XRMS Open Source CRM

Administrator Guide v 1.99.2

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1 Overview of Administrator Tasks

XRMS Administrators are responsible for several major activity areas that are performed from the Administrator screen. They are:

- Access Control List Security
- Manage: Used to maintain different aspects of XRMS.
- Types and Statuses: Maintains information seen in the drop-down lists.
- Plugins: Used to add or delete XRMS plugins.
- Custom Fields: Administering custom fields for your installation.
- Import/Export: Used to import and export company data.

Click the **Administration** link on the top bar to see the Administration screen.

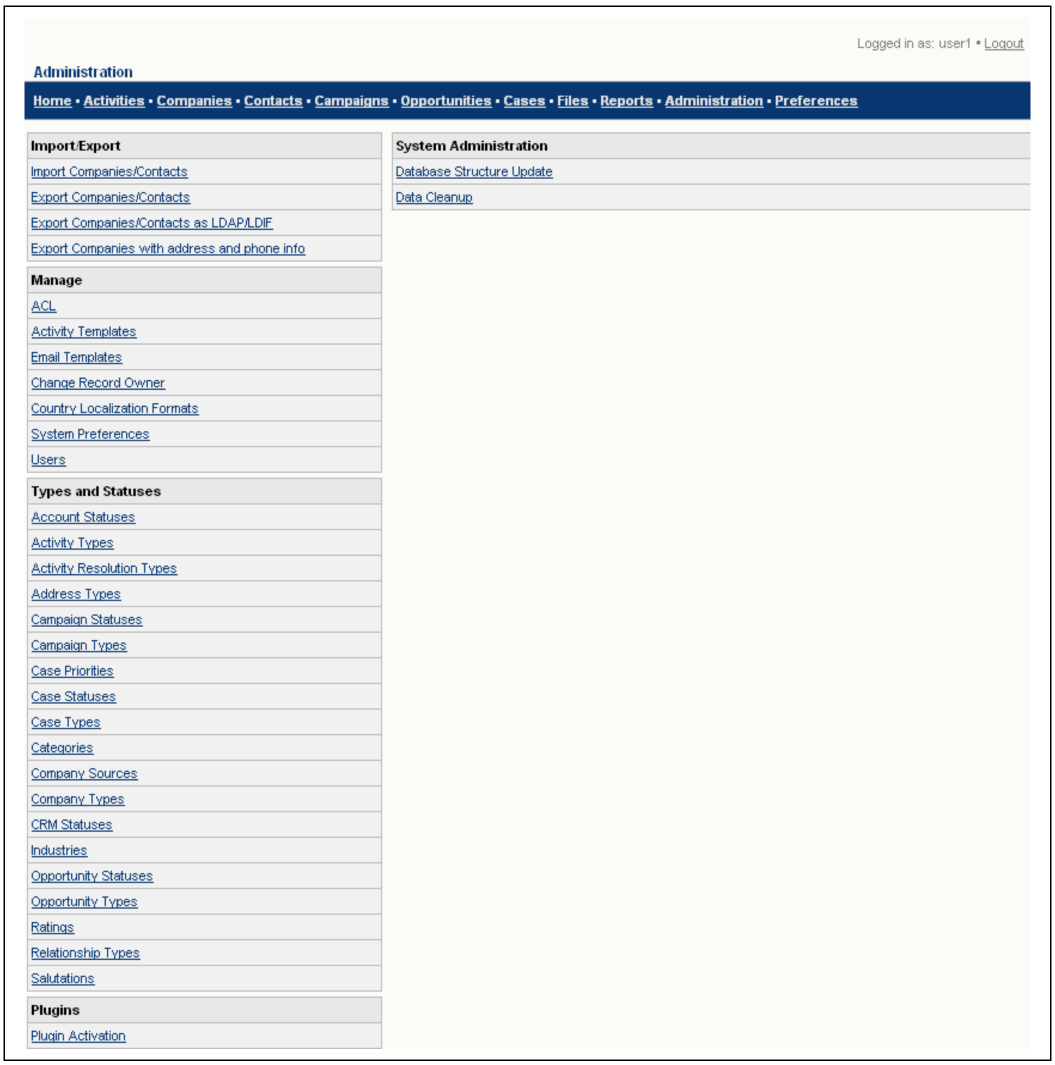


Figure 1: Administration Screen

The five main sets of tasks done by an Administrator are described in detail in the chapters that follow.

2 Access Control List (ACL) Security

The Access Control List (ACL) feature is used to restrict access to certain XRMS features to those users who are authorized to perform such tasks.

The ACL security in XRMS is designed around a model of giving Users a Role in a Group. Permissions on objects in XRMS are defined first by the Role. Specific objects may be owned by a Group. Users may be in multiple Groups.

XRMS uses a "default deny" security policy. So, by default, all permissions are denied to a user. Then, permissions are added by assigning users to Roles in Groups. This additive permissions stream is often referred to as a "most privilege" system. So, as new Roles are assigned to a User, additional privileges will be added to the composite permissions for that user. XRMS's ACL system uses these composite permissions for each user to determine whether a particular user should have specific rights on a specific object in or record inside XRMS.

XRMS ships with one default group "Users", that has access to all records in XRMS, and two Roles "User" and "Administrator". By Default, the User Role has world Read, Write, and Update permissions, and the Administrator Role has full permissions on everything in the system.

Navigate to the Administration>ACL link to see the ACL Management screen.

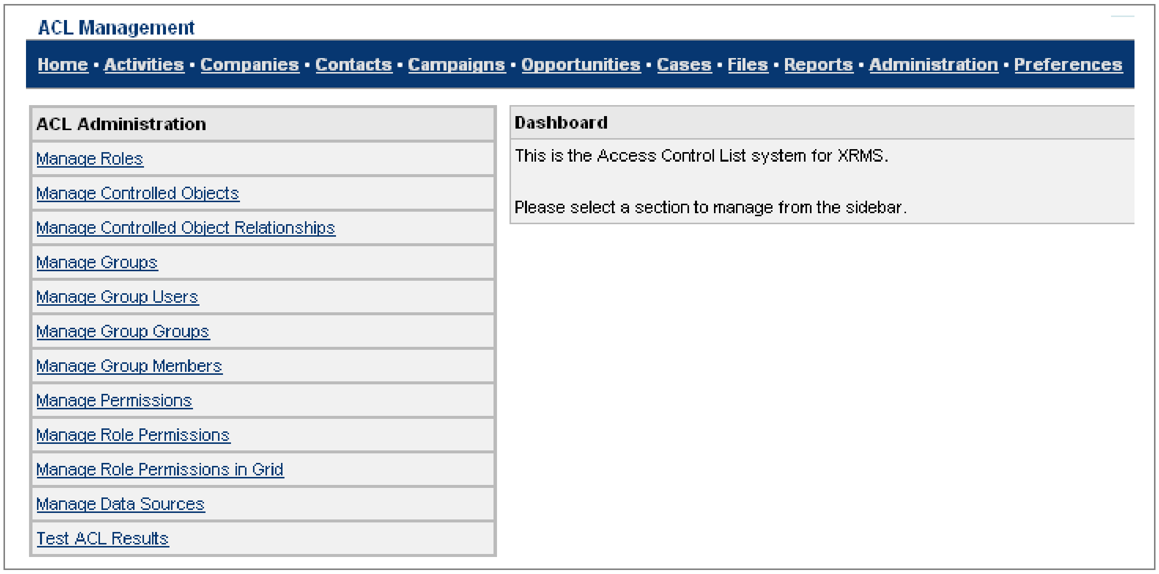


Figure 2: ACL Management Screen

The ACL Management screen has two distinct parts:

- ACL Administration: The right sidebar displays the Access Control List Administration box. This list consists of various elements of XRMS that are defined and controlled by the administrator.
- Dashboard: When you click an item in the Access Control List, the Dashboard displays the different screens.

The following section describes the different items in the Access Control List. The procedure to add and edit is common for all the items on the list. For this reason, the procedure is explained only for one item, Manage Roles.

2.1 Manage Roles

The default roles are:

- User: Can perform business-related tasks but not administrative tasks.
- Administrator: Has the authority to perform administrative tasks.

Click the **Manage Roles** link in the ACL Management Screen, Figure 2. You see the Manage Roles screen.

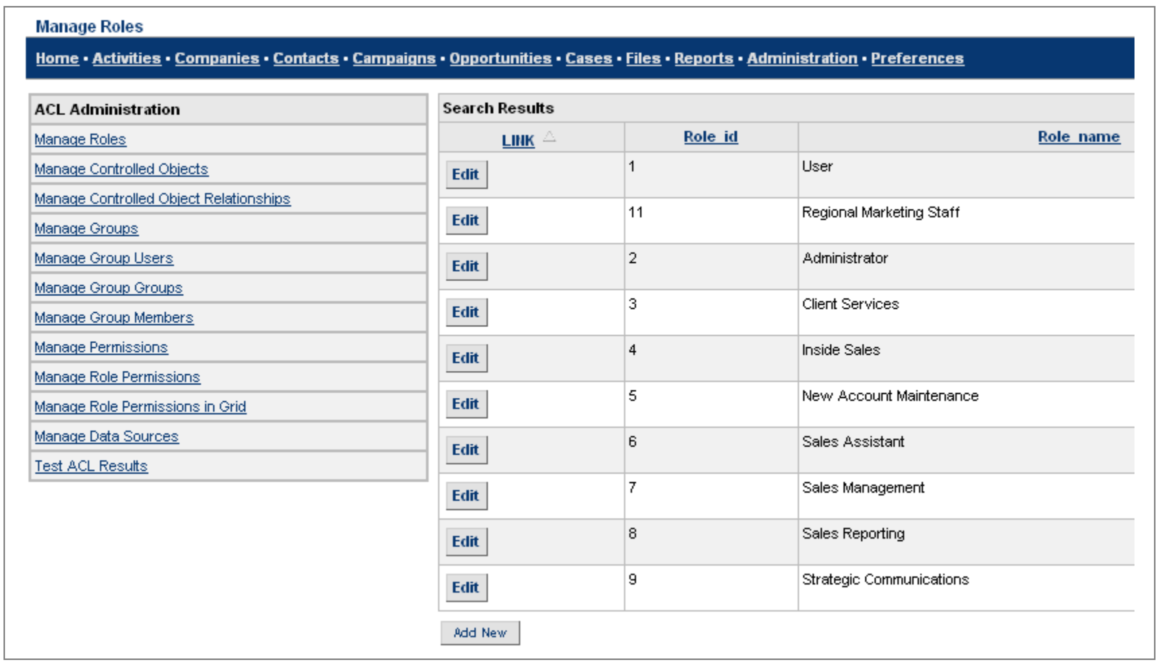


Figure 3: Manage Roles Screen

Adding a Role

A significant Access Control List feature is the ability to add a new role.

To add a role:

1. Click **Add New** in the Search Results table of the Manage Roles screen, Figure 3. The Dashboard displays the Role box.

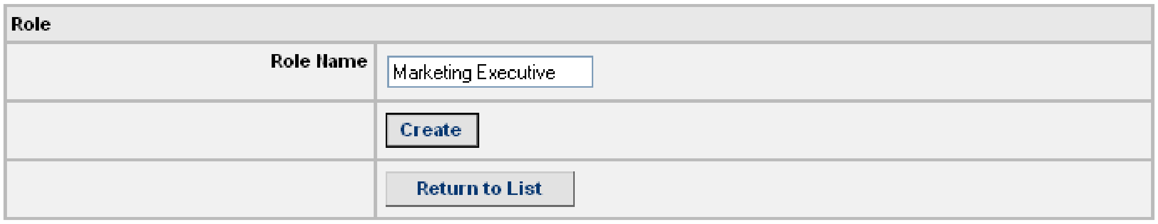


Figure 4: Role - Add Name

2. Enter a new role name in the text box beside Role Name.
3. Click **Create** to create a new role name. You then see the new Role Name displayed in a separate screen.

Click **Return to List** to return to the Search Results table.

Editing a Role

To edit a role, do the following:

1. Click the **Manage Roles** link in the ACL Management Screen, Figure 2 to see the Manage Roles screen (See Figure 3).
2. To sort the items in the Search Results table, click on the underlined column headings.
3. To select the role that you want to modify, click **Edit** on that row. You see the Role box.

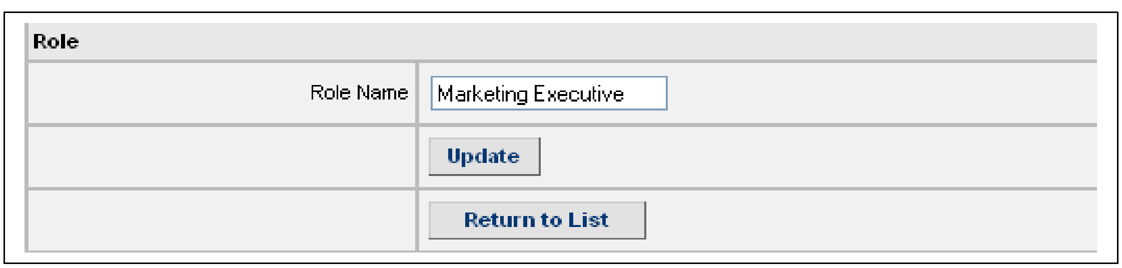


Figure 5: Role - Edit Name

4. Change the existing Role Name and click **Update** to save the changes. You then see the new Role Name displayed on a separate screen.

   Click **Return to List** to return to the Search Results table without creating a new role name.

2.2 Manage Role Permissions

The Manage Role Permissions feature is used to manage the intersection between roles, permissions, and controlled object relationships. A role is assigned a particular permission on a controlled object relationship within a particular scope. The different scope types are:

- User Scope: The role has permission on the child object only if the table has a User field and that field matches the user's User_ID.
- Group: The role has this permission only for those child objects that fall into the group for which the user has this role (or any child groups of this group).
- World: The role has this permission on all controlled objects that are the child in this relationship.

The entries in the Manage Role Permissions list also match those assigned or viewed with the Manage Role Permissions in Grid feature.

Role permissions can also be set to inherit or not, based on the Inheritance flag. If the Inheritance flag is set to Yes, all objects that have a child in this controlled object relationship (parents) inherit the permission. If inheritance is applied to each top-level object relationship, the role will have this permission on every object in the system. Inheritance defaults to "Yes".

Navigate to the Administration>ACL link and click the **Manage Role Permissions** link to reach the Manage Role Permissions screen.

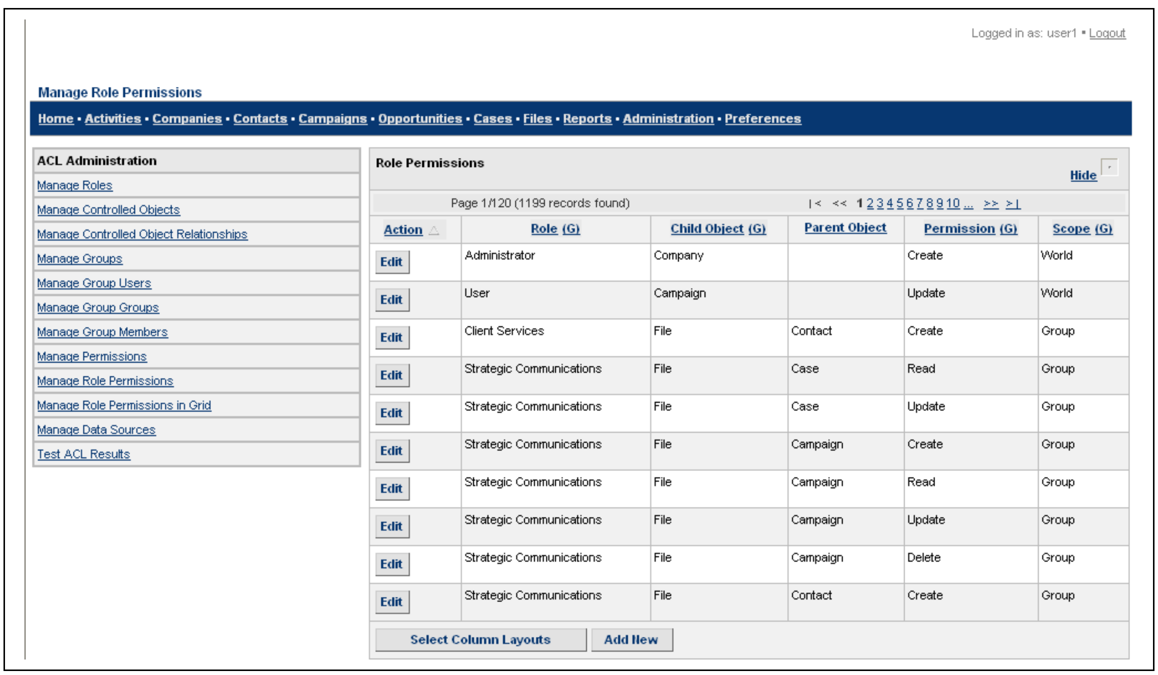


Figure 6: Manage Role Permissions Screen

For details of the procedure to add or edit permissions for a role, see 2.1 Manage Roles, which follows a similar procedure for a role.

The fields from which you can add or edit role permissions are:

Role: Choose the role from the drop-down list.

Controlled Object Relationship: Choose the required relationship from the drop-down list. Scope: Can be User, Group, or World. Permission: Choose the permission from the drop-down list. Inheritable Flag: If you need the permission of on a 'parent' or higher level controlled object to *not* be inheritable, set this value to “No”. In most cases, the default value of “Yes” will be appropriate.

Click **Select Column Layouts** to change the onscreen display of fields. For details, see 2.4.

2.3 Manage Role Permissions in Grid

The Manage Role Permissions in Grid feature can be used on any role that is defined in XRMS. Roles could be: Administrator, Client Support, Regional Marketing Staff, Strategic Communication, Sales Management, and so on.

Manage Role Permissions in Grid is likely to be the ACL screen used most often by your XRMS Administrator to modify permissions for a specific business Role.

To manage role permissions within a grid, follow the steps below:

1. Navigate to the Administration>ACL link and click the **Manage Role Permissions in Grid** link to reach the Manage Permissions for Role screen 1.

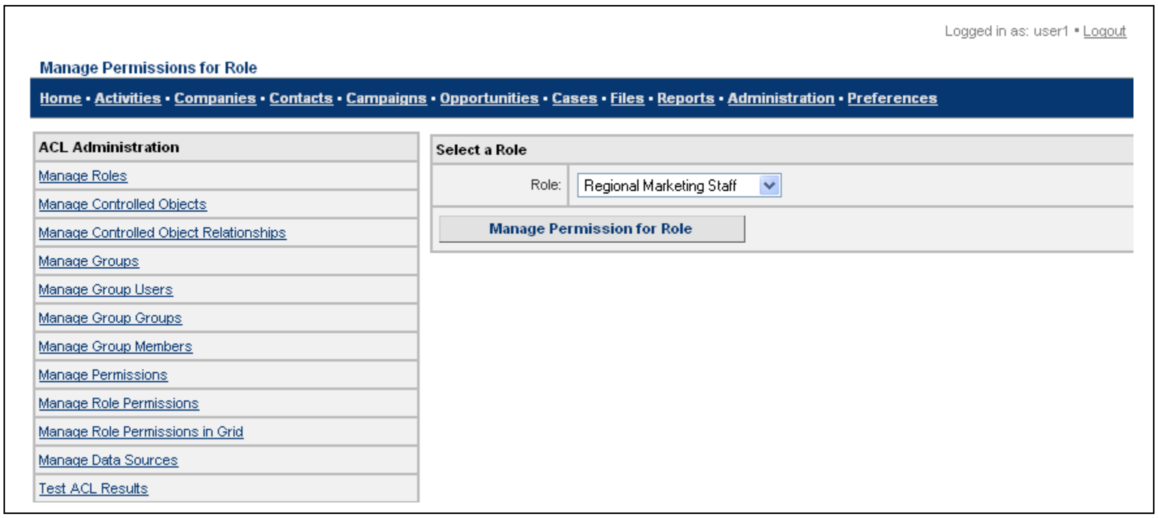


Figure 7: Manage Permissions for Role Screen 1

5. Select a role from the Role drop-down list. The default roles are user and administrator.
6. Click **Manage Permission for Role** to see the Manage Permissions for Role screen 2. If you choose Regional Marketing Staff as the role, you see the Manage Permissions for <Role Name> screen on the Dashboard.

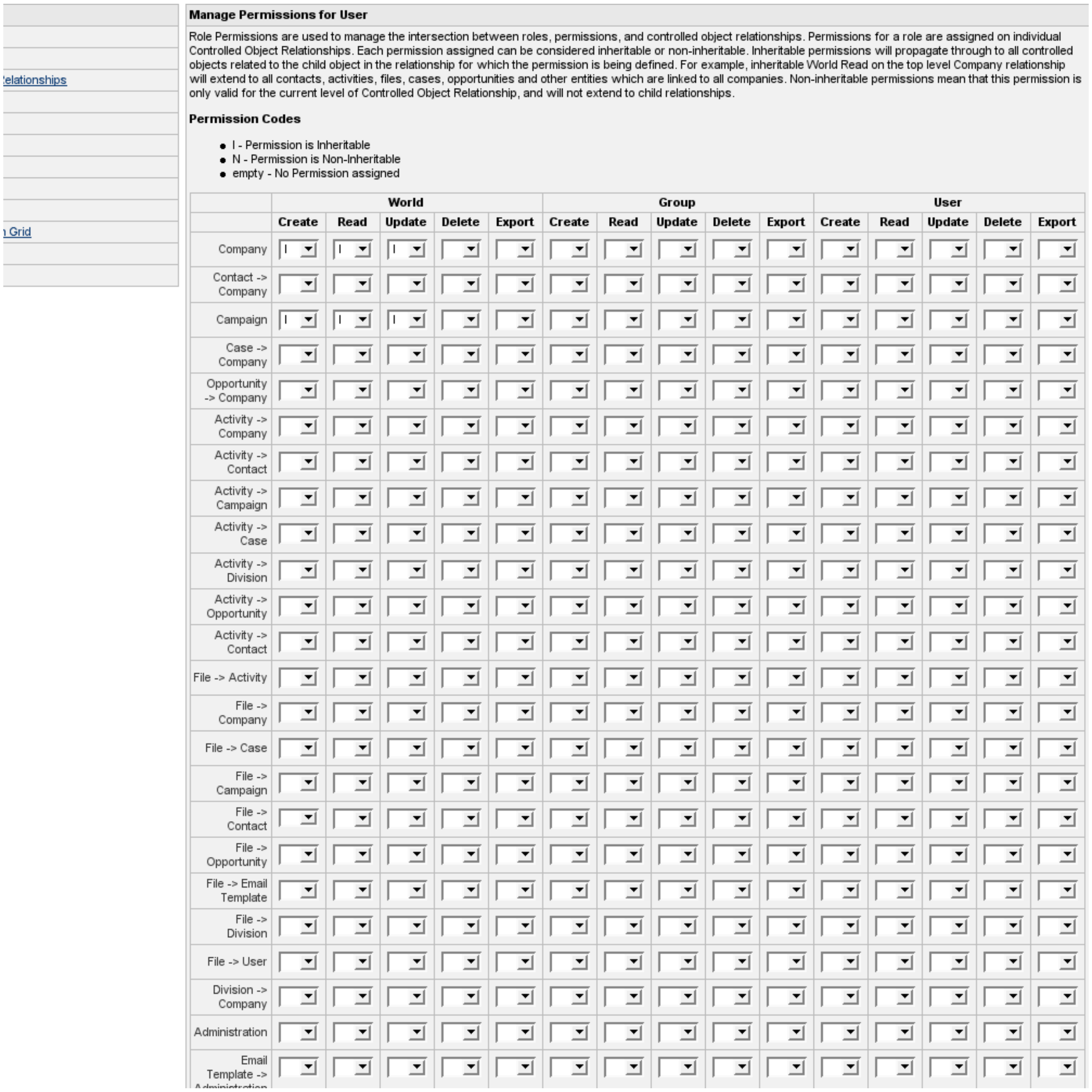


Figure 8: Manage Permissions for Role Screen 2

7. Select the appropriate level of permission to give relevant permissions to the user or administrator. I indicates the permission will be inheritable, while N indicates that the permission should only apply to the particular controlled object relationship.
8. After you select all the required permissions, click **Assign Permissions**.

2.4 Manage Groups

Groups are uses to group users and Controlled objects in XRMS. These

Navigate to the Administration>ACL link and click on the **Manage Groups** link. You see the Manage Groups screen.

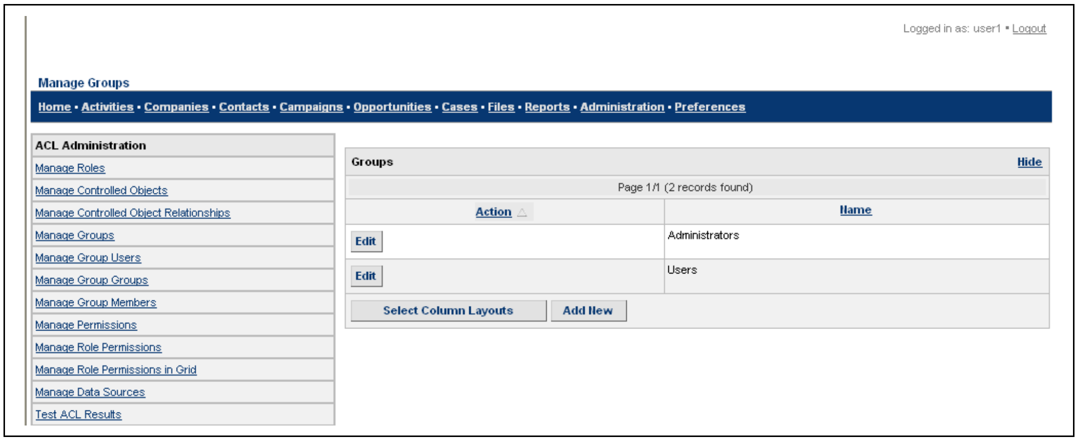


Figure 9: Manage Groups Screen

For details of the procedure to add or edit a group, see 2.1 Manage Roles, which follows a similar procedure for a role.

The only field involved in the procedure to add or edit is:

Group Name: The name of the group.

Select Column Layouts

The Select Column Layouts feature is designed so that you can tailor onscreen search result displays according to your needs. Click **Select Column Layouts** in the Manage Groups screen (See Figure 9) to see the Select Columns box.

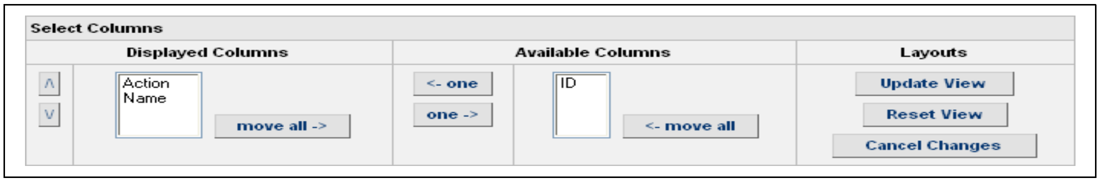


Figure 10: Select Columns

The Available Columns box shows the complete list of column titles to be displayed. The Displayed Columns box shows those columns you wish to have displayed.

To select the column you require, place the cursor bar over the column name and:

Click ←**one** to move items to the Displayed Columns text box, one at a time.

Click ←**move all** to move all the items to the Displayed Columns text box.

Click **one→** to move items to the Available Columns text box, one at a time.

Click **move all→** to move all the items to the Available Columns text box.

To specify the order in which the columns should be displayed, click **Λ** and **V** beside the Displayed Columns box. The column title at the top of the box will be leftmost in the display and others will follow in the order they are shown in this list.

You can now:

- Click **Update View** to see the new column order in the Manage Groups screen (See Figure 9).
- Click **Reset View** to return to the columns shown in the Available Columns box prior to any updates.
- Click **Cancel Changes** to discard the updates you made and return to the Manage Groups screen, Figure 9.

2.4.1 Manage Users in a Group

You can enter and edit the details of users in groups from the Manage Group Users screen.

Navigate to the Administration>ACL link and click on the **Manage Group Users** link to see the Manage Group Users screen.

Group Users | Hide

Action	Group (G)	User (G)	Role (G)
Edit Delete	Users	One, User	Administrator
Edit Delete	Users	van Meerten, Aaron	Administrator
Edit Delete	Users	Peterson, Brian	Administrator
Edit Delete	Users	Carl, Peter	Administrator
Edit Delete	Users	User, Demo	User
Edit Delete	Users	Ito, Christopher	User

Select Column Layouts | Add New

Figure 11: Manage Group Users Screen

For details of the procedure to add or edit a group user, see 2.1 Manage Roles, which follows a similar procedure for a role.

The fields involved in the procedure to add or edit are:

Group: Choose the group from the drop-down list.
User: Choose the user from the drop-down list.
Role: Choose the role of the user from the drop-down list.
source: **What is this ????**

Click **Select Column Layouts** to change the onscreen display of fields. For details, see 2.4.

2.4.2 Manage Groups within a Group

Navigate to the Administration>ACL link and click on the **Manage Group Groups** link to see the Manage Group Groups screen.

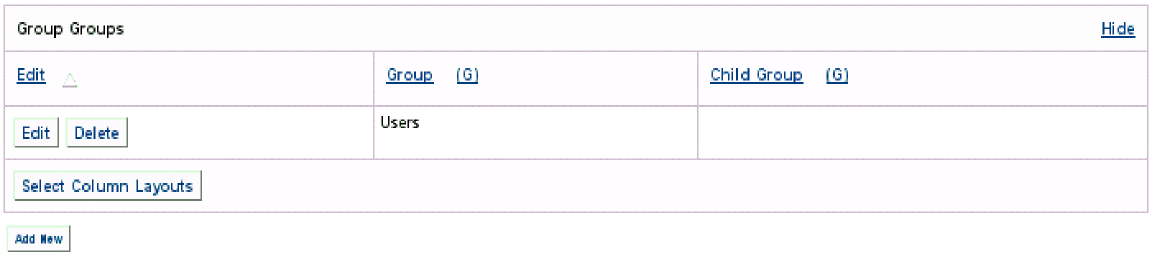


Figure 12: Manage Group Groups Screen

For details of the procedure to add or edit a group within a group, see 2.1 Manage Roles, which follows a similar procedure for a role.

The different fields involved in the procedure to add or edit are:

Group: Choose the group from the drop-down list.

Child Group: Choose the group from the drop-down list.

source: **What is this ????**

2.4.3 Manage Group Members

Navigate to the Administration>ACL link and click on the **Manage Group Members** link to see the Manage Group Members screen.

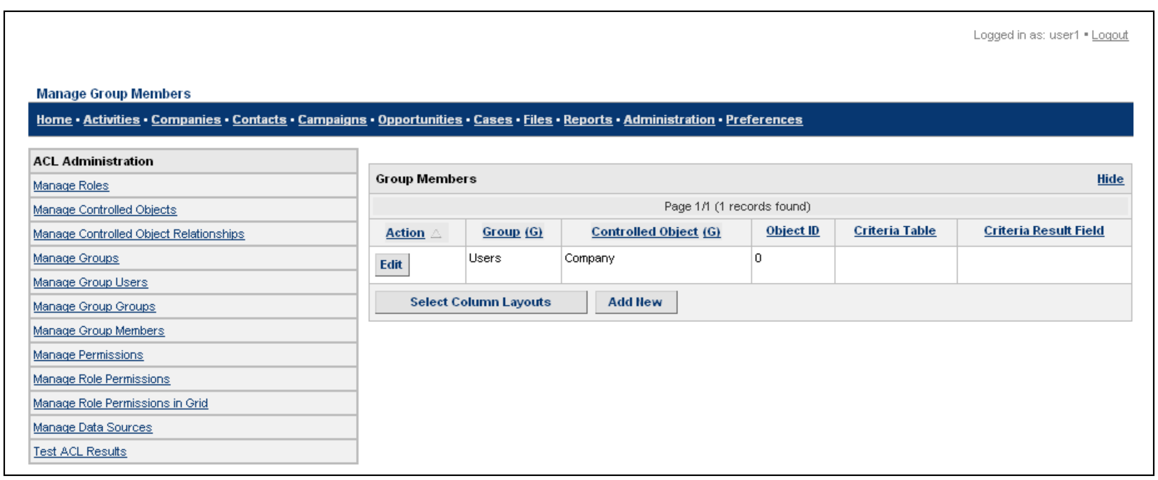


Figure 13: Manage Group Members Screen

For details of the procedure to add or edit a group member, see 2.1 Manage Roles, which follows a similar procedure for a role.

The different fields involved in the procedure to add or edit are:

Group: Choose the group from the drop-down list.
Controlled Object: Choose the controlled object from the drop-down list.
Object ID: Database identifier of the controlled object to add to the group.

Click the **Hide** link if you do not wish to display these columns and associated fields.

Click **Select Column Layouts** to change the onscreen display of fields. For details, see 2.4.

2.5 Manage Controlled Objects

Controlled Objects in XRMS define the system-level entities that can be controlled by the ACL. Every record in XRMS is a specific instance of a more general Controlled Object. Generally, unless to are developing a plugin that needs to add new Controlled Objects, you should ***not*** edit anything about the Controlled Objects in XRMS

Navigate to the Administration>ACL link and click the **Manage Controlled Objects** link to reach the Manage Controlled Objects screen.

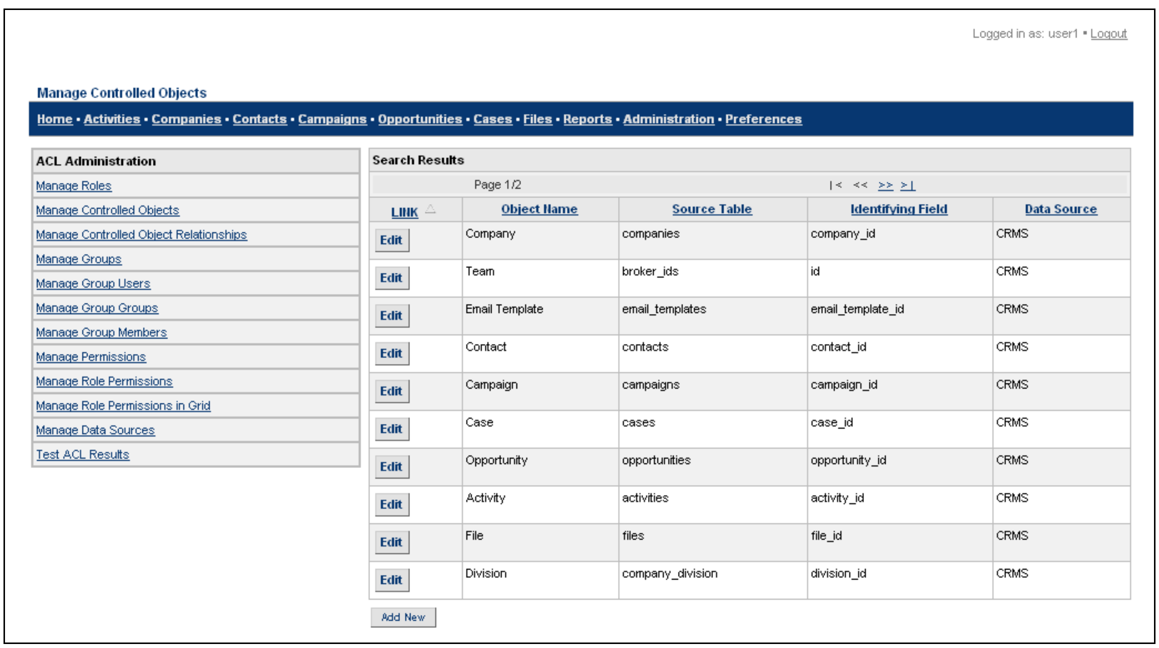


Figure 14: Manage Controlled Objects Screen

For details of the procedure to add or edit a controlled object, see 2.1 Manage Roles, which follows a similar procedure for a role.

The different fields involved in the procedure to add or edit are:

Object Name: The name of the new object.
Source Table: The table from which the object is taken.
Identifying Field: The field name in the source table that refers to this object.

user_field: Identifies the field in the table that contains the user id of the owner of this record. If the field is left blank, it defaults to the “user id”.

Data Source: Choose the source of the data from the drop-down list.

2.5.1 Manage Controlled Object Relationships

Controlled object relationships are used to manage the relationship between controlled objects. These relationships are important because they maintain the inheritance between different tables, and are the entities for which permissions are assigned in the Manage Role Permissions feature.

Navigate to the Administration>ACL link and click the **Manage Controlled Object Relationships** link to reach the Manage Controlled Object Relationships screen.

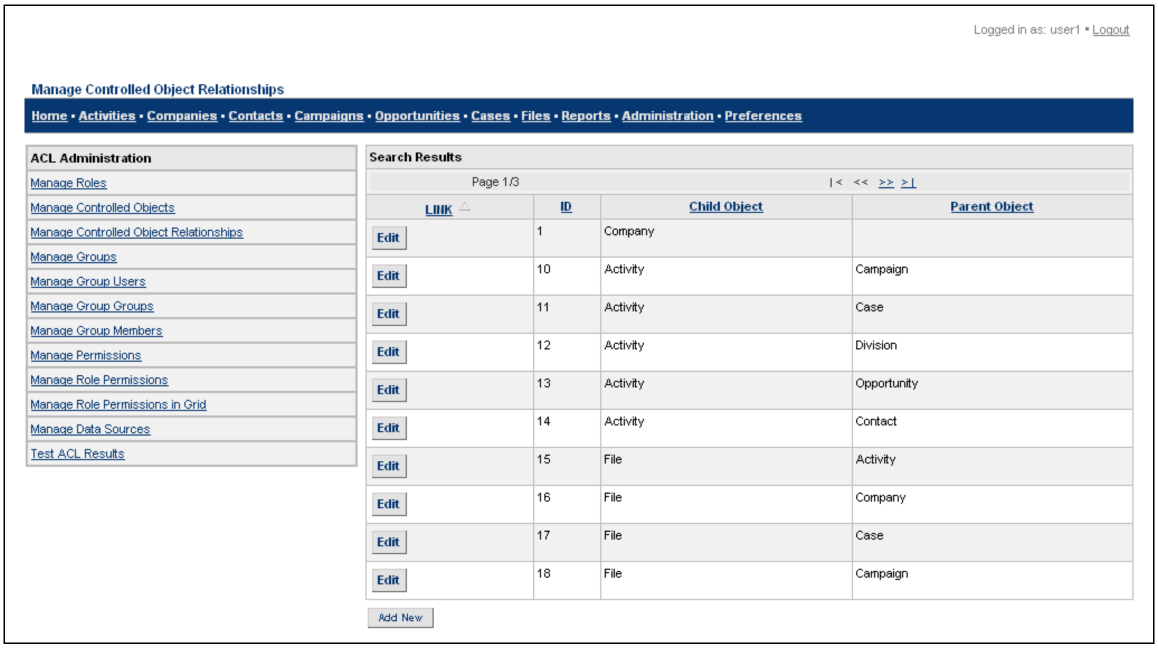


Figure 15: Manage Controlled Object Relationships Screen

For details of the procedure to add or edit a controlled object relationship, see 2.1 Manage Roles, which follows a similar procedure for a role.

The fields involved in the procedure to add or edit are:

Child Controlled Object: Is the child object in the relationship. This field must always be set.

Parent Controlled Object: Is the parent object in the relationship. If this field is left blank, the object is considered top level and not considered to be the child of any object.

on_what_child_field: Defines the field in the child table that contains the ID that identifies to which parent object record it belongs. Defaults to the identifying field name in the parent controlled object. A child field must be defined, if a cross table is defined.

on_what_parent_field: Defines the field in the cross table which has the ID of the parent object.

cross_table: The name of the table which relates two control objects. This is a separate table from the parent and child tables which contains a row for each link between the parent and child objects. Defaults to blank, and does not use cross table for the relationship.

singular: Defines whether or not the child table uses the "on_what_table" and "on_what_id" fields to link to a parent object. If set to 1, it uses on_what_table and on_what_id to determine the object relationship with the parent object. Defaults to 0 or blank.

2.6 Manage Permissions

To ensure the validity of data, different users are given different levels of permissions to manipulate XRMS data. Available permissions include: Create, Read, Update, Delete, and Export.

Permissions in XRMS define the system-level entities that can be controlled by the ACL. Every record in XRMS is a specific instance of a more general Controlled Object. Generally, unless to are developing a plugin that needs to add new Permissions, you should ***not*** edit anything about the Permissions in XRMS.

Navigate to the Administration>ACL link and click the **Manage Permissions** link to reach the Manage Permission screen.

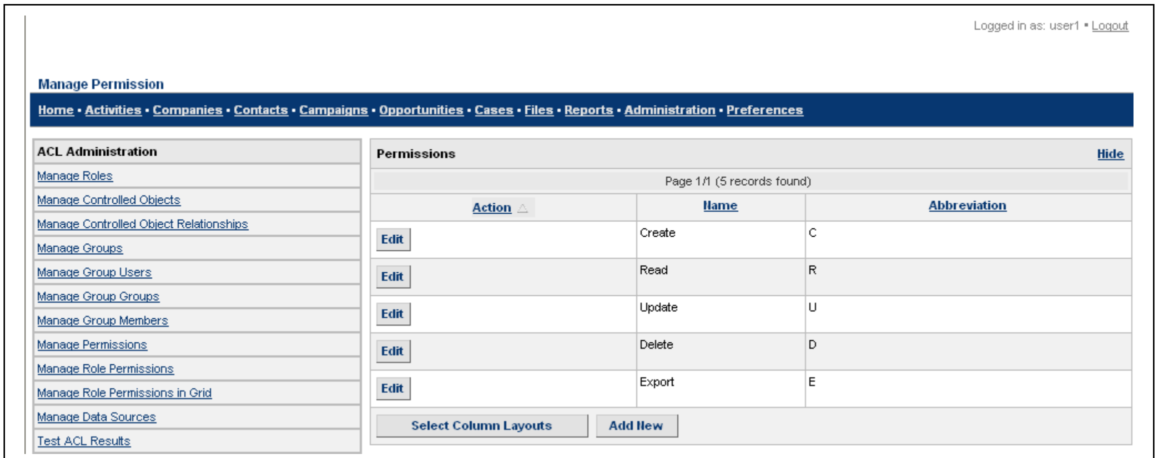


Figure 16: Manage Permission Screen

For details of the procedure to add or edit permissions, see 2.1 Manage Roles, which follows a similar procedure for a role.

The different fields involved in the procedure to add or edit are:

Permission Name: The name of the permission, for example, Delete.

Abbreviation: An abbreviation of the permission name.

Click the **Hide** link if you do not wish to display these columns and associated fields.

Click **Select Column Layouts** to change the onscreen display of fields. For details, see 2.4.

2.7 Manage Data Sources

Data sources are used to manage permissions within databases other than the XRMS database. This is only useful if there are plugins that also use the ACL and define new controlled objects using the new data source, new controlled object relationships, and also register a hook in XRMS to provide database access to the ACL object for this data source.

It is recommended that administrators do not change values in Manage Data Sources, unless they are developing a plugin.

Navigate to the Administration>ACL link and click the **Manage Data Sources** link. You see the Manage Data Sources screen.

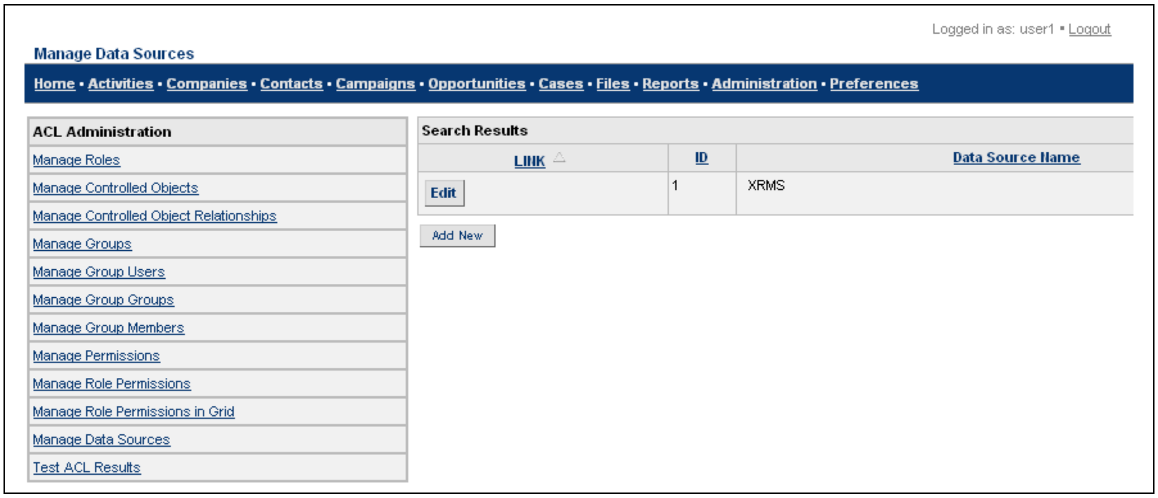


Figure 17: Manage Data Sources Screen

For details of the procedure to add or edit a data source, see 2.1 Manage Roles, which follows a similar procedure for a role.

The only field involved in the procedure to add or edit is:

Data Source Name: The name of the data source.

2.8 Test ACL Results

The Test ACL Results feature is used to test the results of the ACL configuration that has been just built. This feature can be used in two ways in which ACL is called:

- Return the Permissions on an individual object.
- Return the list of objects on which the user has a particular permission.

Navigate to the Administration>ACL link and click the **Test ACL Results** link to reach the ACL Result Test screen.

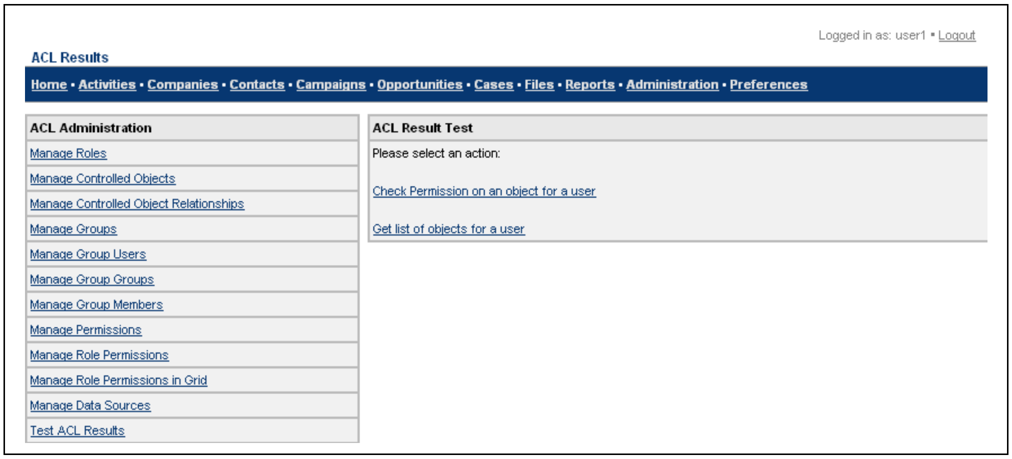


Figure 18: ACL Result Test Screen

You can:

- Check permissions on an object for a user.
  - or
- Get the list of objects for a user.

The following paragraphs give details of the procedure for each.

Check Permission on an Object for a User

To check permission on an object for a user, follow these steps:

1. Click on the **Check Permission on an object for a user** link in the ACL Result Test box. You then see the ACL Parameters box.

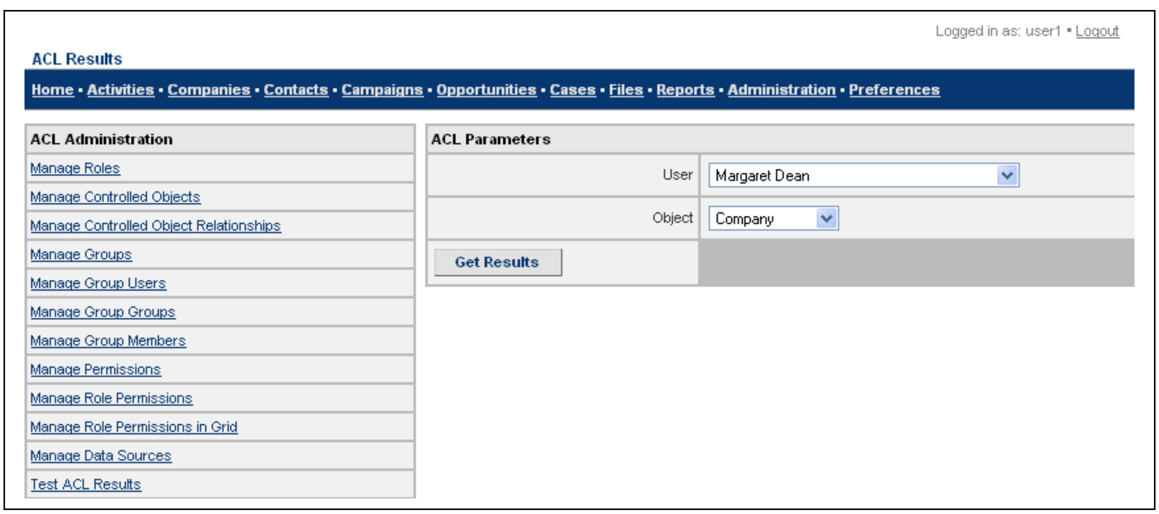


Figure 19: Check Permission on an Object for a User - Enter ACL Parameters

2. Choose the user from the drop-down list.
3. Choose the object from the drop-down list.

4. Click **Get Results**. You see the Search Results box that shows different user ids and the permissions they have to access different types of data.
5. To select the object for which you wish to check permissions, click the radio button in the select on what id column.
6. Click **Calculate Permissions** to see the ACL Results box. The box displays the permissions available to the user for the selected object.

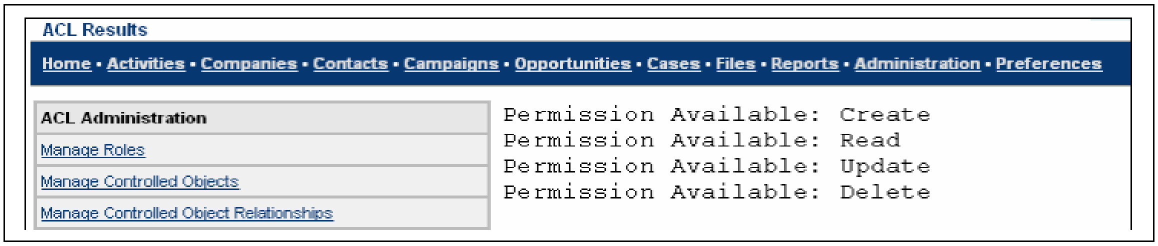


Figure 20: Check Permission on an Object for a User - ACL Results

Get List of Objects for a User

To get a list of objects for a user, follow the steps below:

1. Click the **Get list of objects for a user** link in the ACL Result Test screen (See Figure 18). You see the ACL Parameters box.

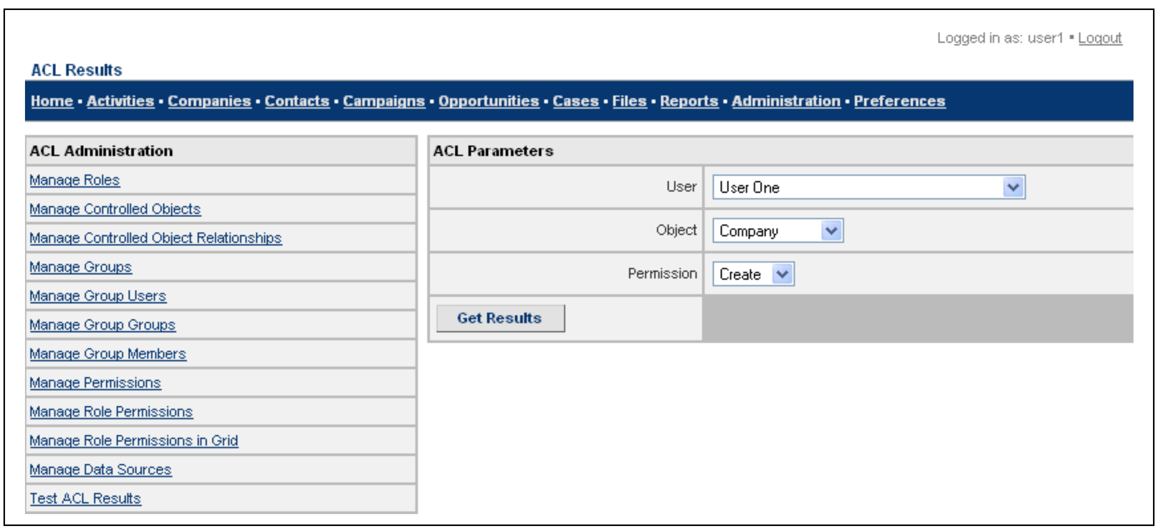


Figure 21: Get List of Objects for a User - ACL Parameters

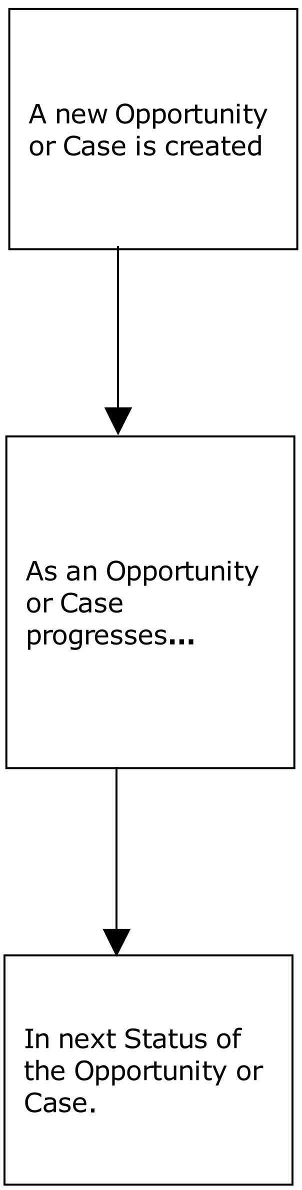
2. Choose the user from the drop-down list.
3. Choose the object from the drop-down list.
4. Choose the permission from the drop-down list.
5. Click **Get Results**. You see the ACL Results box that shows company ids, user ids, and other company data.

3 Workflow

Workflow is currently applicable to the Opportunities and Cases features of XRMS. It will eventually apply to the Campaigns feature**.**

Activity Templates are used to define workflow using Types and Statuses, see Section 5.2 for more details on these templates. An Activity Template is used to create a new activity when the status or type of a case or opportunity changes. Every activity in the Activity Template is assigned to a user with the same role as that defined for the activity in the Activity Template. When numerous users have the same role, the sequence of activity assignment starts from those users with the same role that have the least number of open activities**.**

The concept of workflow can be represented as follows**:**



Each Opportunity or Case has a "Type".

Each Opportunity Type and Case Type has a "Status".

Each Opportunity Status or Case Status has Workflow Activity Templates.

Activity Templates define the standard activities associated with each status.

New Activities are created from the activity templates and assigned based on the Role defined in the activity template.

When the said new activities are completed, further new activities are created from the activity templates and assigned based on the role defined in the activity template.

This cycle of creating new activities from templates, and assigning activities based on roles in the activity template continues until all the activities under a specific status are completed.

The case or opportunity now moves to the next status.

1 The process of creating new activities from activity templates and assigning them based on roles in the activity template, repeats for the activities in this status.

4 Plugins

Plugins are a convenient means of adding functionality to XRMS CRM or linking to external applications. Plugins can be activated in the XRMS Administration panel and some plugins require that other programs or components be installed. Many plugins contain supplementary documentation in the plugin directory. please read this documentation before enabling the plugins. Enabling plugins without first doing required setup may break your XRMS installation. You have been warned.

4.1 Activating Plugins

Click on the **Plugin Activation** link in the Plugin box of the Administration screen (See Figure 1). You see the Plugin Administration screen.

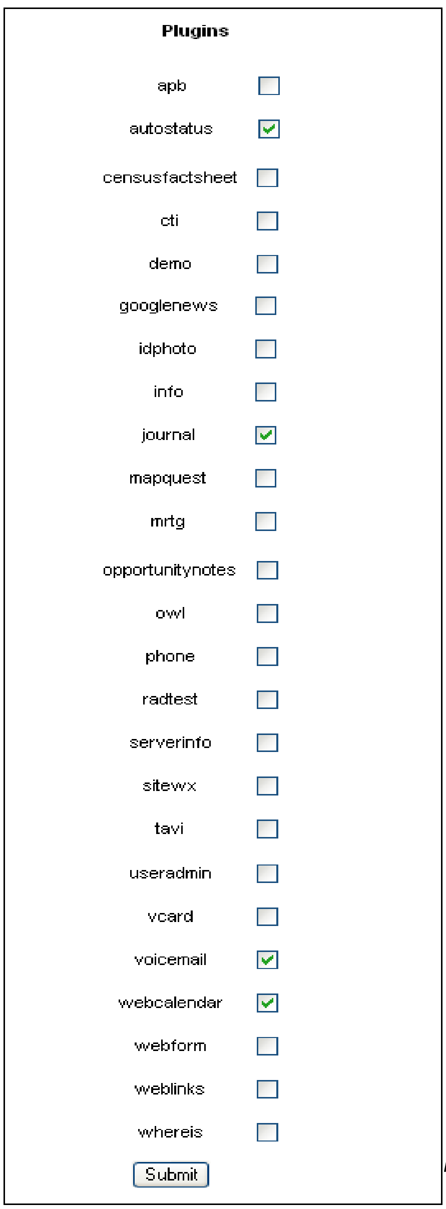


Figure 22: Plugin Administration Screen

4.2 Plugins Included with XRMS CRM

Included Plugins and related information about them are in the table that follows:

Plugin Name	Activation	Description
Apb	Requires installation of apb.	Active PHP Bookmarks enable users to bookmark websites and share these bookmarks.
Cti	Installation required.	Connection to the Asterisk Open Source PBX http://www.asterisk.org/ voicemail system.
custom_fields	Installation Required.	Adds configurable custom fields to XRMS records. See Custom Fields in XRMS
Demo	Administration Panel and addition of a webpage demo.php.	Link to a demo page within XRMS. Intended as an example of simple menu-level plugin integration.
Dunfinder	Installation required.	Dial-Up Number Finder for the US.
extra_activity_widget	Administration Panel only.	Adds a 'Closed Activities' widget to companies/one.php. Designed to be an example of more complex features in plugins.
Googlenews	Administration Panel only.	Looks up google news items on a company in XRMS
Idphoto	Installation required	Adds photos to user records in XRMS
Info	Installation required.	*Deprecated* see custom_fields plugin above and Custom Fields in XRMS
Mapquest	Administration Panel only.	Passes address to mapguest.com to do an address lookup. *Both whereis and mapquest cannot be activated at the same time.*
MRTG	Installation required.	Multi Router Traffic Grapher.
opportunitynotes	Administration Panel only.	Add notes to an Opportunity.
owl	Installation	Uses OWL for file storage. Features file

Plugin Name	Activation	Description
	required.	versioning, hierarchical mini-filesystem with folders, and searching within files. See http://owl.sourceforge.net/
Phone	Administration Panel.	Searches for phone numbers in Company or Contact.
Tavi	Installation required	TAVI wiki ported to XRMS
Useradmin	Administration Panel only.	Deprecated. Selecting this plugin is NOT RECOMMENDED.
vCard	Administration Panel only.	Creates a vCard of the Contact
Webform	Installation required.	Creates a webform on your external website.
Weblinks	Installation required	Adds weblink bookmarks to XRMS records.
Whereis	Administration Panel only.	Passes address to whereis.com.au (Australia) to do an address lookup. Both whereis and mapquest cannot be activated at the same time.

4.3 Developing Plugins

The plugin system in XRMS CRM is derived from the popular webmail system Squirrelmail. See: http://www.squirrelmail.org/ Many thanks to the Squirrelmail development team for creating such a flexible plugin architecture that was so quickly adapted to use in XRMS (less than a day of work was required to add plugin functionality from Squirrelmail into XRMS)

This section of the XRMS Administration Guide is likewise adapted from the Squirrelmail Plugin documentation, which is also released under the GNU Free Documentation License. See: http://www.squirrelmail.org/wiki/DevelopingPlugins The SM pages may provide more detail in some places than this guide, but any incompatibilities will be solely the fault of the XRMS Development team.

4.3.1 Plugin Architecture

The plugin architecture of XRMS is designed to make it possible to add new features without having to patch XRMS itself. Traditionally, because of their position at the core of an enterprise architecture, CRM systems are heavily integrated to other systems.

The Idea

The idea is to be able to run random code at given places in the XRMS code. This random code should then be able to do whatever needed to enhance the functionality of XRMS. The places where code can be executed are called "hooks".

There are some limitations in what these hooks can do. It is difficult to use them to change the layout (this is done using Templates) and to change some core functionality that is already in XRMS.

Some way for the plugins to interact with the help subsystem and translations will be provided in the near future.

The Implementation

The plugin jumping off point in the main XRMS code is in the file plugin.php. In places where hooks are made available, they are executed by calling the function do_hook('hookname'). The do_hook function then traverses the array $xrms_plugin_hooks['hookname'] and executes all the functions that are named in that array. Those functions are placed there when plugins register themselves with XRMS as discussed below. A plugin may add its own internal functions to this array under any hook name provided by the XRMS developers.

A plugin must reside in a subdirectory in the plugins/ directory. The name of the subdirectory is considered to be the name of the plugin. (The plugin will not function correctly if this is not the case.)

When a plugin is registered, the file plugins/plugin_name/setup.php is included and the function xrms_plugin_init_plugin_name() is called with no parameters. That function is where the plugin may register itself against any hooks it wishes to take advantage of.

4.3.2 Writing Plugins

All plugins must contain a file called setup.php and must include a function called xrms_plugin_init_plugin_name() therein. Since including numerous plugins can slow

XRMS performance considerably, the setup.php file should contain little else. Any functions that are registered against plugin hooks should do little more than call another function in a different file.

Any other files used by the plugin should also be placed in the plugin directory (or subdirectory thereof) and should contain the bulk of the plugin logic.

The function xrms_plugin_init_plugin_name() is called to initalize a plugin. This function could look something like this (if the plugin was named "demo" and resided in the directory plugins/demo/):

```
function xrms_plugin_init_demo ()
{
  global $xrms_plugin_hooks;

  $xrms_plugin_hooks['generic_header']['demo'] = 'plugin_demo_header';
  $xrms_plugin_hooks['menuline']['demo'] = 'plugin_demo_menuline';
}
```

In this example, the "demo" plugin should also have two other functions in its setup.php file called plugin_demo_header() and plugin_demo_menuline(). The first of these might look something like this:

```
function plugin_demo_header()
{
  include_once($include_directory . 'plugins/demo/functions.php');
  plugin_demo_header_do();
}
```

The function called plugin_demo_header_do() would be in the file called functions.php in the demo plugin directory and would contain the plugin's core logic for the "generic_header" hook.

4.3.2.1 Including Other Files

A plugin may need to reference functionality provided in other files, and therefore need to include those files. Most of the core XRMS functions are already available to your plugin unless it has any files that are requested directly by the client browser (custom options page, etc.). In this case, you'll need to make sure you include the files you need (see below).

Files are included like this:

```
include_once($include_directory . 'include/validate.php');
```

When including files, please make sure to use the include_once() or require_once() functions and NOT include() or require(), since these all are much less efficient than include_once() and can have a cumulative effect on XRMS performance. In older versions of PHP (prior to PHP 4.3.11) require_once() was also less efficient than include_once(), but this is not true in newer versions of PHP.

The files that you may need to include in a plugin will vary greatly depending upon what the plugin is designed to do. For files that are requested directly by the client browser, we strongly recommend that you include the file $include_directory.vars.php, since it will set up the XRMS environment automatically. It will ensure the the user has been authenticated and is currently logged in, load all user preferences, include internationalization support, and initialize and include many other basic XRMS resources and functions.

4.3.2.2 Hook Types

do_hook

Most hook calls don't pass any data and don't ask for anything back. These always use the do_hook call. A limited number of do_hook calls do pass some extra parameters, in which case your plugin may modify the given data if you do so by reference. It is not necessary to return anything from your function in such a case; modifying the parameter data by reference is what does the job (although the hook call itself (in the source) must grab the return value for this to work). Note that in this case, the parameter to your hook function will be an array, the first element simply being the hook name, followed by any other parameters that may have been included in the actual hook call in the source. Modify parameters with care!

do_hook_function

This hook type was intended to be the main hook type used when the source needs to get something back from your plugin. It is somewhat limited in that it will only use the value returned from the LAST plugin registered against the hook. The source for this hook might use the return value for internal purposes, or might expect you to provide text or HTML to be sent to the client browser (you'll have to look at its use in context to understand how you should return values here). The parameters that your hook function gets will be anything you see AFTER the hook name in the actual hook call in the source. These cannot be changed in the same way that the do_hook parameters can be.

concat_hook_function

This is a hook type meant to address the shortcomings of do_hook_function; specifically in that it uses the return values of all plugins registered against the hook. In order to do so, the return value is assumed to be a string, which is just piled on top of whatever it got from the other plugins working on the same hook. Again, you'll have to inspect the source code to see how such data is put to use, but most of the time, it is used to create a string of HTML to be inserted into the output page. The parameters that your hook function will get are the same as for the do_hook_function; they are anything AFTER the hook name in the actual hook call in the source.

boolean_hook_function

This hook type is used to let all plugins registered against the hook to "vote" for some action. What that action is is entirely dependent on how the hook is used in the source (look for yourself). Plugins make their "vote" by returning TRUE or FALSE. This hook may be configured to "tally votes" in one of three ways. This configuration is done with the third parameter in the hook call in the source:

> 0 -- Any one or more TRUEs will override any FALSEs

< 0 -- Any one or more FALSEs will override any TRUEs

= 0 -- Majority wins. Ties are broken in this case with

the last parameter in the hook call in the source.

Your hook function will get the second parameter in the hook call in the source as its parameter (this might be an array if multiple values need to be passed).

See below for further discussion of special hook types and the values

4.3.2.3 List of Hooks

The table below shows all the hooks in XRMS CRM as of the last edit of this document. It describes:

- the name of the hook: this is the hook name that a plugin registers to handle
- any parameters passed to the hook
- the type of hook (do_hook,do_hook_function,concat_hook_function,boolean_hook)
- the source file the hook appears in

Understanding some hooks should be possible just from reading this table. Other hooks will require scrutinizing the code to understand what they are intended to do. Some hooks will expect the plugin author to directly output any data that they wish to display: the sidebar hooks are a good example of this type of hook. Other hooks are deeply integrated into the XRMS code: authentication and file management hooks are a good example of these types of hooks. You will need to understand the requirements of the plugin you wish to create, and decide which hooks best meet your needs. If you are developing a plugin and need a hook somewhere in the code that does not currently have one, please contact the XRMS CRM core development team. We'll be happy to work with you to help you integrate your code. The table below may be slightly out of date, there may be newer hooks in the code.

Hook Name	Parameters	Hook Type	File
activity_content_bottom	$param	do_hook_function	activities/one.php
activity_edit_2	$param	do_hook_function	activities/edit-2.php
activity_inline_edit'	$activity_rst	do_hook_function	activities/one.php
activity_new_2	$rec	do_hook_function	activities/new-2.php
activity_sidebar_bottom'	$param	do_hook_function	activities/one.php
admin_body_bottom		do_hook	admin/index.php
admin_docs		do_hook	admin/index.php
admin_user_edit_sidebar	$sidebar_rows	do_hook_function	admin/users/one.php
bodytags		do_hook	include/utils-interface.php
case_edit_form	$case_id	do_hook	cases/edit.php
case_edit_js_validate		do_hook	cases/edit.php
case_edit_2	$case_id	do_hook	cases/edit-2.php
case_new_form		do_hook	cases/new.php
case_new_js_validate		do_hook	cases/new.php
case_new_2	$case_id	do_hook	cases/new-2.php
case_one	$case_id	do_hook	cases/one.php
change_company_key	$param	do_hook_function	include/utils-companies.php
company_accounting_inline_display	$accounting_rows	do_hook_function	companies/one.php
company_accounting_inline_edit	$accounting_rows	do_hook_function	companies/edit.php
company_accounting_inline_edit_2	$accounting_rows	do_hook_function	companies/edit-2.php
company_buttons	$company_buttons	do_hook_function	companies/one.php
company_content_bottom	$bottom_rows	do_hook_function	companies/one.php
company_detail		do_hook_function	companies/one.php
company_detail		do_hook	plugins/phone/companies_one.php
company_edit_2	$param	do_hook_function	companies/edit-2.php
company_edit_address_2	$param	do_hook_function	companies/edit-address-2.php
company_edit_address_2	$param	do_hook_function	companies/one-address.php

Hook Name	Parameters	Hook Type	File
company_new_2	$rec	do_hook_function	companies/new-2.php
company_sidebar_bottom	$sidebar_rows_bottom	do_hook_function	companies/one.php
company_sidebar_bottom	$sidebar_rows	do_hook_function	plugins/phone/companies_one.php
company_sidebar_top	$sidebar_rows_top	do_hook_function	companies/one.php
contact_accounting_inline_display	$accounting_rows	do_hook_function	contacts/one.php
contact_accounting_inline_edit	$accounting_rows	do_hook_function	contacts/edit.php
contact_content_bottom	$contact_id	do_hook	contacts/one.php
contact_custom_inline_edit_display	$contact_custom_rows	do_hook_function	contacts/edit.php
contact_custom_inline_edit_validate	$_POST	do_hook_function	contacts/edit-2.php
contact_custom_inline_new_display	$contact_custom_rows	do_hook_function	contacts/new.php
contact_edit_2	$param	do_hook_function	include/utils-contacts.php
contact_edit_2	$param	do_hook_function	include/utils-contacts.php
contact_edit_form_top		do_hook	contacts/edit.php
contact_edit_address_2	$param	do_hook_function	contacts/edit-address-2.php
contact_new_2	$contact_data	do_hook_function	include/utils-contacts.php
contact_sidebar_bottom	$sidebar_rows_bottom	do_hook_function	contacts/one.php
contact_sidebar_top	$sidebar_rows_top	do_hook_function	contacts/one.php
contact_transfer_3		do_hook	contacts/transfer-3.php
data_format_phone	$phone_array	do_hook_function	include/utils-misc.php
division_sidebar_bottom'	$sidebar	do_hook_function	companies/edit-division.php
edit_division_form	$edit_division_form_extra	do_hook_function	companies/edit-division.php
edit_division_process	$rec	do_hook_function	companies/edit-division-2.php
end_page		do_hook	include/utils-interface.php
file_add_file	$file_plugin_params	do_hook_function	include/utils-files.php
file_add_file	&$file_plugin_params	do_hook_function	files/new.php
file_add_folder	&$folder_plugin_params	do_hook_function	plugins/owl/new_folder-2.php
file_browse_files	$plugin_params	do_hook_function	files/sidebar.php
file_delete_file	&$file_plugin_params	do_hook_function	files/delete.php

Hook Name	Parameters	Hook Type	File
file_delete_folder	&$folder_plugin_params	do_hook_function	plugins/owl/delete_folder.php
file_download_file	$plugin_params	do_hook_function	files/download.php
file_get_file_info	&$file_plugin_params	do_hook_function	files/one.php
file_get_one_file_html	&$file_plugin_params	do_hook_function	files/one.php
file_search_files	$file_plugin_params	do_hook_function	files/some.php
file_search_files	$file_plugin_params	do_hook_function	plugins/owl/owl_plugin.php
file_search_files_callback	$file_plugin_params	do_hook_function	files/some.php
file_update_file	&$file_plugin_params	do_hook_function	files/edit-2.php
file_update_file	&$file_plugin_params	do_hook_function	files/edit-2.php
home_docs	$param	do_hook_function	private/home.php
login_before		do_hook	login-2.php
login_cookie		do_hook	login.php
login_form		do_hook	login.php
login_verified		do_hook	login-2.php
loginbar		do_hook	include/utils-interface.php
logout		do_hook	logout.php
menuline		do_hook	include/utils-interface.php
new_division_form	$new_division_form_extra	do_hook_function	companies/divisions.php
new_division_process	$rec	do_hook_function	companies/add-division.php
one_contact_buttons	$contact_buttons	do_hook_function	contacts/one.php
one_contact_buttons		do_hook	plugins/phone/contacts_one.php
one_contact_left		do_hook	contacts/one.php
one_contact_right		do_hook	contacts/one.php
opportunity_detail		do_hook	opportunities/one.php
opportunity_notes_buttons		do_hook	activities/one.php
plugin_admin		do_hook	admin/index.php
preference_possible_values	$option_record	do_hook_function	include/utils-preferences.php
private_front_splash		do_hook_function	private/home.php

Hook Name	Parameters	Hook Type	File
private_body_bottom		do_hook_function	private/home.php
private_sidebar_bottom		do_hook_function	private/home.php
reports_bottom		do_hook	reports/index.php
run_on_completed	$activity_id	do_hook_function	activities/edit-2.php
topofpage		do_hook	include/utils-interface.php
workflow_addition	$activity_template_id	do_hook_function	activities/workflow-activities.php
workflow_system	$template_info	do_hook_function	activities/workflow-activities.php
xrms_acl_auth		do_hook_function	include/classes/acl/xrms_acl_config.php
xrms_acl_database_access	$options	do_hook_function	include/classes/acl/xrms_acl_config.php
xrms_install	$con	do_hook_function	install/install.php
xrms_test_suite	$suite_array	do_hook_function	tests/xrms_test.php
xrms_update	$con	do_hook_function	admin/update.php
xrms_update	$con	do_hook_function	admin/updateto2.0.php

5 Managing System Parameters

You can create activity templates, change a record owner, maintain country localization formats, as well as define system parameters and create and maintain user details from the Manage box in the Administration screen.

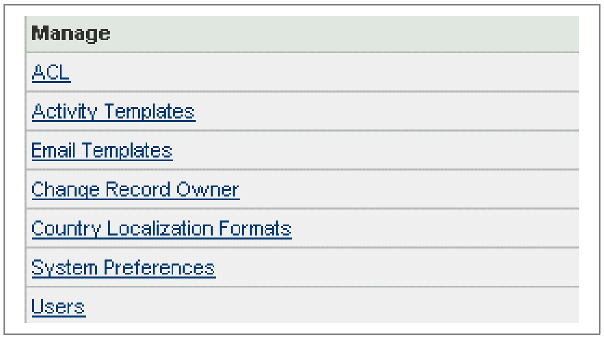


Figure 23: Manage Box

5.1 System Preferences

Click the **Administration** link at the top of an XRMS screen to see the Administration screen (See Figure 1). In this screen, click the **System Preferences** link in the Manage box - . You see the System Preferences screen.

System Preferences	
Language	English
Theme Color and Layout Theme for XRMS	basic
Hide SourceForge Image Hides the SourceForge Image which appears at the bottom of every page	Yes
Block SourceForge Link Disables the SourceForge image and link which appears at the bottom of every page	No
Company Search Type Search method used when searching company names	Name Contains
Default GST Offset Default timezone offset	-5
Audit Level What level of audit logging should be performed. 0 - no logging, 1 - inserts & updates, 2 - and login/logout, 3 - and views, 4 - and searches	4
Activities Default Behavior How will activities behave. Options are Fast or Long. Fast will keep user within current screen while Long will move to the activites/one screen for detailed description entry.	Fast
LDAP Version Version of the LDAP server. Will usually be 2 or 3.	2
RSS Feeds Enabled Provide RSS Feeds. y or n.	No
Maximum RSS Feed Entries Maximum number of entries to include in any RSS feed.	15
Sender Email Address Email address to use as the sender address when sending reports via email.	xrms@example.com
Reports--Use Horizontal Rule Use horizontal rule on reports.	Yes
Reports--Show No Items Found Show text for items with no result on reports.	No
Allow Unassigned Activities Unassigned activities are useful when creating activity pools, but can result in activities erroneously created without accountability.	No
Display Item Technical Details Expose ID numbers and other technical tidbits on production screens. Useful for developers tracking issues in production. Otherwise not necessary.	No
Show Logo Controls custom logo display in the head of every page in XRMS.	No
XRMS Version XRMS Version (read-only)	1.0
Session Data Storage Type Controls where the PHP session data is stored (files or database). Changing this parameter will cause all currently logged in users to be logged out.	Standard
pager_columns	
Save Preferences	

Figure 24: System Preferences Screen

You can select the language of your choice and the theme (UI colors and presentation) from the relevant drop-down lists.

Click **Save Preferences** to save your choices.

The following sections explain the different system parameters used in XRMS.

5.1.1 Activities Default Behavior

It is possible to define specific behaviors for different system parameters that are listed in the Manage System Parameters screen.

Click the **Activities Default Behavior** link in Manage System Parameter screen, see Figure 24, to reach the System Parameter: Activities Default Behavior screen.

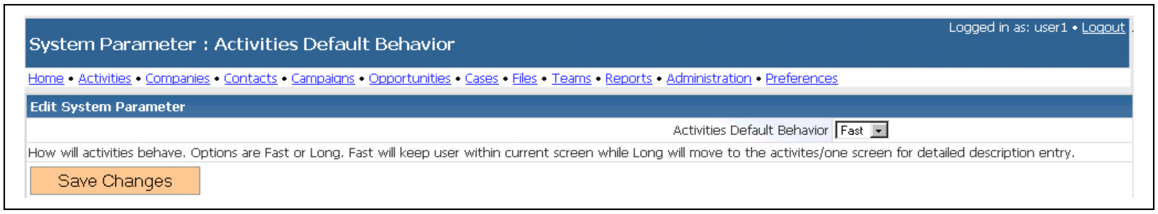


Figure 25: System Parameter - Activities Default Behavior

Choose the relevant option from the Activities Default Behavior drop-down list.

Available options are:

- Fast: The user remains within the current screen.
- Long: The user is taken to the activities/one screen for detailed description entry. *This is the recommended value for most uses of XRMS.*

After you select the option, click **Save Changes** to save the default behavior that you set.

5.1.2 Allow Unassigned Activities

This option allows Activities to not be assigned to an individual User of XRMS. In some environments, planned tasks or activities need to be unassigned initially, and will be assigned to particulaafr users later based on a business process. In most cases, it would be better to use Workflow (See Chapter 6) Navigate to Administration>System Parameters and click the **Allow Unassigned Activities** link to see the System Parameter: Allow Unassigned Activities screen.

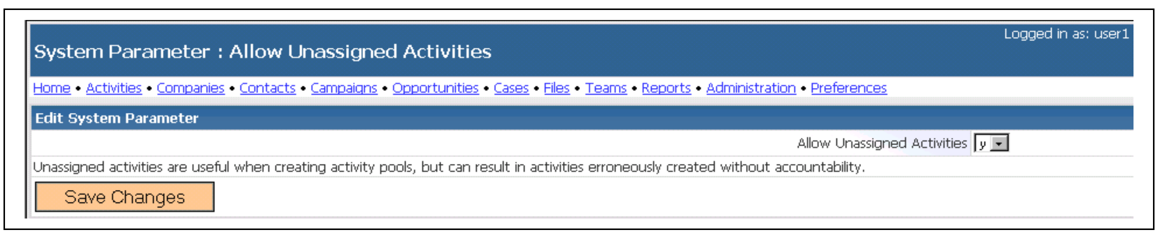


Figure 26: System Parameter - Allow Unassigned Activities

Choose the relevant option from the Allow Unassigned Activities drop-down list.

Available options are:

- y (to allow activities to be created without being assigned to a specific owner)
- n (to disallow an activity to be created without assigning it to a specific owner)

After you select the option, click **Save Changes.**

5.1.3 Audit Level

Navigate to Administration>System Parameters and click the **Audit Level** link to see the System Parameter: Audit Level screen.

Figure 27: System Parameter: Audit Level

Choose the Audit Level option from the drop-down list.

Possible options and what they signify are:

Option	Description
0-No Logging.	No audit log is created.
1-Inserts and Updates	Audit log created for inserts and updates to the database.
2-Insert and Updates and Login/Logout	Audit log created for inserts and updates to the database as well as logins and logouts.
3-Inserts and Updates, Login/Logout and Views	Audit log created for inserts and updates to the database, logins, logouts, and views.
4-Inserts and Updates, Login/Logout, Views and Searches	Audit log created for inserts and updates to the database, logins, logouts, views, and searches.

After you select the relevant option, click **Save Changes**.

5.1.4 Default GST Offset

Navigate to Administration>System Parameters and click the **Default GST Offset** link to see the System Parameter: Default GST Offset screen.

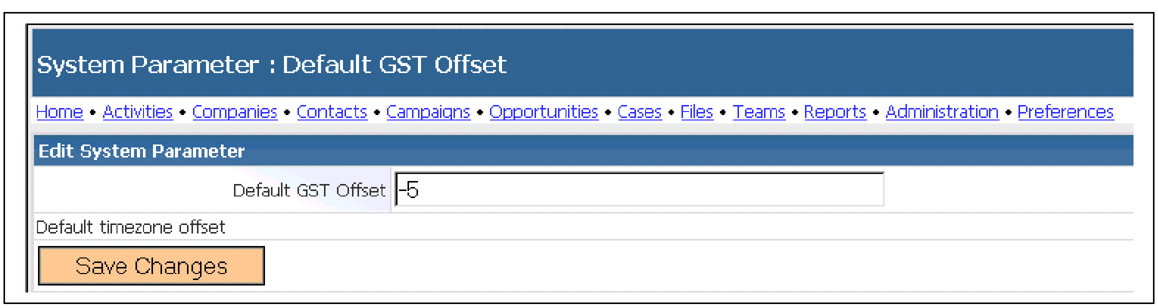


Figure 28: System Parameter - Default GST Offset

Enter a value in the text box beside Default GST Offset. The value you enter should indicate the number of hours ahead of (or behind) Greenwich Sidereal Time (GST).

The format to enter this value is: 00:00:00 that corresponds to hours, minutes and seconds respectively.

NOTE: If the offset is negative, enter a minus sign in front of the offset. If the offset is positive, enter a plus sign in front of the offset.

After you enter the value, click **Save Changes** to store the offset.

5.1.5 Display Item Technical Details

Navigate to Administration>System Parameters and click the **Display Item Technical Details** link to see the System Parameter: Display Item Technical Details screen.

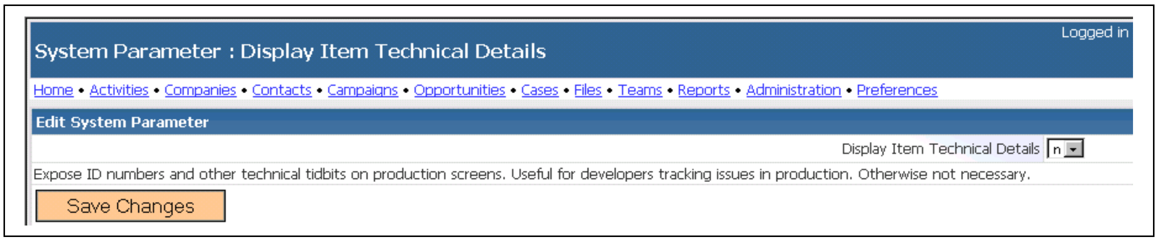


Figure 29: System Parameter - Display Item Technical Details

Choose the relevant option from the drop-down list beside Display Item Technical Details.

The possible options are:

- n (technical details relevant to the items will not be displayed)
- y (technical details relevant to the items will be displayed)

After you select the option, click **Save Changes**.

5.1.6 LDAP Version

You can set the appropriate version of the Lightweight Directory Access Protocol (LDAP) server in XRMS. This Internet protocol is used by email programs to look up contact information from a server.

Go to Administration>System Parameters and click the **LDAP Version** link to see the System Parameter: LDAP Version screen.

Figure 30: System Parameter - LDAP Version

Choose the appropriate LDAP version from the drop-down list. Current versions provided for in this list are: 2 and 3.

After you select the option, click **Save Changes** to save the LDAP version to be used.

5.1.7 Maximum RSS Feed Entries

Rich Site Summary or Really Simple Syndication (RSS) is a family of XML file formats used to access Web content available for distribution from an online publisher to Web users. RSS offers brief highlights of Web content with a link to the complete article. Web content made available for distribution online is delivered as an XML file and is called an RSS feed.

Setting the maximum of RSS feed entries allows organizations to define the highest number of RSS entries to be made available to XRMS users at any time. This is of particular relevance when the News plugin is enabled.

To set the maximum RSS feed entries, go to Administration>System Parameters and click the Maximum RSS Feed Entries link to see the System Parameter: Maximum RSS Entries screen.

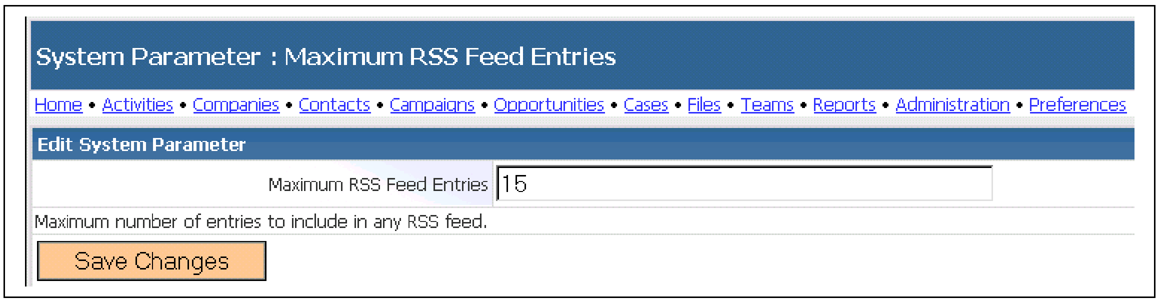


Figure 31: System Parameter - Maximum RSS Feed Entries

Enter the value in the text box beside Maximum RSS Feed Entries.

After you enter the value, click **Save Changes**.

5.1.8 Reports - Show No Items Found

If a user generates a report and no items are found, it is possible to display a message to this effect. The text of the message would be "No items found." It is necessary to specify that this message should be displayed.

Go to Administration>System Parameters and click the **Reports-Show No Items Found** link to see the System Parameter: Reports-Show No Items Found screen.

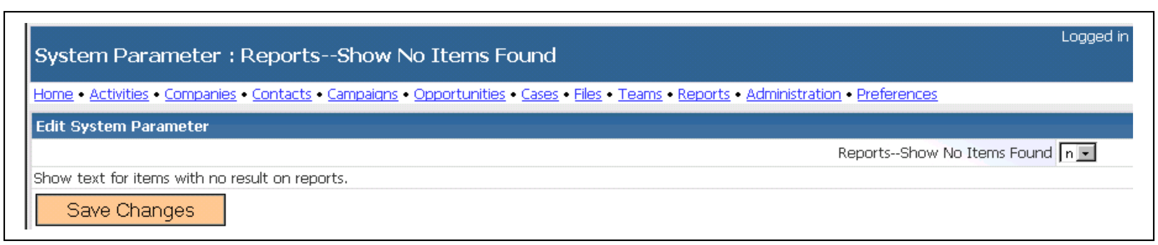


Figure 32: System Parameter – Reports -- Show No Items Found

Choose the relevant option from the drop-down list.

Available options are:

- n (No message is displayed.)
- y (Message "No Items Found" is displayed.)

After you select the option, click **Save Changes**.

5.1.9 Reports – Use Horizontal Rule

This feature is provided to define the appearance of XRMS reports. If a horizontal line is required at certain locations in a report it is important to set this feature.

Go to the Administration>System Parameters and click the **Reports-Use Horizontal Rule** link to see the System Parameter: Reports-Use Horizontal Rule screen.

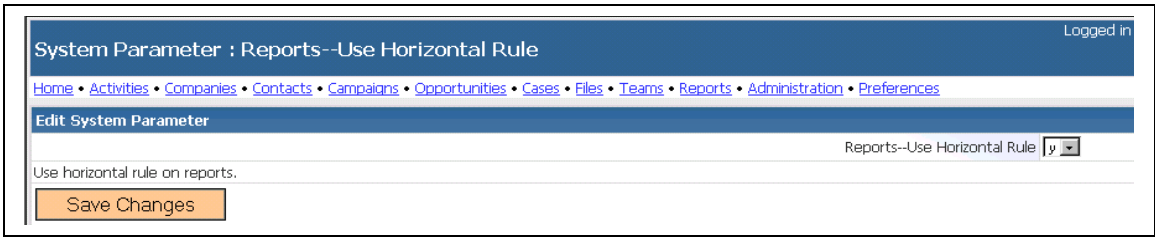


Figure 33: System Parameter - Reports -- Use Horizontal Rule

Choose the relevant option from the drop-down list.

The possible options are:

- n (Use a horizontal line within XRMS reports)
- y (Do not use a horizontal line within XRMS reports)

After you select the option, click **Save Changes**.

5.1.10 RSS Feeds Enabled

Web content made available for distribution online is delivered as an XML file and is called an RSS (Really Simple Syndication or Rich Site Summary) feed. If such feeds should be accessible from XRMS, it is necessary to enable the program to accept the feeds.

Go to Administration>System Parameters and click the **RSS Feeds Enabled** link to see the System Parameter: RSS Feeds Enabled screen.

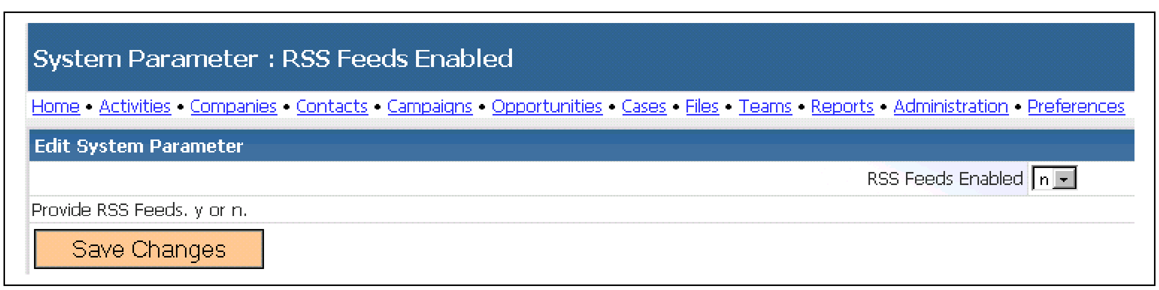


Figure 34: System Parameter - RSS Feeds Enabled

Choose the option from the drop-down list.

Available options are:

- n (Do not allow RSS Feeds)
- y (Allow RSS Feeds)

After you select the option, click **Save Changes**.

5.1.11 Sender Email Address

When sending reports using email, you can set the email address of the sender using the Sender Email Address parameter.

Go to Administration>System Parameters and click the **Sender Email Address** link to see the System Parameter: Sender Email Address screen.

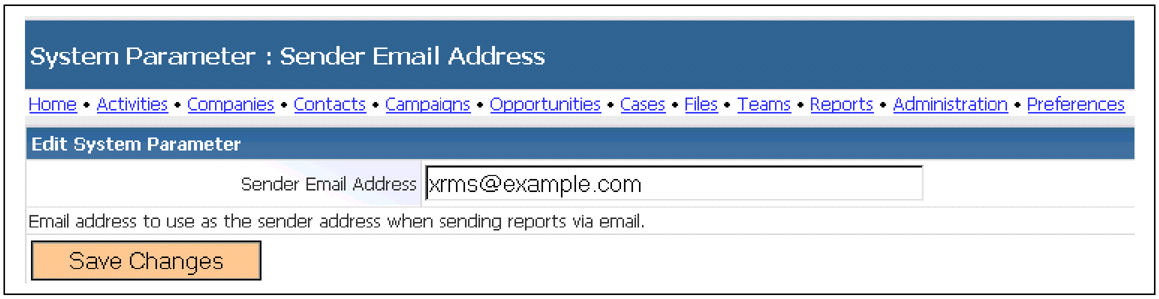


Figure 35: System Parameter - Sender Email Address

Enter the email address that needs to appear in the Sender box for emails in the text box beside Sender Email Address.

Click **Save Changes** to save the email id you have entered.

5.2 Activity Templates

Activity templates show the workflow that has been defined using Types and Statuses. An activity template is used to create a new activity when the status or type of a case or opportunity changes. Each activity is assigned to that user who has the corresponding role defined in the activity template and has the least number of open activities. For more information on Workflow, see Chapter 3.

Navigate to the Administration>Activity Templates link to reach the Manage Activity Templates screen.

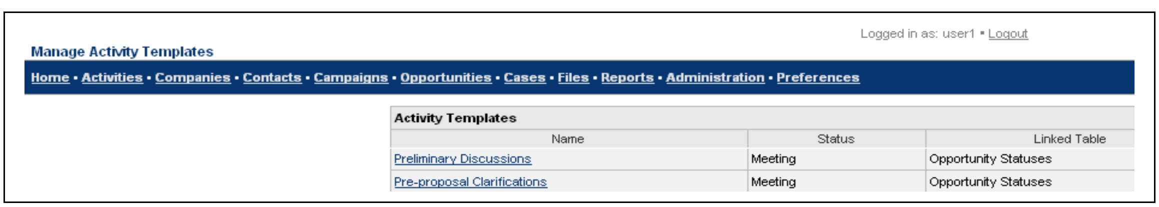


Figure 36: Manage Activity Templates Screen

NOTE: You can only view an activity template if one has been created.

5.2.1 Add an Activity Template

To add an activity template, see 6.2.1 Opportunity Statuses.

The Opportunity Status Details screen provides the option to link activities to opportunity statuses from the Link Activity To Opportunity Status box. When an activity is added to an opportunity status in the Opportunity Status Details screen, the activity is automatically updated to the Manage Activity Templates screen.

5.2.2 View, Edit, and Delete Activity Templates

Go to the **Administration** link and click **Activity Templates** to reach the Manage Activity Templates screen (See Figure 36) where the list of activities is shown.

To edit an activity template

Follow the steps below:

1. In the Manage Activity Templates screen (See Figure 36), click the name of the activity template you want to edit. You then reach the Activity Template Details: <Activity Name> screen.

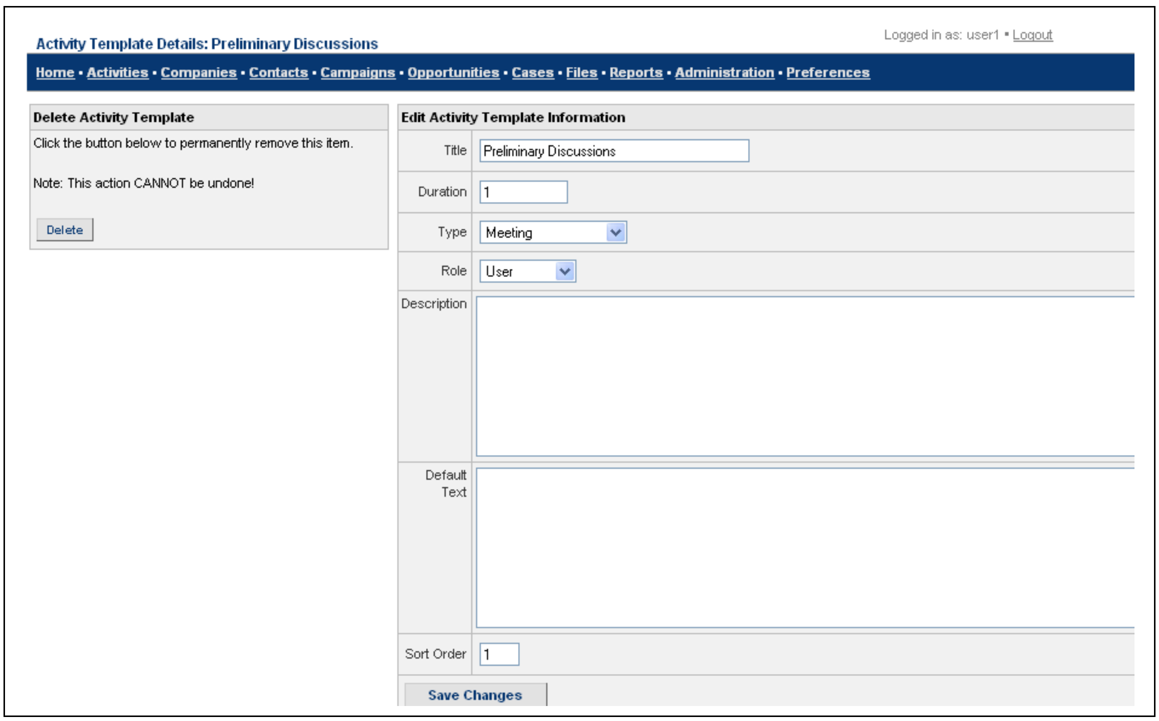


Figure 37: Activity Template Details Screen

2. Edit the fields as described in the table.

Title: Enter the title of the activity.
Duration: Enter the time period for the completion of the activity. The default measurement is in days.
Type: Choose the type of activity from the drop-down list.
Role: Select the appropriate option from the drop-down list.
Description: Enter a description about the activity.
Default Text: Standard text about the activity.

Sort Order: Defines the order that activities are created within a workflow. New activities will not be included in a workflow until all activities in the previous sort order are completed.

3. After you enter or edit the relevant details, click **Save Changes**. You return to the Manage Activity Templates screen.

To delete an activity template

Navigate to the Administration>Activity Templates link to reach the Manage Activity Templates screen (See Figure 36) where the list of activities is shown.

1. In the Manage Activity Templates screen, click the name of the activity you want to edit. You then reach the Activity Template Details: <Activity Name> screen (See Figure 37).
2. Go to the Delete Activity Template box on the left side of the screen. Click **Delete** to remove the activity template.

5.3 Email Templates

Email templates help to save time as they contain relevant information on a particular subject that can be re-used when necessary.

Navigate to the Administration>Email Templates link to reach the Manage Email Templates screen (See Figure 39). You also see a box with the title Manage Templates.

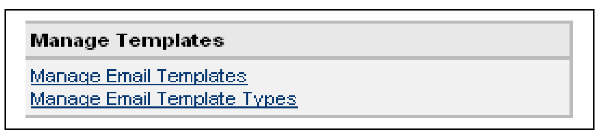


Figure 38: Manage Templates Box

This box has two links:

- Manage Email Templates
- Manage Email Template Types

The way the links function are described in the sections that follow.

5.3.1 Manage Email Templates

This feature helps you to create or edit email templates based on existing template types.

Click the **Manage Email Templates** link in the Manage Templates box to see the Manage Email Templates screen (See Figure 39) that shows the list of existing email templates. You see this screen by default when you click on the Email Templates link in the Administration screen (See Figure 1).

Click **Select Column Layouts** in the Manage Email Templates screen to change the onscreen display of fields. For details, see 2.4.

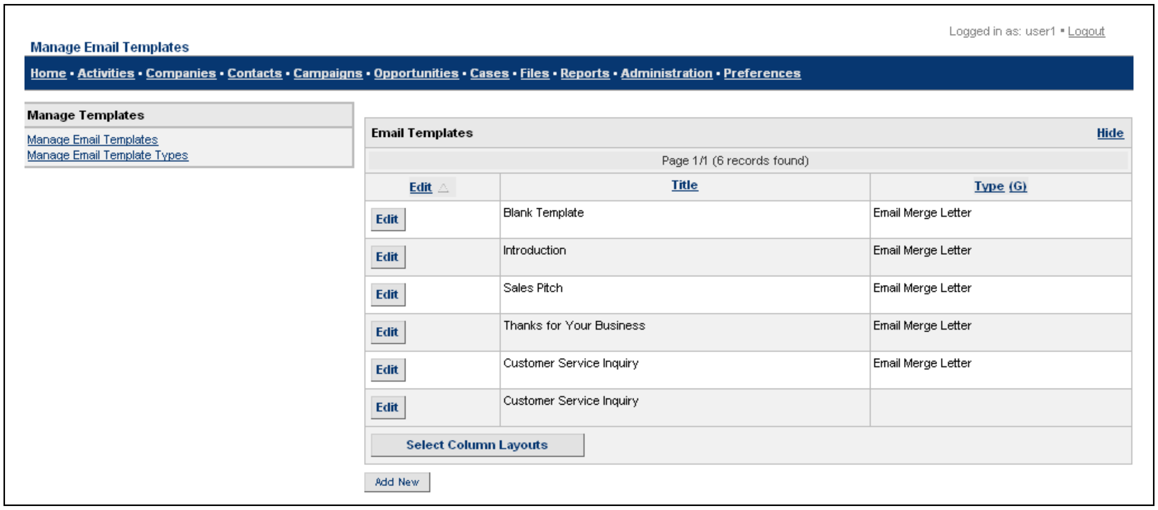


Figure 39: Manage Email Templates Screen

5.3.1.1 Add an Email Template

To add an email template:

1. Click **Add New** in the Manage Email Templates screen (See Figure 39) to reach the Manage Email Template – Add screen.

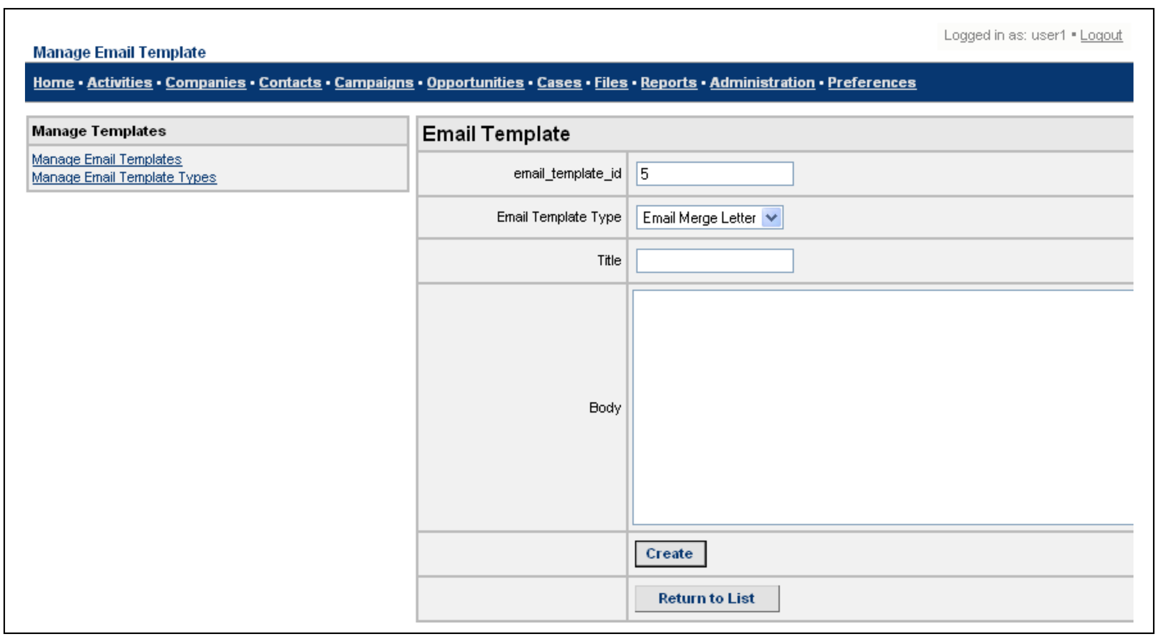


Figure 40: Manage Email Template - Add Screen

2. Enter an identification number for the template in email_template_id.
3. Select the type of template from the existing types in the Email Template Type drop-down list.
4. Enter a name for the template in Title.
5. Enter the text of the new template in Body.

6. Click **Create** to create a new email template. This displays a screen with the details of the email template you created.
7. Click **Return to List** to go to the Manage Email Templates screen.

5.3.1.2 Edit an Email Template

To edit an email template:

1. In the Manage Email Templates screen (See Figure 39), click the **Edit** link corresponding to the required email template in the Title column. You see the Manage Email Template – Edit screen, which is similar to the Manage Email Template – Add screen (See Figure 40). The only difference is that the Update button replaces the Create button in this screen.
2. Make changes to the appropriate fields as required.
3. Click **Update** to save and update the edited email template.
4. Click **Return to List** to go to the Manage Email Templates screen.

5.3.2 Manage Email Template Types

This feature helps you to create or edit different types of email templates.

Click the **Manage Email Template Types** link in the Manage Templates box (See Figure 38). You see the Manage Email Template Types screen (See Figure 41) that shows the list of existing email template types.

Click **Select Column Layouts** in the Manage Email Template Types screen to change the onscreen display of fields. For details, see 2.4.

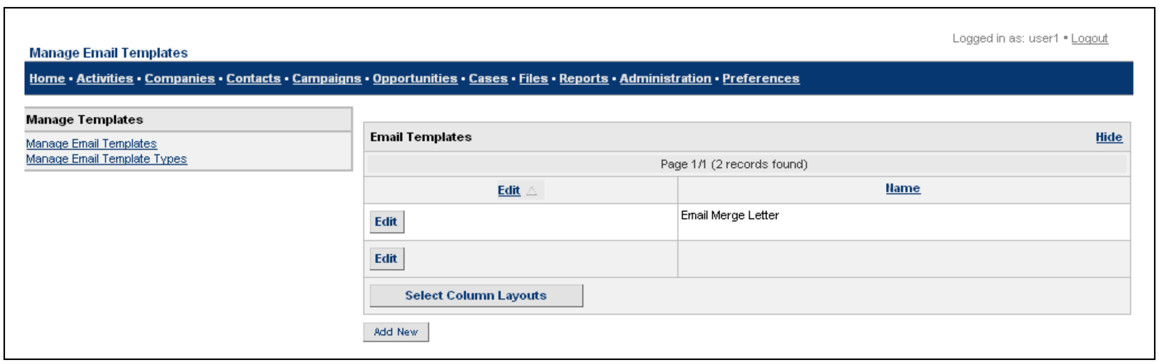


Figure 41: Manage Email Template Types Screen

5.3.2.1 Add an Email Template Type

To add an email template type:

1. Click **Add New** in the Manage Email Template Types screen (See Figure 41) to see the Manage Email Template Types – Add screen.

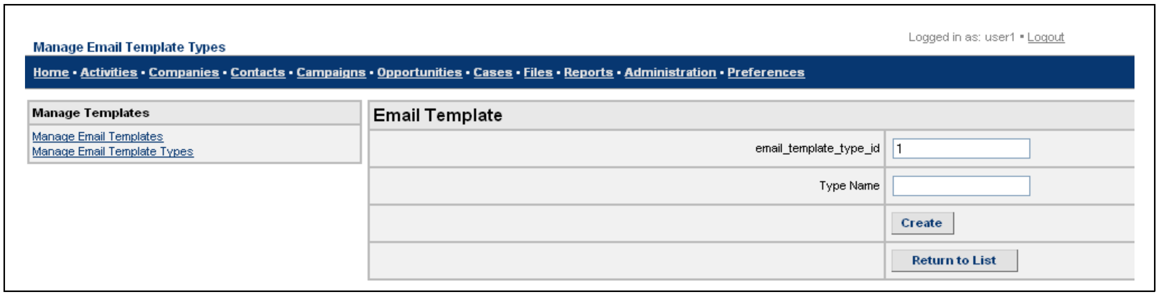


Figure 42: Manage Email Template Types - Add Screen

2. Enter an identification number for the type of email template in email_template_type_id.
3. Enter a name for the new template type in Type Name.
4. Click **Create** to create a new type of email template. This displays a screen with the details of the email template type you created.
5. Click **Return to List** to go to the Manage Email Template Types screen.

5.3.2.2 Edit an Email Template Type

To edit an email template type:

1. In the Manage Email Template Types screen (See Figure 41), click the **Edit** link corresponding to the required email template type in the Name column. You see the Manage Email Template Types – Edit screen, which is similar to the Manage Email Template Types – Add screen (See Figure 42). The only difference is that the Update button replaces the Create button in this screen.
2. Make changes to the appropriate fields as required.
3. Click **Update** to save and update the edited email template type.
4. Click **Return to List** to go to the Manage Email Template Types screen.

5.4 Change Record Owner

To change the owner of open activities, companies, campaigns, opportunities or cases, follow the steps below:

1. Click the **Change Record Owner** link in the Administration screen (See Figure 1), to see the Change Record Owner screen.

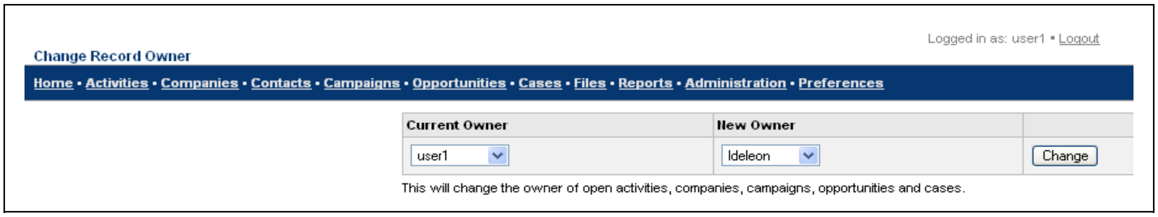


Figure 43: Change Record Owner Screen

2. Choose the Current Owner of the activity, company, campaign, opportunity, or case from the drop-down list.
3. Choose the New Owner from the drop-down list.
4. Click **Change** to save the New Owner.

5.5 Country Localization Formats

To correctly represent different address and phone formats of countries around the world, follow the steps below:

To specify the Phone Format

1. Click the **Country Localization Formats** link in the Administration screen (See Figure 1) to see the Country Localization Formats screen that displays a list of countries in alphabetical order, as well as fields and links from which you can specify telephone and address formats.

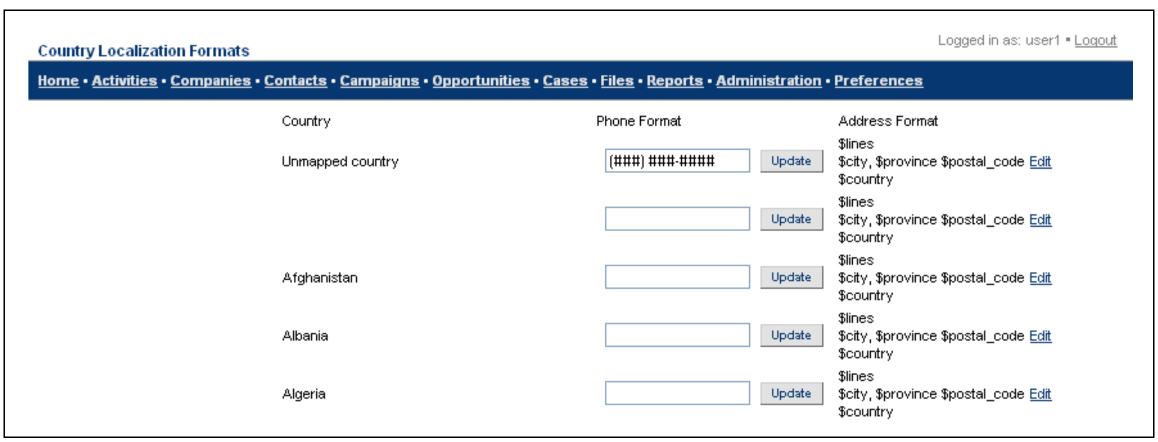


Figure 44: Country Localization Formats

2. Scroll through the list of countries till you reach the one for which you would like to specify a phone or address format.
3. Enter the telephone number format using hashes to represent each digit in the phone number. For example if the country you wish to provide localization details for has a 4-digit state code and a seven-digit number, the hashes would be as follows: (####) ###-###.
4. Click **Update.**

To specify the Country Address Format

5. Click **Edit** corresponding to the required format in the Address Format column of the Country Localization Formats screen (See Figure 44). You see the Edit Country Address Format screen.
6. Update address details as necessary.
7. Click **Save Changes.**

5.6 Users

You can add and edit user names, passwords, and select roles for users from the Manage Users screen.

Click on the **Users** link in the Administration screen (See Figure 1) to see the Manage Users screen.

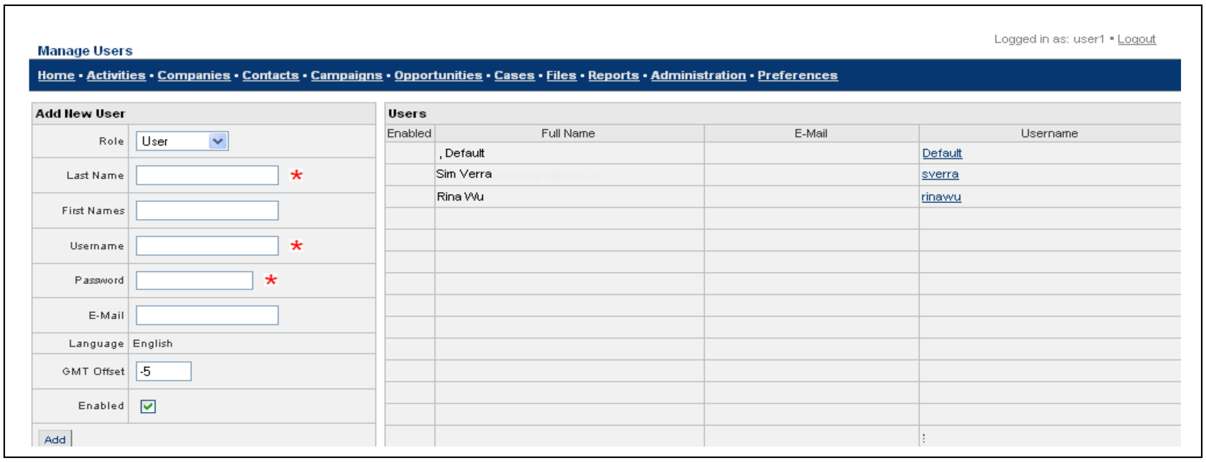


Figure 45: Manage Users Screen

5.6.1 Add a User

1. Navigate to the Administration>Manage box.
2. Click the **Users** link to see the Manage Users screen. This screen shows a list of existing users and also displays the Add New User box.

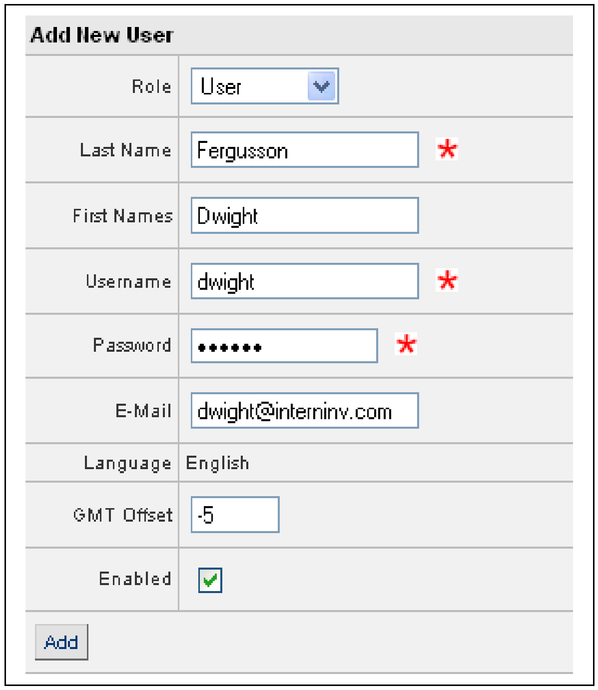


Figure 46: Add New User Box

3. In the Add New User box, enter the fields as shown in the table.

Role: Choose the user's role from the drop-down list.
Last Name: Enter the last name of the user.
First Names: Enter the first name(s) of the user.
Username: Enter a login user name that is unique to this user.
Password: Enter a password for this user.
Email: Enter the email address of the user.
Language: This is a display field and shows the default language set.
GMT Offset: Number of hours added or subtracted from Greenwich Mean Time.
Enabled: Select this check box to activate the user.

4. To save the details of the new user, click **Add**. You see the new user added to the Users box in the Manage Users screen.

5.6.2 Edit User Details

User roles and groups can be managed from the User Details screen. A user can be assigned to roles within groups using the sidebar in the Edit User pages.

1. Navigate to the Administration>Manage box and click the **Users** link to reach the Manage Users screen.
2. Review the list of users and their details as shown in Figure 45 and click on the username of the user in the Manage Users screen whose details you want to change. You see the User Details screen.

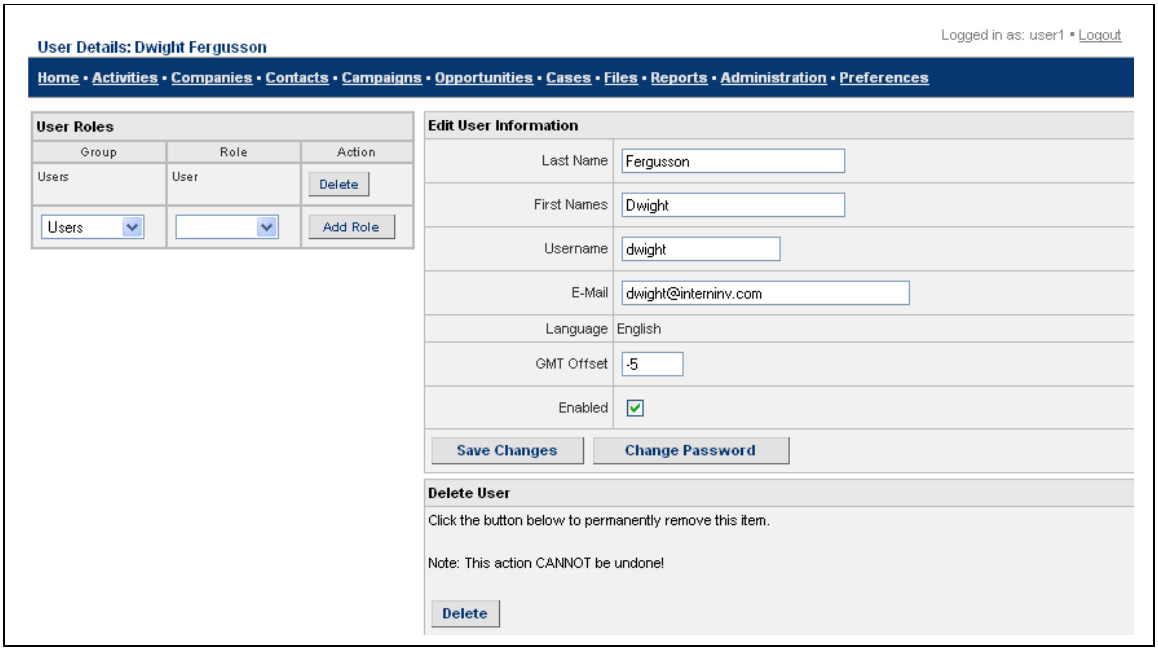


Figure 47: User Details Screen

3. All the fields in this screen are the same as in the Add New User box (See 5.6.1 Add a User). The only fields missing here are Role and Password.
4. After you make the changes, click **Save Changes**.
5. To change the Password, click **Change Password**. You see the Change Password screen.

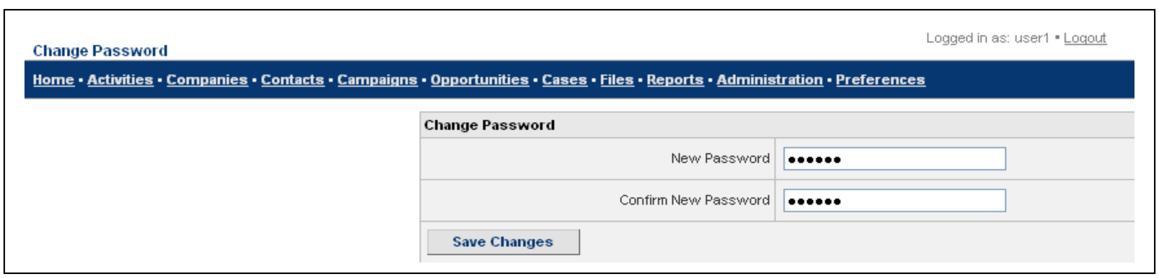


Figure 48: Change Password Screen

6. Enter the new password in the fields and click **Save Changes**.

5.6.3 Delete a User

Follow these steps to delete an XRMS user.

1. Navigate to Administration>Manage box and click the **Users** link to see the Manage Users screen.
2. Click on the username of the person whose details you wish to delete to get to the User Details screen (See Figure 47).
3. Review details of the user in the User Details screen.
4. Click **Delete** in the Delete User box to delete the details of this user.

6 Types and Statuses

Before XRMS can be implemented, it is necessary that the various default values to be used are reviewed and edited appropriately. Defaults can be added, modified, or deleted. However, when a default is deleted, it loses all its associations with companies, contacts, cases, and campaigns.

The different XRMS defaults are:

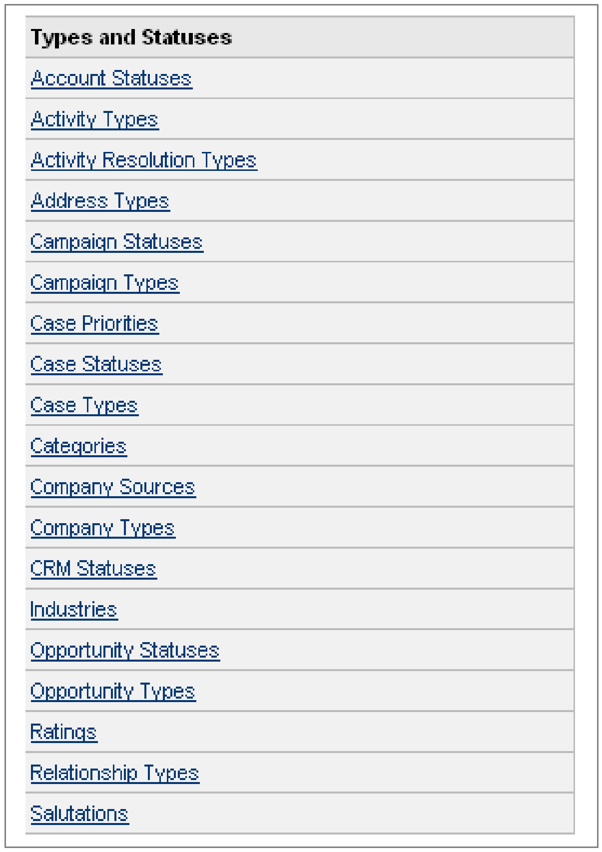


Figure 49: Types and Statuses

There is no fixed limit on the number of items that can be added under a single group.

Types and statuses in Activity Templates are used to define the Workflow. For more details, see Chapter 3 Workflow.

6.1 Add a Default Value

This section is divided into two parts. Defaults that:

- Follow a common procedure to add values.
- Do not follow a common procedure to add values.

6.1.1 Defaults that Follow a Common Procedure to Add Values

The defaults that follow a common procedure to add values share many fields in common. The fields present in the different default screens are indicated by check marks in the table below.

XRMS Defaults	Short Name	Full Name	Full Plural Name	Display HTML	Score Adjustment	Description	Open Status
Account Statuses	✓	✓	✓	✓			
Activity Types	✓	✓	✓	✓	✓		
Activity Resolution Types	✓	✓					
Campaign Statuses	✓	✓	✓	✓			✓
Campaign Types	✓	✓	✓	✓			
Case Priorities	✓	✓	✓	✓	✓		
Case Types	✓	✓	✓	✓			
Categories	✓	✓	✓	✓			
Company Sources	✓	✓	✓	✓	✓		
Company Types	✓	✓	✓	✓			
CRM Statuses	✓	✓	✓	✓			
Industries	✓	✓	✓	✓			

XRMS Defaults	Short Name	Full Name	Full Plural Name	Display HTML	Score Adjustment	Description	Open Status
Opportunity Statuses	✓	✓	✓	✓		✓	✓
Opportunity Types	✓	✓	✓	✓			
Ratings	✓	✓	✓	✓			

To add values, click on the **Administration** link in the top bar to see the Administration screen (See Figure 1).

Go the Types and Statuses box (See Figure 49) to select the items for which you would like to add default values.

Since the procedure to add values is common across the types and statuses we will consider the following two defaults to see how values are added:

- Opportunity Statuses that individually contains the largest number of fields.
- Case Priorities that has some fields not available in Opportunity Statuses.

Together, these two items cover the entire list of fields.

6.1.1.1 Opportunity Statuses

Opportunity Statuses is a default to create different status levels for opportunities. New, Preliminaries, Discussions, and Negotiations are some examples of status levels.

To create a new opportunity status, follow the steps below:

1. Go to Administration>Types and Statuses and click the **Opportunity Statuses** link to see the Manage Opportunity Statuses screen.

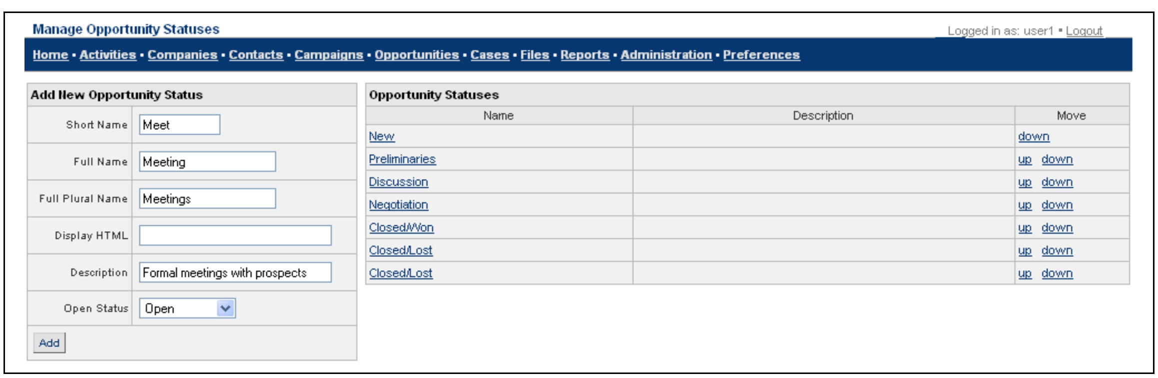


Figure 50: Manage Opportunity Statuses

2. Enter the fields in the Add New Opportunity Status box as given in the table below:

Short Name: Enter an abbreviation for the status. For example, OP for open.
Full Name: Enter the complete name of the status. For example, Open.
Full Plural Name: Enter the plural of the status name.
Display HTML: Enter the HTML format of the status name.
Description: Enter a description of the type of status that is being dealt with.
Open Status: Choose the status of the opportunity from the drop-down list. The options are: open, closed and won, closed and lost.

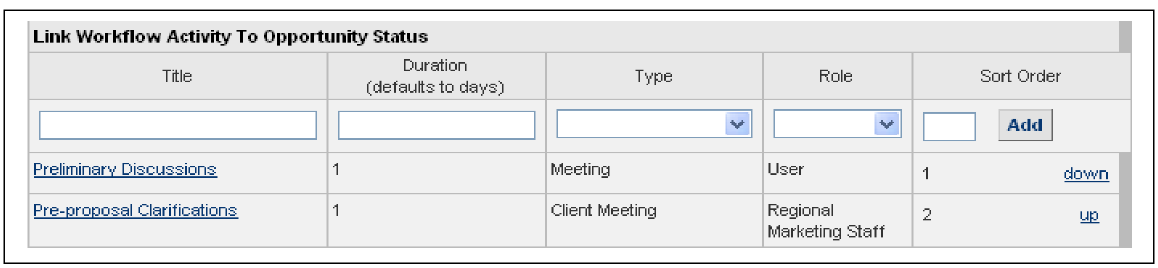
3. When you have finished entering the fields, click **Add** to see the opportunity status added to the Opportunity Statuses table.

To Reorder Items in the Opportunity Statuses table

1. Click the **up** or **down** link as required in the Move column beside the opportunity status that you wish to reorder in the table.
2. The opportunity status moves up or down one row as appropriate.

To link an Opportunity Status to a Workflow Activity

1. Click on the name of an Opportunity Status in the Manage Opportunity Status screen, Figure 50. You see the Edit Opportunity Status Information screen with the Link Workflow Activity To Opportunity Status box where you can edit Opportunity Status information and link an Opportunity Status to a workflow activity.



Link Workflow Activity To Opportunity Status

Title	Duration (defaults to days)	Type	Role	Sort Order	
					Add
Preliminary Discussions	1	Meeting	User	1	down
Pre-proposal Clarifications	1	Client Meeting	Regional Marketing Staff	2	up

Figure 51: Link Opportunity Status to Workflow Activity Box

2. Enter details in the following fields.

Title: Enter the name of the activity to which you wish to link an opportunity status.
Duration: Enter the number of days by which the activity should be complete.
Type: Select the opportunity type from the drop-down list.
Role: Select to which the activity should be assigned from the drop-down list.
Sort Order: Enter the order of display of this item in the table that is created.

3. Click **Add.** This saves the details and displays them in a row in the table below.

To Edit or Delete an Opportunity Status

To edit or delete an activity linked to an opportunity status, click the activity name to see the Activity Details screen. See 5.2.2 View, Edit, and Delete Activity Templates for more details.

6.1.1.2 Case Priorities

Case Priorities is a default to create different types of priority levels for cases. Low, Medium, High, and Critical are some examples of priority levels.

To create a new type of case priority, follow the steps below:

1. Go to Administration>Types and Statuses and click the **Case Priorities** link to see the Manage Case Priorities screen.

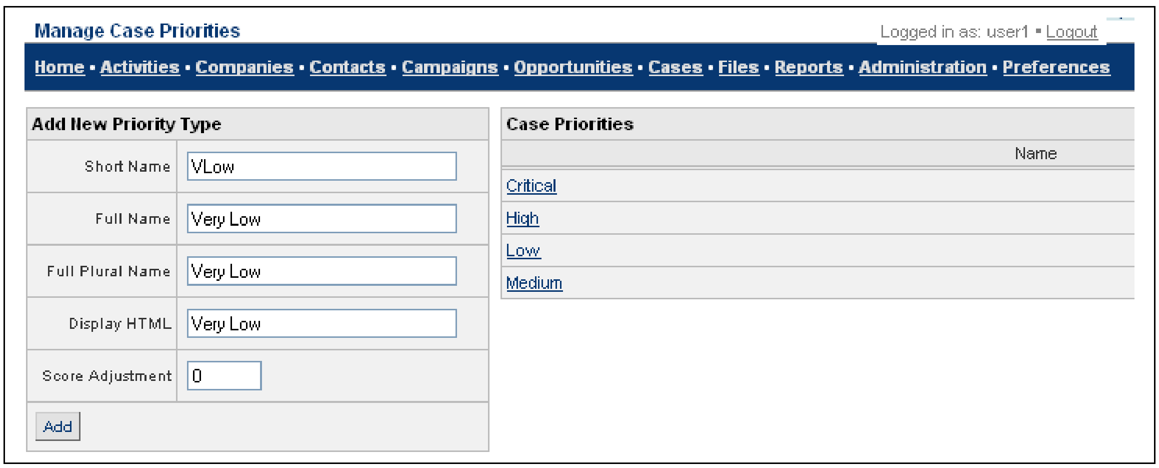


Figure 52: Manage Case Priorities Screen

2. Enter the fields in the Add New Priority Type box as given in the table below:

Short Name: Enter a short name for the priority type.
Full Name: Enter the entire name of the priority type.
Full Plural Name: Enter the plural of the name.
Display HTML: Enter the HTML format of the priority name.
Score Adjustment: ***Deprecated – no longer used***

3. After you enter values in the fields, click **Add**. The new value added is shown in the Case Priorities box.

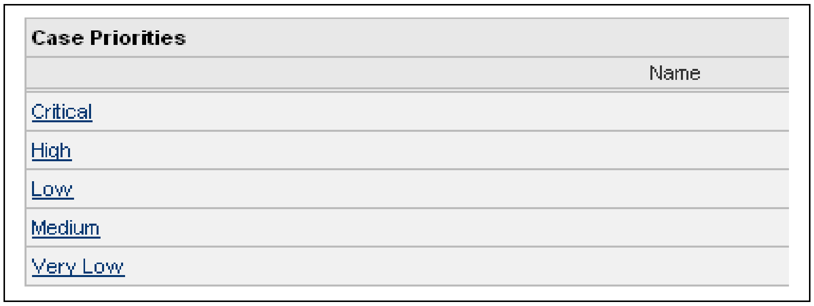


Figure 53: Case Priorities Box

6.1.2 Defaults that Do Not Follow a Common Procedure to Add Values

The defaults that do not follow a common procedure to add values are:

- Address Types
- Case Statuses
- Relationship Types
- Salutations

6.1.2.1 Address Types

Address Types is a default to create different types of addresses. Commercial and Residential are examples of address types.

To create a new address type, follow the steps below:

1. Go to Administration>Types and Statuses and click the **Address Types** link to see the Manage Address Types screen.

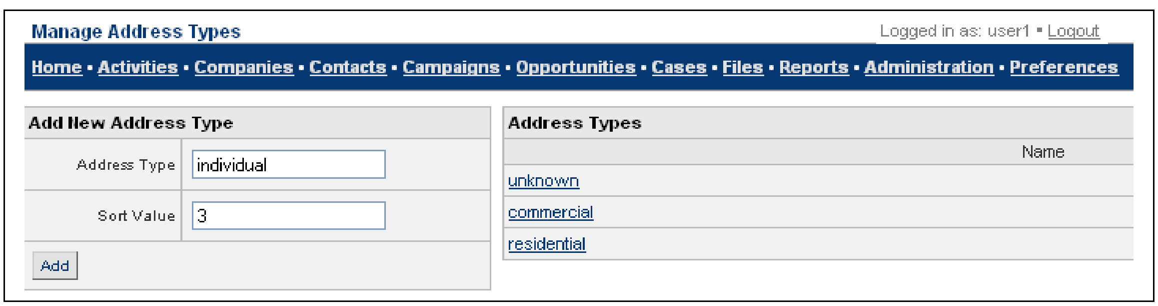


Figure 54: Manage Address Types

2. Enter the fields in the Add New Address Type box as given in the table below:

Address Type: Enter the name of the address type. For example, Individual. Sort Value: Sort order for the address type. The sort order helps you define the order in which the address types are displayed when an address type is created or edited.

3. After you enter the fields, click **Add**. You see the new value displayed in the Address Types box of the Manage Address Types screen

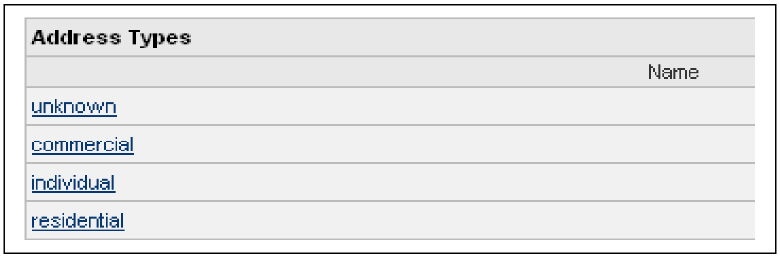


Figure 55: Address Types Box

6.1.2.2 Case Statuses

Case Statuses are used to create different status levels for different status types.

To create a new case status, follow the steps below:

1. Go to Administration>Types and Statuses and click the **Case Statuses** link to see the Manage Case Statuses screen.
2. From the Case Type drop-down list, select the Case Type for which you wish to view, add, edit, or delete a case status. This takes you to the next Manage Case Statuses screen that list case statuses for this case type. You can also add a case status here.

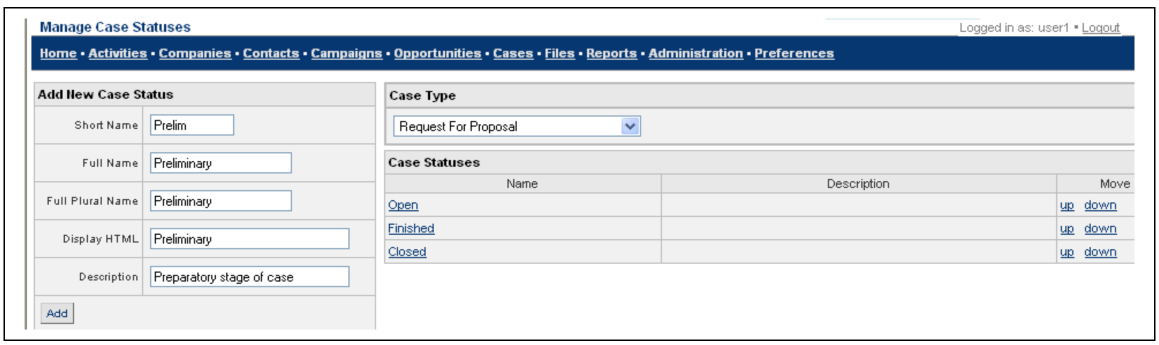


Figure 56: Manage Case Statuses Screen

3. Enter the fields in the Add New Case Status box as given in the table below:

Short Name: Enter a short name for the case status.
Full Name: Enter the entire name of the case status.
Full Plural Name: Enter the plural of the case status.
Display HTML: Enter the HTML format of the case status.
Description: Enter a description for the case status that you plan to add.

4. After entering all the fields, click **Add**. You see the new value in the Case Statuses box of the Manage Case Statuses screen.

6.1.2.3 Relationship Types

XRMS handles different types of relationships between one company and another company, between contacts in different companies, and between a contact and a company, and vice versa. In fact, relationships can be defined between almost any entity in the system: companies, contacts, divisions and so on.

The Relationship Types default is used to create different relationship roles.

To create a new relationship type, follow the steps below:

1. Go to Administration>Types and Statuses and click the **Relationship Types** link to see the Manage Relationship Types screen.

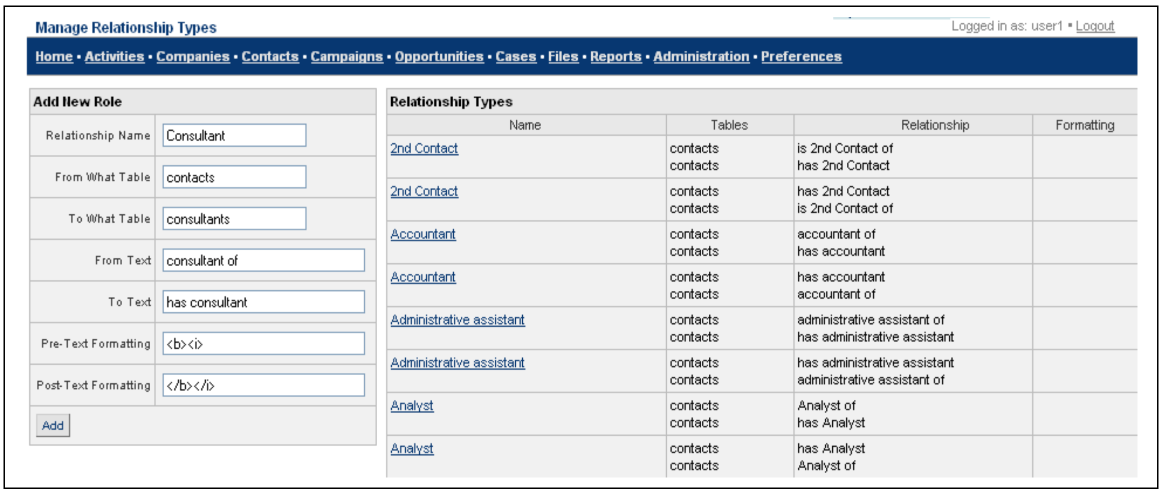


Figure 57: Manage Relationship Types Screen

2. Enter the fields in the Add New Role box as given in the table below:

Relationship Name: Enter the name of the relationship. For example, Consultant.
From What Table: Enter the name of the database table from which this relationship is being created.
To What Table: Enter the name of the database table to which the relationship is being created.
From Text: Enter information regarding the relationship in terms of how one entity (contact or company) relates to the other. For example: vendor of, consultant to, or subsidiary of.
To Text: Enter details of how the other entity is related to the first. For example, purchaser of, has consultant, or parent company.
Pre-Text Formatting and Post-Text Formatting: Used before and after the relationship name to result in appropriate HTML markup on the title. Example and in the corresponding fields will make the display of the relationship name bold.

3. After you enter the fields, click **Add**. The new value is shown in the Relationship Types box of the Manage Relationship Types screen.

6.1.2.4 Salutations

The salutations feature is used to create different forms of addressing a contact.

To create a new salutation, follow the steps below:

1. Go to Administration>Types and Statuses and click the **Salutations** link to see the Manage Salutations screen.

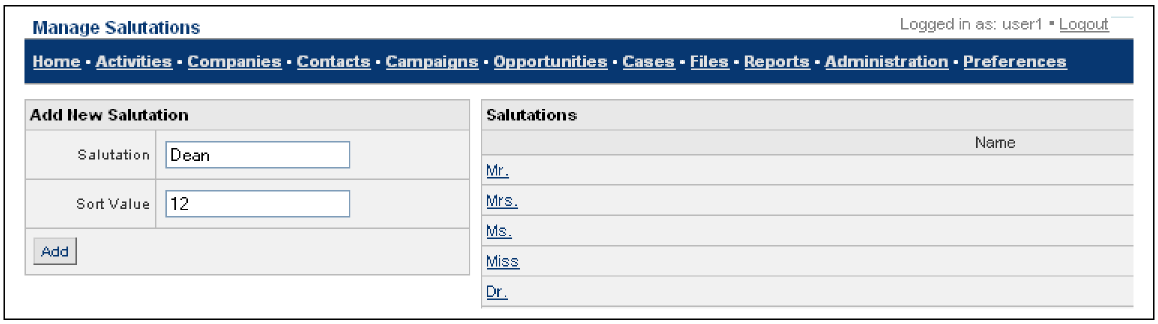


Figure 58: Manage Salutations Screen

2. Enter the fields in the Add New Salutation box as given in the table below.

Salutation: Enter the name of the salutation. For example, Dean, Dr., and so on. Sort Value: Enter the order the salutation should appear in the Salutations list. If you enter 5 here, it appears 5th in the list.

3. After you enter the fields, click **Add**. The new value is shown in the Salutations box and is listed in the order you provided in Sort Value.

6.2 Edit and Delete Default Values

You can edit default values in the Default Value Details screen. The procedure to edit and delete a default value is the same for all defaults.

This guide provides the procedure to edit and delete values in Opportunity Statuses, Activity Types, and Categories. This information is presented in the following sections.

6.2.1 Opportunity Statuses

To edit an opportunity status, follow the steps below:

1. Go to Administration>Types and Statuses and click the **Opportunity Statuses** link to see the Manage Opportunity Statuses screen (See Figure 50). The Opportunity Statuses box on the right of the screen lists all the values created for the default.
2. Click the status to be edited. For example, Discussion. You would then see the Opportunity Status Details: Discussion screen.

3.

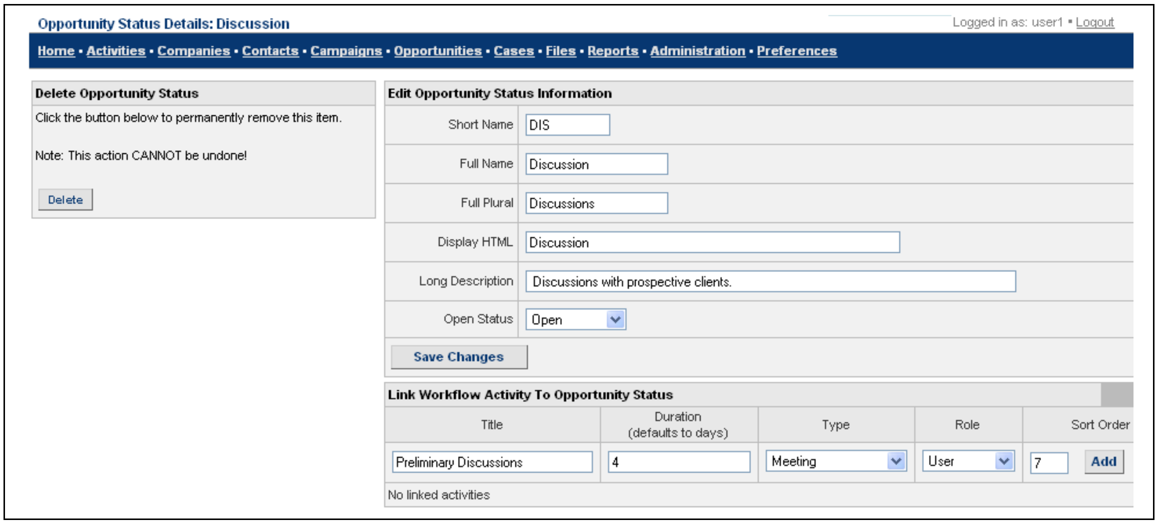


Figure 59: Opportunity Status Details Screen

4. To edit information about the Opportunity status, go to the Edit Opportunity Status Information box. All the fields in this box are the same as in Add New Opportunity Status box in Figure 50: Manage Opportunity Statuses.
5. After you make the required changes, click **Save Changes**.

To link a Workflow Activity to an Opportunity Status

You can link a workflow activity to a given opportunity.

1. Enter the fields to link an activity as given in the table below:

Title: Enter the title of the activity.
Duration: Enter the duration of the activity.
Type: Choose the type of activity from the drop-down list.
Role: Select the role to be linked to the opportunity from the drop-down list.
Sort Order: Enter the order of this workflow activity.

2. Click **Add**. The activity is displayed below the row of fields that you entered.

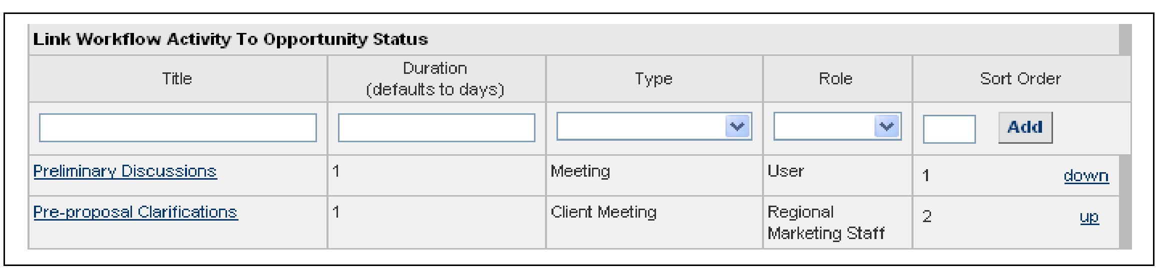


Figure 60: Link Workflow Activity to Opportunity Status

To delete an Opportunity Status

To delete an Opportunity Status, click **Delete** in the Delete Opportunity Status box in Figure 59. This deletes the Opportunity Status from all the drop-down lists in which it currently exists.

6.2.2 Activity Types

Activity Types are used to determine the different types of activities in the system. The activity types provided with XRMS cannot be edited, and are marked as such in the database. Any newly added user activity type could be edited.

To edit an activity type, do the following:

1. Go to Administration>Types and Statuses box and click the **Activity Types** link to see the Manage Activity Types screen.

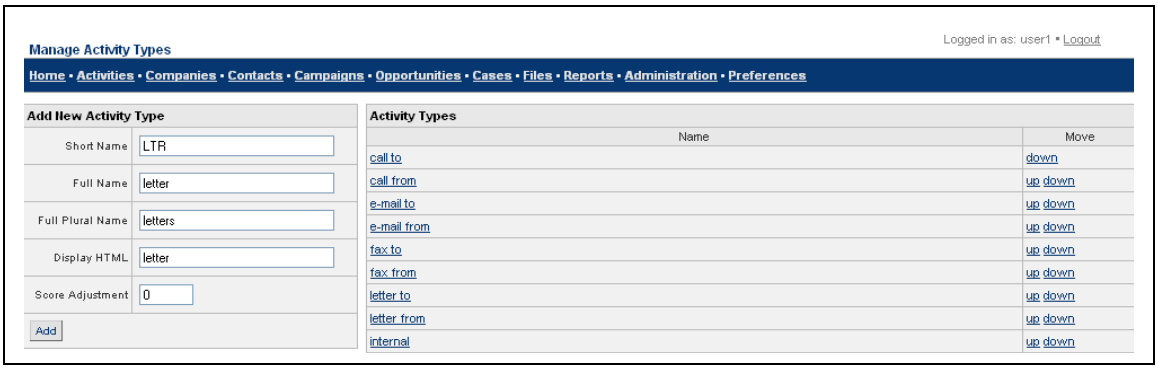


Figure 61: Manage Activity Types Screen

2. The Activity Types box lists all the activities created. Click on the activity you wish to edit. For example, Fax. You see the Activity Type Details: Fax screen.

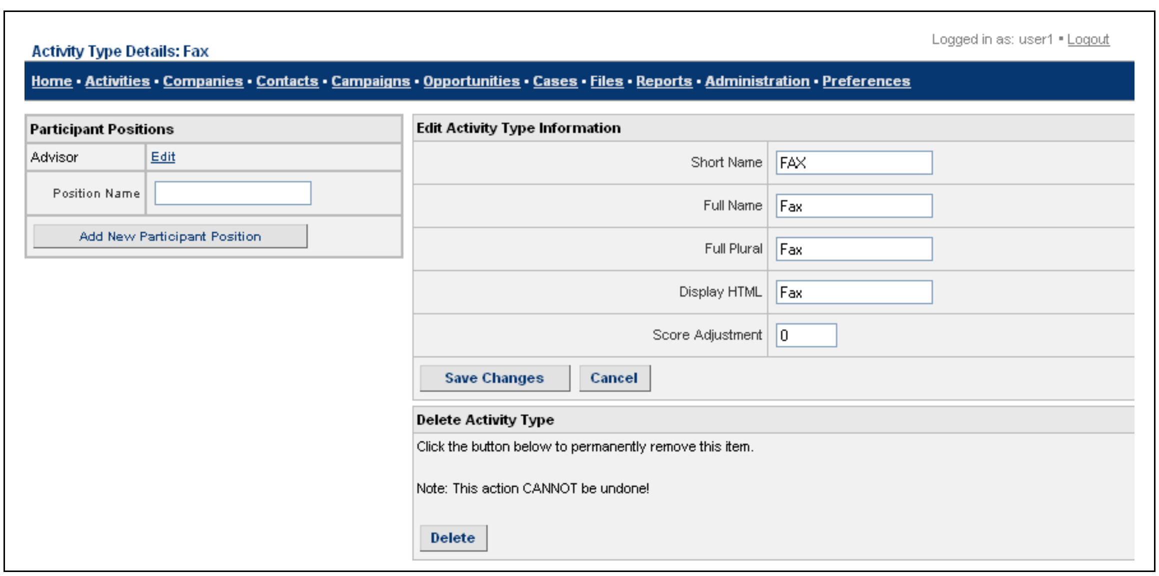


Figure 62: Activity Type Details Screen

3. To make changes, go to the Edit Activity Type Information box.

Modify any of the fields as given in the table below:

Short Name: Enter a short name for the activity type.
Full Name: Enter the entire name of the activity type.
Full Plural Name: Enter the plural of the name.
Display HTML: Enter the HTML format of the name.
Score Adjustment: ***Deprecated – no longer used***

4. After you make all the changes, click **Save Changes**.

To add a new Participant Position

Participant positions link contacts to activities. The default position is Participant and exists in each activity type. Other participant positions need to be defined for each activity type. Example: CC and BCC and To and From are positions for email types.

To define a participant position:

1. Go to the Participant Positions box in the Activity Type Details screen, Figure 62.
2. Enter a new role in the text box beside Position Name.
3. Click **Add New Participant Position** to save the new role.

To Edit an Existing Participant Position

1. In the Participant Positions box in the Activity Type Details screen (See Figure 62), click **Edit** beside the existing position that you wish to edit.

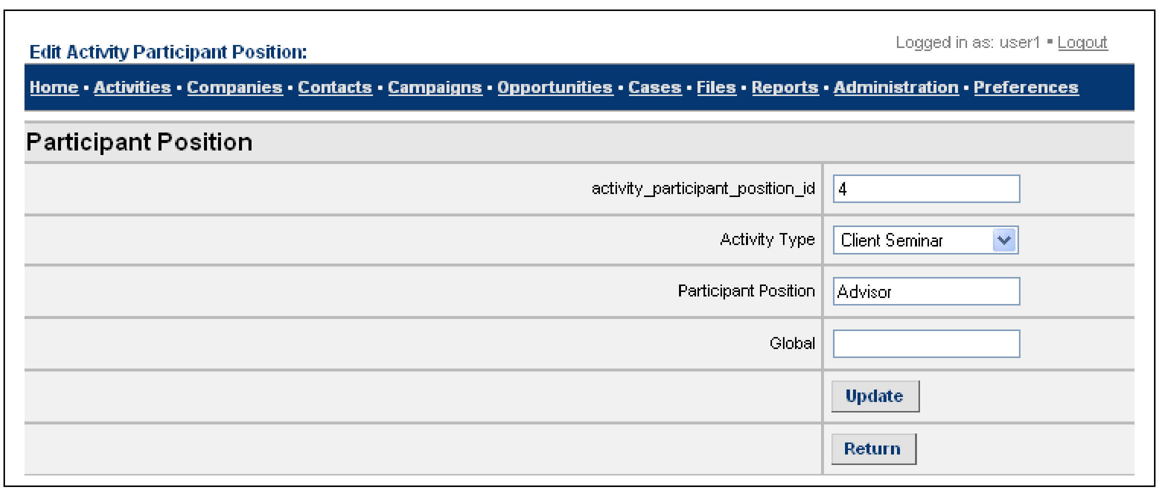


Figure 63: Edit Activity Participant Position Screen

2. Make changes to the fields as necessary.
3. Click **Update** to save the edited details and see the Participant Position Details screen.
4. Click **Return** to go back to the Activity Type Details screen.

To delete an Activity Type

To delete an activity type, click **Delete** in the Delete Activity Type box in Figure 62. This permanently deletes the activity from all screens.

6.2.3 Categories

To edit a category, follow the steps below:

1. Go to Administration>Types and Statuses and click the **Categories** link to see the Manage Categories screen.

Figure 64: Manage Categories Screen

2. The Categories box on the right lists all the values created for the default. Click on the value to be edited. You need to associate a Category scope to describe which objects within XRMS will be linked to this Category using the sidebar "Category Scopes". Failure to associate a Category with object types will cause it to not be usable by your users.

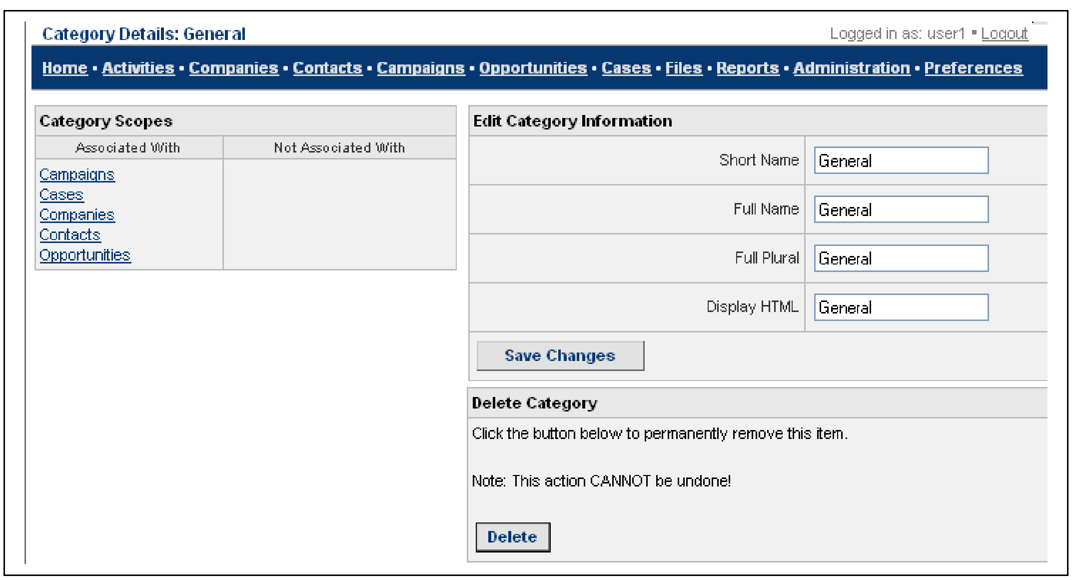


Figure 65: Category Details Screen

3. To edit category details, go to the Edit Category Information box.

Modify any of the fields as given in the table below:

Short Name: Enter a short name for the category. Full Name: Enter the entire name of the category. Full Plural Name: Enter the plural of the name. Display HTML: Enter the HTML format of the name.

4. After you make all the changes, click **Save Changes**.

Other Tasks done from the Category Details Screen

Besides the edits mentioned, you can also do the following:

5. **To**	6. **Do**
7. Set the scope of the category value in the Category Scopes box 8. Items in the Associated With column are related to the category	9. Click on an item name in the Associated With column to move the item to the Not Associated With column. 10. Similarly, click on an item in the Not Associated With column to move it to the Associated With column.
11. Delete a category	12. Click the name of the category you wish to delete in the Manage Categories screen (See Figure 64). You will now see the Category Details screen. 13. Click **Delete** in the Delete Category box. This deletes the category from all XRMS screens.

7 Custom Fields in XRMS CRM

In almost all CRM installations, it eventually becomes necessary to extend the data collected on Companies, Contacts, Activities, etc. to better fit your business. XRMS provides an easy way to do this for many installations without writing custom plugins of your own by enabling the 'custom_fields' plugin.

7.1 Manage Custom Fields

There are different types of information that need to be maintained to ensure that the XRMS application runs according to user specifications. Administrators can add, edit, and delete fields that need to appear in different screens as well as specify where these fields should be displayed within a given screen.

7.1.1 Section Author

This section (and the custom_fields plugin) was written by Keith Edmunds. Suggestions, errors and requests for use other than described in the previous paragraph should be sent to keith@tiger-computing.co.uk.

7.1.2 Warning

DO NOT enable both the custom_fields plugin and its predecessor, the info plugin, on the same installation of XRMS: it WILL break XRMS. If this is done inadvertently, edit the include/plugin-cfg.php file and remove one of the two plugins.

7.1.3 History

This plugin began life as the 'server' plugin, and was specifically designed for a company that maintains servers at various customers' premises and wanted to record details of those servers within XRMS. It grew rapidly via contributions from both the core XRMS developers and external users, and was renamed the 'info' plugin. This rapid growth and broadening of scope made the plugin far more useful, but it also made the code behind it too complex and very difficult to maintain. In the Summer of 2005 it was completely rewritten with a more appropriate internal architecture and was renamed the custom_fields plugin, the new name more accurately reflecting the role it had come to fill.

7.1.4 Function

This plugin displays user-defined fields within XRMS. These fields may appear in a variety of places including:

- as an integrated part of the information displayed in the detail of contacts or companies
- as a separate section below the company details
- as an addition to the home, contacts or companies sidebar with a link to show more detail

The plugin needs to be configured by an administrator, but the data shown can be edited by all users.

7.1.5 Installation

7.1.5.1Preparation

Before installation, ensure that the include/plugin-cfg.php file is writeable by the webserver process (typically Apache).

7.1.5.2Enabling the plugin

From the "Administration" screen click on "Plugin Activation" from the foot of the sidebar. On next screen tick the checkbox next to "custom_fields" and click on the Submit button. The page should refresh with "plugin-cfg.php Config written successfully." at the foot of the page.

7.1.5.3 Table creation

The current version of XRMS at the time of writing (September 2005) requires the custom_fields database tables to be created manually although this may be automated in a future version of XRMS. To create them, the following information is required: the XRMS database name, the database username, and the database password. This information will be already defined in the include/vars.php file. Issue the following command, substituting the appropriate values for the uppercase italicised words:

$ cd YOUR-XRMS-DIRECTORY/plugins/custom-fields

$ mysql -u XRMS-USERNAME -p XRMS-DATABASE < custom-fields.sql

Enter the XRMS database user password when prompted.

7.1.6 Terminology

The custom_fields plugin is a very flexible and powerful plugin, and in order to clearly describe its functionality and management it is necessary to define some terms.

7.1.6.1Custom Field

A Custom Field is the combination of a label and user data. Each field has a type; when being edited, the type determines how the user data may displayed (a radio button, checkbox, text box, text area or select box). When not being edited the user data is always shown as text. In the example below the label is shown in bold and the user data in normal font.

Example:

Server Name: MailServer01

7.1.6.2Custom Fields Object

A Custom Fields Object is a collection of one or more custom fields definitions . The Custom Fields Object does not contain any user data (see also Object Instance), but it does have a name (for example, “Servers”).

Example:

Server Name:

IP Address:

On maintenance contract?

7.1.6.3Object Instance

An Object Instance is a specific instance of a Custom Fields Object. It differs from the Custom Fields Object by virtue of the fact that it includes user data. There may be multiple instances of a given Custom Fields Object.

An example of an instance of the “Servers” Custom Fields Object:

Server Name: MailServer01

IP Address: 10.0.4.1

On maintenance contract? Yes

7.1.7 Configuration

Configuration is carried out from the Manage Custom Fields screen, which in turn is accessed from the Administration screen by the Manage Custom Fields link located in the Plugins section. The layout of the Manage Custom Fields screen is shown below: On the left are a list of all defined Custom Field Objects. There are two pre-defined objects listed, Company Accounting and Contact Accounting. The second column of the table contains a link to enable the fields of the object to be edited, and the third column states where the object data will be displayed. On the right is a form for creating new Custom Field Objects, and below that is the current version of the custom_fields plugin.

Figure 66: The Manage Custom Fields screen

7.1.7.1 About Display On

There are seven locations that may display custom fields, each described below.

company_accounting

Fields displayed on company_accounting are shown within the company detail screen. In the example below, the Accountant Name and VAT fields are custom fields displayed on company_accounting:

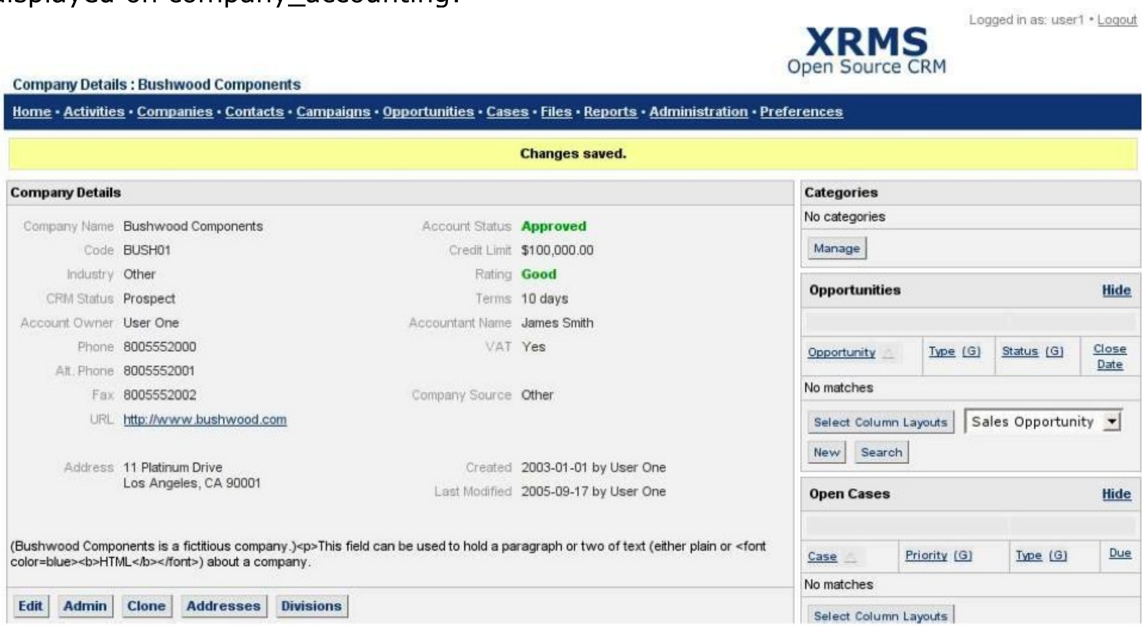


Figure 67: An example of company_accounting field

contact_accounting

Fields displayed on contact_accounting are very similar to those displayed on company_accounting fields except that they are displayed within the contact detail page rather than the company detail page.

Figure 68: Example of company_content_bottom data

company_content_bottom

Fields displayed on company_contact_bottom are shown as a separate section at the foot of the company detail page. In the following example some information about courses run for a company has been added to the foot of the company detail page:

Sidebar displays

There are four sidebar displays as detailed in the table below:

7.1.7.2 Display on Notes

- company_sidebar_bottom Shown at the bottom of the sidebar on the
- company detail page

- contact_sidebar_top Shown at the top of the sidebar on the contact
- detail page

- contact_sidebar_bottom Shown at the bottom of the sidebar on the
- contact detail page

- private_sidebar_bottom Shown at the bottom of the sidebar on the home
- page

Each sidebar displays some details of the object concerned, and has a link to show the full detail. In this example the bottom of the company sidebar shows some information about a server at this company:

Figure 69: company_sidebar_bottom object

7.1.8 Creating and editing Custom Field Objects

7.1.8.1 Editing the Company and Contact Accounting fields

To edit the Accounting objects, click on the Edit link in the Fields column. This displays the Edit Field Definitions screen as shown below:

As there are currently no defined fields for this object, XRMS has helpfully inserted a blank field.
By way of example, we will create two fields in the Company Accounting Object. The first will be a text field labeled "Accountant Name", and the second will be a yes/no

select box labelled VAT (a type of tax). In Label box type “Accountant Name” and click “Save and add another field”. The screen will now appear as follows:

To define the second field, type “VAT” in the blank Label box and select “select” in the Type box. The range of possible values should be comma-separated, so before saving the screen will look as follows:

Click on the Save Changes button to return to the Manage Custom Fields screen.

Figure 70: The Edit Field Definitions screen

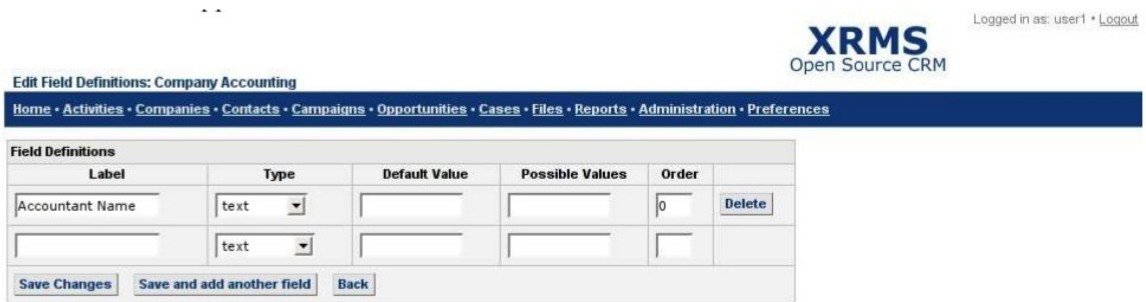


Figure 71: Adding custom fields to an object

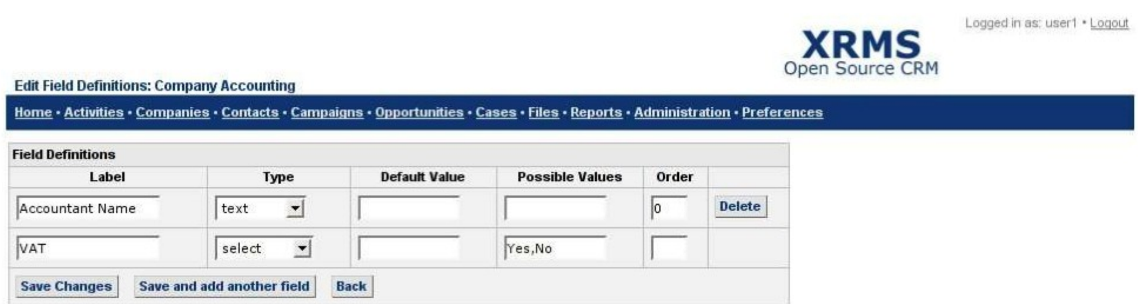


Figure 72: The completed company_accounting field definitions

7.1.8.2Creating a company_content_bottom object

In this example, we will create an object to display details of training courses we have run for each company. On the right of the Manage Custom Fields screen, create a “Courses run” object to be displayed on company_content_bottom as follows:

After clicking on Add, the “Courses run” object will appear in the Custom Fields Object Name list on the Manage Custom Fields page. Click on the corresponding Edit link and fill in the definitions as shown below. After entering the first field, Course Name, click on “Save and add another field” and enter the second field. Continue in this way until all field definitions are entered:

Note that the “Notes” field is of type “textarea” and also that it is to be displayed in column 2. The “order” and “column” attributes are discussed further in the next section. Click on “Save Changes” and go to a company detail page. The foot of that page now has an empty “Courses run” object:

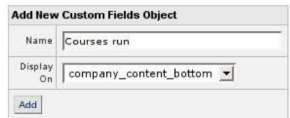


Figure 73: Creating the "Courses run" object

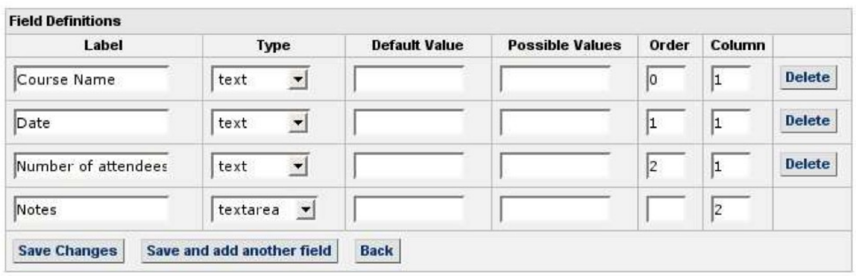


Figure 74: Field definitions for the "Courses run" object

Figure 75: Empy "Courses run" display

A user can click on “New” to enter details of a new course run. The example below shows two courses that have been added to a company page:

Note that each entry has its own Edit and Delete button, and that there is one New button for adding more courses.

7.1.8.3Creating a sidebar object

For this example, we will create a “Servers” object and have it display at the foot of the company sidebar. On the right of the Manage Custom Fields screen, create an object named “Servers” to be displayed on company_sidebar_bottom. Add the fields as described earlier on page 9 to get the field definitions shown below:

Note the following points:

- The “IP address” field will be displayed in the sidebar (“Display in Sidebar” is checked), but the other fields will only be visible in the detailed view.

- Two columns are used, with “Configuration Notes” appearing in column two. There is no limit to

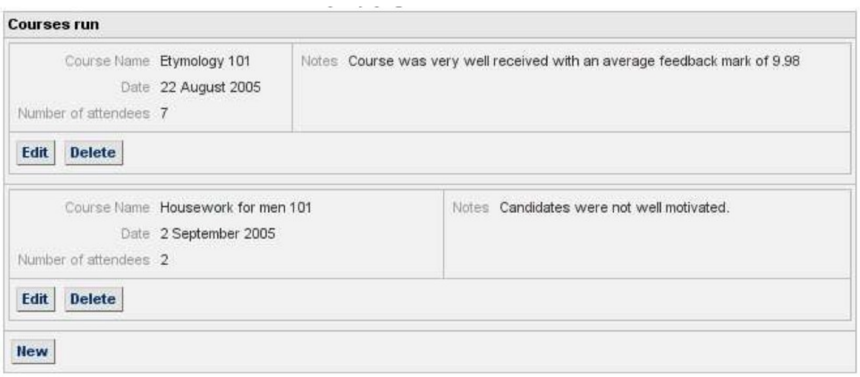


Figure 76: Two "Courses run" objects

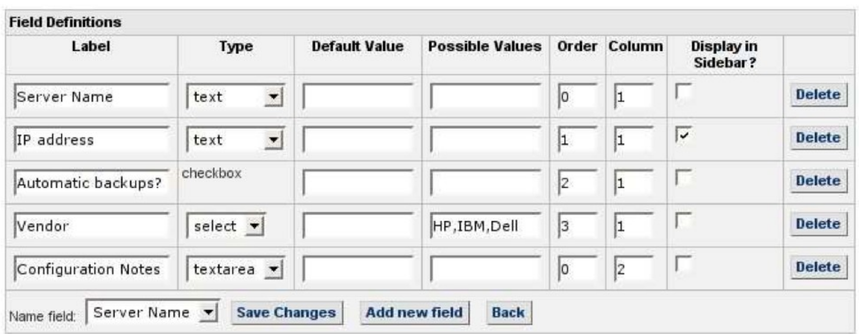


Figure 77: Field definitions for sidebar object

- the number of columns that can be defined, and each column can be given any arbitrary name.
- Columns will be displayed in alphabetical order, so "8" comes before "9", "10" comes before "2",and "middle" comes after "first" and also after "last".
- Within in any one column the fields are displayed in the order dictated by the "order" attribute following the same rules as for columns. If no order is specified then fields will be displayed in the order in which they are created.
- Any field can be deleted by clicking on the “Delete” button. Note: currently there is no confirmation before the field is deleted.
- At the foot of the screen the “Name field” selector. The field selected here will be used as the text of the link to display the full details of this object (see below). Only text fields may be selected as the Name Field.

After saving the above definitions, an entry will appear at the foot of the company sidebar:

- Clicking on the New button will allow a specific instance of a Servers object to be defined as shown below:

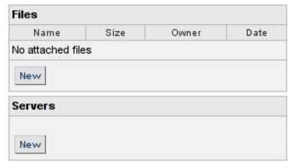


Figure 78: Sidebar with empty object

- After saving this definition, the corresponding company sidebar will appear as shown below:

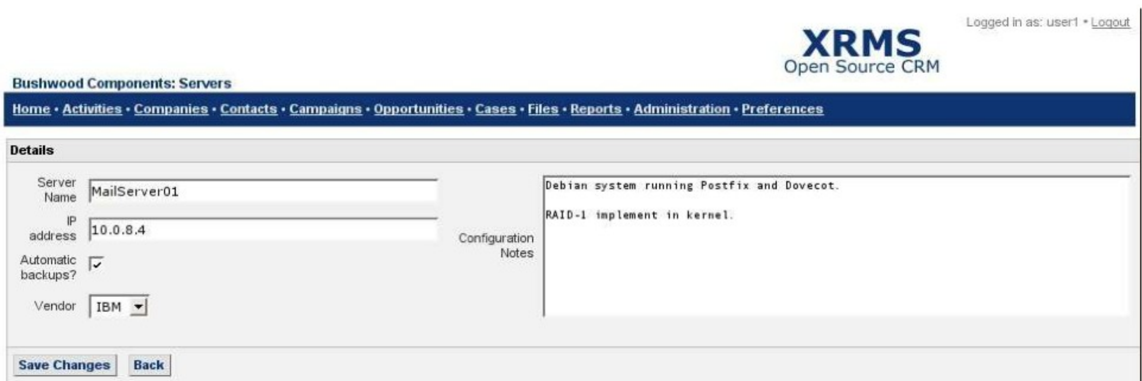


Figure 79: Defining a sidebar instance

Note that the IP address (only) is show in the sidebar, and that the link to show the full details is the name of the server (the "Name field" defined for this object). Clicking on that link shows the full details:

7.2 Manage Info Types

The original method of adding custom fields to XRMS was via the 'info' plugin. This plugin is now deprecated, and will be removed from XRMS version 2.0.0, so don't use it if you can avoid it. See the section below on converting from the info plugin to the custom_fields plugin.

There are different types of information that need to be maintained to ensure that the XRMS application runs according to user specifications. Administrators can add, edit, and delete fields that need to appear in different screens as well as specify where these fields should be displayed within a given screen.

7.2.1 Add an Info type

To add an info type, do the following:

1. Navigate to Administration>Plugins and click the **Manage Info Types** link to reach the Manage Info Types screen.

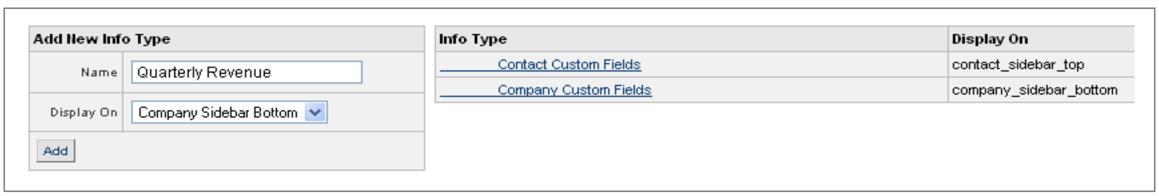


Figure 80: Manage Info Types

2. In the Add New Info Type box, enter the fields as given in the table below:

Name: Enter the name of the new info type. Display On: Choose the position of display of this info type to the user from the drop-down list.

3. Click **Add** to see the new info type added to the list of Info Types on the left side in the Manage Info Types screen.

7.2.2 Editing and Deleting Info Types

To edit an info type, follow the steps below:

1. Navigate to Administration>Plugins and click the **Manage Info Types** link to reach the Manage Info Types screen, see Figure 80.
2. From the list of info types on the left side of the screen, click the name of the info type that you want to edit. You see the Edit Info Type Information screen.

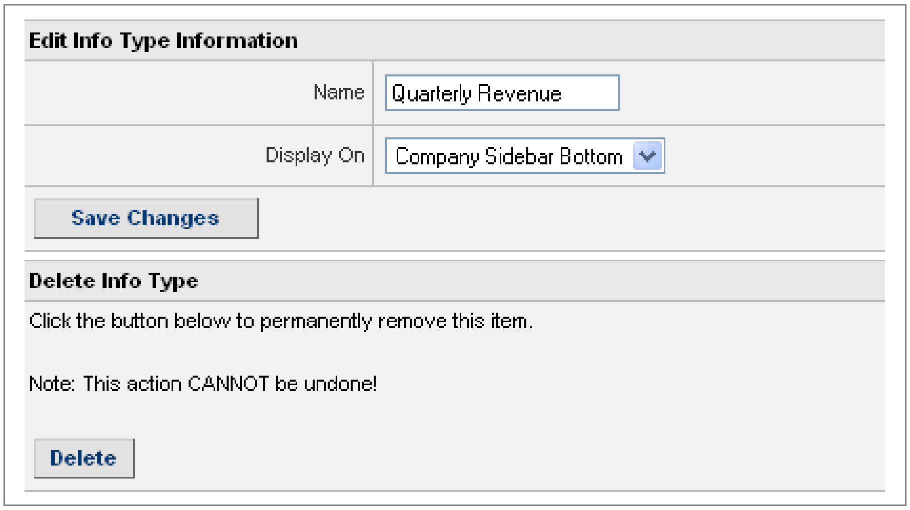


Figure 81: Info Type Details

3. To make changes, go to the Edit Info Type Information box. All the fields are explained in Manage Info Types screen, see Figure 80.
4. After you edit the fields, click **Save Changes.**

To delete an info type

Navigate to the Administration>Manage Info Types link to reach the Manage Info Types screen, see Figure 80.

From the list of info types on the left side of the Manage Info Types screen, click the name of the info type that you want to edit. You see the Info Type Details: < Info type> screen, see Figure 81.

In the Delete Info Type box, click **Delete** to remove the info type.

7.3 Converting 'info' plugin data to 'custom_fields' plugin

Included with the custom_fields plugin is a script to import data from the 'info' plugin.

THIS SCRIPT IS NOT OFFICIALLY SUPPORTED: USE AT YOUR OWN RISK.

Our testing of the upgrade script successfully upgraded a complex production installation of the info plugin with thousands of entries across several info types. We believe that it is stable and the best method of upgrading to the custom_fields code. We recommend (as with any major upgrade) that you take a complete backup of your database before attempting the upgrade.

1. Steps to import data from the 'info' plugin:
2. Carry out a full backup of your XRMS database.
3. Create the custom_fields database tables (see the custom_fields plugin
4. documentation).
5. Ensure that you are the only person accessing the XRMS database.
6. In a browser, navigate to plugins/custom_fields/admin/info_to_cf.php under your XRMS root URL.
7. The script will run and output some information messages.
8. Navigate to your root XRMS URL, then disable the 'info' plugin and enable the 'custom_fields' plugin as described in the custom_fields plugin documentation.
9. Depending on the version of the 'info' plugin that was used to create the info fields, there may be some spurious 'Name' fields in non-sidebar displays. These can be cleaned up from the custom_fields administration screens.

8 Data Integrity Administration

The features that come under this section: Database Structure Update and Data Cleanup are used to upgrade and ensure the integrity of XRMS database data.

8.1 Database Structure Update

A Database Structure Update should be performed after every upgrade of XRMS. This is a non-destructive routine to bring your database structures and default data up to date. Failure to perform a database structure update after an upgrade may result in errors or non-working features.

The developers have worked pretty hard to make sure that upgrades go smoothly, because we are all running current CVS in production at our current companies. If we didn't automate this, our installations would break as well.

If you were up to date (CVS) as of 2004-03-17 or later, all you should need to do to upgrasde XRMS is intall the new code files and run this routine. If you are starting from code older than the March 2004 date above, contact the development team for assistance, as the process is more complicated.

8.2 Data Cleanup

The Data Cleanup routines are mostly deprecated at this time, and will probably be removed from a future version of XRMS. They are non-destructive routines to check for problems in data integrity and correct them. Most of these problems occurred early in XRMS's history, and no new checks have been added to this method since 2005-01-09.

9 Import/Export

Importing and exporting company data is a crucial task for many XRMS users.

The different data types imported to and exported from XRMS are shown in Appendix 2–Default Import Formats.

9.1 Import Companies and Contacts

Only a single company record is stored in XRMS with the contacts of each company related to the company record.

Data imported contains the following information:

- Acct. Owner
- CRM Status
- Company Source
- Category
- Industry
- Account Status
- Rating

To import company or contact information into the XRMS database, follow the steps below:

1. Click on the **Administration** link in the XRMS top bar to see the Administration screen (See Figure 1).
2. Go to the Import/Export Box.

Figure 82: Import/Export Box

3. Click the **Import Companies/Contacts** link to see the Import screen that contains the Import Companies dialog that displays fields to import company data.

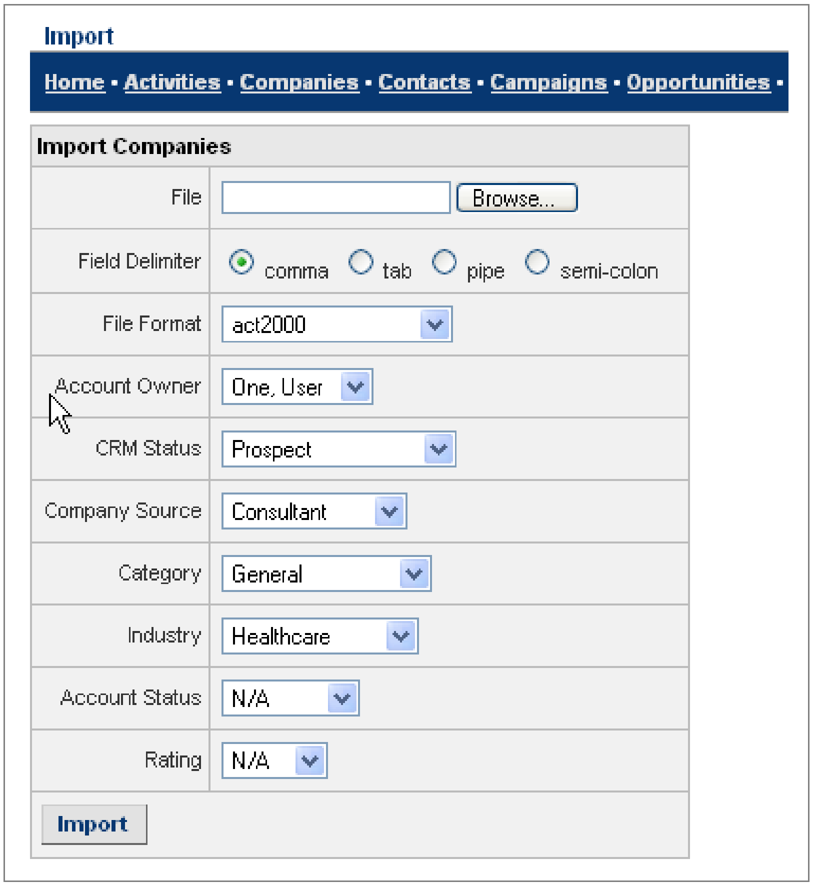


Figure 83: Import Screen

4. Enter the fields in the Import Companies box as given in the table below:

File: Enter the path of the file that has to be imported, or click **Browse** to select the file. Field Delimiter: Data is imported in a delimited form. The different delimiters are: comma, tab, pipe, or semi-colon. Select the radio button beside a delimiter to choose one. File Format: Choose the file format from the drop-down list. File structures supported are: act2000, dunn-and-bradstreet, goldmine, salesforce, outlook, or the XRMS default format given in Appendix 2. Account Owner: Employee assigned to establish a relationship with the company. Select the option from the drop-down list. CRM Status: Status of the company with regard to its relationship with your company. For example: Lead, Prospect, Active, and so on. Select the option from the drop-down list. Company Source: Means by which the company was identified. Select the option from the drop-down list. Category: Choose the category of the company from the drop-down list.

Industry: Industry in which the company operates. Select the option from the drop-down list. Account Status: Select the appropriate account status from the drop-down list. Rating: Select the company rating from the drop-down list.

5. After you enter all the fields, click **Import**.

Imported data is displayed in the Preview Data screen where it is previewed and sent to the XRMS database.

NOTE:

- When data is imported and there is no country assigned to the country field then the default value is USA. To change the country default, see Appendix 1–List of Country Codes.
- The default value for gender is male.

9.2 Export Companies and Contacts

All XRMS data can be exported to a delimited file. This is exported in the default format – CSV. This applies to all the export features in the Import/Export box.

9.3 Export Companies/Contacts as LDAP/LDIF

This option will export an LDIF formatted file of XRMS data to be imported into a corporate LDAP Directory.

9.4 Export Companies with address and phone info

This option will export a comma separateed list of company information with address and phone info.

10 Contributing to the XRMS CRM Project

Many people have asked how they may contribute code back to XRMS. We'll try to address most of those questions here.

If you wish to contribute documentation to XRMS, please contact a member of the development team or post to the SourceForge Forums.

If you wish to contribute code to XRMS, you should be working from the most current code possible. In the case of bug fixes, this may save you some work (someone else may have fixed it already), and in the case of enhancements or other more complex patches, it will save work for the developers by making very clear what has changed. For large, sweeping changes, you probably want to discuss your proposed change on the SourceForge Forums or the irc channel, so that the development team and the XRMS user community can comment on your proposed changes.

If you want to integrate third party software to XRMS, you should probably familiarize yourself with the Plugin architecture, as that is what plugins are for. If you find yourself needing more plugin hooks as you develop your plugin, let the development team know by posting to the Plugins Forum on SourceForge. Somebody there will be happy to help you.

Start with a clean checkout from CVS or with a release tarball or snapshot. The rest of these instructions will assume that you are working from a snapshot tarball, which uncompresses to a directory called xrms.devel. Change as required for your installation.

Update your installation from CVS using the following command from the directory above your working directory:

```
cvs -q -z3 -d :pserver:anonymous@cvs.sf.net:/cvsroot/xrms update -d xrms
```

You will see cvs 'P' - Patch, 'U' Update, and 'M' Merge your files

(vars.php, plugin-cfg.php, and include-locations.inc will most likely 'M' merge)

'C' denotes a conflict. You will need to examine the file with a conflict and resolve any problems. If you anticipate conflicts (e.g. it has been weeks since you did a cvs update), you should probably call cvs with the -n flag, which will just report on what will happen when you actually update, so that you will be warned of conflicts in advance.

Make the changes you need to current CVS code. Make a 'clean' copy of the files you intend to modify, you'll need it later for creating the patch.

****** Do frequent CVS updates. ******

We recommend doing a CVS update before each development session.

This makes life easier for everybody.

Always do a CVS update immediately before submitting patch files, and resolve and test any conflicts.

Once you've made your changes and are happy with the result, create a patch file for each file you changed using the following command:

```
diff -u3 origfile changedfile >> filename.patch
```

the -u3 parameter to diff is very important, because it creates a 'unified' diff with several lines of context. This allows the patch program to find where to insert the changed lines, even if the file has changed slightly since the patch was generated.

Post your patch with a description of the changes to the SourceForge Patches Forum. It often helps to submit both a patch file and a copy of the full,modified file.

One of the XRMS developers will review it and commit your changes to CVS.

Contributions made by you will be placed under Copyright by the "XRMS Development Team", unless you indicate differently.

Thanks for your interest in contributing to XRMS!

11 Translating XRMS

XRMS has been translated into over 15 languages at the release of v1.99

The XRMS Development Team greatly appreciates the efforts of the translators. Their effort makes the enterprise capabilities of XRMS CRM available to a broader audience around the world.

If you are reading this section and your native language is not English, it is probably because you are wondering how to translate XRMS into your language, or how to update the XRMS translation in your language to be more accurate or usable.

11.1 Translating XRMS into a new language

XRMS uses the GNU gettext libraries for translation. This provides a number of advantages over a custom translation scheme, including speed and the availability of tools to assist the translator.

If you wish to translate XRMS into your language, please contact the XRMS development team if you need assistance. We will do everything we can to assist you in preparing a new translation for XRMS.

11.1.1 Preparing to Translate

When working with a new translation, it is best to be working from current CVS so that you will have any new strings that have been added by new features since the previous release of XRMS.

You will need to go into the xrms/locales directory. Here, you should create a directory for your locale using the international standard four character locale codes. For example, French is 'fr_FR' (there is already a complete French translation of XRMS), and Japanese is 'ja_JP' (there is no Japanese translation of XRMS at this time). If you are using Linux or some other *nix or compatible operating system which uses case sensitive file and directory names, the capitalization of this directory is very important.

If you do not know the international code for your language, look in the xrms/include/i18n.php file. Many of the codes are already included in this file, and you should be able to find your language here.

Inside the new directory that you have just created, create a directory called LC_MESSAGES (capitalization is important).

Copy the xrms/locales/xrms.pot file into the new LC_MESSAGES directory. In our Japanese example, this would be xrms/locales/ja_JP/LC_MESSAGES/

Change the name of the xrms.pot file in your LC_MESSAGES directory to 'xrms.po' (remove the trailing 't': xrms.pot⇒xrms.po)

You can do the following two steps in one command from the locales directory like this:

cp xrms.pot ja_JP/LC_MESSAGES/xrms.po

You may now begin translating the xrms.po file in your language directory by filling in between the quotes in the msgstr lines:

msgid "ACL Administration"

msgstr "Administration des ACL "

The msgid lines are the original English string from the code, *don't change these strings.*

We recommend that you use a tool to assist you in translating, as doing this in a text editor is painful and often causes problems.

11.1.2 Tools for Translation

There are many free open source tools designed to make translation using gettext easier and safer for translators.

All of these tools will organize the strings to be translated, let the translator navigate from one string to the next, show you untranslated or problem strings, and compile and test the .po file for you. These tools will make translating the 1000+ strings in XRMS *much* faster than doing it by hand.

The XRMS translators report good success with these:

PoEdit

PoEdit is available for both Windows and *nix systems.

From the project page:

> poEdit is cross-platform gettext catalogs (.po files) editor. It is built with wxWidgets toolkit and can run on any platform supported by it (although it was only tested on Unix with GTK+ and Windows). It aims to provide more convenient approach to editing catalogs than launching vi and editing the file by hand. Unlike other catalog editors, poEdit shows data in very compact way. Entries are aranged in a list, so that you can easily navigate large catalogs and immediately get an idea about how big part of the catalog is already translated, what needs translating and which parts are only translated in a "fuzzy" way.

Gtranslator

Gtranslator is a GNOME application, so will only run most easily on linux or other *nix systems, but may be able to be used on MS Windows with GTK installed.

From the project page:

> gtranslator is an enhanced gettext po file editor for the GNOME desktop environment. It handles all forms of gettext po files like compiled gettext po files (**gmo/mo** files), compressed po files (**po.gz/po.bz2 etc.**) and features many comfortable everyday usage features likeFind/Replace, Auto Translation, Message Translation Learning, Messages Table (for having an overview of the translations/messages in the po file), Easy Navigation and Editing of translation messages & comments of the translation where accurate.

KBabel

Kbabel is a KDE application, so will only run under linux or other *nix systems. Kbabel is reported to be the most advanced and easy to use of these tools.

From the project page:

> KBabel is a set of tools for editing and managing gettext PO files. Main part is a powerful and comfortable PO file editor which features full navigation capabilities, full editing functionality, possibility to search for translations in different dictionaries, spell and syntax checking, showing diffs and many more. Also included is a "Catalog Manager", a file manager view which helps keeping an overview of PO files. Last but not least it includes a standalone dictionary application as an additional possibility to access KBabel's powerful dictionaries.

11.1.3 Submitting Translations

New and updated XRMS translations can be submitted to the Sourceforge Patches Tracker on the XRMS project site, or may be mailed to a project team member.

New translations should be licensed under the GNU GPL or other [open license] or copyright should be assigned to XRMS Development Team developers.

Any translated .po file should pass `msgfmt -v -c -o /dev/null xrms.po` test without any warning or error messages.

Supported translations can be updated by the translation maintainer or member of the translation team. Other people should get approval from the translation maintainer or a member of the translation team. If a translation maintainer does not reply to emails, XRMS developers may assign maintenance of that translation to another person.

An unsupported translation can be updated by anyone who is willing to take over maintenance of that translation.

If a new translation uses a charset unsupported by existing XRMS decoding/encoding functions, there should be a charset mapping to unicode distributed under [open license] or public domain. Preferably, translations should be done in unicode unless there is a compelling reason to use a different Character Set.

11.2 Updating the XRMS translation for your language

We recommend that you first contact the translators of your language file. You can find this in the xrms.po file for your language. Coordinate with this person over suggested additions, corrections, or untranslated strings.

If you are unable to contact the translator, or the translator does not respond, contact the XRMS development team, and we'll do what we can to assist you.

Appendix 1–List of Country Codes

These country codes will be entered when a new installation is made. They may be different on other databases. You probably only need this list if you are doing a massive data import.

Country	Code		Country	Code
	1		Cayman Islands	41
Afghanistan	2		Central African Republic	42
Albania	3		Chad	43
Algeria	4		Chile	44
American Samoa	5		China	45
Andorra	6		Christmas Island	46
Angola	7		Cocos (Keeling) Islands	47
Anguilla	8		Colombia	48
Antarctica	9		Comoros	49
Antigua and Barbuda	10		Congo	50
Argentina	11		Cook Islands	51
Armenia	12		Costa Rica	52
Aruba	13		Croatia	53
Australia	14		Cuba	54
Austria	15		Cyprus	55
Azerbaijan	16		Czech Republic	56
Bahamas	17		Democratic People's Republic of Korea	57
Bahrain	18		Democratic Republic of the Congo	58
Bangladesh	19		Denmark	59
Barbados	20		Djibouti	60
Belarus	21		Dominica	61
Belgium	22		Dominican Republic	62
Belize	23		Ecuador	63
Benin	24		Egypt	64
Bermuda	25		El Salvador	65
Bhutan	26		Equatorial Guinea	66
Bolivia	27		Eritrea	67
Bosnia and Herzegovina	28		Estonia	68
Botswana	29		Ethiopia	69
Brazil	30		Faeroe Islands	70
British Virgin Islands	31		Falkland Islands (Malvinas)	71
Brunei Darussalam	32		Federated States of Micronesia	72
Bulgaria	33		Fiji	73
Burkina Faso	34		Finland	74
Burundi	35		France	75
??	36		France, metropolitan	76
Cambodia	37		French Guiana	77
Cameroon	38		French Polynesia	78
Canada	39		Gabon	79
Cape Verde	40		Gambia	80
Georgia	81		Lesotho	118
Germany	82		Liberia	119

Country	Code		Country	Code
Ghana	83		Libyan Arab Jamahiriya	120
Gibraltar	84		Liechtenstein	121
Greece	85		Lithuania	122
Greenland	86		Luxembourg	123
Grenada	87		Macau	124
Guadeloupe	88		Madagascar	125
Guam	89		Malawi	126
Guatemala	90		Malaysia	127
Guinea	91		Maldives	128
Guinea-Bissau	92		Mali	129
Guyana	93		Malta	130
Haiti	94		Marshall Islands	131
Holy See	95		Martinique	132
Honduras	96		Mauritania	133
Hong Kong Special Administrative Region of China	97		Mauritius	134
Hungary	98		Mayotte	135
Iceland	99		Mexico	136
India	100		Monaco	137
Indonesia	101		Mongolia	138
Iran	102		Montserrat	139
Iraq	103		Morocco	140
Ireland	104		Mozambique	141
Israel	105		Myanmar	142
1Italy	106		Namibia	143
Jamaica	107		Nauru	144
Japan	108		Nepal	145
Jordan	109		Netherlands	146
Kazakhstan	110		Netherlands Antilles	147
Kenya	111		New Caledonia	148
Kiribati	112		New Zealand	149
Kuwait	113		Slovakia	187
Kyrgyzstan	114		Slovenia	188
Lao People's Democratic Republic	115		Solomon Islands	189
Latvia	116		Somalia	190
Lebanon	117		South Africa	191
Nicaragua	150		Spain	192
Niger	151		Sri Lanka	193
Nigeria	152		Sao Tome and Principe	194
Niue	153		Sudan	195
Norfolk Island	154		Suriname	196
Northern Mariana Islands	155		Swaziland	197
Norway	156		Sweden	198
Oman	157		Switzerland	199
Pakistan	158		Syrian Arab Republic	200
Palau	159		Taiwan	201
Panama	160		Tajikistan	202
Papua New Guinea	161		Thailand	203
Paraguay	162		The Former Yugoslav Republic of Macedonia	204

Country	Code		Country	Code
Peru	163		Togo	205
Philippines	164		Tonga	206
Poland	165		Trinidad and Tobago	207
Portugal	166		Tunisia	208
Puerto Rico	167		Turkey	209
Qatar	168		Turkmenistan	210
Republic of Korea	169		Turks and Caicos Islands	211
Republic of Moldova	170		Tuvalu	212
Romania	171		Uganda	213
Russian Federation	172		Ukraine	214
Rwanda	173		United Arab Emirates	215
Reunion	174		United Kingdom	216
Saint Helena	175		United Republic of Tanzania	217
Saint Kitts and Nevis	176		United States	218
Saint Lucia	177		United States Virgin Islands	219
Saint Pierre and Miquelon	178		Uruguay	220
Saint Vincent and the Grenadines	179		Uzbekistan	221
Samoa	180		Vanuatu	222
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Appendix 2–Default Import Formats

Check for updated mappings in admin/import. Column order does not matter. Column names/headers are used to populate an array.

This list is provided for convenience only.

Category	Default Import	Column No.	Category	Default Import	Column No.
//company info	company_name	1	//contact info	first_names	22
	legal_name	2		last_name	23
	division_name	3		email	24
	website	4		work_phone	25
	tax_id	5		home_phone	26
	extref1	6		fax	27
	extref2	7		division	28
	extref3	8		salutation	29
	company_custom1	9		date_of_birth	30
	company_custom2	10		summary	31
	company_custom3	11		title	32
	company_custom4	12		description	33
	employees	13		cell_phone	34
	revenue	14		aol	35
	credit_limit	15		yahoo	36
	terms	16		msn	37
	company_profile	17		interests	38
	company_code	18		contact_custom1	39
	phone	19		contact_custom2	40
	phone2	20		contact_custom3	41
	fax	21		contact_custom4	42
				contact_profile	43
				gender	44
			//address info	address_name	45
				line1	46
				line2	47
				city	48
				state	49
				postal_code	50
				country	51
				address_body	52
				use_pretty_address	53

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