

# < i-UNIS Manual >

1. Configuration .....	2
1.1. AP Mode.....	2
1.2. Network Mode .....	2
2. How to use .....	3
2-1. Downloading i-UNIS and installation .....	3
2-2. Running the program. ....	4
2-3. Intro Menu.....	5
2-4. External Network List .....	6
2-5. Search for list of terminals that are possible to connect.....	8
2-6. Terminal Menu .....	11
2-7. User( Administrator only ) .....	12
2-7-1. Register users .....	13
2-7-2. Edit users.....	15
2-7-3. Search for users and modify .....	16
2-8. Log .....	17
2-9. Transfer(For Admin Use).....	18
2-10. Settings .....	19
2-11. T&A .....	23
2-12. Push Setting Screen (Administrator Mode) .....	24
2-13. Real Time (Administrator).....	25
2-14. DDNS Setting Screen (Administrator Mode).....	25
2-15. T&A .....	27
2-15-1. T&A Settings .....	28
2-15-2. Synchronization Info .....	30
2-16. About .....	31
2-17. Wifi Setting Screen .....	32
2-18. Push History Screen).....	33
2-19. Automatic Logout.....	33
3. Corrective measures for problems).....	35

3-1. Failure of download the app.....	35
3-2. Failure of connecting between the terminal and Wifi when the terminal is in AP mode) .....	36
3-3. Failure of connecting while the terminal is in AP mode .....	37
3-4. A case of using only static IP .....	38
3-4-1. Terminal Static IP Setting .....	39
3-4-2. Android Phone Static IP Setting .....	40

## 1. Configuration

The AC-F100 can communicate in two user definable modes.

Firstly: AP mode where the AC-F100 acts as a Wi-Fi access point enabling an android device to connect directly to it.

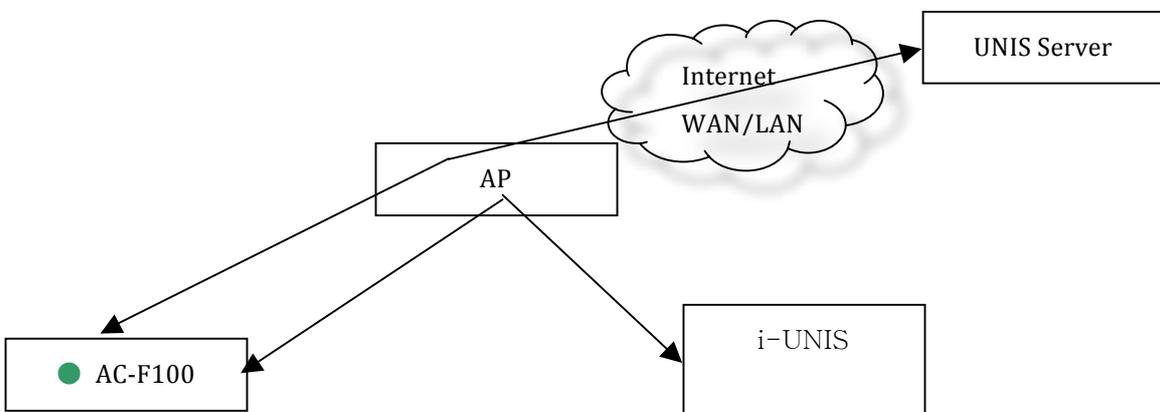
Secondly: Network mode where the AC-F100 connects to a wireless router or access point and through this to a UNIS server or i-UNIS tablet.

### 1.1. AP Mode



- In case of the AC-F100 performing AP function,
- A smart phone can connect to the terminal AP and communicate directly on the same WiFi network.
- Name of default AP : AC-F100 Ap\_serial number, password: 1234567890 [WEP128/Shared Mode]
- Blue LED lights up on the front of the terminal
- This is the default setup when released from a factory

### 1.2. Network Mode



- In case of AC-F100 has already been connected to specific AP
- A smartphone connects to the same AP and communicates with the terminal.
- Name of default AP: unisSvrAP, password: 1234567890 [WPAPSK\_AES/Shared Mode]
- Server AP setup above can be modified in the setting menu on the terminal.
- Green LED lights up on the front of the terminal

To change modes between AP and Network on the AC-F100.

On the AC-F100 terminal itself press and hold the F4 key until the unit sounds. You can now change between AP(Blue) and network mode(Green) by pressing F1

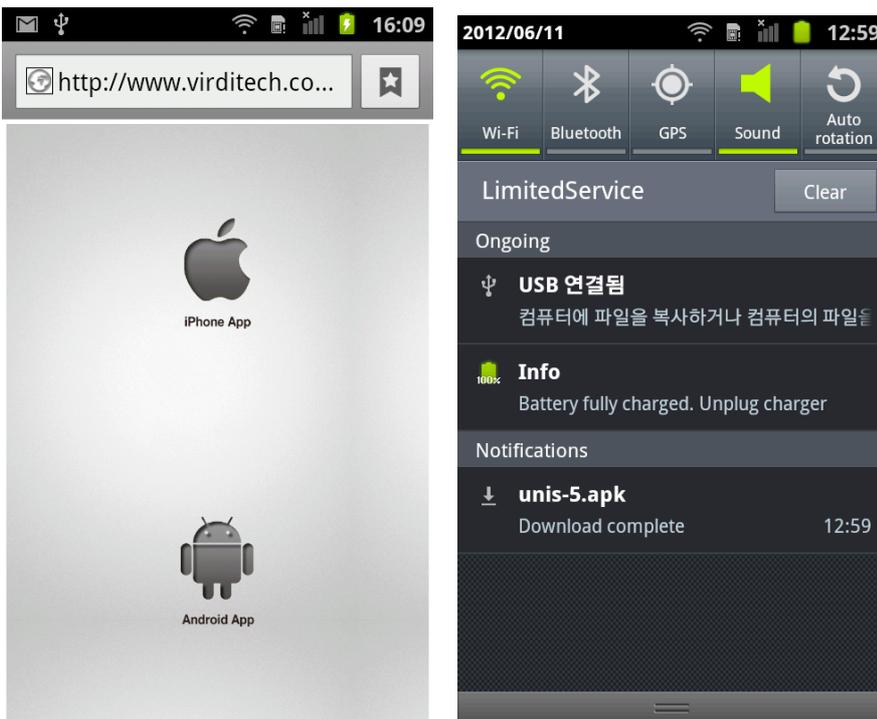
## 2. How to use

### 2-1. Downloading i-UNIS and installation

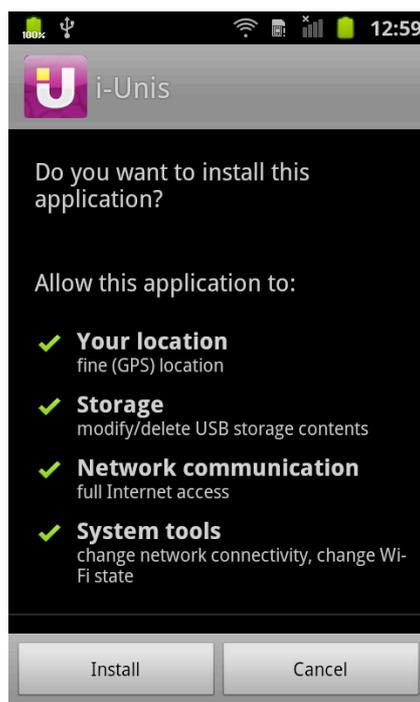
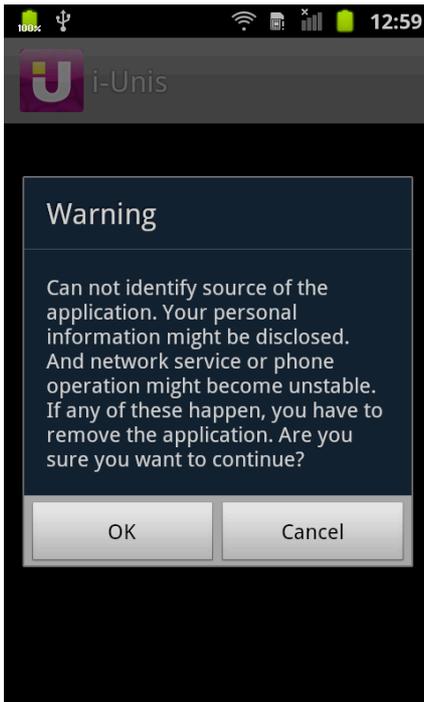
Connect to <http://www.virditech.com/iunis/> in the Android phone browser.

Tap the Android App icon on the bottom and download the application.

Drag down the downloading condition bar on top and check the downloading.



When warning message box appears, press OK and install.



2-2. Running the program.

Tap i-UNIS icon and run the program.



### 2-3. Intro Menu

When you run the application, the screen of selecting the network will be displayed.

- [Internal Net] Button: Select when AC-F100 and iUnis app is in same net. Moves to the terminal search screen.)
- [External Net] Button: Select when iUnis app connects to AC-F100 of the remote site or place. Moves to the external net list screen.)
- [T&A] button : Move to the T&A menu.
- [WiFi setting] button : Move to WiFi setting screen.
- [About] button : Move to application info screen.
- [Push] Button: Moves to push history screen.



<Intro Menu Screen>

## 2-4. External Network List

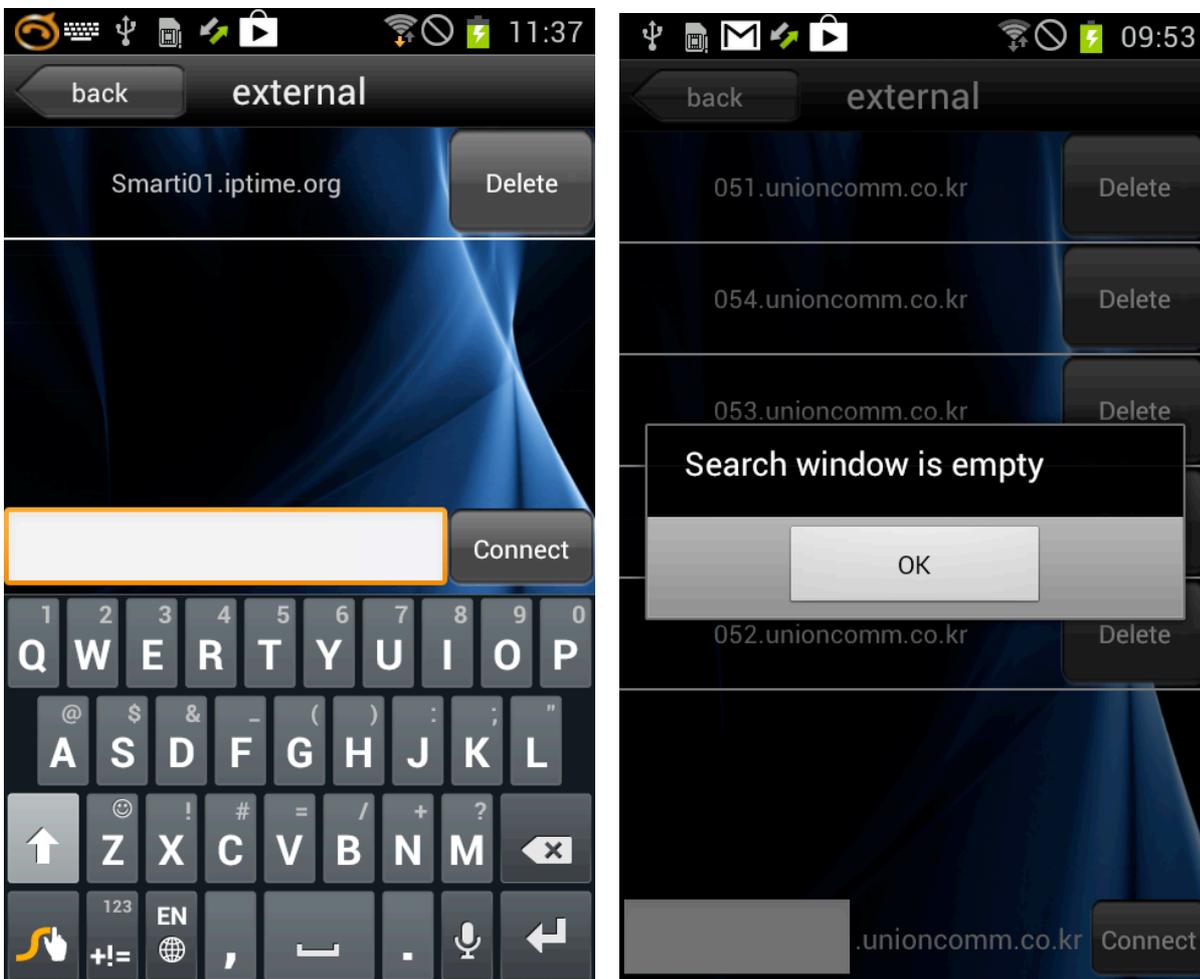
When you connect to external network, host names registered in DDNS server should be enrolled.

When using DDNS service, The router needs to have port forwarding feature.

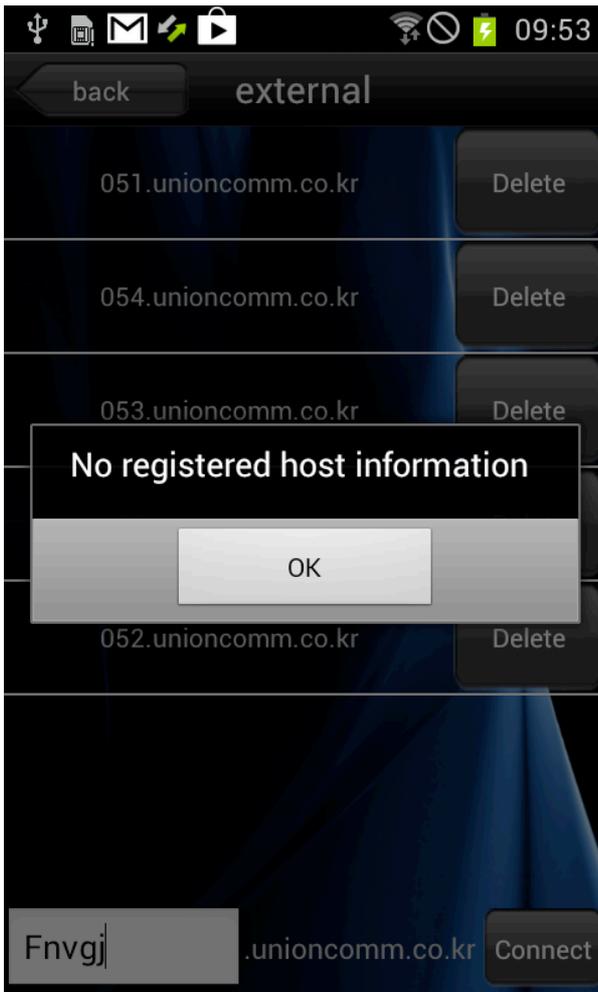
Refer to router user manual and iUNIS external interworking manual for detailed setup.

If you click terminal button on external network menu, it will move to external network list screen.

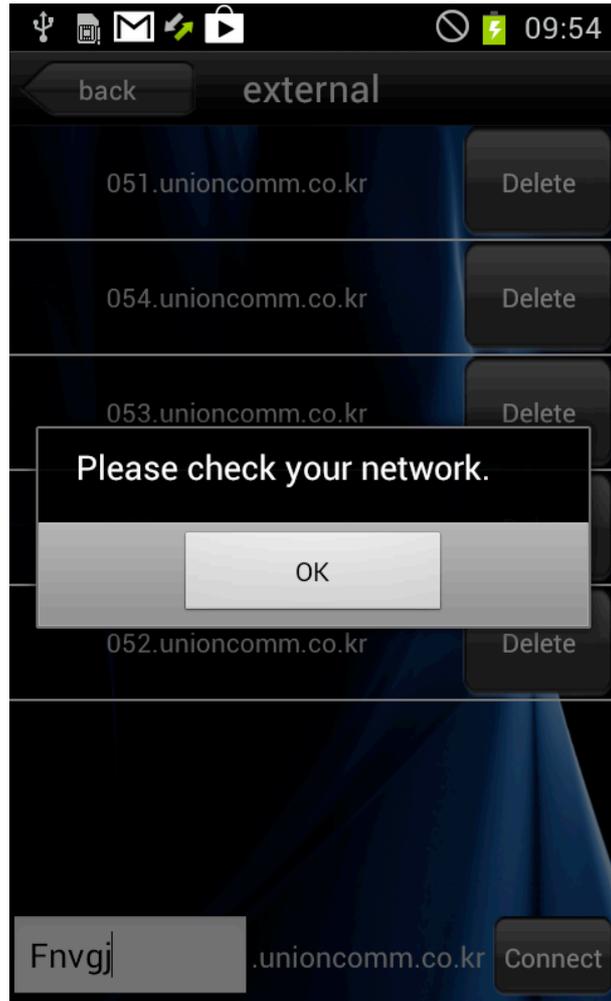
- [Back] : Move to the intro menu
- [Host Name List] : Successfully connected AC-F100 tries to connect as a registered host name
- [Delete] : Delete registered host name server.
- [Connect] : Try to connect to new host name server



<A case of empty search window>



<A warning of not having registered host information or when there is no registered host information>.



<When iUnis is not connected to internet>

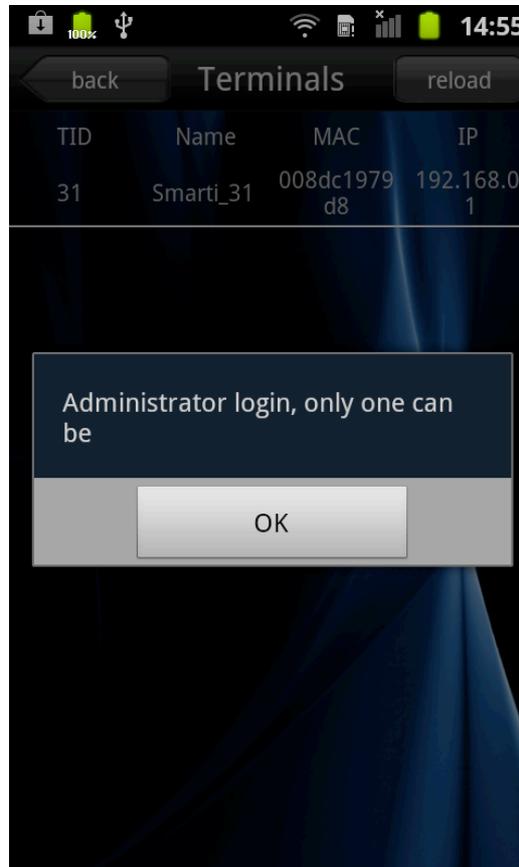
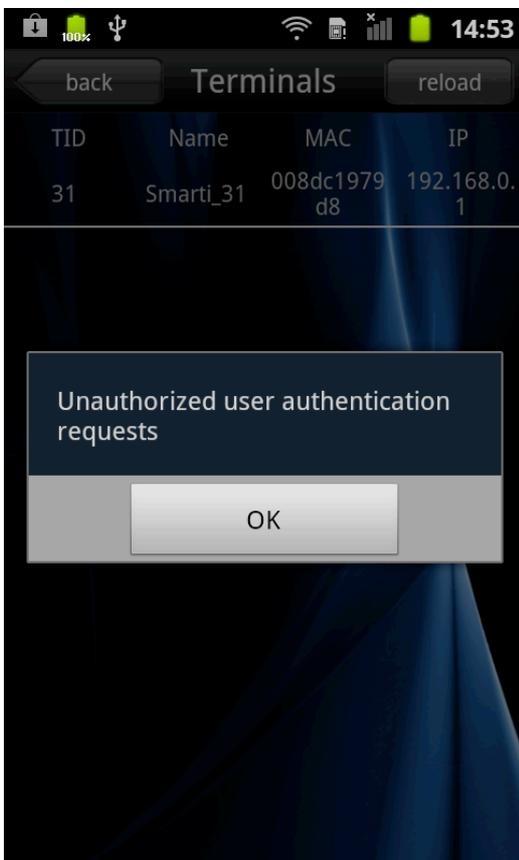
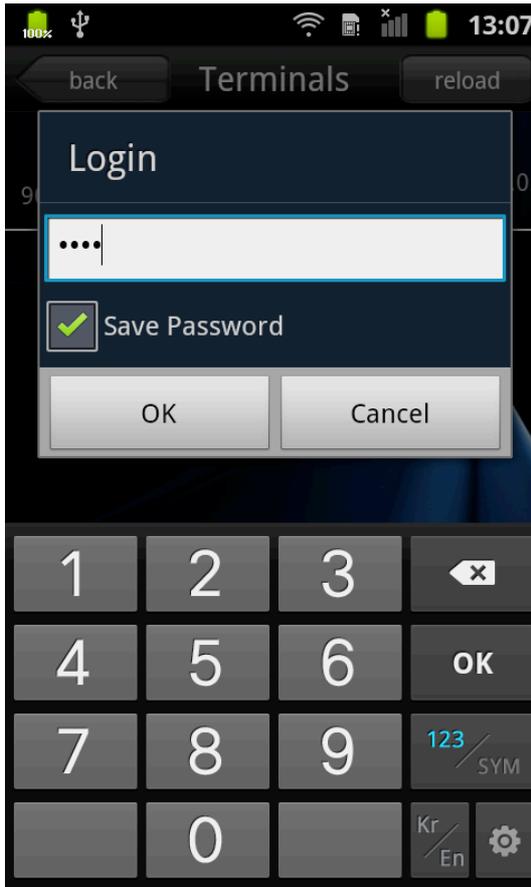
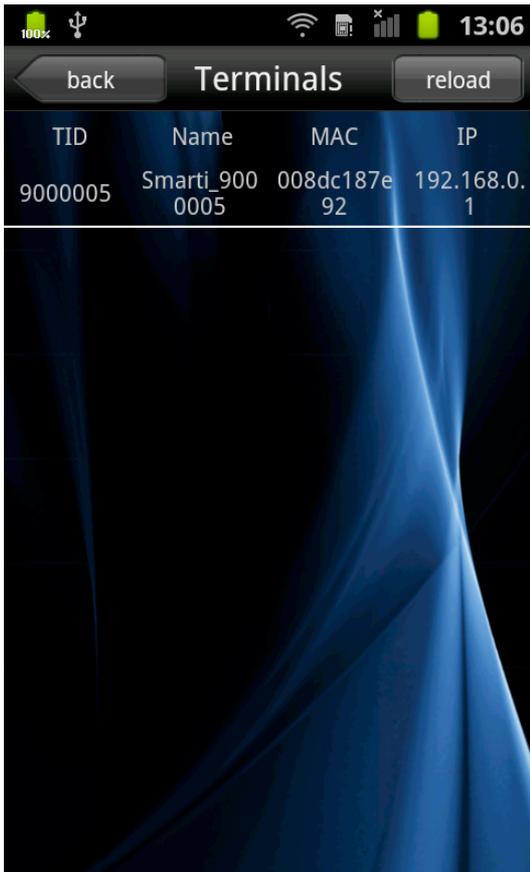
## 2-5. Search for list of terminals that are possible to connect

This screen shows you a list of current possible terminals to connect. At the bottom, currently connected SSID or 3G connection will be exposed or revealed or displayed.

If you select inner network, when you tap terminal on intro menu screen, it will move to searching for terminal list screen.

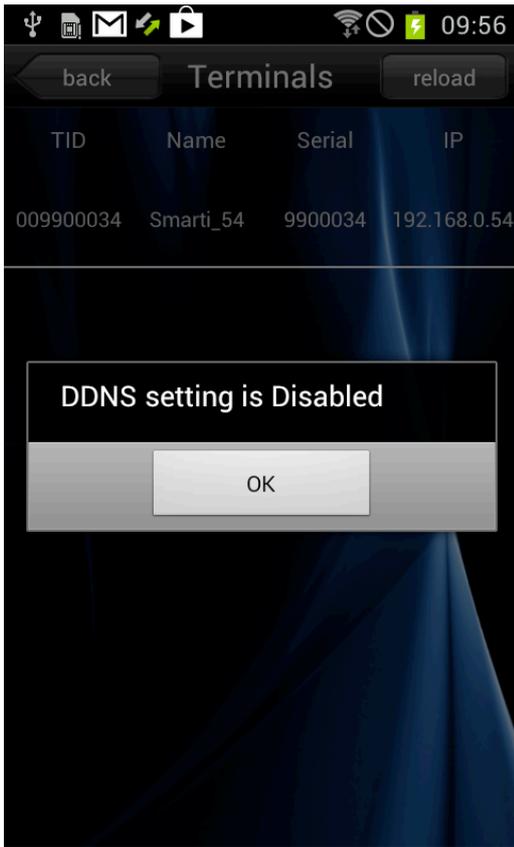
If you select external network, when you choose a list, or try to connect a new one on the host name list, it will move to searching for terminal list screen.

- Network Mode : All terminals connecting to the same AP can be shown.
- AP Mode : Terminals which have been tried to connect can only be shown.
- [Back]: move to the previous page
- [Refresh]: Search for list of terminals again
- [AC-F100 List]: Login dialog of a chosen terminal is shown.
  
- Password log in : Type your password on login dialog and click "OK". You can log in as an administrator.
- Fingerprint log in : Leave login dialog empty and click "OK". AC-F100 will be changed as a state of waiting for input. When you put your FP on AC-F100 for authentication, it will allow you to log in as user or admin mode depending on authority.
- Card log in : Leave login dialog empty and click "OK". AC-F100 will be changed as a state of waiting for input. When you put a card on AC-F100 for authentication, it will allow you to log in as user or admin mode depending on authority.
- Default password is '9999' and it can be changed on terminal setting menu.
- In admin mode, only one admin at a time can log in per terminal.
- In user mode, a maximum of 9 people at a time can log in per terminal.



<Unauthorized user authentication request>

<2 or more administrators request authentication >



<DDNS setting is disabled while connecting to external nets.>

## 2-6. Terminal Menu

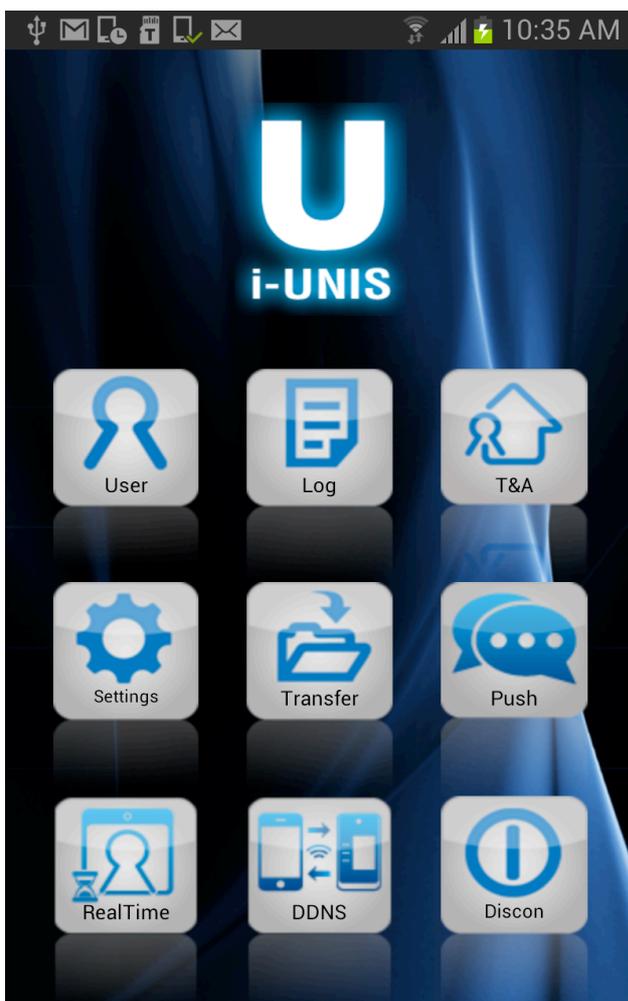
This screen shows terminals and available menus after login.

When a terminal is successfully connected, it will move to the terminal menu.

If you log in as an admin, all menus will be activated.

If you log in as a user, user, settings, transfer and real time button will be deactivated.

- [User]: Register, delete, modify and upload users.
- [Log]: Searching for access records
- [T&A]: Searching for T&A
- [Settings]: Searching and modifying set value of a terminal
- [Transfer]: Sending uploaded users from other terminals
- [Discon]: Disconnecting
- [RealTime] : Move to display realtime image screen.
- [DDNS]: Moves to DDNS setting screen for linking external nets
- [Push] Button: Moves to push edit screen.



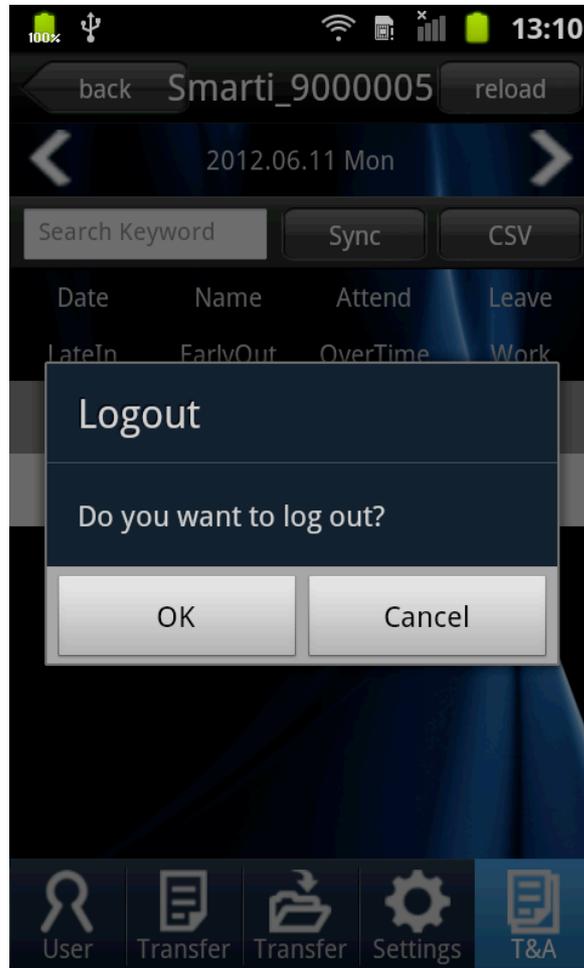
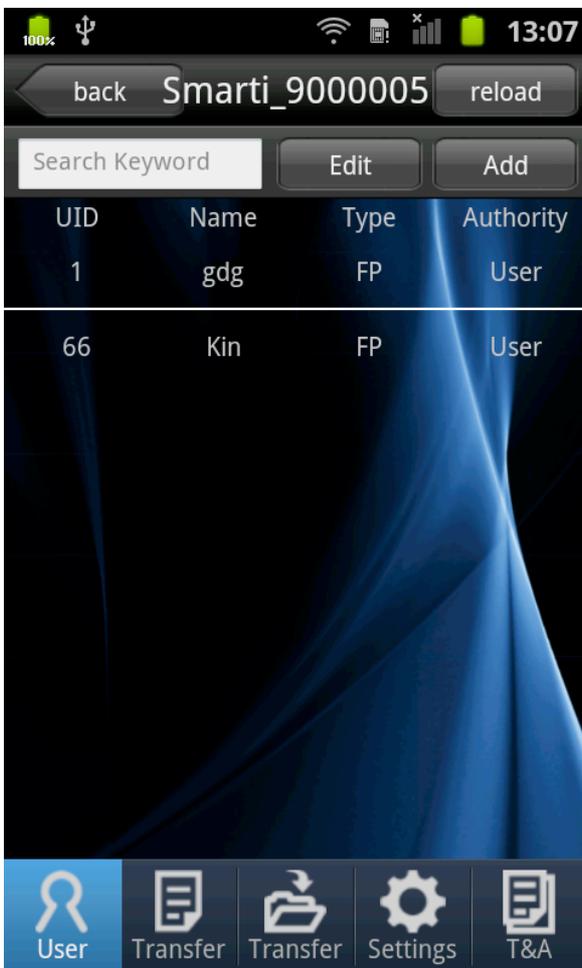
## 2-7. User( Administrator only )

This screen is for managing user information. (Register, Delete, Modify and Import)

When you tap the user icon, it will move to the registered user list screen.

If you type a word in the search box, you will get all the results that have the word.

- [Back]: Tap OK when logout dialog appears to disconnect it from a terminal, and it will move to the intro menu screen.
- [Reload]: Search for the user list again.
- [Edit]: Change to the user list edit mode
- [Add]: Move to the user registration screen.
- [User list]: Move to searching for a chosen user and modification screen
- [UID] title : It will sort users on a UID basis (descending order/ascending order)
- [Name] title : It will sort users on a name basis (descending order/ascending order)



### 2-7-1. Register users

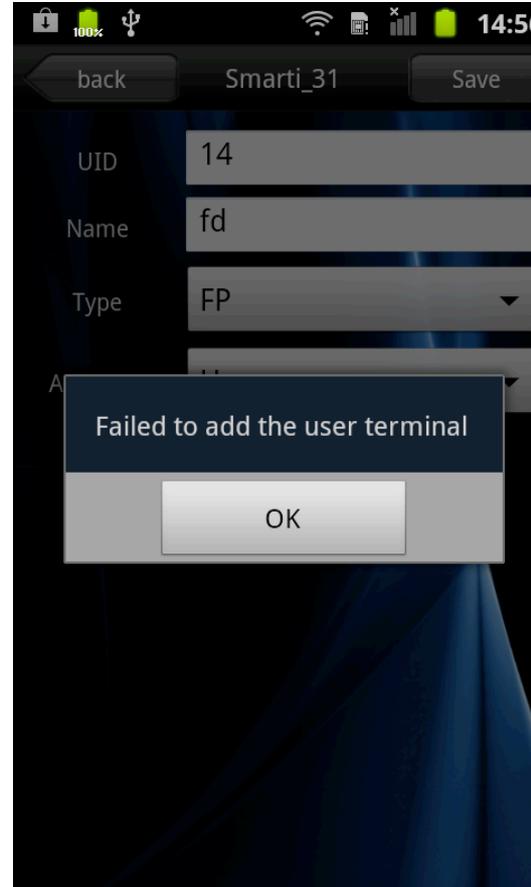
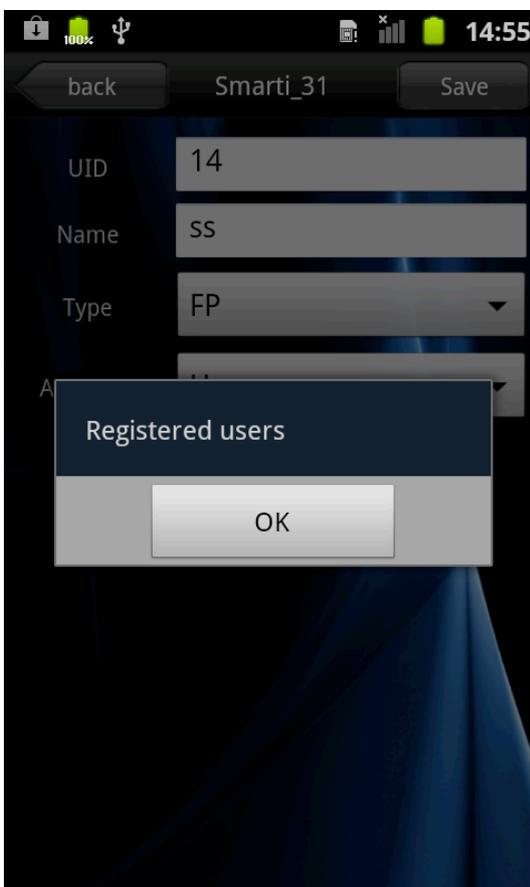
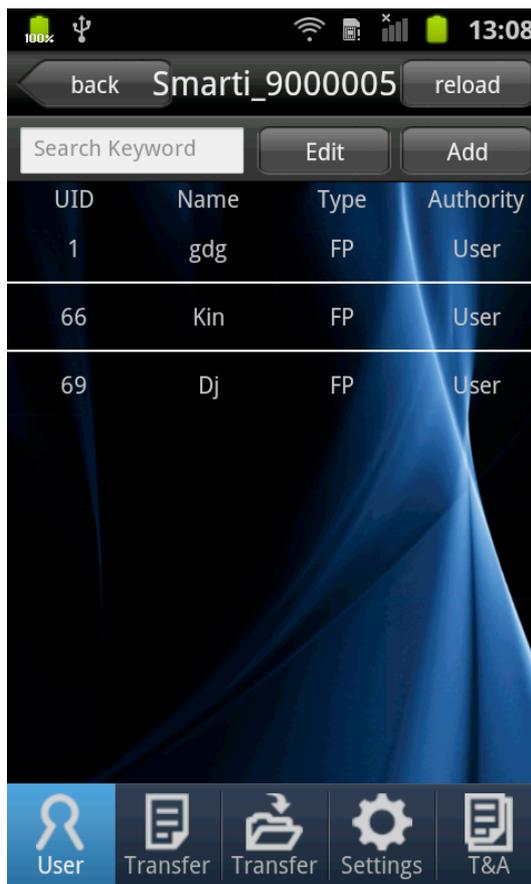
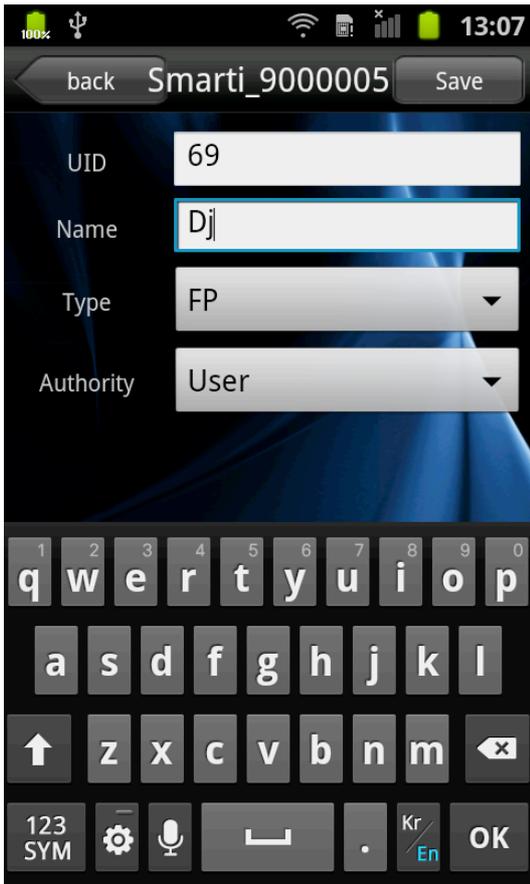
This screen is for registering new users on a terminal.

When you tap the add icon on the user list screen, it will move to the user registration screen.

Type User ID and a name, and then choose authentication type and authority level.

The lowest available number (less 9 characters) among current registered users is automatically chosen as UID but it can be modified.

- You can input up to 20 characters for a name.
- You can choose FP, Card, Card or FP, or Card and FP for authentication method.
- Card : Register an available card on a terminal and use the card for authentication.
- Fingerprint: Register FP and use FP for authentication.
- Card or Fingerprint : Register a card and FP, and use the card or FP for authentication.
- Card and Fingerprint : Register a card and FP, and use the card and FP for authentication.
- A user or an admin can be chosen for authority level.
- [Back]: Move to the previous page.
- [Finish]: After a buzzer sound from the terminal, register a card or fingerprints according to the authentication type to register a user.
- You need to input FP twice. When you input FP for the first time, you need to input the same FP once again after buzzing sound from a terminal.
- If you select Card or FP, Card and FP, card authentication is a priority.
- If input is successful, dialog of success will be shown and it will move to user management screen.
- If input fails, dialog of failure will be shown.



< Failure of enrolling a duplicate user >

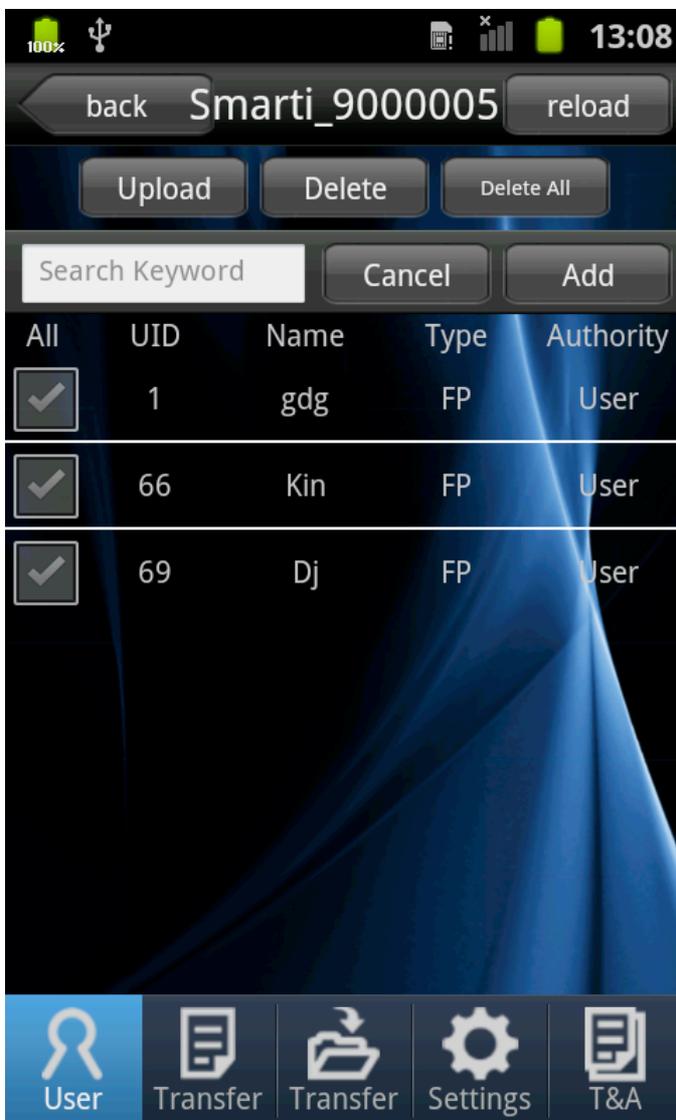
< Failed to recognize authentication >

## 2-7-2. Edit users

This screen is for importing or deleting user information.

When you tap the edit icon on the user list screen, it will change to edit mode.

- [Back]: Tap OK when logout dialog appears to disconnect it from a terminal, and it will move to the intro menu screen.
- [Refresh]: Search for the user list again.
- [Upload]: Upload chosen users information on the user list from a terminal to a smartphone.
- [Delete]: Delete chosen users on the user list from a terminal.
- [Delete All]: Delete all users from a terminal.
- [Cancel]: Cancel the edit mode and change to the general mode.
- [Add]: move to new user registration screen.



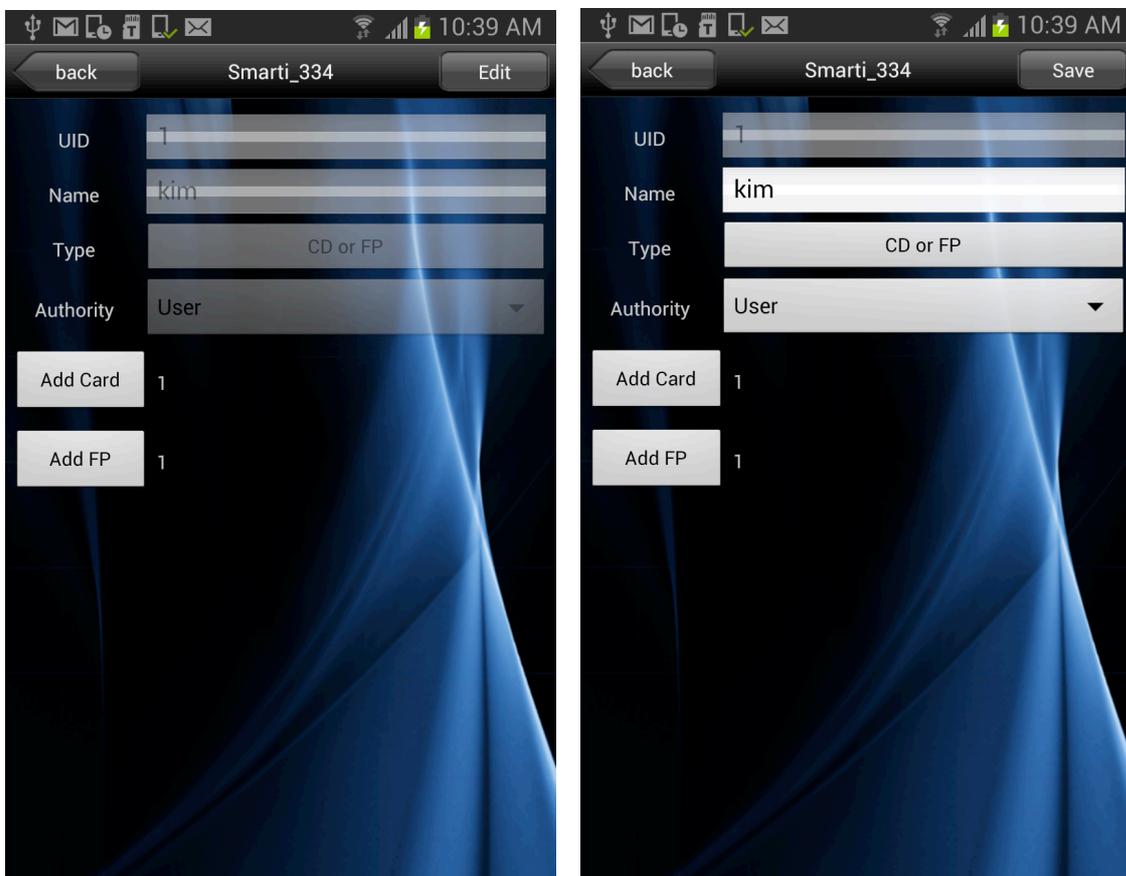
### 2-7-3. Search for users and modify

You can search for information that you input when enrolling a user, and can modify it. FP / Card can be added.

When you choose each user on the user list screen, it will move to the search user screen.

- [Back]: Move to the previous page
- [Edit]: Change to the modifying user info mode
- [Save] button : Save current information and move to user management screen.
- [Register a card] button : Add user card authentication. A terminal enters a state of waiting input (buzzing sound). Input a card which should be added for authentication on a terminal  
If input is successful, the figure on the right of registering card button will increase by 1.
- [Register FP] button : Add user FP authentication. A terminal enters a state of waiting input (buzzing sound). Input FP which should be added for authentication on a terminal.  
If input is successful, the figure on the right of registering FP button will increase by 1.
- You input FP twice. Once you input FP, you need to put the same FP on the terminal again after the buzzing sound.
- The authentication method can be modified when at least one card and fingerprint should be registered respectively. Other authentication methods will be deleted or expired besides selected authentication method

Ex) After selecting a card and click the finish button, existing registered fingerprint information will be deleted



## 2-8. Log

It will display log data of a authentication to a terminal.

When you press the log button on the terminal menu or tap log icon, it will move to search logs screen.

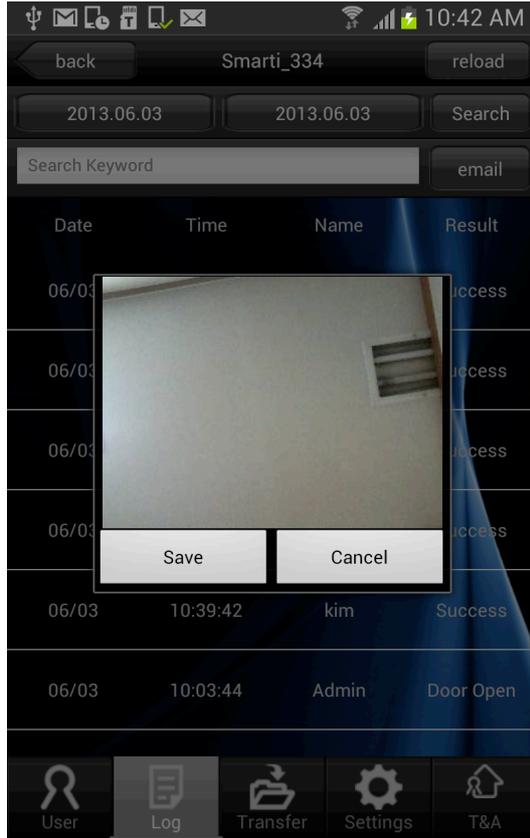
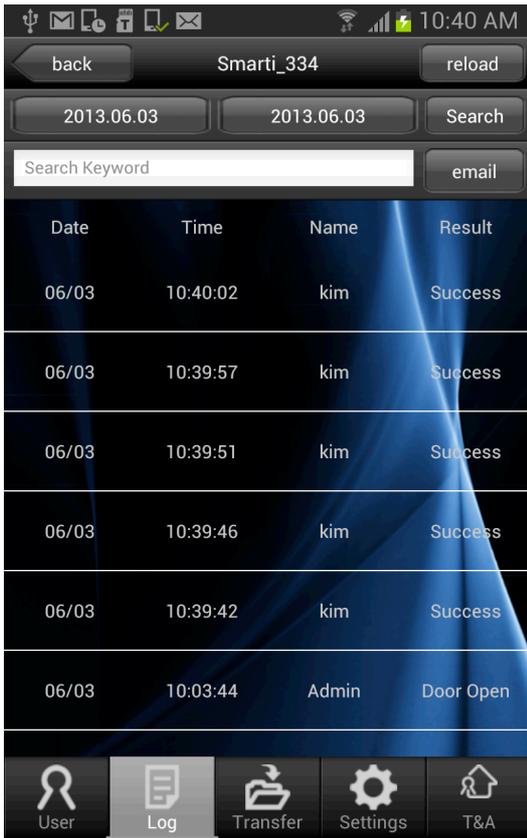
16 logs from a terminal are displayed at a time from the latest to the oldest.

If you scroll down, the previous data will be shown.

When you type a word in the search box, all the users with the word will be shown.

When you tap the arrow next to the date, you can search for logs from previous or next day.

- [Back]: Tap OK when logout dialog appears to disconnect it from a terminal, and it will move to the intro menu screen.
- [Refresh]: Search for the log list again.
- ([yyyy-mm-dd] button: Set up the periodical search. The left button is the start date, and the right button is the end date.)
- [Search] Button: Inquire selected periods of logs
- [email]: Save the log list as csv file and email it to the address is set on T&A settings.
- ex) If you choose Gmail app. It will automatically shift to 'send' section. Log data will be extract to (Log extracted date.csv) a file and attached. If you set mail setting from TNA setting recipient will be automatically appointed. If not, you have to add recipient manually.
- [Log list]: A photo of the moment that a user puts a fingerprint or a card on a terminal will be shown as dialog.
- [Save]: Save the photo on the tablet and check it on the gallery.



## 2-9. Transfer(For Admin Use)

It is user information management section from iUnis.

When you press the transfer button on the terminal menu or tap the transfer icon, it will move to the transfer screen.

Uploaded user list from a terminal to the application will be shown on the edit user list screen.

When you type a word in the search box, all names that have the word will be shown.

- [Back]: Tap OK when logout dialog appears to disconnect it from a terminal, and it will move to the intro menu screen.
- [Refresh]: Search for the uploaded user list again.
- [Edit]: Change to the edit user mode
- [Download]: Download chosen users from the application to a terminal. After transfer, it will shift from transfer edit mode to transfer search mode.
- [Delete]: Delete chosen users from the application. After deletion, it will shift from transfer edit mode to transfer search mode.
- [UID] Title: User will be sorted (ascending/descending) based on User ID.
- [Name] Title: User will be sorted(ascending/descending) based on User Name.



## 2-10. Settings

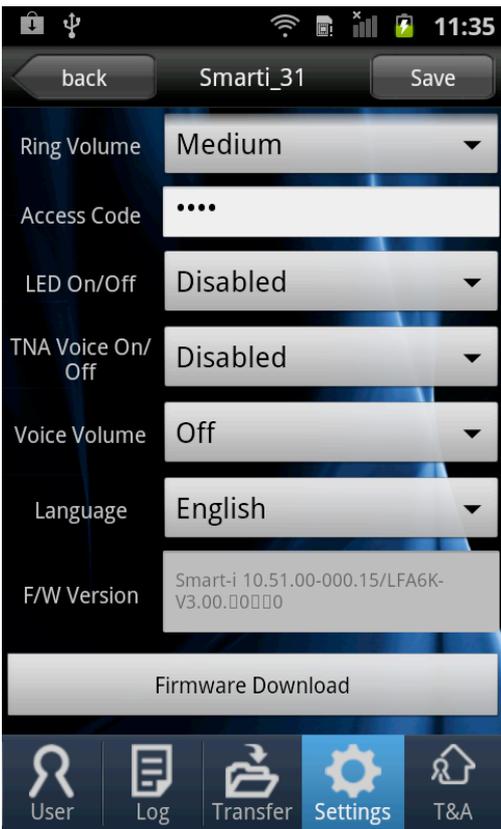
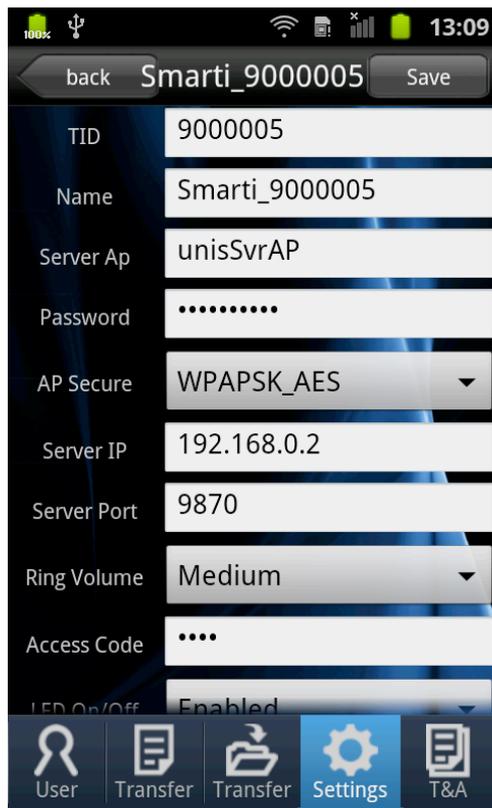
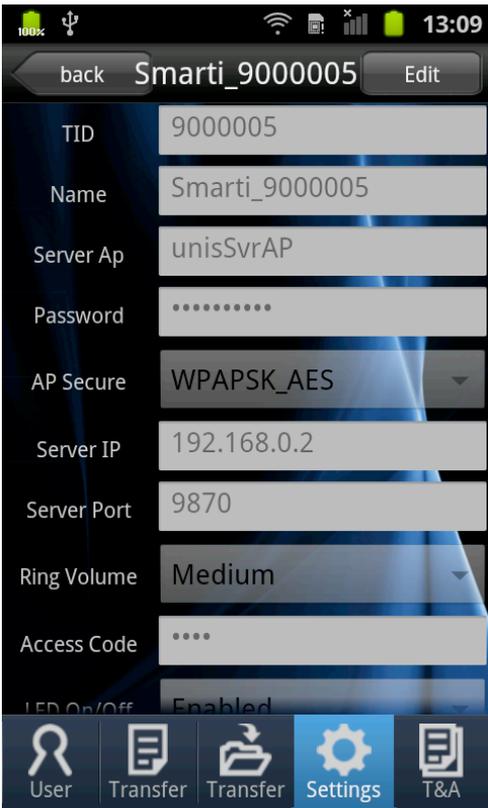
Section for editing and searching terminal settings.

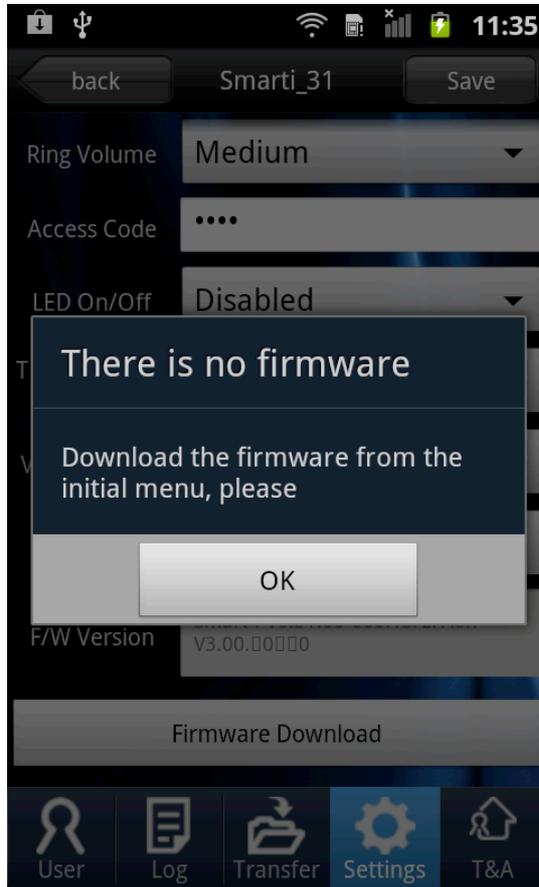
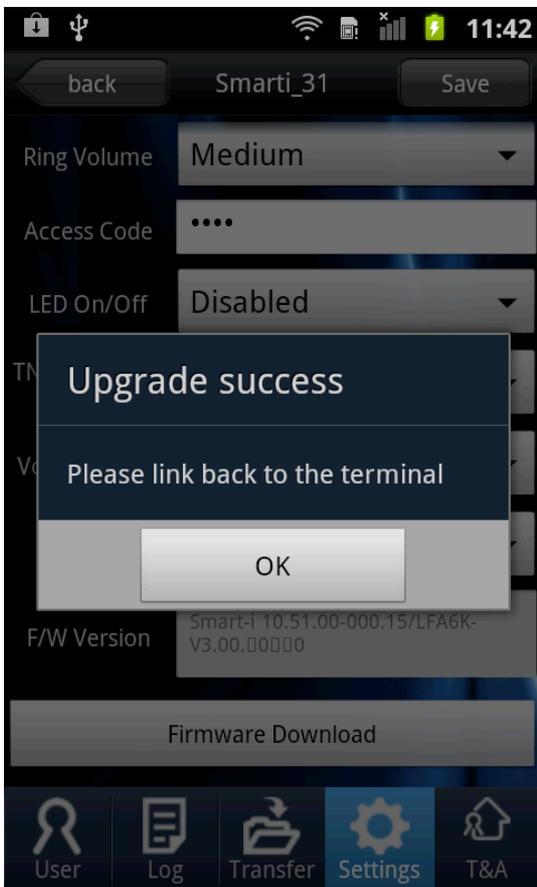
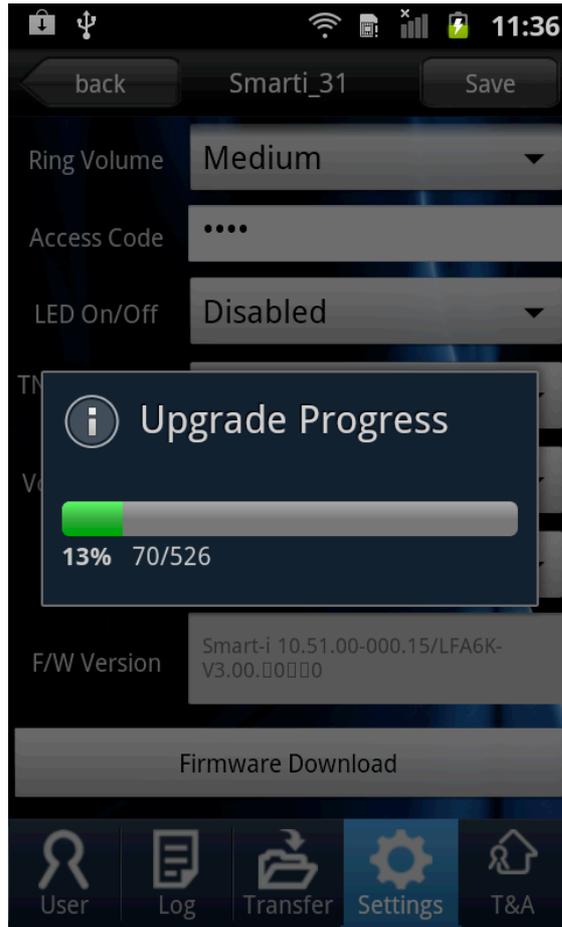
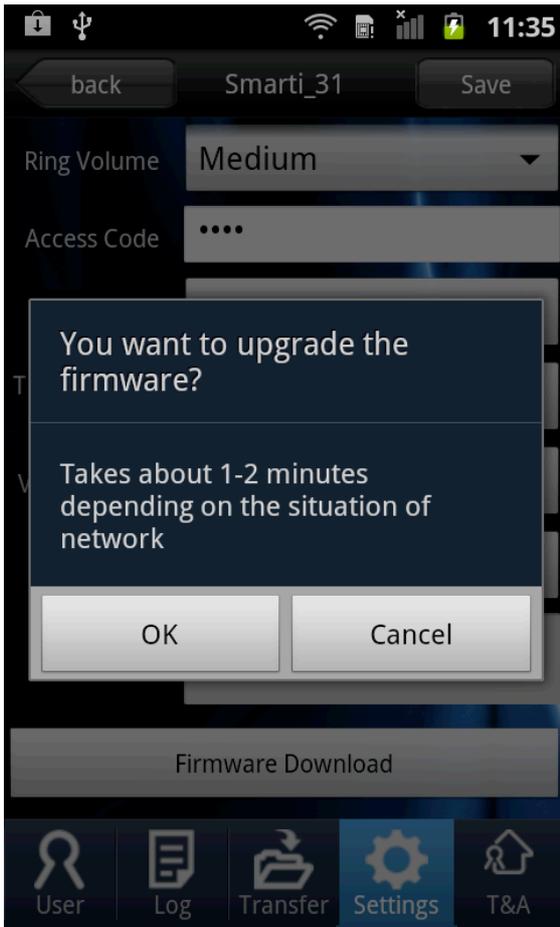
When you press the settings button on the terminal menu or tap the settings icon, it will move to the settings screen.

You can view terminal settings and edit them.

- [Back]: Tap back to move to the terminal menu
- [Edit]: Change to the edit settings mode.
- [Save]: Save modified settings and change to the general mode
- Terminal ID: ID that identifies a terminal
- Terminal Name: Name of a terminal
- Server AP: Set SSID to appointed AP from Network mode.
- password : Set Password to appointed AP form Network mode.
- AP security : Set Security setting to appointed AP form Network mode.
- Server IP: to set Unis sever IP (Only in condition that ACF100 is connected to the same network)
- Server Port : To set Unis server port (Only in condition that ACF100 is connected to the same network).
- Ring volume: The volume of warning sound
- Access Code: Password to log in a terminal.
- LED On/Off: Decide to use LED or not
- T&A voice On/Off : Decide to use T&A Voice function or not
- Voice volume: The volume for the voice function
- Language : Setting language for the voice function on a terminal
- LFD Level: Set up live-ness finger detection feature or Enable/Disenable?
- Static IP: Set IPs that will be allocated to the terminal. If it sets to be activated, can set the terminal IPs, Gateway, and Subnet mask. (Terminal dip switch setting will be automatically ignored) If it sets to be deactivated, then receives IPs from connected APs.)
- Firmware : Terminal firmware version
- [Upgrading Firmware]:Upgrading Firmware (Download firmware file from initial menu information screen.)

When upgrading firmware succeeds, it disconnects from a terminal and moves to the initial menu.





## 2-11. T&A

for sync TNA search, authenticate record based on terminal log data.

When you press the T&A button on the terminal menu or tap the T&A icon, it will move to the T&A screen.

T&A list used by logs saved in the application will be shown.

When you type a word in the search box, all names that have the word will be shown.

When you tap the arrow next to the date, you can search logs from previous or next day.

The period of searching logs can be modified on the T&A settings screen.

- [Back]: Tap OK when logout dialog appears to disconnect it from a terminal, and it will move to the terminal menu screen.
- [Reload]: Search for the uploaded user list again
- [<] Button : Able to search Previous day from TNA. (Based on appointed date)
- [>]Button : Able to search Next day from TNA. (Based on appointed date)
- [Sync]: Synchronize the logs of a terminal
- [email]: Save the log list as csv file and email it to the address is set on T&A settings
- Example: If you choose Gmail app. It will automatically shift to 'send' section. Log data will be extracted to (ltna\_extracted date.csv) a file and attached. If you set mail setting from TNA setting recipient will be automatically appointed. If not, you have to add recipient manually



The screenshot shows the T&A application interface for user 'Smarti\_97'. The date is set to '2012.11'. The table displays log data for user 'hj' across three dates: 11/13, 11/14, and 11/15. The columns are Date, Name, Attend, and Leave.

Date	Name	Attend	Leave
11/13	hj	11:58	13:15
02:58	04:45	--:--	00:17
11/14	hj	14:32	--:--
04:32	--:--	--:--	--:--
11/15	hj	13:46	--:--

## 2-12. Push Setting Screen (Administrator Mode)

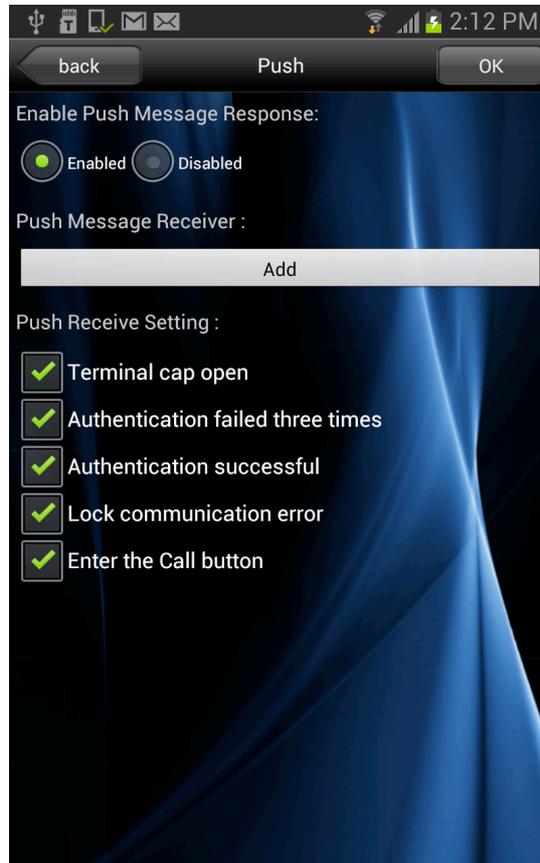
When an event is occurred at AC-F100, iUnis manager sets to receive push messages.

AC-F100, iUnis 모두 인터넷 연결이 가능해야 합니다. iUnis should connect to the Internet to work properly

When there are an opened terminal cover, 3 consecutive authentication failure, authentication success, Lock communication error, and inputted Call button(F3), it can set to send push messages

Push message receivers can be set or added to maximum 3 people

- [Add] button: Add a push message receiver
- [Delete] button: Delete a push message receiver
- [Edit] button: Switch to push setting edit mode.
- [OK] button: Save a currently set push information, and switch to inquiry screen.
- [뒤로가기] 버튼 : 단말기 메뉴 화면으로 이동 합니다. ) [Back] button: Move to the terminal menu screen)



### 2-13. Real Time (Administrator)

When you tap RealTime on terminal menu screen, it will move to displaying RealTime image screen.

- [Back] : Move to terminal menu screen.
- [Doors open] : Open door locks



### 2-14. DDNS Setting Screen (Administrator Mode)

It will display DDNS setting screen for linking external nets

When the user clicks the DDNS button at the terminal menu screen, it will move to DDNS setting screen.

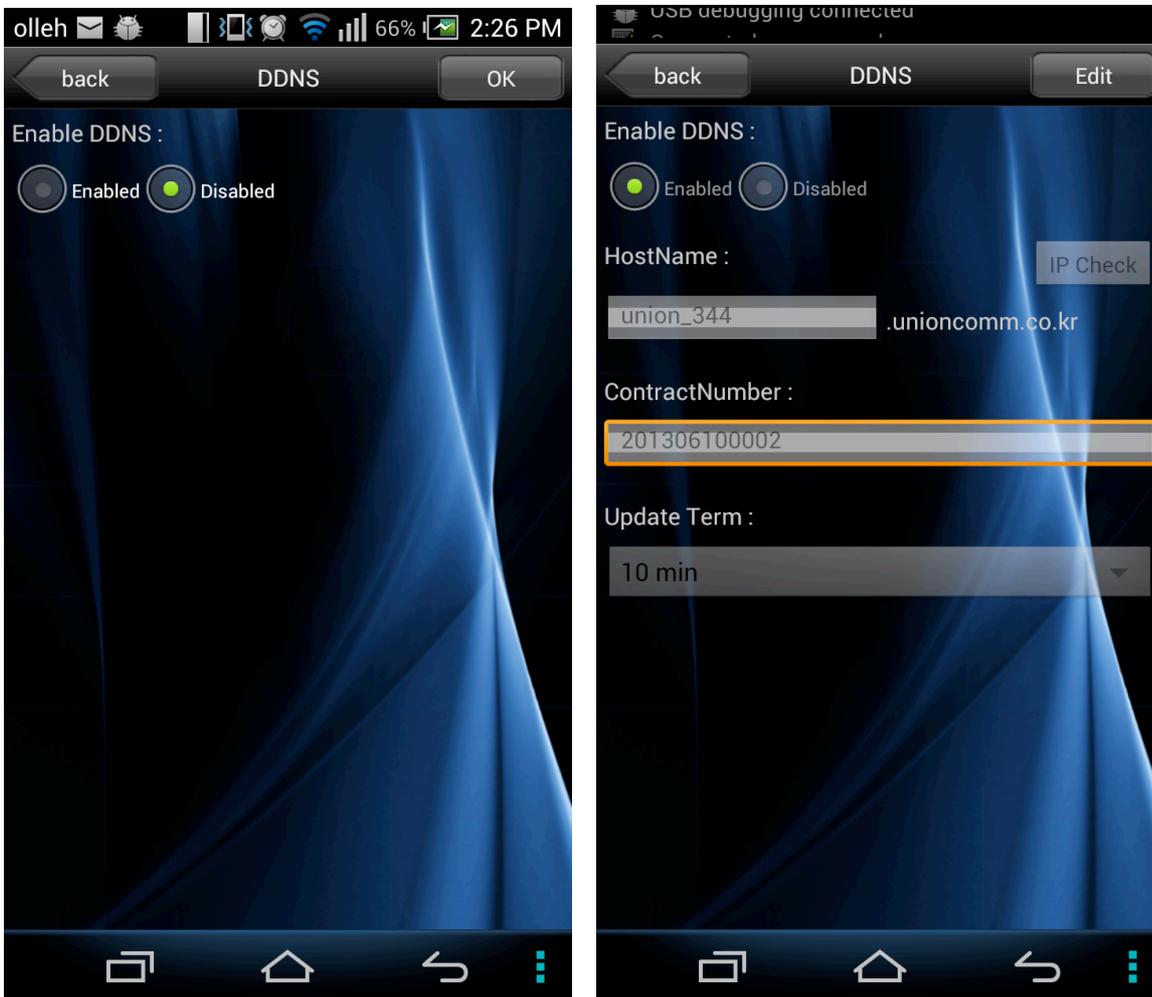
It only allows users to access setting and inquiry when there is Internet connection.

(Refer to IP router instructions guide and AC-F100 DDNS manuals for detailed setting.)

- Whether to use DDNS: This feature is to set whether to use DDNS feature.
- Hostname: Register the hostname to use for connecting external net. Recommend  
Ex) union\_01
- Registration Number: When a hostname is registered, it is an allocated serial number for each AC-F100. This number will be used for terminal change and reset. After the first setting or installation, please remember the allocated signed number.
- Update period: Set DDNS setting update period of AC-F100.

[Ex] If it sets for 2 hours, it will send AC-F100 address information to DDNS server for every 2 hours.]

- [IP check]: Check outside IP and Port of registered host name. However, if iUnis and AC-F100 is in same net, internal IP and Port can be exposed or revealed or displayed.)
- [Back] button: Move to the terminal menu screen.
- [Edit] button: Switch to DDNS setting edit mode.)
- [OK] button: Save currently set DDNS information, and switch to inquiry screen.)



## 2-15. T&A

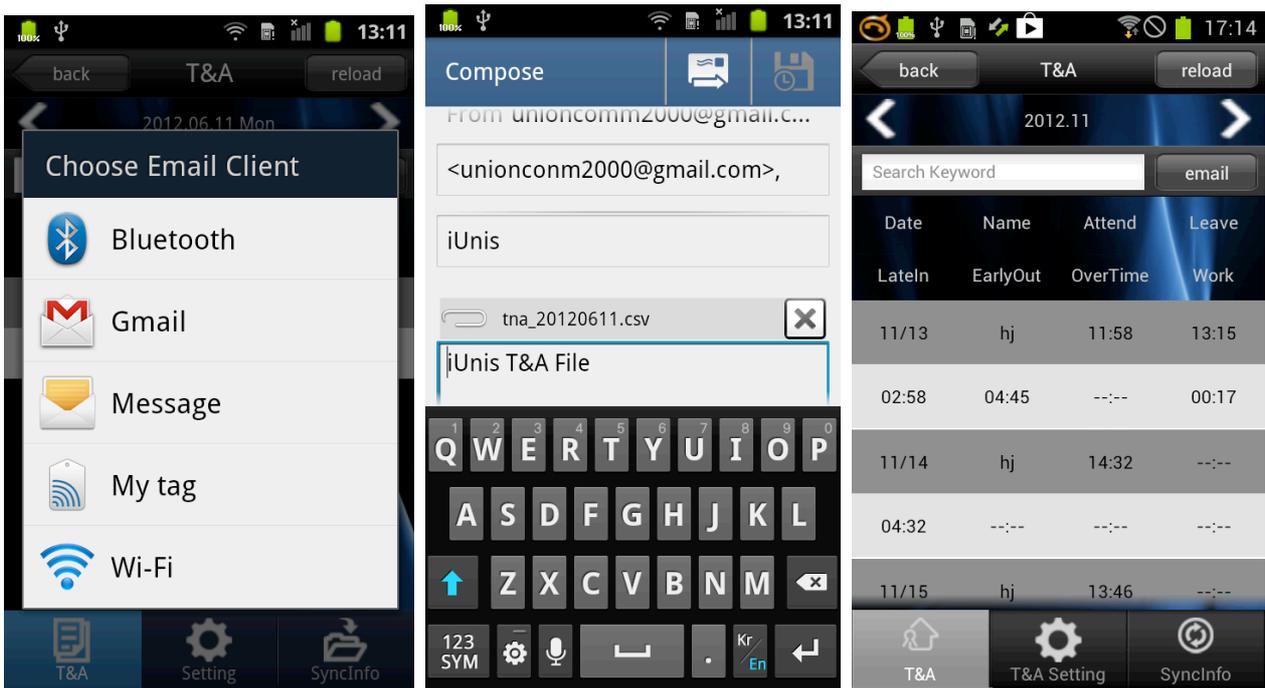
When you tap the T&A icon on the intro menu, it will move to the T&A menu.

T&A list like the T&A tab of the terminal menu will be shown.

It is not possible to synchronize if it's not connected to a terminal.

[Email] Button: Dial Log will be exposed to mail application 'send'. Authenticated log will be entreated and attached to appointed email application.

- Example: If you choose gmail app. It will automatically shift to 'send' section. Log data will be extracted to (tna\_extracted date.csv) a file and attached. If you set mail setting from TNA setting recipient will be automatically appointed. If not, you have to add recipient manually.



## 2-15-1. T&A Settings

It shows recent TNA management setting.

If you choose TNA setting tap from TNA menu, it will shift to TNA setting search.

- Origin: Shows time frame based on a day bases

Example: If set as 04:00 hour, It will set from 04:00 today to 04:00 tomorrow.

- Attend: Set standard for late at work.

Example: If set as 09:00 hour, First verification after 09:00 will mark as late at work.

- Leave: Set standard for early leave, overtime.

Example: If set as 18:00 hour, last verification before 18:00 will mark as early leave. And last verification after 18:00 will mark as extra work.

- Lunch: Set lunch hour as exception for working time.

Ex) If set as 12:00 ~13:00, it will be deducted from the working time.

- Dinner: Set Dinnertime as exception for working hour.

Ex) If set as 18:30 ~19:30, it will be deducted from the working time.

- Term: enables one to edit exposed TNA list periodically.

Ex) TNA list will be exposed daily base if set as show in day.

- Email edit: Email address for receiving TNA (Log) file.

Ex) If you set as unioncomm@gmail.com, It will appoint regarding person's email address automatically.

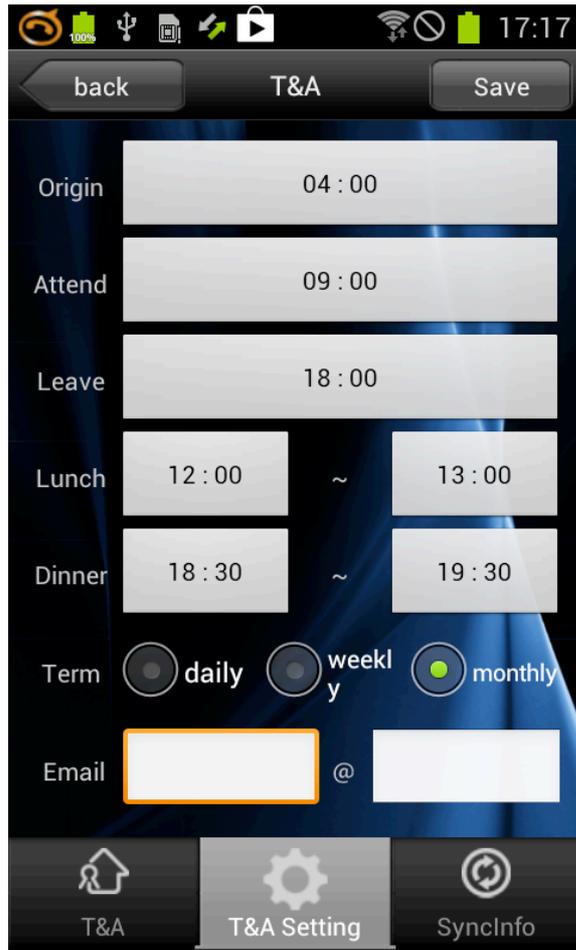
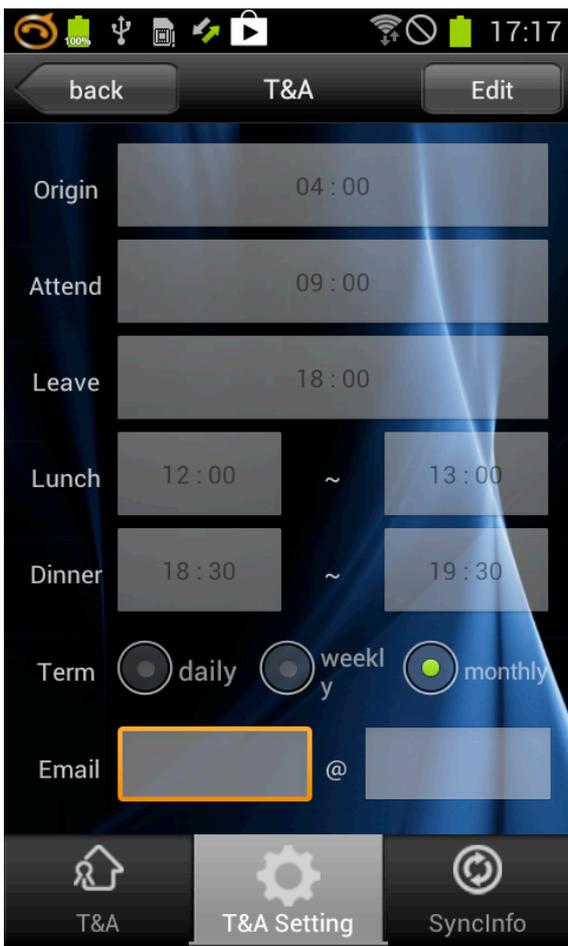
- [Edit] button: Shift to TNA setting mode.

- [Time] button: Show Dial log when you touch time frame.

- Time setting dialog [setting] button: It will apply TNA time setting based on dialog.

- Time setting dialog [cancel] button: Without appointed dialog time, dialog will shut down without saving.

- [Save] button: Recent TNA data will be saved, shift to TNA setting section.



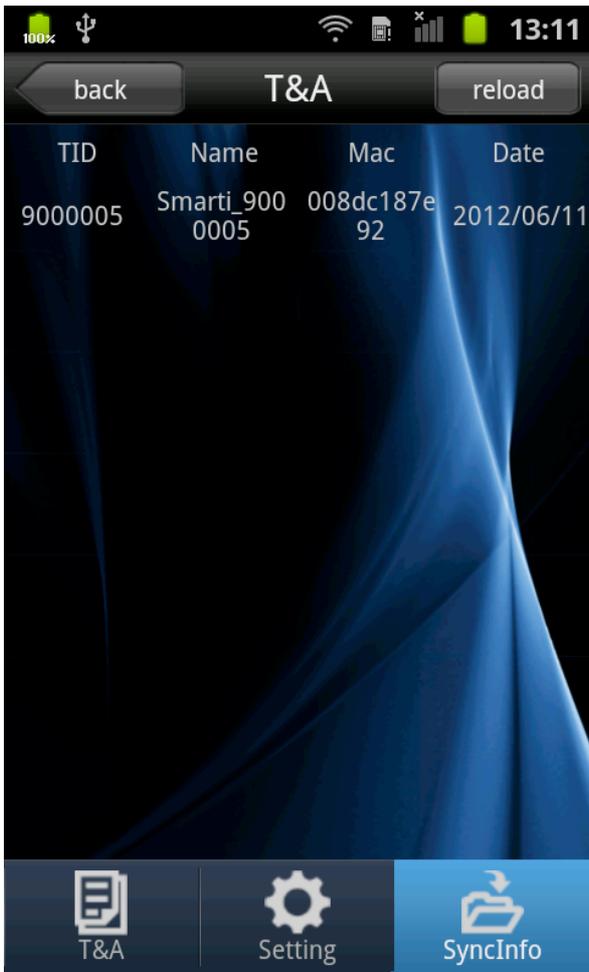
## 2-15-2. Synchronization Info

Show recent sync data from the terminal.

When you tap the Sync Info icon on the T&A menu, it will move to the T&A sync info screen.

It will show the latest sync info list from each terminal.

- [Back]: Move to the intro menu
- [Refresh]: Search for the sync info list again.



## 2-16. About

Please tap the information icon on the intro menu to move to the screen.

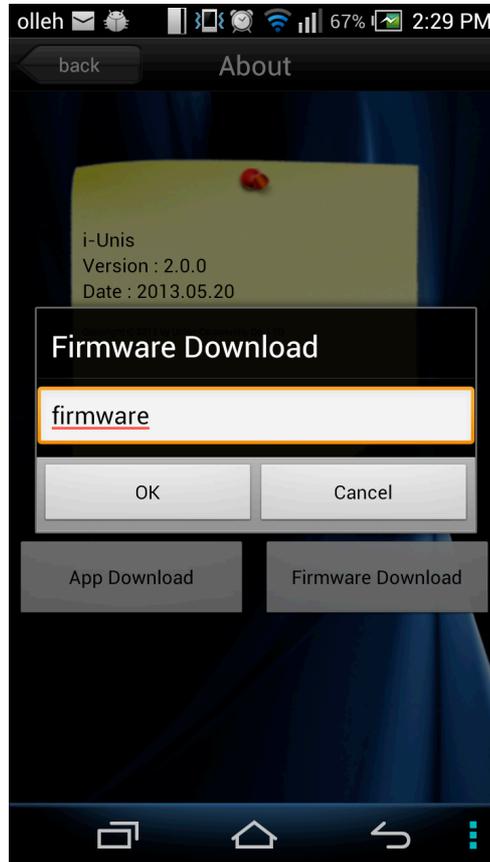
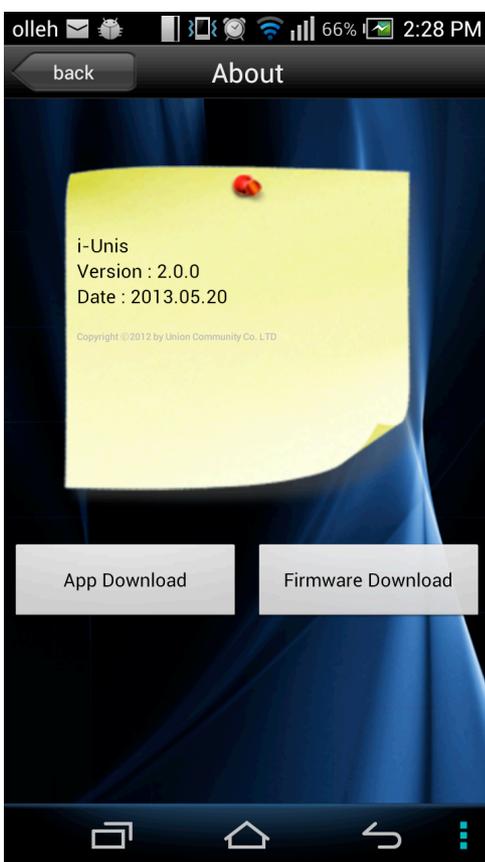
It will show information about i-Unis application.

Download a file for upgrading firmware on setting screen from web to android terminal.

Text message that should type in dialog text box can be different depending on firmware upgrade version.

( To be announced when upgrading firmware necessary )

- [Back]: Move to the intro menu
- [Downloading firmware]: Display dialog of firmware download
- [OK] : Download firmware
- [Cancel] : Cancel downloading firmware
- [App download] : This will open a browser to upgrade iUnis. For the android App tap the android icon.
- [Firmware Download] button: Firmware download dialogue will be exposed or revealed or displayed.

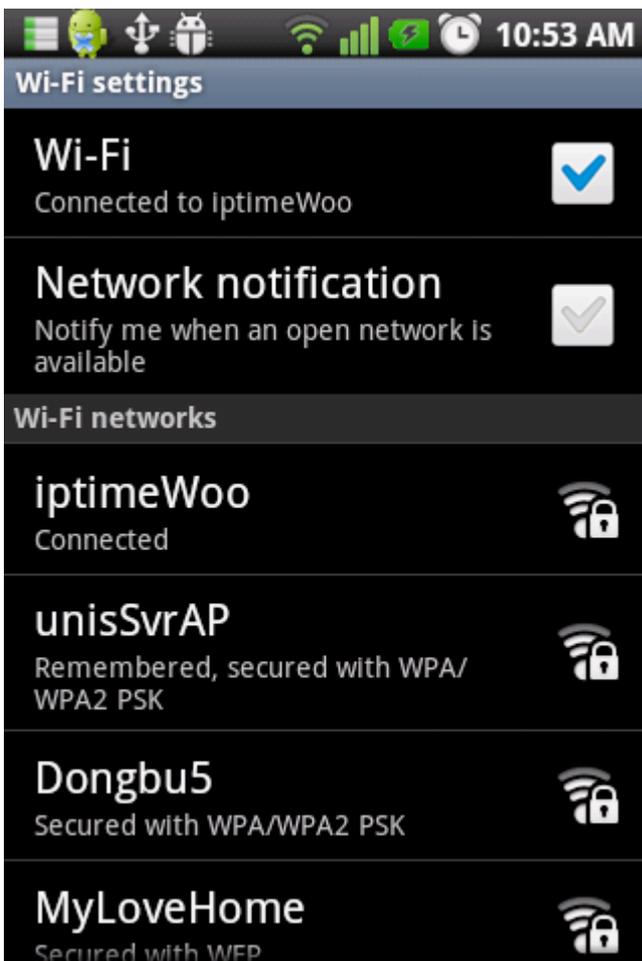


## 2-17. Wifi Setting Screen

Wifi setting from the operating system.

When you tap Wifi setting on intro menu, it will move to Wifi setting screen.

Wifi network provided by Android OS can be set to see terminals directly.



## 2-18. Push History Screen)

It is available to check push message history that is received by iUnis.



date	Terminals	Message
13/05 20:11	Smarti_102	CAPopened
13/05 20:11	Smarti_900005 1a	CAPopened
13/05 20:11	Smarti_900005 1a	CAPopened
13/05 20:10	Smarti_102	CAPopened
13/05 20:10	Smarti_102	CAPclosed
13/05 20:10	Smarti_102	CAPopened
13/05 20:10	Smarti_102	Authentication Success:3
13/05 20:10	Smarti_102	Authentication Success:3
13/05 20:10	Smarti_102	Authentication failed three times in a row
13/05 20:10	Smarti_102	Authentication Success:3
13/05 20:10	Smarti_102	Authentication failed three times in a row
13/05 20:10	Smarti_102	Authentication Success:4
13/05 20:10	Smarti_102	Authentication Success:4

## 2-19. Automatic Logout

If communication between the terminal and iUnis stops for 4 minutes, it will automatically

disconnect from the terminal and log-out.

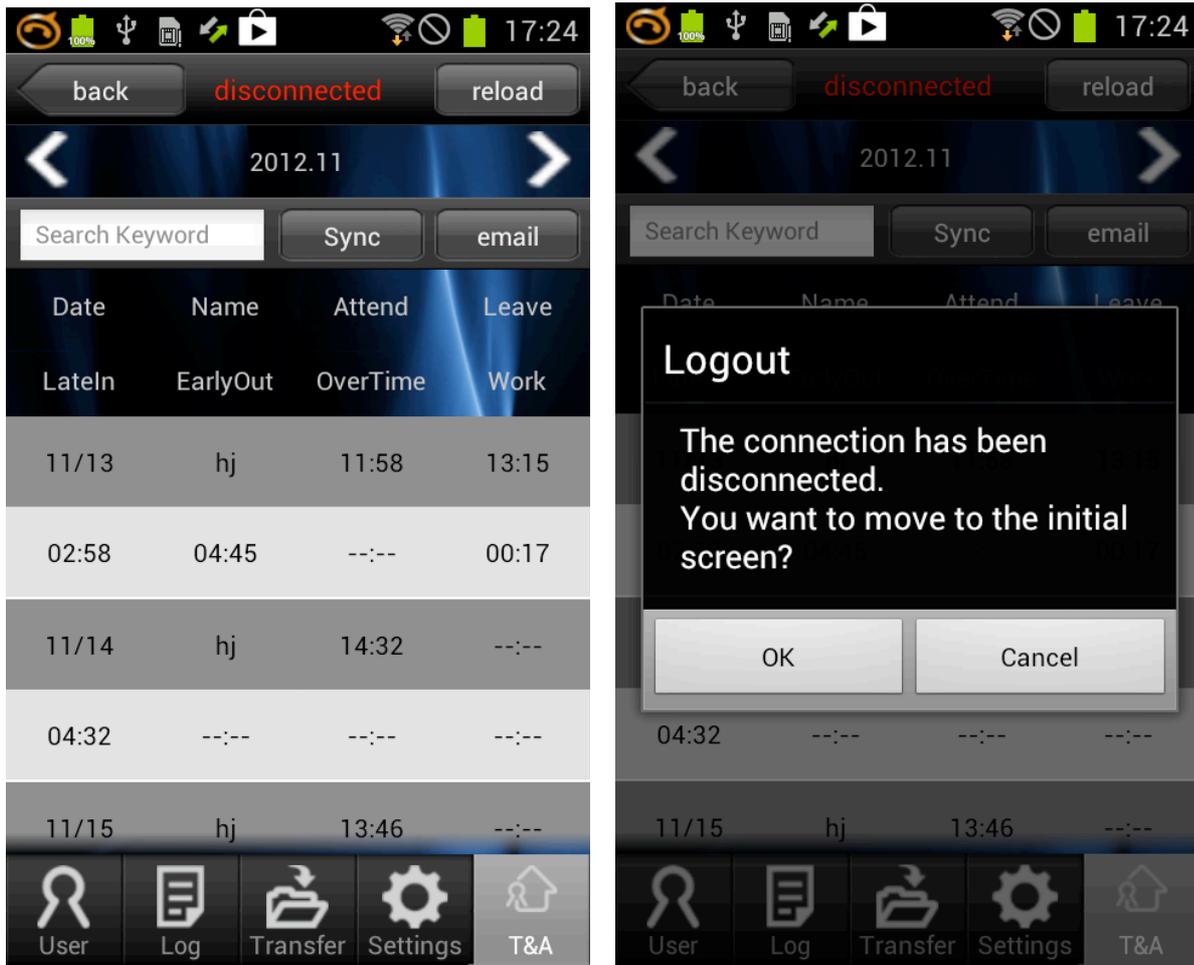
When logged out, a red title (disconnected) will show on top UI and show dialog the logout selection message will appear.

Tap shifting can be available when logged out.

Recent transfer, TNA data can be available when logged out.

Only last record of user, log, setting from logout mode.

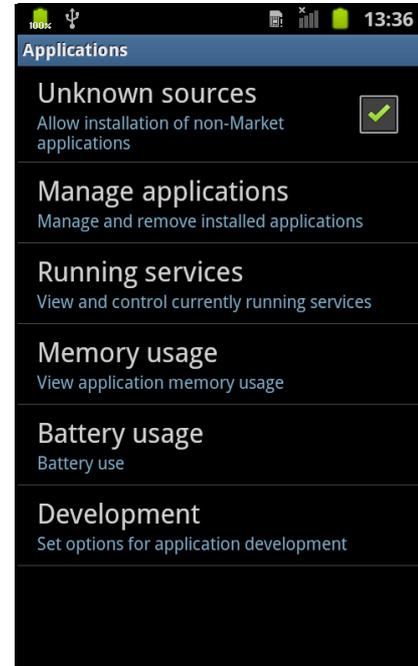
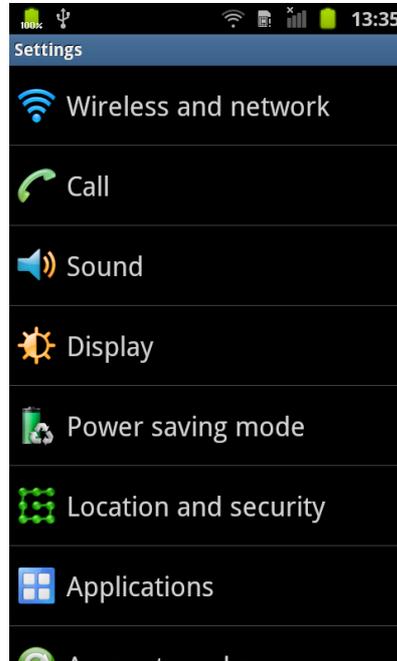
- Logout dialog[Confirm] button: Shift to intro menu



### 3. Corrective measures for problems)

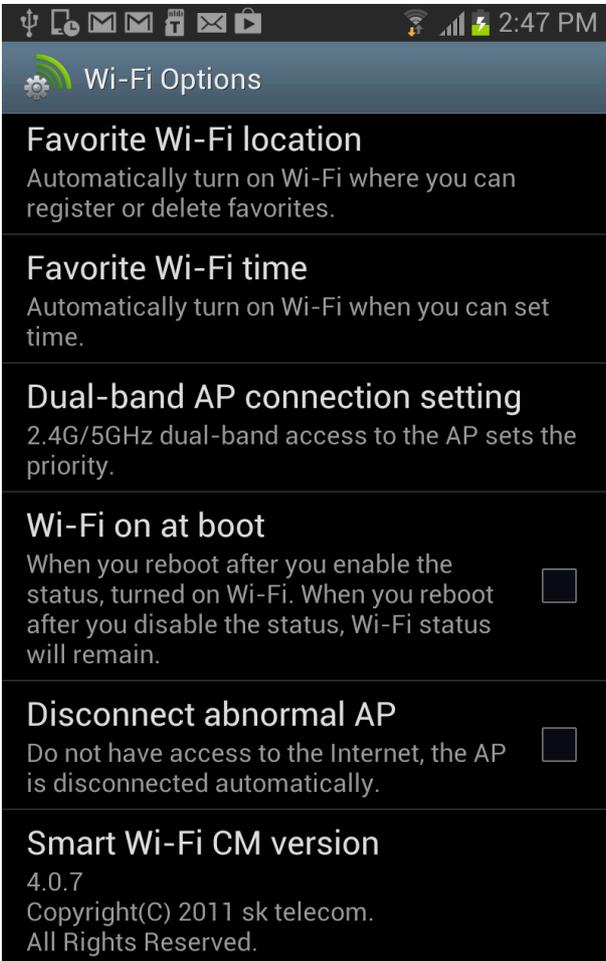
#### 3-1. Failure of download the app

- Must allow downloading an application program that is not on sale.



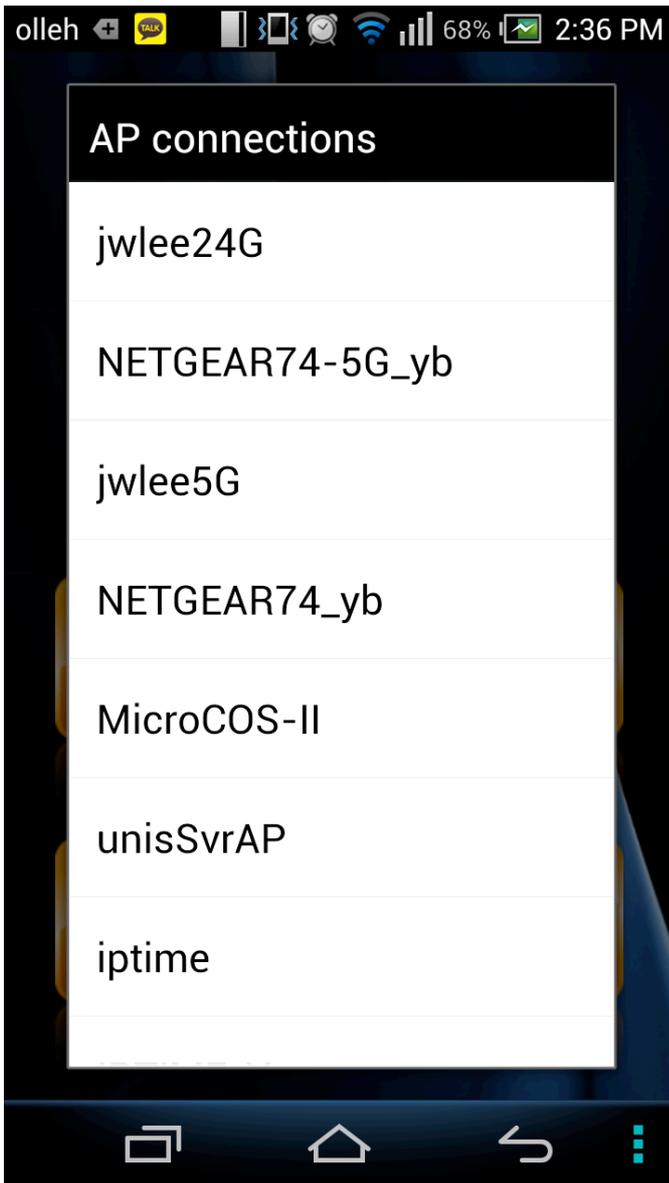
### 3-2. Failure of connecting between the terminal and Wifi when the terminal is in AP mode)

- For some Smartphones, there is an option that checks the Internet availability while connecting to Wifi. If checkbox is unchecked, then the user is possible to connect any AP that doesn't work with the Internet or doesn't support the Internet

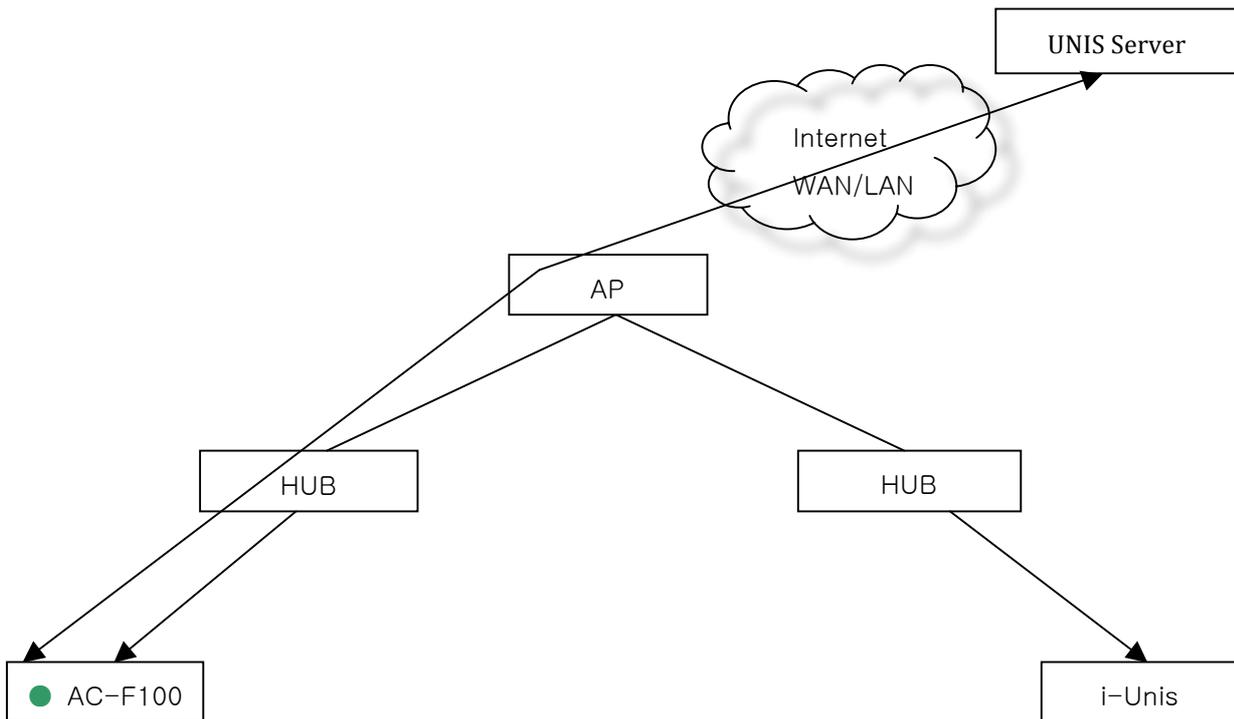


### 3-3. Failure of connecting while the terminal is in AP mode

- For some Smartphones, disconnection with AC-F100 is occurred at Wifi setting screen.
- When the user clicks the hardware menu button at the intro menu screen, wifi setting menu will be exposed, revealed, or displayed at the bottom.
- Clicking Wifi setting menu exposes, reveals, or displays the AP list that can be connected.
- Selecting the AC-F100 that will be connected and typing a password (1234567890) make a successful connection.



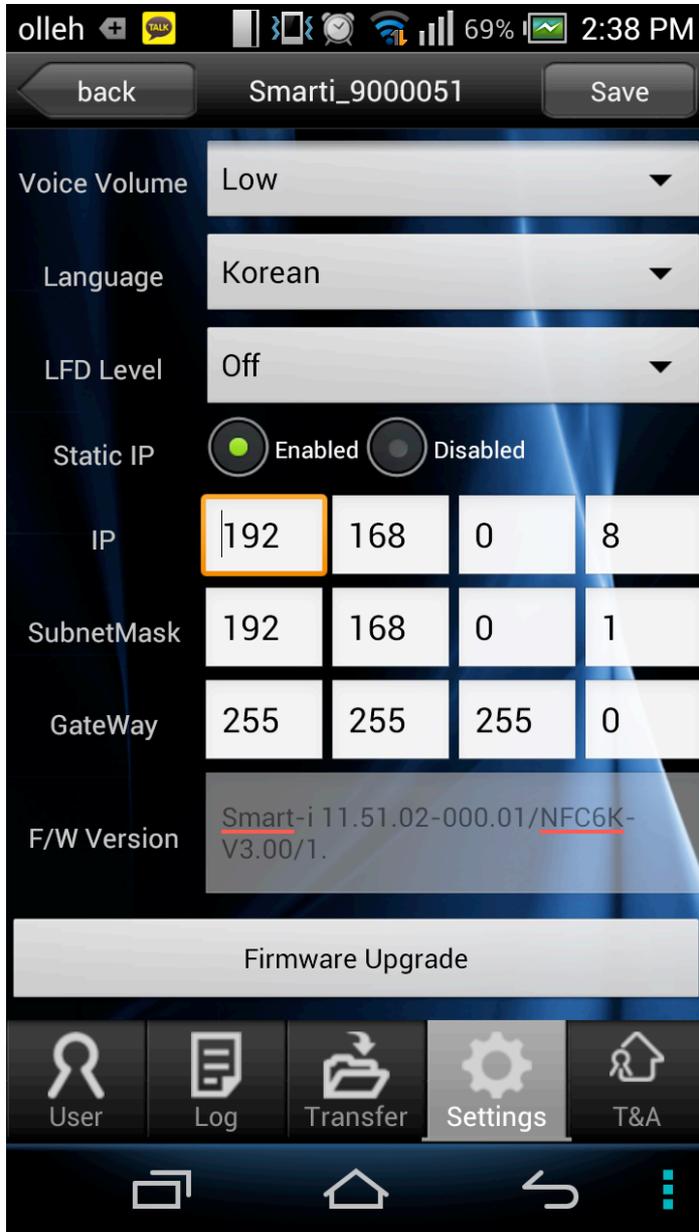
3-4. A case of using only static IP



- When the terminal is already connected to specific HUB
- Smartphone accesses to the HUB that is linked to the other connected HUB in the same AP to do fingerprint Terminal and communication.
- Default AP name: unisSvrAp, password: 1234567890 [WPAPSK\_AES/Shared Mode]
- Above server AP setting can be changed in the terminal setting menu.

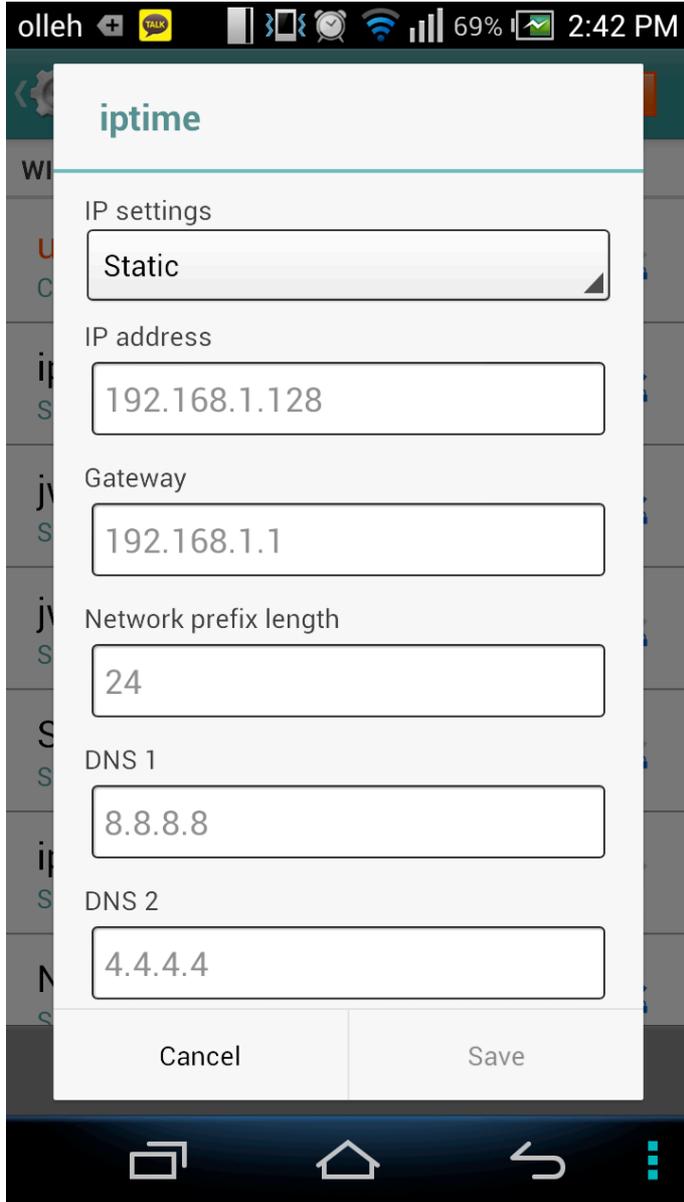
### 3-4-1. Terminal Static IP Setting

- At the iUnis setting screen, type or insert the allocated IP, SubnetMaske, and GateWay with fixed IP address and save



### 3-4-2. Android Phone Static IP Setting

- At the smartphone wifi setting screen, type or insert the allocated IP, SubnetMask, GateWay and save)
- Refer to manufacturer's manual for smartphone static ip setting



<Smartphone Wifi Detailed Setting)