Registry Operations Curriculum
Request Tracker (RT) Installation and Configuration

Notes:

- Commands preceded with "$" imply that you should execute the command as a general user - not as *root*.
- Commands preceded with "#" imply that you should be working as the *root* user.
- Commands with more specific command lines (e.g. "`RTR-GW>`" or "`mysql>`") imply that you are executing commands on remote equipment, or within another program.
- If a command line ends with "\" this indicates that the command continues on the next line and you should treat this as a single line.

Exercises

Exercise 0

Log in to your PC or open a terminal window as the tladmain user.

Exercise 1

Install the necessary packages for RT.

```
$ sudo apt-get install mysql-server-5.1
$ sudo apt-get install rt3.8-apache2
$ sudo apt-get install rt3.8-clients
$ sudo apt-get install rt3.8-db-mysql
$ sudo apt-get install request-tracker3.8
$ sudo apt-get install mutt
```

A quicker way to do this is to specify all the packages on a single line. (Hint, you can copy and past this if you wish):
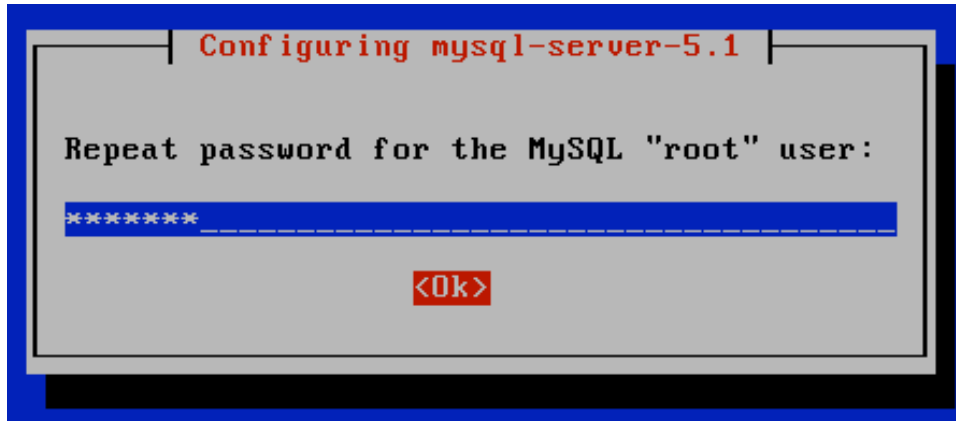
```
$ sudo apt-get install mysql-server-5.1 rt3.8-apache2 \
  rt3.8-clients rt3.8-db-mysql request-tracker3.8 mutt
```

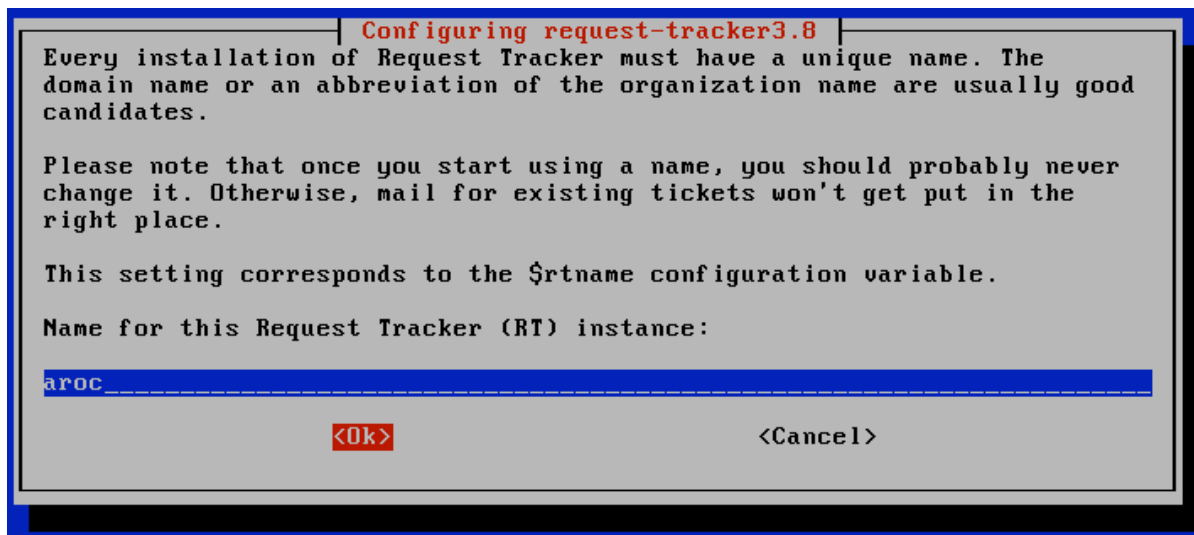Respond "Yes" when prompted if you wish to install the packages.

You will now be presented with several windows. Read the instructions below each item to see how to respond:
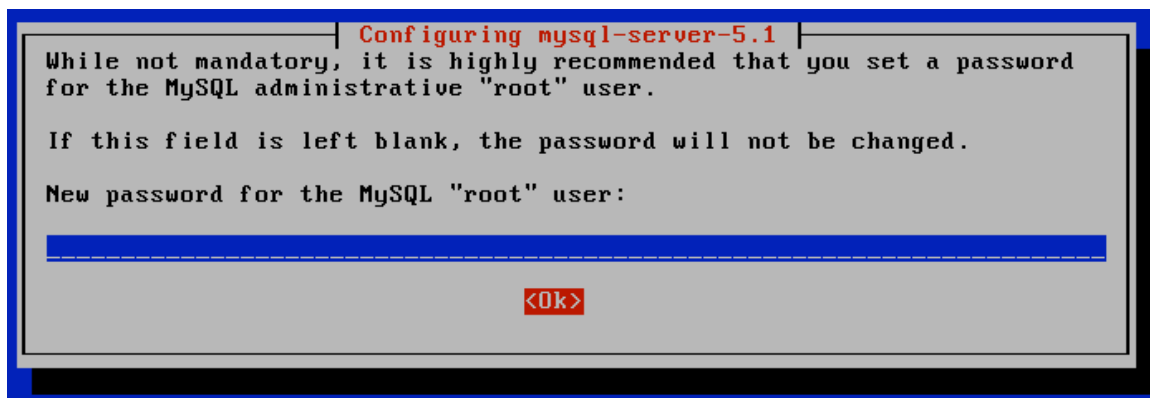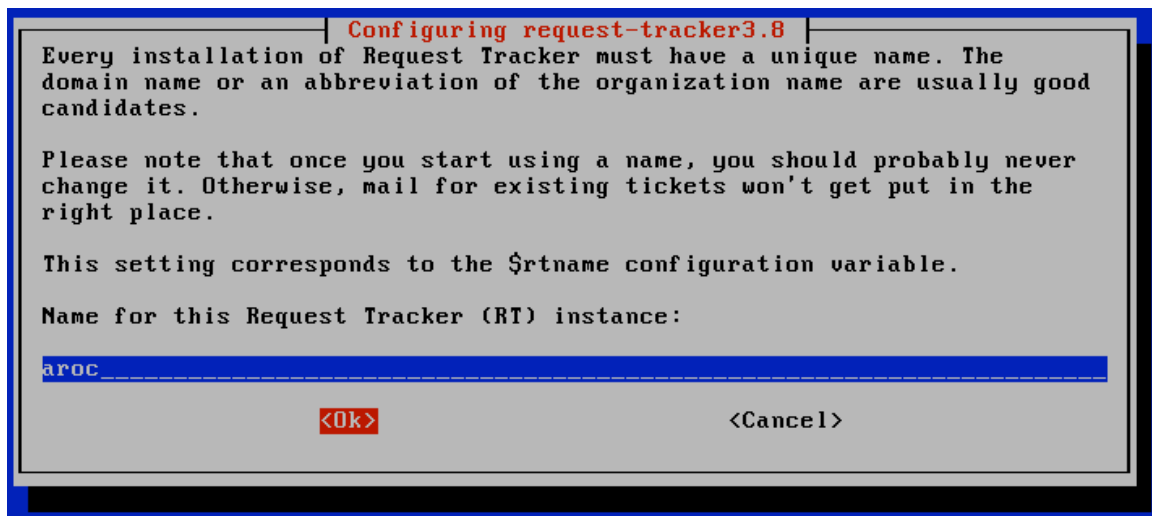
If you enter nothing, then you will receive this prompt again. Please use the administrative password you have been given in class for your machine. If you do not know what this is, then ask your instructor.
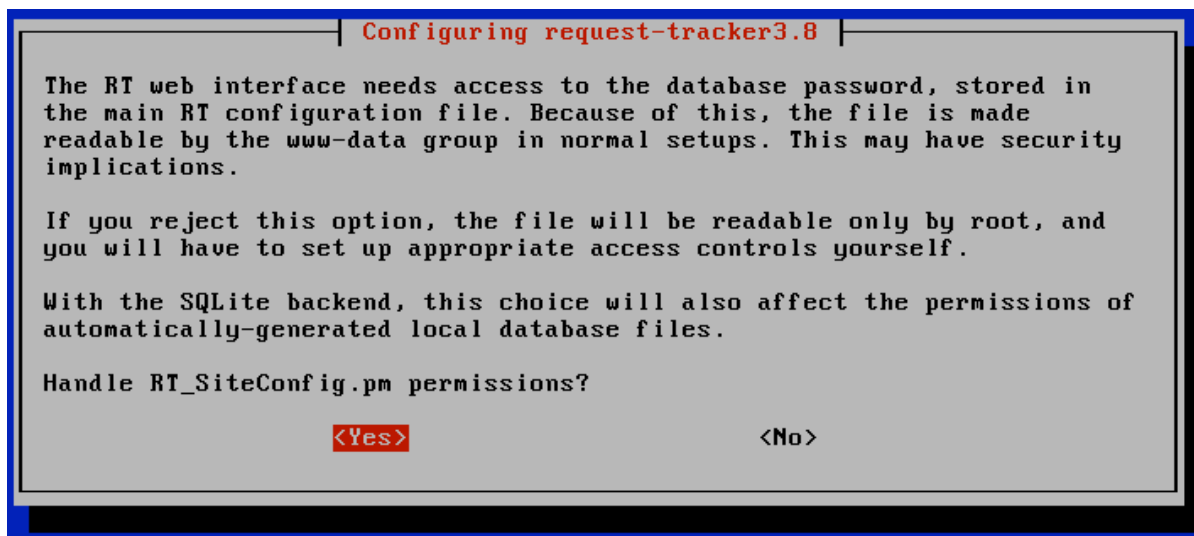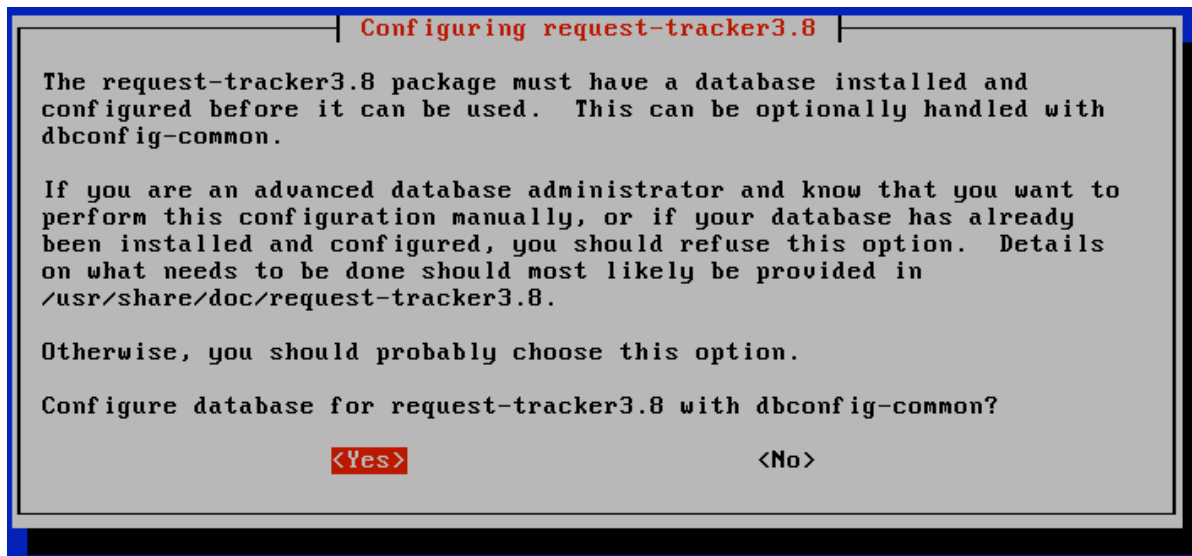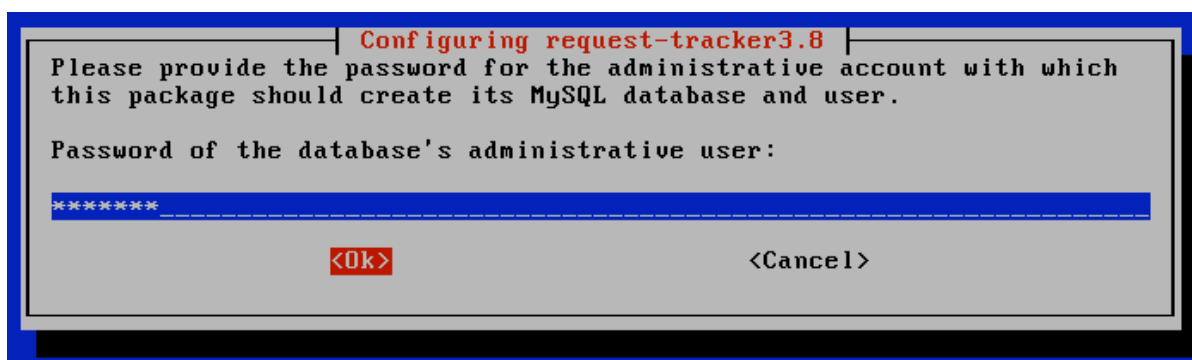

Enter the same password again.

```
┌───────────────┤ Configuring request-tracker3.8 ├───────────────┐
│  Every installation of Request Tracker must have a unique name. The    │
│  domain name or an abbreviation of the organization name are usually good │
│  candidates.                                                          │
│                                                                       │
│  Please note that once you start using a name, you should probably never │
│  change it. Otherwise, mail for existing tickets won't get put in the │
│  right place.                                                         │
│                                                                       │
│  This setting corresponds to the $rtname configuration variable.      │
│                                                                       │
│  Name for this Request Tracker (RT) instance:                         │
│                                                                       │
│  aroc_____      │
│                                                                       │
│           <Ok>                              <Cancel>                  │
└───────────────────────────────────────────────────────────────────┘
```

Use the name "aroc" for this instance of RT.

```
┌───────────────┤ Configuring request-tracker3.8 ├───────────────┐
│  The RT web interface needs access to the database password, stored in │
│  the main RT configuration file. Because of this, the file is made    │
│  readable by the www-data group in normal setups. This may have security │
│  implications.                                                        │
│                                                                       │
│  If you reject this option, the file will be readable only by root, and │
│  you will have to set up appropriate access controls yourself.        │
│                                                                       │
│  With the SQLite backend, this choice will also affect the permissions of │
│  automatically-generated local database files.                        │
│                                                                       │
│  Handle RT_SiteConfig.pm permissions?                                 │
│                                                                       │
│           <Yes>                              <No>                     │
└───────────────────────────────────────────────────────────────────┘
```

Choose "Yes" – Be aware of this issue. You may wish to manually go and change the permissions for the RT configuration file at a later time.

```
                      ┤ Configuring request-tracker3.8 ├
   The request-tracker3.8 package must have a database installed and
   configured before it can be used.  This can be optionally handled with
   dbconfig-common.

   If you are an advanced database administrator and know that you want to
   perform this configuration manually, or if your database has already
   been installed and configured, you should refuse this option.  Details
   on what needs to be done should most likely be provided in
   /usr/share/doc/request-tracker3.8.

   Otherwise, you should probably choose this option.

   Configure database for request-tracker3.8 with dbconfig-common?

                 <Yes>                              <No>
```

Choose "Yes"

```
                      ┤ Configuring request-tracker3.8 ├
    Please provide the password for the administrative account with which
    this package should create its MySQL database and user.

    Password of the database's administrative user:

    *******_____

                 <Ok>                              <Cancel>
```

To keep our installation simple, please use the same password as you did for the MySQL "root" user. You will be prompted either one or two times more for the same password. Please enter it again and select "<OK>" to continue.

At this point you have installed Request Tracker version 3.8. In order to access RT via the Apache web server you need to make one small change.

```
$ cd /etc/apache2/conf.d
$ sudo ln -s /etc/request-tracker3.8/apache2-speedycgi.conf .
$ sudo /etc/init.d/apache2 reload
```

RT is now running and available on your machine.

Exercise 2
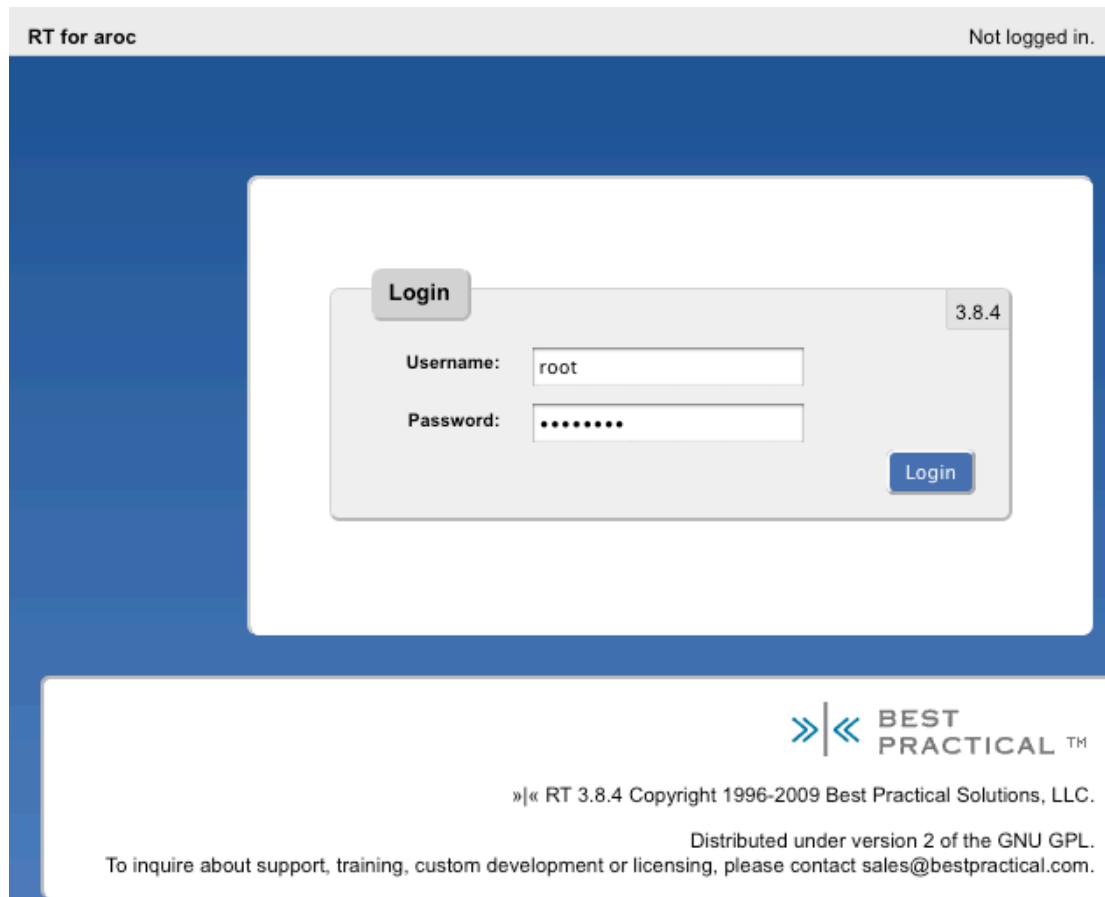
RT Configuration: root User Password Change

Open a web browser and point it to the IP address of the machine where you installed RT.

For example open the link:

http://localhost/rt/

You will now see the opening RT screen. You should log in using the default username and password for a new installation. These are "root" and "password" -
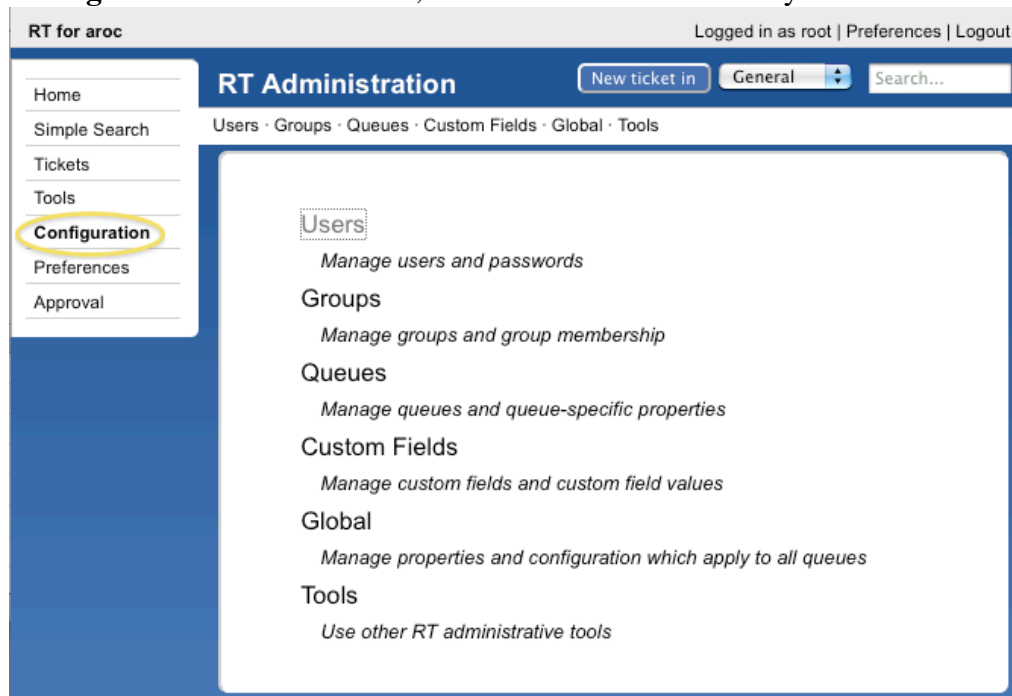
One you have logged in let's update the password for the root RT user. To do this click on **Configuration** in the left menu, then click on the **Users** entry.

Once you've clicked on **Users** you should see a screen like the one below:

Click on the **root** entry and you will now see a detail screen for this user:

Change the password for the root user to the administrative password that you are using in class. Once you have done this press the **Save Changes** button at the bottom of the screen (not visible in our screen capture). You'll see this at the top of the page if all goes well:

Exercise 3

RT Configuration: Create a User

You should already be logged in to RT as the "root" user. If not, log back in as root.
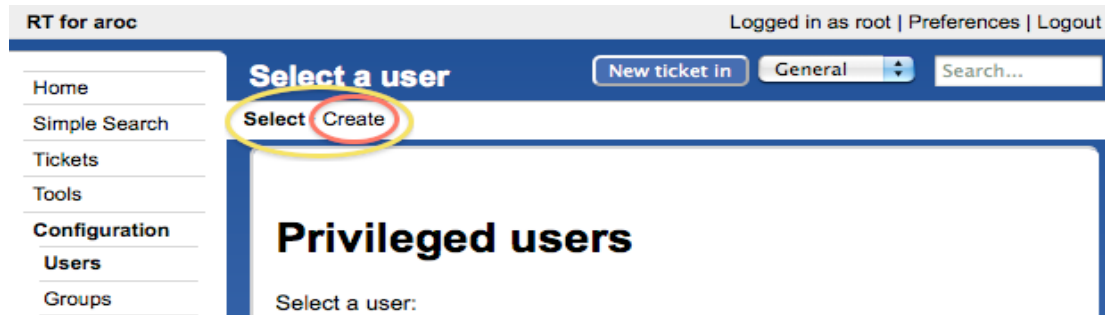
On the left of the screen click **Configuration ➜ Users** and then click on the **Create** item in the upper-left of the screen.
You will now be presented with the following dialogue. Fill in the fields, and make sure the checkbox "Let this user be granted rights" is checked.

Use the same password for "tldadmin" as you are using in class. Once done, scroll down the page and click on the **Create** button (bottom right). You should see this:

Exercise 4

RT Configuration: Create a Group

1. Click on **Configuration** (left menu), then **Groups** (middle of screen).
2. Click on **Create** (top menu)

3. Fill in the name: "**netmgmt**", and add a description, then click on "**Create**"

Exercise 5

RT Configuration: Add Members to a Group

4. Click on **Configuration** (left menu), then **Groups** (center menu)
5. Click on "**netmgmt**" (the group you just created)
6. Click on **Members** (top menu)

7. In the "Add members" list (right), select the user you created in step 3. This is the "tldadmin" user, with the description "AROC Admin Account.":

RT for aroc

Logged in as root | Preferences | Logou

RT/Admin/Edit the group netmgmt

New ticket in | General | Search...

Basics · **Members** · Group Rights · User Rights · History

Home
Simple Search
Tickets
Tools
Configuration
Users
Groups
Select
Create
netmgmt
Queues
Custom Fields
Global
Tools
Preferences
Approval

Editing membership for group netmgmt

Current members

(No members)

Add members

Users
AROC Admin Account
Enoch Root

Groups

(Check box to delete)

Reset

Modify Members

Results

- Member added: tldadmin

Exercise 6

RT Configuration: Create a New Queue

1. Click on **Configuration** (left menu), then **Queues** (center menu)
2. Click on **Create** (top menu)

1. Fill in the fields. Let's use the following values:

   Queue Name: net
   Description: Network Problems
   Subject Tag: Request Tracker: NET
   Reply Address: net@localhost
   Comment Address: net-comment@localhost

2. Click on **Create:**

If your Request Tracker box has a fully qualified domain name you can use this instead of "localhost".

Exercise 7

RT Configuration: Give Rights to our Group on the Queue

1. Click on **Configuration** (left menu), then **Queues** (center menu).
2. Click on "**net**" (the queue that you just created).
3. Click on "**Group Rights**" (top menu).

The following menu is pretty long and complex. Here is what you should do:

In the "Everyone" Group, on the right side under **New Rights** select these three items. Use the SHIFT key (or Apple key on a Macintosh) to select multiple items:

- **CreateTicket**
- **ReplyToTicket**
- **SeeQueue**

In the **netmgmt** Group select <u>everything</u> except for the choice "no value" – You can use the shift key to do this. Once this is done, press the **Modify Groups Rights** button on the bottom right of the page.

System groups

Unprivileged

Current rights   **New rights**

No rights granted.

```
StealTicket
TakeTicket
Watch
WatchAsAdminCc
(no value)
```

Privileged

Current rights   **New rights**

No rights granted.

```
StealTicket
TakeTicket
Watch
WatchAsAdminCc
(no value)
```

Everyone

Current rights   **New rights**

No rights granted.

```
OwnTicket
ReplyToTicket
SeeCustomField
SeeQueue
ShowACL
ShowOutgoingEmail
```

Roles

Requestor

Current rights   **New rights**

No rights granted.

```
StealTicket
TakeTicket
Watch
WatchAsAdminCc
(no value)
```

Owner

Current rights   **New rights**

No rights granted.

```
StealTicket
TakeTicket
Watch
WatchAsAdminCc
(no value)
```

Cc

Current rights   **New rights**

No rights granted.

```
StealTicket
TakeTicket
Watch
WatchAsAdminCc
(no value)
```

AdminCc

Current rights   **New rights**

No rights granted.

```
StealTicket
TakeTicket
Watch
WatchAsAdminCc
(no value)
```

User defined groups

netmgmt

Current rights   **New rights**

No rights granted.

```
StealTicket
TakeTicket
Watch
WatchAsAdminCc
(no value)
```

Reset

Modify Group Rights

You will see a bunch of this:

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and all the rights that the Group "netmgmt" now has on the NET queue (bottom of page):

User defined groups

netmgmt

Current rights	**New rights**
(Check box to revoke right)	(no value)

☐ AdminQueue
☐ AssignCustomFields
☐ CommentOnTicket
☐ CreateTicket
☐ DeleteTicket
☐ ForwardMessage
☐ ModifyACL
☐ ModifyCustomField
☐ ModifyQueueWatchers
☐ ModifyScrips
☐ ModifyTemplate
☐ ModifyTicket
☐ OwnTicket
☐ ReplyToTicket
☐ SeeCustomField
☐ SeeQueue
☐ ShowACL
☐ ShowOutgoingEmail
☐ ShowScrips
☐ ShowTemplate
☐ ShowTicket
☐ ShowTicketComments
☐ StealTicket
☐ TakeTicket
☐ Watch
☐ WatchAsAdminCc

Exercise 8

RT Configuration: Log in as tldadmin

Log out of RT and log back in as the tldadmin user you have created.

You should see this:

At this point RT has been properly configured for initial operation. Now we must configure email properly to talk with our new "net" queue in RT.

Exercise 9

RT Configuration: Email

RT will work with the MTA (Mail Transfer Agent) of your choice. In our case we are using Postfix configured to run as an MTA for an "Internet Site" – that is, to deliver email locally and remotely using SMTP.

Edit the file `/etc/aliases`

Add the following two lines at the end of the file:

```
net-comment: "|/usr/bin/rt-mailgate --queue net --action comment --url http://localhost/rt/"
net:         "|/usr/bin/rt-mailgate --queue net --action correspond --url http://localhost/rt/"
```

Save the file and exit, then run the command:

```
$ sudo newaliases
```

Exercise 10

RT Configuration: Create an Email and Tickets

Let's create an email and send it to the RT "net" queue. Do this as the tldadmin user (not as root!):

```
$ echo "Problem with my router" | mail -s "Router problem" net@localhost
```

Now check that you have received email:

```
$ mutt -f /var/mail/tldadmin
```

You should see an email from Request Tracker acknowledging that your ticket has been created.

Exercise 11

RT Configuration: View, Reply, Resolve, Reopen Tickets in Request Tracker

Go back to your web browser where you are logged in to RT as the tldadmin user and click on the ticket in the main view page (what you see when you first log in):
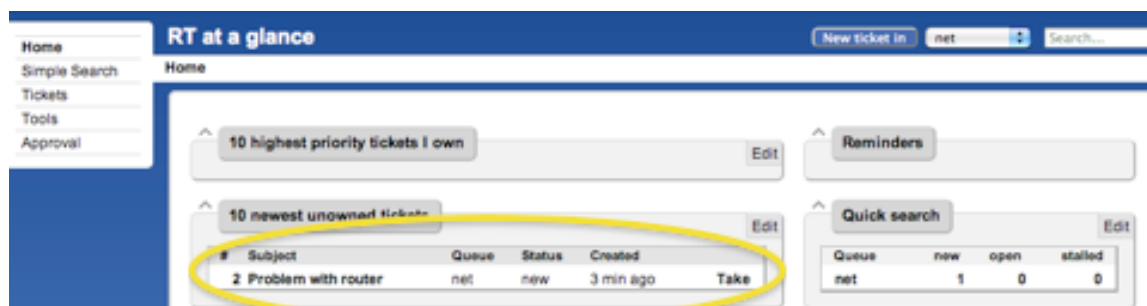
You will see a bunch of information about the ticket. Scroll to the bottom of the page. Here you can **Reply** to the ticket:

Go ahead and type in a reply, set the **Status** of the ticket to **Resolved** (upper-right drop-down menu), and then click on **Update Ticket** (bottom-right):

You should see this

The ticket is currently "Resolved," but you can either reopen the ticket via the RT web interface at any time, or if the original ticket creator (tldadmin in this case) replies to the email you just sent, then the ticket will be reopened.

View the history at the bottom of the page to see that the ticket is currently closed:

If you went back to your terminal session as the tldadmin user and typed:

```
$ mutt -f /var/mail/tldadmin
```

and responded to the email generated from Request Tracker, then your ticket status will change. You can see this by reloading the RT web page for the ticket and viewing the history at the bottom of the page:

You now have a functioning RT instance with email integration. A bit later we will extend the use of RT by integrating it with other Network Monitoring software using the `rt-mailgate` facility that we have already configured in the `/etc/aliases` file.