# $Realization Engine\ Administrators$

# 29th October 2002

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# 1 Copyright

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## 4 The 'root' account:

- The 'root' account is the message base 'super user'.
- 'root' can go into any folder reguardless of owner or settings.

- The 'root' password should be protected and only shared with a limited number of highly trusted administrators.
- The 'root' account can:
  - move folders,
  - edit folder discriptions,
  - 'disapear' messages (hide them),
  - create groups,
  - change account e-mail addresses,
  - assign group memberships
  - deactivate users
  - and more.
- The root account is also presented with a user and message summary table in the root folder.

### 5 Users:

New user accounts are generally created by the new users themselves. It is not uncommon, however, for root to need to create a new account for a user. The only way to do that at this time to is log out of the system, then:

#### 5.1 Create new account:

- click the 'login' button
- click the 'create new account' button
- enter the account name for the new user.
  - Account names are limited to 15 characters
  - All account names and passwords are case sensitive.
- User's e-mail address.
  - A valid e-mail address is required so that the password can be sent to that address.
- The system will generate a random password and send that password and account information to the e-mail address you entered in the dialogue.

After a new user account has been created, a notification e-mail is sent to the administrator's e-mail account. It is often required that new users be added to some groups before they have access to the message base. After you have recieved the e-mail notification, you can quickly add the user to the appropriate groups by following the proceedures in Section 7, Administrative Tools.

#### 5.2 Account Maintenance

Users may change their passwords and e-mail addresses any time they are logged into the system by clicking on the "account maintenance" button at the top of the screen. A dialog will be presented for changing e-mail address and password. In the case that the user forgets a password, or forgets to update their e-mail address, 'root' can update them for the user. See 7, Administrative Tools.

### 5.3 Retrieving lost passwords

Since passwords are stored in a one-way encrypted state, they cannot be retrieved by the administrator (or anyone else). This is a security feature to protect the user's passwords in case the system in somehow comprimised.

If a user loses or forgets their password, they may request that the system e-mail their password to them. Simply go to the login screen, and enter the e-mail address that your account is registered to in the bottom box. The system will create a new, random password and send a message containing the user name and new password to the e-mail account. It is important that the users update their e-mail accounts when they change or they will lose access to their accounts. If they do fail to update their e-mail address, they should always contact the administrator to have their account updated and not create a new account on the system.

# 6 Groups:

The group is a powerful and flexible administration tool. Groups are a convenient way to logically organize users to share folders within their group or groups<sup>1</sup>. The 'root' account is the only user that can create groups, and assign users to groups.

You will find information on creating and maintainting groups in Section 7.2, Group Administration. You will see how groups are used when folder permissions are discussed in Section 8.1.

## 7 Administrative tools

#### 7.1 User Administration

• To enter the User Administration page, you must be logged in as root.

<sup>&</sup>lt;sup>1</sup>Thanks to Matt Welsh & Lar Kaufman, Running Linux, 2nd Ed., p 140 (modified for context)

- From any page, click on the 'user administration' link at the top of the page.
- User accounts are listed along with user passwords, number of messages posted by user, time of last message posted, time of last access by user and status (active/deactivated)

#### 7.1.1 Send e-mail to user

• Simply click on the user's e-mail address from the 'User Administration' page

#### 7.1.2 Manage a user:

- select a user account by clicking on the user name
  - From this page, you can
    - \* change a user's e-mail address (7.1.3)
    - \* change a user's password (7.1.4)
    - \* change the user's groups (7.1.5)
    - \* Change user's username: (new in v 1.0.9) (7.1.6)
    - \* Delete user account (7.1.8)
    - \* Deactivate user account (7.1.9)
    - \* Reactivate user account (7.1.10)
    - \* From this page, you'll also get individual user summary: (new in v 1.0.9) (7.1.11)

#### 7.1.3 Change e-mail address

- select a user account, then
- click on the 'manage this user' button below the menu.
  - The existing e-mail address is shown in the e-mail address field.
  - Edit or change the e-mail address
  - click the 'update user' button

#### 7.1.4 Change password

- select a user account, then
- click on the 'manage this user' button below the menu.

- The user's current password is **not** shown
- type the new password in the 'new password' field
- type the new password again in the 'retype password' field
- click the 'update user' button

#### 7.1.5 Change groups

- select a user account, then
- click on the 'manage this user' button below the menu.
  - Under the 'Select groups for this user' heading,
  - select groups that user should be assigned to
  - unlselect groups if user no longer should belong to those groups
  - click the 'update user' button

#### 7.1.6 Change user name

- As of version 1.0.9, the administrator can change the names assigned to user accounts.
- select a user account, then
- click on the 'manage this user' button below the menu.
  - click on the 'change user name' button.
  - enter the new username
  - check the "confirm username change" checkbox,
  - and click the "confirm username change" button
  - if the username is already in use, the system will reject the change.
  - The name of the 'root' account cannot be changed.
  - The new username will be required for login.
  - A message will automatically be generated and sent to the user notifying them of the username change.
  - All old messages belong to the user will automatically show up under the new name, therefore this is not a solution for assinign an existing account to a new user.

#### 7.1.7 Multiple updates

 You can change any or all of the above settings at one time for a single user

#### 7.1.8 Delete user account

- If the user account has not been used to create a message, the account can be deleted. If even one message has been created by this account, this option will not appear in the menu.
- In order to delete a user account, you must check the "confirm" ceck box and
- click the "delete this user" button.

#### 7.1.9 Deactivate a user account

It is possible to "deactivate" a user account, thereby rendering the account unusable. To do this,

- select the user from the "User Administration" page,
- and click the 'manage this user' button.
- On the administration page,
- change the account password to "deactivate" (it will have to be entered twice),
- remove the user from all groups,
- click the 'update user' button.

Deactivating a user is the only way to remove a user's access to the database (in the case where the user has created a message)<sup>2</sup>. Because deleting a user would leave any message that user created without an owner (thereby 'breaking' the message base), we have provided this unorthodox method of removing user access in the case where a user leaves the company or organization.

#### 7.1.10 Reactiving an account

- select the user from the "User Administration" page,
- and click the 'manage this user' button.
- On the administration page
- Verify that the e-mail address is correct,
- change the account password to a valid password,
- add the user to the appropriate groups,
- click the 'update user' button.

<sup>&</sup>lt;sup>2</sup>If the user has not created a message in the message base, they can simply be deleted without harm as described in Section 7.1.8.

## 7.1.11 User summary<sup>3</sup>

- Click on 'display user summary' to get a listing of all user's:
  - username
  - number of messages posted by each user
  - date/time of each user's last message posted
  - date/time of each user's last page access

## 7.2 Group Administration

To enter the User Administration page, you must be logged in as root.

• From any page, click on the 'group administration' link at the top of the page.

#### 7.2.1 Manage existing groups

From the 'Group Adminstration' page:

- select a group name
- click the 'manage this group' button
- From this page you may
  - add members to the group by checking the checkboxes next to the user names, and
  - remove members from the group unchecking the checkboxes next to the user names.
- New members can be added and old members removed in a single operation

## 7.2.2 Create new group

From the 'Group Adminstration' page:

- enter a new group name in the "Create new group" text box.
- $\bullet\,$  click the 'create this group' button.
- you will receive a confirmation message stating the new group has been create and a 'manage this group' button.
- clicking on the 'manage this group' button will take you to the dialog discussed in 7.2.1

<sup>&</sup>lt;sup>3</sup>new in version 1.0.9

## 7.3 Settings Administration

"Settings Administration" allows the 'root' account to change various display, database network related settings in the database "settings" table.

- user\_table: user table name in database (do not change unless you know what you're doing)
- cookie\_name: change it to match your url if you like
- domain name
- $\bullet$  site\_name
- notification\_address: e-mail address that new user notifications are sent to
- notification\_message: message sent to notification\_address when new users sign up
- title tag: text used in HTML title
- recent\_interval: number of minutes since last page access that a user is considered "recent" in the "recently online" message.
- edit\_interval: number of hours that a message can be edited by the owner
- thread limit: number of threads displayed per page.
- thread style: (incomplete)
  - 1. "standard": new messages expanded, old messages "collapsed"
  - 2. "user enhanced": \*never implimented\*
  - 3. "expand thread": expands the thread requested. All other threads are show as default.
  - 4. "compressed": all threads are compressed into a single message with thread summaries displayed.
- page\_background: HTML background color for pages (#FFFFFF)
- message\_background: default HTMLbackground color for messages
- fresh message time: number of days that a message is considered "fresh"
- fresh\_message\_time: HTML background color for recent messages
- fresh title background: color for background of "fresh" messages
- warm message time: number of days that a message is considered "warm"
- warm\_message\_background: background color for "warm" message body

- warm\_title\_background: background color for "warm" message titles
- day\_old\_message\_background: background color for "day old" message body
- day old title background: background color for "day old" message title
- guest font color: (deprecated)
- allow search: allow message base search (Y/N)
- title: HTML that will be displayed at the top of pages when generated. A relatively large textarea is provided for this. variables will be interpolated.
- page\_footer: footer to be displayed on all pages generated by Realizatio-nEngine

# 8 Folders:

To create a new folder, any user with permission to write in a folder can simply click on the "new folder" button. Folders are a highly effective tool for departmentalizing information.

- Each folder is assigned to a group.
- Each folder has read and write permissions for 'group' and 'other'.
- Any user with write permissions in the current folder can create a subfolder.

## 8.1 Folder permissions:

Here is a brief discription of how folder permissions work:

- Group (read, write) Other (read, write):
  - any user can access, read, and write to this folder. Group members can create subfolders.
- Group (read, write) Other (read):
  - any user can access and read the contents of this folder. Only group members may create messages in this folder.
- Group (read, write) Other (none):

8.2 Folder names: 8 FOLDERS:

- any group member can access, read and write to this folder. Non-group members are not able to read or write to this folder.

- Group (read) Other (read):
  - any user can read this folder, only the folder owner can write to this folder
- Group (read) Other (none):
  - any group member can read this folder, only the folder owner can write to this folder. Non-group members are not able to read or write to this folder.
- Group (none) Other (none):
  - this is a private folder that only the folder owner can read or write to.

#### 8.2 Folder names:

Folder names are restricted to containing only alpha-numeric characters and space (), period (.), tilde ( $^{\sim}$ ) and underscore (\_). Attempting to include other characters will result in an illegal character error.

- Beginning a folder name with a '~' will cause the folder to be listed after the folders that start with alpha and numeric characters.
  - This is often used to push low priority folders lower in the folder list.
- Beginning a folder name with a period (.) will cause the folder to be 'hidden.'
  - This will mean that only members of the group will see the folder in the folder list.
  - This is often used for private or administrative folders that are not of interest to the general population.
  - 'Hiding' a folder does not imply access to non group members.
  - Be sure and set folder permissions accordingly.
- A folder name that starts with '~.' is also hidden, and will be listed lower in the folder list.
  - This is just a way to keep all of the hidden folders from crowding at the top of the folder list.

## 8.3 Folder descriptions:

The folder description area can be edited at any time, but only by the folder owner (or root).

- This is the only content that can be edited over time, unlike message contents.
- This makes the folder description area useful for
  - creating documents that change with time, or
  - that are works in progress.
  - It can also be used to leave brief notes for users that have access to the folder.

### 8.4 Editing folder attributes:

When you're in a folder, there's a small icon next to the folder name at the very top of the page. This icon only appears if you own the folder, or you are logged in as root. This is the "folder attributes" icon. When you click on that icon, you'll be taken to a page that will let you edit the folder attributes.

From the folder attributes page, you can

- edit the folder name,
- change read and write permissions for the folder,
- change the group the folder is assigned to (root can reassign the folder to any group, other users can assign the folder to any group they are a member of),
- the 'root' user can also assign the folder to a new owner. Only 'root' can change the owner of a folder. The is useful for personel changes.
- as well as update/edit the folder description.
- move folders.

You can also "close" and "open" folders. Folders are open by default when created. A "closed" folder allows the information to be read and searched, but cannot be added to. This is useful when using folders for project management, meeting notes or limited discussions. A folder can be reopened later from the same dialog if it is needed.

# 9 Messages

### 9.1 Message Contents:

Messages are created by users in folders where they have write access in.

- A message is created by either:
  - clicking the 'new entry' button at the top of the page, or by
  - clicking the "Reply" link below a message
- Messages are made up of five possible parts:
  - Message name (a title or subject line)
  - Message body, or contents
  - A link to external information. This is a web link and should be in the form of http://www.domain.com/path/filename.html
  - A name for the link
  - An attachement. This is used for uploading files to the system. A limit on the acceptable file size is enforced and noted below the "Attachment" text field.
- The message content can be edited by the message owner ONLY (not even root can edit the messages).
- The user has a specified amount of time that they can edit the message contents or message name, usually 24 hours.
- This allows time for corrections and minor revisions.
- After the specified 'grace period' has passed, the message is 'locked' by the system, and no changes can be made after that point.

# 9.2 "Disapearing" Messages

- Only 'root' has the power to 'disapear' a message by clicking on the "[DIS-APEAR]" link below a message.
- A confirmation page will be presented before the message is disapeared to prevent accidental message "disapearing."
- "Disapearing" a message will cause the message to be hidden from view, along with all of the "children" of that message.
- This tools should be used with caution as users tend to resent being "censored."

# 10 Notification / Status Checking

There is a method by which a user can have the *RealizationEngine* checked and be notified when new messages are left in the database.

#### 10.1 Status Check API

#### 10.1.1 URL

To request the user's "status" (number of messages on server, number of messages in last 24 hours and number of messages since last page access), simply request the following URL:

http://www.your RE domain.com/cgi-bin/re?status=username

Where "www.your\_RE\_domain.com" is the url you use to access the *RealizationEngine*, and "username" is the username used to access the system.

The information will be returned in the format: "total messages:todays messages:new messages"

#### 10.1.2 Method

The information is XORed against the MD5 hash (hex) of the user's password. Before the result it is sent, the message is trimmed to the length of the results.

#### Example:

If the user's password were "password", the MD5 hex would be "5f4dcc3b5aa765d61d8327deb882cf99"

Requesting http://www.your\_RE.com/cgi-bin/re?status=re\_user might send back the result: V^RS V (8 characters, some characters are not prinatable).

By taking the first 8 characters from the MD5\_hex of our password, "5f4dcc3b", and XORing it against the results of the status query, we would get "100:10:4". Normally, the first two numbers are discarded and only the number of new messages is displayed for the user.

### 10.2 RealizationEngine Status Check Clients

One such client for Unix/Linux and Win32 is **rcheck** and is available from Realization Systems, Inc. and is available at http://www.RealizationSystems.com/. This clients is released under the GPL.

# 11 Support

At this time, support is provided via http://www.RealizationEngine.com/. There is a group and a folder for RealizationEngine Administrators who are paid subscriber (paid subscribers receive priority), as well as a group and a folder for "RE Support."

To participate in the "RE Support" folder, you will have to sign up for an account.

# 12 Changes

 $For a complete and up to date list of changes, see \ http://www.RealizationSystems.com/CHANGES.txt$