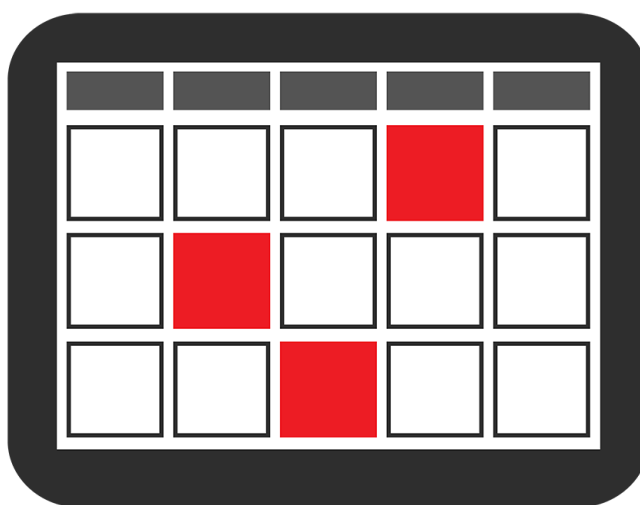


Codeks Shifts Add-on

for Codeks software
version 10.2203.4.16909 and newer



Codeks Shifts Add-on user manual

Jantar d.o.o.

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2023 in Naklo

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1. Shifts

The *Codeks Shifts* is an add-on for the Codeks time and attendance software. The add-on is designed to be used by administrator users (department heads) to create and manage work shifts and assign users to specific shifts. The add-on also enables the notification of department heads about employee delays and errors in the registration of shift work in real-time.

NOTE

This user manual only contains the description and installation instructions for the *Codeks Shifts* add-on. The installation instructions and general settings of the main Codeks software are described in the documentation of the main Codeks AC or Codeks TA application. To successfully install and use this add-on, you must first install the basic Codeks software. Screenshots of the Codeks application contained in this manual were made in a web browser.

1.1. License information

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The Codeks Parking software is distributed together with the Jantar hardware or separately as a replacement system for an existing access control system, which means:

- All copyrights of the Codeks Parking are exclusively owned by the author, Jantar.
- You may not use, copy, emulate, clone, rent, lease, sell, modify, decompile, disassemble, otherwise reverse engineer, or transfer the licensed program, or any subset of the licensed program, except as stated in this agreement. Any such unauthorized use shall result in immediate and automatic termination of this license and may result in criminal and/or civil prosecution.
- The Codeks Parking binary code may NOT be used or reverse engineered to re-create the Codeks access control, time and attendance or communication algorithms which are proprietary and protected by copyright law.
- Codeks Parking is distributed "as is". No warranty of any kind is expressed or implied. You use the Codeks software at your own risk. Neither the author nor his authorized distributors will be liable for any data loss, damages, loss of profits or any other kind of loss while using, misusing or being unable to use this software.
- All rights not expressly granted here are reserved by Jantar d.o.o.
- By installing and using the Codeks Parking add-on you are accepting the terms and conditions of this license.
- If you do not agree with the terms of this license you must remove all Codeks Parking files from your storage devices and cease using the product.

1.2. Disclaimer and Warranty

Disclaimer - The information in this document is subject to change without notice. While the information contained herein is assumed to be accurate, Jantar, assumes no responsibility for any errors or omissions. We also reserve the right to discontinue or change the specifications of products without prior notice. No claim can be made in the case of profit or loss from use or sale of any products bought or delivered by us. Errors reported will be corrected in new software releases.

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The information in this manual is designed for user purposes and not as a substitute for information from customer regulations, technical manuals/documents or other official documents. Customers using this manual can report errors or omissions, recommendations for improvement or other comments to Jantar.

1.3. Contact information

Jantar has more than 30 years of experience in the development and production of access control, time attendance, and visitor control systems. What sets us apart from our competitors is that we develop and manufacture all of our software and most of our hardware ourselves. Our systems are installed and utilized at airports, office buildings, financial institutions, factories, shopping centers, hospitals, etc. Our products are present virtually anywhere our clients need basic or advanced access control and time and attendance systems.

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SLOVENIA

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Support

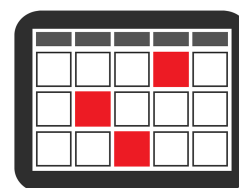
For support contact our regional partner: <https://jantar.si/en/contact/our-partners/>

2. Description and installation instructions

The *Codeks Shifts* is an add-on for the Codeks time and attendance software. The add-on is designed to be used by administrator users (department heads) to create and manage work shifts and assign users to specific shifts. The add-on also enables the notification of department heads about employee delays and errors in the registration of shift work in real-time.

The *Codeks Shifts* add-on software package includes:

- the *Codeks Shifts* license code,
- the *Codeks Shifts* user manual.



2.1. System requirements

Before installing the *Codeks Shifts* add-on, make sure these system requirements are met:

- a server installed with the Windows 10 operating system or newer,
- available free USB ports or Ethernet (LAN) ports for hardware connections,
- display resolution at least 1366 x 768 px (recommended resolution 1440 x 900 px),
- installed Microsoft .NET Framework 4.8,
- a minimum of 4 GB of RAM and a dual-core processor (6 GB of RAM and a quad-core processor, if the database is running on the same server),
- at least 50 GB of available free space on the hard drive,
- PDF Reader software for viewing generated reports,
- internet access,
- Internet Edge, Firefox, or Chrome web browser updated to the latest official version,
(We do not guarantee the proper functioning of the Codeks application if you are using a different browser or older browser versions.)
- installed Codeks software,

NOTE

You can find the installation instructions for the main Codeks software in the main Codeks application documentation ([CodeksManual-en.pdf](#)).

2.2. Activating the licence code

To enable the *Codeks Shifts* add-on you must enter a valid license code for the software. The validity of the *Codeks Shifts* license is equal to the validity of the license of the main Codeks.




You can enter the license code for the *Codeks Shifts* add-on using the Codeks Service Manager program.

Open the Codeks Service Manager by clicking the CodeksServiceManager.exe file located on your desktop or the folder *C:\Program Files\Codeks* (or *C:\Program Files (x86)\Codeks*).

Codeks Service Manager icon:

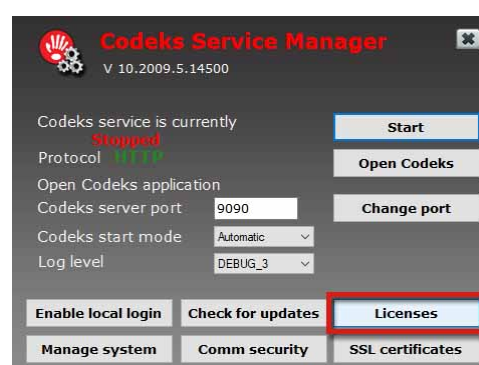


The following picture shows the CodeksServiceManager.exe file in the *C:\Program Files\Codeks* folder:

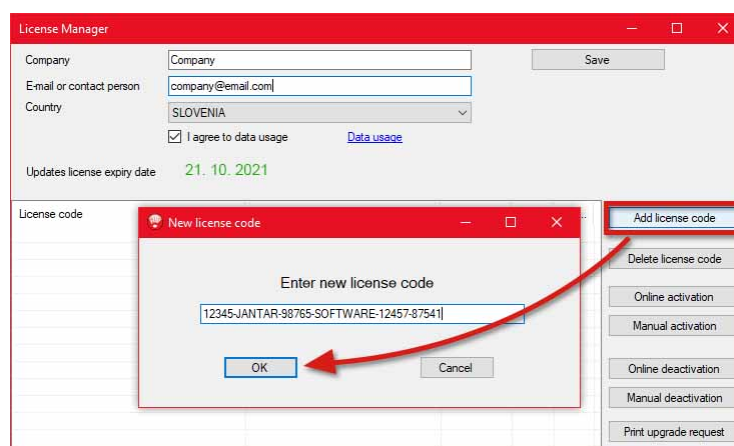
-  CodeksService.InstallState
-  CodeksServiceManager.exe
-  CodeksServiceManager.exe.config

1. Before entering a new license code, stop the *Codeks Service* by clicking on the Stop button. Before continuing make sure the status of the service is Stopped.

2. Then click the Licenses button.

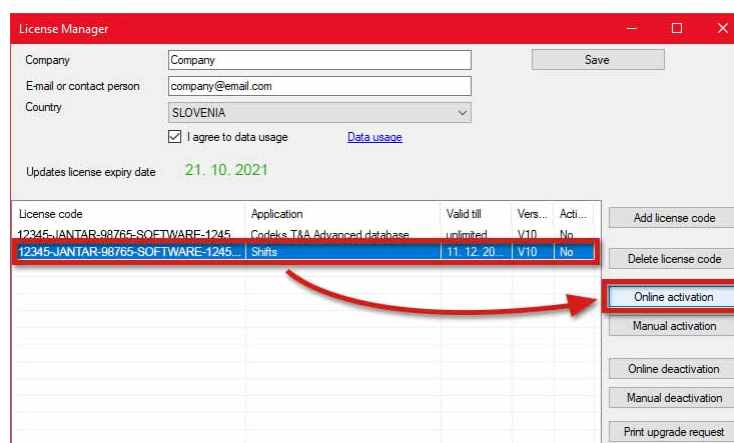


3. Click the Add license code button and the *License Manager* window will appear. Enter the license code and click OK to confirm the entry.



4. The *Codeks Shifts* license code will be displayed in the window.

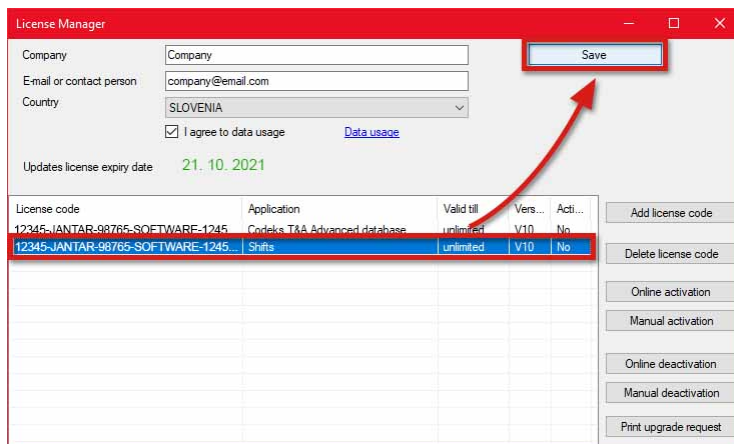
Next, the entered license code must be activated. To activate it, click the Online activation or Manual activation button.



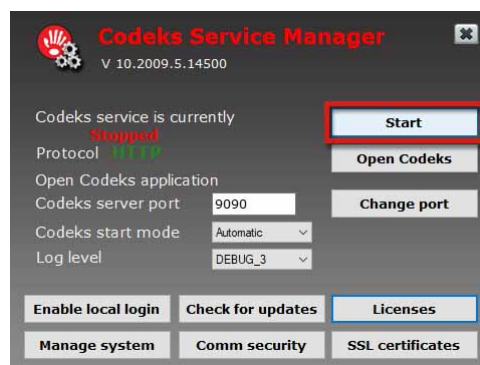
NOTE

If your Codeks server does not have an internet connection, the program will display an error. In this case, you will have to activate the license code manually using another device with internet access.

5. When you are done editing don't forget to save the changes by clicking *Save*.



6. In the main window of the *Codeks Service Manager* program restart the Codeks Service by clicking the Start button.

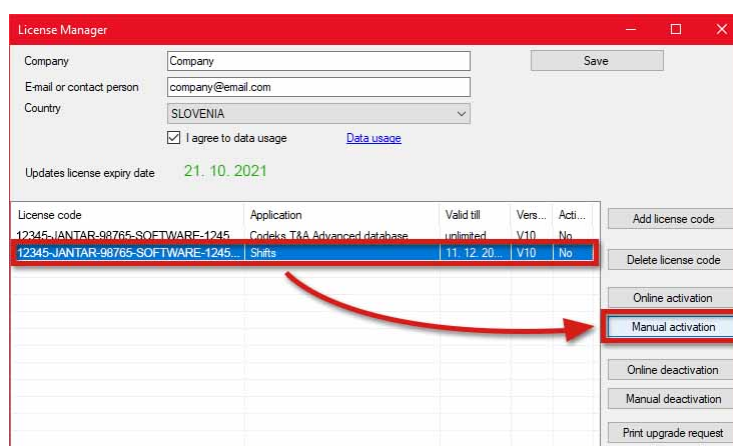


7. The *Codeks Shifts* add-on will now also be visible in the login menu.



MANUAL LICENSE ACTIVATION

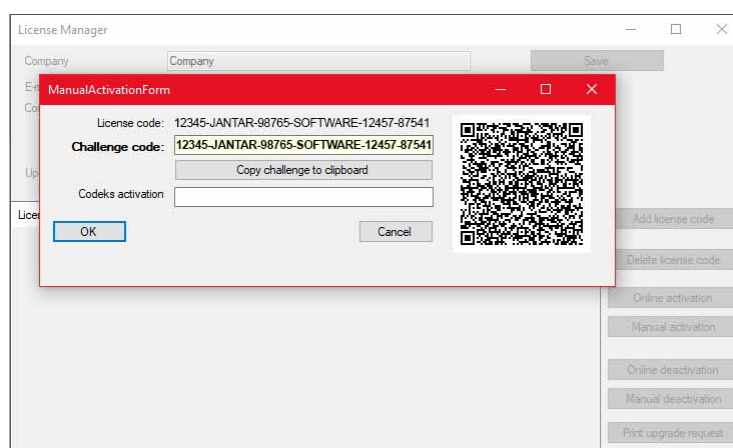
1. Select the license code you wish to activate and click on the *Manual activation* button.



2. The *ManualActivationForm* window will open which contains a Challenge code for activating the selected license code.

IMPORTANT

Do not close this window until you enter the required *Codeks activation code*. If you close this window before entering the *Codeks activation code* you will have to repeat the manual activation process again, because a different *Challenge code* is generated every time you open the manual activation dialogue.



NOTE

If you scan the displayed QR code with your smartphone you will be automatically redirected to the Codeks Activation Form webpage. All the necessary information for generating the *Codeks Activation code* for the selected license code will already be entered in the form fields. To continue just click Submit.

3. Use your smartphone or any other device with internet access and go to <http://www.jantar.si/caf.html>. Here, fill in the *Codeks Activation Form* with the necessary company data and the generated *Challenge code*.

4. Then click Submit.

Codeks - Codeks activation form

Company name:

Contact e-mail / person:

Country:

Challenge code:

Submit

5. The form will then display the Codeks Activation code for activating the selected license code.

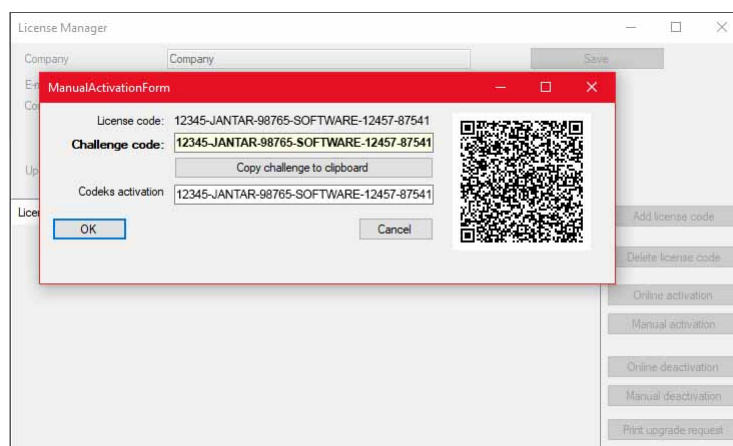
Codeks - Codeks activation form

12345-JANTAR-98765-SOFTWARE-12457-87541

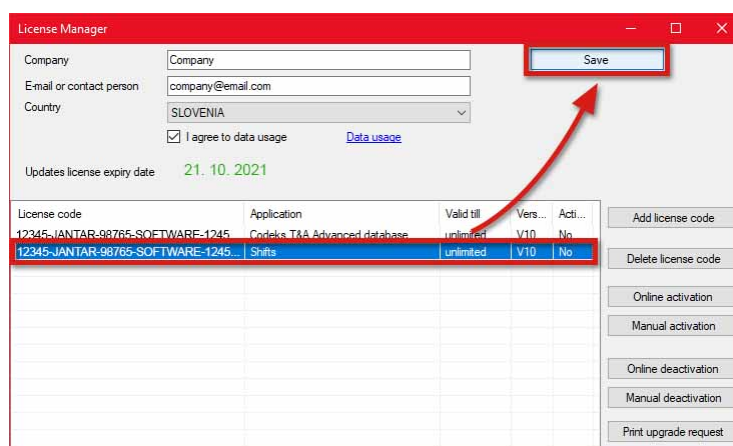
Permission to use your submitted information

The information of Codeks software license owners is stored in our Jantar database. The data will be stored throughout the production and lifetime of the Codeks software.

6. Enter the *Codeks activation code* into the ManualActivationForm and click OK.



7. If activation was successful the validity of the selected license will be changed to *unlimited*.

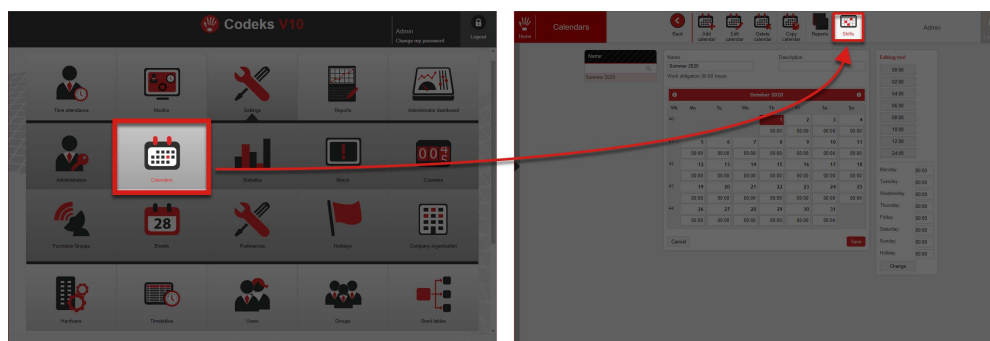


License code	Application	Valid till	Vers...	Acti...
12345-JANTAR-98765-SOFTWARE-1245...	Codeks TAA Advanced database	unlimited	V10	No

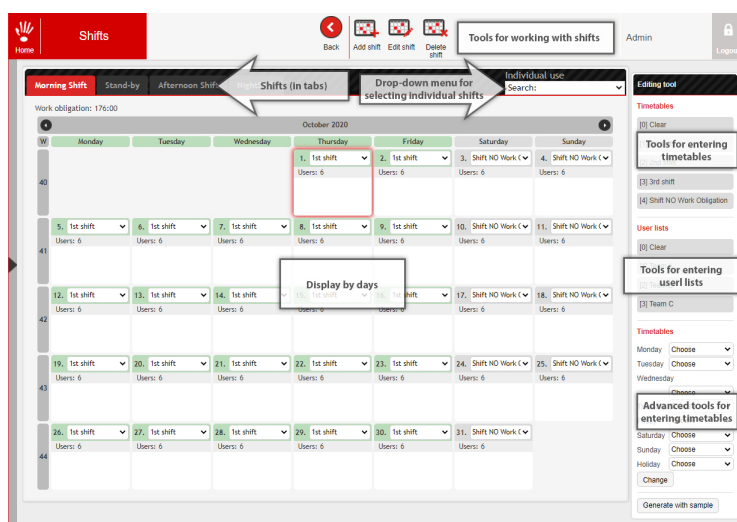
2.3. How the Codeks Shifts work

The *Codeks Shifts* add-on allows you to create and edit shifts and schedule employees into the prepared shifts. Shifts determine the work obligation of users and their permitted exits during work, and also act as a basis for notification of arrival in the wrong shift.

You can access the shift editor via the *Calendars* editor. From the Codeks *Main Menu*, first, click the *Settings* icon. A submenu field will open where you can click the *Calendars* icon. The *Calendar* editor will open, where you can find and click the *Shifts* icon in the toolbar. This will finally open the *Shifts* editor.



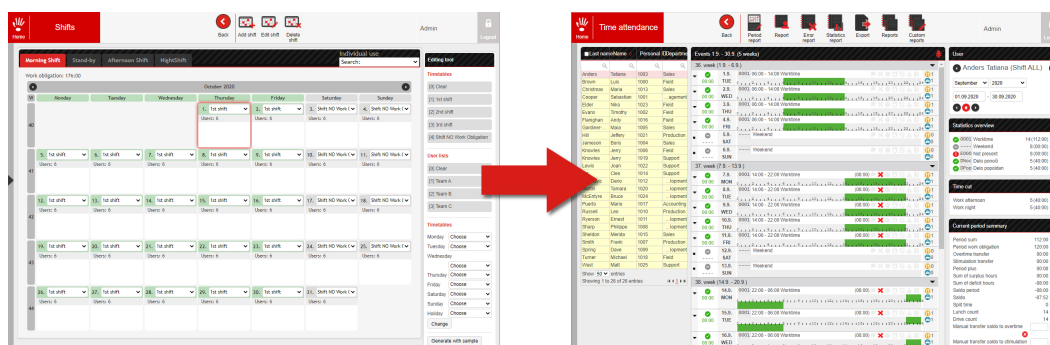
The editor contains tools for creating shifts and arranging users and work timetables for shifts.



You can assign shifts to users by defining them in a shift^[45] (by manual selection or using a list of users), create an individual shift for a particular user^[49], or assign a shift to a Time attendance group or an individual user in the Groups editor^[52].

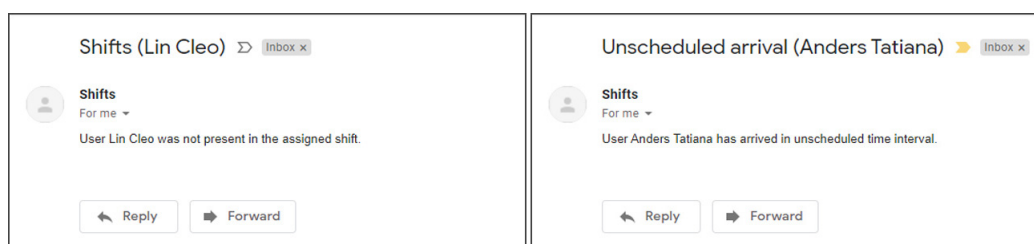
From the *Shifts* editor, it is also possible to send an individual shift schedule to each employee in the form of an email^[61].

Registered user events will be processed and recalculated in the *Time attendance* editor according to the shift (i.e., the timetable on the day determined by the shift).



The option to recalculate the time registration based on shifts is disabled by default. To turn it on, you must enable the *Use to calculate time attendance* for each shift separately.

In addition, the *Codeks Shifts* add-on also enables the heads of departments to be informed about incorrect (unplanned) arrivals of employees to work^[60] and about missing employees who did not come to work in the scheduled shift^[60].



The head of the department receives a notification of an employee's incorrect arrival at work when the employee registers incorrectly. The report on missing employees is formed and sent to the heads of departments at the end of the day (usually at 00.00).

* Option to change shifts when using individual shifts

Users who are assigned individual shifts can now (from the Codeks software version 10.2101.0.14796) be allowed to change their shifts (timetables) by selecting a different timetable on the T&A controller.

Users who will be able to change shifts when registering on the controller must have an individual shift^[49] assigned. It is also necessary to assign intervals of the Timetable selection^[23] type to all the timetables the users will be using and add the necessary buttons for changing the timetables to the controllers.

A user who wants to change their shift (timetable) must first select the appropriate timetable^[70] on the controller and confirm their choice by registering. Then, they can register their entry event as usual according to the newly selected timetable.

3. Settings for the Codeks Shifts

The *Codeks Shifts* is an add-on of the existing main Codeks application, so you need to make sure that settings are set correctly within the main Codeks application before using the add-on. A Codeks system administrator must configure the following settings to enable the *Codeks Shifts*:

1. [Location settings](#) ^[16]

Locations, where employees will register shift work, must have the *Enable time registration* setting enabled.

2. [Timetables settings](#) ^[17]

In the *Timetables* editor, it is necessary to create a *Timetable for shift planning* timetable for work-free days when employees are not working in shifts.

In addition, it is necessary to create an appropriate number of *Timetable for shift planning* type timetables for each work shift during the day (e.g., create separate timetables for the morning, afternoon, and night shifts).

Finally, it is necessary to create a *Timetable for time attendance* type timetable which includes all time intervals contained in the *Timetables for shift planning*, which must later be assigned to all passages (readers), where users will register their shift work.

* To create a system where [users can change shifts \(timetables\) on the controller](#) ^[23], you must create additional intervals for selecting a timetable and assign these intervals to all the timetables mentioned above.

NOTE

An employee who will be able to change their shift (timetable) on the controller MUST be assigned an individual shift. Read more about individual shifts in chapter [Individual shifts for individual users](#) ^[49].

* To set up a shifts system [with a comparative timetable](#) ^[27] where the number of hours the employees actually worked is compared to a standard schedule (e.g., 40 hours per week), according to which they are paid, you must create *Comparative timetables* which are then assigned to all timetables used in the shifts system.

3. [Group settings](#) ^[29]

In the *Groups* editor, users must be added to the *Time and attendance group*, through which they will be granted access rights to readers, where they will register their shift work.

4. [User settings](#) ^[31]

Users must be able to register working hours, and they must also be assigned an appropriate *Time attendance group*, through which they have assigned access rights at passages (readers), where they will register their shift work.

5. [Notification settings](#) ^[36]

The *Codeks Shifts* add-on also enables sending notifications to:

- [the heads of departments](#) ^[36] to be informed about incorrect (unplanned) arrivals of employees to work and about missing employees who did not come to work in the scheduled shift. Notifications are turned off by default and must be subsequently enabled in the general program settings or for each individual shift.

Users acting as heads of departments should also be granted the appropriate rights to receive notifications about users of a particular department.

- [employees](#) ^[39] about the scheduled shifts to which they are assigned. On request, individual e-mails with their shift schedule can be sent to employees in the *Shifts* editor.

* 6. [User lists](#) ^[41]

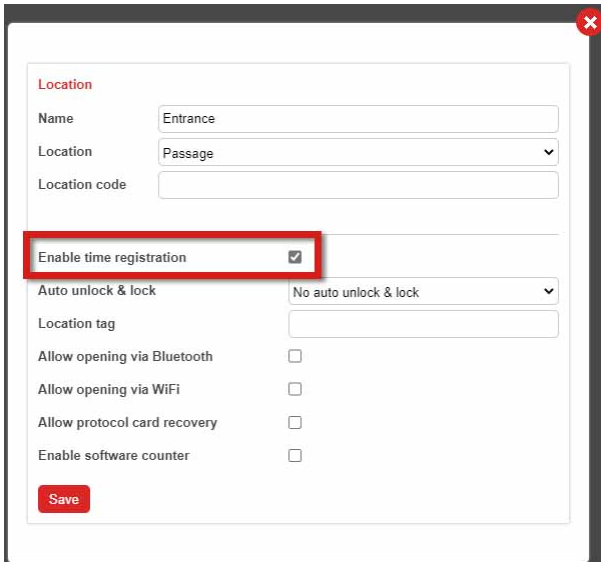
If you are going to assign employees into shifts using user lists, you must create the appropriate user lists before you can work with shifts.

You will then be able to continue creating and working with [shifts](#) ^[43].

3.1. Location settings

Locations, where employees will register shift work events, must have the *Enable time registration* setting enabled.

To turn on the setting for each passage, open the pop-up window for editing the passage settings and enable the *Enable time registration* setting.



The screenshot shows a 'Location' settings pop-up window. The 'Name' field is 'Entrance', the 'Location' dropdown is 'Passage', and the 'Location code' field is empty. The 'Enable time registration' checkbox is checked and highlighted with a red box. Below it, the 'Auto unlock & lock' dropdown is 'No auto unlock & lock'. The 'Location tag' field is empty. The 'Allow opening via Bluetooth', 'Allow opening via WiFi', 'Allow protocol card recovery', and 'Enable software counter' checkboxes are all unchecked. A red 'Save' button is at the bottom left.

3.2. Timetable settings

Timetables in the Codeks application determine the access rights of users at locations and act as a basis for recalculating events in the users' time registration. You must create the following schedules for *Codes Shifts* to work properly:

1. Timetable for work-free days ^[18]

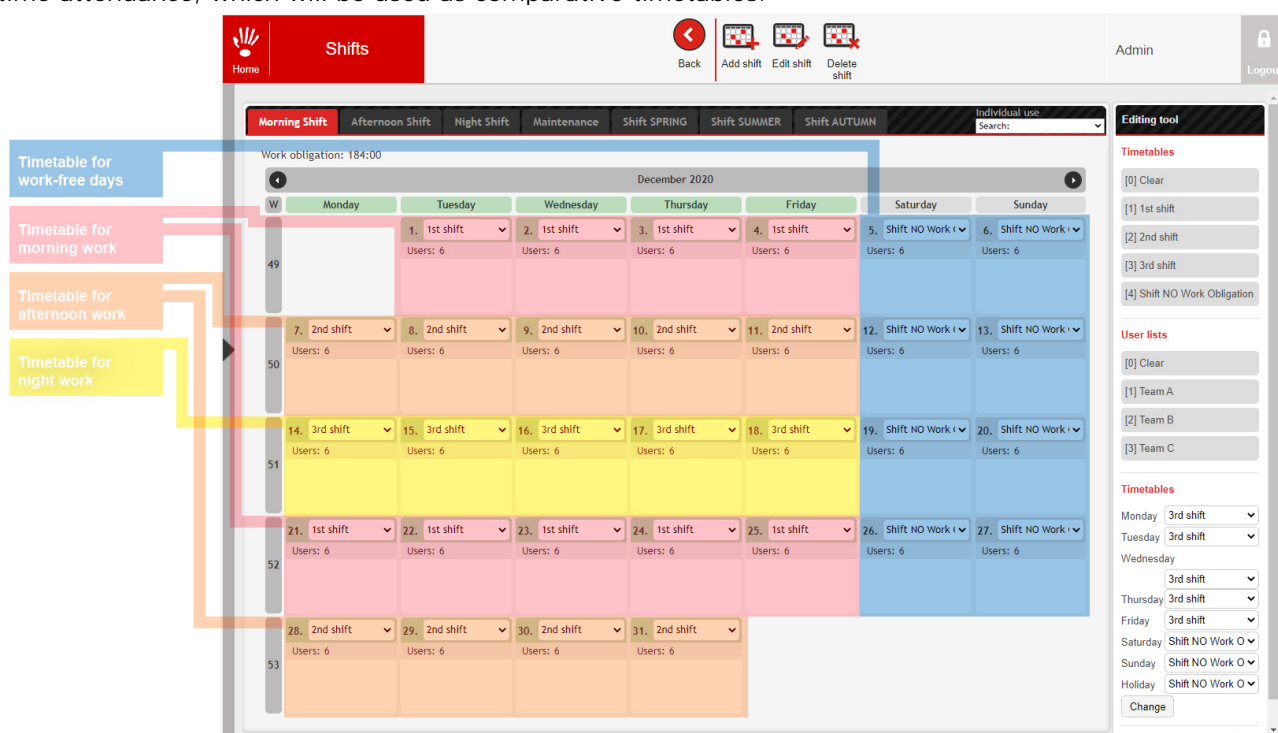
It is necessary to create a *Timetable for shift planning* for work-free days when employees are not working in shifts, which has no work obligation (i.e., work obligation is set to 0) and does not contain any time intervals.

2. Shift work timetables ^[19] for each shift of the day

It is also necessary to create an appropriate number of *Timetable for shift planning* type shift work timetables for each individual shift during the day (e.g., separate timetables for the morning, afternoon, and night work).

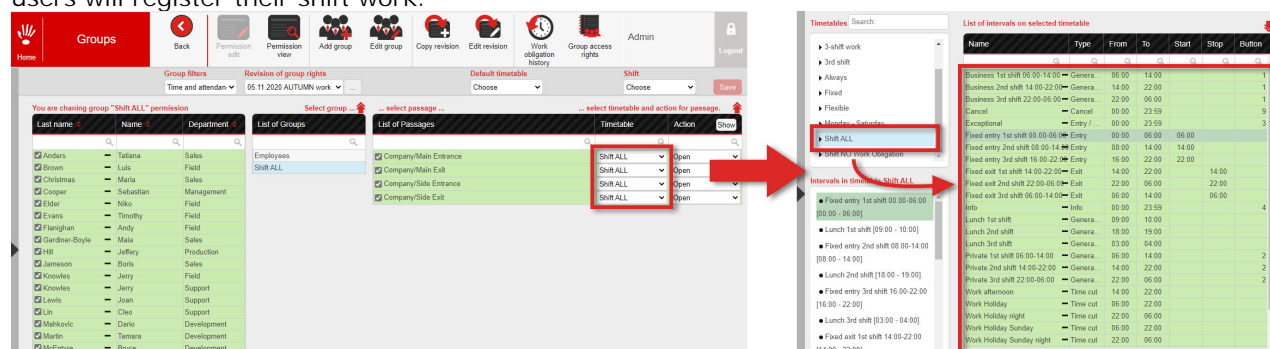
* If you are creating a system where users can change shifts (timetables) on controllers ^[23], you must also create the necessary intervals for selecting timetables and assign them to all timetables used in the shift system.

* If you are creating a system with a comparative timetable ^[27], you must also create new *Timetables for time attendance*, which will be used as comparative timetables.



3. Timetable for the allocation of access rights ^[21], containing all intervals used in shift work schedules

Finally, it is necessary to create a *Timetable for time attendance* type timetable, which contains all time intervals assigned to the shift work timetables and which must be assigned to all passages (readers) where users will register their shift work.



3.2.1. Timetable for free days

Shifts must have an assigned timetable for each day, so it is also necessary to create a timetable for the work-free days in shifts.

1. To create a shift work timetable, first, click the *Add timetable* icon in the toolbar of the *Timetables* editor.

2. A new window will open for editing the timetable settings.

In the new window, first, enter the name of the timetable, then select *Timetable for shift planning* from the *Type* drop-down menu.

3. Then, in the *Work obligation* section below, set the values for all days to 00:00. The timetable will thus determine no work obligation for users (i.e. work obligation will be 0).

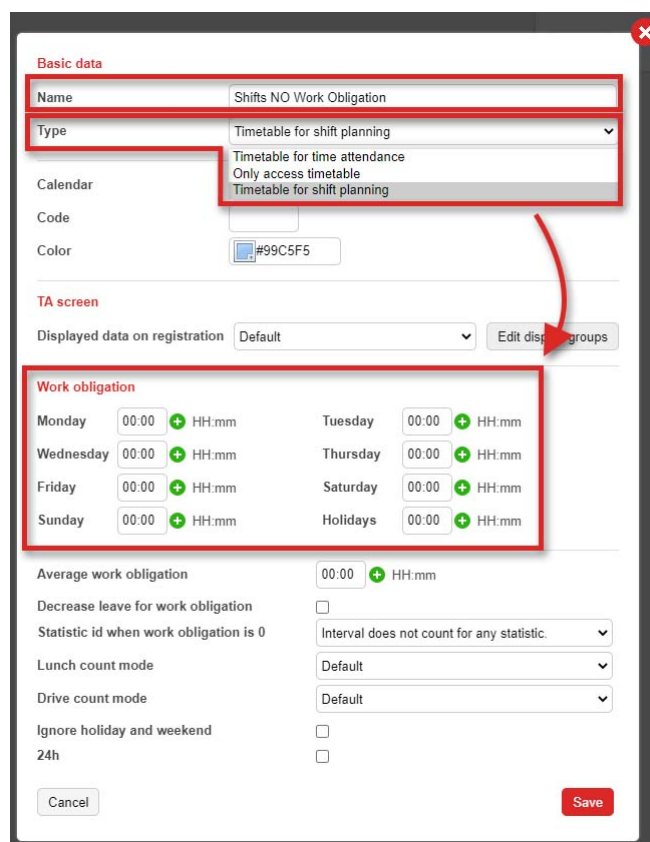
* 4. If you want, you can set a custom color for the timetable. However, this color will only be used in the *Planned shift work* ⁶⁴ report, which you can print in the *Time attendance* editor.

5. When you have finished editing, click *Save*. A new timetable will be added to the *list of all timetables*.

6. This completes the basic configuration of the timetable for work-free days, as there is no need to add any time interval to the timetable.

However, if you want, you can add the *Info* and *Cancel* intervals to the timetable, which allow users to view their data on the controller and cancel their last registered event, respectively.

You can read more about timetables in the documentation of the main Codeks application.



3.2.2. Shift work timetables

For each shift in the day, it is necessary to create a separate *Timetable for shift planning*.

1. To create a shift work timetable, first, click the *Add timetable* icon in the toolbar of the *Timetables* editor.

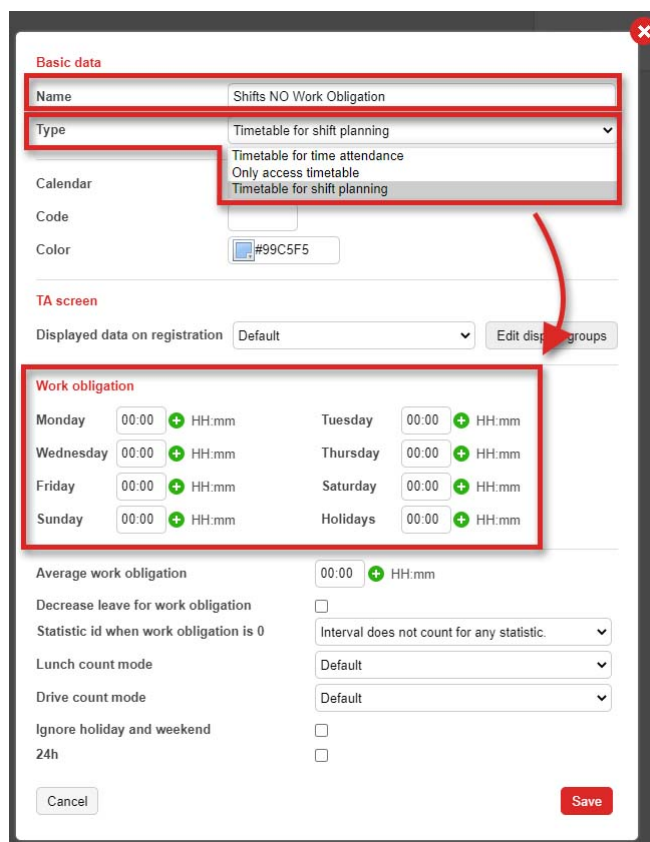
2. A new window will open for editing the timetable settings.

In the new window, first, enter the name of the timetable, then select *Timetable for shift planning* from the *Type* drop-down menu.

3. Then, in the *Work obligation* section below, set the hours of work obligation for each day of the week.

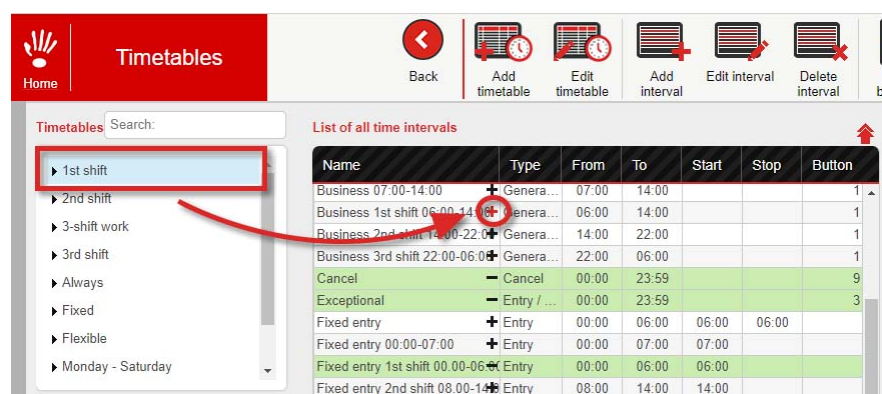
* 4. If you want, you can set a custom color for the timetable. However, this color will only be used in the *Planned shift work* report, which you can print in the *Time attendance* editor.

5. When you have finished editing, click *Save*. A new timetable will be added to the *list of all timetables*.



6. In the next step, you need to add the appropriate arrival and departure time intervals and all allowed exits during working hours to the new timetable by clicking on the plus icon (+) next to the time interval name in the *list of all time intervals*.

You can view examples of completed shift timetables in the following chapter.



You can read more about timetables in the documentation of the main Codeks application.

Example of timetables for 3-shift work:

The company's employees work in three shifts:

- 1st shift: from 6.00 to 14.00
- 2nd shift: from 14.00 to 22.00
- 3rd shift: from 22.00 to 6.00

They are arranged in different shifts with the help of the *Codeks Shifts* add-on. To determine the shifts, it was necessary to create 3 work timetables - a separate timetable for each shift in the day.

In the presented case, **simple fixed timetables** were created,

- which always round off the arrival time of workers to a **fixed time at the start of a shift** (6.00, 14.00 or 22.00),
- and also rounds off the departure time of workers to a **fixed time at the end of a shift** (14.00, 22.00 or 6.00).

Employees are entitled to **lunch** during work, which can be used **from 9.00 to 10.00 in the first shift, from 18.00 to 19.00 in the second shift and from 3.00 to 4.00 in the third shift.**

Employees can also make **private or business exits during working hours.**

Additionally the following intervals are also added to the timetables:

- the interval **Info**, which allows employees to view their work hours and leave status on a controller,
- the interval **Cancel**, with which employees can cancel their last registered event on a controller, and
- the interval **Exceptional**, which allows employees to arrive or leave work when **working overtime** as instructed by their head of department.

1st shift

Name	Type	From	To	Start	Stop	Button
Business 1st shift 06:00-14:00	General p...	06:00	14:00			1
Cancel	Cancel	00:00	23:59			9
Exceptional	Entry / Exit	00:00	23:59			3
Fixed entry 1st shift 00:00-06:00	Entry	00:00	06:00	06:00		
Fixed exit 1st shift 14:00-22:00	Exit	14:00	22:00		14:00	
Info	Info	00:00	23:59			4
Lunch 1st shift	General p...	09:00	10:00			
Private 1st shift 06:00-14:00	General p...	06:00	14:00			2

2nd shift

Name	Type	From	To	Start	Stop	Button
Business 2nd shift 14:00-22:00	General p...	14:00	22:00			1
Cancel	Cancel	00:00	23:59			9
Exceptional	Entry / Exit	00:00	23:59			3
Fixed entry 2nd shift 08:00-14:00	Entry	08:00	14:00	14:00		
Fixed exit 2nd shift 22:00-06:00	Exit	22:00	06:00		22:00	
Info	Info	00:00	23:59			4
Lunch 2nd shift	General p...	18:00	19:00			
Private 2nd shift 14:00-22:00	General p...	14:00	22:00			2

3rd shift

Name	Type	From	To	Start	Stop	Button
Business 3rd shift 22:00-06:00	General p...	22:00	06:00			1
Cancel	Cancel	00:00	23:59			9
Exceptional	Entry / Exit	00:00	23:59			3
Fixed entry 3rd shift 16:00-22:00	Entry	16:00	22:00	22:00		
Fixed exit 3rd shift 06:00-14:00	Exit	06:00	14:00		06:00	
Info	Info	00:00	23:59			4
Lunch 3rd shift	General p...	03:00	04:00			
Private 3rd shift 22:00-06:00	General p...	22:00	06:00			2

3.2.3. Timetable for access rights

Finally, you must create a timetable, of the *Timetable for time and attendance* type, that contains all the time intervals that are assigned to individual [shift work timetables](#)^[19], and then you must assign this timetable to all passages (readers) where users will register their shift work.

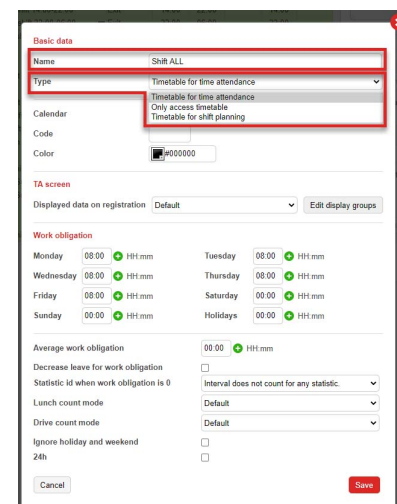
1. To create a shift work timetable, first click the

Add timetable icon in the toolbar of the *Timetables* editor.

2. A new window will open for editing the timetable settings.

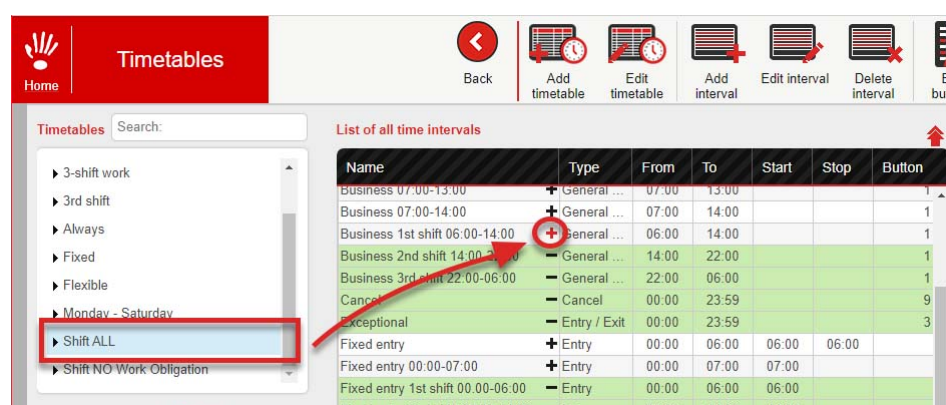
In the new window, first enter the name of the timetable, then select *Timetable for time attendance* from the *Type* drop-down menu.

3. Then click *Save*. A new timetable will be added to the list of all timetables.

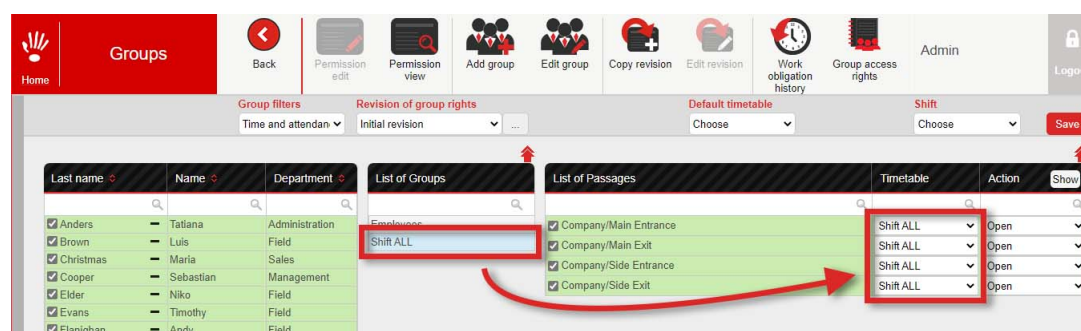


4. In the next step, you must add all the intervals that are assigned to the shift work timetables, according to which the users will be registering their shift work, to this new timetable.

An example is shown in the following chapter.



5. Finally, assign this new timetable to all the passages where employees will register their shift work in the *Groups* editor.



You can read more about timetables in the documentation of the main Codeks application.

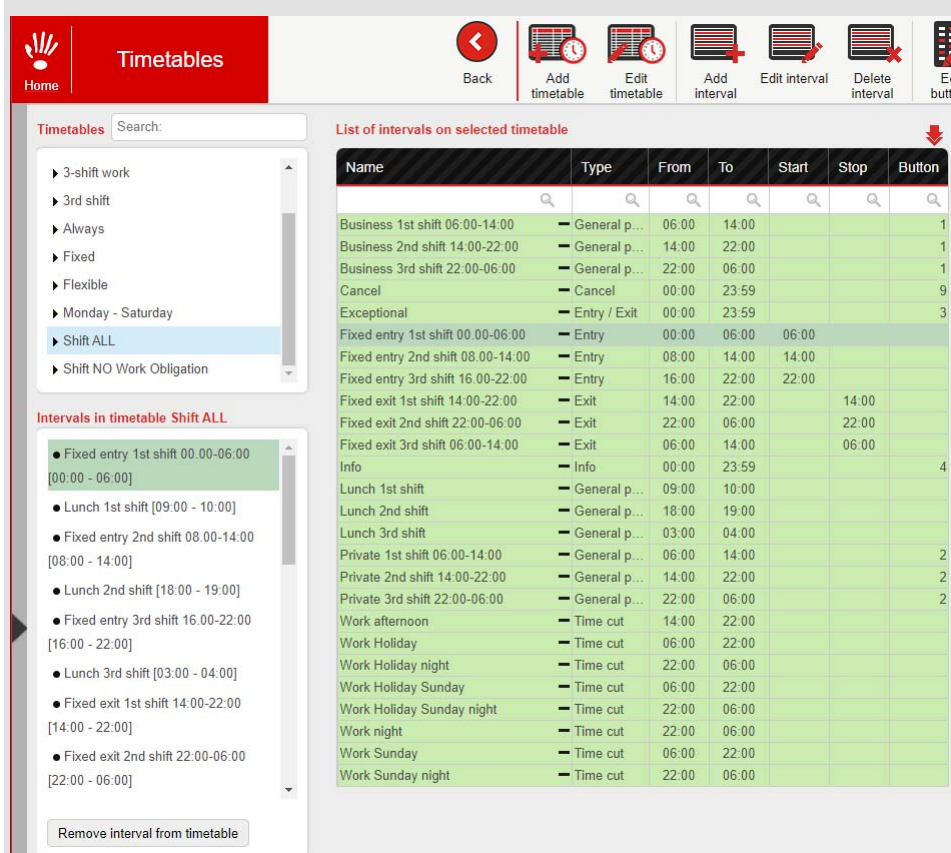
Example of a timetable for access rights:

For a company where employees work in 3 shifts, a *Shift ALL* timetable was created, which contains all the intervals contained in the individual work shift timetables.

The timetable thus includes all entry intervals for arrival at work, lunch intervals and exit intervals for departure from work for all three shifts.

Furthermore, it also contains all the intervals that allow private and business exits during work for each shift and the interval for recording overtime work instructed by the heads of departments.

Finally, the *Info* interval is also included in the timetable, which allows employees to review their work hours and leave status, as well as the *Cancel* interval, with which employees can cancel their last registered event on the controller,



The screenshot shows the Jantar Timetables interface. On the left, there is a sidebar with a 'Home' button and a 'Timetables' section. Under 'Timetables', there is a search bar and a list of categories: 3-shift work, 3rd shift, Always, Fixed, Flexible, Monday - Saturday, Shift ALL (selected), and Shift NO Work Obligation. Below this, there is a section titled 'Intervals in timetable Shift ALL' showing a list of intervals for the selected timetable. The main area displays a table titled 'List of intervals on selected timetable' with columns: Name, Type, From, To, Start, Stop, and Button. The table lists various intervals such as Business 1st shift, Business 2nd shift, Business 3rd shift, Cancel, Exceptional, Fixed entry, Fixed exit, Info, Lunch, Private, Work afternoon, Work Holiday, Work Holiday night, Work Holiday Sunday, Work Holiday Sunday night, Work night, Work Sunday, and Work Sunday night. Each row includes a 'Button' column with a number indicating the count of events.

Name	Type	From	To	Start	Stop	Button
Business 1st shift 06:00-14:00	General p...	06:00	14:00			1
Business 2nd shift 14:00-22:00	General p...	14:00	22:00			1
Business 3rd shift 22:00-06:00	General p...	22:00	06:00			1
Cancel	Cancel	00:00	23:59			9
Exceptional	Entry / Exit	00:00	23:59			3
Fixed entry 1st shift 00:00-06:00	Entry	00:00	06:00	06:00		
Fixed entry 2nd shift 08:00-14:00	Entry	08:00	14:00	14:00		
Fixed entry 3rd shift 16:00-22:00	Entry	16:00	22:00	22:00		
Fixed exit 1st shift 14:00-22:00	Exit	14:00	22:00		14:00	
Fixed exit 2nd shift 22:00-06:00	Exit	22:00	06:00		22:00	
Fixed exit 3rd shift 06:00-14:00	Exit	06:00	14:00		06:00	
Info	Info	00:00	23:59			4
Lunch 1st shift	General p...	09:00	10:00			
Lunch 2nd shift	General p...	18:00	19:00			
Lunch 3rd shift	General p...	03:00	04:00			
Private 1st shift 06:00-14:00	General p...	06:00	14:00			2
Private 2nd shift 14:00-22:00	General p...	14:00	22:00			2
Private 3rd shift 22:00-06:00	General p...	22:00	06:00			2
Work afternoon	Time cut	14:00	22:00			
Work Holiday	Time cut	06:00	22:00			
Work Holiday night	Time cut	22:00	06:00			
Work Holiday Sunday	Time cut	06:00	22:00			
Work Holiday Sunday night	Time cut	22:00	06:00			
Work night	Time cut	22:00	06:00			
Work Sunday	Time cut	06:00	22:00			
Work Sunday night	Time cut	22:00	06:00			

3.2.4. * Configuration for changing timetables on the controller

To set up a system where users can change their assigned shifts on the controller, it is necessary to create *Timetable selection* type intervals for all *Timetables for shift planning*.

NOTE

An employee who will be able to change their shift (timetable) on the controller MUST be assigned an individual shift. Read more about individual shifts in chapter [Individual shifts for individual users](#) [49].

Creating *Timetable selection* type intervals

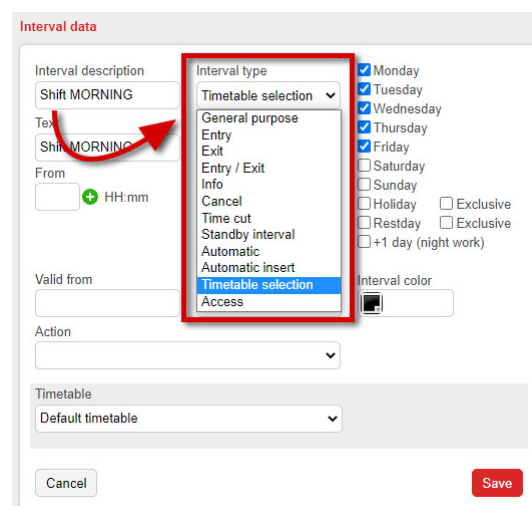
Create a *Timetable selection* interval for each *Shift planning timetable* that users can select on controllers, including the timetable for work-free days (e.g., for a 3-shift work system where users can change their current work timetable, you need to create 3 intervals for each shift as well as an interval for the timetable for work-free days).

1. Click the Add Interval icon in the *Timetable* editor toolbar to create a new time interval.

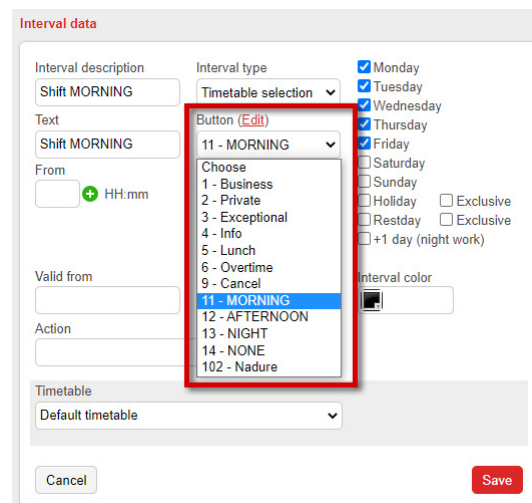
Clicking on the icon enables the field for editing time intervals on the right side of the editor.



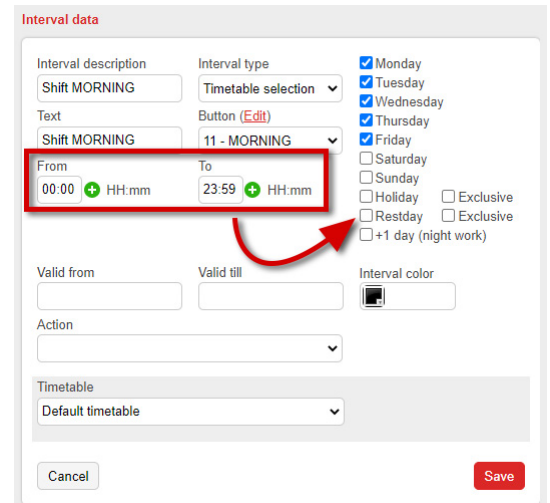
2. Enter a name for the interval and select the *Timetable selection* type from the interval type drop-down list.



3. You must also assign a button to the interval, with which users will be able to select it when registering on the controller.

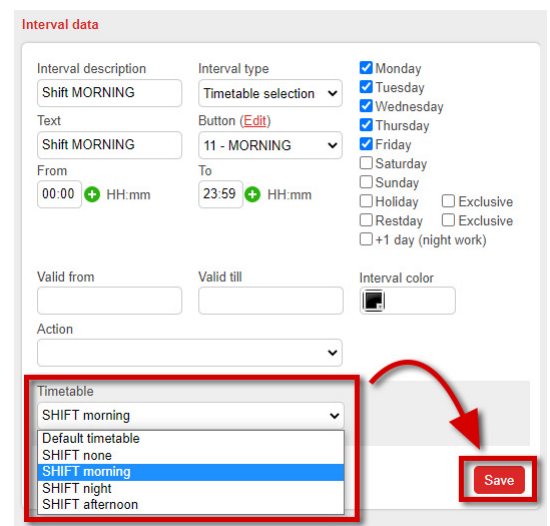


4. Specify the days of the week and the time of day when users will be able to use the *Timetable selection* interval.



The screenshot shows the 'Interval data' form. The 'Interval type' is set to 'Timetable selection'. The 'From' field is set to '00:00' and the 'To' field is set to '23:59'. The 'Valid from' and 'Valid till' fields are empty. The 'Interval color' is set to a dark gray. The 'Timetable' dropdown is set to 'Default timetable'. The 'Save' button is highlighted with a red box and an arrow pointing to it.

5. In the *Timetable* drop-down list, select the *Timetable for shift planning* that the user will activate by selecting this interval.



The screenshot shows the 'Interval data' form with the 'Timetable' dropdown menu open. The dropdown list contains the following options: 'SHIFT morning', 'Default timetable', 'SHIFT none', 'SHIFT morning', 'SHIFT night', and 'SHIFT afternoon'. The 'SHIFT morning' option is highlighted with a blue background. The 'Save' button is highlighted with a red box and an arrow pointing to it.

6. When you have entered all the desired data, confirm the entry by clicking Save.

The new interval will be displayed on the list of all time intervals, however, it is not yet assigned to any timetable.

7. Repeat the process until you have created intervals to select all the timetables that users will be able to select on the controller.

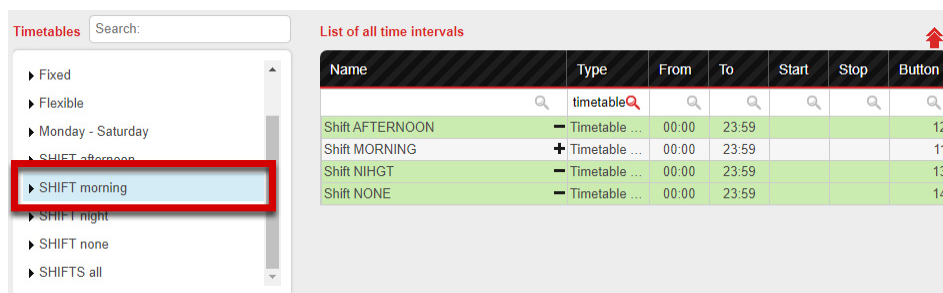
Adding intervals to the timetables of the shifts system

The newly created intervals must then be assigned to the [timetable for free days](#)^[18], [all the shift work timetables](#)^[19], and the [timetable for allocating access rights](#)^[21].

NOTE

Due to the nature of the process of changing the timetable on the controller, each *timetable for shift planning* must also contain an interval for selecting oneself.

1. To assign a time interval to a timetable, first select the *Timetable for shift planning* to which you want to assign intervals in the *List of all timetables*. The marked timetable will color *blue*.



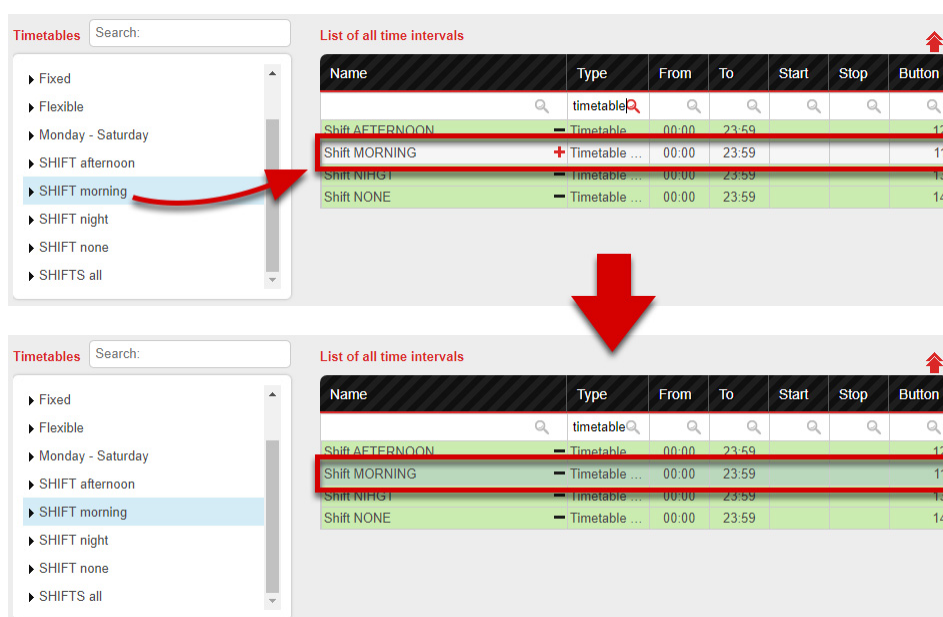
Timetables Search:

- ▶ Fixed
- ▶ Flexible
- ▶ Monday - Saturday
- ▶ SHIFT afternoon
- ▶ **SHIFT morning**
- ▶ SHIFT night
- ▶ SHIFT none
- ▶ SHIFTS all

List of all time intervals

Name	Type	From	To	Start	Stop	Button
Shift AFTERNOON	Timetable ...	00:00	23:59			12
Shift MORNING	Timetable ...	00:00	23:59			11
Shift NIGHT	Timetable ...	00:00	23:59			13
Shift NONE	Timetable ...	00:00	23:59			14

2. Then, in the list of all time intervals, find all the desired *Timetable selection* intervals and click the + (plus) icon next to the interval name to add the interval. The added time interval will color *green*. Be sure to add the interval which enables the current timetable to select itself to each selected timetable (for example, you must also add an interval to select a morning shift timetable to your morning shift timetable).



Timetables Search:

- ▶ Fixed
- ▶ Flexible
- ▶ Monday - Saturday
- ▶ SHIFT afternoon
- ▶ **SHIFT morning**
- ▶ SHIFT night
- ▶ SHIFT none
- ▶ SHIFTS all

List of all time intervals

Name	Type	From	To	Start	Stop	Button
Shift AFTERNOON	Timetable ...	00:00	23:59			12
Shift MORNING	Timetable ...	00:00	23:59			11
Shift NIGHT	Timetable ...	00:00	23:59			13
Shift NONE	Timetable ...	00:00	23:59			14

3. Repeat the procedure for each timetable that users will be able to select on the controller.

Example of timetable configuration for a system with the option to change timetables:

Employees of the company work in three shifts (1st shift: from 6.00 to 14.00, 2nd shift: from 14.00 to 22.00 and 3rd shift: from 22.00 to 6.00). The working hours of each employee are normally determined by an individual shift.

In certain cases, however, an employee may have to come to work in a shift other than the one they are originally assigned to (e.g. replacing a sick co-worker). The employee must then choose the new shift they have come to work in on the controller. At the controller, the employee first selects the appropriate shift (timetable), and only after that can they register their arrival at work. You can read more about the registration process in chapter [Changing the shift timetable on the controller](#) [70].

To set up such a system, it is necessary to add *Timetable selection* type intervals to all timetables used for shifts, which allow the shift (timetable) to be changed. In the case described, it is necessary to create the following *Timetable selection* type intervals:

- the Shift MORNING, which allows the user to change their currently assigned shift for the morning shift,
- the Shift AFTERNOON, which allows the user to change their currently assigned shift for the afternoon shift,
- the Shift NIGHT, which allows the user to change their currently assigned shift for the night shift.
- the Shift NONE, which allows the user to change their currently assigned shift to a (permitted) work-free day.

SHIFT WORK TIMETABLES

All shift work timetables and the timetable for free days include all the *Timetable selection* type intervals, as the employee can be called to another shift at any time, including on their day off. Due to the nature of the process of changing the timetable on the controller, each shift work timetable must also contain an interval for selecting oneself.

SHIFT none							SHIFT afternoon						
Name	Type	From	To	Start	Stop	Button	Name	Type	From	To	Start	Stop	Button
Cancel	Cancel	00:00	23:59			9	Business 2nd shift 14:00-22:00	General p...	14:00	22:00			1
Info	Info	00:00	23:59			4	Cancel	Cancel	00:00	23:59			9
Shift AFTERNOON	Timetable ...	00:00	23:59			12	Exceptional	Entry / Exit	00:00	23:59			3
Shift MORNING	Timetable ...	00:00	23:59			11	Fixed entry 2nd shift 08:00-14:00	Entry	08:00	14:00	14:00		
Shift NIGHT	Timetable ...	00:00	23:59			13	Fixed exit 2nd shift 22:00-06:00	Exit	22:00	06:00		22:00	
Shift NONE	Timetable ...	00:00	23:59			14	Info	Info	00:00	23:59			4
							Lunch 2nd shift	General p...	18:00	19:00			
							Private 2nd shift 14:00-22:00	General p...	14:00	22:00			2
							Shift AFTERNOON	Timetable ...	00:00	23:59			12
							Shift MORNING	Timetable ...	00:00	23:59			11
							Shift NIGHT	Timetable ...	00:00	23:59			13
							Shift NONE	Timetable ...	00:00	23:59			14

SHIFT morning							SHIFT night						
Name	Type	From	To	Start	Stop	Button	Name	Type	From	To	Start	Stop	Button
Business 1st shift 06:00-14:00	General p...	06:00	14:00			1	Business 3rd shift 22:00-06:00	General p...	22:00	06:00			1
Cancel	Cancel	00:00	23:59			9	Cancel	Cancel	00:00	23:59			9
Exceptional	Entry / Exit	00:00	23:59			3	Exceptional	Entry / Exit	00:00	23:59			3
Fixed entry 1st shift 00:00-06:00	Entry	00:00	06:00	06:00			Fixed entry 3rd shift 16:00-22:00	Entry	16:00	22:00	22:00		
Fixed exit 1st shift 14:00-22:00	Exit	14:00	22:00		14:00		Fixed exit 3rd shift 06:00-14:00	Exit	06:00	14:00		06:00	
Info	Info	00:00	23:59			4	Info	Info	00:00	23:59			4
Lunch 1st shift	General p...	09:00	10:00				Lunch 3rd shift	General p...	03:00	04:00			
Private 1st shift 06:00-14:00	General p...	06:00	14:00			2	Private 3rd shift 22:00-06:00	General p...	22:00	06:00			2
Shift AFTERNOON	Timetable ...	00:00	23:59			12	Shift AFTERNOON	Timetable ...	00:00	23:59			12
Shift MORNING	Timetable ...	00:00	23:59			11	Shift MORNING	Timetable ...	00:00	23:59			11
Shift NIGHT	Timetable ...	00:00	23:59			13	Shift NIGHT	Timetable ...	00:00	23:59			13
Shift NONE	Timetable ...	00:00	23:59			14	Shift NONE	Timetable ...	00:00	23:59			14

SHIFTS all

The SHIFTS all timetable is used as the default timetable, giving users access rights, and contains all the intervals that appear in individual *Timetables for shift planning*.

SHIFTS all						
Name	Type	From	To	Start	Stop	Button
Business 1st shift 06:00-14:00	General p...	06:00	14:00			1
Business 2nd shift 14:00-22:00	General p...	14:00	22:00			1
Business 3rd shift 22:00-06:00	General p...	22:00	06:00			1
Cancel	Cancel	00:00	23:59			9
Exceptional	Entry / Exit	00:00	23:59			3
Fixed entry 1st shift 00:00-06:00	Entry	00:00	06:00	06:00		
Fixed entry 2nd shift 08:00-14:00	Entry	08:00	14:00	14:00		
Fixed entry 3rd shift 16:00-22:00	Entry	16:00	22:00	22:00		
Fixed exit 1st shift 14:00-22:00	Exit	14:00	22:00		14:00	
Fixed exit 2nd shift 22:00-06:00	Exit	22:00	06:00		22:00	
Fixed exit 3rd shift 06:00-14:00	Exit	06:00	14:00		06:00	
Info	Info	00:00	23:59			4
Lunch 1st shift	General p...	09:00	10:00			
Lunch 2nd shift	General p...	18:00	19:00			
Lunch 3rd shift	General p...	03:00	04:00			
Private 1st shift 06:00-14:00	General p...	06:00	14:00			2
Private 2nd shift 14:00-22:00	General p...	14:00	22:00			2
Private 3rd shift 22:00-06:00	General p...	22:00	06:00			2
Shift AFTERNOON	Timetable ...	00:00	23:59			12
Shift MORNING	Timetable ...	00:00	23:59			11
Shift NIGHT	Timetable ...	00:00	23:59			13
Shift NONE	Timetable ...	00:00	23:59			14

An example of a (standard) timetable configuration can be found in chapter [Example of timetables for 3-shift work](#) [20].

3.2.5. * Configuration for Comparative timetables

In systems where a comparative timetable is used, employees work in shifts and often have an unevenly distributed work obligation, however, their salaries are paid according to a fixed (usually 40-hour-a-week) work obligation.

In practice, therefore, employees can actually clock in more hours in a given month through their shift work than they are paid according to the comparative timetable. The employees' excess working hours from a certain month are transferred to the following month, and the number of actually performed work hours are equated with the required work obligation according to the comparative timetable at the annual level by appropriately allocating the users to different shifts.

To set up a comparative timetable system, you must first create the *Comparative timetables* and then assign them to all timetables in the shift work system.

NOTE

When using the comparative timetable, it is recommended that ALL USERS in the system have a comparative timetable assigned, as this facilitates the *Custom reports* data exports that are later imported into payroll programs.

Creating a Comparative timetable

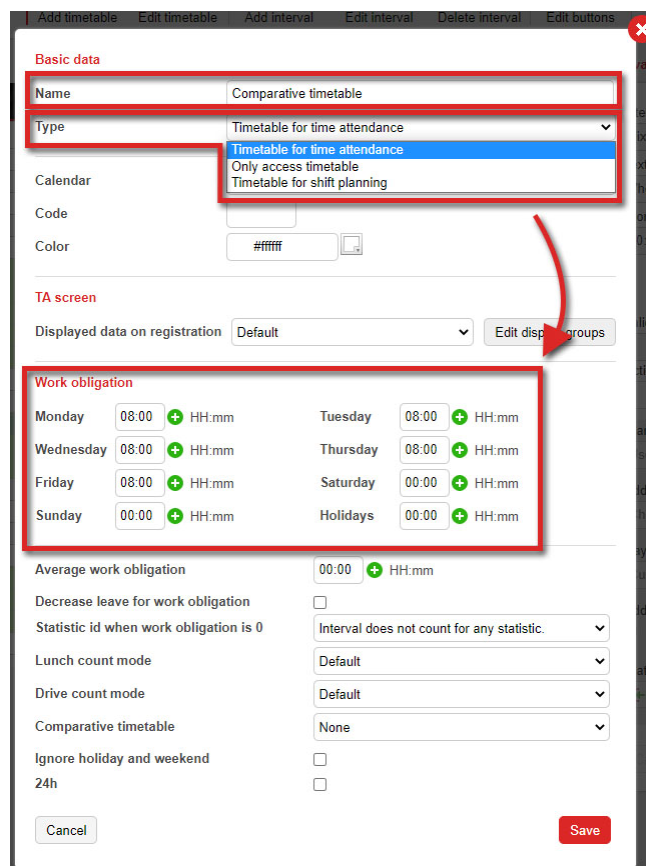
1. To create a comparative timetable, first, click the *Add timetable* icon in the toolbar of the *Timetables* editor.

2. A new window will open for editing the timetable settings.

In the new window, first enter the name of the timetable (e.g., *Comparative timetable*), then select *Timetable for time attendance* from the *Type* drop-down menu.

3. In the *Work obligation* section set the work obligation for each day of the week.

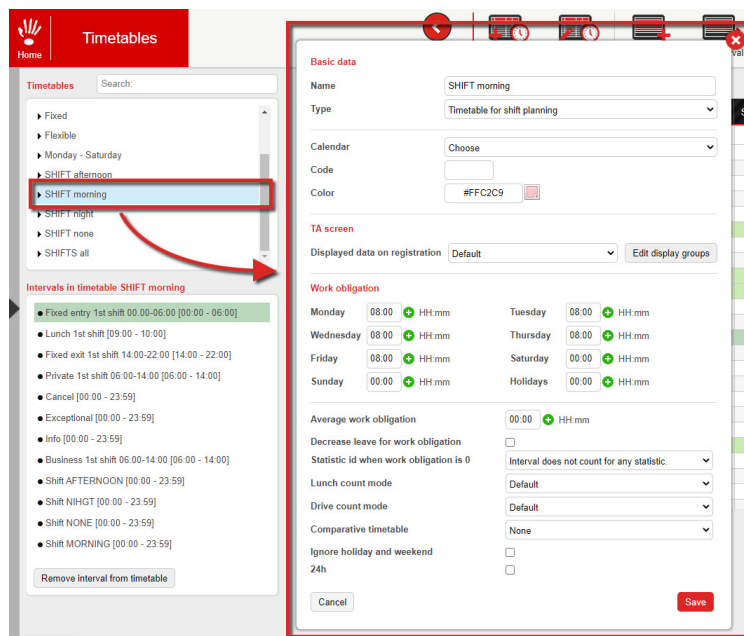
4. Finally, click *Save*. The new timetable will be added to the *list of all timetables*.



Assigning the comparative timetable to timetables for shift work

The new comparative timetable created in the previous step must be assigned to all timetables used in the shift system (i.e., both shift work timetables and the timetable for free days).

1. To assign the *comparative timetable* to a timetable used in the shift work system, first, select the timetable from the *list of all timetables* in the *Timetables* editor. Double-click on the timetable to open the window for editing the timetable.

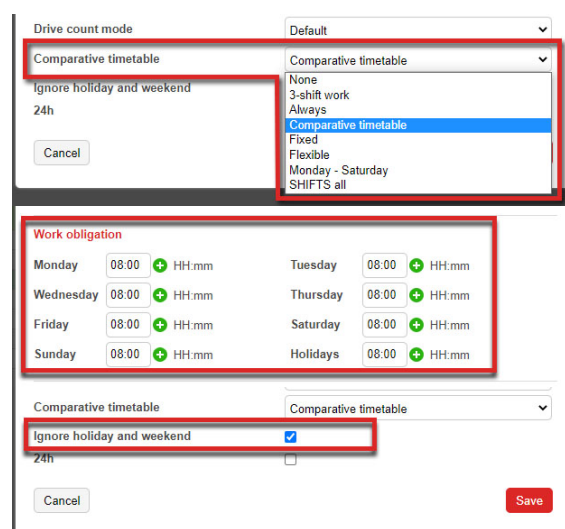


2. In the lower part of the window, find the *Comparative timetable* setting and select the comparative timetable you have created in the previous step from the drop-down menu.

3. Then check that all shift work timetables have the proper work obligation value entered for every day or set these values appropriately for each day (including the weekend and holidays).

4. Also, enable the *Ignore holiday and weekend* setting for all shift work timetables and the timetable for free days.

5. Finally, save the entered changes.



3.3. Settings for groups

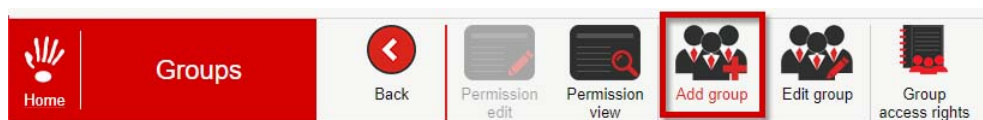
In the *Groups* editor, users must be added to the *Time and attendance group*, with which they will be granted access rights to readers, where they will register their shift work.

NOTE

We recommend that you do not use an existing group as the *group for access rights*, but that you create a new dedicated group.

To assign access rights at readers, create a new *Time and attendance group* type group, to which you assign the *timetable for access rights* at the appropriate passages.

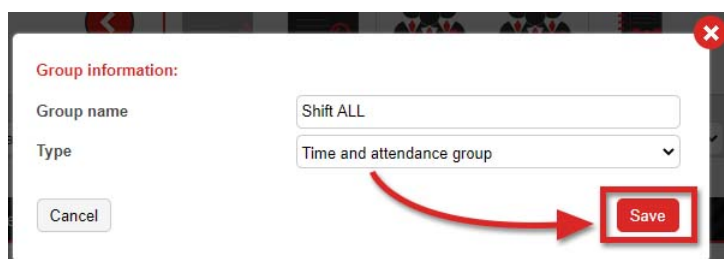
1. First, click the *Add group* button in the *Groups* editor. A new window for adding a group will open.



2. In the new pop-up window, first, enter the name of the new group, and under the *Type* setting, select *Time and attendance group*.

Then click *Save*.

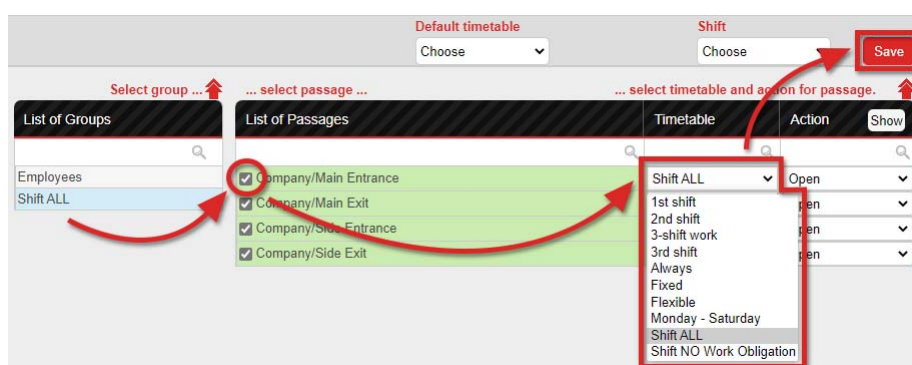
The new group will be added to the list of groups in the *Groups* editor.



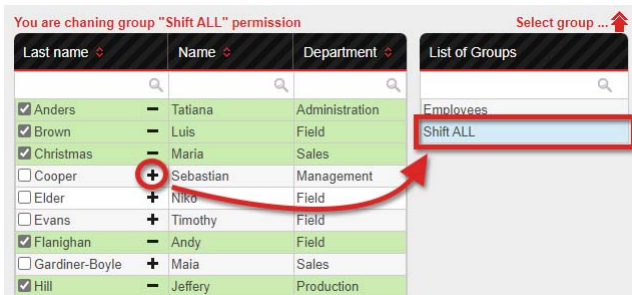
3. Add access rights to the group at all passages where shift employees will register.

To assign access rights to a passage, first enable the passage, and then, in the *Timetable* column, select the *timetable for access rights*.

Click *Save*.



4. In the next step, assign users to the new group by clicking the plus icon (+) next to the users' name.



5. When you have finished adding users to the new group, you still need to [send tables](#) to the affected controllers to apply the set changes.

3.4. Settings for users

Before using the *Codeks Shifts* add-on, some settings need to be properly prepared, in the main Codeks application, for employees (regular users) and heads of departments.

The settings differ according to the type of user:

- [Regular users](#)^[31] who are involved in shift work.
- [Heads of departments](#)^[34] who receive notifications about unplanned arrivals of employees to work.

3.4.1. Settings for regular users

Employees (regular users) must have the following settings set in the main Codeks application:

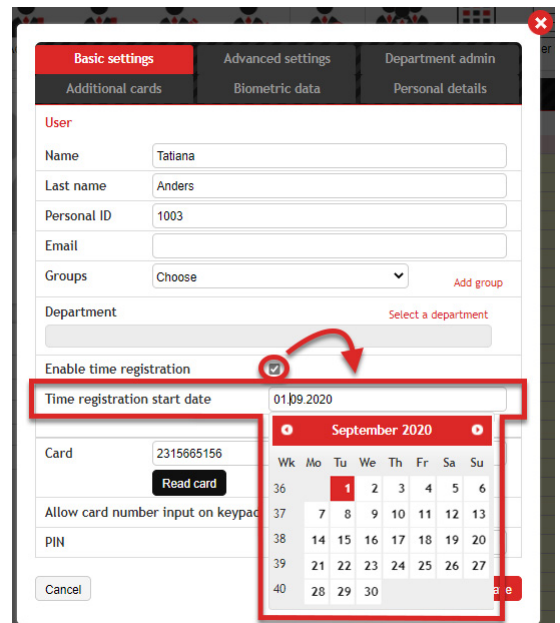
- They must be able to register their time and attendance.
- They must be assigned to the appropriate department.
- They must have the [group for access rights](#)^[29] assigned to them.
- They must have a valid e-mail address for receiving e-mail notifications.

A) Turn on the time registration

1. To turn on the time registration in the *Users* editor, first, find and double-click the appropriate user in the user list. A new window for editing user settings will open.

2. Then, on the *Basic settings* tab, turn on the *Enable time registration* setting and specify the *Time registration start date*.

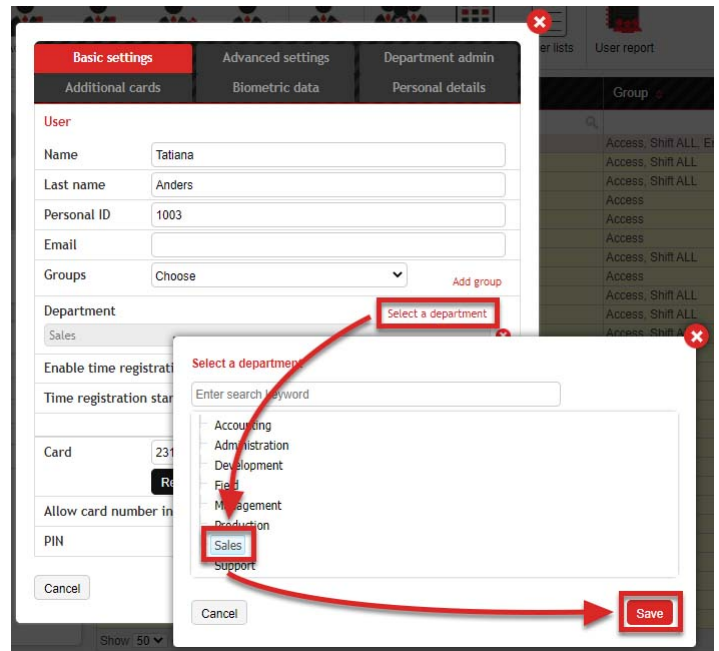
3. Then click *Save*.



The screenshot shows the 'Basic settings' tab for a user named 'Tatiana Anders' with personal ID '1003'. The 'Enable time registration' checkbox is checked. A red box highlights the 'Time registration start date' field, which is set to '01.09.2020'. A calendar widget for September 2020 is open, showing the date '01' selected. The 'Card' field contains '2315665156' and the 'PIN' field is empty. The 'Read card' button is visible.

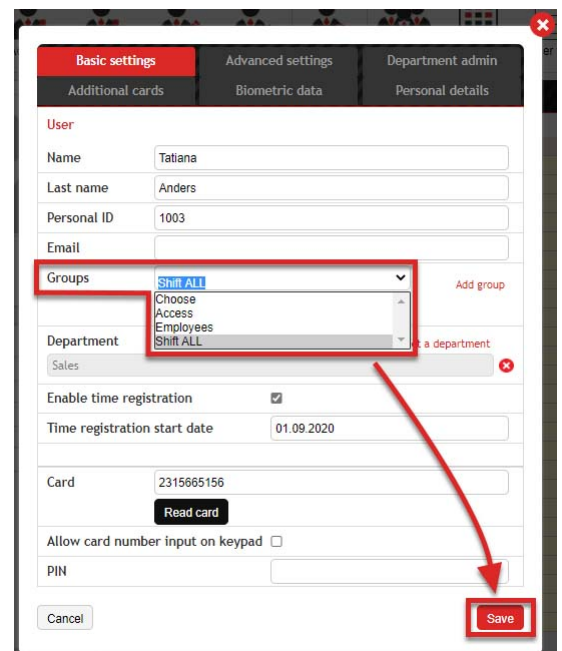
B) Assigning users to the appropriate department

1. To assign a user to the appropriate department in the *Users* editor, first find and double-click the appropriate user on the list of users. A new window for editing the user's settings will open.
2. Then, on the *Basic settings* tab, under the *Department* section, click the *Select a department* link.
A new window will open where you select the appropriate department and then click *Save*.
3. Then click *Save* again in the first pop-up window.



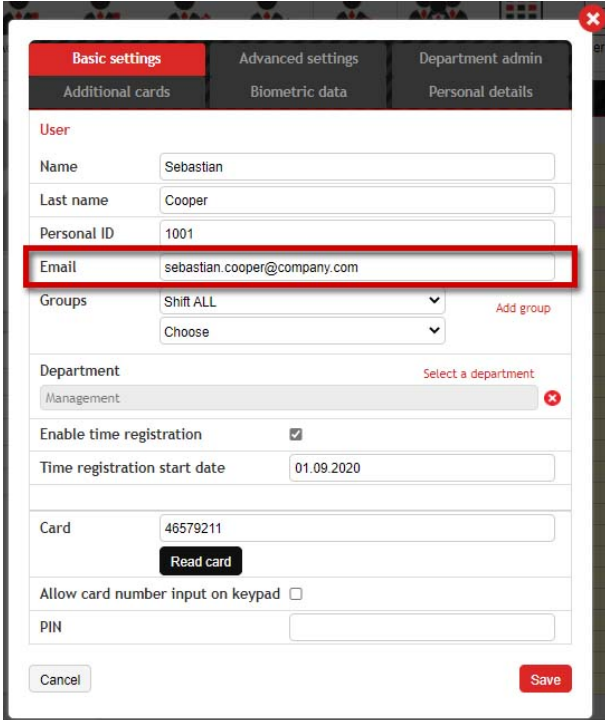
C) Assigning the group for access rights to users

1. To assign a user to the *group for access rights* in the *Users* editor, first find and double-click the appropriate user on the list of users. A new window for editing the user's settings will open.
2. Then, on the *Basic settings* tab, under the *Groups* section, select the *group for access rights* from the drop-down list.
3. Then click *Save*.



D) Adding a valid email address

In order for users to be able to receive email notifications about their shift schedule, they must have their own (valid) email address entered in the user's settings.



The screenshot shows the 'Basic settings' tab for a user named Sebastian Cooper. The 'Email' field is highlighted with a red box, indicating it is the focus of the instruction. The email address entered is 'sebastian.cooper@company.com'. Other visible fields include 'Name' (Sebastian), 'Last name' (Cooper), 'Personal ID' (1001), 'Groups' (Shift ALL), 'Department' (Management), and 'Card' (46579211). The 'Save' button is located at the bottom right of the form.

3.4.2. Settings for heads of departments

For department heads who will receive notifications about unplanned arrivals of users to work, it is necessary to:

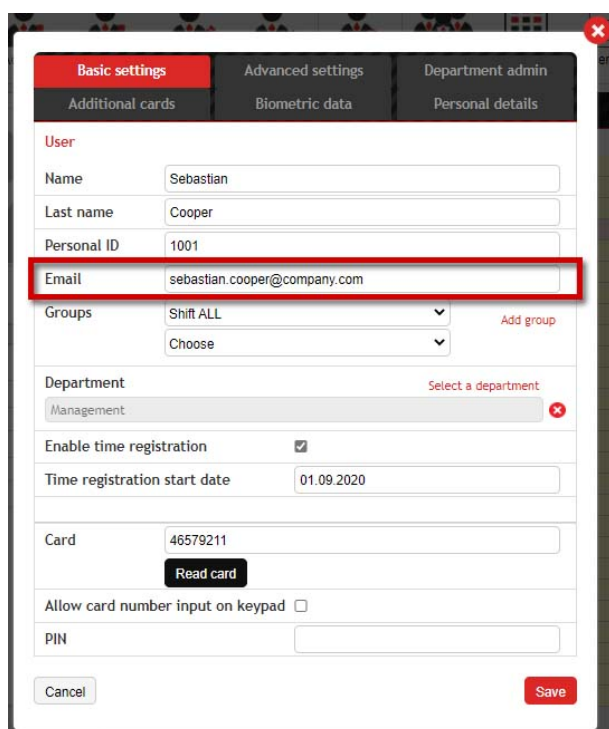
- A) enter a valid email address;
- B) properly organize the *Company organization* and set up selected users as heads and deputy heads of departments.
- C) enable the rights of users acting as department heads to be notified (described in chapter [Notification settings](#)^[36]).

NOTE

Appointed heads and deputy heads of departments will only be able to receive emails if they have a [valid email address entered](#)^[34] in their user settings. Only users who are designated as heads of departments and deputy heads of departments in the *Company organization* or have the [rights to be notified enabled](#)^[36] in their user settings will be informed about unplanned arrivals of employees in shifts.

A) Setting the email address for notifications

Heads of departments will be informed about unplanned arrivals of employees in shift work by e-mail, so they need to have a valid e-mail address assigned to them in their user settings in the *Basic settings* tab.

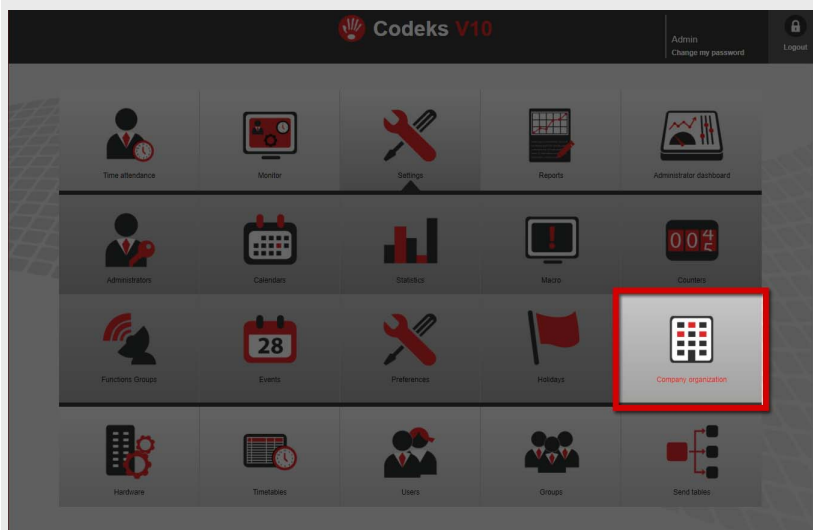


The screenshot shows the 'Basic settings' tab for a user. The 'Email' field is highlighted with a red box and contains the address 'sebastian.cooper@company.com'. Other fields include Name (Sebastian), Last name (Cooper), Personal ID (1001), Groups (Shift ALL), Department (Management), Enable time registration (checked), Time registration start date (01.09.2020), Card (46579211), and PIN. The 'Save' button is visible at the bottom right.

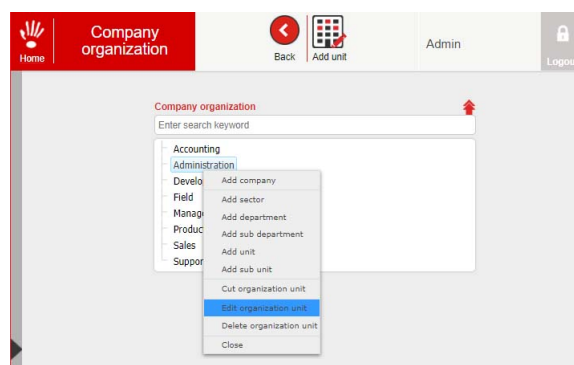
B) Setting up heads and deputy heads of departments in the *Company organization* editor

NOTE

Before setting up heads and deputy heads of departments, you must edit the company structure in the *Company organization* editor, which is accessible through the *Settings* submenu.

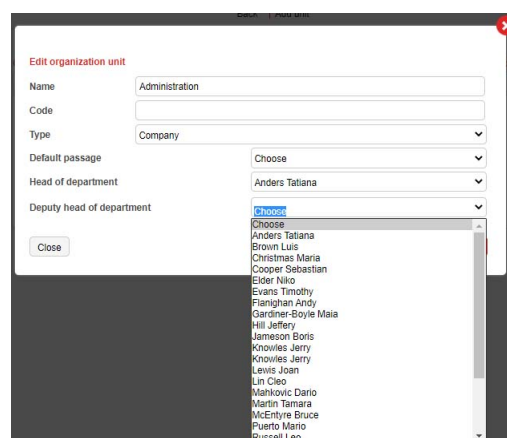


1. To assign a head or deputy head of departments, first double-click the desired organizational unit to bring up a pop-up window to edit the company structure.



2. In the pop-up window under the *Head of department* and *Deputy head of department* settings, select the user who will act as the head for the selected department. You can choose from existing users in the Codeks system.

3. When you have finished, save the data by clicking *Save*.



3.5. Notification settings

With the *Codeks Shifts* add-on, notifications can be sent to heads of departments as well as the employees who work in shifts. Heads of departments can be informed via electronic messages about unplanned employee arrivals and about employees who did not arrive to shift work on time. Employees, on the other hand, can receive their shift work schedules in the form of electronic messages.

3.5.1. Notification settings for heads of departments

The *Codeks Shifts* add-on enables notifying heads of departments about the arrival of employees in the wrong shift or about missing employees who did not come to work. Notifications are turned off by default, so it is necessary to:

- (A) turn on the global setting for sending shift notifications in the *Preferences* editor as well as
- (B) enable notifications for each individual shift,
- (C) appoint heads and deputy heads of departments or enable the rights of users acting as department heads to be notified.

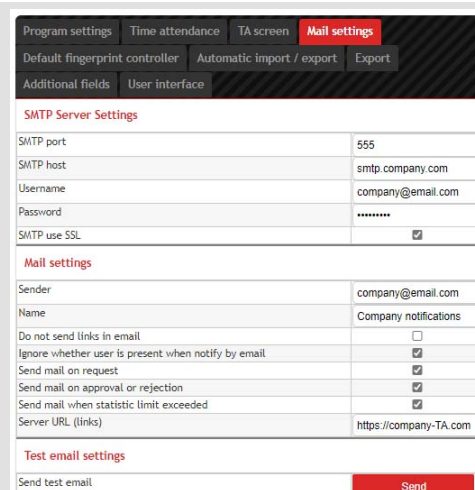
NOTE

Appointed heads and deputy heads of departments will only be able to receive emails if they have a [valid email address entered](#)^[34] in their user settings. Only users who are designated as heads of departments and deputy heads of departments in the *Company organization* or have the [rights to be notified enabled](#)^[36] in their user settings will be informed about unplanned arrivals of employees in shifts.

NOTE

To enable email notification about unplanned employee arrivals it is necessary to properly set the email settings in the *Mail setting* tab in the *Preferences* editor.

You can read more about email settings in the documentation for the main Codeks application.



The screenshot shows the 'Mail settings' tab in the 'Preferences' editor. It includes sections for 'SMTP Server Settings', 'Mail settings', and 'Test email settings'.

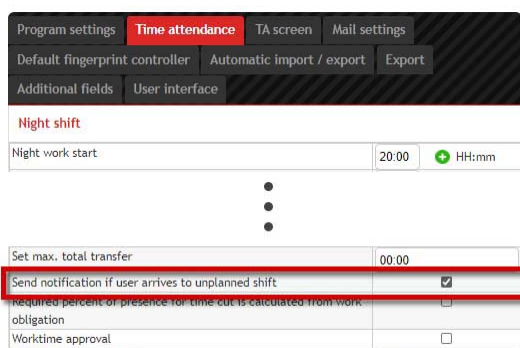
SMTP Server Settings	
SMTP port	555
SMTP host	smtp.company.com
Username	company@email.com
Password	*****
SMTP use SSL	<input checked="" type="checkbox"/>

Mail settings	
Sender	company@email.com
Name	Company notifications
Do not send links in email	<input type="checkbox"/>
Ignore whether user is present when notify by email	<input checked="" type="checkbox"/>
Send mail on request	<input checked="" type="checkbox"/>
Send mail on approval or rejection	<input checked="" type="checkbox"/>
Send mail when statistic limit exceeded	<input checked="" type="checkbox"/>
Server URL (links)	https://company-TA.com

Test email settings	
Send test email	<input type="button" value="Send"/>

A) Enable global notification settings for unplanned user arrivals in shifts

To turn on the global setting for notifying heads of departments in the *Preferences* editor, on the *Time attendance* tab, under the *Time attendance* section, find and enable the *Send notification if user arrives in unplanned shift* setting.

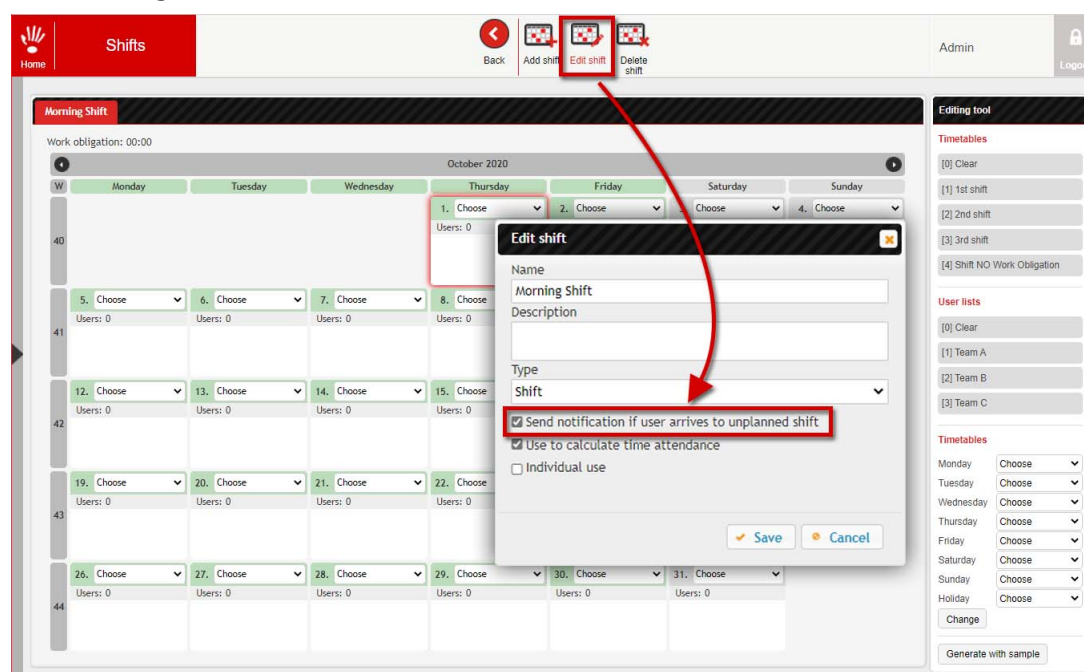


Setting	Description
Send notification if user arrives in unplanned shift	If you enable this setting, the system will send an e-mail notification to the head of department every time an employee comes to work in an unscheduled shift or when an employee does not come to work at all.

B) Turn on notification on each individual shift

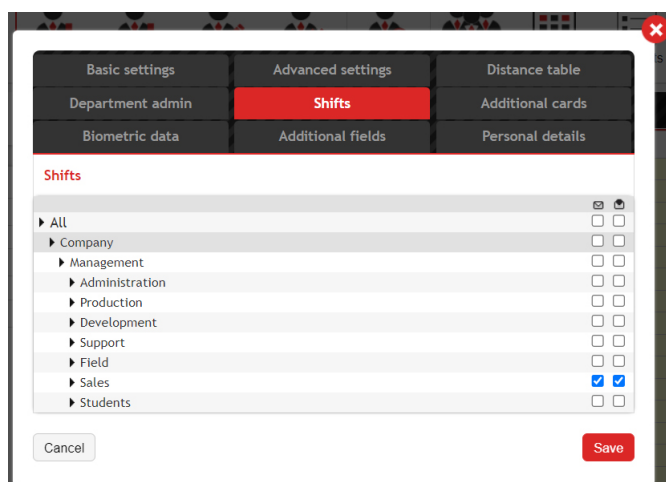
To turn on notifications for a particular shift in the *Shifts* editor, open the window for editing the shift, and then enable the *Send notification if user arrives to unplanned shift* setting.

This setting must be switched on for EACH shift INDIVIDUALLY!



C) Enabling user rights to notifications

In the *Users* editor, you can enable each user the right to be notified about different events in the shift work of their co-workers from particular departments.



Settings	Description
<input checked="" type="checkbox"/> - Receive notification in case of unscheduled arrival	If you enable this setting, the user will receive notifications in the event of an unplanned arrival of users of this department outside of their scheduled shift.
<input checked="" type="checkbox"/> - Receive notification in case of unscheduled absence	If you enable this setting, the user will receive notifications in the event of an unplanned absence of users of this department from work in their scheduled shift.

3.5.2. Notification settings for employees

All employees who work in shifts can be sent an individual e-mail about the schedule of their shift work from the *Shifts* editor.

Sending the shift schedule to employees can only be initiated manually by clicking the *Send email* button in the *Shifts* editor toolbar.

NOTE

Each administrator can only send an electronic message of the scheduled shift work SIMULTANEOUSLY to ALL employees for whom he has the right to view and edit shifts and who are assigned to any shift in the *Shift* editor.

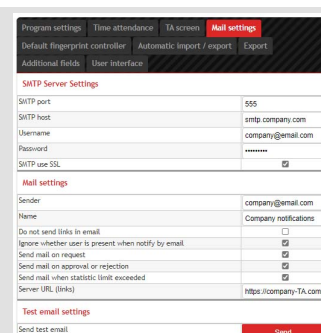
NOTE

Employees will only be able to receive emails if they have a [valid email address entered](#) in their user settings.

NOTE

To enable email notification about scheduled shift work it is necessary to properly set the email settings in the *Mail setting* tab in the *Preferences* editor.

You can read more about email settings in the documentation for the main Codeks application.



Designing the email notification template

First, in the general settings for *Time attendance* in the *Settings -> Preferences* menu, create a template for the message that will be sent to employees.

1. Open the *Settings -> Preferences* menu and navigate to the *Time attendance* tab. Then find the *Shifts* section.

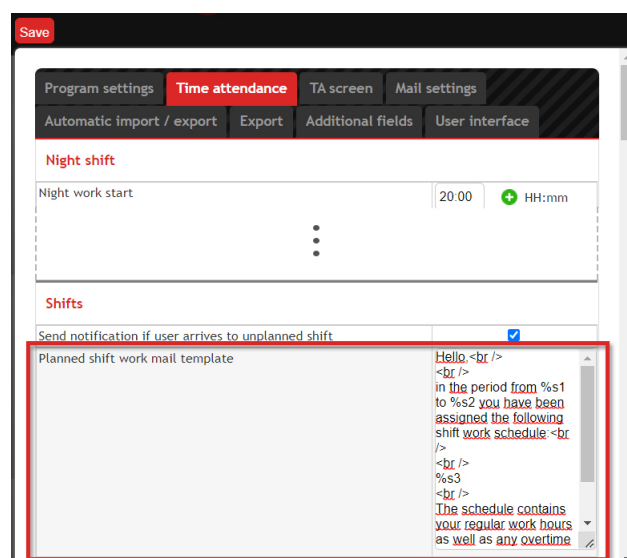
2. Compose the content of the email in the *Planned shift work mail template* settings field.

In the body of the message, use the following commands to display key data:

- %s1 - the start date of the period for displaying the shift schedule,
- %s2 - the end date of the period for displaying the shift schedule,
- %s3 - table with the shift schedule.

For an appropriate message break, use the html element to break to a new line
.

3. When you are finished, click *Save*.



Example of the email template:

Hello,

 in the period from %s1 to %s2 you have been assigned the
 following shift work schedule:

 %s3

 The schedule contains your regular work hours as well as any
 overtime hours.

 Sincerely,

 Company, LLC

Example of a sent email:

Planned shift work from 07/11/2022 ti 07/17/2022 

SHIFTS

For me ▼

Example of the email template: Hello,

in the period from 11. 07. 2022 to 17. 07. 2022 you have been assigned the following shift work schedule:

Date	Timetable
11. 07. 2022	AFTERNOON SHIFT
12. 07. 2022	AFTERNOON SHIFT
13. 07. 2022	AFTERNOON SHIFT
14. 07. 2022	AFTERNOON SHIFT
15. 07. 2022	AFTERNOON SHIFT
16. 07. 2022	FREE DAY
17. 07. 2022	FREE DAY

The schedule contains your regular work hours as well as any overtime hours.

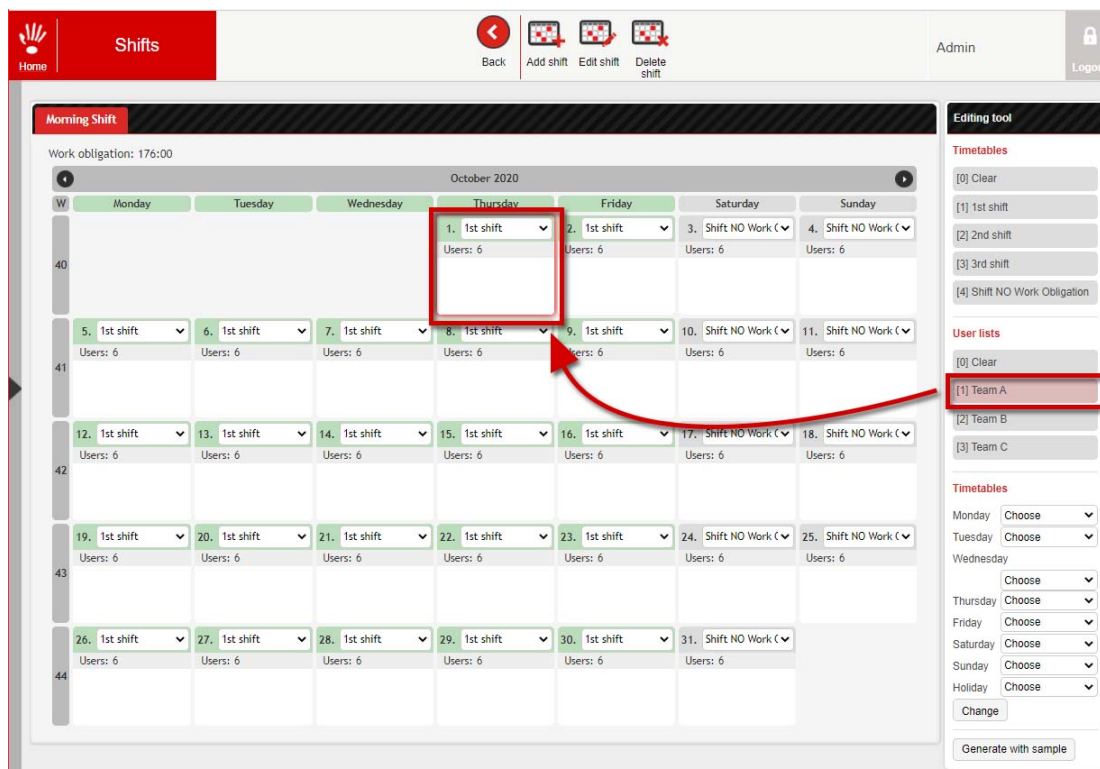
Sincerely,
 Company, LLC

Sending emails

Triggering the sending of a message to employees is described in the chapter [Notifying employees](#)⁶¹.

3.6. * User lists

User lists are used in the Codeks application to make it easier to select or filter users in different application editors. By using the *Codeks Shifts* add-on, user lists can make it easier to assign users to shifts.

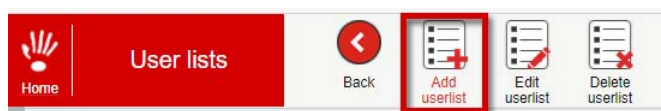


You can create user lists in the *User lists* editor, which can be accessed via the *User lists* icon in the *Users* editor toolbar.



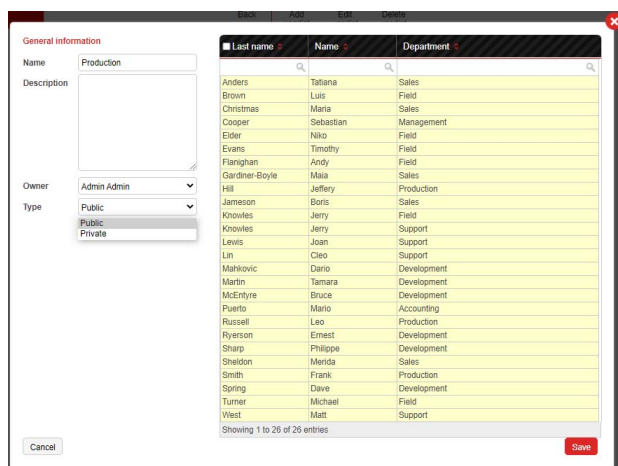
Add a user list

1. Click the *Add user list* icon in the *User list* editor toolbar to add a new list of users.



2. A new window will open where you specify the *name* of the new list and you can also add a description.

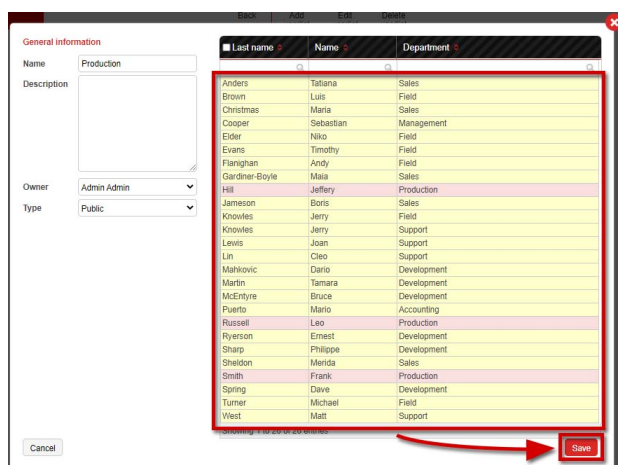
3. You can also select the administrator who will own the list and specify the list *type*.



Public lists will be available to all Codeks users, and *private lists* will only be available to the list owner.

4. Then, in the list on the right, select the users to be added to the new list.

You can select multiple users by holding down the *Ctrl* or *Shift* key.



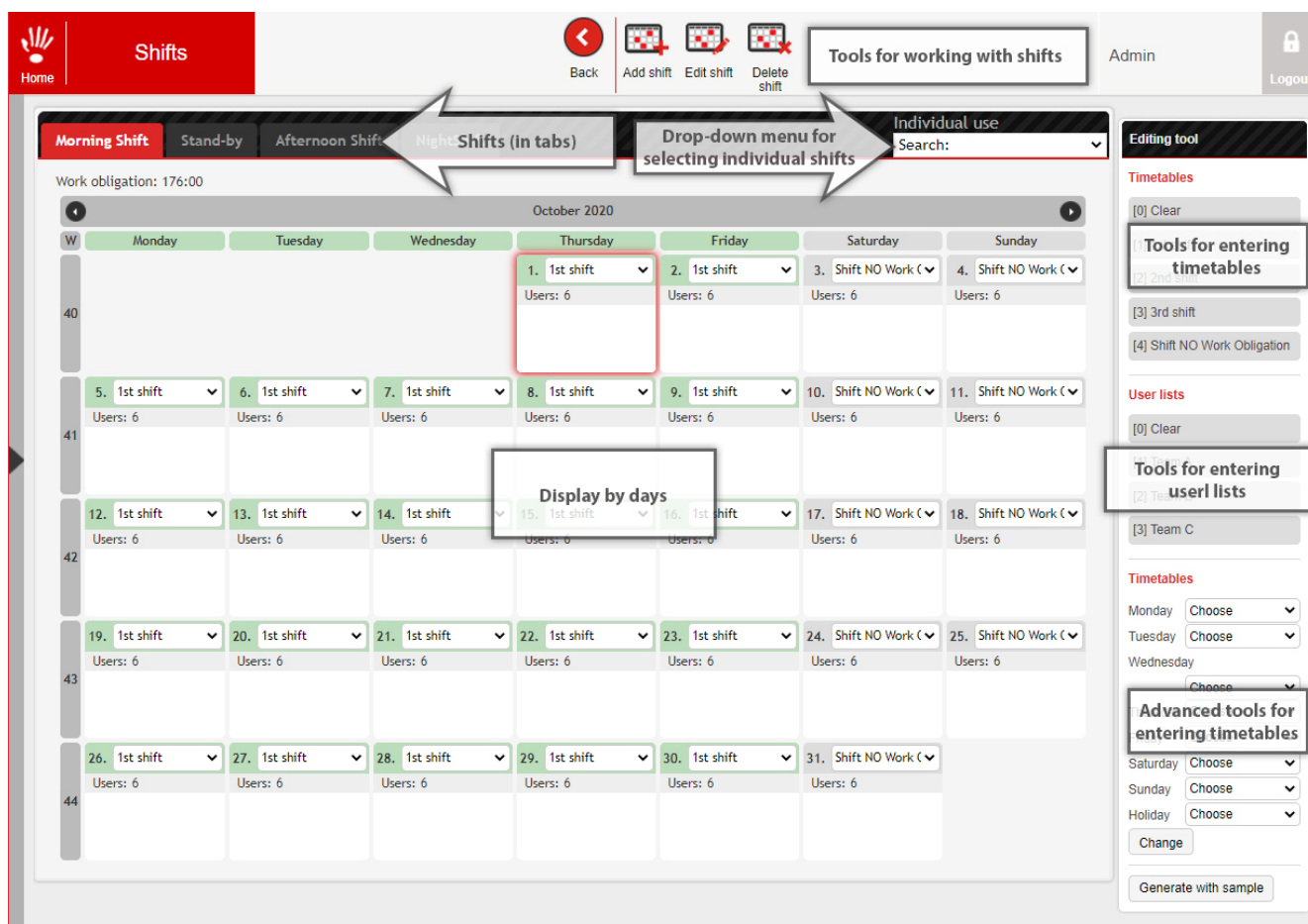
5. When you are finished, click *Save*.

The new user list will be displayed in the lower part of the editor.

You can read more about *User lists* in the documentation of the main Codeks application.

4. Working with Shifts

You can create the shifts you will use to assign shift work to users in the *Shifts* editor. Here you can also edit and delete existing shifts.



The screenshot displays the 'Shifts' editor interface. At the top, there is a navigation bar with 'Home' and 'Shifts' tabs. The 'Shifts' tab is active, showing a calendar view for October 2020. The calendar is organized by days of the week (Monday to Sunday) and time slots (40, 41, 42, 43, 44). Each time slot contains a dropdown menu for selecting a shift. Annotations highlight key features:

- Tools for working with shifts:** A box at the top right containing 'Back', 'Add shift', 'Edit shift', and 'Delete shift' buttons.
- Drop-down menu for selecting individual shifts:** A box pointing to the '1st shift' dropdown in the Thursday 40 slot.
- Display by days:** A box pointing to the '1st shift' dropdown in the Thursday 42 slot.
- Tools for entering timetables:** A box on the right side, pointing to the 'Timetables' section.
- Tools for entering user lists:** A box on the right side, pointing to the 'User lists' section.
- Advanced tools for entering timetables:** A box on the right side, pointing to the 'Advanced tools for entering timetables' section.

The right sidebar contains sections for 'Editing tool', 'Timetables', 'User lists', and 'Advanced tools for entering timetables'. The 'Timetables' section includes a search bar and a list of timetables. The 'User lists' section includes a search bar and a list of user lists. The 'Advanced tools for entering timetables' section includes a table for selecting timetables for each day of the week.

4.1. Adding shifts

You can create shifts with the *Codeks Shifts* add-on in different ways.

In the *Shift* editor, you can choose between different types of shifts:

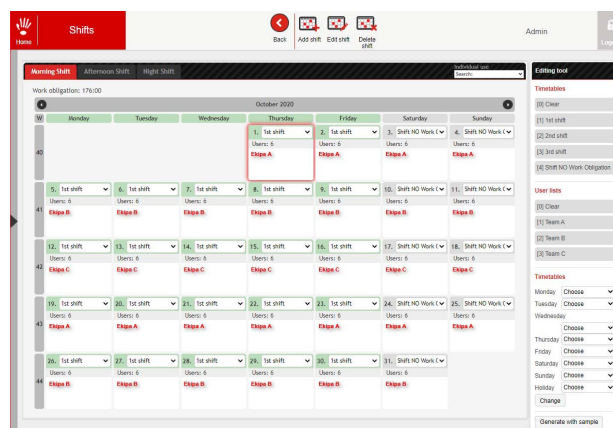
- Shift

If you select this (basic) type of shift, you will create a shift, to which you can assign different users and timetables for each day.

Example 1

Morning shift

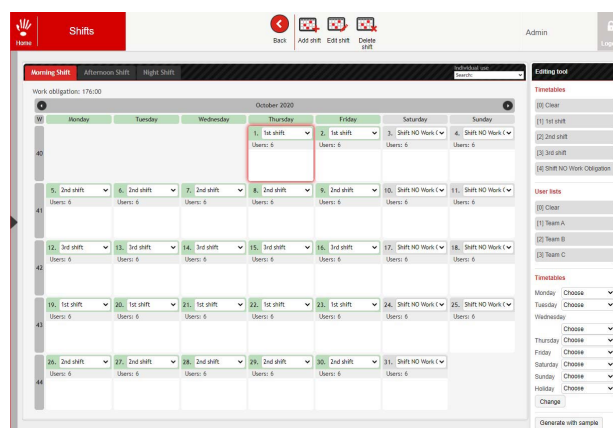
The *Morning shift* has the *Morning shift* timetable, which regulates the working hours of employees when they work from 6.00 to 14.00, set for each day. Every week the teams that work in the morning shift change, namely Team A works in the morning on the 1st week, Team B in the 2nd week, Team C in the 3rd week, then Team A works in the morning again in the 4th week, and so on.



Example 2

Team A shift

The *Team A shift* is made for employees who are assigned to Team A with a user list, so the same employees are assigned to the shift for each day. Every week, the timetable changes, which determines the shift in which the employees in Team A will work. The 1st week they work in the Morning shift, the 2nd week they work in the Afternoon shift, the 3rd week they work in the Night shift, then they again work in the Morning shift in the 4th week, and so on.



- Individual use of the *Shift* type shifts

If you select the (basic) *Shift* type for a new shift, you can also create a shift that will only apply to one specific user (which you select when creating the new shift) by enabling the additional *Individual use* setting. You can read more about using this type of shift in chapter [Individual shifts for individual users](#)^[49].

* By using individual shifts, you can also allow users to change their currently assigned shift right on the controller. You can read more about this in chapters [* Configuration for changing timetables on the controller](#)^[23], and [Changing the shift timetable on the controller](#)^[70].

- Standby

The functionality of the *Standby* type shifts is still under development.

- Shift for group

If you select this type of shift, you can create a shift with different timetables by day, which you can then assign to different groups or individuals in the *Groups* editor.

4.1.1. Regular shifts

When using regular shifts, you can specify for each workday both the users, that will be working in the shift, as well as the shift work timetables.

Adding a new shift

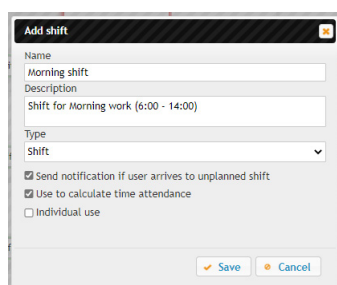
1. To add a new shift, click the *Add shift* icon in the toolbar of the editor.



2. A new window will open where you can enter the *name* and *description* of the new shift.

3. Select *Shift* for the *Type* setting.

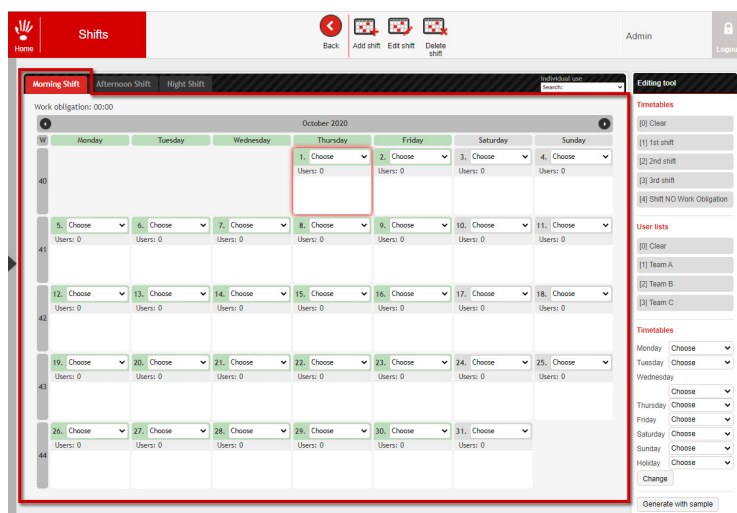
4. Next, also enable the *Send notification if user arrives to unplanned shift* and the *Use to calculate time attendance* settings for the new shift.



You can enable the following settings for a new shift:

Settings	Description
Send notification if user arrives to unplanned shift	If you enable this setting, the system will send an email to the head of department every time an employee comes to work in an unscheduled shift or when an employee does not come to work at all.
Use to calculate time attendance	If you enable this setting, the shift will be used as a basis for recalculating events in employee time registration and for determining employee work obligations.
* Individual use	Enabling this setting will create an <i>individual shift</i> that will only apply to one user. You can select the user from the drop-down list below this setting. Note that you cannot add other users to this shift or assign the shift to another user. You can read more in chapter Individual shifts for individual users ⁴⁹ .

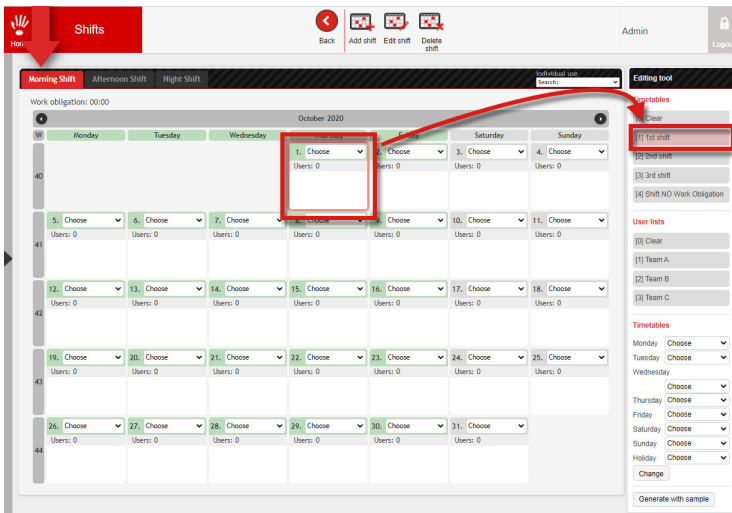
5. Click *Save*. The new shift will be displayed in the field below.



6. In the next step, add the appropriate shift work timetables and users to the newly created shift.

Adding users and timetables to the shift

1. First, make sure you have selected the tab of the correct shift and that the correct month of the year is displayed in the editor.
2. Select the first day to which you want to add a timetable and users. The selected day will be bordered in red.
3. To assign a *Timetable for shift planning*, simply select and click the timetable you want to assign from the *List of timetables* in the *Editing tools* section.



NOTE

Each shift must have an assigned timetable for each day of the month!

It is, therefore, necessary to create a *timetable for free days* in advance, which you can then assign to days when users will not be working (i.e., will not have a work obligation).

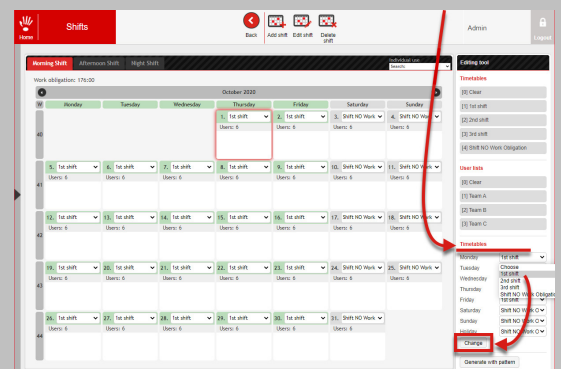
ADDING TIMETABLES ACCORDING TO A PATTERN

In some companies, shift work is planned on a weekly or multi-day basis, so manually assigning schedules to individual days can be time consuming and awkward. To this end, advanced day scheduling tools have been added to the *Shift* editor.

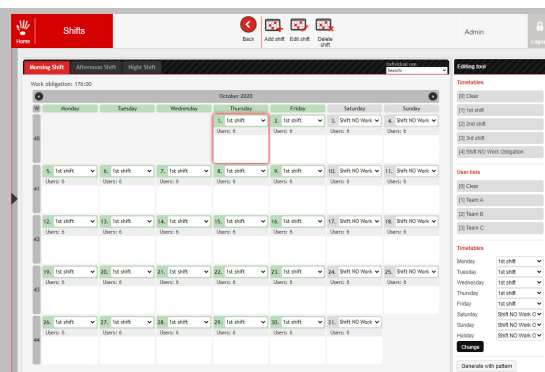
A) Add timetables according to a weekly pattern

A1. To add timetables according to a weekly pattern, set the appropriate timetable for each day of the week as well as for holidays, in the *Timetables* section below.

A2. Then click *Change*.



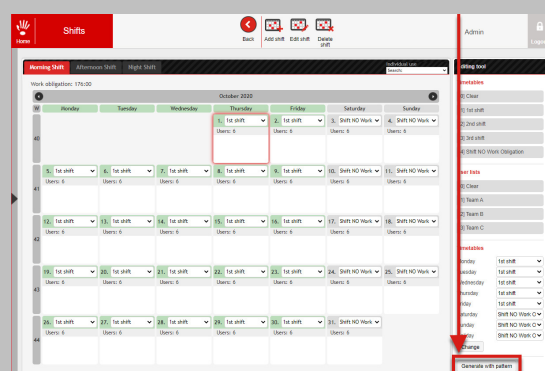
A3. The generated pattern will be assigned to all days in the current month.



B) Add timetables according to a custom multi-day pattern

B1. To add timetables according to a custom multi-day pattern, first, click *Generate with pattern*.

A new pop-up window will open.



B2. In the new window in the upper part you create a pattern according to the number of consecutive days with the same timetable, and in the lower part, you can set the period for which you want to set the prepared pattern.

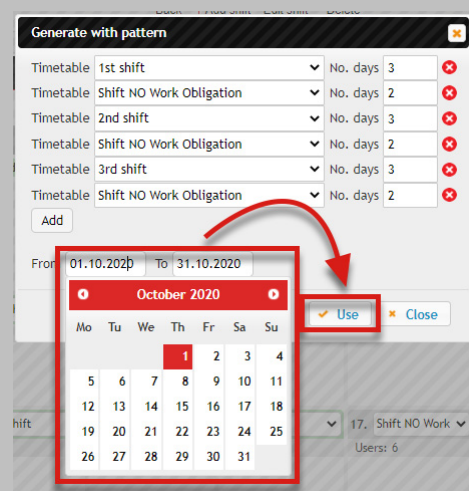
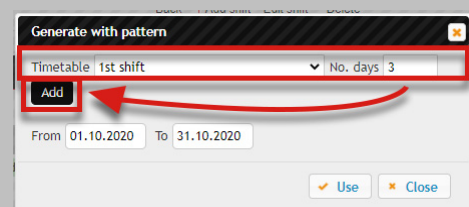
B2a. In the first line select the first timetable and set how many consecutive days it should be set for.

B2b. Then click the *Add* button. A new line will be added below the first line, where you can select a second schedule and also set how many consecutive days it should be set for.

B2c. Repeat the process until you have created one complete pattern cycle.

B2d. Set the period for which the pattern should be set.

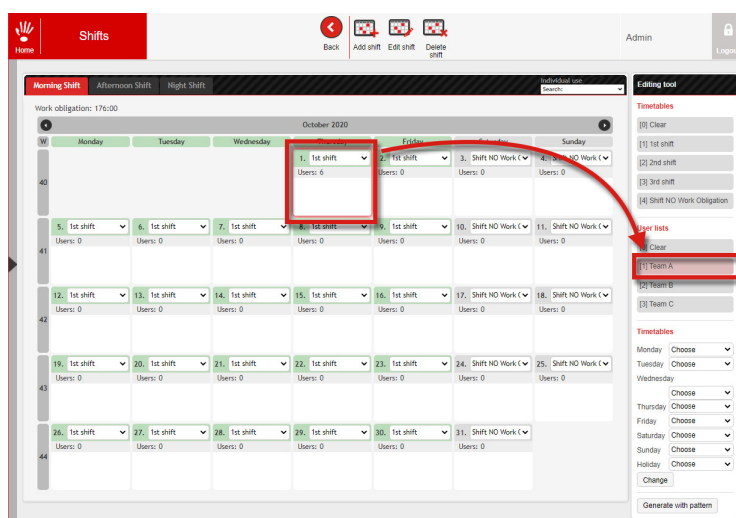
B2e. Finally, click *Apply*.



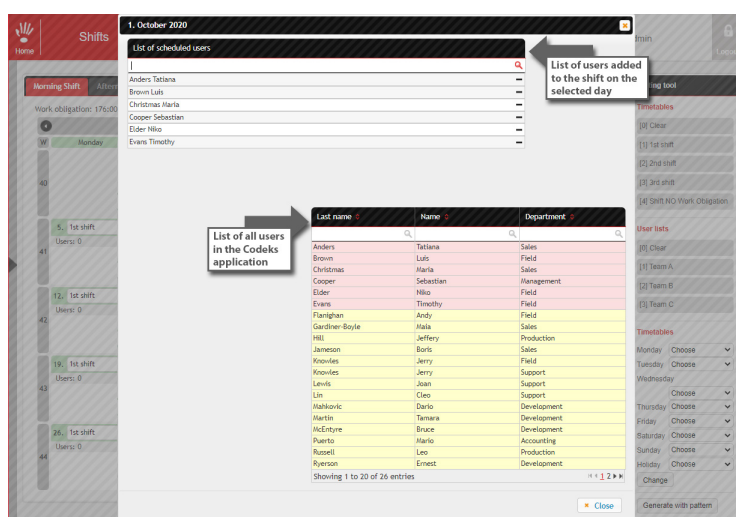
B3. The generated pattern will be assigned to all days in the current month.

4. There are two ways to add users to a selected day in the shift:

- Simply by clicking on the appropriate (pre-prepared) *User list*, which is displayed at the bottom of the *Editing tools* section.



- Manually add individual users via the pop-up dialog window you can access by clicking on a selected day.



Using the pop-up window for adding users, you can also subsequently change the users that you have added to the shift with a *User list*. (You can add additional users to the shift by clicking them on the *List of all users* at the bottom of the dialog box. Users already assigned to the shift are highlighted in red. You can remove already assigned users from the shift by clicking the minus icon at the end of the user's row.)

5. Repeat this procedure for each day of the displayed month. Assigned timetables and users will be automatically saved the moment you assign them to a day.

4.1.2. Individual shifts for individual users

If you *enable the Individual use setting* for a new shift, you can create a shift that will only apply to a specific user (which you select when creating the new shift). With this type of shift, the user is therefore fixed and you can only set shift work timetables for individual days.

NOTE

You cannot add other users to an individual shift or assign the shift to another user.

Adding a new individual shift

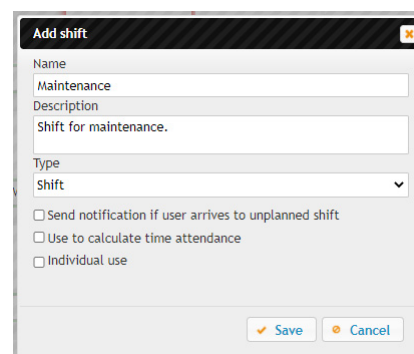
1. To add a new individual shift, first, click the *Add shift* icon in the toolbar of the editor.



2. A new window will open where you can enter the

name and *description* of the new shift.

3. Select *Shift* for the *Type* setting.

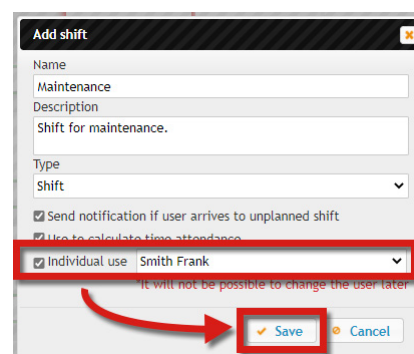


4. Next, enable the *Individual use* setting.

A drop-down list will appear next to the setting.

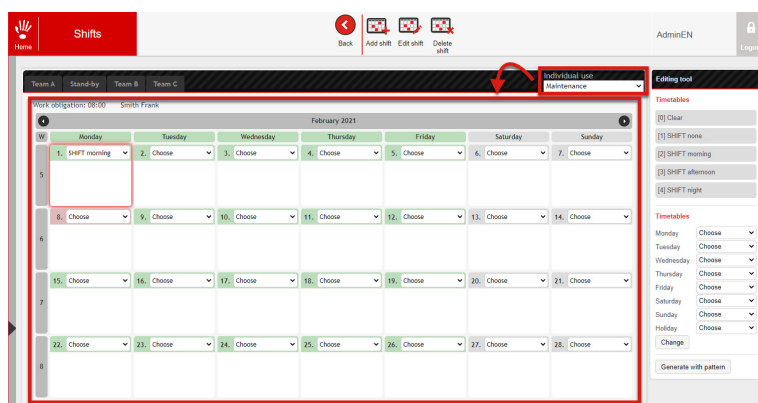
5. In the new drop-down list, select the user to whom the shift will apply.

6. You can also enable the *Send notification if user arrives to unplanned shift* and *Use to calculate time attendance* setting for the new shift.



Setting	Description
Send notification if user arrives to unplanned shift	If you enable this setting, the system will send an email to the head of department every time an employee comes to work in an unscheduled shift or when an employee does not come to work at all.
Use to calculate time attendance	If you enable this setting, the shift will be used as a basis for recalculating events in employee time registration and for determining employee work obligations.

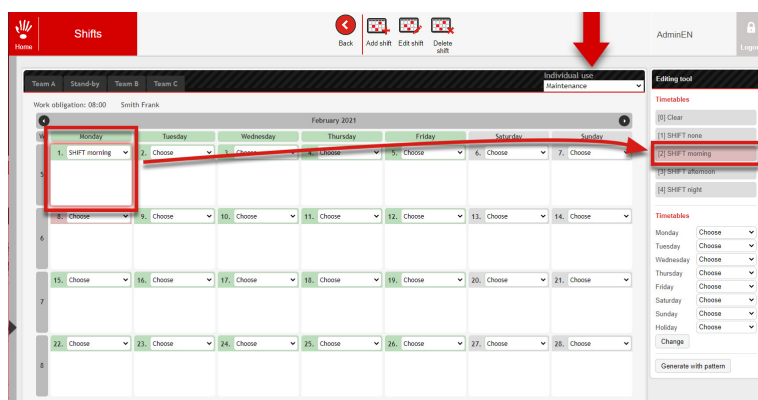
7. Click *Save*. The new shift will be displayed in the drop-down menu on the right, and its contents will be displayed in the main field below.



8. In the next step, add the appropriate shift work timetables to the newly created shift.

Adding timetables to an individual shift

1. First, make sure you have selected the tab of the correct shift and that the correct month of the year is displayed in the editor.
2. Select the first day to which you want to add a timetable. The selected day will be bordered in red.
3. To assign a *Timetable for shift planning*, simply select and click the timetable you want to assign from the *List of timetables* in the *Editing tools* section.



NOTE

Each shift must have an assigned timetable for each day of the month!

It is, therefore, necessary to create a *timetable for free days* in advance, which you can then assign to days when users will not be working (i.e., will not have a work obligation).

NOTE

In some companies, shift work is planned on a weekly or multi-day basis, so manually assigning schedules to individual days can be time consuming and awkward. To this end, advanced day scheduling tools have been added to the *Shift* editor.

The procedure of *Adding timetables according to a pattern* is described in chapter [Regular shifts](#) ^[45].

4. Repeat this procedure for each day of the displayed month. The assigned timetables will be automatically saved the moment you assign them to a day.

The user will be assigned the new individual shift immediately, and you can [check and change which individual shift is assigned to the user in the Groups editor](#) ^[54]. You can change the currently assigned individual user shift [in a controlled manner in the Groups editor using revisions](#) ^[56].

4.1.3. Shifts for standby

In preparation.

4.1.4. Shifts for groups

The *Shift for groups* type of shifts allow you to create a shift that already has the different timetables set by days, however, you will specify the users to whom the shift will apply later in the *Groups* editor. You can assign a prepared *Shift for groups* to a user by either assigning the shift to the *Group for time and attendance*, to which the user belongs, or assign the shift directly to the selected user.

Adding a new shift for groups

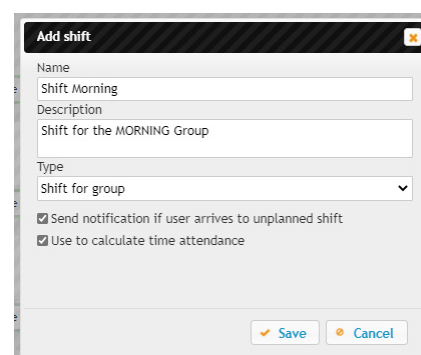
1. To add a new shift for groups, first, click the *Add shift* icon in the toolbar of the editor.



2. A new window will open where you can enter the *name* and *description* of the new shift.

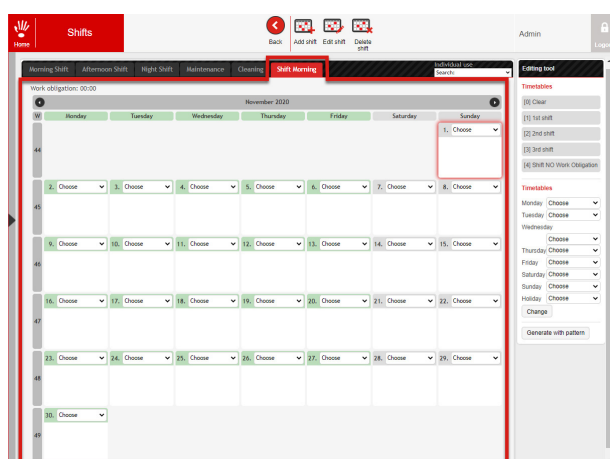
3. Select *Shift for groups* for the *Type* setting.

4. You can also enable the *Send notification if user arrives to unplanned shift* and the *Use to calculate time attendance* settings for the new shift.



Settings	Description
Send notification if user arrives to unplanned shift	If you enable this setting, the shift will be used as a basis for recalculating events in employee time registration and for determining employee work obligations.
Use to calculate time attendance	If you enable this setting, the shift will be used as a basis for recalculating events in employee time registration and for determining employee work obligations.

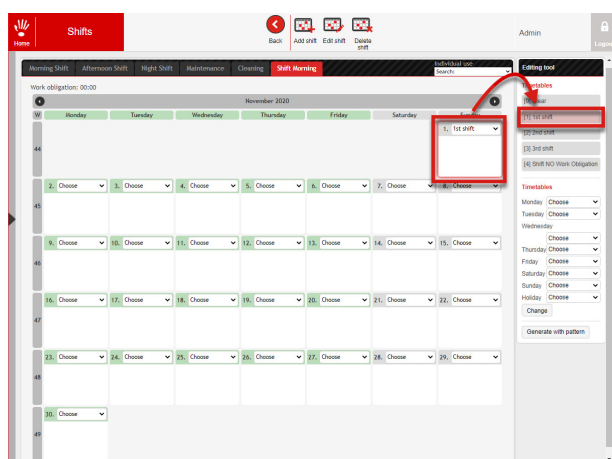
5. Click *Save*. The new shift will be displayed in the field below.



6. In the next step, add the appropriate shift work timetables to the newly created shift, and then assign the shift to users in the *Groups* editor.

Adding timetables to the shift for users

1. First, make sure you have selected the tab of the correct shift and that the correct month of the year is displayed in the editor.
2. Select the first day to which you want to add a timetable and users. The selected day will be bordered in red.
3. To assign a *Timetable for shift planning*, simply select and click the timetable you want to assign from the *List of timetables* in the *Editing tools* section.



NOTE

Each shift must have an assigned timetable for each day of the month! It is, therefore, necessary to create a *timetable for free days* in advance, which you can then assign to days when users will not be working (i.e., will not have a work obligation).

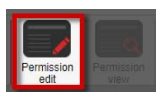
NOTE

In some companies, shift work is planned on a weekly or multi-day basis, so manually assigning schedules to individual days can be time consuming and awkward. To this end, advanced day scheduling tools have been added to the *Shift* editor. The procedure of *Adding timetables according to a pattern* is described in chapter [Regular shifts](#) ⁴⁵.

4. Repeat this procedure for each day of the displayed month. The assigned timetables will be automatically saved the moment you assign them to a day.

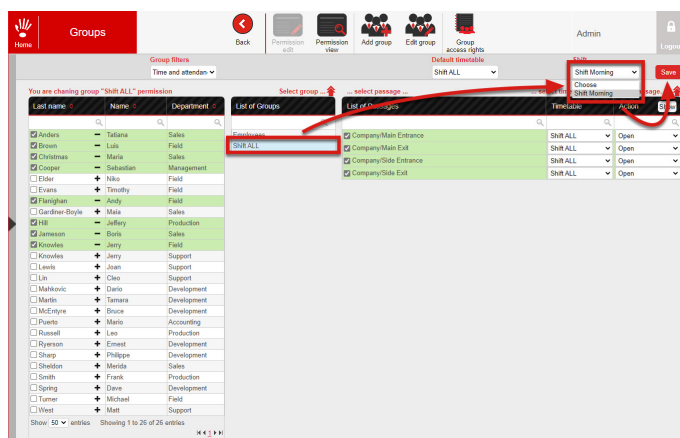
Assigning a shift to a group in the *Groups* editor

1. In the *Groups* editor, first, click the *Edit rights* icon to enable editing.



2. On the *List of all groups*, highlight the group to which you want to assign the shift.

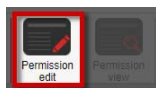
3. Then, in the row above the lists, find the *Shift* setting, and from the drop-down list, select the shift for groups that you want to assign to the group.



4. Click *Save*.

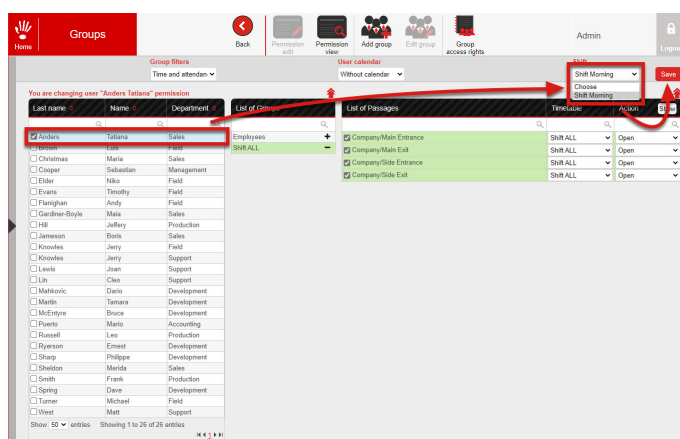
Assigning a shift to an individual user in the *Groups* editor

1. In the *Groups* editor, first, click the *Edit rights* icon to enable editing.



2. On the *List of all users*, highlight the user to which you want to assign the shift.

3. Then, in the row above the lists, find the *Shift* setting, and from the drop-down list, select the shift for groups (or an individual shift prepared for the selected user) that you want to assign to the user.



4. Click *Save*.

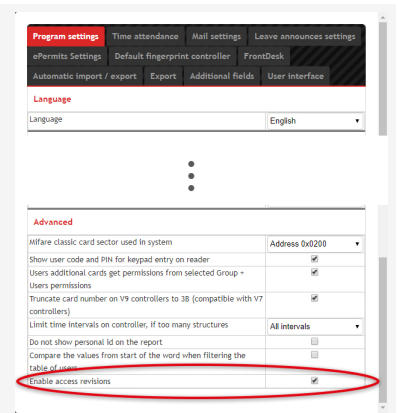
4.1.4.1. Shifts for groups and revisions

By using group and user revisions, it is possible to change the shift assigned to a particular group or user, for a certain period or from a certain date onwards.

NOTE

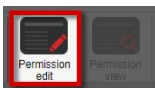
Revisions are snapshots of the status of access or time&attendance rights of either an individual user or group. These snapshots (revisions) together form the history of changes made to the rights of users or groups. Revisions enable you to save and manage the past records of users' or groups' rights, and also set changes to these rights that will be put into effect sometime in the future

By default, *Revisions* are disabled in the Codeks software. To use revisions, first, enable the *Enable access revisions* setting in the *Settings -> Preferences* in the *Program settings* tab.



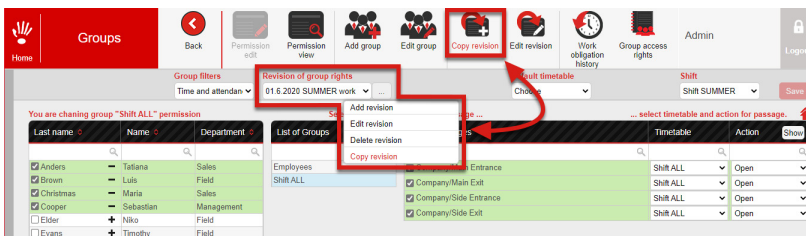
Change the shift assigned to a group using revisions

1. First, click the *Permission edit* icon to enable editing in the Groups editor.

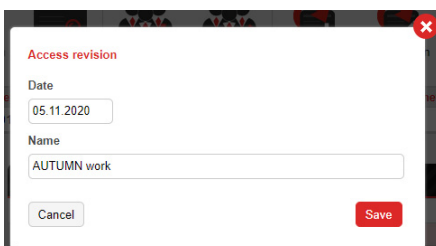


2. To change the assigned shift to the group, first, select the group on the *List of groups*.

3. Then, click the *Copy revision* icon in the toolbar or select the *Copy revision* option from the drop-down menu next to the *Revision of group rights* field.



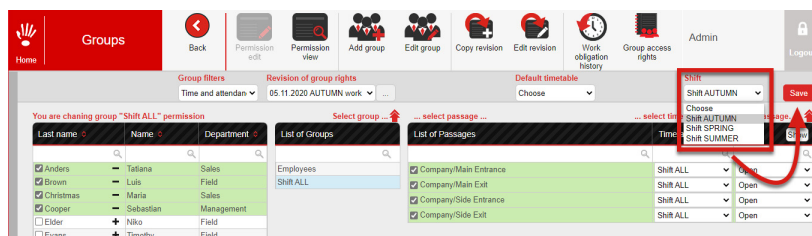
4. A new pop-up window will open where you need to enter the *Start date of the revision* and the *revision name*.



5. Click *Save*.

6. After copying, the *Groups* editor will display the status of rights in the newly copied revision which is the same as defined by the original revision.

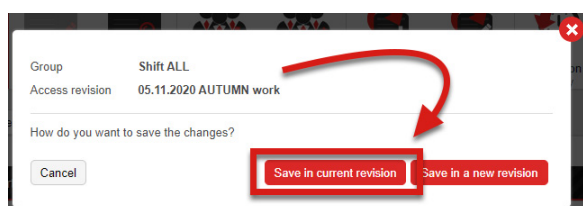
Then, in the row above the lists, find the *Shift* setting and select a new *Shift for groups* you want to assign to the group from the drop-down list.



7. Then click *Save*.

8. The system will ask you in which group revision you want to save the changes.

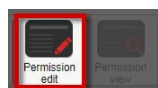
Select *Save in current revision*.



9. The edited rights will be saved in the newly created revision.

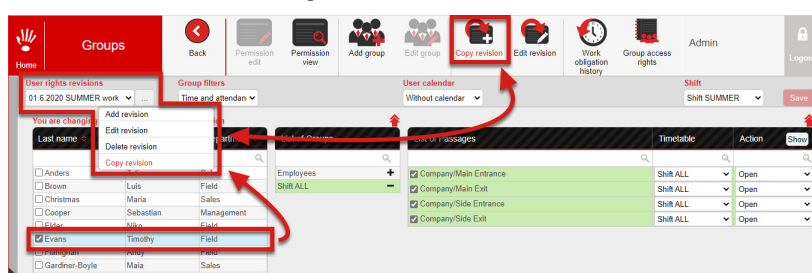
Change the shift assigned to a user using revisions

1. First, click the *Permission edit* icon to enable editing in the Groups editor.

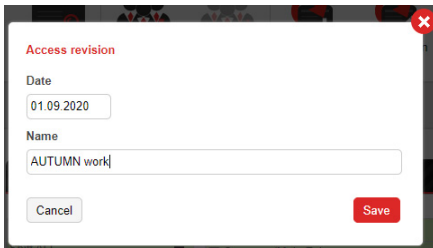


2. To change the assigned shift to the user, first, select the user on the *List of users*.

3. Then, click the *Copy revision* icon in the toolbar or select the *Add revision* option from the drop-down menu next to the *User rights revisions* field.



4. A new pop-up window will open where you need to enter the *Start date of the revision* and the *revision name*.



Access revision

Date
01.09.2020

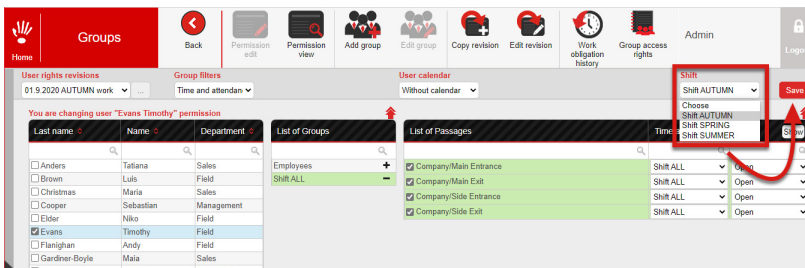
Name
AUTUMN work

Cancel Save

5. Click *Save*.

6. After copying, the *Groups* editor will display the status of rights in the newly copied revision which is the same as defined by the original revision.

Then, in the row above the lists, find the *Shift* setting and select a new shift you want to assign to the user from the drop-down list.



Groups

Back Permission edit Permission view Add group Edit group Copy revision Edit revision Work obligation history Group access rights Admin Logout

User rights revisions
01.9.2020 AUTUMN work

Group filters
Time and attendance

User calendar
Without calendar

You are changing user "Evans Timothy" permission

Last name	Name	Department
<input type="checkbox"/> Anders	Tatiana	Sales
<input type="checkbox"/> Brown	Luis	Field
<input type="checkbox"/> Christmas	Maria	Sales
<input type="checkbox"/> Cooper	Sebastian	Management
<input type="checkbox"/> Elder	Niko	Field
<input checked="" type="checkbox"/> Evans	Timothy	Field
<input type="checkbox"/> Flanighan	Andy	Field
<input type="checkbox"/> Gardiner-Boyle	Maia	Sales
<input type="checkbox"/> Lutz		Production

List of Groups

Employees
Shift ALL

List of Passages

Company	Shift	Access
<input checked="" type="checkbox"/> Company/Main Entrance	Shift ALL	Open
<input checked="" type="checkbox"/> Company/Main Exit	Shift ALL	Open
<input checked="" type="checkbox"/> Company/Side Entrance	Shift ALL	Open
<input checked="" type="checkbox"/> Company/Side Exit	Shift ALL	Open

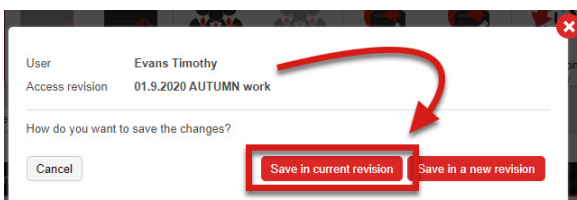
Shift
Shift AUTUMN
Choose
Shift AUTUMN
Shift SPRING
Shift SUMMER

Save

7. Then click *Save*.

8. The system will ask you in which user revision you want to save the changes.

Select *Save in current revision*.



User
Evans Timothy

Access revision
01.9.2020 AUTUMN work

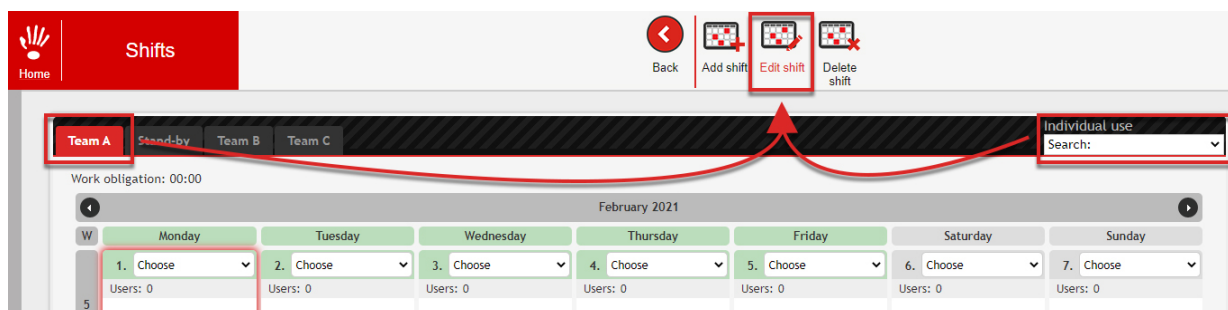
How do you want to save the changes?

Cancel Save in current revision Save in a new revision

9. The edited rights will be saved in the newly created revision.

4.2. Editing shifts

1. To edit (the name, description, and type) of an existing shift, first, select the tab of the shift you want to edit or select an individual shift from the drop-down menu on the right and then click the *Edit shift* icon.



2. A window for editing the shift's information will open.

✕

Edit shift

Name

Morning Shift

Description

Type

Shift

☒ Send notification if user arrives to unplanned shift

☒ Use to calculate time attendance

☐ Individual use

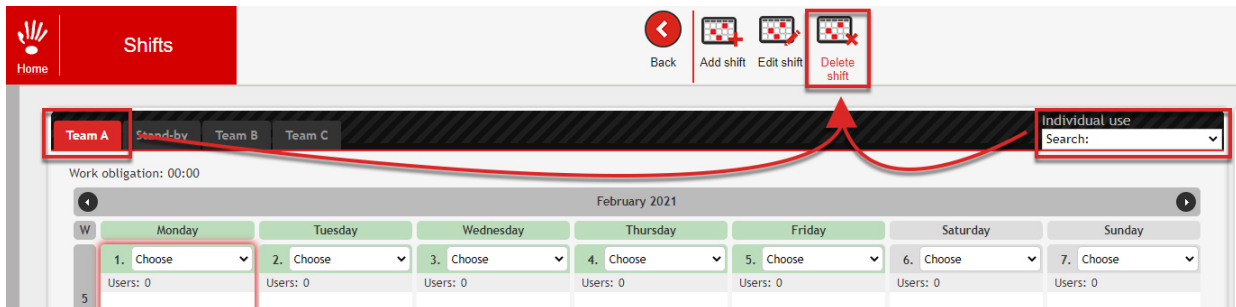
✓ Save

✕ Cancel

3. When you have finished editing the shift, click *Save*.

4.3. Deleting shifts

1. To delete an existing shift, first select the tab of the shift you want to edit or select an individual shift from the drop-down menu on the right, and then click the *Delete shift* icon.

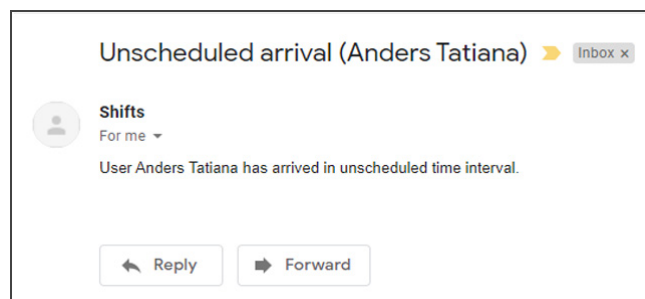


2. The browser will ask you to confirm the deletion of the shift. When you confirm the deletion by clicking *OK*, the change will be removed from the *Shifts* editor.

4.4. Notifying heads of departments

The Codeks Shifts add-on allows [heads and deputy heads of departments](#)³⁴ to be informed about employees who have come to work in a shift they have not been assigned to, and about absent employees who have not come to work at all.

The head of department is notified of the employee's incorrect entry as soon as the employee registers incorrectly.

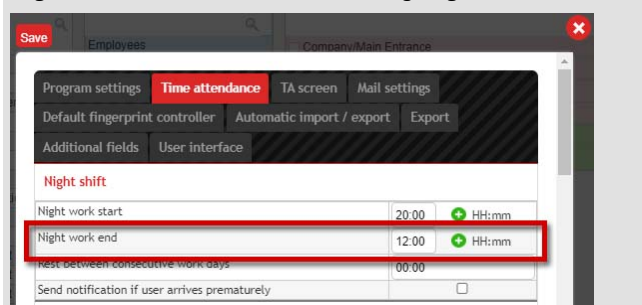


Notifications of employees who did not come to work are sent at the times of daily calculations - at midnight and at the end of night work.



NOTE

By default, the end of night work is set to 12.00, and the setting can be changed in the *Preferences* of the Codeks application in the *Time attendance* tab in the *Night shift* section under the setting *Night work end*.



4.5. Notifying employees

Employees who work in shifts can be sent an individual email about their shift schedule.

NOTE

Each administrator can only send an electronic message of the scheduled shift work SIMULTANEOUSLY to ALL employees for whom he has the right to view and edit shifts and who are assigned to any shift in the *Shift* editor.

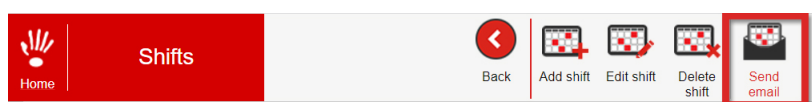
NOTE

Employees will only be able to receive emails if they have a [valid email address entered](#) ³⁹ in their user settings.

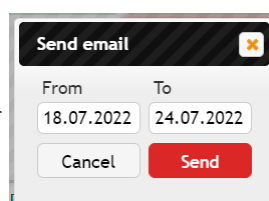
NOTE

Before sending an email, check or design [the template for emails](#) ³⁹ in the general settings of the Codeks application.

1. To send an e-mail about the shift schedule to employees, click the *Send e-mail* icon in the toolbar of the *Shifts* editor.



2. A pop-up window will open where you can select the shift schedule period you want to send to employees. By default, the next week period is set for sending.



3. Click *Send*.

4. All users participating in any of the shifts (and for whom the current administrator has the right to review or edit the shift work) will be sent emails with their personal shift work schedule.

Planned shift work from 7/18/2022 to 7/24/2022 Inbox x

SHIFTS

For me ▼

Hello,

in the period from 18. 07. 2022 to 24. 07. 2022 you have been assigned the following shift work schedule:

Date	Timetable
18. 07. 2022	AFTERNOON SHIFT
19. 07. 2022	AFTERNOON SHIFT
20. 07. 2022	AFTERNOON SHIFT
21. 07. 2022	AFTERNOON SHIFT
22. 07. 2022	AFTERNOON SHIFT
23. 07. 2022	FREE DAY
24. 07. 2022	FREE DAY

The schedule contains your regular work hours as well as any overtime hours.

Sincerely,
Company, LLC

4.6. Shifts in the Time attendance editor

4.6.1. Editing shifts on a day

NOTE

You can only assign or change a shift on a day to a user who has an [individual shift](#) ^[49] assigned!

In the *Time attendance* editor, you can subsequently change a shift (i.e., a *Timetable for shift planning*) for a user who is assigned an individual, according to which his working hours are recorded.

NOTE

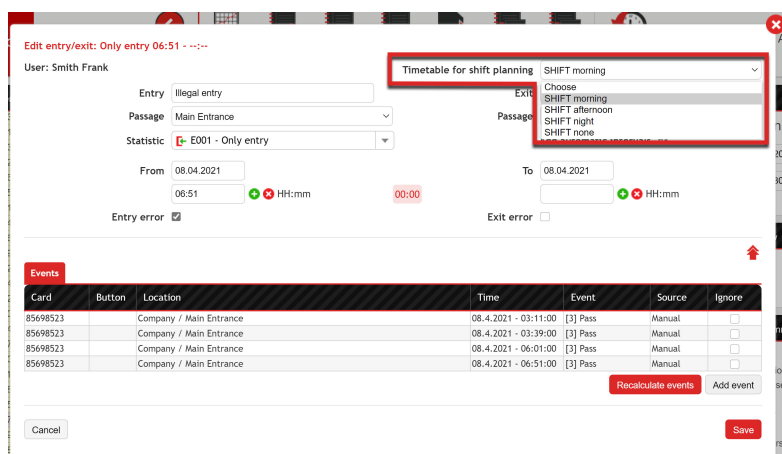
An employee who will be able to change their shift (timetable) on the controller MUST be assigned an individual shift. Read more about individual shifts in chapter [Individual shifts for individual users](#) ^[49].

1. To change a shift (i.e., a *Timetable for shift planning*), first find and select the appropriate user in the user list in the *Time attendance* editor.
2. Then double-click the day you want to edit to open the window for editing the day.

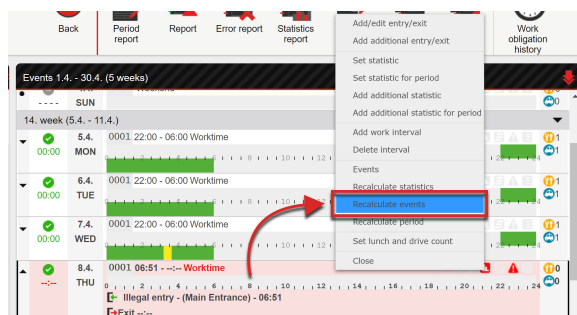


3. In the new window, select the appropriate shift from the *Timetable for shift planning* drop-down list at the top right.

Then click *Save*.



4. Then select *Recalculate events* from the right-click menu on the day to incorporate the corrections entered in the time attendance registration.



The system will warn you that you are about to perform a recalculation. Click *OK* to perform the recalculation.

4.6.2. * Section Current period comparative summary

When using the [comparative timetable](#)^[27], a new section named *Current period comparative summary*, where a user's data according to the comparative timetable will be displayed in the *Time attendance* editor.

Current period comparative summary

Period work obligation	32:00
Work obligation for selected period	176:00
Period plus	00:08
Saldo period	-08:00
Saldo	-07:52
Manual transfer from prev. month	<input style="width: 100px;" type="text"/>

Save

Settings	Description
Period work obligation	The number of hours the employee is obligated to work up to this moment according to the comparative timetable.
Work obligation for selected period	The number of hours the employee is obligated to work up to the end of the period displayed in the <i>Time attendance</i> editor according to the comparative timetable.
Period plus	The number of comparative saldo hours transferred from the previous period. (The value is dependent on the Manual transfer from prev. month ^[63] setting located lower in this section.)
Saldo period	The (positive or negative) difference between the comparative work obligation and the working hours performed by shift work in the current period.
Saldo	The total value of the comparative saldo including the values of the <i>Saldo period</i> and <i>Period plus</i> .
Manual transfer from prev. month	The number of comparative saldo hours that will be manually transferred from the previous period. The transferred value will be displayed in the <i>Period plus</i> field of the next month.

4.6.3. Planned shift work report

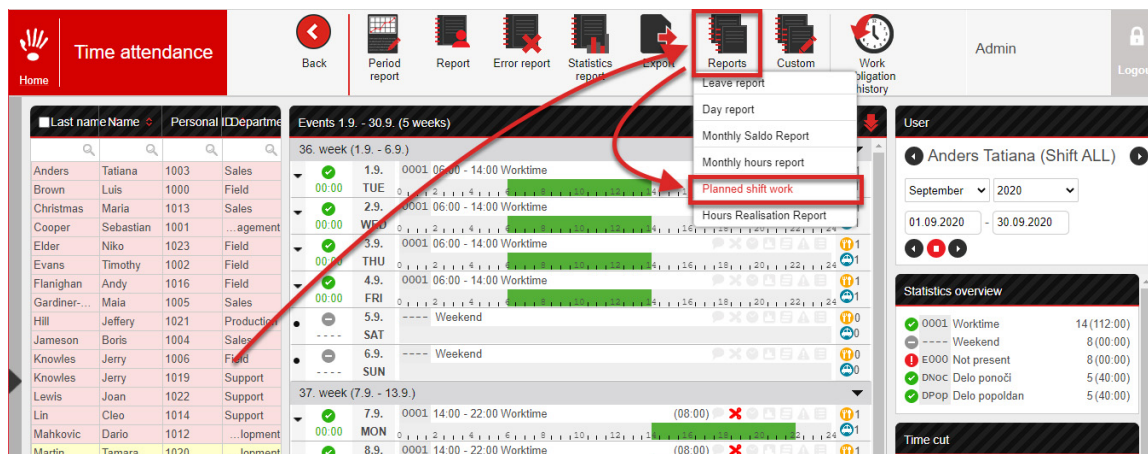
In the *Time attendance* editor, you can print a shift report for individual users.

1. To print the scheduled shift work of users, first select the users for whom you want to generate a report from the list on the left in the *Time attendance* editor.

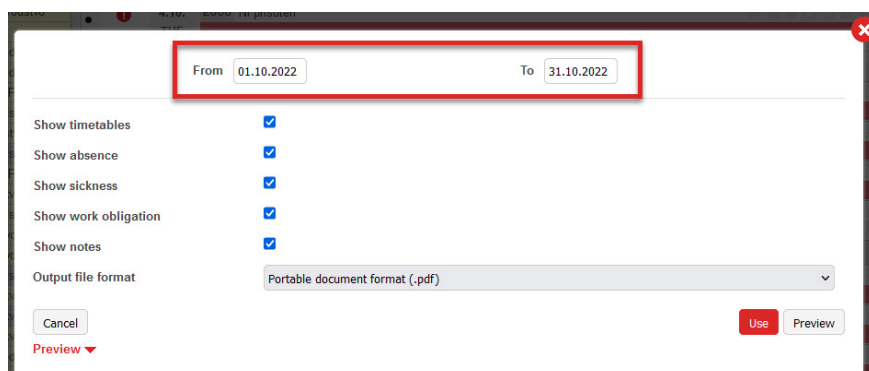
You can select multiple users by holding down the *Ctrl* or *Shift* key.

2. Then click the *Reports* icon in the editor toolbar and select *Planned shift work* from the drop-down list.

A new pop-up window will open.



3. In the new window, you can specify the period and then select other data to show on report.

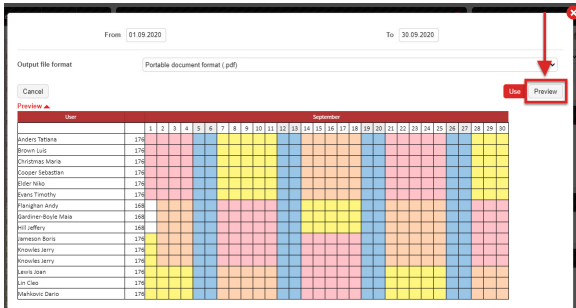


- Show timetables (shows codes and colors of timetables in common row)
- Show absences (shows codes and colors of statistics that are set to mark absences in common row)
- Show sick (shows codes and colors of statistics that are set to mark sick leave in common row)
- Show work obligation (shows additional row with work obligation)
- Show Notes (shows additional blank row for entering notes)

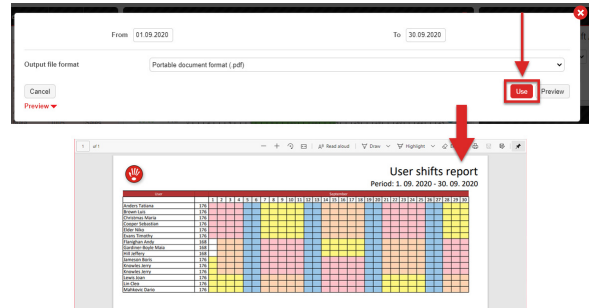
Timetables, absences and sick leaves are displayed in combined row. Absences and sick days are displayed prior to timetables, so if there are such statistics on specific day, the statistics will be displayed instead of the timetable. Separate lines are added for work obligation and notes.

For report you can choose between Portable document format (.pdf), Excel Worksheet (.xls), Excel Worksheet (.xlsx), Open document spreadsheet (.ods) and Comma separated values (.csv).

4a. Click the *Preview* button to preview the data that will appear in the report.



4b. Click the *Use* button to print the report in the selected final format.



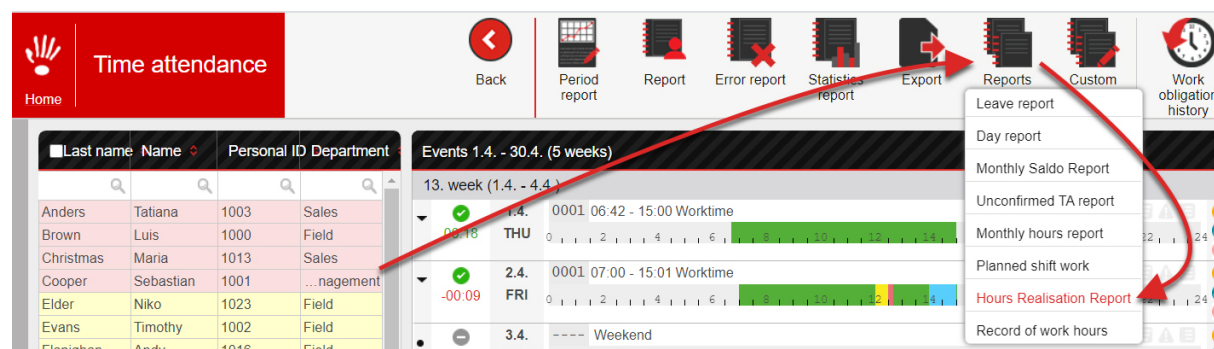
4.6.4. Hours Realization Report

In the *Time attendance* editor, you can print a hours realization report for individual users.

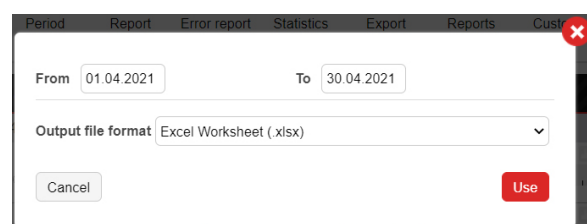
1. To print the hours realization report of users, first select the users for whom you want to generate a report for from the list on the left in the *Time attendance* editor. You can select multiple users by holding down the *Ctrl* or *Shift* key.

2. Then click the *Reports* icon in the editor toolbar and select *Hours Realization Report* from the drop-down list.

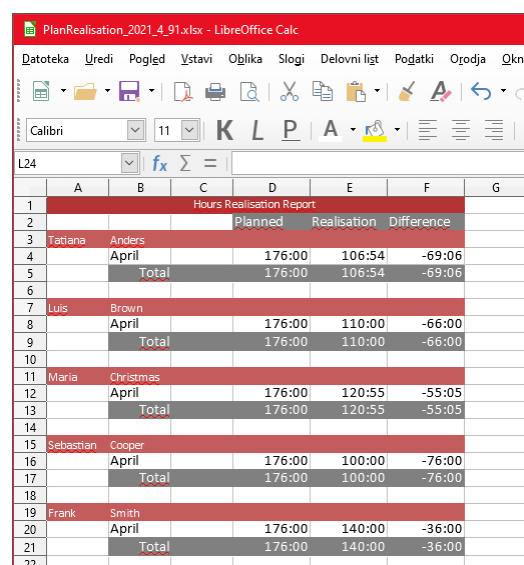
A new pop-up window will open.



3. In the new window, you can specify the period for printing and select the report data format. You can choose between Portable document format (.pdf), Excel Worksheet (.xls), Excel Worksheet (.xlsx), Open document spreadsheet (.ods) and Comma separated values (.csv).



4. Click the *Use* button to print the report in the selected final format.



Hours Realisation Report			
	Planned	Realisation	Difference
Tatiana Anders			
April	176:00	106:54	-69:06
Total	176:00	106:54	-69:06
Luis Brown			
April	176:00	110:00	-66:00
Total	176:00	110:00	-66:00
Maria Christmas			
April	176:00	120:55	-55:05
Total	176:00	120:55	-55:05
Sebastian Cooper			
April	176:00	100:00	-76:00
Total	176:00	100:00	-76:00
Frank Smith			
April	176:00	140:00	-36:00
Total	176:00	140:00	-36:00

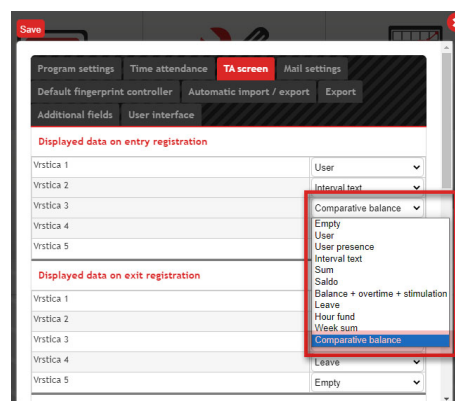
The report shows the number of scheduled hours of shift work, the number of performed (realized) hours of shift work and the difference between performed and planned hours of shift work for each selected user.

4.7. * Displaying the comparative balance on the controller

With the appropriate setting, you can allow employees to check the status of their comparative balance on T&A controllers. You can set the display on the controllers (A) globally for the whole system or (B) separately for each timetable.

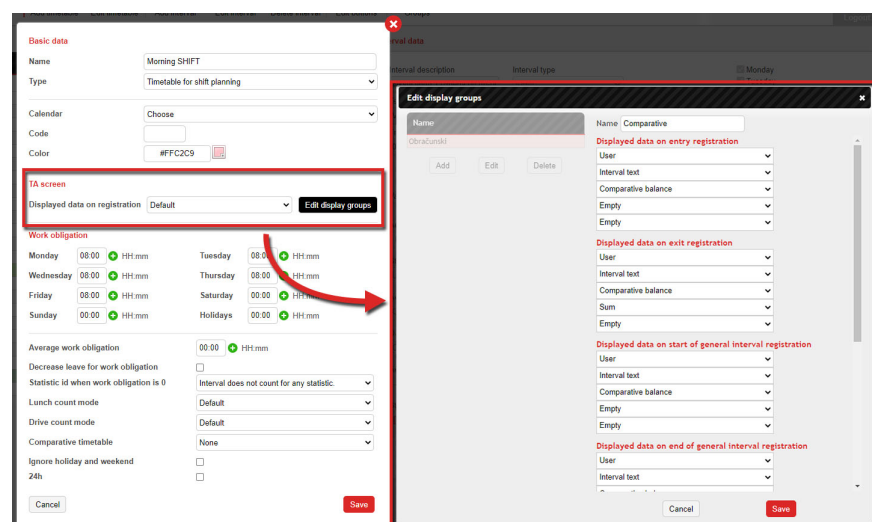
A) Global setting for the whole system

In the *Settings -> Preferences* editor, in the *TA screen* tab, set the display of the comparative balance value by selecting the *Comparative balance* option from the drop-down list.



B) Setting for an individual timetable

In the *Timetables* editor, open the window for editing a timetable. Under the *TA screen* section, select the appropriate display group or create a new display group that will contain the *Comparative balance* option. To display the comparative balance select *Comparative balance* from the drop-down list.



You can read more about the TA screen settings in the documentation of the Codeks application, which is available on our download pages: <https://jantar.si/en/documentation/>.

Example of using the display of the comparative balance on the controller

A company has their global settings for the display on T&A controllers set so that users can view their comparative balance by registering an *Info* event on controllers.

Program settings	Time attendance	TA screen	Mail settings
Default fingerprint controller	Automatic import / export	Export	
Additional fields	User interface		
Displayed data on entry registration			
Vrstica 1		User	▼
Displayed data on registration info when user is present			
Vrstica 1		User	▼
Vrstica 2		User presence	▼
Vrstica 3		Comparative balance	▼
Vrstica 4		Leave	▼
Vrstica 5		Empty	▼
Displayed data on registration info when user is not present			
Vrstica 1		User	▼
Vrstica 2		User presence	▼
Vrstica 3		Comparative balance	▼
Vrstica 4		Leave	▼
Vrstica 5		Empty	▼

In this way, users in the company can check the status of their working hours according to the comparative timetable at any time by pressing the *Info* button and registering on the controller.

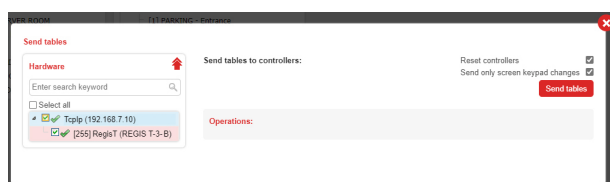


5. Sending tables




To implement the entered settings for the *Codeks Shifts* you must update the saved data on the affected controllers by using the *Send tables* function.



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 controllers* on the left.
3. Click the *Send tables* button.



The *List of hardware* also shows the current state of communication with controllers:

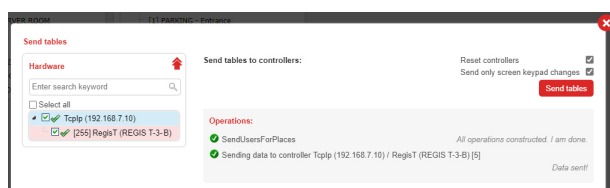
-  - Controller is connected
-  - Controller is not connected
-  - Controller is not in use

Reset controllers - The settings of the inputs and outputs of the controllers will be reset (to their basic values) when sending tables. (The function resets the blocked/unblocked status of readers, resets the anti pass-back status of users, and affects the operation of macros.)



Send only screen keypad changes - Sending graphic keypad elements to controllers with a touchscreen can be a very time-consuming process which can also significantly burden the network connections because a large amount of data is sent. If you enable this setting, only changes of the keypads that may have been made will be sent to the controllers.

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.



The *Operation report* field will show a quick report of the completed process:

-  - Data was sent successfully
-  - Data was not sent successfully

6. Appendix

6.1. Changing the shift timetable on the controller

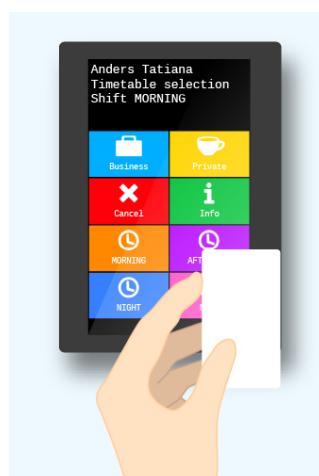
You can read about the user settings and instructions for configuring timetables for the system where users can change their shift (timetable) on the controller in the sub-chapters of the chapter [Settings for the Codeks Shifts](#)^[15]. The following chapter describes the user registration process when changing the shift on the controller.

1. When an employee wants to change their shift or time attendance timetable, according to which their work hours will be recorded they must first press the appropriate shift (timetable) key on the controller.



2. Then, the employee brings their card closer to the controller. The controller records the timetable selection and displays the timetable change information on the screen.

With this, the user successfully changed the shift (timetable), thus ensuring that their daily events recorded throughout the current day will be recalculated according to the NEWLY SELECTED timetable.



3. In the next step, the user must still register their entrance (arrival at work).

The user therefore once again brings the card closer to the controller or first presses the appropriate key (e.g. Private) and then brings the card closer to the controller.

Only this second registered event on the controller will be regarded as the employee's arrival at work and will also be recorded as such in their time and attendance.

