

iSMA Android Application

User Manual



Table of Contents

1	Introduction	3
1.1	Revision History.....	3
2	Installation	4
2.1	Before Installation	4
2.2	Installation Steps	4
3	Setting Application	8
3.1	Logging In to Any Station.....	8
3.1.1	Autologin.....	9
3.1.2	PIN Protection	10
3.2	Station Options	11
3.3	Application Menu.....	12
3.4	Kiosk Mode.....	13
3.5	Other Settings	13
4	Language	16
4.1	Changing Language.....	16
5	Updates.....	19
6	Export and Import.....	20
6.1	Export of Settings	20
6.2	Import of Settings.....	21
7	Rest API	22
7.1	Rest API V1.0.0.....	22
7.2	Rest API V2.0.0.....	22

1 Introduction

The iSMA Android Application is an app designed for the iSMA CONTROLLI industrial PC panels, which allows for easy logging and accessing Niagara station or any HTML5 webserver. The credentials to the Niagara station can be entered just once, and with each log out or restart of the industrial PC panel, the user is automatically logged back in. The Android operating system gives a lot of possibilities but the device can also be managed only as a user interface to keep track of the temperature in rooms or change some settings of the system, which is operated through the Kiosk mode of the application. The Kiosk mode prevents any other application to be used on the panel. It can be turned off only with the password.

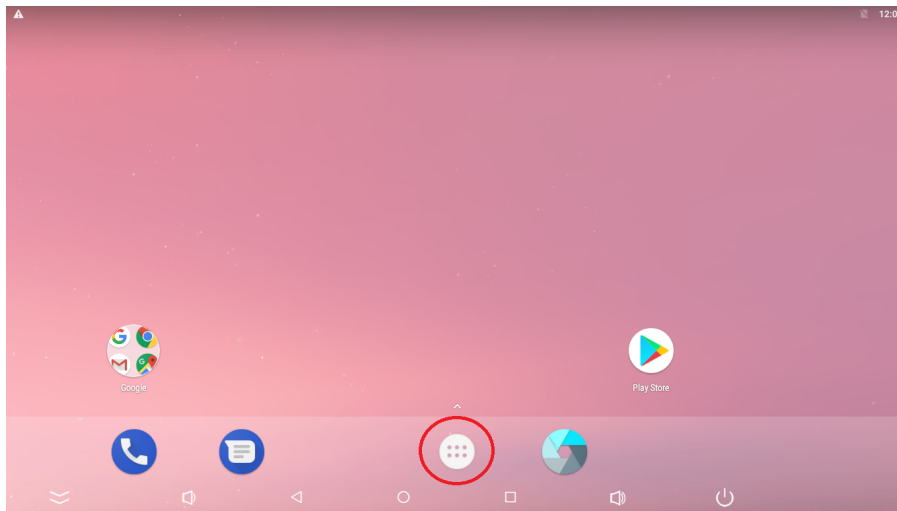


Figure 1. iSMA Android app

1.1 Revision History

Rev.	Date	Description
4.3	1 Dec 2022	Rest API V2.0.0 support
4.2	25 May 2022	Rebranded
4.1	14 Oct 2021	Added note in the Autologin part
4.0	22 Jun 2021	Fourth edition Autologin feature added
3.1	4 Nov 2020	Application languages added
3.0	22 Jul 2020	Third edition
2.0	6 Dec 2019	Second edition
1.0	26 Aug 2019	First edition

Table 1. Revision history

2 Installation

2.1 Before Installation

The following are needed to install the application:

- PC with Windows OS (the 32 or 64-bit latest version 7);
- USB A-USB A cable or USB C-USB A—depending on the version of iSMA-D-PA;
- Panel PC iSMA-D-PA7C-B1, iSMA-D-PA10C-B1, or iSMA-D-PA15C-B1.

2.2 Installation Steps

Note: Remember that this application is exclusively for iSMA Industrial PC Panels and Niagara stations.

Step 1: Add the folder with the application to your PC desktop.

Step 2: Turn the Panel PC on.

Step 3: The USB port should be set to OTG Mode, USB debugging to On, and USB Configuration to MTP (steps from 3.1 to 3.5 are necessary for iSMA-D-PA panels with a USB A interface).

Step 3.1: Go to the main menu of the Android Panel PC—a round, white icon with dots at the bottom center of the screen:

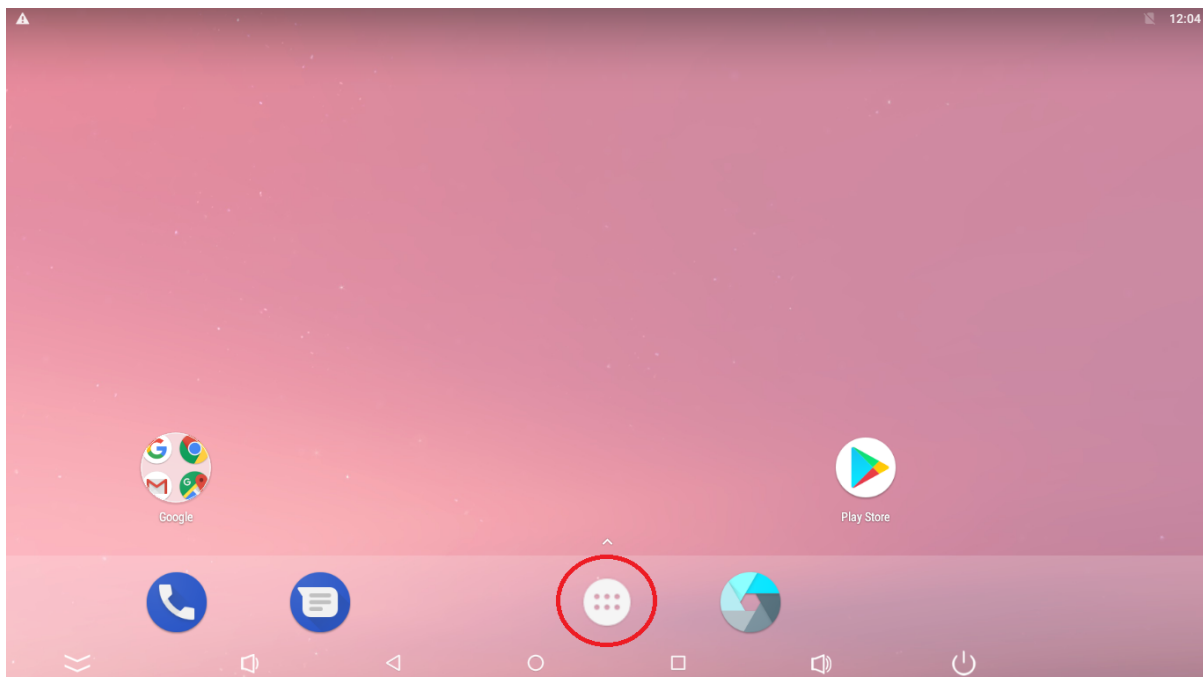


Figure 2. Main menu

Step 3.2: Go to the Settings:

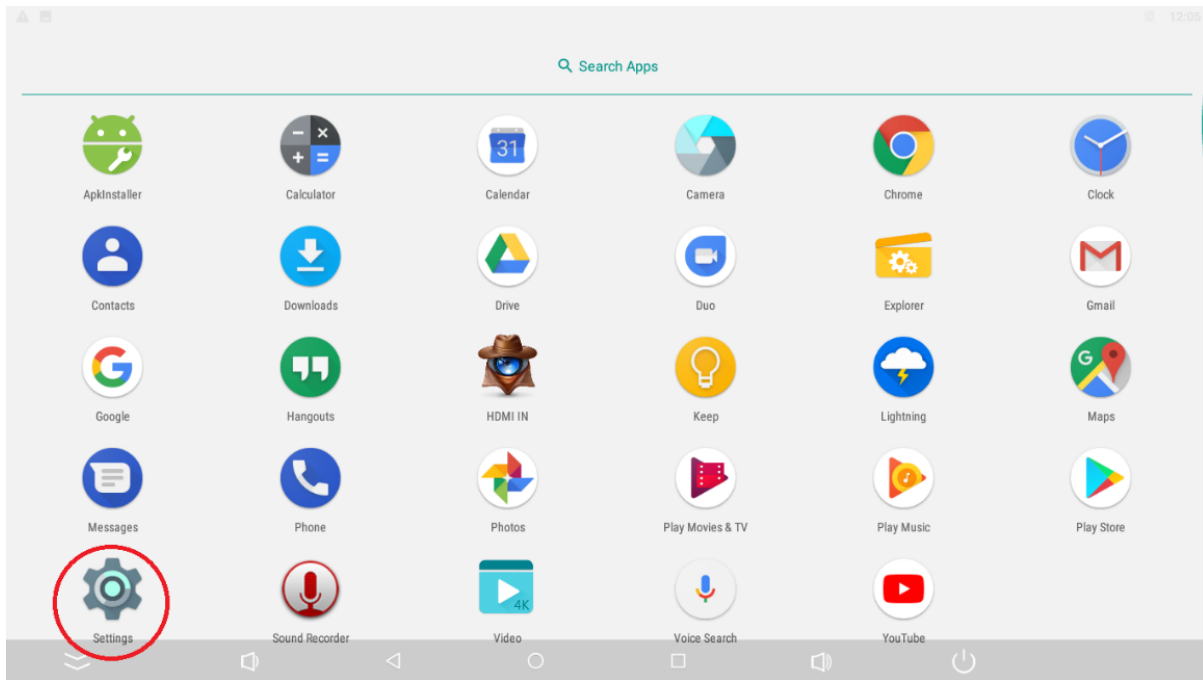


Figure 3. Settings

Step 3.3: Go to the Developer options:

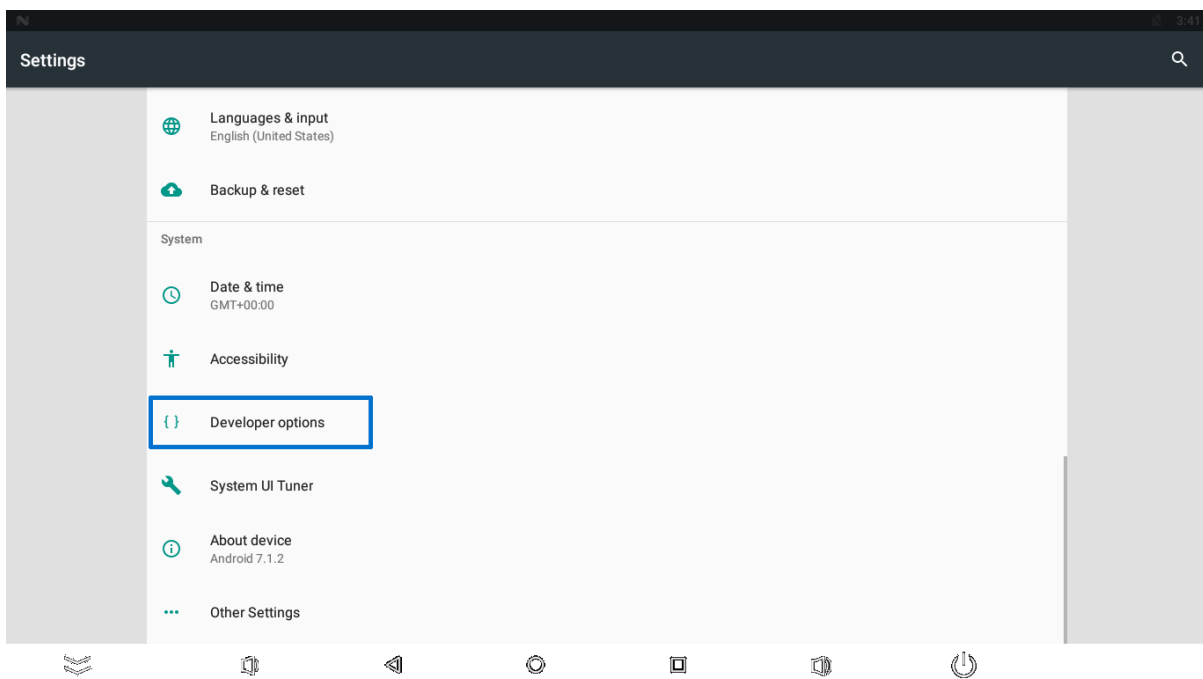


Figure 4. Developer options

Step 3.4: Set the USB Mode to OTG Mode and turn the USB debugging on:

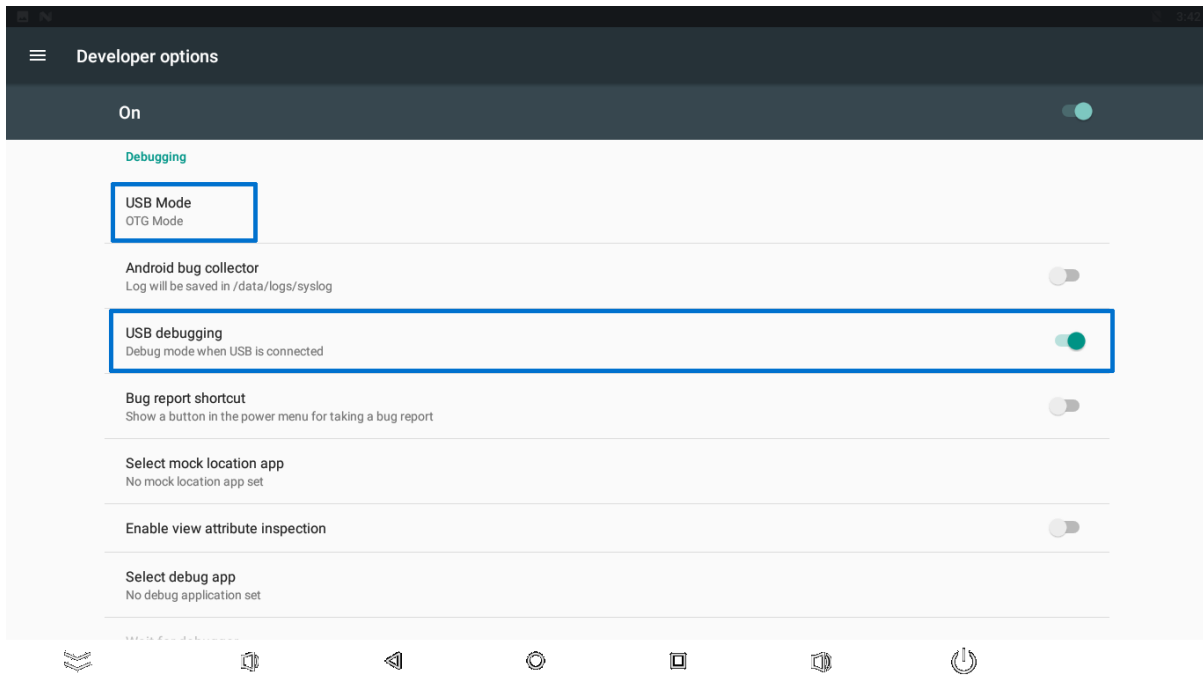


Figure 5. USB mode and USB debugging

Step 3.5: Set the USB Configuration to MTP:

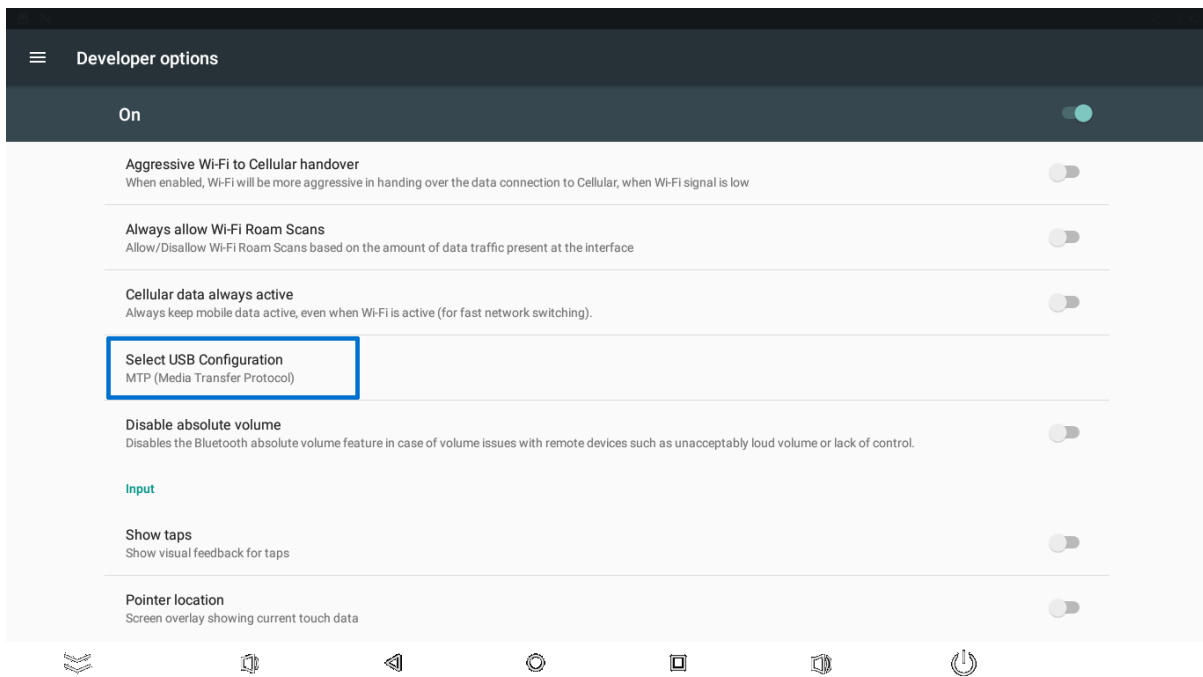


Figure 6. Select USB configuration

Step 4: Connect a USB A cable to the PC and to the Panel (use the USB A socket next to RJ45 or the USB C–marked on the figures below):

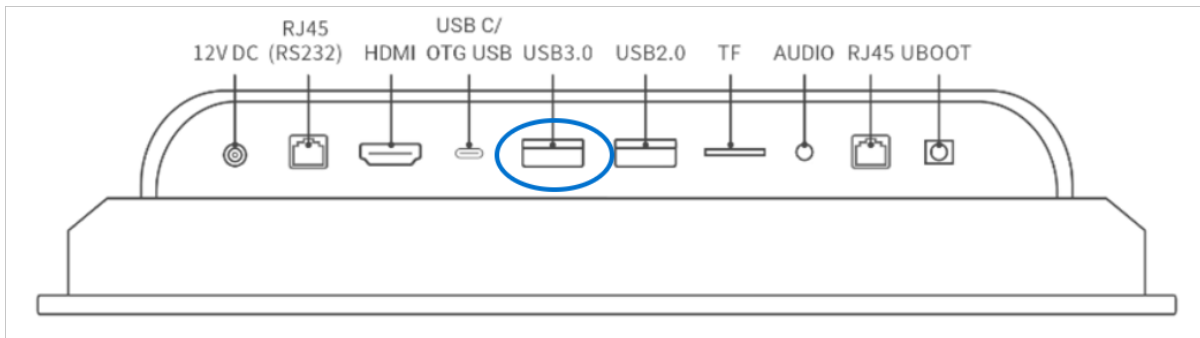


Figure 7. Interfaces in a 10.1 inch panel

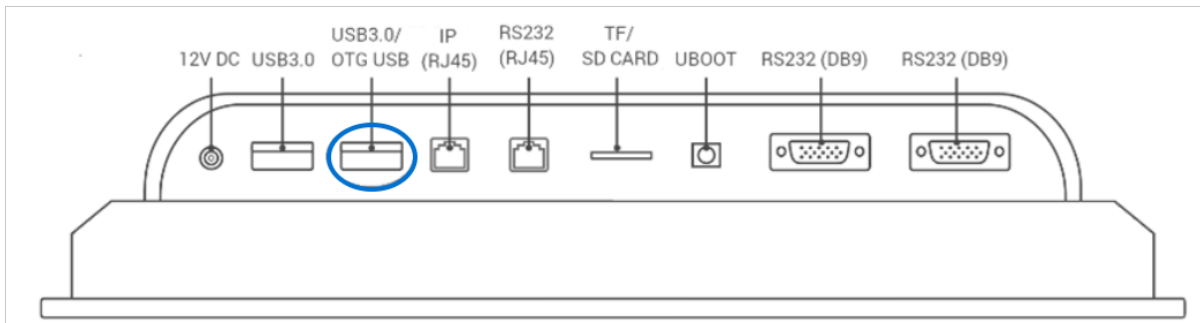


Figure 8. Interfaces on a 15.6 inch panel

Step 5: Wait for the PC to recognize the device and install drivers.

Step 6: Open the folder with the application.

Step 7: Double click on install.bat file—the application will be installed automatically on the connected Panel PC.

Step 8: The last step is to set the application as the Home app.

After touching the screen, a new window shows up. Choose the iSMA Android Application and select Always.

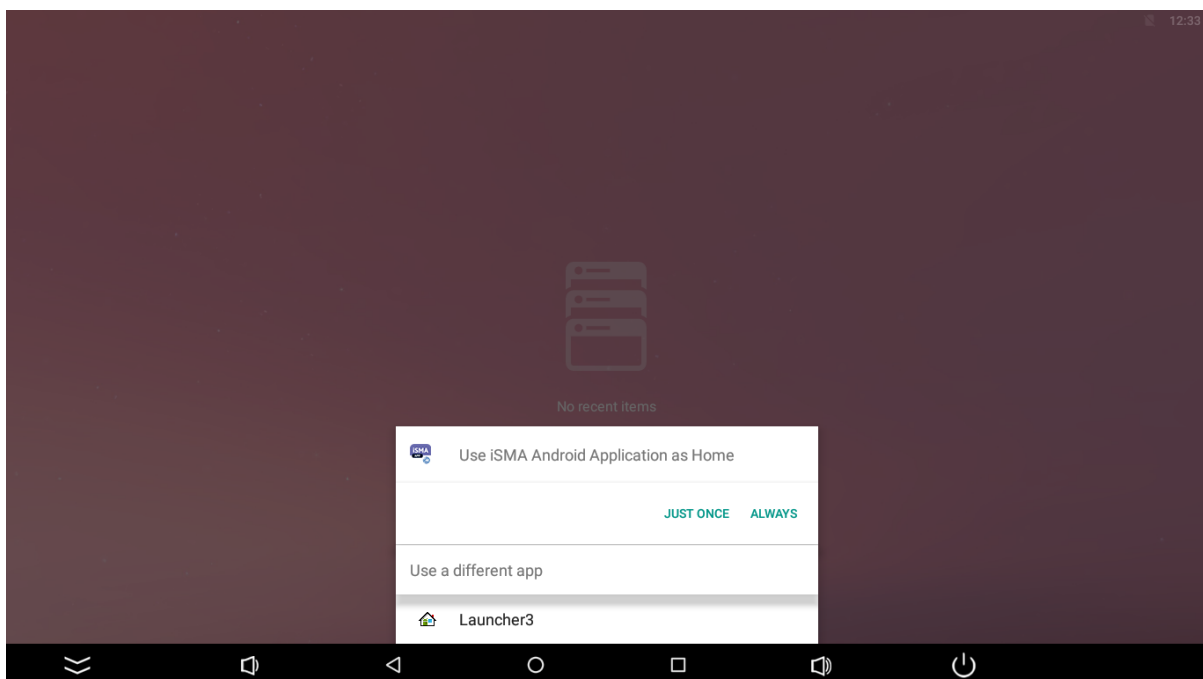


Figure 9. Home application

Note: Application is now ready to work. Follow the next steps to set up Niagara station and Kiosk Mode.

3 Setting Application

3.1 Logging In to Any Station

When the application turns on, the main screen, which allows for adding multiple stations, appears. To add a new Niagara station, touch a '+ Add View' tile:



Figure 10. Main screen

Enter credentials and save them.

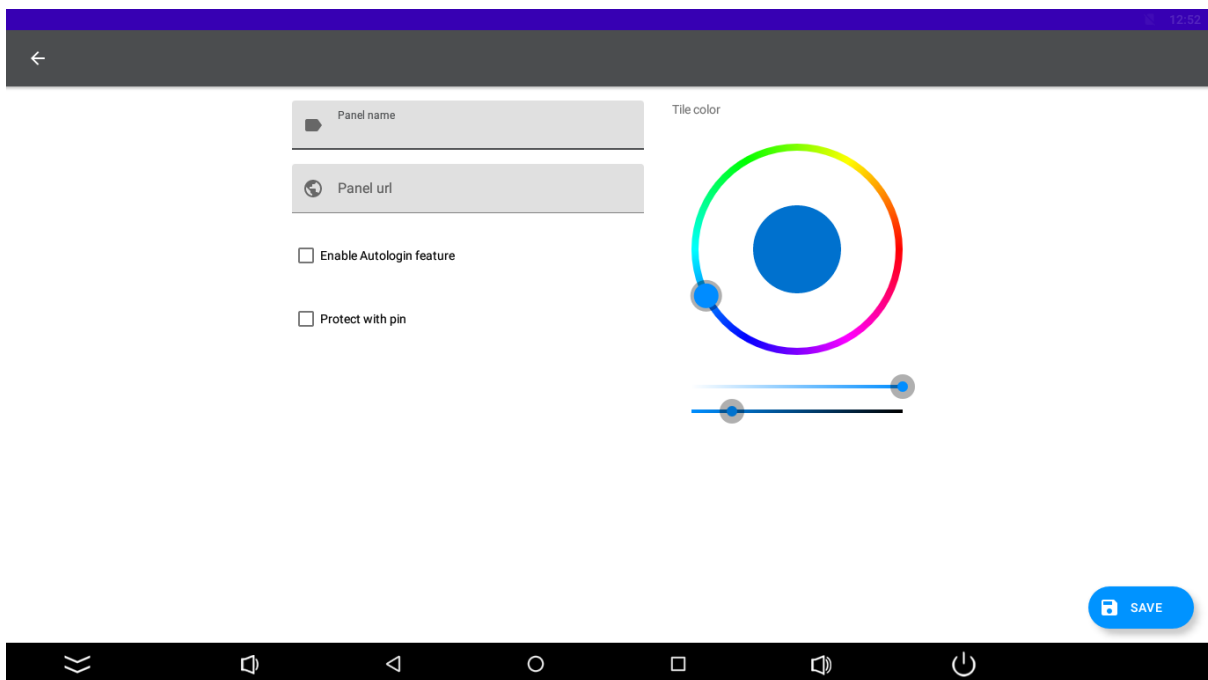


Figure 11. Credentials

Logging into the station is available with two options to check:

- Enable Autologin feature, and
- Protect with pin.

3.1.1 Autologin

Checking the Enable Autologin feature extends the username and password fields. Saved, the credentials are remembered, and the station is automatically logged from the panel. If the option remains unchecked, logging in is redirected to an external login website (Niagara or other).

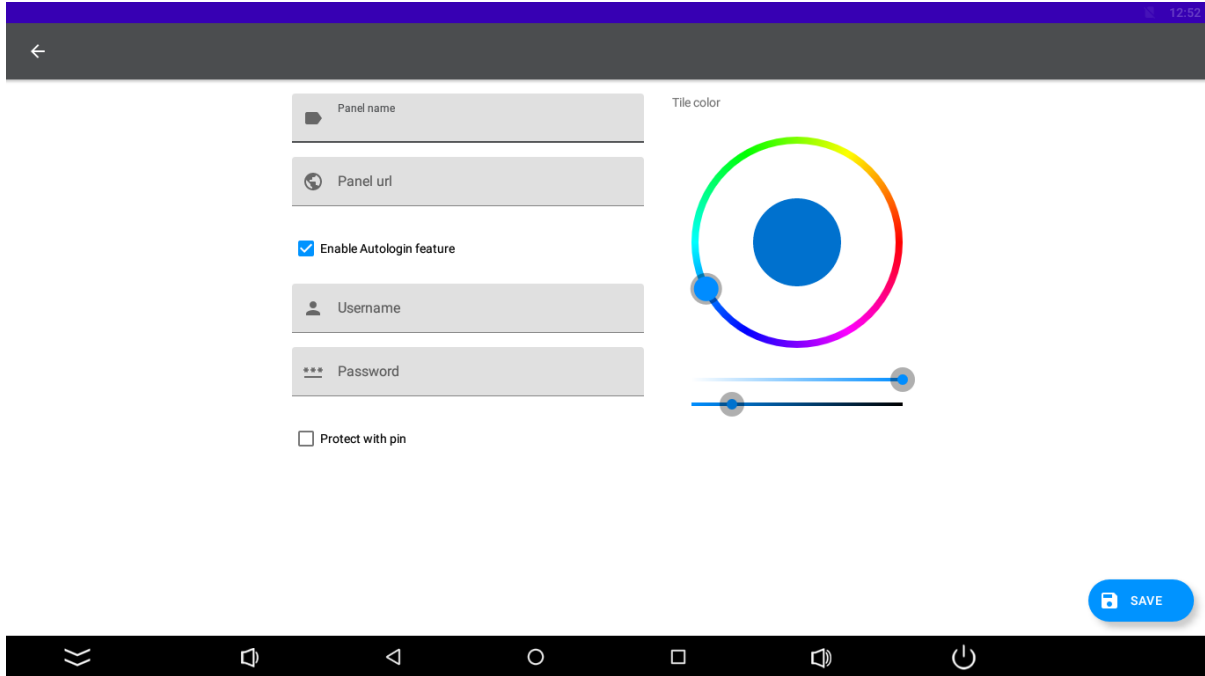


Figure 12. Autologin credentials

Note: If there are any problems with logging in, it is advised to leave the option unchecked, which redirects to the Niagara or other login website and enables logging in there. Please note that it supports logging in to any controller, which enables HTML5 graphics.

Note: If there are any problems with opening of the login page, please add the “/login.html” or “/prelogin” part at the end of the station’s url, or add any other extension that leads the user to the login page.

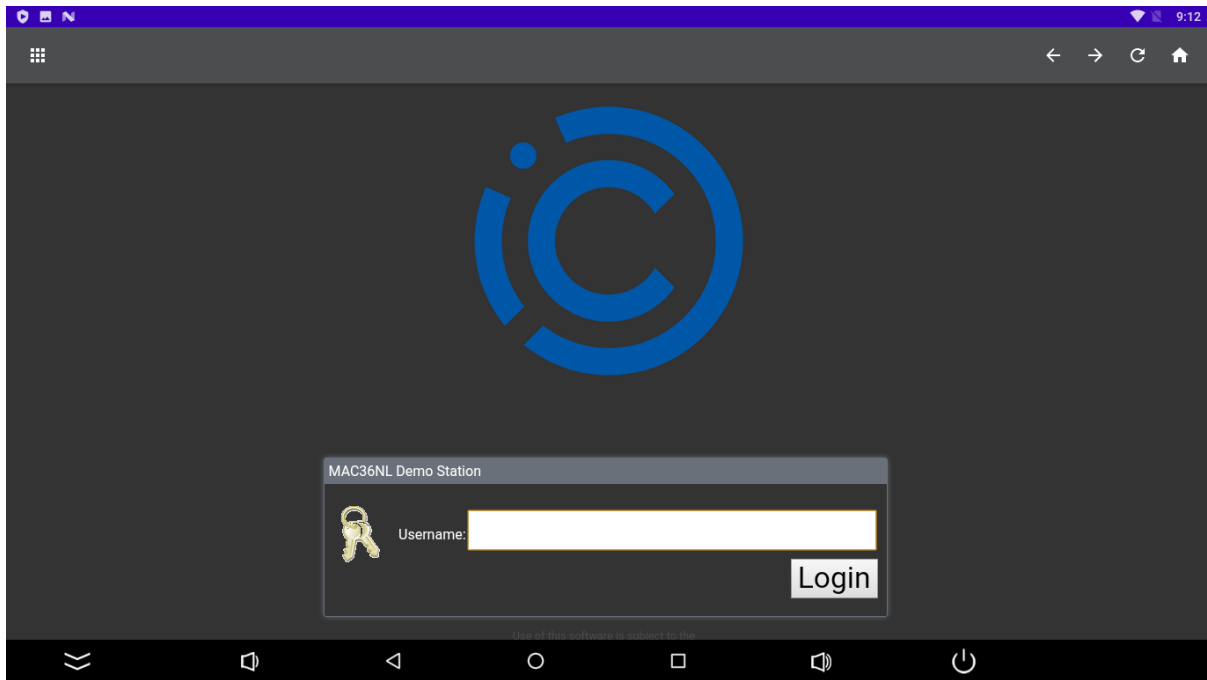


Figure 13. Niagara login website enabling logging into any controller with HTML5 graphics

Note: To enable a proper functioning of autologin, please remember to add a port number after a panel's IP address:

- :443 for https connection;
- :80 for http connection,

For example: <https://168.192.1.1:443>.

Note: Selecting the autologin feature is available from the iSMA Android Application 4.0.

3.1.2 PIN Protection

Checking the Protect with pin option enables the station to require entering a pin number after a set time of inactivity in the Kiosk mode. Go to the Kiosk mode settings for more information about entering the Kiosk mode and setting the pin lock timeout.

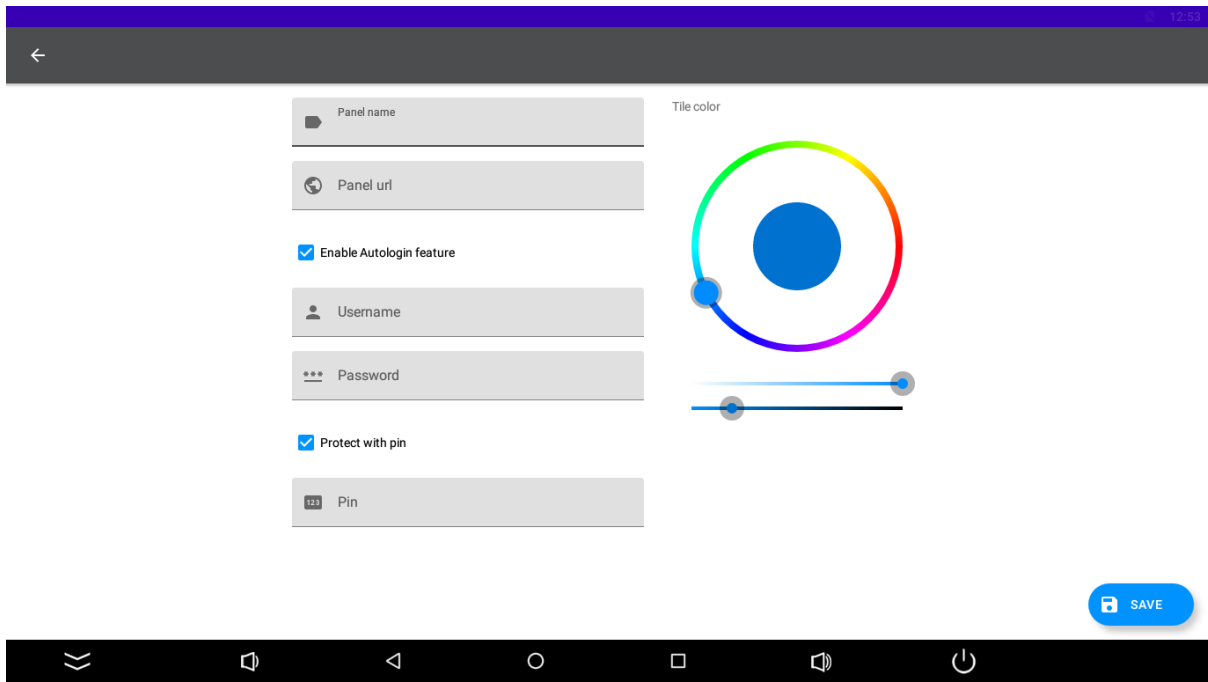


Figure 14. Protect with pin option

After successful logging in, the application goes back to the main screen with a list of added stations.

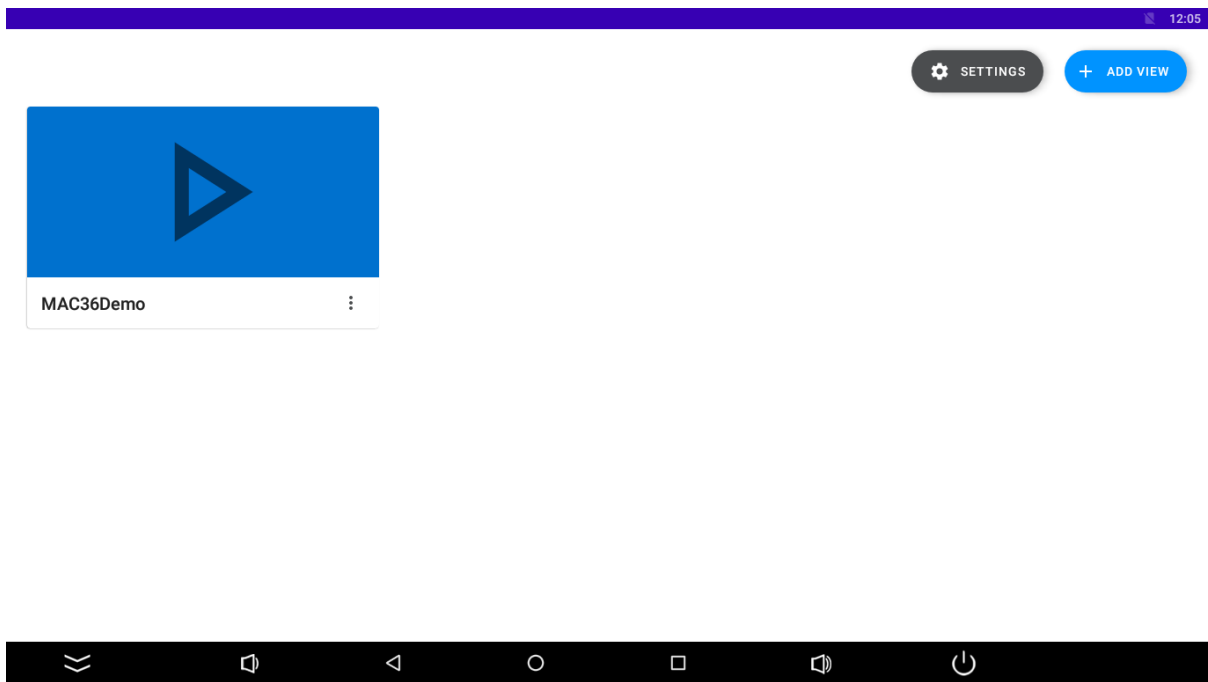


Figure 15. Main screen with an added station

3.2 Station Options

Three dots in the upper right corner of the station lead to the station settings:

- Home station: can be chosen only for one station; the chosen station will be automatically logged in after restarting or turning on the Industrial PC panel with Android;
- Edit: edits the station credentials;
- Delete: deletes the station.

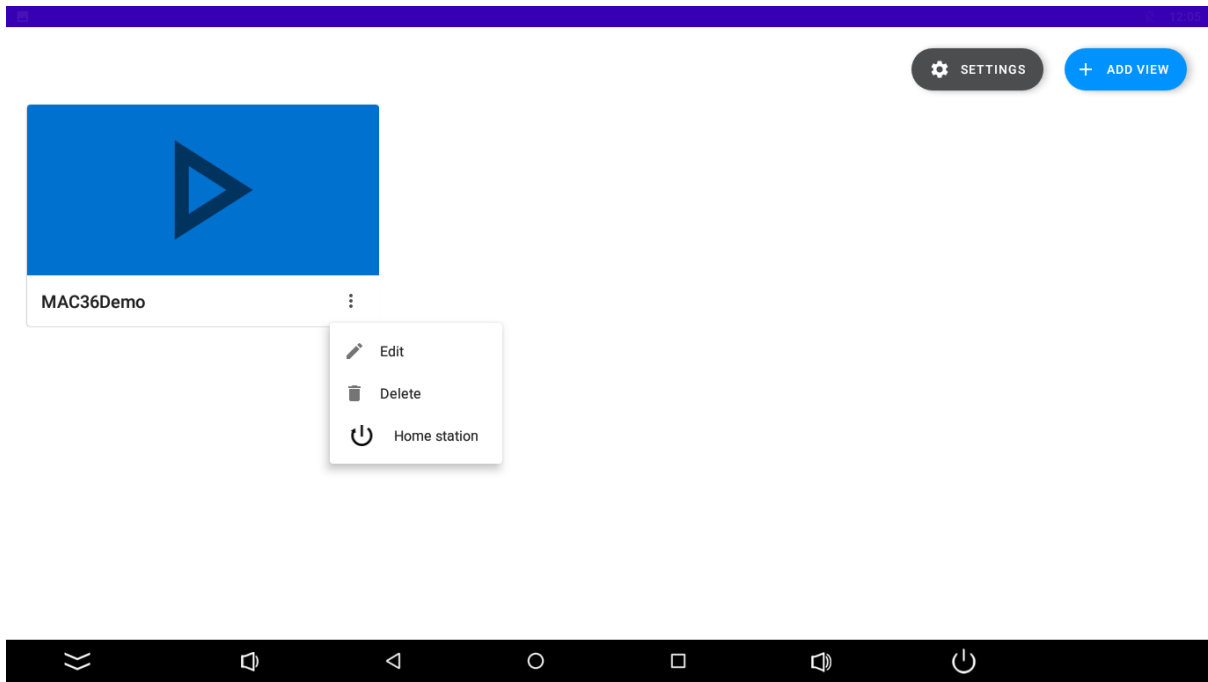


Figure 16. List of stations, with options

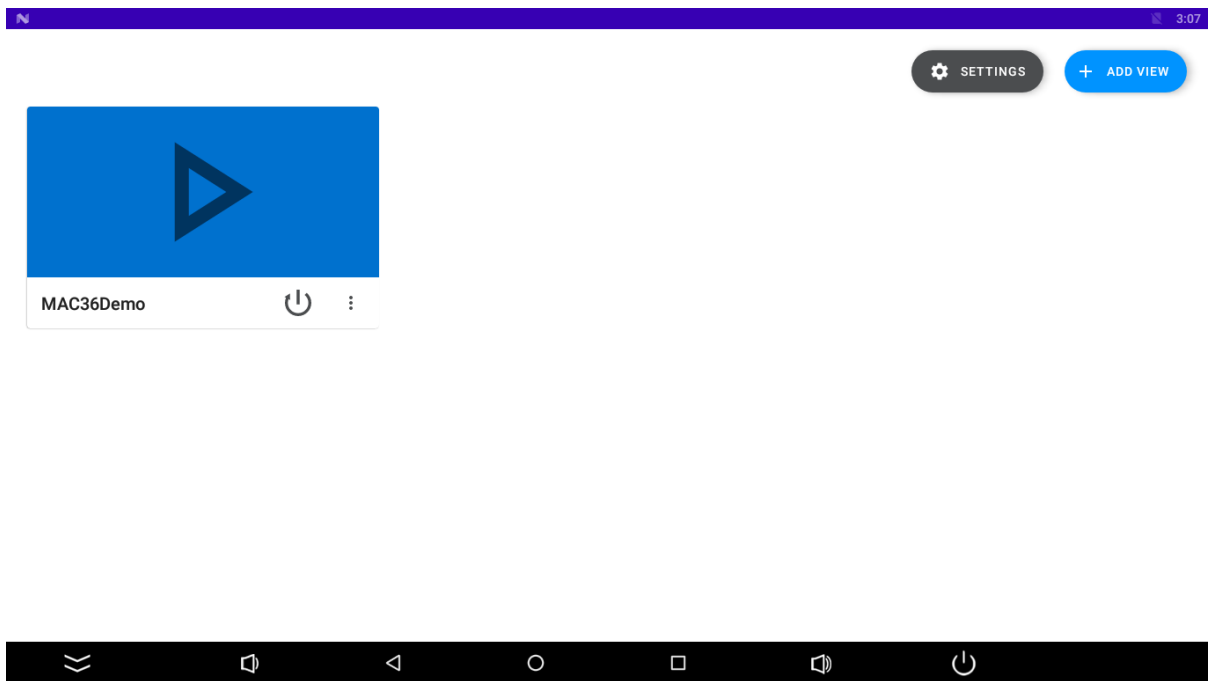


Figure 17. List of stations - the MAC36Demo is set as a home station, which is marked by the additional icon

3.3 Application Menu

When swiping down on the top of the display, the menu, which allows to go back/forward/refresh/home page, is visible. Nine tiles icon allows for going back to the main view with all added stations.



Figure 18. Application menu

3.4 Kiosk Mode

To turn on the Kiosk mode and change the password from the default (“password”), click on three black dots in the right top corner and choose settings. The new screen appears:

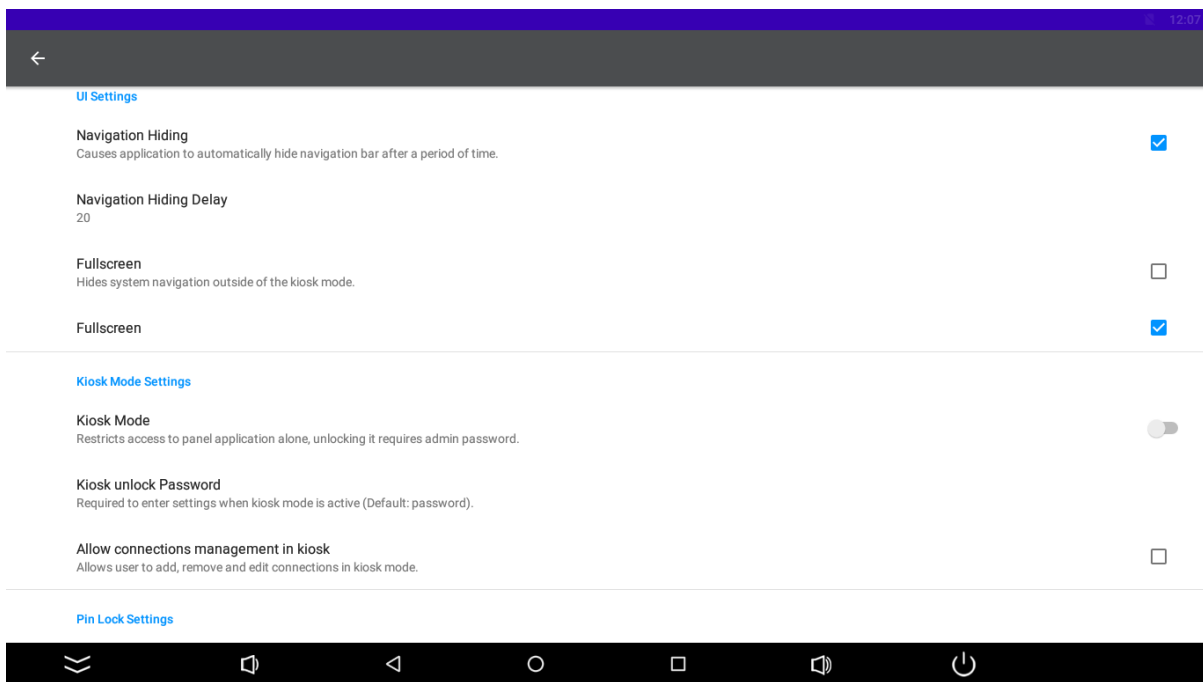


Figure 19. Settings

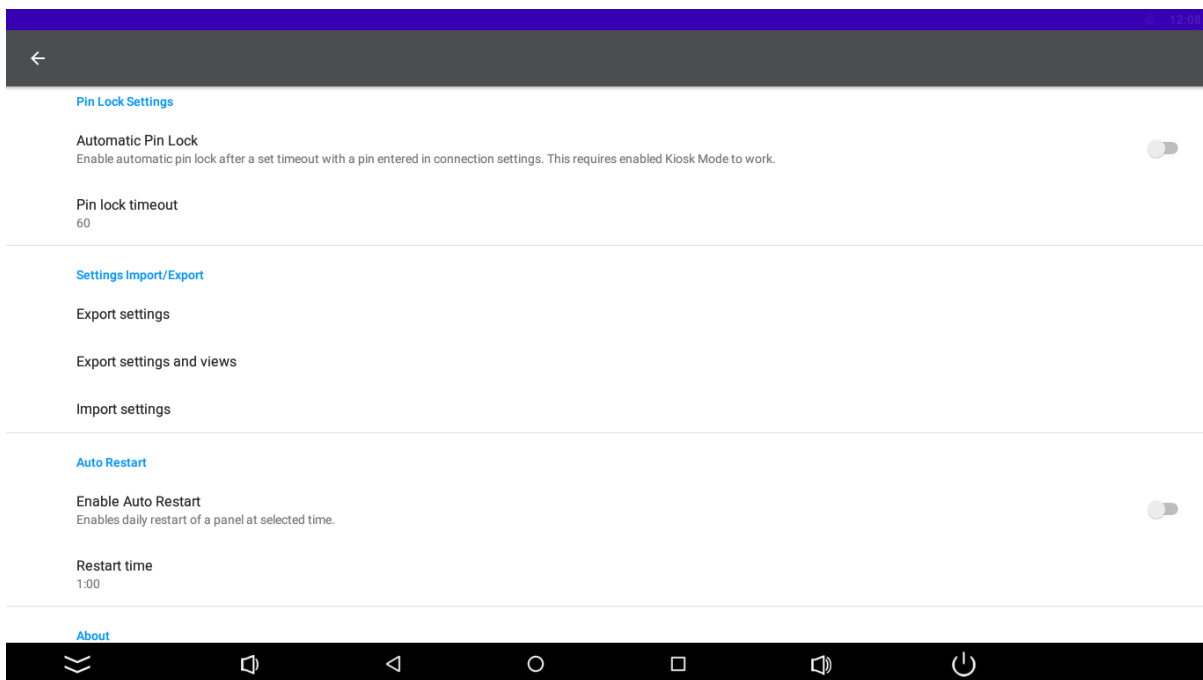


Figure 20. Settings

An admin password can be changed in this view together with turning on/off the Kiosk mode. After turning the Kiosk mode on, the password is needed to enter settings.

3.5 Other Settings

Other settings:

- Navigation Hiding: if marked, allows navigation to automatically hide after a time set in “Navigation Hiding Delay”;

- Navigation Hiding Delay;
- Fullscreen: opens the application in a fullscreen mode;
- Kiosk Mode: blocks the possibility to use other applications than the iSMA Android Application; Kiosk Mode blocks the possibility to restart and turn off the Panel PC with Android;
- Kiosk unlock Password: allows changing the password for turning off the Kiosk mode; the default password is "password";
- Allow connections management in the kiosk: if marked, allows the user to add, remove, and edit connections while the Kiosk Mode is on;
- Automatic Pin lock: allows to add a PIN protection to the credentials (it can have up to 7 digits); in the Settings it has to be turned on.

Note: The automatic Pin lock works only when the Kiosk Mode is on.

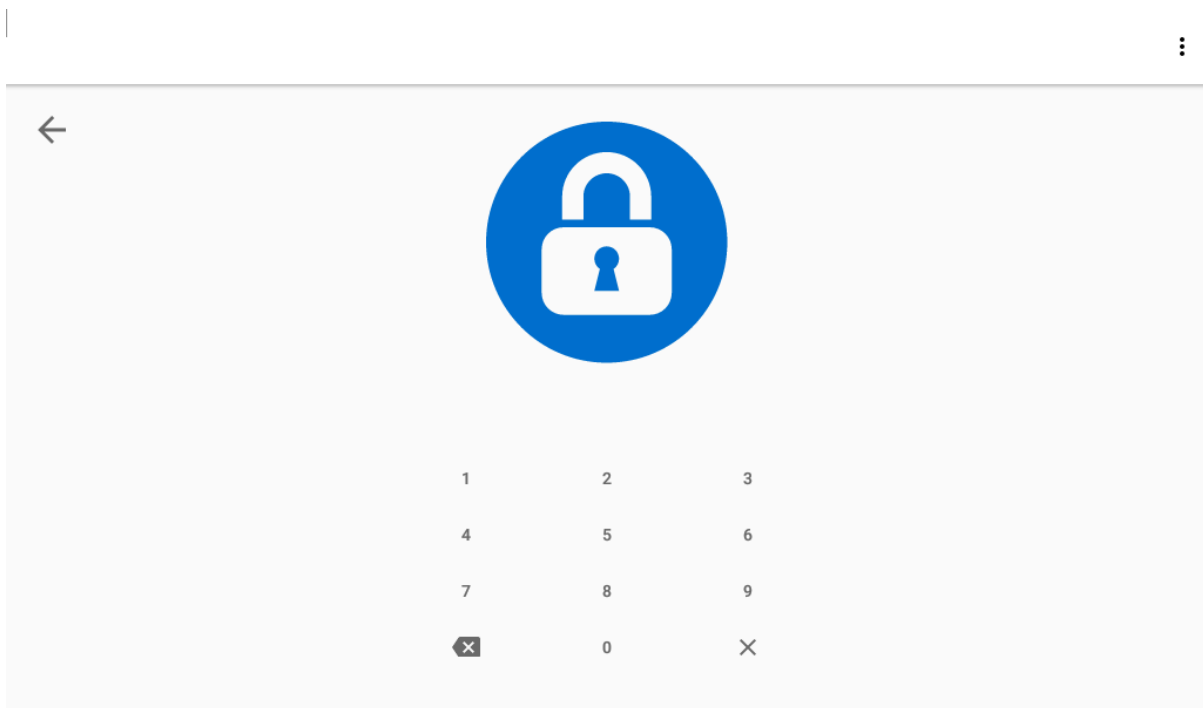


Figure 21. PIN lock popout

- Pin lock timeout: a station will get locked after a time set; to unlock the station it is necessary to enter the PIN;

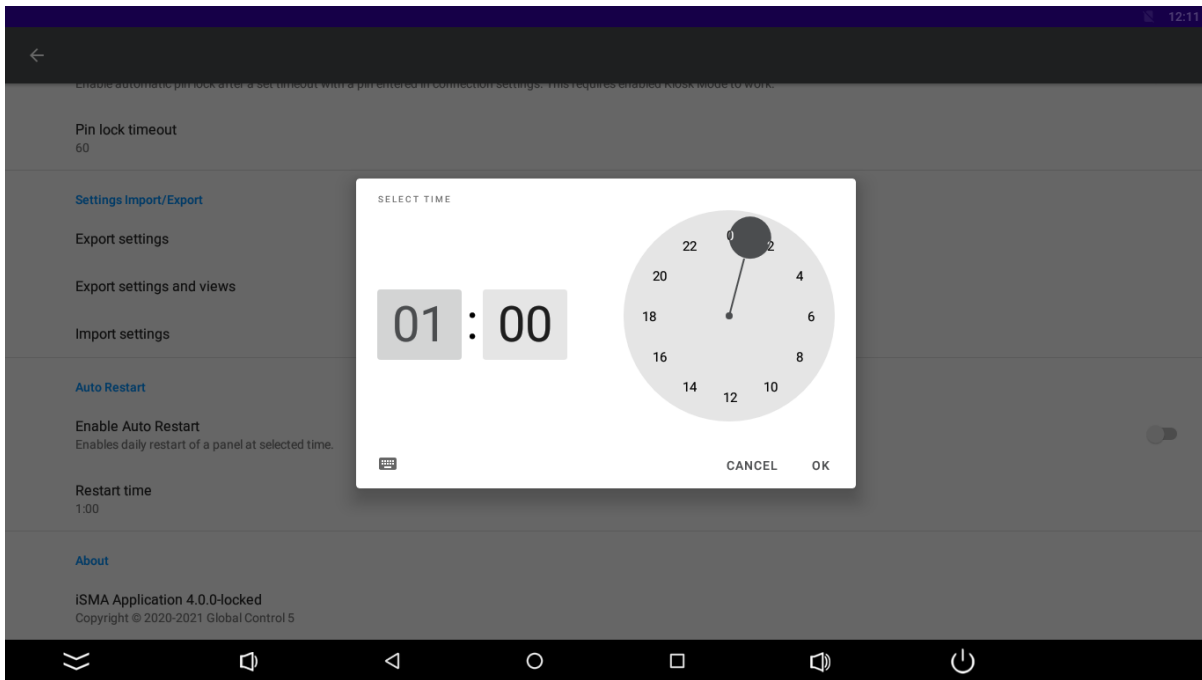


Figure 22. Settings

- Export settings: settings can be exported to a file;
- Import settings: settings can be imported from a file;
- Enable autorestart: when the Kiosk Mode is turned on, there is a possibility to turn on a daily restart of the Android panel;
- Restart time: the time of restart can be set here.

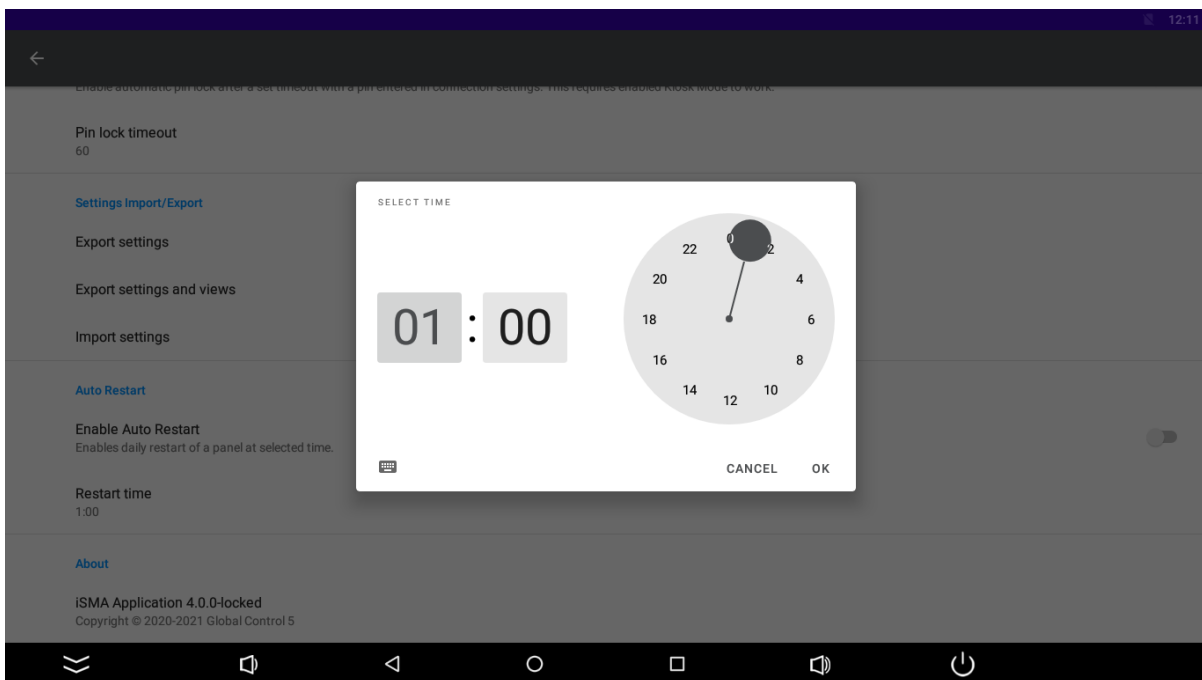


Figure 23. Setting a restart time pop up

4 Language

4.1 Changing Language

There is a possibility to change the language of the application. The list of added translations includes:

- PL;
- DE;
- CZ;
- IT;
- HU;
- LV.

The iSMA Android application will be displayed in the system language, provided the language is included in the application list of languages. If the user sets the Android system language to one that is not available on the list, the application will be displayed in English. To change the system language, follow the below steps:

Step 1: Go to the main menu of the Android panel PC—a round, white icon with dots at the bottom center of the screen:

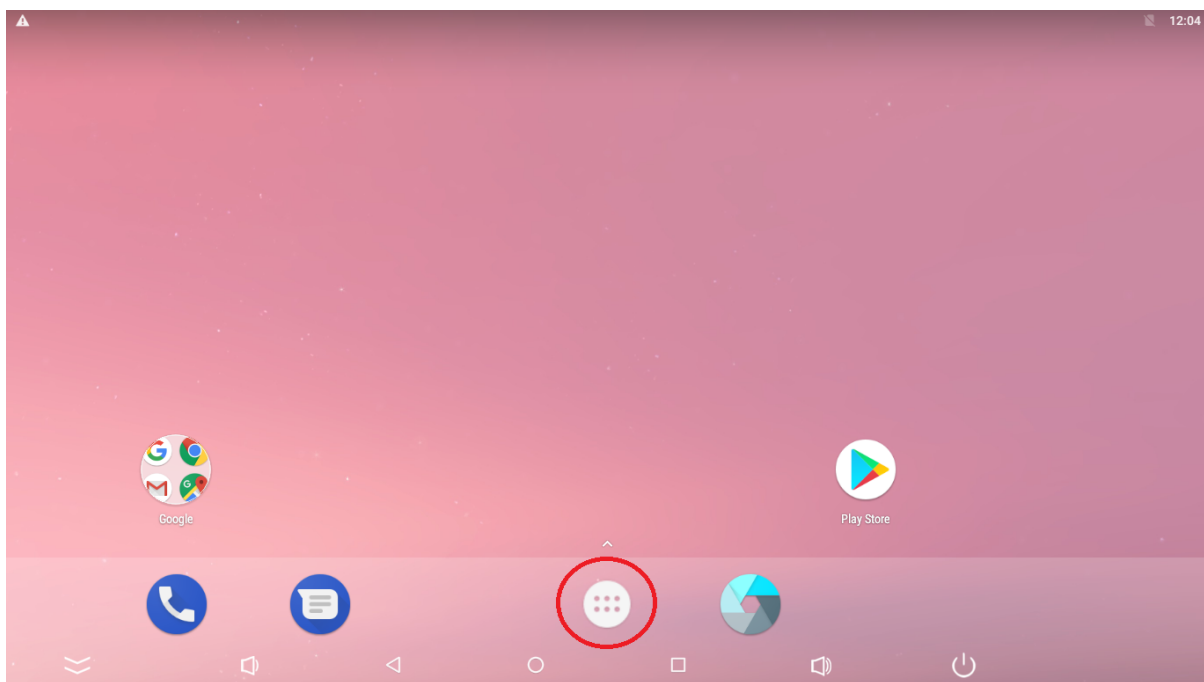


Figure 24. Main screen

Step 2: Go to the Settings:

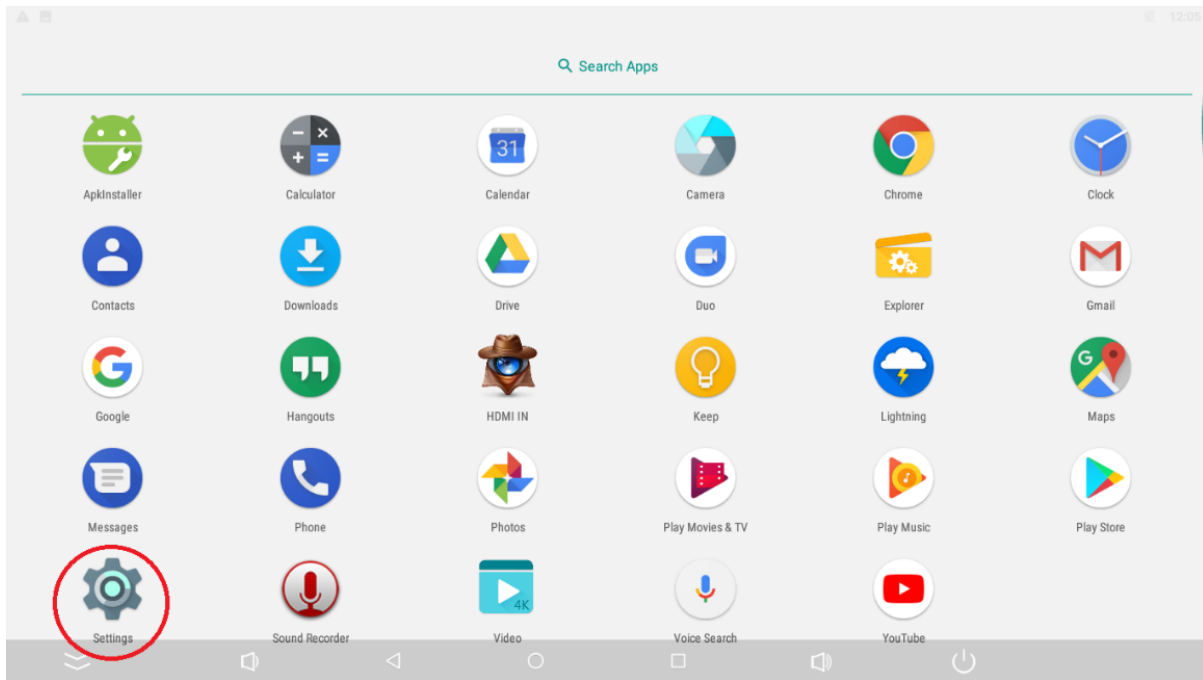


Figure 25. Settings

Step 3: Go to the Language & input:

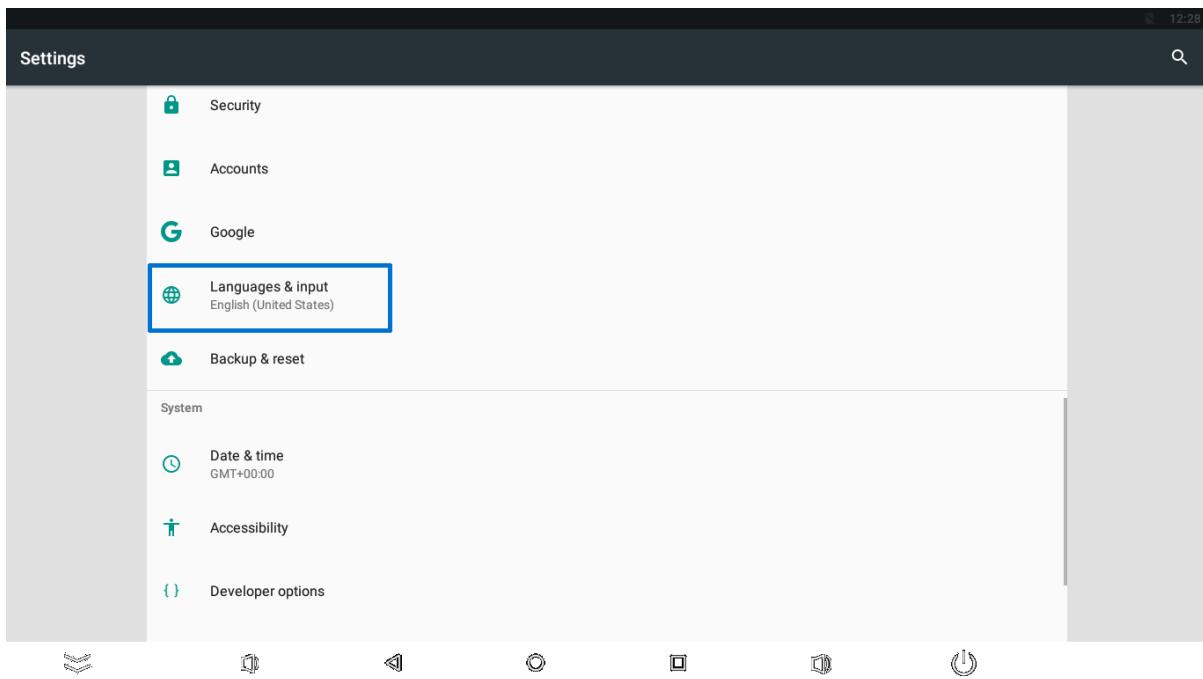


Figure 26. Language settings

Step 4: Go to the Language, which expands the list of languages available to choose from. Tap the chosen language:

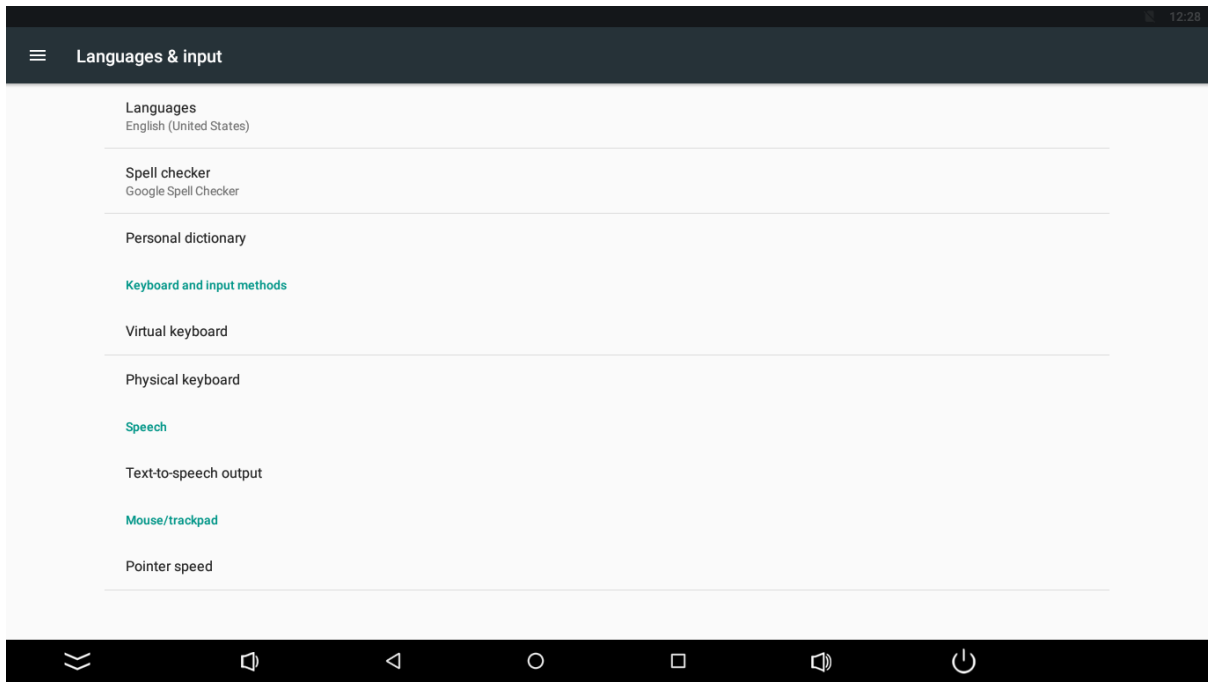


Figure 27. Language

5 Updates

Follow the below steps to install an update:

Step 1: Installation files should be located on a USB flash drive.

Step 2: Turn the Kiosk mode off.

Step 3: Insert the USB flash drive into a USB port located next to RJ45 (figures 6 and 7).

Step 4: The inserted USB drive can be visible in the Android menu at the top of the screen (scroll down).

Step 5: Click on file with an '.apk' extension and select Install in the popup window.

6 Export and Import

6.1 Export of Settings

Follow the below steps to export settings:

Step 1: Select the Export settings or Export setting with views (exports settings along with connection data).

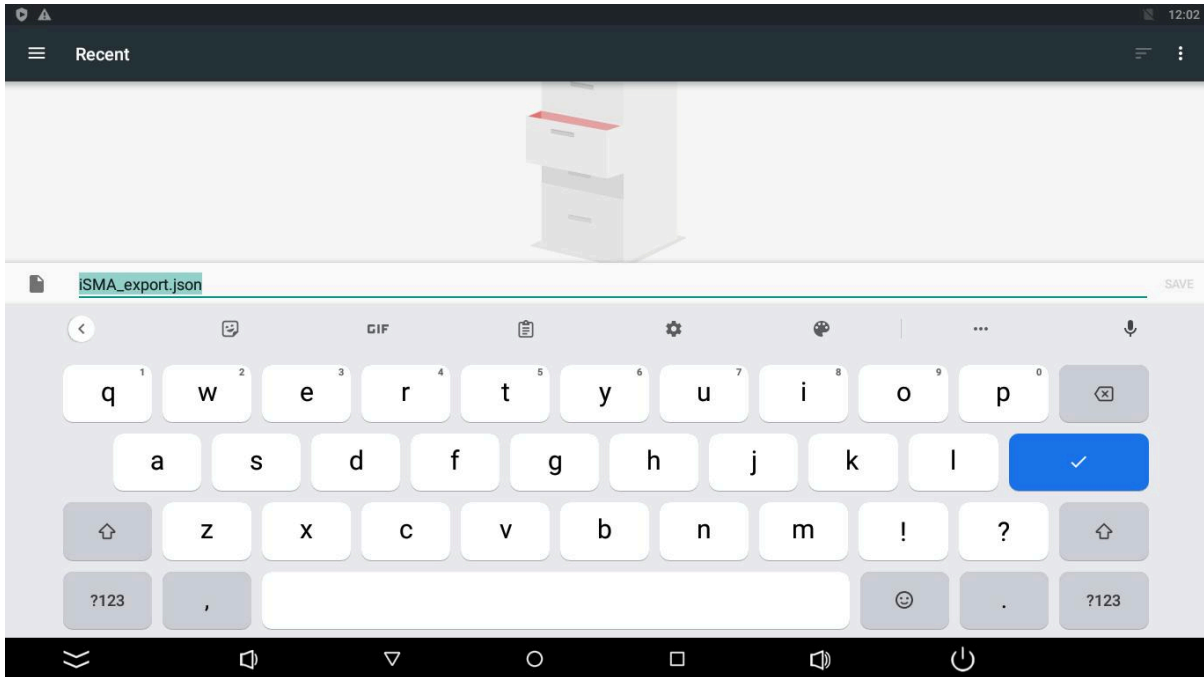


Figure 28. Export settings

Step 2: New window shows up. A default name of the file is 'iSMA_export.json' but it can be changed; also at this point the user has to pick the location of the file (touch the three dots icon in the right top corner of the screen).

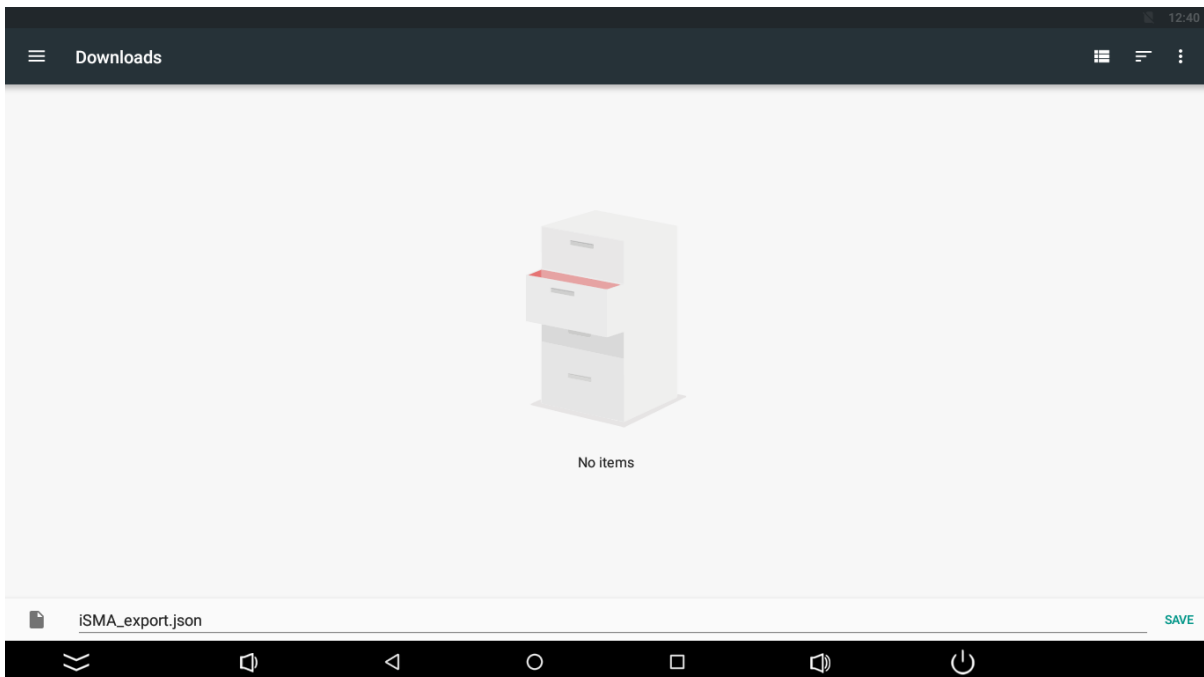


Figure 29. Export file name and location

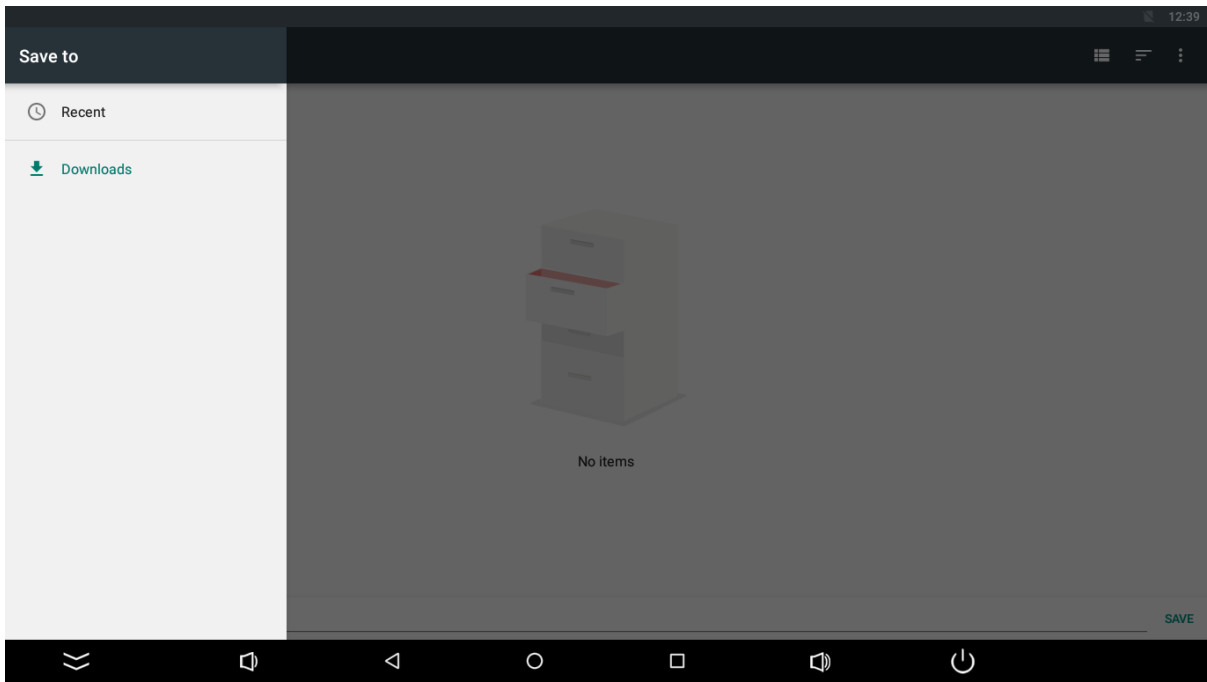


Figure 30. Selecting location for an export file

6.2 Import of Settings

Follow the below steps to import settings:

Step 1: Select the Import settings.

Note: Importing settings overwrites current settings, including added connections.

Step 2: Choose a file to import (touch the three dots icon in the right top corner of the screen); it can be downloaded from an e-mail, cloud, or from a flash drive.

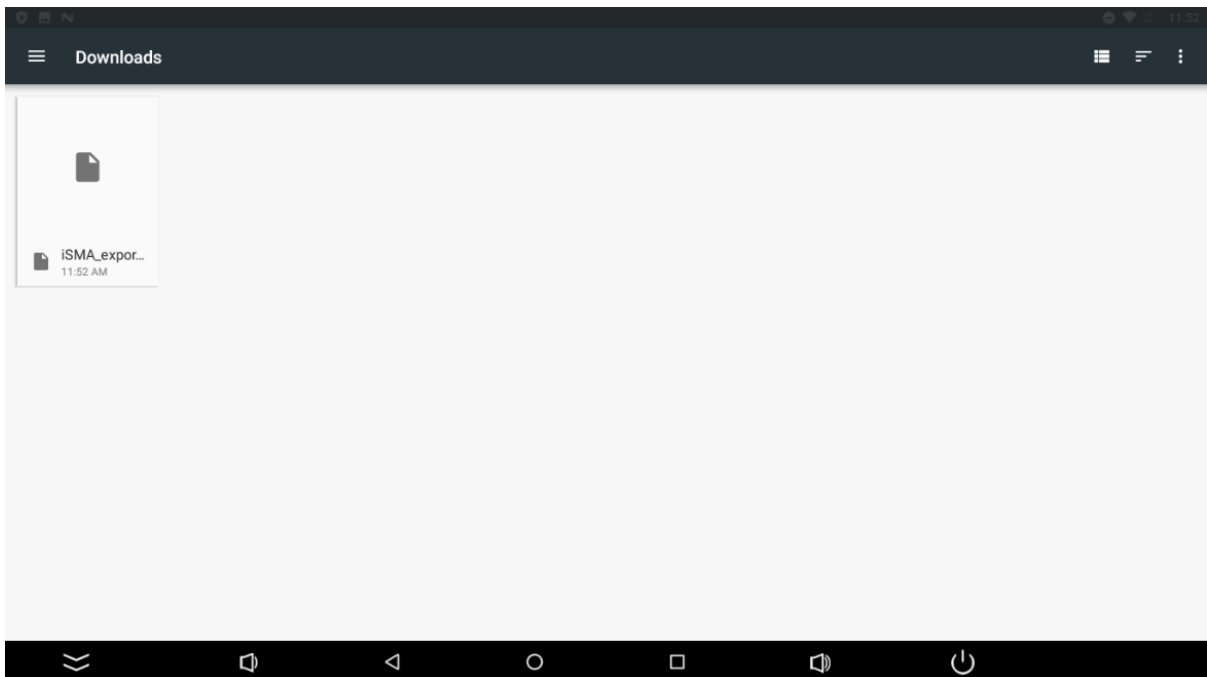


Figure 31. Import settings file location

7 Rest API

The iSMA Android Application is equipped with the Rest API interface, which provides a remote access to some of application's functions like modifying saved connections or managing screen brightness and inactivity timeout. Rest API, when enabled, is available on the port 5580.

A complete functional documentation of the iSMA Android Application's Rest API is available in the iSMA-Android-Application_Rest-API.html document. It provides commands in the following programming languages:

- Curl;
- Java;
- Java for Android;
- Obj-C;
- JavaScript;
- C#;
- PHP;
- Perl;
- Python.

Figure 32. Technical documentation for the iSMA Android Application Rest API

The Rest API for the iSMA Android Application is available in two versions.

7.1 Rest API V1.0.0

The API V1.0.0 has the following functionalities:

- managing the Kiosk mode;
- managing an autostart connection view;
- adding, editing, and removing connection views.

Note: Rest API does not require an additional authentication. Make sure to use the Rest API V.1.0.0 only on a secured network.

7.2 Rest API V2.0.0

The API V2.0.0 has the following functionalities:

- enables an HTTP basic authentication;
- managing screen brightness and timeout;
- playing tunes on a device's speaker;
- protection with a configurable username and password.

Note: Taking into consideration required functionalities, enable the relevant Rest API version in the application's menu.