nuRF Wireless System

User Guides

Rev 1.8.1

Ву





FCC Statement:

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE Statement:

RF INTERFERENCE WARNING: This is a Class A product. In a domestic environment this product may cause radio frequency (RF) interference, in which case the user may be required to take adequate measures.



Revision History

Rev Number	Rev Date	Revised By	Details
1.0	20 May 2010	Stan Chee	Draft Version for User Guide
1.1	20 May 2010	Vincent Ng	Pre-release revision
1.2	6 July 2010	Marcus Yap	Added tag alert guide
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1.0 Background

This document is intended as a guide to the end user to get started using the nuRF Wireless System.

For instructions on installing and setting up the nuRF Wireless System, refer to the Installation Manual or contact your solution provider.

This document is serves as a general reference to all variants of nuRF Wireless System, including but not limited to Demo System and Enterprise System. As such, some of the screen captures may vary depending on the system version.



2.0 Starting Up

The following provides steps for the initial start up of the nuRF Wireless System.

2.1 Start the nuRF Engine

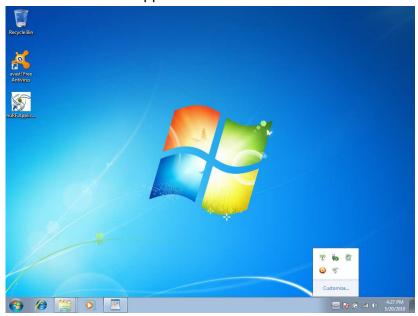
If the nuRF Engine has already started as part of the system installation, skip the following steps and go to 2.3.

2.1.1 Click on the "Start" button



Click on the "nuRF.ApplicationTray.exe"

2.1.2 A small icon on the appear on the window taskbar as shown below

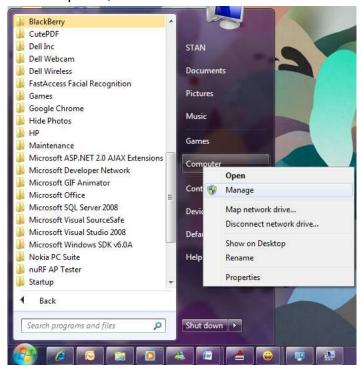




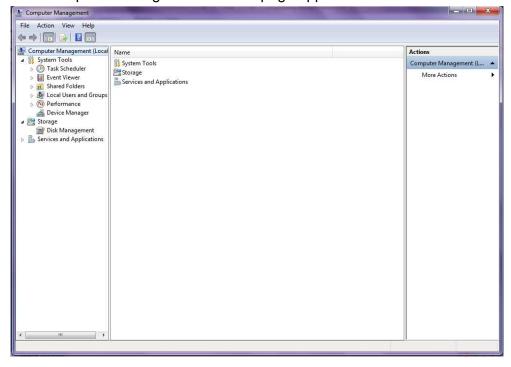
2.2 Start the web server, Internet Information Services (IIS)

If IIS is started, skip the following steps and go to 2.3.

2.2.1 In the existing installation of nuRF Wireless System, run the "Computer Management" by navigating from "Start" button to "Computer" and then right-click the "Computer", as shown below.

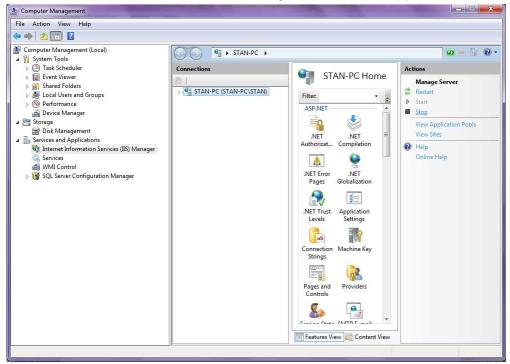


- 2.2.2 Click on the "Manage" button.
- 2.2.3 The "Computer Management" default page appears as follows.





2.2.4 In the left panel, click on the "Services and Applications" and then click on "Internet Information Services (IIS) Manager". Screen will appear as shown below.



If the "Start" button on the right panel is clickable, the IIS Web Services is not yet started. Click on the "Start" button to start the IIS Web Services.

If the "Start" button on the right panel is non-clickable, the IIS Web Services is already started.



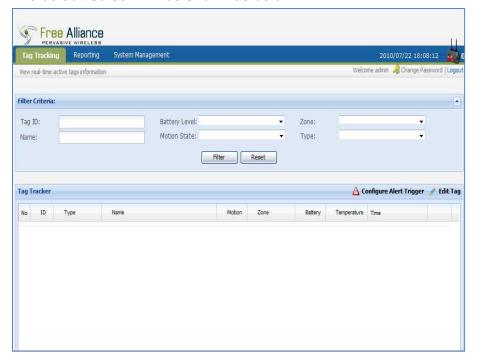
2.3 Login

2.3.1 Start Internet Explorer 7.0 and enter the nuRF Wireless System web URL to go to the login page.



For this installation, the URL is http://192.168.1.200/nuRFWireless2.2

- 2.3.2 Enter "admin" as user name and "password" as password. Click on the "Log In" button.
- 2.3.3 The default screen will be shown as below.

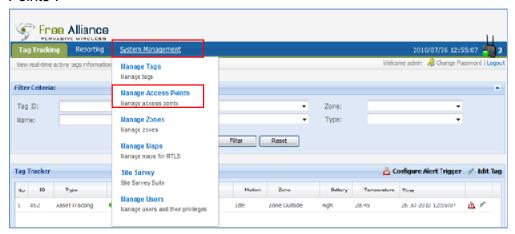




2.4 View Connected Access Points

The nuRF Access Point automatically registers to the nuRF Wireless System service found on the network.

2.4.1 Click on the menu item "System Management" and click on "Manage Access Points".



2.4.2 The "Manage Access Points" page will appear as follows.



If Access Points are connected to the nuRF Wireless System service, the entries will be shown here. The number of records reflects the number of AP and/or RF channels (If APs with multiple RF channels are detected).

If no record is shown, precede the following steps:

- Check the server IP address (192.168.1.200) as highlighted in *Installation Guide Setup nuRF Server*.
- Check the nuRF Access Point driver (if using USB) as highlighted in Installation Guide – Setup nuRF Server.
- Check "nuRF.ApplicationTray.exe.config" as highlighted in *Installation Guide Install and configure nuRF Engine*.
- Check "web.config" as highlighted in *Installation Guides Install and configure nuRF Web Application.*
- Check the network connection between the server where nuRF Wireless System is installed and the nuRF Access Points.

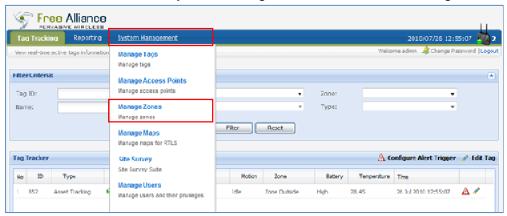


2.5 Assigning Zones

Logical zones must be assigned to each Access Point (and their respective RF Channels) in order for the system to show Tags detected by them.

This applies to all APs regardless of the antennas that are being used, or the different types of APs.

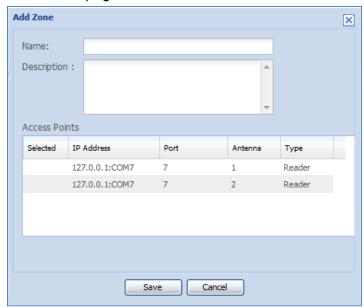
2.5.1 Click on the menu item "System Management" and click on "Manage Zones".



2.5.2 Click on the "Add Zone".

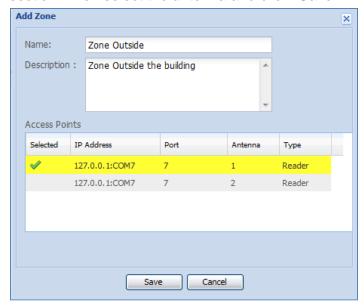


2.5.3 "Add Zone" page will be shown as follows.

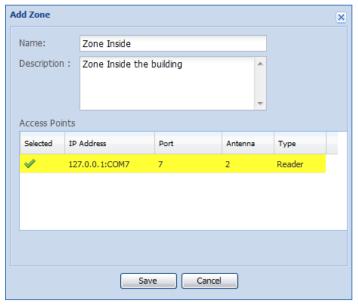




2.5.4 Enter the zone name in "Name" section and description in the "Description" section. Then select the antenna and click "Save".



2.5.5 Repeat step 2.5.2 to add another zone (e.g. if the AP has 2 RF channels).



NB: Note that only unassigned APs/RF channels will be shown in the list of available Access Points.

NB: All zones must be registered to complete the setup for the List View function.

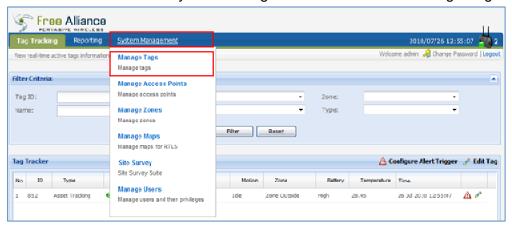
2.5.6 User has successfully completed the zone setup.



2.6 Register new Tag(s)

A previously unregistered Tag must be registered in this manner for it to be monitored and displayed by the web application.

2.6.1 Click on the menu item "System Management" and click on "Manage Tags".



2.6.2 The screen will appear as shown below.



The "Manage Tag" page will show all detected tags.

Unregistered tags will be highlighted in red colour.

Click on the "" icon to add the tag.



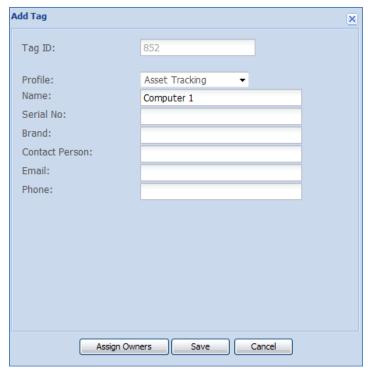
2.6.3 "Add Tag" page is shown as below.



2.6.4 Select the desired profile from the "Profile" section.

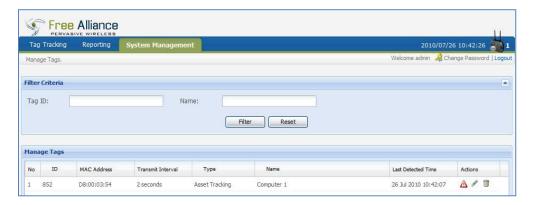
NB: All profile will enable the monitoring and tracking of the Tag except the "Unknown" Profile.

2.6.5 Enter the name of the asset or personnel in the "Name" section of the Tag and other relevant information as shown in the screen below.





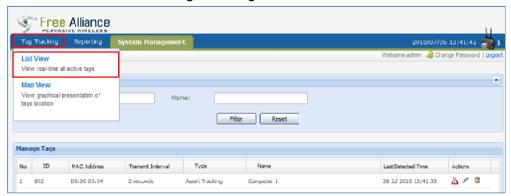
- 2.6.6 Click "Save" to save the Tag information.
- 2.6.7 Tag successfully added will not be highlighted as shown in the screen below.



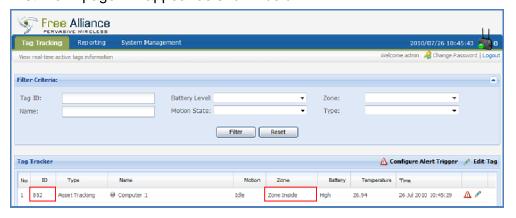
2.7 Tracking of Tag

To perform real-time monitoring and tracking of the Tags registered within the system.

2.7.1 Click on the menu item "Tag Tracking" and click on "List View".



2.7.2 "List View" page will appear as shown below.



E.g. The Tag ID 852 is being tracked and currently it is on the "Zone Inside".

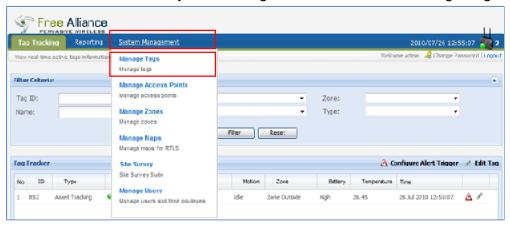


3.0 Configure Tag Alert Trigger

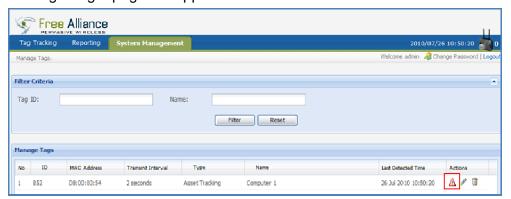
The system supports Alert Rules assigned to individual Tags. To configure the desired alert triggers for a Tag, follow the steps below.

3.1 Accessing Tag Alert Configuration Screen

3.1.1 Click on the menu item "System Management" and click on "Manage Tags".



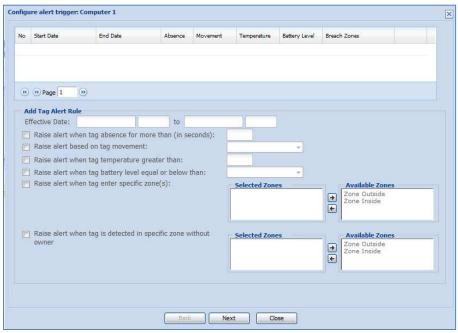
3.1.2 "Manage Tags" page will appear as follow.



3.1.3 Click on the "\(\Delta \)" icon on the selected tag to configure the alert trigger as shown in the screen above.

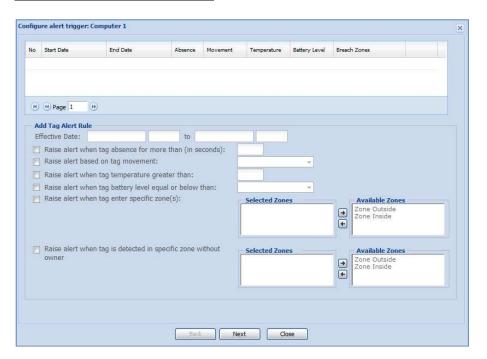


3.1.4 The "Configure alert trigger" for the selected tag will be shown as below.



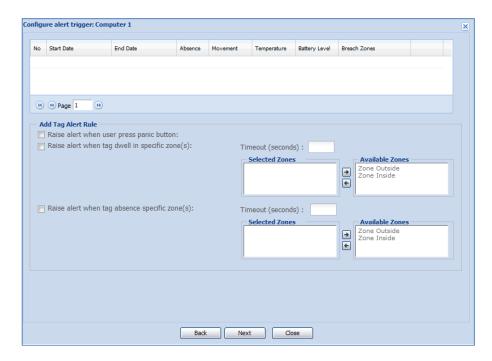
This window consists of three screens as shown below.

Screen 1: Alert Rule Screen 1

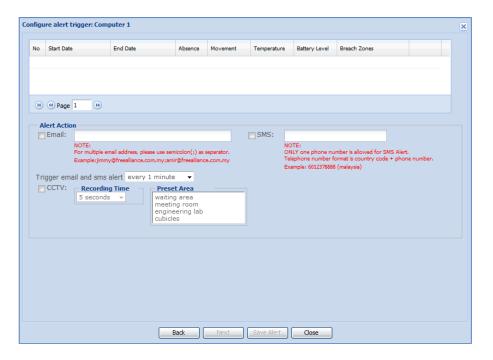




Screen 2: Alert Rule Screen 2



Screen 3: Alert Action Screen



User can navigate between the screens via "Back" and "Next" button.

To save an alert, click on the "Save Alert" button.

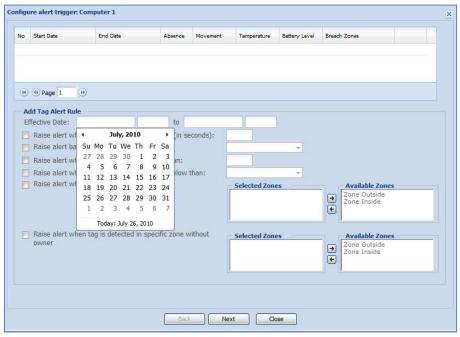
To discard an alert without saving, click on the "Close" button.



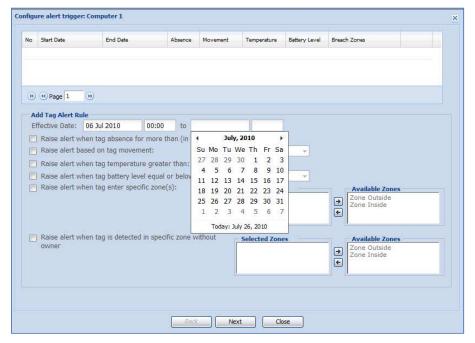
3.2 Setting an effective period of an alert

This is the first step to configure an alert. Each alert requires a start date and time as well as an end date and time. User can set multiple effective periods for a Tag.

3.2.1 Click on the input box next to "Effective Date" line and a calendar selection window will appear as shown below.



3.2.2 Select the date for the start date and end date from the calendar as shown below.



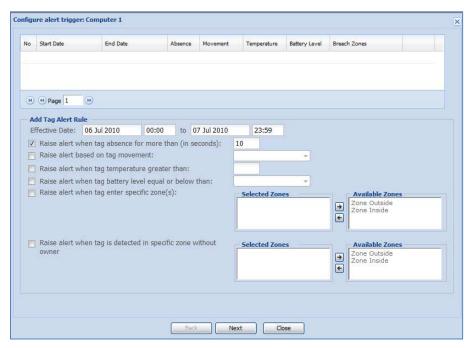
NB: Effective date and time has to be configured for every alert.



3.3 Raising alert when tag is absent for more than x (in seconds)

This step is to configure the alert when the tag is absent for specific time.

- 3.3.1 In the Alert Rule Screen 1, click on the box next to the line "Raise alert when tag absent for more than (in seconds)" to activate this feature.
- 3.3.2 Enter the required time (in seconds) in the input box next to this line.
- 3.3.3 The screen will appear as shown below.



E.g. the time is set to be 10 seconds.

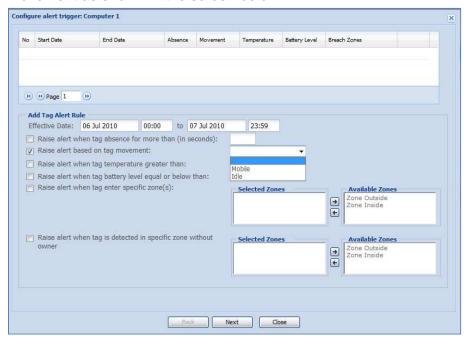
NB: User can also set combination of alert rule for a specific time.



3.4 Raising alert based on tag movement

This step is to configure the alert based on the tag movement.

- 3.4.1 In the Alert Rule Screen 1, click on the box next to the line "Raise alert based on tag movement" to activate this feature.
- 3.4.2 Click on the inverted arrow next to this white box to view the available tag movement as shown in the screen below.



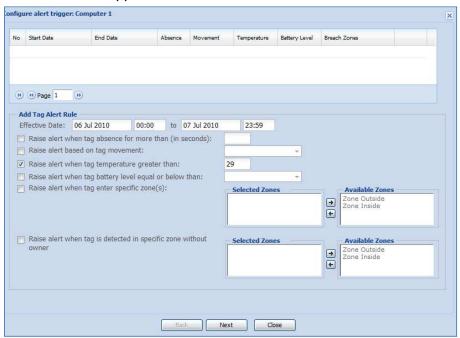
3.4.3 Select the required tag movement for the alert to be raised.



3.5 Raise alert when tag temperature greater than a user specified temperature value

This step is to configure the alert based on the temperature of the tag.

- 3.5.1 In the Alert Rule Screen 1, click on the box next to the line "Raise alert when tag temperature greater than" to activate this feature.
- 3.5.2 Enter the temperature threshold for the alert is to be raised when the tag temperature is greater than the threshold temperature.
- 3.5.3 The screen will appear as shown below.



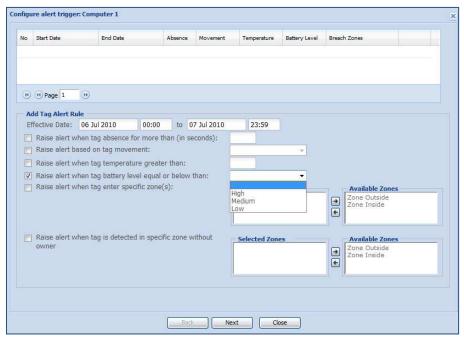
E.g. the temperature is set to be 29℃.



3.6 Raise alert when tag battery level equal or below than user specified battery level

This step is to configure the alert based on battery level of the tag.

- 3.6.1 In the Alert Rule Screen 1, click on the box next to the line "Raise alert when tag battery level equal or below than" to activate this feature.
- 3.6.2 Click on the inverted arrow next to this input box to view the available battery level as shown in the screen below.



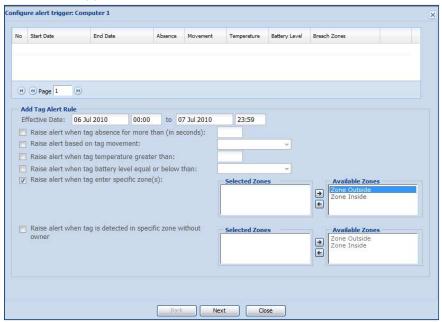
3.6.3 Select the required tag battery level for the alert to be raised.



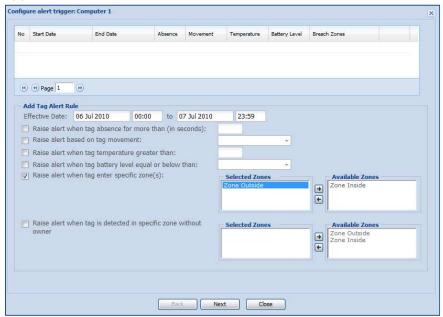
3.7 Raise alert when tag enter specific zone(s)

To configure the alert based on the tag location in specific zone(s):

- 3.7.1 In the Alert Rule Screen 1, click on the box next to the line "Raise alert when tag enter specific zone(s)" to activate this feature.
- 3.7.2 Click on the location in "Available Zones" to highlight the required zone. The screen will appear as shown below.



3.7.3 Click on "for move the selected to zone to "Selected Zones". The screen will appear as shown below



To remove the zone in "Selected Zones", select the zone in "Selected Zones" and click "

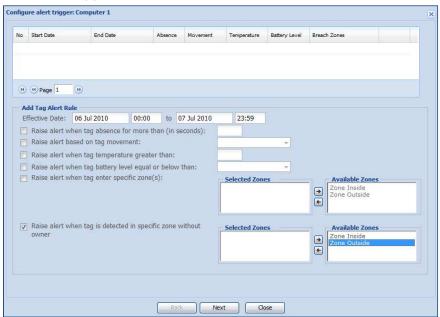
"to move it to "Available Zones".



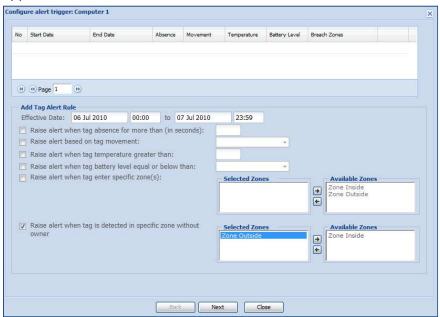
3.8 Raise alert when tag is detected in specific zone without owner

This step is to configure the alert based on the tag location in specific zone(s) without owner

- 3.8.1 In the Alert Rule Screen 1, click on the box next to the line "Raise alert when tag enter specific zone(s) without owner" to activate this feature.
- 3.8.2 Click on the location in "Available Zones" to highlight the required zone. The screen will appear as shown below.



3.8.3 Click on "for move the selected to zone to "Selected Zones". The screen will appear as shown below.



To remove the zone in "Selected Zones", select the zone in "Selected Zones" and click "

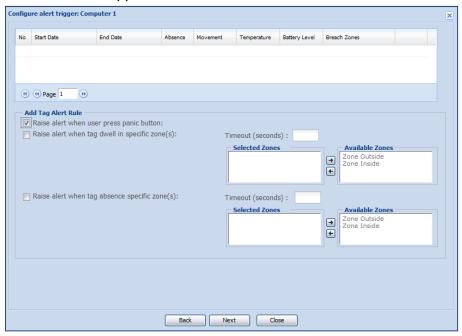
"to move it to "Available Zones".



3.9 Raise alert when user presses panic button

This step is to configure the alert when the user presses the panic button on the tag (if panic button is available on the tag).

- 3.9.1 In the Alert Rule Screen 2, click on the box next to the line "Raise alert when user press panic button" to activate this features.
- 3.9.2 The screen will appear as shown below.

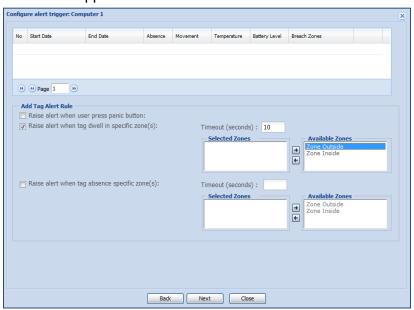




3.10 Raise alert when tag dwell in specific zone(s)

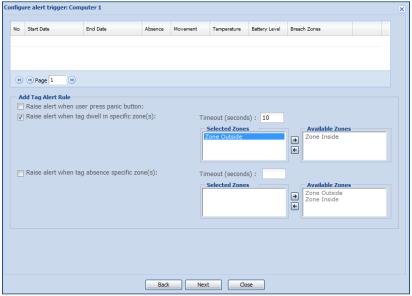
This step is to configure the alert when the tag dwells into specific zone(s) within a timeout period (in seconds).

- 3.10.1 In the Alert Rule Screen 2, click on the box next to the line "Raise alert when tag dwell in specific zone(s)" to activate this feature.
- 3.10.2 Enter the timeout in seconds into the "Timeout (seconds)" section.
- 3.10.3 Click on the location in "Available Zones" to highlight the required zone. The screen will appear as shown below.



3.10.4 Click on "

"to move the selected to zone to "Selected Zones". The screen will appear as shown below.



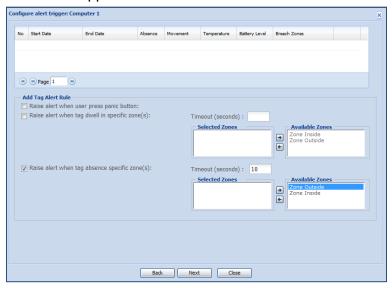
To remove the zone in "Selected Zones", select the zone in "Selected Zones" and click "
"to move it to "Available Zones".



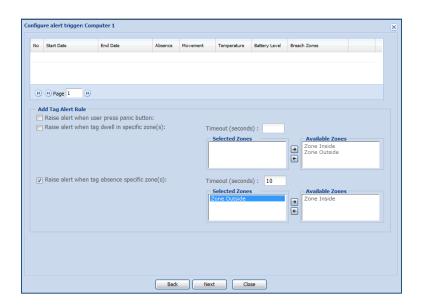
3.11 Raise alert when tag absent specific zone(s)

This step is to configure the alert when the tag absents in specific zone(s) within a timeout period (in seconds).

- 3.11.1 In the Alert Rule Screen 2, click on the box next to the line "Raise alert when tag absent specific zone(s)" to activate this feature.
- 3.11.2 Enter the timeout in seconds into the "Timeout (seconds)" section.
- 3.11.3 Click on the location in "Available Zones" to highlight the required zone. The screen will appear as shown below.



3.11.4 Click on "f" to move the selected to zone to "Selected Zones". The screen will appear as shown below.



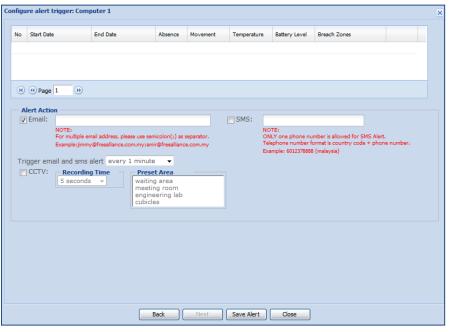
To remove the zone in "Selected Zones", select the zone in "Selected Zones" and click " to move it to "Available Zones".



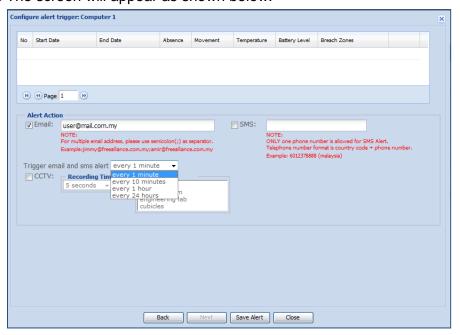
3.12 Alert Action: Send Email Notification

To configure the alert action for email notification:

- 3.12.1 In the Alert Action Screen, click on the box next to the line "Email" to activate this feature.
- 3.12.2 The screen will appear as shown below.



- 3.12.3 Enter the email account into the "Email" section.
- 3.12.4 Click on the down arrow in the "Trigger email and sms alert" section to select the alert trigger time.
- 3.12.5 The screen will appear as shown below.

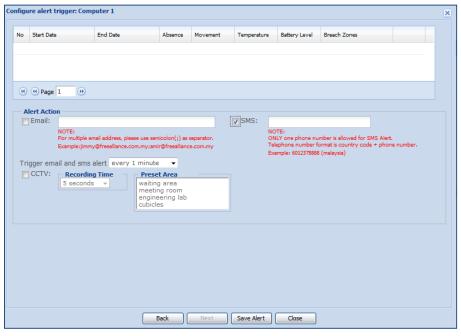




3.13 Alert Action: Send SMS Notification

This step is to configure the alert action for Short Message Service (SMS) notification.

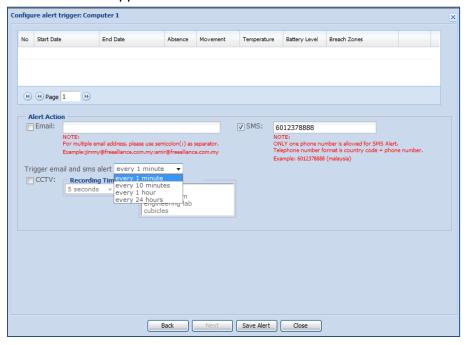
- 3.13.1 In the Alert Action Screen, click on the box next to the line "SMS" to activate this feature.
- 3.13.2 The screen will appear as shown below.



- 3.13.3 Enter the phone number into the "SMS" section using country code followed by mobile no.
- 3.13.4 Click on the down arrow in the "Trigger email and sms alert" section to select the alert trigger time.



3.13.5 The screen will appear as shown below.



E.g. SMS mobile number format uses country code (60 for Malaysia) followed by mobile phone number (12378888).

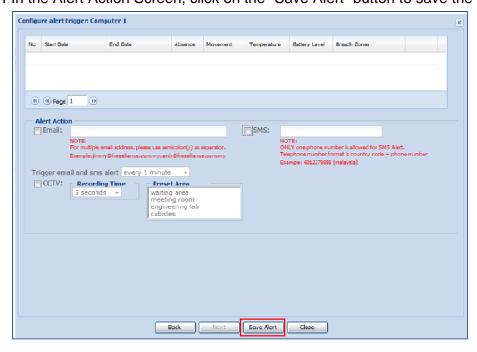
3.14 Alert Action: CCTV Recording

This feature is only available in customized solution.

3.15 Save Alert Setting

This step is to guide user to save the alert rules and alert actions.

3.15.1 In the Alert Action Screen, click on the "Save Alert" button to save the alert.

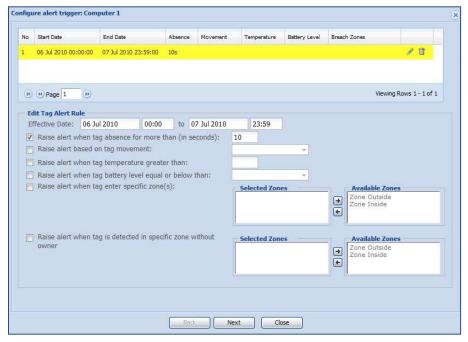




3.16 Edit Alert Setting

This step is to edit the alert rules and alert action.

3.16.1 Click on the alert option to highlight the alert configuration of the tag as shown below.



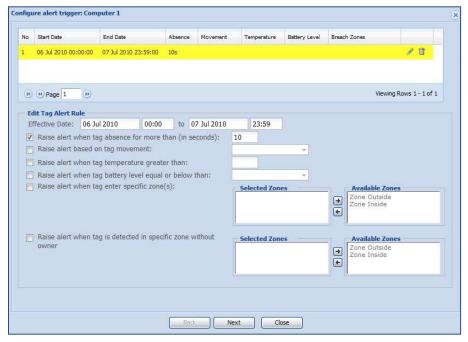
NB: Alert Rules and Alert Action will be populated and user can edit the alert configuration.



3.17 Delete Alert Setting

This step is to delete the alert.

3.17.1 Click on the alert option to highlight the alert configuration of the Tag as shown below.



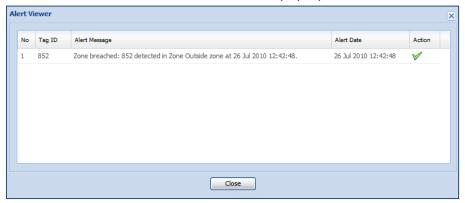
3.17.2 Click on the " to remove the alert configuration of this Tag.



3.18 Acknowledging Alert(s)

"Alert Viewer" will pop up automatically to show the alert raised for specific alert configuration of the tags. User can view the alert information raised by the Tag(s) on this screen.

3.18.1 Check the alert rose in the "Alert Viewer" pop up screen as shown below.



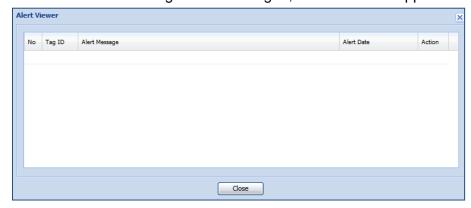
- 3.18.2 Click "✓" under the "Action" column in the "Alert Viewer" pop up window to acknowledge the alert raised by this tag.
- 3.18.3 The screen will appear as shown below.



3.18.4 Click "OK" to acknowledge this alert in the "Message from webpage" window or "Cancel" to remain the alert message in the Alert Viewer.



3.18.5 After the alert for the tag is acknowledged, the screen will appear as shown below.



NB: If no acknowledgement is performed for this alert, the "Alert Viewer" will continue to pop up to notify the user regarding this alert.

NB: User can permanently remove or edit this alert configuration by clicking "▲" for specific tag.

3.18.6 Click "Close" to return to the main page.



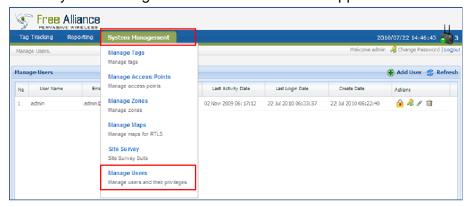
4.0 Manage Users

This step is to allow user to add, edit and delete user information on the web application. This setup might require internet connection (email notification) in order to complete the setup process.

4.1 Manage Users Menu

This step is to add more users into the web application. This setup might require internet connection.

4.1.1 Click "System Management" and the screen will appear as shown below.



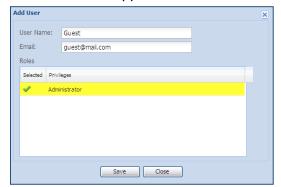
4.1.2 Click on "Manage Users" and the screen will appear as shown below.



4.2 Add User

This step will add new user for the web application.

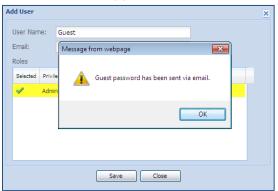
- 4.2.1 Click " Add User " to add new user into the web application.
- 4.2.2 The screen will appear as shown below.



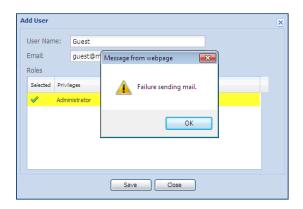
NB: This step requires an internet connection.



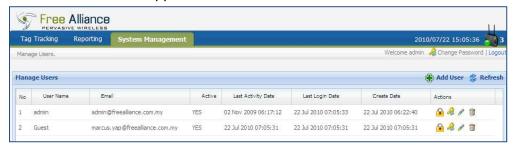
- 4.2.3 Enter the username and valid username email address. The password for this account will be sent to the user through this email address.
- 4.2.4 Click "Administrator" to highlight the user privileges.
- 4.2.5 Click "Save" to save this user information or "Close" to cancel adding this user.
- 4.2.6 The screen will appear as shown below indicating the successful process.



NB: If no internet connection is available or invalid email address is inserted, the screen will appear as shown below.



4.2.7 New added user will appear as shown in the screen below.



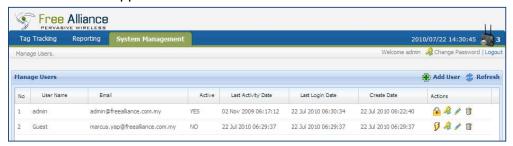
4.2.8 Check the user email account for the username and password.



4.3 Block User

This step will block certain user from using the web application.

- 4.3.1 In the "Manage User" page, select the user to be blocked and click "1.2".
- 4.3.2 Click "OK" to block this user or "Cancel" to cancel blocking this user.
- 4.3.3 The screen will appear as shown below.



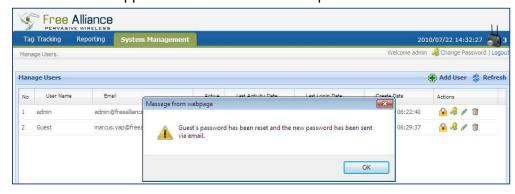
NB: The icon "∮" indicate that the particular user is block from using the web application.

4.3.4 Click "₱" to unblock this user. Click "OK" to unblock this user or "Cancel" to keep blocking this user.

4.4 Reset Password

This step allow user to reset the user password to the new password. Internet connection is required in this process.

- 4.4.1 In the "Manage User" page, click "\$\infty\$" for specific user. Click "OK" to reset the password for this user or "Cancel" to keep the old password.
- 4.4.2 The screen will appear as shown below when password is reset.



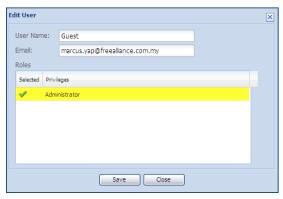
NB: New password will be sent to the user email account. Check the user email account for the new password.



4.5 Edit User Information

This step allow user to edit specific user information.

4.5.1 In the "Manage User" page, click " ✓ " to edit specific user. The screen will appear as shown below.



- 4.5.2 Enter the new email account or change the user privileges.
- 4.5.3 Click "Save" to save the edited information or "Close" to keep the old information.

4.6 Remove User

This step allow user to remove specific user from the web application users.

- 4.6.1 In the "Manage User" page, click " in on the specific user to remove this user.
- 4.6.2 Click "OK" to remove this user or "Cancel" to keep this user as a web application user.
- 4.6.3 The screen will appear as shown below if the user is removed.





4.7 Change Password

This option is only available after the user successfully log in as a web application user.

- 4.7.1 In the top right of the screen, click " Change Password" to change the user log on password.
- 4.7.2 The screen will appear as shown below.



- 4.7.3 Enter the "Current Password", "New Password", and "Confirm New Password" respectively. New password must contain minimum length of 7 characters.
- 4.7.4 Click "Change Password" to change the password or "Cancel" to cancel changing the password.
- 4.7.5 The screen will appear as shown below if the password is successfully changed.



4.7.6 Click "Continue" or proceed to other section of the web application.