Administrator Guide

Version: 0.2

http://www.issue-tracker.com/

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Installation and Configuration

Basic installation and setup of Issue-Tracker should be relatively simple for most people. First thing you will need of course is the latest version of Issue-Tracker which can be found at http://sourceforge.net/projects/issue-tracker. For those of you running an rpm based Linux system installation of the files should be completely painless. Simply download the rpm and run the command:

```
rpm -ivh issue-tracker-<version>.noarch.rpm
```

and all files will be installed to your system, in the /var/www/html directory. For everyone else you will need to download the tarball or zip, uncompress the file and then place the files in your web server's document root directory. This location depends on what OS you are using and what web server you are running. For most linux distributions running Apache, this directory will be /var/www/html.

Once the files are installed it is time to configure Issue-Tracker for your setup. A little further on I will explain what you need to do if you do not want all of your Issue-Tracker files to be inside your document root, but for now we will assume that you have left everything in one directory. Included with Issue-Tracker is a generic configuration file inside the conf directory named config.php-default. You will need to rename this file to config.php so that Issue-Tracker will find it. Once you have renamed the file you will need to use a text editor to edit the file and include the values for your setup.

Configuration

The first thing that you will need to change is the database information. This should be the first thing you see in the file. Should look something like this:

```
$db = array(
  "type" => "",
  "host" => "",
  "post" => "",
  "name" => "",
  "user" => "",
  "pass" => ""
);
```

This is the information that Issue-Tracker will use to connect to your database, so if this is not setup correctly Issue-Tracker will not work. This array should be pretty easy to understand but I'll run through what each value is.

type
: This is the type of database that Issue-Tracker will be connecting to. As of version 4.0 there are only two values that can be used here, mysql for a MySQL backend, and pgsql for a PostgreSQL backend. Any other value will not be recognized.

host
: This is the server that Issue-Tracker will have to connect to for your database. If the database will be on the same system as Issue-Tracker then either set this to "localhost" or leave it blank.

port
: The port that your database server is running on. Unless you have changed the default port of your database server then you should leave this blank.

name
: This is the name of the database where all of Issue-Tracker's data will be stored.

user and pass
: The username and password used to connect to your database server. If you do not know this information you will want to check with your system administrator. If you are the system administrator you might want to look at the documentation for your database server.

Administrator Email (_ADMINEMAIL_)
The _ADMINEMAIL_ constant should be set to the email address of the person who will be taking care of most of the administration of your instance of Issue-Tracker. This is the address that will receive notifications of fatal errors, and other important system information.

Outgoing Email (_EMAIL_)
The _EMAIL_ constant is used as the outgoing email address. Any time Issue-Tracker sends out an email to your users this is the email address it will appear to come from. Make sure that if you plan to use the incoming email parser that this address and your incoming address match, otherwise replies to the outgoing mails will not work.

Ok, this covers what really needs to be set for normal functionality of Issue-Tracker. The rest of the configuration file is options that could remain at their default setting but I will go over each one so that you know exactly what they are for.

Title & Company Name (_TITLE_ & _COMPANY_)
These two constants are mainly just for cosmetic purposes. The _TITLE_ constant is used as part of the page title that will display in the titlebar of your user's browsers, and _COMPANY_ is used in certain outgoing emails such as new account creation and password resets.

Default Theme ($default_theme)
This variable is of course the default theme that will be used by all users unless they have chosen a different theme. At this time Issue-Tracker only comes with one theme, so unless you have created your own, this setting should not be touched. Keep in mind that only complete themes should be set to the default, otherwise you could running into very big problems with pages rendering.

Error Handler & Backtrace ($error_handler & $backtrace)
If set to TRUE then Issue-Tracker will use its own error handler when it encounters an error while executing. The Issue-Tracker error handler is setup to log all errors to the logs directory of Issue-Tracker and to notify the administrator if any fatal errors are encountered.

If the $backtrace variable is set to TRUE then Issue-Tracker will attempt to use the debug_backtrace function to give more information in the logs or email message. Since the debug_backtrace function was not introduced in PHP until 4.3.0, this setting will not do anything unless you are using 4.3.0 or a later version.

Session Handler ($session_handler)
This setting determines whether to use the Issue-Tracker database session handler or to use the stock PHP one. By default this is set to FALSE, due to some users having issues where the session data does not get written to the database fast enough. This usually only occurs on slower systems though, so if you would like your user's session information to be stored in the database instead of in flat text files then you will want to set this to TRUE. Be sure to test this setting on your setup before going live though to make sure it is working correctly.

Event Editting ($disable_edit)
This setting allows you to disable editting of events by all users except administrators. By default this is set to FALSE.

Allow Registration ($allow_register)
Setting this to true will allow people coming to your instance of Issue-Tracker to register for their own account without an administrator having to create it for them.

Default Group (_DEFGRP_)
This is the id of the group that users who register for an account will be added to automatically.

Maximum Event Length (MAXLENGTH)
This setting allows you to limit the number of characters that can be entered for a single event. By default this is set to 256,000 characters which should be more than enough for a single event. I usually recommend that if someone wants to post more than that, that they attach it as a file. This can be disabled by either setting it to 0 or commenting it out.

Bad Mime Types ($bad_mime)
This is an array of mime types that when uploaded will have .dl tagged onto the end of the filename. This is done for security purposes on files such as cgi scripts so that a user could not upload a file and then attempt to download it which would cause the file to execute on the web server.

Caching ($cache_data)
By default Issue-Tracker attempts to cache frequenly queried items such as usernames and group names. This array determines which tables will use the caching feature. This caching functionality is very basic and caches the data not the actual queries.

Ok, that should take care of the main configuration file. You may have noticed that at the bottom of the config.php there is an include call to the second file in the configuration directory, const.php. The const.php configuration file should not be editted unless you absolutely know what your doing. This file allows you to move certain directories to other locations outside of the main Issue-Tracker directory and is also where the system constants for things like status types and severities are set. There is one setting in this file though that you may need to change. By default the directory where Issue-Tracker will keep uploaded files (_FILES_) is set to /var/files. Now if this directory is not available to you, or you are using a Windows machine then you will need to change this. This directory needs to be writable by your web server but for security reasons should not be directly web accessible.

Database Setup

Now that your configuration files are setup correctly, or at least should be, we will move on to the database setup. If you haven't done so already you will need to create your database. If you are using a MySQL database you will want to run the command:

```
mysqladmin -u <username> create <database name>
```

and if you are using a PostgreSQL database the command is:

```
createdb -U <username> <database name>
```

If you run into an error when creating the database please see the documentation for your database server. Once the database is created we need to import the schema and default data. The files that you will need to import are located in the setup directory that is included with Issue-Tracker. You should have 4 files, schema.pgsql, schema.mysql, data.sql, and indexes.sql. The filenames should give you a pretty good idea of what each one is for. The first one we will need to import is the schema. The command to do this on MySQL would be:

```
mysql -u <username> <database name> < schema.mysql
```

and on PostgreSQL:

```
psql -U <username> <database name> < schema.pgsql
```

If you get any errors importing the schema you can post to the project forums at http://sourceforge.net/projects/issue-tracker and we will be happy to help you figure out why you are getting the errors. Once the schema is imported you will also want to import data.sql and indexes.sql using the same command but with the correct filenames. If all 3 files for your database import without any errors then your database should now be setup correctly for users to login, but first we need to make sure permissions for a couple directories are set correctly.

Directory Setup

If you installed Issue-Tracker from an rpm then you should not need to worry about this section unless you run across any problems.

There are a few directories that must be writeable by your web server for Issue-Tracker to function properly. These directories are cache, css, download, logs, sessions, and themes. The commands to do this in Linux is:

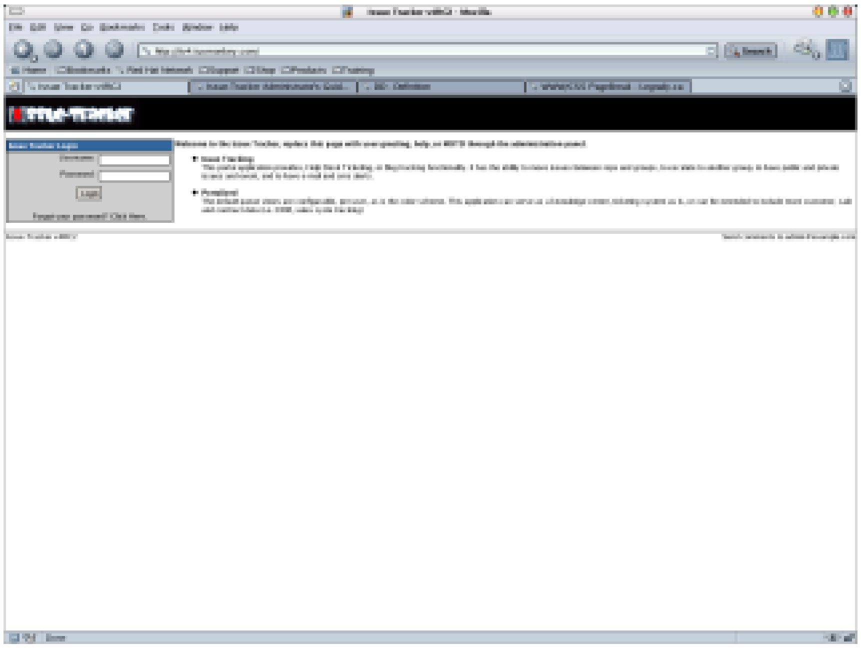
```
chown -R <username> cache
```

```
chown <username> css download logs sessions themes
```

where username would be the web server user, normally either apache or nobody. Unfortunately I do not run Windows web servers so if you are having trouble with permissions to these directories please check Microsoft's site (http://www.microsoft.com/) for help on setting the permissions correctly. Now if you will also be using the graphing support for the reporting module you will also want to make the images directory writeable using the same command as above.

Logging In

Once all of the above is complete you should be able to point your browser to the url you specified for the base url and you should get a login screen that looks something like this:



If you do not see the login screen then you might want to check your logs directory and see if you have any error messages. If you get the login screen then attempt to login with the default administrator:

Username: admin
Password: demo

There is also a employee account setup with the following information:

Username: demo
Password: demo

If you login successfully then you should be all set. I would recommend that the first thing you do is change the password on the admin account. You might also want to visit the administation section of Issue-Tracker and update the Message of the Day for your setup.

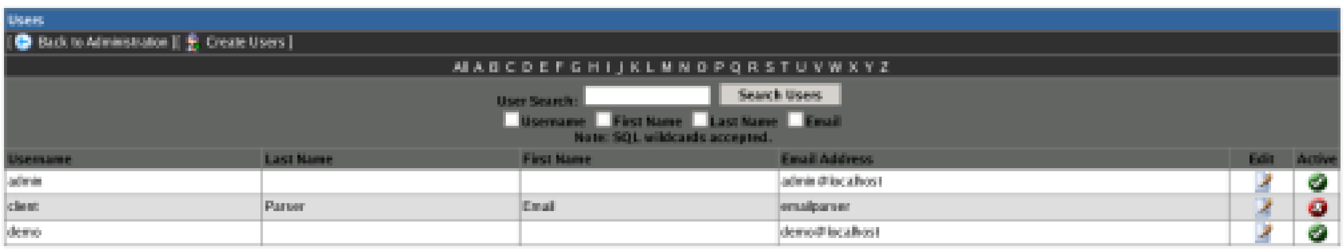
If at any point during the installation and setup you encounter any errors and need help just head over to the project forums and we would be happy to help.

User Management

Access to the users module of Issue-Tracker is limited to users within the employees group, or administrators. All other users the option for this module should not even be visible.

To access the user management module you will need to click the administration button which, in the default theme, is located in the upper right hand corner of the page. If you do not see the button there, then the user you are currently logged in as does not have access to any administrative tasks. For now we will assume that the user you are logged in as has administrative privileges.

Once you have clicked on the administration button you should see a panel with the administrative options available to you. For now the only one we need worry about is the 'User Management' button, which in most cases should be the first option. To enter the main user management page simply click on the button and it will take you there. You should see a page that looks something like this:

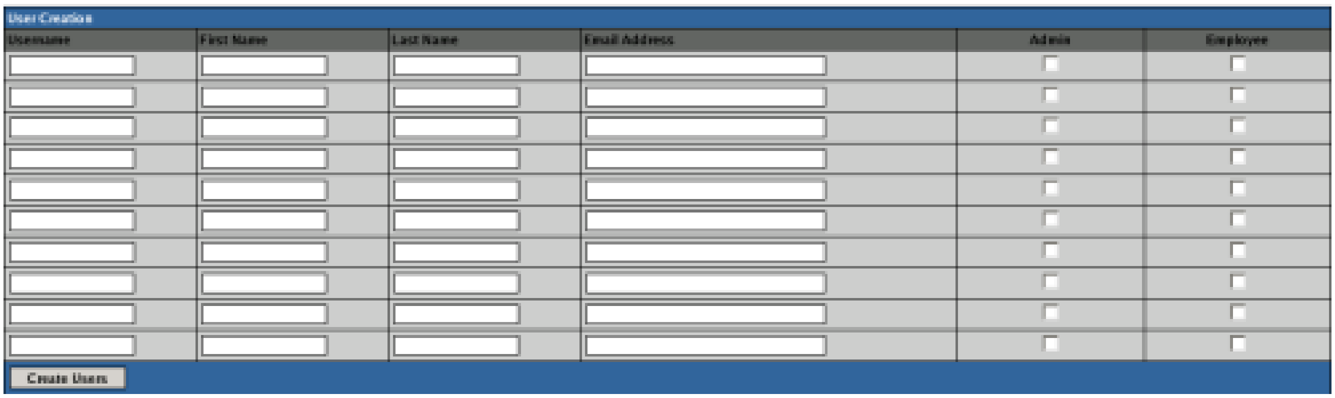


This is a listing of the users currently in the system. The default list displays all users with usernames beginning with the letter "A". To see all user's within the system click the "All" link under the titlebar. The list should be pretty easy to understand, you have username, last name, first name, email address, and the user's current active status. If the user's account is currently active you should see a green check mark, and if their account has been deactivated then you should see a red X. Toggling a user's active status can be done easily through this listing by simply clicking the icon.

Towards the top of this page you should also have a section to search the listing. As of v4.0 the fields that you can search on are username, first name, last name, and email address. To search for any user(s) just enter your criteria and click the search button. SQL wildcards are also accepted in the search. For example say you wanted to find all users who have an "a" in their username, no matter where it is. You would check the username checkbox and enter "%a%" as your search criteria. Simple enough right?

Creating a User

To create a new user, click on the "Create Users" link at the top of the user list. This will take you to a page that looks something like this:



This page contains 10 rows of fields, allowing you to create up to 10 users at one time. The fields here should be pretty easy to understand but I'll go over them just in case.

`Username`
: username given to this user (Required)

`First Name`
: first name of user

`Last Name`
: last name of user

`Email Address`
: valid email address where the user can be reached (Required)

`Admin`
: Checking this box will set the user as a system administrator giving them full access (Only visible by admins)

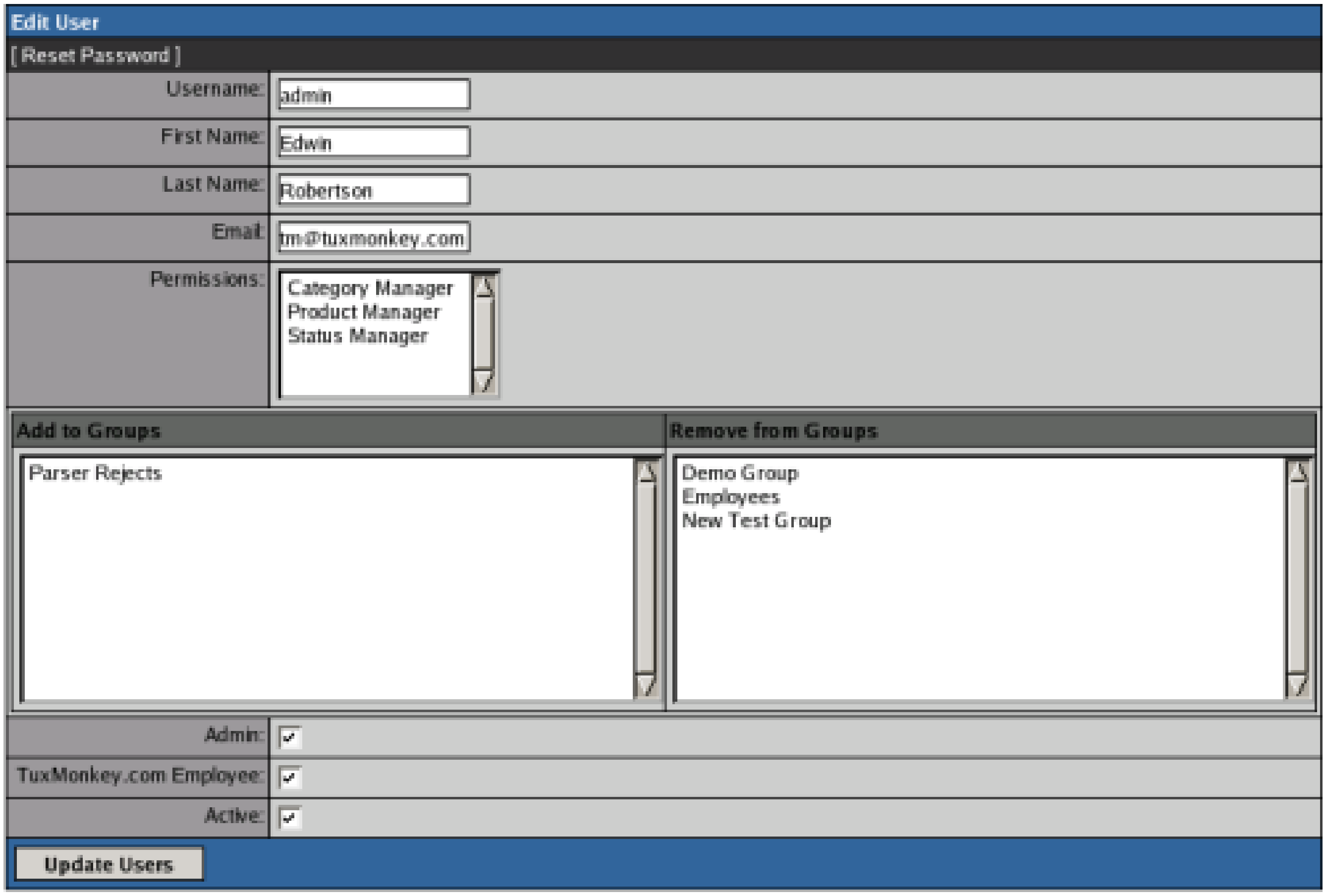
`Employee`
: Checking this box will automatically add the user to the employees group

Now you may have noticed that this form does not include a place to enter a password for the user(s). This is because a randomly generated password is sent to the user(s) when they receive their notification of account creation. So make sure that the email address entered for the user is correct, otherwise they will not receive their password and will have no way to login. Also, you are not required to fill in all 10 rows, a row will be skip automatically if data is not found in the username field.

Once you have filled in the information for the user(s) you want, just click the "Create Users" button and the user(s) should be created. If there are any errors the page will refresh and display the errors towards the top of the page.

Modifying a User

Modifying a user is just as easy as creating a new one. First of course you must select the user you want to modify through the user listing page discussed earlier. Once you select the user, by clicking on their username, you should be presented with a page that looks something like this:

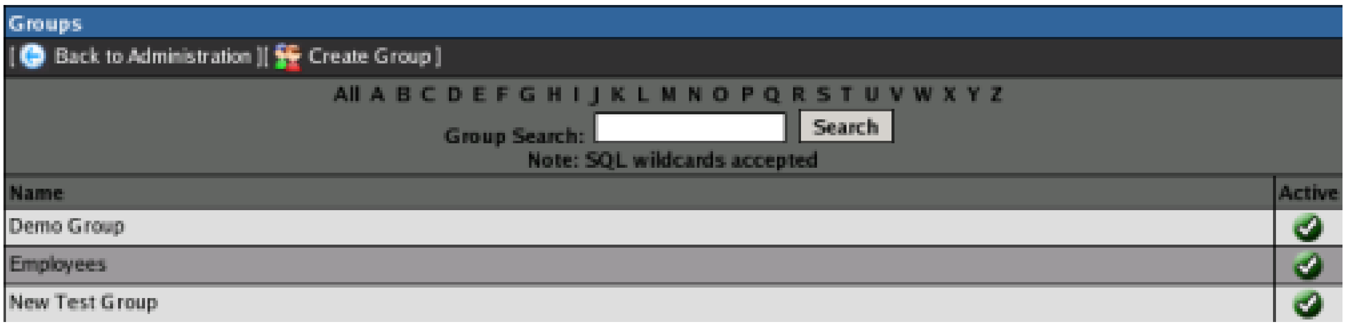


Most of the things here are the same as the fields from the new user page so I will only cover the things that did not show up there. First we have the "Permissions" select box. This box will contain any permissions in the system that have been set as a "User Permission". I will cover user and group permissions later in the Permissions section. Selecting any items from this box will give that permission to the user, and of course deselecting any items from the box will remove that permission from the user. Below that you should have two more select boxes side by side. The box on the left contains any groups in the system which you are allowed to add new members to. And the box on the right contains any groups that the user is in that you have the right to remove members from. As you may have guessed, selecting groups from these boxes will add or remove the user from those groups. And last but certainly not least is the Active checkbox. If this box is checked then the user's account is active and they are able to login and work with the system. If this box is not checked the user is not allowed to login at all.

Well that should pretty much cover the basics of user management. Now to move onto group management.

Group Management

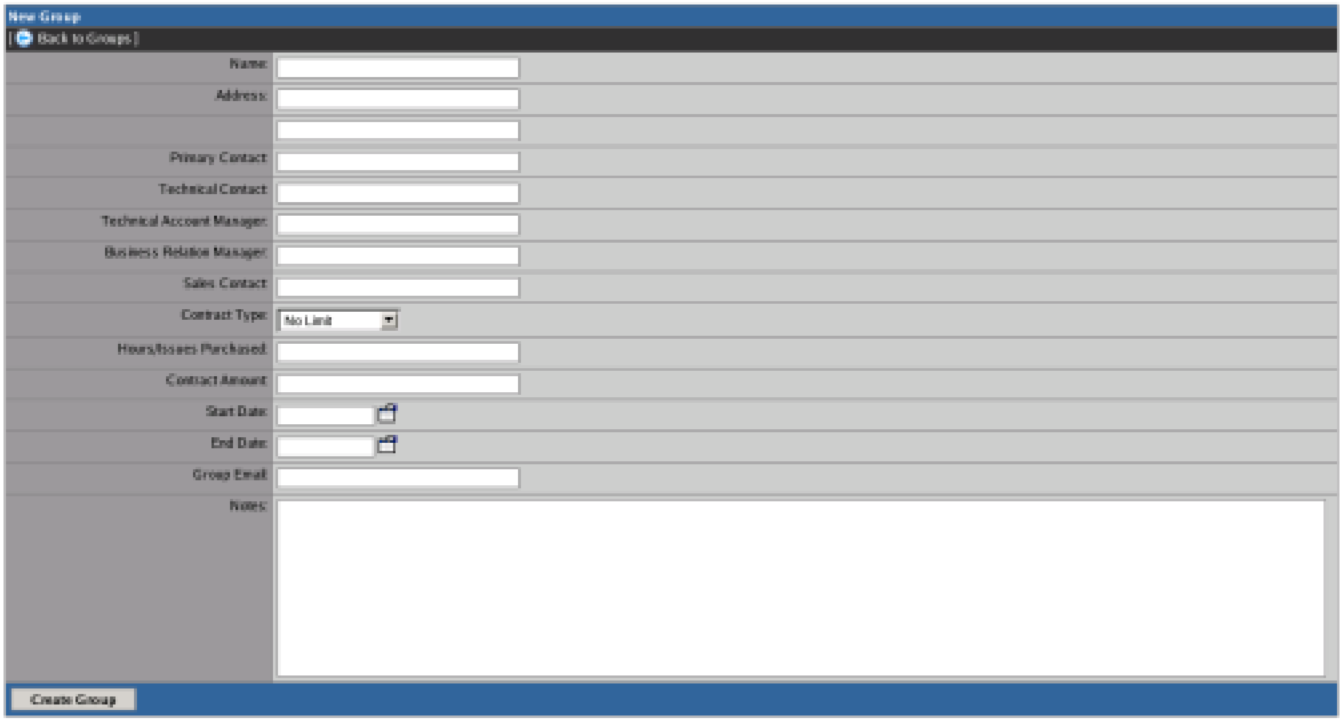
Access to the group management module is limited to the same users as the user management module, employees and admins, and is accessed in the same way. First click the administration button in the top right corner and then click Group Management. You should be present with a listing similiar to that of the user list, and should look something like this:



The group listing should be very easy to understand so we'll move on to creating a new group.

Creating a Group

To create a new group click the "Create Group" link at the top of the group listing. You will be taken to the group creation form which should look something like this:



I'll go over each of the fields here and explain what they are used for. Very few of these fields are actually required, and most people have no need for some of them but they are there for informational purposes.

Name
: Name of group to be created, this name must be unique (Required)

Address
: Address of customer/company that this group represents, used only for information purposes

Primary Contact
: Primary contact for group on the customer side, used only for information purposes

Technical Contact
: Technical contact for group on the customer side, used only for information purposes

Technical Account Manager
: Technical contact for this group on the employee side, used only for information purposes

Business Relation Manager
: Person who keeps things running smooth :), used only for information purposes

Sales Contact
: Sales person who is covering the group, used only for information purposes

Contract Type
: Each group can have a limit type put on it, as of v4 the available types are hours and issues

Hours/Issues Purchased
: Number of hours/issues purchased by customer, if a contract type is chosen, this is the limit placed on the group

Contract Amount
: The amount paid for the support contract, used only for information purposes

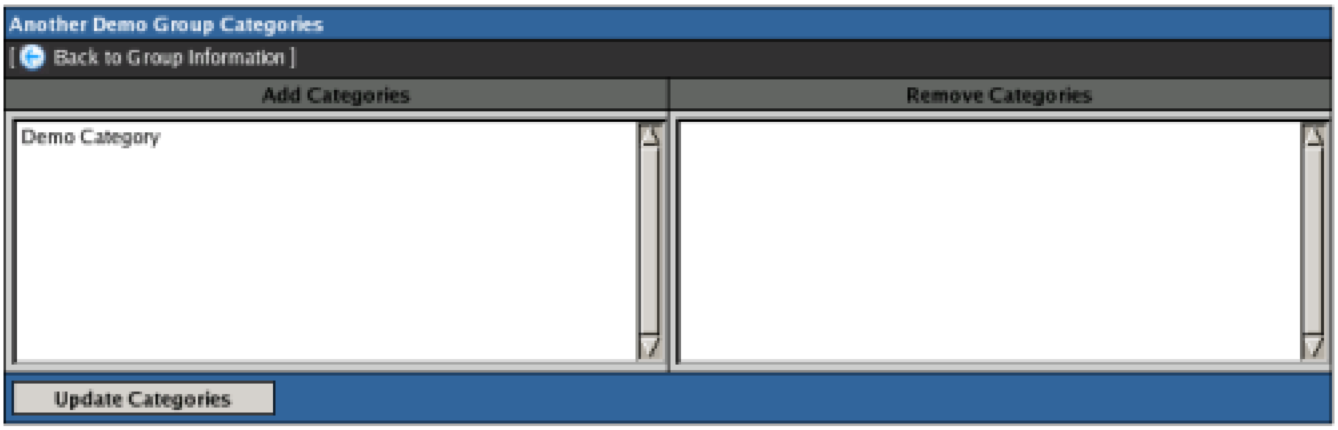
Start Date
: The start date of the contract, currently used only for information purposes, but may change in the future

End Date
: The end date of the contract, currently used only for information purposes, but may change in the future

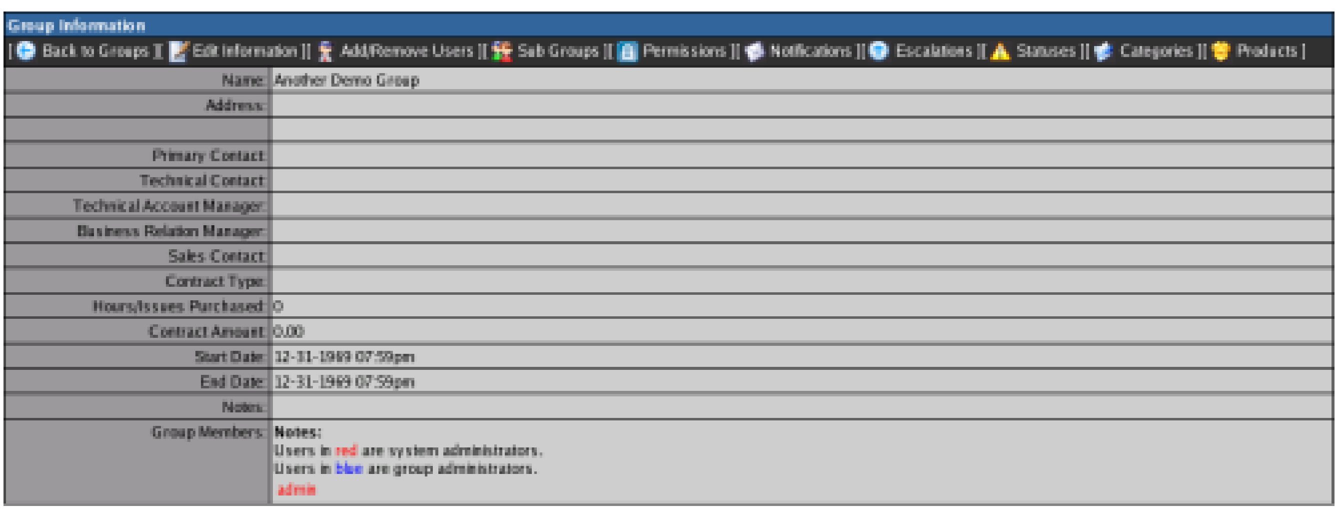
Group Email
: This is used to allow the group to accept anonymous emails through the email parser, if you do not use the email parser then setting this field will do nothing

Notes
: This field is used for two seperate purposes. If the group email field is filled in, then this is the response message that will be sent to people when they submit a new issue. The message must contain the string [TID] which will be replaced with the issueid of the issue when the message gets sent out.

Once you have filled out the information for the group just click the "Create Group" button and the group should be created. If there are any problems the page should refresh with error(s) at the top of the page letting you know whats wrong. If all went ok you will be sent to the next step of group creation. Each group has their own set of statuses, categories, and products which they can select to use from the master list of each. None of these are automatically propagated to your new group, so it is up to you to select which ones your group will use. You should be presented with 3 pages, one for statuses, one for categories, and one for products, possibly not in that order. Each one should look something like this:



Simply select the ones that you want to add to your group and click the update button. Once you are done adding your statuses, categories, and products, you should be presented with the group summary for your new group which should look something like this:



Managing Groups

To get to a group's summary page simply click on its name in the group listing. The summary page contains a non-editable view of the group's current information, including a listing of all the group members, along with system administrators and group administrators highlighted. At the top of the summary page you should see a row of links which will take you to the different sections of the group management module. If you do not see these links then your user does not have the correct permissions to modify the group you are currently looking at, and you will need to contact one of the group administrators to get the correct permissions. For now we will assume that you have the correct permissions, and we'll move on to general group information.

General Information

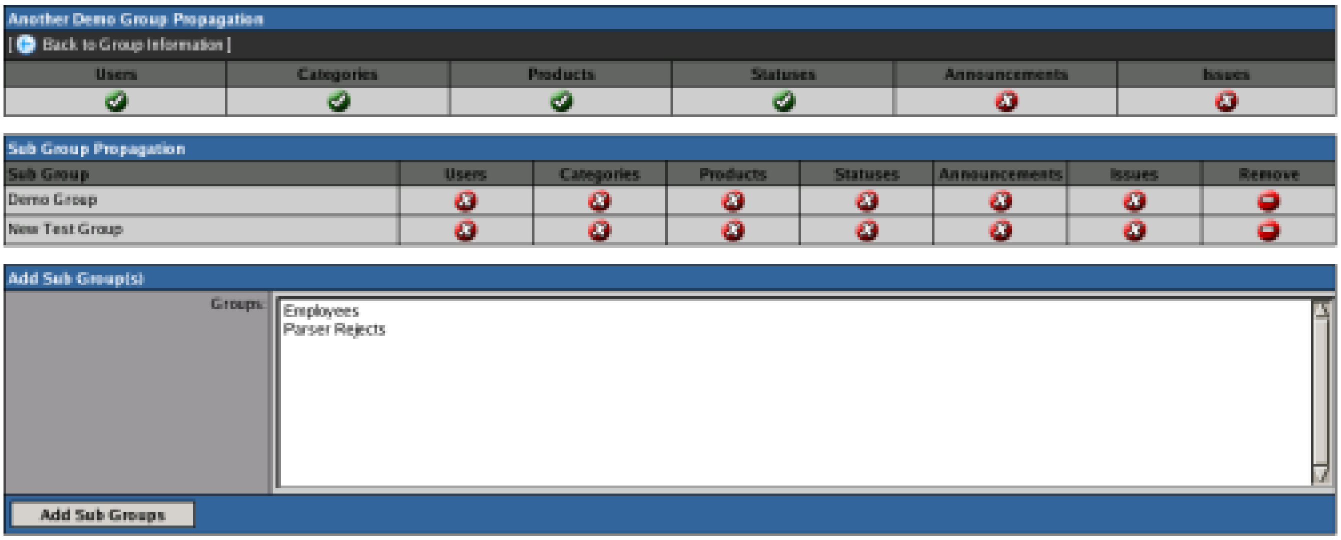
To edit the general group information click the link titled "Edit Information". This should present you with a page that looks similiar to the form you saw when creating a new group, with the addition of the "Status Reports" and "Active" checkboxes. Since these are the only difference between this form and the group creation form, these are the only two I will cover here. Checking the Status Reports checkbox will enable Status Reports for this group. This allows technicians to enter periodic reports to let management know whats going on with the group, along with a standing indicator to show how things are going. As with users, the active checkbox is what determines whether the group is active or not. To modify any of this information simply edit the fields you want to update and then click the update button. To get back to the group summary page you can click the "Back to Group Information" link at the top.

Adding and Removing Users

To add or remove users from your group, you will need to click the link titled ironically enough "Add/Remove Users". This will take you to a page that looks similiar to the one you were presented with for statuses, categories, and products during group creation. On the left is a list of users that can be added to this group, selecting any users from this list will add them to the group when the form is submitted. On the right is a list of users that already belong to the group, and selecting anyone from this list will remove them from the group when the form is submitted. Pretty simple don't you think. To get back to the group summary page you can click the "Back to Group Information" link at the top.

Managing Sub Groups

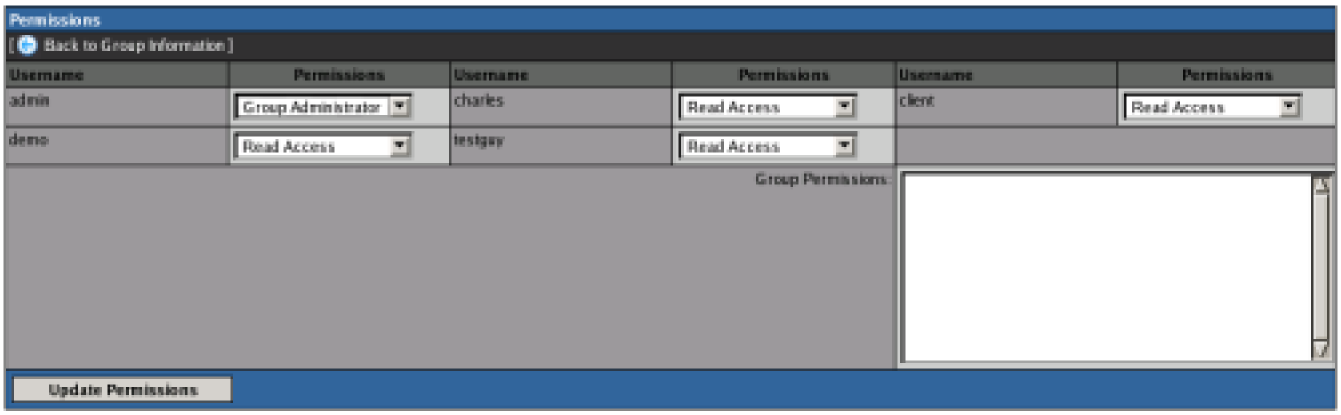
Sub groups are a new feature in v4.0 and can be very confusing if you don't layout your group structure first. This functionality basically allows you to create groups within groups. Think of each sub-group as a seperate department of the same company. The sub-groups page should look something like this:



There are 3 sections to this page, the first being the propagation of data from the group you are currently modifying. This section determines what data will propagate from the parent group down to the children (sub groups). To change one of the settings simply click the icon. If your group has any children then the next section will contain the propagation settings for each one of the child groups, and the option to disown the child. Each one of these settings determines whether or not that type of data propagates from the child up to the parent group. As with the parent, to change one of these settings just click the icon. The last section of this page contains a select box with possible children for this group. These are groups which you are allowed to add as children of this group. To add a child just select it in the box and click the add button. The group should then display within the children section of the page. If the group you are currently modifying has a parent group you will also see a non-editable section for the parent group, letting you know what data does and does not propagate down to this group.

Managing Permissions

Managing group permissions has been simplified greatly in v4.0, and with simple comes limits. Group administrators no longer have to manage huge lists of permissions for the members of their groups, but this also means that they can no longer give or take away a single permission from a user. Instead we now have permission sets, or roles. Each permission set is a grouping of permissions which can then be assigned to a user. Issue-Tracker v4.0 has 5 default permission sets which are covered later in the Permissions section of this guide. To get to the permissions section of a group click the link titled "Permissions". You should see a page that looks something like this:



There are two sections to this page, the member permissions, and the overall group permissions. We'll start with the member permission sets. Each member of the group should be listed here along with their current permission set. If the user has not yet been assigned a permission set then their drop down should say "Read Access". This means that the user can not actually create or update issues within the group. To update a user's permission set simply choose one of the sets from the drop down and click the update button. At any time you can remove the user's permissions by setting this back to "Read Access".

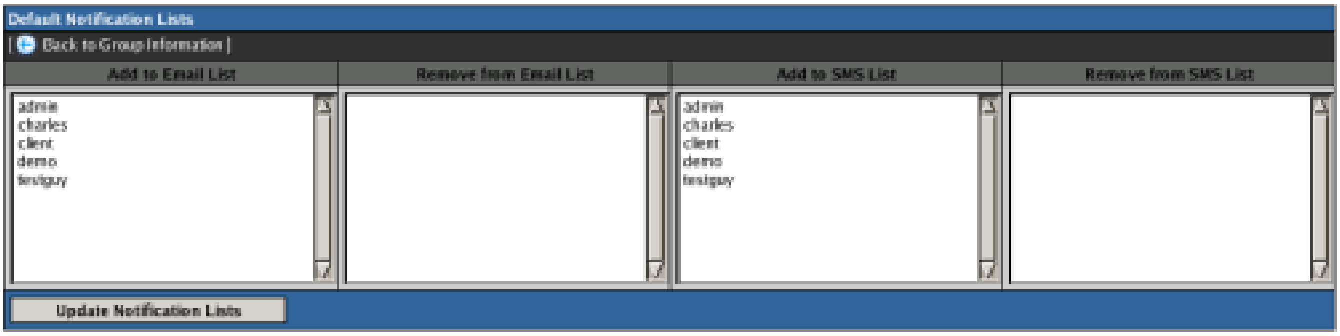
Below the member's permission settings you should see the overall group permissions. By default Issue-Tracker does not have any overall group permissions. This is here for module developers who may want to use such functionality. What an overall group permission will do is grant all user's in the group the specific permission by simply enabling it here, and of course you could also remove a permission from all group members by deselecting it.

Managing Statuses, Categories, and Products

Managing the statuses, categories, and products of a group is very easy. Each one of these has their own section but are identical to the forms you were presented with at the time of group creation. Since they are identical, if you would like an explanation of these forms please see the section on Creating a Group.

Managing Notification Lists

Each group has two seperate notifications lists, one for email notifications and one for sms notifications. Issue-Tracker's support for sms messaging is strictly through email based services, so technically you could use the sms field as just a secondary email field for your users. To modify the notification lists of a group you click on the link titled "Notifications". The page should look something like this:



On the left is two boxes for email notifications, one to add members of the group to the default list, and another to remove members that are already on the default list. On the right is two boxes for sms notifications, same as with emails, one to add members, and one to remove them. Users will still receive notifications for certain reason even if they are not on the default notification lists, such as if they opened or are assigned to an issue, or if they are selected in the notifications list for an update. Adding a user to one of these lists simply means that they will receive a notification for any action taken within the group, including issue creation, issue updates, etc.

Managing Escalation Points

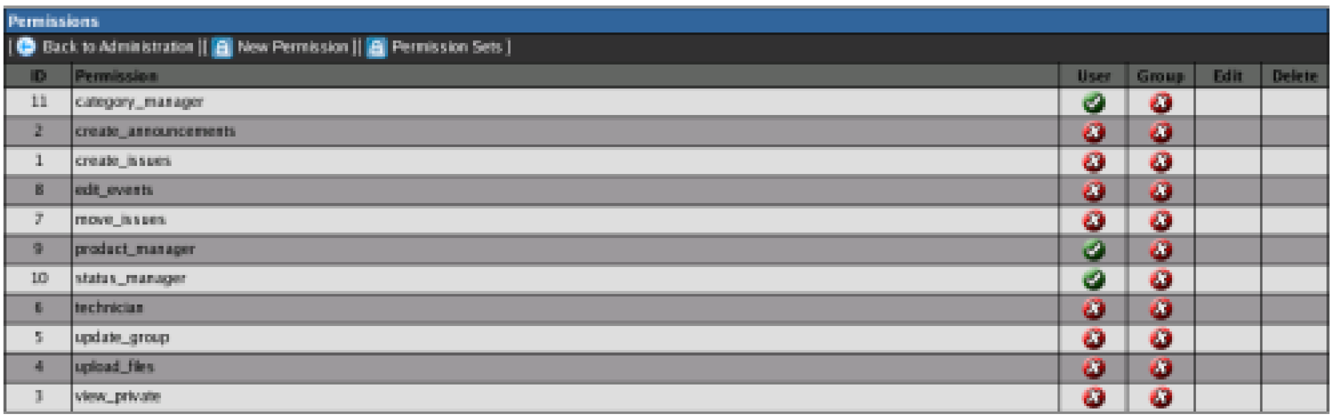
Each group can have their own set of escaltion points. These are groups that issues from the current group can be escalated into, which basically just includes that group as part of the issue. Members of the escalation group can then view the issue as if it were in their group, including with the permissions that they have in the escalation group. If a user belongs to multiple groups that are involved in the same issue they will be presented with a select box to choose which group they will be viewing the issue as. This is done for a couple of reasons but mainly for correct permission checks and also private events. By default all events posted from a group which is not the original group of the issue will automatically be forced private.

The form for adding and removing escaltion points is essentially the same as that of adding and removing users. You have one box for adding new escalations points, and a second box for removing escalation points. Simple enough.

Well, that should pretty much cover management of groups, now lets move on to Permissions.

Permissions

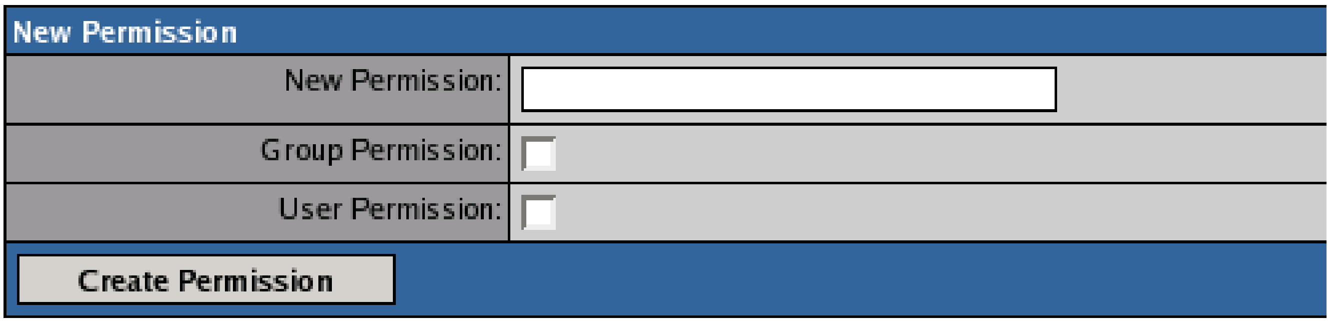
The permissions system for Issue-Tracker v4.0 is a complete rewrite from how things worked in v3. Permissions can now be grouped into definable permission sets which make managing user permissions within groups much easier for group administrators. You can also define seperate user and group permissions. User permissions will grant a permission just to that user, group permissions will grant a permission to all members of the given group. All additions and modifications of permissions are done through the permission section of the administration module, which can be accessed by clicking on the administration button in the top right corner and then going to "Permissions Management". You should then be presented with a page that looks something like this:



This is a list of all permissions currently present in the system along with whether or not they can be set as user or group permissions. You may have noticed that this listing does not allow you to edit or remove the stock Issue-Tracker permissions. This is because these permissions are set as "System" permissions, which means that they are required for Issue-Tracker to function properly. Removal or modification of one of these permissions could cause Issue-Tracker to show odd behavior so these actions are not allowed. At the top of the listing you should have two links, one to create a new permission and another to view the currently defined permission sets.

Creating a Permission

To create a new permission click on the link titled "New Permission". This will take you to a page that looks something like this:



This form should be pretty easy to understand but as usual I'll go over what each item is for. The text field is of course the name of your permission. This is what will be used in permission checks to determine if a user has the permission. Make sure this matches whatever the permission checks in your code will be looking for. Next is the group permission checkbox. Checking this box will allow the permission to be assigned to a group, which gives the permission to all members of the group. And last is the user permission checkbox. Checking this box will allow the permission to be assigned directly to a user instead of through a permission set. This is used for permissions such as "status_manager". To create the permission simply click the create button and it should be created, if there are any problems the page will refresh with an error letting you know whats wrong.

Managing Permissions

To modify a permission simply click the icon located in the edit column of the permission list. As stated earlier, system permissions can not be editted or removed. Once you click on the icon you will be presented with a form identical to the one you saw when creating the permission. Simply modify the settings you want changed and click the update button.

To remove a permission you would click on the icon located in the delete column of the permission list. This will take you to a page asking you to confirm or cancel the action. If you confirm the action then the permission will be removed from the system and you will be taken back to the permission list. If you cancel the action then you will just be taken back to the permission list.

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Permission Sets

As mentioned earlier, as of Issue-Tracker v4.0 you are now able to create groups of permissions called Permission Sets, or Roles. These permission sets allow group administrators to quickly and easily setup the permissions for the users within their groups without having to manage huge lists of permissions. Issue-Tracker v4.0 has 5 default permission sets, which are:

`Group Administrator`
: This permission set gives a user all of the stock permissions, including the permission to update the group, edit events in the group issues and move issues between groups.

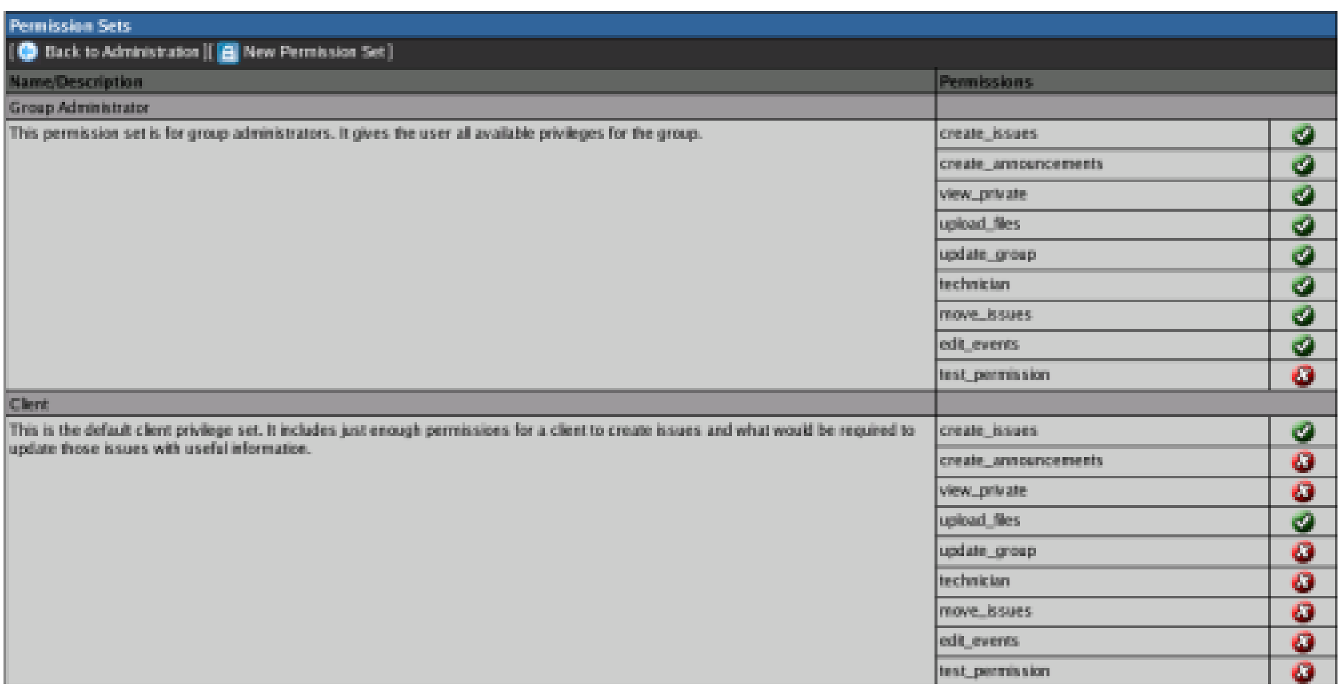
`Client`
: This permission set is designed for the average client user. It gives them just enough permissions to create new issues, add events, and upload files.

`Privileged Client`
: This permission set is identical to the Client permission set, with the addition of permission to create announcements.

`Super Client`
: Identical to Privilege Client permission set, with the addition of permission to view private tickets and events. This permission set should not be given to any outside client unless absolutely necessary. This is meant more as a restricted technician permission set.

`Technician`
: This permission set is the same as Super Client, with the addition of the technician permission. The technician permission allows for things like duration of events.

To view the current permission sets you can either click on the Permission Sets link under the administration panel, or click on the link located at the top of the permission list. You should be taken to a page that looks something like this:



This is a listing of all the currently defined permission sets including which permissions are active and which are not. Just as with permissions, the stock permission sets can not be editted or removed. Underneath the name of each permission set should be a short description letting you know what the permission set is used for. To the right of the description is a list of permissions and their current status for that permission set. A green check means that that permission is active in that permission set, and a red X means that the permission is not active.

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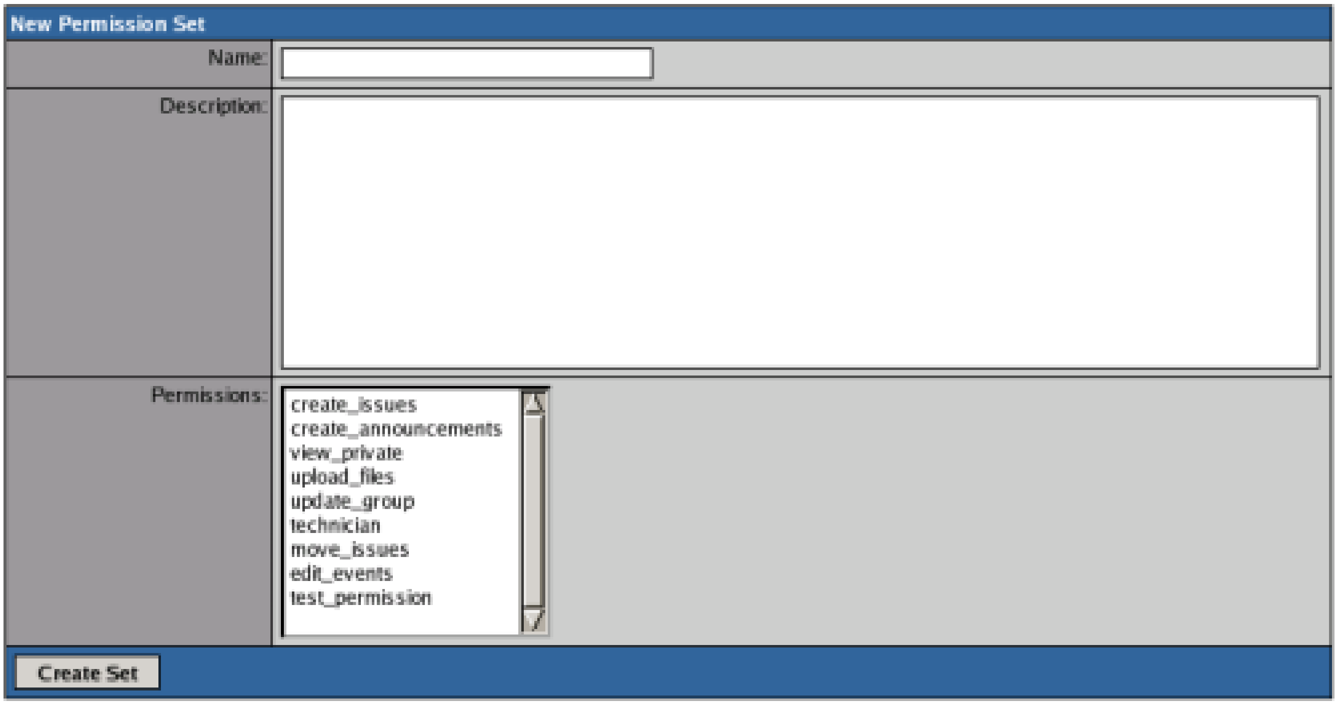
Creating Permission Sets

To create a new permission set, click the link at the top of the listing title "New Permission Set". You should then be presented with a page that looks something like this:



Here is an explanation of each field:

Name
: This is the name for the permission set. This name must be unique since this is the name that group administrators will see in the drop down when modifying permissions for members of their groups.

Description
: This field should contain a short description of the permission set. This will be displayed for group administrators when they click the help link, and also in the permission set listing.

Permissions
: This is a list of the available permissions for new permission sets. This list does not include user or group permissions since they are only assigned directly to a user or group.

Once you have filled in the information for your permission set and chosen the permissions you want it to have then simply click the create button and the permission set should be created. If there were any problems while attempting to create the permission set, then the page will be refreshed along with an error letting you know what went wrong.

Managing Permission Sets

Looking back at the listing for permission sets, if you have any permission sets which are not stock system permission sets, then they should have two links above the list of permissions. There should be one link for modifying the permission set, and another for removing it from the system. To modify a permission set simply click the link titled "Edit Set" and you will be taken to a form that looks identical to the one you would see when you create a permission set. Modify the information how you would like it, and click the update button to update the permission set with the new information.

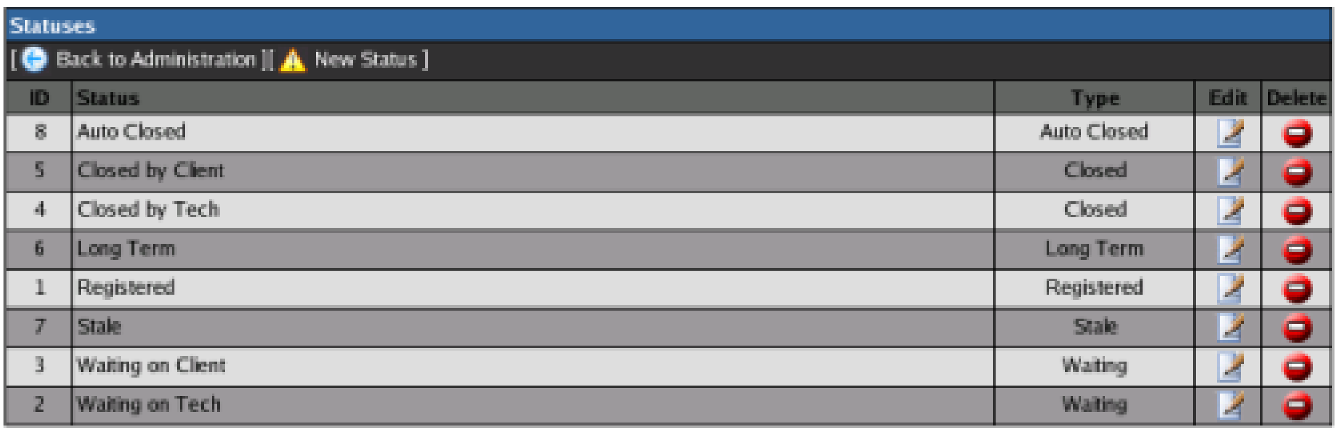
To remove a permission set you would click the link titled "Delete Set". You will be presented with a page to confirm or cancel the action. If you choose to confirm, then the permission set will be removed from the system and you will be sent back to the permission set listing. If you cancel then you will just be sent back to the permission set listing.

Well that covers the basics of managing permissions and permission sets, now lets move on to Statuses, Categories, and Products

Statuses, Categories, and Products

Since the administration sections for these three groups of items is identical with the exception of Status Types, I will only cover the statuses section here. Access to these sections is limited to system administrators and users which have been granted the status_manage, category_manager, or product_manager permissions. To access these sections you will need to enter the administration panel by clicking on the button in the top right corner of the page, and then clicking on the icon for the section you want to enter. If you do not have a button for one of these three sections, or do not have the administration button, then that means that you do not have the correct permissions, and will need to talk with your system administrator.

Once you have entered one of the sections you should be presented with a listing that looks similiar to this:


Statuses

[Back to Administration][New Status]

ID	Status	Type	Edit	Delete
8	Auto Closed	Auto Closed		
5	Closed by Client	Closed		
4	Closed by Tech	Closed		
6	Long Term	Long Term		
1	Registered	Registered		
7	Stale	Stale		
3	Waiting on Client	Waiting		
2	Waiting on Tech	Waiting		

Of course in the category and product listings you will not have a "Type" column, but other than that they should be the same. From here on I will refer to statuses, categories, and products simply as items. At the top of the listing should be a link to return to the administration panel and another one to create a new item. Each item in the listing should have two icons to the far right, one to modify the item and a second to remove it.

To create a new item you click the link at the top and should be presented with a form that contains a text field and in the case of statuses a drop down to select the status type. Simply fill in the text field and click the create button to create your new item. If there is a problem creating the new item then the page will refresh along with an error letting you know what went wrong.

To modify one of the existing items simply click the icon to the right that is in the edit column and you should be presented with the same form you saw at item creation. Modify the data for the item and click the update button and then item will be updated in the database. If there is a problem updating the item then the page will refresh along with an error letting you know what went wrong.

To remove an item, click the icon located in the delete column of the listing, and you should be presented with a page to confirm or cancel the action. If you confirm the action then the item will be removed and you will be taken back to the listing. If you cancel then you will just be taken back to the listing.

Status Types

Ok, now that I have you confused, let me explain what status types are. Each status must have a status type assigned to it. This status type lets the system know what the status is used for, functionality wise. The status type is then used later to determine which statuses should be used in certain checks against issues like inside the is_closed () function. Any status with a status type of Closed will be used within that function to determine if the issue is closed or not. Here is a quick explanation of the available status types:

`Registered`
: Only one Registered status can be defined. This is the status assigned to issues when they are first created.

`Waiting`
: This type is used for status that simply mean the issue is currently waiting for someone to do something.

`Long Term`
: Similiar to the Waiting status type, except issues which have been assigned a status which has the Long Term status type are not checked by the Autocloser script, and therefore will not be automatically closed due to no activity.

`Stale`
: Only one Stale status can be defined. This status is then used by the Autocloser script to mark issues which have not received any activity in the time period assigned for autoclosing.

`Closed`
: Used to defined statuses which represent a closed issue.

`Auto Closed`
: Only one Auto Closed status can be defined. This status is then used by the Autocloser script to close issues which are set to the Stale status and have not received any activity in the time period assigned for autoclosing.

That should cover these three things. If I've confused you, or you need more information please visit the project forums at http://sourceforge.net/projects/issue-tracker. Now lets move on to debugging.

Debugging

Issue-Tracker v4.0 includes a couple of tools which can be handy for simple debugging of problems that users might encounter with the system. These tools include the ability to switch users, builtin debugger, and an interface to directly query the database from the web interface. As stated these tools are meant for simple debugging and are definately not a replacement for an actual code debugger.

Switching Users

The Switch User action of the administration module provides a very easy way to determine whether a problem that a user reports is something that is happening on the server or something that is caused by the client. To switch users, enter the administration panel, and then click on the "Switch Users" button. You will be taken to a simple form which includes a drop down list of every user in the system. Once you select a user click the "Switch Users" button and you will be logged in as that user, including having the exact same permissions and groups as the user. You can then navigate through the interface to try and replicate a problem that a user has reported. Once you want to switch back to your normal user, simply click the link located on the main navigation menu titled "Switch Back".

Builtin Debugger

The builtin debugger is more for informational purposes than anything else. For this tool to work correctly you must have javascript turned on in your browser's preferences. You can enable this tool through the administration panel by clicking on the "Enable Debugger" button. Once enabled each page within Issue-Tracker will spawn a second window with information about your session, cookie, POST data, GET data, and any error messages that may have been written to the logs during the execution of the scripts, including failed database queries. To disable the debugger, go back to the administration panel and click the same button which should now be labeled "Disable Debugger".

Query Tool

The last of the debugging tools, and the only one that does not require administrator access (Manager), is the query tool. This tool can be used to write limited queries and retrieve data from the Issue-Tracker database. The reason I say limited is because this tool can not be used to modify data in any way, and if your user is not an administrator you will not be able to query data in the users or sessions tables of the database. With the exception of those two limits though, any query may be run against the database. This tool also provides a way to generate the query plan along with the query results using EXPLAIN.

Well there may not be much to the included debugging tools of Issue-Tracker but they can definately come in handy when you need to quickly track down small bugs. If you have any suggestions for tools/functionality that could be added to make debugging problems within Issue-Tracker easier for you, please let me know by sending me an email at tm@tuxmonkey.com.

Changelog

v0.2

* Wed Oct 09 2003 Edwin Robertson <tm@tuxmonkey.com>

Updated a couple of things that changed between v4RC3 and final.

v0.1

* Sun Sep 28 2003 Edwin Robertson <tm@tuxmonkey.com>

Well here is my first attempt at some actual documentation for the administration of Issue-Tracker. Documentation is definately not one of my strengths so please bare with me. Thanks to Pawel Zygadlo for proof reading this version and finding my enormous amount of screw-ups :). Please send suggestions, comments, and complaints to tm@tuxmonkey.com.