# Phone Network Gateway

# Android Application

**For Smartphones, PDAs and other hand-held devices which use**

**Android 2.2 (or higher) Operating System**
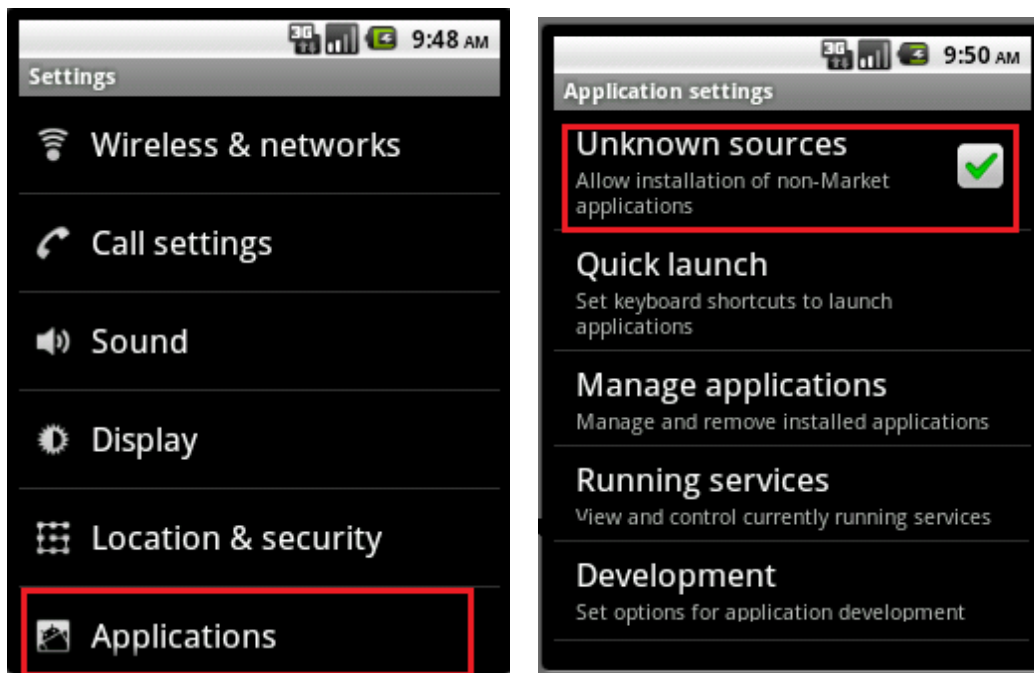
# User Guide

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# Contents

# 1. Installation

## Step 1 - Allow installation of "non-market" applications

In order to allow installation of the 'Phone Network Gateway Application', we have to do following setting.

- Click settings
- Select "Applications" in the list
- You will be in "Application Settings" window
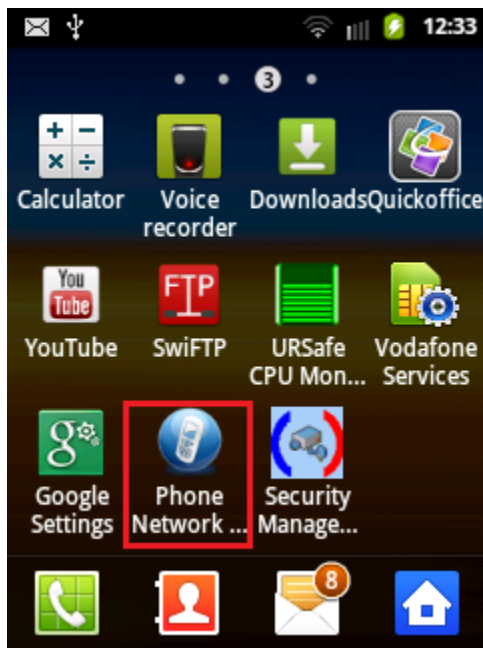- Check "Unknown sources"->Allow installation of non-market applications

## Step 2 – Copy application installable on Android

- Transfer the application installable (*.apk file) on Android SmartPhone.
- The file transfer can be done with FTP File transfer. For this we can install a FTP server.
  For example: "SwiFTP" is a free FTP server available in Android Market
- Click on "Wi-Fi file transfer", click "start" on the application.
- It will show the IP address assigned.

- Start the FTP client program on your computer and enter the IP address and port number shown in Wi-Fi file transfer.
- Copy the *.apk file from your machine to the required location on Android phone.
   (For example : /sdcard)

## Step 3 -Install application installable on Android

- Access the file system on Android SmartPhone.
- You can go to MyFiles and go to the location where *.apk file is copied
- Click on the installable and click "OK" for install
- The application will get installed on Android your phone
- Then you can click on application icon for 'Phone Network Gateway' and start the application.
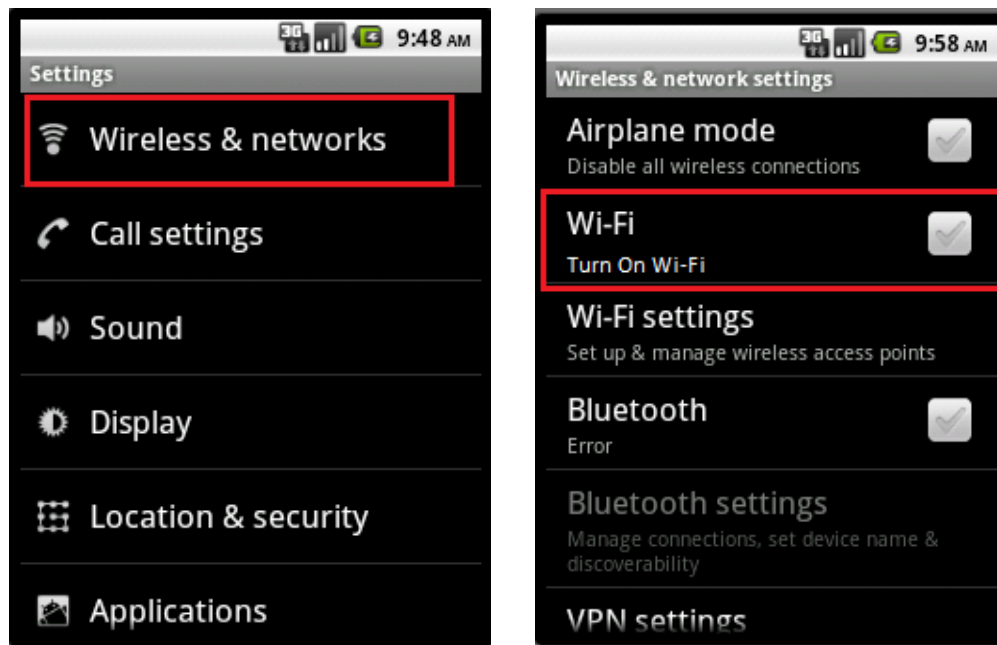
# 2. Settings

Following are the phone settings required to successfully run the 'Phone Network Gateway Application' and to keep it running 24X7 without needing human inputs.
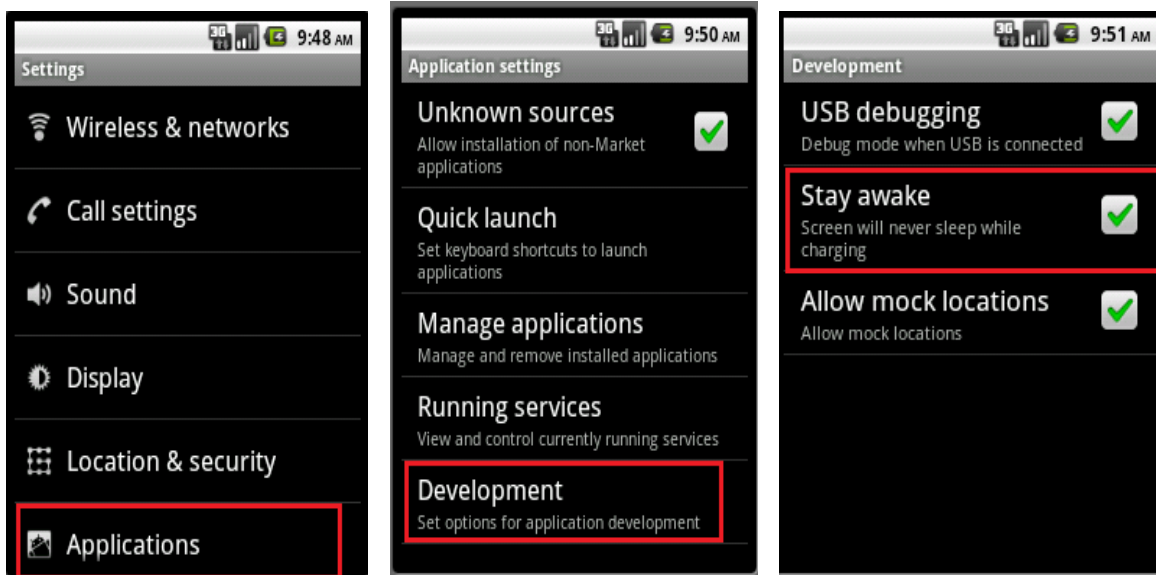
## Enable Wi-Fi

- Go to settings tab, select "Wireless and Networks" and select "Turn ON Wi-Fi".
- It will detect the available Wi-Fi networks and then you can choose the correct Wi-Fi network

## Keep awake setting

By default Android phone sleeps when there is no activity on screen. This also disconnects Wi-Fi and then Security Management System application cannot communicate with the server. Hence if you want to run the application continuously, you will have to do setting for keeping the SmartPhone awake.

Check Settings->Application->Development ->Stay Awake. This keeps screen ON while phone is charging.
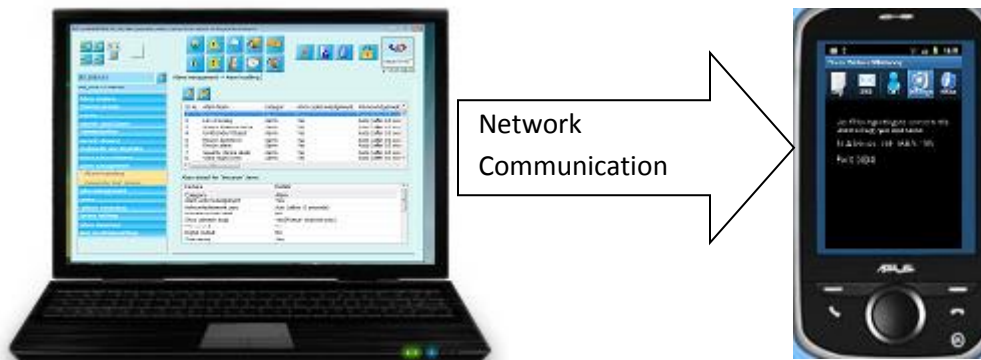
# 3. Overall Working of the Solution

Security Management System application communicates with 'Phone Network Gateway 'application, running on an android smartphone.

Phone Network Gateway application receives commands from Security Management System application through network communication and accordingly sends SMS / makes phone call.

Phone network Gateway application must be continuously running in order to receive commands from other application.

Following is the typical system setup



Network
Communication

**Computer with Security Management System Application**

**Android Smartphone with Phone Network Gateway Application Running on it.**

# 4. User Interface

User Interface for 'Phone Network Gateway' application has following main screens

- [Logs](#)

- [SMS](#)

- [Call](#)

- [Settings](#)

- [About](#)

SMS and Call screens are provided so that user can send Test SMS and make a test call in order to make sure that application is working correctly
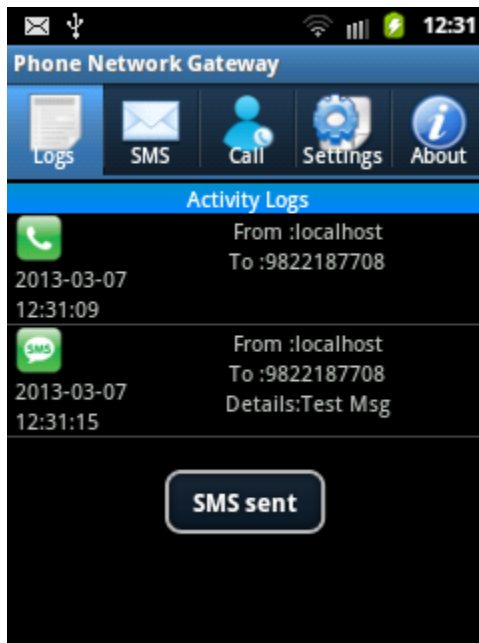
Logs screen shows the list of all the actions (SMS/ Call) performed by Phone Network Gateway applications so far

# 5. Logs

This screen shows the logs of actions executed so far.

The logs list gets updated when you send SMS or call a number using the user interface for phone or when the application sends a command to send SMS / call a number.

"From" field indicates the IP address of calling application. When you send commands through test user interface then "From" field has value "localhost"
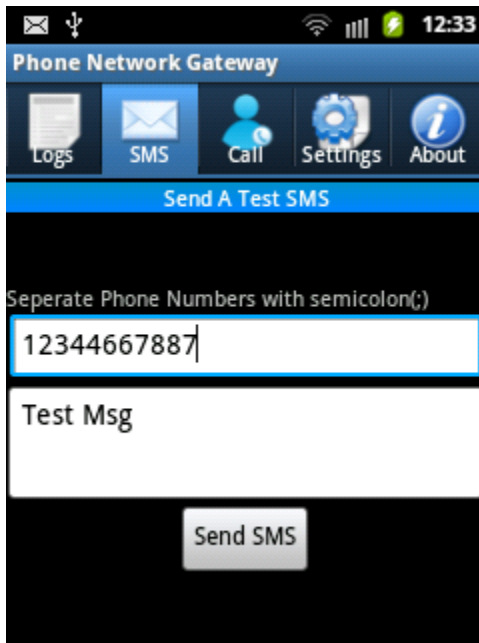
# 6. SMS (Sending test SMS)

This is provided for testing the "SMS" functionality from phone.

You can enter multiple recipients separated by semicolon ";" and the text message to be sent.

On clicking "Send SMS" the SMS is sent to all the recipients and the "Logs" section is updated accordingly
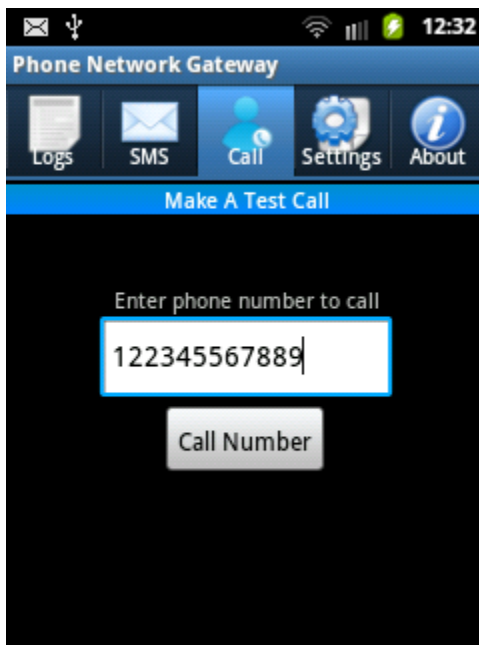
# 7. Call (Make test call)

This is a tab provided for testing the "Call" functionality from phone.

You can enter the phone number in the text box.
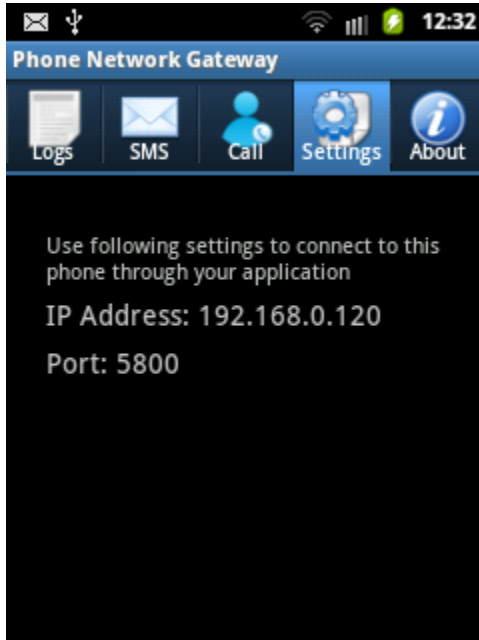
On clicking "Call Number" the number is dialed.

The logs are updated when the call ends.

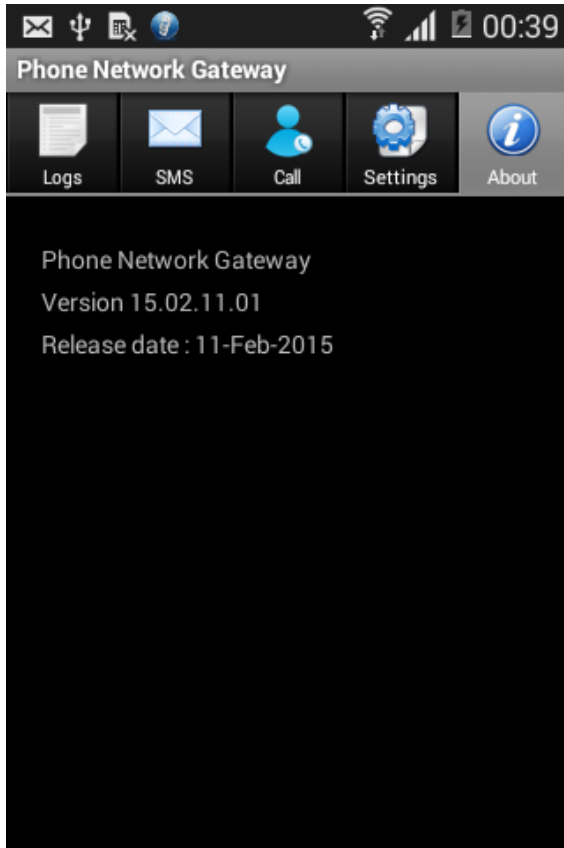![Infinova logo - The Integrator's Manufacturer]

# 8. Network Communication Settings

This tab displays the connection information of the smartphone.

Your application should connect to the mentioned IP address and port number in order to send commands. Please refer to Section 6 in this document which mentions using the settings in Security Management System application.
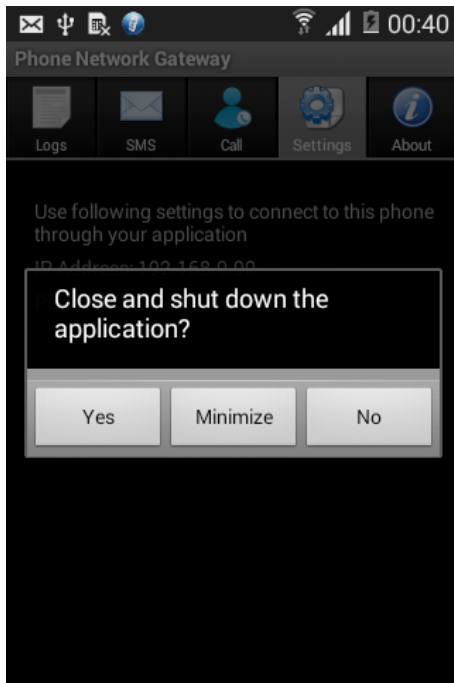
# 9. About

This tab displays information about application version and release date.

# 10. Running application in background

When you press on back button on device to close the screen, following message is displayed
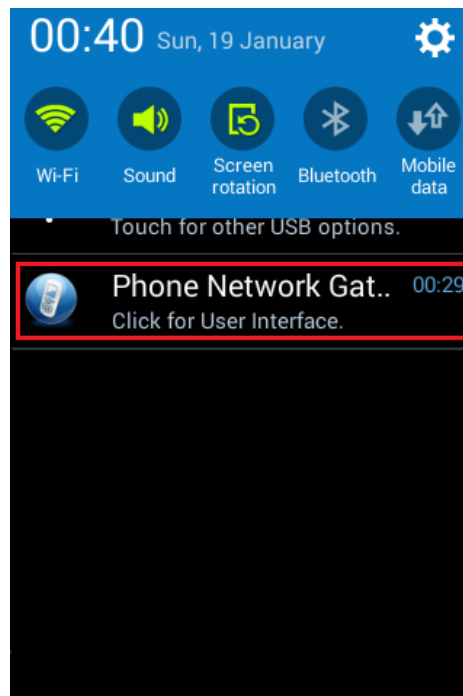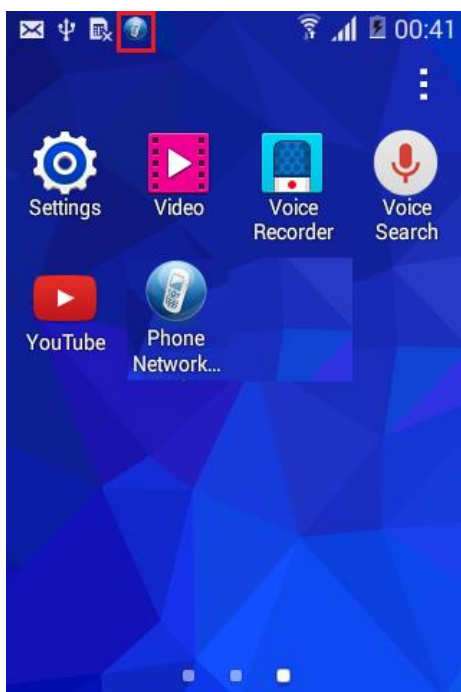


Clicking on **Yes** shuts down the application

Clicking on **No** cancels closing of application

Clicking **Minimize** minimizes the application in tasks tray

If user clicks minimize, the application is minimized and its icon can be seen on top. It keeps running in background and process requests for making calls / sending SMS in minimized state.
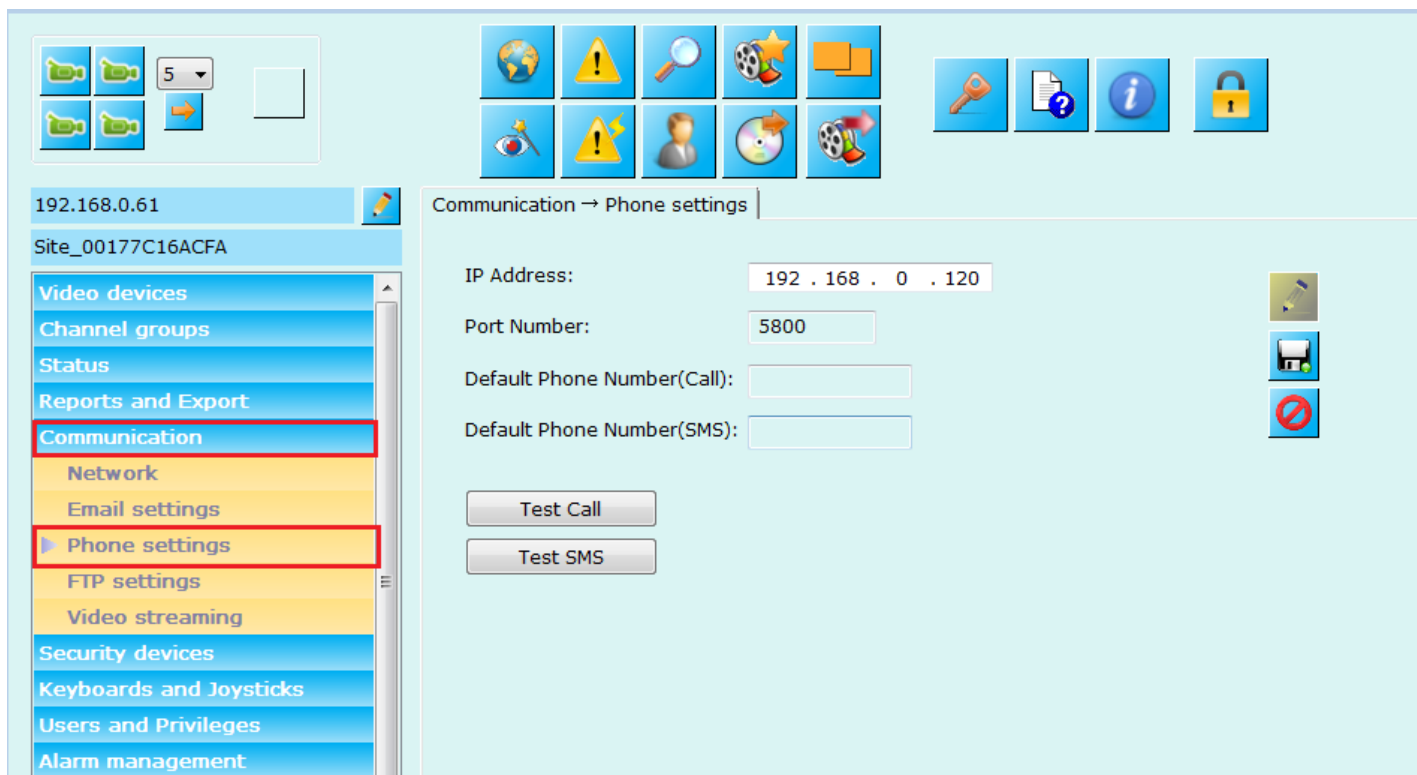
Sliding down the top bar shows application in tray. User can click on it to view the user interface.

# 11. Configuration in Security Management System

## Step 1: Set IP address and port number of android phone in security management system.

- Go to Communication -> Phone Settings tab in Security Management System application.

- Set IP address of phone number. You can find out IP address of phone number from 'Settings' section of android application

- Click 'Save' to save settings

- You can make 'Test Call' or send 'Test SMS' to ensure that communication is happening correctly between security management system application and android phone.

## Step 2: Configure 'Alarms Settings' to send SMS/ Make call

- Go to Alarm Management -> Alarm Handling. You can find the list of available alarms handles by Security Management System Application

- Select one or more alarms with Edit Single  or Edit Multiple  buttons

- Select Send SMS and or Call Phone options. You can either choose to use default number set on Communication->Phone Settings or use a different number.

- Save the settings

- Now SMS and/ or phone call will be sent to the mentioned number when the selected alarm is raised in Security management system