

# Codeks Virtual Controller

---

INSTRUCTION MANUAL FOR ADMINISTRATORS on the use of the  
**Codeks Virtual Controller** add-on and the configuration of  
a system with virtual controllers



# CONTENTS

<b>0</b>	<b>INTRODUCTION.....</b>	<b>3</b>
<b>1</b>	<b>ADDING THE LICENSE CODE TO THE SOFTWARE .....</b>	<b>4</b>
<b>2</b>	<b>SETTINGS IN THE HARDWARE EDITOR .....</b>	<b>5</b>
<b>3</b>	<b>SETTINGS FOR USER GROUPS .....</b>	<b>6</b>
<b>4</b>	<b>SENDING TABLES.....</b>	<b>7</b>
	SENDING TABLES IN CODEKS TA AND CODEKS TA ADVANCED .....	7
	SENDING TABLES IN CODEKS TA KIT .....	8
<b>5</b>	<b>REGISTERING T&amp;A USING A MOBILE DEVICE.....</b>	<b>9</b>
	REGISTERING ENTRY/EXIT EVENTS.....	10
	REGISTERING EVENTS WITH BUTTONS.....	11
<b>6</b>	<b>VIEWING THE EVENT REGISTERED IN THE AREA OF THE VIRTUAL CONTROLLER .....</b>	<b>12</b>
	MONITOR .....	12
	TIME ATTENDANCE.....	12
	REPORTS.....	13

## 0 INTRODUCTION

**This document provides instructions for administrators and describes how to use the additional Codex Virtual Controller license code.**

The Codeks Virtual Controller license enables mobile registration, additionally, it also enables the geographical restriction of the area around the point of the virtual controller, where employees are still allowed to register their working hours via mobile app.

### NOTE

All **newer Codeks systems** whose main Codeks license (Codeks TA Kit, Codeks TA or Codeks TA Advanced) was first activated **AFTER October 1, 2021, WILL REQUIRE at least one Codeks Virtual Controller license to enable mobile T&A registration through the Codeks Mobility app.**

All **older Codeks systems** whose main Codeks license (Codeks TA Kit, Codeks TA or Codeks TA Advanced) was first activated **BEFORE October 1, 2021, will NOT REQUIRE for the basic operation of mobile T&A registration.** Owners of such systems will be able to purchase the additional Codeks Virtual Controller license if they wish to upgrade their system with the functionality of geographically restricting mobile registration. Older systems without a Codeks Virtual Controller license will continue to operate as before.

### NOTE

The new functionality of the Codeks Virtual Controller license is only possible when using at least the version Codeks 10.2110.0.15840 of the main software or later.

Each Codeks Virtual Controller license **replaces one physical T&A device.** Each license allows you to specify **one virtual controller** i.e. determine the **geographical coordinates of its position and the area of the greatest distance from these coordinates, where employees are still allowed mobile registration.**

You can also leave the virtual controller geographically unrestricted, allowing employees mobile registration anywhere.

Each virtual controller location requires its own Codeks Virtual Controller license (e.g., to set up a system with 3 virtual controllers, you must purchase 3 Codeks Virtual Controller licenses). Additionally, each Codeks Virtual Controller license is limited by the number of employees who can register at each virtual location. Codeks Virtual Controller licenses are available for up to 40 users, up to 300 users, and unlimited users.



You can read more about the Codeks software and its add-ons on our website [jantar.si](https://jantar.si).

# 1 ADDING THE LICENSE CODE TO THE SOFTWARE

After obtaining the **Codeks Virtual Controller** license code you must add it to your Codeks system and activate it to enable the function of mobile T&A registration in your system.

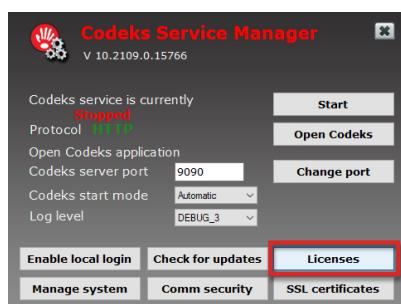
Add the *Codeks Virtual Controller* license to your system using the **Codeks Service Manager** program.

The *Codeks Service Manager* program is installed on the Codeks server so to proceed you will need access to your Codeks server. You can open the program by double-clicking the **CodeksServiceManager.exe** file (C:\Program Files\Codeks or C:\Program Files (x86)\Codeks).

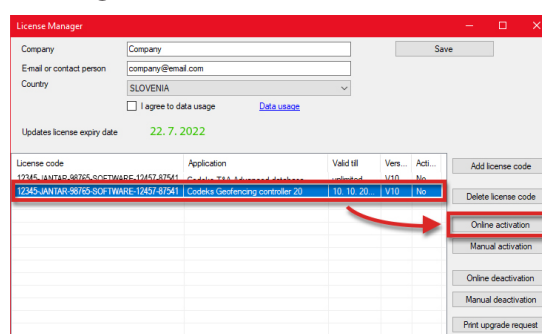
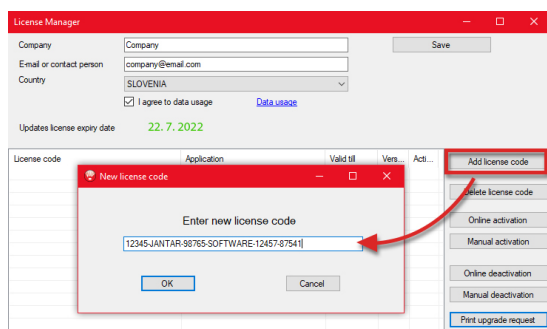
- Before entering the license code, stop the Codeks service by clicking the **Stop** button. Before continuing make sure the service status is set to *Stopped*.
- The *Codeks Virtual Controller* license will now be displayed on the list. You still need to activate the newly entered license by clicking the **Internet activation** button.



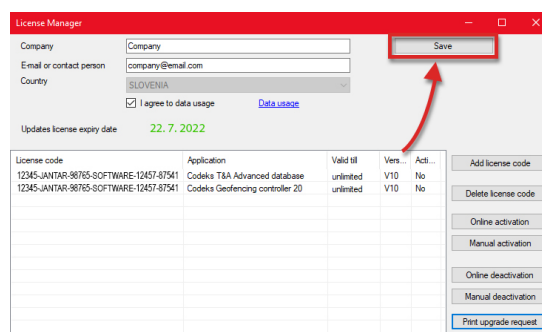
- Then, click the **Licenses** button. A new pop-up window will open.



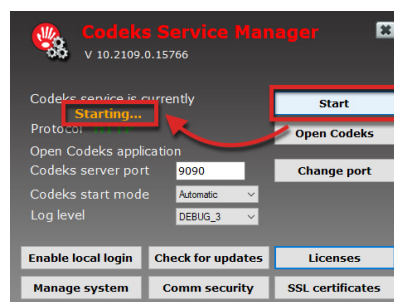
- Click the **Add license code** button and the **License Manager** window will open where you can enter the license code and confirm your entry by clicking **OK**.



- The license validity date has now been changed to **unlimited**. When you are done, save your changes by clicking **Save**.



- Then in the main window of the *Codeks Service Manager* program click the **Start** button to restart the Codeks service.



You can read more about adding, activating and removing license codes in the documentation of the main Codeks application (**CodeksManual-en\_V10.pdf**).

## 2 SETTINGS IN THE HARDWARE EDITOR

To activate the functionality of the virtual controller, it is **necessary to assign a Codeks Virtual Controller license to the selected location** in the *Hardware editor* and **adjust the location settings accordingly**.

1 In the *Hardware editor*, **create a new Passage location for the virtual controller, or use an existing location** (to which no device has yet been assigned) and **open the window to edit the location settings**.


2 **Enable the Geolocation setting**.

New location settings will open.

3 First, select the *Codeks Virtual Controller* license for this location from the **License** settings drop-down list.

4 \* If you enable the **Unlimited** setting, the virtual controller will not have specific geographical coordinates and the area where employees are allowed to register mobile will not be restricted - employees will be able to register mobile anywhere.

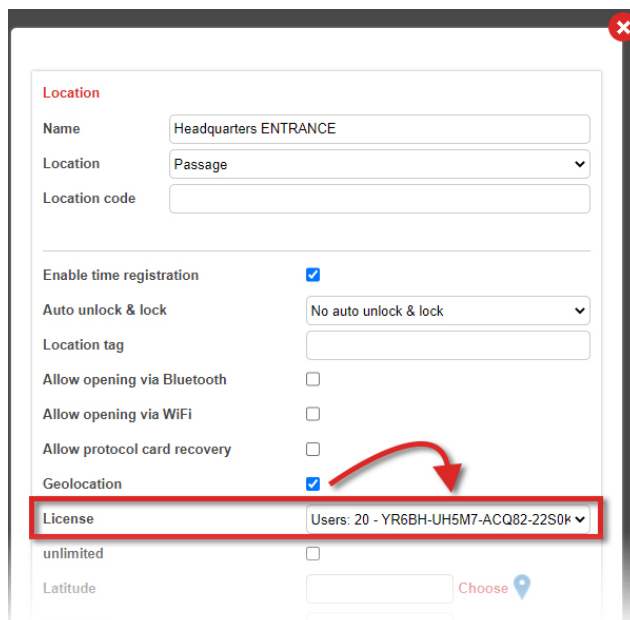
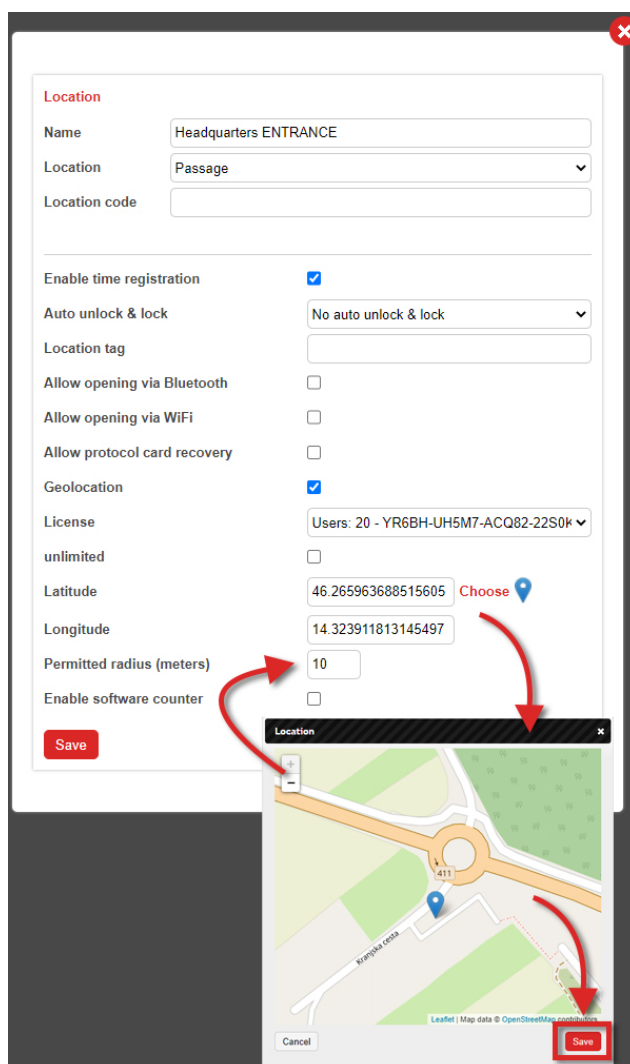
5 **To limit the virtual controller area enter the geographical coordinates to which you want to bind the controller in the Latitude and Longitude settings fields.**

You can also set the coordinates with the graphic selector by clicking the **Choose** button .

6 Then set the **Permitted radius (meters)** from the selected geographical coordinates, where users will still be allowed to register their T&A. The minimum possible distance is 10 m.

7 Finally, click **Save**.

8 A new virtual controller with a virtual reader already connected to the newly added location will appear in the hardware list.

### 3 SETTINGS FOR USER GROUPS

After editing the settings of the new location for the virtual controller, you must also edit the rights of the user groups at the new location of the virtual controller in the *Groups* editor.

Employees are assigned time attendance rights through the time attendance groups to which they belong, and the recording of work hours is regulated by timetables assigned to T&A locations.

**Each user must, therefore, be assigned to the appropriate time attendance group.**

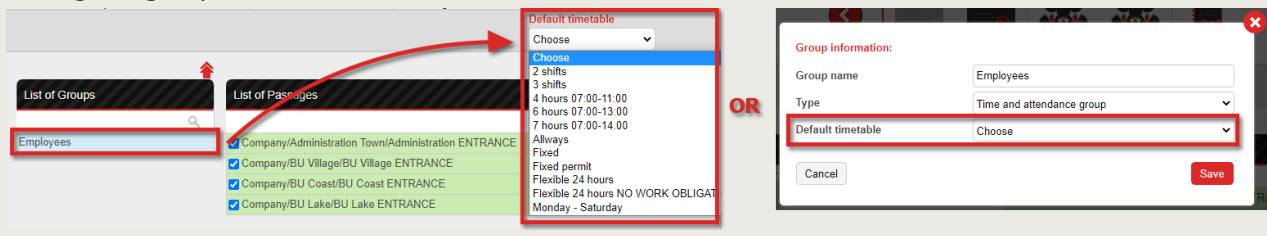
#### NOTE

Timetables for time attendance specify the work obligation of employees, the times of arrival and departure from work, and the permitted exits during working hours (e.g. private or business exit).

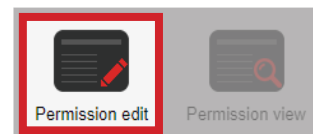
**In newer systems**, the T&A events that employees can register via the mobile app **are determined by a timetable assigned at the virtual controller location.**

**In older systems (that don't have a Codeks Virtual Controller license)**, however, T&A events that employees can register via the mobile app **are determined by the default time attendance timetable of the group to which they belong.**

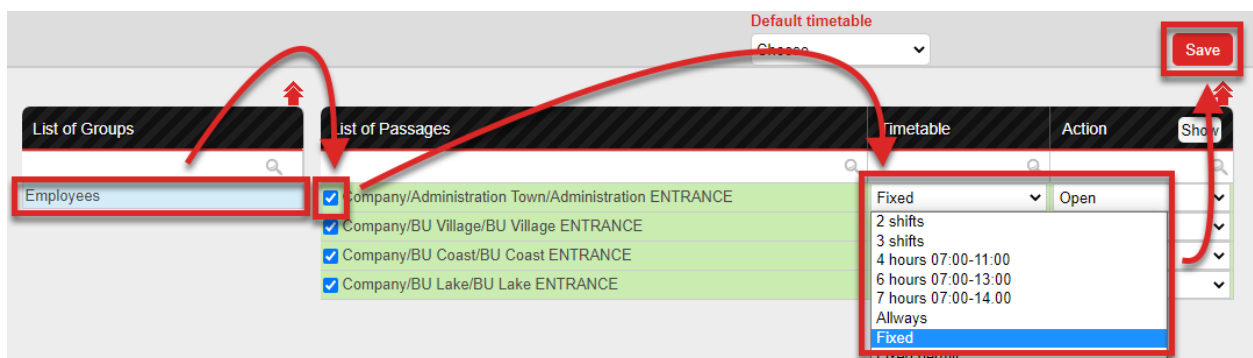
You can specify the default timetable for the T&A group in the editor toolbar or in the pop-up group for editing the group's data.



- 1 To edit the groups' rights, first, click the **Permission edit** icon to enable editing in the *Groups* editor.



- 2 In the *List of groups* **select the group** you wish to assign an access right at a passage. The selected group will be colored *blue*.
- 3 **To add an access right at a passage enable the checkmark next to the name of the passage** in the *List of passages*.



The passages, where the group's access rights are enabled, are colored green  and passages, where the group's access rights are disabled, are colored red .

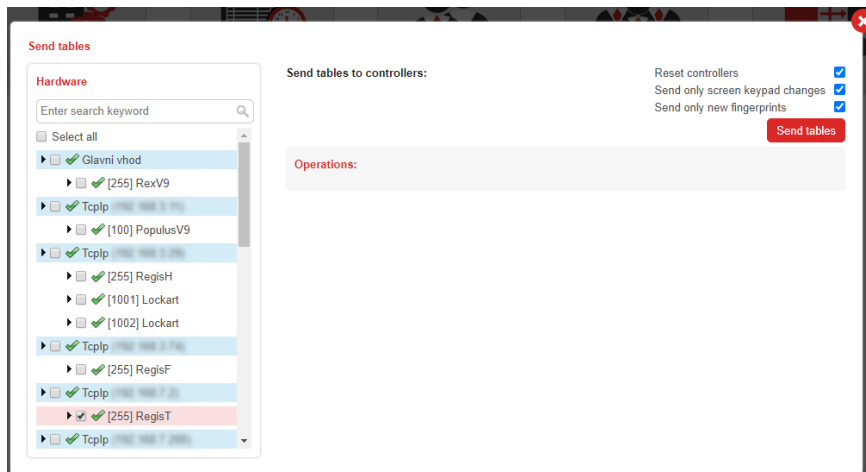
- 4 Set the **Timetable** that defines when the users will be able to pass through the passage.
- 5 When you are done editing, click **Save**.

## 4 SENDING TABLES

The last step in configuring a system with virtual controllers is to **send the tables**. Although there are no physical controllers in the system to which you would have to send the data you have entered into the software, **tables must also be sent to virtual controllers so that all the edited and changed settings can be recalculated and recorded correctly in the Codeks database.**

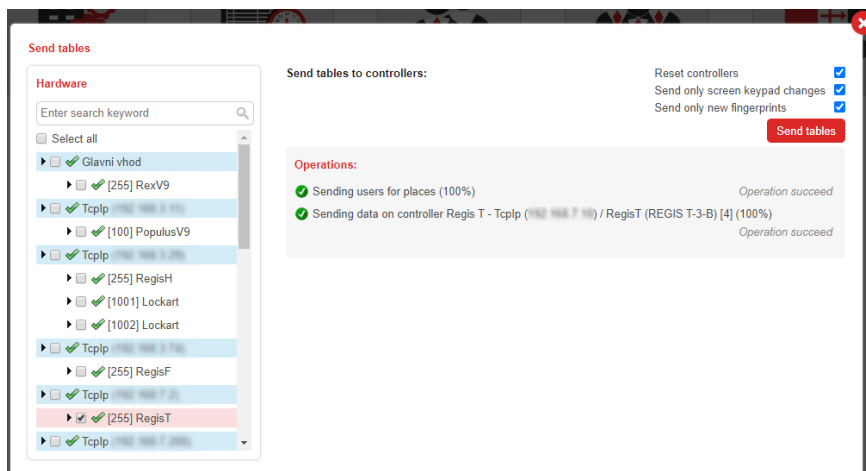
### SENDING TABLES IN CODEKS TA AND CODEKS TA ADVANCED

- 1 To send tables click the **Send tables** button in the *Main menu*. A new window will open where you can select the appropriate controllers.
- 2 **Select all the controllers** to which you want to send tables from the *List of hardware* on the left.
- 3 Click the **Send tables** button.



The process can take several minutes depending on the number of controllers and the speed of the connection.

- 4 The system will display a report in the window when the process is finished.



## SENDING TABLES IN CODEKS TA KIT

The process of Sending tables is automatized in the Codeks TA Kit application and will be triggered every time the administrator returns to the Main menu page.

The status of sending tables will be displayed in the *Communication status* line. During sending the database of the application is fully occupied, consequently, it is not possible to edit anything until sending is complete.

The screenshot shows the Codeks TA Kit V10 application interface. The top navigation bar includes the application logo, a 'Company' dropdown, and an 'Admin' section with 'Change my password' and 'Logout' links. Below the navigation bar is a menu with icons for Users, Groups, Timetables, Time attendance, Hardware, Holidays, and Preferences. The main content area displays a table with the following data:

Location	Date and time	Card	User	Event	Time&Attendance
Company / Entrance FRO...	16.4.2018 15:55	11741037	Cooper Sebastian	Pass	Exit (entry/exit)   Balance 0
Company / Entrance FRO...	16.4.2018 15:52	15678635	Marlowe Maria	Pass	Exit (entry/exit)   Balance 0
Company / Entrance BAC...	16.4.2018 15:06	15485621	Smith Frank	Pass	Exit (entry/exit)   Balance 0
Company / Entrance BAC...	16.4.2018 15:06	2735299	Brown Luis	Pass	Exit (entry/exit)   Balance 0
Company / Entrance FRO...	16.4.2018 12:41	2735299	Brown Luis	Pass	Return Lunch   Balance 02:
Company / Entrance BAC...	16.4.2018 12:40	11741037	Cooper Sebastian	Pass	Return Lunch   Balance 01:
Company / Entrance FRO...	16.4.2018 11:37	2735299	Brown Luis	Pass	Lunch   Balance 02:04
Company / Entrance BAC...	16.4.2018 11:37	11741037	Cooper Sebastian	Pass	Lunch   Balance 01:23
Company / Entrance FRO...	16.4.2018 08:34	11741037	Cooper Sebastian	Pass	Entry   Balance 04:00
Company / Entrance BAC...	16.4.2018 08:07	25896458	Russell Leo	Pass	Entry   Balance 01:15
Company / Entrance BAC...	16.4.2018 07:22	9856547	Knowles Jerry	Pass	Entry   Balance 00:04
Company / Entrance FRO...	16.4.2018 07:15	55662158	Gardiner-Boyle Maia	Pass	Entry   Balance 03:22
Company / Entrance FRO...	16.4.2018 06:47	15678635	Marlowe Maria	Pass	Entry   Balance -02:13
Company / Entrance FRO...	16.4.2018 06:42	15485621	Smith Frank	Pass	Entry   Balance 01:11
Company / Entrance BAC...	16.4.2018 06:38	2735299	Brown Luis	Pass	Entry   Balance 02:04

Below the table, a red-bordered box displays the communication status: "Communication status: Communication OK, Sending data to controllers. Please wait..."

The footer of the application shows the 'Company' dropdown, the version 'Codeks 10.2108.0.15677', and the copyright 'jantar.si © 2021'. The Windows taskbar at the bottom shows the date and time as 10:41 on 6.09.2021.

## 5 REGISTERING T&A USING A MOBILE DEVICE

Users who are assigned a virtual (additional) card can register their time and attendance using the application with the help of the simulated T&A controller in the *Time attendance* tab.

### NOTE

To assign virtual cards to users, you need to purchase the *Codeks Virtual Card* license, which adds a specific number of virtual cards for employees to your Codeks system. A virtual card must be assigned to each user by a Codeks system administrator in the *Users* editor.

### NOTE

All **newer Codeks systems** whose main Codeks license (Codeks TA Kit, Codeks TA or Codeks TA Advanced) was first activated **AFTER October 1, 2021**, WILL REQUIRE at least one Codeks Virtual Controller license to enable mobile T&A registration through the Codeks Mobility app.

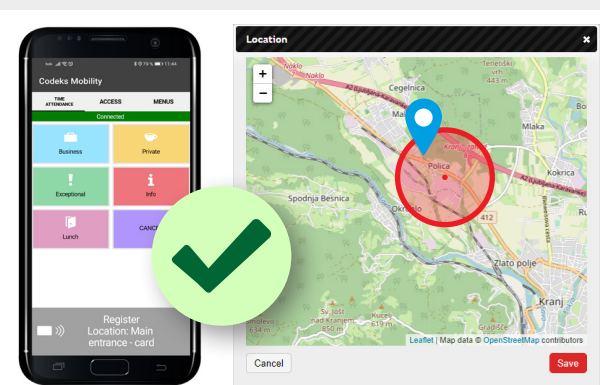
The Codeks Virtual Controller license enables mobile registration, additionally, it also enables the geographical restriction of the area around the point of the virtual controller, where employees are still allowed to register their working hours via mobile app.

All **older Codeks systems** whose main Codeks license (Codeks TA Kit, Codeks TA or Codeks TA Advanced) was first activated **BEFORE October 1, 2021**, will NOT REQUIRE for the basic operation of mobile T&A registration. Owners of such systems will be able to purchase the additional Codeks Virtual Controller license if they wish to upgrade their system with the functionality of geographically restricting mobile registration. Older systems without a Codeks Virtual Controller license will continue to operate as before.

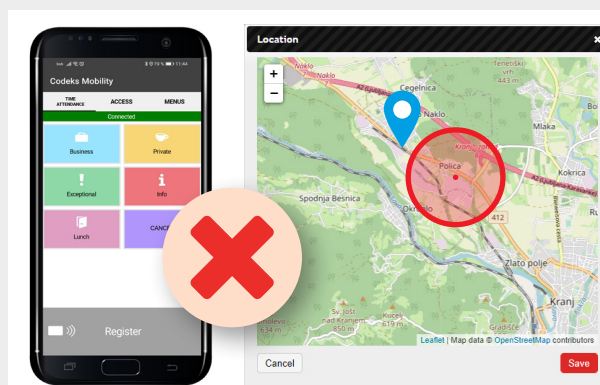
### NOTE

Controller license is only possible when using at least the version Codeks 10.2110.0.15840 of the main software or later.

In newer systems with a Codeks Virtual Controller license, the *Register* button will also display the name of the virtual controller where you will be registering.



The event can be registered by the user only if it is within the allowed range from the point of the virtual controller. In this case, the location of the virtual controller will also be displayed on the **Register** button.



However, if the user is outside the allowed range, the location will not be displayed on the **Register** button and he will not be able to register the time registration event. To register the event, the user will have to move closer to the point of the virtual controller or within the permitted distance range.

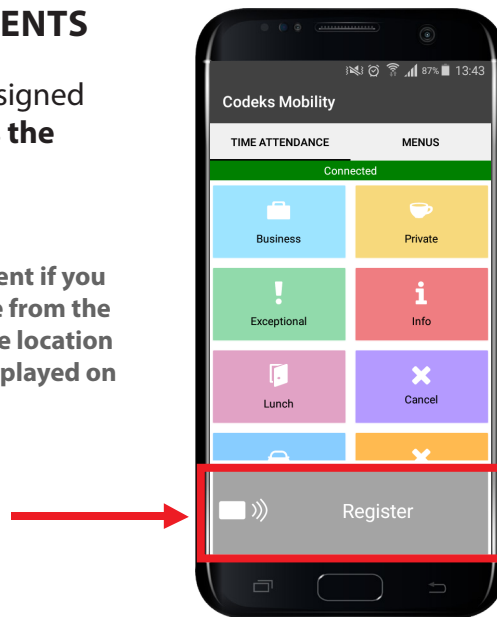
If the user is allowed both geographically unrestricted and restricted registration of working hours (e.g., registration at the administrative building is geographically limited and registration at different client locations is geographically unrestricted), the application will first try to register the event for geographically restricted location, and only if this fails will the application register the event under a geographically unrestricted location.

## REGISTERING ENTRY/EXIT EVENTS

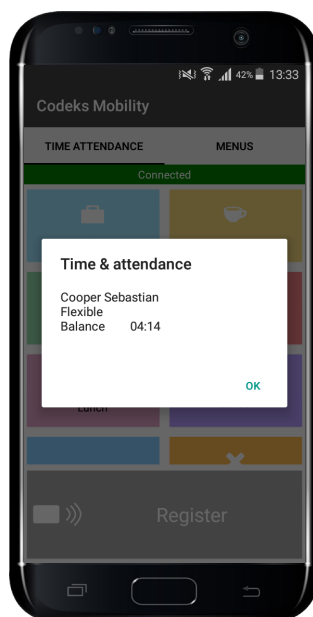
- 1 To register an event without an assigned button (e.g. an entry or exit) **press the *Register* button.**

### NOTE FOR NEWER SYSTEMS

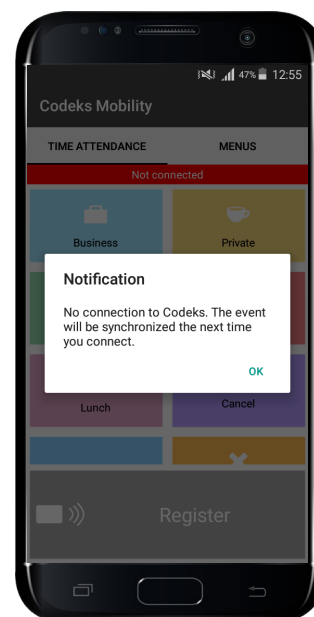
You will only be able to register the event if you are within the area of allowed distance from the virtual controller point. In this case, the location of the virtual controller will also be displayed on the *Register* button.



- 2 **a** – If the application can connect to the Codeks server, a message containing the servers response will be displayed.



- 2 **b** – If the application cannot connect to the Codeks server, the message on the image below will be displayed. The event will be stored as an unsynchronized event and will be sent to the server at a later time when the connection has been reestablished.

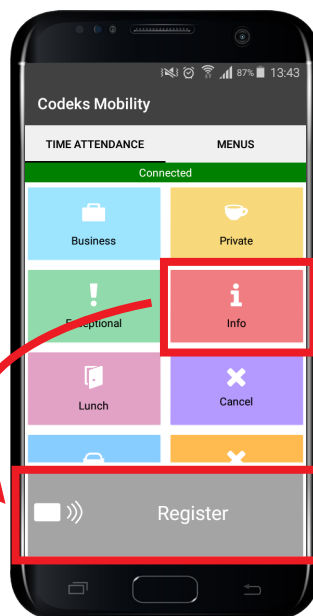


## REGISTERING EVENTS WITH BUTTONS

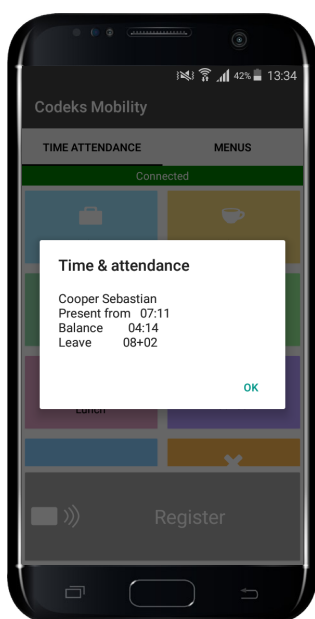
- 1 To register an event, for which you must press a button when registering at a controller (e.g. business exit or info), **first select the appropriate button, then, click Register.**

### NOTE FOR NEWER SYSTEMS

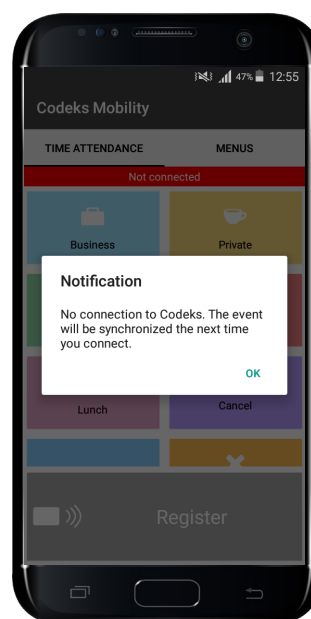
You will only be able to register the event if you are within the area of allowed distance from the virtual controller point. In this case, the location of the virtual controller will also be displayed on the Register button.



- 2 **a** – If the application can connect to the Codeks server, a message containing the servers response will be displayed.



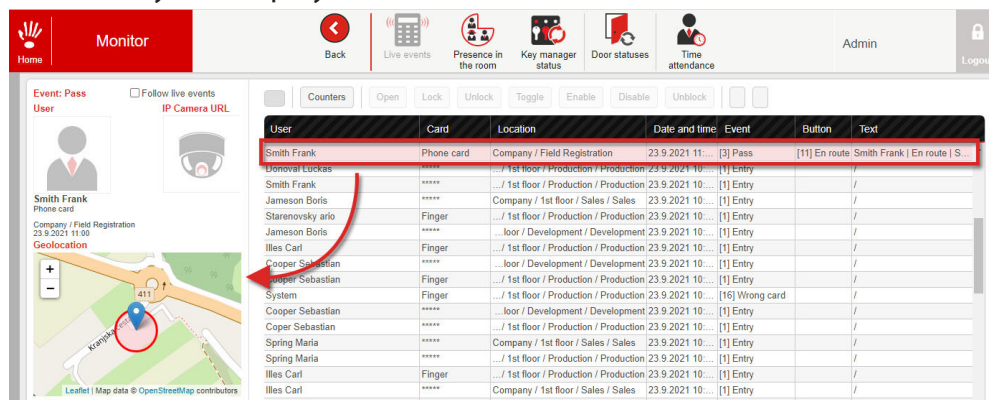
- 2 **b** – If the application cannot connect to the Codeks server, the message on the image below will be displayed. The event will be stored as an unsynchronized event and will be sent to the server at a later time when the connection has been reestablished.



## 6 VIEWING THE EVENT REGISTERED IN THE AREA OF THE VIRTUAL CONTROLLER

### MONITOR

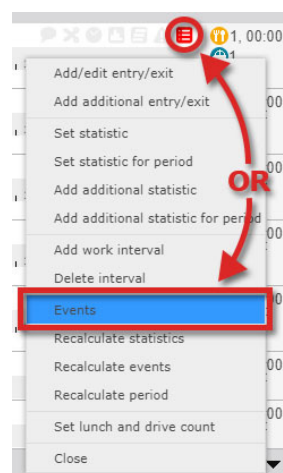
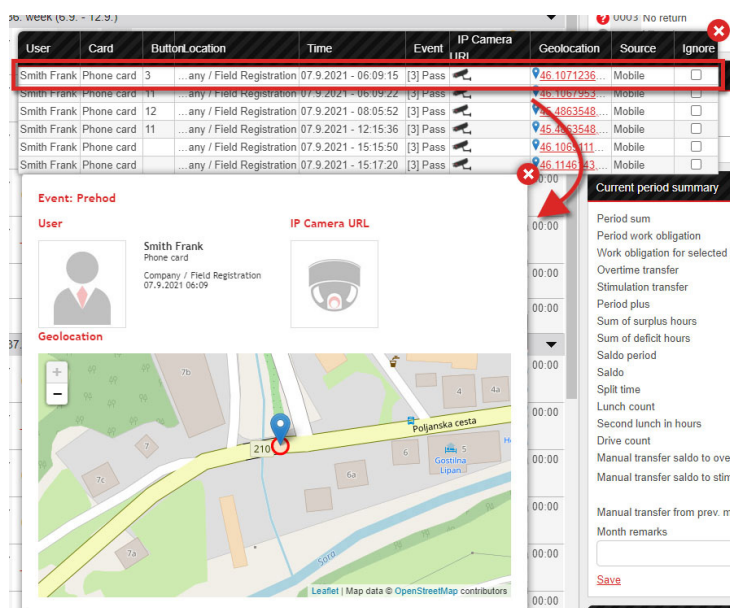
In the *Monitor* viewer, you can **see the location of the registration of working hours by clicking on an individual event in the list of all events**. The picture also shows the accuracy of the geographical location recorded by the employee's device with a red circle.



### TIME ATTENDANCE

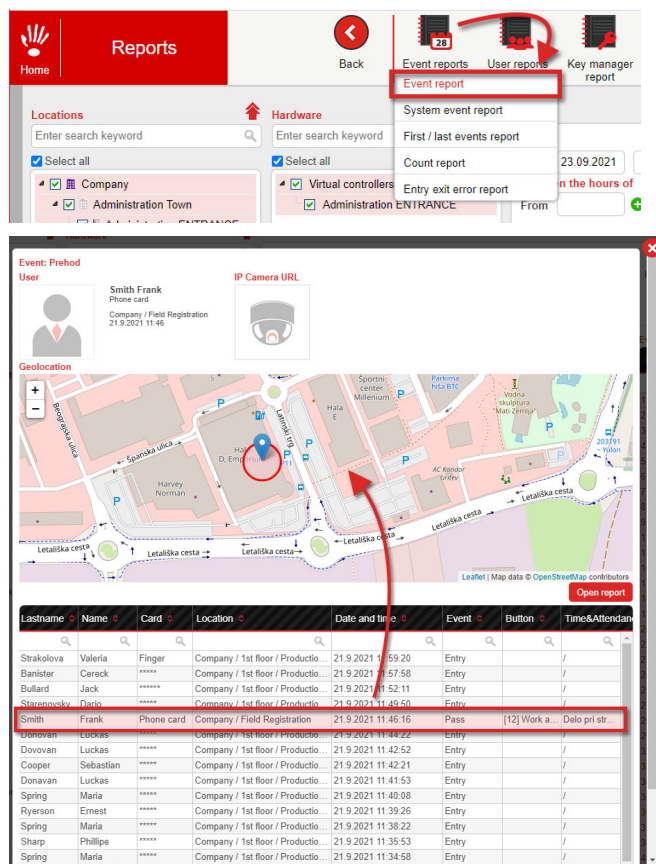
In the *Time attendance* editor, you can view the events of the time attendance **by clicking the *Show events* icon or by clicking the *Events* option from the right-click menu on a day**.

A table with all registered events in the selected day will be displayed. **Clicking on the coordinates of an individual event will open a new window showing the location of the event registration**, additionally, a red circle will also indicate the area of accuracy of the geographical location provided by the employee's device.



## REPORTS

In the *Report* editor, you can view working time registration events at virtual controller locations in the preview of the **Event report** report display window.



**Event: Prehod**

User: Smith Frank  
Phone card  
Company / Field Registration  
21.9.2021 11:46

IP Camera URL

Geolocation

Lastname	Name	Card	Location	Date and time	Event	Button	Time&Attendance
Strakolova	Valeria	Finger	Company / 1st floor / Productio...	21.9.2021 11:59:20	Entry		/
Banister	Cereck	*****	Company / 1st floor / Productio...	21.9.2021 11:57:58	Entry		/
Bullard	Jack	*****	Company / 1st floor / Productio...	21.9.2021 11:52:11	Entry		/
Stavenovsky	Dario	*****	Company / 1st floor / Productio...	21.9.2021 11:49:50	Entry		/
Smith	Frank	Phone card	Company / Field Registration	21.9.2021 11:46:16	Pass	[12] Work a...	Delo pri str.
Donovan	Lucas	*****	Company / 1st floor / Productio...	21.9.2021 11:44:22	Entry		/
Donovan	Lucas	*****	Company / 1st floor / Productio...	21.9.2021 11:42:52	Entry		/
Cooper	Sebastian	*****	Company / 1st floor / Productio...	21.9.2021 11:42:21	Entry		/
Donovan	Lucas	*****	Company / 1st floor / Productio...	21.9.2021 11:41:53	Entry		/
Spring	Maria	*****	Company / 1st floor / Productio...	21.9.2021 11:40:08	Entry		/
Ryerson	Ernest	*****	Company / 1st floor / Productio...	21.9.2021 11:39:26	Entry		/
Spring	Maria	*****	Company / 1st floor / Productio...	21.9.2021 11:38:22	Entry		/
Sharp	Phillipe	*****	Company / 1st floor / Productio...	21.9.2021 11:35:53	Entry		/
Spring	Maria	*****	Company / 1st floor / Productio...	21.9.2021 11:34:58	Entry		/



---

**Jantar d.o.o., elektronski sistemi**

Kranjska cesta 24, 4202 Naklo, SLOVENIJA

**T:** +386 (0)4 277 18 12, +386 (0)4 277 18 09 | **E:** prodaja@jantar.si

**[www.jantar.si](http://www.jantar.si)**