



The Time&Attendance system should provide clear and accurate calculations of work time for each employee. An integral part of the system is hardware that is compatible with time and attendance software and has characteristics that are suited to the customer needs.

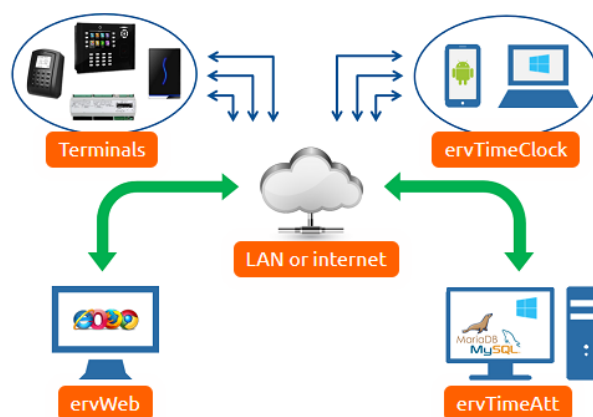
The Time and Attendance system consists of:

- terminals for recording working hours
- contactless cards/keys used for checking at terminals
- software for time and attendance

Key features of the Time&Attendance system

- ✓ Employee's productivity is improved by replacing all manual timecard calculations
- ✓ Reduces manual payroll & data entry errors
- ✓ Increased work discipline
- ✓ Minimizes payroll processing time
- ✓ Removes any doubt about the number of hours spent in the workplace
- ✓ Scheduling employee's is simple and time effective

Our system is very simple to use, has managing IN and OUT of an unlimited number of events (working hours, breaks, field work, private...), absences (holidays, sick leave, blood donations...), delays, overtime, etc... modules for video surveillance of the checking process and management of visitors, time and attendance and event overview with any device, as well as option to make customized reports...



The software consists of a client and a server part. The client part can be installed on multiple computers in the network from where you can process data and create reports. If the pre-configured standard reports do not suit you, you can create a new report with the help of the "report designer" by using the standard one as base report. This new one report can be further customized to the needs of the user, then printed or exported in different file formats.

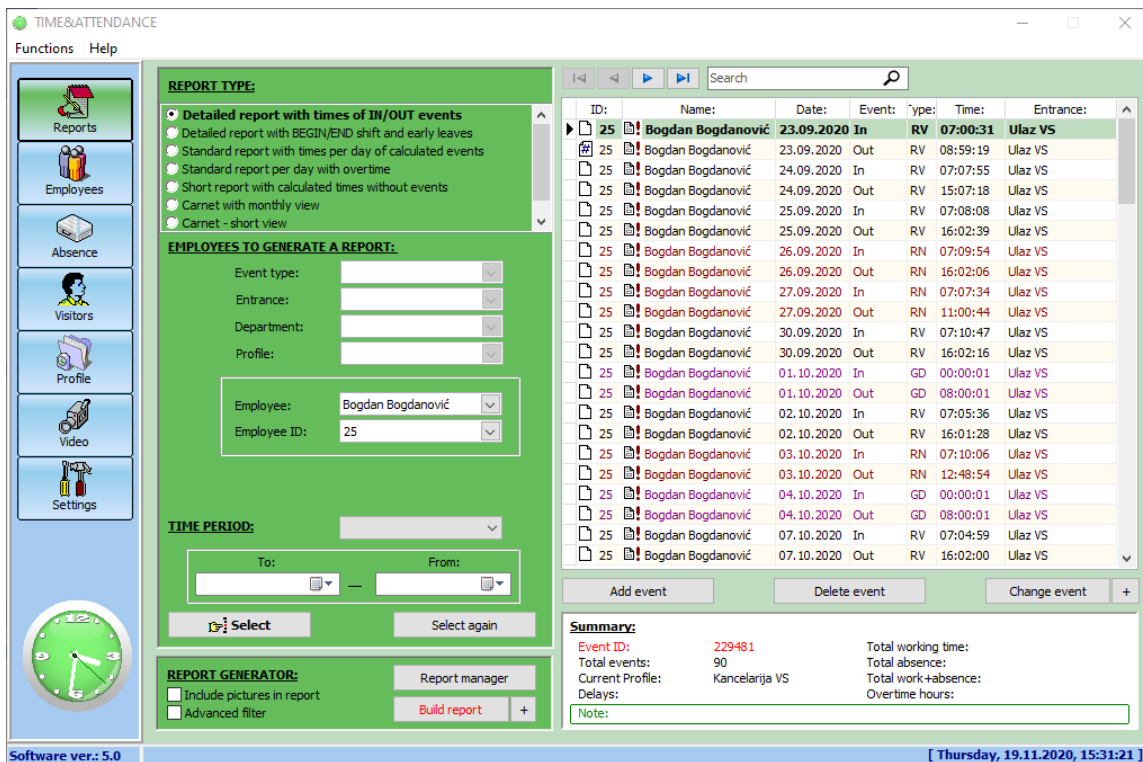
The server part is installed together with the database on one network computer that collects all data from the terminal. Next to these basic parts, the user also has at his disposal additional modules that expand the functionality of the software:

- ervWeb - enables individual viewing of events by employees or group viewing of events by department manager for all employees to whom he is superior via a web browser
- ervTimeClock - allows the use of any device running on the Android or Windows platform (PC/Laptop/Mobile phone) as a terminal for ime tracking, suitable for mobile recording of working hours from any location, field work, work from home or for group time tracking

Several standard reports are at your disposal, which we divide into several groups:

- detailed reports with the times of all IN/OUT events, begin/end time of the shift, etc.
- standard reports with times by day and overtime (in multiple levels)
- short reports with total sums
- carnets with a monthly display of the event time or by type of event

In addition to these, there are many other reports such as the attendance list, the display of data about an employee or a group of employees, a report with an image of an event, etc... The program has a built-in **report designer**, and each report can be further customized. The number of reports that can be created in this way is unlimited.



Program will automatically mark seemingly problematic events as follows:

- dark gray color event that is unmatched, ie. arrival without his departure or similar, or one event in watched day (the employee forgot to check out)
- light gray color the other paired events in that day where you have an unmatched event
- yellow color event whose sum of working hours are more than a defined time (adjustable in the settings)

When making the report you must first pair events, although you can form all events without pairing, only then for unmatched events it will not be possible to calculate work time. If you have a system with S880 terminals, you can include a picture of event in the report.

The report can be printed or saved in pdf, xlsx, xls, docx, doc, txt, csv, rtf, ods... or some other format.

WORKING TIME REPORT										
Name:		Bogdan Bogdanović			ID: 25		Report for period:			
Employee profile:		Kancelarija VS			1.6.2021. - 20.6.2021.					
No.:	Date:	In:	Enter:	Out:	Exit:	Typ:	Lait:	Total time:	Reckognized time:	Night:
1	uto, 01.06.2021	07:10:28	Ulaz VS	16:02:29	Ulaz VS	RV		08:52:01	08:00:00	
2	sre, 02.06.2021	07:24:16	Ulaz VS	11:01:06	Ulaz VS	RV		03:36:50	03:01:06	
3	sub, 05.06.2021	07:03:32	Ulaz VS	16:16:05	Ulaz VS	RN		09:12:33	09:12:33	
4	ned, 06.06.2021	07:03:04	Ulaz VS	16:08:38	Ulaz VS	RN		09:05:34	09:05:34	
5	pon, 07.06.2021	07:03:38	Ulaz VS	16:01:28	Ulaz VS	RV		08:57:50	08:00:00	
6	uto, 08.06.2021	00:00:01	Ulaz VS	08:00:01	Ulaz VS	GD		08:00:00	00:00:01	
7	sre, 09.06.2021	07:11:34	Ulaz VS	11:06:10	Ulaz VS	RV		03:54:36	03:06:10	
8	sub, 12.06.2021	06:59:24	Ulaz VS	16:00:36	Ulaz VS	RN		09:01:12	09:01:12	
9	ned, 13.06.2021	00:00:01	Ulaz VS	08:00:01	Ulaz VS	BO		08:00:00	08:00:00	
10	pon, 14.06.2021	00:00:01	Ulaz VS	08:00:01	Ulaz VS	BO		08:00:00	00:00:01	
11	uto, 15.06.2021	00:00:01	Ulaz VS	08:00:01	Ulaz VS	BO		08:00:00	00:00:01	
12	sre, 16.06.2021	00:00:01	Ulaz VS	08:00:01	Ulaz VS	BO		08:00:00	00:00:01	
13	sub, 19.06.2021	00:00:01	Ulaz VS	08:00:01	Ulaz VS	BO		08:00:00	08:00:00	
14	ned, 20.06.2021	00:00:01	Ulaz VS	08:00:01	Ulaz VS	BO		08:00:00	08:00:00	

Cod	Event type	Time	Recognize
RV	Radno vreme	25h,21:17	22h,07:16
RN	Rad neradnim danom	27h,19:19	27h,19:19
P1	Pauza	0h,00:00	0h,00:00
SL	Službeno	0h,00:00	0h,00:00
PP	Puš Pauza	0h,00:00	0h,00:00
SP	Službeni put	0h,00:00	0h,00:00
Total		52h,40:36	49h,26:35

Cod	Event type	Time	Recognize
GD	Godišnji	8h,00:00	0h,00:01
BO	Božovanje	48h,00:00	24h,00:03
PR	Praznik	0h,00:00	0h,00:00
PV	Privatno	0h,00:00	0h,00:00
DK	Davanje krvi	0h,00:00	0h,00:00
Total		56h,00:00	24h,00:04

	Total	Total
Work + Absence	108h,40:3	73h,26:39
Needed hours	112h,00:0	112h,00:0
Difference	-3h,19:24	-38h,33:21

Event type	Time
Total late	0h,00:00
Total night	0h,00:00

The software allows information to be displayed in the following languages:

- Serbian (Latin / Cyrillic)
- English or German
- if needed, option to provide translation into another language

ervTimeAtt application is the standard software for Windows, which bases its work on the MariaDB/MySQL database and the network environment, so from this derives so-called general conditions that a computer should fulfill:

- ✓ 64-bit Windows OS, Windows 10 or Windows Server 2016 and newer
- ✓ Intel i3 or AMD Athlon processor, clocked at 2 and more GHz (with 2 or more cores) and better
- ✓ DDR3 RAM and faster
- ✓ If you use the video surveillance capturing process then HD with some larger capacity
- ✓ Internet connection

For faster data processing, we recommend using an SSD hard drive.

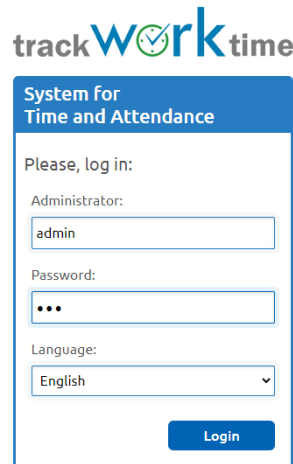


The software is designed so that in case of system expansion or increase in the number of users, it can be easily upgraded by purchasing only the necessary upgrade modules, keeping in mind customer needs. It also has the ability to automatically synchronize with time and attendance terminals in terms of downloading relevant data. The system can be easily extended with additional terminals.

If the user needs an access control system, we suggest a hardware solution in the form of a C3 or BCM controller which are designed for such situations, and can be upgraded with software for time and attendance. The BCM controller is a professional access control system, has many options and a Grade IV security certificate (the highest in its class).

Additional modules and applications:

ervWeb is an optional time tracking module that allows access to events and its administration via a web browser. It provides employees insight into their working hours and enables communication with managers. It provides department managers an overview of employee attendance and makes assignment planning easy. It is easy to use, has intuitive controls, training is practically not required. The administrator has full control over the system and can adjust the access parameters. The ervWeb module enables easy and efficient monitoring of working hours, both for employees and managers.



The ervWeb module is designed to work on any device like desktop computers, laptops, tablets or smartphones. Regardless of whether the device runs on Windows, Linux, Mac, Android or iOS, users can have an overview of all events and in this way simplify their administration. This flexibility allows users to use the ervWeb module without additional investment in hardware equipment (terminals and controllers) and their installation (cables, connectors and their assembly). At the same time they do not have to worry about the compatibility of the application with different devices running on different operating systems.

ervTimeClock is an application that turns your device that works on Android or Windows platform into a time and attendance terminal. Mobile time and attendance can be used for any type of field work, in any place where it is not possible to use a standard wall-mounted terminal or you already have a suitable device and do not want to invest money in the purchase of additional terminals.

In the case of individual time tracking, the user does not need a card, he can register event on the device by simply selecting it on the screen. For group tracking, if it is done on Windows OS, you need to have a suitable USB RFID card reader, and if it is done on Android OS, a phone with NFC. Employees will simply register their card/key on the appropriate device. The device can also take a photo of the person who is registering, if it has a camera.



To use this application, make sure that your device meets certain software and hardware requirements. Installation of this application is free and no registration is required, so you can check its operation at no extra cost, but to connect it to the time and attendance system, an appropriate license is required.

Software features and capabilities

- ✓ the interface is intuitive, with multi-language support, and the use of software is simple
- ✓ employees can be described by applying an unlimited number of profiles that define the way the employee works (shift, needed hours to calculate overtime, delays...)
- ✓ ability to define an unlimited number of event types and configure processing methods for each one individually
- ✓ possibility to define departments and subdepartments for the employee
- ✓ ability to define an unlimited number of user accounts with a password and customizing the account to be able to manage and administer only a certain department
- ✓ ability to configure privileges for each user account
- ✓ possibility to define shift work in 2 or 3 shifts
- ✓ possibility to define night work
- ✓ possibility to define work on a non-working day
- ✓ possibility of defining delays and early departures from work
- ✓ possibility of entering various absences (holidays, sick leave, blood donation, fire drills...)
- ✓ possibility to enter employee data by direct reading from the Personal ID card
- ✓ the software enables manual or automated backup
- ✓ employees can view their log data, add notes and communicate with the system administrator via any web browser, if this option is enabled
- ✓ possibility of making each report in the form of individual or group
- ✓ possibility of preparing individual reports with the display of only the basic data on the report or with the display of all events on the basis of which the report was made
- ✓ possibility of creating group reports with the display of only the basic data on the report or with the display of all events on the basis of which the report was made
- ✓ possibility to create several standard types of reports and work presence list
- ✓ possibility to add, and display, employee registration image into the report
- ✓ possibility of making reports in the form of carnets
- ✓ integrated Report designer:
 - user has the ability to change the appearance of standard reports without the need to hire a software vendor programmer
 - operator has the ability to create any type of report, without the need to hire a software vendor programmer
- ✓ reports contain data on total working hours, overtime hours, working hours during non-working days, use of paid or unpaid leave (vacation, sick leave, ...), delays
- ✓ ability to generate and print a list of all employees, profiles, data for one employee, all employees in the terminal with card numbers, etc....
- ✓ software has the ability to export reports in PDF format and in MS Excel format, and additionally supports export to xml, ods, odt, dbf, html, rtf, jpeg, bmp, tiff, gif, txt, csv, e-mail...
- ✓ ability to control access in terms of granting rights and authorization, so that access is provided only to authorized operators. For each system there is a user with admin privileges. With this account, the system administrator can help the head of the organizational unit to log in to the system, if he forgets his password
- ✓ possibility of grouping users in relation to specific rights which ensures that only authorized users can perform certain actions in the system (e.g. changing parameters, creating reports, etc.)
- ✓ log of all data changes by all operators. The log contains old and new record values as well as a description of these changes (e.g. created, modified, deleted). The log is protected at the highest level of access in the system and it does not allow data modification
- ✓ with the ervWeb module, the possibility of simple event view with a web browser, from any location, via any device, regardless of the operating system the device is running on
- ✓ with a USB RFID reader or a mobile phone with NFC, the possibility of time tracking at remote locations, mobile businesses, from home... without investing in new hardware equipment and installation



Time&Attendance terminals

The time and attendance software supports various terminals from which it is possible to choose the one that will best suit the user's requirements with its functions.

The terminals can function without a constant connection to a computer because they have internal memory and they can save data, and you can add them an uninterrupted power supply (UPS), and the system will continue to work in case of power failure. The computer on which the time and attendance software is installed, downloads all registrations from terminals periodically and saves them in the database. After that you can create and print reports for employee time tracking.

More about these systems can be found on our website <https://www.trackworktime.com/clocks/>

Comparative characteristics of the systems can be seen in the table below:

System name	Anti –Vandal	Mounting	Display	Connection over HTTP-a	User capacity	Registration capacity
BCM	Yes/No (depending on reader)	Outdoor/ Indoor	No	Yes	100000	1000000
SCR100	No	Indoor	No	Yes/No	10000	30000
SC103	No	Indoor	Yes	Yes/No	10000	30000
S880	Yes/No	Outdoor(with spc.housing)/ Indoor	Yes	Yes/No	50000	150000
C3	Yes/No (depending on reader)	Outdoor/ Indoor	No	No	30000	100000