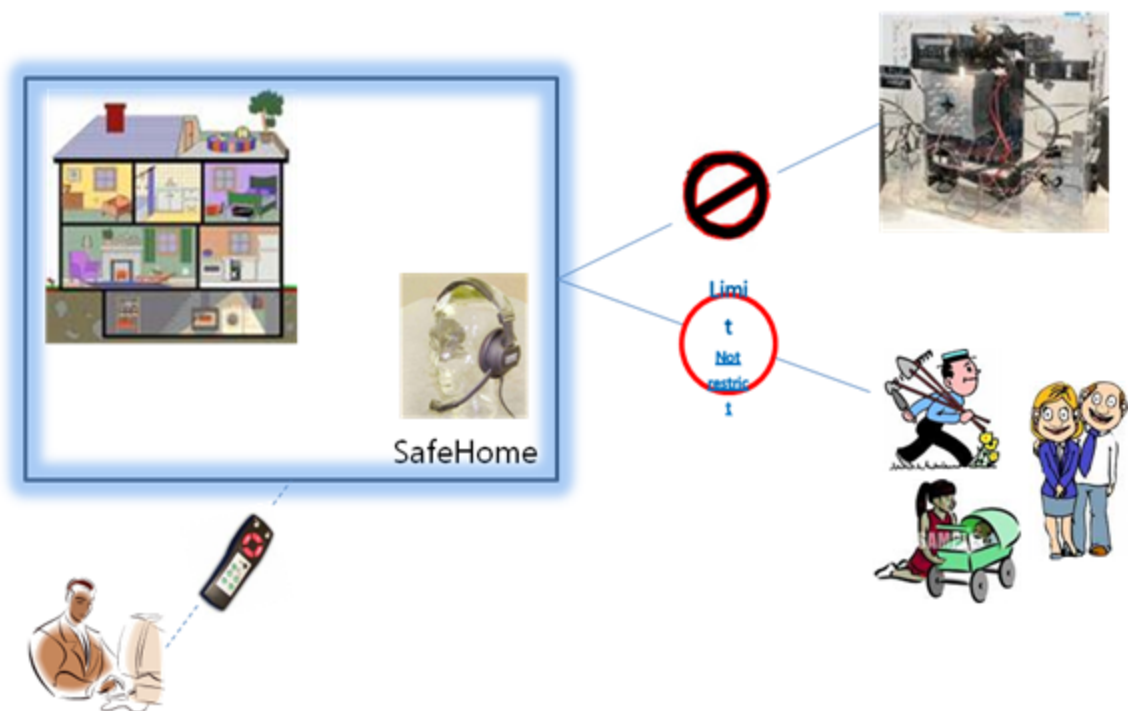


User Guide for SafeHome System



Team 4

Jinho Choi

Le Do Tuan Khanh

Junsu Kim

Table of Contents

	0
Part I Preface	5
Part II Introducing SafeHome	7
Part III Getting Started	9
1 SafeHome Installation.....	9
2 Turn on the system.....	10
3 Logging in the SafeHome system.....	11
4 Basic Display for SafeHome.....	12
5 Turn off the system.....	14
Part IV Securing the House	17
1 Change to Away Mode.....	17
Change to Away mode through Control Panel	17
Change to Away mode through Web	20
2 Change to Stay Mode.....	22
Change to Stay Mode through Control Panel	22
Change to Stay Mode through Web	24
3 Enter to Panic Mode.....	25
Enter to Panic Mode through Control Panel	25
Enter to Panic Mode through Web	26
4 Exit from Panic Mode.....	27
Exit from Panic Mode through Control Panel	27
Exit from Panic Mode through Web	29
5 Detect Accidents or Intruder.....	30
Part V Observing the House	33
1 View in one Camera.....	33
Zoom the Camera	36
Pan the Camera	37
2 View in Thumbnail View.....	38
Select One camera	39
Change Password	41
Set Password	42
Remove Password	44
Part VI Configuring the SafeHome System	47
1 Account Configuration.....	47
2 Floor Plan Configuration.....	49
Add Security Zone	50
Modify Security Zone	53

Remove Security Zone	56
Activate Security Zone	58
Make Temporal Security Zone	60

Part



Preface

1 Preface

The *User Guide* contains instructional and conceptual information for using SafeHome system to build enterprise level applications. The guide assumes that you have installed SafeHome system on your computer.

Audience

The information in this guide is intended primarily for users using SafeHome system to protect their house.

SafeHome Documentation Set

The documentation set for Together consists of the items listed in Table1.

Table 1 SafeHome documentation set

Item	Description	Location
User Manual	Comprehensive information most relevant to the user, including: <ul style="list-style-type: none">• Introduction to SafeHome system• Getting started.• Securing the house• Observing the house• Configuring the SafeHome System	PDF located as follows. <ul style="list-style-type: none">• SafeHome's main menu under Help Manuals• Your SafeHome installation under \$SafeHome\$/doc/userManual.pdf
API documentation	Technical reference for the SafeHome API generated by Javadoc.	

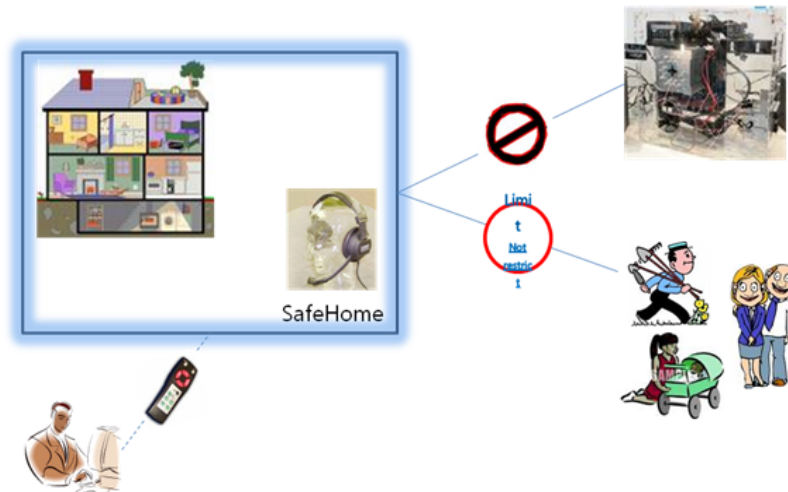
Part



Introducing SafeHome

2 Introducing SafeHome

SafeHome is a novel system composing of an innovative wireless box and a central processor. The wireless boxes are attached to every hardware device to make a secure network connection around the house. The central processor contains of control software which has the responsibility to perform all the system's functions and a web server to store the information and data as well as to provide the Web interface and remote control interface.



There are three main features that SafeHome system provide.

1. Secure the house
 - Home owner can arm/disarm the house to protect the inside-outside house from unauthorized intruders or detect such accidents as fire or flood.
 - Home owner can allow some occasionally authorized accesses to a few parts of the house using the security zones.
 - Home owner can request for external assistance immediately in the cases of emergency situations such as heart attack or robbery.
 - Home owner can, furthermore, control the house's security functions via the simple Control Panel interfaces or detail Web interface, locally or remotely.
2. Observe the house
 - Home owner can view thumbnails of the cameras around the house offline as well as observe multiple cameras online.
 - Home owner can set up the cameras' passwords to prohibit other authorized web users or monitoring company from viewing several cameras.
 - Home owner can, furthermore, control the house's surveillance functions via Web interface locally or remotely using Webbrowser-supported remote devices.
3. Configure the system
 - Home owner can create and define the security zones through the Web interface to support many different usage contexts.
 - Home owner can update his/her personal information and system's passwords through Control Panel or Web interface.
 - Home owner can, furthermore, perform this feature locally or remotely.

Part



Getting Started

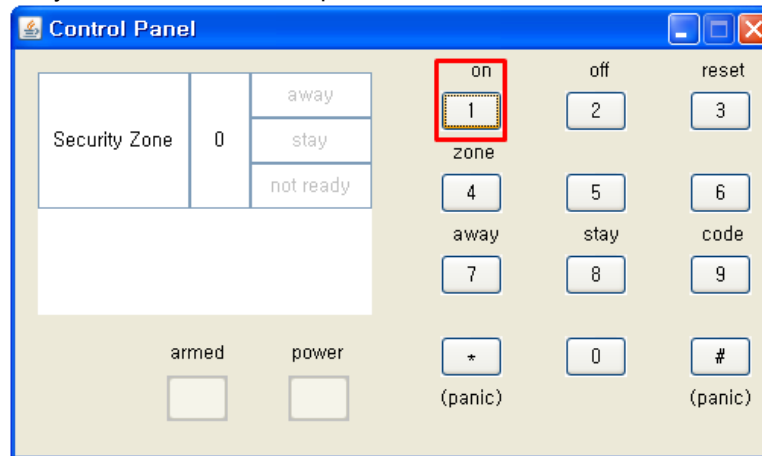
3 Getting Started

3.1 SafeHome Installation

Before installed SafeHome system, you should install the JDK 5 or JDK 6.
This link is for downloading JDK. <http://java.sun.com/javase/downloads/index.jsp>

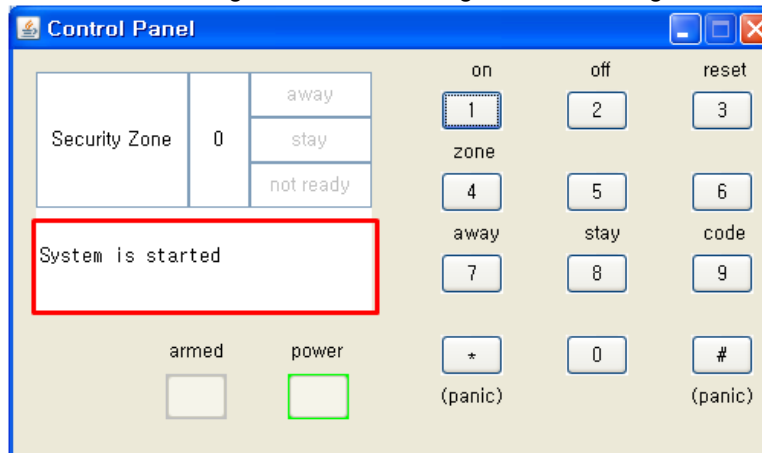
3.2 Turn on the system

You can turn on the system from the control panel. To do this, first clicks button like below figure.



Turning on the system through control panel

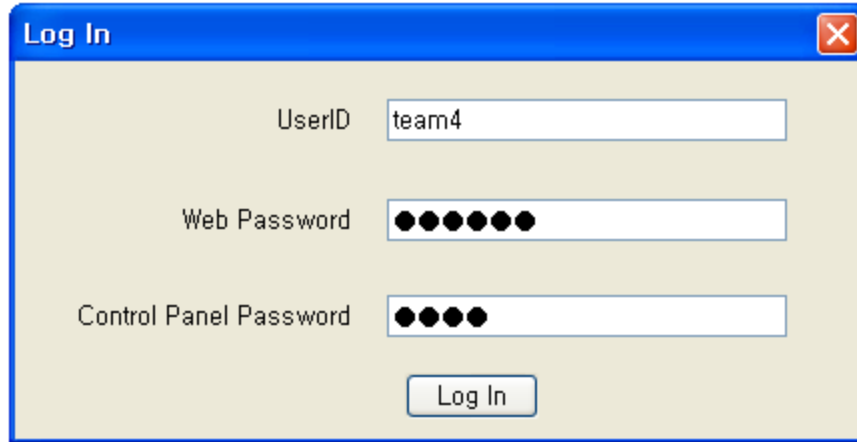
And then you can confirm the message that inform turning on like below figure.



System is turned on

3.3 Logging in the SafeHome system

When the system is turned on, you can log-in the SafeHome system through web. If you selects entering the system through web, the Log-In window is popped up like below figure.



The screenshot shows a 'Log In' dialog box with a blue border and a close button in the top right corner. The dialog contains three input fields: 'UserID' with the text 'team4', 'Web Password' with six black dots, and 'Control Panel Password' with four black dots. A 'Log In' button is located at the bottom center of the dialog.

Window for Log-In

To enter the SafeHome system, you should pass the log-in procedure. It requires user id, password for web, and password for control panel. The default ID and passwords are listed in Table 2. Of course, the passwords can be changed by you.

Table 2 default id and passwords

User ID	team4
Password for Web	123456
Password for Control Panel	1111

Enter the your id and passwords and click the "Log In" button and then you can enter the SafeHome system to use,

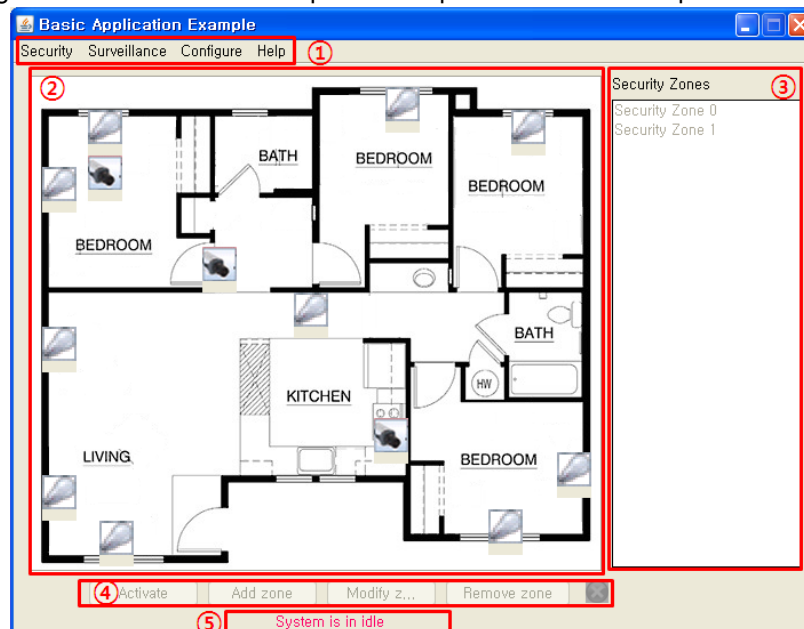
3.4 Basic Display for SafeHome

When the user id and passwords are valid, the program is started and 2 windows are showed like below figures. Below figure is the window for control panel that provide interface for user to control the SafeHome system.



Window for Control Panel

The control panel has a small display to represent the current status of SafeHome system.(indicated by ①) When the system is started, the system is in stay mode so this state of system is represented in display. It also has two LEDs, one for represent armed status or not, another for powered status or not. (indicated by ②) In above figure the LED for power turned on because the system was started. In the right side of control panel, there are 12 buttons to input some commands from you.(indicated by ③) The below figure is the window for floor plan that represent current floor plan for house.

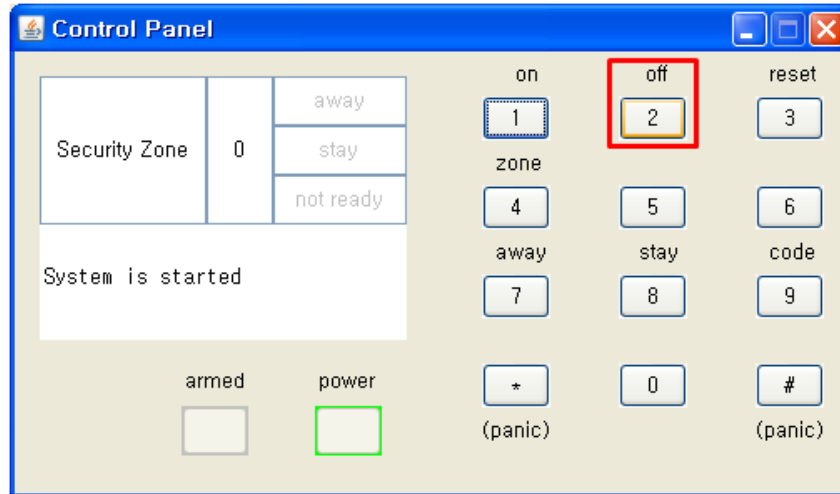


Window for Floor Plan

In the window for floor plan, there are 5 main parts that listed by number, 1 to 5. In the top, there is menu bar. (indicated by ①) You can use whole provided services through this menu bar. The floor plan for house is indicated by ②. You can see current floor plan for house and turn on/off the sensors and cameras by click. The list box on right side is for showing security zones.(indicated by ③) At least one security zone must be exist. You can also add, modify, and remove the security zone through below buttons. (indicated by ④) In addition, you can arm the security zone by clicking "Activate" button.The current state of system is represented in below that is indicated by ⑤

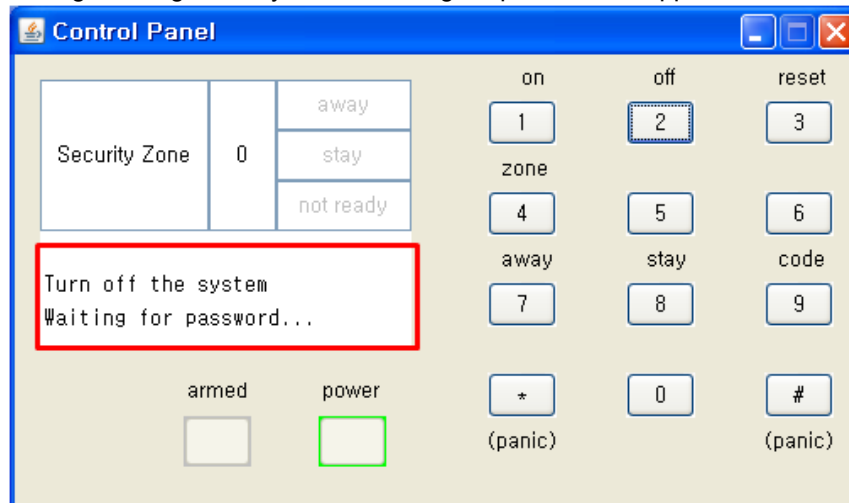
3.5 Turn off the system

There are two way to turn system off. You can turn off the system from the control panel. To do this clicks button OFF like below figure.



Process 1 for Turning System Off from control panel

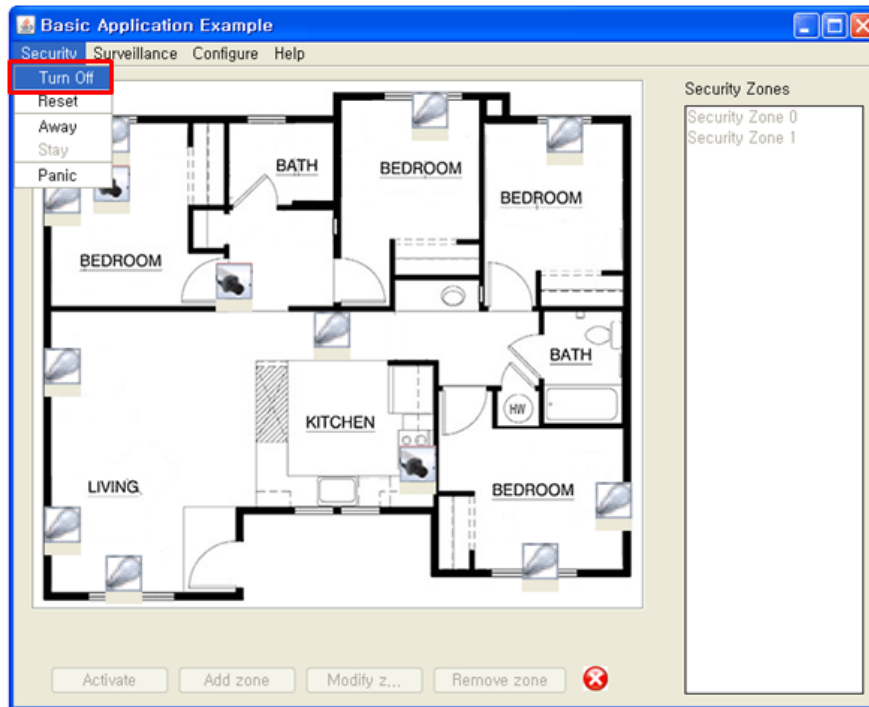
And then the informing message that system is waiting for password is appeared like below figure.



Process 2 for Turning System Off from control panel

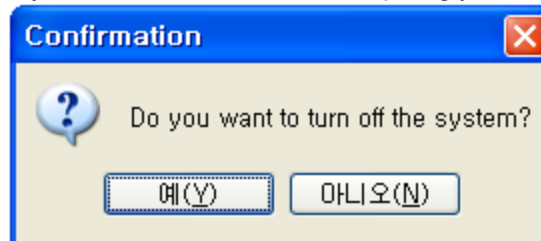
You have to enter the password for control panel in order to turn off the system. You have to enter the each button within 3 seconds. After entering the password, system will be turned off, and user will be logged out.

You can also turn off the system from web interface. To do this, first clicks the "turn off" menu item form "security" menu like below figure.



Process 2 for Turning System Off from control panel\

After clicking the menu item, you can see the window for requiring your confirmation like below figure.



confirming the turn off

If you click the yes button, the system will be turned off, and user will be logged out.

Part



Securing the House

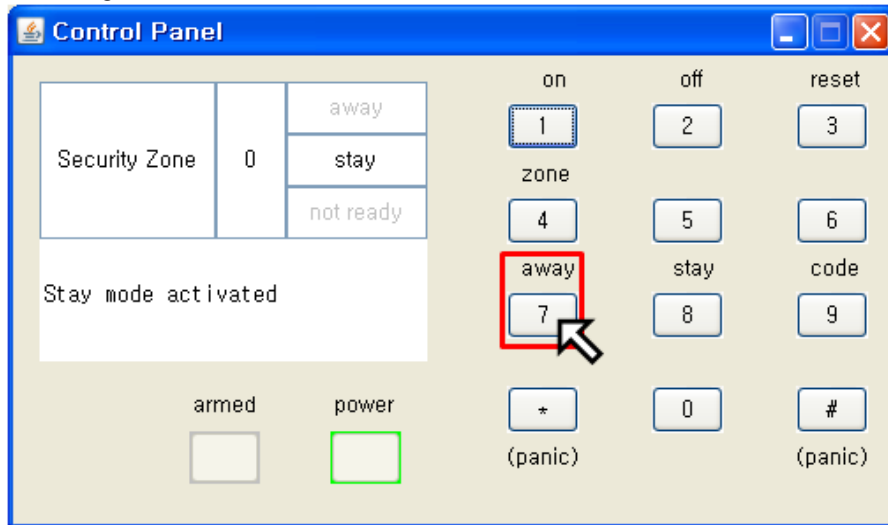
4 Securing the House

4.1 Change to Away Mode

There are two ways to change Stay Mode to Away Mode. The one is through control panel and another is through web interface. To explain those, It assumed that the current mode of system is Stay Mode.

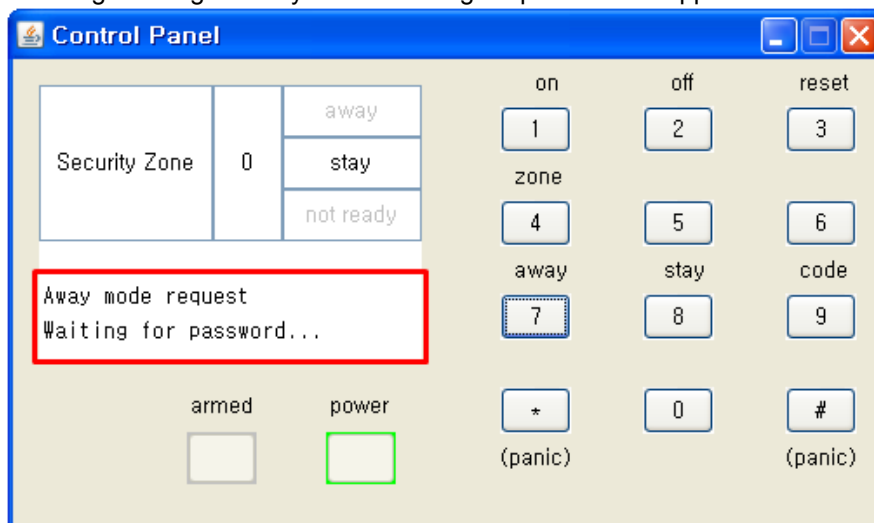
4.1.1 Chage to Away mode through Control Panel

The one way to change Stay Mode to Away Mode is using control panel. First, click the "away" button (button 7) like below figure.



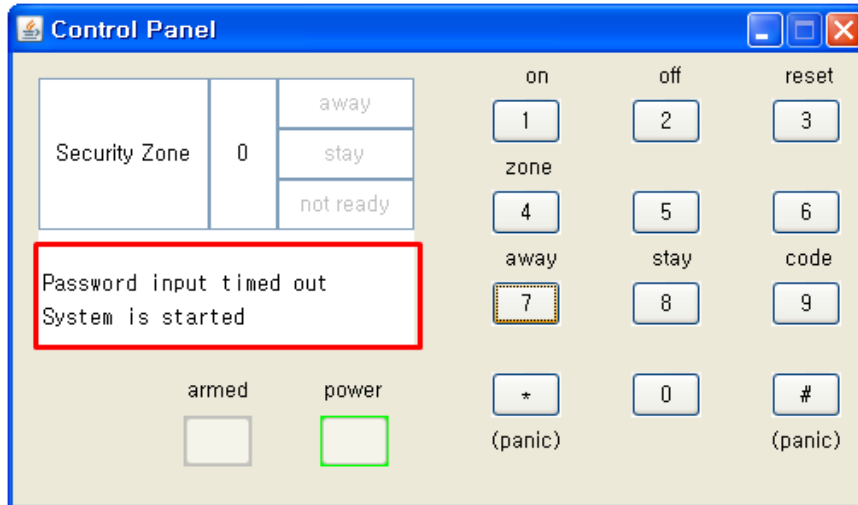
Process 1 for Changing Away Mode to Stay Mode

And then the informing message that system is waiting for password is appeared like below figure.



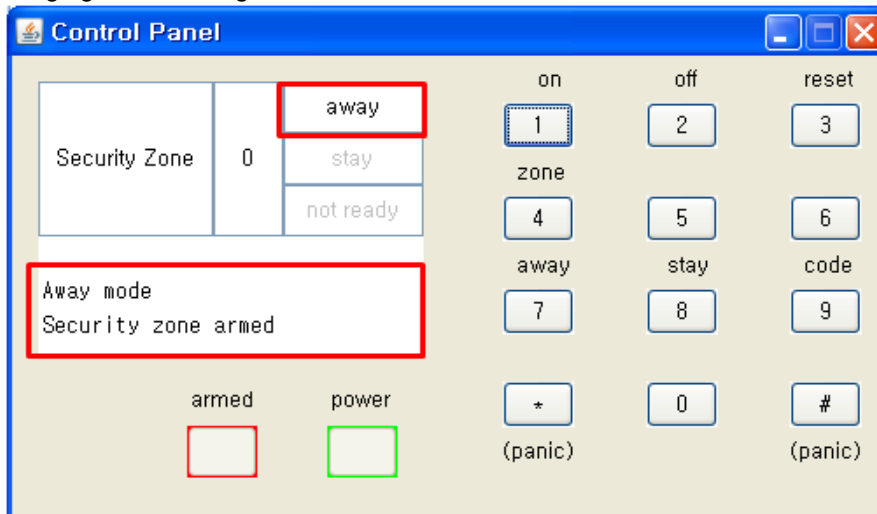
Process 2 for Changing Away Mode to Stay Mode

You have to enter the password for control panel in order to change stay mode to away mode. You have to enter the each button within 3 seconds. If you cannot enter the password in the limited seconds, then the changing to the away mode is failed and you can see the message like below figure.



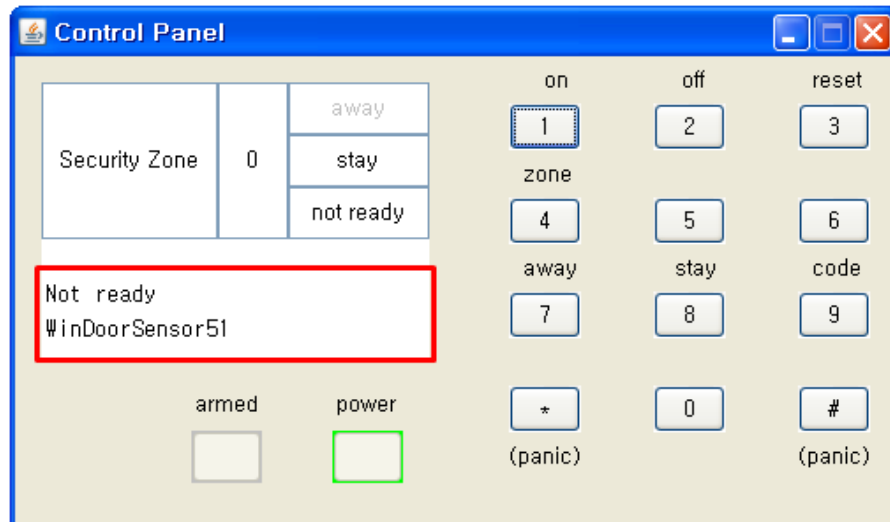
Process 3-1 for Changing Away Mode to Stay Mode

After entering the password in time, if the the password is valid and all windows are closed, you can see the result of changing like below figure.



Process 3-2 for Changing Away Mode to Stay Mode

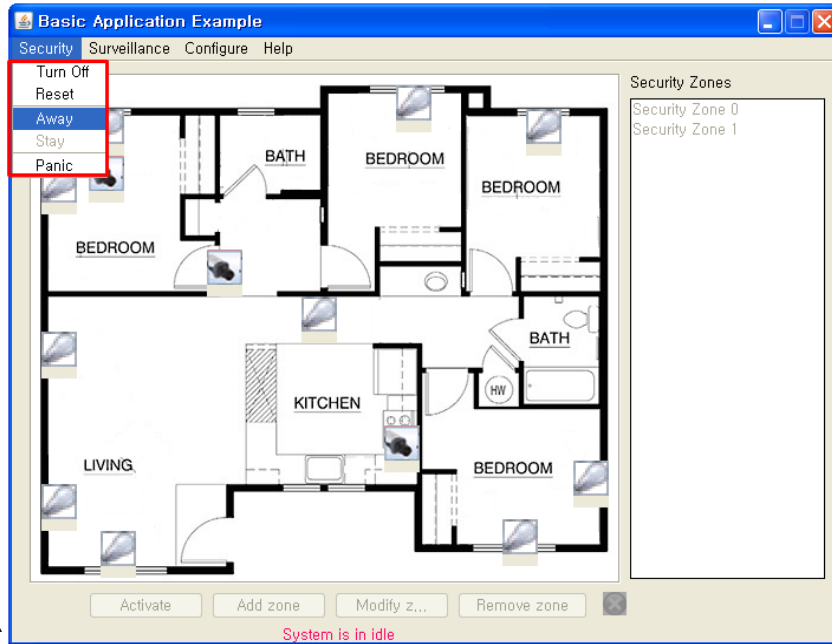
You can also see the LED for armed turned on because the system is in away mode. But, if some window are opened so system is not ready, you cannot change to away mode like below figure.



Process 3-3 for Changing Away Mode to Stay Mode (not ready)

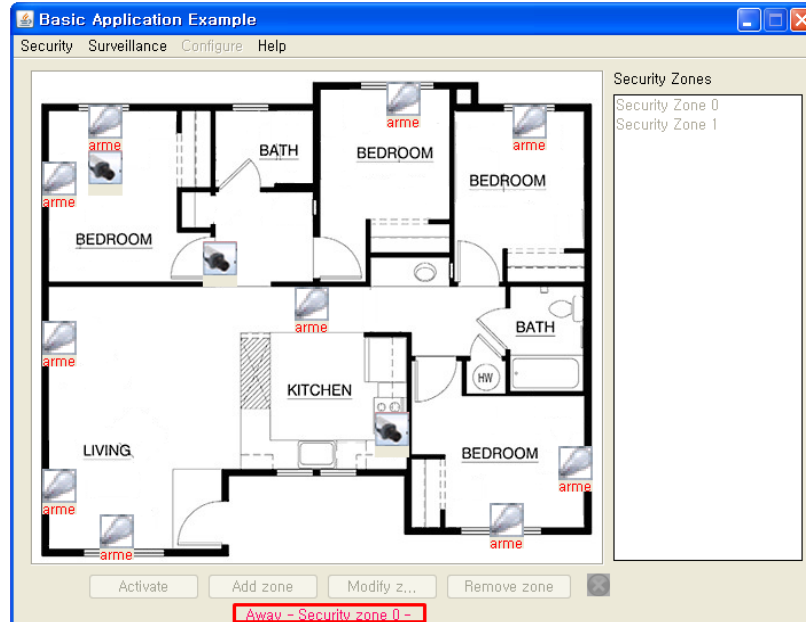
4.1.2 Change to Away mode through Web

The another way to change Stay Mode to Away Mode is using web interface. First, click the "away" menu item from "security menu", like below figure.



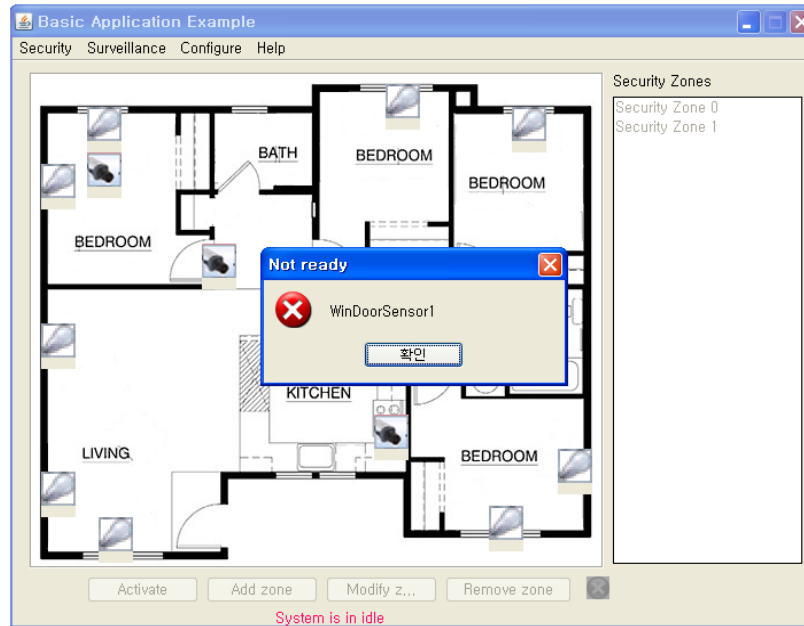
Process 1 for Changing Away Mode to Stay Mode

And then if the all windows are closed, you can confirm that the system is changed to away mode and sensors in current security zone are armed, like below figure. You can also confirm the what security zone is activated.



Process 2-1 for Changing Away Mode to Stay Mode

But, if some window are opened so system is not ready, you cannot change to away mode like below figure.



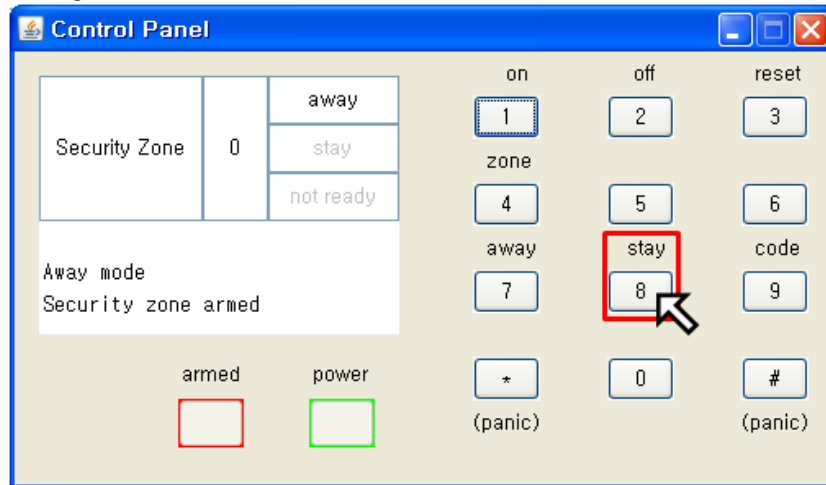
Process 2-2 for Changing Away Mode to Stay Mode

4.2 Change to Stay Mode

There are two ways to change Away Mode to Stay Mode. The one is through control panel and another is through web interface. To explain those, It assumed that the current mode of system is Away Mode.

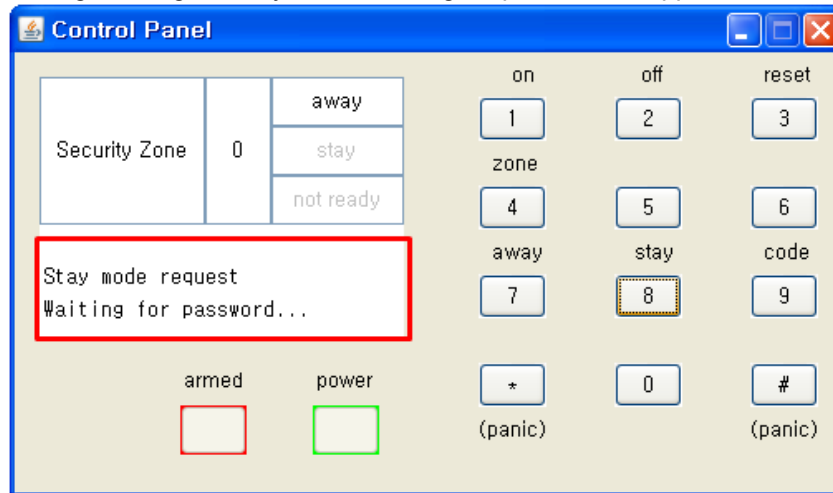
4.2.1 Change to Stay Mode through Control Panel

The one way to change Away Mode to Stay Mode is using control panel. First, click the "stay" button (button 8) like below figure.



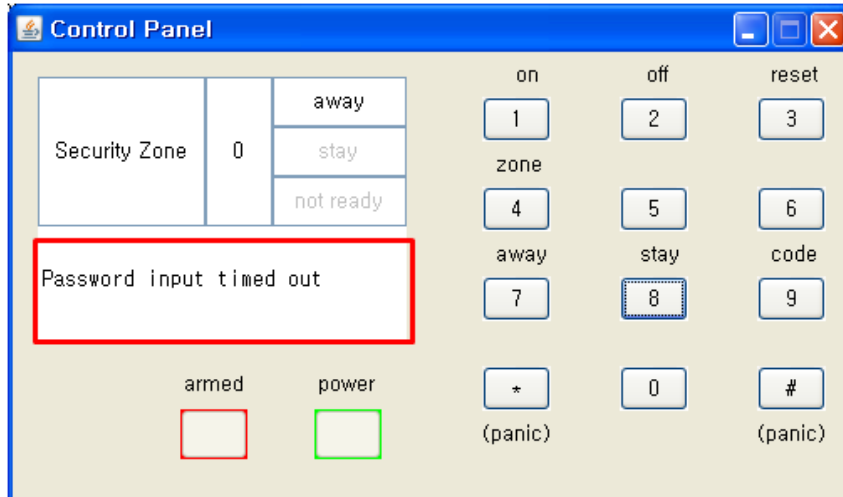
Process 1 for Changing Stay Mode to Away Mode

And then the informing message that system is waiting for password is appeared like below figure.



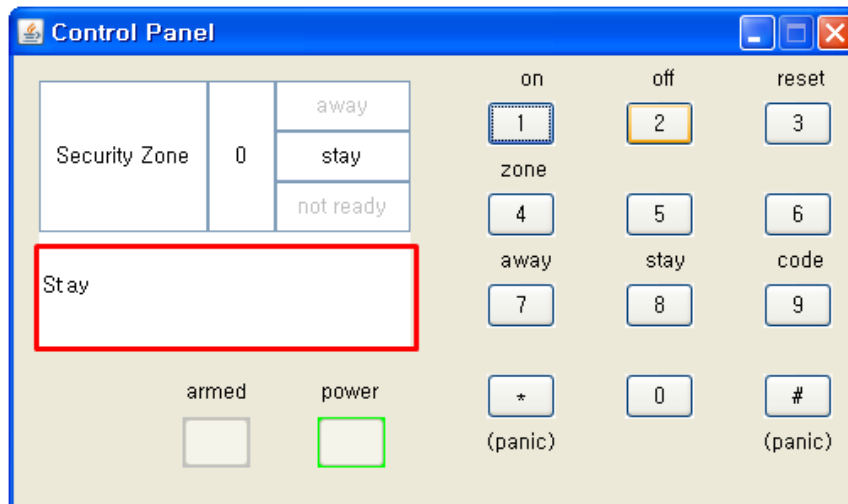
Process 2 for Changing Stay Mode to Away Mode

You have to enter the password for control panel in order to change away mode to stay mode. You have to enter the each button within 3 seconds. If you cannot enter the password in the limited seconds, then the changing to the stay mode is failed and you can see the message like below figure.



Process 3-2 for Changing Stay Mode to Away Mode

After entering the password in time, if the password is valid, you can see the result of changing like below figure.

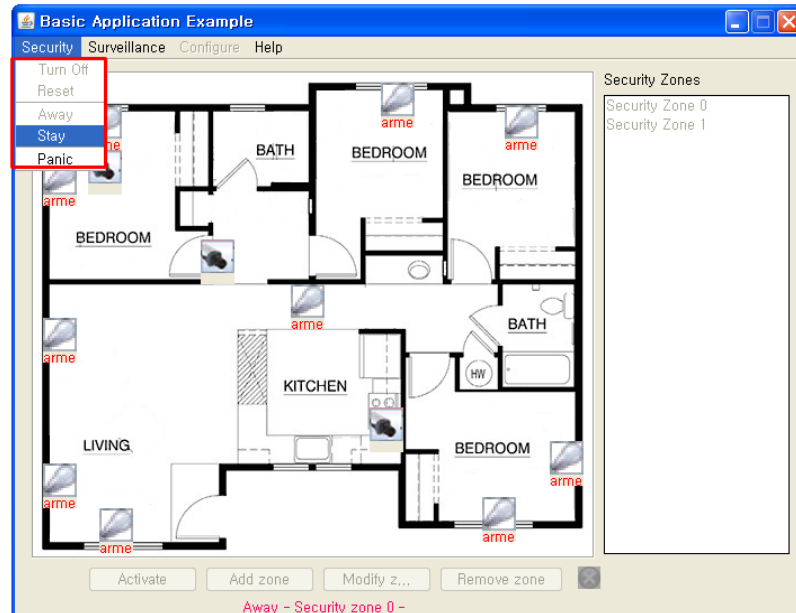


Process 3-2 for Changing Stay Mode to Away Mode

You can also see the LED for armed turned off because the system is in stay mode.

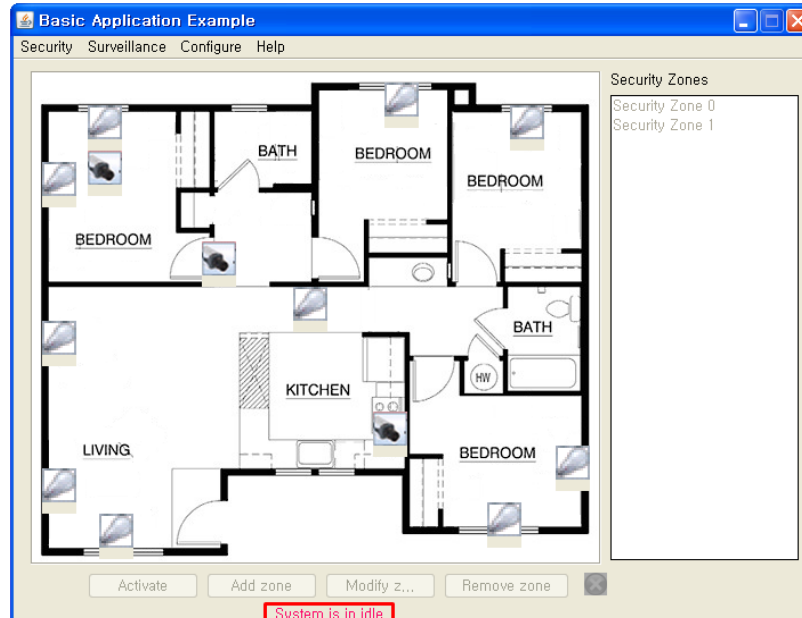
4.2.2 Change to Stay Mode through Web

The another way to change Away Mode to Stay Mode is using web interface. First, click the "stay" menu item from security menu, like below figure.



Process 1 for Changing Stay Mode to Away Mode

And then you can confirm that the system is changed to stay mode and sensors in current security zone are disarmed, like below figure. You can also confirm the system is in idle state.



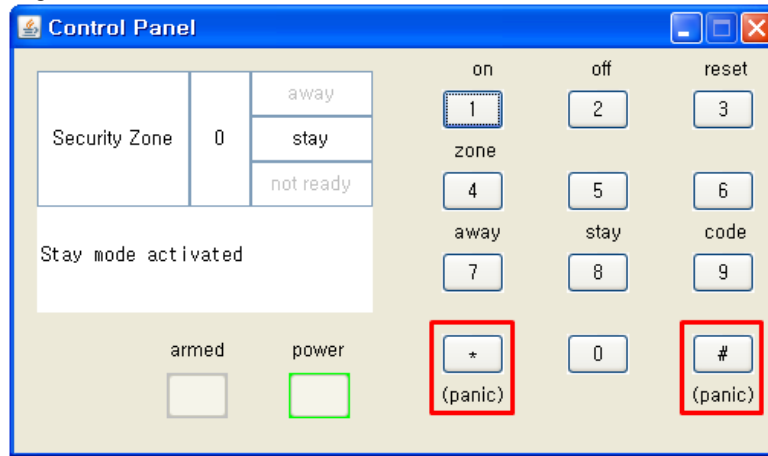
Process 2 for Changing Stay Mode to Away Mode

4.3 Enter to Panic Mode

If you get the emergency situation, such as heart attack, you can use Panic Mode to require rescue. There are two ways to enter panic mode, the one is through Control Panel, and another is through Web.

4.3.1 Enter to Panic Mode through Control Panel

The one way to enter Panic Mode is using control panel. First, click the "panic" button (button * and button #) like below figure.



Process 1 for Entering Panic Mode

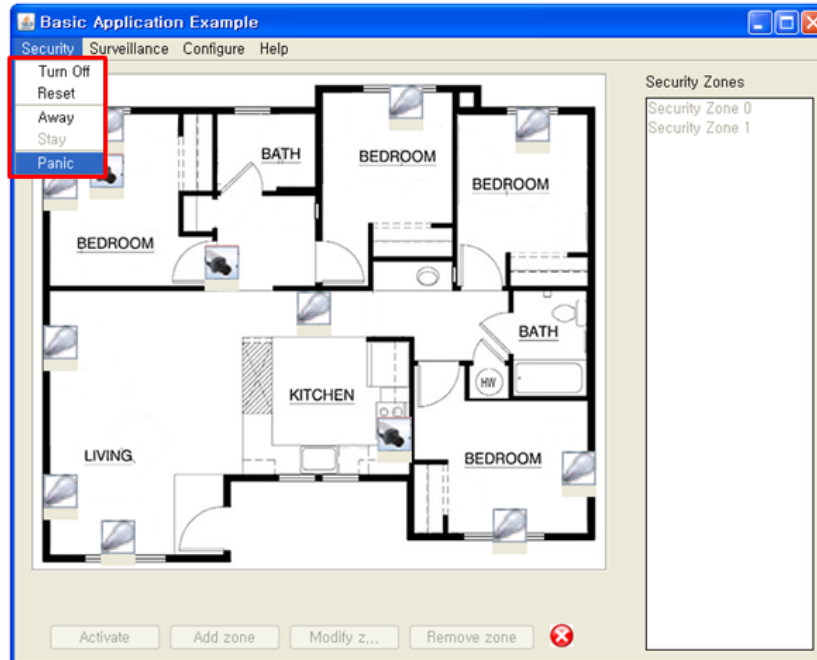
And then the informing message that system is requesting for emergency is appeared like below figure. You can also hear the sound that informing emergency.



Process 2 for Entering Panic Mode

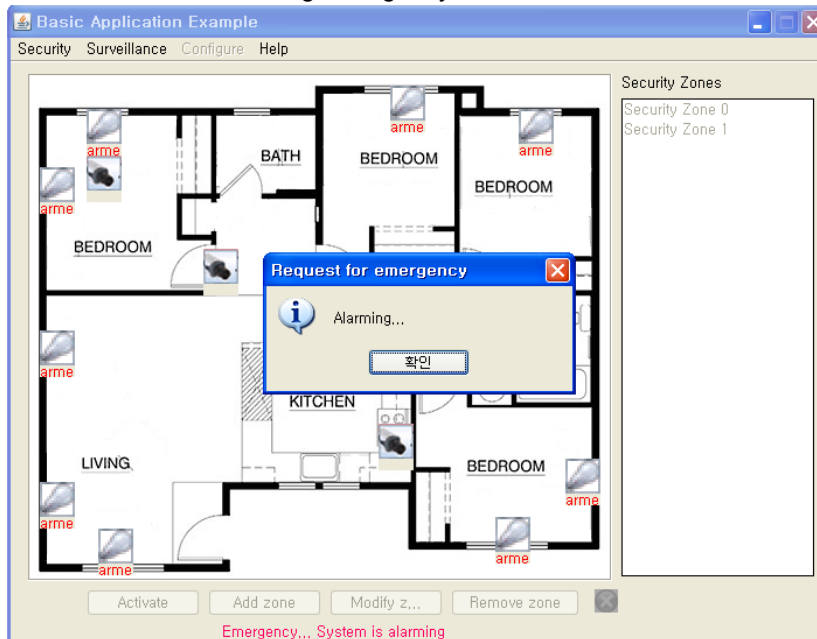
4.3.2 Enter to Panic Mode through Web

The another way to enter Panic Mode is using web interface. First, click the "panic" menu item from security menu like below figure.



Process 1 for Entering Panic Mode

And then the informing message that system is requesting for emergency is appeared like below figure. You can also hear the sound that informing emergency.



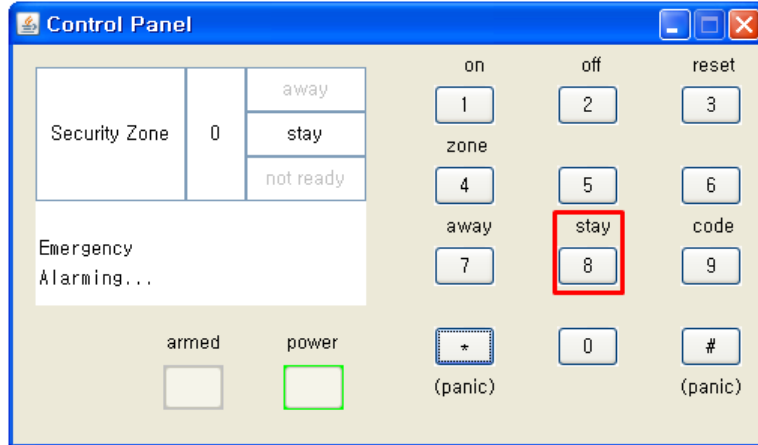
Process 2 for Entering Panic Mode

4.4 Exit from Panic Mode

There are two ways to exit panic mode, the one is through Control Panel, and another is through Web.

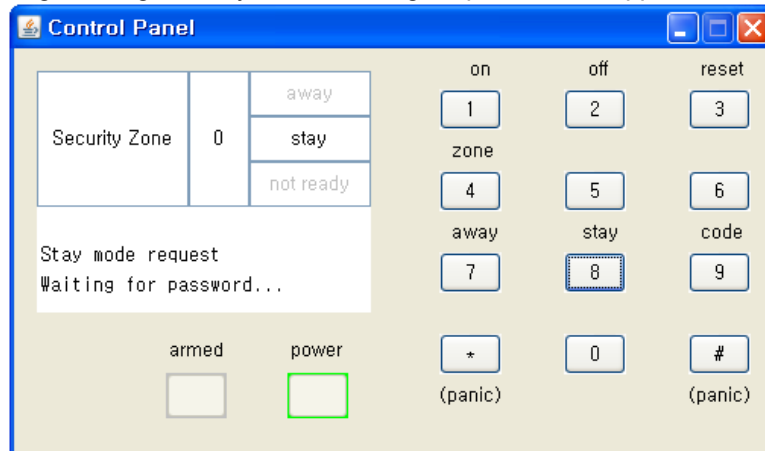
4.4.1 Exit from Panic Mode through Control Panel

In the Panic Mode, you can exit from Panic Mode to click the "stay" button like below figure.



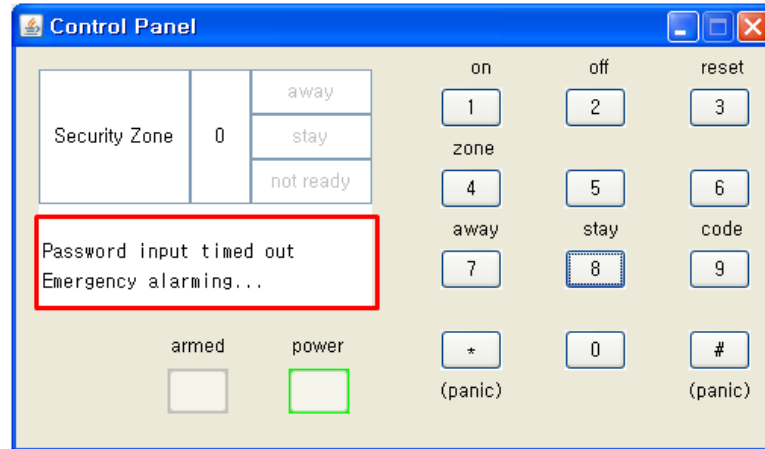
Process 1 for Exiting from Panic Mode

And then the informing message that system is waiting for password is appeared like below figure.

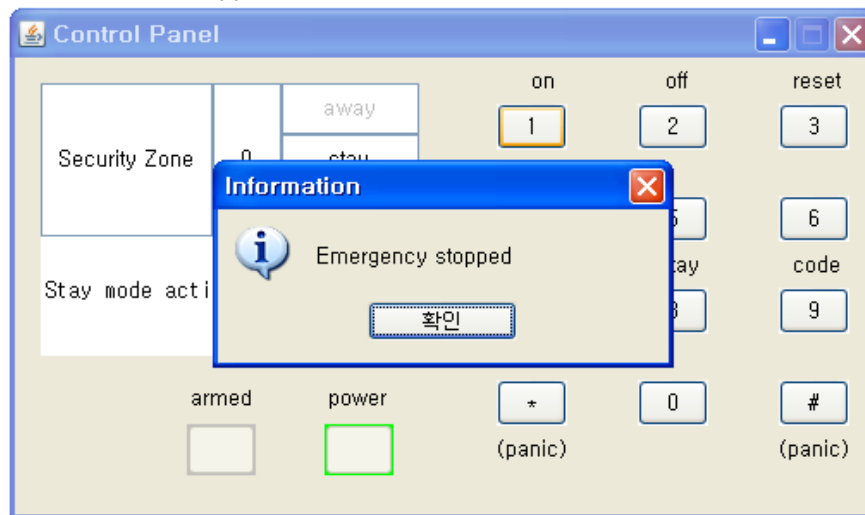


Process 2 for Exiting from Panic Mode

You have to enter the password for control panel in order to exit from panic mode. You have to enter the each button within 3 seconds. If you cannot enter the password in the limited seconds, then the changing to the stay mode is failed and you can see the message like below figure



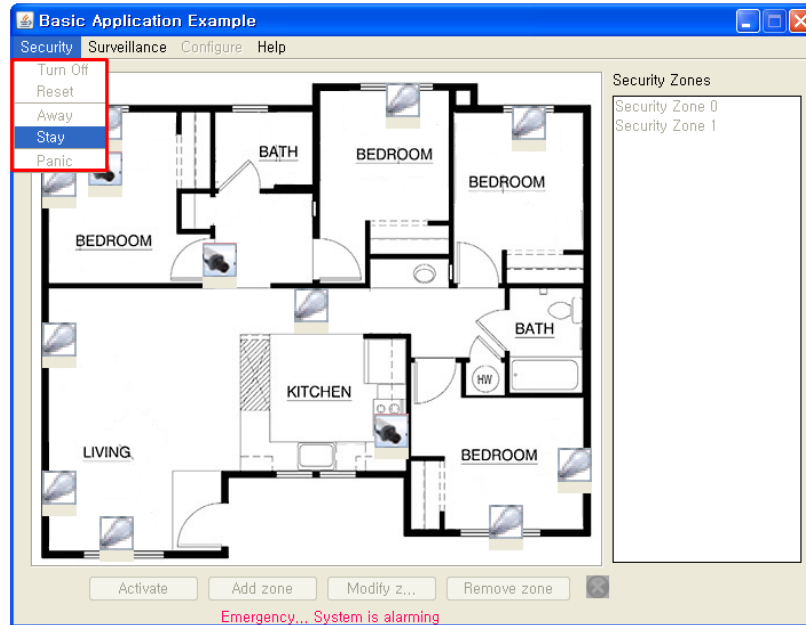
After entering the password in time, if the password is valid, you can see the result of exiting like below figure and the alarm sound is stopped.



Process 3 for Exiting from Panic Mode

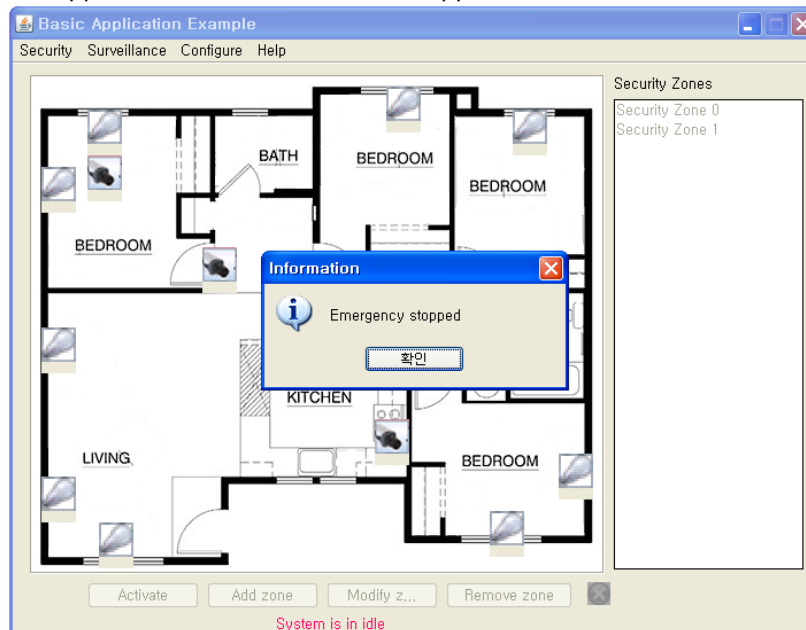
4.4.2 Exit from Panic Mode through Web

The another way to exit Panic Mode is using web interface. First, click the "stay" menu item from security menu like below figure .



Process 1 for Entering Panic Mode

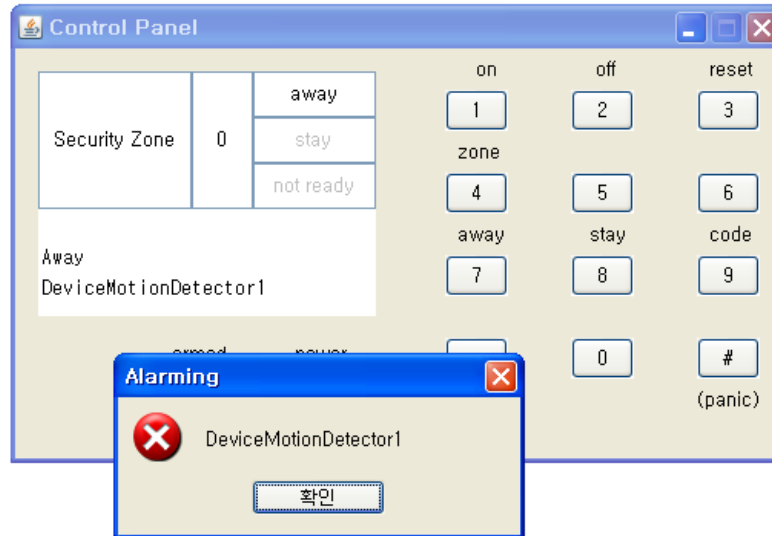
And then the informing message that system exited from emergency is appeared like below figure and the alarm sound is stopped and the alarm sound is stopped.



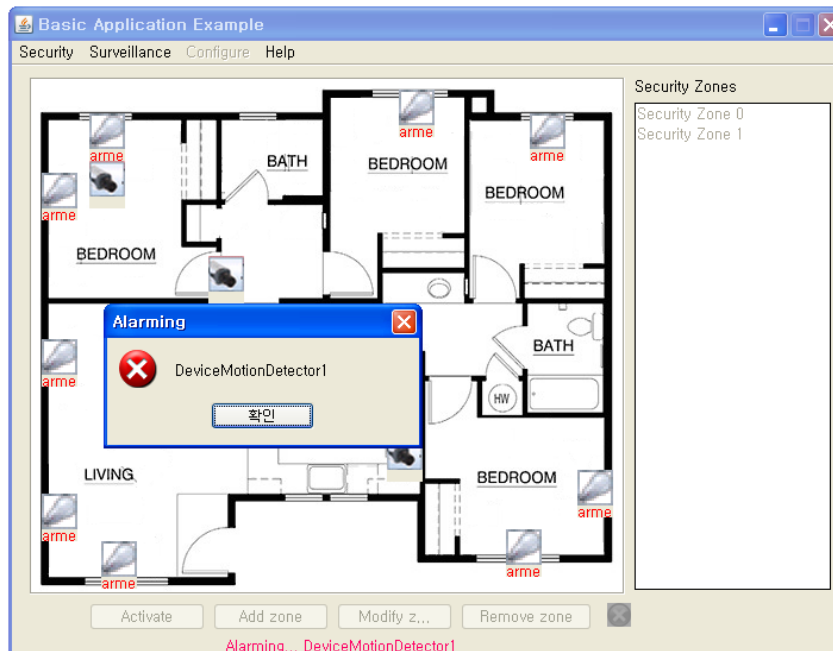
Process 2 for Entering Panic Mode

4.5 Detect Accidents or Intruder

When the system is in away mode, that means system is in monitoring state, you can get the alarming message when an accident happens or an intruder invades the house. System will be put into the alarming state. In this state, SafeHome still monitors the sensors to detect if any other accident or intruder.

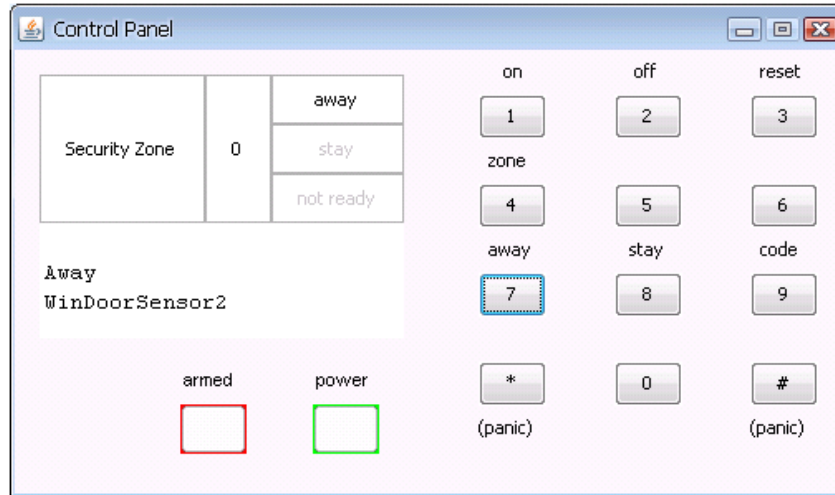


Detecting accidents or intruder from control panel

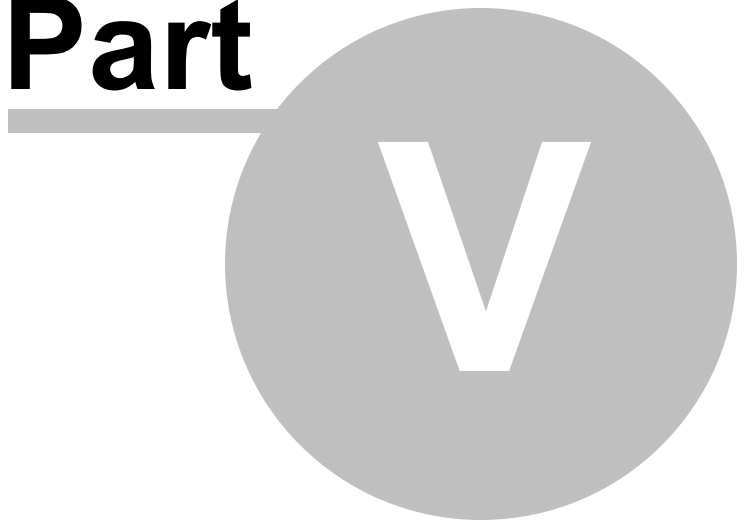


Detecting accidents or intruders from web interface

User can only turn off the alarming event by putting the system back to "Stay Mode".
 The final alarming event will last for 5 seconds and system will be put back to "Away Mode" with a message for the last alarming event.



Part

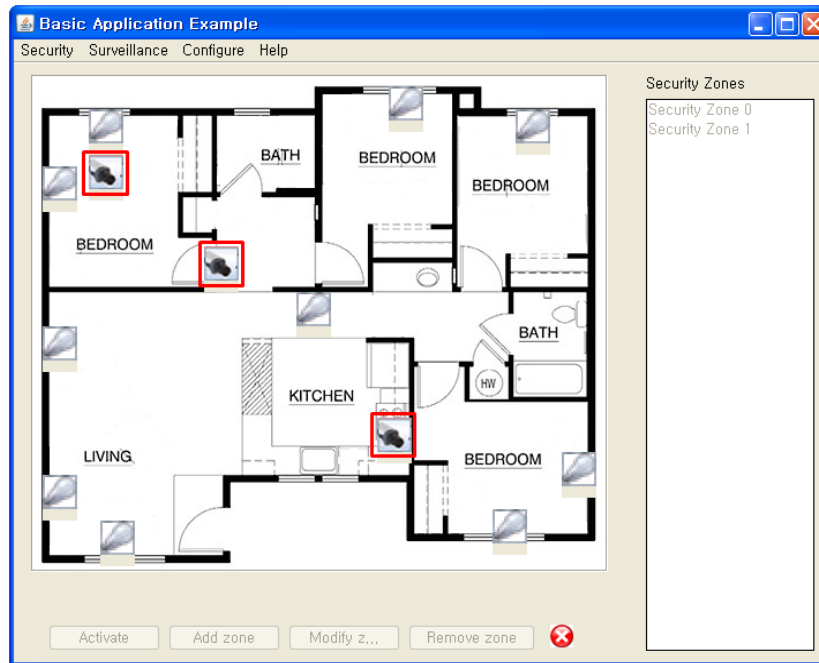


Observing the House

5 Observing the House

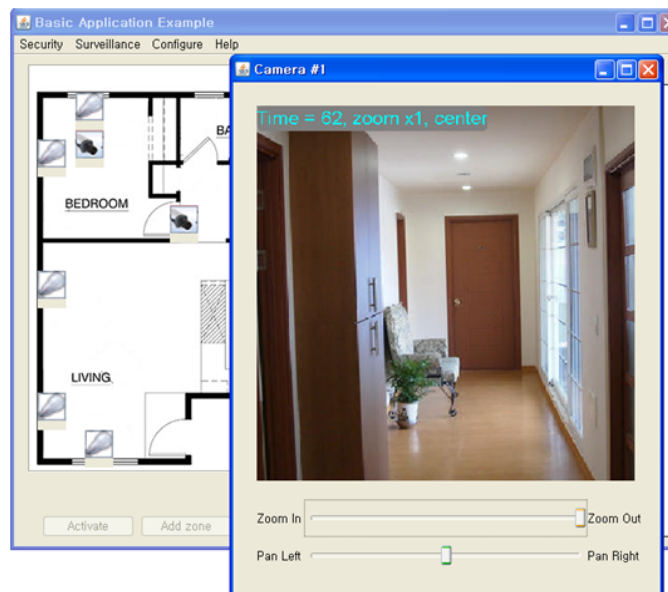
5.1 View in one Camera

You can view in your house or outside through one camera that installed in house. You can use this function through the web interface only. First, selects a camera for viewing in floor plan. In below figure there are three cameras, clicks one camera.



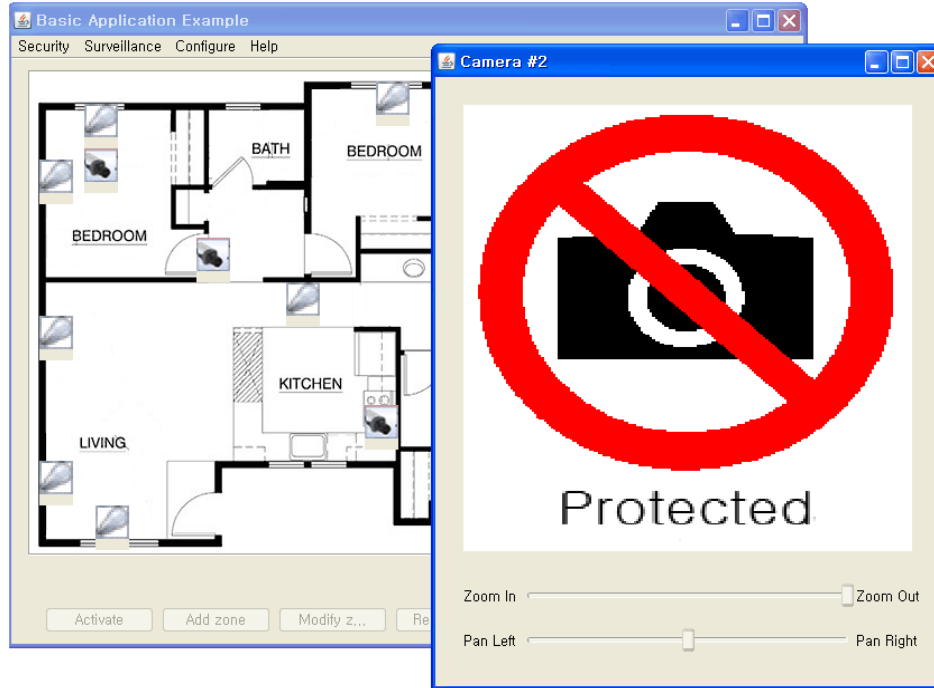
Process 1 for Viewing in one Camera (not protected)

And then the new window is appeared to view the scene like below figure, if the camera is not protected by password.



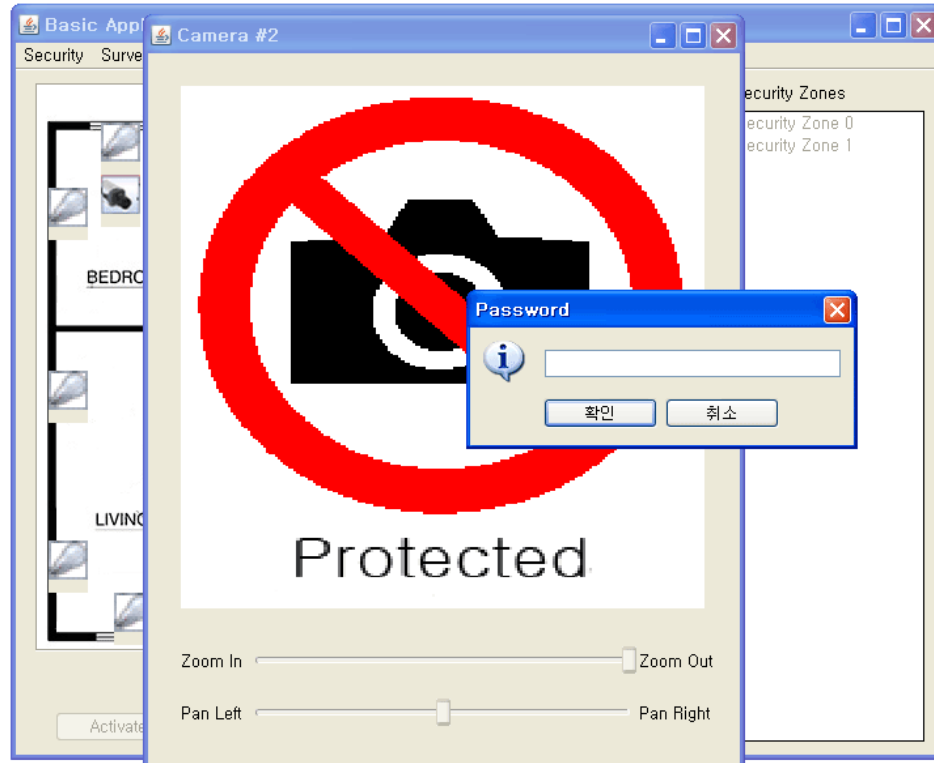
Process 2 for Viewing in one Camera (not protected)

If the camera is protected by password, you cannot view immediately like below figure.



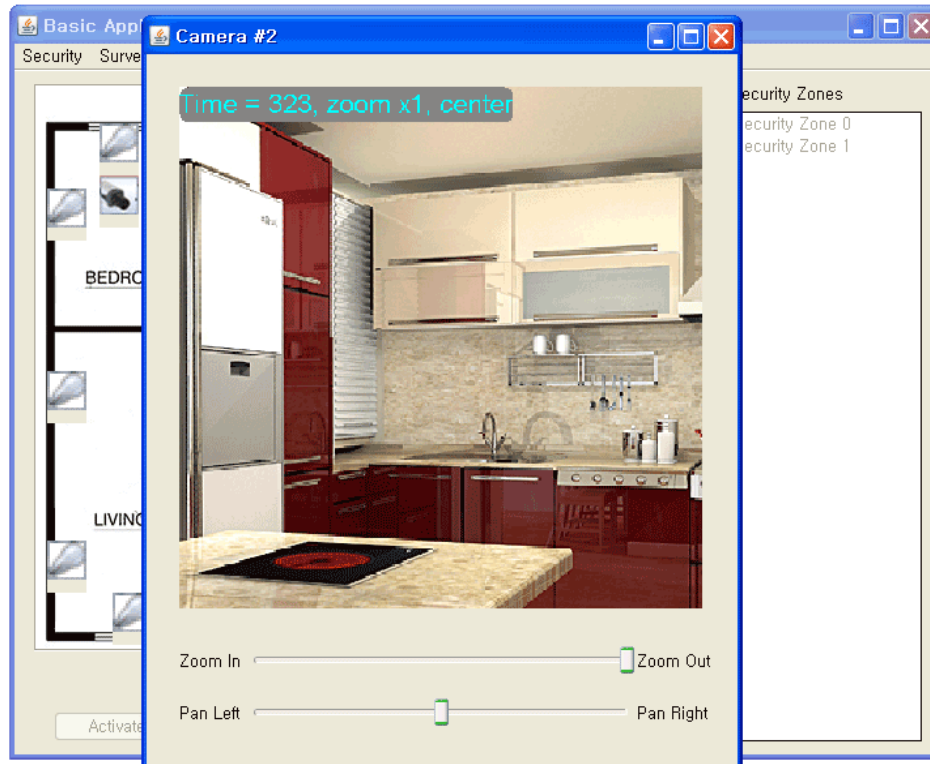
Process 1 for Viewing in one Camera (protected)

To view through this camera, first you click the display for Camera.



Process 2 for Viewing in one Camera (protected)

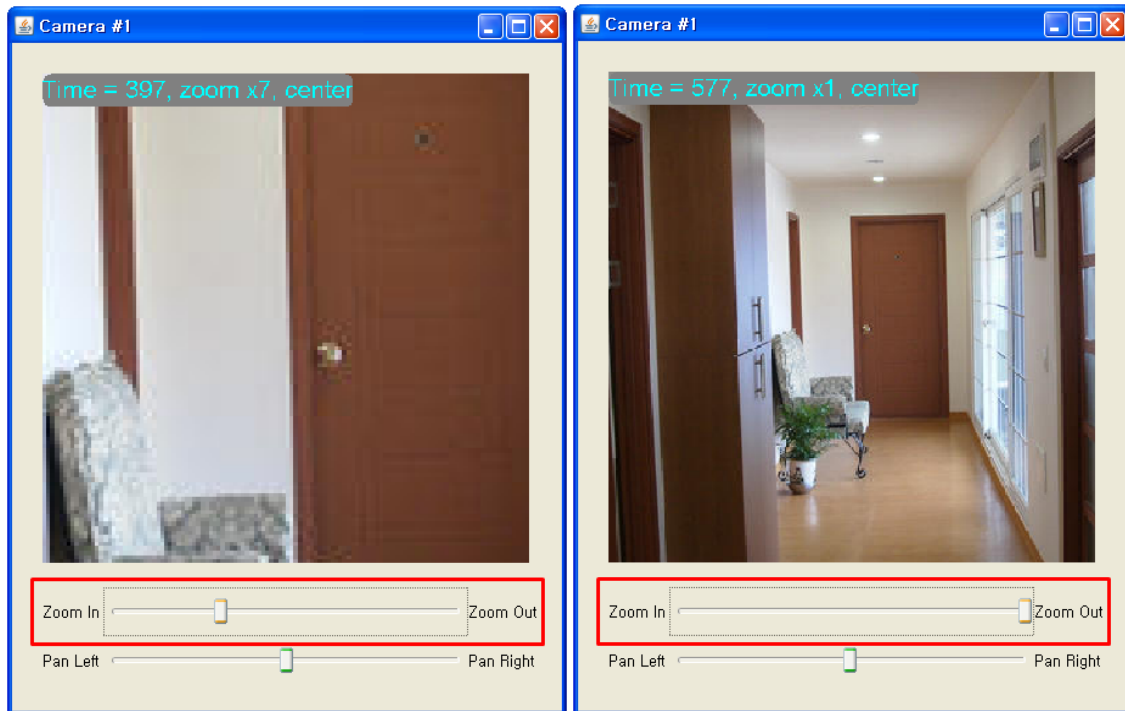
And then, the window for requiring the password of camera is appeared. Enter the password for camera and if the password is valid, you can see the scene through the camera like below figure.



Process 3 for Viewing in one Camera (protected)

5.1.1 Zoom the Camera

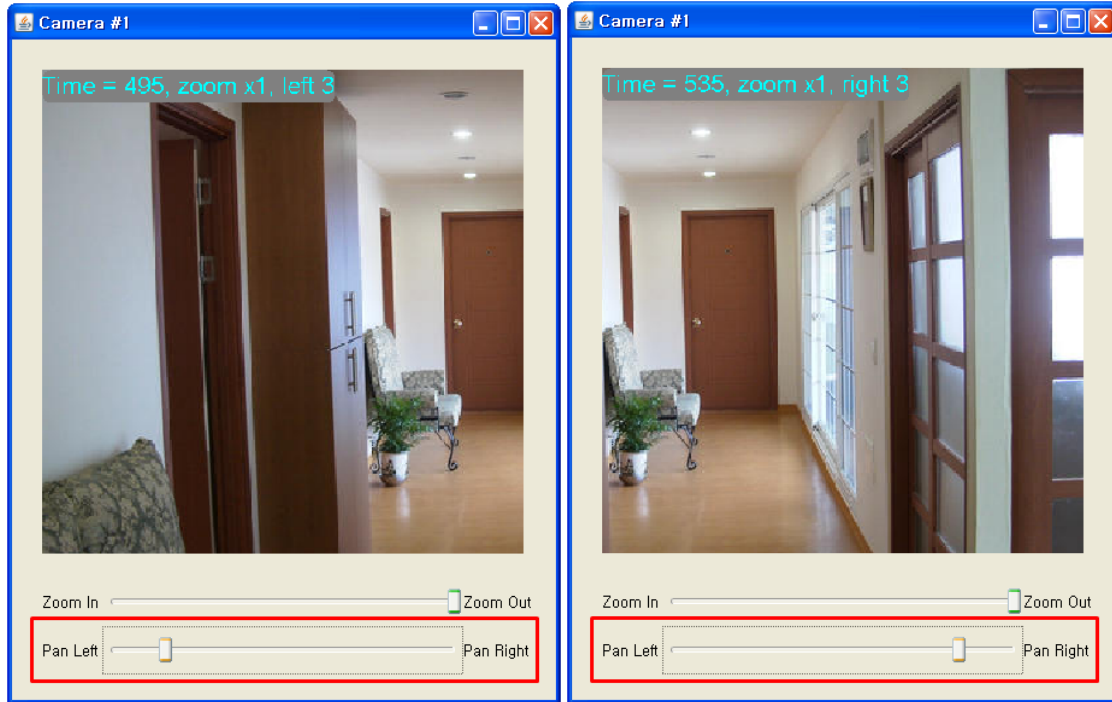
When it is possible to view through the camera, you can zoom in or zoom out the camera by using slider control for zoom like below figure.



Zoom In or Zoom Out

5.1.2 Pan the Camera

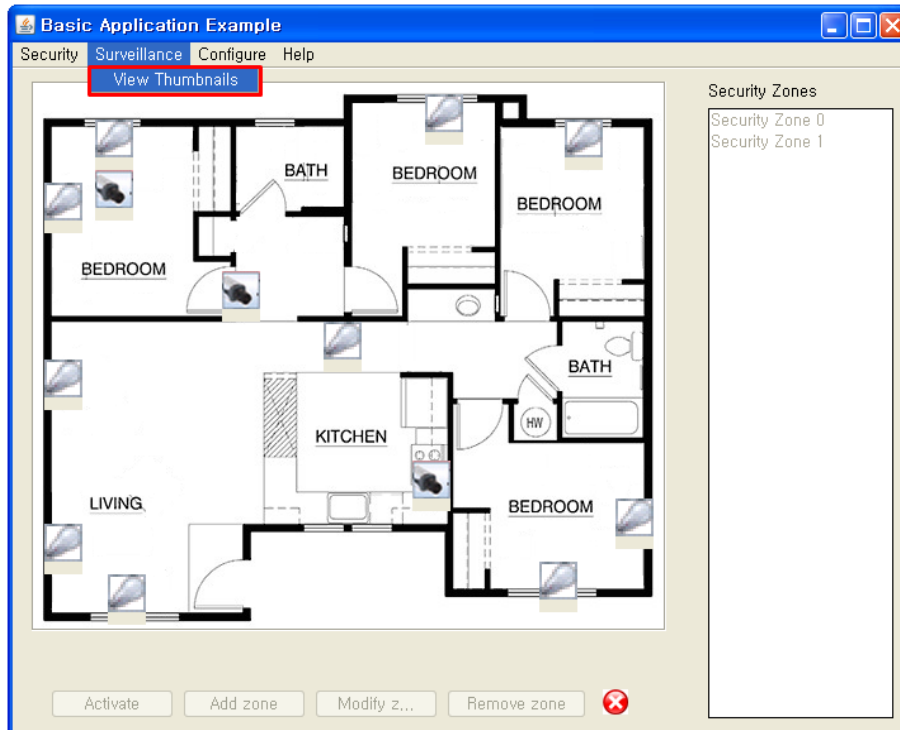
When it is possible to view through the camera, you can pan left or pan right the camera by using slider control for pan like below figure.



Pan Left or Pan Right

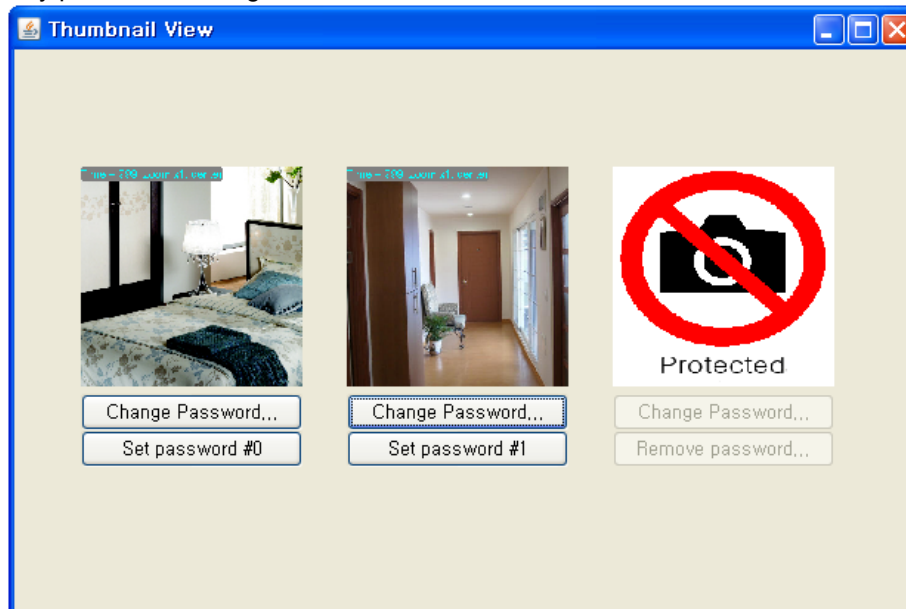
5.2 View in Thumbnail View

You can view in your house or outside through all cameras that installed in house simultaneously. You can use this function through the web interface only. First, selects "view thumbnail" menu item from surveillance menu like below figure.



Process 1 for Viewing in Thumbnails.

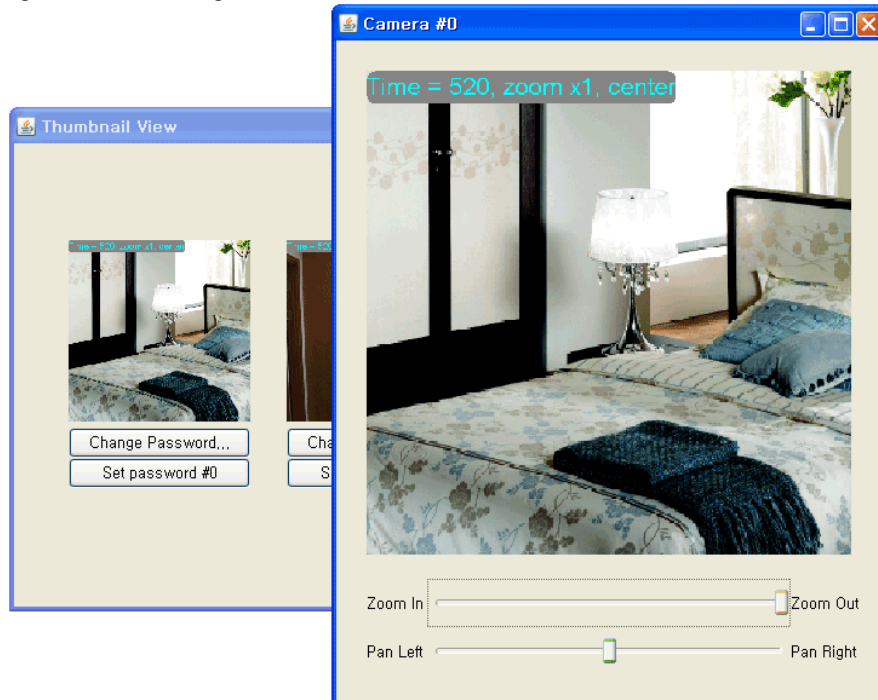
And then, the window for thumbnail view is appeared and you can see all the scene from cameras that is not protected by password like Figure.



Process 2 for Viewing in Thumbnails.

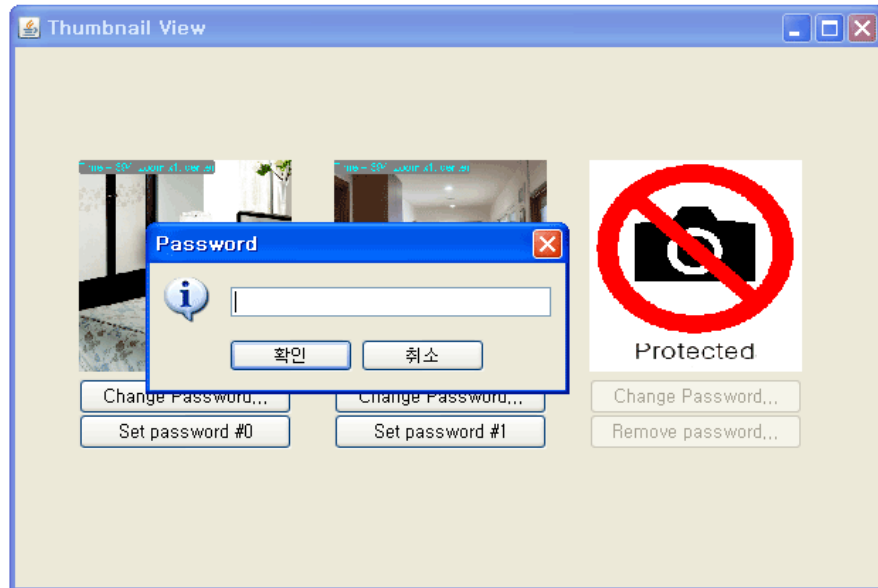
5.2.1 Select One camera

In the window for thumbnail view, you can select one camera that is not protected by password then display is enlarged like below figure .



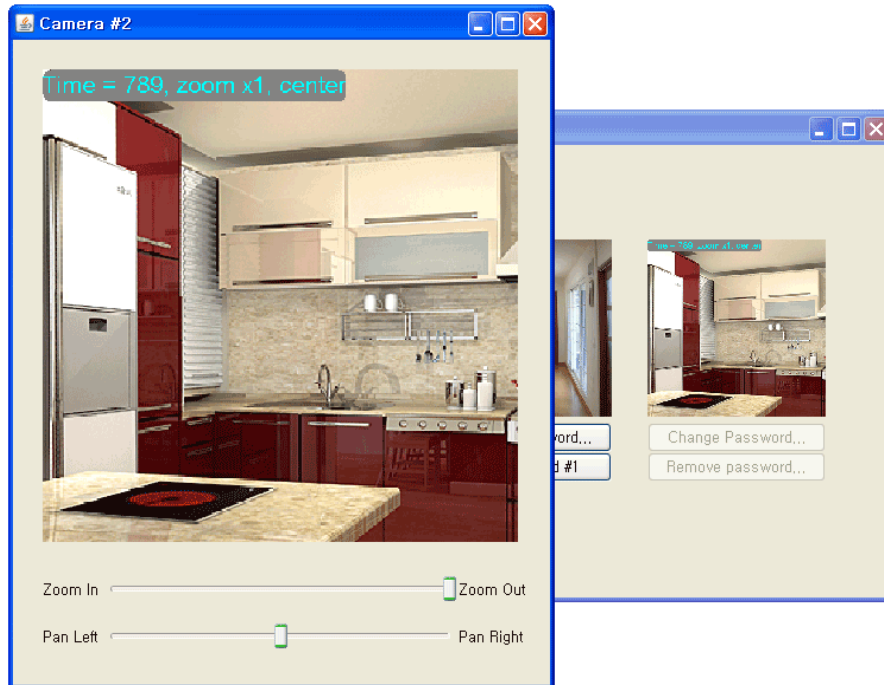
Select One Camera for Enlarging the display (not protected)

If the camera is protected by password, the window for requiring the password is appeared like below figure .



Process 1 for Select One Camera for Enlarging the display (protected)

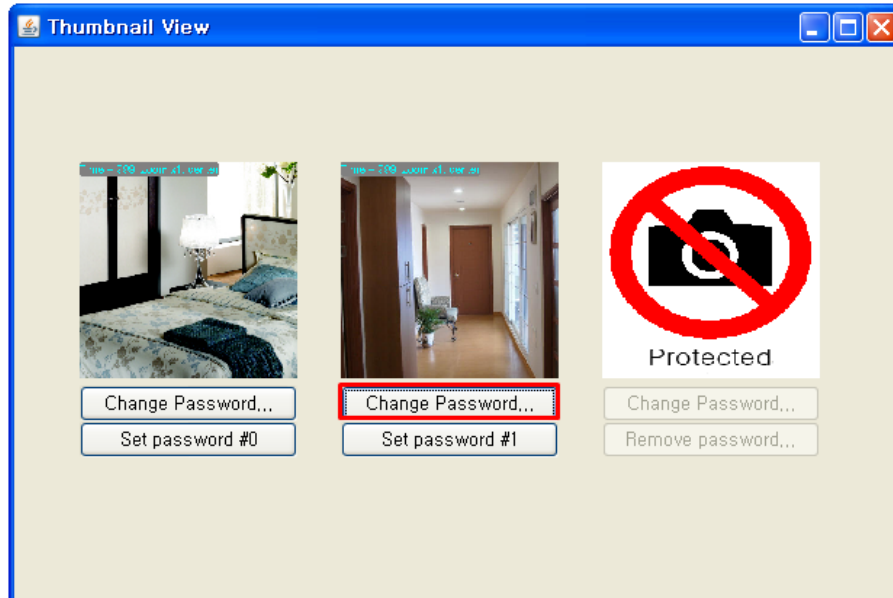
You have to enter the password for enlarging the display and viewing. If the password for camera is valid, you can view with enlarged display.



Process 2 for Select One Camera for Enlarging the display (protected)

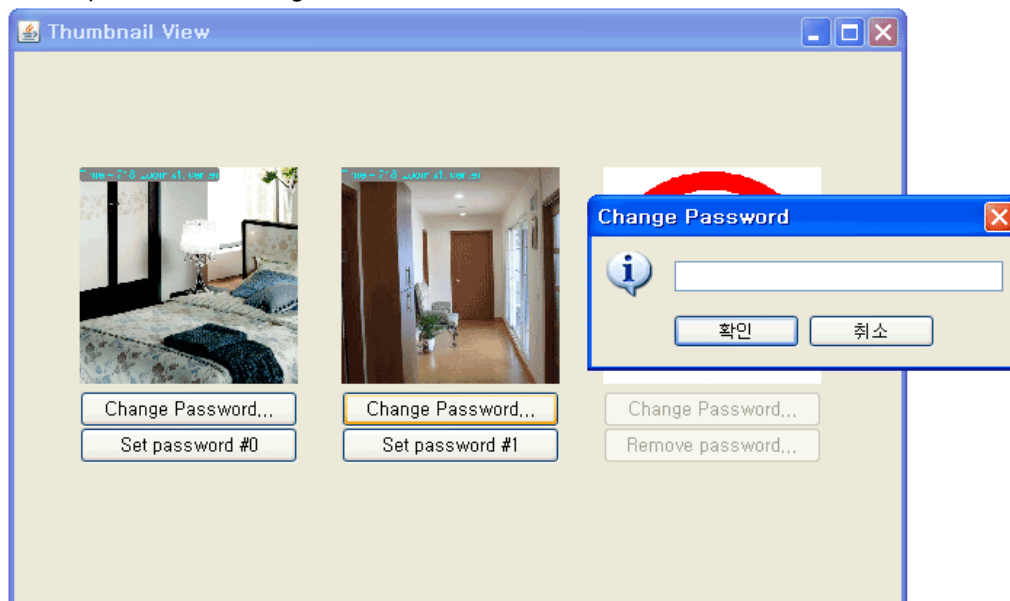
5.2.2 Change Password

In window for thumbnail view, you can change the password for camera. First clicks the Change Password Button like below figure. If the camera is not in viewing, the button for changing password is disabled. Before start to change, change the display to viewing.



Process1 for Changing Password for Camera

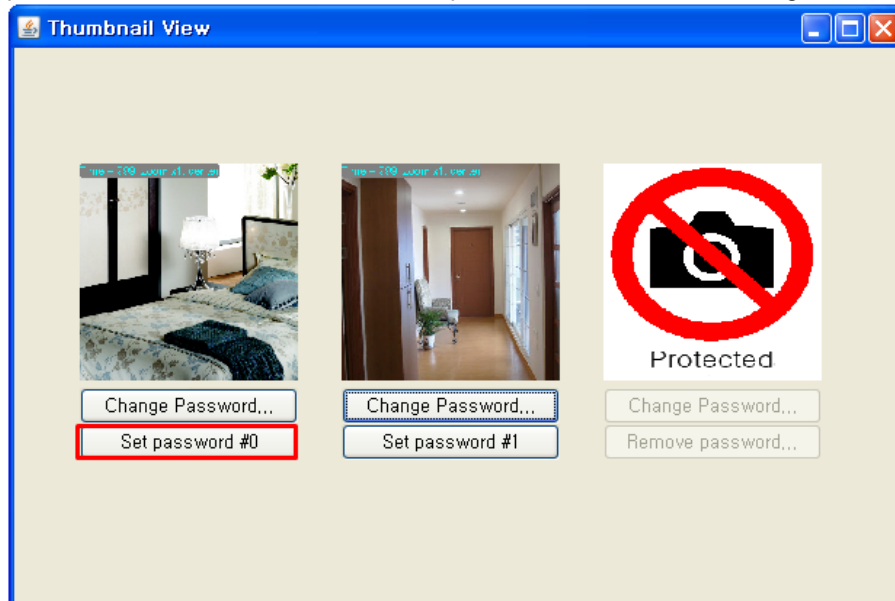
After clicks, you can see the window for requiring new password like below figure . Enter the new password then password is changed.



Process1 for Changing Password for Camera

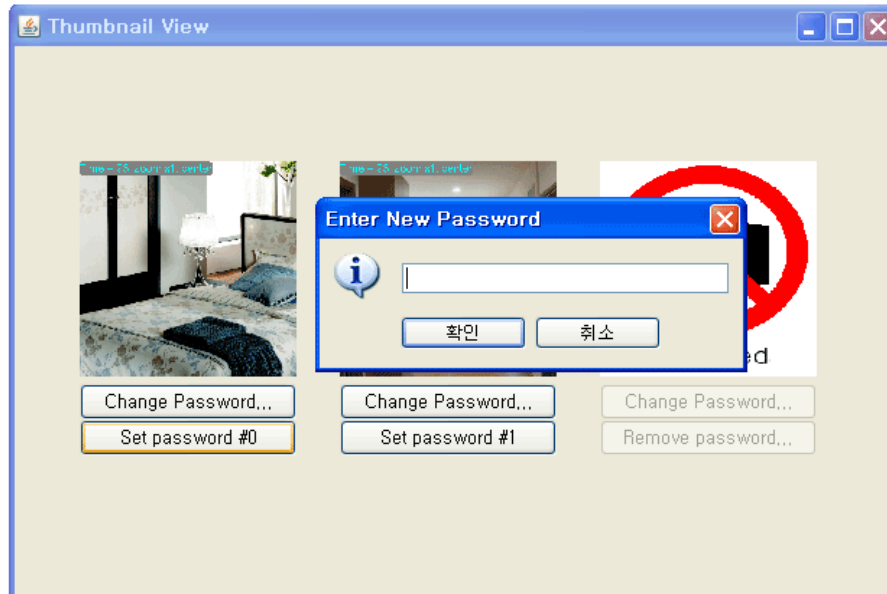
5.2.3 Set Password

If the camera is in not protected state, you can set the password for camera to make the camera protected by password. To do this, first clicks a set password button like below figure.



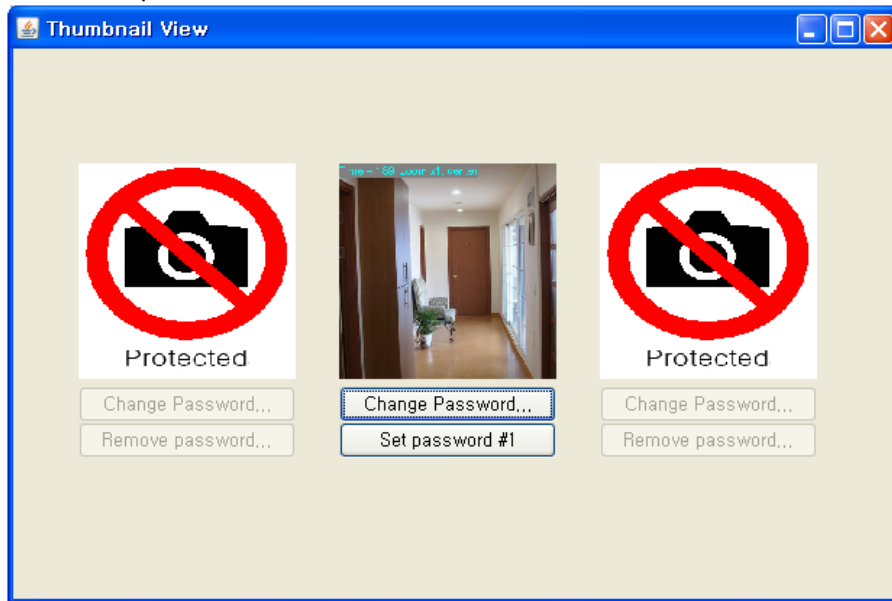
Process1 for Set Password for Camera

And then, you can see the window for requiring new password like below figure. Enter the new password then password is set.



Process 2 for Set Password for Camera

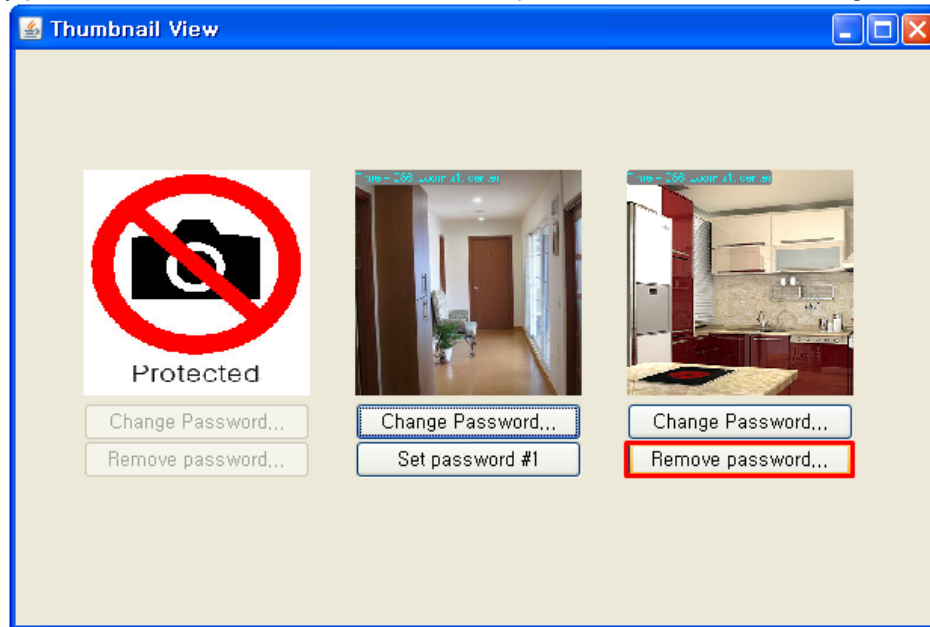
When the window for thumbnail view is opened again, you can confirm the camera that has the password is indicated to protected.



Process 3 for Set Password for Camera

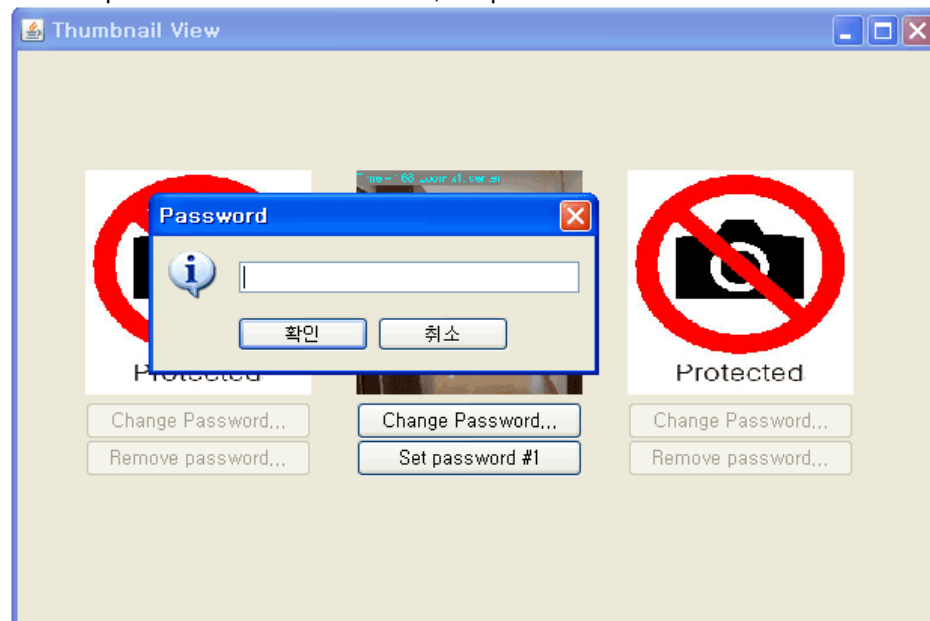
5.2.4 Remove Password

If the camera is in protected state, you can remove the password for camera to make the camera not protected by password. To do this, first clicks a remove password button like below figure.



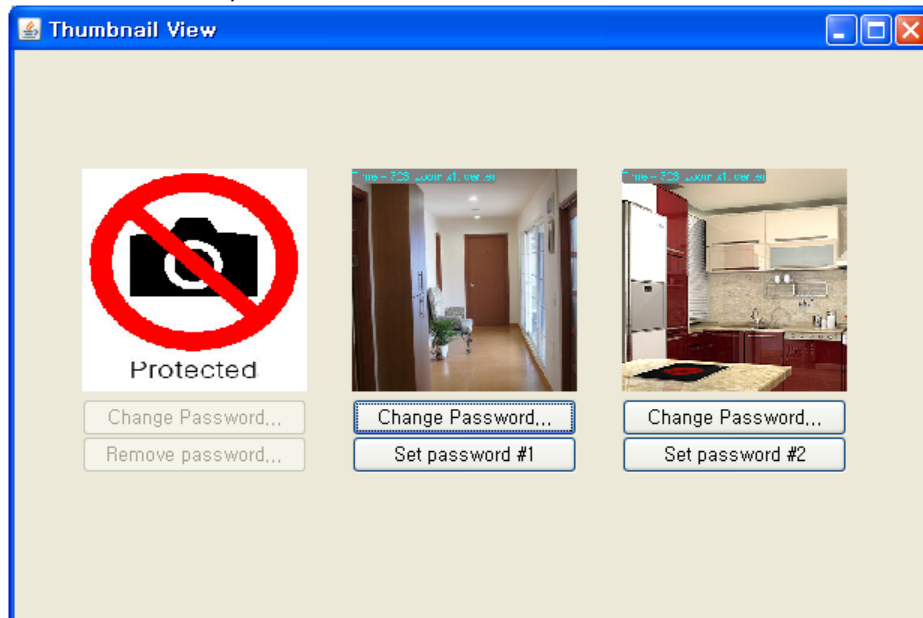
Process 1 for Remove Password for Camera

And then, you can see the window for requiring current password for camera like below figure. Enter the password and if the password for camera is valid, the password is removed.



Process 2 for Remove Password for Camera

When the window for thumbnail view is opened again, you can confirm the camera that does not have the password is indicated to unprotected.



Process 3 for Remove Password for Camera

Part

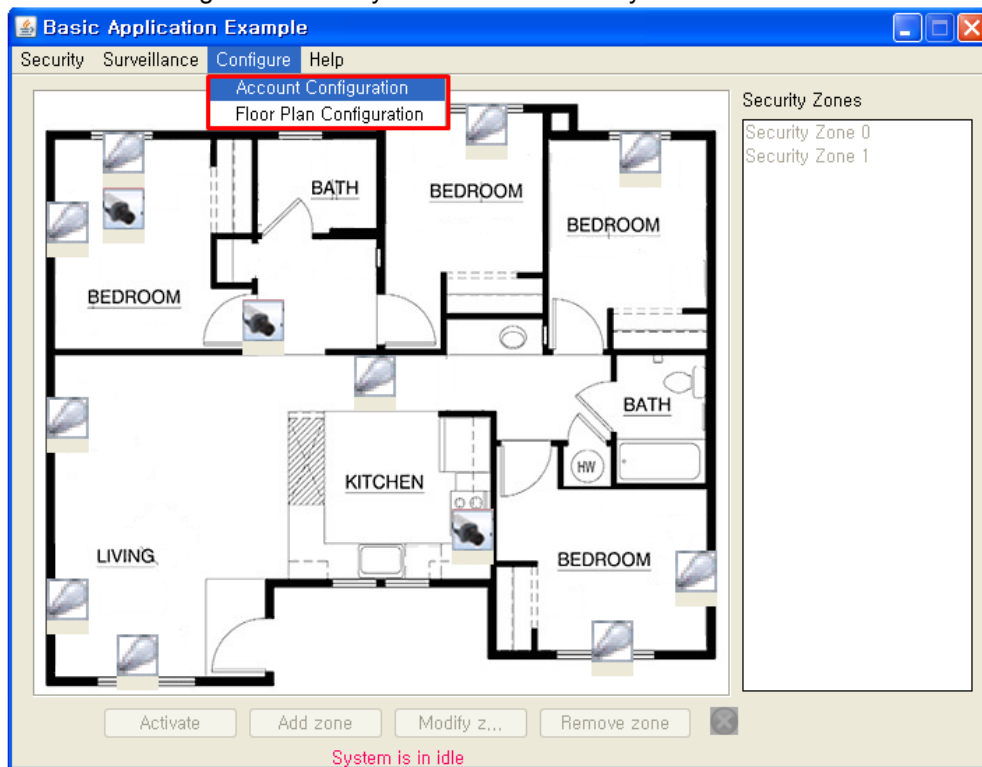


Configuring the SafeHome System

6 Configuring the SafeHome System

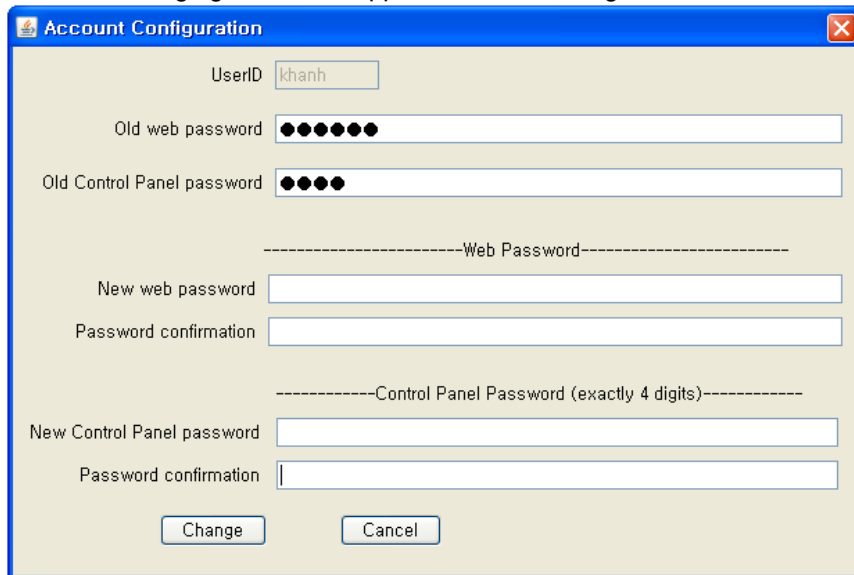
6.1 Account Configuration

You can change the password for web interface and the password for control panel through web interface only. To do this, first clicks the "account configuration" menu item from configure menu like below figure . The "account configuration" is only available when the system is idle.



Process 1 for Account Configuration.

And then the window for changing account is appeared like below figure.

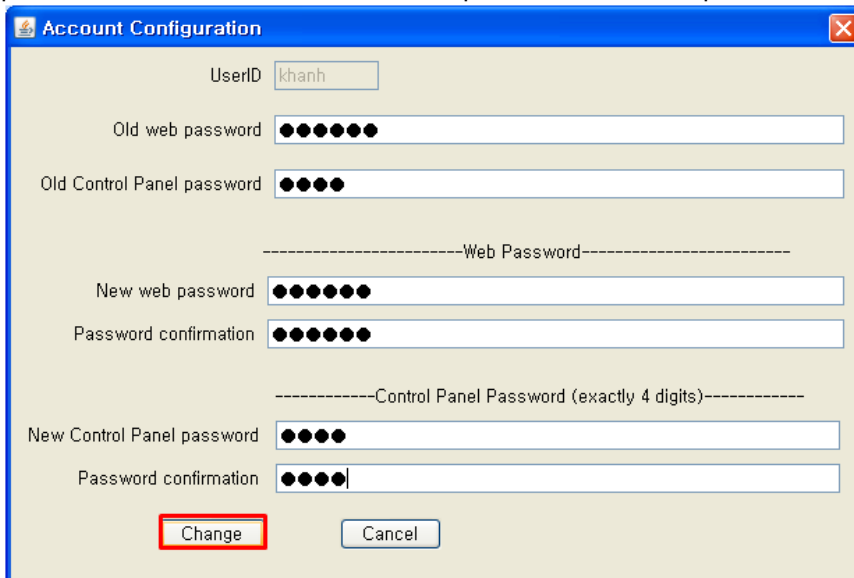


The screenshot shows a window titled "Account Configuration" with a blue title bar and a close button. The window contains the following fields and controls:

- UserID:
- Old web password:
- Old Control Panel password:
- Web Password-----
- New web password:
- Password confirmation:
- Control Panel Password (exactly 4 digits)-----
- New Control Panel password:
- Password confirmation:
- Buttons: and

Process 2 for Account Configuration

Enter the new password for web interface and the new password for control panel.



The screenshot shows the same "Account Configuration" window, but now with the new passwords entered into the respective fields:

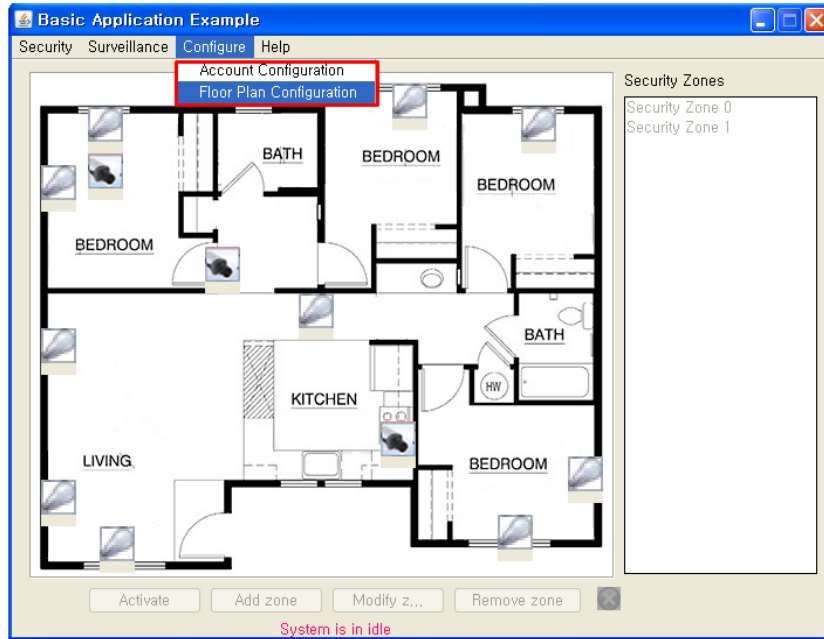
- UserID:
- Old web password:
- Old Control Panel password:
- Web Password-----
- New web password:
- Password confirmation:
- Control Panel Password (exactly 4 digits)-----
- New Control Panel password:
- Password confirmation:
- Buttons: (highlighted with a red box) and

Process 3 for Account Configuration

And then, clicks the change button then the new password is stored.

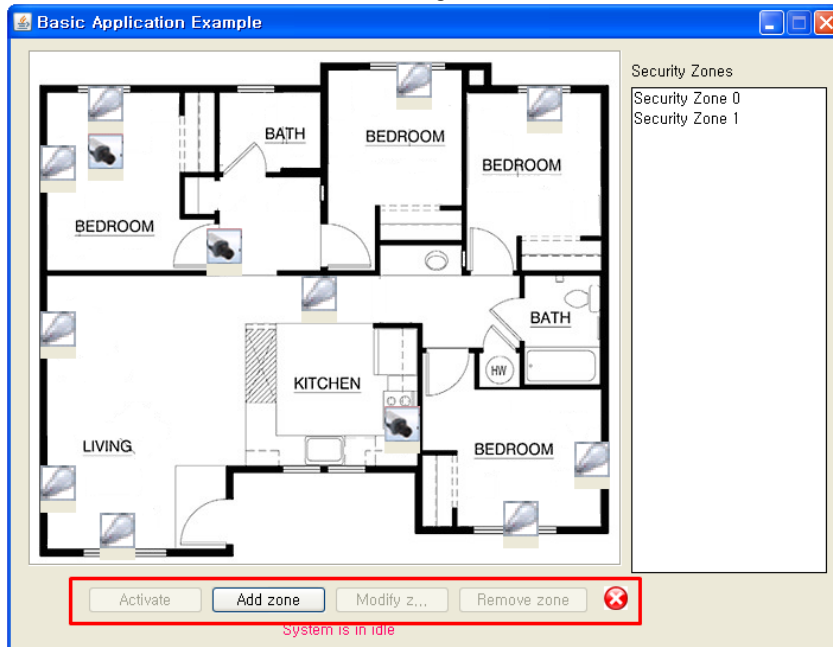
6.2 Floor Plan Configuration

You can manage the security zone through web interface only. you can add, modify, and remove the security zone. You can also select one security zone to activate. To do this, first clicks the "floor plan configuration" menu item from configure menu like below figure . The "floor plan configuration" is only available when the system is idle.



Configure the Floor Plan

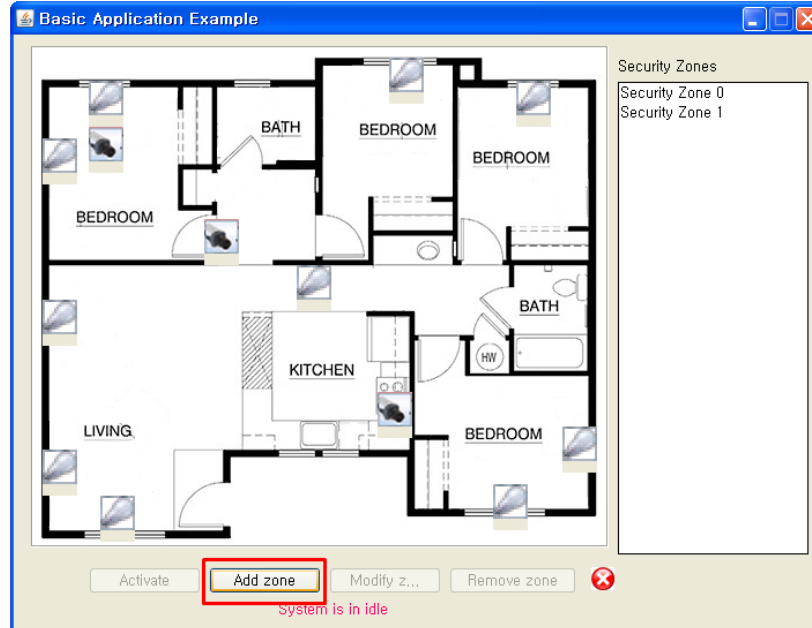
And then the below buttons are activated like below figure.



After clicking the "floor plan configuration" menu item

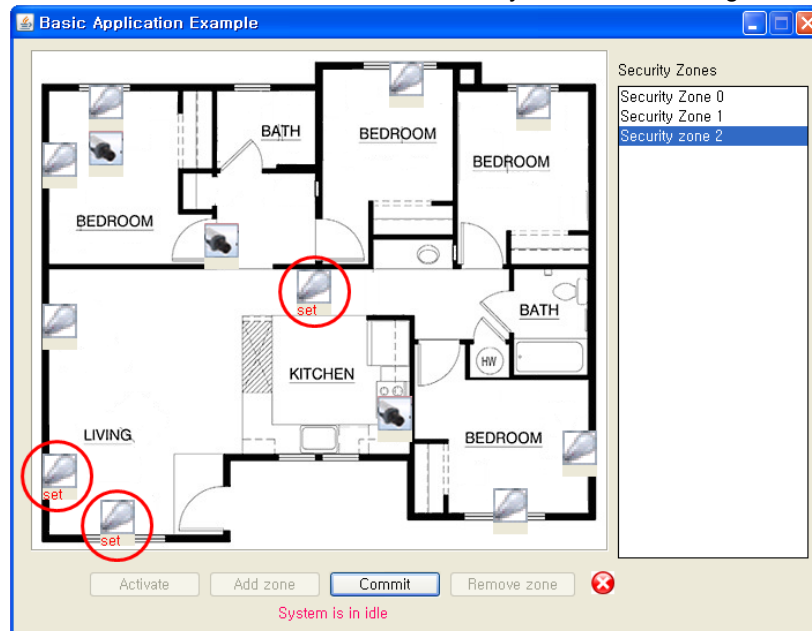
6.2.1 Add Security Zone

You can add security zone include sensors. To this, first clicks the add zone button like below figure.



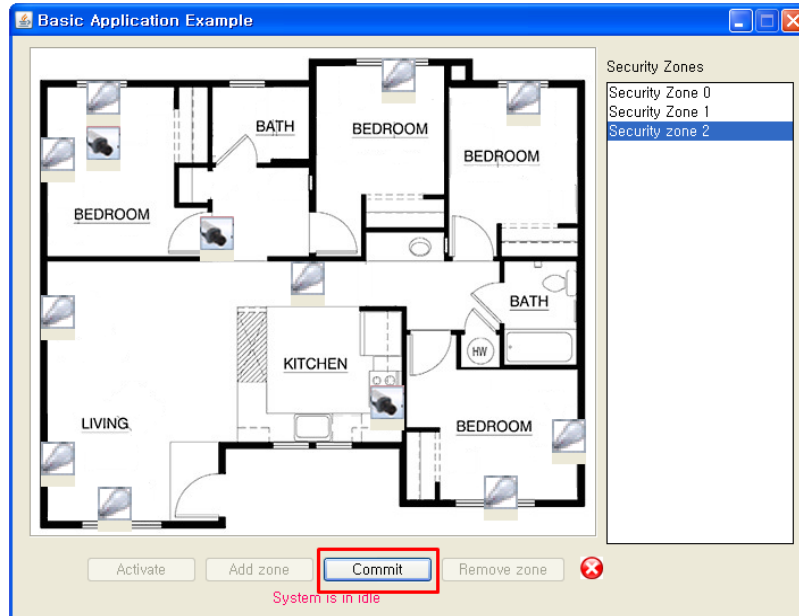
Process 1 for Adding Security Zone

And then, you can select sensors to include in new security zone like below figure .



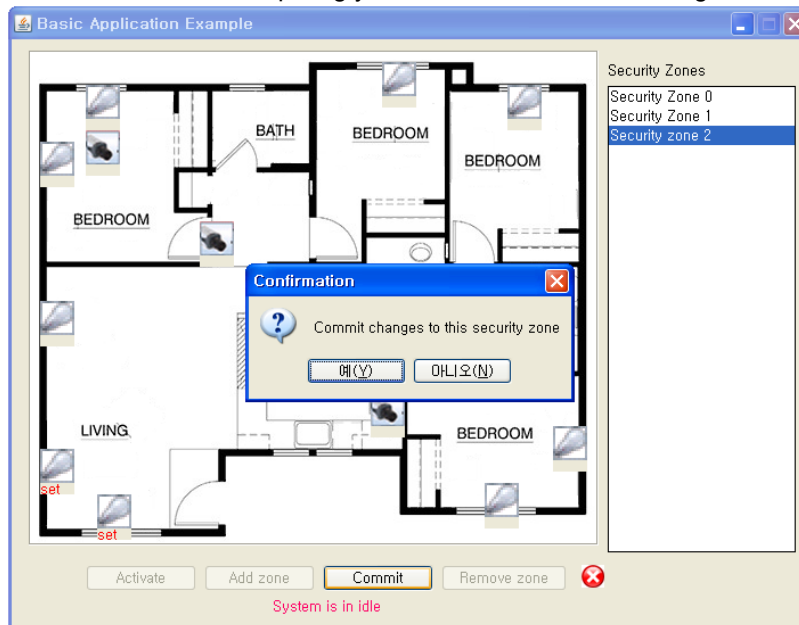
Process 2 for Adding Security Zone

After selecting, clicks the commit button like below figure .



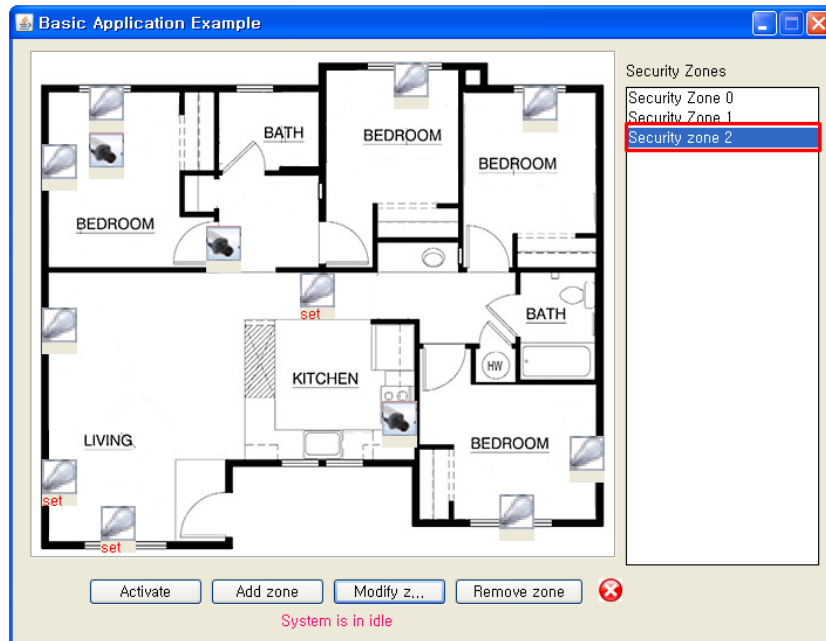
Process 3 for Adding Security Zone

And then, you can see the window for requiring your confirmation like below figure.



Process 4 for Adding Security Zone

After clicking "yes" button, you can confirm the new security zone is added in security zone list. If you click the "no" button, you will be in process 3

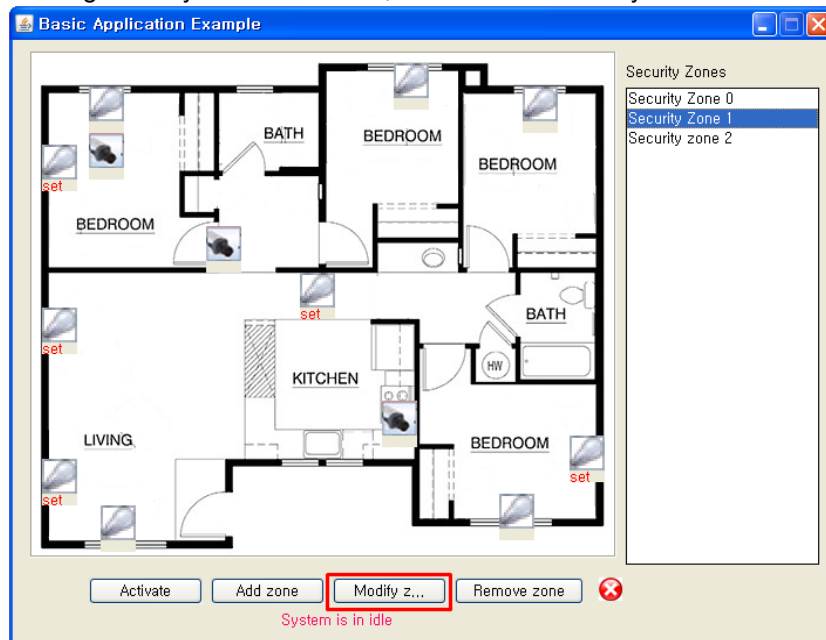


Process 5 for Adding Security Zone

You can cancel this whole process and go out by clicking the round button in right side of buttons.

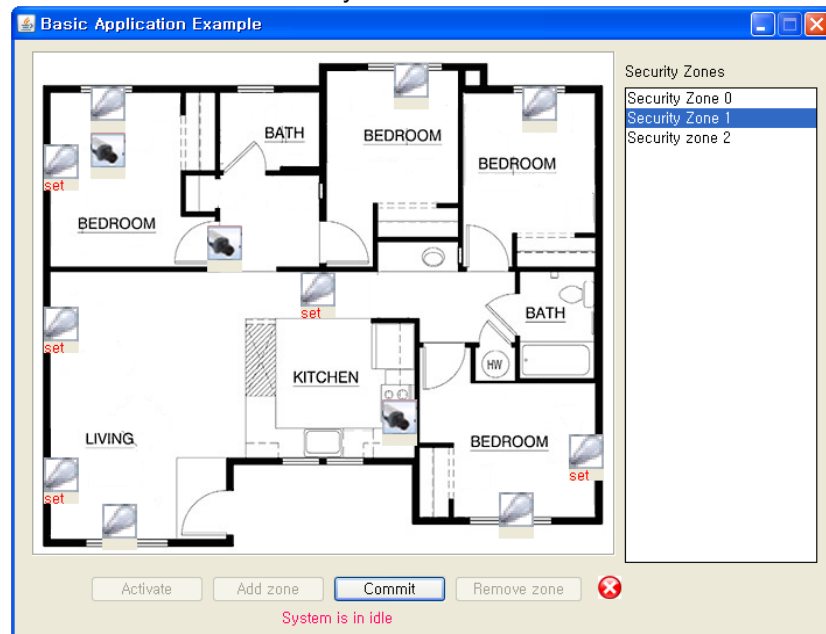
6.2.2 Modify Security Zone

You can modify existing security zone. To do this, first click the modify zone button like below figure.



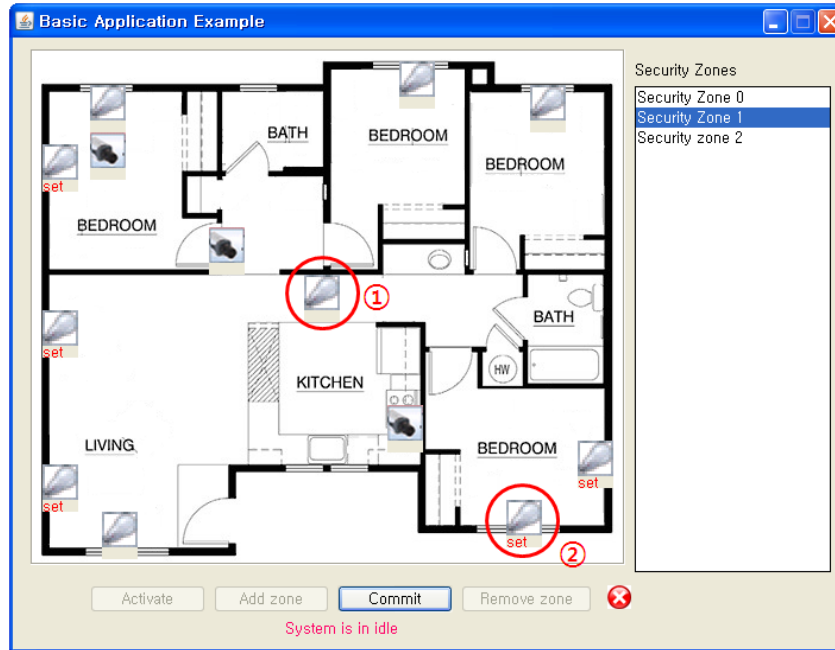
Process 1 for Modifying Security Zone

And then, you can confirm the current states of that security zone like Figure . That is, you can see the what sensors are included in selected security zone.



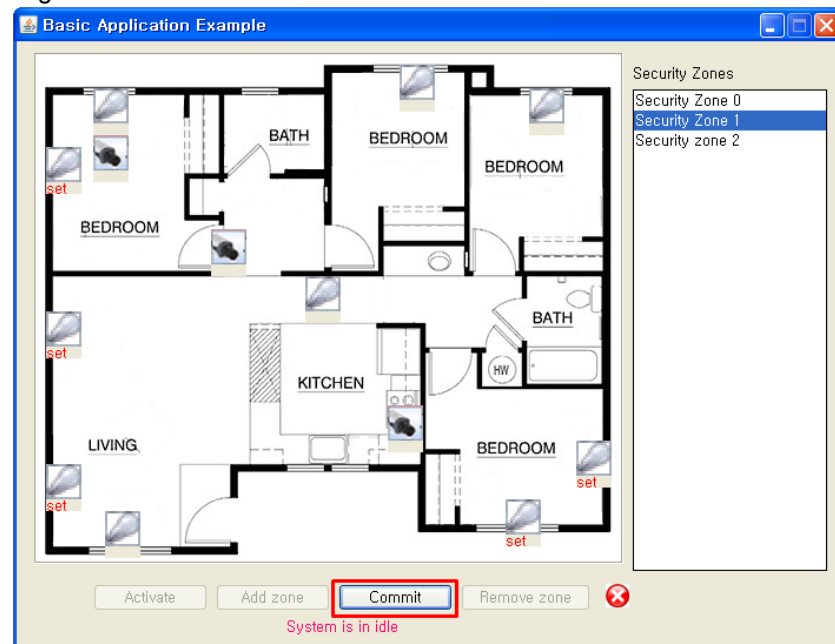
Process 2 for Modifying Security Zone

If you clicks the included sensor, the sensor is excluded in the security zone. If you clicks the excluded sensor, the sensor is included in the security zone like below figure.



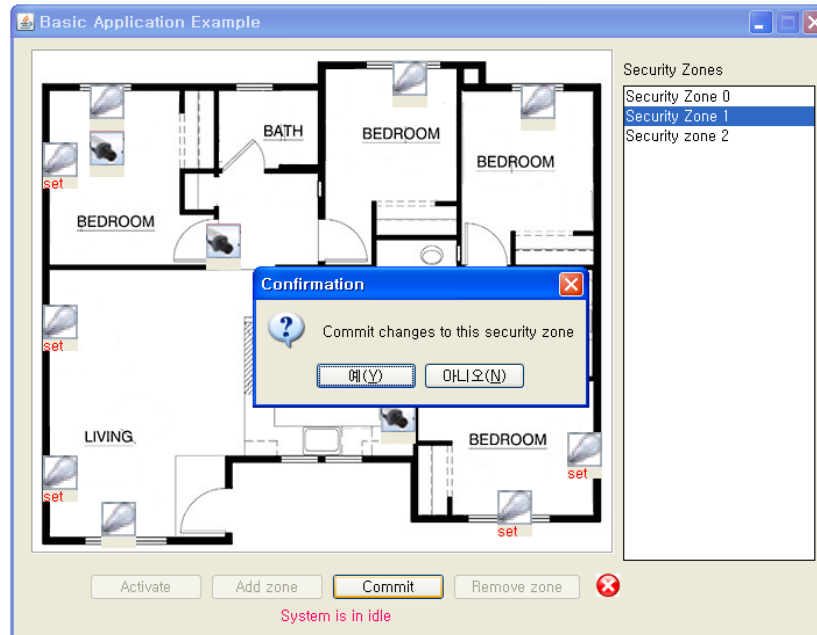
Process 3 for Modifying Security Zone

The sensor ① is excluded and the sensor ② is included. After the configuration, clicks the commit button like below figure .



Process 4 for Modifying Security Zone

And then, the window for confirming the change is appeared, if you clicks yes button, then the security zone is modified, otherwise there is no change.

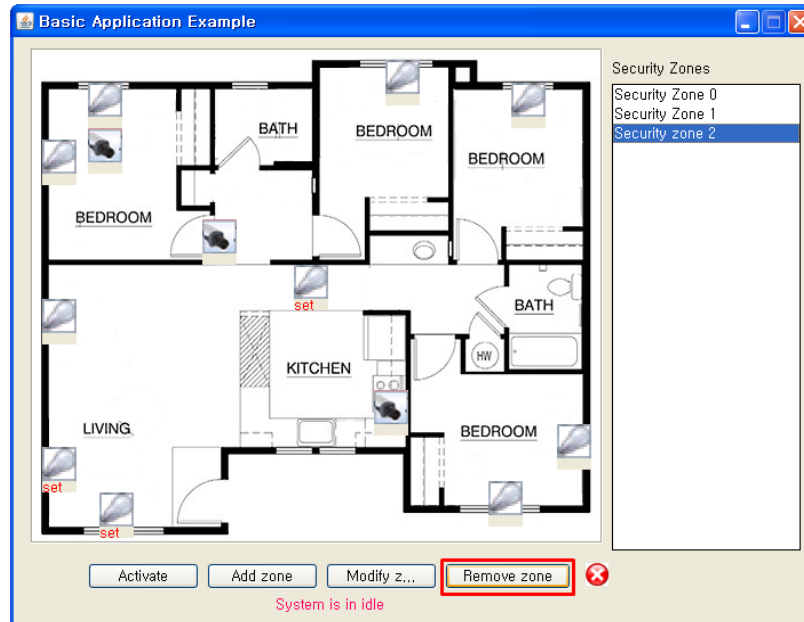


Process 5 for Modifying Security Zone

You can cancel this whole process and go out by clicking the round button in right side of buttons.

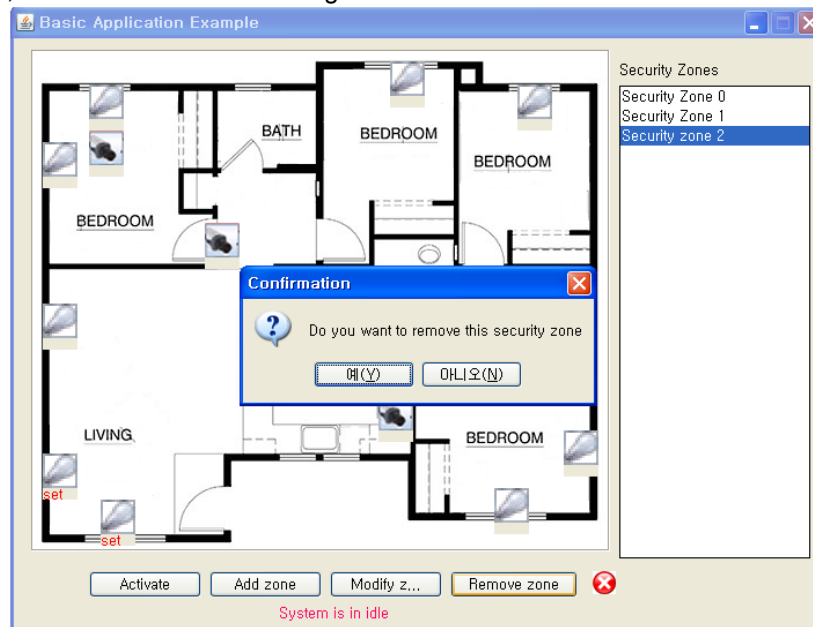
6.2.3 Remove Security Zone

You can remove existing security zone. To do this, first click the "remove zone" button like below figure.



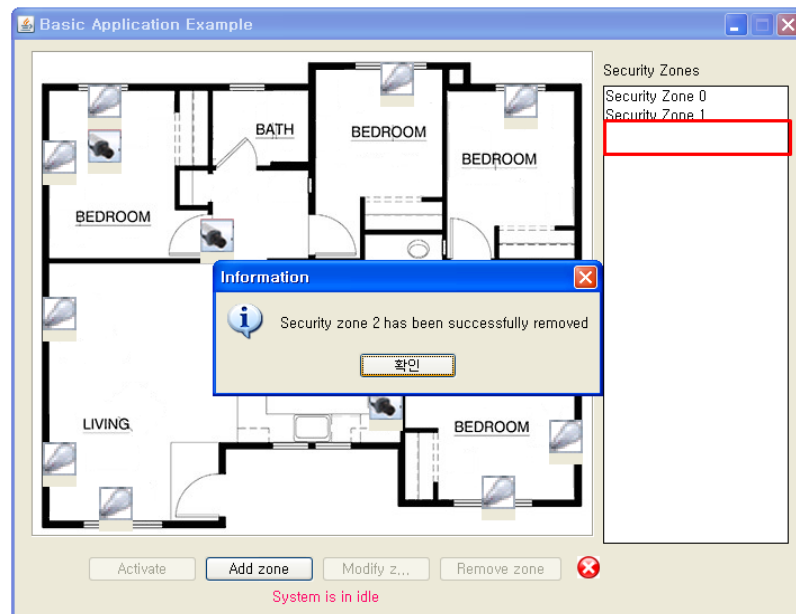
Process 1 for Removing Security Zone

And then, the window for confirming the removal is appeared, if you click "yes" button, then the security zone is removed, otherwise there is no change.



Process 2 for Removing Security Zone

After clicking yes button, you can confirm the informing message for successful removal like below figure

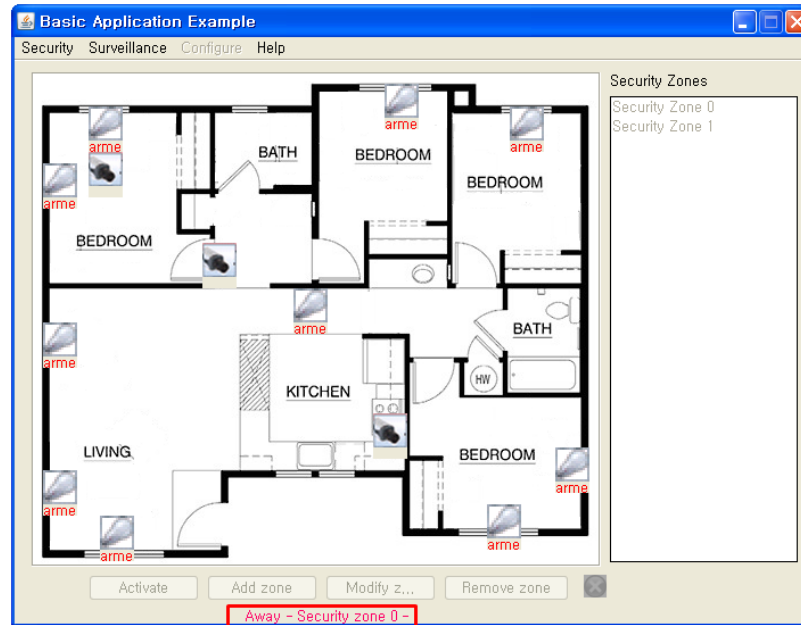


Process 3 for Removing Security Zone

You can cancel this whole process and go out by clicking the round button in right side of buttons.

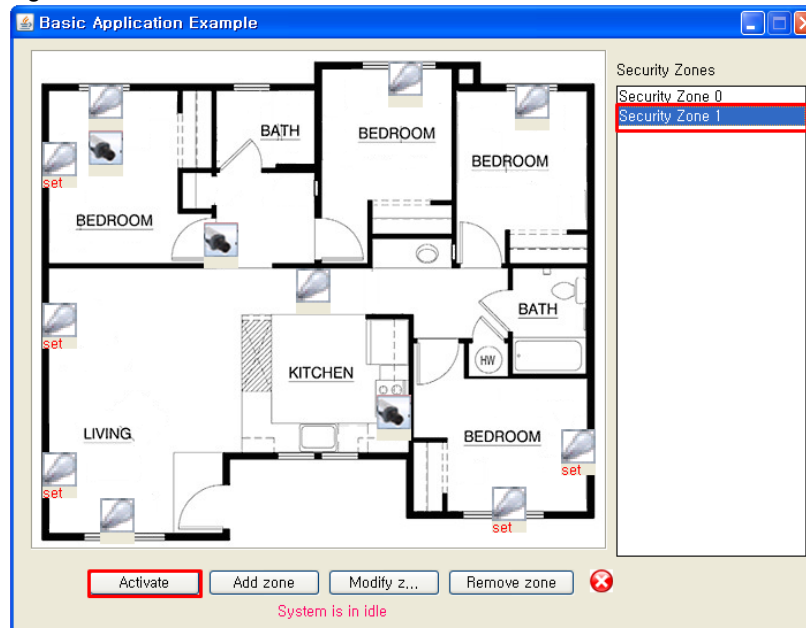
6.2.4 Activate Security Zone

You can choose what security zone is activated. As you can see below figure, the current security zone is security zone 0.



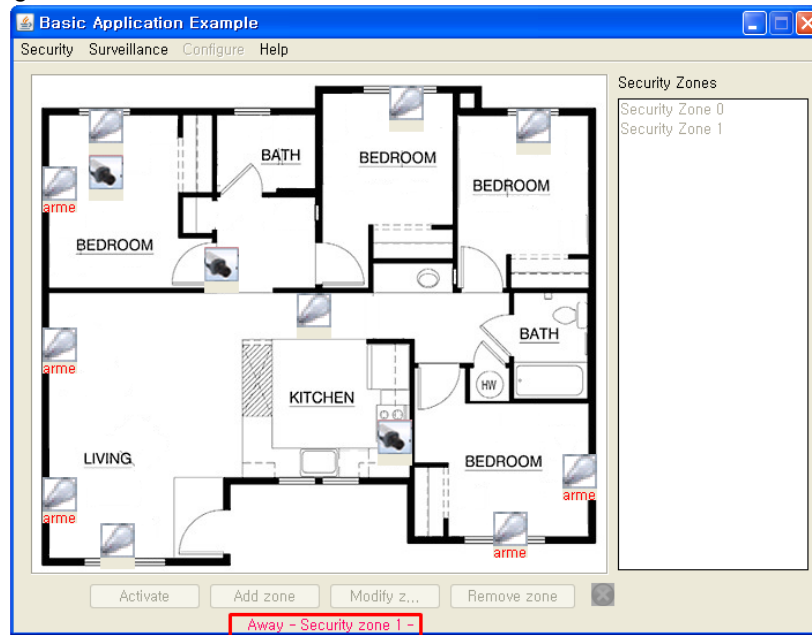
Current Security Zone before Selects new Security Zone.

Set the system is in stay mode and go into "floor plan configuration" menu. To select another security zone, first click the one security zone in right side security zone list. And then click the activate button like below figure.



Process 1 for Activating another Security Zone.

After clicking the activated button, you can confirm the current security zone is changed to security zone 1 in below figure.

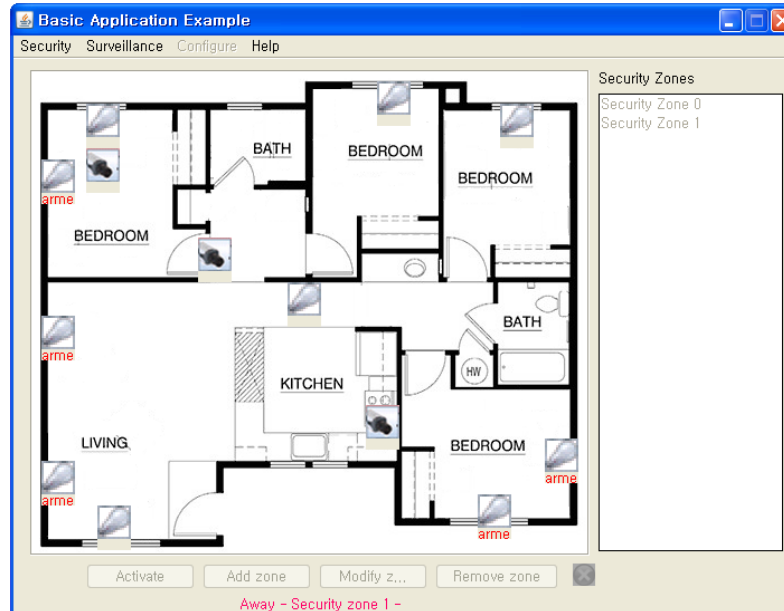


Process 1 for Activating another Security Zone.

You can cancel this whole process and go out by clicking the round button in right side of buttons.

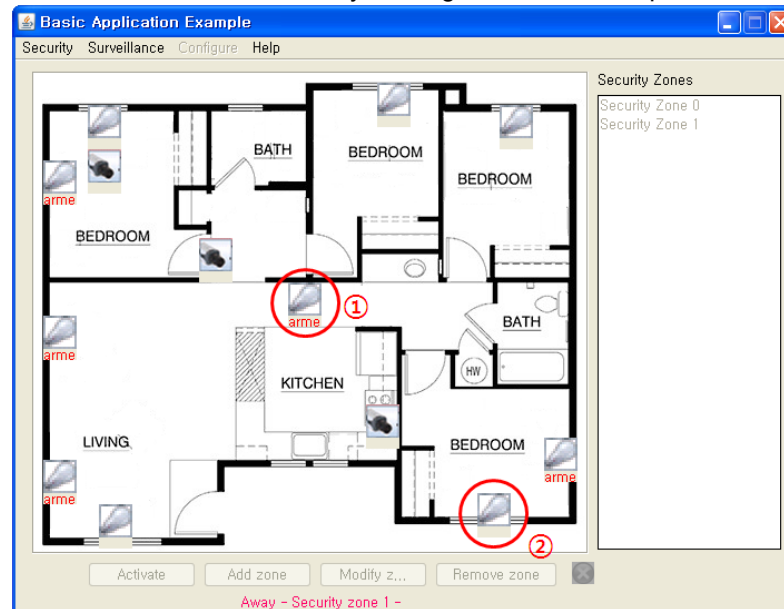
6.2.5 Make Temporal Security Zone

You can make temporal Security Zone without adding new security zone. To do this, first you arm the system like below figure.



Process 1 for Making Temporal Security Zone.

After that, you can arm or disarm the sensors by clicking the icon in floor plan like below figure.



Process 2 for Making Temporal Security Zone.

sensor ① is armed and the sensor ② is disarmed. The temporal security zone does not stored.

Index

- A -

accidents 30
add security zone 50
Audience 5
Away Mode 17, 20

- C -

change the password 47
change the password for camera 41
change the password for web 47
Configure the system 7

- D -

default id and passwords 11
downloading JDK 9

- E -

emergency 25, 26
enter the password 17, 22, 39
Enter the password for camera 33
exit Panic Mode 29
exit from Panic Mode 27

- F -

floor plan 33
floor plan configuration 49

- I -

installation 5
intruder 30

- J -

Javadoc 5
JDK 5 9

JDK 6 9

- L -

LED for armed 17
Log-In 11

- M -

main features 7
make temporal Security Zone 60
manage the security zone 49
modify existing security zone 53

- N -

not protected by password 33

- O -

Observe the house 7

- P -

pan left 37
pan right 37
Panic Mode 25, 26
protected by password 33

- R -

remove existing security zone 56
remove the password for camera 44

- S -

Secure the house 7
security menu 20
selects another security zone 58
set the password for camera 42
Stay Mode 22, 24

- T -

thumbnail view 39, 41

turn off the system 14
turn on the system 10

- V -

view in your house 33
view thumbnail 38

- W -

Window for Control Panel 12
Window for Floor Plan 12

- Z -

zoom in 36
zoom out 36