eCoRo App – Administration Manual

eCoRo App allows you to receive VerticalMan alarm reports via SMS or from eCoRo Web. It is a simple but powerful alarm console for smartphones or tablets.

Configuration

Alarm reception via SMS

It is important that the SMS Template parameter of the eCoRo App is set exactly as in the configuration of the sender VerticalMan otherwise it will not be possible to recognize the alarm message with all its information.

eCoRo App automatically interprets messages from old Sonim / eCom and SkyNet G systems without the need for SMS templates.

From version 3.4 it is possible to forward the reports received via SMS in the eCoRo App to eCoRo Web, thus making the latter also a bridge between the two technologies.

Alarm reception via the web

It is possible to acquire in the eCoRo App the alarms raised by VerticalMan via http notifications to eCoRo Web. In this mode, it is preferable to also set one of the alarm notification push reception systems in any case, the eCoRo App will consult the configured web server every minute to check whether are new alarms.

It is possible configure eCoRo App to forward SMS alarm to eCoRo Web

Double notifications

If the eCoRo App receives a double notification for the same alarm from two different channels (SMS and Web), only the first will be considered. Verification is carried out using the unique instance identifier (#AlarmInstanceId #) therefore this must also be present in the SMS template.

Indoor maps

If you want to use the display of internal positions, you need to copy the map files in jpg or png format to the /eCoRo/maps folder. The file names must be completely lowercase and named exactly with the AreaId indoor.es. a01.jpg

If you want to view a detailed image in addition to a first map, you can insert a further file (jpg or png), always named with the area name, in the directory /eCoRo/maps/detail.

Additional notes for indoor areas

If, while viewing the details, you want to view a text that describe the area or the path to reach it, you must set the IPSnote key.

This key is configurable only by importing a json configuration file and not from the user interface.

The IPSnote key is made up of records separated by semicolons and with fields separated by hash (#) characters. Each record contains the following information: AreaIpsId # Note in HTML.

Ex.

A01 # Enter through the central door
 Go up the first two flights of stairs <br> open the left door; P003 # From the main gate continue along road 1 and after 200m turn into road 3 to the ambulance parking area

Local GPS maps

If you want to use the local GPS maps of OsmAndMap you need to upload the tiles file in zip format in the /osmdroid directory.

To create local maps you can use any tool that generates tiles.In Aldea, we use JSOM to customize the maps and MapAperitive to generate the tiles then manually incorporated in a zip.

Markers on GPS maps

To display custom icons on GPS maps (both Google and Open Street View) you can define them by setting the gisMarker configuration key.

The key contains a series of semicolon-separated marker information formatted as follows:

a) Group name (e.g. amb)

b) GPS position (Latitude, Longitude separated by semicolons)

c) Image file name for Icon (if not present the group name will be used in jpg or png format) - Optional

d) Point description (to be displayed by tapping the icon) - Optional

Currently it is possible to define this key only by importing it from json files and not from the user interface

Each field is separated by a hash character:

Example of defining two tokens, one for collection points and one for ambulance parking.

 puntoraccolta # 44.484286,12.264859 ##; amb # 44.484243,12.264949 # Ambulance parking N #;

External siren

When an alarm is received, it is possible to configure that an SMS or Web message is automatically sent to an SMS controller such as RTU5024 or WebRelay.

SMS controller

It is necessary to set the parameters to indicate the SIM phone number of the SMS controller and the text messages to activate and deactivate the siren.

Web controller

It is necessary to set the URLs to call for activation (alarm reception) and deactivation (alarm acknowledgment).

Device status

With the slide on the main screen it is possible to switch to viewing the list of remote devices and their status (active, inactive, in alarm). For this function it is necessary to enable in VerticalMan the SMS or Web notification of the entry/exit from the App and in eCoRo the "Device list" parameters that show if VerticalMan is running and possibly "Device status" which allows you to consult the status in the detail with battery levels and radio antennas.

Low battery alarm

eCoRo App can check the battery level of the local device because under a configured value alerts with an alarm. It is important to set this alert to make sure that the device with eCoRo is not forgotten disconnected from the power supply.

WiFi not available alarm

If the reception of alarms via the web is active and the Wi-Fi connection is lost, a local alarm is raised to indicate that it is not possible to receive such notifications.

You can disable this type of alarm from the configuration.

Check device not reachable alarm

If the "Device reachability check" parameter is active, a check is made that the active devices (with a green dot) have also sent the status within the minutes indicated in the "After how long a device is considered unreachable" parameter.

Backup installation

If the eCoRo App receives alarms only via SMS and is installed on multiple devices, a backup installation can be configured, with the parameter of the same name, to not raise alarms but only to store them. Backup installations are useful in case you have at least two devices with eCoRo App but only one must be the main one with the signals while the others remain silent but keep a copy of the alarms received in case the first device has malfunctions and needs to be replaced.

Web-based configuration

It is possible to acquire the eCoRo App configuration from eCoRo Web (also in Lite version), especially useful if there are several eCoRo Apps in the company.

Receiving alarms via notifications

eCoRo App can also receive alarms via push notifications from two alternative systems. If eCoRo App used to consult the alarms received from the eCoRoWeb, installed on the customer's server, it is essential that a system for receiving push notifications is configured between Message Queue and WebSocket.

Firebase Cloud Message (FCM)

If you have an eCoRo Cloud account, you can receive alerts via Google's Firebase Cloud Message (FCM) notifications. In that case you need to configure

- • Enable eCoRo Web in configuration
- • Define the URL as eCoro Web: https://ecoro.aldea.it/restful
- • Username and password indicate your eCoRo Cloud credentials
- • Enable the "eCoRo Cloud Message" parameter.

For FCM notifications, the device with the eCoRo App must have constant access to the Internet.

Message Queue

In local installations to the company LAN of eCoRoWeb it is possible to configure a Message Queue (currently Apache ActiveMQ Artemis is supported) to receive alerts with push notifications.

WebSocket

For eCoRo Web installations on your own servers, you can define the receipt of alarm notifications by the eCoRo App by listening to the WebSocket, in which case the "WebSocket Url" parameter must be configured. The correct address will be provided by the installation of the eCoRo Web websocket module.

Es url websocket: ws: //192.168.1.10: 10200

eCoRo App must be able to reach the url indicated by respecting the rules of any firewalls inside the LAN.

Administrative functions

In the App Settings there are some important functions for the administrator:

Feature	Description
Alarms export	Export all alarms in csv format into /eCoRo/ directory and asks if you want to delete and email the alarms. The generated file will have the name eCoRo_Alarms_<timestamp> .csv
Import alarms	Import the alarms in the same exported csv format. The file must be named eCoRo_Alarms.csv and present in the directory <internal memory>/eCoRo
Configuration export	Export the eCoRo App configuration to /eCoRo/eCoRoConfig.json to be able to save the configuration as a backup or to pass it on to other installations of the same App.
Configuration import	Import the configuration from a file stored in /eCoRo/eCoRoConfig.json
Log a Helpdesk	Send the configuration and the App log to the Aldea cloud to allow technical support to analyze them.
Backup Configuration on the Cloud	It is possible to copy the configuration to the Aldea Cloud for a simpler restore operation on the same device or on another device. Backup on the cloud requires Internet connection and returns a backup ID that must be marked in order to proceed with the restore procedure. By using the backup save on the Cloud you accept that the configuration resides on Aldea's servers and that the system administrators have access to these configurations. Cloud configuration backup files are designed to be used for short periods also because they are deleted after a few months. It is recommended that you do a file backup for long-term storage.
Restore configuration from Cloud	It requires you to enter the backup Id and restore the configuration previously saved with "Backup configuration on the Cloud".

Configuration parameters detail

The description of all the configuration keys is available online at:
https://www.aldea.it/ecorolite/configDoc?lang=en&appName=eCoRo

It is useful to know the Parameter ID of the configuration key only in case of centralized configuration using the eCoRo Web application which provides an esay way to edit JSON configuration file.