.
- Number of Concurrent Self-Service Portal Users : The number of self-service portal users associated with your license key.

The following steps cover editing the license key for your account when changing Sugar editions as an example:

- 1. Navigate to Admin > License Management.
- 2. Click the Edit button and enter the download key associated to your new Sugar edition.

License Management



- 3. Once the download key is entered, click "Save".
  - The expiration date, number of users, etc. will automatically be updated based on the new download key.

#### License Management



Please note that when you save the new license key information, the system automatically checks it against the information in the SugarCRM database to make sure it is valid.

#### License Validation

The License Validation panel of the License Management page allows administrators to re-validate their license as necessary. Sugar automatically re-validates your license once every 90 days as long as a system administrator logs into Sugar within the 90 day period. However, if your system fails to communicate with the License Validation server through the internet or you are behind a firewall; you will have to re-validate the license via Admin > License Management. If the re-validation is successful, the Status field in the License Validation panel will display the timestamp of the successful validation. The validation key expiration date will be 90 days from the date of the last successful validation date.

### License Expiration

Typically, Sugar licenses are purchased for a one year period (e.g. 01/03/2013 to 01/03/2014). Please note that you will be notified of your upcoming subscription renewal via email or call and a notification will appear in the Sugar cube on the upper left of your Sugar account regarding your license expiration. If the subscription is renewed past the expiration date, then administrators must re-validate their license via Admin > License Management in order to update the account with the new subscription. If the administrator does not re-validate the license, regular users will be prohibited from logging into Sugar until the license is successfully validated by the administrator.

#### Re-validating the License

Although Sugar automatically re-validates your license once every 90 days, there

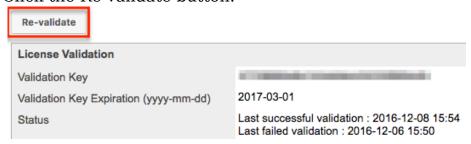
may be special circumstances where administrators must re-validate the license via License Management. For example, if you renew your subscription after the expiration date or if you purchase additional users mid-term, you will have to re-validate the license via Admin > License Management in order to update your Sugar account with the new subscription.

The fields in the License Validation panel are as follows:

- Validation Key: System generated validation key associated to your Sugar subscription.
- Validation Key Expiration : The date the validation key expires. The expiration date is typically 90 days from the last successful validation date.
- Status: The status displaying the timestamp of the last failed or successful validation.

Use the following steps to re-validate the license in Sugar:

- 1. Navigate to Admin > License Management.
- 2. Click the Re-validate button.



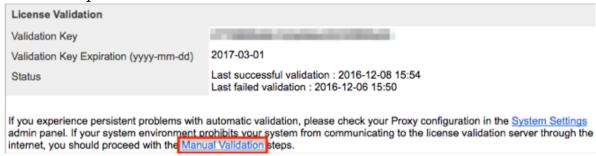
The system will communicate with the License Validation server to validate your license based on your Sugar subscription. If the re-validation is successful, then the status will reflect the date and time of the successful validation. If the system fails to connect successfully with the License Validation server and you cannot re-validate your license, use the Manual Validation option at the bottom of the License Validation panel.

#### **Manual Validation**

If your system fails to communicate successfully with the License Validation server through the internet, you have the option to perform a manual validation via Admin > License Management.

Use the following steps to perform a manual validation in Sugar:

- 1. Navigate to Admin > License Management.
- 2. Click the Manual Validation link located at the bottom of the License Validation panel.



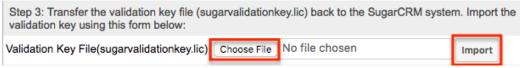
3. Click the Export Download Key button to export the sugarkey.lic file. Select "Save to Disk" in the pop-up window to save the file to your local machine then click "OK".



- 4. Go to http://updates.sugarcrm.com/license and submit the sugarkey.lic file for validation.
  - If the validation is successful, the validation key file (sugarvalidationkey.lic) will be generated, and the system will prompt you to save the file.



- 5. Log back into your instance and navigate to the Manual Validation page (Admin > License Management > Manual Validation).
- 6. On Step 3, choose the sugarvalidationkey.lic file on your local machine and click "Import".



Once the validation key is imported successfully, you have completed the manual validation process. Sugar will update the validation status along with the Validation Key Expiration date for the license key.

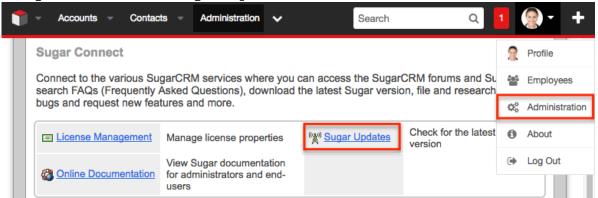
# Sugar Updates

The Sugar Updates page allows administrators to check for the latest available

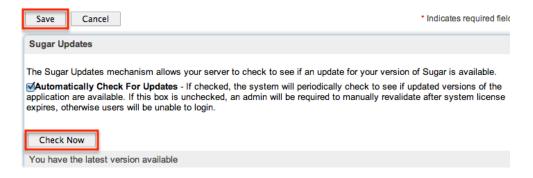
Sugar versions. By default, Sugar automatically checks for updates on a periodic basis to see if any version updates are available for your instance. If a new version update is available, the Sugar Updates link in the Administration page will appear red and display the latest Sugar version next to it. Administrators can uncheck the automatic updates option in the Sugar Updates page if they do not wish to have the system automatically check for updated version releases.

Use the following steps to perform a manual check for Sugar updates:

1. Navigate to Admin > Sugar Updates.



Click the Check Now button to see if a new update of Sugar is available. Sugar Updates

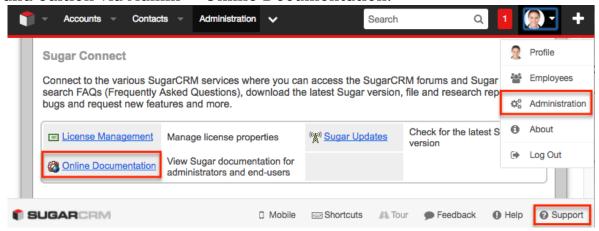


If there is an available version update, a message will appear below the Check Now button with the latest version along with a message to visit support.sugarcrm.com to retrieve and download the latest version. Please note that clients hosted on Sugar's cloud service are normally upgraded by the SugarCRM team on a predetermined schedule as releases are made available. On-Site clients will need to perform the upgrade themselves as Sugar is hosted on their servers. If the system detects that you have the latest version of Sugar, then the message will inform you that you have the latest version available.

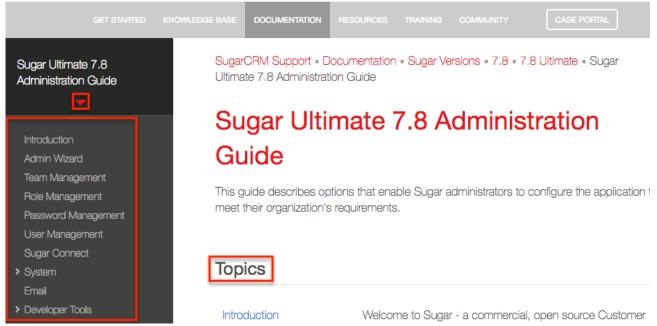
## Online Documentation

Administrators can easily access the documentation for their current Sugar version

and edition via Admin > Online Documentation.

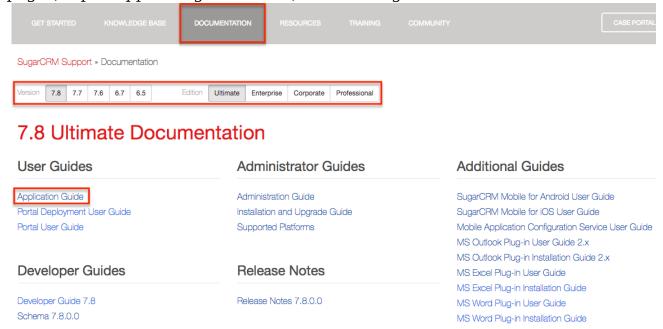


A new window will open directing you to the appropriate Administration Guide, which provides information about configuring and administering your Sugar instance. You can view specific sections of the Administration guide by selecting the various topic links (e.g. Users, System, Email) on the main page or from the Administration Guide tree menu to the left. You can also access the relevant Application Guide which provides information about the functionality available to end users. Simply click the down arrow at the top of the menu to the left of the Administration Guide and select the Application Guide link (e.g. Sugar Ultimate 7.8 Application Guide). To learn more about a specific module in Sugar, select the appropriate topic link (e.g. Accounts, Contacts) on the main Application Guide page or from the menu on the left.



Please note that all users can view the online documentation as well by clicking the Support link in Sugar's footer. Doing so will open the SugarCRM Support page in a separate tab, and users can click the DOCUMENTATION tab on the navigation bar to view the appropriate guides. Once the main documentation page opens, simply

select the version and edition specific to your Sugar instance. The guides (e.g. User Guides, Administrator Guides) specific to the selected version and edition of Sugar will now display on the page. Additional guides (e.g. SugarCRM Mobile for iOS User Guide, MS Outlook Plug-in User Guide 2.x) are available to view as well to the right of the page. Please note that you can also access documentation outside of your Sugar instance simply by navigating to the SugarCRM Support page (http://support.sugarcrm.com) and clicking the DOCUMENTATION tab.



The Application and Administration Guides provide end-users and administrators with an in-depth look at configuring, customizing, and utilizing Sugar, as well as the various options available in the application. The Installation and Upgrade Guide provide users with the necessary instructions to properly install or upgrade their On-Site Sugar instance. The Supported Platforms page covers the supported components that are necessary to run the Sugar application. The Developer Guides provide developers with advanced information on configuring and customizing Sugar to best meet their organization's needs. The release notes cover feature enhancements, fixed issues, etc. that are included in the specific version release. Additional guides include instructions for using mobile applications as well as plug-ins for Microsoft Office and IBM Notes.

Last Modified: 03/16/2018 10:36pm

# System

#### Overview

Sugar comes with the ability to configure many different system settings to

personalize the way Sugar works. The System section is only available to administrative users and can be accessed via the Admin screen. The following sections are available options from the System section.

System contains the following menus:

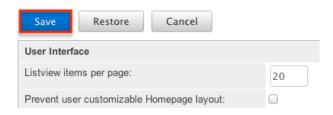
System Settings	Configure system-wide settings
Locale	Set default localization settings for your system
Currencies	Set up currencies and conversion rates
Languages	Manage which languages are available for users
Search	Select modules for the Global Search and configure full-text searching
Connectors	Manage connector settings
OAuth Keys	OAuth key management
Import Wizard	Import records easily into the system
Upgrade Wizard	Upload and install Sugar upgrades
Backups	Back up web files for your Sugar instance
Repair	Check and repair Sugar
Diagnostic Tool	Capture system configuration for diagnostics and analysis
Tracker	Enable/Disable tracking
Scheduler	Set up scheduled events
PDF Manager	Manage templates for generated PDF files
Mobile	Select modules to appear in the Mobile applications
Web Logic Hooks	Configure actions to call out to code hosted outside of your Sugar instance to process specified actions.

# System Settings

System Settings allows administrators to configure system-wide settings to your organization's specifications. The system settings are split across a few different panes of related information. Change the values in any of the panels and click

"Save" to preserve your changes.

System Settings

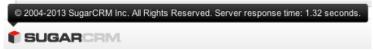


Alternatively you can click "Restore" to restore the system settings back to default.

#### User Interface

The User Interface pane consists of a group of settings that affect the interface of Sugar. Use the following settings to configure the different aspects of the interface:

- Listview items per page: The maximum number of records to display per list view results set, as well as the search results set on the View All Results page for Global Search. By default, this is set to 20 records per results set. The system paginates lists that contain more than the specified number of list view items per page.
  - Note: The recommended setting is below 50 for acceptable performance levels. As additional fields are added to the list view, this number should be at the lower end of the recommended setting.
- Subpanel items per page: The maximum number of records to display on a page in subpanels. The system paginates lists that contain more than the specified number of records. Defaults to 5.
  - Note: Recommended setting is no more than 25 with lower values recommended when subpanels include many fields.
- Display server response times: When hovering over the logo located in the footer on every page, a statistic 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 option if you do not want to display the response time. Defaults to Enabled.



• System Name: The name of this instance of Sugar. Displays in the browser's title har



• Show Full Names: Select this option to set the default value for new users to

- display the full name of users instead of login names throughout Sugar.
- Current Logo: The current logo being used in the bottom left hand corner of the footer bar.
- Select Logo: Click "Choose File" to navigate to and select a new logo for your system. The dimension should be 212 X 40 pixels, with the standard transparent background color, in PNG or JPG format.
- Display Downloads Tab: Select this option to display the Download tab in the User settings and provide users with access to Sugar plug-ins and other available files



- Lead Conversion Options: Select an option from the dropdown menu to determine the handling of related activity records (e.g. calls, tasks, etc.) during lead conversion. For more information, please refer to the Leads documentation in the Application Guide.
  - Move: This option moves all of the lead's activities to the contact record created during conversion.
  - Do Nothing: This option does not alter the lead's activities during conversion. The activities remain related only to the lead. This is the default setting.
- Display actions within menus: Select to display detail view and subpanel actions within a dropdown menu. If disabled, the actions will display as separate buttons.
  - Note: Only applies to Legacy modules.
- Collapse all subpanels and disable sticky feature: Select this option to
  collapse all subpanels in the record view by default and disable automatically
  expanding previously-expanded subpanels in order to improve performance.
  Once enabled, users wishing to view subpanel data will need to expand the
  subpanel each time they return to a module.
  - Note: Only applies to Sidecar modules.
- Prevent user customizable subpanel layout: Select this option to prevent users from dragging and dropping subpanels to a different location in the detail view layout.
  - o Note: Only applies to Legacy modules.

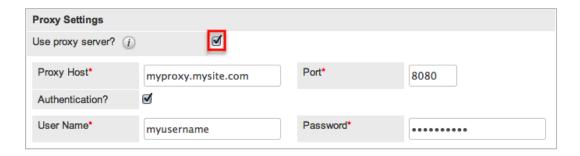
## **Proxy Settings**

Proxy servers redirect Internet traffic coming from and to the server running Sugar. If you are using a proxy server, you will need to enter proxy information into the system settings to allow the Sugar instance to communicate with the internet. This is necessary to allow the system licensing to validate and update. For more information on system licenses, please refer to the License Management section of the Sugar Connect documentation in the administration guide.

Note: Proxy settings should not be used for instances hosted on Sugar's cloud service.

Use the following settings to configure proxy settings:

- Use Proxy Server? : Select this option to use a proxy server and to reveal the following fields.
- Proxy Host: The host name or ip address of the proxy server to use.
- Port : The communication port of the proxy server.
- Authentication? : Select this option if the proxy server requires authentication and to reveal the following fields.
- User Name: The user name to authenticate to the proxy server.
- Password : The password to authenticate to the proxy server.



## SkypeOut

SkypeOut takes any stock or custom field that has a type of Phone and makes it a link that launches Skype to call the phone number. The phone number must be formatted properly to use this feature. It must be "+" "The Country Code" "The Number" (e.g., +1 (555) 555-1234). Select "Enable SkypeOut integration" to enable this feature.



#### Tweet to Case

The Tweet-to-Case feature allows users to create cases directly from incoming tweets within the Twitter dashlet. Select the Enable Tweet to case integration checkbox to enable this feature. For more information on using the feature, please refer to the Twitter Dashlet and Cases section of the Cases documentation.



Note: The Twitter connector must already be set up prior to enabling this feature. For more information on how to configure the Twitter connector, please refer to the Connectors section of this documentation.

### Preview Pane Settings

The preview edit feature allows users to edit records directly from the intelligence pane on list views. Select the checkbox labeled "Enable edit in Preview pane" to enable this feature. For more information on using the feature, please refer to the



#### Advanced

The Advanced panel consists of the following group of settings for advanced configuration of Sugar:

- Validate user IP address: Select this option to validate user's IP address
  while accessing Sugar. If the IP address of a user changes in mid-session,
  Sugar will log them out and force them to log back in for security reasons.
  Note: Some high availability systems, VPNs, and switching Wi-Fi and wired
  connections may change IP addresses and thus cause your users to be logged
  out when they have not changed their configuration.
- Log slow queries: Select this option to log queries that take longer than the slow query time threshold. This is useful for performance debugging.

  Note: There is an inherent overhead to logging slow queries. If the threshold is set too low, it may cause performance issues.
- Maximum upload size: Specifies the maximum file size in bytes that is allowed to be uploaded to Sugar. This setting affects images, import files, and module uploads.
  - Note: The file upload size is also dependent on the php.ini upload\_max\_filesize and post max size directives.
- vCal Updates Time Period: Determines the number of months the Free/Busy data is published to vCal. Specify the number of months in advance of the current date that Free/Busy information for calls and meetings to be published. To turn Free/Busy publishing off, enter "0". The maximum is 12 months.
- Log memory usage: Select this option to log memory usage per action performed in Sugar. The data will be stored in the ./memory\_usage.log file.
- Slow query time threshold (msec): Specify a threshold in milliseconds to begin logging slow queries at. If "Log slow queries" is selected, queries that take longer than the threshold to process will be logged. If you have enabled

- the Tracker Queries option on the Tracker page, you can run the pre-defined Slow Queries report to view slow queries.
- Display stack trace of errors: Select this option to display where errors occur
  in the application's stack trace. This option is for debugging purposes and
  should not be left on in a production instance.
- Developer Mode: Select this option to disable caching to immediately view changes made to language, vardefs, and template files. This option is for debugging purposes and should not be left on in a production instance.
- Import Maximum Number of Rows: Specify how many rows are allowed within import files. If the number of rows in an import file exceeds this number, the user will be alerted. If no number or zero is entered, an unlimited number of rows are allowed.
  - Note: Header rows count towards the total number of rows in the import file.
- Prevent private team names from inheriting the user's name fields: Select this option if private team names may be different from the user's first and last name. By default, Sugar will update a private team name to [Firstname Lastname] any time the corresponding user's profile is edited and re-saved, even if the change was not made to the user's first or last name. Enable this option to ensure that edited private team names do not revert to the system default.

### Logger Settings

Sugar comes with a built-in logging system to log information or errors that occur in the application. By default, the logs are written to sugarcrm.log in the Sugar root directory. If a problem arises, you can refer to the log file for information that may help in troubleshooting the issue. The Logger Settings panel consists of a group of settings that affect the Sugar logs.

Note: The Logger Settings panel is hidden for instances on Sugar's cloud service. Should you require a log level to be temporarily changed on a Sugar cloud production environment, you must open a support case. For more information about default configuration settings for Sugar's cloud environments, please refer to the Sugar Cloud Policy Guide.

Use the following settings to configure the different aspects of Sugar logging:

- Log File Name: Specify a name for the log file. Defaults to sugarcrm.
- Maximum log size: Specify the maximum size of the log file in megabytes (MB). The default is 10MB. Once a log file reaches the specified size it is renamed to have an incrementing number and a new file will be created to contain new logs.
- Log Level: Select the event level that you want to capture in the log file. The levels are listed below in order of the most log records to the least. The

default level is fatal. When specifying a logging level, the system will create log files for the specified level as well as higher levels. For example, if you select "error", the system creates log files for "error", "fatal", and "security". Please note that there is an inherent overhead to logging. If the log level is set too high, it may cause performance issues. The "info" and "debug" settings are not recommended for continuous use in a production environment.

- o debug: Logs events that help debug the application
- o info: Logs informational messages
- o warn: Logs potentially harmful events
- error : Logs error events in the application
- fatal: Logs severe error events that cause the application to abort
- security: Logs events that may compromise the security of the application
- off: The logger will not log any events
- Extension : Specify the file extension for the log file. Defaults to .log.
- Default date format : The date format for the log file. This format must be supported by strftime. Defaults to %c.
- Maximum number of logs (before rolling): 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. Defaults to 10.
- Append after filename: Select a time period from the dropdown list to append to the file name (None, Month\_Year, Day\_Month, Month\_Day\_Year). This makes it easier to identify the log that you want to view.

## View Log

The Sugar log is stored in the root directory of Sugar and is accessible from the operating system. Administrators who do not have access to the operating system running Sugar do have the ability to view the log through Sugar. Select "View Log" from the System Settings screen.

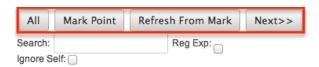


This opens the log viewer for the current log file. You have the following options for navigating the log file:

- All : Select this option to view the entire log.
- Mark Point : Select this option to mark a starting point in the current log file.
- Refresh From Mark: Select this option to view any entries made in the log

after the most recent mark.

• Next : Select this option to view new entries in the current log file.



A common method for utilizing these options to debug a problem would be to click "Mark Point", perform the action causing problems, and then select "Refresh From Mark" to see any log entries caused by the action being debugged.

You also have the ability to search within the log file for keywords. To perform a search, simply enter a keyword into the search box and press Enter on your keyboard to execute the search.

#### Locale

Locale allows administrators to configure localization settings to your organization's specifications. Some of the settings specified here can be overridden by user level personalizations such as datetime format on the User Preferences page. The locale settings are split across a few different panels of related information. Change the values in any of the panels and click "Save" to preserve your changes.

Locale



#### User Interface

The User Interface panel consists of a group of locale settings that affect the interface of Sugar. Use the following settings to configure the different aspects of the interface:

- Date Format : Select a format from the dropdown for displaying the date throughout the application.
- Language: Select a default language from the dropdown for use throughout

the application. Users can select a different language from the login page. For more information regarding enabling or disabling languages, please refer to the Languages section.

- Name Format: Select a format from the dropdown for displaying people names throughout the application. You can specify any combination of salutation, first name, and last name.
- Time Format: Select a format from the dropdown for displaying the time throughout the application.

Users have the ability to override the default date, time, and name formats through their user profiles. For more information on how to set locale settings per user, please refer to the Locale Settings section of the Getting Started documentation in the Application guide.

### System Currency

The System Currency panel consists of a group of currency settings that affect the interface of Sugar. Use the following settings to configure the different currency options:

- Currency: The name of the default currency your organization uses to conduct business.
- ISO 4217 Currency Code: The ISO code for the currency.
  - Note: This setting must be populated in order for the currency (e.g. EUR) to display in the Quotes detail view.
- Decimal Symbol: The default decimal symbol.
- Currency Symbol: The default symbol for the currency.
- 1000s Separator: The default delimiter to separate thousands.

Users have the ability to override the currency defaults through their user profiles. For more information on how to set currency settings per user, please refer to the

# **Export Settings**

The Export Settings panel consists of a group of export settings that affect different aspects of exporting in Sugar. Use the following settings to configure the different export options:

- Export Delimiter: The delimiter used to separate fields while exporting data. Defaults to a comma.
- Disable export : Select this option to disable the export option for all users, including administrators.

- Default Character Set for Import and Export : Select a default character set from the dropdown that handles the expected characters in an import and export. Defaults to UTF-8.
- Admin export only: Select this option to disable the export option for standard users, administrators will be allowed to export.

Users have the ability to override the default export delimiter and character set through their user profiles. For more information on how to set export settings per user, please refer to the User Preferences section of the Getting Started documentation in the Application guide.

Note: Locales that use character encoding other than UTF-8 must specify the appropriate character set.

#### **Database Collation**

The Database Collation panel only shows if running on a MySQL database and contains an option to change the collation of the connection Sugar makes to the database. Select the desired collation from the dropdown. Defaults to utf8 general ci.

Note: Changing this setting will not change existing tables, but only new tables going forward. If this setting does not match the collation of the current tables in the database then the database will return errors when accessing those tables.

### Currencies

Currencies allows administrators to configure all currencies and exchange rates in Sugar. The defined currencies are displayed in a table at the top of the page and a form is displayed at the bottom for creating a new currency. From the table you can select the currency's name to modify the details of the currency, or you can select "delete" to remove the currency.

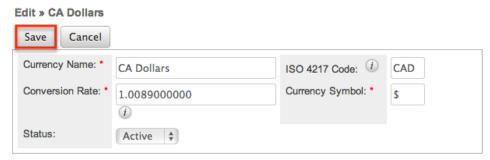
Currencies



The system currency is displayed here but is not editable. For more information on how to edit the system currency, please refer to the System Currency section. When selecting a currency, the form underneath the table is populated with the

selected currency's data. Modify the following fields and click "Save" to preserve your changes:

- Currency Name: The name or designation of the currency.
- Conversion Rate: The conversion rate to get to this currency from the system currency. In our example above, to get Canadian Dollars, you would have to multiply US Dollars by 1.0089. This value is the conversion rate.
- Status: The current status of the currency (e.g., Active, Inactive). Selecting "Inactive" will remove this currency from the dropdowns throughout the application.
- ISO 4217 Code: The ISO code for the currency.
  - Note: This setting must be populated in order for the currency (e.g. EUR) to display in the Quotes detail view.
- Currency Symbol: The default symbol for the currency.



To create a new currency in the system, simply populate the Create form with the details of the new currency and click "Save".



Note: When creating a new currency, you can populate the ISO 4217 Code and the Currency Name and Currency Symbol will automatically populate based on the code entered.

# **Updating Conversion Rates**

Users may use the currencies defined in Admin > Currencies when populating any currency amount field in stock or custom modules. When doing so, the exchange rate for the selected currency is stored on the record itself. The conversion rate stored on each record will update to match the current rate specified in Admin > Currencies under the following scenarios:

- The record undergoes a save event (e.g., mass update, manual save, etc.) and the record's currency has a different conversion rate defined in Admin > Currencies than is currently saved in the opportunity.
- An administrator updates the currency exchange rate under Admin > Currencies. This will trigger a scheduled job which updates all records saved with that currency to the new rate.

To keep amounts relevent to closed business historically accurate, opportunity and quote records will not update if they are in a closed status. For more information about updating opportunity currency rates, please refer to the Opportunities documentation in the application guide. For more information about updating quote currency rates, please refer to the Quotes documentation in the application guide.

# Languages

Languages allows administrators to configure which languages are available for users to login with. To disable a language, simply drag the language from the Enabled Languages panel to the Disabled Languages panel and click "Save".

Languages

Save Cancel **Enabled Languages** Disabled Languages English (US) Български Česky Dansk Deutsch Ελληνικά Español עברית Magyar Italiano Lietuvių Save Cancel

Drag and Drop the names of the languages below to enable and disable them.

Any languages in the Disabled Languages section will not be in the Languages dropdown while logging in.

## Search

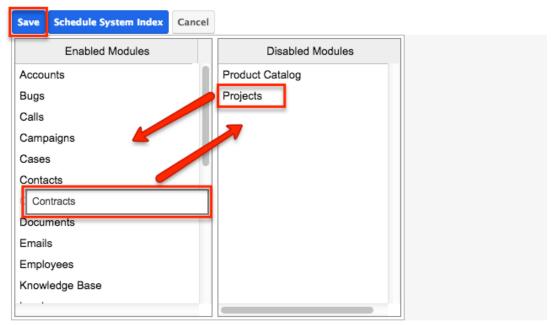
Global search in the desktop application allows users to search for information across their entire Sugar database as opposed to restricting search within a specific module. For more information on how to use global search, please refer to the Global Search section of the Search documentation in the Application guide. The Search administration settings allow administrators to configure, enable, and index full text search as well as configure legacy global search. Global searches in the desktop application will be returned by full text search. SugarCRM Mobile global searches will be returned for modules enabled in the Legacy Global Search Configuration page.

### Configuring Full Text Search

Sugar's global search is enabled with full text searching abilities which uses the elasticsearch engine. Full text search allows users to search throughout various fields and modules for an enhanced search experience. In order for results to return for a particular module, the module must be enabled on the Full Text Search Configuration page. To enable or disable a stock or custom module for global search, simply drag and drop the module between the Enabled Modules or Disabled Modules column and click "Save".

## Full Text Search

Select the module(s) that users will be able to search against using the Global Search. Perform a full system index after enabling modules for the Global Search. To enable module fields for full text searching, use Studio.



For the desktop application, disabled modules will not be included in the global search results nor available to select in the Modules list on the Global Search bar. For more information on filtering global search by modules, please refer to the Filtering by Module section of the Search documentation in the Application guide.

Modules must be enabled for SugarCRM Mobile global searches in the Legacy Global Search Configuration page.

After enabling modules for Global Search, a full system index must be performed in order for the module to appear in the search results. For more information on performing a system index, please refer to the Indexing Full Text Search section of this documentation.

Individual module fields must be enabled for full text search in the field attributes via Studio > {Module Name} > Fields > {Field Name}. For more information, please refer to the Studio documentation.

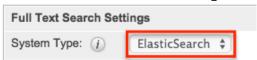
Note: Only modules enabled for Full Text Search can be referenced in user posts on the activity stream. For more information on referencing record's in posts, please refer to the Activity Stream documentation in the Application guide.

### Activating Full Text Search

Sugar's global search is enabled with full text searching abilities utilizing the elasticsearch engine. Full text search (FTS) allows users to search throughout various fields and modules for an enhanced search experience. Please note that elasticsearch is required to be set up when installing Sugar for on-site instances and it is automatically enabled by default for instances on Sugar's cloud service.

Use the following steps to configure full text search:

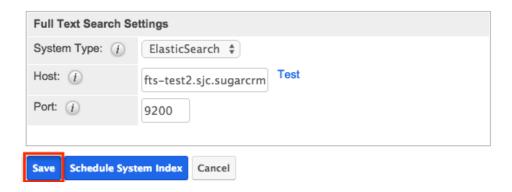
- 1. The ElasticSearch server is selected by default for the System Type field.
  - Note: For more information on elasticsearch, please refer to www.elasticsearch.org.



- 2. Enter the host name or IP address of the full-text search engine.
  - Note: Defaults to "localhost" assuming you are running the search engine on the same server as Sugar.
- 3. Enter the port number for Sugar to connect to the search engine.
  - Note: Defaults to "9200", which is elasticsearch's default port number.
- 4. Click "Test" to verify that the settings are entered correctly and confirm that Sugar connects to the search engine successfully.



- 5. A popup message will confirm if the connection was successful or not.
- 6. If the connection was successful, click "Save" to preserve your changes.



Each enabled module has a set of fields that are enabled for full text searching by default. Administrators can enable or disable specific fields for full text search via Admin > Studio. For more information on how to enable or disable fields for full text search, please refer to the Studio documentation.

Note: Once a new module or field is added to full text search, you must perform a system index in order for that field or module to be included in the full text search results.

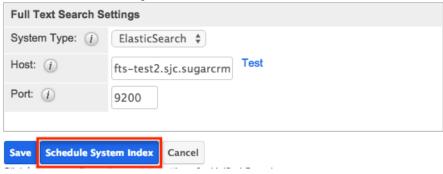
### Indexing Full Text Search

Full text search relies on an index of the records and data to be able to quickly locate results. After enabling full text search, or enabling a module or field, you should perform a full index of your system.

Note: System performance can be affected while the index is being performed. It is recommended to run a system index during low usage or off hours.

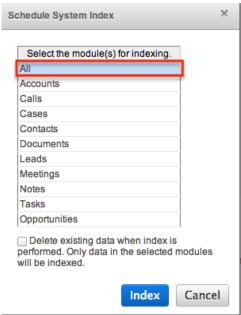
Use the following steps to perform a full system index:

1. Click "Schedule System Index".



- 2. A pop-up message will display warning of potential performance issues during the index. Click "OK" to proceed.
- 3. The list of available full text search modules will display. Simply select one or more module(s) to perform the index. You may also select "All" to index all full

#### text search enabled modules.



- 4. Select the checkbox to delete the current index data before the index operation runs. If this is the first index being performed on the system, you do not need to select this option. If you have added fields to a module's index, then this checkbox should be selected or the new field may not show in the results.
- 5. Click the Index button to schedule the index.
- 6. The next time the scheduler runs, it will rebuild the index based on the selected options. For more information on schedulers, please refer to the Schedulers documentation.

Note: The time and resource it takes to perform an index is directly proportional to the number of modules selected for the indexing. It is recommended that you choose only the modules that require indexing and perform the index during low usage or off hours.

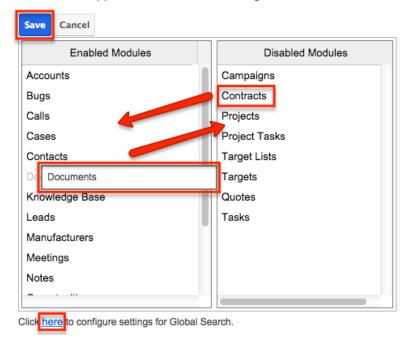
# Configuring Legacy Global Search

Legacy global search will only be used to return results in SugarCRM Mobile global searches. In order for legacy global search to return results for a particular module, it must be enabled on the Legacy Global Search Configuration page. To enable modules for global search in the desktop application, use the Full Text Search Configuration instead.

Modules may be enabled or disabled for legacy global search by moving the module to the appropriate column and clicking "Save". To move modules between the columns, simply drag and drop the module names.

#### Search

Select the module(s) that users will be able to search against.



Note: Legacy global search for Sugar installations running on Oracle is case-sensitive by default. To change this, add the following line to the config override.php file:

\$sugar\_config['oracle\_enable\_ci'] = true;

#### Connectors

The connector settings page allows administrators to configure and manage the various types of connectors to external data sources which integrate with Sugar. A number of different connectors (e.g., Twitter, Citrix GoToMeetings, etc.) come out-of-the-box with Sugar and are enabled by default to allow users to easily view external data via their instance.

Please note that connectors can be disabled and configured accordingly via Admin > Connectors. Developers in your organization can also create connectors to other data sources, which can be uploaded via Module Loader. For more information on how to upload and install packages in Sugar, please refer to the Module Loader documentation. You can also search for other available connectors via Sugar Forge (http://www.sugarforge.org) and Sugar Exchange (http://www.sugarexchange.com

#### **Connector Settings**



Set Connector Properties
Configure the properties for
each connector, including URLs
and API keys.



Map Connector Fields
Map connector fields to module
fields in order to determine what
connector data can be viewed
and merged into the module
records.



Enable Connectors Select which modules are enabled for each connector.



Manage Connector Search Select the connector fields to use to search for data for each module.

### **Setting Connector Properties**

Many connectors use web services and require certain connector properties (e.g. API Key, API Secret) to be configured prior to use. To configure the connector properties, simply click the Set Connector Properties button on the Connector Settings page.



Set Connector Properties
Configure the properties for each
connector, including URLs and API
keys.

The Set Connector Properties page displays a tab for each connector that must be configured in order to use in Sugar. The tabs will include the necessary steps or link for you to obtain the information (e.g. API Key, API Secret, etc.) needed to set up the connector. Once the necessary information has been entered, click "Save" to preserve your settings.

Connector Settings » Set Connector Properties



The following connectors and their properties are available to configure:

Connector	Property	Description
D&B	D&B Username	The username associated to your D&B account provided by D&B
	D&B Application Key	The Application Key provided by D&B

	D&B Environment	The D&B environment name
Google	Client ID	The Client ID provided by Google
	Client secret	The Client secret provided by Google
GoToMeeting	API Key	The API key provided by GoToMeeting
IBM SmartCloud	OAuth Consumer Key	The OAuth Consumer Key provided by IBM
	OAuth Consumer Secret	The OAuth Consumer Secret provided by IBM
Twitter	API Key	The API Key provided by Twitter
	API Secret	The API Secret provided by Twitter

For the Twitter and D&B tabs, click the Test Connector button on the bottom left of the screen to confirm that the data source is configured correctly. Please note that Sugar's WebEx integration is configured via the External Accounts tab of the user's profile. Since WebEx does not have global properties to configure, it will not appear on the Set Connector Properties page. For more information on configuring the WebEx application, please refer to the Getting Started documentation in the Application guide.

# **Enabling Connectors**

In order to utilize the connectors in Sugar, administrators should ensure that they are enabled properly. Please note that certain connectors are enabled for the entire application while some allow you to enable specific modules for the connector. To specify which modules are enabled for each connector, click the Enable Connectors button on the Connector Settings page.



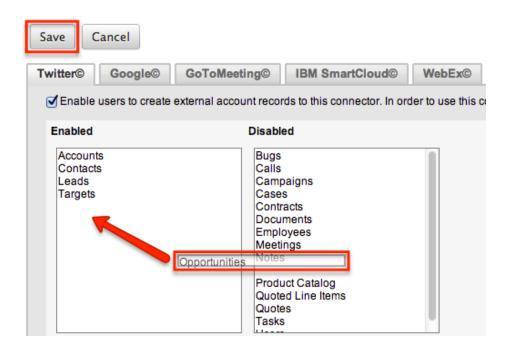
Enable Connectors
Select which modules are enabled for each connector.

The Enable Connectors page will display a tab for each connector that is available in your Sugar instance. To enable a specific module for the connector, simply drag and drop the desired module from the Disabled column to the Enabled column. Click "Save" to preserve you changes.

Please note that you can enable the connector for any modules (e.g., Accounts, Contacts, etc.) that have a standard record view (for Sidecar modules) or detail

view (for Legacy modules) layout in Sugar. For example, the Knowledge Base module does not have a record view layout, so it will not appear as an available module when configuring the Twitter connector.

Connector Settings » Enable Connectors



## Mapping Connector Fields

Some connectors query external services based on fields in Sugar. These mappings can be customized to use different fields based on your organizations needs. To configure the field mappings, simply click the Map Connector Fields button on the Connector Settings page.



Map Connector Fields
Map connector fields to module
fields in order to determine what
connector data can be viewed and
merged into the module records.

The Map Connector Fields page has a tab for each connector that has field mappings available. Each of the enabled module(s) will display the connector fields and will need to have the corresponding Sugar field selected from the dropdown list. If the connector is enabled for multiple modules, be sure to select the proper fields for each module. Once the field mapping is set up properly, click "Save" to preserve your changes.

#### Connector Settings » Map Connector Fields



Please note that the connector fields may not always match up with a stock field in Sugar. If you wish to capture and map certain fields from the connector to Sugar, you will need to create new fields via Admin > Studio. For more information on how to create fields in Studio, please refer to the Studio documentation.

The following fields are available from the default connector mappings:

Connector	Fields
Twitter	Twitter Username

The field mapping for Twitter is used to look up and pull the information based on the value in the specific Sugar field. For example, if the Twitter connector is mapped to a custom field (New Twitter field) with a valid Twitter ID, then it will pull the feeds associated to that ID to the Twitter dashlet. Please note that mapping the Twitter username to the Name field will not always result in a match, so it is recommended that you map to a field containing the Twitter ID in the record view. For more information on how to use features related to the Twitter connector, please refer to the Twitter Dashlet and Cases section of the Cases documentation.

# Managing Connector Search

Connectors that have multiple fields for mapping need to specify which fields are to be used when searching for data in the module. To designate the connector fields for search, click the Manage Connector Search button on the Connector Settings page. Please note that there are no connectors which come out-of-the-box with Sugar that have search fields defined, so no connectors will be available to configure on this page.



Manage Connector Search Select the connector fields to use to search for data for each module.

The Manage Connector Search page will normally display a tab for every connector that needs connector fields defined for search. The available search fields are limited to the input parameters of the connector being used. To enable a field for search, simply drag and drop the desired field from the Available column to the Default column. Once the necessary field(s) have been selected, click "Save" to preserve your changes.

# OAuth Keys

OAuth is an open standard for authorization that enables users to share private resources stored on one site with another site without divulging personal credentials such as user name and password. OAuth works with a public consumer key and a private consumer key. Together, these keys identify which application connects to the service. It is the choice of the Sugar administrator to decide how many different keys to have and whom to give them to.

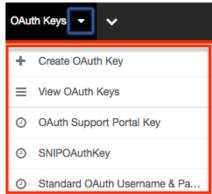
### OAuth Keys Fields

The OAuth Keys module contains a number of stock fields which come out-of-the-box with Sugar. The below definitions are suggested meanings for the fields, but the fields can be leveraged differently to best meet your organization's needs.

Field	Description
Consumer Key Name	The name or designation of the OAuth Key.
Consumer Key	Public key. A user name is a suitable consumer key value.
Consumer Secret	Private key. A password is a suitable consumer secret value. Note: The private key is not sent when making a connection.
OAuth Version	The version of the OAuth protocol/framework to use. (OAuth 1.0, OAuth 2.0)
Description	A description or other information about the OAuth key.

### OAuth Keys Module Tab

The OAuth Keys module tab appears on the navigation bar once you select "OAuth Keys" from the Administration page. Once in the OAuth Keys list view, you can click the triangle in the OAuth Keys module tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of OAuth keys you last viewed in the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
5	Opens the edit view layout to create a new OAuth Key
	Opens the list view layout to search and display OAuth Keys

# Creating OAuth Keys

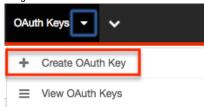
There are various methods for creating OAuth keys in Sugar including via the OAuth Keys module and via duplication. The full edit view layout opens when creating the OAuth keys directly from the OAuth menu and includes all of the relevant fields for your organization's OAuth keys. The quick create form is a shortened version of the OAuth Keys edit view and typically contains fewer fields.

### Creating Via OAuth Keys Module

One of the most common methods of OAuth key creation is via the Create OAuth Key option in the OAuth Keys module tab. This opens up the edit view layout which allows you to enter in all the relevant information for the OAuth key.

Use the following steps to create an OAuth key via the OAuth Keys module:

- 1. Navigate to Admin > OAuth Keys.
- 2. Click the triangle in the OAuth Keys module tab and select "Create OAuth Key".



- 3. Enter appropriate values for the Fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Once the necessary information is entered, click "Save".

Create



#### Creating Via Duplication

You can also create a new OAuth key by duplicating an existing record. The duplicate option is useful if the key you are creating has similar information to an existing OAuth key.

Note: The system generated OAuth Support Portal Key can not be duplicated.

Use the following steps to create an OAuth key by duplicating an existing record:

- 1. Navigate to an OAuth key record's detail view.
- 2. Select "Duplicate" from the Actions menu.

ExternalOAuth



3. The displayed edit view is pre-populated with the original key's values. Update the necessary fields, then click "Save".



Note: When duplicating, the Consumer Key and OAuth Version are not modifiable.

### Viewing OAuth Keys

There are various options available for viewing OAuth key records in Sugar including via OAuth Keys list view, OAuth Keys detail view, and OAuth Recently Viewed menu.

#### Viewing Via List View

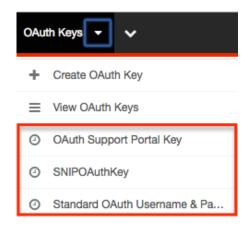
The OAuth Keys list view displays all OAuth key records meeting the current search criteria. To access the list view, simply click the OAuth Keys module tab. While list view shows key OAuth key fields, you can click the key's name to open the record in detail view. For more information on viewing OAuth keys via list view, please refer to the OAuth Keys List View section.

#### Viewing Via Detail View

The OAuth Keys detail view displays thorough OAuth key information including all key fields followed by subpanels of the key's related records belonging to various modules. The detail view can be reached by clicking a key record's link from anywhere in the application including from the OAuth Keys list view. For more information on viewing OAuth keys via detail view, please refer to the OAuth Keys Detail View section.

#### Viewing Via Recently Viewed

As you work in the OAuth Keys module, Sugar will keep track of which OAuth key records you have recently viewed. Click the triangle in the OAuth Keys module tab



## Searching OAuth Keys

The OAuth Keys list view includes a Basic and Advanced Search to help you locate records easily and effectively in a module-specific manner. Once the search is performed, the relevant results will be displayed in the OAuth Keys list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you can use the wildcard at the beginning of your text as well (e.g., %services). This will pull up any record that has the word "services" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used in the different methods, please refer to the Search documentation.

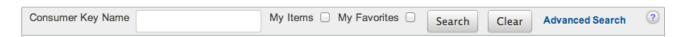
#### Basic Search

Basic search offers a few, commonly used fields for a simplified search experience. From the Basic Search panel, you can click "Advanced Search" to access additional search functionality as needed.

The buttons and checkboxes available in Basic Search panel have the following functions:

- Search: Click the Search button or press your Return/Enter key to perform the search
- Clear: Click the Clear button to clear all criteria from the searchable fields.

#### OAuth Consumer Keys



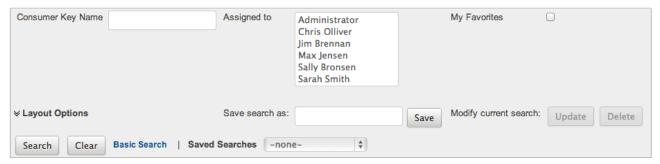
When you run a search, Sugar will return records matching all (as opposed to any) of the fields and checkboxes for which you have given a value. Once the search is complete, the relevant results will populate in the list view below the search panel. To see all OAuth key records to which you have access, simply click "Clear" and then "Search" to perform a blank search with no filters.

#### Advanced Search

Advanced Search offers a more in-depth search experience than Basic Search including additional fields, layout options, and saved search capability. From the Advanced search panel, you can click "Basic Search" for simplified searching.

The buttons, checkboxes, and dropdowns available in Advanced Search have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.
- Layout Options: Use the expandable Layout Options section to configure your list view. For more information, please refer to the Layout Options section of the Search documentation.
- Saved Searches: Save, recall, update, and delete searches which you use often. For more information, please refer to the Saved Search section of the Search documentation.



When you run a search, Sugar will return records matching all (as opposed to any) of the fields for which you have given a value. When searching by a multiselect or dropdown field (e.g., "Assigned to"), however, Sugar will return records matching any of these selections. Once the search completes, the relevant results will populate in the list view below the search panel. To see all OAuth key records to which you have access, simply click "Clear" and then "Search" to perform a blank search with no filters.

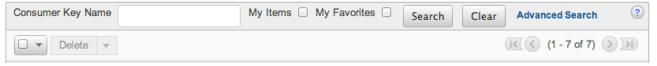
## OAuth Keys List View

The OAuth Keys list view displays all OAuth key records meeting the current search criteria. You can view the basic details of each key within the field columns. You have the option to change what fields are displayed in list view by configuring your layout options in the OAuth Advanced Search. For more information on configuring your list view, please refer to the Layout Options section of the Search documentation.

#### **Pagination**

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

By default, Sugar displays 20 records per list view page, but administrators can change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System Settings > User Interface section of this page.



#### **Checkbox Selection**

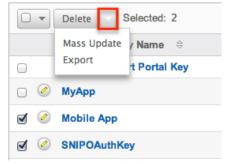
You can perform several actions on OAuth key records directly from the list view by first selecting the desired records. To select individual key records on the OAuth Keys list view, mark the checkbox on the left of each row. To select or deselect multiple key records on the list view, use the options in the checkbox dropdown menu:

- Select This Page: Selects all records shown on the current page of key results.
- Select All: Selects all records in the current search results across all pages of key results.
- Deselect All: Deselects all records that are currently selected.



#### Actions Menu

The Actions menu to the right of the checkbox dropdown allows you to perform various actions on the currently selected records.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description	
Delete	Delete one or more OAuth keys at a time	
Mass Update	Mass update one or more OAuth keys at a time	
Export	Export one or more OAuth keys to a CSV file	

### Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. The list view may be sorted by only one column at a time. You can also set a default order-by column using the layout options in Advanced Search. For more information on setting a default column sort, please refer to the Layout Options section of the Search documentation.



### OAuth Keys Detail View

The OAuth Keys detail view displays thorough OAuth key information including all fields. You can also view a key's related tokens which appear in a subpanel beneath the key fields. The detail view can be reached by clicking a OAuth key record's link from anywhere in the application including from the OAuth Keys list view.

#### Actions Menu

The Actions menu on the top left of each OAuth key's detail view allows you to perform various actions on the current record. Administrator users can change the action items to be displayed as separate buttons instead of a dropdown menu via Admin > System Settings. For more information on configuring the actions menu, please refer to the System Settings > User Interface section of this page.

#### ExternalOAuth



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description	
Edit	Edit this OAuth key	
Duplicate	Duplicate this OAuth key	
Delete	Delete this OAuth key	

#### Next or Previous Record

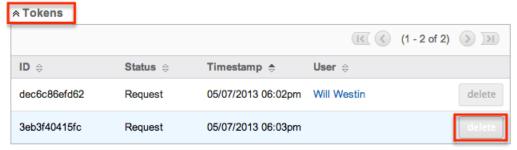
On the upper right of the OAuth Keys detail view, there are two buttons that allow you to page through each OAuth key in the OAuth Keys list view's current search results. Clicking the Previous button displays the previous key of the current search results while clicking the Next button displays the next key of the current search results. The text in between shows which key result you are currently viewing within the total number of current results.

#### ExternalOAuth



#### **Tokens**

Beneath an OAuth key record's fields is a subpanel containing related token records. Tokens are created when the user establishes an OAuth connection with the OAuth key pair. These are connections between the Sugar user, the OAuth keys, and the permissions to enable the external application to access data. Tokens created for each OAuth connection are listed in the Tokens subpanel of the corresponding OAuth Keys detail view page. The Tokens subpanel can be collapsed or expanded by clicking the double arrow to the left of the subpanel's name.



To delete a token from an OAuth key, choose "Delete" from the far right of the record's row.

## **Editing OAuth Keys**

OAuth keys may be edited at any time to update or add information to the record. You can make changes to existing key records via the OAuth Keys edit view and quick create forms. Edit view is available within the OAuth Keys module and includes all of the key fields you should need.

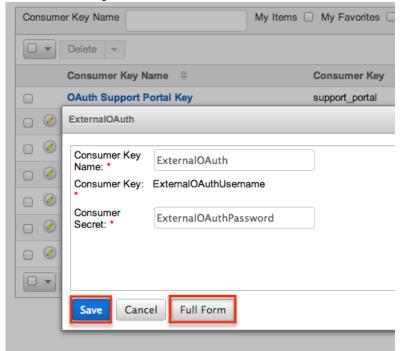
Note: The system generated OAuth Support Portal Key can not be modified.

ExternalOAuth » Edit



Quick create is available for editing keys from outside the OAuth Keys module and opens as a pop-up without navigating away from your current page. It generally

contains fewer fields, but the Full Form button may be used to access the full edit view should you need to edit additional fields.



Note: Consumer Key and OAuth Version fields can not be edited after creation. If either of these fields need changed, you will have to create a new OAuth key.

### Editing Via Detail View

You can edit OAuth keys via the Detail View by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve your changes.

ExternalOAuth



#### Editing Via List View

You can edit OAuth keys via the List View by clicking the Pencil icon to the left of each key's name. A pop-up window will open with the quick create form which is a shortened version of the edit view layout. Update the necessary fields, then click "Save" to preserve your changes.



### **Deleting OAuth Keys**

If an OAuth key record is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from either the OAuth Keys detail view or list view. Deleting via the detail view allows you to delete a single record while the list view allows for mass deleting multiple records at once.

Note: The system generated OAuth Support Portal Key should not be deleted.

#### Deleting Via Detail View

Use the following steps to delete an OAuth key record via the detail view:

- 1. Navigate to a key record's detail view.
- 2. Select "Delete" from the Actions menu.

ExternalOAuth

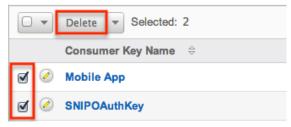


3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

#### Mass Deleting Via List View

Use the following steps to delete one or more OAuth key records via the list view:

- 1. Navigate to the OAuth Keys list view by clicking the OAuth Keys module tab.
- 2. Use the Basic or Advanced Search to find the key records you wish to delete.
- 3. Select the desired key records individually or using the checkbox dropdown's
- 4. Choose "Delete" from the Actions menu.



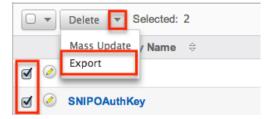
5. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of key records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

### **Exporting OAuth Keys**

Sugar's Export option allows users to download all fields for the selected OAuth keys to their computers as a .CSV (comma-separated values) file. This may be useful when needing to use OAuth data with other software such as Microsoft Excel. Due to PHP memory limitations on the server, there may be occasions when the application times out while exporting a large number of key records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

OAuth keys may be exported from the OAuth Keys list view by selecting "Export" from the Actions menu.



## Mass Updating OAuth Keys

Mass Updating allows users to make the same change to multiple OAuth key records at once from the OAuth Keys list view. Due to the PHP memory limitations on the server, there may be occasions when the application times out while mass updating a large number of key records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches. Use the following steps to mass update OAuth key records from the list view:

- 1. Navigate to the OAuth Keys list view by clicking the OAuth Keys module tab.
- 2. Use the list view's Basic or Advanced Search to find key you wish to modify.

- 3. Select the desired keys individually or using the checkbox dropdown's options.
- 4. Choose "Mass Update" from the Actions menu.



5. Scroll to the Mass Update panel and set values for the fields you wish to alter.

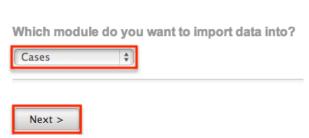


6. Click "Update" to save the changes to all of the currently selected key records.

## Import Wizard

Import Wizard allows administrators to launch an import for any import enabled module without navigating to the module itself. After selecting "Import Wizard" from the Admin menu, you can select a module to perform an import on.

Import » Step 1: Select Data Source



After selecting the module, click "Next" to continue the import. The steps to complete the import are identical to performing an import from the module. For more information on how to perform an import, please refer to the Import documentation in the Application guide.

## Upgrade Wizard

The Upgrade Wizard allows on-site customers to upgrade their Sugar instance to the latest software version. The Upgrade Wizard is only available for administrators of on-site installations. For steps to complete an on-site upgrade using the wizard, please refer to the Upgrading section of the Installation and Upgrade Guide.

# **Backups**

Backups allow administrators to easily backup the file system in their instance of Sugar. Please note that the Backups option is only available for on-site instances as SugarCRM manages backups for instances on Sugar's cloud service. Keep in mind that performing a backup will backup only the web files and you should perform database backups on a regular basis per the instructions from your database vendor.

Use the following steps to back up the web files for your Sugar instance:

- 1. Navigate to the Administration page and select "Backups" under the System section.
- 2. Enter a path in the Directory field to create the backup file in for Sugar. This directory must be writable by Sugar and the path needs to be fully qualified.
  - Please do not specify a path that points to any directory contained by the Sugar instance location on your server. Doing this will continue to increase the size of the backups as previous backup archives will accumulate into the most current backup.
- 3. Enter a filename to use for the backup file.
  - Note: The filename should end with a .zip.
- 4. Once the settings have been entered, click "Confirm Settings".

#### Backups

documentation for informat	o assist in creating backups of the Su ion on how to backup your database. lication files in a .zip file, enter the foll	
Directory: Must be writable by Sugar	/tmp/sugar/backups/	
Filename:	sugarcrm_201305.zip	
Confirm Settings		

The settings are confirmed by verifying that the directory can be written to and the filename does not already exist. Once the settings are confirmed, click "Run Backup". Please note that the backup can take some time depending on the size of your Sugar instance and will display a message once complete.

Note: If the backup fails to complete and your instance is hosted on-site, please evaluate your server error logs to determine the cause. If the failure is due to insufficient PHP settings, you can increase the max\_execution\_time setting by editing php.ini and restarting your webserver.

## Repair

Repair allows administrators to perform common maintenance routines on their instance of Sugar. The repair menu is available to only administrative users and can be accessed through Admin > Repair.

For more information on the different repair options available, please refer to the Repair documentation in the Administration guide.

# Diagnostic Tool

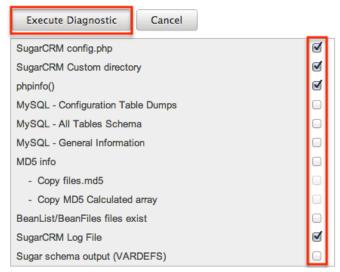
Diagnostic Tool allows administrators to create a file with many diagnostic and configuration details. This tool will collect basic system information regarding Sugar and server configuration and place it all into a zip file to help debug or diagnose issues. The Diagnostic Tool has options that you can turn on and off to include only specific configuration data. Select one or more of the following available options:

Option	Description	
SugarCRM config.php	Includes a copy of the config.php file from the root directory of Sugar. This file contains many useful system settings options in Sugar.  Note: The db password contained in this file is replaced with asterixs before sending for security purposes.	
SugarCRM Custom directory	Includes a copy of the entire custom directory in Sugar.	
Phpinfo()	Includes the output of the PHP function phpinfo() saved to an html file. The phpinfo() function returns information about how PHP is configured on the server running Sugar including the version of PHP, the loaded Extensions, and more.	
MySQL - Configuration Table Dumps	Includes an HTML file for each configuration table in Sugar. The file has three sections: field definitions, indexes, and data.	
MySQL - All Tables Schema	Includes an HTML file titled MySQLTablesSchema.html which has two sections for each table in Sugar: field definitions and indexes.	
MySQL - General Information	Includes an HTML file titled MySQL-General-info.html. This file	

	contains some basic information about the MySQL database Sugar is running on such as version number and character sets.
MD5 info	Includes a php file that shows any file in your instance of Sugar that has a different hash than the stock file. This can indicate which files are customized and where they are located in your file system.
Copy files.md5	Includes the list of all files and their original md5 hash in a file titled files.md5.  Note: Only available when the MD5 info option above is selected.
Copy MD5 Calculated array	Includes the list of all files and their current hash in a php file titled md5_array_calculated.php. Note: Only available when the MD5 info option above is selected.
BeanList/BeanFiles files exist	Includes an HTML file titled beanFiles.html. This file contains a list of the modules in Sugar and checks all the references for that module to make sure they are correct.
SugarCRM Log File	Includes a copy of the current log file for Sugar.
Sugar schema output (VARDEFS)	Includes an HTML file titled vardefschema.html which contains detailed metadata on each table in Sugar.

The more options selected, the bigger the resulting zip file will be. Select the desired options and click "Execute Diagnostic".

#### Diagnostic Tool



Once the diagnostic tool is finished, select "Download the diagnostic file" to download the zip file containing the results to your computer.

#### Diagnostic Tool



Optionally, you can then select "Delete the Diagnostic file" to remove it from the server. Large diagnostic files should be deleted from the server as they can pile up and take necessary disk space.

### Tracker

Tracker allows administrators to configure the system to track certain user actions and information for Sugar modules. This information is used in tracker reports and dashlets. By default the tracker options are disabled.

Use the following options to record tracker data:

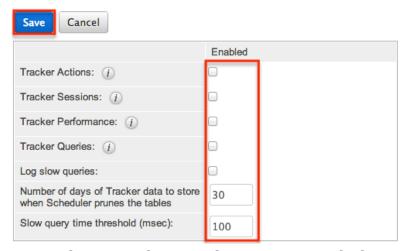
Tracker Actions: Tracks user actions such as modules accessed and records

saved.

- Tracker Sessions: Tracks active users' session data such as session length.
- Tracker Performance: Tracks system performance such as database round trips, number of files accessed, server response time, and memory usage.
   Note: This option can cause performance issues and should not be enabled in a production environment.
- Tracker Queries: Tracks any query that takes longer than the specified slow query time threshold and saves the data to the database. Tracker queries logs the query, how many times it has been run, the last time ran, and the average seconds the query took. "Log slow queries" also needs to be selected before this option tracks data.
  - Note: This option can cause performance issues and should not be enabled in a production environment.
- Log slow queries: Select this option to log queries that take longer than the slow query time threshold to the sugar log. This is useful for performance debugging.
  - Note: This option can cause performance issues and should not be enabled in a production environment.
- Number of days of Tracker data to store when Scheduler prunes the tables:
   Specify the number of days of data to be retained. The Prune Tracker Tables scheduler will remove any tracker records older than the specified number of days. For more information on the Prune Tracker Tables scheduler, please refer to the Prune Tracker Tables section of the Scheduler documentation in the Administration guide.
- Slow query time threshold (msec): Specify a threshold in milliseconds to begin logging slow queries at. If "Log slow queries" is selected, queries that take longer than the threshold to process will be logged to the sugar log. If "Tracker Queries" is selected, queries will be logged to the database.

Select the desired settings and click "Save" to preserve your changes.

Tracker



Note: Changing the Log slow queries and Slow query time threshold values will also change them in Admin > System Settings.

### Scheduler

Scheduler provides administrators with a method to automate the execution of custom and system processes. The Scheduler menu is available to only administrative users and can be accessed through Admin > Scheduler. For more information on the different schedulers available, please refer to the Schedulers documentation in the Administration guide.

# PDF Manager

PDF Manager allows administrators to create and manage templates for generated PDF files for any deployed module, custom or standard. The PDF Manager is available to only administrative users and can be accessed through Admin > PDF Manager.

For more information on the PDF Manager, please refer to the PDF Manager documentation in the Administration guide.

#### Mobile

The Mobile settings on the Administration page allow administrators to configure what modules they want enabled or disabled for SugarCRM Mobile and the browser-based Sugar mobile application . In addition, you can enable the mobile offline capability for your instance for SugarCRM Mobile.

The browser-based Sugar mobile application allows users to access various Sugar modules (stock and custom modules) via a web browser on a smartphone or PDA. SugarCRM Mobile is a native mobile application that enables users to access Sugar from certain smartphones (e.g., iPhone). For a list of supported devices for SugarCRM Mobile, please refer to the Mobile Supported Platforms page. You can add, edit, and remove fields, including Calculated Value fields, to customize the mobile layouts via Admin > Studio. For more information on configuring fields, please refer to the Fields section of the Developer Tools documentation. For more information on configuring the mobile layouts, please refer to the Mobile Layouts section of the Developer Tools documentation.

Note: Calculated Value fields will not be updated in real time for mobile edit view layouts.

## Configuring SugarCRM Mobile

You can configure what modules are available for use in SugarCRM Mobile via

Admin > Mobile. Please note that the Bug Tracker, Campaigns, Contracts, Knowledge Base, Products, and Targets modules are not available for SugarCRM Mobile. For more information on enabling modules for SugarCRM Mobile, please refer to the Enabling Modules for Mobile Access section of this documentation.

### Configuring Mobile Browser Access

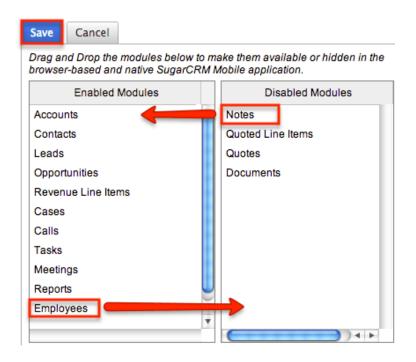
The modules enabled for use via Admin > Mobile will also apply to the browser-based Sugar mobile application. For more information on enabling modules for the browser-based Sugar mobile application, please refer to the Enabling Modules for Mobile Access section of this documentation. Please note that the Reports module is not available for the browser-based Sugar mobile application.

### **Enabling Modules for Mobile Access**

Use the following steps to enable modules for mobile access:

- 1. Navigate to Admin > Mobile.
- 2. To enable a module for the browser-based and native SugarCRM mobile application, drag and drop the module from the Disabled Modules column to the Enabled Modules column.
- 3. To disable a module, drag and drop the module from the Enabled Modules column to the Disabled Modules column.

Mobile



4. Click "Save" to apply the changes made to SugarCRM Mobile and the browser-based Sugar mobile application.

### **Enabling Offline Mobile Access**

You can also allow mobile offline capabilities for your instance in SugarCRM Mobile by marking the Offline enabled checkbox in Admin > Mobile. Enabling offline access allows the user's mobile device to cache records for offline viewing as well as buffer changes they make to records while offline. The changes made will be synced once they are reconnected. Please note that the offline option must be enabled in Sugar first before users can enable the offline mode on their devices. For more information on enabling offline in mobile devices, please refer to the SugarCRM Mobile User Guide for your specific mobile device type (iPhone, Android).

Enabled Modules Disabled Modules Accounts Notes Contacts Quoted Line Items Leads Quotes Opportunities Documents Revenue Line Items Cases Calls Tasks Meetings Reports Employees Offline Settings ₹

Drag and Drop the modules below to make them available or hidden in the browser-based and native SugarCRM Mobile application.

Last Modified: 03/16/2018 05:35pm

# Repair

Offline enabled

#### Overview

The repair functions in Sugar allow administrators to perform common maintenance routines on their instance of Sugar. The repair menu is available to only administrative users and can be accessed through Admin > Repair. The

following sections are available options from the repair menu.

## Quick Repair and Rebuild

The quick repair and rebuild is the most commonly used repair option and should be performed after significant changes have been made to your instance of Sugar. If you notice inconsistencies with module layouts or fields as you have customized them via Studio, this option is normally the best first course of action to try and correct the issue. Sugar caches files to help access necessary files quickly. This option clears out many of the cached files in Sugar which allows new versions of the files to be loaded. The quick repair and rebuild option performs the following actions:

- Clear Vardefs From Cache: Deletes any \*vardefs.php file in the cached modules folder
- Clear Language Files From Cache: Deletes any {Module Name}.lang.php file in the cached modules folder
- Clear Template Files From Cache: Deletes any \*.tpl files in the cached modules folder
- Clear JavaScript Files From Cache: Deletes any \*.js files in the cached modules folder
- Clear JavaScript Language Files From Cache: Deletes any \*.js files in the cached jsLanguage folder
- Clear Dashlet Files From Cache: Deletes any \*.php files in the cached dashlets folder
- Clear Sugar Feed Files From Cache: Deletes the Sugar Feed files in cached modules folder
- Clear Smarty Template Files From Cache: Deletes any \*.tpl.php files in the cached smarty templates folder
- Clear Theme Files From Cache : Deletes theme files in the cached theme folder for all themes in Sugar
- Clear XML Files From Cache: Deletes any \*.xml files in the cached xml folder
- Clear Search Files From Cache: Deletes the unified\_search\_modules.php file in the cached module folder
- Clear External API Cache Files: Deletes the external API cache PHP and JavaScript files in the cached include folder
- Clear Additional Cache Files: Loops through the cached API folders and deletes any \*.php files as well as the cached clients folder
- Clear PDF Font Cache Files: Deletes the cached PDF font list file
- Rebuild Extension Files: Rebuilds language files, extensions, dashlet containers, relationships, and the table dictionary; this step also clears any cached files by APC or WinCache, resets the Zend accelerator, clears eAccelerator's cache, and clears XCache cached files

Note: These functions will only run if the associated systems are installed and

running.

- Rebuild Audit Tables: Creates audit tables for any module that has audit enabled and where the audit table does not already exist; the results for each table are printed on the page
- Repair Database Tables: Checks to make sure the database is in synch with the table dictionary and vardef files; any missing tables, columns, and indexes will be scripted to be recreated as well as any column properties that are incorrectly set in the database. The screen will display any database changes that should be made. Click "Execute" to execute the script to apply the changes to the Sugar database or click "Export" to save the script to a SQL file.

The following script will sprot the database aftor varders:

The following script will sprot the database structure with the structure defined in the vardefs. You have the option of exporting this script and then running it against your database using external database management tools, or to allow the administration module to run the script.

NOTE: any changes you make to the script in the textbox will be reflected in the exported or executed code.

| "Table: accounts "/
| "COLUMNS" |
| "NIDEXES ! |
| "MISSING INDEX IN DATABASE - idx\_accnt\_assigned\_del -index\_ROW \*/
| ALTER TABLE accounts\_ADD INDEX idx\_accnt\_assigned\_del (deleted, assigned\_user\_id);
| "Checking Custom Fields for module: Accounts "/
| CREATE TABLE accounts\_cstm\_did\_c char(36) NOT NULL , PRIMARY KEY (id\_c)) CHARACTER SET utf8 COLLATE utf8\_general\_ci;
| "MISSING IN DATABASE - test\_c - ROW" |
| ALTER TABLE accounts\_cstm\_add COLUMN test\_c varchar(100) NULL;
| "MISSING IN DATABASE - testint\_c - ROW" |
| ALTER TABLE accounts\_cstm\_add COLUMN test\_c varchar(100) NULL;
| "MISSING IN DATABASE - testint\_c - ROW" |
| ALTER TABLE accounts\_cstm\_add COLUMN testint\_c int(150) NULL;
| "MISSING IN DATABASE - testint\_c - ROW" |
| ALTER TABLE accounts\_cstm\_add COLUMN testint\_c int(150) NULL;
| "MISSING IN DATABASE - testint\_c - ROW" |
| ALTER TABLE accounts\_cstm\_add COLUMN testint\_c int(150) NULL;
| "MISSING IN DATABASE - testint\_c - ROW" |

# **Upgrade Teams**

The Upgrade Teams option performs some cleanup regarding team records in Sugar. This can be useful to restore the private teams for all users in the event they become corrupted or are removed for any reason. The upgrade teams option performs the following actions:

- Global Team: Creates or restores the global team if it does not exist or has been deleted. All users are then assigned to the global team if not already.
- Private Teams: Creates a private team for every user in the system that does not already have a private team and assigns the user to their private team.

The results are printed on the screen as to what teams already existed and what teams were created.

## Expand Column Width

The expand column width option provides a fix for some limitations of MSSQL when requiring multi-byte characters in the database. This limitation only exists for systems running on a MSSQL database while using the MSSQL Drivers for PHP. This function is not available and not necessary to be run on any of the currently supported database platforms.

Note: We recommend running Sugar on at least version 2.0.1 of the SQLSRV Drivers.

Use the following steps to run the Expand Column Width repair option:

- 1. Select "Expand Column Width" from the Admin > Repair screen.
- 2. Select from the dropdown which of the following actions you would like to take:

Display SQL: Displays the appropriate sql commands on the screen. Export SQL: Creates a .sql file containing the appropriate SQL commands.

Execute SQL: Executes the SQL commands on your database.

3. Select "Go" to perform the selected action.



4. The script takes any field in the database that is type varchar, char, or text and increases the length of the field. The new length is set to three times the current length, or if that is higher than 255, the length is set to 255.

#### Rebuild .htaccess File

Rebuild .htaccess File option creates or updates the .htaccess file in the root of the Sugar directory. The .htaccess file contains specific commands to prevent unauthorized access to certain files and directories on your webserver. File permissions need to be configured correctly in order for Sugar to write to the .htaccess file. If writing to the file fails, the expected contents for the file will be printed on the page.

Note: If you have additional lines to add to the .htaccess file, place them outside of the "# BEGIN SUGARCRM RESTRICTIONS" and "# END SUGARCRM RESTRICTIONS" lines or they will be removed when running this repair function.

## Rebuild Config File

The Rebuild Config File option takes the config.php file in the root directory of Sugar and rebuilds it to have all default values for any options not specified directly. It first runs a check to make sure Sugar can write to the config.php file and will return to you if it can or not. When ready to rebuild the config file select "Rebuild".



The default values for the config will be merged with any custom values currently set and will be loaded into the config.php file.

## Rebuild Sugar Logic Functions

The Rebuild Sugar Logic Functions rebuilds the cache files for all Sugar logic functions in the system. The Sugar logic functions are primarily used as formulas in field definitions. The results of the repair are shown on the screen.

## Rebuild Relationships

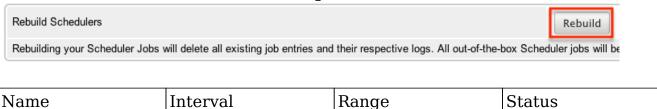
Rebuild Relationships clears out the relationship cache and data and rebuilds it from the vardef files. Custom and stock relationships are all rebuilt. This repair option is good to run after an upgrade or when installing or uninstalling custom modules. The results of the repair are shown on the screen.

### Rebuild Schedulers

The Rebuild Schedulers option removes all schedulers and recreates schedulers that come with Sugar by default. If you have customized the Active/Inactive flag, the frequency the job runs, or even deleted a job this repair option will restore all settings back to their original default value and recreate any deleted default schedulers.

Note: This also deletes any custom schedulers added to Sugar. If you have made changes to the default schedulers or created custom schedulers, please backup the details of each scheduler before running this repair.

The schedulers and their default settings are listed below:



Process Workflow Tasks	As often as possible.	01/01/2005 05:30am - 12/31/2020 06:59pm	Active
Run Report Generation Scheduled Tasks	On the hour; 06:00am	01/01/2005 02:15am - 12/31/2020 06:59pm	Inactive
Prune Tracker Tables	On the hour; 02:00am; 1st	01/01/2005 12:00pm - 12/31/2020 06:59pm	Active
Check Inbound Mailboxes	As often as possible.	01/01/2005 02:00am - 12/31/2020 06:59pm	Active
Run Nightly Process Bounced Campaign Emails	On the hour; From 02:00am to 06:00am	01/01/2005 02:00pm - 12/31/2020 06:59pm	Active
Run Nightly Mass Email Campaigns	On the hour; From 02:00am to 06:00am	01/01/2005 08:15am - 12/31/2020 06:59pm	Active
Prune Database on 1st of Month	On the hour; 04:00am; 1st	01/01/2005 02:15am - 12/31/2020 06:59pm	Inactive
Update tracker_sessions Table	As often as possible.	01/01/2005 01:00am - 12/31/2020 06:59pm	Active
Run Email Reminder Notifications	As often as possible.	01/01/2008 08:30am - 12/31/2020 06:59pm	Active
Clean Jobs Queue	On the hour; 05:00am	01/01/2012 04:15am - 12/31/2030 06:59pm	Active
Create Future TimePeriods	On the hour; 11:00pm	01/01/2012 01:30am -	Active

12/31/2030	
06:59pm	

# Rebuild Sugar Dashlets

Rebuild Sugar Dashlets deletes the cached dashlets.php file and recreates it. This file contains the path to the php files, the class to use, and the module for each dashlet in Sugar. This repair option is good to run when making changes to the dashlets that come with Sugar or custom dashlet loaded into Sugar. The results of the repair are shown on the screen.

#### Rebuild WorkFlow

Rebuild Workflow deletes files in the custom workflows folder for each module and then rebuilds the files from the workflow data in the database. This repair also verifies the proper logic hooks are in place to properly fire the workflows and rebuilds any plug-ins that are installed.

## Rebuild Javascript Languages

The Rebuild Javascript Languages function deletes all files in the cached jsLanguage folder and deletes any {Module Name}.lang.php file in the cached modules folder. The cached files will be rebuilt when they are needed.

### Rebuild Sidecar Files

Rebuild Sidecar Files will replace compressed JavaScript files for the Sidecar framework with original, full JavaScript source files. The full files will then be compressed (minified) to maximize application performance.

# Rebuild JS Grouping Files

Rebuild JS Grouping Files takes the many different JavaScript files that are required with Sugar and concatenates them together into the cache directory.

Note: The process will continue working if you navigate away from this page, but if you wait you will see a notification on the page when it is complete.

## Rebuild Sprites

Rebuild Sprites takes images in the following directories:

- ./include/images
- ./themes
- ./custom/themes

Creates the sprites and metadata files in the ./cache/sprites/ folder.

Note: The process will continue working if you navigate away from this page, but if you wait you will see a notification on the page when it is complete.

## Repair Non-Lowercase Fields

The Repair Non-Lowercase Fields option takes any custom field defined in Sugar and, if the field contains an upper case letter, it will change the field to be lowercase. The database, vardef files, and views are all searched through and corrected for and uppercase fields. This option also clears any vardef files from the cache when finished.

## Repair Teams

The Repair Teams option runs a quick check against the database for every user. It performs the following checks:

- Users not in the global team
- Users who do not have a private team
- Users who are not a member of a team that a user who reports to them is a member of

If any of the checks return true, the page will indicate that records were found and the associated action will be selected by default. Select the options you wish to perform and click "Rebuild".

#### The selected options will perform the following:

	Repair Non-Lowercase Fields	Repair mixed-case custom table(s) and metadata file(s) to fix issues lowercase field names	
	P Repair Teams	Rebuilds private team memberships based on user reporting hierarchy	
		Repairs Roles by adding all new modules that support Access Controls, new Access Controls to existing modules	

- Rebuild access to global team: Create a global team if one does not exist and loops through every user and adds them to the global team.
- Rebuild access to private team: Loops through every user and creates a
  private team if one does not exist, and then adds the user to their private
  team.
- Rebuild team hierarchy: Loops through every user and makes sure every
  manager is included in their employees' teams. This ensures that if Sally
  reports to Jim, that Jim can see all of Sally's records.
  Note: Sugar prevents a loop from being created via the Reports To field. For
  more information on setting the Reports To field, please refer to the User
  Management documentation.
- Clean up unused combinations of teams: Searches the database for unused combinations of teams and deletes the records from the database.

The users looped through are displayed on the screen when complete.

# Repair Roles

Repair Roles goes through every ACL enabled module and ensures that there are appropriate database records to allow roles to be used on the specified module. This repair is important to run after adding new modules via Module Loader or Module Builder to make sure all of the role options are available for the new module. If there is a module that has ACL enabled for it, but the module does not show in the Roles section, then this repair option will add the module. The results of the modules accessed are printed on the screen.

# Repair Inbound Email Accounts

Repair Inbound Email Accounts loops through every active inbound email account in Sugar and verifies the settings configured. Any Inbound email account that fails to successfully repair will be listed on the page and will require someone to manually repair them by reentering a valid user name and password.

### Remove XSS

The Remove XSS repair loops through the database and removes any malicious scripts from specified field types. Select a module from the dropdown, or select "All" to run for all modules.

#### Removes XSS Vulnerabilities from the database

Select a module to remove potential XSS strings. Select "All" to address every module. Press execute to start the detection and removal process.



The page will then display the count of records that will be scanned, and repaired if necessary. Click "Execute" to being the repair.

Removes XSS Vulnerabilities from the database

You will see the count of Object(s) Repaired incrementing as it is running. Once the repair is complete you will get a popup message saying "Done." and the count repaired should match the count of objects found.

## Repair Activities

Repair Activities takes Call or Meeting records where the status field does not equal "Held" and updates the end date based on the duration of the activity. If the status equals "Held" or the record is marked as deleted, this repair will skip it. The screen will show "Done" when complete.

# Enable/Disable Seed Users

The Enable/Disable Seed Users option will either enable or disable the default users that are installed with Sugar when selecting a demo installation. If the first seed user retrieved from the database is set to "Active" then this option will give you the option to "Deactivate" the seed users, otherwise, you have the option to "Activate" the seed users.



This option will set the status based on the option presented for all users that have

an id that starts with "seed".

Note: If you did not populate Sugar with demo data when installing, this repair will return "No seed users" and will not do anything.

#### Clear Additional Cache

The Clear Additional Cache option loops through the cached API folders and deletes any \*.php files as well as the cached clients folder. This option is also performed by the Quick Repair and Rebuild option. The screen will show "Done" when complete.

Last Modified: 03/20/2017 07:28pm

## Schedulers

#### Overview

Schedulers in Sugar provide users with a method to automate the execution of custom and system processes. Sugar comes with many default schedulers to perform jobs such as monitoring inbound emails, executing workflows, running reports, and dispatching campaign emails. Schedulers are available only to administrative users and can be accessed through Admin > Schedulers. The following sections are available options from the Schedulers menu.

### Schedulers Fields

The Schedulers module contains a number of stock fields which come out of the box with Sugar. The following definitions are suggested meanings for the fields, but the fields may be leveraged differently to best meet your organization's needs.

Field	Description	
Active From	Time the scheduler begins to be active per day	
Active To	Time the scheduler stops being active per day	
Date & Time End	Date and Time the scheduler will stop running on the specified interval	
Date & Time Start	Date and Time the scheduler will begin	

	running on the specified interval	
Execute If Missed	Specifies if a scheduler should be executed during the next cron run in the event that cron did not run at the exact time a job is scheduled for	
Interval	How often and when the schedule will run, defaults to every day, every minute	
Job	The job to execute on the defined schedule	
Job Name	The name or designation of the scheduler	
Job URL	The URL of a page to execute Note: Only available if the job selected is URL.	
Status	The current status of the scheduler (i.e. Active, Inactive)	

Note: Any times configured for schedulers will be based on the admin user's time zone (user id = '1').

## **Default Schedulers**

The default schedulers that packaged with Sugar are required for different activities throughout the application. The following lists the default schedulers and their default settings:

Name	Interval	Range	Status
Check Inbound Mailboxes	As often as possible.	01/01/2005 02:00am - 12/31/2020 06:59pm	Active
Clean Jobs Queue	On the hour; 05:00am	01/01/2012 04:15am - 12/31/2030 06:59pm	Active
Create Future TimePeriods	On the hour; 11:00pm	01/01/2012 01:30am - 12/31/2030 06:59pm	Active
Advanced Workflow Scheduled Job	As often as possible.	01/01/2015 07:15am -	Active

		12/31/2040 18:59pm	
Process Workflow Tasks	As often as possible.	01/01/2005 05:30am - 12/31/2020 06:59pm	Active
Prune Database on 1st of Month	On the hour; 04:00am; 1st	01/01/2005 02:15am - 12/31/2020 06:59pm	Inactive
Prune Old Record Lists	As often as possible	01/01/2005 08:15am - 12/31/2020 03:59pm	Active
Prune Tracker Tables	On the hour; 02:00am; 1st	01/01/2005 12:00pm - 12/31/2020 06:59pm	Active
Remove diagnostic tool files	On the hour; 04:00am; Sunday	01/01/2005 06:00am - 12/31/2030 06:59pm	Active
Remove temporary files	On the hour; 04:00am	01/01/2005 05:30am - 12/31/2030 06:59pm	Active
Remove temporary PDF files	On the hour; 04:00am	01/01/2005 04:00am - 12/31/2030 06:59pm	Active
Run Email Reminder Notifications	As often as possible.	01/01/2008 08:30am - 12/31/2020 06:59pm	Active
Run Nightly Mass Email Campaigns	On the hour; From 02:00am to 06:00am	01/01/2005 08:15am - 12/31/2020 06:59pm	Active
Run Nightly Process Bounced Campaign Emails	On the hour; From 02:00am to 06:00am	01/01/2005 02:00pm - 12/31/2020 06:59pm	Active

Run Report Generation Scheduled Tasks	On the hour; 06:00am	01/01/2005 02:15am - 12/31/2020 06:59pm	Inactive
Sugar Heartbeat	On the hour; 04:00am	01/01/2005 11:45am - 12/31/2030 03:59pm	Active
Update tracker_sessions Table	As often as possible.	01/01/2005 01:00am - 12/31/2020 06:59pm	Active

#### Check Inbound Mailboxes

The Check Inbound Mailboxes scheduler is active and runs as often as possible by default. This scheduler will retrieve any unread email from active group inbound email accounts configured in the system. Personal and bounce mail accounts are not checked by this scheduler. If the group email account is configured to create cases or to send auto-reply emails, then this scheduler will handle those tasks as well. For more information on how to set up and configure a group inbound email account, please refer to the Email documentation in the Administration guide.

# Clean Jobs Queue

The Clean Jobs Queue scheduler is active and runs every day at 5:00 AM by default. The jobs queue is essentially a log of when each scheduler has run. This scheduler will go through the job queues and either soft or hard delete old records in the jobs queue. A soft delete is simply hiding the record from Sugar, but keeping it in the database for recovery if necessary. A hard delete is permanently deleting it from the database. Job queue records will be soft and hard deleted by this scheduler with the following criteria:

- Soft Delete: Completed more than 7 days ago.
- Hard Delete : Completed more than 21 days ago.

Note: The number of days for a soft and hard delete are configurable through the sugar config files by modifying the values of \$sugar\_config['jobs']['soft\_lifetime'] and \$sugar\_config['jobs']['hard\_lifetime'].

#### Create Future TimePeriods

The Create Future TimePeriods scheduler is active and runs every day at 11:00 PM by default. When setting up the Forecasts module for the first time, you are prompted with what type of time period (Yearly or Quarterly) and how many future and past time periods you would like. This scheduler runs based off of those settings and creates new time period records as needed for forecast data entry.

For more information about configuring the time periods for forecasting, please refer to the Forecast Configuration documentation in the Administration guide.

### Advanced Workflow Scheduled Job

The Advanced Workflow Scheduled Job scheduler is responsible for processes associated with the Advanced Workflow business process management tool. It is active and runs as often as possible by default. The Advanced Workflow Scheduled Job will check for any active time-based process events in a pending state. If any processes meet this criterion, the scheduler will ensure the process flow continues. For more information about Advanced Workflow, please refer to the Advanced Workflow documentation in the Administration guide.

Note: Advanced Workflow events processed by this scheduler will be run by the admin user (user id = '1') in Process History unless the admin user is disabled.

#### **Process Workflow Tasks**

The Process Workflow Tasks scheduler is active and runs as often as possible by default. This scheduler processes and runs any time elapsed workflows are due to run. If you utilize time-elapsed workflows, it is highly recommended to run this scheduler as often as possible to ensure the workflows are executed quickly. For more information on creating workflows, please refer to the Workflow Management documentation in the Administration guide.

Note: Workflows processed by this scheduler will be run by the admin user (user id = '1') unless the admin user is disabled.

#### Prune Database on 1st of Month

The Prune Database on 1st of Month scheduler is inactive and runs at 4:00 AM on the first day of every month. Sugar implements a soft delete feature when deleting records through the application. Instead of deleting the record right away, the system marks a field called deleted in the database for the record. This scheduler

runs through every table in the Sugar database and deletes any record that has this deleted flag. This is beneficial to keep the database small and efficient, but will remove the ability to recover accidentally deleted records. If you have a large database, we recommend activating this scheduler and running it once a month for performance.

Note: Sugar keeps a backup of each record deleted by this scheduler in the form of a PHP file created in the cached backups folder. The file contains a SQL insert statement for each record in each table that was deleted to allow you to recover the data if necessary.

#### Prune Old Record Lists

The Prune Old Record Lists scheduler is active and runs as often as possible by default. This scheduler job will clean up backend database entries Sugar uses when generating export files. Such entries that are older than 1 hour from the current date and time will be removed from the record list database table.

Keeping this scheduler active will help prevent exports from failing due to size limitations.

#### **Prune Tracker Tables**

The Prune Tracker Tables scheduler is active and runs at 2:00 AM on the first day of every month by default. This scheduler will delete data in the tracker tables based on the tracker prune interval. This interval can be set from Admin > Trackers and defaults to 30 days if not set. Any record older than the specified amount of days will be deleted from the following tables:

- tracker
- tracker sessions
- tracker perf
- tracker queries
- tracker tracker queries

Keeping this scheduler active helps ensure overall system performance is kept at optimum levels, as these tables are continually updated via common actions in the application. For more information on trackers and setting this interval, please refer to the Tracker section in the System documentation of the Administration guide.

## Remove Diagnostic Tool Files

The Remove Diagnostic Tool Files scheduler is active and runs Sundays at 4:00 AM by default. The ./cache/diagnostic directory serves as a temporary directory for data generated by Sugar's Diagnostic Tool, which allows administrators and developers to capture basic system and server configuration details in order to diagnose problems in a Sugar instance. The tool places this data into a zip file on the server. The Remove Diagnostic Tool Files scheduler will remove any of these temporary files from the directory once a week during off-peak hours. For more information about the Diagnostic Tool, please refer to the Diagnostic Tool documentation.

### Remove Temporary Files

The Remove Temporary Files scheduler is active and runs daily at 4:00 AM by default. Sugar uses a cache directory to store files such as images, documents, and installable modules uploaded by users. Some of these documents may be large in size and can cause performance issues. This scheduler will remove any unused files that are found in the ./uploads/tmp directory or in most user-configured upload directories. For more information about temporary file storage, please refer to the Advanced Configuration Options documentation.

## Remove Temporary PDF Files

The Remove Temporary PDF Files scheduler is active and runs daily at 4:00 AM by default. The ./cache/pdf/ directory serves as a temporary directory for in-progress PDF files generated from reports, quotes, and other parts of Sugar. Upon successful completion of the PDF operation, the file is typically removed from the directory, but there may be circumstances where orphaned PDF files could remain in the directory. This scheduler will remove any PDF files from the directory during off-peak hours.

#### Run Email Reminder Notifications

The Run Email Reminder Notifications scheduler is active and runs as often as possible by default. This scheduler will send out email reminders for meetings and calls that have met or passed the reminder time. Meetings and calls need to have a status that does not equal "Held" in order for the email reminder to be sent to invitees.

## Run Nightly Mass Email Campaigns

The Run Nightly Mass Email Campaigns scheduler is active and runs on the hour,

every hour from 2:00 AM to 6:00 AM by default. This scheduler will process any campaign emails waiting to be sent in the email queue up to the configured batch amount. If the number of emails to send per batch is set to 500, and this scheduler is set to run once an hour, then you will be sending 500 emails per hour. Please configure this scheduler and the number of emails to send per batch to allow the proper amount of email to be sent.

Note: Many email providers place limitations on email send rates such as emails per hour, emails per day, unique recipients, etc. Please check with your email provider to ensure that they will be able to process the volume of emails you desire to send through campaigns.

For more information on setting the number of emails sent per batch, please refer to the Campaign Email Settings section in the Email documentation in the Administration guide.

### Run Nightly Process Bounced Campaign Emails

The Run Nightly Process Bounced Campaign Emails scheduler is active and runs on the hour, every hour from 2:00 AM to 6:00 AM by default. This scheduler will retrieve any unread email from active bounce inbound mail accounts configured in the system. Bounce email accounts are important for receiving any bounced emails from a campaign. Emails in the bounce mail account must match all of the following criteria to be classified as a bounced email:

- 'From' email address must contain MAILER-DAEMON or POSTMASTER.
- 'Remove me' link from the original email must be in the email body.
- The originating email does not have a campaign activity log type of invalid email or send error.

We recommend setting this scheduler to run at the same time and interval as the Run Nightly Mass Email Campaigns scheduler. For more information on how to set up and configure a bounce inbound email account, please refer to the Email documentation of the Administration guide.

## Run Report Generation Scheduled Tasks

The Run Report Generation Scheduled Tasks scheduler is inactive by default with an interval set to run daily at 6:00 AM when activated. This scheduler executes any scheduled reports and emails the results to the designated user. If you want to utilize scheduled reports, please enable this scheduler, otherwise the reports will not be emailed. We recommend running this scheduler as often as possible, this way if someone schedules a report for 6:15 AM, they will not have to wait until

7:00 to receive the report. For more information on scheduling reports, please refer to the Scheduling Reports section in the Reports documentation of the Application guide.

### Sugar Heartbeat

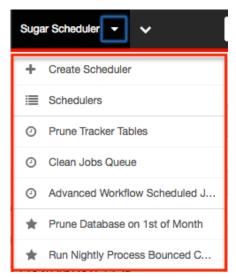
The Sugar Heartbeat scheduler is active with an interval set to run daily at 4:00 AM by default. This scheduler ensures that Sugar continues to receive heartbeat information even if no users have logged into your instance in the last three days. When this occurs, the Sugar heartbeat information will be sent automatically when cron runs.

### Update tracker sessions Table

The Update tracker\_sessions Table scheduler is active and runs as often as possible by default. This scheduler updates the tracker\_sessions table, setting all records that have a date older than six hours to not active. This ensures any user that is inactive for six hours or more will be logged out and their sessions will no longer be active. Please keep in mind that PHP settings on the server may be more restrictive than the six hour limitation on inactivity this scheduler imposes.

### Schedulers Module Tab

The Schedulers module tab can be accessed by navigating to the Administration page and clicking "Scheduler" in the System section. Once in the Schedulers list view, you can click the triangle in the Sugar Scheduler module tab to display the Actions, Recently Viewed, and Favorites menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of schedulers you last viewed in the module. The Favorites menu displays the list of schedulers you most recently marked as favorites in the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
	Opens the edit view layout to create a new scheduler
	Opens the list view layout to search and display schedulers

# Creating Schedulers

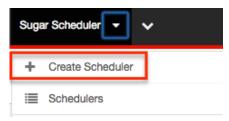
There are various methods for creating schedulers in Sugar including via the Schedulers module and via duplication. The full edit view layout opens when creating the scheduler directly from the Schedulers menu and includes all of the relevant fields for your organization's schedulers. Schedulers can be created for built in jobs within the application or they can be created to call a URL outside of Sugar.

# Creating via Schedulers Module

One of the most common methods of scheduler creation is via the Create Scheduler option in the Sugar Scheduler module tab. This opens up the edit view layout which allows you to enter in all the relevant information for the scheduler.

Use the following steps to create a scheduler via the Scheduler module:

- 1. Navigate to Admin > Scheduler.
- 2. Click the triangle in the Sugar Scheduler module tab and select "Create Scheduler".



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving. Note: For more information on setting the advanced options for the interval, please refer to the Advanced Options section.
- 4. Once the necessary information is entered, click "Save".

Create



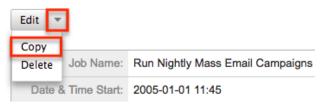
### Creating via Duplication

You can also create a new scheduler by duplicating an existing scheduler record. The Copy option is useful if the scheduler you are creating has similar information to an existing scheduler.

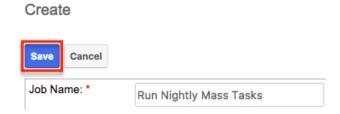
Use the following steps to create a scheduler by duplicating an existing record:

- 1. Navigate to a scheduler record's detail view.
- 2. Select "Copy" from the Actions menu.

Run Nightly Mass Email Campaigns 😭



3. The displayed edit view is pre-populated with the original scheduler's values. Update the necessary fields, then click "Save". For more information on setting the advanced options for the interval, please refer to the Advanced Options section.



# Viewing Schedulers

There are various options available for viewing scheduler records in Sugar including via Schedulers list view, Schedulers detail view, and Schedulers Recently Viewed menu.

### Viewing via List View

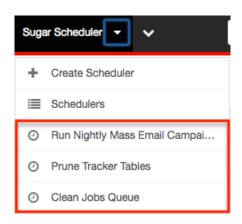
The Schedulers list view displays all scheduler records meeting the current search criteria. To access the list view, simply click the Schedulers module tab. While list view shows key scheduler fields, you can click the scheduler's name to open the record in detail view. For more information on viewing scheduler via list view, please refer to the Schedulers List View section.

## Viewing via Detail View

The Schedulers detail view displays thorough scheduler information including all scheduler fields followed by the log records of when this scheduler has ran. The detail view can be reached by clicking a scheduler record's link from anywhere in the application including from the Schedulers list view. For more information on viewing scheduler via detail view, please refer to the Schedulers Detail View section.

# Viewing via Recently Viewed

As you work, Sugar will keep track of which scheduler you have recently viewed. Click the triangle in the Sugar Scheduler module tab to see a list of the 3 schedulers you most recently viewed. Clicking the scheduler name will open the scheduler in detail view.



# Searching Schedulers

The Schedulers list view includes a Basic Search to help you locate records easily and effectively in a module-specific manner. Once the search is performed, the relevant results will be displayed in the Schedulers list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you can use the wildcard at the beginning of your text as well (e.g. %services). This will pull up any record that has the word "services" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used in the different methods, please refer to the Search documentation.

Basic Search offers a few, commonly used fields for a simplified search experience. The buttons in Basic Search panel have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.

#### Schedulers



Once the search is complete, the relevant results will populate in the list view below the search panel. To see all scheduler records, simply click "Clear" and then "Search" to perform a blank search with no filters.

### Schedulers List View

The Schedulers list view displays all scheduler records meeting the current search criteria. You can view the basic details of each scheduler within the field columns.

### Pagination

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

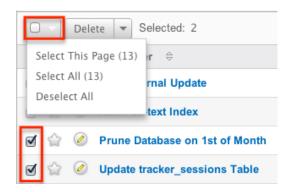
By default, Sugar displays 20 records per list view page, but administrators can change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide.



#### Checkbox Selection

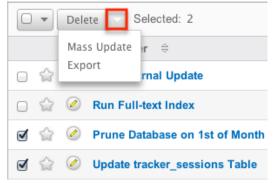
You can perform several actions on scheduler records directly from the list view by first selecting the desired records. To select individual scheduler records on the Schedulers list view, mark the checkbox on the left of each row. To select or deselect multiple scheduler records on the list view, use the options in the checkbox dropdown menu:

- Select This Page : Selects all records shown on the current page of scheduler results.
- Select All: Selects all records in the current search results across all pages of scheduler results.
- Deselect All: Deselects all records that are currently selected.



#### Actions Menu

The Actions menu to the right of the checkbox dropdown allows you to perform various actions on the currently selected records.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Delete	Delete one or more schedulers at a time
Mass Update	Mass update one or more schedulers at a time
Export	Export one or more schedulers to a CSV file

# Favorite Designation

Users have the option to mark scheduler records as favorites via the list view as well as the detail view. This allows users to designate records that are important or will be viewed often so that they can easily be accessed via search or from the Schedulers module tab. In the Schedulers list view, the star on the left of each schedule's row is yellow once marked to indicate a favorite schedule. For more information on marking records as favorites, please refer to the Favoriting Schedulers section of this documentation.



### Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. The list view may be sorted by only one column at a time.



### Schedulers Detail View

The Schedulers detail view displays thorough scheduler information including all scheduler fields which are grouped by default into the Overview, More Information, and Other panels. You can also view a scheduler's log which appears in beneath the scheduler fields. The detail view can be reached by clicking a scheduler record's link from anywhere in the application including from the Schedulers list view.

#### **Actions Menu**

The Actions menu on the top left of each scheduler's detail view allows you to perform various actions on the current record. Administrator users can change the action items to be displayed as separate buttons instead of a dropdown menu via Admin > System Settings. For more information on configuring the actions menu, please refer to the System documentation in the Administration guide.

Run Nightly Mass Email Campaigns 😭

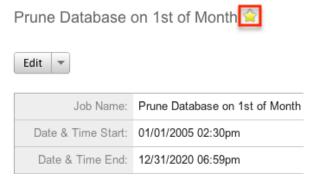


The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit this scheduler
Сору	Duplicate this scheduler
Delete	Delete this scheduler

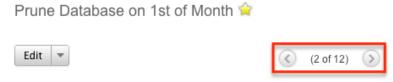
### **Favorite Designation**

Users have the option to mark scheduler records as a favorite via the detail view as well as the list view. This allows users to designate records that are important or will be viewed often so that they can easily be accessed via search or from the Schedulers module tab. In the Schedulers detail view, the star on the right of the scheduler's name is yellow once marked to indicate a favorite scheduler. For more information on how to mark records as favorites, please refer to the Favoriting Schedulers section of this documentation.



#### Next or Previous Record

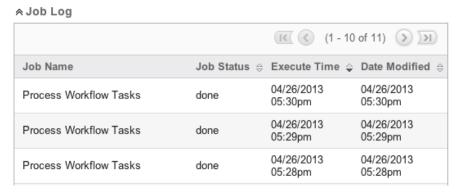
On the upper right of the Schedulers detail view, there are two buttons that allow you to page through each scheduler in the Schedulers list view's current search results. Clicking the Previous button displays the previous scheduler of the current search results while clicking the Next button displays the next scheduler of the current search results. The text in between shows which scheduler result you are currently viewing within the total number of current results.



# Job Log

Beneath a schedule record's fields is a subpanel containing the logs of when the scheduler has run. Each record will contain a Job Status field indicating the

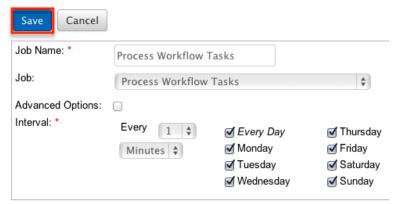
outcome of the job and an Execute Time field to show when the job started.



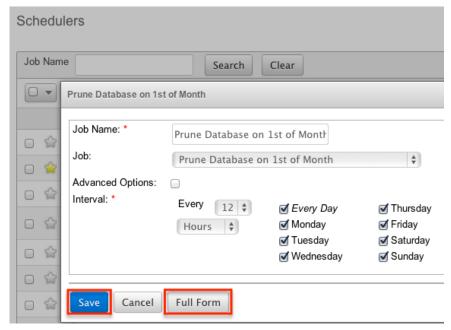
# **Editing Schedulers**

Schedulers may be edited at any time to update or add information to the record. You can make changes to existing scheduler records via the Schedulers edit view and quick create forms. Edit view is available within the Schedulers module and includes all of the Scheduler fields you should need.

Process Workflow Tasks » Edit



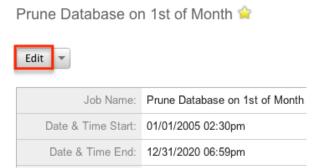
Quick Create is available for editing schedulers from outside the Schedulers module and opens as a pop-up without navigating away from your current page. It generally contains fewer fields, but the Full Form button may be used to access the full edit view should you need to edit additional fields.



For more information on setting the advanced options for the interval, please refer to the Advanced Options section.

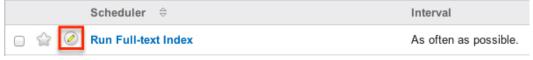
### Editing via Detail View

You can edit schedulers via the detail view by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve your changes.



# Editing via List View

You can edit schedulers via the list view by clicking the Pencil icon to the left of each scheduler's name. A pop-up window will open with the quick create form which is a shortened version of the edit view layout. Update the necessary fields, then click "Save" to preserve your changes.



## **Deleting Schedulers**

If a scheduler record is invalid and should no longer appear in your organization's Sugar instance, it may be deleted from either the Schedulers detail view or list view. Deleting via the detail view allows you to delete a single record while the list view allows for mass deleting multiple records at once.

Note: If you wish to disable a scheduler, but do not want to delete it, you can set the status to Inactive and it will not be ran.

### Deleting via Detail View

Use the following steps to delete a scheduler record via the detail view:

- 1. Navigate to a scheduler record's detail view.
- 2. Select "Delete" from the Actions menu.

Prune Database on 1st of Month 😭

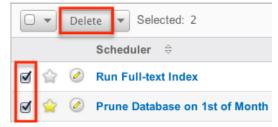


3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

# Mass Deleting via List View

Use the following steps to delete one or more scheduler records via the list view:

- 1. Navigate to the Schedulers list view by clicking the Schedulers module tab.
- 2. Use the Search to find the scheduler records you wish to delete.
- 3. Select the desired scheduler records individually or using the checkbox dropdown's options.
- 4. Choose "Delete" from the Actions menu.



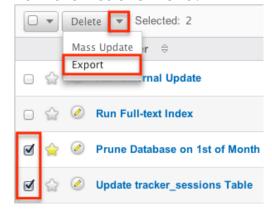
5. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of scheduler records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

# **Exporting Schedulers**

Sugar's Export option allows users to download all fields for the selected schedulers to their computers as a .CSV (comma-separated values) file. This may be useful when needing to use Scheduler data with other software such as Microsoft Excel. Due to PHP memory limitations on the server, there may be occasions when the application times out while exporting a large number of scheduler records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

Schedulers may be exported from the Schedulers list view by selecting "Export" from the Actions menu.



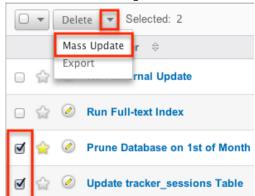
# Mass Updating Schedulers

Mass updating allows users to make the same change to multiple scheduler records at once from the Schedulers list view. Currently, only fields with the data type of date, datetime, dropdown, multiselect, and radio may be altered during a mass update. Due to the PHP memory limitations on the server, there may be occasions when the application times out while mass updating a large number of scheduler records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

Use the following steps to mass update scheduler records from the list view:

- 1. Navigate to the Schedulers list view by clicking the Schedulers module tab.
- 2. Use the list view's Search to find schedulers you wish to modify.
- 3. Select the desired schedulers individually or using the checkbox dropdown's options.

4. Choose "Mass Update" from the Actions menu.



5. Scroll to the Mass Update panel and set values for the fields you wish to alter.

Mass Update



Click "Update" to save the changes to all of the currently selected scheduler records.

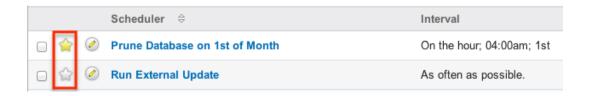
# Favoriting Schedulers

Each Sugar administrator has the option to designate their own favorite schedulers that are important or will be viewed often. Once records are marked as favorites, you can select your most recent favorites directly from the Sugar Scheduler module tab.

# Favoriting via List View

Use the following steps to mark records as favorites via the Schedulers list view:

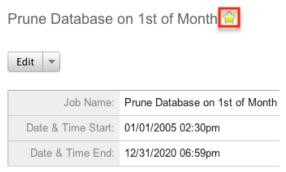
- 1. Navigate to the Schedulers list view by clicking the Schedulers module tab.
- 2. Use Search to find the scheduler records you wish to mark as favorites.
- 3. Click the star icon on the left of each desired scheduler's row.
- 4. To remove the scheduler as a favorite, click the star again to revert it to white.



### Favoriting via Detail View

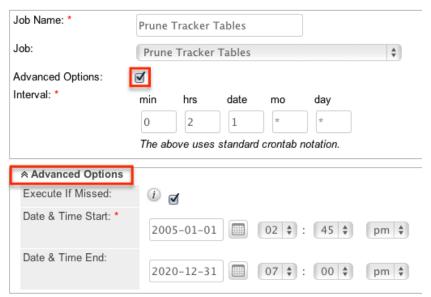
Use the following steps to mark records as favorites via the Schedulers detail view:

- 1. Navigate to a scheduler record's detail view.
- 2. Click the star icon to the right of the scheduler's name in the upper left of the detail view to designate it as a favorite.
- 3. To remove the scheduler as a favorite, click the star again to revert it to white.



# **Advanced Options**

From the edit view of a scheduler, you can select the Advanced Options checkbox to refine the interval of the scheduler as well as configure the Advanced Options panel.



This opens up the cron tab notation for the interval field. Cron tab notation gives administrators more flexibility to define when and how often the scheduler runs. Cron tab notation allows you to enter a value for each time part for the job to run on. You can specify complex values by using the following notations:

Character	Description
*	Asterisk is used to represent every value for the specified time part. For example, * in the mins field will run every minute.
/	Forward slash is used to represent increments. For example, */15 in the mins field will run every 15 minutes. 30/5 in the mins field will run starting at the 30th minute of the hour and every 5 minutes after.
,	Comma is used to specify multiple values. For example, 18,20 in the hrs field will run at 6:00 PM and 8:00 PM.
-	Hyphen is used to specify a range of values. For example, 1-6 in the mo field will run from January through June.

Specify the values to run in the following interval fields using cron tab notation:

- min : Specify the minute of the hour to run on (0-59).
- hrs : Specify the hour of the day to run on (0-23).
- date: Specify the day of the month to run on (1-31).
- mo : Specify the month of the year to run on (1-12).
- day: Specify the day of the week to run on (0-6).

You may specify any combination of the fields to create the schedule needed to run the job.

# Setting up Cron Scheduler

In order for the schedulers to run at the designated times, there needs to be a process running on the server to initiate the schedulers. This backend process will call the cron.php file in Sugar with some specific parameters, and the cron.php file will execute the schedulers as necessary.

Sugar instances hosted on Sugar's cloud service have the cron scheduler set up automatically, but it must be configured for on-site instances. In UNIX systems (MAC and Linux) you can configure crontab to run the schedulers. Navigate to Admin > Scheduler to get the system information necessary to set up the crontab.

```
Note: In order to run Sugar Schedulers, add the following line to the crontab file:

* * * * * cd /var/www/sugar123; php -f cron.php > /dev/null 2>&1
```

Note: The scheduler is throttled by default to prevent it from being ran more often than every 30 seconds. This value is configurable by setting the \$sugar config['cron']['min cron interval'] value in the config override.php file.

### Setting Up in Unix/Linux

Use the following steps to set up crontab to run the Sugar schedulers:

- From a command prompt, execute the following command: crontab -u apache -e
- 2. The text editor will launch as the user "apache". If your webserver is running under a different user, please adjust the line accordingly.
- 3. Add in the commands from Admin > Schedulers into the crontab file:

  \*\*\*\* cd /var/www/sugar123; php -f cron.php > /dev/null 2>&1

  Note: Make sure that the path to the root directory of Sugar and to PHP is correct.
- 4. Save the changes to the file. This will run the cron job every minute.

You can check crontab to see what commands are being run by executing the following command: "crontab -u apache -l".

Last Modified: 03/16/2018 10:18pm

# PDF Manager

#### Overview

The PDF Manager is used to create and manage templates for generated PDF files for any deployed module, custom or standard. Sugar comes with two PDF templates out of the box (Quote and Invoice).

Note: Legacy Quote PDF Templates (custom Quote templates created through code customizations) are not displayed in the PDF Manager but are still available in the Quotes module provided the templates were built off the TCPDF engine.

# PDF Manager Fields

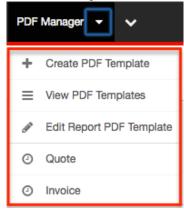
The PDF Manager module contains a number of stock fields which come out-of-the-box with Sugar. The below definitions are suggested meanings for the fields, but the fields can be leveraged differently to best meet your organization's needs.

Field	Description
Author	The author name to be placed in the PDF properties
Description	A description or other information about the template
Footer Text	The text to be placed in the template's footer
Header Logo File	Click "Choose File" to upload a header image to the template Note: Header images will display as 454 pixels wide by 45 pixels high, so the uploaded image should be sized relative to these dimensions (e.g. 908x90 or 1816x80).
Header Text	The text to be placed in the template's header
Header Title	The title of the template header
Keyword(s)	The keywords to be placed in the PDF properties
Module	The module this template will work in

	Note: Once a template is created, the module cannot be changed.
Name	The name or designation of the template
Published	Determines if a template is available to users or not
Subject	The subject to be placed in the PDF properties
Teams	The Sugar team(s) assigned to the template record
Template	The content of the template
Title	The title to be placed in the PDF properties

# PDF Manager Module Tab

The PDF Manager module tab can be accessed by navigating to the Administration page and clicking "PDF Manager" in the System section. Once in the PDF Manager list view, you can click the triangle in the PDF Manager module tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of templates you last viewed in the module. Please note that clicking the module tab allows you to access the PDF Manager list view.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Create PDF Template	Opens the edit view layout to create a new template
View PDF Templates	Opens the list view layout to search and display templates
Edit Report PDF Template	Opens the edit view layout to modify the

report template

# **Creating PDF Templates**

There are various methods for creating PDF templates in Sugar including via the PDF Manager module and duplication. The full edit view layout opens when creating the template directly from the PDF Manager menu and includes all of the relevant fields for your organization's templates.

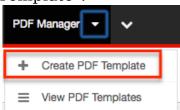
Note: It is generally recommended to create a new template via duplication and then modify to suit your needs.

### Creating Via PDF Manager Module

You can create a new template via the Create PDF Templates option in the PDF Manager module tab. This opens up the edit view layout which allows you to enter in all the relevant information for the template.

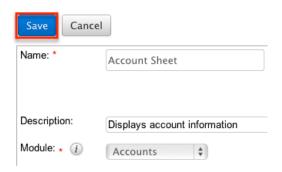
Use the following steps to create a template via the PDF Manager module:

- 1. Navigate to Admin > PDF Manager.
- 2. Click the triangle in the PDF Manager module tab and select "Create PDF Template".



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Once the necessary information is entered, click "Save".

Create



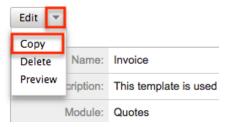
### Creating Via Duplication

You can also create a new template by duplicating an existing template record. The Copy option is useful if the template you are creating has a similar layout to an existing template.

Use the following steps to create a template by duplicating an existing record:

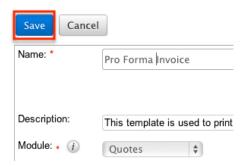
- 1. Navigate to a template record's detail view.
- 2. Click "Copy" from the Actions menu.

Invoice



3. The displayed edit view is pre-populated with the original template's values. Update the necessary fields, then click "Save".

Create

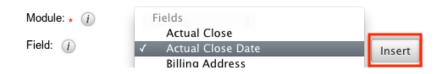


Note: If you change the module field during duplication, you will have to remove all variable references to the old module in the layout before saving.

# **Creating Content**

The PDF template can contain images and HTML formatting as well as variable fields from the assigned module. TincyMCE is the rich text editor for formatting your template using HTML. For more information on using TinyMCE, please refer to the TinyMCE section in the User Interface in the Application guide.

To add variable fields from the assigned module, simply select the desired field from the Field dropdown and then click "Insert".



The variable will be placed wherever your computer's cursor is located in the template and can be moved around as necessary.

Note: The Link section provides all one-to-one and one-to-many relationships to provide linked data in the template.

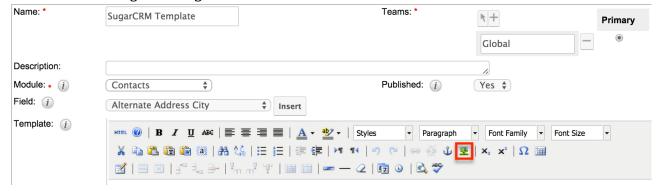
For modules that have a subset of data in the template (e.g. Product line items in Quotes), there are special containers in the template that indicate where the repeating areas start and stop. These containers are designated by the following commands:

• Start : {foreach from=\$product bundles item="bundle"}

• End : {/foreach}

Note: These lines are important and if removed can cause errors when generating a PDF. If you encounter an error when generating a PDF, we recommend checking the template for these start and end placeholders.

To add images to a PDF template, simply select the image icon in the toolbar. Fill out the image details (Image URL, Alignment, Dimensions, Border, etc.) in the Insert/Edit Image dialog then click "Insert".



Note: Images can not be copy and pasted or drag and dropped into a PDF template. The image icon must be used to insert an image.

## Viewing PDF Templates

There are various options available for viewing template records in Sugar including via PDF Manager list view, PDF Manager detail view, and PDF Manager Recently Viewed menu.

### Viewing Via List View

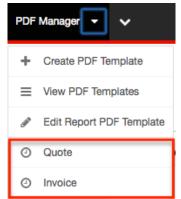
The PDF Manager list view displays all template records meeting the current search criteria. To access the list view, simply click the PDF Manager module tab. While list view shows key template fields, you can click the template's name to open the record in detail view. For more information on viewing templates via list view, please refer to the PDF Manager List View section.

### Viewing Via Detail View

The PDF Manager detail view displays thorough template information including all template fields. The detail view can be reached by clicking a template record's link from anywhere in the application including from the PDF Manager list view. For more information on viewing templates via detail view, please refer to the PDF Manager Detail View section.

### Viewing Via Recently Viewed

As you work, Sugar will keep track of which templates you have recently viewed. Click the triangle in the PDF Manager module tab to see a list of the 3 templates you most recently viewed. Click the template's name from the list to open it in detail view.



# Searching PDF Templates

The PDF Manager list view includes a Basic Search to help you locate records easily and effectively in a module-specific manner. Once the search is performed, the relevant results will be displayed in the PDF Manager list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you

can use the wildcard at the beginning of your text as well (e.g. %services). This will pull up any record that has the word "services" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used in the different methods, please refer to the Search documentation.

Basic search offers a few, commonly used fields for a simplified search experience. The buttons and checkboxes available in Basic Search panel have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.

Search PDF Manager



When you run a search, Sugar will return records matching all (as opposed to any) of the fields and checkboxes for which you have given a value. For example, if you select a module and enter a template name, Sugar will only return template records with a matching name that are assigned to that module. Once the search is complete, the relevant results will populate in the list view below the search panel. To see all template records, simply click "Clear" and then "Search" to perform a blank search with no filters.

## PDF Manager List View

The PDF Manager list view displays all template records meeting the current search criteria. You can view the basic details of each template within the field columns.

## Pagination

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page

and Last Page buttons allow you to skip to the beginning or the end of your current results.

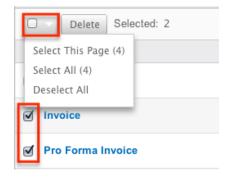
By default, Sugar displays 20 records per list view page, but administrators can change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide.



#### Checkbox Selection

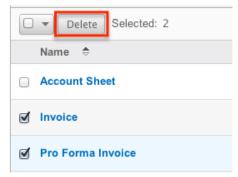
You can perform several actions on template records directly from the list view by first selecting the desired records. To select individual template records on the PDF Manager list view, mark the checkbox on the left of each row. To select or deselect multiple template records on the list view, use the options in the checkbox dropdown menu:

- Select This Page: Selects all records shown on the current page of PDF template results.
- Select All: Selects all records in the current search results across all pages of PDF template results.
- Deselect All: Deselects all records that are currently selected.



#### Actions Menu

The Actions menu to the right of the checkbox dropdown typically allows you to perform various actions on the currently selected records.



The only action available from the PDF Manager list view is the following operation:

Menu Item	Description
Delete	Delete one or more templates at a time

### Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. The list view may be sorted by only one column at a time.



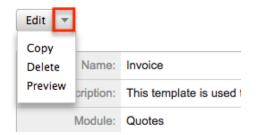
# PDF Manager Detail View

The PDF Manager detail view displays thorough template information including all template fields which are grouped by default into the Overview and PDF Document Properties panels. The detail view can be reached by clicking a template record's link from anywhere in the application including from the PDF Manager list view.

#### Actions Menu

The Actions menu on the top left of each template's detail view allows you to perform various actions on the current record. Administrator users can change the action items to be displayed as separate buttons instead of a dropdown menu via Admin > System Settings. For more information on configuring the actions menu, please refer to the System documentation in the Administration guide.

#### Invoice



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit this template
Сору	Duplicate this template
Delete	Delete this template
Preview	Preview this template

#### Next or Previous Record

On the upper right of the PDF Manager detail view, there are two buttons that allow you to page through each template in the PDF Manager list view's current search results. Clicking the Previous button displays the previous template of the current search results while clicking the Next button displays the next template of the current search results. The text in between shows which template result you are currently viewing within the total number of current results.

Pro Forma Invoice



# **Editing PDF Templates**

Templates may be edited at any time to update or add information to the record. You can make changes to existing template records via the PDF Manager edit view. Edit view is available within the PDF Manager module and includes all of the template fields you should need.

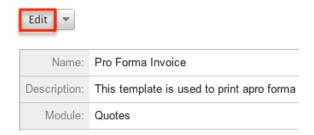
#### Pro Forma Invoice » Edit



### Editing Via Detail View

You can edit templates via the detail view by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve your changes.

Pro Forma Invoice



# **Editing Report PDF Template**

The Report PDF Template is used when generating a report as a PDF. The report template may be edited at any time to include your company's logo. This logo displays as a header in all Report PDF files.

You can edit the report template via the detail view by clicking the Edit Report PDF Template action in the PDF Manager module tab. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve your changes.

Report PDF Template



# **Deleting PDF Templates**

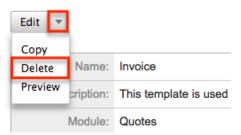
If a template record is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from either the PDF Manager detail view or list view. Deleting via the detail view allows you to delete a single record while the list view allows for mass deleting multiple records at once.

### Deleting Via Detail View

Use the following steps to delete a template record via the detail view:

- 1. Navigate to a template record's detail view.
- 2. Select "Delete" from the Actions menu.

Invoice

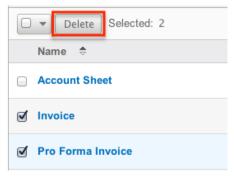


3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

# Mass Deleting Via List View

Use the following steps to delete one or more template records via the list view:

- 1. Navigate to the PDF Manager list view by clicking the PDF Manager module tab.
- 2. Use the Basic Search to find the template records you wish to delete.
- 3. Select the desired template records individually or using the checkbox dropdown's options.
- 4. Choose "Delete" from the Actions menu.



5. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of template records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

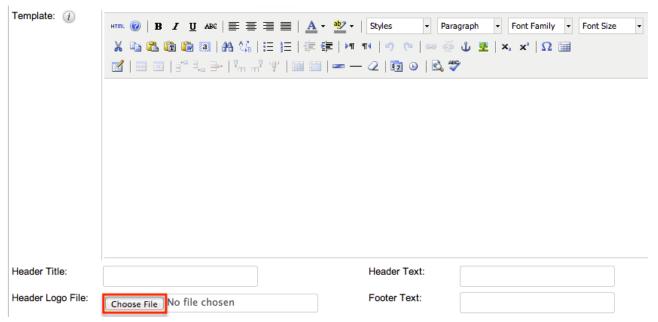
# Adding a Header Image to PDF Template

Image files can easily be uploaded from your local machine to be used as a header image on a PDF template. After uploading and saving the image to the template's Header Logo File field, it will be shown on the PDF generated by users in Sugar.

Header images will display as 454 pixels wide by 45 pixels high, so the uploaded image should be sized relative to these dimensions (e.g. 908x90 or 1816x80).

After saving an appropriately sized image file to your computer, use the following steps to add the header image to the PDF template:

- 1. Create a new PDF template or open up an existing template via Admin > PDF Manager.
- 2. Click the "Choose File" button in the Header Logo File field to open a file selection window from your browser.



3. Select the image file from your local machine then click "Open" to add the image.

Please note that you must save then preview the PDF template in order to view the inserted header image.

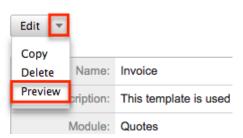
# Previewing PDF Templates

Previewing PDF templates allows you to see what the template will look like before publishing it in Sugar. The preview option displays the PDF template with the database field names and not actual data values and is accessible from the detail view.

Use the following steps to preview a template via the detail view:

- 1. Navigate to a template record's detail view.
- 2. Select "Preview" from the Actions menu.

  Invoice



3. The PDF will download to your computer for viewing.

# Web Logic Hooks

#### Overview

Web logic hooks allow you to establish events on a per module basis for Sugar to send data from the record in focus to an external URL so that additional processing can be completed outside the Sugar application. When a Web Logic Hook is triggered, the data is not sent instantaneously. Rather, the data is queued and processed under the Dispatch Web Logic Hook scheduled job. Once the job is processed through a regular scheduler run, the data for the record that triggered the hook is transmitted to the designated URL in a JSON format for further processing. This can allow you to send this data to other applications within your organization or to manipulate the data and transmit it back to Sugar via the REST API.

# Web Logic Hook Fields

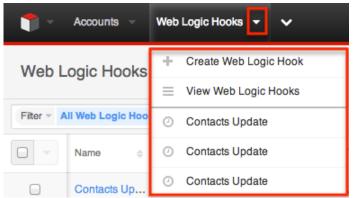
The Web Logic Hooks module contains a number of stock fields which come out-of-the-box with Sugar. The below definitions are suggested meanings for the fields, but the fields can be leveraged differently to best meet your organization's needs.

Field	Description
Module Name	The module that the web logic hook will trigger off when the trigger event occurs in that module
Name	The name of the web logic hook
Request Method	The HTTP request method that the web logic will utilize to call out to the specified URL
Trigger Event	The event that must occur in order for the web logic hook to process
URL	The URL that will receive the data transmitted by the web logic hook
	Note: This URL should be a URL outside of your SugarCRM instance. If you have an instance on Sugar's cloud service, it

is your responsibility to host the URL that will process the web logic hook.

# Web Logic Hooks Module Tab

The Web Logic Hooks module tab is typically located on the navigation bar at the top of any Sugar screen after selecting "Web Logic Hooks" from the admin screen. Click the tab to access the Web Logic Hooks list view. You may also click the triangle in the Web Logic Hooks tab to display the Actions and Recently Viewed menu items. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of web logic hooks you last viewed in the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
	Opens the record view layout to create a new web logic hook
View Web Logic Hooks	Opens the list view layout to search and display web logic hooks

# Creating Web Logic Hooks

There are two methods for creating web logic hooks in Sugar including via the Web Logic Hooks module and duplication.

# Creating Via Web Logic Hooks Module

The most common methods of web logic hook creation is via the Web Logic Hooks module using the Create Web Logic Hook option in the module tab or the Create button on the list view. This opens the record view layout which allows you to

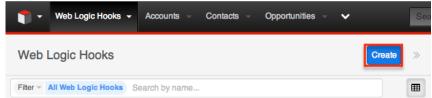
enter all of the relevant information for the account.

Use the following steps to create a web logic hook via the Web Logic Hooks module:

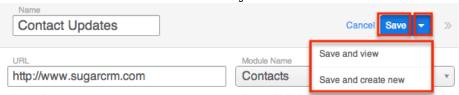
1. Click the triangle in the Web Logic Hooks module tab to open the actions menu and select "Create Web Logic Hook". You can also click the Create button on the upper right of the Web Logic Hooks list view. From Web Logic Hooks module tab:



From Web Logic Hooks list view:



- 2. Enter appropriate values for the fields in the record view layout. All required fields will indicate "Required" in the field and must be completed prior to saving.
- 3. Once the necessary information is entered, click "Save".
  - Alternatively, you can use the Actions Menu to the right of the Save button to select "Save and view" or "Save and create new". "Save and view" will display the record's details after the save is complete. "Save and create new" saves the current record and opens a new, blank record view in edit mode where you can create another record.

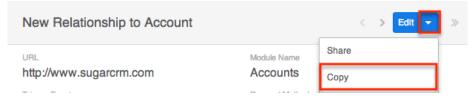


# Creating Via Duplication

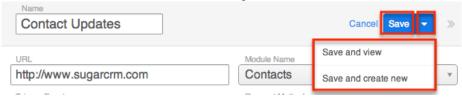
You can also create a new web logic hook by duplicating an existing web logic hook record. The Copy option is useful if the web logic hook you are creating has similar information to an existing web logic hook.

Use the following steps to create a web logic hook by duplicating an existing record:

- 1. Navigate to an web logic hook's record view.
- 2. Click the Actions menu and select "Copy".



- 3. The displayed record view is pre-populated with the original account's values. Update the necessary fields, then click "Save".
  - Alternatively, you can use the Actions Menu to the right of the Save button to select "Save and view" or "Save and create new". "Save and view" will display the record's details after the save is complete. "Save and create new" saves the current record and opens a new, blank record view in edit mode where you can create another record.



# Viewing Web Logic Hooks

There are various options available for viewing web logic hook records in Sugar including via Web Logic Hooks list view, Web Logic Hooks record view, and Web Logic Hooks Recently Viewed menu.

# Viewing Via List View

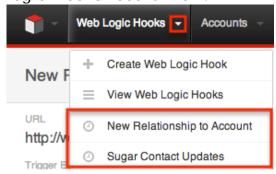
The Web Logic Hooks list view displays all account records meeting the current search criteria. To access the list view, simply click the Web Logic Hooks module tab. While list view shows key account fields, you can click the web logic hook's name to open the record view. For more information on viewing web logic hooks via list view, please refer to the Web Logic Hooks List View section of this documentation.

# Viewing Via Record View

The Web Logic Hooks record view displays all the applicable fields for the record in question. The record view can be reached by clicking a web logic hook record's link from anywhere in the application including from the Web Logic Hooks list view. For more information on viewing web logic hooks via the record view, please refer to the Web Logic Hooks Record View section of this documentation.

#### Viewing Via Recently Viewed

As you work, Sugar will keep track of which web logic hooks you have recently viewed. Click the Actions menu in the Web Logic Hooks module tab to see a list of your most recently viewed web logic hooks, and click each name to open the Web Logic Hooks record view.



# Searching Web Logic Hooks

The Web Logic Hooks list view includes a module search to help you locate records easily and effectively in a module-specific manner. Once the search is performed, the relevant results will be displayed in the Web Logic Hooks list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you can use the wildcard at the beginning of your text as well (e.g. %services). This will pull up any record that has the word "services" in the name, regardless of how it starts or ends.

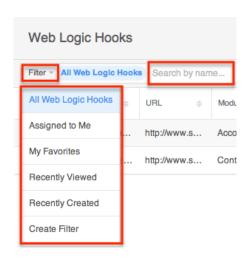
For more information on using the various search methods as well as how wildcards are used in the different methods, please refer to the Search documentation.

#### Module Search

Module search enables users to easily search by account name within the Accounts module and pull up matching records in the list view. The search also provides a Filter option allowing you to narrow your search further using the available options as follows:

- All Web Logic Hooks: Returns all records in the module
- My Favorites: Returns only records you have marked as favorites
- Recently Viewed: Returns only records you have viewed in the module within

- the last 7 days
- Recently Created: Returns only records you created in the module within the last 7 days
- Create Filter: Create a new custom filter which you can use to filter your search



When you choose a filter and run a search, Sugar will return accounts with a matching name from within the filtered list view results. For example, if you select "My Favorites" in the Filter options and enter an account name, Sugar will only return account records with a matching name that are favorited by you. Once the search is complete, the relevant results will populate in the list view below the search bar. To see all account records to which you have access, simply select the All Web Logic Hooks option in the filter and remove any text from the search bar.

# Creating a Filter

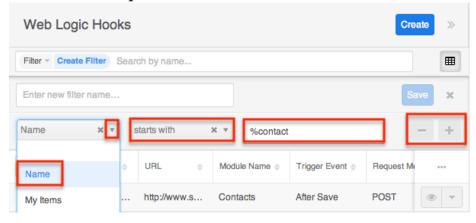
Users can also create new filters via the Create Filter option in the Filter list of the search bar. This allows users to add custom, complex filter options when searching in the Web Logic Hooks list view. You have the option to add multiple fields to your new filter by clicking the Plus button to the right of the filter selection dropdown lists. Please note that each one of the filter's criteria need to be true for a record in order for it to appear in the list view search result.

The following steps cover creating a new search by Name filter as an example:

1. Click the Filter option on the Web Logic Hooks search bar then select "Create Filter".



- 2. Select the field you wish to add to your filter as well as the condition and matching criteria.
- 3. To add multiple fields to the new filter, click the Plus button to the right of the filter dropdown list.
  - To remove fields from the new filter, click the Minus button to the right of the filter dropdown list.



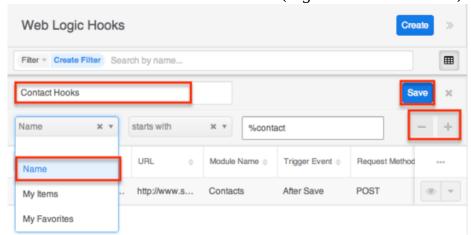
The list view will automatically display results matching your filters as you create and modify the criteria.

# Saving a Filter

Once a user has created a new filter, they have the option of saving it. Doing so will preserve the chosen fields as well as the conditions and values. The saved filter will then be available from the Filter dropdown menu in the module search bar to allow for easy retrieval of important sets of filters and values.

Use the following steps to save a new filter:

- 1. Create a new filter to perform a search on your desired fields.
- 2. Enter in a name for the new filter (e.g. "Contact Hooks").



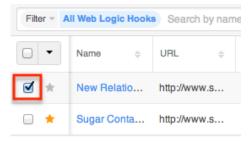
3. Click "Save" to add this filter and specified values to the module's Filter dropdown list.

### Web Logic Hooks List View

The Web Logic Hooks list view displays all account records meeting the current search criteria to which your user has access. You can view the basic details of each web logic hook within the field columns.

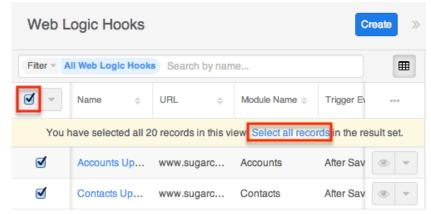
#### Checkbox Selection

You can perform several actions on web logic hook records directly from the list view by first selecting the desired records. To select individual web logic hook records on the Web Logic Hooks list view, mark the checkbox on the left of each row.

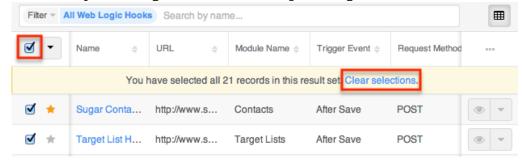


To select all web logic hook records displayed on the current set of list view results, click the checkbox to the left of the Actions menu. A dialog will appear below the list view column headers indicating that you have selected all records on the list view's current results set (e.g. 20). To select all records matching the

current search results set, click "Select all records" in the dialog.

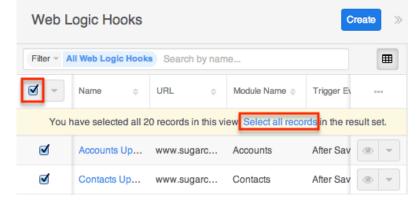


If you wish to clear the selection for all records on the list view result set, simply click "Clear selections" in the dialog. You can also clear the selections for all records by clicking the checkbox option again to remove the check marks.

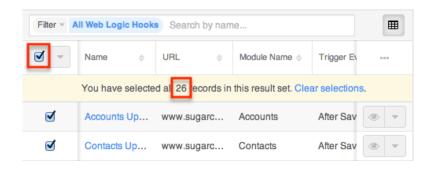


#### **Total Record Count**

You can view the total record count on the Web Logic Hooks list view by selecting all records displayed on the current set of list view results. Once the records are selected, a dialog will appear allowing you to select all records in the results set.

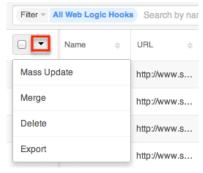


The total count of all records on the list view result set will appear in the dialog.



#### Mass Actions Menu

The Mass Actions menu to the right of the checkbox option allows you to perform various actions on the currently selected records.



The options in the Mass Actions menu allow you to perform the following operations:

Menu Item	Description
Mass Update	Mass update one or more web logic hooks at a time
Merge	Merge two or more duplicate web logic hooks
Delete	Delete one or more web logic hooks at a time
Export	Export one or more web logic hooks to a CSV file

# Column Sorting

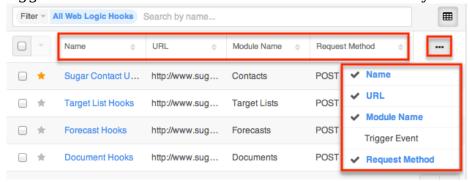
List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. Please note that the list view may be sorted by only one

column at a time.



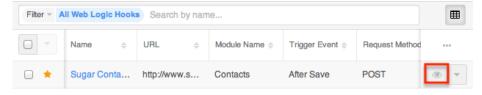
#### Column Selection

Sugar gives users the ability to personalize the list view by specifying which fields they want displayed. You can click the Column Selection icon to the far right of the list view column headers to see the list of available fields. Click a field name to toggle whether or not it is included as a column on your list view.

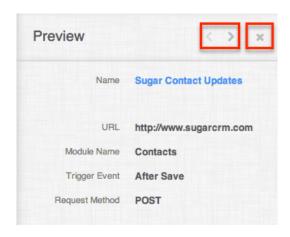


#### Preview

Users can view a record's details directly from the Web Logic Hooks list view by clicking the Preview icon to the far right of each web logic hook's row.

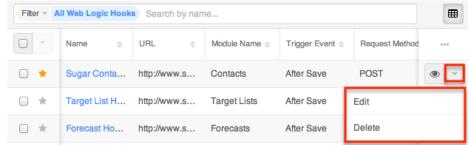


The record's data will display to the right of the list view providing key information. On the upper right of the intelligence pane, there is a Left and Right arrow button that allows you to scroll through the list view's current search results by previewing the next or previous record. To close the preview, simply click the "X" on the upper right of the intelligence pane.



#### Record Actions Menu

The Record Actions menu to the right of each record's Preview button allows users to edit or delete specific records directly from the list view.

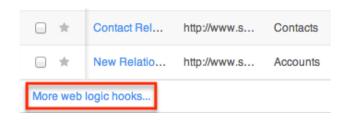


The options in the Record Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit this web logic hook
Delete	Delete this web logic hook

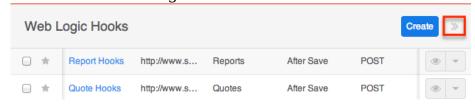
# More Web Logic Hooks

The list view loads an initial number of records meeting the current search criteria with the option to show additional results at the user's request. By default, Sugar displays 20 records per list view results set, but administrators can change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide. To load the next set of list view results, simply click the More Web Logic Hooks link at the bottom of the list view.



### Right Hand Side Drawer

On the upper right of the Web Logic Hooks list view there is a double arrow icon which allows users to expand the list view to the full screen width. The intelligence pane to the right of the list view will be hidden when the list view is expanded. To reduce the list view's width and reveal the intelligence pane, simply click the double arrow icon again.

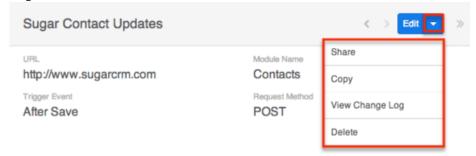


# Web Logic Hooks Record View

The Web Logic Hooks record view displays all information pertaining to the record in question. The record view can be reached by clicking an web logic hook record's link from anywhere in the application including from the Web Logic Hooks list view.

#### Actions Menu

The Actions menu on the top right of each web logic hook's record view allows you to perform various actions on the current record.

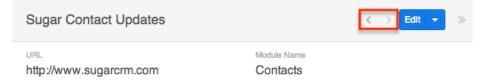


The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit this web logic hook
Share	Share a link to this web logic hook via email
Сору	Duplicate this web logic hook
View Change Log	View a record of changes to this web logic hook
Delete	Delete this web logic hook

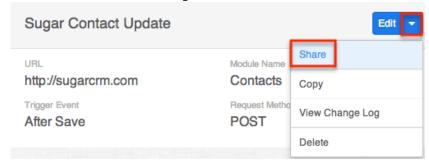
#### Next or Previous Record

On the upper right of the Web Logic Hooks record view, there are two buttons that allow you to page through each web logic hook in the Web Logic Hooks list view's current search results. Clicking the Left arrow button displays the previous web logic hook of the current search results while clicking the Right arrow button displays the next web logic hook of the current search results.



# Sharing Web Logic Hooks

Individual Web Logic Hook records can be shared with other users in your organization by sending an email with the record's link directly from the record view. In the web logic hook's record view, select "Share" from the Actions menu which will open a Compose Email window including the URL of the web logic hook record. Enter the recipient(s) email address in the To field then click "Send".

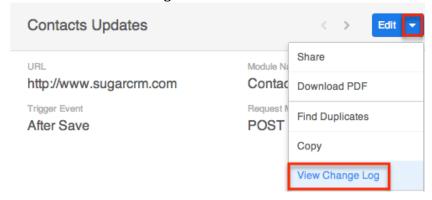


Users can simply click the link in the email to access the web logic hook record in Sugar. Please note that the user must be logged into Sugar in order to access the record. Users will only be able to view the shared record as allowed by their team membership, user access type, and assigned roles. For more information on teams

and roles, please refer to the Team Management and Role Management documentation in the Administration guide.

# Viewing Web Logic Hook Change Logs

Changes made to each web logic hook record are tracked over time, and users are able to view the history of changes via the change log in each web logic hook's record view. To view the change log, navigate to a web logic hook in record view and select "View Change Log" from the Actions menu. Please note that only fields marked as "Audit" in Admin > Studio will be displayed in the change log. For more information on designating for audit, please refer to the Studio documentation in the Administration guide.



Once the change log opens, you can view the details of historical changes and can search by field name, old value, etc. by entering the keyword into the search box.

# **Editing Web Logic Hooks**

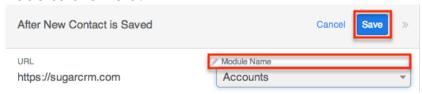
Web Logic Hooks may be edited at any time to update or add information to the record. You can make changes to existing web logic hook records via the Web Logic Hooks record view and quick create forms. Record view is available within the Web Logic Hooks module and includes all of the Web Logic Hook fields you should need.

Please note that your ability to edit web logic hooks in Sugar may be restricted by a role. For more information on roles, please refer to the Role Management documentation in the Administration guide. Check with your system administrator if you do not see the Edit options.

Administrators in Sugar may configure both the Web Logic Hooks record view and quick create via Admin > Studio. For more information on configuring layouts, please refer to the Studio documentation in the Administration guide.

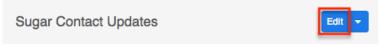
#### Editing Inline Via Record View

Users can edit individual fields on a web logic hook's record view without entering the full edit mode by clicking the field name. Fields which are available for inline editing will display a pencil icon when hovering on the field name or value. This will allow users to type or select a new value. Click "Save" to preserve the changes made to the field.

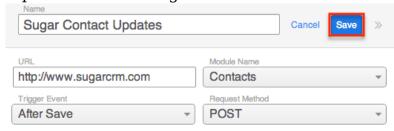


#### Editing Via Record View

You can edit web logic hooks via the record view by clicking the Edit button on the upper left of the page.

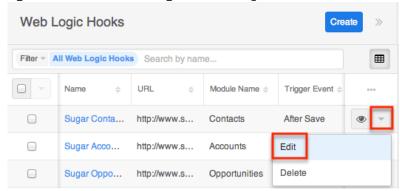


Once the record view layout is open, update the necessary fields, then click "Save" to preserve the changes made.

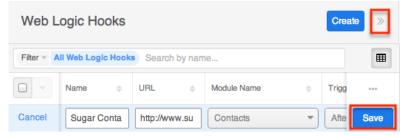


# Editing Via List View

You can edit web logic hooks via the list view by clicking the triangle icon to the right of each web logic hook's preview and choose "Edit".



The web logic hook will become editable, inline as a shortened version of the record view layout. Click the double arrows to the right of the "Create" button to expand the editing window. Update the necessary fields, then click "Save" to preserve the changes.



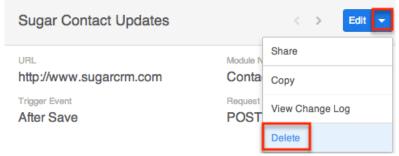
# Deleting Web Logic Hooks

If a web logic hook record is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from either the Web Logic Hooks record view or list view. Deleting via the record view allows you to delete a single record while the list view allows for mass deleting multiple records at once. Please note that your ability to delete web logic hooks in Sugar may be restricted by a role. For more information on roles, please refer to the Role Management documentation in the Administration guide. Check with your system administrator if you do not see the Delete options.

### Deleting Via Record View

Use the following steps to delete a web logic hook record via the record view:

- 1. Navigate to a web logic hook record's record view.
- 2. Select "Delete" from the Actions menu.

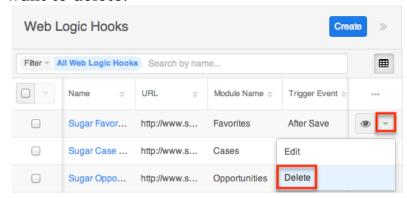


3. A pop-up message will display asking for confirmation. Click "Confirm" to proceed.

# Deleting Via List View

Use the following steps to delete a specific web logic hooks via the list view:

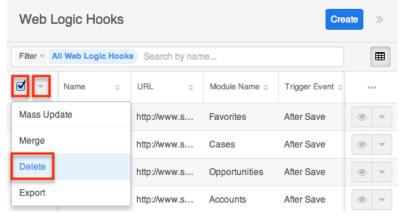
- 1. Navigate to the Web Logic Hooks list view by clicking the Web Logic Hooks module tab.
- 2. Use the Module Search to find the Web Logic Hook records you wish to delete.
- 3. Click the triangle to the right of the preview button of the web logic hook you want to delete.



### Mass Deleting Via List View

Use the following steps to delete one or more web logic hook records via the list view:

- 1. Navigate to the Web Logic Hooks list view by clicking the Web Logic Hooks module tab.
- 2. Use the Module Search to find the Web Logic Hook records you wish to delete.
- 3. Select the desired web logic hook records individually or using the Checkbox Dropdown'soptions then choose "Delete" from the Actions menu.



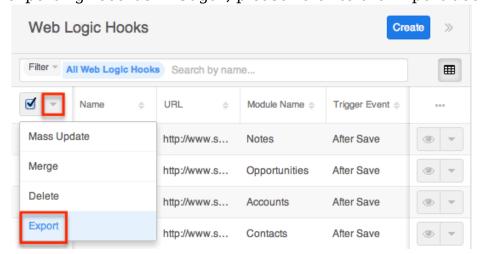
4. A pop-up message will display asking for confirmation. Click "Confirm" to proceed.

You can also use the Select All feature in the list view, which will allow you to easily select the first 1000 records in the result set. If you wish to delete more than 1000 records or delete a specific group of records on the list view, please use the filter option in module search to perform the deletions in smaller batches.

# **Exporting Web Logic Hooks**

Sugar's Export option allows users to download all fields for the selected web logic hooks to their computers as a .CSV (comma-separated values) file. This may be useful when needing to use Web Logic Hook data with other software such as Microsoft Excel or to update existing records by exporting, making changes, then importing the altered web logic hooks back into Sugar. For more information on updating existing records via import, please refer to the Import documentation. Due to PHP memory limitations on the server, there may be occasions when the application times out while exporting a large number of web logic hook records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

Web Logic Hooks may be exported from the Web Logic Hooks list view by selecting "Export" from the Actions menu. Users with access to the Reports module also have the option of creating or accessing reports containing specifically chosen fields for web logic hooks and their related record(s). Please note that only Rows and Columns-type reports have the ability to be exported. For more information on exporting records in Sugar, please refer to the Export documentation.



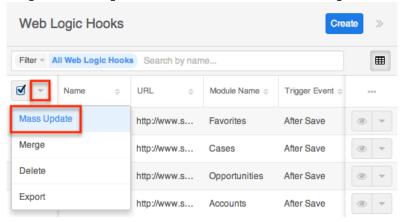
# Mass Updating Web Logic Hooks

Mass Updating allows users to make the same change to multiple web logic hook records at once from the Web Logic Hooks list view. Users with administrator or developer level access can control which fields are available to change during mass update via Admin > Studio. Currently, only fields with the data type of date, datetime, dropdown, multiselect, and radio may be altered during a mass update. For more information on configuring mass update, please refer to the Studio documentation in the Administration guide. You can use the Select All feature in the list view, which will allow you to easily select the first 1000 records in the result set. If you wish to update more than 1000 records or update a specific group of records on the list view, please use the filter option in module search to perform the updates in smaller batches.

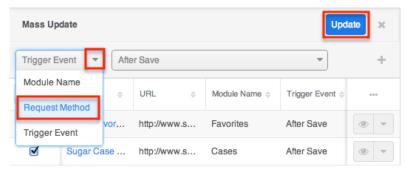
Please note that your ability to mass update web logic hooks may be restricted by a role. For more information on roles, please refer to the Role Management documentation in the Administration guide. Check with your system administrator if you do not see the Mass Update option.

Use the following steps to mass update web logic hook records from the list view:

- 1. Navigate to the Web Logic Hooks list view by clicking the Web Logic Hooks module tab.
- 2. Use the Module Search to identify Web Logic Hook records you wish to modify.
- 3. Select the desired web logic hooks individually or using the checkbox dropdown's options then choose "Mass Update" from the Actions menu.



- 4. The Mass Update panel will appear below the search bar. Set values for the field(s) you wish to alter.
  - To add additional fields for mass update, click the Plus icon to the right of the dropdown list.
  - Note: For the Teams field, mark "Append Team(s)" to add the teams specified here to any existing team assignments. Not marking the checkbox will replace the existing team assignment with the new one.



5. Click "Update" to save the changes to all of the currently selected web logic hook records.

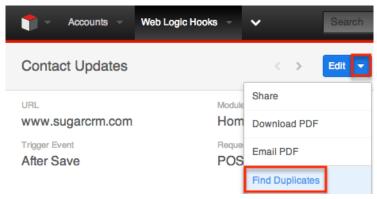
# Finding Duplicate Web Logic Hooks

Between multiple users working in Sugar, importing new records, and converting leads, it is possible for duplicate web logic hook records to be accidentally input to the system. Before creating a new web logic hook record, a good practice is to first check that the web logic hook does not already exist in Sugar. You can locate duplicate records for cleanup using module search from the Web Logic Hooks list view. Searching for web logic hooks with similar names or other information can turn search into a powerful, duplicates-finding tool. Sugar also provides a wizard for finding potential duplicates that is available from the Web Logic Hooks record view and may be used as shown below. If duplicate web logic hook records are detected, you can perform a merge per the Merging Web Logic Hooks section of this documentation.

Please note that your ability to use the Find Duplicates action may be restricted by any role which prevents web logic hook deletion. For more information on roles, please refer to the Role Management documentation in the Administration guide. Check with your system administrator if you do not see the Find Duplicates option.

Use the following steps to locate duplicate web logic hooks using the Find Duplicates option from the Web Logic Hooks record view:

- 1. Navigate to an web logic hook's record view.
- 2. Choose "Find Duplicates" from the Actions menu.



- 3. Potential duplicate web logic hook records will be listed on the Find Duplicates page. Select the duplicate record(s) you wish to merge then click "Merge Duplicates".
  - You can preview the duplicate record's details by clicking the Preview button to the far right of the records row.
  - You can search for specific records from the Web Logic Hooks list view if you wish to check for more possible duplicates. For more information on performing a search, please refer to the Module Search section of this documentation.
  - You can also click the Column Selection icon above the Preview button to change the list of fields that display on the list view column headers.

Once you click "Merge Duplicates", the merging process with the current record will begin. For instructions on performing the merge that follows, please refer to Steps 3-9 of the Merging Via List View section of this documentation.

# Merging Web Logic Hooks

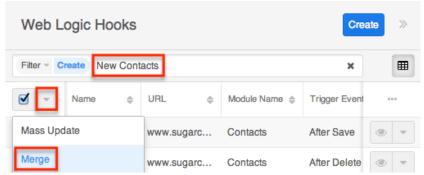
When duplicate records are identified in Sugar, you have the option to merge two or more web logic hooks into a single record. Once the merge is complete, the duplicate web logic hook record(s) will be deleted, and the primary record will remain. Please note that all relationships belonging to the duplicate web logic hooks will be merged to the primary record meaning that any calls, meetings, cases, etc. related to the duplicate web logic hook record(s) will automatically be related to the resulting, merged web logic hook record.

# Merging Via List View

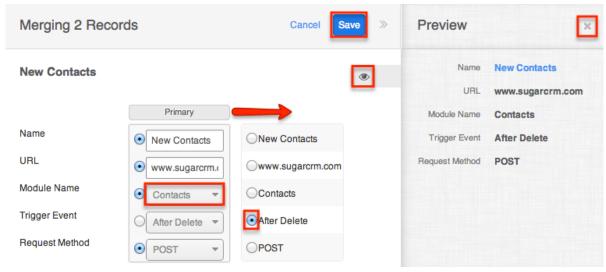
Module Search may be used to identify duplicate web logic hooks by, for example, searching for records with similar names. Once your search has identified duplicate [account]s, you can merge them directly from the Web Logic Hooks list view.

Use the following steps to merge web logic hooks via the list view:

- 1. Use the list view's Module Search to identify duplicate web logic hooks.
- 2. Possible duplicates will be displayed in the list view. Select the duplicate record(s) that you wish to merge.
  - Please note that up to five records may be merged at once in Sugar. An error message ("Invalid number of records passed. The valid range is from 2 to 5 records.") will appear if more than five records are selected when attempting to perform a merge.



3. Select "Merge" from the Actions menu to display the Merging Records page. The primary record's field values are displayed on the left while other record's values are in columns to the right. For convenience, fields with differing values will appear on the top of the list. Saving the merge will preserve only the field values marked with the radio button into a single record.



- 4. To change which record is considered the primary, drag and drop the Primary label on the top of a different column.
- 5. Review the field values in each column and click the radio button to the left of the value that should appear on the final record. You can also manually type or select a new value for any field as necessary.
- 6. Preview what the final, merged record will contain as you work by clicking the eye icon to display the preview in the Intelligence Pane.
- 7. Click "Save" once all fields you wish to appear on the single, merged record have their radio buttons selected.
- 8. A pop-up message will display confirming that the duplicate record(s) should

be deleted. Click "Confirm" to proceed.

Last Modified: 03/15/2018 04:52pm

#### **Email**

#### Overview

Sugar comes with many different abilities in regards to email and many of these abilities require an administrator to setup or configure them. Email administration includes email settings, campaign email settings, email archiving, inbound email, and the email queue.

# **Email Settings**

The Email Settings section allows Sugar administrators to configure the system's outbound email settings as well as additional email and security options. Make any necessary changes in the sections below and click "Save" to commit the changes.

**Email Settings** 



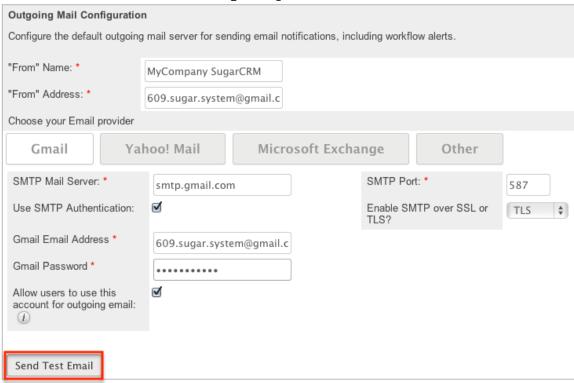
### Outgoing Mail Configuration

The Outgoing Mail Configuration section contains details for sending email notifications, scheduled reports, workflow alerts, etc. Enter appropriate values for the following fields keeping in mind all required fields are marked with a red asterisk and must be completed prior to saving:

- From Name: The name outgoing email will come from; for example, the name of your organization. Defaults to "SugarCRM".
- From Address: The email address outgoing email will come from. Defaults to "do not reply@example.com".
  - Note: If specifying a different address than the email address associated with the account you are authenticating, the email server being utilized may need to be configured to allow the email account to send email as the entered From Address.
- Choose Your Email Provider: Choose your mail provider to populate provider specific values.

- SMTP Server : The web address of the external email server Sugar will connect to.
- SMTP Port: The communication port number used for connecting to the mail server.
- Use SMTP Authentication? : Check this box to connect to the SMTP server using a user name and password. If left unchecked, the SMTP server must accept anonymous connections, which is not recommended.
- Enable SMTP over SSL or TLS?: Select the appropriate option from the dropdown to use Secure Socket Layer, Transport Layer Security, or no encryption when connecting to the mail server.
- Email Address / Username : Enter the email address or user name to connect to the SMTP server with.
- Password : Enter the password associated with the entered email address or user name.
- Allow users to use this account for outgoing email: Check this box if you would like users to be able to send emails using the same outbound mail account. If the option is not selected, users will still be able to use the outbound mail server to send emails by entering their personal mail account information in their user preferences. For more information on setting up the email settings in user preferences, please refer to the Email Settings section of the Getting Started documentation.

Once the appropriate mail server information is entered, you can send a test email to make sure it is configured properly. Click "Send Test Email", enter your email address, and send the test. If you do not receive the test email, re-enter the account information including the password to ensure it is all correct.



#### **Email Options**

The Email Options section provides some global options for email configuration. Check the box next to the desired options:

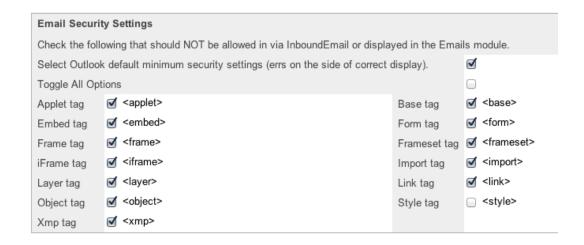
- Assignment Notifications: Sends email notifications to users automatically
  when records are assigned to them. When assigning a record to yourself, you
  will not receive a notification of the assignment. Default is checked.
  Note: To receive notifications, users must also have "Notify on Assignment"
  checked in their user profile.
- Delete related notes & attachments with deleted Emails: Related notes and attachments are deleted when an email is deleted. This ensures that data is not orphaned in the system when an email is deleted. Default is checked.
- Send notification from assigning user's e-mail address: Sends notifications from the email address and name of the user who is assigning a record to another user. Default is not checked.
  - Note: The SMTP server being used must allow sending from a different email address than the authenticated account and the email account may need to be configured to allow the Send As permission.

### **Email Security Settings**

The Email Security Settings section allows Sugar administrators to decide which HTML tags are allowed to be displayed in Sugar. The selected tags will not be allowed for viewing within Sugar. There are two options to mass set the tag selection:

- Select Outlook default minimum security settings: Select this option to automatically select every tag that Outlook also restricts. This will not strip the style tag which is used by default in Outlook. This option is selected by default
- Toggle All Options : Select this option to either select all tags, or deselect all tags.

After selecting one of those options you can individually select or deselect additional tags to restrict or allow the tags respectively.



#### Related Contacts Emails

The Related Contacts Emails section allows administrators to enable or disable related contact's emails from appearing in the Emails subpanel and History dashlet for certain modules (Cases, Accounts, Opportunities). In order to have emails from related contacts appear in the Emails subpanel, simply mark the checkbox to the right of the module name (e.g. Opportunities). To disable related contact's emails from appearing in the Emails subpanel, uncheck the box for the specific module as necessary. Click "Save" to preserve the change.



# Campaign Email Settings

The Campaign Email Settings section allows Sugar administrators to configure some backend settings for sending campaign emails. Select the appropriate values for the following fields keeping in mind all required fields are marked with a red asterisk and must be completed prior to saving:

• Number of emails sent per batch: When the "Run Nightly Mass Email Campaigns" scheduler runs, it will send out the specified number of emails for a single run. The default is set to 500. Some mail servers have one or more of the following restrictions for a specific timeframe (e.g. hour, day, etc.): the number of unique recipients, how many times the same email can be sent to individual recipients, and the most common, how many emails can be delivered. This setting helps control the outgoing email to conform to these restrictions. For example, if your scheduler is set to run every hour, the

- number of emails to send per batch is set to 500, and you have 1600 emails to send out, starting at 2:00 AM the last batch of emails will be sent at 5:00 AM. Please check with your email provider to determine the proper level.
- Location of campaign tracking files: Campaign tracking files log responses from campaign targets. If you are running Sugar on an external network, select "Default" to accept the default location. However, if your Sugar instance is behind a firewall, then choose "User Defined" and specify the path to your external web server in the field below. The external web server must have the ability to connect to your Sugar instance behind the firewall. Ensure that you create a file named index.php to handle requests for three different types of entry points: campaign\_trackerv2, removeme, and image, and place the index.php file in the path to your external web server. This index.php file must make the appropriate calls to the index.php file located in the root of your Sugar instance in order to properly record the activities in Sugar. For more information on how to setup a custom campaign tracker page, please refer to the Using a Custom Page For Campaign Trackers section of the Advanced Config Options documentation in the Administration guide.
- Keep copies of campaign messages: Set this option to "Yes" to keep a copy of
  every email sent during a campaign. If "No" is selected, the template is
  stored, but not the individual emails sent. Default is set to "No".
  Note: Storing every email sent does take up space in the database and can
  reduce performance. We recommend setting this value to "No".

#### Campaign Email Settings

Outbound Email Options	
Number of emails sent per batch: *	500
Location of campaign tracking files (like campaign_tracker.php) *	Default Ouser Defined
	Value of Config.php se
Keep copies of campaign messages: * ①	○ Yes <b>⊙</b> No
Save Cancel	

Make any necessary changes and click "Save" to commit the changes.

# **Email Archiving**

Sugar Email Archiving allows users to easily archive email to Sugar records simply by sending the email to a special email address. The email archiving service monitors the email address and imports the email into your instance of sugar and links related records without the use of a plug-in or other synching process. This service is only available for Sugar Professional subscriptions and above.

### **Enabling Email Archiving**

Before you can use Sugar Email Archiving, you need to enable the service for your instance. Email Archiving can only be activated for one instance per license key. If you have a test instance with Email Archiving activated, that service will need to be deactivated before your production instance can be activated.

Use the following steps to enable email archiving via the administration page:

1. In the Email section of the administration page, Select "Email Archiving".

Email

Manage outbound and inbound emails. The email settings must be configured in ord



- 2. Read the Email Archiving feature description, Master Subscription Agreement, and privacy policy.
- 3. Select the checkbox to agree to the teams and click "Enable Email Archiving".



Note: Your instance needs to be reachable over the internet from SugarCRM's Email Archiving server. Specifically, the URL

http(s)://{site\_url}/service/v4/rest.php needs to be accessible from the IP range associated with Sugar's cloud service, 70.42.242.0/24 (this is the same as 70.42.242.0 with a 255.255.255.0 subnet mask). This site\_url value is specified in your config.php and must match the publicly accessible URL.

- 4. The next screen displays a status of Enabled and your instance's unique email address for Email Archiving.
- 5. Click "Disable Email Archiving" to turn off this feature. Note: If you disable and re-enable Email Archiving you will receive a different unique email address.

# Using Email Archiving

To automatically archive an email into Sugar using the Email Archiving service, simply include your system's unique email address in the To, Cc, or Bcc fields when composing, replying, or forwarding an email. The email will then be archived into your Sugar database including any attachments on the email. Sugar will automatically create relationships to the imported email for any stock

Sugar will automatically create relationships to the imported email for any stock module records that match an email address in the From, To, and Cc fields in the email. In addition, the Sugar Email Archiving service will also scan the body of the email to archive the email to records with a matching email address. Please note that in order for the email address to be recognized properly for email archiving, it

must be displayed as "To: (End Client Name (optional)) <(End Client Email Address)>" (e.g. To: John Smith <john@example.com>) in the body of the email. The archived email will appear in the History dashlet for any matching records in Sugar.

Note: The Bcc field can not be seen by the Sugar email archive service just like they are not visible to any other recipient of the email. Any email addresses included in the Bcc will not get relationships made to them from the email. The following are some features and limitations for the email archiving service:

- Meetings: If the email archived contains a calendar event, Sugar will archive
  the email as well as create a Meeting record. The meeting created will also be
  related to the matching records in Sugar via the email addresses in the From,
  To, and Cc fields.
- Cases: Email containing the case macro in the email's Subject field will also be archived to a Case record. By default, the case macro is [CASE:{number}], meaning that an email with subject "[Case:1024] Help needed!" will be automatically archived to case number 1024. For more information on how to change the case macro, please refer to the Modifying the Case Macro section.
- Custom Modules: Currently, Sugar Email Archiving is only able to match email addresses on stock modules. Any relationships between the archived email and custom modules will have to be made manually.
- Size Limit: Sugar Email Archiving can process emails up to 10 MB in size including attachments.
- Implicit Relationships: Sugar Email Archiving creates an implicit relationship between the email and matching records via the email addresses on the email. This implicit relationship behaves and sometimes displays differently than an explicit relationship. For example, an email implicitly related to Beth Roberts' Contact record would appear in her History subpanel just like one that is explicitly related. However, if Beth's email address is updated in Sugar, the emails created via Sugar Email Archiving will no longer appear in her History since the email addresses no longer match. You can explicitly relate a contact to an email by selecting the contact in the email's Contacts subpanel.

# Inbound Email

Inbound Email allows external email to be pulled into Sugar. Inbound accounts can be configured as either group email accounts or bounce email accounts. Group inbound accounts can be configured to create case records in Sugar or send automatic replies to imported email. This section will cover how to use the Inbound Email module as well as the various actions and options available from within the module.

### Inbound Email Fields

The Inbound Email module contains a number of stock fields which come out-of-the-box with Sugar in order to configure inbound email accounts. The below definitions are the meanings for the available fields.

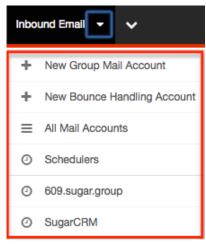
Field	Description
Allow users to send emails using the "From" Name and Address as the reply to address	Select this option if you want to enable users to use this account's From name and address as their Reply To address. Only available for Group Accounts and defaults to not checked.
Assign To Teams	The Sugar team(s) assigned to the email record.  Note: Users will only be able to see emails in group accounts as allowed by their team membership.
Auto-Reply Template	Select an existing template, or click Create to create a new one to send an automated response notifying email senders that you received their email. Note: If both Auto-Reply and Case Reply templates are selected, Sugar will respond to the sender with the Case Reply template only.
Create Case from Email	Select this option to create cases automatically from inbound emails. Only available for Group Accounts and defaults to not checked. For more information on creating cases via email, the distribution method, and case auto-reply, please refer to the Creating Cases From Email section.
Distribution Method	Only available if Create Case from Email is checked for a Group Account and allows you to select Round-Robin or Least-Busy for assigning the new cases.
From Address	The email address any outgoing email will come from. Defaults to the email address from your user profile.
From Name	The name outgoing email will come from; for example, the name of your organization. Defaults to your first and

	last name from your user profile.
Import Emails Automatically	Select this option to create email records automatically in Sugar for all incoming emails. Only available for Group Accounts and defaults to checked.
Leave Messages On Server	Select this option to not removed emails from the server. Only available for Group Accounts and defaults to Yes.
Mail Server Address	The web address of the external email server from which emails will be imported in Sugar.
Mail Server Port	The communication port number used for connecting to the mail server.
Mail Server Protocol	The mail protocol used to communicate with the mail server. IMAP is the default selection and provides the best functionality with Sugar.
Monitored Folders	The folders in your external account that Sugar will monitor. Inbox is selected by default. To select one or more folders to monitor click "Select" and then pick the folders in your external account for Sugar to monitor.
Name	The name or designation of the account.
New Case Auto-Reply Template	Only available if Create Case from Email is checked for a Group Account and allows you to select or create an automated response template notifying email senders that a case has been created to resolve their issue.  For more information on creating cases via email, the distribution method, and case auto-reply, please refer to the Creating Cases From Email section.
No Auto-Reply to this Domain	Enter the domain name to exclude a domain from receiving the automatic email response. It is common to specify your organization's domain to prevent auto-replies from being sent to your organization's members.
Number of Auto-responses	Set the maximum number of

	auto-responses to be sent to a unique email address during a period of 24 hours.
Password	Enter the password associated with the entered email address or user name.
Reply-to Address	The email address that will receive any replies from your email. If left blank, replies will be sent to the From Address.
Reply-to Name	The name that will receive any replies from your email. If left blank, replies will be sent to the From Name.
Sent Folder	Select a folder from your external account to store any email being sent from that account through Sugar.
Status	The current status of the account (i.e. Active, Inactive).
Trash Folder	Select a folder from your external account to be designated as the trash folder. Sugar will place deleted emails into this folder on your external account.
Use SSL	Check this box to force the connection and communication between Sugar and the mail server to use a secure socket layer of encryption.
Username	Enter the email address or user name to connect to the SMTP server with.

#### Inbound Email Module Tab

The Inbound Email module tab is typically located on the navigation bar at the top of any Sugar screen after selecting "Inbound Email" from the Admin page. Once in the Inbound Email list view, click the triangle in the Inbound Email module tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of inbound email accounts you last viewed in the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
New Group Mail Account	Opens the edit view layout to create a new Group Mail Account
New Bounce Handling Account	Opens the edit view layout to create a new Bounce Handling Account
All Mail Accounts	Opens the list view layout to display all inbound mail accounts
Schedulers	Opens the list view layout to search and display schedulers

# Creating Inbound Email Records

There are various methods for creating inbound email accounts in Sugar including via Inbound Email module, Emails module, Campaigns module and duplication. The full edit view layout opens when creating the inbound account directly from the Inbound Email menu and includes all of the relevant fields for your organization's accounts.

For more information on how to create a personal inbound email account, please refer to the Emails documentation in the application guide.

For more information on how to create a bounce handling inbound email account via the Campaigns module, please refer to the Campaigns documentation in the application guide.

From the Inbound Email module tab you can create two kinds of Inbound Email Accounts:

• Group Mail Accounts : Allows multiple users, such as team members, to view

emails from an external mail account. 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 team members.

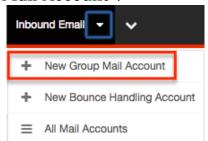
- Note: Group Mail Accounts will only import unread messages from the mail server.
- Bounce Handling Mail Accounts: Stores campaign emails that bounce back to you due to incorrect email addresses. You can create a bounce handling inbox separately for each campaign, or you can create one that is common to all campaigns. The system tags every bounced campaign email with a unique identifier that enables you to identify the campaign.

#### Creating Group Mail Accounts

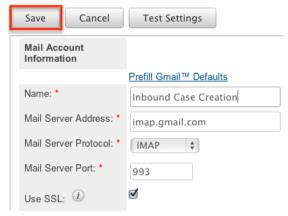
One of the most common methods of Group Mail Account creation is via the New Group Mail Account option in the Inbound Email module tab. This opens up the edit view layout which allows you to enter in all the relevant information for the group mail account. Please note that Group Mail Accounts will only import unread messages from the mail server.

Use the following steps to create a group mail account via the Inbound Email module:

- 1. Navigate to Admin > Inbound Email.
- 2. Click the triangle in the Inbound Email module tab and select "New Group Mail Account".



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving. Note: If your mail account is using Gmail, click "Prefill Gmail™ Defaults" to populate many fields with defaults to connect to Gmail.
- 4. Once the necessary information is entered, click "Save".



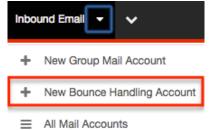
Optionally, click "Test Settings" to verify your entries.

#### Creating Bounce Handling Accounts

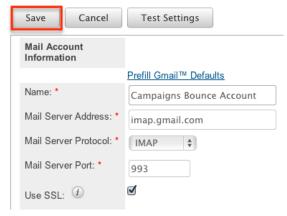
One of the most common methods of Bounce Handling Account creation is via the New Bounce Handling Account option in the Inbound Email module tab. This opens up the edit view layout which allows you to enter in all the relevant information for the bounce handling mail account.

Use the following steps to create a bounce handling account via the Inbound Email module:

- 1. Navigate to Admin > Inbound Email.
- 2. Click the triangle in the Inbound Email module tab and select "New Bounce Handling Account".



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving. Note: If your mail account is using Gmail, click "Prefill Gmail™ Defaults" to populate many fields with defaults to connect to Gmail.
- 4. Once the necessary information is entered, click "Save".



Optionally, click "Test Settings" to verify your entries.

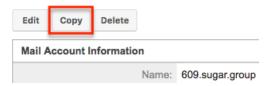
#### Creating Via Duplication

You can also create a new group mail or bounce handling account by duplicating an existing inbound email account record. The copy option is useful if the inbound email account you are creating has similar information to an existing inbound email account.

Use the following steps to create an inbound email account by duplicating an existing record:

- 1. Navigate to an inbound email account record's detail view.
- 2. Click "Copy".

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3. The displayed edit view is pre-populated with the original account's values. Update the necessary fields, then click "Save".

#### 609.sugar.group Save Cancel Test Settings Mail Account Information Prefill Gmail™ Defaults Name: \* Inbound Case Creation Mail Server Address: \* imap.gmail.com Mail Server Protocol: \* IMAP 4 Mail Server Port: \* 993 Use SSL: (i)

#### Viewing Inbound Email Records

There are various options available for viewing inbound account records in Sugar including via Inbound Email list view, detail view, and Last Viewed menu.

#### Viewing Via List View

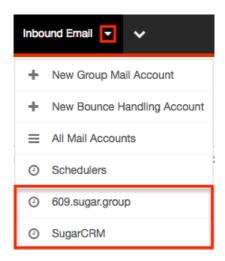
The Inbound Email list view displays all inbound account records. To access the list view, simply click the Inbound Email module tab. While list view shows key inbound account fields, you can click the account's name to open the record in detail view. For more information on viewing inbound accounts via list view, please refer to the Inbound Email List View section.

#### Viewing Via Detail View

The Inbound Email detail view displays thorough inbound account information including all fields. The detail view can be reached by clicking an account record's link from anywhere in the application including from the Inbound Email list view. For more information on viewing inbound accounts via detail view, please refer to the Inbound Email Detail View section.

#### Viewing Via Recently Viewed

As you work, Sugar will keep track of which inbound accounts you have recently viewed. Click the triangle in the Inbound Email module tab to see a list of the 3 records you most recently viewed in the module. Clicking the record's name within the list will open the record in detail view.



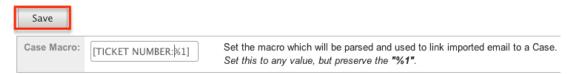
## Inbound Email List View

The Inbound Email list view displays all inbound account records meeting the current search criteria and to which your user has access. You can view the basic details of each account within the field columns.

## Modifying the Case Macro

The Case Macro field determines what distinct string Sugar will use to match emails to the Cases module. The Case Macro is on the Inbound Email list view and displays the current case macro string. By default this string is set to [CASE:%1]. To customize it, you can change CASE to a different word, but you must preserve the rest of the string; for example, [TICKET NUMBER:%1].

Home



Click "Save" to preserve your changes.

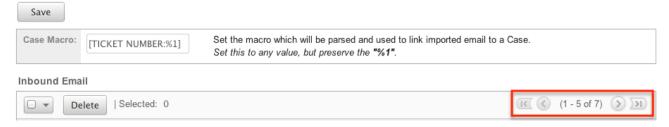
Note: Incoming emails must have no space before the case number in order to be related to the existing case. For example, an email with the subject "[Case:1234]" will automatically be related to case number 1234 while an email with the subject "[Case: 1234]" will not.

## Pagination

List view displays the current results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just

below the case macro you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

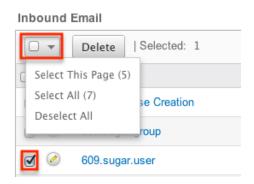
By default, Sugar displays 20 records per list view page, but administrators can change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide.



#### Checkbox Selection

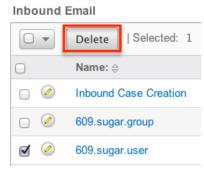
You can perform several actions on inbound account records directly from the list view by first selecting the desired records. To select individual inbound account records on the Inbound Email list view, mark the checkbox on the left of each row. To select or deselect multiple inbound account records on the list view, use the options in the checkbox dropdown menu:

- Select This Page: Selects all records shown on the current page of inbound account results.
- Select All: Selects all records across all pages of inbound account results.
- Deselect All: Deselects all records that are currently selected.



#### **Action Buttons**

The Actions menu to the right of the checkbox dropdown typically allows you to perform various actions on the currently selected records.



The only action available from the Inbound Email list view is the following operation:

Menu Item	Description
Delete	Delete one or more inbound accounts at a time

## Column Sorting

List view provides the ability to sort all of the current results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. The list view may be sorted by only one column at a time.



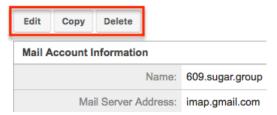
## Inbound Email Detail View

The Inbound Email detail view displays thorough inbound account information including all inbound account fields which are grouped by default into the Mail Account Information and Advanced Setup panels. The detail view can be reached by clicking an inbound account record's link from anywhere in the application including from the Inbound Email list view.

#### **Action Buttons**

The Action Buttons on the top left of each inbound account's detail view allows you to perform various actions on the current record.

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The action buttons allow you to perform the following operations:

Menu Item	Description
Edit	Edit this inbound account.
Сору	Duplicate this inbound email account.
Delete	Delete this inbound account.

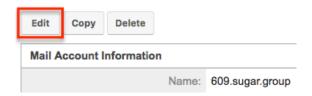
## **Editing Inbound Email Records**

Inbound accounts may be edited at any time to update or add information to the record. You can make changes to existing inbound account records via the Inbound Email edit view. Edit view is available within the Inbound Email module and includes all of the Inbound Email fields you should need.

## Editing Via Detail View

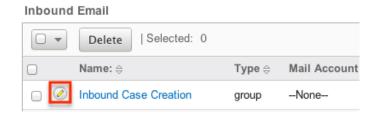
You can edit inbound accounts via the detail view by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve your changes.

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## Editing Via List View

You can edit inbound accounts via the list view by clicking the Pencil icon to the left of each inbound account's name. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve your changes.



## **Deleting Inbound Email Records**

If an inbound account record is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from either the Inbound Email detail view or list view. Deleting via the detail view allows you to delete a single record while the list view allows for mass deleting multiple records at once. Deleting inbound account records will not delete the email imported from this account.

## Deleting Via Detail View

Use the following steps to delete an inbound account record via the detail view:

- 1. Navigate to an inbound email account record's detail view.
- 2. Click "Delete".

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3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

## Mass Deleting Via List View

Use the following steps to delete one or more inbound email account records via the list view:

- 1. Navigate to the Inbound Email list view by clicking the Inbound Email module tab.
- 2. Select the desired inbound email account records individually or by using the checkbox dropdown's options.
- 3. Click "Delete".



4. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of inbound account records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

# Creating Cases From Email

To create a case via email, simply send an email to a group inbound email account that has the case creation option selected. The subject and description of the case is populated with the subject and body of the email respectively. The new case is assigned to the team defined in the inbound email account record and the case can be assigned to a specific user in that team based on two rules:

- Round-Robin : Sugar distributes cases evenly among all users within the team
- Least-Busy: Sugar distributes cases to the least busy user within the team.
   Least busy is defined by the person with the least number of unread emails assigned to them.

Note: Case assignment is distributed to all members of the specified team, but excludes any inherited members of the team due to the "Reports To" structure. For more information on teams and the Reports To structure, please refer to the Team Management and User Management documentation in the Administration guide. Cases created from email are automatically related to contact and account records that match the email address in the From field of the email.

If a case auto-reply template is specified the sender of the email will receive an email based on the template selected. The response contains the system generated case number in the subject line of the email based off of the case macro. The body of the email for which the case was created displays below the template text. The case auto-reply ignores the "No Auto-Reply to this Domain" field if populated. Note: If both Auto-Reply and Case Auto-Reply templates are selected, Sugar will respond to the sender with the Case Auto-Reply template only.

# **Email Queue**

The Email Queue option in Admin is where Sugar administrators can monitor and perform actions on queued email. When sending a campaign the emails are not sent immediately, but are queued to be sent. Each queued email has a "Send On" date and time set by the campaign they are sent from. The scheduler "Run Nightly Mass Email Campaigns" takes the queued emails that are ready to be sent based on this date and time and sends them in batches. If an email fails to send from the queue for any reason it will be flagged as a send attempt and, by default, Sugar will not attempt to send that email for another 24 hours. Once Sugar reaches six failed attempts to send an email it will be deleted from the queue. In order to send a failed email sooner than the default 24 hours, you can perform a mass update to reset the In Process field. This section will cover how to use the email queue as well as the various actions and options available from within the email queue.

## Viewing Via List View

The email queue list view displays all queued email records meeting the current search criteria. To access the list view, simply click the Email Queue link on the Admin page. List view shows key email fields including links to the Campaign, Recipient, and Marketing Message records. For more information on viewing queued email via list view, please refer to the Email Queue List View section.

## Searching Queued Email

The email queue list view includes a Basic and Advanced Search to help you locate records easily and effectively in a module-specific manner. Once the search is performed, the relevant results will be displayed in the Email Queue list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you can use the wildcard at the beginning of your text as well (e.g. %services). This will pull up any record that has the word "services" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used in the different methods, please refer to the Search documentation.

#### Basic Search

Basic search offers a few, commonly used fields for a simplified search experience. From the Basic Search panel, you can click "Advanced Search" to access additional search functionality as needed.

The buttons and checkboxes available in Basic Search panel have the following

#### functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.

#### **Email Queue**



Once the search is complete, the relevant results will populate in the list view below the search panel. To see all queued email records to which you have access, simply click "Clear" and then "Search" to perform a blank search with no filters.

#### Advanced Search

Advanced Search offers a more in-depth search experience than Basic Search including additional fields, layout options, and saved search capability. From the Advanced search panel, you can click "Basic Search" for simplified searching. The buttons, checkboxes, and dropdowns available in Advanced Search have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.
- Layout Options: Use the expandable Layout Options section to configure your list view. For more information, please refer to the Layout Options section of the Search documentation.
- Saved Searches: Save, recall, update, and delete searches which you use often. For more information, please refer to the Saved Search section of the Search documentation.

#### **Email Queue**

Email Queue			
Campaign	Recipient Name	Recipient Email	?
My Items			
<b>以 Layout Options</b>	Save search as:	Modify current search:	Update Delete
Search Clear Basic Search	Saved Searches -none-		
Send Queued Campaign Emails			

When you run a search, Sugar will return records matching all (as opposed to any) of the fields for which you have given a value. For example, if you enter in a campaign name to search and a recipient name, Sugar will only return queued email records with matching both fields. Once the search completes, the relevant results will populate in the list view below the search panel. To see all queued email records to which you have access, simply click "Clear" and then "Search" to perform a blank search with no filters.

## Email Queue List View

The Email Queue list view displays all queued email records meeting the current search criteria and to which your user has access. You can view the basic details of each email within the field columns.

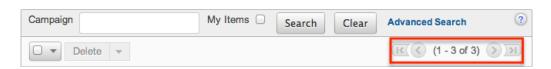
You have the option to change what fields are displayed in list view by configuring your layout options in the Advanced Search. For more information on configuring your list view, please refer to the Layout Options section of the Search documentation.

## Pagination

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

By default, Sugar displays 20 records per list view page, but administrators can change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide.

**Email Queue** 

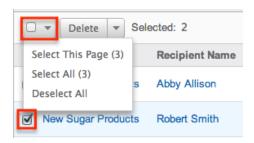


## **Checkbox Selection**

You can perform several actions on queued email records directly from the list view by first selecting the desired records. To select individual queued email records on the Email Oueue list view, mark the checkbox on the left of each row.

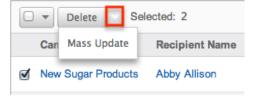
To select or deselect multiple queued email records on the list view, use the options in the checkbox dropdown menu:

- Select This Page: Selects all records shown on the current page of results.
- Select All: Selects all records in the current search results across all pages of results.
- Deselect All: Deselects all records that are currently selected.



#### Actions Menu

The Actions menu to the right of the checkbox dropdown allows you to perform various actions on the currently selected records.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Delete	Delete one or more queued emails at a time
<u> </u>	Mass update one or more queued emails at a time

## Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. The list view may be sorted by only one column at a time. You can also set a default order-by column using the layout options in Advanced Search. For more information on setting a default column sort, please refer to the Layout Options section of the Search documentation.



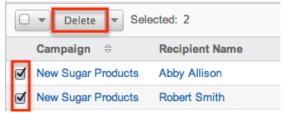
## **Deleting Queued Email**

If a queued email is invalid or should no longer be sent, it may be deleted from the list view. The list view allows for mass deleting multiple records at once. Deleting queued emails will not delete the campaign or target, but will remove the instance of this email so it will not be sent.

## Mass Deleting Via List View

Use the following steps to delete one or more queued email records via the list view:

- 1. Navigate to the Email Queue list view by clicking the Email Queue link on the Admin page.
- 2. Use the Basic or Advanced Search to find the queued email records you wish to delete.
- 3. Select the desired records individually or using the checkbox dropdown's options.
- 4. Choose "Delete" from the Actions menu.



5. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of queued email records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

# Mass Updating Queued Email

Mass Updating allows users to make the same change to multiple queued email records at once from the Email Queue list view. Currently, only fields with the data type of date, datetime, dropdown, multiselect, and radio may be altered during a mass update. Due to the PHP memory limitations on the server, there may be

occasions when the application times out while mass updating a large number of queued email records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

Use the following steps to mass update queued email records from the list view:

- 1. Navigate to the Email Queue list view by clicking the Email Queue link on the Admin page.
- 2. Use the list view's Basic or Advanced Search to find queued email you wish to modify.
- 3. Select the desired records individually or using the checkbox dropdown's options.
- 4. Choose "Mass Update" from the Actions menu.



5. Scroll to the Mass Update panel and set values for the fields you wish to alter.

Mass opuate			
Send Date	(mm/dd/yyyy)	In Process	-none- 🛊
Queued Date	(mm/dd/yyyy)		
Update Cancel Send Queued Campaig	n Emails		

Note: After an email has failed to send, setting In Process to "No" will flag the email to attempt to send again. Otherwise the email will not attempt to be sent again until 24 hours has passed. Optionally set the Send Date to configure when the email should be attempted again.

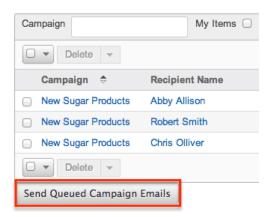
6. Click "Update" to save the changes to all of the currently selected queued email records.

# Sending Queued Email

Queued email will be automatically be sent out in batches by the "Run Nightly Mass Email Campaigns" scheduler. For more information on setting up and configuring scheduler, please refer to the Schedulers documentation in the Administration guide. Alternatively, you can manually send a batch of emails in the queue. The amount of queued email that will be sent is equal to the "Number of emails sent per batch" value specified in the Campaign Email Settings. Use the following steps to manually send a batch of queued emails from the list view:

- 1. Navigate to the Email Queue list view by clicking the Email Queue link on the Admin page.
- 2. Choose "Send Queued Campaign Emails" from below the list view.

Email Queue



3. Sugar will then send a batch of queued email whose Send On date and time is equal to now or in the past.

Note: If an email fails to send it will not be tried again for 24 hours.

Selecting specific records and searching for specific records will not determine which queued emails will be sent. This process will send a batch of emails that are queued to be sent in order by the Send On field. For more information on setting the batch amount, please refer to the Campaign Email Settings section.

Note: If your batch size is set high and you have a lot of queued email, this process can take a while to run through a single batch.

Last Modified: 03/16/2018 09:50pm

# **Developer Tools**

## Overview

The Developer Tools section of Sugar's Admin page contains various configuration menus that help you customize your instance to best suit your organization's needs. Developer Tools allow you to edit the look, feel, and functionality of your instance, including adding fields, changing layouts, adding automated processes, and creating entirely new modules.

The Developer Tools section contains the following menus:

Menu	Description
Studio	Modify fields, relationships, and layouts for existing modules
Module Builder	Create new modules to be deployed into this instance or exported to other Sugar instances
Module Loader	Upload and manage customization packages to your instance, such as additional modules or third-party integrations
Dropdown Editor	Manage dropdown lists to add new lists or edit existing lists
Rename Modules	Update the name of each module within Sugar
Display Modules and Subpanels	Hide or display modules and subpanels across the application
Configure Navigation Bar Quick Create	Configure which modules appear in the Quick Create menu on the navigation bar
Workflow Management	Manage automated processes in Sugar to optimize and streamline your company's business process

# Studio

Studio enables administrators to customize stock or custom modules by modifying fields, page layouts, and more. This allows Sugar to be modified to ideally fit your organization's needs and terminology. Please note that only users with administrator or developer access have the ability to make changes via Admin > Studio. For more information on how to utilize Studio, please refer to the Studio documentation.

# Module Builder

Module Builder enables administrators to create, deploy, and maintain custom modules in Sugar. For your convenience, the custom modules are based on templates such as Basic, Person, Company, etc. Modules can then be deployed within your instance of Sugar so that users can utilize the new module in their daily process. In addition, modules can be exported for additional development or published and then imported to other Sugar instances. For more information on using Module Builder, please refer to the Module Builder documentation.

## Module Loader

Module Loader is used to import deployable packages into Sugar to make changes to core files. Examples of module loadable packages are Sugar custom modules created in Module Builder, language packs, third-party integrations, or any other type of file that would make changes to Sugar's core file system. Module Loader opens this window through Sugar's user interface to facilitate this process where Zip files simply have to be uploaded and then installed. For more information on how to use Module Loader, please refer to the Module Loader documentation.

# Dropdown Editor

The Dropdown Editor allows administrators to view, modify, and create dropdown lists which can be added as fields in Sugar. Since dropdown lists are not module specific, they are stored and managed through the Dropdown Editor. Please note that the dropdown list can only be associated to a Dropdown, Multiselect, and Radio type field via Admin > Studio. For more information on associating dropdown lists to the different field types, please refer to the Studio documentation.

Certain dropdown lists cannot be edited via the Dropdown editor as they are controlled by a separate area (e.g. Contract Types, Releases, etc.) of the Admin page. These include dropdown lists for the Forecasting, Bug Tracker, Contracts, and Products and Quotes modules. Please refer to the appropriate sections of the Administration guide for more information regarding the fields and how they can be edited.

# Adding Dropdown Lists

Dropdown lists can be created at any time and added to a Dropdown type field via

Use the following steps to create a dropdown list via Dropdown Editor:

- 1. Navigate to Admin > Dropdown Editor.
- 2. Click the Add Dropdown button above the list of existing dropdown lists.



- 3. Enter a name for your dropdown list on the Name field (e.g. "account manager list").
  - Note: The name must be alphanumeric and use the underscore character for spaces.



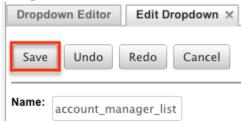
- 4. To create the items that will appear in your dropdown list, enter an "Item Name" and a "Display Label". Click "Add" once you have populated both fields to add the value to the dropdown list.
  - The item name is the backend system name for the list item and must be alphanumeric. An underscore or a period can be used for the item name.
  - The display label defines what will be displayed within the actual dropdown. Please note that there is no character restrictions when entering the display label. Click "Add" once you have populated both fields to add the value to the dropdown list.

# List Items: Item Name[Display Label] • j\_kelly[Joseph Kelly] Item Name: Display Label: w\_westin Will Westin

5. Once all values have been added to your dropdown list, you can click one of the sort options to rearrange the values as desired. Lists can be sorted alphabetically in ascending or descending order based on the display label. You can also sort the list manually by dragging and dropping the values up-and-down the list.



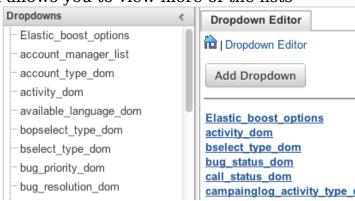
6. Click "Save" at the top of the screen to complete and add your dropdown list. You will be directed back to the main dropdown editor page once the save completes.



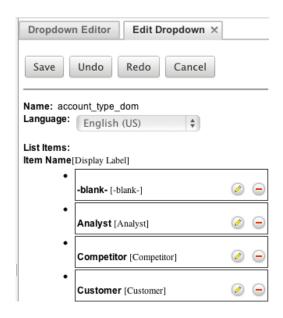
## Viewing Dropdown Lists

The Dropdown Editor displays all existing dropdown lists in two separate sections (Dropdowns list, Dropdown Editor) on the page. The Dropdowns list to the left of the page displays the dropdown lists in alphabetical order. The Dropdown Editor tab displays the dropdown lists in columns and allows you to view more of the lists

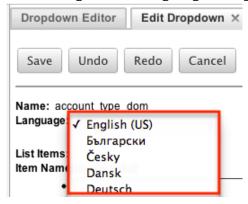
at once instead of scrolling down a single list.



Once you locate the dropdown list you are looking for, click the list's name to open the Edit Dropdown tab to view and edit the list. The Edit Dropdown tab displays the name, set language for the list, list values, and the item name. The list will be ordered as they appear in the dropdown list when added as a field to a layout. You can reorder the list if you wish by dragging and dropping the items into the desired positions.



If your organization uses Sugar in languages other than English, Sugar can display translated dropdown lists for each language used. For example, Sugar will display French dropdown items when a user is logged into Sugar in French. You must provide the translations for each language by specifying display labels for each dropdown item. First, finalize your list's items by adding or removing items since the item names (a.k.a. database values) and order of items will be consistent across all languages. Choose the desired language in the Language dropdown above the list. Then, click the pencil icon for each item and enter a translated display label. When all labels have been translated, click "Save" to preserve your changes. After saving, the list will automatically be displayed in English, but you can change the Language dropdown again to check your labels.

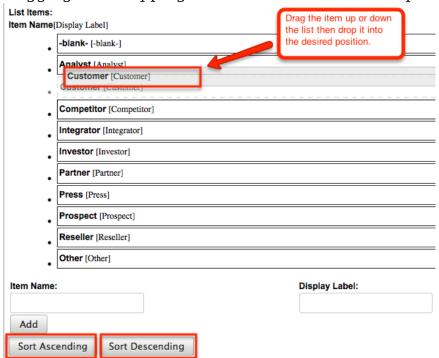


# **Editing Dropdown Lists**

Dropdown lists can easily be modified via the Dropdown Editor by selecting the specific dropdown list which opens the edit layout. You can reorder the items in the list, add new values, remove unnecessary values, change the display label of a value, or change the display label language.

Please note that the name of the dropdown list cannot be changed once created. Also, dropdown lists cannot be deleted since they can span multiple modules in Sugar and cause important data to be lost if removed in error. Once the necessary modifications have been made, click "Save" on the upper right to preserve the changes made.

To sort the list alphabetically, you can simply click the Sort Ascending or Sort Descending button on the bottom left of the tab view. Please note that the sorting is based on the display label. You can also reorder the items in your list, by dragging and dropping the items into the desired position.

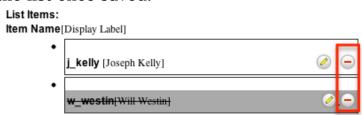


To add a new value, enter an item name and corresponding display label below the list of existing values then click "Add". Please note that the item name is the back-end system name and must be alphanumeric without any special characters other than an underscore or a period. The text in the display label defines how the value will be displayed in the dropdown list when viewed in the user interface. Please note that this there is no character restriction for the display label.



To remove a value from the list, click the Minus icon to the far right of the item row. Once deleted, the item will show a strike through and will be removed from

the list once saved.



The item name of a dropdown value cannot be edited, but you can update the display label via the Dropdown Editor. Simply locate the value in the list then click the Pencil icon to the far right of the item row. Enter the new value into the open text box then click anywhere on the page to close the edit.



## **Editing Sales Stages**

The Opportunities module contains two fields that function unlike other fields in Sugar. When the Sales Stage dropdown field is updated, the corresponding probability updates in the Probability (%) field. This is a unique function to the Opportunities module and when any changes are made to the sales\_stage\_dom list, you must consider the sales\_probability\_dom list as well to ensure the relationship between the two fields remain intact. For example, if you add a new sales stage (e.g. Item Name: "review\_stage", Display Label: "Review Stage") to the sales\_stage\_dom list then you must add a corresponding probability (e.g. Item Name: "review\_stage", Display Label: "50") to the sales\_probability\_dom list in order for it to populate properly in the opportunity. The two lists' item names and order must match.

The Dropdown Editor contains both the "sales\_stage\_dom" and "sales\_probability\_dom" lists. Both dropdown lists have the same item name for all values, but different display labels. The sales\_stage\_dom list is associated to the Sales Stage field and displays the various sales stages (e.g. prospecting, qualification, closed won, etc.). The sales\_probability\_dom list is associated to the Probability (%) field and displays the corresponding probability value (e.g. 10, 20, 100, etc.) for each sales stage.

Note: Both the sales\_stage\_dom and sales\_status\_dom lists must have "Closed Won" and "Closed Lost" as item names in order for the Forecasts module to function correctly. Please ensure any changes to these dropdown lists do not remove or change the item name for these 2 options.

## For sales\_stage\_dom list:

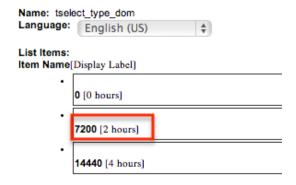
Name: sale	s_stage_dom		
Language:	English (US)		
List Items:			
Item Name[	Display Label]		
	Prospecting [Prospecting]		
	Qualification [Qualification]		
	Needs Analysis [Needs Analysis]		
	Value Proposition [Value Proposition]		
For sales	s_probability_dom list:		
Name: sale	s_probability_dom		
Language:	English (US)		
List Items: Item Name[	Display Label]		
	Prospecting [10]		
	Qualification [20]		
	Needs Analysis [25]		
	Value Proposition [30]		

Users can create similar logic for custom fields using Sugar Logic in Studio.

## **Editing Time Intervals**

The "After Time Elapsed" workflow triggers after a specified period of time has elapsed from when a record save occurs in Sugar. For more information on "After Time Elapsed" workflows, please refer to the Workflow Management documentation. When creating the conditions for the workflow, you have the option to specify the time interval (e.g. 0 hours, 4 hours, 1 day, 1 week, etc.) used by the system to execute the workflow. The available time interval values can easily be modified via the Dropdown Editor.

The Dropdown Editor contains the "tselect\_time\_dom" list, which allows administrators to configure the time intervals used for time elapsed workflows. To add new time intervals to the dropdown list, simply enter the "Item Name" and "Display Label", keeping in mind that the item name must display the number of seconds corresponding to the new time interval. The display label value should have the time as it relates to minutes, hours, days, etc. For example, if you are adding 2 hours to the time interval list, the item name value will be "7200" and the display label will show "2 hours".

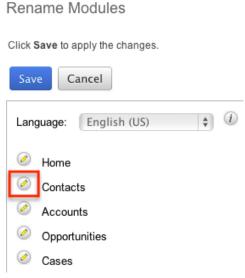


## Rename Modules

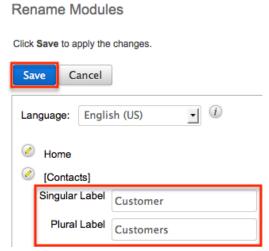
Depending on your business needs, it may be necessary to alter the display label to make the module's name (e.g. Contacts, Accounts, etc.) align to your various business components. Administrators can easily rename modules via Admin > Rename Modules. When editing a name, you are given the option to update both the singular and plural version of the word. This change will be reflected globally across Sugar so that every use of the given module name is updated to your preference, seamlessly to all users. You can also use the language dropdown list at the top of the page to rename the modules to a language other than English.

The following steps cover renaming the Contacts module as an example:

- 1. Navigate to Admin > Rename Modules.
- 2. Locate the module you wish to change and click the Pencil icon to the left of the module's name.



3. Enter a new singular and plural name for the module then click the Pencil icon again to close the text boxes.



4. Click "Save" to deploy your changes across your instance.

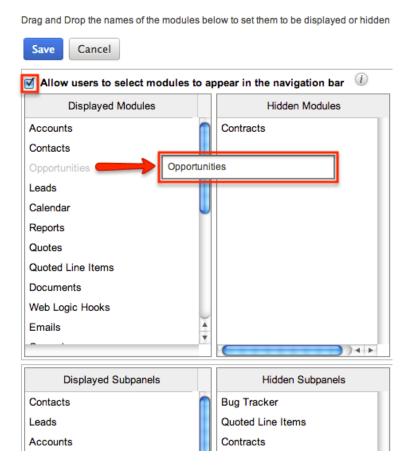
# Display Modules and Subpanels

Administrators have the ability to control which modules and subpanels will appear in their instance via Admin > Display Modules and Subpanels. This option is useful as any unnecessary module(s) and subpanel(s) can be hidden to prevent user's from accessing it. Please note that not every module and subpanel in Sugar is enabled by default when initially installed.

Once the Display Modules and Subpanels page is open, you will see the Displayed Modules, Hidden Modules, Displayed Subpanels, and Hidden Subpanels column. To configure which modules are displayed on the navigation bar, drag and drop the module from the Hidden Modules column to the Displayed Modules column. To hide a module, simply drag and drop the module from the Displayed Modules column to the Hidden Modules column. To configure which subpanels appear in modules, drag and drop the module from the Hidden Subpanels column to the Displayed Subpanels column. To hide a subpanel, simply drag and drop the module from the Displayed Subpanels column to the Hidden Subpanels column. After making the necessary changes, click "Save" at the top of the page to deploy your changes or "Cancel" to revert back to your previous settings.

Please note that if a hidden module is related to a module that is visible in Sugar, it will display as a subpanel in the record view (for Sidecar modules) or detail view (for Legacy modules) of the related module. In addition, hidden modules continue to be available to users when viewing, creating, and managing reports via the Reports module. When a subpanel is hidden, users cannot view any related records from the record view (for Sidecar modules) or detail view (for Legacy modules) of the related module.

#### Display Modules and Subpanels



Users have the option to hide and display modules per their viewing preference via the User Profile. The list of available modules to display and hide in a user's account is based on the modules in the Displayed Modules column of the Display Modules and Subpanels page. To disable the users ability to modify which modules are hidden or displayed on their navigation bar, uncheck the Allow users to select modules to appear in the navigation bar checkbox above the Displayed and Hidden Modules columns.

# Configure Navigation Bar Quick Create

The Quick Create menu allows users to easily create new records from anywhere in Sugar. Simply click the quick create button on the upper right of any Sugar page to access the menu. Administrators can easily configure the Quick Create menu via Admin > Configure Navigation Bar Quick Create menu to control which modules are enabled/disabled, as well as the order the modules will appear in the menu.

Once the Configure Navigation Bar Quick Create page is open, you will see the Enabled Modules and Disabled Modules columns. Modules that appear within the

Enabled Modules column will display in the Quick Create menu. To enable a module to be displayed in the Quick Create menu, drag and drop the module from the Disabled Modules column to the Enabled Modules column. To disable a module, simply drag and drop the module from the Enabled Modules column to the Disabled Modules column. You can also change the order of the modules as they appear in the Quick Create menu by dragging and dropping the modules up-and-down within the Enabled Modules list. After making the necessary changes, click "Save" at the top of the page to deploy your changes or "Cancel" to revert back to your previous settings.

Note: The Quick Create menu can display a maximum of 10 modules at one time. Configure Navigation Bar Quick Create



# Workflow Management

Sugar's Workflow functionality allows administrators to configure cause and effect type actions throughout Sugar and across multiple modules. Workflows can be used to update fields, send emails, or create records once certain sets of conditions are met. Workflows are a great way to configure automated processes within Sugar so that users do not need to remember manual steps and instead can focus on their primary tasks and job responsibilities. Administrators can create and manage workflows via Admin > Workflow Management. For more information on workflows, please review the Workflow Management documentation.

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# Studio

## Overview

Studio enables administrators to customize stock or custom modules by modifying

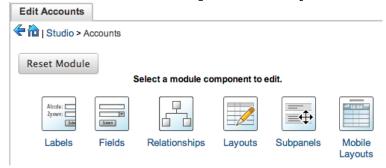
fields, page layouts, and more so that you can modify Sugar to fit your organization's needs and terminology. Please note that only users with administrator or developer access have the ability to make changes via Admin > Studio. This documentation will cover how to use Studio as well as the various actions and options available from within Studio.

# Navigation

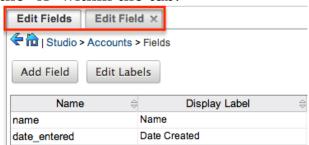
Studio's navigation is different than other modules within Sugar. Studio is divided into three main sections which consist of the main panel, modules panel, and footer.

#### Main Panel

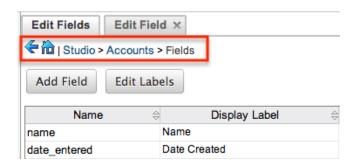
The main panel in Studio is where you can access the modules, add fields, configure layouts, etc. It displays to the right of the Modules panel and houses the various components (e.g. fields, layouts, subpanels, etc.) of the module. As you select the different components, they will load in new tabs on the main panel.



For example, if you select "Fields" on the main panel, the list of available fields along with the options to configure will appear under the Edit Fields tab. Additional tabs that appear as you configure the module can be closed by clicking the "X" within the tab.



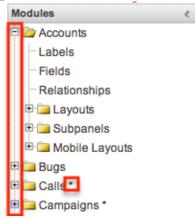
The main panel also includes a breadcrumb bar showing where in Studio you currently are. You can navigate to a specific section by clicking the link within the breadcrumb bar.



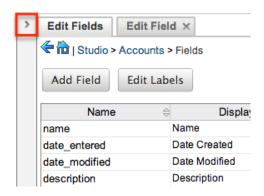
To go back to the previous page that you were viewing, click the Left arrow on the breadcrumb bar. Clicking the Home icon to the right of the arrow will navigate you back to the Developer Tools home page.

## Modules Panel

The Modules panel is located to the left of the screen and displays a list of existing stock and custom modules that are editable through Studio. Please note that all modules (e.g. Campaigns, etc.) using the Legacy user interface will display an asterisk (\*) to the right of the module's name in Studio. The associated fields, labels, layouts, subpanels, etc. are grouped within each module. Click the plus sign (+) preceding the module name to expand the module tree and display the associated items (e.g. fields, layouts, etc.). Simply select an item in the Modules panel to load the view in the main panel to the right.



Please note that if you do not see the Modules panel, it may be collapsed. Locate the gray bar to the left of the main panel and click the Right arrow to expand the Modules panel.



## Footer

The footer is located on the bottom left of Studio and displays buttons which enable you to navigate to the different areas (e.g. Dropdown Editor) of Developer Tools.



The options in the footer allow you to navigate to the following locations:

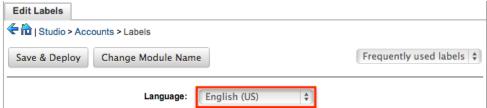
Menu Item	Description
Home	Navigates to the home page of the Developer Tools
Studio	Navigates to the home page of Studio
Module Builder	Opens Module Builder to create or edit modules
Dropdown Editor	Opens the Dropdown Editor to modify dropdown options

# **Editing Labels**

Labels are used throughout Sugar to designate field headers, subpanel titles, error messages, and more. To modify the labels for a module, select "Labels" from the Modules panel under the desired module (e.g. Accounts). Please note that HTML tags are not supported in labels.



The Edit Labels tab will open in the main panel displaying all the labels associated to the module. Please note that you can change the language for the labels by selecting from the Language dropdown list.



If the label you wish to change cannot be found, change the filter dropdown option from "Frequently used labels" to "All Labels".



Modify the labels accordingly per the selected language and click "Save and Deploy" when complete. This will save your changes and instantly deploy them to your Sugar instance.



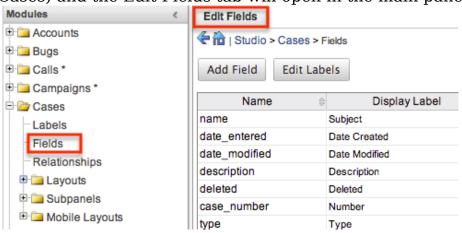
To change the name of the module, click "Change Module Name" to the right of the Save & Deploy button.

This will direct you to the Rename Modules page where you can change the labels for the module accordingly. For more information on how to rename modules, please refer to the Rename Modules section of the Developer Tools documentation.



## **Fields**

The Fields section in Studio allows administrators to create new fields for stock and custom modules as well as update existing fields. To access the Fields section in Studio, select "Fields" from the Modules panel under the desired module (e.g. Cases) and the Edit Fields tab will open in the main panel.



# Field Types

Studio comes out-of-the-box with many different types of fields which can be created in Sugar. Please note that the options and properties available when configuring the field varies for each data type.

The following data types are available when creating fields in Studio:

Data Type	Description
Address	Creates fields for street, city, postal code, state, and country.
	Note: Custom address fields cannot be grouped together like stock address fields (e.g. billing address).
Checkbox	Creates a checkbox for data fields with a Yes/No action.

	0 1 11
Currency	Creates a field to enter a currency value. The system automatically creates a dropdown of the currency type if the field does not already exist in that module.
Date	Creates a field to enter a date. Includes a button for a calendar popup.
DateTime	Creates a field to enter the date and time. Includes a Calendar icon button to choose a date via the popup calendar, as well as a dropdown list to select the time.
Decimal	Creates a field to hold a number rounded to a specified decimal precision. Sugar stores the exact representation of the number in the database (e.g. For a precision of 2: 1.236 is stored as 1.24).
Dropdown	Creates a field where you can associate a dropdown list of values.
Encrypt	Creates a field for sensitive information, such as social security numbers, whose value is to be encrypted in the Sugar database. The value is encrypted in the database but is visible in the user interface to users.
Flex Relate	Creates a dropdown list from which you can relate a single record from a variety of modules.
	Note: Only one Flex Relate-type field is allowed per module. Out of the box, the Flex Relate option is not available for the Accounts, Calls, Contracts, Meetings, Notes, and Tasks modules.
Float	Creates a field to hold a number rounded to a specified decimal precision. Sugar stores the value differently based on the database platform Sugar is running on.
HTML	Creates static HTML-formatted text to display in record views.

IFrame	Creates a field to store or generate a URL to display an iFrame in record views.
Image	Creates an image field to upload an image to display on a record.
Integer	Creates a field to specify positive or negative numbers with no decimal places.
MultiSelect	Creates a dropdown list of values where multiple values can be selected at once.
Phone	Creates a field to enter a phone number.
Radio	Creates a radio button for a user to select one value from a dropdown list.
Relate	Creates a field to associate a record with another module's record as a one-way relationship. You can add multiple Relate fields to a module.  Note: Relate fields and custom relationships are independent of each other. Changes made to either one are not reflected in the other. Relate fields can be added to a report, but any data on the related record cannot be accessed in the report. To access related record data in a report you will need to create a custom relationship.
TextArea	Creates an open text area field for multiple lines of text.
TextField	Creates a field for a single line of text.
URL	Creates a field to store or generate a URL and display as a link.

Note: Name-type and ID-type fields cannot be created via Studio. Each stock module and module created via Module Builder will have a Name-type and ID-type field. The Name-type field is automatically displayed in the header of each record view (for Sidecar modules) while the ID field is not available in Studio but is a part of the unique URL for each record.

# Field Options

Fields provide ways to store different data types in Sugar. While many fields come

with Sugar by default, there can be instances where your organization needs to create custom fields to store additional data.

Each field, depending on the data type, will have different properties and options available when configuring the field via Studio. Please note that some properties can exist across all data types and some are unique to only a few types.

The following properties and options are available for fields in Studio:

- Audit: Select this checkbox to audit the field for changes made in Sugar.
  - Users can view the changes made to audited fields via the View Change Log option in the module's record view (for Sidecar modules) or detail view (for Legacy modules).
  - Fields marked as "Audit" will generate update posts in the activity stream for Sidecar modules (e.g. Accounts, Contacts, etc.) whenever the field gets updated. For more information on activity streams, please refer to the Activity Streams documentation.
  - Note: The Audit option is available for all data type fields.
- Boost value: Enter a boost value for the field to enhance the relevancy of the field for full text search.
  - The default boost value is 1.0 which indicates a neutral boost. To apply a
    positive boost, set the boost value higher than 1. To apply a negative
    boost, use values lower than 1. For example a value of 1.35 will
    positively boost a field by 135%. But using a value of 0.60 will apply a
    negative boost.
  - Note: It is not necessary to perform a full system index when boost values are changed for fields.
- Border: Select this checkbox to add a border around the image for this field.
  - Note: The Border option is only available for Image data type fields.
- Calculated Value : Select this checkbox to designate this field as a calculated field.
  - This opens up the Formula option and disables the Default Value and Importable options. For more information regarding entering a formula for a calculated value, please refer to the Formula option listed in this section.

Calculated Value: (i)	
Formula:	Edit Formula

- The result of the formula will be entered into the field for any new or modified records. When selecting this option, the field value cannot be modified by users.
- Note: The Calculated Value option is only available for the following data type fields:

Checkbox	Currency

Date	Datetime
Decimal	Encrypt
Float	Integer
Phone	TextArea
TextField	

Columns : Enter the number of columns to specify the width of a TextArea data type field.

• Note: The Columns option is only available for TextArea data type fields.

Comment Text : Enter a comment or description about the field. The comment text is only viewable via Studio.

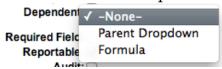
• Note: The Comment Text option is available for all data type fields except Flex Relate.

Default Value: Specify or select a default value for this field when a record is created. Default values for the record are populated by default on the record view (for Sidecar modules) and edit view (for Legacy modules) layout, but can be modified by users.

 Note: The Default Value option is available for all data type fields except HTML, Image, Flex Relate, and Relate.

Dependent :Select this option to designate this field as being dependent on a formula or a parent dropdown.

• For dropdown data type fields you can select "Parent Dropdown" or "Formula" for the dependency.



• Selecting "Parent Dropdown" will open the Parent Dropdown option as shown below. Selecting "Formula" will open the Visible If option to create a dependency formula. For other field data types (e.g. Date), select the Dependent checkbox to open the Visible If option. For more information regarding entering a formula to make a dependent field visible, please refer to the Visible If option listed in this section.



• Note: The Dependent option is available for all data type fields except Address.

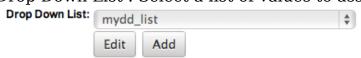
Disable Format : Select this checkbox to disable number formatting such as the thousands separator.

• Note: The Disable Format option is only available for Integer data type fields.

Display Label: Enter a value to display as the field label and header in layouts. Normally defaults to the Field name entered when creating field.

- This value is also modifiable via the Labels section of Studio.
- Note: The Display Label option is available for all data type fields except Flex Relate. Flex Relate uses the Label Value option.

Drop Down List: Select a list of values to associate to the field.



- Only values in the chosen list will be available for selection in the field. Click "Edit" to change the values for the currently selected list, or click "Add" to create a new list.
- Note: The Dropdown List option is only available for the dropdown, multiselect, and radio data type fields. For more information on editing dropdown values via the Dropdown Editor, please refer to the Editing Dropdown Lists section of the Developer Tools documentation.

Duplicate Merge: Select one of the following options to determine the field's functionality when records are being merged:

- Disabled : Selected by default. The field will not appear on the Merge Duplicates screen.
- Enabled: The field will appear on the Merge Duplicates screen.
- In Filter: (Legacy/BWC modules only) The field will appear in the Merge Duplicates feature, and will also be available in the Find Duplicates feature
- Default Selected Filter: (Legacy/BWC modules only) The field will be used for a filter condition by default in the Find Duplicates page, and will also appear in the Merge Duplicates feature.
- Filter Only: (Legacy/BWC modules only) The field will not appear in the Merge Duplicates feature, but will be available in the Find Duplicates feature.
- Note: The Duplicate Merge option is available for all data type fields except Image.

Field Name: Enter the name of the field being created. Once a field has been created the field name cannot be changed.

- Field names can contain only alphanumeric characters as well as the underscore character.
- Custom fields added via Studio are automatically appended with an "\_c" to ensure the field does not conflict with a current or future stock field.

• Note: The Field Name option is required for all data type fields.

Full Text Searchable : Specify whether or not the field should affect Global Search results.

- Disabled: Select "Disabled" if you do not want this field to be captured when the database is indexed for searches. Search indices collect the values of searchable fields for evaluation by the Global Search.
- Searchable: Select "Searchable" to include this field's value in search indexes.
  - Selecting "Searchable" will reveal the Boost value field, which allows you to set a relevance weight for searches.
     When a user's search query matches the value of a field with a higher boost level, the record will appear higher in the search results. For more information regarding boost values in Full Text Search, please refer to the Search documentation in the Application guide.
  - The Full Text Searchable option is only available for the following data type fields:

Phone	TextArea
TextField	URL

Note: For a list of searchable fields for each module for global search, please refer to the Search documentation in the Application guide.

Formula: Contains the current formula to return a calculated value.

• Click "Edit Formula" to launch the formula builder and change the formula. For more information on how to build a formula using the formula builder, please refer to the Using Sugar Logic section of this documentation.



• Note: The Formula option is only available when the Calculated Value option is selected when editing or creating a field.

Generate URL: Select this checkbox to allow variables from the current module to be placed into the Default Value option for creating dynamic URLs.



• This is useful for providing links or iFrames to internal systems such as an ERP or to external systems such as Google Maps.

- Select the desired field to add from the dropdown and click "Insert Field" to add the field to the Default Value. When selecting this option, the field value cannot be modified by users.
- Note: The Generate URL option is only available for the IFrame and URL data type fields.

Height: Enter the number of pixels to vertically scale the image for this field. Enter only the Width or Height options to retain the aspect ratio of the image.

• Note: The Height option is only available for Image data type fields.

Help Text: Enter basic instructions for populating this field. The text entered here will display below the field when creating or editing a record for modules using the Sidecar user interface. For modules using the Legacy user interface, the helptext will appear when users hover their mouse within the field in the Edit View layout.

• Note: The Help Text option is available for all data type fields.

HTML : Enter static rich text with formatting or HTML code to display on a record. For more information on how to use the text editor please refer to the



Note: The HTML option is only available for HTML data type fields.

IFrame Height: Enter the number of pixels for the height of the IFrame field. The width of the IFrame field is always the width of the field container.

• Note: The IFrame Height option is only available for IFrame data type fields.

Importable: Select one of the following options to determine the field's functionality when records are being imported:

- Yes: The field can be included in an import operation.
- No: The field cannot be included in an import.
- Required : A value for the field must be provided in any import.

Label Value: Enter a value to display as the field label and header in layouts. This value is also modifiable in the Modules panel under Labels. Defaults to "Flex Relate".

• Note: The Label Value option is only available for Flex Relate data type fields.

Mass Update : Select this checkbox to add this field as an option to mass update.

• Note: The Mass Update option is only available for the following data type fields:

Date	Datetime
Dropdown	MultiSelect
Radio	

Max Size: Enter the maximum number of characters allowed for this field. Defaults to 255.

 Note: The Max Size option is only available for the following data type fields:

Address	Decimal
Float	IFrame
Integer	Phone
URL	TextField

Max Value: Enter the highest value allowable for this field. If a user enters a higher value in the field than the specified value, a notification will appear upon save informing them of the set maximum value.

• Note: The Max Value option is only available for Integer data type fields.

Min Value: Enter the lowest value allowable for this field. If a user enters a value in the field that is lower than the specified value, a notification will appear upon save informing them of the set minimum value.

• Note: The Min Value option is only available for Integer data type fields.

Module: Select a module from the dropdown to relate to the current module.

• A module can relate back to itself, a good example of this would be a relate field on Contacts to relate back to Contacts for a referred by field. This will allow users to select which contact record referred a different contact. The chosen module cannot be modified once the field is created.

Module: Contacts \$

Note: The Module option is only available for Relate data type fields.

Open Link In : Select one of the following options to determine how a URL will open:

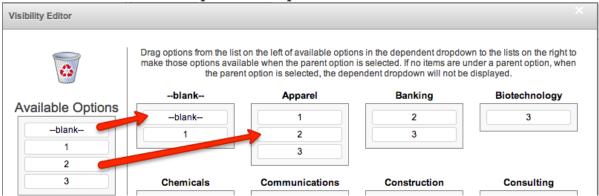
- New Window: Opens the URL in a new Tab or Window depending on your browser and settings.
- Same Window: Opens the URL in the same window as the record you are currently browsing.
- Note: The Open Link In option is only available for URL data type fields.

Parent Dropdown: Select an option from the dropdown to specify the parent that controls the visibility of this dropdown field.

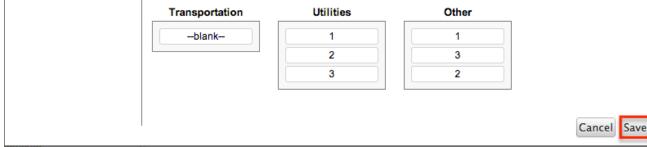
• The Parent Dropdown option is populated with the other dropdown data type fields in the current module.



- Note: The Parent Dropdown option is only available when the Dependent option has "Parent Dropdown" selected.
- Click "Edit Visibility" to specify which options are available from the current dropdown for each value of the parent dropdown. In the Visibility Editor window, drag values from the current dropdown list to the value sections of the parent dropdown.



• This will determine which options in the dropdown list are available when the parent dropdown is set to the specified value. In this example, if the parent dropdown is set to "Apparel", then the current dropdown will have options 1, 2, and 3 where if the parent dropdown is set to "Banking", then the current dropdown will only have options 2 and 3 available. If there are no available options for a parent dropdown value, then the dependent dropdown will not display. To remove an item from the list, simply click and drag the value to the Trash bin on the left. Once the values are set, click "Save" to preserve your changes.



Precision: Enter a number to specify the number of digits to the right of the decimal point the value should be stored as in Sugar.

• Note: The Precision option is only available for the Decimal and Float

data type fields.

Reportable: Select this checkbox to allow the field to be used in reports.

• Note: The Reportable option is available for all data type fields except Encrypt, Flex Relate, HTML, IFrame, and Image.

Required Field: Select this checkbox to mark the field as required in Sugar. The user will be required to enter a value for the field when saving the record.

• Note: The Required option is available for all data type fields except Checkbox and HTML.

Rows: Enter the number of rows to specify the height of a TextArea data type field.

• Note: The Rows option is only available for TextArea data type fields.

System Label: Enter the system value for storing the label of the field. This is defaulted to the name of the field preceded with "LBL\_". Any lowercase characters entered will be converted to an uppercase upon saving. Once the field has been created, the system label cannot be changed.

- It is recommended that administrators avoid naming fields with the same system label in order to prevent the same label and header values from existing in the system.
- Note: The System Label option is available for all data type fields.

Visible If: Contains the current formula to determine if a field is visible on the layout or not. Click "Edit Formula" to launch the formula builder to change the formula.



- The formula must result in a Boolean (true/false) response. For more information on how to build a formula using the formula builder, please refer to the Using Sugar Logic section of this documentation.
- Note: The Visible If option is only available when the Dependent option is checked or "Formula" is selected from the dropdown.

Width: Enter the number of pixels to horizontally scale the image for this field. Enter only the Width or Height options to retain the aspect ratio of the image.

Note: The Width option is only available for Image data type fields.

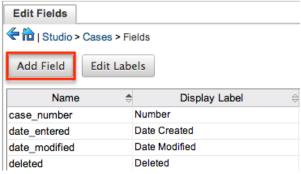
# Creating Fields

Use the following steps to create a new field via Studio:

1. Expand out the tree under the desired module (e.g. Cases) in the Modules panel and select "Fields".



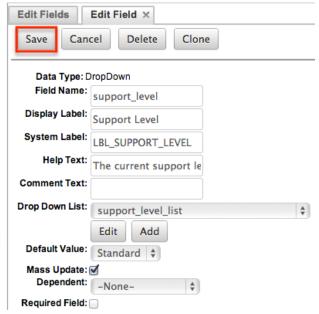
2. In the main panel, click "Add Field".



3. Enter appropriate values for the Field Options.

Note: Field Name is required.

4. Once the necessary information is entered, click "Save".



Please note that once a field is created, it must be placed on the record view (for

Sidecar modules) or edit view (for Legacy modules) layout before users can enter data into that field. For more information on editing layouts, please refer to the Editing Layouts section of this documentation.

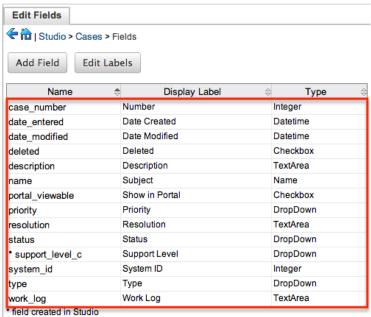
### **Editing Fields**

Use the following steps to edit an existing field via Studio:

1. Expand out the tree under the desired module (e.g. Cases) in the Modules panel and select "Fields".

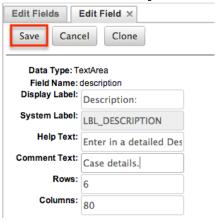


- 2. In the main panel, select a field to edit. Sorting the fields by the column header will help in locating the field faster.
  - Note: Fields created via Studio will display an asterisk next to their names.



3. Enter appropriate values for the Field Options.

4. Once the necessary information is entered, click "Save".



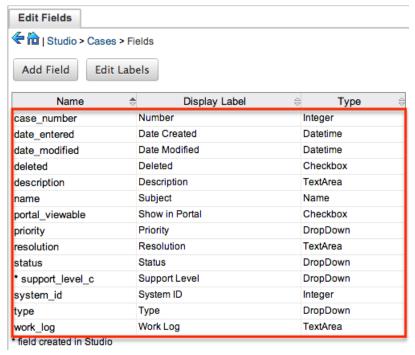
## **Deleting Fields**

Use the following steps to delete an existing field via Studio:

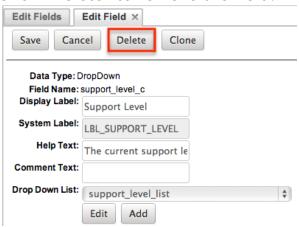
1. Expand out the tree under the desired module (e.g. Cases) in the Modules panel and select "Fields".



- 2. In the main panel, select a field to delete. Sorting the fields by the column header will help in locating the field faster.
  - Fields created via Studio will display an asterisk (\*) next to their names.
  - Note: Stock fields cannot be deleted.



3. Click "Delete" to remove the field.



- 4. A pop-up message will display asking for confirmation. Click "Ok" to proceed.
  - When deleting fields, both the field and all the data related to the field in the database will be permanently removed. Before deleting a field please verify and resolve the following issues:
    - 1. Field must be removed from any report filters or displays.
    - 2. Field must be removed from any workflows that filters or displays the field.
    - 3. Field must be removed from any dashlet that filters or displays the field.
    - 4. Field must be removed from any Sugar Logic formulas.
    - 5. Field must be removed from any email templates.
    - 6. Field must be removed from any saved searches.
- 5. The field will automatically be removed from any module layouts when deleted.

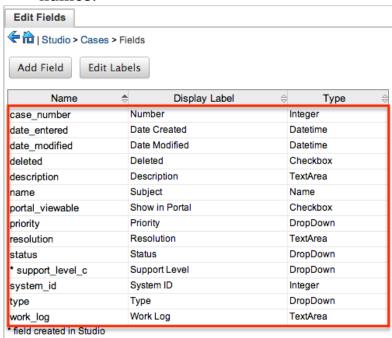
## Cloning Fields

Use the following steps to clone an existing field via Studio:

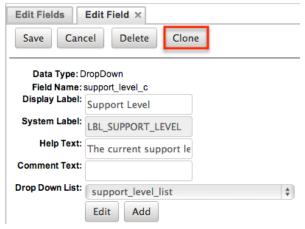
1. Expand out the tree under the desired module (e.g. Cases) in the Modules panel and select "Fields".



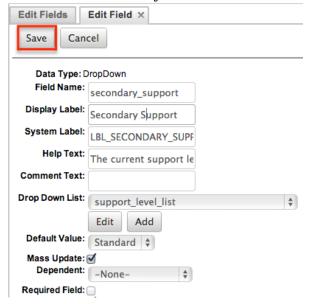
- 2. In the main panel, select a field to delete. Sorting the fields by the column header will help in locating the field faster.
  - Note: Fields created via Studio will display an asterisk (\*) next to their names.



- 3. Select "Clone" to duplicate the field.
  - Note: Some non-standard stock fields (e.g. Name) do not have the ability to clone.



- 4. Enter appropriate values for the Field Options.
- 5. Once the necessary information is entered, click "Save".



# Relationships

Relationships define the links between different modules in Sugar and allow records between those modules to be related. Related records display in fields or subpanels on a module's record view (for Sidecar modules) or detail view (for Legacy modules) depending on the relationship type. When you create a new relationship between two modules, the system automatically creates the necessary subpanels, related fields, and metadata relationships. Relationships provide the added benefit in reports to allow access to a related records fields in addition to the base module's fields.

The relationships section in Studio allows administrators to create new relationships between custom and stock modules as well as change some properties on existing relationships. To access the Relationships section in Studio, select "Relationships" from the Modules panel and the module's relationship tab will open in the main panel.



## Relationship Types

Sugar contains a few different types of relationships you can create between modules. The relationship type will determine what fields or tables will be created in the database as well as what interface the user will see when managing the relationship.

The following relationship types are available in Studio:

• One-to-One: Records in the primary module and the related module are uniquely related to each other. For a one-to-one relationship between Accounts and Contacts, an account can be associated with only one contact and a contact can be associated with only one account. The relationship will show as a field in each module's record view where changing the relationship from either module will also change the value in the other module. From the primary Accounts module:



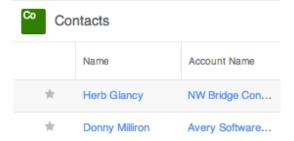
From the related Contacts module:



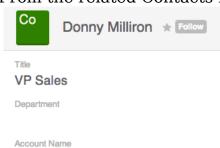
Note: You can create a one way relationship between modules using relate fields. For more information regarding relate fields, please refer to the Field Types section of this documentation.

 One-to-Many: Records in the primary module can have relationships with many records in the related module. For a one-to-many relationship between Accounts and Contacts, an account can be associated with many contacts, but each contact can be associated with only one account. The record view of the primary module will display a subpanel for the related module, and the record view of the related module will display a field containing a link to the related record.

From the primary Accounts module:



#### From the related Contacts module:

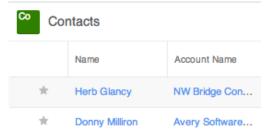


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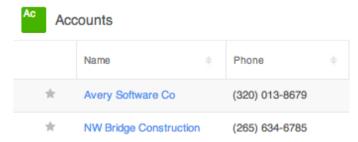
Note: A one-to-many relationship is the same as a many-to-one relationship except the Primary and Related modules are reversed. Adding a custom one-to-many relationship to "Activities" will add custom relationships to calls, meetings, notes, tasks, and emails. This will also automatically add these subpanels to the record view.

 Many-to-Many: Records in both the primary module and the related module can have multiple records related in each module. For a many-to-many relationship between Accounts and Contacts, an account can be associated with many contacts, and a contact can be associated with many accounts. Both module's record view will display a subpanel for the opposite module.

### From the primary Accounts module:



#### From the related Contacts module



Note: Only modules with subpanels available can be on the "Many" side of a relationship. For example, the Product Catalog module lacks a subpanel; therefore, Product Catalog can only be selected on the "One" side of a relationship.

When you create a relationship for a module, the module you initiate the relationship from is considered the primary module and the module that you relate it with is the related module.

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.

# Creating Relationships

Use the following steps to create a new relationship via Studio:

1. Expand out the tree under the desired module (e.g. Cases) in the Modules panel and select "Relationships".



2. In the main panel, click "Add Relationship".



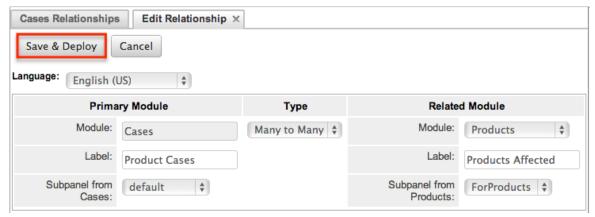
3. Enter appropriate values for the following options:

Type: Select the type of relationship to create from the options in the Relationship Types section.

Module: The Primary module is set as the module to which you are adding the relationship. Select the related module from the dropdown list to the right. The Primary and Related module can be the same in order to create a parent child relationship.

Label: Enter a label to reference the Primary module or Related module's subpanels for this relationship.

- Note: This option is only available for the "Many" side of a relationship. Subpanel from : Select a subpanel option to display the Primary or Related module's records in. This will determine the fields displayed in the subpanel.
- Note: This option is only available for the "Many" side of a relationship.
- 4. Once the necessary information is entered, click "Save & Deploy".



5. The required fields and subpanels are instantly created and deployed to the appropriate modules.

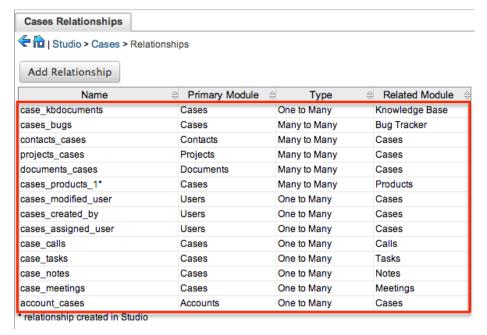
### **Editing Relationships**

Use the following steps to edit a relationship via Studio:

1. Expand out the tree under the desired module (e.g. Cases) in the Modules panel and select "Relationships".



- 2. In the main panel, select a relationship to edit.
  - Sorting the column header will help in locating the relationship faster.
  - Note: Relationships created via Studio will display an asterisk next to their names.



- 3. The only editable field on a relationship is the Label field for naming the Primary or Related modules subpanels.
  - Note: This option is only available for the "Many" side of a relationship.
- 4. Once the necessary information for the Label field is entered, click "Save".



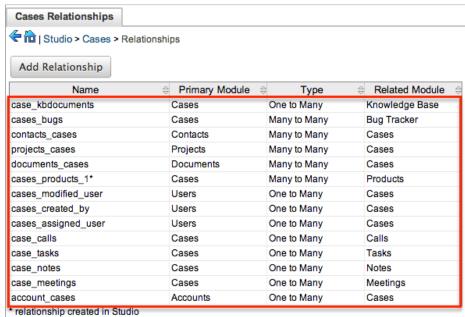
# **Deleting Relationships**

Use the following steps to delete a relationship via Studio:

1. Expand out the tree under the desired module (e.g. Cases) in the Modules panel and select "Relationships".



- 2. In the main panel, select a relationship to delete.
  - Sorting the column header will help in locating the relationship faster.
  - Note: Relationships created via Studio will display an asterisk next to their names.



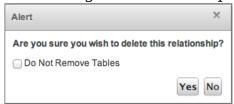
3. Select "Delete" to remove the relationship.



- 4. A pop-up message will display asking for confirmation. Click "Yes" to proceed.
  - o Note: If you wish to retain the data and table structure that currently

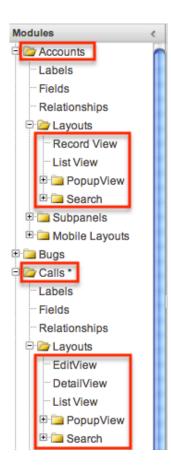
exists for the relationship, select the "Do Not Remove Tables" option. Leaving the "Do Not Remove Tables" unchecked will delete the relationship data and remove the tables for the relationship from the database.

- Before deleting a relationship please verify and resolve the following issues:
  - Relationship must be removed from any report filters or displays
  - Relationship must be removed from any workflows that filters or displays fields from the relationship
  - Relationship must be removed from any Sugar Logic formulas referencing the relationship



# Layouts

The layouts in Studio are used to represent the various views (e.g. record view, list view, edit view, etc.) in Sugar. Users with administrator or developer access have the ability configure these layouts via Admin > Studio. Please note that the layouts available to configure will vary based on whether the module uses the Sidecar or Legacy user interface. All modules using the Legacy user interface will display an asterisk (\*) to the right of the module's name in Studio. The available layouts for the selected module will appear once you open up the Layouts option.



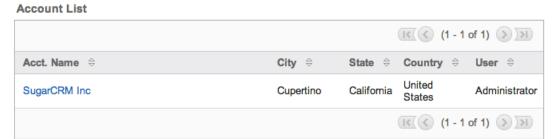
## Layout Types

Sugar comes with different types of layouts to represent different sections of Sugar. Please note that not all layouts are available in every module.

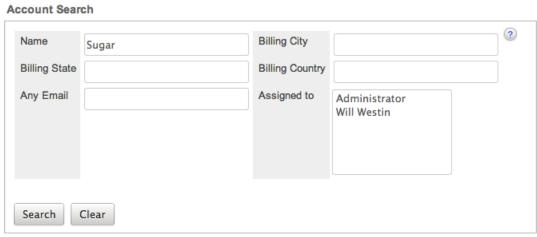
The following layout options are available in Sugar:

- Convert Lead: The Convert Lead layout can be configured to mark modules as required for lead conversion, add or remove modules from the convert lead layout, etc. Please note that the Convert Lead layout is only available for the Leads module. For more information on modifying the Convert Lead layout, please refer to the Editing Convert Lead Layout section below.
- Record View(for Sidecar modules): Record view is used to modify, create, or view the current record's details within a specified module. This layout is specific to modules using the Sidecar user interface and controls the layout for viewing, creating, and editing a record, as well as the quick-create layout and the fields displayed when the record is viewed via the preview pane.
- Edit View (for Legacy modules): Edit view layout is used to modify or create records in the specified module.
- Detail View(for Legacy modules): Detail view layout is used to view the current data for a record within the specified module.

- List View: List view layout is used to view multiple records within the specified module. The list view is also used for displaying the results from module search (for Sidecar modules), as well as Basic or Advanced search (for Legacy modules).
- Quick Create (for Legacy modules): Quick Create layout is used in Sugar to quickly view and modify records within a specified module without having to navigate away from the current page. For example, logging a call from the Quotes detail view will open up the call's quick create form.
- Popup List View: Pop-up list view layout is used to view a list of records in a pop-up window when selecting one or more records to relate to a current record.



 Popup Search(for Legacy modules): Pop-up search layout allows users to search for records in the pop-up window to relate to a current record and appears above the pop-up list view in the same window. Legacy modules (e.g. Quotes) use this layout for pop-up searching while Sidecar modules (e.g. Accounts) use the Search layout's configuration.



• Search: Search layout is used to allow users to search for records from a module's list view via module search (for Sidecar modules) or Basic and Advanced search (for Legacy modules). This layout is also used by Sidecar modules on the pop-up search and select. In addition, changes made to the Search layout for Sidecar modules affects the list of available fields to filter for the module's list view dashlet (e.g. My Contacts) since it is controlled by the same layout as well.

Note: Encrypt fields cannot be added to Search layouts.

### **Layout Options**

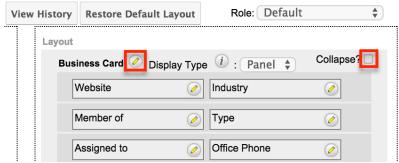
Administrators have the ability to configure the various layouts (e.g. record view, list view, etc.) available via Studio. The following are some of the options available to administrators when configuring layouts in Studio.

#### **Panels**

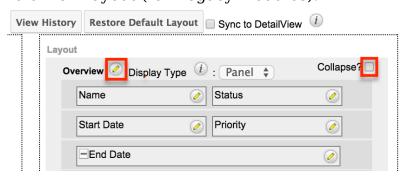
Every field on a layout is contained within a panel, which can be organized to contain groups of similar or related fields to assist in organization. Modules using the Legacy user interface will have fields grouped by default into the Overview and Other panels while modules using the Sidecar user interface will have the Business Card and Show More panels. You can change the panel header titles by clicking the Pencil icon to the right of the panel name.

Note: You can have the panel collapsed by default on the Record View, Edit View, or Detail View by marking the Collapse? checkbox to the far right of the panel header.

### Record View layout (for Sidecar modules):



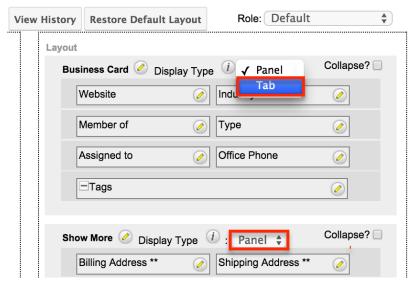
#### Edit View layout (for Legacy modules):



### **Tabs**

Each of the panels (Business Card, Overview, etc.) may optionally be displayed as tabs in the layout. You can also nest panels within other panels defined as tabs. For example, if you set the Business Card panel as a "Tab" and leave "Show More"

as a panel in the Record View layout, the Show More panel will appear within the Business Card tab.



Every panel listed under a Tab display type will be a panel within the tab until the next Tab display type panel is reached. So if you add a new panel below "Show More" and set both the Business Card and Show More panel as "Tabs", then the newly added panel will appear within the Show More tab.

### **Restoring Layouts**

Sugar keeps a history of the changes made to each layout. You can preview and restore historical layouts via "View History". For more information on viewing the history of layouts, please refer to the Viewing Layout History section of this documentation.

It is also possible to restore the Record View, Detail View, etc. layouts back to the default out-of-the-box layout. For more information on how to reset a layout to default, please refer to the Restoring Default Layouts section in this documentation.

### Sync And Copy (Legacy Modules)

Sugar provides administrators with the ability to sync and copy certain layouts to assist in configuring layouts. Often it makes sense for a module's edit view and detail view layouts to be identical. Instead of having to duplicate any changes made to one layout, administrators can configure the detail view layout to be synced to the edit view layout.

To sync the layouts, select the Sync to DetailView checkbox on the upper right of the EditView layout and click "Save & Deploy".



The current detail view layout will be replaced with the current edit view layout. At this point, changes cannot be made to the DetailView layout in Studio, but any changes made to the EditView layout will automatically be synced to the DetailView layout when saved.

Alternative to syncing the layouts, administrators can copy the layout from the EditView to the DetailView or QuickCreate layouts. This is especially useful if you want the layouts to be similar, but different. Make any necessary changes to the EditView layout, then navigate to either the DetailView or QuickCreate layout. Select "Copy from EditView" to replace the current layout with details from the EditView layout. Once copied, you can continue to edit the DetailView layout as you wish.



Note: The copy feature is a one-time copy of the layouts. Any future changes to the EditView layout will not be reflected on the DetailView layout without performing the copy again.

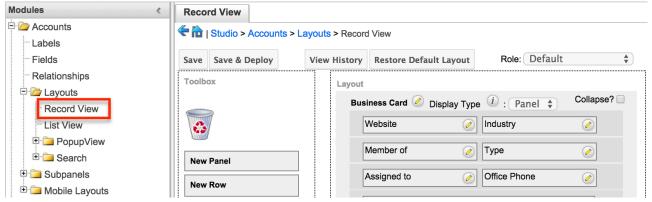
# **Editing Layouts**

You can add, remove, hide, etc. the fields for the available layouts in the module by selecting the specific layout under the Modules panel to edit. Please note that the List View, PopupView, and Search layouts have columns where you can designate fields users can and cannot see.

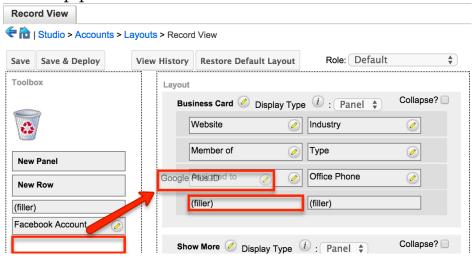
### **Editing Record View Layout**

The following steps cover editing the Record View layout for the Accounts module as an example:

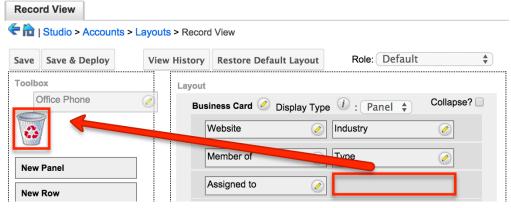
1. Expand "Layouts" from the Modules panel under the Accounts module and select "Record View". The Record View layout will display in the main panel to the right.



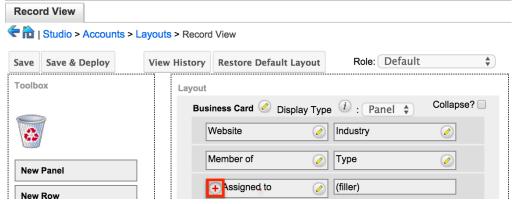
- 2. To add a field to the Record View layout, drag the field from the list of fields in the Toolbox to a "(filler)" location on the layout per your preference.
  - You can also drag a field to a location on the layout that already has a field in place. The newly added field and the existing field on the layout will swap places.



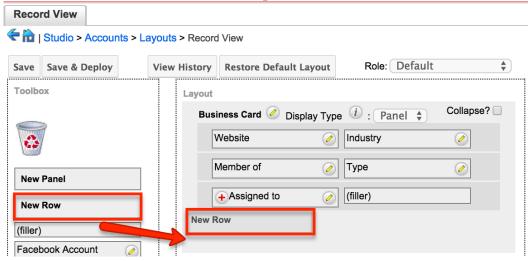
3. To remove a field from the layout, drag and drop the field from the layout to the trash bin in the toolbox to remove the field from the layout. You may remove an entire row in the layout using the same method.



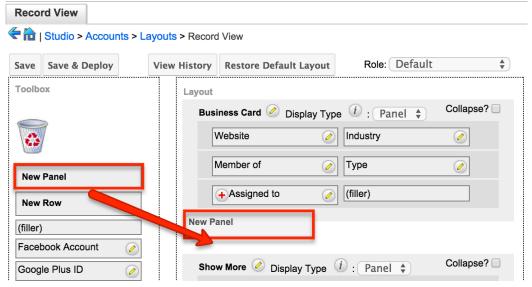
- 4. To expand or minimize the field column in the layout, click the Plus icon (+) to stretch the field over two columns or click the Minus icon (-) to fit the field into one column.
  - Note: The layout will display a "(filler)" if there is no field in that location.



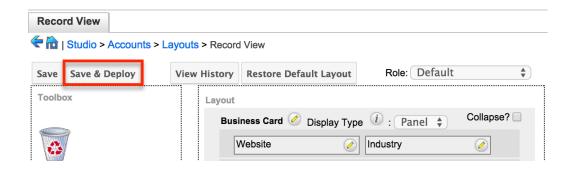
5. To add a new row, drag the "New Row" item in the Toolbox to the layout to allow additional fields or blank spaces to be added.



6. To add a new panel, drag the "New Panel" item in the Toolbox to the layout to group different sets of fields together in the Record View layout.



- 7. Once the layout is finalized, click "Save & Deploy" to preserve your changes and deploy immediately.
  - You can click "Save" if you wish to preserve the changes made but not deploy to Sugar's user interface.



Note: It is recommended that dependent fields be placed below and/or to the right of the independent field in order to preserve the correct display of fields on the layout.

### **Editing List View Layout**

The List View layout has columns where you can define the fields that users can and cannot see. The List View layout also controls the list of available fields for the module's list view dashlet (e.g. My Contacts). Once the appropriate configurations are made in Studio, the deployed changes will be reflected in the Columns field of the corresponding module dashlet's Configuration Options page. Keep in mind that the module dashlet will not automatically reflect the Studio changes and users must edit the dashlet in order to view the changes, add new fields to the layout, etc.

When configuring the List View layout, you will see three columns (Default, Available, Hidden) where fields can be dragged and dropped accordingly.

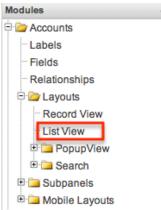
- Default: Drag fields into the Default column to display them on the default List view layout. The top-to-bottom order of fields corresponds with the left-to-right presentation of columns on the list view (or right-to-left for users viewing an RTL language). For example, the topmost field in the default column will be shown in the leftmost column of the list view.
- Available: Drag fields into the Available column to make them available for users to personalize their view of the layout without making them part of the default layout. Users will be able to click the Column Selection icon to see the list of available fields. For more information on working with columns in the list view, please refer to the User Interface documentation.
  - Note: Not all list-type layouts have an Available fields section.
- Hidden: Drag fields into the Hidden column to hide them from users completely.

Note: The Search layout is edited in the same fashion as the List View layout using the Default and Hidden columns. Only the fields listed in the Default column are available to users as list view filters. For Sidecar modules, the Search layout also

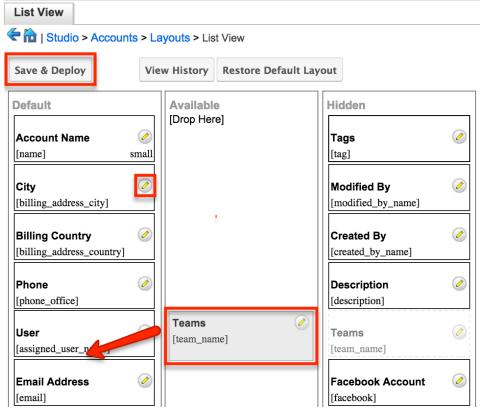
controls the fields available as filters in the module's list view dashlet (e.g. My Contacts).

The following steps cover editing the List View layout as an example:

1. Expand "Layouts" from the Modules panel under the Accounts module and select "List View".



- 2. To add a field to the List View layout, drag and drop the fields from the Hidden column to the Default column.
  - Note: The fields in the Default column will be available to add as display columns in the corresponding module dashlet (e.g. My Accounts).



- 3. To remove a field from the layout, drag and drop the field from the Default column to the Hidden column.
- 4. To change the left-to-right order of the fields displayed on the list view, drag

and drop fields up or down within the Default list.

- Note: The order of fields designated for the List View layout also affects the order for the list of available fields in the corresponding module dashlet (e.g. My Accounts).
- 5. Optionally, modify the label and width for the field. Click the Pencil icon next to each field, enter the new label or select the width (e.g. small, medium, large), then click "Save". Changes to a field's label will affect all List View layouts for this module. For more information on setting column widths, please refer to the List View Column Widths section.



6. Click "Save & Deploy" to preserve your changes and deploy immediately.

#### List View Column Widths

Administrators can easily set the column widths for specific fields when configuring the List View layout. You can choose from a pre-defined list of width sizes (e.g. small, medium, large) that are available out-of-the-box with Sugar or enter a custom width value. The custom width value should be entered in pixels (e.g. 200) for Sidecar modules. Legacy modules should be entered as a percentage (e.g. 40) of the total width of the list view that should be dedicated to the column.

The following table describes the available column width sizes for fields in Sugar's list-view layouts. The Approximate Characters column indicates the maximum number of characters that the column will display before indicating overflow with an ellipsis. For example, a column size with an Approximate Characters value of 4 would display "University of Miami" as "Univ...". This number is an approximation due to the various widths of characters in the alphabet (e.g. a "w" character occupies more horizontal space than an "i" character). Users may expand the default column width manually or hover over the ellipses to reveal the field's entire contents.

Name	Width	Approximate Characters
xxsmall	20px	1
xsmall	40px	2
small	68px	8
medium	128px	15
large	180px	30

xlarge	280px	50
xxlarge	460px	85

Note: For currency fields, Sugar enforces a minimum 141px column width. Therefore, only the "large" setting and above will apply and custom values must be defined as 141 or wider.

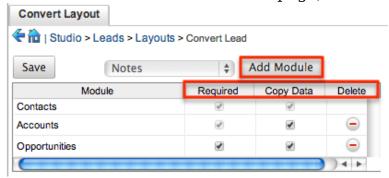
### **Editing Search Layout**

The Search layout controls which fields are available as filters in a module's list view or list view dashlet. You edit the Search layout in the same fashion as the List View layout, but using only the Default and Hidden columns. Fields placed in the Default column will be available as filters for users in the module's list view and list view dashlet; fields placed in the Hidden column will not. For more information on dragging and dropping fields between the Default and Hidden columns, please refer to the Editing List View Layout section of this page.

Note: After an administrator edits the Search layout for a module in Studio, users must edit or re-create their list view dashlets to see the deployed changes to their available filters or columns.

### **Editing Convert Lead Layout**

The Convert Lead layout in Sugar is structured differently from the other layouts as it is specific to the lead conversion page for the Leads module. Administrators can configure which modules are available to convert, mark modules as required, add modules to the Convert Lead page, etc.



The following settings are available when configuring the Convert Lead layout:

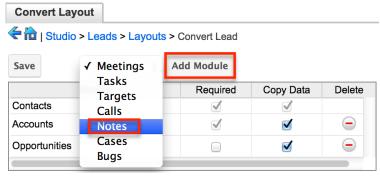
- Required: Makes the module required during lead conversion. Required modules must be created or selected on the Convert Lead page in order for the lead to be converted and saved.
- Copy Data: Copies data from the Leads fields (stock and custom) to fields

with the same name in the newly created record for the module.

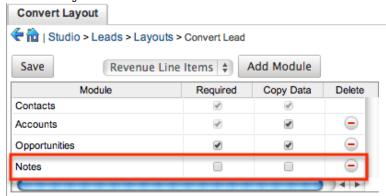
- Note: The field name and type must match between both modules (e.g. Leads and Accounts) in order for the data to copy over.
- Delete: Removes the module from the Convert Lead layout.

The following steps cover adding the Notes module to the Convert Lead layout:

1. Select the Notes module from the dropdown list above the convert lead table then click "Add Module".



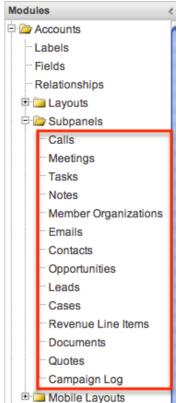
- 2. The Notes module will appear in the convert lead table and you can configure the settings as necessary. Click "Save" to preserve your changes.
  - Note: Modules added to the Convert Lead layout can be re-arranged by dragging and dropping the row (e.g. Notes) within the table. The Contacts, Accounts, and Opportunities modules cannot be re-arranged on the layout.



# Subpanels

Related records between modules in Sugar are commonly displayed in Subpanels. Similar to list type layouts, administrators can modify the subpanel layouts to change which fields are shown in a module's subpanel. You can add or remove fields for these subpanels depending on the information you want displayed to users. You can also rename a subpanel if needed. To access the subpanels section in Studio, expand "Subpanels" from the Modules panel under the desired module and the available subpanels will appear. Please note that the list of available

subpanels for each module will vary.

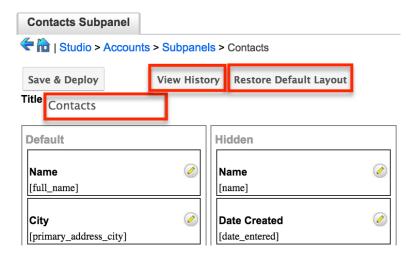


## **Subpanel Options**

When configuring the Subpanel layout in Studio, there are options which allow you to change the subpanel title, view historical layout changes, as well as restore the default layout.

The following options are available when configuring subpanels in Studio:

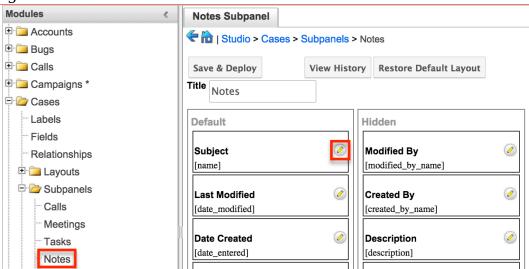
- Subpanel Title: Sugar administrators have the option to modify the name of the subpanel. This will change the display value of the subpanel when viewing the record view (for Sidecar modules) or detail view (for Legacy modules) of a record from the specified module.
- View History: Sugar keeps a history of the changes made to each subpanel. You can preview and restore historical layouts via "View History". For more information on viewing the history of subpanels, please refer to the Viewing Layout History section of this documentation.
- Restore Default Layout: Restores the subpanel layout back to the default out-of-the-box layout. For more information on how to reset a subpanel to the default layout, please refer to the Restoring Default Layouts section of this documentation.



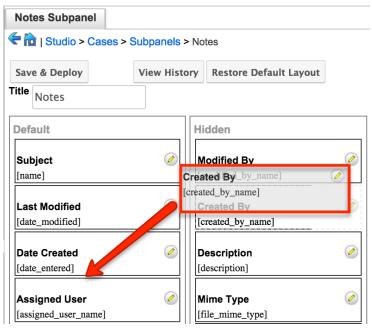
## **Editing Subpanels**

The following steps cover editing the Notes subpanel for the Cases module as an example:

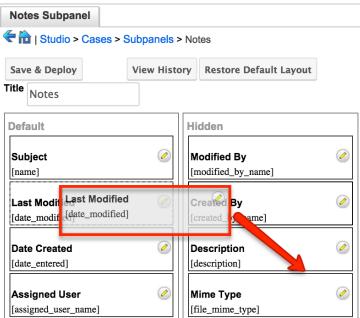
1. Expand "Subpanels" from the Modules panel under the Cases module and select "Notes". The Notes subpanel layout will display in the main panel to the right.



2. To add a field to the Subpanel layout, drag and drop the fields from the Hidden column to the Default column. You can then drag the field up and down the list to change the position of the field in the subpanel.

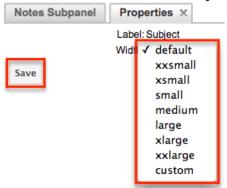


3. To remove a field, drag and drop the fields from the Default column to the Hidden column.



- 4. Click the Pencil icon to change the column width of the field in the subpanel.
  - Note: Administrators can choose from a pre-defined list of width sizes (e.g. default, small, medium, etc.). Please note that selecting the Default width will set the list view column to equal the Medium width size. Selecting "custom" from the list will allow you to enter a custom width value in the open box. The custom width value should be entered in pixels (e.g. 200) for Sidecar modules. Legacy modules should be entered as a percentage (e.g. 40) of the total width of the list view that should be dedicated to the column.
  - When defining the column width for currency fields (e.g. Likely, Best, etc.), only "large" and above applies because there is a minimum width requirement in Sugar for this field type. In addition, when defining a

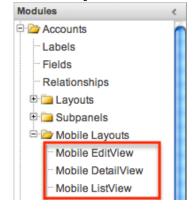
custom width for currency fields, the value must be 141px or wider.



5. Click "Save & Deploy" to preserve your changes and deploy immediately.

# Mobile Layouts

Mobile layouts are used to represent the views in SugarCRM Mobile. The mobile layouts section in Studio allows administrators to add fields and configure the various mobile layouts. To access the mobile layouts section in Studio, expand "Mobile Layouts" from the Modules panel under the desired module. The available mobile layouts for the selected module will appear under "Mobile Layouts".



# Mobile Layout Types

There are various mobile layouts in Sugar to represent the different areas of the SugarCRM mobile application. Please note that not all layouts are available in every module and the different mobile applications will use the information defined here differently.

The following mobile layouts are available in Sugar:

• Edit View: Edit view layout is used to modify or create records in the specified module.

- Detail View: Detail view layout is used to view the current data for a record within the specified module. Certain fields are translated to SugarCRM Mobile as buttons instead of data. For example, instead of seeing the phone number, there is a phone icon to be able to call the number on the record.
- List View: List view layout is used to view multiple records within the specified module. Only the first two fields in the list view section will be displayed in SugarCRM Mobile.

### **Mobile Layout Options**

Administrators have the ability to configure the various mobile layouts available via Studio.

The following options are available when configuring mobile layouts in Studio:

- View History: Sugar keeps a history of the changes made to each layout. You can preview and restore historical layouts via "View History". For more information on viewing the history of layouts, please refer to the Viewing Layout History section of this documentation.
- Restore Default Layout: Restores the mobile layout back to the default out-of-the-box layout. For more information on how to restore the default layout, please refer to the Restoring Default Layouts section in this documentation.



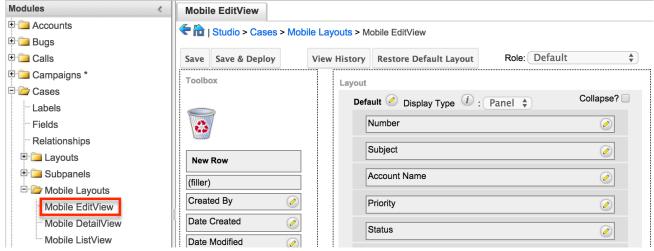
## **Editing Mobile Layouts**

You can add, remove, hide, etc. the fields for the available layouts in "Mobile Layouts" by selecting the specific layout under the Modules panel to edit. Please note that the Mobile EditView and DetailView layouts are modified in similar fashions. The Mobile ListView layout has columns where you can designate fields users can and cannot see.

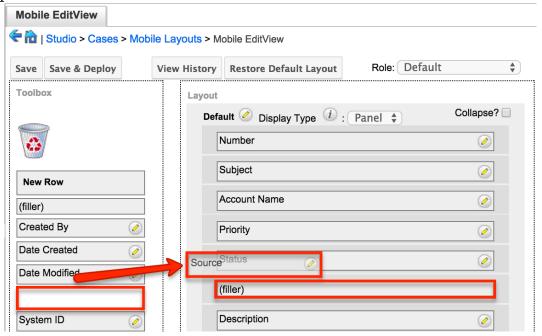
The following steps cover editing the Mobile EditView layout for the Cases module as an example:

1. Expand "Mobile Layouts" from the Modules panel under the Cases module

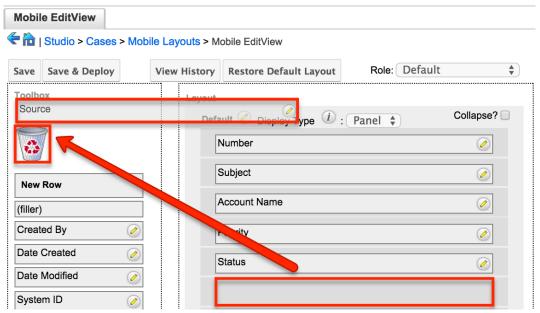
and select "Mobile EditView". The Mobile EditView layout will display in the main panel to the right.



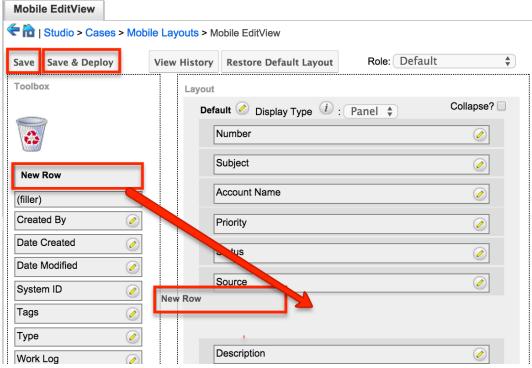
- 2. To add a field to the Mobile EditView layout, drag the field from the list of fields in the Toolbox to a "(filler)" location on the layout per your preference.
- 3. You can also drag a field to a location on the layout that already has a field in place. The newly added field and the existing field on the layout will swap places.



4. To remove a field from the layout, drag and drop the field from the layout to the trash bin in the Toolbox to remove the field from the layout. You may remove an entire row in the layout using the same method.



5. To add a new row, drag the "New Row" item in the Toolbox to the layout to allow additional fields or blank spaces to be added.



6. Once the layout is finalized, click "Save" to preserve your changes or "Save & Deploy" to preserve your changes and deploy them instantly.

Unlike the Mobile EditView layout, the Mobile List View layout has columns were you can designate fields users can and cannot see. When configuring the Mobile List View layout, you will see three columns (Default, Available, Hidden) where fields can be dragged and dropped accordingly.

• Default: This column contains fields that are displayed in the list view.

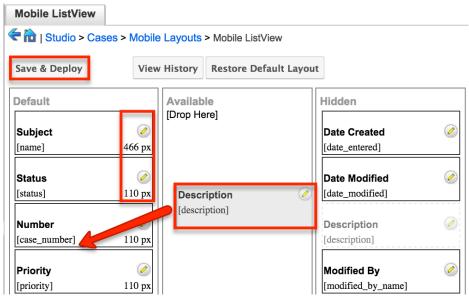
- Available: Available fields are fields that will not show by default in the layout, but if the layout can be personalized, users can add these fields to their view of the layout. Not all list type layouts have an available fields section.
- Hidden: This column contains fields that will not be displayed in the list view.

The following steps cover editing the Mobile List View layout as an example:

1. Expand "Layouts" from the Modules panel under the Cases module and select "Mobile List View".



2. To add a field to the Mobile ListView layout, drag and drop the fields from the Hidden column to the Default column.



- 3. Click the Pencil icon to modify the label of the field as well as the width size the field will take up in the list view. Please note that the modified label will display in all List View layouts.
- 4. Click "Save & Deploy" to preserve your changes and deploy immediately.

## Using Sugar Logic

Sugar Logic allows administrators to write simple formulas and logic checks to provide a calculation for a field or to set the visibility of a field. For more information regarding the types of fields you can use Sugar Logic in, please refer to the Field Options section of this documentation. A calculated field uses a formula to derive its value based on the values of other fields as well as mathematical or logical operators. A dependent field uses a formula to determine whether or not the field should be displayed. These formulas are automatically recalculated when the record is updated. In addition, when a record containing a formula's input field is updated, the formula is automatically recalculated.

Note: When creating a calculated formula for a Currency field, the currency symbol should not be used for a value (e.g. \$100) in the formula. The formula should only define the numeric value (e.g. 100), as including the currency symbol will result in improper calculated values.

When a calculated or dependent field is created or its formula is modified, all existing records in the module will not use the new formula until they have undergone a save action. To update the existing records to use the new formula, the module's list view includes a Recalculate Value action. Admin users or users with developer-level access can use this feature to cause existing records to recalculate affected fields without having to perform an update on each record individually. For more information, please refer to the User Interface documentation in the Application Guide.

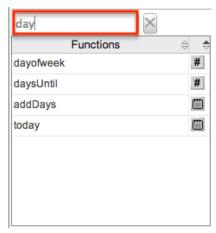
Administrators can access the formula builder for the fields and options that accept formulas by selecting "Edit Formula".



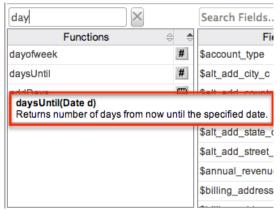
For more information and examples using Sugar Logic, please refer to the Sugar Logic section of the Knowledge Base, which includes articles covering the use of dependent and calculated fields. Topics range from introductory information to example Sugar Logic formulas and detailed walkthroughs of how to construct various fields and formulas in the formula builder.

#### **Functions**

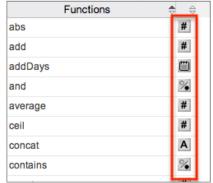
Functions are listed on the bottom left hand corner of the formula builder and provide a variety of calculations, logic checks, and formatting options. To locate the function you need, simply scroll through the list or enter the search criteria to narrow the list.



To see how to use a function and what the function does, simply hover over the function to view the syntax, parameters, and a brief description of what the function does.



The function name is followed by a comma-separated list of parameters to the function. The list specifies the data type expected for each parameter. For example, the function "daysUntil" expects one parameter of Date type. The brief description in the hover text will typically specify what data type is being returned, but if it does not, you can determine the data type being returned via the icon to the right of the function in the grid.



The following is a list of the possible return type symbols and what they stand for:

Symbol	Description
#	Returns a Number
Calendar	Returns a Date object with a date and

	time
%	Returns a Boolean (true or false) value
A	Returns Text
[]	Returns a List
?	Returns a variable data type that could be any of the above

#### List of Functions

Some functions require a given number of parameters while others are more flexible. Most parameters require a specific data type to be passed in for the function to work. Functions with the same data type can be nested in a single formula.

The following functions and their parameters (multiple parameters are represented by "...") are available in Sugar:

Function	Description	Parameters	Return Type
abs	Returns the absolute value of \$param1.	Number \$param1	Number
add	Returns the sum of the given parameters.	Number \$param1,	Number
addDays	Returns \$date moved forward or backwards by \$days.	Date \$date, Number \$days	Date
and	Returns true if and only if all given parameters are true.	Boolean \$param1,	Boolean
average	Returns the average of the given parameters.	Number \$param1,	Number
ceil	Returns \$param1 rounded up to the next integer.	Number \$param1	Number
concat	Returns all of the	String \$param1,	Text

	given parameters appended together in the order passed.		
contains	Returns true if \$needle is within \$haystack.	String \$haystack, String \$needle	Boolean
count	Returns the number of records related to this record by \$module	Relate \$module	Number
countConditional	Returns the number of records related to this record by \$link and that match the value of a specific field.	Relate \$link, Field \$string, Values \$list	Number
createList	Returns a List of the given parameters.	Generic \$param1, 	List
date	Returns \$param1 as a Date object.	String \$param1	Date
dayofweek	Returns the number of the day of week that \$param1 falls on.	Date \$param1	Number
daysUntil	Returns the number of days from now until \$param1.	Date \$param1	Number
divide	Returns the snumerator divided by the sdenominator.	Number \$numerator, Number \$denominator	Number
equal	Returns true if \$param1 is equal to \$param2.	Generic \$param1, Generic \$param2	Boolean
floor	Returns \$param1 rounded down to the next integer.	Number \$param1	Number
getDropdownKeySe t	Returns a List of the keys in the dropdown named \$param1. This list	String \$param1	List

	must be defined in the Dropdown editor.		
getDropdownValue	Returns the value for the \$key found in the dropdown named \$list. This list must be defined in the Dropdown editor.	String \$list, String \$key	Text
getDropdownValue Set	Returns a List of the values in the dropdown named \$param1. This list must be defined in the Dropdown editor.	String \$param1	List
getListWhere	Returns the matched array from lists.	String \$trigger, Enum \$lists	List
greaterThan	Returns true if \$param1 is greater than \$param2.	Number \$param1, Number \$param2	Boolean
hoursUntil	Returns the number of hours from now until \$param1.	Date \$param1	Number
ifElse	Returns \$return1 if \$condition is true or \$return2 if \$condition is false.	Boolean \$condition, Generic \$return1, Generic \$return2	Variable
indexOf	Returns the position of \$needle in \$haystack or -1 if \$haystack does not contain \$needle. The index starts at 0.	Generic \$needle, List \$haystack	Number
isAfter	Returns true if \$param1 is after \$param2.	Date \$param1, Date \$param2	Boolean
isBefore	Returns true if \$param1 is before	Date \$param1, Date \$param2	Boolean

	\$param2.		
isInList	Returns true if \$needle is contained within \$haystack.	Generic \$needle, List \$haystack	Boolean
isValidDate	Returns true if \$param1 is a valid date string.	String \$param1	Boolean
isValidEmail	Returns true if \$param1 is in a valid email address format.	String \$param1	Boolean
isWithinRange	Returns true if \$value is greater than or equal to \$min and less than or equal to \$max.	Number \$value, Number \$min, Number \$max	Boolean
ln	Returns the natural log of \$param1.	Number \$param1	Number
log	Returns the \$base Log of \$value.	Number \$value, Number \$base	Number
max	Returns highest value of the given parameters.	Number \$param1, 	Number
maxRelatedDate	Returns the highest value of \$field in records related to \$module.	Relate \$module, String \$field	Date
median	Returns the median of the given parameters.	Number \$param1,	Number
min	Returns lowest value of the given parameters.	Number \$param1,	Number
monthofyear	Returns the number of the month that \$param1 is in.	Date \$param1	Number
multiply	Returns the value of the given parameters multiplied together.	Number \$param1,	Number

negate	Returns the negated value of \$param1.	Number \$param1	Number
not	Returns true if \$param1 is false, and false if \$param1 is true.	Boolean \$param1	Boolean
now	Returns a Date object representing todays date and the current time.		Date
number	Returns the numeric value of \$param1.	String \$param1	Number
or	Returns true if any given parameters are true.	Boolean \$param1,	Boolean
pow	Returns the \$value raised to the power of \$exponent.	Number \$value, Number \$exponent	Number
related	Returns the value of \$field in the related \$module.	Relate \$module, String \$field	Variable
rollupAve	Returns the average value of \$field in records related to \$module.	Relate \$module, String \$field	Number
rollupConditionalSu m	Returns the sum of the values of \$field in records related by \$link where \$conditionField contains something from \$conditionalValues.	Relate \$link, String \$field, String \$conditionField, List \$conditionalValues	Number
rollupMax	Returns the highest value of \$field in records related to \$module.	Relate \$module, String \$field	Number
rollupMin	Returns the lowest value of \$field in records related to	Relate \$module, String \$field	Number

	\$module.		
rollupSum	Returns the sum of the values of \$field in records related to \$module.	Relate \$module, String \$field	Number
strlen	Returns the number of characters in \$param1.	String \$param1	Number
strToLower	Returns \$param1 converted to lower case.	String \$param1	Text
strToUpper	Returns \$param1 converted to upper case.	String \$param1	Text
subStr	Returns the portion of \$value specified by \$start and \$length. The position starts at 0.	String \$value, Number \$start, Number \$length	Text
subtract	Returns \$param1 minus \$param2.	Number \$param1, Number \$param2	Number
timestamp	Returns the passed in datetime string as a unix timestamp.		Date
today	Returns a Date object representing todays date.		Date
toString	Returns \$param1 converted to a string.	Generic \$param1	Text
translateLabel	Returns the translated value of \$label for \$module.	String \$label, String \$module	Text
valueAt	Returns the value at position \$index in \$haystack.	Number \$index, List \$haystack	Variable

# Fields

Fields are listed on the bottom right hand corner of the formula builder and

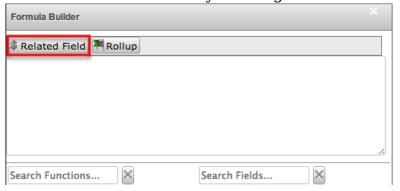
contain the fields for the current module. Fields can be referenced in formulas and will start with a \$. To locate the field you need, simply scroll through the list or enter a search criteria to narrow the list.



To add a field to the formula, simply click on the field to be added. The variable name for the field will be placed at the end of the formula. You can also type the variable names manually in the formula.

#### Related Field

Related fields are available to be added to formulas via the related function. You can manually add related function calls to your formula or you can build the syntax for the related function by clicking "Related Field".



This will open a dialog box which will assist in building the syntax to use the related function. Select a module and a field within that module to pull the related field from and click "Insert".



The resulting syntax for the selected options will be added to the formula.

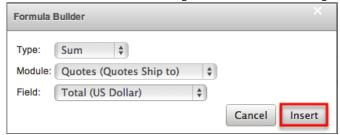
Note: If a record has multiple related records to a module, the related function will pull the field from one of the related records. It is not recommended to rely on the related function to pull the same related records for a many relationship.

### Rollup

In addition to adding related fields, you can also add aggregate functions on related fields to formulas via the rollup functions. You can manually add rollup function calls to your formula or you can build the syntax for the rollup function by clicking "Rollup".



This will open a dialog box which will assist in building the syntax to use the rollup function. Select the type of rollup function (Sum, Average, Minimum, or Maximum) to perform on the module field. To perform a count of related records, please refer to the count function listed in the Functions section. Select a module and a field within that module to perform the rollup function on and click "Insert".



The resulting syntax for the selected options will be added to the formula.

Note: Rollup functions can only aggregate number type fields.

## Viewing Layout History

Layouts, subpanels, and mobile layouts in Studio keep a history of the last ten changes made to the specific layout. To view the history for any of these layouts, simply select "View History" from the Record View (for Sidecar modules), List View, Edit View (for Legacy modules), etc. layout in Admin > Studio.

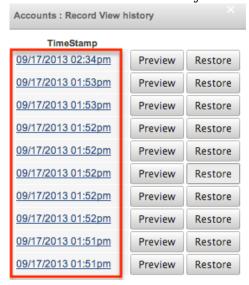
The following steps cover viewing the layout history for the Record View layout as

### an example:

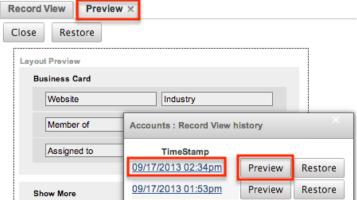
- 1. Navigate to the Record View layout in Admin > Studio.
- 2. Click the View History button on the upper left of the layout editor.



3. The History dialog box will appear showing the timestamps of the last ten saves to the selected layout.



4. Click the timestamp or Preview button and a preview of the modified layout will appear in a new tab of the main layout panel.



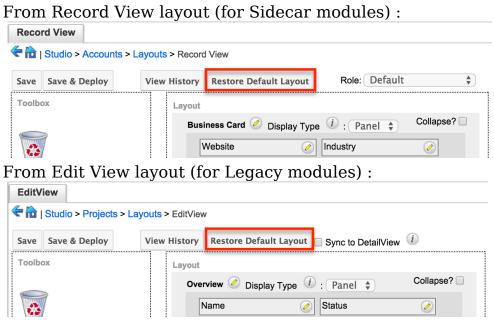
5. To restore a specific layout per the history, click the Restore button within the Preview layout or from the History dialog box.



The chosen Record View layout will load into the editor and you may make appropriate changes to the layout as you wish. Click "Save" to preserve your changes or "Save & Deploy" to preserve your changes and deploy immediately.

### Restoring Default Layouts

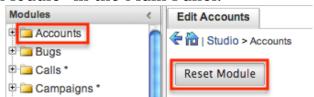
Various layouts in Studio can be restored back to the default out-of-the-box configuration, which will revert all changes made to the specific layout (e.g. list view, record view, etc.). To restore the default layout, simply click the Restore Default Layout button from the Record View (for Sidecar modules), List View, Edit View (for Legacy modules), etc. layout in Admin > Studio.



The default layout will load into the editor and you may make appropriate changes to the layout as you wish. Click "Save" to preserve your changes or "Save & Deploy" to preserve your changes and deploy immediately.

# Resetting Modules

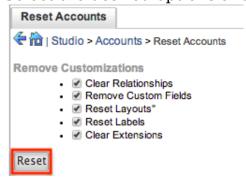
Sugar comes with the ability to reset an entire module back to the default settings. You can also pick and choose which customizations you would like to remove. To reset a module, select the module from the Modules Panel and click "Reset Module" in the Main Panel.



The next screen will give you the following options to remove specific customizations:

- Clear Relationships: Deletes all relationships added via Studio.
- Remove Custom Fields: Deletes all fields added via Studio.
- Reset Layouts: Resets the layouts back to the out-of-the-box configuration. You will need to click "Save & Deploy" on edit view and detail view layouts to be able to access the layouts.
- Reset Labels: Deletes the custom language files located in ./custom/modules/{Module Name}/language/ which sets the labels for the module.
- Clear Extensions: Deletes any customizations made to stock or custom fields and sets them back to the default. Deletes the module folder located in ./custom/Extension/modules/.

Select the desired options and click "Reset" to execute the reset.



## **Exporting Customizations**

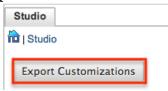
Sugar allows you to export a module's customized layouts, fields, and field labels from one Sugar instance to import into another Sugar instance. To do this, you will need to package the customizations in Studio, export it to your local machine, and then upload it into another Sugar instance. The system applies the customizations to the appropriate layouts, fields, and field labels.

Note: Safari users will need to change the default browser setting to disable

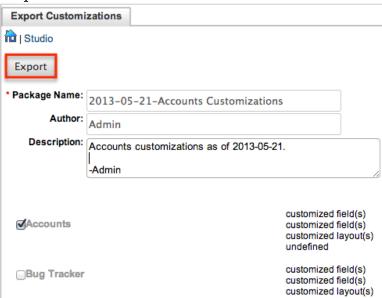
automatic unzipping of files to ensure that exported packages install properly in Sugar. Navigate to Safari > Preferences > General and uncheck "Open 'safe' files after downloading" to disable the setting.

Use the following steps to export you customizations via Studio:

1. From the Studio home page, select "Export Customizations" in the main panel.



- 2. Enter appropriate values in the following fields. All required fields are marked with a red asterisk and must be completed prior to saving.
- Package Name: Enter the name of the package to be displayed during installation.
- Author: Enter the name of the author creating the package to be displayed during installation.
- Description : Enter a description of the export to be displayed during installation.
- Select at least one module to include in the customization export and click "Export".



 The customizations are saved to your computer in a zip file that can be loaded into a different instance of Sugar via the module loader. For more information regarding installing packages, please refer to the Module Loader documentation. Last Modified: 03/22/2018 02:37pm

### Module Builder

#### Overview

Module Builder enables administrators to create, deploy, and maintain custom modules in Sugar. Modules can be created in Module Builder and then deployed within your instance of Sugar or exported for additional development and deployment to other instances of Sugar. This is convenient for testing new modules and for distributing a module to many different instances. Please note that only users with administrator or developer access can create and manage custom modules via Admin > Module Builder. This documentation will cover how to use Module Builder as well as the various actions and options available from within Module Builder.

## Navigation

Sugar's Module Builder is divided into three main sections which consist of the main panel, packages panel, and footer. You can easily create, access, and manage the custom modules via the main panel and Packages panel. The footer of Module Builder allows you to access different areas (e.g. Studio, Dropdown Editor) of the Developer Tools section by clicking the corresponding buttons at the bottom of the page.

#### Main Panel

The main panel in Module Builder is where you can create a new package, access existing packages, deploy a package, etc. As you create and configure the module(s) within the package, the various sections (e.g. layouts, fields, etc.) you access will open inside tabs on the main panel. Additional tabs that open up can be closed by clicking the "X" within the tab.



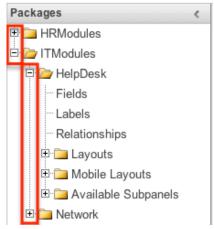
The main panel also displays the breadcrumbs bar showing where in Module Builder you currently are. You can navigate to a specific section by clicking the link within the breadcrumb bar.



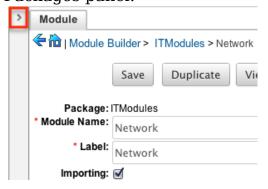
To go back to the previous page you were viewing, click the Left arrow on the breadcrumbs bar. Clicking the Home icon will navigate you back to the Developer Tools home page.

## Packages Panel

The Packages panel is located to the left of the main panel and displays a list of existing packages and associated custom modules that are accessible via Module Builder. The custom modules are grouped under a package and the fields, layouts, subpanels, etc. specific to each module appear when you expand out the tree for the module.



Select an item in the Packages panel to load it into the main panel. Please note that i f you do not see the Packages panel, it may be collapsed. Simply locate the gray bar to the left of the main panel and click the Right arrow to expand the Packages panel.



#### Footer

The footer is located on the bottom left of Module Builder and displays buttons

which enable you to navigate to the different areas (Studio, Dropdown Editor, etc.) of Developer Tools.



The options in the footer allow you to navigate to the following locations:

Menu Item	Description
Home	Navigates to the home page of Developer Tools
Studio	Navigates to the home page of Studio
Module Builder	Opens Module Builder to create and manage custom modules
Dropdown Editor	Opens the Dropdown Editor to create and edit dropdown lists

## **Packages**

Packages in Module Builder allow you to create and house multiple modules of different types. Please note that a package must first be created in order to create a custom module via Module Builder. While packages can be useful to group similar or dependent modules together to ensure they are deployed together, it is generally recommended that a separate package be created for each module. This can help prevent potential issues down the road since if you ever need to uninstall a module and it is part of a larger package, then all modules in that package must be uninstalled. Keeping modules isolated to their own package allows greater flexibility in the future if a module is no longer needed.

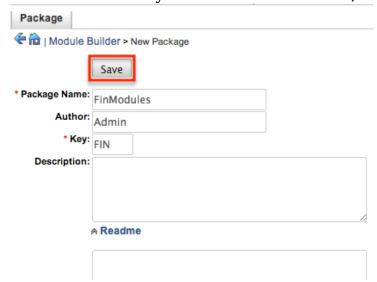
## Creating Packages

Use the following steps to create a new package via Module Builder:

1. Navigate to the Module Builder's main panel and click "New Package".

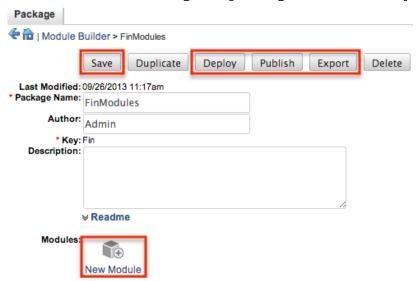


- 2. Enter appropriate values for the following fields:
  - Package Name: The name or designation of the package. The package name is what displays in the Packages panel and in Module Loader when installing packages.
  - Author: The author who is creating the package. The author displays in Module Loader when installing packages.
  - Key: The key is an alphanumeric text to distinguish modules with similar names. The system will prefix all class names, directories, and table names with this key.
  - Description : A description or other information about the package.
  - Readme: Click "Readme" to display an open text box where you can enter additional information about the package or modules contained in the package.
  - Note: All required fields are marked with a red asterisk and must be completed prior to saving.
- 3. Once the necessary information is entered, click "Save".



## **Deploying Packages**

Once the package is created and saved, you can create custom modules by clicking the New Module icon. Please note that the package must contain at least one module in order to properly publish and deploy the package, as well as export the customizations. There are various options (e.g. deploy, publish, export, etc.) available when viewing the package which allow you to perform various actions.



The Package options allow you to perform the following operations:

Action	Description
Save	Click "Save" to preserve any changes made to the Package details (Package Name, Author, etc.).
Deploy	Installs the package into the current instance. Any modules in the package will be created or updated in the current instance.  Note: Do not re-deploy a package once deployed from Module Builder as any workflows, code-level customizations, or changes made through Studio for the custom modules will be lost. It is recommended that module packages be deleted from Module Builder after a successful deploy to avoid an accidental re-deploy. Please use Studio to perform any additional configurations to your module once deployed.
Publish	Saves the package into an installable zip file containing all customizations. Upload the file via Module Loader to install the package into a different instance.  Note: Packages developed on Professional editions of Sugar can only

	be installed on instances running Professional editions of the same version.
Export	Saves the package into an importable zip file containing all customizations. Upload the file via Module Loader to view the package in Module Builder on a different instance where it can then be further developed and deployed.
	Note: Packages developed on Professional editions of Sugar can only be installed on instances running Professional editions of the same version.

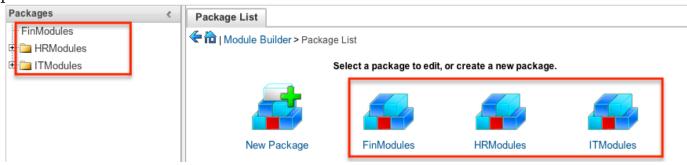
### **Deleting Packages**

If a package is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from Module Builder. Please note that deleting a package will delete all files contained in the package, but will not remove the package from any instance where the package was deployed. For more information on how to uninstall a deployed package from an instance, please refer to the Module Loader documentation in the Administration guide.

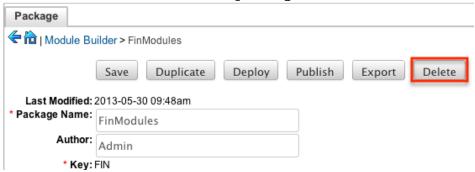
Note: We recommend deleting packages from Module Builder after they have been deployed in a production instance to prevent it from accidentally being re-deployed. The only exception to this rule is in a development environment as you may want to continue working and testing until you are ready to move the module to your production environment.

Use the following steps to delete a package via Module Builder:

1. Select the desired package from either the Packages panel or from the main panel.



2. Click "Delete" to remove the package.



3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

### Modules

Various types of modules can be created and configured within the package in Module Builder. Although multiple custom modules can be created in a package, it is generally recommended that only one module be created per package. This will help prevent potential issues down the road and allow greater flexibility in the future if a module is no longer needed.

Note: Activity streams are not available for custom modules.

### Module Types

Module Builder comes with a few predefined module templates for creating modules. Select the module type that best fits your organization's use of the new module and then customize the module to further fit your needs. The following module types are available by default in Module Builder:

Туре	Description
Basic	Generic module with only the most basic fields defined by default. All other module types build on top of the basic module type.
Company	Contains fields designed for company, account, or organization type records. Includes billing and shipping addresses, email address, phone numbers, industry, website, and more.
File	Contains fields designed for file upload or document records. Includes category, expiration date, status, filename, and more.

Issue	Contains fields designed for bug, issue, or case record types. Includes issue number, status, priority, work log, and more.
Person	Contains fields designed for people, contacts, or lead records. Includes first and last name, primary and alternate addresses, email addresses, phone numbers, and more.
Sale	Contains fields designed for sales, transactions, or opportunities. Includes, amount, currency, probability, sales stage, and more.

### **Module Options**

When creating modules in Module Builder, the following options are available to complete when setting it up:

- Module Name: The name (e.g. HelpDesk) or designation of the module. The module name is what displays in the Packages Panel as well as in Studio after deploying.
- Plural Label: The plural label (e.g. HelpDesks) for the module name. The label is what displays when using the module within Sugar.
- Singular Label: The singular label (e.g. HelpDesk) for the module name. The label is what displays when using the module within Sugar.
- Importing : Select this option to enable importing for the module.
- Team Security: Select this option to enable team security for the module. If this option is unchecked, records in this module will not be assigned to a team and will be restricted by roles only. For more information on teams and roles, please refer to the Team Management and Role Management documentation in the Administration guide.
- Navigation Tab: Select this option to add the module and module actions to the navigation bar.
- Type: Select the module type to use as a template when building the module. Each module type includes a list of stock fields by default which can be added and removed in the layout as necessary. Please note that the module type can only be selected when initially creating the module. For more information regarding the module types, please refer to the Module Types section of this documentation.

## Creating Modules

While you have the option to create multiple types of modules within a package, it is generally recommended that only one module be created per package. Doing so will help prevent potential issues down the road and allow greater flexibility in the future if a module is no longer needed.

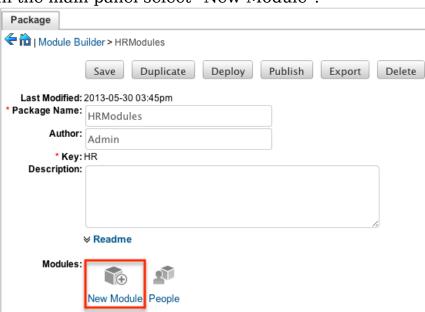
### Creating Modules Via Package

One of the most common methods of module creation is via the New Module option in the package. When the New Module icon is selected, it opens up the New Module screen which allows you to enter in the module's details (e.g. name, label, etc.) as well as select the module type you wish to use as a template. Use the following steps to create a custom module in the package:

1. Select a package from the Packages Panel to create a new module.

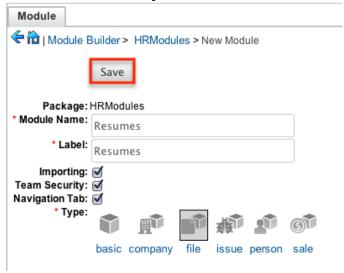


2. In the main panel select "New Module".



- 3. Enter the appropriate values for the Module options. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Select a module type (e.g. file) to use as a template when configuring your module.

5. Once the necessary information is entered, click "Save".



### Creating Modules Via Duplication

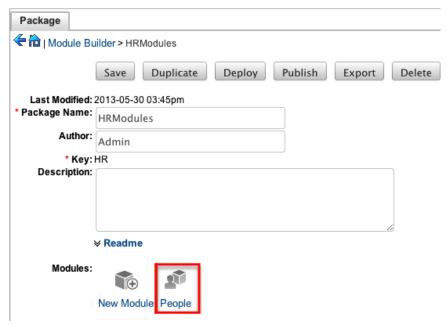
You can also create a new module by duplicating an existing module within a package. The duplicate option is useful if the module you are creating has similar information or structure to an existing module.

Use the following steps to create a module by duplicating an existing module:

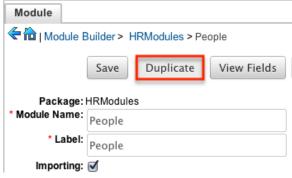
1. Select a package from the Packages panel to create a new module.



2. In the main panel, select a module to duplicate.



3. Click "Duplicate" to create a copy of the module.

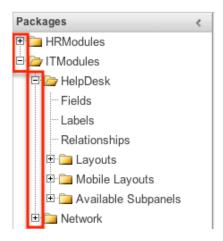


4. The selected module is duplicated to a new module with a "1" appended at the end of the module name. Update the necessary fields, then click "Save".



## Modifying Modules

The associated fields, labels, layouts, subpanels, etc. for each module can be modified within each package. Click the plus sign (+) preceding the module name to expand the module and view the associated items (e.g. Layouts, Fields, etc.). Selecting the module from the Packages panel will load the view into the main panel. You can modify the Module options for the selected module via this page.



#### **Modifying Labels**

Labels are used throughout Sugar for items like buttons, field headers, subpanel titles, error messages, and more. To modify the labels for a module, select "Labels" from the Packages panel under the desired module.



The Labels tab will open up in the main panel where you can change the names for specific labels associated to the module. Please note that you can also define the primary language to use per the language packs currently installed in Sugar when changing the labels. Select the desired language from the dropdown to view and modify the labels according to that language.



Modify the labels for the selected language and click "Save" to preserve your changes.



#### **Fields**

The Fields section in Module Builder allows administrators to create new fields as well as change properties on existing fields within a module. To access the Fields section in Module Builder, select "Fields" from the Packages panel under the desired module and the view will open up in the main panel to the right.



#### Field Types

The Fields section for each module contains a number of stock fields which come out-of-the-box with Sugar. Please note that each data type has various options and properties available to configure.

The following data types are available to be added to modules in Module Builder:

Data Type	Description
Address	Creates fields for street, city, postal code, state, and country. Note: Custom address fields cannot be grouped together like the stock address fields.
Checkbox	Creates a checkbox for data fields with a Yes/No action.

Currency	Creates a field to enter a currency value. The system automatically creates a dropdown of the currency type if the field does not already exist in that module.
Date	Creates a field to enter a date. Includes a button for a calendar popup.
DateTime	Creates a field to enter the date and time. Includes a button for a calendar popup as well as dropdowns for the time.
Decimal	Creates a field to hold a number rounded to a specified decimal precision. Sugar stores the exact representation of the number in the database (e.g. For a precision of 2: 1.236 is stored as 1.24).
DropDown	Creates a field that you can associate with a dropdown list of values.
Encrypt	Creates a field for sensitive information, such as social security numbers, whose value is to be encrypted in the Sugar database. The value is encrypted in the database but is visible in the user interface to users.
Float	Creates a field to hold a number rounded to a specified decimal precision. Sugar stores the value differently based on the database platform Sugar is running on.
HTML	Creates static HTML-formatted text to display in record views.
IFrame	Creates a field to store or generate a URL to display an iFrame in record views.
Image	Creates an image field to upload an image to display on a record.
Integer	Creates a field to specify positive or negative numbers with no decimal places.
MultiSelect	Creates a dropdown list of values where multiple values can be selected at once.

Flex Relate	Creates a dropdown list from which you can relate a single record from a variety of modules. Only one Flex Relate field is allowed per module. If the module already has a Flex Relate field, this option does not display in the Data Type dropdown list.
Phone	Creates a field to enter a phone number.
Radio	Creates a radio button for a user to select one value from a dropdown list.
Relate	Creates a field to associate a record with another module's record as a one-way relationship. You can add multiple Relate fields to a module.  Note: Relate fields and custom relationships are independent of each other. Changes made to either one are not reflected in the other. Relate fields can be added to a report, but any data on the related record cannot be accessed in the report. To access related record data in a report you will need to create a custom relationship.
TextArea	Creates an open text area field for multiple lines of text.
TextField	Creates a field for a single line of text.
URL	Creates a field to store or generate a URL and display as a link.

#### Field Options

Fields provide ways to store different data types in Sugar. While many fields come out-of-the-box with Sugar by default, there can be instances where your organization needs to store additional data.

When creating or modifying fields via Module Builder, there are some properties that exist across all field types, and there are some that are unique to only a few types.

The following field properties and options are available in Sugar:

- Audit: Select this checkbox to audit the field for changes made in Sugar.
  - Users can view the changes made to audited fields via the View Change Log option in the module's record view (for Sidecar modules).
  - Note: The Audit option is available for all data type fields.
- Boost value: Enter a boost value for the field to enhance the relevancy of the field for full text search.
  - The default boost value is 1.0 which indicates a neutral boost. To apply a
    positive boost, set the boost value higher than 1. To apply a negative
    boost, use values lower than 1. For example, a value of 1.35 will
    positively boost a field by 135%. But using a value of 0.60 will apply a
    negative boost.
  - Note: It is not necessary to perform a full system index when boost values are changed for fields.
- Border: Select this checkbox to add a border around the image for this field.
  - o Note: The Border option is only available for Image data type fields.
- Calculated Value : Select this checkbox to designate this field as a calculated field.
  - This opens up the Formula option and disables the Default Value and Importable options. For more information regarding entering a formula for a calculated value, please refer to the Formula option listed in this section.

Calculated Value:	(i)	
Formula:		Edit Formula

- The result of the formula will be entered into the field for any new or modified records. When selecting this option, the field value cannot be modified by users.
- Note: The Calculated Value option is only available for the following data type fields:

Checkbox	Currency
Date	Datetime
Decimal	Encrypt
Float	Integer
Phone	TextArea
TextField	

Columns: Enter the number of columns to specify the width of a TextArea data type field.

• Note: The Columns option is only available for TextArea data type fields.

Comment Text : Enter a comment or description about the field. The comment text is only viewable via Module Builder and Studio.

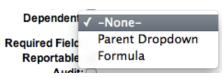
• Note: The Comment Text option is available for all data type fields except Flex Relate.

Default Value: Specify or select a default value for this field when a record is created. Default values for the record are populated by default on the record view layout, but can be modified by users.

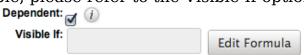
• Note: The Default Value option is available for all data type fields except HTML, Image, Flex Relate, and Relate.

Dependent : Select this option to designate this field as being dependent on a formula or a parent dropdown.

• For DropDown data type fields you can select "Parent Dropdown" or "Formula" for the dependency.



• Selecting "Parent Dropdown" will open the Parent Dropdown option as shown below. Selecting "Formula" will open the Visible If option to create a dependency formula. For other field data types (e.g. Date), select the Dependent checkbox to open the Visible If option. For more information regarding entering a formula to make a dependent field visible, please refer to the Visible If option listed in this section.



• Note: The Dependent option is available for all data type fields except Address.

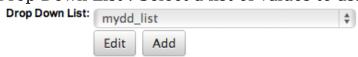
Disable Format : Select this checkbox to disable number formatting such as the thousands separator.

• Note: The Disable Format option is only available for Integer data type fields.

Display Label: Enter a value to display as the field label and header in layouts. Normally defaults to the Field name entered when creating the field.

- This value is also modifiable in the packages panel under Labels.
- Note: The Display Label option is available for all data type fields except Flex Relate. Flex Relate uses the Label Value option.

Drop Down List: Select a list of values to associate to the field.



• Only values in the chosen list will be available for selection in the field.

- Click "Edit" to change the values for the currently selected list, or click "Add" to create a new list.
- Note: The Drop Down List option is only available for the DropDown, MultiSelect, and Radio data type fields. For more information on editing dropdown values via the Dropdown Editor, please refer to the Editing Dropdown Lists section of the Developer Tools documentation.

Duplicate Merge: Select one of the following options to determine the field's functionality when records are being merged:

- Disabled: Selected by default. The field will not appear in the Merge Duplicates feature and will not be available to use for the filter conditions in the Find Duplicates feature.
- Enabled: The field will appear in the Merge Duplicates feature, but will
  not be available to use for the filter conditions in the Find Duplicates
  feature.
- In Filter: The field will appear in the Merge Duplicates feature, and will also be available in the Find Duplicates feature.
- Default Selected Filter: The field will be used for a filter condition by default in the Find Duplicates page, and will also appear in the Merge Duplicates feature.
- Filter Only: The field will not appear in the Merge Duplicates feature, but will be available in the Find Duplicates feature.
- Note: The Duplicate Merge option is available for all data type fields except Image.

Field Name: Enter the name of the field being created. Once a field has been created, the field name cannot be changed.

- Field names can contain only alphanumeric characters as well as the underscore character.
- Note: The Field Name option is required for all data type fields.

Full Text Searchable : Specify whether or not the field should affect Global Search results.

- Disabled: Select "Disabled" if you do not want this field to be captured when the database is indexed for searches. Search indices collect the values of searchable fields for evaluation by the Global Search.
- Searchable: Select "Searchable" to include this field's value in search indexes.
  - Selecting "Searchable" will reveal the Boost value field, which allows you to set a relevance weight for searches.
     When a user's search query matches the value of a field with a higher boost level, the record will appear higher in the search results. For more information regarding boost values in Full Text Search, please refer to the Search documentation in the Application guide.
  - Note: The Full Text Searchable option is only available for the

following data type fields:

Phone	TextArea
TextField	URL

Formula: Contains the current formula to return a calculated value.

 Click "Edit Formula" to launch the formula builder and change the formula. For more information on how to build a formula using the formula builder, please refer to the Using Sugar Logic section of this documentation.



• Note: The Formula option is only available when the Calculated Value option is selected.

Generate URL: Select this checkbox to allow variables from the current module to be placed into the Default Value option for creating dynamic URLs. Generate URL: ✓



- This is useful for providing links or iFrames to internal systems such as an ERP or to external systems such as Google Maps.
- Select the desired field to add from the dropdown and click "Insert Field" to add the field to the Default Value. When selecting this option, the field value cannot be modified by users.
- Note: The Generate URL option is only available for IFrame and URL data type fields.

Height: Enter the number of pixels to vertically scale the image for this field. Enter only the Width or Height options to retain the aspect ratio of the image.

• Note: The Height option is only available for Image data type fields.

Help Text: Enter in basic instructions for populating this field. The text entered here will display when users hover their mouse on the field in record view.

• Note: The Help Text option is available for all data type fields.

HTML: Enter in static rich text with formatting or HTML code to display on a record. For more information on how to use the text editor please refer to the



• Note: The HTML option is only available for HTML data type fields.

IFrame Height: Enter the number of pixels for the height of the IFrame field. The width of the IFrame field is always the width of the field container.

• Note: The IFrame Height option is only available for IFrame data type fields.

Importable: Select one of the following options to determine the field's functionality when records are being imported:

- Yes: The field can be included in an import operation.
- No: The field cannot be included in an import.
- Required : A value for the field must be provided in any import.

Label Value: Enter a value to display as the field label and header in layouts. This value is also modifiable in the packages panel under Labels. Defaults to "Flex Relate".

• Note: The Label Value option is only available for Flex Relate data type fields.

Mass Update : Select this checkbox to add this field as an option to mass update.

• Note: The Mass Update option is only available for the following data type fields:

Date	Datetime
DropDown	MultiSelect
Radio	

Max Size: Enter the maximum amount of characters allowed for this field. Defaults to 255.

 Note: The Max Size option is only available for the following data type fields:

Address	Decimal
Float	IFrame
Integer	Phone
URL	TextField

Max Value: Enter the highest value allowable for this field. If a user enters a higher value in the field than the specified value, a notification will appear upon save informing them of the set maximum value.

• Note: The Max Value option is only available for Integer data type fields.

Min Value: Enter the lowest value allowable for this field. If a user enters a value in the field that is lower than the specified value, a notification will appear upon save informing them of the set minimum value.

• Note: The Min Value option is only available for Integer data type fields.

Module: Select a module from the dropdown to relate to the current module.

• A module can relate back to itself, a good example of this would be a relate field on Contacts to relate back to Contacts for a referred by field. This will allow users to select which contact record referred a different contact. The chosen module cannot be modified once the field is created.



• Note: The Module option is only available for Relate data type fields.

Open Link In : Select one of the following options to determine how a URL will open:

- New Window: Opens the URL in a new Tab or Window depending on your browser and settings.
- Same Window: Opens the URL in the same window as the record you are currently browsing.
- Note: The Open Link In option is only available for URL data type fields.

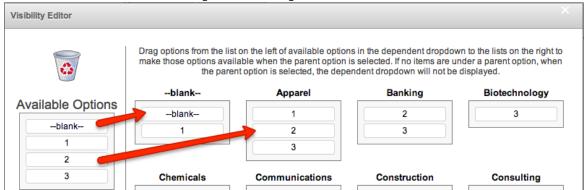
Parent Dropdown : Select an option from the dropdown to specify the parent that controls the visibility of this dropdown field.

• The Parent Dropdown option is populated with the other dropdown data type fields in the current module.

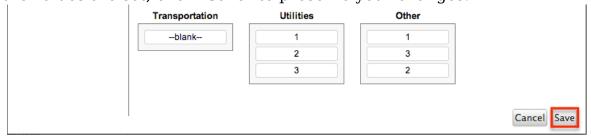


- Note: The Parent Dropdown option is only available when the Dependent option has "Parent Dropdown" selected.
- Click "Edit Visibility" to specify which options are available from the current dropdown for each value of the parent dropdown. In the

Visibility Editor window, drag values from the current dropdown list to the value sections of the parent dropdown.



• This will determine which options in the dropdown list are available when the parent dropdown is set to the specified value. In this example, if the parent dropdown is set to "Apparel", then the current dropdown will have options 1, 2, and 3 where if the parent dropdown is set to "Banking", then the current dropdown will only have options 2 and 3 available. If there are no available options for a parent dropdown value, then the dependent dropdown will not display. To remove an item from the list, simply click and drag the value to the Trash bin on the left. Once the values are set, click "Save" to preserve your changes.



Precision: Enter a number to specify the number of digits to the right of the decimal point the value should be stored as in Sugar.

• Note: The Precision option is only available for Decimal and Float data type fields.

Reportable: Select this checkbox to allow the field to be used in reports.

• Note: The Reportable option is available for all data type fields except Encrypt, Flex Relate, HTML, IFrame, and Image.

Required Field: Select this checkbox to mark the field as required in Sugar. The user will be required to enter a value for the field before saving the record.

• Note: The Required option is available for all data type fields except Checkbox and HTML.

Rows: Enter the number of rows to specify the height of a TextArea data type field.

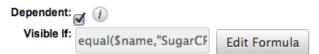
• Note: The Rows option is only available for TextArea data type fields.

System Label: Enter the system value for storing the label of the field. This is defaulted to the name of the field preceded by "LBL". Any lowercase characters entered will be converted to an uppercase upon saving. Once the field has been created, the system label cannot be changed.

- It is recommended that administrators avoid naming fields with the same system label in order to prevent the same label and header values from existing in the system.
- Note: The System Label option is available for all data type fields.

Visible If: Contains the current formula to determine if a field is visible on the layout or not.

• Click "Edit Formula" to launch the formula builder to change the formula.



- The formula must result in a Boolean (true/false) response. For more information on how to build a formula using the formula builder, please refer to the Using Sugar Logic section of this documentation.
- Note: The Visible If option is only available when the Dependent option is checked or "Formula" is selected from the dropdown.

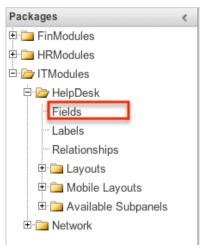
Width: Enter the number of pixels to horizontally scale the image for this field. Enter only the Width or Height options to retain the aspect ratio of the image.

• Note: The Width option is only available for Image data type fields.

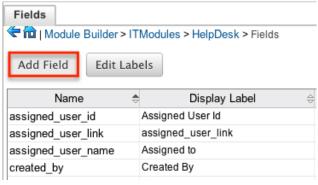
#### Creating Fields

Use the following steps to create a new field via Module Builder:

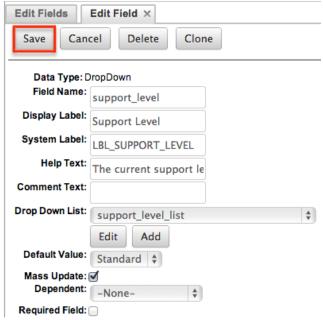
1. Expand out the tree under the desired module in the Packages panel and select "Fields".



2. In the main panel click "Add Field".



- 3. Enter appropriate values for the Field options. Please note that Field Name is required.
- 4. Once the necessary information is entered, click "Save".

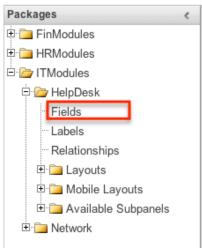


5. Once a field is created it must be placed on the record view layout in order for users to enter data into that field. For more information on editing layouts, please refer to the Editing Layouts section of this documentation.

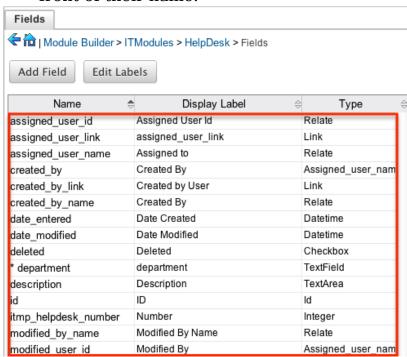
### **Editing Fields**

Use the following steps to edit an existing field via Module Builder:

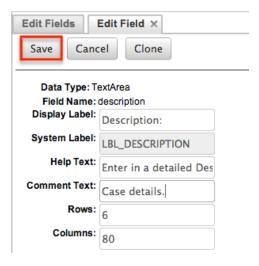
1. Expand out the tree under the desired module in the Packages panel and select "Fields".



- 2. In the main panel, select a field to edit. Sorting the fields by the column header will help in locating the field faster.
  - Note: Fields created via Module Builder will display an asterisk (\*) in front of their name.



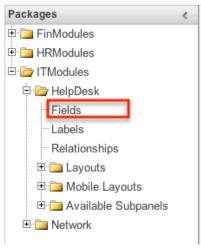
3. Update the necessary Field options and click "Save" once complete.



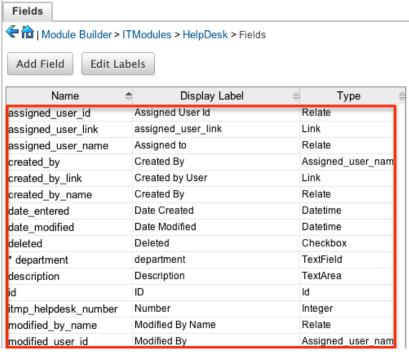
### **Deleting Fields**

Use the following steps to delete an existing field via Module Builder:

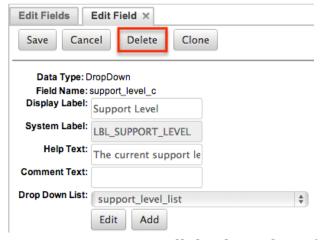
1. Expand out the tree under the desired module in the Packages panel and select "Fields".



- 2. In the main panel, select a field to delete. Sorting the fields by the column header will help in locating the field faster.
  - $\circ\,$  Fields created via Module Builder will display an asterisk in front of their name.
  - $\circ$  Note: Fields added via the module type template cannot be deleted.



3. Select "Delete" to remove the field.

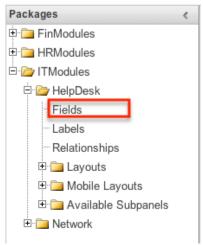


- 4. A pop-up message will display asking for confirmation. Click "Ok" to proceed.
  - Before deleting a field please verify and resolve the following issues:
    - 1. Field must be removed from any report filters or displays.
    - 2. Field must be removed from any workflows that filters or displays the field.
    - 3. Field must be removed from any dashlet that filters or displays the field.
    - 4. Field must be removed from any Sugar Logic formulas.
    - 5. Field must be removed from any email templates.
    - 6. Field must be removed from any saved searches.
- 5. The field will automatically be removed from any module layouts when deleted.
  - Note: When deleting fields in a module and re-deploying the package, the data related to the field in the database will not be removed.

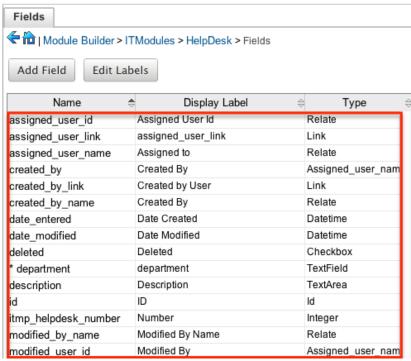
### Cloning Fields

Use the following steps to clone an existing field via Module Builder:

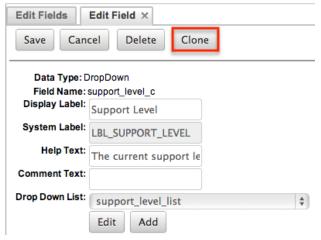
1. Expand out the tree under the desired module in the Packages panel and select "Fields".



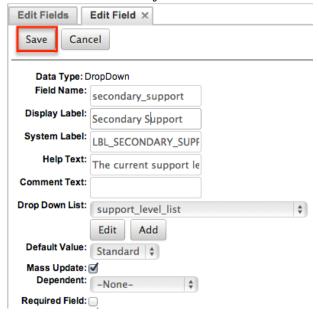
- 2. In the main panel, select a field to delete. Sorting the fields by the column header will help in locating the field faster.
  - Note: Fields created via Module Builder will display an asterisk (\*) in front of their names.



- 3. Select "Clone" to duplicate the field.
  - Note: Some non-standard stock fields (e.g. Name) do not have the ability to clone.



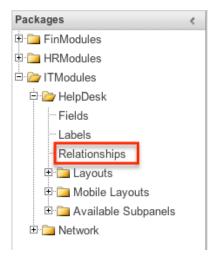
- 4. Enter appropriate values for the Field options.
- 5. Once the necessary information is entered, click "Save".



# Relationships

Relationships define the links between different modules in Sugar and allow records between those modules to be related. Related records display in fields or subpanels on a module's detail page depending on the relationship type. When you create a new relationship between two modules, the system automatically creates the necessary subpanels, related fields, and metadata relationships. Relationships provide the added benefit in reports to allow access to a related records fields in addition to the base module's fields.

The relationships section in Module Builder allows administrators to create new relationships between custom and stock modules as well as change some properties on existing relationships. To access the relationship section in Module Builder, select "Relationships" from the Packages panel under the desired module.



Note: Relationships created through Module Builder cannot be deleted in Studio after being deployed. Due to this, it is recommended that relationships be created in Studio after deploying the module instead of via Module Builder. As best practice, never re-deploy the module from Module Builder as it will remove all customizations made to your module via Studio, code customizations, etc.

### Relationship Types

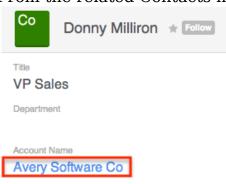
Sugar contains a few different types of relationships you can create between modules. The relationship type will determine what fields or tables will be created in the database as well as what interface the user will see to manage the relationship.

The following relationship types are available in Module Builder:

One-to-One: Records in the primary module and the related module are
uniquely related to each other. For a one-to-one relationship between
Accounts and Contacts, an account can be associated with only one contact
and a contact can be associated with only one account. The relationship will
show as a field in each module's record view where changing the relationship
from either module will also change the value in the other module.
From the primary Accounts module:



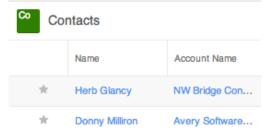
From the related Contacts module:



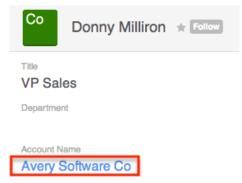
Note: You can create a one way relationship between modules using relate fields. For more information regarding relate fields, please refer to the Field Types section of this documentation.

• One-to-Many: Records in the primary module can have relationships with many records in the related module. For a one-to-many relationship between Accounts and Contacts, an account can be associated with many contacts, but each contact can be associated with only one account. The record view of the primary module will display a subpanel for the related module, and the detail view of the related module will display a field containing a link to the related record.

From the primary Accounts module:

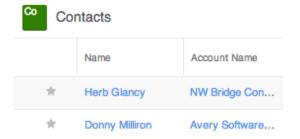


From the related Contacts module:

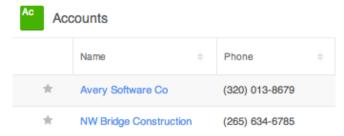


Note: A one-to-many relationship is the same as a many-to-one relationship except the Primary and Related modules are reversed. Adding a custom one-to-many relationship to "Activities" will add custom relationships to calls, meetings, notes, tasks, and emails. This will also automatically add these subpanels to the record view.

 Many-to-Many: Records in both the primary module and the related module can have multiple records related in each module. For a many-to-many relationship between Accounts and Contacts, an account can be associated with many contacts, and a contact can be associated with many accounts. Both module's record view will display a subpanel for the opposite module. From the primary Accounts module:



From the related Contacts module:



Note: Only modules with subpanels available can be on the "Many" side of a relationship. For example, the Product Catalog module lacks a subpanel; therefore, Product Catalog can only be selected on the "One" side of a relationship.

When you create a relationship for a module, the selected module is considered to be the primary module and the module that you relate it with is the related module.

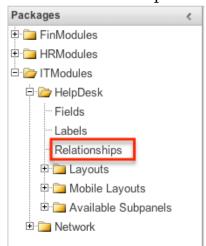
You can also create a relationship between a module and itself. In this case, the relationship becomes a parent-child relationship. For example, you can create a relationship from Accounts to Accounts in order to create sub-accounts within the

primary account.

Creating Relationships

Use the following steps to create a new relationship via Module Builder:

1. Expand out the tree under the desired module in the Packages Panel, and select "Relationships".



2. In the main panel, click "Add Relationship".



3. Enter appropriate values for the following options:

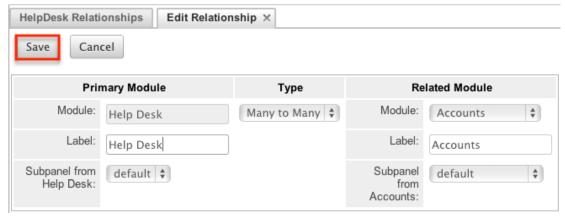
Type: Select the type of relationship to create from the options in the Relationship Types section.

Module: The Primary module is set to the module you are adding the relationship to. Select the Related module from the dropdown. The Primary and Related module can be the same in order to create a parent child relationship.

Label: Enter a label to reference the Primary module or Related module's subpanels for this relationship. This option is only available for the "Many" side of a relationship.

Subpanel from: Select a subpanel option to display the Primary or Related module's records in. This will determine the fields displayed in the subpanel. This option is only available for the "Many" side of a relationship.

4. Once the necessary information is entered, click "Save".

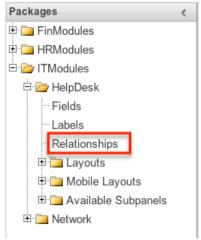


5. The required fields and subpanels are instantly created and saved in the package.

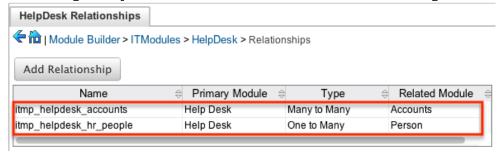
#### **Editing Relationships**

Use the following steps to edit a relationship via Module Builder:

1. Expand out the tree under the desired module in the Packages Panel, and select "Relationships".



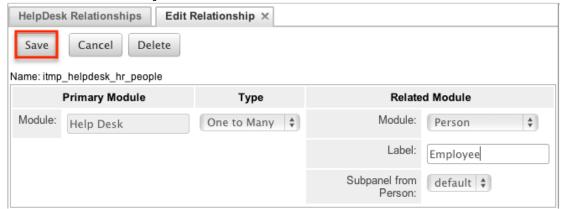
2. In the main panel, select a relationship to edit. Click the column headers to sort the grid by different columns to assist in locating the relationship.



3. The only editable field on a relationship is the Label field for naming the Primary or Related module subpanels. Please note that this option is only

available for the "Many" side of a relationship.

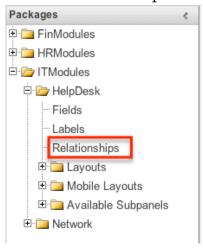
4. Once the necessary information for the Label field is entered, click "Save".



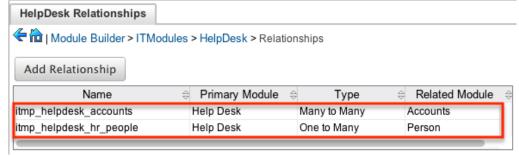
**Deleting Relationships** 

Use the following steps to delete a relationship via Module Builder:

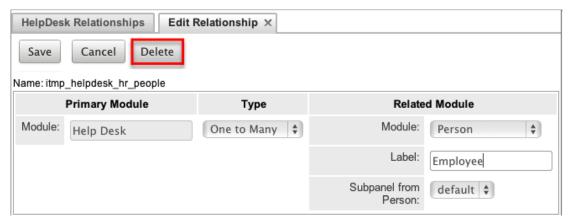
1. Expand out the tree under the desired module in the Packages panel and select "Relationships".



2. Select a relationship to delete in the main panel. Click the column headers to sort the grid by different columns to assist in locating the relationship.



3. Click "Delete" to remove the relationship.



4. A pop-up message will display asking for confirmation. Click "Yes" to proceed.



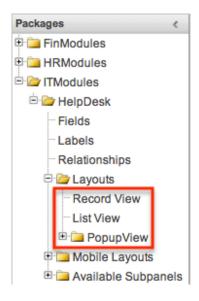
Note: If you wish to retain the data and table structure that currently exists for the relationship, select the "Do Not Remove Tables" option. Leaving the "Do Not Remove Tables" unchecked will delete the relationship data and remove the tables for the relationship from the database when the package is installed.

Before deleting a relationship please verify and resolve the following issues:

- Relationship must be removed from any report filters or displays.
- Relationship must be removed from any workflows that filters or displays fields from the relationship.
- Relationship must be removed from any Sugar Logic formulas referencing the relationship.

## Layouts

Layouts are used to represent many screens in Sugar. The layouts section in Module Builder allows administrators to add fields and configure layouts. To access the layouts section, expand "Layouts" from the packages panel under the desired module. The available layouts for the selected module will appear below.



### Layout Types

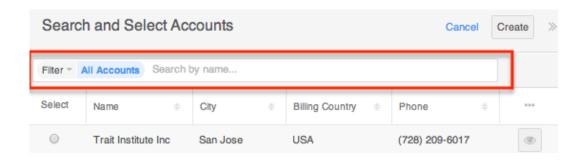
Sugar comes with different types of layouts to represent different sections of Sugar. Please note that not all layouts are available in every module. The following layouts are available to configure in Module Builder:

- Record View: Record view layout is used to modify, create, or view a record within the specified module. Please note that this layout is specific to modules using the Sidecar user interface.
- List View: List view layout is used to view multiple records within the specified module and displays all results meeting the current search criteria.
- Popup List View: Popup list view layout is used to view multiple records via a popup window used to locate and select records in the specified module.
   For Sidecar modules:



• Popup Search: Popup search layout is used to allow users to perform a search via the popup window used to select records in the specified module.

For Sidecar modules:



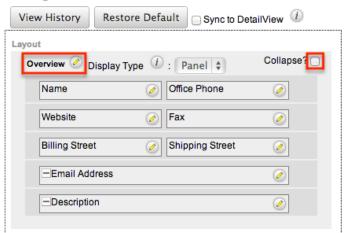
#### **Layout Options**

Administrators have the ability to configure the various layouts (e.g. record view, list view, etc.) available via Module Builder. Please note that the layouts can be configured via Admin > Studio as well once the module has been deployed. For more information on configuring layouts, please refer to the Studio documentation.

The following are some of the options available to administrators when configuring layouts via Module Builder:

 Panels: Every field on a layout is contained within a panel. Panels can be open or collapsed by default and have a title defining the panel. Panels can be organized to contain groups of similar or related fields to assist in organization.

Select the Pencil icon next to the Panel title to modify the title. Select the Collapsed? checkbox to default the panel as collapsed. Users can open and close panels as the wish.



Note: The default panel name cannot be modified in Module Builder.

 View History: Sugar preserves a history of the changes made to each layout. Click "View History" and the History dialog box will display the timestamp of when changes occurred and allow you to preview the layout then restore if you wish. For more information on viewing the history of layouts, please refer to the Viewing Layout History section of this documentation.  Restore Defaults: Sugar provides the option to restore a layout to its original default configuration. For more information on how to restore the default layout, please refer to the Restoring Layout Defaults section of this documentation.

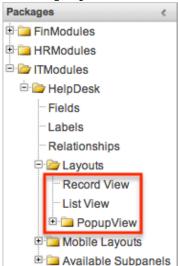
#### **Editing Layouts**

You can add, remove, hide, etc. the fields for the available layouts in the module by selecting the specific layout under the Packages panel to edit. Please note that the List View and Popup View layouts have columns where you can designate fields users can and cannot see.

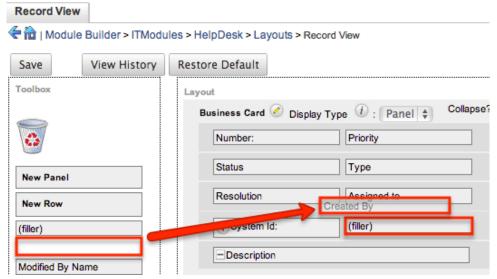
Editing Record View Layout

The following steps cover editing the Record View layout as an example:

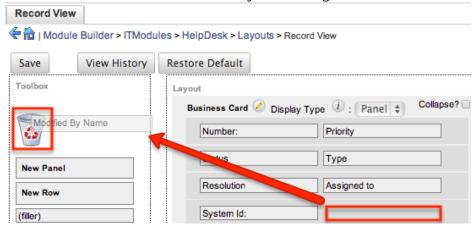
1. Expand "Layouts" from the Packages panel under the desired module and select the layout (e.g. Record View) you wish to edit. The Record View layout will display in the main panel to the right.



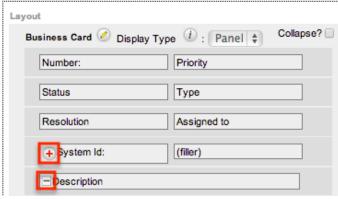
- 2. To add a field to the Record View layout, drag the field from the list of fields in the Toolbox to a "(filler)" location on the layout per your preference.
  - You can also drag a field to a location on the layout that already has a field in place. The newly added field and the existing field on the layout will swap places.



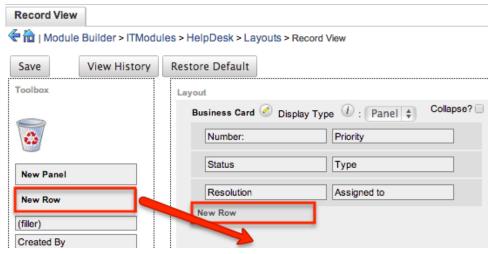
3. To remove a field from the layout, drag and drop the field from the layout to the trash bin in the toolbox to remove the field from the layout. You may remove an entire row in the layout using the same method.



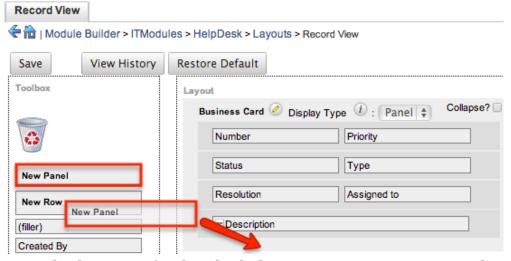
- 4. To expand or minimize the field column in the layout, click the Plus icon (+) to stretch the field over two columns or click the Minus icon (-) to fit the field into one column.
  - Note: The layout will display a "(filler)" if there is no field in that location.



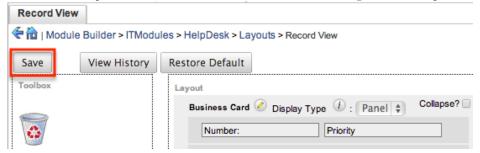
5. To add a new row, drag the "New Row" item in the Toolbox to the layout to allow additional fields or blank spaces to be added.



6. To add a new panel, drag the "New Panel" item in the Toolbox to the layout to group different sets of fields together in the Record View layout.



7. Once the layout is finalized, click "Save" to preserve your changes.



Note: It is recommended that dependent fields be placed below and/or to the right of the independent field in order to preserve the correct display of fields on the layout.

Editing List View Layout

Unlike the Record View layout, the List View layout has columns where you can designate fields users can and cannot see. When configuring the List View layout,

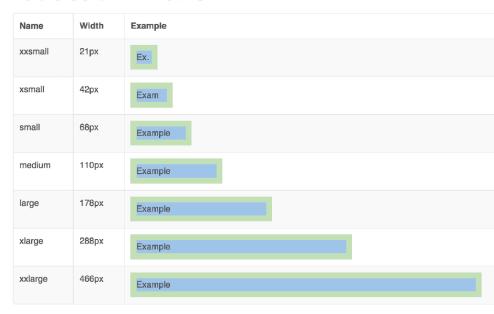
you will see three columns (Default, Available, Hidden) where fields can be dragged and dropped accordingly.

Please note that editing the List View layout affects the list of available fields for the module's list view dashlet as well since both are controlled by the same layout (List View). Once the custom module is deployed, the configurations made to the list view layout in Module Builder will be reflected in the Columns fields of the corresponding module dashlet's Configuration Options page. After the custom module is deployed, all succeeding changes to the List View layout can be made via Studio. Please keep in mind that the custom module dashlet will not automatically reflect the Studio changes and users must edit the dashlet in order to view the changes, add new fields to the layout, etc.

Administrators can easily set the column widths for specific fields when configuring the List View layout. You can choose from a pre-defined list of width sizes (e.g. small, medium, large, etc.) that are available out-of-the-box with Sugar or enter a custom width value in pixels (e.g. 200) for Sidecar modules.

Note: When defining the column width for currency fields (e.g. Likely, Best, etc.), only "large" and above will apply because there is a minimum width requirement in Sugar for this field type. In addition, when defining a custom width for currency fields, the value must be 141px or wider.

The following table lists the available column width sizes in Sugar along with the corresponding width in pixels: **Table column widths** 



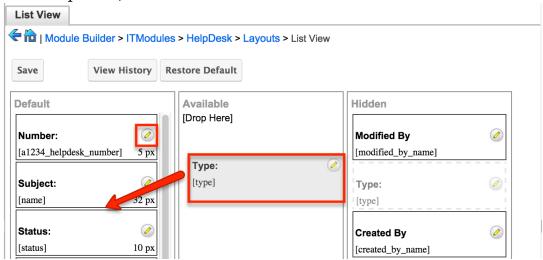
- Default: This column contains fields that are displayed in the layout.
- Available: Available fields are fields that will not show by default in the layout, but if the layout can be personalized, users can add these fields to

their view of the layout. Not all list type layouts have an available fields section.

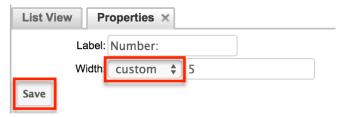
• Hidden: This column contains fields that will not be displayed in the layout.

The following steps cover editing the List View layout as an example:

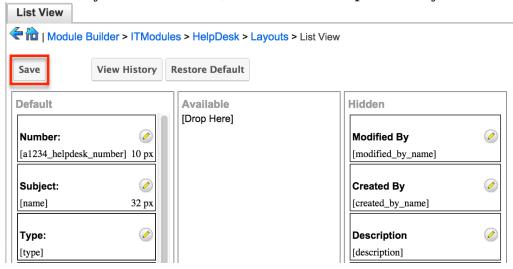
- 1. Expand "Layouts" from the Packages panel under the desired module and select "List View".
- 2. To add a field to the List View layout, drag and drop the fields from the Hidden column to the Default column.
  - Note: The fields in the Default column will be available to add as display columns in the corresponding custom module dashlet (e.g. My HelpDesk).



- 3. To remove a field from the layout, drag and drop the field from the Default column to the Hidden column.
- 4. To change the left-to-right order of the fields displayed on the list view, drag and drop fields up or down within the Default list.
  - Note: The order of fields designated for the List View layout also affects the order for the list of available fields in the corresponding custom module dashlet (e.g. My HelpDesk).
- 5. To modify the label of the field, as well as the width of the field, click the Pencil icon next to each field.
- 6. Enter the new label or select the width (e.g. small, medium, large, etc.) then click "Save". Please note the modified label will display in all List View layouts for this module.
  - Note: Administrators can choose from a pre-defined list of width sizes (e.g. default, small, medium, etc.). Please note that selecting the Default width will set the list view column to equal the Medium width size.
     Selecting "custom" from the list will allow you to enter a custom width value in the open box. The custom width value should be entered in pixels (e.g. 200) for the fields.



7. Once the layout is finalized, click "Save" to preserve your changes.



## Mobile Layouts

Administrators can also configure the mobile layouts for SugarCRM Mobile by expanding "Mobile Layouts" for the desired module from the Packages panel. The list of available mobile layouts will display below and you can select the specific layout (e.g. Mobile EditView, Mobile ListView, etc.) you wish to configure.



## Mobile Layout Types

There are various mobile layouts in Sugar to represent the different areas of the SugarCRM mobile application. Please note that not all layouts are available in

every module and the different mobile applications will use the information defined here differently.

The following mobile layouts are available in Sugar:

- Edit View: Edit view layout is used in Sugar to modify or create records in the specified module.
- Detail View: Detail view is used in Sugar to view the current data for a record within the specified module. Certain fields are translated to SugarCRM Mobile as buttons instead of data. For example, instead of seeing the phone number, there is a phone icon to be able to call the number on the record.
- List View: List view layout is used in Sugar to view multiple records within the specified module. Only the first two fields in the list view section will be displayed in SugarCRM Mobile.

#### Mobile Layout Options

Administrators have the ability to configure the various layouts available via Module Builder. Please note that the mobile layouts can be configured via Admin > Studio as well once the module has been deployed. For more information on configuring layouts, please refer to the Studio documentation.

The following are some of the available options when configuring mobile layouts via Module Builder:

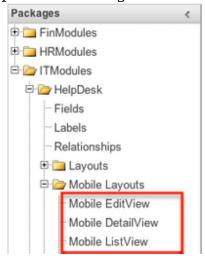
- View History: Sugar preserves a history of the changes made to each layout. Click "View History" and the History dialog box will display the timestamp of when changes occurred and allow you to preview the layout then restore if you wish. For more information on viewing the history of layouts, please refer to the Viewing Layout History section of this documentation.
- Restore Defaults: Sugar provides the option to restore a layout to it's original default configuration. For more information on how to restore the default layout, please refer to the Restoring Layout Defaults section of this documentation.

### **Editing Mobile Layouts**

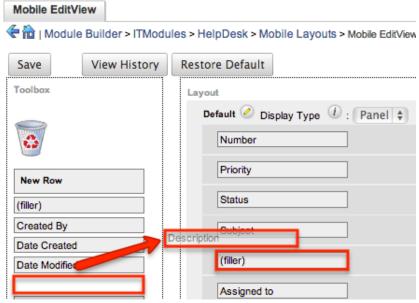
You can add, remove, hide, etc. the fields for the available layouts in "Mobile Layouts" by selecting the specific layout under the Packages panel to edit. Please note that the Mobile EditView and DetailView layouts are modified in similar fashions. The Mobile ListView layout has columns where you can designate fields users can and cannot see.

The following steps cover editing the Mobile EditView layout as an example:

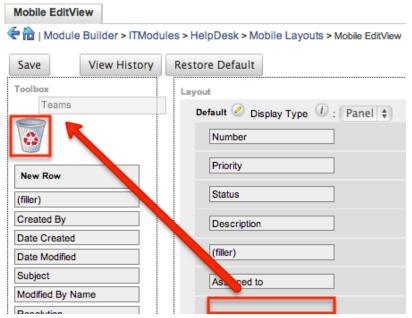
1. Expand "Mobile Layouts" from the Packages panel under the desired module and select "Mobile EditView". The selected layout will display in the main panel to the right.



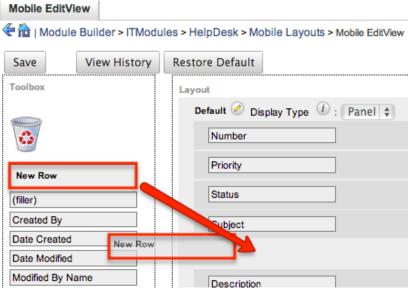
- 2. To add a field to the Mobile EditView layout, drag the field from the list of fields in the Toolbox to a "(filler)" location on the layout per your preference.
  - You can also drag a field to a location on the layout that already has a field in place. The newly added field and the existing field on the layout will swap places.



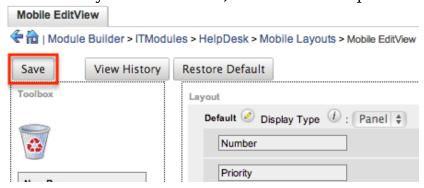
3. To remove a field from the layout, drag and drop the field from the layout to the trash bin in the Toolbox to remove the field from the layout. You may remove an entire row in the layout using the same method.



4. To add a new row, drag the "New Row" item in the Toolbox to the layout to allow additional fields or blank spaces to be added.



5. Once the layout is finalized, click "Save" to preserve your changes.



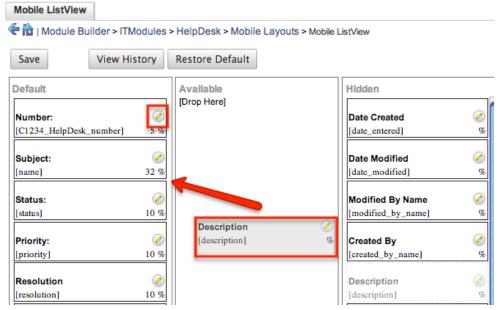
Unlike the Mobile EditView layout, the Mobile ListView layout has columns were you can designate fields users can and cannot see. When configuring the Mobile

ListView layout, you will see three columns (Default, Available, Hidden) where fields can be dragged and dropped accordingly.

- Default: This column contains fields that are displayed on the list view.
- Available: Available fields are fields that will not show by default in the layout, but if the layout can be personalized, users can add these fields to their view of the layout. Not all list type layouts have an available fields section.
- Hidden: This column contains fields that will not be displayed on the list view.

The following steps cover editing the Mobile ListView layout as an example:

- 1. Expand "Layouts" from the Packages panel under the desired module and select "Mobile ListView".
- 2. To add a field to the Mobile ListView layout, drag and drop the fields from the Hidden column to the Default column.

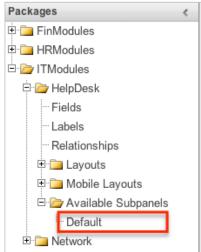


- 3. Click the Pencil icon to modify the label of the field as well as the width percentage the field will take up in the list view. Please note that the modified label will display in all List View layouts in SugarCRM Mobile.
- 4. Once the layout is finalized, click "Save" to preserve your changes.

## Available Subpanels

Related records between modules in Sugar are commonly displayed in Subpanels. Similar to list type layouts, administrators can modify the available subpanel layouts to change which fields are shown in a module's subpanel. You can add or

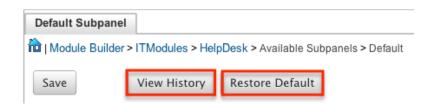
remove fields for these subpanels depending on the information that you want to display to users. To access the subpanels section in Module Builder, expand "Available Subpanels" from the Packages panel under the desired module. The available subpanel for the selected module will appear to the right of the screen.



### **Subpanel Options**

When configuring the Subpanel layout in Module Builder, there are some available options which allow you to view historical layout changes as well as restore the default layout. Please note that the subpanel layout can be configured via Admin > Studio as well once the module has been deployed. For more information on configuring layouts, please refer to the Subpanels section of the Studio documentation.

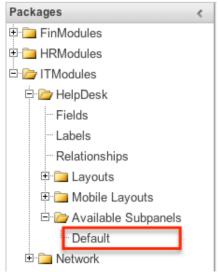
- View History: Sugar keeps a history of the changes made to each subpanel. These changes and when they occurred can be viewed and restored via "View History". For more information on viewing the history of subpanels, please refer to the Viewing Layout History section of this documentation.
- Restore Defaults: Sugar also contains the ability to restore a subpanel to it's original default configuration. For more information on how to reset a subpanel to default, please refer to the Restoring Layout Defaults section of this documentation.



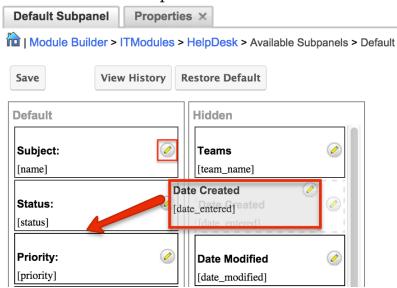
**Editing Subpanel Layout** 

Use the following steps to modify a subpanel via Module Builder:

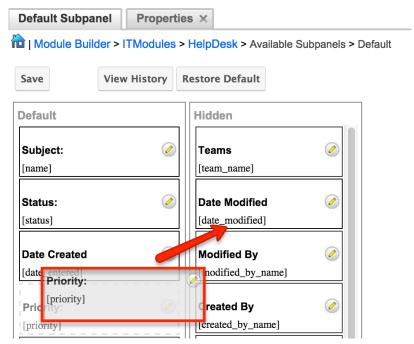
1. Expand "Available Subpanels" from the Packages panel under the desired module and select the subpanel you wish to edit. The selected subpanel layout will display to the right in the main panel.



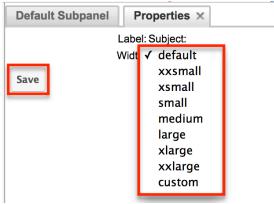
- 2. To add a field to the Subpanel layout, drag and drop the fields from the Hidden column to the Default column.
  - You can drag the field up and down the list to change the position of the field in the subpanel.



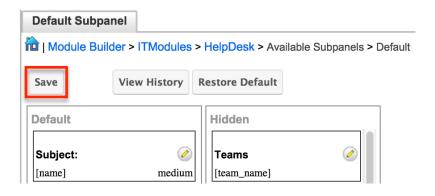
3. To remove a field, drag and drop the fields from the Default column to the Hidden column.



- 4. Click the Pencil icon to change the column width of the field in the subpanel.
  - Note: Administrators can choose from a pre-defined list of width sizes (e.g. default, small, medium, etc.). Please note that selecting the Default width will set the list view column to equal the Medium width size. Selecting "custom" from the list will allow you to enter a custom width value in the open box. The custom width value should be entered in pixels (e.g. 200) for the fields.
  - When defining the column width for currency fields (e.g. Likely, Best, etc.), only "large" and above applies because there is a minimum width requirement in Sugar for this field type. In addition, when defining a custom width for currency fields, the value must be 141px or wider.



5. Once the subpanel layout is finalized, click "Save" to preserve your changes.



## Using Sugar Logic

Sugar Logic allows administrators to write simple formulas and logic checks to provide a calculation for a field or to set the visibility of a field. A formula specifies one or more field values along with operators and functions that are mathematical or logical. When you execute a formula, Sugar performs the calculation to derive the value. When a field is used in a formula, Sugar recalculates the value whenever a user updates it and saves the record. Similarly, if you update a formula, Sugar recalculates the field value based on the updated formula.

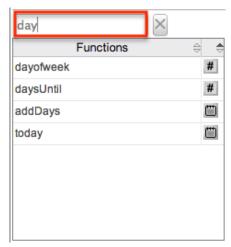
Note: When creating a calculated formula for a Currency field, the currency symbol should not be used for a value (e.g. \$100) in the formula. The formula should only define the numeric value (e.g. 100), as including the currency symbol will result in improper calculated values.

For more information regarding the types of fields you can use Sugar Logic in, please refer to the Field Options section of this documentation. You can access the formula builder when editing or creating the field by checking "Calculated Value" then clicking "Edit Formula".

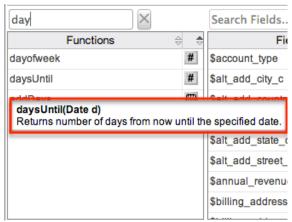


#### **Functions**

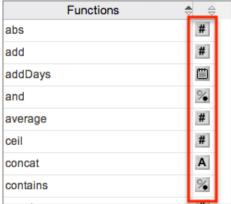
Functions are listed on the bottom left hand corner of the formula builder and provide a variety of calculations, logic checks, and formatting options. To locate the function you need, simply scroll through the list or enter the search criteria to narrow the list.



To see how to use a function and what the function does, simply hover over the function to view the syntax, parameters, and a brief description of what the function does.



The function name is followed by a comma-separated list of parameters to the function. The list specifies the data type expected for each parameter. For example, the function "daysUntil" expects one parameter of Date type. The brief description in the hover text will typically specify what data type is being returned, but if it does not, you can determine the data type being returned via the icon to the right of the function in the grid.



The following is a list of the possible return type symbols and what they stand for:

#	Returns a Number	
Calendar	Returns a Date object with a date and time	
%	Returns a Boolean (true or false) value	
A	Returns Text	
[]	Returns a List	
?	Returns a variable data type that could be any of the above	

Functions are defined to either accept a set number of parameters or have an undetermined amount of parameters. Many function parameters require a specific data type to be passed in for the function to work. Functions can be nested matching up the return data type of the function to the parameter data type of a different function.

The following functions and their parameters (multiple parameters are indicated with "...") are available in Sugar:

Function	Description	Parameters	Return Type
abs	Returns the absolute value of \$param1.	Number \$param1	Number
add	Returns the sum of the given parameters.	Number \$param1, 	Number
addDays	Returns \$date moved forward or backwards by \$days.	Date \$date, Number \$days	Date
and	Returns true if and only if all given parameters are true.	Boolean \$param1,	Boolean
average	Returns the average of the given parameters.	Number \$param1,	Number
ceil	Returns \$param1 rounded up to the next integer.	Number \$param1	Number
concat	Returns all of the given parameters appended together	String \$param1,	Text

	in the order passed.			
contains	Returns true if \$needle is within \$haystack.	String \$haystack, String \$needle	Boolean	
count	Returns the number of records related to this record by \$module	Relate \$module	Number	
createList	Returns a List of the given parameters.	Generic \$param1,	List	
date	Returns \$param1 as a Date object.	String \$param1	Date	
dayofweek	Returns the number of the day of week that \$param1 falls on.	Date \$param1	Number	
daysUntil	Returns the number of days from now until \$param1.	Date \$param1	Number	
divide	Returns the snumerator divided by the sdenominator.	Number \$numerator, Number \$denominator	Number	
equal	Returns true if \$param1 is equal to \$param2.	Generic \$param1, Generic \$param2	Boolean	
floor	Returns \$param1 rounded down to the next integer.	Number \$param1	Number	
getDropdownKeySe t	Returns a List of the keys in the dropdown named \$param1. This list must be defined in the Dropdown editor.	String \$param1	List	
getDropdownValue	Returns the value for the \$key found in the dropdown named \$list. This list must be defined	String \$list, String \$key	Text	

	in the Dropdown editor.		
getDropdownValue Set	_		List
greaterThan	Returns true if \$param1 is greater than \$param2.	Number \$param1, Number \$param2	Boolean
hoursUntil	Returns the number of hours from now until \$param1.	Date \$param1	Number
ifElse	Returns \$return1 if \$condition is true or \$return2 if \$condition is false.	Boolean \$condition, Generic \$return1, Generic \$return2	Variable
indexOf	Returns the position of \$needle in \$haystack or -1 if \$haystack does not contain \$needle. The index starts at 0.	Generic \$needle, List \$haystack	Number
isAfter	Returns true if \$param1 is after \$param2.	Date \$param1, Date \$param2	Boolean
isBefore	Returns true if \$param1 is before \$param2.	Date \$param1, Date \$param2	Boolean
isInList	Returns true if \$needle is contained within \$haystack.	Generic \$needle, List \$haystack	Boolean
isValidDate	Returns true if \$param1 is a valid date string.	String \$param1	Boolean
isValidEmail	Returns true if \$param1 is in a valid email address	String \$param1	Boolean

	format.		
isWithinRange	Returns true if \$value is greater than or equal to \$min and less than or equal to \$max.	Number \$value, Number \$min, Number \$max	Boolean
ln	Returns the natural log of \$param1.	Number \$param1	Number
log	Returns the \$base Log of \$value.	Number \$value, Number \$base	Number
max	Returns highest value of the given parameters.	Number \$param1,	Number
maxRelatedDate	Returns the highest value of \$field in records related to \$module.	Relate \$module, String \$field	Date
median	Returns the median of the given parameters.	Number \$param1,	Number
min	Returns lowest value of the given parameters.	Number \$param1,	Number
monthofyear	Returns the number of the month that \$param1 is in.	Date \$param1	Number
multiply	Returns the value of the given parameters multiplied together.	Number \$param1,	Number
negate	Returns the negated value of \$param1.	Number \$param1	Number
not	Returns true if \$param1 is false, and false if \$param1 is true.	Boolean \$param1	Boolean
now	Returns a Date object representing todays date and the current time.		Date

number	Returns the numeric value of \$param1.	String \$param1	Number
or	Returns true if any given parameters are true.	Boolean \$param1,	Boolean
pow	Returns the \$value raised to the power of \$exponent.	Number \$value, Number \$exponent	Number
related	Returns the value of \$field in the related \$module.	Relate \$module, String \$field	Variable
rollupAve	Returns the average value of \$field in records related to \$module.	Relate \$module, String \$field	Number
rollupMax	Returns the highest value of \$field in records related to \$module.	Relate \$module, String \$field	Number
rollupMin	Returns the lowest value of \$field in records related to \$module.	Relate \$module, String \$field	Number
rollupSum	Returns the sum of the values of \$field in records related to \$module.	Relate \$module, String \$field	Number
strlen	Returns the number of characters in \$param1.	String \$param1	Number
strToLower	Returns \$param1 converted to lower case.	String \$param1	Text
strToUpper	Returns \$param1 converted to upper case.	String \$param1	Text
subStr	Returns the portion of \$value specified by \$start and \$length. The position starts at 0.	String \$value, Number \$start, Number \$length	Text

subtract	Returns \$param1 minus \$param2.	Number \$param1, Number \$param2	Number	
timestamp	Returns the passed in datetime string as a unix timestamp.		Date	
today	Returns a Date object representing todays date.		Date	
toString	Returns \$param1 converted to a string.	Generic \$param1	Text	
translateLabel	Returns the translated value of \$label for \$module.	String \$label, String \$module	Text	
valueAt	Returns the value at position \$index in \$haystack.	Number \$index, List \$haystack	Variable	

#### **Fields**

Fields are listed on the bottom right hand corner of the formula builder and contain the fields for the current module. Fields can be referenced in formulas and will start with a \$. To locate the field you need, simply scroll through the list or enter a search criteria to narrow the list.

To add a field to the formula, simply click on the field to be added. The variable name for the field will be placed at the end of the formula. You can also type the variable names manually in the formula.

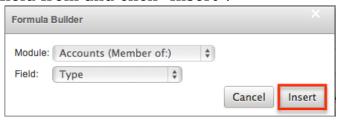


#### Related Field

Related fields are available to be added to formulas via the related function. You can manually add related function calls to your formula or you can build the syntax for the related function by clicking "Related Field".



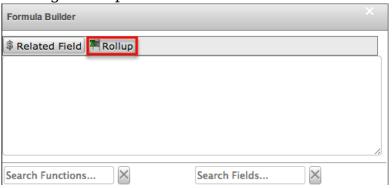
This will open a dialog box which will assist in building the syntax to use the related function. Select a module and a field within that module to pull the related field from and click "Insert".



The resulting syntax for the selected options will be added to the formula. Note: If a record has multiple related records to a module, the related function will pull the field from one of the related records. It is not recommended to rely on the related function to pull the same related records for a many relationship.

#### Rollup

In addition to adding related fields, you can also add aggregate functions on related fields to formulas via the rollup functions. You can manually add rollup function calls to your formula or you can build the syntax for the rollup function by clicking "Rollup".



This will open a dialog box which will assist in building the syntax to use the rollup function. Select the type of rollup function (Sum, Average, Minimum, or Maximum) to perform on the module field. To perform a count of related records, please refer

to the count function listed in the Functions section. Select a module and a field within that module to perform the rollup function on then click "Insert".



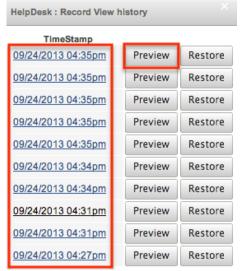
The resulting syntax for the selected options will be added to the formula. Note: Rollup functions can only aggregate number type fields.

### Viewing Layout History

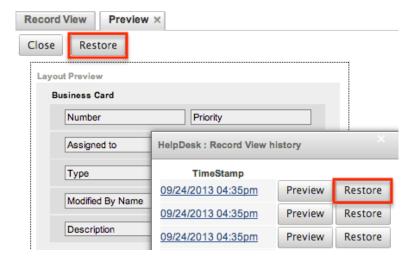
Layouts, subpanels, and mobile layouts keep a history of the last ten changes made to each layout. To view the history for any of these layouts, simply click "View History" on the layout editor view in Module Builder.



The History dialog box will open up displaying the timestamps of when changes occurred and allow you to preview the layout by clicking the Preview button.



The preview will show the details of the layout as of the specific time it was saved. To restore the layout to the particular version you are viewing, simply click the Restore button from under the Preview tab or in the History dialog box. The restored layout will load into the layout editor allowing you to make any additional changes as necessary. Click "Save" to preserve your changes.



#### **Restoring Layout Defaults**

Many layouts, subpanels, and mobile layouts can be restored to their original default configuration. To restore the default for any of these layouts, simply select "Restore Default" from the edit layout screen in Module Builder.



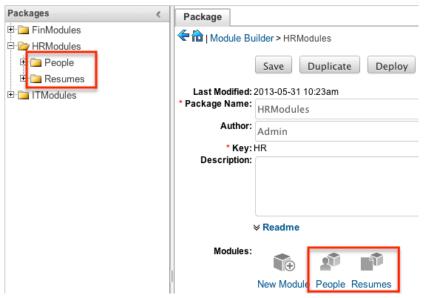
The default layout will load into the editor allowing you to make changes as necessary. Click "Save" to preserve your changes.

# **Deleting Modules**

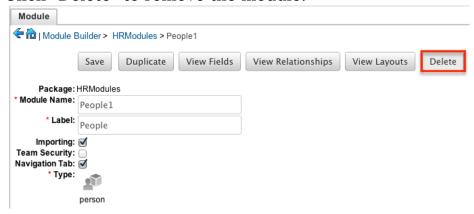
If a module is invalid or should no longer appear in a package, it may be deleted from Module Builder. Please note that deleting a module from a package will not remove the module from any instances where the package was deployed. For more information on how to uninstall a deployed package from an instance, please refer to the Module Loader documentation.

Use the following steps to delete a module from a package via Module Builder:

1. Select the desired package and module from the Packages panel or the main panel.



2. Click "Delete" to remove the module.



3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Last Modified: 11/23/2016 02:19am

## Module Loader

## Overview

Module Loader is used to install a variety of custom file packages, including custom modules, into a Sugar instance. Using Module Loader, you can also manage and uninstall these packages, all done through Sugar's user interface. Packages are uploaded as a ZIP file from an administrator's local computer and then, when deployed, will force changes upon the instance's filesystem and database.

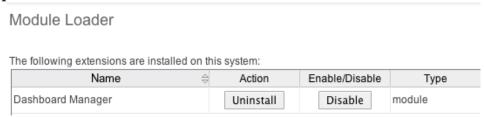
Custom module packages can be created and modified in Module Builder, and then, after deployment, they will show in Module Loader. They can also be

exported from Module Builder in one instance, and then uploaded to another instance via Module Loader.

## Module Loader Layout

Module Loader consists of three panels. The panels include all necessary information about the packages, and also include different action buttons, explained in Module Loader Fields. The panels are:

• Installed Packages: This panel shows all installed packages. On this panel, you have the option to uninstall or disable installed packages. After installation, the packages will move from the Uploaded Packages panel to this panel.



 Module Upload: This panel consists of an upload option where files can be uploaded to Sugar via a browser file selection window. Please review Uploading Modules for more information on using this panel.



• Uploaded Packages: This panel shows all packages that have been uploaded to Sugar, but have not yet been installed, or have been uninstalled. Packages can be installed or deleted from Sugar using this panel.



#### Module Loader Fields

Module Loader contains different fields on the Installed Packages and Uploaded Packages panels. Each set of fields show relevant and identifying information about the module package.

The Installed Packages panel consists of the following fields:

Field	Description
Name	The name of the package, pulled from

	the manifest.php file of the package
Action	Button allowing you to uninstall the package from your Sugar instance if the package is marked as uninstallable in the manifest.php file of the package
Enable/Disable	Button allowing you to enable or disable the functionality of the package, without uninstalling
Type	Describes the type of package, pulled from the manifest.php file of the package
Version	The version of the package, pulled from manifest.php file of the package
Date Installed	The date and time that the package was installed
Description	The description of the package, pulled from the manifest.php file of the package

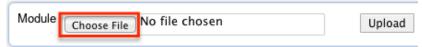
The Uploaded Packages panel consists of the following fields:

Field	Description
Name	The name of the package, pulled from the manifest.php file of the package
Install	Button allowing you to install the package to your Sugar instance
Delete	Button allowing you to delete the package from your Sugar instance
Type	Describes the type of package, pulled from the manifest.php file of the package
Version	The version of the package, pulled from manifest.php file of the package
Date Published	The date and time that the package was initially created from the publisher
Uninstallable	Tells you if the package is uninstallable from the manifest.php file of the package
Description	The description of the package, pulled from the manifest.php file of the package

# **Uploading Packages**

After receiving the file that you would like to install, you must first upload it to your Sugar instance. To upload a file, follow the following steps:

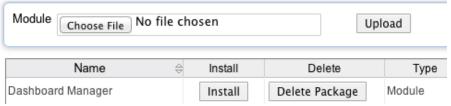
- 1. Navigate to Admin > Module Loader
- 2. Click the "Choose File" button in the Module Upload panel to open a file selection window from your browser



- 3. Select the file from your local computer
- 4. After you select your file, click the "Upload" button to complete the process



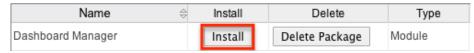
5. After it has been uploaded, the package will show in the Uploaded Packages panel



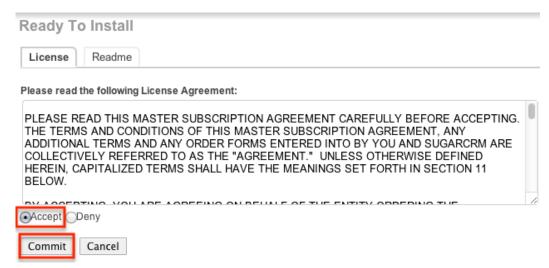
# **Installing Packages**

After uploading a package to Module Loader, it must be installed for the package's contents to take effect on your instance. To install a package, follow the following steps:

- 1. Follow the steps to upload your package to Module Loader.
- 2. Click the "Install" button on the Uploaded Packages panel.



3. You will be brought to the installation screen to confirm that the packages should be installed and to read and accept any license or readme documentation as needed. Click "Commit" when ready to run the installation.



- 4. The next page will show a progress bar and a completion notice. If there are any errors, they will be displayed with a verbose explanation of what went wrong. If not, click "Display Log" to show what happened during the installation process.
  - Note: To sustain the stability, security, and integrity of Sugar's cloud service environment, all installed packages are scanned to check for code not conforming to environmental agreements. Any package that fails this scanner will not be installed and the installer will produce a reason for the failed installation. If this happens, please contact the developer of your package for more information.
- 5. Click "Back to Module Loader" when complete to return to Module Loader. If you do not need to install any further packages, you can navigate to any other section of Sugar as need be.



# Uninstalling Packages

After a package has been installed in your Sugar instance, it can be removed if it is no longer needed. When uninstalled, the package will remove any available customizations to your instance from the filesystem and database.

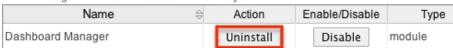
Note: Packages have to be defined as "Uninstallable" in the manifest.php file of the package to be able to be uninstalled.

To uninstall a package, perform the following steps:

1. Navigate to Admin > Module Loader.

- 2. Locate the package you would like to uninstall in the Installed Packages panel.
- 3. Click the "Uninstall" button.

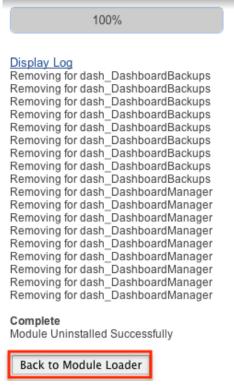
The following extensions are installed on this system:



- Note: If you do not see an Uninstall button next to your package, it may be caused by one of the following circumstances:
  - There may be a newer version of the package installed that has an Uninstall button and that package must be uninstalled first.
  - The manifest.php file may not define the package as uninstallable.
  - The package may be missing files that are critical to performing the uninstall.
- 4. If the package has added any database tables to your instance, you will see a selection whether to remove or retain the database tables. If the database tables include any information you would like to keep, select the "Do Not Remove Tables" option. An example of this would be if you are uninstalling a custom module but will be reinstalling a new version of the same module. You would want to keep the data, but remove any files associated with the old module that will be replaced with the new package.
- 5. Click "Commit" when you are ready to uninstall the package.



- 6. The next page will show a progress bar and a completion notice. If there are any errors, they will be displayed with a verbose explanation of what went wrong. If not, click "Display Log" to show what happened during the uninstall process.
- 7. Click "Back to Module Loader" when complete to return to Module Loader. If you do not need to uninstall any further packages, you can navigate to any other section of Sugar as need be.



8. After the package has been uninstalled, it can be deleted from your instance via the Uploaded Packages panel.



# **Installing Role-Based Customizations**

Administrators have the ability to create role-based custom dropdown lists and role-based custom record views via Studio and Dropdown Editor. These role-based customizations are included when exporting customizations via Studio. When the exported package is then installed on a destination instance, administrators will be given the opportunity to map the package's customized roles to the destination instance's roles. Sugar will attempt to select a matching role from amongst the destination instance's roles. The role mapping can be manually altered by selecting a different role from the dropdown menus. If you wish to not install a role's customizations, choose "Do not map this role" in the dropdown. Once the mappings are correctly set, click "Commit" to proceed with installing the package.

#### Map ACL Roles

Package Roles	Instance Roles			
Sales Administrator ID: 40df175a-e723-804a-8af7-556cde10469e	Sales Administrator \$	(matches by Name)		
Customer Support Administrator ID: 4ef9edf3-9145-73d1-5682-556cde2fd660	Customer Support Administrator \$	(matches by Name)		
Marketing Administrator ID: 47fcf6db-c11e-8032-2174-556cdef11e45	Do not map this role 💠			
Commit				

## Importing Role-Based Custom Record Views

If the package contains role-based custom record views, the mapped roles in the destination instance will be updated to match the package's custom record views. Any prior customizations made record view for the destination instance's role will be overwritten. Regardless of any prior customizations made on the destination instance, all mapped roles will be updated to completely match the imported role-based record views. For more information about creating role-based custom record views, please refer to the Studio documentation.

# Importing Role-Based Custom Dropdown Lists

When a package contains non-stock dropdown values for the default role, the destination instance's default role-list will be completely overwritten by the package.

If the package, the destination instance, or both include role-based custom dropdown lists, Sugar will take the destination instance's original customized role-lists into consideration when deciding on the resulting customized role-lists. The following table demonstrates how default custom dropdown lists and role-based custom dropdown lists will be affected:

- When a cell indicates "Undefined", it means that the role does not have a customized role-list, and it will inherit the custom default list.
- When a cell indicates "Any", it means that the role's role-list is customized, but any of the possible combinations of values will produce the same result.
- When a cell indicates "Empty", it means that the role's role-list is customized to have no enabled values.
- In every situation, the resulting default role-list will be overwritten to exactly match the package's default role-list.

Situation and Outcome	Destinatio n Default Role-List	Destinatio n Custom Role-List	Package Default Role-List	Package Custom Role-List	Resulting Default Role-List	Resulting Custom Role-List
The destination and package match.  The destination remains		B,C	A,B,C	B,C	A,B,C	B,C
unchanged .						
This role is not customized in the destination or package.  This role will not be customized and will inherit the default		Undefined	X,Y,Z	Undefined	X,Y,Z	Undefined
role-list.  This role is customized in both the destination and package.  This role's custom role-list is updated to match the package's.		Any	A,B,C	A,C	A,B,C	A,C

This role is customized in both the destination and package.		Any	X,Y,Z	X,Y	X,Y,Z	X,Y
This role's custom role-list is updated to match the package's.						
This role's custom role-list has no enabled options in the package.  This role's custom role-list will have no enabled values.	A,B,C	Any, Empty, or Undefined	X,Y,Z	Empty	X,Y,Z	Empty
This role is customized in the destination but not in the package.  This role's custom role-list is reduced to the values present in both the destination 's custom		A,C	A,B,E	Undefined	A,B,E	A

role-list and the package's default role-list.					
This role is customized in the destination but not in the package.	Any	X,Y,Z	Undefined	X,Y,Z	Empty
This role's custom role-list will have no enabled values since there is no overlap between the destination 's custom role-list and the package's default role-list.					
This role is customized in the destination but not in the package.	С	A,B,E	Undefined	A,B,E	Empty
This role's custom role-list will have no enabled values					

since there			
is no			
overlap			
between			
the			
destination			
's custom			
role-list			
and the			
package's			
default			
role-list.			

For more information about creating role-based custom dropdown lists, please refer to the Dropdown Editor documentation.

Last Modified: 03/16/2018 10:08pm

# Workflow Management

#### Overview

Sugar's Workflow functionality allows administrators to configure cause and effect type actions throughout Sugar and across multiple modules. Workflows can be used to update fields, send emails, or create records when certain conditions are met. Workflows are a great way to configure automated processes within Sugar so that users do not need to remember manual steps and instead can focus on their primary tasks and job responsibilities.

All workflow conditions are reached and checked for once a record is saved. Workflows can be configured to either start their process to perform the job the moment the save occurs, or they can be delayed for a given amount of time.

The following save events can trigger a workflow to fire:

- Manually saving a record
- Mass updating records
- Importing records
- Another workflow updating a record
- Reassigning Records via User Management
- Updating or creating a record via plug-ins
- Updating or creating a record via Sugar mobile applications
- Updating or creating a record via the Web Services

Workflows can be viewed and configured by any System Administrator User. In addition, regular users with a role that provides Developer access will be able to access workflows for the module they have the rights to. For more information on Roles, please review the Roles documentation.

## Workflow Fields

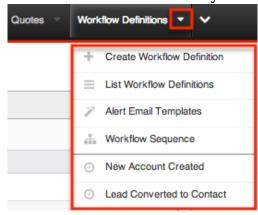
The Workflow module contains seven fields that will retain both functional and organizational purposes in Workflows. These fields cannot be edited or added to because of their functional purposes in the workflow process.

Field	Dropdown Options	Description	
Applies To	<ul> <li>New and Updated Records</li> <li>New Records Only</li> <li>Updated Records Only</li> </ul>	Choose if this workflow is going to fire on all saves, when a new record is created, or when an existing record is updated	
Description	(Text Area Field, no character limit)	A description of this workflow and its purpose	
Execution Occurs	<ul><li>When record saved</li><li>After time elapses</li></ul>	Whether the workflow effects will occur once a record is saved, or if they will be re-checked and occur after a defined amount of time	
Name	(Text field, limit of 50 characters)	Identifying name of the workflow	
Processing Order	<ul><li> Alerts then Actions</li><li> Actions then Alerts</li></ul>	If your workflow is going to include both email alerts and workflow actions, select which of the two you would like to happen first	
Status	• Active • Inactive	When set to Inactive, the workflow will not process	
Target Module	(Module List)	A list of all modules in Sugar that are compatible with workflows. Choose which module the primary conditions will be	

triggered from

## Workflow Module Tab

The Workflow Definitions module tab is typically located on the navigation bar at the top your Sugar screen after navigating to Admin > Workflow Management. Click the tab to access the Workflows list view. You may also click the triangle in the Workflow Definitions tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The



The Actions menu allows you to perform the following operations:

Menu Item	Description
Create Workflow Definition	Opens the edit view layout to create a new workflow
List Workflow Definitions	Opens the list view layout to search and display workflows
Alert Email Templates	Opens the Alert Template menu to allow you to create, view, and edit existing alert email templates
Workflow Sequence	Opens the Workflow Sequence menu to allow you to reorganize the processing order of your workflows for each module

# Creating Workflows

Workflows are created by accessing the Admin menu, navigating to the Developer Tools section and then clicking on the link for Workflow Management.



**Product and Quotes** 

Once on the Workflow Management module, you can create a new workflow or duplicate an existing one. The process of creating workflows contains four main sections. First, the workflow itself must be created. This creation process will include the name of the workflow, as well as the rest of the values for the fields listed in the Workflow Fields section of this documentation. After the workflow has been saved, the next step will be to configure the Workflow Conditions, which defines what will cause the workflow to happen, or its triggers. Finally, the Workflow Alerts and Workflow Actions must be configured. These define what the workflow will do to Sugar records or what emails will be sent out after triggered.

## Creating Via Workflow Module

The most common method of workflow creation is via the Create Workflow Definition option in the Workflow Management module. This opens up the edit view layout which allows you to enter in all the relevant information for the workflow.

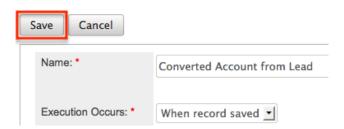
Use the following steps to create a workflow via the Workflow Management module:

- 1. Navigate to Admin > Workflow Management.
- 2. Click the triangle in the Workflow Definitions tab to open the Actions menu and select "Create Workflow Definition".



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Once the necessary information is entered, click "Save".

Create



- 5. Define the conditions of the workflow that will trigger the workflow to process as described in Creating Workflow Conditions.
- 6. Define what will happen when the workflow is processed as described in Creating Workflow Alerts and Creating Workflow Actions.

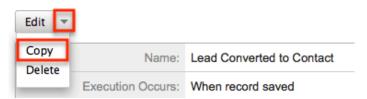
## Creating Via Duplication

You can also create a new workflow definition by duplicating an existing workflow record. The duplicate option is useful if the workflow you are creating has similar information, conditions, and alerts and actions to an existing workflow as all of these are copied over during the duplication process.

Use the following steps to create a workflow definition by duplicating an existing record:

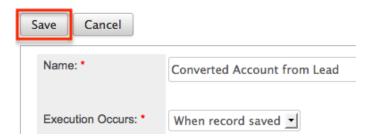
- 1. Navigate to a workflow definition's detail view.
- 2. Click the Actions menu and select "Copy".

Lead Converted to Contact



3. The displayed edit view is pre-populated with the original workflows values. Update the necessary fields then click "Save".

Create



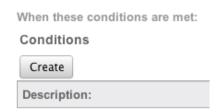
# **Creating Workflow Conditions**

Workflow conditions are an essential function when creating workflows. Workflow Conditions define the "cause" side of workflow's cause and effect type functionality. At least one condition must exist for a workflow to trigger. If more

than one conditions exist, they all must be fulfilled for the workflow to trigger.

Use the following steps to create a workflow condition:

- 1. Navigate to the detail view of the workflow.
- 2. Click "Create" on the Conditions subpanel to open a popup box with the different condition possibilities.



- 3. Follow the prompts in the popup to create the different conditions, as described below. Once complete, click "Save" and the condition will be added to your workflow definition.
- 4. Repeat this process as necessary to add additional conditions.
- 5. After the condition has been created, it will appear in the conditions subpanel

Note: The available conditions will vary depending on the execution type ("When record saved" or "After time elapses") you have chosen for the workflow.

Creating "After Time Elapsed" Workflow Conditions

The "After time elapsed" workflow condition options are different for the first condition and subsequent conditions. This is to ensure that your time based condition is recorded. After that, you can set additional conditions to filter the records from which the workflows will fire.

The initial "After time elapsed" workflow condition options are as follows:

- When a field in the target module changes to or from a specified value: You will be asked to specify a specific field within the module, and its value. Then, you will select the amount of time after the change that, after this threshold, the workflow will fire.
- Field does not change for a specified amount of time: You will be asked to specify a specific field within the module and a timeframe. After the field changes, if it does not change again in the given timeframe, the workflow will fire.

Please note that the time intervals (e.g. 0 hours, 4 hours, 8 hours, etc.) you specify

when setting up the conditions can be configured via Admin > Dropdown Editor. For more information on configuring the time intervals, please refer to the Developer Tools documentation.

The secondary conditions for an "After time elapsed" workflow contain the two mentioned above, but also two others, as follows:

- When a field in the target module contains a specified value: This condition is
  used to filter records that should or should not be included in the workflow.
  You will be asked to specify a field and the value of the field, and if you want
  to include records where the field is a specific value, or if it is not a specific
  value. These conditions will vary by which field is chosen.
- When the target module changes and a field in a related module contains a specified value: This condition is used to filter records based on their related records. You will be asked to specify which relationship you would like to the workflow to look at, and which field and value should or should not be used when triggering the workflow.

Creating "When Record Saves" Workflow Conditions

The "When record saves" workflow condition options are as follows:

- When a field in the target module changes to or from a specified value: This
  option can be used to specify both the new value of a specific field to trigger a
  workflow, and also what the previous value was. You will be asked to specify
  the specific field and the new value after save to use this condition. The
  previous value is not required.
- When the target module changes: This option will cause the workflow to trigger when any change to the record takes place.
- When a field on the target module changes: This option will cause the workflow to trigger when there is any change to a specific field, regardless of what the change is.
- When a field in the target module contains a specified value: This condition is
  used to filter records that should or should not be included in the workflow.
  You will be asked to specify a field and the value of the field, and if you want
  to include records where the field is a specific value, or if it is not a specific
  value. These conditions will vary by which field is chosen.
- When the target module changes and a field in a related module contains a specified value: This condition is used to filter records based on their related records. You will be asked to specify which relationship you would like to the workflow to look at, and which field and value should or should not be used when triggering the workflow.

# Creating Workflow Alerts

Workflow alerts are one of the possible effects of workflow's cause and effect type functionality. These can be used with or without workflow actions. Workflow alerts, when triggered by the workflow condition, will cause an email to be sent to a specified recipient. These recipients include Sugar users or individuals related to the target module. To create a workflow alert, follow the following steps:

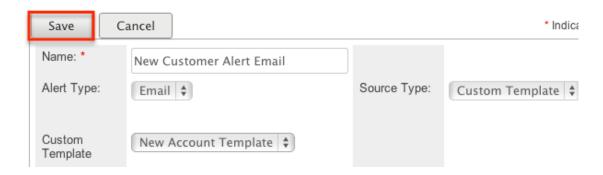
- 1. Navigate to the detail view of the workflow.
- 2. Click "Create" on the Alerts subpanel, which will bring you to the alert setup page.

Create 🔻	

3. You will be presented with the following fields to populate.

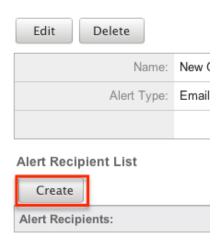
Field	Description
Name	Choose a brief, descriptive name for this alert
Alert Type	Defaults to Email, which is the most common usage, but you can choose Invite if the alert is going to send an invite for appointment based modules
Source Type	Normal message will produce a plain text message (written in the Alert Text field), or Custom Template will use a Workflow Alert Template
Alert Text	Enter in text that will be sent to the alert recipients for a simple message without formatting or variables
	Note: This field will show depending on the selection made in Source Type
Custom Template	Select from your available Workflow Alert Templates in this dropdown for this alert's target module
	Note: This field will show depending

Enter necessary values for all fields and click Save.



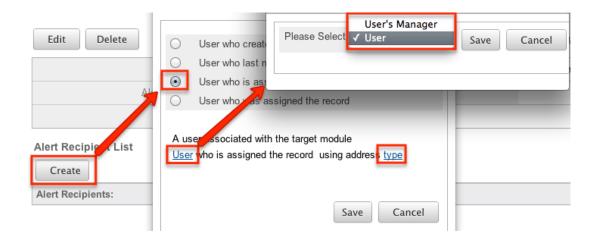
On the next screen, click "Create" on the "Alert Recipient List" subpanel to choose your recipients.

New Customer Alert Email



Note: The only options that will send to someone other than a Sugar user are "Recipient associated with the target module" and "Recipient associated with a related module".

Pick the recipients, select any blue hyperlink text to define any variables, such as who a specified user is, or if the recipient should be sent the email as a "To", "CC", or "BCC" recipient, and then click "Save" to continue.



Repeat steps 5 and 6 as need be to add additional recipients for this workflow alert.

Click the hyperlink for "Send alert to the following recipient" to make any changes, remove any errant recipients with the "Remove" button on the corresponding row, or the "Edit" button on the top left if you need to change any configurations. Once complete, click "Return to Workflow Definition".

# Return to Workflow Definition Name: New Customer Alert Email Alert Type: Email Alert Recipient List Create

After the alert has been created, it will appear in the Alert Subpanels.

Send alert to the following recipient: A user associated with the target module

# Creating Workflow Actions

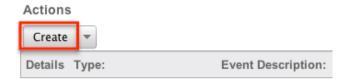
Alert Recipients:

New Customer Alert Email

Workflow actions are one of the possible effects of workflow's cause and effect type functionality. These can be used with or without Workflow Alerts. Workflow actions, when triggered by the workflow condition, will cause either updates to existing records or creation of new records. To create a workflow action, follow the

#### following steps:

- 1. Navigate to the detail view of the workflow that you are working on
- 2. Click "Create" on the Actions subpanel to open a popup box with the different action possibilities



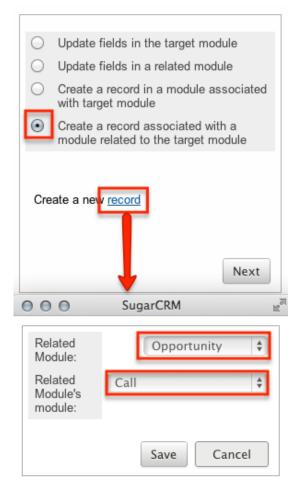
- 3. Follow the prompts in the popup to create the different actions, as described in Workflow Actions. Once complete, click "Save" and the action will be added to your workflow definition.
- 4. Repeat this process as necessary to add additional actions.
- 5. After that action has been created, it will appear in the Actions Subpanel.

#### Workflow Action Types

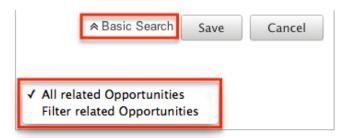
There are four options for actions that are available. These options can make updates to the module your workflow is tied to, or a module related to this target module. The options can also create records in related modules or modules related to related modules. The options are as follows:

- Update fields in the target module: You will be given the option so select one or more fields within the target module of the workflow, and what the new value or values should be.
- Update fields in a related module: You will first be given the option to choose which related module to the target module you would like to update. After selecting the related module, you will select one or more fields within the related module to update, and what the new value or values should be.
- Create a record in a module associated with target module: You will be given the option to choose a related module to your target module. This action will create a new record in the related module, such as creating a new call related to an account, where Accounts is the target module. After selecting the module, you will be given the option to populate any or all fields with the related module. Any required fields will be marked with a red asterisk.
- Create a record associated with a module related to the target module: This action will take a record, or all records, related to your target module, and create a related record to this middle module. When creating these actions, you are asked to select the related module to your target module, and then

select that module's related module where the new record is going to be created. For example, if your workflow's target module is Contacts, the following screenshot shows how a call will be created and related to the contact's related Opportunity.



On the next screen, after selecting your modules, you will select one or more fields within the related module to update, and what the new value or values should be. Clicking on the "Advanced Search" button at the bottom of this window will allow you to select if the workflow is specific for all related records (Opportunities), or if the related record should be filtered at all.



The "Advanced Search" function also contains special functions for specific field types:

- Assigned User: Allows you to configure the action to set the assigned user to be either the actual user or the user's manager who either is currently assigned to the triggered record, the one who most recently updated it, the one who created it, or is the one saving the record.
- Team ID : Allows you to configure the action to set the team to be the default team of the user who triggered the workflow or, if it is updating a related record, to match the primary team of the triggered record.
- Dropdown Fields: Allows you to configure the action to sequentially move the dropdown option forward or backward in the order in which it appears in the dropdown list.

# Viewing Workflows

There are various options available for viewing workflow records in Sugar including via Workflow Definitions list view, Workflow Definitions detail view, and the Workflow Definitions Last Viewed menu. Each method will provide varying degrees of detail and insight into the workflow.

## Viewing Via List View

The Workflow Definitions list view displays all records meeting the current search criteria. To access the list view, simply click the Workflow Definitions module tab, which is made available by navigating to Admin > Workflow Management. While list view shows key workflow fields, you can click the workflow definition's name to open the record in detail view. For more information on viewing workflows via list view, please refer to the Workflows List View section of this documentation.

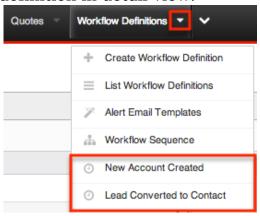
# Viewing Via Detail View

The Workflow Definitions detail view displays thorough workflow information including all workflow fields followed by subpanels showing the Conditions, Alerts, and Actions that process the workflow. The detail view can be reached by clicking a workflow definition's link from the Workflow Definitions list view. For more information on viewing workflows via detail view, please refer to the Workflow Detail View section of this documentation.

# Viewing Via Recently Viewed

As you work, Sugar will keep track of which workflows you have recently viewed. Click the Actions menu in the Workflow Definitions module tab to see a list of your most recently viewed workflows and click each name to open the workflow

#### definition in detail view.



# Searching Workflows

The Workflow Definitions list view includes a Basic and Advanced Search to help you locate records easily and effectively. Once the search is performed, the relevant results will be displayed in the Workflows list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you can use the wildcard at the beginning of your text as well (e.g. %created). This will pull up any workflow that has the word "created" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used in the different methods, please refer to the Search documentation.

#### Basic Search

Basic search offers a simplified search experience allowing you to search for just the name of the workflow. From the Basic Search panel, you can click "Advanced Search" to access additional search functionality as needed.

The buttons and checkboxes available in Basic Search panel have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear criteria from the Name field.

#### Workflow Definitions



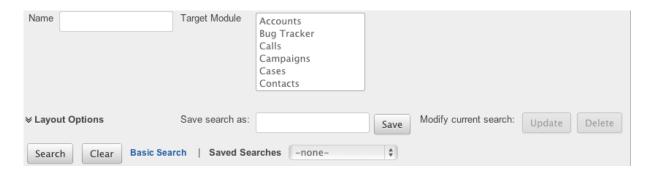
When you run a search, Sugar will return records matching all (as opposed to any) of the fields for which you have given a value. Once the search is complete, the relevant results will populate in the list view beneath the search panel. To see all workflow definitions, simply click "Clear" and then "Search" to perform a blank search with no filters.

#### Advanced Search

Advanced Search offers a more in-depth search experience than Basic Search including additional fields, layout options, and saved search capability. From the Advanced search panel, you can click "Basic Search" for simplified searching.

The buttons and dropdowns available in Advanced Search have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.
- Layout Options: Use the expandable Layout Options section to configure your list view. For more information, please refer to the Layout Options section of the Search documentation.
- Saved Searches: Save, recall, update, and delete searches which you use often. For more information, please refer to the Saved Search section of the Search documentation.



When you run a search, Sugar will return records matching all (as opposed to any) of the fields for which you have given a value. For example, if you select the Target Module as "Accounts" or "Contacts" and enter in the word "Created" for the Name search, Sugar will only return workflow definitions with a matching name from the

Accounts or Contacts modules. Once the search completes, the relevant results will populate in the list view beneath the search panel. To see all workflow definitions, simply click "Clear" and then "Search" to perform a blank search with no filters.

### Workflows List View

The Workflows list view displays all workflow definitions meeting the current search criteria. You can view the basic details of each workflow within the field columns. The list view also allows for records to be edited or deleted as need be.

## **Pagination**

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

By default, Sugar displays 20 records per list view page, but the number of records displayed can be changed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation.

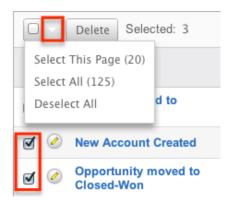


#### Checkbox Selection

You can delete workflow definitions directly from the list view by first selecting the desired records. To select individual workflows on the Workflow Definitions list view, mark the checkbox on the left of each row. To select or deselect multiple workflow definitions on the list view, use the options in the checkbox dropdown menu:

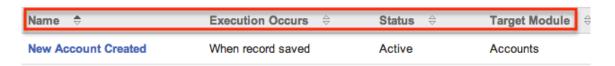
- Select This Page : Selects all records shown on the current page of workflow results.
- Select All: Selects all records in the current search results across all pages of workflow results.

• Deselect All: Deselects all records that are currently selected.



## Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. The list view may be sorted by only one column at a time. You can also set a default order-by column using the layout options in Advanced Search. For more information on setting a default column sort, please refer to the Layout Options section of the Search documentation.



## Workflow Detail View

The Workflow Definition detail view displays thorough workflow information including all workflow fields. You will also see the Conditions, Alerts, and Actionssubpanels beneath the workflow fields. The detail view can be reached by clicking a workflow record's link from the Workflow Definitions list view or from the recently viewed menu.

#### Actions Menu

The Actions menu on the top left of each workflow definition's detail view allows you to perform various actions on the current record. The action items can be configured to be displayed as separate buttons instead of a dropdown menu via Admin > System Settings. For more information on configuring the actions menu, please refer to the System documentation in the Administration guide.

#### New Account Created



The Options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit this workflow definition
Сору	Duplicate this workflow definition
Delete	Delete this workflow definition

### Next or Previous Record

On the upper right of the Workflow Definitions detail view, there are four buttons that allow you to page through each workflow in the Workflow Definition list view's current search results. Clicking the Previous button displays the previous workflow of the current search results while clicking the Next button displays the next workflow of the current search results. The two double-arrow First Page and Last Page buttons allow you to skip to the first or the last workflow of your current results. The text in between shows which workflow result you are currently viewing within the total number of current results.

New Account Created



# Conditions Subpanel

The Workflow Conditions subpanel allows you to create additional conditions for your workflow and also lets you view and modify the existing ones. The subpanel shows a Description and a Value for each condition. The Description is an automatically generated, brief explanation of the condition. The Value shows what field or fields are covered in the condition, if not expressly stated in the description. The Conditions subpanel allows the following operations to be

### performed.

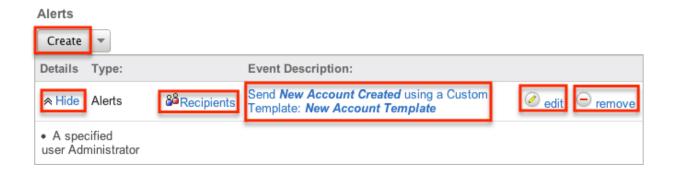
- To view the details or edit a condition, either click the condition's description in the subpanel or click the edit button to from the far right of the record's row to open the condition popup.
- To create a new workflow condition, choose "Create" from above the subpanel, then follow the steps supplied in the Creating Workflow Conditions
- To delete a condition on this workflow, choose "Remove" from the far right of the record's row.



## Alert Subpanels

The Workflow Alert subpanel allows you to create additional alerts for your workflow and also lets you view and modify the existing ones. The subpanel displays the "Detail"s, "Type", and "Event Description" for each condition. After an alert has been created, there is also a column for Recipients. The "Event Description" is automatically generated and provides a brief explanation of the alert with the name of the Alert record and what template (if applicable) is being sent to the recipients. The Alerts subpanel allows the following operations to be performed.

- To view or edit an alert, either click the alert's event description or click "Edit" on the far right of the row to open the alert's edit view.
- To view the recipients of the alert, click "Show" from the far left of the record's row. Click "Hide" to collapse the drawer highlighting the recipients
- To edit or add recipients of the workflow alert, click "Recipients". This button will also open the alert's detail view.
- To create a new workflow alert, choose "Create" from above the subpanel, then follow the steps supplied in the Creating Workflow Alerts section of this documentation.
- To delete an alert on this workflow, choose "Remove" from the far right of the record's row.



## **Actions Subpanel**

The Workflow Actions subpanel allows you to create additional actions for your workflow and also lets you view and modify the existing ones. The subpanel shows a Details, Type and an Event Description for each condition. The Event Description is an automatically generated, brief explanation of the action that will be performed by the workflow. The Conditions subpanel allows the following operations to be performed.

- To view the details or edit a condition, either click the condition's description in the subpanel or click the edit button to from the far right of the record's row to open the condition popup.
- To view the actions that will be performed, click "Show" from the far left of the record's row. Click "Hide" to collapse the drawer highlighting the actions.
- To create a new workflow action, choose "Create" from above the subpanel, then follow the steps supplied in the Creating Workflow Actions section of this documentation.
- To delete an action on this workflow, choose "Remove" from the far right of the record's row.



# **Editing Workflows**

Workflows may be edited at any time to update or add information to the definition. You can make changes to existing workflow definitions via the

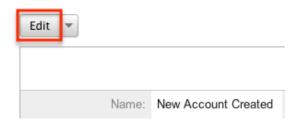
Workflows edit view. Edit view is available within the Workflows module and includes all of the Workflow fields. It can be accessed either via the detail view or list view. Please note that Conditions, Alerts, and Actions are not edited through the Workflow edit view.

Note: After a workflow has been created, the fields "Execution Occurs" and "Target Module" cannot be edited

### Editing Via Detail View

You can edit workflows via the detail view by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve the changes made.

New Account Created



## Editing Via List View

You can edit workflows via the list view by clicking the Pencil icon to the left of each workflow's name. The page will navigate to the edit view. Update the necessary fields, then click "Save" to preserve the changes. After saving, you will be brought to the detail view of the workflow.



# **Deleting Workflows**

If a workflow definition is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from either the Workflow Definitions detail view or list view. Deleting via the detail view allows you to delete a single record while the list view allows for mass deleting multiple records at once. Deleting the workflow definition will also remove the conditions, actions, and alerts to stop workflows from firing.

## Deleting Via Detail View

Use the following steps to delete a workflow via the detail view:

- 1. Navigate to a workflow definition's detail view.
- 2. Select "Delete" from the Actions menu.

New Account Created

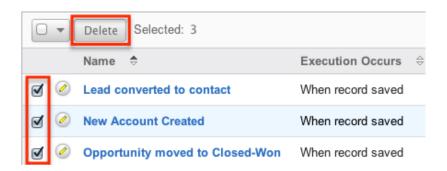


3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

### Mass Deleting Via List View

Use the following steps to delete one or more workflows via the list view:

- 1. Navigate to the Workflow Definitions list view via Admin > Workflow Management.
- 2. Use the Basicor Advanced Searchto find the Workflow Definitions you wish to delete.
- 3. Select the desired records individually or using the checkbox dropdown's options.
- 4. Choose "Delete" from the Actions menu.



5. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of workflow definitions. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

# Workflow Alert Templates

When sending a workflow alert, you have the option of sending either a "Normal Message" which will be just a simple, plain text alert, or utilizing a workflow template. Templates have the option to use full HTML editing, to include formatting changes, colors, variables to include data from fields in Sugar, and more.

## Alert Template Fields

The Workflow Templates functionality contains several fields that will retain both functional and organizational purposes in Workflows. These fields cannot be edited or added to because of their functional purposes in the workflow process.

Description
This is where you can design your email template using the WYSIWYG (What you See Is What You Get) editor. Click the "Alt Text" checkbox to edit the plain text version of this email. The entry into this box is what will actually be sent to the recipients of the email.
A short explanation of the template and what it is used for.
Used to select which field from the given module will be inserting into the Variable Insert field to eventually be inserted into the template, which can be changed by updating the Related Module dropdown field.
What sender's email address will be shown on the email when received by the recipient.
Note: Mail servers have the functionality to override this setting meaning the email address will show as the one that actually sends this, defined in Admin > Email Settings. Please review the Emails documentation for more information.

From Name	What sender's name will be shown on the email when received by the recipient.
Name	Identifying name of the template.
Related Module	List of modules related to the Target Module, which will change the Field List and, therefore, change the fields that can be used for variables in the email.
Subject	The subject line of the email which will show for the recipients.
Target Module	Selected when creating the template and a non-editable field, this will cause the template show when using the template for workflows made to the corresponding module.
Type	Will only show as workflow, but will vary when making other template types to include Email and Campaign.
Value Type	Select "New Value" or "Old Value" if the variable will be changing on the workflow to determine if the variable should include the value of the field before or after the record is saved.
Variable Insert	This field will build the variable for you based on the Target Module, Related Module, Field List, and Value Type fields.

# **Creating Alert Templates**

Alert Templates are created only via the Workflow module. Alert templates can be created either directly from the workflows module via the Alert Templates page, or via duplication. The Target Module is defined during the creation process, and then a full edit view layout opens including all fields that will be necessary to create the template.

### Creating Alert Templates Via Workflows Module

The most common method of template creation is via the Alert Email Templates option in the Workflow Definitions module tab. This will open the edit view layout allowing you to configure the template to your specifications.

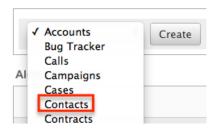
Use the following steps to create the template via Workflow Management:

- 1. Navigate to Admin > Workflow Management.
- 2. Click the triangle in the Workflow Definitions tab and select "Alert Email Templates".



3. Select the module you wish to create the alert template for then click "Create".

Alert Templates



- 4. Enter appropriate values for the following fields below. Required fields are marked with a red asterisk and must be completed prior to saving.
  - Name : Enter a name for the email template.
  - Type: Leave as "Workflow".
  - From Name: The name that the email recipient will see as the sender.
  - From Address : The email address that the email recipient will see as the sender.

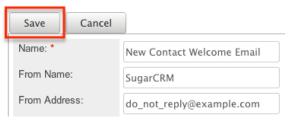
Note: This may be overwritten by your mail server configured in Admin > Email Settings.

- Description : Enter a description or other information about the template.
- Related Module : To insert a field from a record related to the target module, select the related module.
- Subject: Enter the subject of the email that will be sent.
- Body: Enter the body of the emails that will be sent.
- Attachments: Click the "Choose File" button to open a file selection window from your browser and attach a file. Click the Sugar Document button to attach a file from the sugar database.
- 5. Populate the template body that will be sent to the email recipients. Insert variables as necessary for your workflows.
- 6. Using the TinyMCE functions, add simple formatting to your email's content.

For more advanced customization you can click the HTML button in the top left to access and edit the generated HTML code. For more information on using TinyMCE, please refer to the User Interface documentation.

Note: If images or advanced CSS are required in your email template, it is highly recommended to host the images or CSS file on a publicly available hosting service and link to it in the email template.

7. Once the necessary information is entered, click "Save" to preserve your changes to the email template.



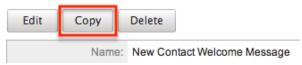
### **Creating Alert Templates Via Duplication**

You can also create a new template by duplicating an existing template. The duplicate option is useful if the template you are creating has similar information to an existing template.

Use the following steps to create a template by duplicating an existing template:

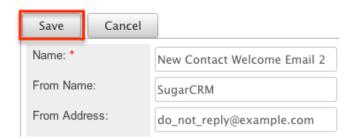
- 1. Navigate to an existing template's detail view.
- 2. Click the action option for "Copy".

New Contact Welcome Message



3. The displayed edit view is pre-populated with the original template's values. Update the necessary fields then click "Save".

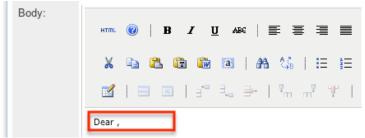
New Contact Welcome Email



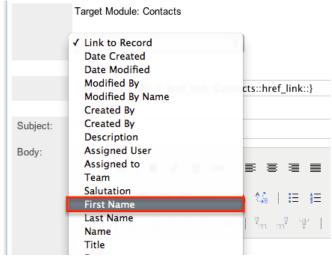
### **Inserting Variables**

When constructing the subject and body of your email, Sugar allows you to insert variables, or placeholders, into the template that will be populated with the record's information for that variable. The variables allow you to insert data from fields within the record that triggered the workflow and its related records into your template. Use the following steps to insert a variable for the recipient's first name into the template:

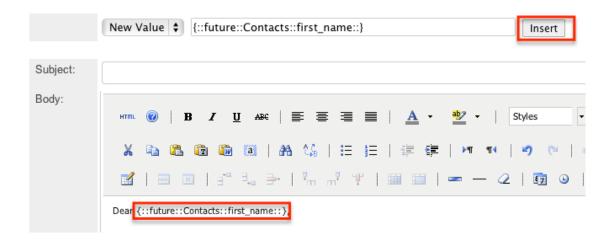
1. Click to place your cursor on the location in the subject or body where the recipient's first name should appear.



2. Set the variable dropdown to the desired field from the workflow's target module. For our example, select "First Name".



- 3. Choose between "New Value" and "Old Value" in the value dropdown field. This will determine if the value of the given variable shown on the template will be the value of the field in question before or after the workflow fired. This functionality is especially helpful if you are showing a change between two values, such as an opportunity moving from new ("Old Value") to closed-won ("New Value"). "New Value" is the default option for this list.
- 4. Click "Insert" to insert the generated variable name to your subject or body at your cursor's location.



Note: You can click "Alt Text" at the bottom of the page to have the plain text option send differently than the HTML text.

## **Viewing Alert Templates**

There are various options available for viewing workflow templates in Sugar including via Workflow Templates list view, Workflow Templates detail view, and from the Emails module.

### Viewing Alert Templates Via List View

The Workflow Templates list view displays all workflow templates and key fields about each template. To access the list view, simply navigate to the Workflow Management section of the Admin menu and select "Alert Email Templates" from the Workflow Definitions module tab. Use the Alert Templates list view for the following functions:

- To open the record in detail view, click the template's name
- To re-sort the list view results one column at a time, click the column header, and the columns will sort alphabetically or chronologically
- Use the arrows in the top right side of the list view navigate through the pages of your templates, or skip to the first or last page using the double arrow buttons
- To delete a template, click "Remove" from the far right of the corresponding template's row

### Viewing Alert Templates Via Detail View

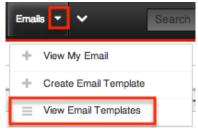
The Alert Templates detail view displays thorough alert template information

including all template fields and a preview of the workflow template that recipients will see after it is sent. The detail view can be reached by clicking a template's link from the Alert Templates list view.

While viewing the detail view, the preview of the email template is shown as the last field option. You can also click the "Alt Text" checkbox to see how this email will look when the recipient views it as plain text.

### Viewing Alert Templates Via Emails Module

The Emails module contains all of the email templates in Sugar. Alert Templates can be accessed via Emails, in addition to accessing via Workflow Management. To access alert templates via Emails, simply select the View Email Templates option from the Emails module tab.

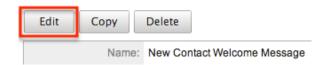


This will bring you to the Email Templates list view where you can select which template you would like to view. For more information on navigating the Emails module, please review the Emails module section of the Application Guide.

# **Editing Alert Templates**

Alert Templates may be edited at any time to update or add information to the template. You can make changes to existing templates via the Alert Templates edit view. Edit view is accessible via the Alert Templates detail view. You can edit alert templates via the detail view by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve the changes made.

New Contact Welcome Message



## **Deleting Alert Templates**

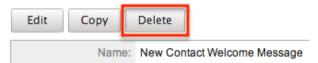
If an alert template is invalid or should no longer appear in your organization's

Sugar instance, it may be deleted from either the Alert Templates detail view or list view. Deleting alert templates will not delete any workflows using them. If a workflow is utilizing a template which you are deleting, it is recommended that the workflow be updated to include a new template on the alert.

To delete a template from the template's detail use the following steps:

- 1. Navigate to the Alert Templates detail view.
- 2. Click the Delete button.

New Contact Welcome Message



3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

To delete a template from the list view, use the following steps:

- 1. Navigate to the Alert Templates list view.
- 2. Select the "Remove" button on the row of the template you would like to delete.



3. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

## Time Intervals for Time Elapsed Workflows

Time elapsed workflows trigger after a specified amount of time has passed from when the record was saved. Users with administrator or developer access have the ability to add new time intervals to the dropdown list ("tselect\_type\_dom") used for time elapsed workflows. The time interval dropdown list can be viewed and edited via Admin > Dropdown Editor. For more information on Dropdown Editor, please refer to the Developer Tools documentation.

By default, the time intervals are:

4 days5 days1 week2 weeks3 weeks

0 hours	3 days	30 days

4 hours	60 days
8 hours	90 days
12 hours	120 days
1 day	150 days
2 days	180 days

The following steps cover adding a 1 hour time interval to the dropdown list via Dropdown Editor as an example:

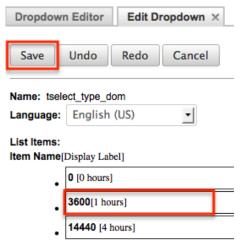
- 1. Navigate to Admin > Dropdown Editor.
- 2. Locate the tselect\_type\_dom dropdown list and click to view the details.



- 3. Enter in an item name (e.g. 3600) and display label (e.g. 1 hours) into the corresponding fields below the existing item list.
  - Please note that the Item Name field must be in seconds equaling to the hours, days, weeks you wish to add.



- 4. Click "Add" to add the new value to the dropdown list.
  - Note: The value will be added to the end of the list, but you can drag and drop the item to the top of the list if you wish. For more information on how to reorder and position values in the dropdown list, please refer to the Developer Tools documentation.



5. Once the item has been added and placed in the correct position, click "Save" to preserve the change.

The newly added time interval will now appear in the corresponding dropdown list when creating the condition for a time elapsed workflow.

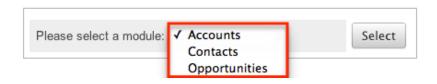
# Workflow Sequence

When a record is saved within a module, Sugar will check all workflows for that module to see if they need to process and perform any actions or send any alerts. Sugar processes each of the workflows in a sequential order, one after another. By default this order is determined as the order in which the workflow definitions were created; the oldest workflow fires first, moving up to the newest. This order, however, can be reorganized using the Workflow Sequence menu.

Workflow Sequence can be accessed by the following process:

- 1. Navigate to Admin > Workflow Management.
- 2. On the Workflow Definitions module tab, select "Workflow Sequence".
- 3. Select the module you would like to reorganize from the dropdown menu and click "Select".

Workflow Sequence



This process will produce a list view with all of the workflows for the particular selected module. The list view will show three columns containing details from the

#### **Workflow Sequence: Accounts**



The Process Order column is used to reorganize the workflows into their correct processing order. The Up button will move the workflow up one rung in the process, whereas the Dn button will lower it in the sequence. The order of the workflow process for this module is determined on this menu, starting at the top and working its way down.

Last Modified: 08/04/2017 07:54pm

# **Products and Quotes**

### Overview

The configuration options in the Admin page's Products and Quotes panel enable you to define a variety of options for the Quoted Line Items and Quotes modules. The Products and Quotes panel provides access to the following administrative modules:

Module	Description
Product Catalog	List of products sold by your organization; used as a template for the
Product Categories	The categories by which your products are organized in the Product Catalog
Product Types	The Type dropdown list in the Product Catalog
Manufacturers	The Manufacturer Name dropdown list in the Product Catalog
Shipping Providers	The Shipping Provider dropdown list in
Tax Rates	The Tax Rate dropdown list in Quotes

Please note that only administrators or users with developer-level role access have the ability to control the configurations within this documentation.

# Working With Product Catalog and Categories

The Product Catalog and Product Categories modules use Sugar's Sidecar user interface. The following links will open specific sections of the User Interface documentation where you can read about views and actions that are common across most Sidecar modules. The sections following this table describe behaviors and functionality specific to the Products- and Quotes-related modules.

Content Link	Description
Creating Records Basic Record Creation Creating Via Subpanels Creating Via Duplication Importing Records	The Creating Records section covers the various methods of creating new records, including via the Create button in the module, via the subpanel on related module records, duplication of an existing record, and importing a list of records into Sugar using a .csv spreadsheet.
Viewing Records Viewing Via List View Viewing Via Record View Viewing Via Recently Viewed Viewing Via Preview Viewing Via Reports	The Viewing Records section describes the various methods of viewing records, including via the list view and record view, the Recently Viewed menu in the module tab, previewing records in the right-hand side panel, and reports displaying the record's data.
Searching for Records Global Search List View Search Creating a Filter Saving a Filter	The Searching for Records section provides an introduction to the two searching methods for locating Sugar records: global search, which searches across all Sugar modules, and list view search, which searches and filters within the module.
List View Total Record Count Create Button List View Search Checkbox Selection Mass Actions Menu Column Reordering Column Resizing Column Sorting Column Selection Preview Record Actions Menu More Records Intelligence Pane	The List View section walks through the many elements of the List View layout, which contains a filterable list of all records in the current module. While the generic menu options are described in the User Interface sections linked to the left, the options specifically available in the list view are described in the List View Mass Actions Menu and List View Record Actions Menu sections of the module overviews below.

Record View Next or Previous Record Actions Menu Show More Intelligence Pane	The Record View section walks through the many elements of the Record View layout, which contains detailed information about a single record. While the generic menu options are described in the User Interface sections linked to the left, the options specifically available in the record view are described in the Record View Actions Menu sections of the module overview sections below.
Editing Records Editing Inline Via Record View Editing Via Record View Editing Inline Via Subpanels Editing Inline Via List View Mass Editing Via List View Editing Fields	The Editing Records section describes the various methods of editing existing records, including inline via the record view, in full edit mode on the record view, inline via the subpanel on related module records, inline via the list view, and via the Mass Update option on the list view. The Editing Fields section provides instructions for modifying the different field types available in Sugar records.
Deleting Records Deleting Via Record View Deleting Via List View Mass Deleting Via List View	The Deleting Records section describes the various methods of deleting unwanted records, including via the record view, an individual record's Actions menu on the list view, and the Mass Actions menu on the list view.
Exporting Records	The Exporting Records section provides an introduction to the export functionality, which allows you to download a list of records and all their data as a .csv file for use outside of Sugar (e.g. in Microsoft Excel).
Recalculating Calculated Values	The Recalculating Calculated Values section provides instructions on utilizing the Recalculate Values list view option to update calculated field values in the module if the administrator has changed the field's formula via Admin > Studio.
Finding Duplicate Records	The Finding Duplicate Records section provides instructions for locating duplicate records. If searching on matching fields (e.g. Name) identifies

	one or more duplicates, they can be merged into a single record.
Merging Records Merging Via List View	The Merging Records section provides instructions for merging duplicates, which combines field values and related records into a single record.
Sharing Records	The Sharing Records section provides instructions for the Share record view option, which composes an email with a link to the record. If the recipient is logged into Sugar, clicking the link will bring them directly to the record view.

# **Product Catalog**

Sugar's Product Catalog module contains a list of all products or services that your organization sells. This module provides the Quoted Line Items module with the template used when creating products to be used for Opportunities and Quotes, including pricing and cost information and information about the manufacturer.

Products within the Product Catalog can be broadly classified into product types, such as Software and Hardware. Each product type can be further organized into several product categories. For example, the software product type can contain product categories such as Spreadsheets and Word Processors. You can also create sub-categories within a category.

This documentation will cover information and actions specific to the Product Catalog. For instructions concerning views and actions which are common across most Sugar modules, such as creating, editing, and deleting records, please refer to the Working With Product Catalog and Categories section of this page.

# **Product Catalog Fields**

The Product Catalog contains a number of stock fields that come out-of-the-box with Sugar. The definitions below are suggested meanings for the fields, but the fields can be leveraged differently to best meet your organization's needs. Fields can be altered, added, or removed via Admin > Studio. For more information on configuring fields, please refer to the Studio documentation in the Administration guide.

Field	Description
Availability	Select if the item is in stock or not from

	the dropdown list
Category Type	The product category to which the new item belongs
Cost	The actual cost of the item. This will not appear on printed quotes
Currency	The currency of the given prices (Cost, List, Unit)
Date Available	Select the date of availability if the item is out of stock
Date Created	The date the product catalog record was created
Date Modified	The date the product catalog record was last modified
Date-Cost-Price	The starting date that the cost is valid
Default Pricing Formula	Select a formula from the dropdown list to arrive at the discount price for the Unit Price field. The formulas are as follows:  • Fixed Price: Allows you to enter a
	<ul> <li>Unit Price without any calculation.</li> <li>Profit Margin: Enter the points in the adjoining field to vary the percentage against the cost.</li> <li>Markup over Cost: Choose a percentage to raise the price over the cost.</li> <li>Discount from List: Enter the discount percentage from the List Price in the adjoining field.</li> <li>Same as List: The Unit Price will be the same as the List Price.</li> </ul>
Description	A description or other information about the product
List Price	The quotable list price of the product
Manufacturer Name	The manufacturer of the product
Mft. Part Number	The manufacturer's part number for the product
Product Name	The name of the product
Product URL	The web address of product if it is

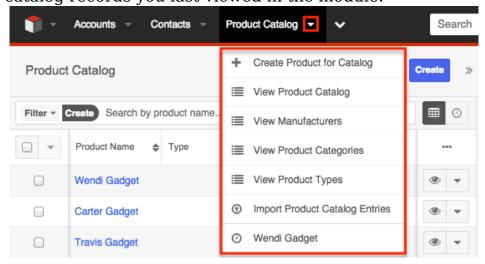
Enter the number of units that are in
stock of the product  Note: Negative values are supported in
this field.
The support person's contact information, such as the phone number or email address
Brief description or other information regarding the support provided
The name of the Customer Support person
The term (e.g. six months, one year, etc.) in which support will be provided for the product
User-created keywords that can be used to identify records in filters, dashlets, and reports  Note: For more information on creating and using tags, please refer to the Tags documentation.
Tax classification (e.g. taxable, non-taxable) for the product
The specified product type
The unit price of the product
The vendor's part number for the product
The weight of the product  Note: Negative values are supported in this field.

# **Product Catalog Menus**

The Product Catalog module contains various options that are available via menus in the module tab, list view, and record view. The following sections present each menu and its options with links to more information about each option in the User Interface documentation or, for module-specific functionality, within this page.

### Module Tab Menu

The Product Catalog module tab can be accessed by clicking the Product Catalog option in the Admin menu. Click the tab to access the Product Catalog list view. You may also click the triangle in the Product Catalog tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of product catalog records you last viewed in the module.



The Product Catalog's Actions menu allows you to perform the following operations:

Menu Item	Description
Create Product for Catalog	Opens the record view layout to create a new product for the catalog
View Product Catalog	Opens the list view layout to search and display the product catalog
View Manufacturers	Opens the Manufacturers list view
View Product Categories	Opens the Product Categories list view
View Product Types	Opens the Product Types list view
Import Product Catalog Entries	Opens the import wizard to create or update product catalog entries using external data

#### List View Menus

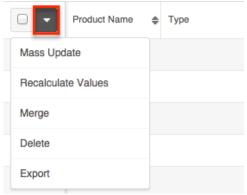
The Product Catalog list view displays all product catalog records meeting the current search criteria. You can view the basic details of each product within the

field columns. Please note that you will only be able to see product catalog records as allowed by your user access type (Developer) and assigned roles. For more information on roles, please refer to the Role Management documentation.

Users with administrator or developer access have the ability to change what fields are visible in the list view via Admin > Studio. For more information on editing layouts, please refer to the Studio documentation in the Administration guide.

#### Mass Actions Menu

The Mass Actions menu to the right of the checkbox option allows you to perform various actions on the currently selected records.



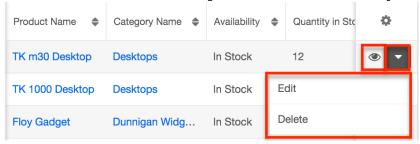
The options in the Mass Actions menu allow you to perform the following operations:

Menu Item	Description
Mass Update	Mass update one or more product catalog records at a time
Merge	Merge two or more duplicate products
Delete	Delete one or more product catalog records at a time
Export	Export one or more product catalog records to a CSV file
Recalculate Values	(Available in certain circumstances) Updates calculated values to reflect changes to calculated fields made in Studio

#### Record Actions Menu

The Record Actions menu to the right of each record's Preview button allows users

to edit, follow, or delete specific records directly from the list view.



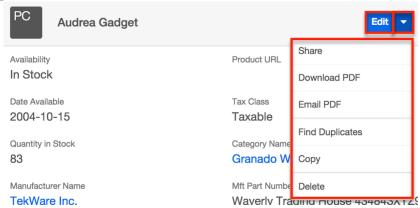
The options in the Record Actions menu allow you to perform the following operations:

Menu Item	Description
Preview (Eye icon)	Preview this product in the intelligence pane
Edit	Edit this product
Delete	Delete this product

#### Record View Actions Menu

The Product Catalog record view displays thorough product information including all product fields. The record view can be reached by clicking a product record's link in the Product Catalog list view. You have the ability to change the record view by configuring the layout via Admin > Studio. For more information on editing layouts, please refer to the Studio documentation.

The Actions menu on the top right of each product's record view allows you to perform various actions on the current record.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description

Edit	Edit this product
Share	Share a link to this product via email
Download PDF	Download product information as a PDF file
Email PDF	Email product information as a PDF attachment
Find Duplicates	Locate potential duplicates of this product
Сору	Duplicate this product
Delete	Delete this product

# **Product Categories**

The Product Categories module allows you to create categories to group records under a Product Type. This is one of the levels of organization you can use for the products and services that your organization offers, and will contain multiple entries from the product catalog.

This documentation will cover information and actions specific to the Product Catalog. For instructions concerning views and actions which are common across most Sugar modules, such as creating, editing, and deleting records, please refer to the Working With Product Catalog and Categories section of this page.

# **Product Category Fields**

The Product Category module contains four stock fields that come out-of-the-box with Sugar. The definitions below are suggested meanings for the fields.

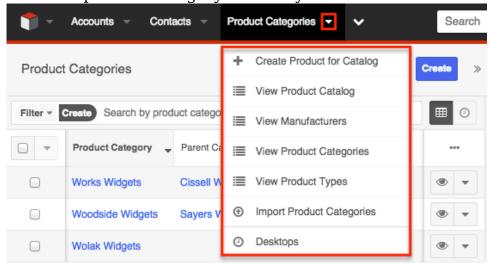
Field	Description
Product Category	The category's name as it will appear on the Product Category dropdown list
Parent Category	Select a parent product category if this product category is a sub-set of another category
Description	A description or other information about the product category
Order	Enter a number to specify the order in which this category will appear in the Product Category dropdown list

## **Product Category Menus**

The Product Categories module contains various options and functions that are available via menus in the module tab, list view, and record view. The following sections present each menu and its options with links to more information about each option in the User Interface documentation or, for module-specific functionality, within this page.

#### Module Tab Menu

The Product Categories module tab can be accessed by clicking the Product Categories option in the Admin page. Click the tab to access the Product Categories list view. You may also click the triangle in the Product Categories tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of product category records you last viewed in the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Create Product for Catalog	Opens the product catalog's record view to create a new product for the catalog
View Product Catalog	Opens the Product Catalog list view
View Manufacturers	Opens the Manufacturers list view
View Product Categories	Opens the Product Categories list view
View Product Types	Opens the Product Types list view
Import Product Categories	Opens the import wizard to create or

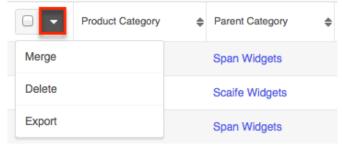
update product categories using external data

#### List View Menus

The Product Categories list view displays all product category records. You can view the basic details of each product category within the field columns. You can also click on a category's name to edit it, or delete the category by clicking the "Delete" button at the end of the row.

#### Mass Actions Menu

The Mass Actions menu to the right of the checkbox option allows you to perform various actions on the currently selected records.



The options in the Mass Actions menu allow you to perform the following operations:

Menu Item	Description
Merge	Merge two or more duplicate product categories
Delete	Delete one or more product categories at a time
Export	Export one or more product categories to a CSV file

#### Record Actions Menu

The Record Actions menu to the right of each record's Preview button allows users to edit or delete specific records directly from the list view.



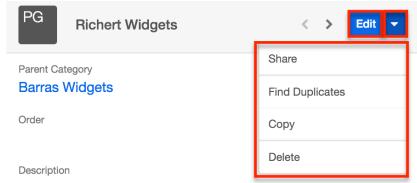
The options in the Record Actions menu allow you to perform the following operations:

Menu Item	Description
Preview (Eye icon)	Preview this category in the intelligence
	pane
Edit	Edit this product category
Delete	Delete this product category

#### Record View Actions Menu

The Product Categories record view displays product category information including all relevant fields. The record view can be reached by clicking a product category's link from the Product Categories list view.

The Actions menu on the top right of each product category's record view allows you to perform various actions on the current record.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Edit	Edit this product category
Share	Share a link to this product category
Find Duplicates	Locate potential duplicates of this product category

Сору	Duplicate this product category
Delete	Delete this product category

# **Product Types**

The Product Types module controls the Type dropdown list in the Product Catalog fields. In addition to product categories, Type allows you to define the classification of a product or service that is being offered on a product catalog record.

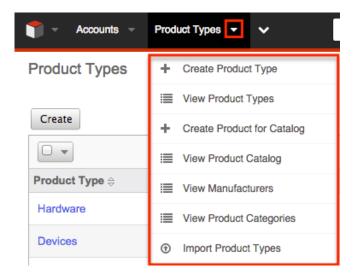
## **Product Type Fields**

The Product Types module contains three stock fields that come out-of-the-box with Sugar. The definitions below are suggested meanings for the fields.

Field	Description
Product Type	The category's name as it will appear on the Product Category dropdown list
Description	A description or other information about the product
Order	Enter a number to specify the order in which this category will appear in the Product Type dropdown list

# Product Types Module Tab

The Product Category module tab can be accessed by clicking the Product Category option in the Admin menu. Click the tab to access the Product Category list view. You may also Click the triangle in the Product Types tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of product category records you last viewed in the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Create Product Type	Opens the Product Types list view to create a product
View Product Types	Opens the Product Types list view
Create Product for Catalog	Opens the Product Catalog to create a new product for the catalog
View Product Catalog	Opens the Product Catalog list view
View Manufacturers	Opens the Manufacturers list view
View Product Categories	Opens the Product Categories list view
Import Product Types	Opens the import wizard to create or update product types using external data

# **Creating Product Types**

Product types can be created either via the Product Types module or importing product types. When creating via the Product Types module, the full edit view layout opens below the Product Types list view and includes all of the relevant fields for your product type.

Use the following steps to create a product type via the Product Types module:

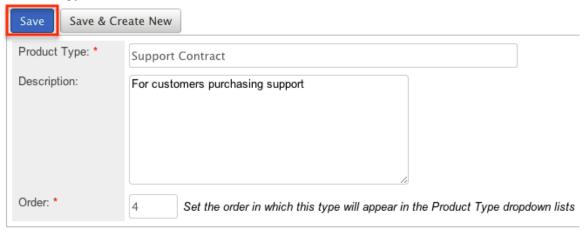
- 1. Navigate to Admin > Product Types.
- 2. Click on "Create" above the list view.

### **Product Types**



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Once the necessary information is entered, click "Save". If you would like to create a new type, click "Save & Create New".





### **Importing Product Types**

The import function allows you to push multiple product types into Sugar using a comma (or other character) delimited file instead of creating them one-by-one. For more information on importing, please refer to the Import documentation.

## **Product Types List View**

The Product Types list view displays all product type records. You can view the basic details of each product type within the field columns. You can also click on a category's name to edit it, or delete the category by clicking the "Delete" button at the end of the row.

### Column Sorting

List view provides the ability to sort all product types by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields that allow sorting will have a pair of arrows. Please note the list view may be sorted by only one column at a time.

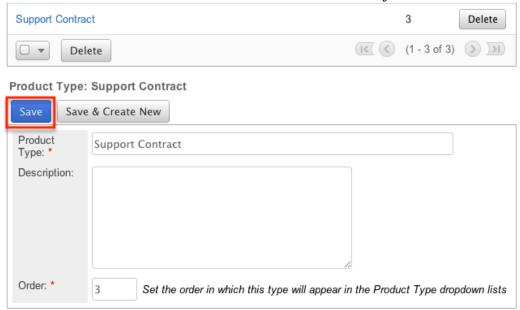


### **Ordering Product Types**

The Order field in Product Types defines the order of the different type options when viewing the Type dropdown list of a Product Catalog record. The Order field allows you to organize what order the dropdown list will display, with 1 being the highest on the list and moving down as the order number rises. When creating new product type record options, the Order field will automatically increment to the next number in the list, thereby adding the new option to the bottom of the list. The Order field can be overwritten with another number if you would like to manually re-order the options.

## **Editing Product Types**

Product Types may be edited at any time to update or add information to the record. You can make changes to existing product type records via the Product Type edit view. Edit view is available within the Product Types module, below the list view, and includes all of the relevant fields you should need.



## **Deleting Product Types**

If a product type is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from the Product Types list view.

Use the following steps to delete a product type via the detail list:

- 1. Navigate to a Product Types list view.
- 2. Locate the product type you wish to delete.
- 3. Click "Delete" on the corresponding product type's row.



4. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

## Manufacturers

The Manufacturers module controls and maintains the Manufacturer dropdown list in the Product Catalog module. This dropdown list allows you to select from a list of the manufacturers you use to classify your products and specify from which manufacturer they are produced.

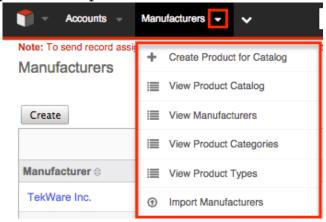
### Manufacturers Fields

The Manufacturers module contains three stock fields that come out-of-the-box with Sugar. The below definitions are suggested meanings for the fields.

Field	Description
Manufacturer	The manufacturer's name as it will appear on the Manufacturer Name dropdown list
Status	Choose whether this manufacturer's name should show on the Manufacturer Name dropdown list
Order	Enter a number to specify the order in which this category will appear in the Manufacturer Name dropdown list

### Manufacturers Module Tab

The Manufacturers list view can be accessed by navigating to the Admin page and selecting "Manufacturers" under the Product and Quotes panel. Click the tab to access the Manufacturers list view. You may also click the triangle in the Manufacturers tab to display the Actions menu. The Actions menu allows you to perform important actions within the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Create Product for Catalog	Opens the Product Catalog to create a new product for the catalog
View Product Catalog	Opens the Product Catalog list view
View Manufacturers	Opens the Manufacturers list view
View Product Categories	Opens the Product Categories list view
View Product Types	Opens the Product Types list view
Import Manufacturers	Opens the import wizard to create or update manufacturers using external dataManufacturers List View

The Manufacturers list view displays all manufacturers records. You can view the basic details of each manufacturer within the field columns. You can also click on a manufacturer's name to edit it, or delete the manufacturer by clicking the "Delete" button at the end of the row.

# Creating Manufacturers

Manufacturers can be created either via the Manufacturers module or by importing Manufacturers. When creating via the Manufacturers module, the full edit view layout opens below the Manufacturers list view and includes all of the fields for your manufacturers.

Use the following steps to create a manufacturer via the Manufacturers module:

- 1. Navigate to Admin > Manufacturers.
- 2. Click on "Create" above the list view.

#### Manufacturers



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Once the necessary information is entered, click "Save". If you would like to create a new manufacturer, click "Save & Create New".



### Importing Manufacturers

The import function allows you to push multiple manufacturers into Sugar using a comma (or other character) delimited file instead of creating them one-by-one. For more information on importing, please refer to the Import documentation.

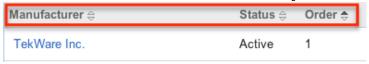
### Manufacturers List View

The Manufacturers list view displays all manufacturers records. You can view the basic details of each manufacturer within the field columns. You can also click on a manufacturer's name to edit it, or delete the manufacturer by clicking the "Delete" button at the end of the row.

### Column Sorting

List view provides the ability to sort all manufacturers by a field column in either

ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields that allow sorting will have a pair of arrows. Please note the list view may be sorted by only one column at a time.

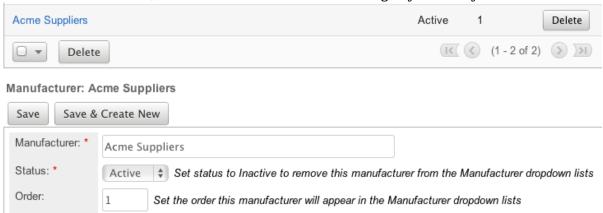


### Ordering Manufacturers

The Order field in Manufacturers defines the order of the different type options when viewing the Manufacturer Name dropdown list of a Product Catalog record. The Order field allows you to organize what order the dropdown list will display, with 1 being the highest on the list and moving down as the order number rises. When creating new manufacturer record options, the Order field will automatically increment to the next number in the list, thereby adding the new option to the bottom of the list. The Order field can be overwritten with another number if you would like to manually re-order the options.

## **Editing Manufacturers**

Manufacturers may be edited at any time to update or add information to the record. You can make changes to existing product category records via the Manufacturers edit view. Edit view is available within the Manufacturers module, below the list view, and includes all of the category fields you should need.

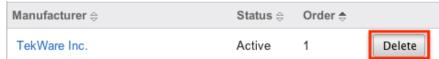


# **Deleting Manufacturers**

If a manufacturer is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from the Manufacturers list view.

Use the following steps to delete a manufacturer via the list view:

- 1. Navigate to a Manufacturers list view.
- 2. Locate the manufacturer that you would like to delete.
- 3. Click "Delete" on the corresponding manufacturer's row.



4. A pop-up message will display asking for confirmation. Click "Ok" to proceed

# **Shipping Providers**

The Shipping Providers module controls and maintains the Shipping Provider dropdown list in the Quotes module. This dropdown list allows you to determine how you are going to transport the purchased products or services to the customer.

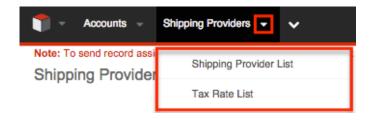
## Shipping Provider Fields

The Shipping Provider module contains three stock fields that come out-of-the-box with Sugar. The definitions below are suggested meanings for the fields.

Field	Description
Shipping Provider	The provider's name as it will appear on the Shipping Provider dropdown list
Status	Choose whether this provider's name should show on the Shipping Provider dropdown list
Order	Enter a number to specify the order in which this category will appear in the Shipping Provider dropdown list

# Shipping Providers Module Tab

The Shipping Providers list view can be accessed by navigating to the Admin page and selecting "Shipping Providers" under the Product and Quotes panel. You may also click the triangle in the Shipping Providers tab to display the Actions menu. The Actions menu allows you to perform important actions within the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Shipping Provider List	Opens the Shipping Providers list view
Tax Rate List	Opens the Tax Rates list view

## **Creating Shipping Providers**

Shipping providers can be created via the Shipping Providers menu through the Admin menu. When creating via the Shipping Providers menu, the full edit view layout opens below the Shipping Providers list view and includes all of the fields for your providers.

Use the following steps to create a shipping provider via the Shipping Providers module:

- 1. Navigate to Admin > Shipping Providers.
- 2. Click on "Create" above the list view.



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Once the necessary information is entered, click "Save". If you would like to create a new provider, click "Save & Create New".

Shipping Provider:

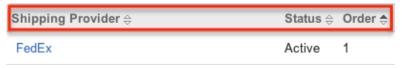


## Shipping Providers List View

The Shipping Providers list view displays all shipping provider records. You can view the basic details of each provider within the field columns. You can also click on a provider's name to edit it, or delete the provider by clicking the "Delete" button at the end of the row.

### Column Sorting

List view provides the ability to sort all shipping providers by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields that allow sorting will have a pair of arrows. Please note the list view may be sorted by only one column at a time.

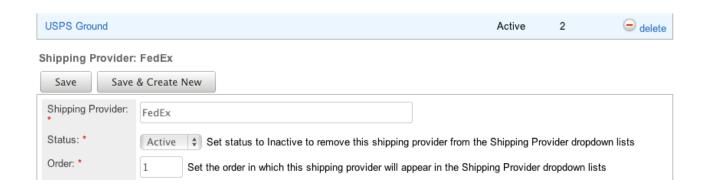


### **Ordering Shipping Providers**

The Order field in Shipping Providers defines the order of the different shipping providers options when viewing the Shipping Provider dropdown list of a quote. The Order field allows you to organize what order the dropdown list will display, with 1 being the highest on the list and moving down as the order number rises. When creating new shipping provider record options, the Order field will automatically increment to the next number in the list, thereby adding the new option to the bottom of the list. The Order field can be overwritten with another number if you would like to manually re-order the options.

# **Editing Shipping Providers**

Shipping providers may be edited at any time to update or add information to the record. You can make changes to existing shipping provider records via the Shipping Providers edit view. Edit view is available within the Shipping Providers menu, below the list view, and includes all of the provider fields you should need.



## **Deleting Shipping Providers**

If a shipping provider is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from the Shipping Providers list view.

Use the following steps to delete a shipping provider via the detail list:

- 1. Navigate to the Shipping Providers list view.
- 2. Locate the provider that you would like to delete.
- 3. Click "Delete" on the corresponding provider's row.



4. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

### Tax Rates

The Tax Rates module controls and maintains the Tax Rates dropdown list in the Quotes module. This dropdown list allows you to apply applicable taxes to quotes so that the grand total is representative of any added tax to the subtotal. Tax rates can be added to the dropdown list as any necessary percentage, so they will be able to include national and international rates.

### Tax Rate Fields

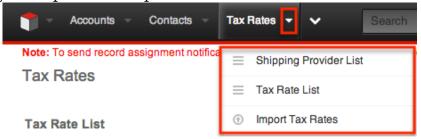
The Tax Rate module contains four stock fields that come out-of-the-box with Sugar. The below definitions are suggested meanings for the fields.

Field	Description
	The tax rate's name as it will appear on the Tax Rate dropdown list

Percentage	The percentage of the quote's subtotal that will be taxed
Status	Choose whether this tax rate should show on the Tax Rate dropdown list
Order	Enter a number to specify the order in which this rate will appear in the Tax Rate dropdown list

#### Tax Rates Module Tab

The Tax Rates module tab can be accessed by clicking the Tax Rates option in the Admin menu. Click the tab to access the Tax Rates list view. You may also click the triangle in the Tax Rates tab to display the Actions menu. The Actions menu allows you to perform important actions within the module.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Shipping Provider List	Opens the Shipping Provider list view
Tax Rate List	Opens the Task Rates list view
	Opens the import wizard to create or update tax rates using external data

# Creating Tax Rates

Tax Rates can be created either via the Tax Rates module or by importing tax rates. When creating via the Tax Rates module, the full edit view layout opens below the Tax Rates list view and includes all of the fields for your tax rates.

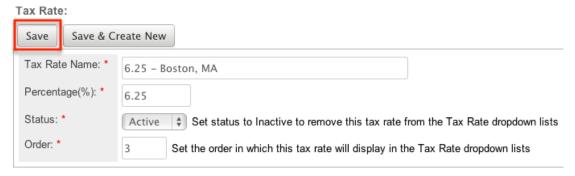
Use the following steps to create a task rate via the Tax Rates module:

- 1. Navigate to Admin > Tax Rates.
- 2. Click on "Create" above the list view.

#### Tax Rates



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Once the necessary information is entered, click "Save". If you would like to create a new tax rate, click "Save & Create New".



### **Importing Tax Rates**

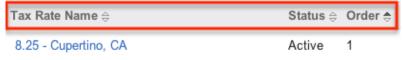
The import function allows you to push multiple tax rates into Sugar using a comma (or other character) delimited file instead of creating them one-by-one. For more information on importing, please refer to the Import documentation.

### Tax Rates List View

The Tax Rates list view displays all tax rate records. You can view the basic details of each rate within the field columns. You can also click on a tax rate's name to edit it, or delete the rate by clicking the "Delete" button at the end of the row.

### Column Sorting

List view provides the ability to sort all tax rates by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields that allow sorting will have a pair of arrows. Please note the list view may be sorted by only one column at a time.

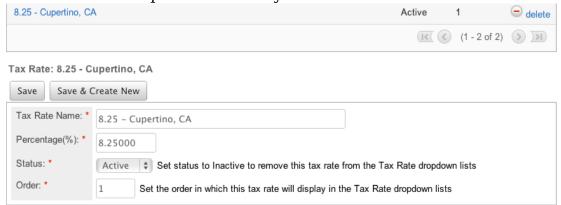


### **Ordering Tax Rates**

The Order field in Tax Rates defines the order of the different tax rates options when viewing the Tax Rate dropdown list of a quote. The Order field allows you to organize what order the dropdown list will display, with 1 being the highest on the list and moving down as the order number rises. When creating new Tax Rate record options, the Order field will automatically increment to the next number in the list, thereby adding the new option to the bottom of the list. The Order field can be overwritten with another number if you would like to manually re-order the options.

## **Editing Tax Rates**

Tax Rates may be edited at any time to update or add information to the record. You can make changes to existing tax rates records via the Tax Rates edit view. Edit view is available within the Tax Rates module, below the list view, and includes all of the provider fields you should need.

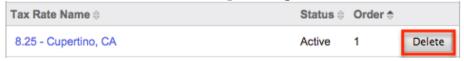


# **Deleting Tax Rates**

If a tax rate is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from the Tax Rates list view.

Use the following steps to delete a tax rate via the list view:

- 1. Navigate to a Tax Rates list view.
- 2. Locate the rate that you would like to delete.
- 3. Click "Delete" on the corresponding rate's row.



4. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Last Modified: 12/01/2016 12:57pm

# **Bug Tracker**

### Overview

In the Bugs module, there are two dropdown fields, "Found in Release" and "Fixed in Release", that cannot be edited though normal means. Although these are dropdown fields, they do not show a dropdown list option in Dropdown Editor to add, remove, and edit the dropdown options.



The release dropdown list is instead controlled by the Releases section of the Administration page. The release list is more comprehensive than a standard dropdown list, so each list option needs additional information. This documentation will cover how to use the Releases module to make changes to the list that controls these fields.

# Release Fields

The Releases module contains three fields which come out-of-the-box with Sugar. These fields are not found in Studio, and therefore cannot be edited.

Field	Description
Release Version	The version name or number of this release.
Status	Select Active from this dropdown list to display the name in the Release dropdown list. Inactive records will only show in the list view of this page.
Order	Enter a number to specify the order in which the release is displayed in the dropdown list. Numbers can be

repeated in this field, so they can either be ranked in order (1,2,3...), in order of importance (1,1,1,2,2,2,3,3,3...), or any other ranking that is used internally.

### Release Module Tab

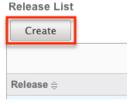
The Releases module tab can be accessed by navigating to the Administration page and clicking "Releases" in the Bugs section. Once in the Releases list view, you can click the triangle in the Releases module tab to display the Actions menu, which allows you to perform important actions within the module. Please note that clicking the module tab allows you to access the Releases list view.



# Creating Releases

Releases can only be created from the Releases module. Use the following steps to create a release option for dropdown lists:

- 1. Navigate to Admin > Releases.
- 2. Click the Create button above the Releases list view.



3. An editable subpanel will open below the list view. Enter the required information on the fields provided.



4. Click one of your two save options. Both will store your new record and have it available for use through Sugar. However, the behavior after clicking is dependent on which button used:

- Save: After clicking "Save", the same release option that you created will remain editable for you to make additional changes if need be, after appearing on the list view above.
- Save & Create New: After clicking "Save & Create New", the release appears on the list view, the edit form's "Release Version" field is cleared out, and the "Order" field is increased by one.



# Viewing Releases

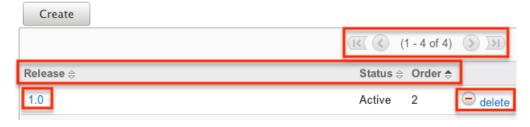
All of the release options are shown on a list view in the Releases module. Due to the Releases module only containing three fields, all of the necessary details are shown on this list view. The list view is always available when viewing the Releases module, and specific releases can be selected from the list, but records can also be selected via the Recently Viewed section of the module tab.

## Viewing Via Module

To view all of the releases, navigate to Admin > Releases. The list view displays with all currently available releases within Sugar. The list view can be ordered by any of the three fields within Releases. To see additional releases, use the arrows in the top right of the list view to scroll through available pages. Here, you can see which records of the total amount of releases are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of the list.

From this list, any of the releases can be clicked and either edited or deleted.

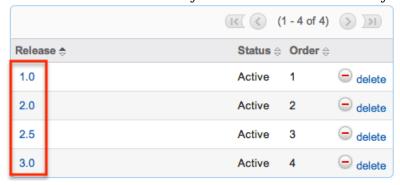
Release List



# **Editing Releases**

Changes to releases can be made at the discretion of any admin at any time. To make changes, such as changing the name of the release and how it shows in the Bugs module, whether the release value is active or not, or the order in which the releases display, the release record needs to just be accessed via the list view. Follow these steps to edit releases:

- 1. Navigate to Admin > Releases.
- 2. Select the release that you would like to edit by clicking the release name.



3. This will open the editor below the list view for the specific record where you can make the necessary changes.



- 4. Click one of your two save options. Both will store your updates to the record. However, the behavior after clicking is dependent on which button used:
  - Save: After clicking "Save", the same release option that you edited will remain editable for you to make additional changes if need be, after the changes update on the list view above.
  - Save & Create New : After clicking "Save & Create New", the changes to the release appear on the list view, the edit form defaults back to creating a new record.

# **Deleting Releases**

If a release option is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from the Releases list view. Deleting release options will not delete the bugs that use them. Instead, if a bug's "Found in Release" or "Fixed in Release" field was filled in with the deleted release, the field will now be blank. Use the following steps to delete a release option from the Bugs

### module:

- 1. Navigate to Admin > Releases.
- 2. Click the Delete button corresponding to the release that you would like deleted.



The page will refresh and the option will now be removed from the list view and no longer appear in the dropdown fields (e.g. Found in Release).

Last Modified: 02/01/2017 07:48pm

# Forecast Configuration

### Overview

Sugar's Forecasts module incorporates opportunity records to build forecasting worksheets and predict sales. Users can work towards sales quotas at the individual, team, and sales organization level. Before users may access the Forecasts module to begin building forecasting worksheets, a user with administrator access must configure the Forecasts module with the organization's desired Time Periods, Ranges, Scenarios, and Worksheet Columns.

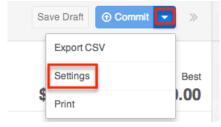
## **Configuring Forecasts**

Administrator users can access the Forecast configuration settings by navigating to the Administration page and clicking the Forecasts link.



As an alternative, administrators can also access the Forecast configuration settings by navigating to the Forecasts module. Clicking the Forecasts module tab before the module has been configured will automatically redirect administrators to the configuration wizard. After the module has been configured, they are able to

choose "Settings" from the Actions menu within the Forecasts module to review their configuration selections and potentially make changes. For more information on making changes to the configuration, please refer to the Editing Forecast Configurations section of this documentation.



The Forecasts Setup wizard will guide you through the various configuration items.

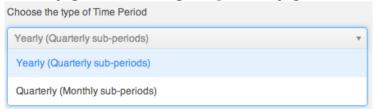
Note: The Forecast Time Periods cannot be changed after initial setup without losing all existing Forecast data. The Forecast Ranges cannot be changed after the first Save Draft or Commit action in the Forecasts module. In order to make changes to these selections, please refer to the Editing Forecast Configurations section of this documentation.

### Time Periods

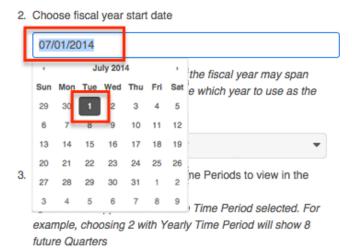
The Time Periods panel allows you to match the Forecasts module's fiscal year and frequency of quota cycles to your organization's practices. These settings will control the beginning and duration of your forecasting time periods as well as control the number of past and future time periods users may access.

Use the following steps to configure Forecast Time Periods:

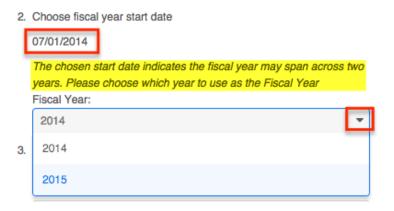
1. Select the Time Period type which matches your sales organization's practices. Choose "Yearly" if your sales organization has quarterly quotas which build up to a yearly goal. Choose "Quarterly" if you operate with monthly goals building to quarterly goals instead.



2. Click the calendar icon to select the start day and month of your organization's fiscal year from the date picker.



If the start date of your organization's fiscal year is a date other than January 1, the fiscal year will span two years. You must specify which of those two years the start date applies to. In these cases, a dropdown will appear prompting you to select the appropriate fiscal year. For example, if the start date of the fiscal year is 07/01/2014, the end date will be 06/30/2015. The forecast wizard will therefore ask you if the time period 07/01/2014 -06/30/2015 should be considered fiscal year 2014 or fiscal year 2015.



Note: It is not recommended to choose February 29th for the fiscal year start date, though this is possible to do during a leap year. If this date is chosen, non-leap years will have fiscal year start date of March 1st.

- 3. Select how many future time periods users will be able to view in their forecast worksheets. This is the number of base Time Periods (years or quarters) as opposed to the sub-periods (quarters or months).
- 4. Select how many past time periods users will be able to view in their forecast worksheets. This is the number of base Time Periods (years or quarters) as opposed to sub-periods (quarters or months).
- 5. Click "Next".

Note: The Forecast Time Periods cannot be changed after initial setup without losing all existing Forecast data. In order to make changes after initial setup, please refer to the Editing Forecast Configurations section of this documentation.

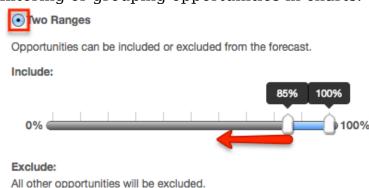
## Ranges

Forecast Ranges are a method of predefining what opportunity records should likely be included on forecasts and which should not. As the administrator, you will specify the sale probabilities which will cause opportunities to be initially included on a user's forecast. Each user, however, can then manually choose to include or exclude their opportunities no matter how the probabilities line up with these ranges.

In addition to initially including opportunities, these ranges will also be available to users in the Forecasts module as categories for filtering or for grouping in charts.

### Two Ranges

Choose the Two Ranges radio button for a simple include or exclude model. You will then drag the left slider to specify the minimum probabilities that qualify {{an opportunity}} to be initially included on forecasts. In this two-range model, all opportunities with probabilities falling below the defined range will be initially excluded from forecasts. Choosing "Two Ranges" will cause the categories "Include" and "Exclude" to be available for users in the Forecasts module for filtering or grouping opportunities in charts.



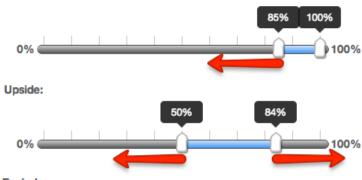
### Three Ranges

Choose the Three Ranges radio button to enable an intermediate range. Drag the left Include slider to specify the minimum probabilities that qualify {{an opportunity}} to be predefined as included on forecasts. Then use the Upside sliders to define the range of probabilities which will be initially excluded from forecasts but which can be viewed independently for consideration for inclusion by the user. All opportunities with probabilities falling outside these two ranges will also be predefined as excluded from forecasts. Choosing "Three Ranges" will cause the categories "Include", "Upside", and "Exclude" to be available for users in the Forecasts module for filtering opportunities in charts.



Opportunities can be tagged as Include, Upside, or Exclude in the forecast. Upside is not included in forecasts by default, but allows users to further classify the excluded opportunities based on likelihood to close.

#### Include:



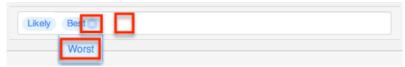
**Exclude:** 

All other opportunities will be excluded.

#### **Scenarios**

The Scenarios panel allows you to specify if you wish to have opportunity records' Best Case and/or Worst Case fields available on the forecast worksheets. The "Likely" scenario is included automatically because it matches the opportunity record's required amount field. When "Best" and "Worst" are also selected, users will have the ability to view and modify these additional values based on their opinion of what values may come about in the sale. This provides a broader range possible sales information when working to make forecasts as predictive as possible.

To add the Best or Worst scenario, click in the text box and select from the dropdown list which appears. Unwanted scenarios may be removed by clicking the "x".



Once you are satisfied with your range selections, click "Worksheet Columns" to open the next panel.

Note: The Forecast Scenarios configurations may be changed at any time following initial setup by returning to the Admin > Forecasts page.

#### Worksheet Columns

The Worksheet Columns panel allows you to specify which fields will be available

as columns in the Forecasts module. Users will be able to select from this list to configure the final appearance of their worksheet. For more information on selecting desired columns, please refer to the Forecasts documentation. Please note that "Best" and "Worst" will only be available if they are enabled in the Scenarios panel. Re-enabling one of these scenarios will automatically add it to the list of worksheet columns.

Add additional fields by clicking in the text box and choosing from the dropdown list which appears. Typing in the text box will narrow down the list to show only matching fields. Unwanted fields may be removed by clicking the "x".



Once you are satisfied with your worksheet column selections, click "Save" at the top right.

Note: The Forecast Scenarios configurations may be changed at any time following initial setup by returning to the Admin > Forecasts page.

# **Editing Forecast Configurations**

Once the Forecast Configurations have been completed, Sugar will apply the selected options and do an initial load of opportunities to the Forecasts module. The selected Time Periods are locked at the completion of the Forecast Configuration wizard, and the Ranges are locked once the first Save Draft or Commit action is performed within the Forecasts module. If, at a later time, the selections you made for Time Periods and Ranges need to be changed, the only way this can be accomplished is at the expense of any existing Forecasting data.

Should you choose to lose all forecasting worksheets for the current, past, and future time periods, a user with administrator access can navigate to https://yourinstancename.com/#bwc/index.php?module=Forecasts&action=ResetS ettings (where "https://yourinstancename.com" represents the URL you use to navigate to your Sugar instance) to instantly reset the Forecasts module. Please note that you cannot undo this action, and you will not be prompted to confirm this decision before it takes effect.

Please take caution: Navigating to the URL above will reset your Forecasts module to a state as if it had never been used before, enabling you to make fresh

selections for all elements within the Forecasts Configuration by navigating to Admin > Forecasts. Your instance's opportunity records will not be affected.

Last Modified: 12/01/2017 02:06pm

# **Contract Types**

### Overview

The Contract Types module in Admin > Contract Types enables you to create and manage contract types for the Contracts module. When a contract type is created, it will display in the Type dropdown list in the Contracts module for users to select. Please note that only users with administrator or developer access have the ability to modify what contract types are available and the order in which they appear in the Type dropdown list. This documentation will cover how to use the Contract Types module to create and manage the contract types available for users to choose when creating contract records in Sugar.

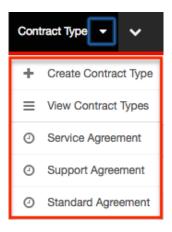
# Contract Type Fields

The Contract Types module contains two stock fields which come out-of-the-box with Sugar. Please note that Contract Type fields are not editable via Admin > Studio as the module does not exist in Studio.

Field	Description
Name	The name of the contract type
List Order	A number to specify the order in which the contract type is displayed in the Type dropdown field in the Contracts module

# Contract Types Module Tab

The Contract Type module tab can be accessed by navigating to the Administration page and clicking "Contract Types" in the Contracts section. Once in the Contract Types list view, you can click the triangle in the Contract Type module tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of contract type records you last viewed in the module.



The Actions menu allows you to perform the following operations:

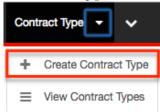
Menu Item	Description
5 1	Opens the edit view layout to create a new contract type
	Opens the list view layout to search and display contract types

# **Creating Contract Types**

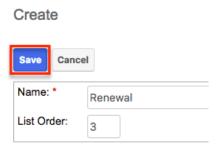
You can create contract types via the Create Contract Type option in the Contract Types module. This opens up the edit view layout which allows you to enter in all the relevant information for the contract type.

Use the following steps to create a contract type via the Contract Types module:

- 1. Navigate to the Contract Types module via Admin > Contract Types.
- 2. Click the triangle in the Contract Type module tab and select "Create Contract Type".



- 3. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 4. Once the necessary information is entered, click "Save".



# Viewing Contract Types

There are various options available for viewing contract type records in Sugar including via Contract Types list view, Contract Types detail view, and Contract Types Recently Viewed menu.

## Viewing Via List View

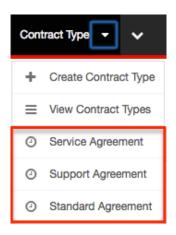
The Contract Types list view displays all contract type records meeting the current search criteria. To access the list view, simply click the Contract Types module tab

## Viewing Via Detail View

The Contract Types detail view displays contract type information including all contract type fields followed by the Documents subpanel displaying the contract type's related documents. The detail view can be reached by clicking a contract type record's link from the Contract Types list view. For more information on viewing contract types via detail view, please refer to the Contract Types Detail View section of this documentation.

# Viewing Via Recently Viewed

As you work in the Contract Types module, Sugar will keep track of which contract type records you have recently viewed. Click the triangle in the Contract Type module tab to see a list of the 3 records you most recently viewed in the module. Clicking the record's name (e.g. Service Agreement) within the list will open it in detail view.



# Searching Contract Types

The Contract Types list view includes a Basic and Advanced Search to help you locate records easily and effectively in a module-specific manner. Once the search is performed, the relevant results will be displayed in the Contract Types list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search, you can use the wildcard at the beginning of your text as well (e.g. %services). This will pull up any record that has the word "services" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used in the different methods, please refer to the Search documentation.

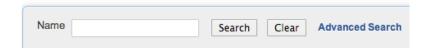
### Basic Search

Basic search offers a few, commonly used fields for a simplified search experience. From the Basic Search panel, you can click "Advanced Search" to access additional search functionality as needed.

The buttons and checkboxes available in Basic Search panel have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.

### **Contract Types**



Enter in the appropriate keyword in the basic search Name field then click the Search button. Once the search is complete, the relevant results will populate in the list view below the search panel. To view all contract type records, simply click "Clear" and then "Search" to perform a blank search with no filters.

### **Advanced Search**

Advanced Search offers a more in-depth search experience than Basic Search including additional fields, layout options, and saved search capability. From the Advanced search panel, you can click "Basic Search" for simplified searching.

The buttons and dropdowns available in Advanced Search have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.
- Layout Options: Use the expandable Layout Options section to configure your list view. For more information, please refer to the Layout Options section of the Search documentation.
- Saved Searches: Save, recall, update, and delete searches which you use often. For more information, please refer to the Saved Search section of the Search documentation.



Enter in the appropriate keyword in the advanced search Name field then click the Search button. Once the search completes, the relevant results will populate in the list view below the search panel. To view all contract type records, simply click "Clear" and then "Search" to perform a blank search with no filters.

# **Contract Types List View**

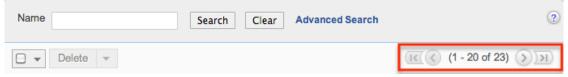
The Contract Types list view displays all contract type records meeting the current search criteria. You can view the basic details of each contract type within the field columns.

You have the option to change what fields are displayed in list view by configuring your layout options in the Contract Types Advanced Search. For more information on configuring your list view, please refer to the Layout Options section of the Search documentation.

## **Pagination**

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially hundreds of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

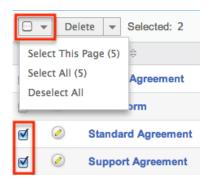
By default, Sugar displays 20 records per list view page, but administrators can change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide.



#### Checkbox Selection

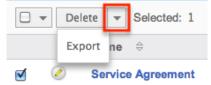
You can perform several actions on contract type records directly from the list view by first selecting the desired records. To select individual contract type records on the Contract Types list view, mark the checkbox on the left of each row. To select or deselect multiple contract type records on the list view, use the options in the checkbox dropdown menu:

- Select This Page : Selects all records shown on the current page of contract type results.
- Select All: Selects all records in the current search results across all pages of contract type results.
- Deselect All: Deselects all records that are currently selected.



### Actions Menu

The Actions menu to the right of the checkbox dropdown allows you to perform various actions on the currently selected records.

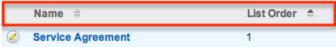


The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Delete	Delete one or more contract types at a time
Export	Export one or more contract types to a CSV file

# Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. The list view may be sorted by only one column at a time. You can also set a default order-by column using the layout options in Advanced Search. For more information on setting a default column sort, please refer to the Layout Options section of the Search documentation.



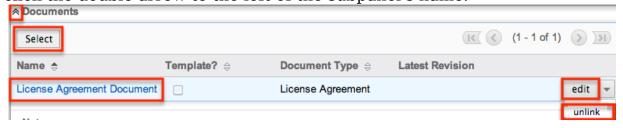
# Contract Types Detail View

The Contract Types detail view displays information such as the contract's name and list order. You can also view related documents to the contract type record which appear in a subpanel beneath the contract type fields. The detail view can be reached by clicking the contract type record's link from the Contract Types list view.

## **Documents Subpanel**

Beneath a contract type record's fields is the Documents subpanel containing related document records from the Documents module. Simply click the Select button and the documents pop-up window will open. You can search and select the desired document(s) in the pop-up window to relate to the current contract type record. The related document(s) will appear in the Documents subpanel of the contract type record. Please note that when a contract record is created with a specific contract type, the related documents to the contract type will appear in the Documents subpanel of the contract record as well.

To view the details of the related document record, click the record's name in the subpanel to open it in detail view. You can also delete the contract type's relationship to the document record by clicking "Unlink" from the dropdown on the far right of the contract type record's row. To collapse or expand the subpanel, just click the double arrow to the left of the subpanel's name.



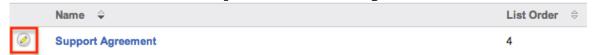
# **Editing Contract Types**

Contract types may be edited at any time to update information on the record. You can make changes to existing contract type records via the quick create form in the Contract Types list view. Quick create forms appear as a pop-up window and generally contains fewer fields compared to the full edit view layout. But since the Contract Types module only consists of two fields, both layouts look the same. To access the full edit view layout, simply click the Full Form button in the quick create form.



## Editing Via List View

You can edit contract types via the list view by clicking the Pencil icon to the left of each contract type's name. A pop-up window will open with the quick create form which mirrors the Contract Types full edit view layout. Update the necessary fields, then click "Save" to preserve the changes.



# **Ordering Contract Types**

When creating contract types, you will define the order in which the contract type is displayed in the Type dropdown field in the Contracts module. The numeric value (e.g. 1, 2, 3, etc.) you enter in the List Order field determines the order each contract type will appear on the dropdown list. For example, a contract type with a list order of "1" will be displayed at the top of the dropdown list followed by the next value (e.g. 2), and so forth. Please note that you can change the list order by editing the contract type via the list view.

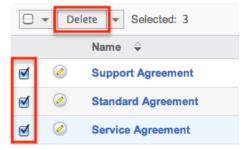
## **Deleting Contract Types**

If a contract type record is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from the Contract Types list view. Deleting via the list view allows you to mass delete multiple records at once. Please note that d eleting contract type records will not delete the related records (e.g. documents) and will only remove the relationship.

# Mass Deleting Via List View

Use the following steps to delete one or more contract type records via the list view:

- 1. Navigate to the Contract Types list view via Admin > Contract Types.
- 2. Use the Basicor Advanced Search to find the Contract Type records you wish to delete.
- 3. Select the desired contract type records individually or using the checkbox dropdown's options.
- 4. Choose "Delete" from the Actions menu.



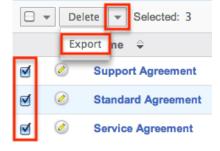
5. A pop-up message will display asking for confirmation. Click "Ok" to proceed.

Due to PHP memory limitations on the server, there may be occasions when the application times out while deleting a large number of contract type records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

# **Exporting Contract Types**

Sugar's Export option allows users to download all fields for the selected contract types to their computers as a .CSV (comma-separated values) file. This may be useful when needing to use Contract data with other software such as Microsoft Excel. Due to PHP memory limitations on the server, there may be occasions when the application times out while exporting a large number of contract type records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

Contract Types may be exported from the Contract Types list view by selecting "Export" from the Actions menu. Once the export is complete, a .CSV file will open up with all the Contract Type field values for the selected record(s).



Last Modified: 02/01/2017 07:36pm

# **Knowledge Base Administration**

### Overview

Sugar's Knowledge Base module provides the ability to create, maintain, and publish articles. Certain aspects of the Knowledge Base module are only available for administrators or users with developer-level role including the creation and editing of templates and knowledge base's Settings page. For more information on actions available to regular users such as creating and editing articles, please refer to the Knowledge Base documentation in the Application Guide. This documentation will cover information and actions specific to Knowledge Base administration. For instructions concerning views and actions which are common across most Sugar modules, such as creating, editing, and deleting templates, please refer to the Working With KB Templates section of this page.

# Working With KB Templates

The following links will open specific sections of the User Interface documentation where you can read about views and actions that are common across most Sidecar modules. The sections following this Working With Knowledge Base section describe Knowledge Base-specific behaviors and functionality.

Content Link	Description
Creating Knowledge Base Templates Basic Knowledge Base Template Creation	The Creating Records section covers how to create new knowledge base templates via the Create button on the list view or the Create option in the module tab.
Viewing Knowledge Base Templates Viewing Via List View Viewing Via Record View Viewing Via Activity Streams Viewing Via Preview	The Viewing Records section describes the various methods of viewing knowledge base templates, including via the Knowledge Base Templates list view and record view, activity stream entries concerning template updates and such, as well as previewing templates in the right hand side panel.
Searching for Knowledge Base Templates List View Search Creating a Filter Saving a Filter	The Searching for Records section provides an introduction to list view search, which searches and filters within the Knowledge Base Templates list view.

Knowledge Base Templates List View The List View section walks through the Total Record Count many elements of the Knowledge Base Create Button Templates List View layout which List View Search contains a filterable list of all knowledge Checkbox Selection base template records in Sugar. While Mass Actions Menu the generic menu options are described in the User Interface sections linked to Favorite Designation Column Reordering the left, the options specifically Column Resizing available in the Knowledge Base Column Sorting Templates list view are described in the Column Selection Preview Record Actions Menu More Knowledge Base Templates **Activity Stream** Intelligence Pane Knowledge Base Templates Record View The Record View section walks through Favorite Designation the many elements of the Knowledge Following Designation Base Templates Record View layout Next or Previous Record which contains detailed information Actions Menu about a single knowledge base template record. While the generic menu options Show More are described in the User Interface **Activity Stream** Intelligence Pane sections linked to the left, the options specifically available in the Knowledge Base Templates record view are described in the Record View Actions Menu section of this page. Editing Knowledge Base Templates The Editing Records section describes Editing Inline Via Record View the various methods of editing existing Editing Via Record View knowledge base template records, Editing Inline Via List View including inline via the knowledge base template record view, in full edit mode Mass Editing Via List View **Editing Fields** on the record view, inline via the Knowledge Base Templates list view, and via the Mass Update option on the list view. The Editing Fields section provides instructions for modifying the different field types available in Sugar records. The Deleting Records section describes Deleting Knowledge Base Templates Deleting Via Record View the various methods of deleting Deleting Via List View unwanted knowledge base templates, including via the Knowledge Base Mass Deleting Via List View

Templates record view, an individual

	record's Actions menu on the Knowledge Base Templates list view, and the Mass Actions menu on the list view.
Exporting Knowledge Base Templates	The Exporting Records section provides an introduction to the export functionality which allows you to download a list of knowledge base template records and all their data as a .csv file for use outside of Sugar (e.g. in Microsoft Excel).
Merging Knowledge Base Templates Merging Via List View	The Merging Records section provides instructions for merging duplicate knowledge base templates which will combine field values and related records into a single template.
Viewing Knowledge Base Template Change Logs	The Viewing Record Change Logs section describes the View Change Log record view option which displays a history of changes to the knowledge base template's audited fields.
Favoriting Knowledge Base Templates Favoriting Via List View Favoriting Via Record View	The Favoriting Records section describes the various methods of marking knowledge base templates as favorites, including via the Knowledge Base Templates list view or Knowledge Base Templates record view. Favoriting a knowledge base template allows you to easily access it from the list view.
Following Knowledge Base Templates Following Via List View Following Via Record View	The Following Records section describes the various methods of marking knowledge base template's as "Following", including via the Knowledge Base Template's list view and record view. Following a knowledge base template record causes its activity stream updates to be included on your Home page and Knowledge Base Template list view activity streams so that you can easily keep up with changes and user posts on the record.
Sharing Knowledge Base Templates	The Sharing Records section provides instructions for the Share record view option which composes an email with a

	link to the knowledge base template record. If the recipient is logged into Sugar, clicking the link will bring them directly to the knowledge base template's record view.
Using the TinyMCE Text Editor	The Using the TinyMCE Text Editor section describes how to use the built-in WYSIWYG to build and customize the contents of your knowledge base template.

## **KB** Template Menus

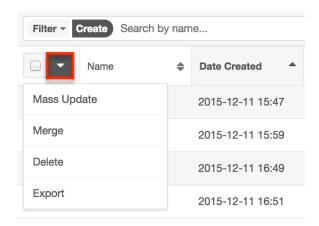
The Knowledge Base Templates section contains various options and functionality which are available via menus in the list view and record view. The following sections present each menu and its options with links to more information about each option in the User Interface documentation or, for Knowledge Base Templates-specific functionality, within this page.

#### List View Menus

The Knowledge Base Templates list view displays all knowledge base template records and allows for searching and filtering to locate specific templates. You can view the basic details of each record within the field columns of the list view or click an template's name to open the record view. To access a module's list view, simply click the Knowledge Base module's tab in the navigation bar at the top of any Sugar page and select "View Templates".

#### List View Mass Actions Menu

The Mass Actions menu to the right of the checkbox option in the list header allows you to perform mass actions on all currently selected records. You can use the checkbox on each record's row to select individual template records or click the checkbox in the list header to select all records displayed on the current set of list view results.

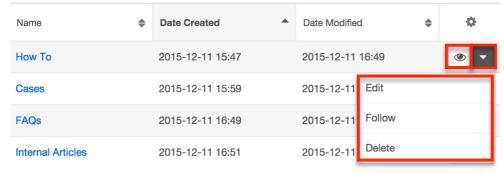


The Mass Actions menu allows you to perform the following operations:

Menu Item	Description
Mass Update	Mass update one or more templates at a time
Merge	Merge two or more duplicate templates
Delete	Delete one or more templates at a time
Export	Export one or more templates to a CSV file

### List View Record Actions Menu

The Record Actions menu to the far right of each record's row allows you to perform actions on the individual template directly from the list view.



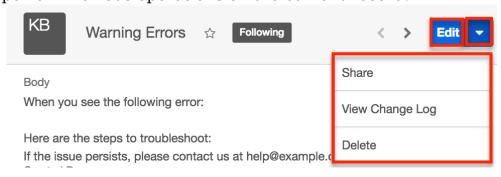
The list view's Record Actions menu allows you to perform the following operations:

Menu Item	Description
Preview (Eye icon)	Preview this template in the intelligence pane
Edit	Edit this template

Follow	Follow this template
Delete	Delete this template

### Record View Actions Menu

The knowledge base template record view displays a single template in full detail including its fields and the activity stream. To access a template's record view, simply click a hyperlinked template name from anywhere within Sugar. The record view's Actions menu appears on the top right of the page and allows you to perform various operations on the current record.



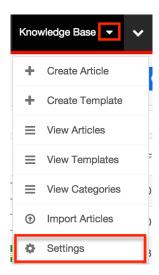
The Actions menu allows you to perform the following operations:

Menu Item	Description
Edit	Edit this template
Share	Share this template
View Change Log	View a record of changes to this template
Delete	Delete this template

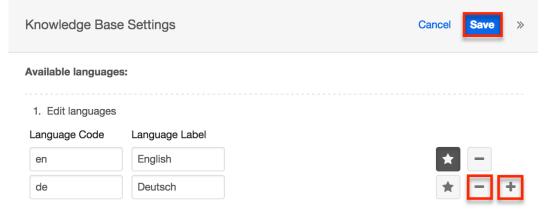
# Settings

You have the option to add, edit, or delete different languages for article records in the Settings section. This is helpful if articles are to be translated into multiple languages. When one or more additional languages have been added, users can create localization articles. It is important to note that when a language is deleted from the available languages, all localization articles created with that language will also be deleted.

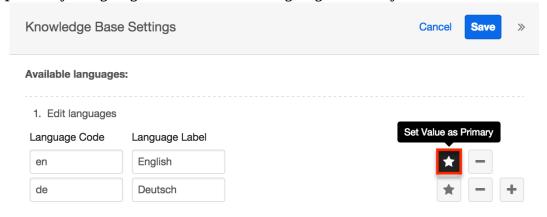
To access the Settings page, click the triangle in the Knowledge Base module tab to open the Actions menu and select "Settings".



The Knowledge Base Settings drawer will appear which allows you to edit, add, or remove languages for the Knowledge Base module. To add a new language, click the "+" icon and enter the Language Code and Language Label. To remove a language, select the "-" icon. Click "Save" to finalize any changes made.



You can also set a language as primary by selecting the star to its far right. The primary language is set in the Language field by default for all new articles.



Last Modified: 12/01/2016 01:07pm

# Tag Management

#### Overview

Tags are user-created keywords or phrases that can help users find, group, and classify large amounts of data by common attributes that may not be defined via basic database fields. Sugar stores tags as individual records in the Tags module. Modules using the Sidecar user interface (e.g. Accounts, Contacts, etc.) contain a Tags field where users can create and share tags that can be used to identify records in filters, dashlets, and reports. For a list of sidecar modules, please refer to the User Interface documentation in the Application Guide.

While tags can be created and used by regular Sugar users, some actions in the Tags module are only available to administrators and users with developer-level role access. This documentation will cover these administration options which allow you to manage the system-wide tag repository. For information about tag functionality which is available to regular users, please refer to the Tags documentation in the Application Guide. For instructions concerning views and actions which are common across most Sugar modules, such as creating, editing, and deleting tags, please refer to the Working With Tags section of this page.

Note: The Tags module is not configurable in Studio.

### **Understanding Tag Behavior**

The act of relating a tag to a Sugar record is referred to as "tagging". By default, modules using the Sidecar user interface (e.g. Contacts, Leads, Accounts, etc.) are enabled for tagging and include the Tags field in the layout. Tags can be related to multiple records across any sidecar module, so a single tag can appear on multiple records. Likewise, a single record can have multiple tags. Unlike other Sugar modules, users can see all tag records regardless of their team membership. Additionally, users will be able to edit Tag fields to add existing tags or create new tags regardless of any role restrictions their user has for the Tags module.

Please note that only administrators and users with developer-level role access may create, edit, merge, and delete tags in the Tags module. To assign a Tags Administrator role to a Sugar user, please refer to the Creating a Tags Administrator section of this page.

For more information on tag usage guidelines and interacting with tags in Sugar, please refer to the Tags documentation in the Application Guide.

# Tag Fields

The Tags module contains a number of stock fields that come out-of-the-box with Sugar. The definitions below are suggested meanings for the fields, but the fields can be leveraged differently to best meet your organization's needs.

Field	Description
Name	The name or designation of the tag
Assigned To	The Sugar user assigned to the tag record
Date Created	The date the tag record was created
Date Modified	The date the tag record was last modified
Description	A description or other information about the tag

## Working With Tags

The following links will open specific sections of the User Interface documentation where you can read about views and actions that are common across most Sidecar modules. The sections following this Working With Tags section describe Tags-specific behaviors and functionality.

Content Link	Description
Creating Tags Basic Tag Creation Importing Tags	The Creating Records section covers the various methods of creating new tag records, including via the Create button in the Tags module and importing a list of tags into Sugar using a .csv spreadsheet.
Viewing Tags Viewing via List View Viewing via Record View Viewing via Recently Viewed Viewing via Dashlets Viewing via Preview Viewing via Reports	The Viewing Records section describes the various methods of viewing tag records, including via the Tags list view and record view, the Recently Viewed menu in the Tags module tab, list view dashlets showing tag information, previewing tags in the right hand side panel, and reports displaying tag data.
Searching for Tags List View Search Creating a Filter	The Searching for Records section provides an introduction to list view search, which searches and filters

Saving a Filter	within the Tags module. Note: For information on using tags as global search filters, please refer to the
Tags List View Total Record Count Create Button List View Search Checkbox Selection Mass Actions Menu Favorite Designation Column Reordering Column Resizing Column Sorting Column Selection Preview Record Actions Menu More Tags Intelligence Pane	The List View section walks through the many elements of the Tags List View layout which contains a filterable list of all tag records in Sugar. While the generic menu options are described in the User Interface sections linked to the left, the options specifically available in the Tags list view are described in the List View Mass Actions Menu and List View Record Actions Menu sections of this page.
Tags Record View Favorite Designation Next or Previous Record Actions Menu Subpanels Related Record Subpanels Filtering Subpanels Reordering Subpanels Intelligence Pane	The Record View section walks through the many elements of the Tags Record View layout which contains detailed information about a single tag record. While the generic menu options are described in the User Interface sections linked to the left, the options specifically available in the Tags record view are described in the Record View Actions Menu section of this page.
Editing Tags Editing Inline via Record View Editing via Record View Editing Inline via List View Mass Editing via List View Editing Fields	The Editing Records section describes the various methods of editing existing tag records, including inline via the Tags record view, in full edit mode on the record view, inline via the Tags list view, and via the Mass Update option on the list view. The Editing Fields section provides instructions for modifying the different field types available in Sugar records.  Note: If the tag's name is edited, all records related to the tag will automatically display the updated tag value.
Deleting Tags Deleting via Record View	The Deleting Records section describes the various methods of deleting

Deleting via List View Mass Deleting via List View	unwanted tags, including via the Tags record view, an individual record's Actions menu on the Tags list view, and the Mass Actions menu on the list view.
Exporting Tags	The Exporting Records section provides an introduction to the export functionality which allows you to download a list of tags and all their data as a .csv file for use outside of Sugar (e.g. in Microsoft Excel).
Merging Tags Merging via List View	The Merging Records section provides instructions for merging duplicate tags which will combine field values and related records into a single tag.  Note: Date Created and Date Modified field types are not supported when merging duplicate Tag records in Sugar.
Viewing Tag Change Logs	The Viewing Record Change Logs section describes the View Change Log record view option which displays a history of changes to the tag's audited fields.  Note: Only the Assigned User Id field is audited for the Tags module and will be displayed in the change log.
Favoriting Tags Favoriting via List View Favoriting via Record View	The Favoriting Records section describes the various methods of marking tags as favorites, including via the Tags list view or Tags record view. Favoriting a tag allows you to easily access it from list views, dashlets, or the Tags module tab.
Sharing Tags	The Sharing Records section provides instructions for the Share record view option which composes an email with a link to the tag record. If the recipient is logged into Sugar, clicking the link will bring them directly to the tag's record view.

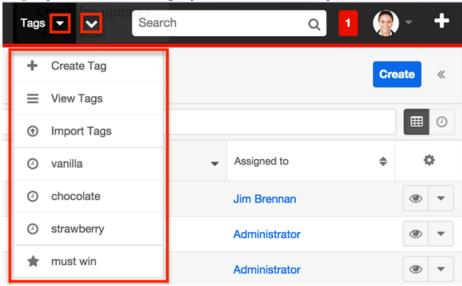
# Tag Menus

The Tags module contains various options and functionality which are available via

menus in the module tab, list view, and record view. The following sections present each menu and its options with links to more information about each option in the User Interface documentation or, for Tags-specific functionality, within this page.

#### Module Tab Menus

The Tags module tab is typically found by clicking the arrow to the right of the navigation bar tabs at the top of any Sugar screen. The additional modules will appear on the list and you can click "Tags" to access the list view. Once the Tags module tab displays on the navigation bar, you can click the triangle within the tab to display the Actions, Recently Viewed, and Favorites menu. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of tags you most recently viewed. The Favorites menu displays the list of tags you most recently marked as favorites.



The module tab's Actions menu allows you to perform the following operations:

Menu Item	Description
Create Tag	Opens the record view layout to create a new tag
View Tags	Opens the list view layout to search and display tags
Import Tags	Opens the import wizard to create or update tags using external data

If you do not see the Tags module tab in Sugar, please check the following:

• The Tags module may be marked as hidden in your user preferences which will prevent the module tab from being displayed. Navigate to your user

profile (upper right of Sugar), click the Advanced tab, and check the Layout Options section. If you see the Tags module in the Hide Modules list, simply move it to the Display Modules list and save. For more information on hiding and displaying modules, please refer to the Layout Options section of the Getting Started documentation in the Application Guide.

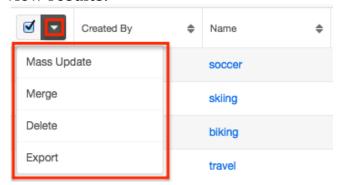
• The Tags module may be disabled for your entire Sugar instance. Enable the Tags module and add the Tags field to related module layouts. For more information on displaying and hiding modules throughout Sugar, please refer to the Developer Tools documentation.

#### List View Menus

The Tags list view displays all tag records and allows for searching and filtering to locate specific tags. You can view the basic details of each record within the field columns of the list view or click a tag's name to open the record view. To access a module's list view, simply click the module's tab in the navigation bar at the top of any Sugar page.

#### List View Mass Actions Menu

The Mass Actions menu to the right of the checkbox option in the list header allows you to perform mass actions on all currently selected records. You can use the checkbox on each record's row to select individual tag records or click the checkbox in the list header to select all records displayed on the current set of list view results.



The Mass Actions menu allows you to perform the following operations:

Menu Item	Description
Mass Update	Mass update one or more tags at a time
Merge	Merge two or more duplicate tags
Delete	Delete one or more tags at a time
Export	Export one or more tags to a CSV file

#### List View Record Actions Menu

The Record Actions menu to the far right of each record's row allows you to perform actions on the individual tag directly from the list view.

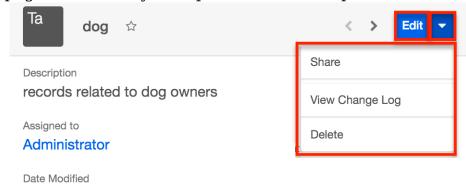


The options in the Record Actions menu allow you to perform the following operations:

Menu Item	Description
Preview	Preview this tag in the intelligence pane
Edit	Edit this tag
Delete	Delete this tag

#### Record View Actions Menu

The Tags record view displays a single tag in full detail including its relevant fields and subpanels of related records. To access a tag's record view, simply click a hyperlinked tag name from the Tags list view, Tags list view dashlet, or from report results. The record view's Actions menu appears on the top right of the page and allows you to perform various operations on the current record.



The Actions menu allows you to perform the following operations:

Menu Item	Description
Edit	Edit this tag

Share	Share a link to this tag via email
View Change Log	View a record of changes to this tag
Delete	Delete this tag

## Consolidating Synonymous Tags

Sugar prohibits users from saving duplicate tag records, but with many users working in and importing new records to Sugar, it is possible for synonymous tag records (e.g. computer and computers) to accidentally occur in the system.

Before creating a new tag record, a good practice is to first check that a similar tag does not already exist in Sugar. You can locate candidates for cleanup using the list view search from the Tags list view. Searching for tags with similar names or other information can turn search into a powerful, duplicate-finding tool.

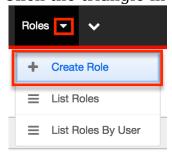
Note: While the "Find Duplicates" functionality is disabled for all users of the Tags module, users with administrator access to the Tags module can find and merge duplicate tag records via list view. For more information on merging records, refer to the User Interface documentation.

## Creating a Tags Administrator

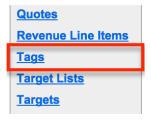
By default, only administrator or developer users have the ability to create, edit, delete, and merge tags in the Tags module. It may be helpful to delegate these administrative tasks to one or more designated user(s) without giving them full administrative permissions in Sugar.

Use the following steps to create a Tags Administrator role:

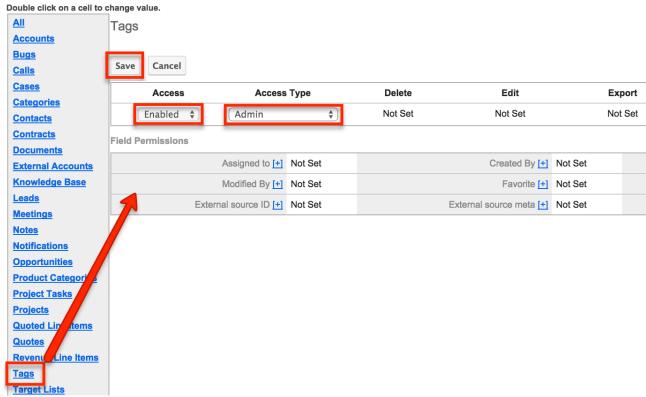
- 1. Navigate to Admin > Role Management.
- 2. Click the triangle in the Roles module tab and select "Create Role".



- 3. Enter a name (e.g. Tags Administrator) for the role then click "Save".
- 4. On the Role Chart screen, click "Tags" in the module's list to the far left of the page.



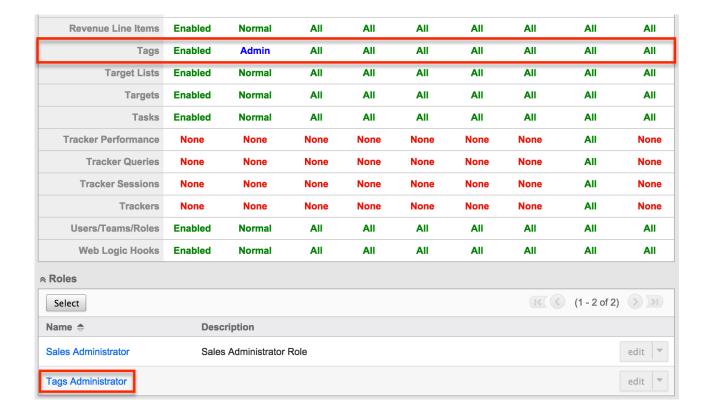
- 5. The following screen will display the role settings specific to the Tags module. The Access and Access Type columns will default to "Not Set". Click the "Not Set" in both columns and select the following options::
  - Access : Enabled
  - AccessType: AdminNote: All other role settings can remain as "Not Set" since the Admin access type will ensure full access to the remaining options.



- 6. Click "Save" to preserve the changes.
- 7. Scroll to the Users subpanel on the bottom of the screen and click "Select User". Search and select the user(s) you wish to assign this role to.



8. After selecting the user(s), navigate to the user's profile to view their access information via the Access tab. Confirm that the Tags Administrator role is displayed in the Roles subpanel and the Tag module's access is set to "Admin".



Any user assigned to the Tags Administrator role will have the ability to access increased functionality such as creating, editing, deleting, and merging records in the Tags module. For more information on creating roles, please refer to the Role Management documentation.

Last Modified: 02/15/2018 04:06pm

## **Employee Records**

#### Overview

Sugar's Employees module consists of individual people within your organization. The Employees module allows you to see a list of all employees, their contact information, and their employment status in one convenient location. Employee records are typically created when a user record is created, but users with administrative access can also add non-user employees. This means that, typically, all users will be listed as employees, but not all employees are necessarily Sugar users.

As the Employees module contains internal information about your company, not specifically Sugar, it is not subject to team and role restrictions.

# **Employee Fields**

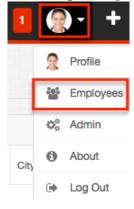
The Employees module contains a number of stock fields which come out-of-the-box with Sugar. The below definitions are suggested meanings for the fields, but the fields can be leveraged differently to best meet your organization's needs. Fields can be altered, added, or removed via Admin > Studio. For more information on configuring fields, please refer to the Studio documentation in the Administration guide.

Field	Description
City	The city of the employee's address
Country	The country of the employee's address
Department	The department where this employee works
Email Address	The employee's email address
Employee Status	The employee's employment status in the organization, either: Active, Terminated, or Leave of Absence
Fax	The employee's fax number
First Name	The employee's first name
Home Phone	The employee's home phone number
IM Name	The employee's instant message screen name
IM Type	The employee's instant message client type
Last Name	The employee's last name
Mobile	The employee's mobile phone number
Notes	A description or other information about this employee
Office Phone	The employee's office phone number and extension
Other	An additional phone number for the employee
Picture	A picture, headshot, or identifying image of the employee
Primary Address	The number and street of the employee's address
Postal Code	The postal code of the employee's address

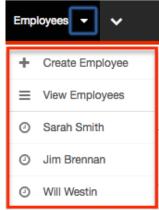
1 -	This field list's the employee's manager, if the manager is a Sugar user
State	The state of the employee's address
Title	The employee's job title

## **Employees Module Tab**

The Employees module tab can be accessed by clicking your profile icon and selecting "Employees" in the user menu.



Once in the Employees list view, you can click the triangle in the Employees module tab to display the Actions and Recently Viewed menus. The Actions menu allows you to perform important actions within the module. The Recently Viewed menu displays the list of employees you last viewed in the module. Please note that clicking the module tab allows you to access the Employees list view.



The Actions menu allows you to perform the following operations:

Menu Item	Description
_ 5	Opens the edit view layout to create a new employee
1	Opens the list view layout to search and display employees

### **Creating Employees**

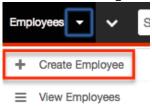
There are various methods for creating employees in Sugar including via the Employees module, the Users module, and duplication. The full edit view layout opens when creating the employee directly from the Employees menu and includes all of the relevant fields for your organization's employees. The edit view layout can be configured via Admin > Studio. For more information on configuring layouts, please refer to the Studio documentation.

### Creating Via Employees Module

One of the most common methods of employee creation is via the Create Employee option in the Employees module tab. This opens up the edit view layout which allows you to enter in all the relevant information for the employee.

Use the following steps to create an employee via the Employees module:

1. Click the triangle in the Employees module tab and select "Create Employee".



- 2. Enter appropriate values for the fields in the edit view layout. All required fields are marked with a red asterisk and must be completed prior to saving.
- 3. Once the necessary information is entered, click "Save".



### Creating Via Users Module

When a user is created, an employee record is also created by default using the relevant fields from the user record to be populated on the employee record. The field in the Users module that controls this is the "Display Employee Record" field. For more information on creating users, please review the Users documentation.



#### Creating Via Duplication

You can also create a new employee by duplicating an existing employee record. The Copy option is useful if the employee you are creating has similar information to an existing employee.

Use the following steps to create an employee by duplicating an existing record:

- 1. Navigate to an employee record's detail view.
- 2. Click the Actions menu and select "Copy".



3. The displayed edit view is pre-populated with the original employee's values. Update the necessary fields, then click "Save".



## Viewing Employees

There are various options available for viewing employee records in Sugar including via Employees list view, Employees detail view, and the Employees Recently Viewed menu. Please note that you will only be able to access these views by first clicking on the Employees button after clicking on your user name in the top right side of Sugar.

#### Viewing Via List View

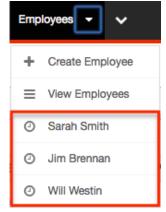
The Employees list view displays all employee records meeting the current search criteria. To access the list view, simply click the Employees option under your user name on the module tab bar. While list view shows key employee fields, you can click the employee's name to open the record in detail view. For more information on viewing employees via list view, please refer to the Employees List View section of this documentation.

#### Viewing Via Detail View

The Employees detail view displays thorough employee information by showing all employee fields. The detail view can be reached by clicking an employee record's link from the Employees list view. For more information on viewing employees via detail view, please refer to the Employees Detail View section of this documentation.

#### Viewing Via Recently Viewed

As you work, Sugar will keep track of which employees you have recently viewed. Click the triangle in the Employees module tab to see a list of the 3 records you most recently viewed in the module. Clicking the record's name (e.g. Will Westin) within the list will open it in detail view.



### Searching Employees

The Employees list view includes a Basic and Advanced Search to help you locate records easily and effectively in a module-specific manner. Once the search is performed, the relevant results will be displayed in the Employees list view below. Please note that Sugar automatically appends the wildcard character (%) to the end of your search phrase. This allows the system to retrieve all records that start with the keyword entered in the search. If you would like to broaden the search,

you can use the wildcard at the beginning of your text as well (e.g. %services). This will pull up any record that has the word "services" in the name, regardless of how it starts or ends.

For more information on using the various search methods as well as how wildcards are used in the different methods, please refer to the Search documentation.

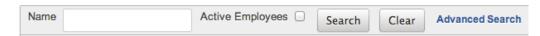
#### Basic Search

Basic search offers a few, commonly used fields for a simplified search experience. From the Basic Search panel, you can click "Advanced Search" to access additional search functionality as needed.

The buttons and checkboxes available in Basic Search panel have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.
- Active Employees: Select this box to return only records where Employee Status is Active.

#### Search Employees



When you run a search, Sugar will return records matching all (as opposed to any) of the fields and checkboxes for which you have given a value. For example, if you select "Active Employees" and enter an employee's name, Sugar will only return employee records with a matching name that are active. Once the search is complete, the relevant results will populate in the list view below the search panel. To see all employee records, simply click "Clear" and then "Search" to perform a blank search with no filters.

Administrators can configure what fields appear on the Employees Basic Search via Admin > Studio. For more information on editing layouts, please refer to the Studio documentation in the Administration guide

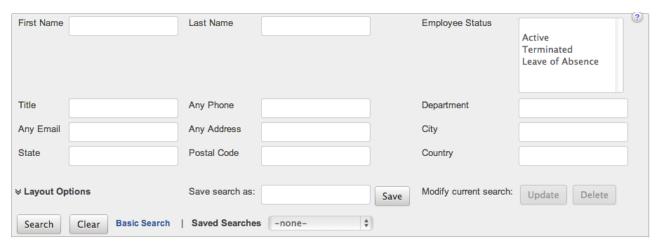
#### Advanced Search

Advanced Search offers a more in-depth search experience than Basic Search

including additional fields, layout options, and saved search capability. From the Advanced search panel, you can click "Basic Search" for simplified searching.

The buttons, checkboxes, and dropdowns available in Advanced Search have the following functions:

- Search : Click the Search button or press your Return/Enter key to perform the search.
- Clear: Click the Clear button to clear all criteria from the searchable fields.
- Active Employees: Select this box to return only records where Employee Status is Active.
- Layout Options: Use the expandable Layout Options section to configure your list view. For more information, please refer to the Layout Options section of the Search documentation.
- Saved Searches: Save, recall, update, and delete searches which you use often. For more information, please refer to the Saved Search section of the Search documentation.



When you run a search, Sugar will return records matching all (as opposed to any) of the fields and checkboxes for which you have given a value. For example, if you select "Active Employees" and enter an employee's name, Sugar will only return employee records with a matching name that are active. Once the search is complete, the relevant results will populate in the list view below the search panel. To see all employee records, simply click "Clear" and then "Search" to perform a blank search with no filters.

Administrators can configure what fields appear on the Employees Basic Search via Admin > Studio. For more information on editing layouts, please refer to the Studio documentation in the Administration guide.

## Employees List View

The Employees list view displays all employee records meeting the current search criteria. You can view the basic details of each employee within the field columns.

You have the option to change what fields are displayed in the list view by configuring your layout options in the Employees advanced search. For more information on configuring your list view, please refer to the Layout Options section of the Search documentation. Users with administrator or developer access also have the ability to change what fields are visible in the list view via Admin > Studio. For more information on editing layouts, please refer to the Studio documentation in the Administration guide.

#### **Pagination**

List view displays the current search results broken into pages that you can scroll through rather than displaying potentially thousands of rows at once. To the right just below the search panel you can see which records of the total results set are currently being displayed. The two single-arrow Next and Previous buttons can be used to scroll through the records page-by-page. The two double-arrow First Page and Last Page buttons allow you to skip to the beginning or the end of your current results.

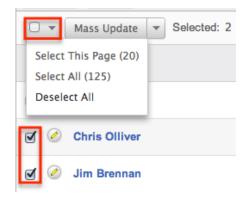
By default, Sugar displays 20 records per list view page, but administrators can change the number of records displayed via Admin > System Settings. For more information on changing the number of displayed records, please refer to the System documentation in the Administration guide.



#### Checkbox Selection

You can perform actions on employee records directly from the list view by first selecting the desired records. To select individual employee records on the Employees list view, mark the checkbox on the left of each row. To select or deselect multiple case records on the list view, use the options in the checkbox dropdown menu:

- Select This Page : Selects all records shown on the current page of case results
- Select All: Selects all records in the current search results across all pages of case results.
- Deselect All: Deselects all records that are currently selected.



#### Actions Menu

The Actions menu to the right of the checkbox dropdown allows you to perform actions on the currently selected records.



The options in the Actions menu allow you to perform the following operations:

Menu Item	Description
Mass Update	Mass update one or more employees at a time
Export	Export one or more employees to a CSV file

## Column Sorting

List view provides the ability to sort all of the current search results by a field column in either ascending or descending order. To sort by a field or switch the sort direction, click the column header noting that the fields which allow sorting will have a pair of arrows. The list view may be sorted by only one column at a time. You can also set a default order-by column using the layout options in Advanced Search. For more information on setting a default column sort, please refer to the Layout Options section of the Search documentation.

## **Employees Detail View**

The Employees detail view displays thorough employee information by way of all employee fields grouped into one page.

Users with administrator or developer access have the ability to change the detail view by configuring the layout via Admin > Studio. For more information on editing layouts, please refer to the Studio documentation in the Administration guide.

#### Next or Previous Record

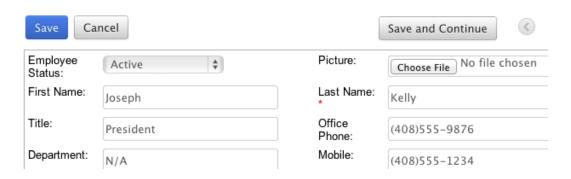
On the upper right of the Employees detail view, there are two buttons that allow you to page through each employee in the Employees list view's current search results. Clicking the Previous button displays the previous employee of the current search results while clicking the Next button displays the next employee of the current search results. The text in between shows which employee result you are currently viewing within the total number of current results.



## **Editing Employees**

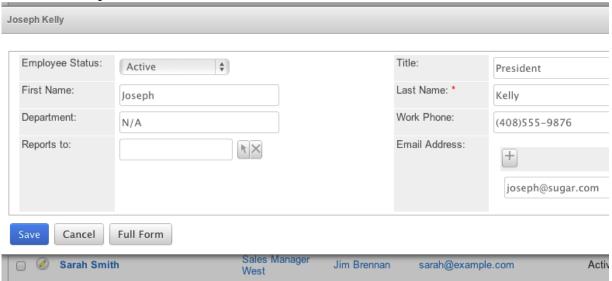
Administrators may edit employees at any time to update or add information to the record. You can make changes to existing employee records via the Employees edit view and quick create forms. Edit view is available within the Employees module and includes all of the Employees fields you should need.

Joseph Kelly » Edit



Quick create is available for editing employees from the Employees list view and

opens as a pop-up without navigating away from your current page. It generally contains fewer fields, but the Full Form button may be used to access the full edit view should you need to edit additional fields.



You may configure both the Employees edit view and quick create via Admin > Studio. For more information on configuring layouts, please refer to the Studio documentation in the Administration guide.

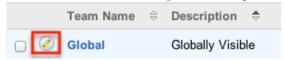
### Editing Via Detail View

You can edit employees via the detail view by clicking the Edit button on the upper left of the page. Once the edit view layout is open, update the necessary fields, then click "Save" to preserve your changes.



### Editing Via List View

You can edit employees via the list view by clicking the Pencil icon to the left of each employee's name. A pop-up window will open with the quick create form which is a shortened version of the edit view layout. Update the necessary fields, then click "Save" to preserve your changes.



## **Deleting Employees**

If an employee record is invalid or should no longer appear in your organization's Sugar instance, it may be deleted from the Employee's detail view. Deleting employee records will also delete the User record that this employee was related to.

Use the following steps to delete an employee record via the detail view:

- 1. Navigate to an employee record's detail view.
- 2. Click the Actions menu and select "Delete".
  - » Will Westin

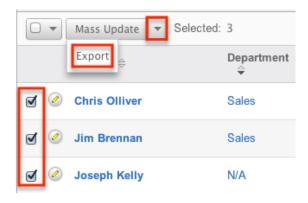


3. A pop-up message will display asking for confirmation and alerting you that the User record will also be deleted. Click "Ok" to proceed.

## **Exporting Employees**

Sugar's Export option allows administrators to download all fields for the selected employees to their computers as a CSV (comma-separated values) file. This may be useful when needing to use Employee data with other software such as Microsoft Excel. Due to PHP memory limitations on the server, there may be occasions when the application times out while exporting a large number of employee records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

Employees may be exported from the Employees list view by selecting "Export" from the Actions menu. For more information on exporting records in Sugar, please refer to the Export documentation.

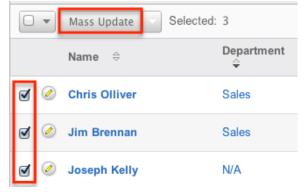


## Mass Updating Employees

Mass Updating allows administrators to make the same change to multiple employee records at once from the Employees list view. Administrators can control which fields are available to change during mass update via Admin > Studio. Currently, only fields with the data type of date, datetime, dropdown, multiselect, and radio may be altered during a mass update. For more information on configuring mass update, please refer to the Studio documentation in the Administration guide. Due to the PHP memory limitations on the server, there may be occasions when the application times out while mass updating a large number of employee records. If you encounter an error when performing this action, we recommend selecting the records in smaller batches.

Use the following steps to mass update employee records from the list view:

- 1. Navigate to the Employees list view by clicking the Employees module tab.
- 2. Use the list view's Basic or Advanced Search to find employees you wish to modify.
- 3. Select the desired employees individually or using the checkbox dropdown's options.
- 4. Choose "Mass Update" from the Actions menu.



5. Scroll to the Mass Update panel and set values for the fields you wish to alter.



6. Click "Update" to save the changes to all of the currently selected employee records.

Last Modified: 02/02/2017 12:09pm

# **Advanced Configuration Options**

#### Overview

Sugar comes with many different ways to configure your system to best meet your needs. Many configuration options are available throughout the application; though, some advanced options are not available through the interface, but can still be configured.

In the root directory of Sugar, there are two configuration files: config.php and config\_override.php. These files hold many configuration options within your instance of Sugar. The config\_override.php file is available for you to add or modify Sugar's configuration. For more information on what options are available to change, please refer to the Developer Guide.

Note: Instances running on Sugar's cloud service do not have access to modify the config override.php file.

## System Configuration

Changing values in the config files can change functionality and behaviors in Sugar. We always recommend testing your changes on a development or test system before changing values in a production system. After changing the config\_override.php file, you should perform a quick repair and rebuild from the Admin > Repair menu. For more information on the quick repair and rebuild, please refer to the Repair documentation.

### Configuring File Permissions

Many features in Sugar require the webserver to have the proper file permission settings to be able to read and write files. At a minimum, the following files and directories need to be writable from your webserver:

- ./config.php
- ./config override.php
- ./sugarcrm.log
- ./cache/ and all subdirectories and files
- ./custom/ and all subdirectories and files
- ./data/ and all subdirectories and files
- ./modules/ and all subdirectories and files

Sugar running on Windows with IIS will need the IIS user (IUSR\_[computerName]) to have access to these files.

Sugar running on Linux expects the listed files and directories to be owned by the same user running the webserver and to also be in the same group. Sugar would then require the following permissions:

- 775 for the directories listed above
- 664 for the config.php file and all files in the directories listed above

When running on Linux, the config.php file in your Sugar instance's root directory contains a setting called default\_permissions. This setting controls the ownership and accessibility to all files and folders created by Sugar. 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' => 1528,
   'file_mode' => 432,
   'user' => 'apache',
   'group' => 'apache',
),
```

The values for 'dir\_mode' and 'file\_mode' are decimal equivalent values for the standard octal values entered for permissions. The value 1528 is the decimal equivalent of the octal value 02770 and a value of 432 which is the decimal equivalent of octal value 0660. These are the recommended directory and file permissions for Linux systems.

Note: If the octal values are entered, they will be interpreted as decimal and will not provide the expected file permission settings.

The 'user' and 'group' values determine the ownership of the files created. When empty, your Apache settings will take precedence to determine file and directory ownership. These values should be set explicitly to the Apache user and group on your server and these values will vary depending on the Apache setup and/or Linux OS you are running. To update these values, please edit the config\_override.php file in the root directory of your installation and add the following lines:

```
$sugar_config['default_permissions']['user'] = '<your Apache user>';
$sugar_config['default_permissions']['group'] = '<your Apache group>';
```

Note: These values will take effect for only newly created files, not existing files. If you need to change the file permissions or ownership for existing files, you must execute the changes through the file system.

### Allowing POP Email Accounts

Inbound email accounts are setup to work with IMAP protocols by default. If your email provider required POP3 access instead of IMAP, you can add the following line to the config override.php file:

```
$sugar_config['allow_pop_inbound'] = true;
```

This will allow new inbound email accounts to be configured with POP3 or IMAP.

Note: POP3 access is not supported and can cause unintended consequences. IMAP is the recommended protocol to use for inbound email accounts.

## **Security Options**

In Sugar, by default, all administrators have access to administrative tools like the Upgrade Wizard, Module Builder, Module Loader, and Backups. The following sections will show a few different ways to disable these options.

## Locking Down Admin Control

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 with a single command in the config\_override.php file:

```
$sugar_config['admin_access_control']=true;
```

#### Locking Down Module Loader

To ensure that users with administrative privileges do not load sub-standard modules into Sugar, you can restrict the Module Loader to a specific directory on the webserver that you control. This allows you to check modules before they are loaded into Sugar. To restrict the module loader, simply add the following lines to the config override.php file:

```
$sugar_config['use_common_ml_dir'] = true;
$sugar_config['common_ml_dir'] =
'/Applications/MAMP/htdocs/sugarcrm/screenedModules';
```

This will prevent any admin users from loading a module from any directory other than the specified directory. Once a module is approved through the necessary channels, the module can be placed in the specified directory for any admin to install when necessary.



Another method for locking down the module loader is to enable the package scanner. The package scanner is enabled by default for instances hosted On-Demand. If you are running Sugar on-site, you can enable the package scanner by adding the following command in the config override.php file:

```
$sugar_config['moduleInstaller']['packageScan'] = true;
```

When the package scanner is enabled, the module loader will check the files being loaded for various functions that could be damaging to the server or instance of Sugar. For more information on which functions are blacklisted and how to configure the package scanner, please refer to the Developer Guide.

## Locking Down Backups

To prevent admin users from running a backup of the Sugar files, you can add this the following line to the config override.php file:

```
$sugar_config['hide_admin_backup'] = true;
```

### **Enabling Sites as Referers**

To prevent Cross-Site Request Forgery (XSRF) attacks, Sugar has a list of acceptable sites that are allowed as a referer to Sugar. If you receive a "Possible Cross Site Request Forgery (XSRF) Attack Detected" message from an approved site trying to access Sugar, you can add that approved site's URL to the list of valid referers by adding the following line to the config override.php file:

```
$sugar_config['http_referer']['list'][] = 'my.site.com';
```

This line will add the specified site to the list of approved sites. If you have multiple sites to add, repeat this line for each site required.

#### Performance

If the performance of your Sugar instance begins to degrade, there are some configuration options you can enable to lighten the load on your system. The following options may cause Sugar's performance to increase, but some performance gains will come with a loss of functionality.

#### Recommended Server Settings

Sugar recommends a PHP memory limit of at least 512MB. This value may need to be increased depending on how your users utilize Sugar. For example, operations such as mass update and imports may require additional memory depending on your instance size and configuration. To change this limit, edit the setting within php.ini:

```
memory_limit = 512M
```

In addition, display\_errors should always be set to "off". Enabling this option can result in adverse behavior for your users. To turn this setting off, edit the option within php.ini:

```
display_errors = off
```

When making changes to either of these settings or any other settings within php.ini, you must restart the webserver before the settings will take effect.

## Limiting System Resources

Sugar allows non-admin users to be restricted to how many queries they can run per action. By default the limit for all modules is set to 1000 queries. This prevents user-initiated processes from taking up too many system resources. If an operation

is performed by a user that attempts too many queries they will see a message returned saying: "Error: Query limit of 1000 reached for Leads module.". To change this limit for all modules, add the following line to the config\_override.php file:

```
$sugar_config['resource_management']['default_limit'] = 5000; //
default is 1000
```

Note: Setting the default\_limit value to 0 will remove the query limit altogether for all modules.

In addition to setting the default for all modules, you can specify certain modules to have a different value. To remove the limit for specific modules only you need to specify the modules and the limit for those modules by adding the following lines to the config override.php file:

```
$sugar_config['resource_management']['special_query_modules'][] =
'Leads';
$sugar_config['resource_management']['special_query_modules'][] =
'Contacts';
$sugar_config['resource_management']['special_query_limit'] = 0; //
default is 50000
```

In this example, the Leads module, Contacts module, and any other module in the special\_query\_modules array will no longer be limited. All other modules will adhere to the default limit.

Note: Setting this limit too low can severely restrict users from performing basic actions. Alternatively, removing the limits altogether may let users inadvertently perform operations that significantly impact overall performance.

## Changing the Upload Directory

Sugar stores content, such as images, documents, and installable modules, uploaded by users in the upload directory. Some of these documents may be large in size and can cause performance issues. Administrators can move the upload directory to a different location to ensure that enough space is available for uploads without affecting the system. You can change the location of the uploads to a different folder within the sugar directory or use an absolute path to place the folder anywhere in the file system. You can change this location by adding the following line to the config\_override.php file:

```
$sugar_config['upload_dir'] = 'd:\upload\';
```

Note: Remember to copy files from the old upload directory into the new upload

directory for accessibility. The upload directory should be writable by the user running the webserver.

#### Changing the Cache Directory

Sugar uses a cache directory to store files (such as compiled templates, aggregated variable definitions, remote mailbox data, various cache files) produced by the system to optimize functionality and enhance system performance. These files can take considerable space, especially in larger systems. You can change the location of the cache to a different folder within the sugar directory or use an absolute path to place the folder anywhere in the file system. You can change this location by adding the following line to the config override.php file:

```
$sugar_config['cache_dir'] = 'd:\cache\';
```

Some of the cache files can be accessed by direct URLs. So if you move the cache directory, you should also ensure that the URL /cache/ (relative to the main Sugar site URL) on your webserver is configured to refer to the new cache location. For more information on how to configure mappings between URLs and file system directories, refer to your webserver documentation.

Note: The cache directory needs to be created first, or you may receive an Internal Server error. The cache directory should be writable by the user running the webserver.

## **Configuring Count Queries**

By default, list views and subpanels in Sugar return record counts. This can be convenient to know how many records were found for a specific search, but in order to retrieve the record count; Sugar needs to perform additional queries on the database. When there are large amounts of data, these queries can cause performance issues. You can disable these count queries in Sugar by adding the following line to the config override.php file:

```
$sugar_config['disable_count_query'] = true;
```

Instead of seeing the total record count, you will see the current known record count with a plus sign next to it.

## Disabling Related Calculation Fields

When a calculated field in Sugar users the related function in the Sugar Logic, this will cause the calculated field to be executed when the related module is updated. This can cause a cascading effect through the system to update related calculated fields. When this happens you may receive a 502 Gateway Error. You can disable the related calculation field updates by adding the following line to the config override.php file:

```
$sugar_config['disable_related_calc_fields'] = true;
```

Note: This is a global setting that will affect all modules. If you have a calculated field in Accounts that sums up all Opportunities for the account, setting this value to true will no longer update the opportunity account sum in Accounts until the account record itself is modified. However, if this setting is left disabled, the sum would update any time a related opportunity or the account is modified.

## **Disabling Automatic Searches**

By default, list views in Sugar remember the last search performed by the current user in each module. While this can be convenient, it is sometimes unnecessary. If the last search performed in a module was an extensive search, the next time the user navigates to that module will inadvertently perform the search again. This can have a negative impact on performance in Sugar.

Set the following values in the \$sugar\_config['save\_query'] value in the config override.php file to configure different options for saving list view queries:

Value	Description
all	Populates the last search and executes it Note: This is the default behavior in Sugar.
no	Discards the previous search and executes a search with no criteria
populate_only	Populates the last search, but does not execute it.

For example:

```
$sugar_config['save_query'] = 'populate_only';
```

Note: The \$sugar\_config['save\_query'] setting is not supported for Sidecar modules and only applies to Legacy modules.

## Using a Custom Page For Campaign Trackers

When sending campaigns through Sugar, tracker URLs are used for images, links, and the opt-out link in the campaign. When the recipient of the campaign clicks one of these links they are by default taken to the Sugar instance that sent the campaign. Many organizations may want to use a custom page to send recipients to instead of using Sugar, or when running Sugar onsite it may be behind a firewall and not accessible to the recipients of the campaign. Use the following steps to create a custom landing page to use for tracker URLs while still properly recording the activity in Sugar.

- 1. Create an index.php page on the desired web server that is open to the Internet.
- 2. Add the following code to the custom index.php page to ensure all campaign activities are properly recorded in Sugar.

```
<?php
  if ($_REQUEST['entryPoint'] == 'removeme' || $_REQUEST['entryPoint']
== 'campaign_trackerv2' || $_REQUEST['entryPoint'] == 'image') {
    if (strlen($_REQUEST['identifier']) == 36) {
      $ch = curl init();
      if (strlen($_REQUEST['track']) > 0) {
        curl_setopt($ch, CURLOPT_URL,
\"http://sugar_url/index.php?entryPoint=\" . $_REQUEST['entryPoint'] .
\"&identifier=\" . $_REQUEST['identifier'] . \"&track=\" .
$ REQUEST['track']);
                curl_setopt($ch, CURLOPT_HEADER, 1);
                curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, 0);
                curl_setopt($ch, CURLOPT_FOLLOWLOCATION, 0);
                curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
                curl_setopt($ch, CURLOPT_USERAGENT,
$_SERVER['HTTP_USER_AGENT']);
                $headers = curl_exec($ch);
                $headerArray = explode(\"\n\",$headers);
                foreach ($headerArray as $value) {
                    if (substr(strtolower($value),0,8) ==
\"location\") {
                        header($value);
            } else {
                curl_setopt($ch, CURLOPT_URL,
\"http://sugar_url/index.php?entryPoint=\" . $_REQUEST['entryPoint'] .
\"&identifier=\" . $_REQUEST['identifier']);
                curl_setopt($ch, CURLOPT_HEADER, 0);
```

Note: Replace all instances of "http://sugar\_url" in the code above with the actual Site URL of your Sugar instance.

3. Finally, specify the external server URL in the Admin > Campaign Email Settings > Location of campaign tracking files option in order for the tracking links to be correctly generated in the campaign emails. For more information on setting this value, please refer to the Email documentation.

## Configuring Cron for Schedulers

Sugar's scheduler jobs are executed by the cron utility which runs on your server. There are several configuration options available to ensure that long-running or failed scheduler jobs do not impede your other scheduler jobs from running in a timely manner.

First, max\_cron\_runtime determines how long a single job should be allowed to run. If a single job exceeds this limit, cron.php is aborted with the long-running job marked as in progress in the job queue. The next time cron runs, it will skip the job that overran the limit and start on the next job in the queue. Additionally, if the total running time of a single cron run across all current jobs exceeds max\_cron\_runtime, then cron will complete whatever job it is currently executing, then stop. The next time cron runs, it will pick up with the next queued job. The max\_cron\_runtime uses seconds as its units and defaults to 1800 (30 minutes). You may wish to adjust this number based on the typical time requirements of scheduler jobs in your instance.

By default, max\_cron\_runtime is not enforced on your instance. In order to enforce this limit, set enforce runtime to true.

```
$sugar_config['cron']['enforce_runtime'] = true; // default is false
$sugar_config['cron']['max_cron_runtime'] = 1800; // seconds, default
is 1800
```

The timeout configuration controls how long cron will wait before re-starting a job that previously failed to complete. Once a job has been marked as in progress for longer than the timeout setting, the next cron run will mark the job as failed, making it eligible in the queue to be executed by the following cron run. The timeout uses seconds as its units and defaults to 3600 (1 hour). You may wish to adjust this number based on how quickly you wish a failed or long-running job to be reattempted. Please note that should enforce\_runtime be set to false or your max\_cron\_runtime be longer than the timeout, a job which is running normally may be set to "failed" upon reaching this timeout limit.

\$sugar\_config['jobs']['timeout'] = 3600; // seconds, default is 3600

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