

ZKTime Enterprise

USER MANUAL

Version: English 1.1

Date: July 2019

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0. Introduction

ZKTime Enterprise is a software application for time and attendance and access control. With this application you can monitor and manage your employee’s work-time.

ZKTeco also offers a “lite” software version for Time Management specially designed for SMB called **ZKTime Small Business**.

		ZKTime Enterprise	ZKTime Small Business
Features	Configurable Attendance periods	▪	
	Creation of New companies	▪	▪
	Employee Profile Management	▪	
	Organization chart	▪	
	Comparative view of calendars	▪	
	Accrued balance	▪	
	Costs	▪	
	Backups	▪	▪
	Day type management	▪	
Employee management	Basic employee management	▪	▪
	Calendar Management	▪	▪
	Calendars – Advanced options	▪	
	Standard hours	▪	
	Employee hiring & dismissals	▪	
	Comments, notes and employee history	▪	
	Employee Hierarchy Management	▪	
	Cost management	▪	
Schedules	Basic scheduling management	▪	▪
	Variants	9	2
	Rotative schedules	▪	
	Costs	▪	
	Events	▪	
	Roundings	▪	
	Schedule Interruptions	▪	
Calendars	Basic calendar management	▪	▪
	Automatic generation of calendars	▪	▪
	Advanced Automatic Calendar Generation Options	▪	
	Annual calendar view	▪	
Devices	Basic device management	▪	▪
	Autodetection of devices	▪	▪
	Events	▪	
	Bells	▪	
Reports	List display	▪	▪
	Time and payroll reports	▪	Only time
	Formulas	▪	
	Automatic submission of reports	▪	
Events	Basic event management	▪	▪
	Accruals	▪	
	Advanced Event Options	▪	

1. Setup

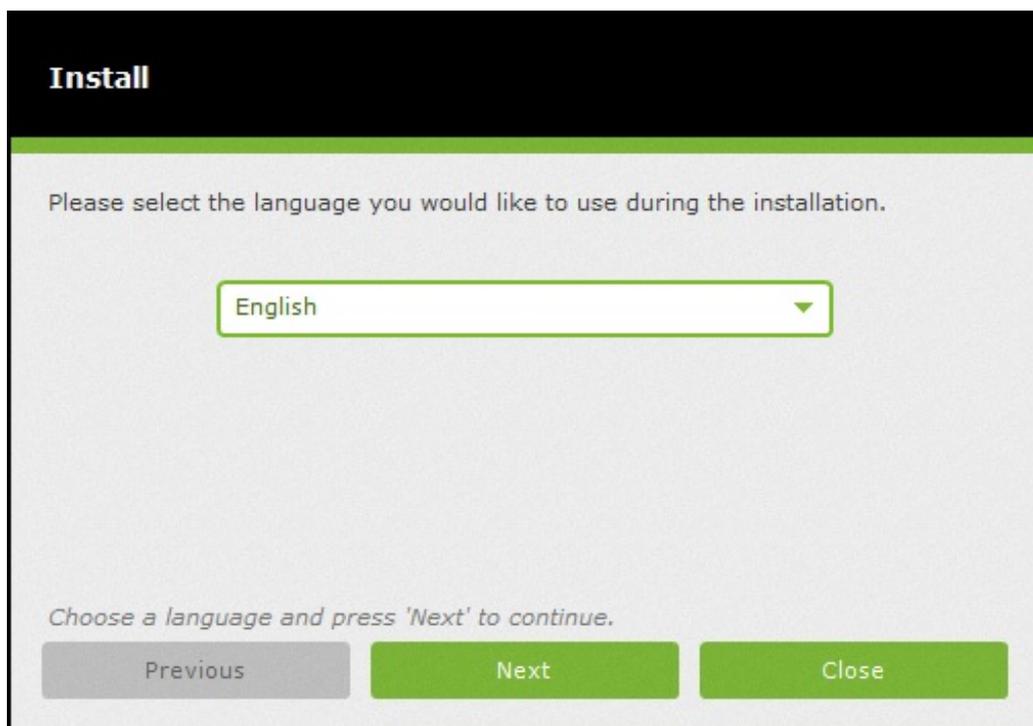
1.1 Pre-requirements

You will have to install some of next pre-requirements according to the operating system you will be using.

- Windows Vista and Windows 7: You can proceed directly to the installation, it does not require any previous installation.
- Windows XP and Windows 2000: Installation of Framework. NET 3.5 or higher required.
- Windows Server: Installation of MDAC 2.8 (Microsoft Data Access Components) required.

1.2 Installation

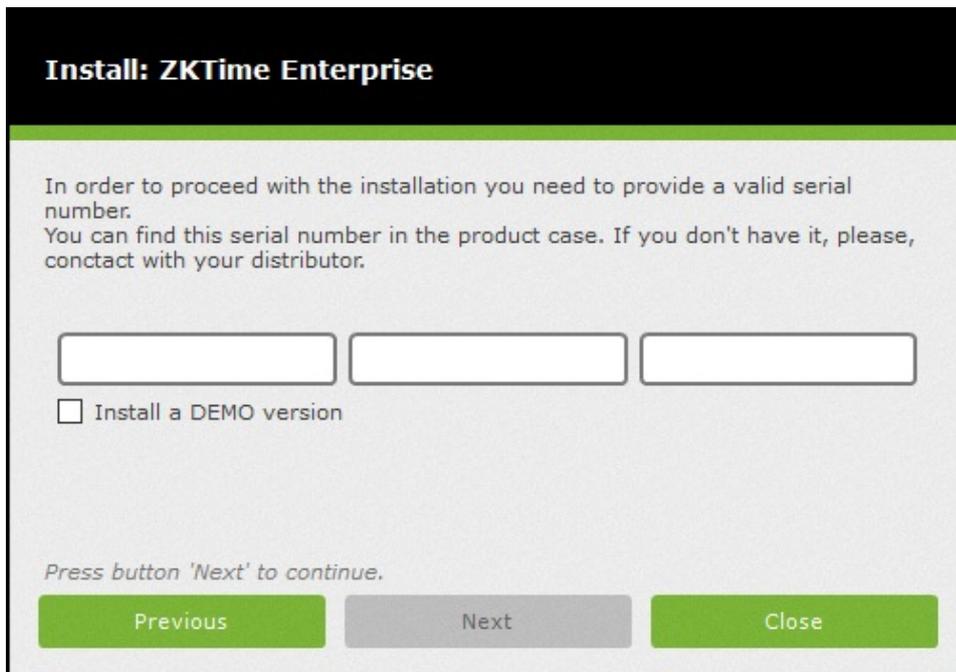
Now, we can install ZKTime Enterprise software. The installation guide will lead us throughout the process. First, we have to select the installation language; language selected hereby will define the language that ZKTime Enterprise will use by default the first time you run it.



Next, you shall decide if you want the installer to connect to the ZKTeco Server, and, download the latest version. This is recommended if are performing a clean new installation of the program.



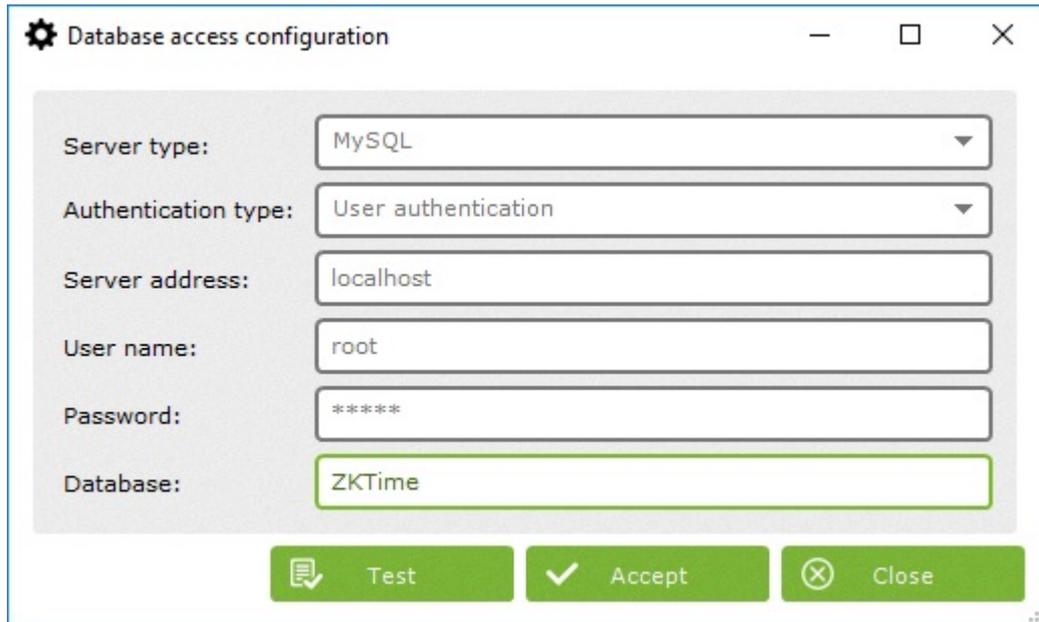
Finally, select a folder and enter the required serial/ license number to proceed with the installation.



1.3 Database Engine

After the software installation process is completed; proceed to configure the linkage to the database. ZKTime Enterprise works with the following servers:

- 1) Oracle
- 2) MySQL
- 3) SQL Server



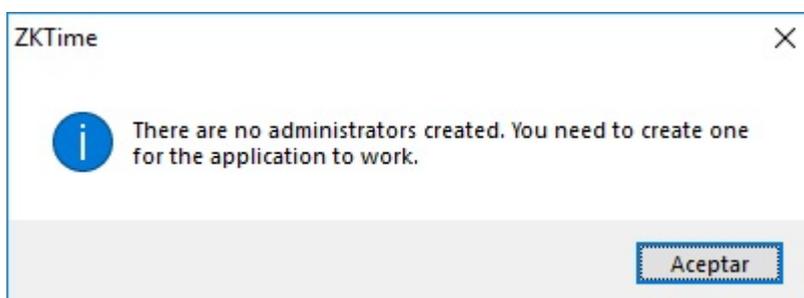
When using SQL Server or MySQL you can use any of the following authentication methods on the server:

- **Trusted Connection:** No need for username or password. If you are using MySQL you will need to edit the server's settings in order to allow access to anonymous users. If you're using SQL Server instead, it must be configured to accept trusted connections and must use the same domain as the server.
- **User Authentication:** This is the recommended choice if using MySQL.

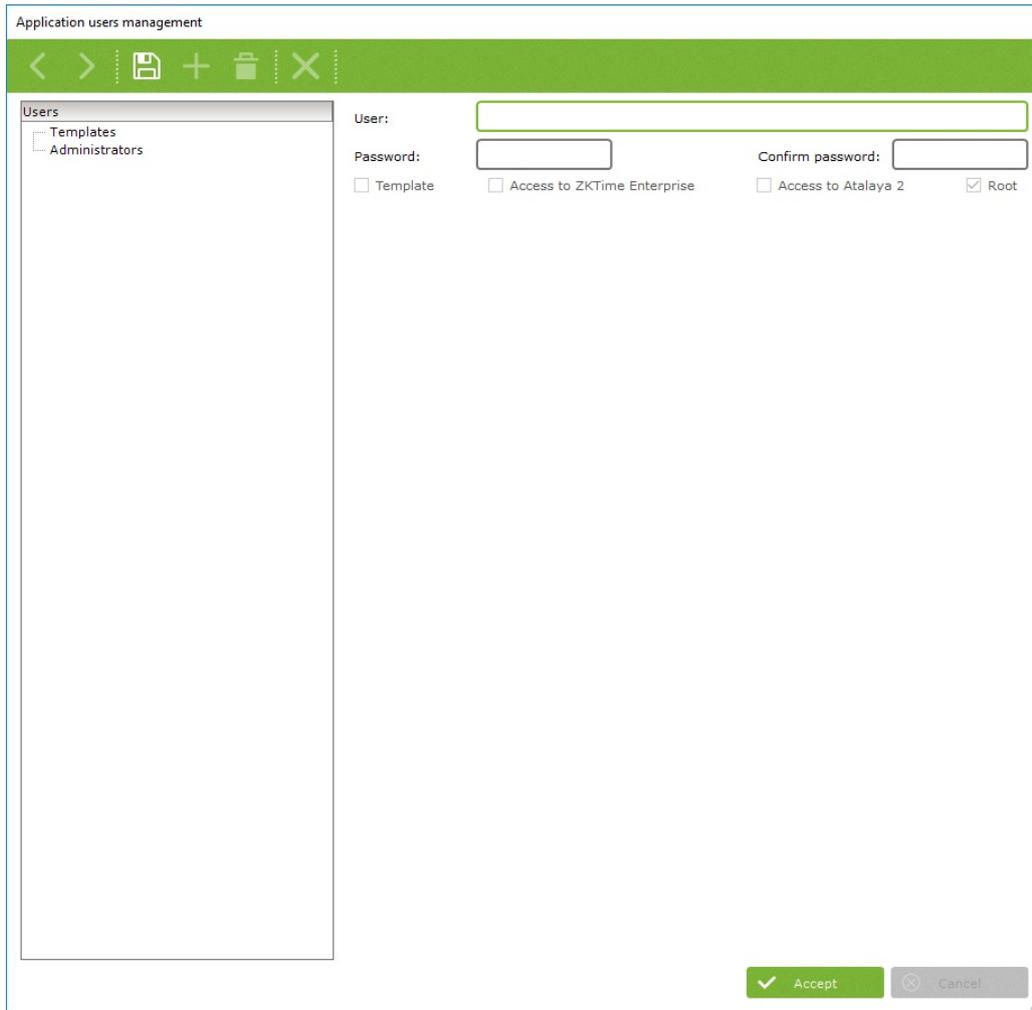
After configuring the database connection, you may start working with the platform.

1.4 First Run

The first time you run ZKTime Enterprise you will find it to be a bit different from the rest. The first thing that you will find is the following message warning of the need to create an administrator user.

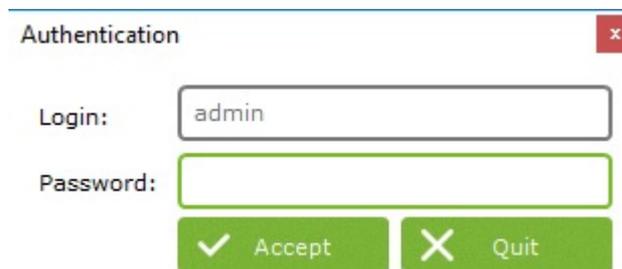


It will immediately be followed by another window where you will be able to introduce username and password for the administrator.

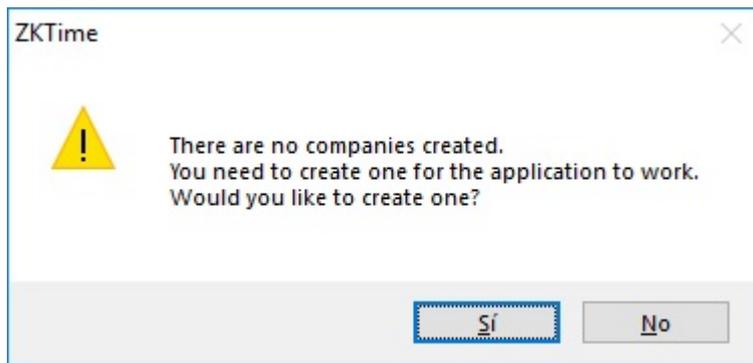


Above picture shows most of its fields disabled. This is because they are not needed for the creation of an administrator, we will go into further detail about these in other options.

Once you have created an administrator user close this window, a new login window will pop up. Now introduce the user name and the password you just created.



Once logged in, ZKTime Enterprise will ask if you want to create a “company”, by clicking "Yes" you will go to the “Company” management window. If clicking on "No", it will close the application.



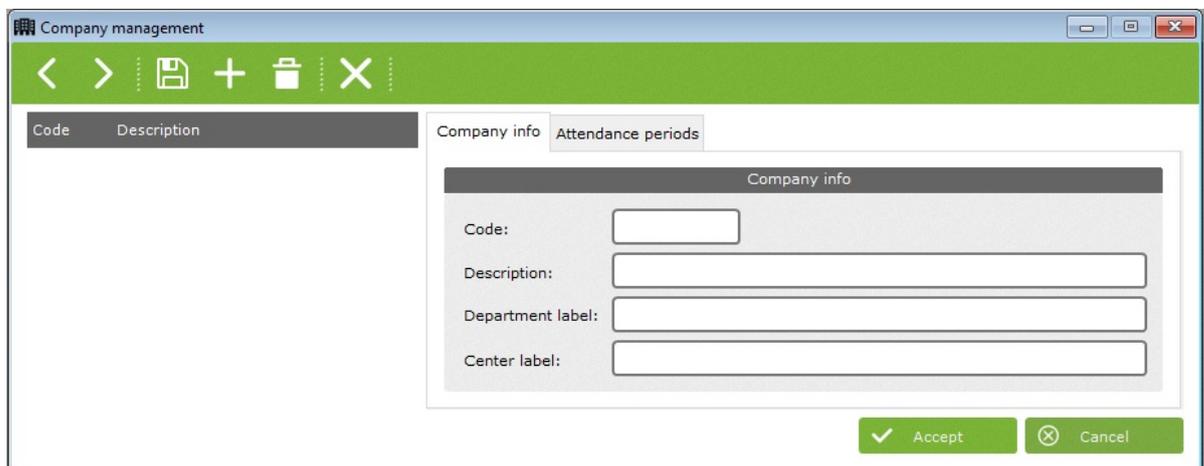
1.5 Company creation

On the Company management window, you will find the following options:

- **Code:** An alphanumeric value that identifies the company, must be unique for each company.
- **Description:** A short text containing the name or a brief definition of the company.

ZKTime Enterprise suggests two configurable fields to organize the employees of your company. By default, these are "Department" and "Center".

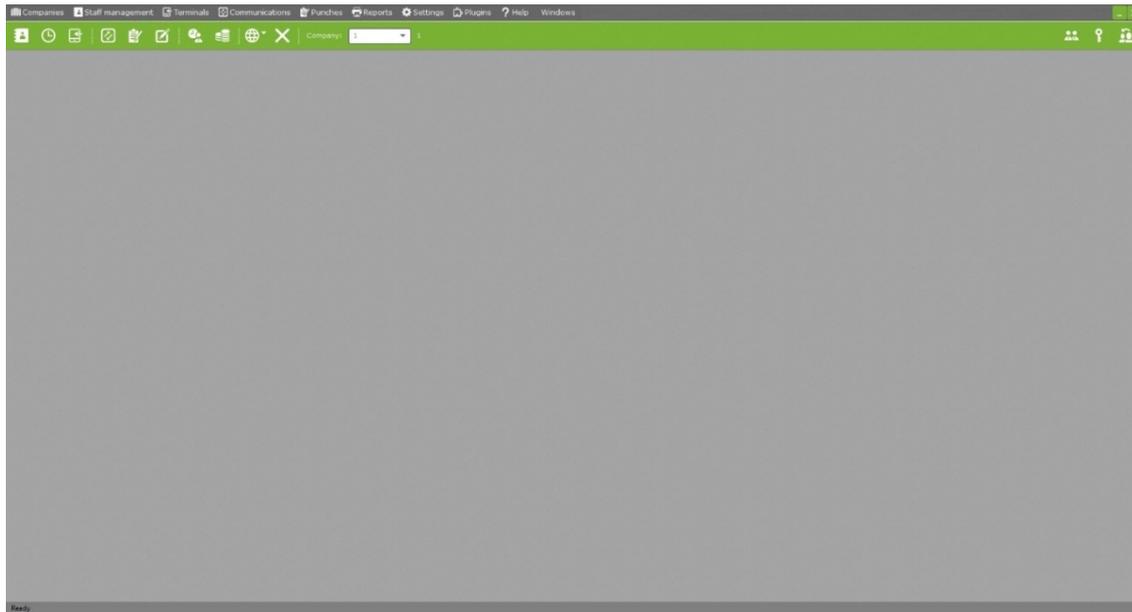
- **Department label:** Here you can state a name for the field "Department".
- **Center label:** Here you can state a name for the field "Center".
- **Attendance Periods:** Here you define the bookkeeping months, by default it matches the calendar month.



If installing the program, setting the connection to the database, defining an administrator and creating a company processes have been completed, you can start working with the program normally.

ZKTime Enterprise

Now you can start to use ZKTime Enterprise. From homepage you will be able to move all over the application.



The following options are displayed:

- **Companies:** To manage everything related to companies, create new companies, remove or edit existing ones or transfer information from one to another.
- **Staff:** To manage everything related to your employees and their organization, be able to add, remove or edit employees, calendars or company schedules. You may also check employee reports, organizational charts or relocate employees on to other centers or departments.
- **Terminals:** To manage hardware terminals, choose those with whom you want to communicate or gather information from.
- **Communications:** To communicate with the terminals, send them information, retrieve information from them or make backup copies of the data stored in the terminal.
- **Punches:** To edit punches or closures.
- **Reports:** To access different reports offered by ZKTime Enterprise.
- **Settings:** To manage ZKTime Enterprise settings.
- **Help:** To contact ZK Software support center and obtain general information regarding the program.
- **Windows:** To show all the windows open and allows bringing up the one you wish.

2. Companies

In section 1.5 we explained how to create a company but did not get into further detail about this feature and how to use. A company is the core of ZKTime Enterprise each one has its own tables and works independently.

2.1 Data transfer between companies

To send data from one company to another you can do by using the “Companies data transfer” tab.

Following options are available:

- **Source company:** This is the exporting company of selected data.
- **Destination company:** This is the importing company in which store selected information.

- **'From date' and 'To date':** To set a date interval for the information you want to transfer in case you do not want to transfer closings or punches.
- **Information:** To select the information you want to transfer from the source company to the destination one.

Companies data transfer

Source company: 1 - 1

Destination company: 1 - 1

From date: 01/01/2018 To date: 16/03/2018

Informație

- Calendars
- Punches
- Closures
- Departments and centers
- Employees
- Events
- Profiles
- Reports
- Terminals

Transfer Close

3. Terminals

Terminals are essential part of the time and attendance and access control solutions. They are responsible for identifying the employees either through fingerprint recognition, face recognition or by using a proximity card reader so, the employee gets access to controlled rooms or is enabled to punch any work event.

3.1 Terminal management

Terminal management

Code	Description
001	Terminal1
002	Terminal2

Terminal data

Code: 001

Description: Terminal1

IP Address: 192.168.1.220 Port: 4370 Detect

Model family: Zk iClock Fingerprint Model: ZK iClock fingerprint

Ethernet connection Serial port connection

Access only Attendance only Attendance/Access

Punch events with workcode Punch events with function keys

Show advanced options Test Accept Cancel

If the terminal is registered, the 'Terminal Management' tab offers the following options:

- **Code:** Numeric value which identifies the terminal, it must be unique for each terminal.
- **Description:** A short text containing the name or a brief definition of the terminal.
- **Terminal model:** Each terminal is different and has different features and requirements. ZKTime Enterprise is not capable to automatically recognize with which device has been connected so we need to introduce this data. We have the following options:
 - ZK Fingerprint: Any terminal with a black and white screen display or no screen at all with a fingerprint reader.
 - ZK Card: Any terminal with a black and white screen display or no screen at all and without fingerprint reader.
 - ZK IClock footprint: Terminals with color display and fingerprint reader.
 - ZK IClock card: Any terminal with color display without fingerprint reader.
 - ZK IFace: Any facial recognition camera-type terminal.
 - ZK Series C: Some terminals with screen color display and all C Series models.

NOTE: If you have any doubts regarding your terminal model please contact your dealer for help. They will be able to assist you.

- **Terminal Type:** ZKTime Enterprise distinguishes three types of terminals according to functionality is access control or time management:
 - Access control terminal: Supports an access configuration, it is connected to a door which opens or not according to configuration. All punches from this terminal are considered access control punches.
 - T&A and Access control terminal: This terminal generates access or T&A punches depending on the event marked by the employee when punching.
 - T&A terminal: It doesn't support any access configuration and therefore only generates T&A punches.
- **Type of communication:** ZKTime Enterprise can connect to the terminals through a network (Ethernet) or by connecting the computer directly through the serial port:
 - Ethernet Communication: If we choose Ethernet connection, we will have to introduce the Terminal's IP address and the port through which it will communicate (4370 by default).
 - Serial communication: In this case we must specify the serial port to which the terminal is connected. This option is not recommended since this connection type is obsolete and instable.
 - Work code: Employee punches using a work code or function key. This option is specifically maintained only for compatibility with former versions and should be left as it appears by default.

3.2 Buzzers

Some terminals can be connected to an industrial bell to signal factory employees of their shifts. From this window you can set the time in which you want to schedule bell ring. You can set up to 12 events per day.

3.3 No access days

In every company there are days in which the company remains closed and access is forbidden. For that, we have the "no access days" option.

Here we define a range of dates in which none of the registered users can access the premises. The terminal will recognize the user and record the punch attempt as a access denied punch. The terminal will not open the door.

3.4 Time Zones

The time zones are basic for the access configuration, each one will store a time zone for each day of the week in which the employee can have access. Each terminal stores its own time zones and from the management window we can set which slots can be accessed from this button



3.5 Access Groups

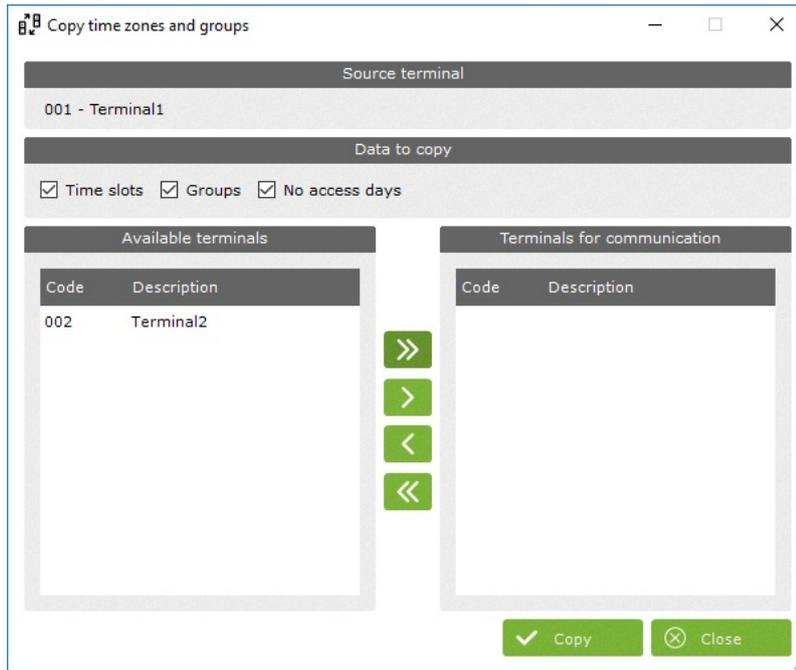
Each employee has its own configuration with permission for access in three times zones, prevailing always the least restrictive one. This is, in the event of an employee trying to access the terminal-controlled room and, two of the access zones assigned to him denying him the access but, the third one is allowing it, the employee will have access to the room. Purpose of the groups feature is to avoid having to establish three time zones for each employee, when they are using the same configuration. These groups contain three time slots which you can later assign to as many employees as you need.



3.6 Copy access settings

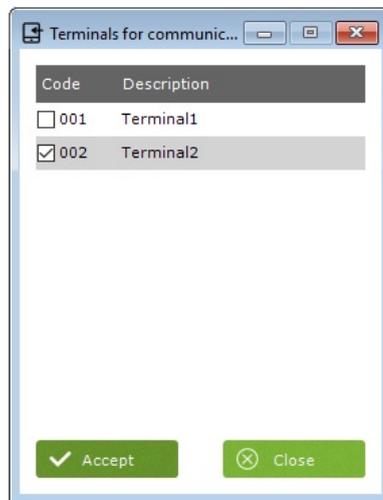
If you have several terminals with the same configuration, we can copy this configuration to several devices by using the "copy" tab in the terminal management window. Once you click on the "Copy" button a new window pops up which will offer you the following options:

- Source terminal: Is the terminal from which you are going to export the access configuration to copy on to the rest of the terminals.
- Data to copy: To select the settings which you want to copy.
- Available terminals: These are the terminals on which you want to copy the data.



4. Connecting terminals

In this window you can configure the terminals which you want to communicate with. Since you can have multiple installations in different locations connected to the same database, this configuration is tied to each PC. However, this does not imply that you can connect all terminals defined for a company.



5. Device Status

In this window you can check terminal parameters, check if the terminal is connected or not, the number of punches stored in it and employees' status and firmware version.

Terminal	Punches	Users	Firmware version
001 [Not connected]	-	-	-
✓ 002 [Connected]	630	7	Ver 6.60 Mar 2 2018

6. Events

Events is outstanding feature of ZKTime Enterprise software. They work as trackers to follow the employee's activity at work: when they are on holidays, their daily working time, when they are being late or on a special service out of the office. Events can be introduced through punches, associated to a determined day on the calendar or, maybe, even the own system can enter them for you. Based on the above, events can be divided into two standard types and one special case:

System Events: These events are created within each company. They cannot be created nor deleted. The program will automatically assign them when the required conditions are met.

User Events: These events are created by the user according to the specific needs of the company and must be set manually.

'0000' Events: These events are the ones that are generated by the punch of an employee who does not specify anything but merely identifies himself in the terminal.

6.1 System Events

When initiating the program for the first time you will meet with 10 events already created by the system that you won't be able to delete. These are the '0000' system events which we will explain below in more detail:

- **Events '0000 ':** These events are the ones that are generated by the punch of an employee who does not specify anything, or enters an invalid event, the punch will always have this event assigned.
- **System Events:**
 - 'S001' Event: This event is automatically created in an employee's report when its first punch of the day is done earlier than the beginning of its shift.
 - 'S002' Event: This event is automatically created in an employee's report when its first punch of the day is done later than the beginning of its shift.
 - 'S003' Event: This event is automatically created in an employee's report when it works fewer hours than those stipulated in its schedule.
 - 'S004' Event: This event is automatically created in an employee's report when it fails to attend its jobs on a weekday.

- 'S005' Event: This event is automatically created in an employee's report when it works more hours than those stipulated in its schedule.
- 'S006', 'S007', 'S008' and 'S009' Events: These events are automatically created in an employee's report when the maximum or minimum time taken for other events is exceeded or falls short. We will get into further depth later when we get to explain workdays..

Except for the '0000' events, none of the events explained above can be introduced neither by the ZKTime Enterprise administrator nor by the employee with a punch. It will be the application that decides when to generate them based on the employee's movements, hour and work schedule.

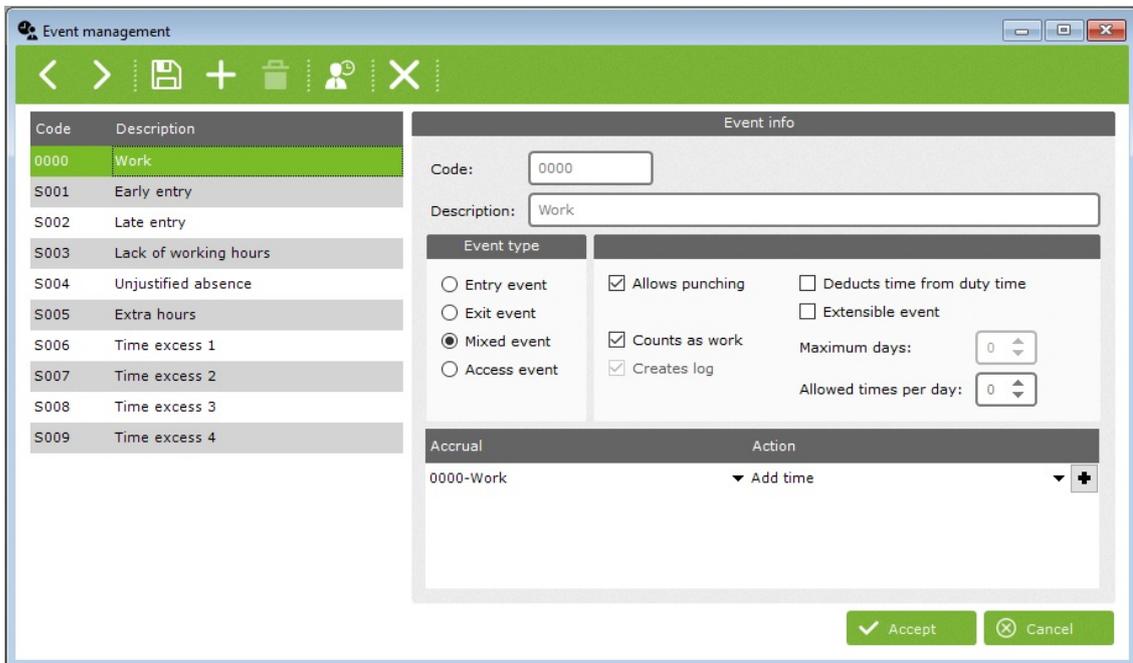
6.2 Accruals and Reports

As explained before events can be assigned to a punch or to a day of the calendar and we have also introduced the concept of reports. Now, we will explain the concept of accruals.

- **Accruals:** An Accrual is an accumulator of either amount of time or number of times a particular event takes place or occurs. Each event can update one or more accruals so, when an event is generated either because it is entered by a punch, created by association to a specific day on the employee's calendar or automatically created by ZKTime Enterprise, the event updates the accruals to which it is assigned.
- **Report:** The report is the list of events registered for each employee and the accruals updated by them. It is a daily report grouped by employee. Any further necessary calculations will be based on this information.

6.3. Event Management

On this window we will be able to create new events and/or edit details of the System events.



Code	Description
0000	Work
S001	Early entry
S002	Late entry
S003	Lack of working hours
S004	Unjustified absence
S005	Extra hours
S006	Time excess 1
S007	Time excess 2
S008	Time excess 3
S009	Time excess 4

Event info

Code:

Description:

Event type

Entry event
 Exit event
 Mixed event
 Access event

Allows punching
 Counts as work
 Creates log

Deducts time from duty time
 Extensible event

Maximum days:

Allowed times per day:

Accrual

0000-Work

Action

▼ Add time

- **Code:** Numeric value to identify events, it must be unique for each terminal.
- **Description:** A short text containing the name or a brief definition of the event.

- **Event type:** We previously explained that events can be selected by the employee on the moment of their punch. We can distinguish up to four types of events:
 - **Entry events:** These can only be selected by way of entry punches. It will meter the time from the moment of the entry punch until the departure one.
 - **Mixed events:** These can be selected on both entry and departure punches. In either case the absence will be calculated upon the employee's time slots schedule. In the case of an entry punch, it will serve to justify the time lapse between the theoretical beginning of the employee's time slots and the real time of the punch. In the case of a departure punch, it will serve to justify the time lapse between the punch and the time of the next entry or until its time slots schedule ends.
 - **Exit events:** These can only be selected upon departure punches. It will serve to justify the time lapse between the punch and the time of the next entry or until its time slots schedule ends.
 - **Access events:** These can be selected upon any punch. They will not calculate times involved. All punches done selecting an access event will count as an access punch, with no effect on the times of attendance. Therefore, should you want to register when an employee has passed through a location controlled by a terminal, but do not want to register the attendance time, you will use this type of event.
- **Allows punching:** This option controls if a punch can have assigned this event or not. If option is unticked, the event will not be uploaded into the terminals which allow event reports. On terminals with no event reports, if an employee selects an event which is not associated to a punch, the program will remove this event and automatically assign the '0000' system event.
- **Opens door:** This option controls door opening function through relay activation when the event is punched. For this option to be effective it's necessary to upload the event into the terminal. Important: note that not all terminals support this configuration.
- **Counts as work:** This option controls if the event will be recognized as work time or not. If enabled, the invested time will add up to the total work time and to determine the payroll.

Differences between 'work accrual' and 'total attendance' shown in some reports: the work accrual only takes into account the amount of time involved in all the events which update that specific accrual; the total attendance time is calculated taking into account all the events which affect, in any way, what it's considered as worked time; like an event which counts as work or an excess on the use of the time allotted to an event which, will negatively effect on the time considered as worked for the company (Further explanations on point 7. time slots)

- **Creates log:** This option can only be enabled for system events. If this option is unticked for an event, the program will ignore the event when it occurs and no information on it will be stored in any data base or report.
- **Deducts time from the duty time:** This option, when enabled, does not only justify the time taken on the event, it also deducts the time from the duty time of the employee. Holidays are a good example for the use of this option. When these are taken, they are counted as holidays and at the same time reduced from the duty time, thus if the employee is the whole day on a holiday, its duty time will be reduced to 0.
- **Extensible event:** Some events do not only apply to the whole day in which they occur but, they are extended to a number of days on which the employee will not be able to punch on the office. This is very common on certain jobs, such as a sales person or installers, who might need several days out of the office when travelling on business trips. This option will help you to handle this eventuality. You will have to create an event and check the extensible event option. This way the employee will

be able to select this event upon its departure punch when leaving the office and this way the event will extend until its return and entry punch or otherwise until the maximum number of days allotted to his event are consumed. If the maximum number of days is set to 0, the program will understand that there is no time limit and thus it will extend the time of the event until the employee finally returns and does an entry punch.

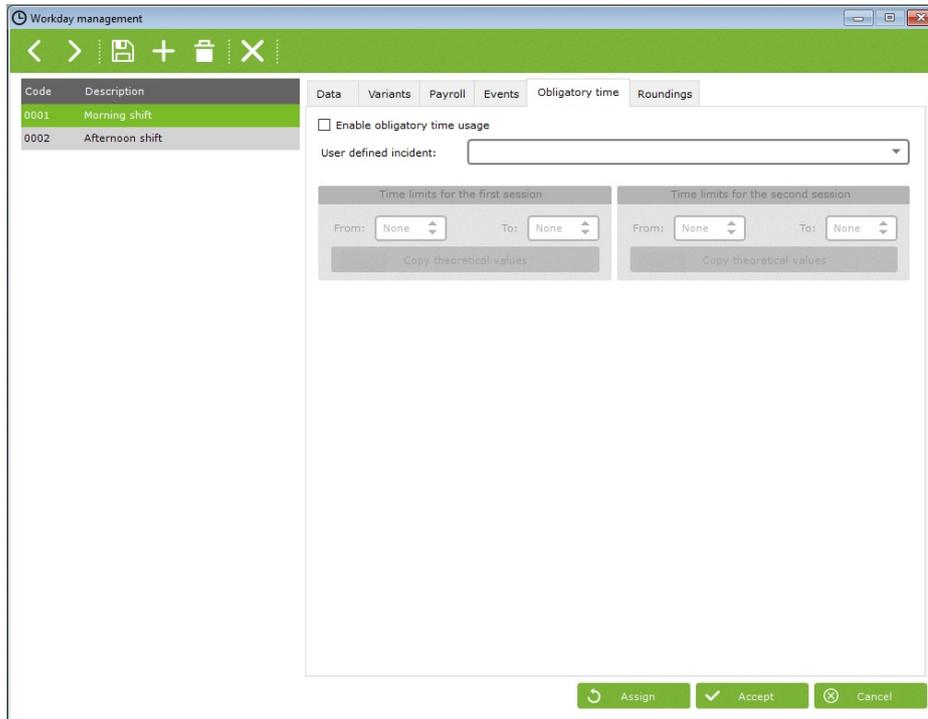
- **Allowed times:** This option controls the number of times in which an employee will be able to punch a specific event. If this option is set to 0, the program will understand that there is no limit to the amount of times in which it can be selected.

7. Workday

A Workday defines the employee's working hours for every day, outlining the beginning and end of their working day and managing their delays and shifts.

ZKTime Enterprise allows the creation of several types of shifts depending on certain circumstances: if the employee has one or several shifts, if these shifts are fixed or variable in the employee's calendar or if it works on day or night shifts.

7.1. Workday management



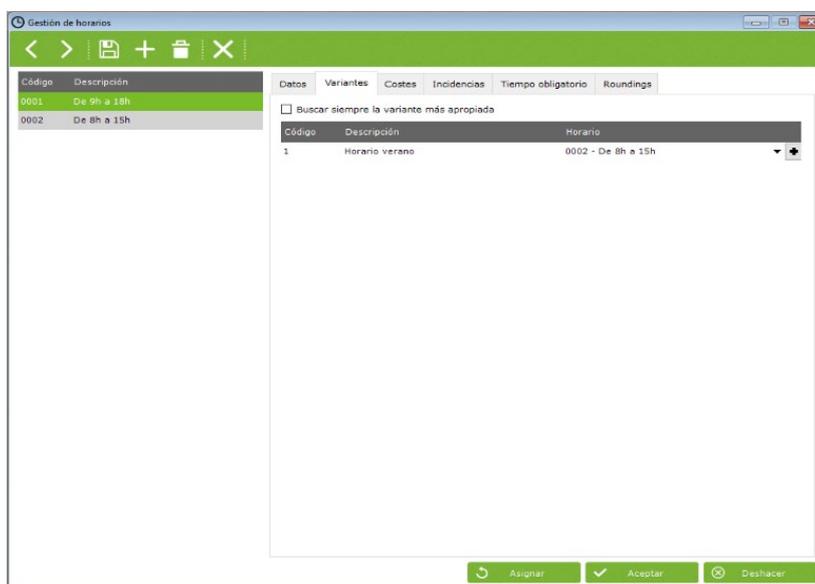
- **Workday timetable:** Above is the workday management window which manages work schedules. There are three main types of workday timetables:
 - Day shift: When the date of the workday timetable is the date of the late entry limit of the shift. Commonly, the 'office hours' are day shifts.
 - Night shift: When the date of the workday timetable is the date of the early exit limit of the shift.
 - Rotating shift: This is a special case since this type of schedule does not accept any configuration at all. It just contains up to three day or night shifts which alternate according to the employee's punches.
- **Sessions:** A session is an uninterrupted time slot which defines a workday. ZKTime Enterprise allows each workday timetable to have one or two sessions. All further calculations will be made on the basis of such sessions. All sessions entail:
 - Early entry limit: The time after which it is not considered that the employee has arrived early.
 - Late entry limit: The time after which it is considered that the employee has arrived late.
 - Session start: The time at which the shift starts, all times are calculated based on this hour, either delays or early arrivals. For instance, if the session start is set at 09:00 and the late entry limit at 09:15, when the employee arrives at 09:30 the program will calculate a delay of 30 minutes, not 15.
 - Early exit limit: The time after which a departure punch ends the session.

- Late exit limit: The time after which a punch is no longer considered to belong to that session. If it occurs at the end of the first session, being there a second one, it will be considered that the employee is on its second session. Otherwise any punch will be considered off duty.
- Session end: The time hour at which the session ends. When an employee is absent with event, the event will be calculated ending at this time.
- **Total worktime**: Is the total number of hours that an employee has to work in each session. The sum of the two sessions will result on the total hours of the workday. This number will not necessarily correspond or be equal to the time difference between the start of the first and the second session. For instance, a workday which goes from 08:00 to 18:00, with 8 working hours, one for lunch and another for the employee's free disposal along the workday.
 - Workday timetable limits: These limits will create a time slot in which the program will search for punches that belong to a workday outside what could be considered as an ordinary workday. This option will take into account double shifts or peaks in production. These limits cannot overlap with the session times or involve a time range which exceeds 24 hours. It is common, for office and commercial shifts, to set the workday timetable beginning at 0:00 and ending at 23:59. However, in some cases where there is a rotating shift, with morning, evening and night shifts, it will be convenient to adjust a bit the beginning and end limits for the workday timetable to the start of the first session and the end of the second one.
 - Extend workday timetable until matching punches outside the workday: This option allows having workday schedules longer than 24 hours. If enabled, on days with an odd number of punches registered, the program will look for the missing punches beyond the session limits until all the check-in and check-out punches are accounted for.

7.2. Variants

It is quite common for an employee to have different workday schedules along its annual calendar, for example: split from Monday to Thursday and intensive on Fridays during the winter and another schedule for the summer months. To manage this situation, we use the concept of variants, which are:

- **Code**: Numeric value to identify the variants defined for a workday.
- **Description**: A short text containing the name or a brief definition of the variant.
- **Workday**: This field specifies the alternative schedules referenced in the variant.



ZKTime Enterprise permits to define up to 9 different variants for a workday, codified from 1 to 9. These variants can be marked onto the calendar forcing one of the shifts for a specific workday or, choose the 'Always look for the best fitting variant' option. Upon the selection of this last option, the program will calculate the most fitting shift, among all the options available, based on the employee's check-in and check-out punches.

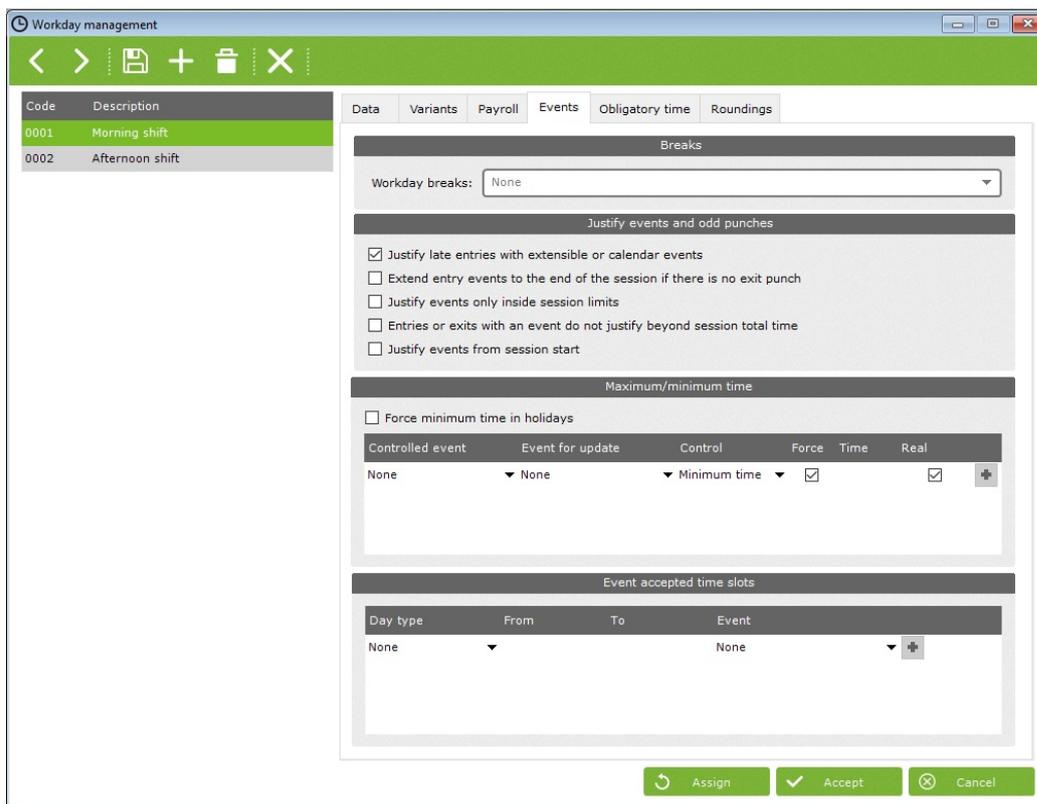
Criteria used by ZKEnterprise to calculate best possible adjustment are listed next in order of priority: proximity of punches to the limit entry hour of each session, total percentage of hours in each session completed between the limit entry hour and the limit exit hour, and, the total hours completed between the limit entry hour and the limit exit hour.

7.3 Payroll

This point is closely connected to the 'Profiles' one and will be explained in detail later on, in point 8. of this manual.

7.4 Events

Every workday schedule has different ways in which to address the events; we will explain each of them below:



- **Workday breaks:** See point 8. of this manual.
- **Justify late entries with extensible or calendar events:** On point 6.3 of this manual, we explained the extensible events and how do they explain the absence of employees. Events from calendar have the same purpose and will be explained in detail later, on point 8. of this manual. If this option is enabled, these events will not only explain the employee's absence but also the delays. For example, a salesman checks-out one day selecting an extensible event such as 'business visit' and returns next

day with a delay of three hours upon the session start, the program will justify the time lapse passed from the beginning of the session until its return with the 'business visit' event.

- **Extend entry events to the end of the session if there is no exit punch:** This option is used for very specific cases in which an employee makes an entry punch but will not do an exit one until several days later. Military quarters are a good example for this use. It is common for a soldier to check-in on Monday but do not leave until the following Friday. If this option is enabled and the employee selects an extensible entry event, the program will justify the entire time lapse between the entry punch to the end of the workday with this event. Hereinafter, the marked event will justify all the employee's absences following the rules explained before in point 6.2. of this manual.
- **Justify events only inside session limits:** When this option is enabled the program will not consider any circumstances outside of the session times. This way, an event will not be able to be accounted before the session begins nor after the session ends.
- **Entries or exits with an event do not justify beyond session total time:** If enabled, this option prevents events that count as work time to be added up, don't sum more than the total amount of time of the session in which they are marked. This makes sense when an employee has a flexible schedule. For example, the case of an employee which has a flexible entry time of half an hour, meaning that can arrive between 08:30 and 09:00 in the morning and must complete a workday of five hours, session ending at 14:00. If the employee arrives at 08:45 but, has an event punch that counts as work, the program will calculate up to 14:00, 5 hours and 15 minutes of working time. However, by enabling this option you make the program calculate the working time up to complete the session of 5 hours, thus closing the event at 13:45 instead of doing it at 14:00.
- **Justify events from session start:** This option should be enabled in case you want events to start having effect from the moment of the entry punch instead of from the time of the session start. This option is quite useful when you have flexibility on the time to get to work.
 - Maximum and minimum time: Establishes the maximum and minimum time lapse allowed for each event. This way if an employee has exceeded the time allowed for the related event, only the maximum time will be applied ignoring the time exceeded. Same way, minimum time allowed would be applied in case of late arrival.

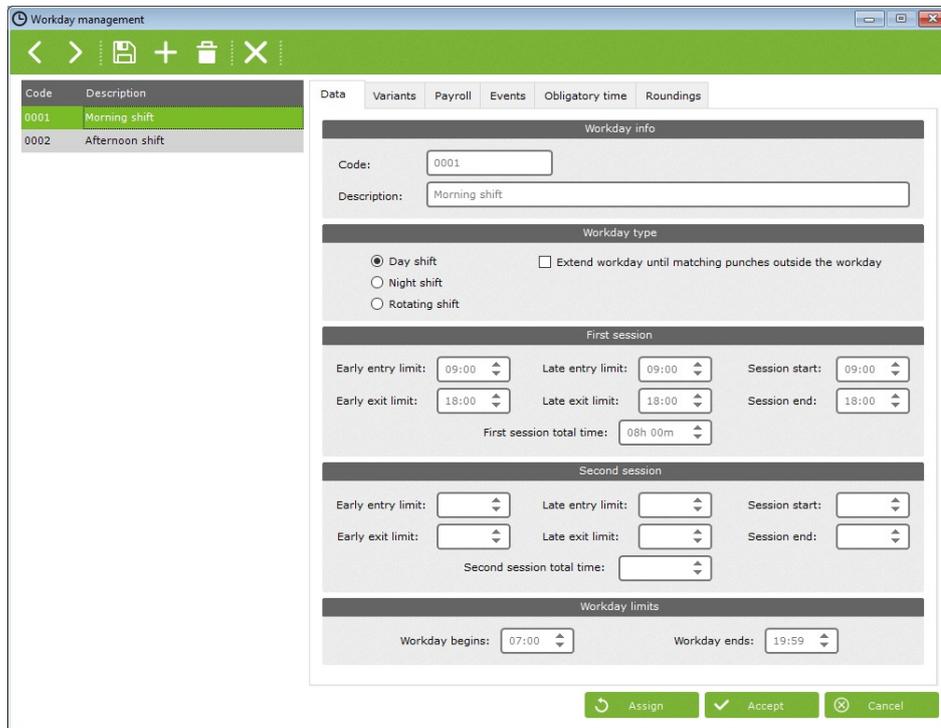
We count with 4 different types of system events to help with this control, which we can modify as we need. These system events are used as a support for the original event, in terms of controlling the extra or less time of events, and, they will only be updated in the case of not fulfilling the minimum or exceeding the maximum time, then storing the difference in hours between original event and the established limit for it.

Once the system event has been defined and assigned to the original event if we want to update and defined related maximum and minimum time, we can choose between 2 options to modify performance: assign real time or force minimum time.

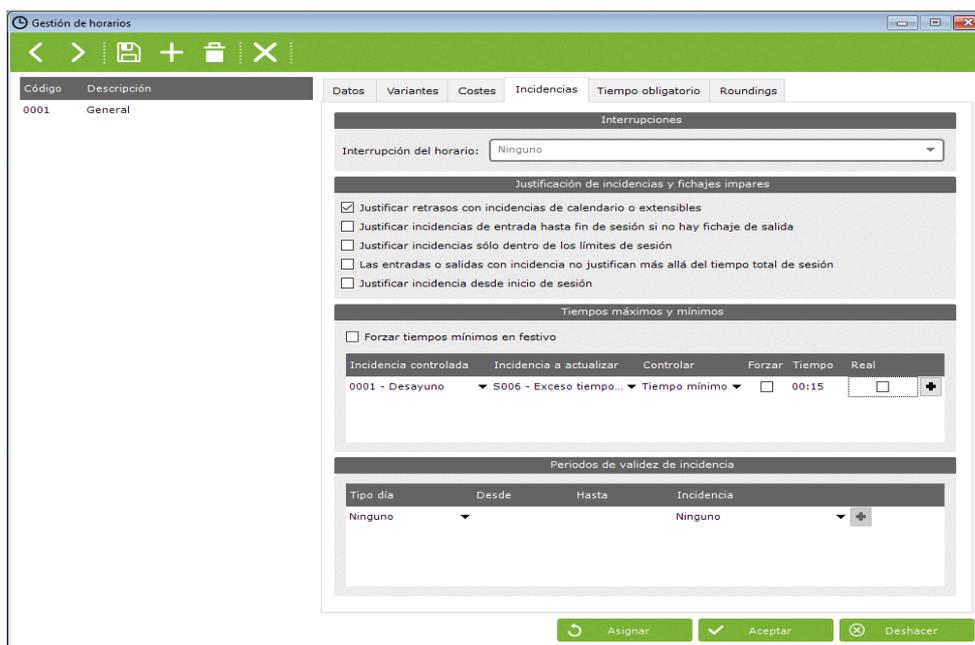
- **Assign real time:** This affects to original event. If this option is ticked, the system will assign real time to the original event. If it's not ticked, then maximum or minimum time will be applied. To original event if necessary.
As explained above, the event will be updated with the time difference between original event and established limit.
- Force minimum: This option will only be available in case we have enabled minimum time control. If so, the system will force that minimum time in case there are NO punches that day for original event.

Settings and results examples:

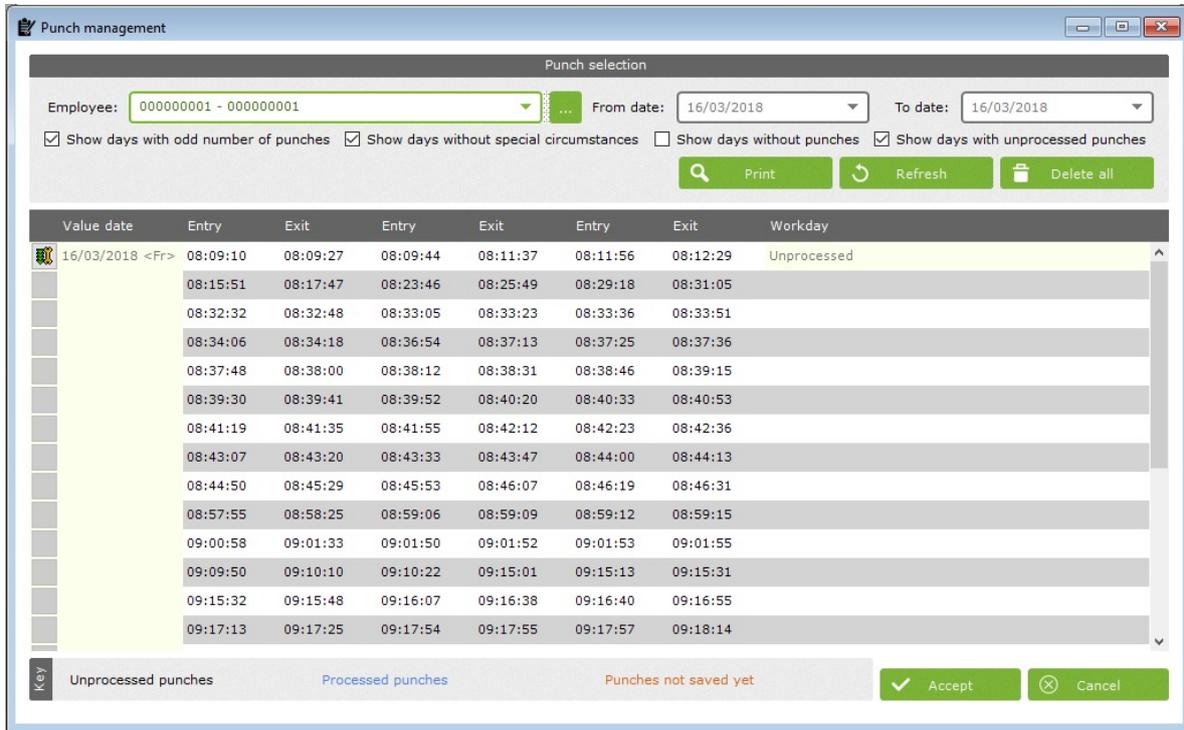
Next you can find a table including settings and response values based on an example for better understanding of this point. Let's consider a timetable from 9.00h to 14.00h, without breaks as shown in next table:



We add to the timetable a minimum time of 15min. To even "006-Breakfast", which, in its turn will update system incidence "S006-Brakfast Defect", as shown in above image.



We have realized punches for 3 days in order to be able to show all possible situations for this example: one day that employee didn't break for breakfast, other day with an only 5 min. breakfast and the third day with a 30 min. breakfast.



Next table shows the time results for all possible combinations between “force minimum time” and “assign real time” for the 3 different days cases:

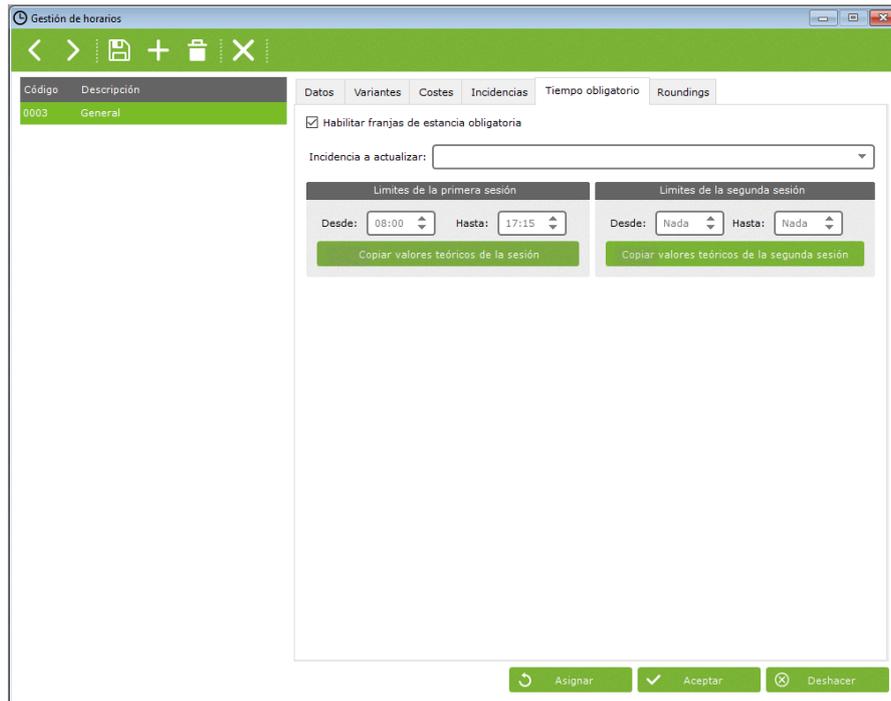
		02/06/2016 0' Breakfast			02/06/2016 5' Breakfast			02/06/2016 30' Breakfast		
Force	Real Time	006	S006	Time	006	S006	Time	006	S006	Time
NO	NO	0:00	0:00	3:00	0:15	0:10	2:45	0:30	0:00	2:30
NO	SI	0:00	0:00	3:00	0:05	0:10	2:45	0:30	0:00	2:30
SI	NO	0:15	0:15	2:45	0:15	0:10	2:45	0:30	0:00	2:30
SI	SI	0:00	0:15	2:45	0:05	0:10	2:45	0:30	0:00	2:30

One remark: once the minimum time has been defined, this time will always be deducted from the total time, provided that the value of the event to be controlled is not higher. If higher than minimum time, then the value associated to the event will be deducted.

7.5. Obligatory Time

ZKTime Enterprise allows to define up to two compulsory attendance time slots on this tab. Within these time slots the employee will have to be either on the office or out from office with an event which counts as work.

The obligatory time tab includes the following fields for its configuration:



For obligatory time settings we have the next fields:

- **Event to be updated:** Define the event caused when an employee is absent during the obligatory working time.
- **Set time limits for the first session/ second session:**
 - From: The beginning time for the compulsory attendance time slot. Any absence reported from this time will be considered as a breach of the obligatory time.
 - To: The termination time for the compulsory attendance time slot. Any absence reported between the time set in the 'From' field and this one will be considered as a breach of the obligatory time.
 - Copy theoretical values: Clicking on this button sets the session start and end time values as obligatory time slots.

The values set on the limits of the first and/ or second sessions on this tab should be comprehended within the time slots of their corresponding sessions. It will make no sense to establish an obligatory working time out of the employee's actual session times, like establishing an obligatory time from 8.00h to 14.00h if the theoretical entry time is 9.00h and the theoretical exit time is 14.00h.

8. Calendars

With the Calendars you will be able to establish the working days and public holidays along with all the events that might occur, such as holidays, sick leaves and so one.

8.1 Personal and public calendars

ZKTime Enterprise distinguishes between public and personal calendars. Public calendars are generated for all the company and will serve as template for the personal calendars. In some cases, one sole calendar might be needed, in other cases, several could be needed.

For example, a company with working centers in different locations will probably need a different public calendar allotted to each work center to account for the different public holidays of each location.

This way, each employee will have a public calendar according to its location and will use it as a template for its own personal template. The personal calendar will be updated with any changes made to the public calendar; such as out of the office working days, change on shifts, sick leaves, holidays or any other event.

Personal calendars only register alterations regarding the public calendar which uses as template. Any change made in a public calendar will be automatically updated to all the employees whom have it as a template, unless they have a different configuration in their personal calendars for the days involved in the modification.

8.2. Day type

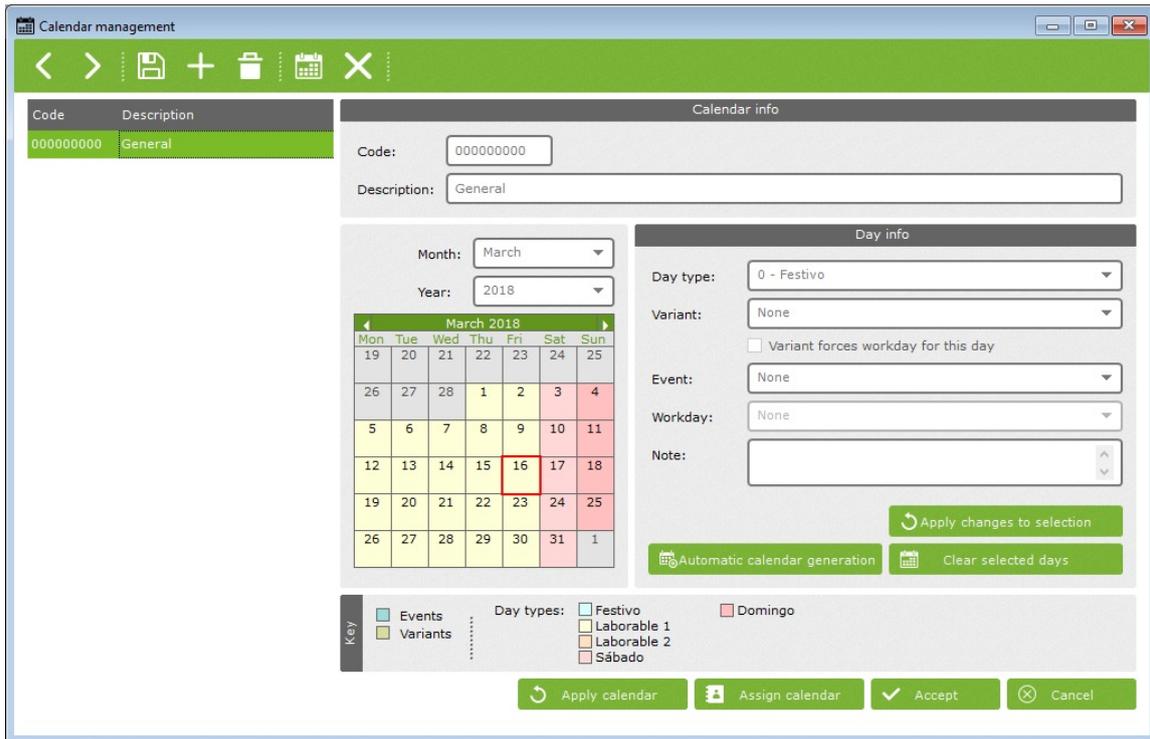
It is important to have clear the significance of 'day types'. They involve a unique code and description and there are three different types:

- **Working day:** In these days, reporting to work is considered a duty for employees. Any delay and whether they meet or not their work time will be reported. If anyone does not report to work on these days, the absence will be considered unjustified by default.
- **Remark:** In case of rotating shifts, if there is no punch during a working day, the software will justify the absence based on the first timetable established.
- **Holiday:** In these days employees do not have to work. In case they do, all the time spent working will be considered as overtime and no delays or absences will be considered.
- **Optional:** These days are a special case. If an employee has an entry punch it will be considered as a workday, otherwise as a holiday.

The day type option works as a tracker which will enable you to group different days with similar circumstances. For example, usually all holidays are the same for the company, therefore we will be able to group all the holidays under the day type holiday, coded '0'. We will be also able to discern between days like Mondays to Thursdays, which have split shifts, from Fridays which might be intensive workdays, grouping them in two different types of workdays, coded 1 and 2.

8.3. Calendar Management

This window will let you manage the different calendars of the company. You will be able to create, edit and delete as much calendars as needed. Furthermore, you will be able to assign the calendars to your employees.



When editing a calendar, ZKTime Enterprise will allow you to edit up to six parameters for each day:

- **Day type:** Every day of the year can be assigned with a different a 'day type'. Usually, the days with similar circumstances are grouped under the same 'day type'. For example, you could have all holidays assigned the day type coded '0', which is the one ZKTime Enterprise sets for holidays by default.
- **Variant:** In Section 7.1 we described the variant option, explaining that it could be enabled in the calendar to allow a different workday shift. Every day of the year may have allotted a time variant, coded from 0 to 9. Should you choose the variant coded as 0, the program will understand that you are selecting for that day the main shift and not any variant. In case a non-existing variant is chosen in the calendar, the program will deem that no variant at all has been selected.
 - Variant forces shift: This option is only available when we have a variant selected. If this option is enabled, the program will assign the selected variant for the day regardless if the option 'Always look for the best fitting variant' is selected in the employee's shift. If this option is not enabled, the program will consider the variant as the expected shift and will consider instead the selection of the 'Always look for the best fitting variant' option.
- **Event:** ZKTime Enterprise allows you to assign an event to one or more days, this way, if an employee does not report to work on a specific day, the program will justify the absence with it.
 - Workday timetable: This option allows to define an alternative workday schedule when an event occurs in the calendar and we don't want the program to justify the event upon the regular shift.
- **Comments:** This field is used to include brief notes on a day when necessary.

When editing a calendar, we have two options. Either edit the whole year with the 'automatic calendar generation' or, edit several days selecting them and following the example below.

The screenshot shows the 'Day info' configuration window. On the left is a calendar for March 2018. Days 19, 20, and 21 are highlighted in green. A red box highlights the configuration for day 16. On the right, the 'Day info' panel shows settings for '1 - Laborable 1', 'Variant: None', and 'Event: None'. Below the panel are buttons for 'Apply changes to selection' and 'Clear selected days'. Callouts point to the selected days in the calendar, the configuration panel, and the 'Clear selected days' button.

Days selected to edit

Edition zone

Unselect days previously selected

Apply the edited configuration on selected days

8.4. Automatic Calendar Generation

This option allows to define the patterns which the program will use to create the calendar every year, simplifying the entire process by automatically generating a calendar.

The screenshot shows the 'Generación automática de calendarios' window. It includes sections for:

- Tomar como referencia para generar los tipos de día:** Radio buttons for 'El primer: Lunes del año' and 'Una fecha: 04/01/2016'.
- Período de generación de calendario:** Radio buttons for 'Generar calendario para todo el año' and 'Generar calendario para el periodo: Fecha de inicio: Fecha de fin:'.
- Tipos de día:** A table with columns: Cant., Tipo de día, Variante, Forzar.
- Festivos:** A table with columns: Días festivos, Tipo de día.
- Variantes:** A table with columns: Fecha de inicio, Fecha de fin, Variante, Forzar.
- Incidencias:** A table with columns: Fecha de inicio, Fecha de fin, Incidencia, Aplicar incidencia.

 At the bottom right, there are 'Aceptar' and 'Deshacer' buttons.

The calendar will be generated following the pattern set on this window. You will create a sequence which will repeat all along the year, assigning the configuration fixed for each day. The program will take as a reference whatever you have chosen at the 'take as reference for assigning day types' so, the beginning of the sequence must match the selected day. By default, ZKTime Enterprise will suggest a week period which will start on the first Monday of the year, with five workdays, one day marked with the code '3', which stands for a Saturday and another day marked with the code '4', which stands for Sunday. It's important to note that if the year does not begin with the reference day selected, the sequence will also reproduce backwards until the beginning of the year.

Automatic calendar generation

Take as reference for assigning day types

The first: Monday of the year This date: 01/01/2018

Calendar's period generation

Generate calendar for all year Generate calendar for period: Date of beginning: Date of ending:

Quan.	Day type	Variant	Force
5	1-Labornal	None	Force variant
1	3-Sábado	None	Force variant
1	4-Domingo	None	Force variant

Holidays

Holiday dates	Day type
None	None

Variants

Start date	End date	Variant	Force variant
None	None	None	Force variant

Events

Start date	End date	Event	Apply event
None	None	None	All days

Annotations:

- The type of day selected
- Total number of consecutive days of its kind to be introduced
- Assigned time variant
- If the employee's base time will have the option to consider or not: Always look for the best fitting variant

- **Holidays:** To fix holidays. One remark: ZKTime Enterprise only works with immovable holidays, not with those like the Easter holidays, which vary dates and need to be calculated every year.
- **Variants:** To establish a shift variant which will always spread over a fixed range of dates with the usual variant configuration options. At some periods of the year shifts might change, for example, during the summer some companies apply a different workday schedule from the rest of the year.
- **Events:** To create a calendar including events that affect all the company, such as summer shut down, reform/transformation closures, end of the season and others; specifying if it will affect to all the days or just to workdays within the defined range.

8.5. Apply and assign calendar

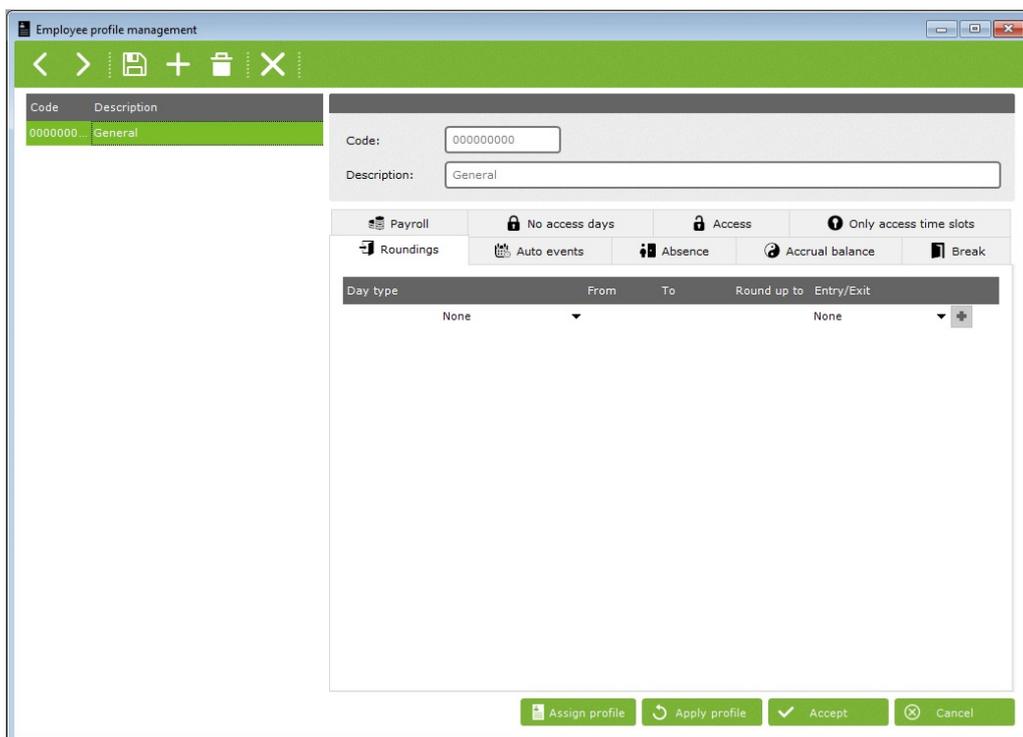
Once all the public calendars are created, they can be assigned to employees. We must select between two options:

- **Assign calendar:** When assigning a public calendar to an employee we are changing the template used for its personal calendar. All existing values in the employee's personal calendar will be maintained.

- **Apply calendar:** When applying a public calendar to an employee we are deleting all changes made on the personal calendar and we are assigning the new public calendar as template for the employee's personal calendar.

9. Profiles

Employee's profiles involve a range of configurations that can be assigned to each employee. We can define as much general and personal profiles as necessary and we can assign them to the employees.



9.1 Roundings

When we don't need to know the exact hour of a punch, we use this function. For example: we want all punches realized between 8.45h and 9.05h to be rounded to 9.00h which is the standard entry time. Consequently, all the times associated to punches made from 8.45h and 9.05h will be calculated as if the punch in fact had been made at 9.00h.

Each rounding has next options:

- **Day type:** To decide to which type of day the rounding will be applied.
- **From:** Earliest time limit for rounding.
- **To:** Latest time limit for rounding.
- **Rounding up to:** Time to which the rounding will be made within the earliest and latest time limits.
- **Entry/Exit:** To define which punch will be rounded, the entry or the exit punch.

9.2. Automatic Events.

At certain hours all punches can be considered together with an event because the terminal in use lacks a keypad and does not allow to choose an event or, because by default, at certain times, everyone punches

for the same specific reason. For example, we can set that all exit punches between 13:00h and 14:00h should be considered as a lunch event.

In any case, if an employee punches an event in the space of time defined for an automatic event, the former will have preference over the automatic event.

The options allowed are:

- **Day type:** To decide to which type of day you want the automatic event to be applied.
- **From:** Earliest time limit for the automatic event.
- **To:** Latest time limit for the automatic event.
- **Event:** The event that we want to assign
- **Entry/Exit:** To define if the automatic event will be applied to the entry or exit punches.

9.3 Absence

By default, ZKTime Enterprise will associate the 'S004' system event, 'unjustified absence' to every workday in which an employee has not any active punch or extensible event or calendar events. To avoid this, we can decide for the program to mark the absence as one of the events of own creation. For example, if a group of employees can have their overtime rewarded with days off.

9.4. Accrual balance

We can set limits on the accruals being these limits on the total amount of time, on the number of times or both cases. We can define next options.

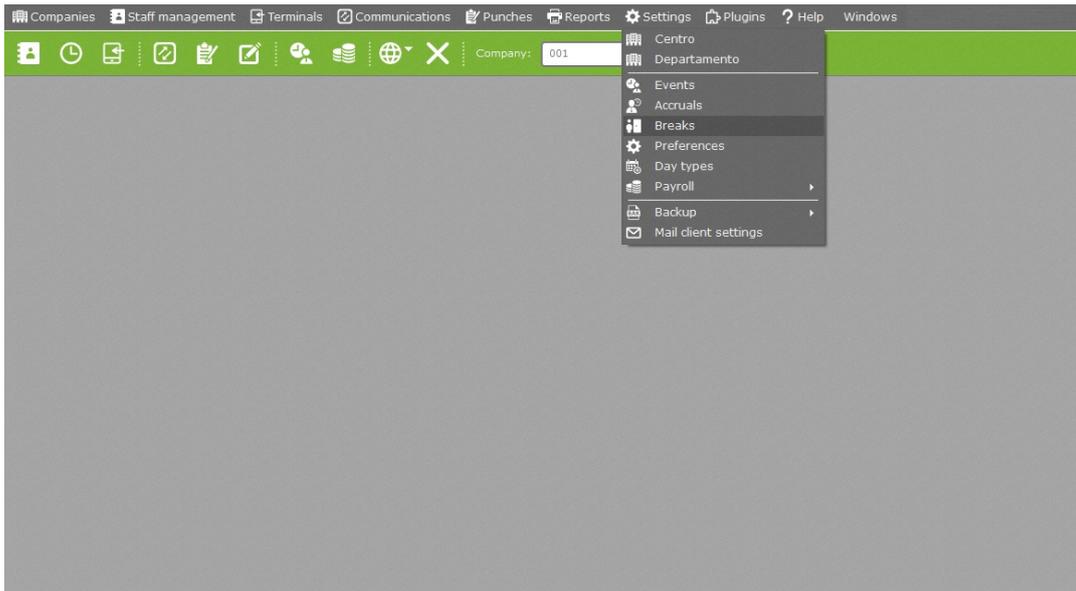
- **Accrual:** Is the accrual we want to control.
- **Times allowed:** Fixes the maximum number of times that the accrual can be updated within permitted time. To avoid controlling the number of times it is updated, leave it in blank.
- **Amount of time:** Fixes the maximum amount of time that you will allow for an accrual to accumulate within a specified time. If you do not want to control the total amount of time accumulated, leave it in blank.
- **Time:** Fixes the time in which you will control the accrual balance (weekly, monthly or annually). Once the period comes to the end, the balance turns back to the initial value.

9.5. Breaks

These are automatic entry and exit punches set for breaks to be deducted from the workday schedule. By using this option, we can program a break which will make the program automatically assume that the employee has punched for such break. For example, if the company make available a kitchen in the company's premises for employees' lunch, and establishes a lunch time from 13:00h to 14:00h, regardless if the employee punches out/in for the lunch, the program can automatically assume it. However, if an employee is reported to have an exit punch and has not returned by the time of the beginning of the break, it will not have any effect.

We have next options:

- **Day type:** Fixes the type of day to which to apply the event
- **Break:** To define the break you want to apply. You can define through *Menu -> Settings-> Breaks* (check picture next page)

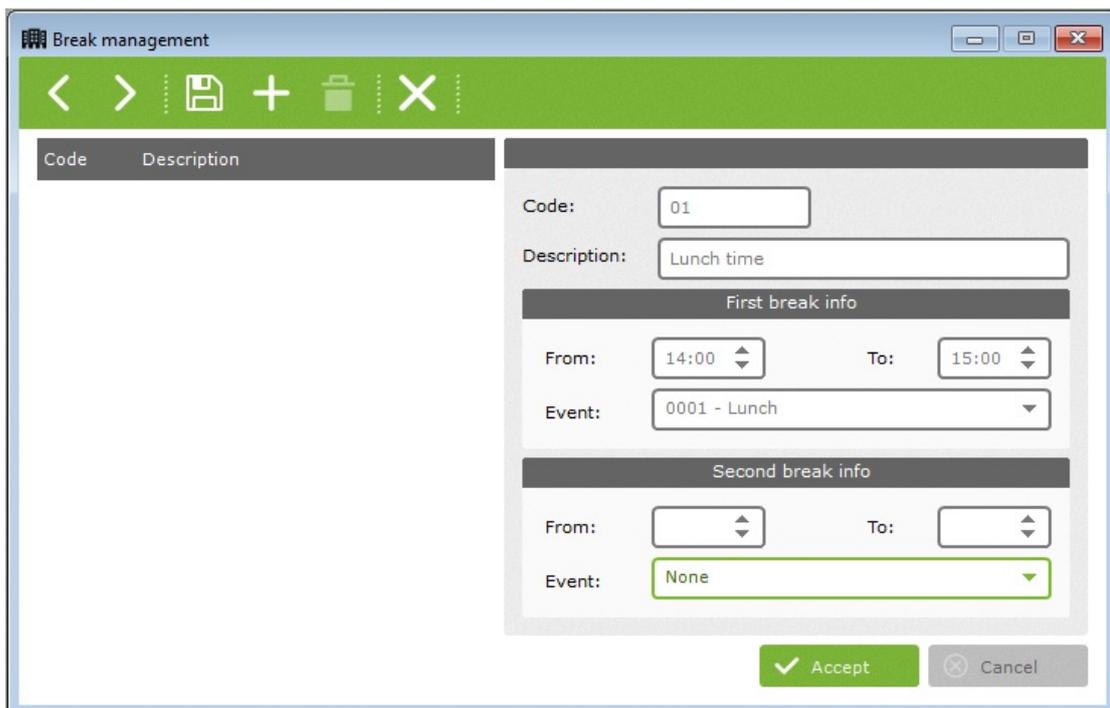


9.5.1 Break management

To define up to two breaks that will assign to the profiles. We find the following options to edit each break:

- From: Is the start time of the break. If the break is applied, exit punches will match with the time set here.
- To: Is the end time of the break. If the break is applied, entry punches will match the time set here.
- Event: The event applied to the exit punch created by the break.

Even there is the possibility to edit two different breaks, we can choose establishing only first break and leave second one in blank.



9.6. Payroll

This one is a special option, as it's related to both profiles and workdays timetables and depends on the configuration of both. Broadly, a payroll is a way of dividing the work time into different cost concepts such as: standard hours, extra hours, night hours and others.

We will begin by explaining all the options offered on the profiles and workday timetable tabs. Later we will move on to explain in further detail how do payrolls work. You can define different payrolls which will divide the worked hours into different cost concepts. First option you find in this tab is for two payroll assignment methods:

- **Employee and day type:** By choosing this option payroll will be assigned always to each employee upon their personal settings and personal calendar.
- **Workday and day type:** By choosing this option payroll will be assigned always to each employee upon their actual working hours and personal calendar.

Should you choose the 'time slots and day type' option the choices you can see on the picture below will be disabled, as it won't have any effect and, from now on, the payroll assignment will be based on what was defined upon the employee's time slots schedule.

Code	Description
0001	Payroll 1

Line info

Code: Description:

Calculate payroll based on total hours Calculate payroll based on time slots

Apply roundings

From	To	Item	Prize type	Price
00:00	23:59	None	Manual	0

Accept Cancel

Both options work in the same way. You can find two options to assign payroll lines:

- **Payroll:** Represents the payroll line that we want to follow.
- **Day type:** Fixes the type of day to which the payroll will be applied.

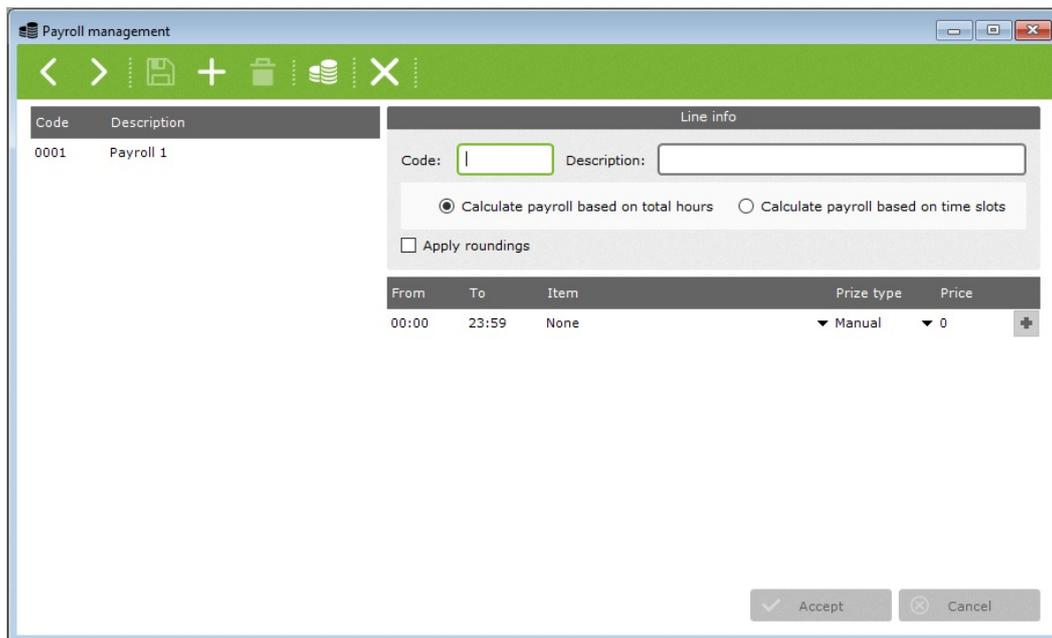
Payroll assignment mode

Employee and day type
 Workday and day type

Define payroll compensation

9.6.1 Payroll items

Payroll items are units of 'hour organization'. You can edit the settings on the payroll management menu from main menu.



The screenshot shows the 'Payroll management' window. On the left, there is a table with the following content:

Code	Description
0001	Payroll 1

On the right, the 'Line info' panel is open, showing the following details:

- Code:
- Description:
- Calculate payroll based on total hours Calculate payroll based on time slots
- Apply roundings

Below this, there is a table with the following content:

From	To	Item	Prize type	Price
00:00	23:59	None	Manual	0

At the bottom right, there are 'Accept' and 'Cancel' buttons.

Options available are:

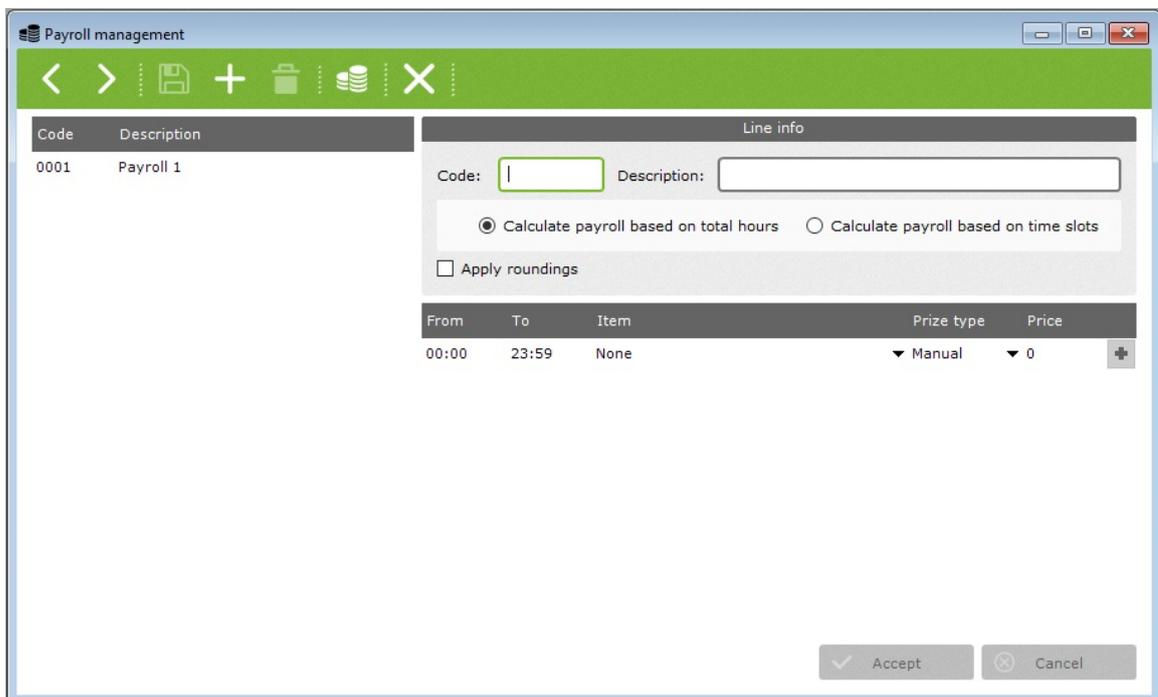
- **Minimum time:** To set the minimum time slot that must be reached to consider an item. For example, if we create the payroll item 'extra hour' and fix a minimum time slot of 30 minutes for it, in case the employee at the end of the day adds up to 29 minutes or less on this item, the time will be cast-off, and the program will calculate 0 minutes for that item. If you do not want to establish a minimum time slot you just have to leave the option unmarked.
- **Roundings:** The time involved on this payroll item can be calculated in two ways.
 - **Calculate payroll based on total hours:** In this case the program will calculate the real time involved on the corresponding payroll item.
 - **Calculate payroll based on time slots:** In this case the program will round the time involved on the corresponding payroll item according to the following options:
 - Round down: The rest resulting from the division between the time assigned to the item and the one defined on the 'time' field is discarded.
 - Round up: Will add up the necessary time to achieve that a rest resulting from the division between the time assigned to the item and the one defined on the 'time' field until the difference is '0'. For example, if rounding up is set every 30 minutes and an employee has

45 minutes worked under that payroll item, the program will automatically add the remaining 15 minutes until reaching 60 minutes.

- Round according to value: The rest resulting from the division between the time assigned to the item and the one defined on the 'time' field is different to '0', if this value is higher than the time set on the field 'value' and will be rounded down if it is lower.

9.6.2 Payroll lines

Payroll lines are one or more payroll items which will divide the workday time into different payroll items. From the main menu we access to payroll settings window.



To define each payroll line, we have next options:

- **Calculation method**: There are two ways to calculate a payroll, based on total hours or time slots. The first is based on the number of hours worked, for example, the first 8 hours could be standard, from 8h to 10h they might be considered extra hours and from 10h they are considered double extra hours. In the second case, the payroll will depend on the time slot in which employee is working, all hours between 9h and 18h
- **Apply rounding**: If this option is enabled, the rounding set for each payroll item will be applied, otherwise it will not.
- **Item**: The last option is a list with 5 columns which will help you to set each payroll item and how it will work.
 - From\To: These two fields set the earliest and latest limits of each item; depending of the calculation method the values will represent a total amount of hours or a time slot.
 - Item: This field will enunciate the payroll item that you want to associate with a specific time slot or number of hours.

- Price type: Here you can set the price for each hour. You will be able to choose one of 5 types assigned to each employee, a percentage of those or introduce a price manually.
- Price: The content of this field depends on previous selection of the 'price type'. If you chose to introduce the price manually, you will have to introduce the price per hour in euros. If you chose to use percentages, you will have to introduce the percentage value of the hourly cost.

The program will let us establish as many payroll items as we needed within the same payroll line. There are only two limitations regardless of the calculation method. The first, time slots can range only from 00:00 to 23:59 and secondly, and second, there cannot be any empty time slots you from 00:00 to 23:59.

The program will make sure that above constraints are applied. If just one payroll cost item is defined, 'From' field is forced to be set at 0:00 and the 'To' one at 23:59. If the payroll has several items and one is deleted, the program will extend the beginning of the next item until the beginning time of the one deleted.

9.6.3 Payroll compensation

There is an option on the payroll tab, within the profile management window, which we have avoided explaining so far: defining payroll compensation.

The screenshot shows a configuration window for payroll compensation. At the top, there are two radio buttons: 'Empleado y tipo de día' (selected) and 'Horario y tipo de día'. Below this is a green button labeled 'Definir compensación de costes'. At the bottom, there is a table with two columns: 'Tipo de día' and 'Coste'.

ZKTime Enterprise includes the payroll compensation option. This option considers, on one side, the duty time which, must achieve a minimum value and the extra hours, which are accounted for once the duty time has reached such minimum level.

To set the payroll compensation we have the following options:

- **Compensate:** Sets the period where to apply the compensation, daily, weekly, monthly or yearly. If payroll compensation is not necessary, select the option 'never'.
- **Duty time should be:** We need to define a minimum duty time to set payroll compensation. In case such minimum is not reached the compensation is applied. There are two options to define the duty time, first, to introduce manually the total number of hours, regardless of the employees' shift and calendar, or ZKTime Enterprise will establish within each period the minimum duty time based on the employee's time slots and calendar.
- **Payroll items counted as duty time:** Duty time does not necessarily have just one payroll item. For example, we may have defined two types: daily hours and night hours which have to sum a total of 40 hours per week before considering any type of overtime. We can set as many different types as wanted.
- **Compensation Table:** Defines how to compensate payrolls.
 - Compensate item time with: Sets the item which will account for the offset time.
 - Time from item: Sets the item from which the time will be withdrawn until its value matches the established duty time.
 - Minimum time: Sets the minimum amount of time that must remain on the field 'time from item' after the compensation. If this minimum time is not reached that time will be discarded from the item involved.

10. Staff

10.1. Data

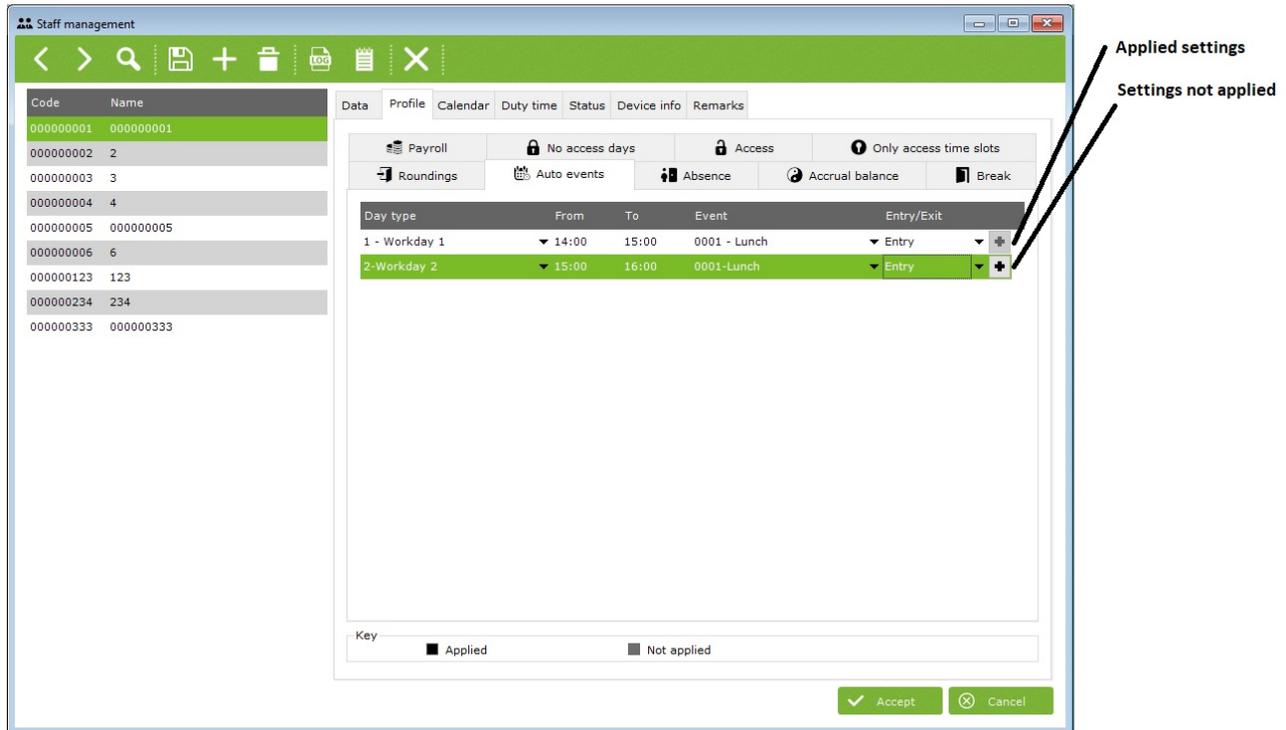
Staff management handles the personal details and other data related with employees which affects to the configuration of the program:

- **Calendar:** Sets the public calendar which is the base to define the employee's personal calendar.
- **Duty time:** Sets the workday of any employee which can have up to 9 variants.
- **Profile:** Sets the public profile which is the base to define the employee's personal settings.
- **Department / Center:** These fields enable to group employees according to their position in the company.
- **Employee in charge:** Sets a hierarchical responsible for an employee.

The screenshot displays the 'Staff management' application window. On the left, there is a table listing employee records with columns for 'Code' and 'Name'. The main area is a form titled 'Employee data' with various input fields and dropdown menus. The form includes sections for personal information (Name, Last name, Doc. Number, Date of birth, Address, Zip code, Province, Town, Phone, Cell phone, E-Mail), organizational details (Calendar, Profile, Workday, Rate 1-5, Departamento, Centro), and a field for 'Employee in charge'. Action buttons like 'Create user', 'Change photo', 'Delete photo', 'Send mail', 'Accept', and 'Cancel' are also visible.

10.2. Profile

Public profile settings will be automatically applied by default, although they can be edited, created and/or deleted from this tab. Any configuration not in use will be gray colored while the ones in use will appear with the usual black color font. Go to section 9 for detailed explanation on settings.



10.3. Calendar

Shows the personal calendar of an employee. By default, it is the template of the public calendar assigned to the employee which, will keep modifications applied to the employee.

All options here included are same than those explained in detail in section 8. 'Calendar Management'

10.4. Duty time

The duty time is an estimation of that an employee should work based on its calendar. Information shown is for illustrative purposes only. For example, in the cases where there are optional days on the calendar, or in the case of rotating work shifts or variants, it is not possible to calculate this data accurately until all punches are collected and the closing is made.

10.5. Status

To set the employee's entry and leaving date in the company. By default, it coincides with the date in which the employee's profile is created. This field is editable. An employee can have several entry/leave dates, as it occurs with seasonal workers.

10.6. Terminal

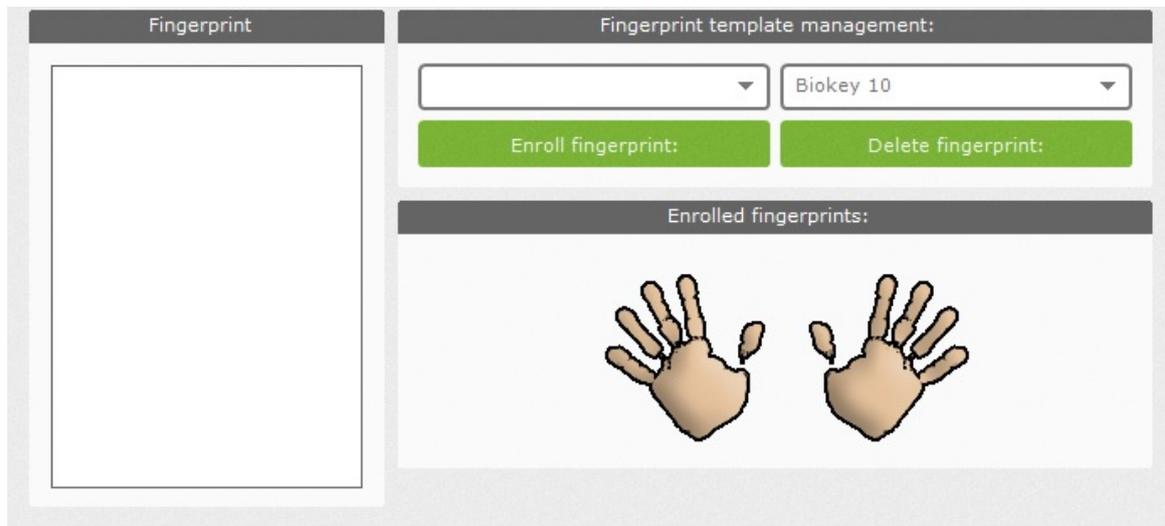
To set the data that will be later be uploaded to the terminal:

- **Alias:** Is the name that will display the terminal when the employee's punches. Maximum length is 8 characters.
- **Password:** Is the password which the employee will use to identify himself in the terminal.
- **Privileges:** Defines the level of user privileges held by an employee in the terminal.
- **Delete template:** Used to remove template from database and synchronize removal from the terminal next time data is send to the terminal.

- **Fingerprint Management:** This point will be explained in detail in next section 10.6.1.

10.6.1 Fingerprint Management

This option is used to collect users' fingerprints through a USB fingerprint reader and enroll them into the software. ZKTime Enterprise has a storage capacity of up to 10 fingerprint templates for each user and we can send them to each terminal from the software. In option 'registered fingerprint' fingerprints already stored in the data base appear red-colored.



10.7. Importing employees

We can import employees in our system from a file generated manually or through a third-party application IF UTF-8 encoded.

10.7.1 Entry File Format

The file must be CSV format. CSV file format (Comma Separated Values) stores tabular data, any number of records (numbers and text) in plain text form, separating the information by line breaks and commas (in locations where the comma is used as a decimal separator, semicolon, TAB, or other characters are used instead). Fields with embedded commas, line breaks or quotes must be enclosed within double-quote characters.

10.7.2 Column titles

The columns titles must match following in order to assure successful data import:

- **Codigo (Code):** This is the code that the employee will have in the system. It must be unique.
- **Nombre (Name),** Apellidos (Last Name), Direccion (Address), Poblacion (City), CP (Zip), Provincia (State), Telefono (Phone), Movil (Mobile), NIF (ID), Mail (Email), FechaNacimiento (BirthDate), Foto (Photo): These are the personal details of the employee.
- **Tarjeta (Card):** Card number used by the employee in the company, if available or assigned.
- **Alias (Alias):** The name which is displayed when the employee punches on the terminals.
- **Privilegios (Privileges):** Employee's user privileges on the terminal.
- **Activo (Status):** This field specifies if the employee is currently working in the company or has left.

- **IdPerfil (Profile)**, IdCalendario (Calendar), IdHorario (Time slots), IdResponsable (Employee in charge), IdUbicacion (Location), IdCentro (Center): These fields correspond to the ID of the different profiles, time slots, centers ... assigned to the employee.
- **Coste 1, 2, 3, 4, 5 (Payroll)**: These are the different payrolls assigned to an employee.

NOTE:

- The program is not sensitive to uppercase/ lowercase. This means that you can write the column title in the CSV file as 'code' or 'CODE', the program will read it either way as Code.
- All dates must be written in next format: "yyyyMMdd".
- All names of columns are written without written accent. For example, if the column name is 'Codigo' is written with its written accent 'Código' the system will not recognize the column and the corresponding data will not be imported.

10.7.3 Column order

There is no obligation to keep a specific column order. For example, it makes no difference to receive a file with column order like 'Codigo;Nombre;Direccion;' or to receive other with next column order 'Direccion; Nombre; Codigo' , as the system will upload them automatically from the database.

10.7.4 Required columns

The minimum required columns to import the employee's data are 'CODIGO (Code)' and 'NOMBRE (Name)'. The rest of the columns are not mandatory since during this process a pop-up window will appear to autocomplete the required fields to keep the integrity of the database.

10.7.5 Duplicated data

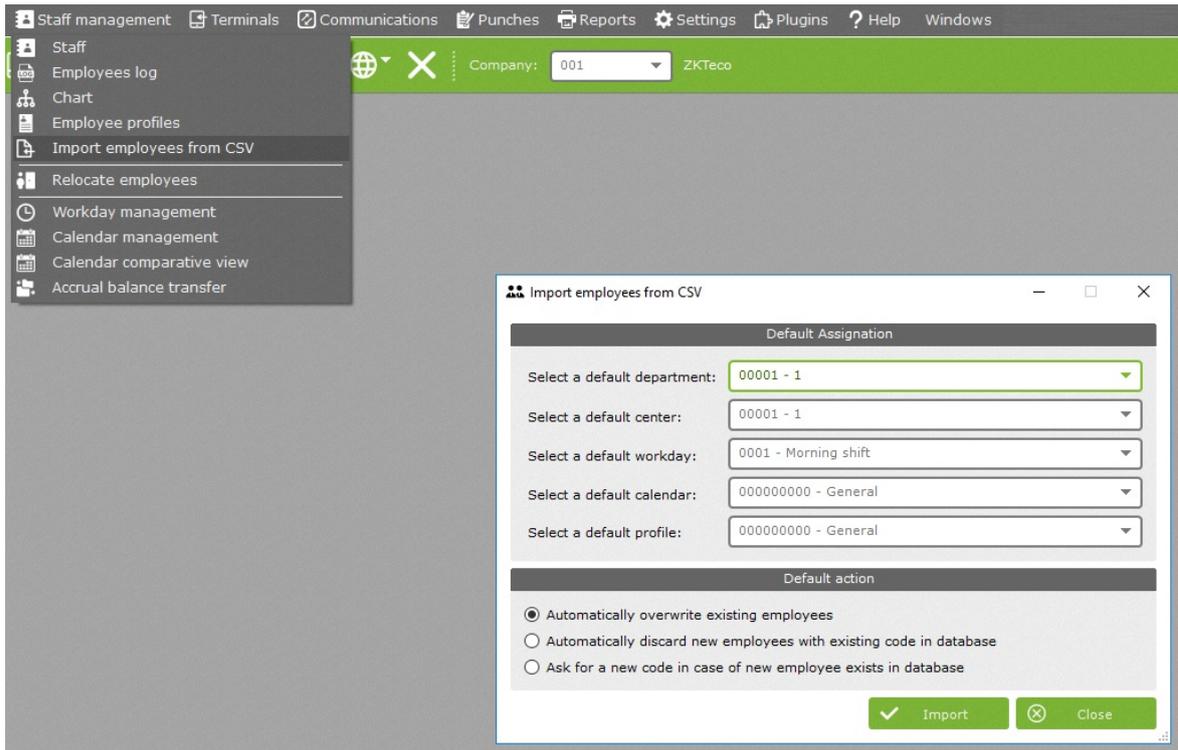
The program will not let you introduce duplicated information for data 'CODIGO (code)' and 'TARJETA (card)' columns. If the program detects duplicated information it will launch a pop-up window (example below), to show you a list of fields that need to be modified in the file to complete a successful data importation.

You can see below an example of a correctly generated database which will be successfully imported into the system, provided that the 'CODIGO (code)' and 'TARJETA (card)' values do not already exist in the system:

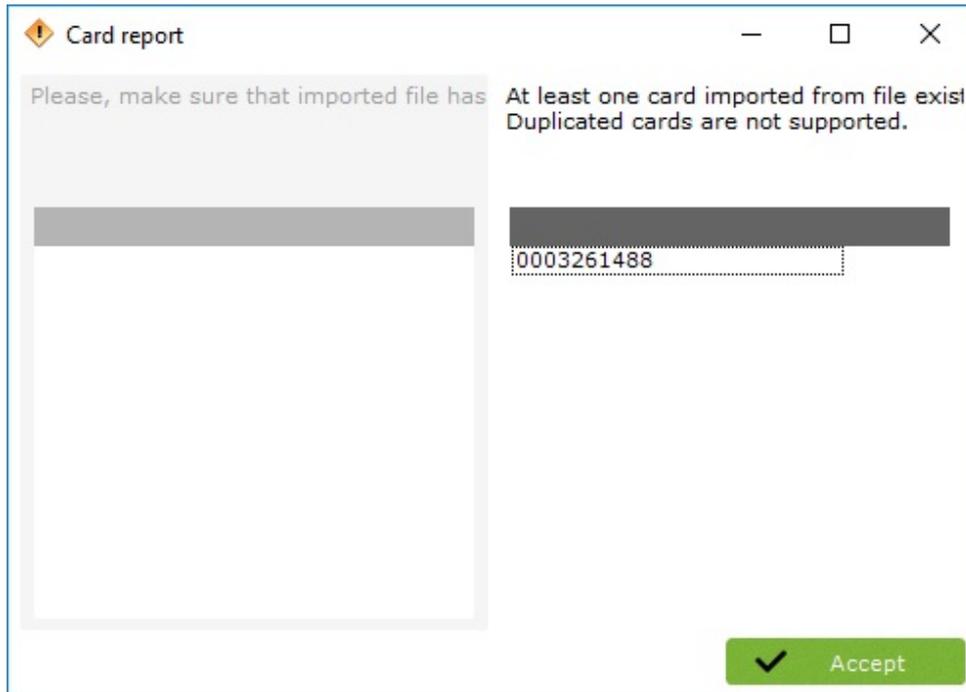
```
Codigo; TARJETA, nombre, apellidos, Direccion  
00 001, 060; Robert; Longbow; Old St  
00 003, 070, Woodrow, Wilson, Wigmore St
```

10.7.6 Employee Import Process

If the file including employee's data is available on required file format, we can upload all the information into the system. Inside the staff management tab, you will find the 'import employees from CSV' option, click on it to start importation. The window below will pop up and you will be able to choose default values for some fields required for keeping the integrity and functionality of the database. These will be used in case the column does not exist in the database or contains invalid information.



Set 'default actions', and click the import button, a folder selection window will appear and click to open. Select the relevant file and the system will automatically proceed to upload. A dialogue box will appear to inform on the result of the process.

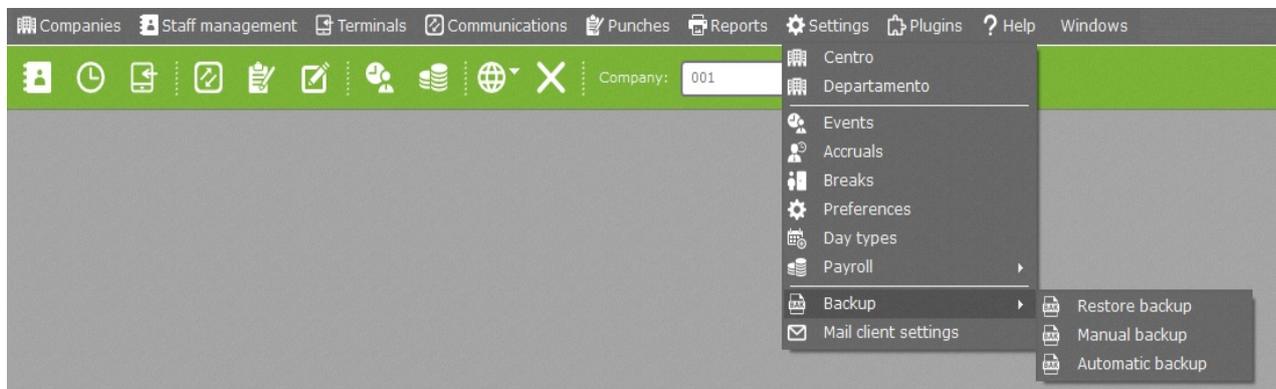


11. Backups

Backup copies create files which contain the application data to export or, save in a secure storage system, to use later in case the information collected in the system is lost.

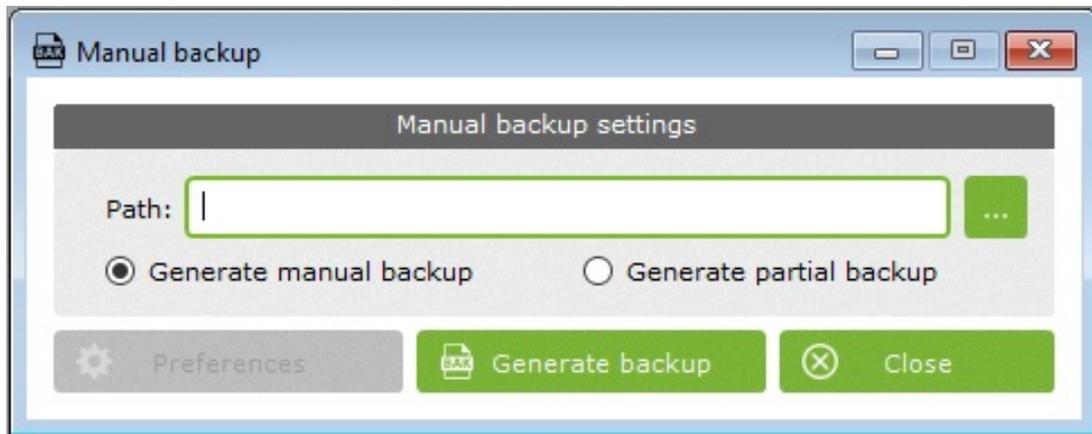
To make a backup copy, go to main menu and on the drop-down menu click on 'settings' click 'backup' and choose one of the following options:

- Restore Backup
- Manual Backup.
- Automatic Backup



11.1. Manual Backup

Next window will pop up to give you the option to select a path to store the file and the possibility of choosing between full or partial backup

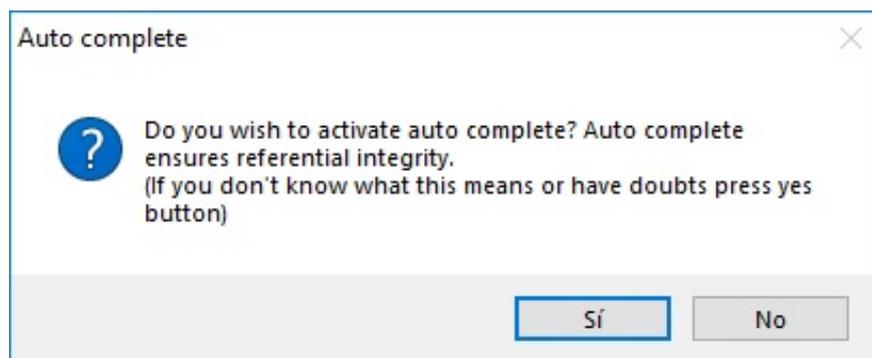


11.1.1 Full backup

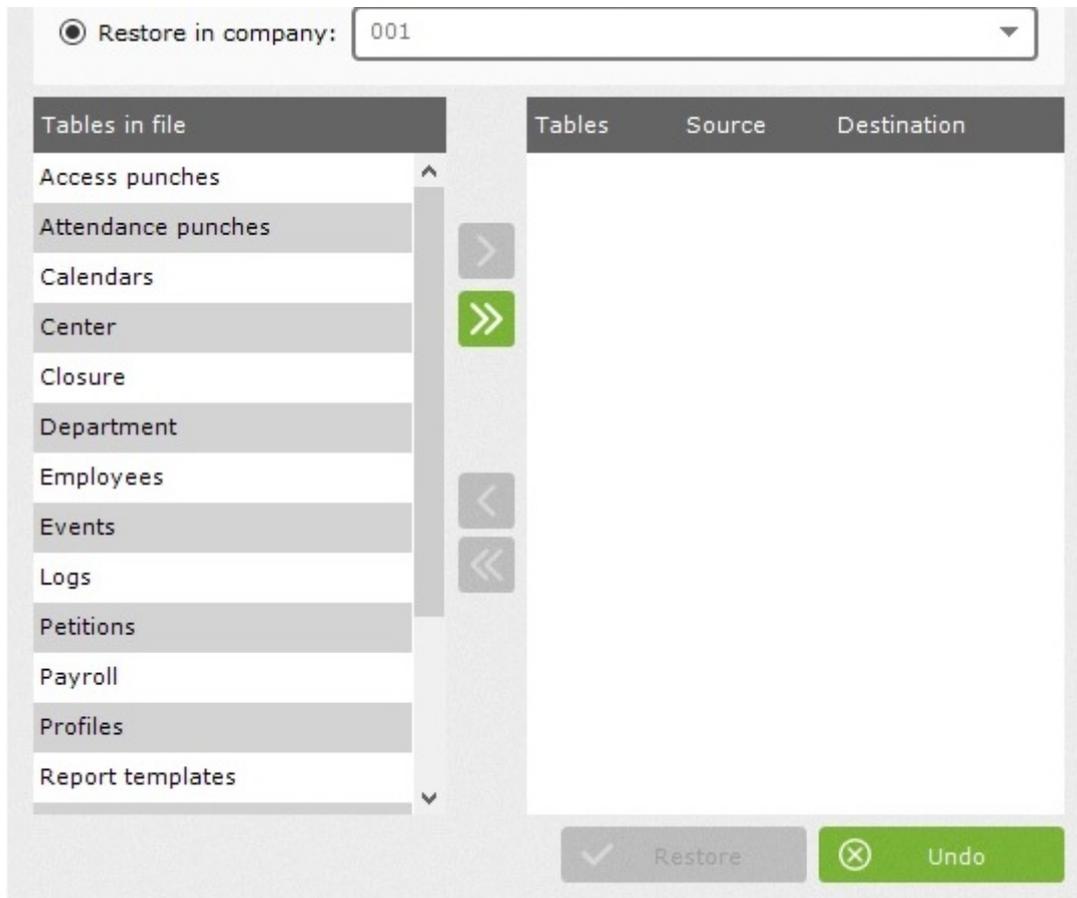
The manual backup makes a complete copy of the database, including all system users and all existing companies.

11.1.2 Partial Backup

If partial backup is selected, the preferences button will be enabled. By clicking on it, a new window will appear requesting if you wish or not to activate the autocomplete option. This option ensures the referential integrity of the databases uploaded.



The notion of referential integrity refers to the assurance that each record will always be related to other valid records from the database. Meaning that these records will always be accurate, without repetitions, lost information or relations returning incomplete data. For example, if you wish to save a backup of the employees table with the autocomplete option activated, together with the employees tables, the departments, center and time slots tables will also be included in the selection since they contain information which depend on the employees table. This way we assure that the information will be properly restored into the system in case necessary.



To add a table to the selection of tables for the backup, simply pick the company you want to back up, choose the tables and click on the 'Add button'. Your choice will automatically pass on to the right side showing its name and the company to which it belongs. If you want to add all tables at same time just click on the 'Add all button'.

If you want to delete a table procedure is same than above but with the 'Delete' and 'Delete all' buttons. This time keeping the referential integrity when deleting the employees table, will not delete the same tables which were added to the selection in first place but, only the profiles one. This is not due to a malfunction running of program but, although the employees table depends on some more tables these other tables not depend on employees. If you want to delete those tables, you will have to do it manually.

NOTE: When choosing the table 'System' in a company, we are specifying to the program to back up the data related to that company in order to restore it without the need of having created earlier on. For further information check section 11.1.5.

11.1.3 Generate backup

To begin backup process, click the 'Generate' button. The time that will take to generate backup file will depend on the size of the database and the computer running the program.

11.2 Automatic Backup Options

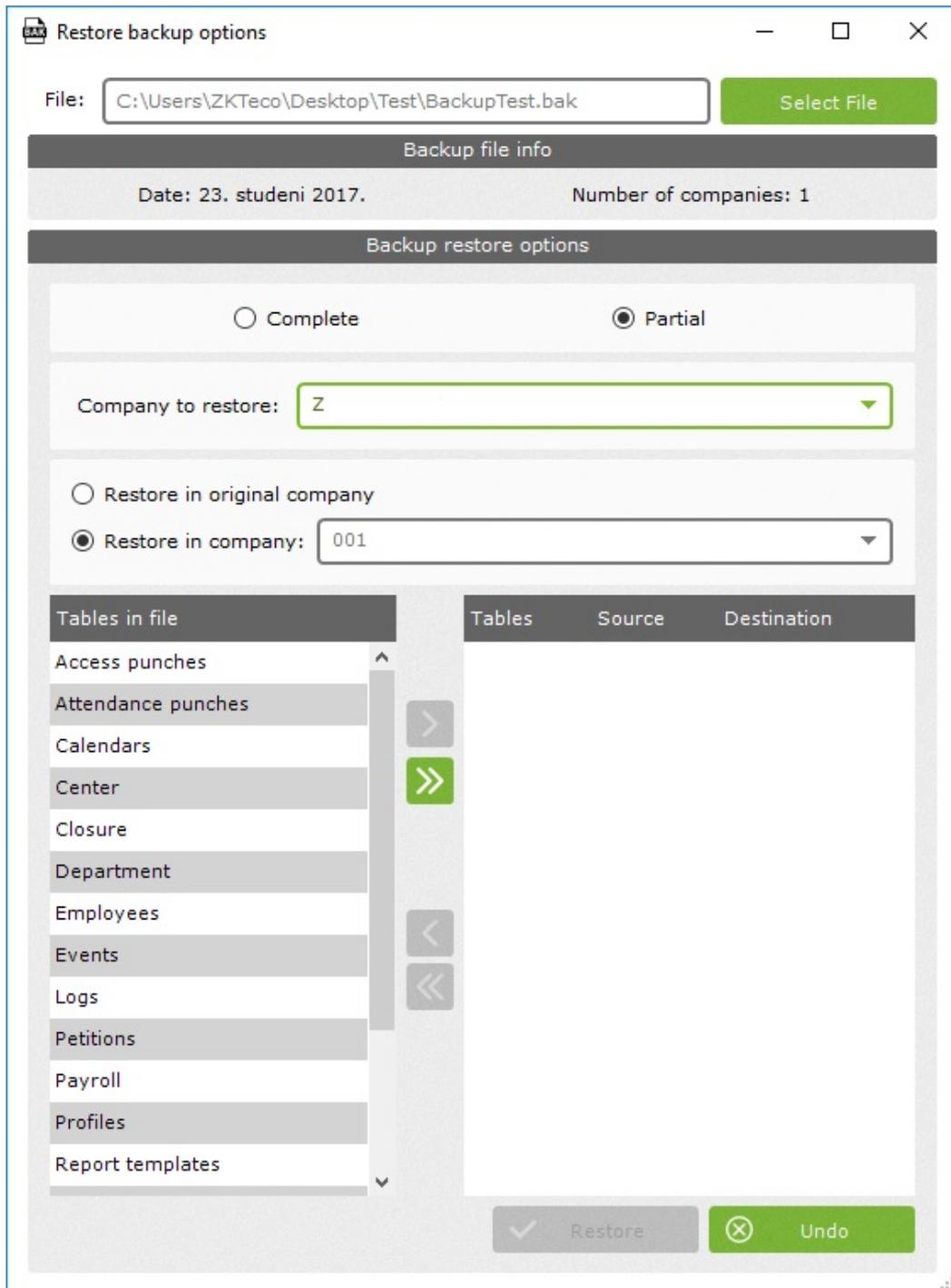
Window in next page show these options that allow the control backup process if need to be run automatically.

Options included are:

- **Backup generation options:** The 'Name' field will be used to identify the backup copy must be unique. The rest of available options were previously explained in section 12.1.
- **Backup automation options:** To choose the regularity the program must run automatic backups.
- **New:** By clicking on this button all fields will be erased and the window will get prepared for the introduction of a new automatic backup.
- **Delete:** This button deletes from the list the automatic backup selected.

11.2.1. Restore backup options

When selecting this option first thing to define is if referential integrity must be maintained or not (check at section 11.1.2.). Once selected if yes or not we will see next window:



We select the backup file to be restore and according to the type of copy of backup file it is, the options will be enabled. We can find two options:

- Complete restoration:** This option will be enabled if the backup copy selected is a complete copy of the system. When clicked in this option the remaining options are disabled and only can use option 'Restore'. It's important to bear this in mind, as all the data existing in the system will be totally replaced by the ones included in the backup file, including all system users and created companies.

- **Partial Restoration:** When clicked the remaining options are enabled. They are:
 - Company to restore: Listing all companies stores in the back up file.
 - Restore in original company: This option is only enabled if the database corresponding to such company are stored in the back up file. If the code of the company we are trying to restore is already in the system, we will see a pop up saying that code already exists in the database. We will have the option to overwrite it or to choose a new one to avoid overwriting the any company existing in the database.
 - Restore in company: Listing all existing companies to choose which we want to restore.

NOTE: Both if we select 'Company to Restore' or 'Restore in original Company' we are only choosing the company we want to restore. To select the specific data to be restore we need to select the tables from the list and add to the selection.

12. Reports

Reports are the tools to visualize all the attendance data collected and to work with them in a friendly use display. ZKTime Enterprise generates next types:

- Master reports.
- Punch reports.
- Payroll and time report
- Report of punch modifications
- Punches of the day

12.1. Master reports

This type of reports will display non-processed basic data. This report list employees filtered by department, center or the different payrolls registered in the system We have eight different subcategories:

- Employee report.
- Employee notes report
- Standard hour reports
- Workday report
- Calendar report
- Event reports
- Calendar events report
- Payroll report

12.1.1 Employee report

This report will display a relation of the employees stored in the system. They can be filtered by department, center, code, by creating a range of employees or through a combination of all the former. Beyond the basic employee information: Code, Name and Last name we can add up to 8 more columns including any personal data from the employees.

The screenshot shows a window titled "Master reports" with a green header bar containing navigation icons. Below the header, the "Report type" is set to "Employee report". The configuration fields are as follows:

- Title: Employee report
- From employee: All
- To employee: None
- Departamento: All
- Centro: All
- Employee status: All
- Order by: Code

There is a "Select custom columns" button and a "Report title" field at the bottom. At the bottom right, there are "Accept" and "Cancel" buttons.

12.1.2 Employee notes report

This report shows the notes associated to an employee. We can select according to our wishes the data to be displayed.

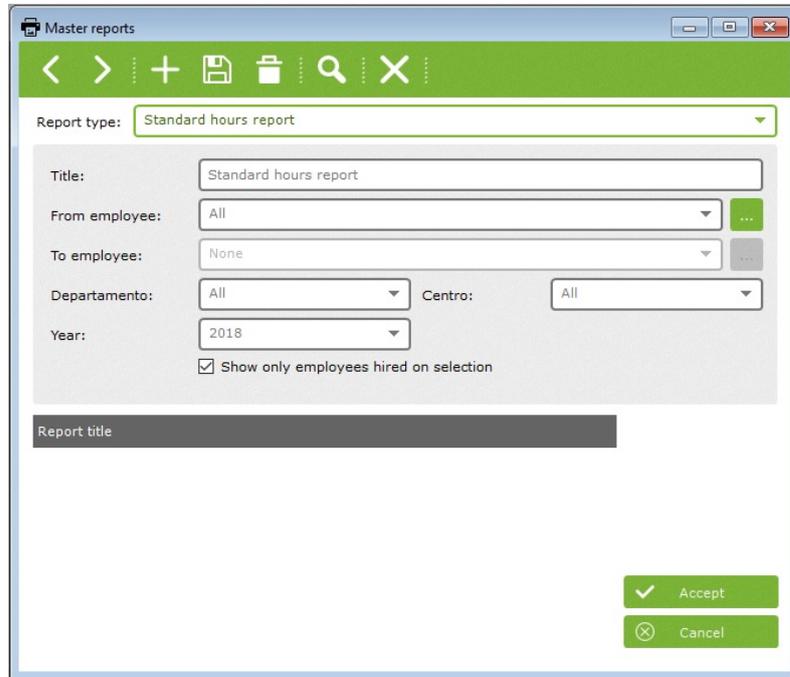
The screenshot shows a window titled "Master reports" with a green header bar containing navigation icons. Below the header, the "Report type" is set to "Employee notes report". The configuration fields are as follows:

- Title: Employee notes report
- From employee: All
- To employee: None
- Departamento: All
- Centro: All
- From date: 01/03/2018
- To date: 31/03/2018

There is a "Report title" field at the bottom. At the bottom right, there are "Accept" and "Cancel" buttons.

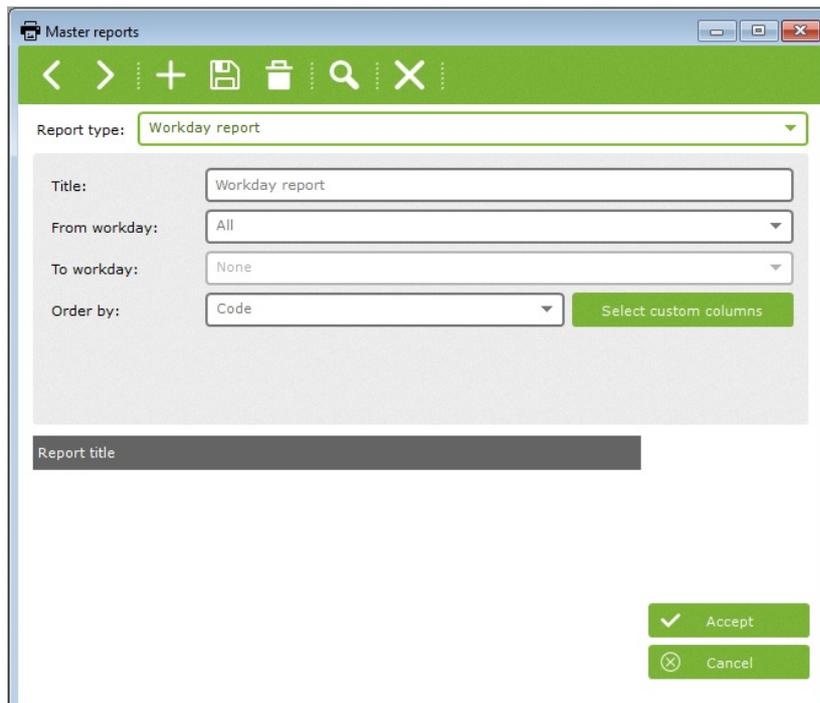
12.1.3 Standard hours report

This report displays an estimation of the hours which an employee should work, based on its workday schedule and its calendar. The data to be showed can be filtered as wished.



12.1.4 Workday report

This report displays a relation of the existing workday schedules. The information to be shown can be filtered.



12.1.5 Calendar report

This report displays a relation of the existing calendars. In this one you will be able to sort the calendars by year, type and range.

The screenshot shows a window titled "Master reports" with a green header bar containing navigation icons. Below the header, the "Report type:" dropdown is set to "Calendar report". The form includes the following fields:

- Title:** A text input field containing "Calendar report".
- From calendar:** A dropdown menu set to "All".
- To calendar:** A dropdown menu set to "None".
- Year:** A dropdown menu set to "2018".
- Calendar type:** A dropdown menu set to "Public".
- Annual view

Below the form is a "Report title" label and a dark grey input field. At the bottom right, there are two green buttons: "Accept" (with a checkmark icon) and "Cancel" (with an 'X' icon).

12.1.6 Event reports

This report will display the events stored in the system. We can filter by range.

The screenshot shows a window titled "Master reports" with a green header bar containing navigation icons. Below the header, the "Report type:" dropdown is set to "Event report". The form includes the following fields:

- Title:** A text input field containing "Event report".
- From event:** A dropdown menu set to "All".
- To event:** A dropdown menu set to "None".

Below the form is a "Report title" label and a dark grey input field. At the bottom right, there are two green buttons: "Accept" (with a checkmark icon) and "Cancel" (with an 'X' icon).

12.1.7 Calendar events report

This report will display a relation of the events from existing calendars.

The screenshot shows a software window titled "Master reports" with a green header bar containing navigation icons. Below the header, the "Report type" is set to "Calendar events report". The form includes several input fields: "Title" (Calendar events report), "From employee" (All), "To employee" (None), "Departamento" (All), "Centro" (All), "Event" (All), "Order by" (Code), "From date" (01/03/2018), and "To date" (31/03/2018). There is a "Report title" label above a dark grey bar. At the bottom right, there are "Accept" and "Cancel" buttons.

12.1.8 Payroll report

This report will display a relation of the existing payrolls stored in the system.

The screenshot shows a software window titled "Master reports" with a green header bar containing navigation icons. Below the header, the "Report type" is set to "Payroll report". The form includes several input fields: "Title" (Payroll report), "From payroll" (All), and "To payroll" (None). There is a "Report title" label above a dark grey bar. At the bottom right, there are "Accept" and "Cancel" buttons.

12.2. Punch Reports

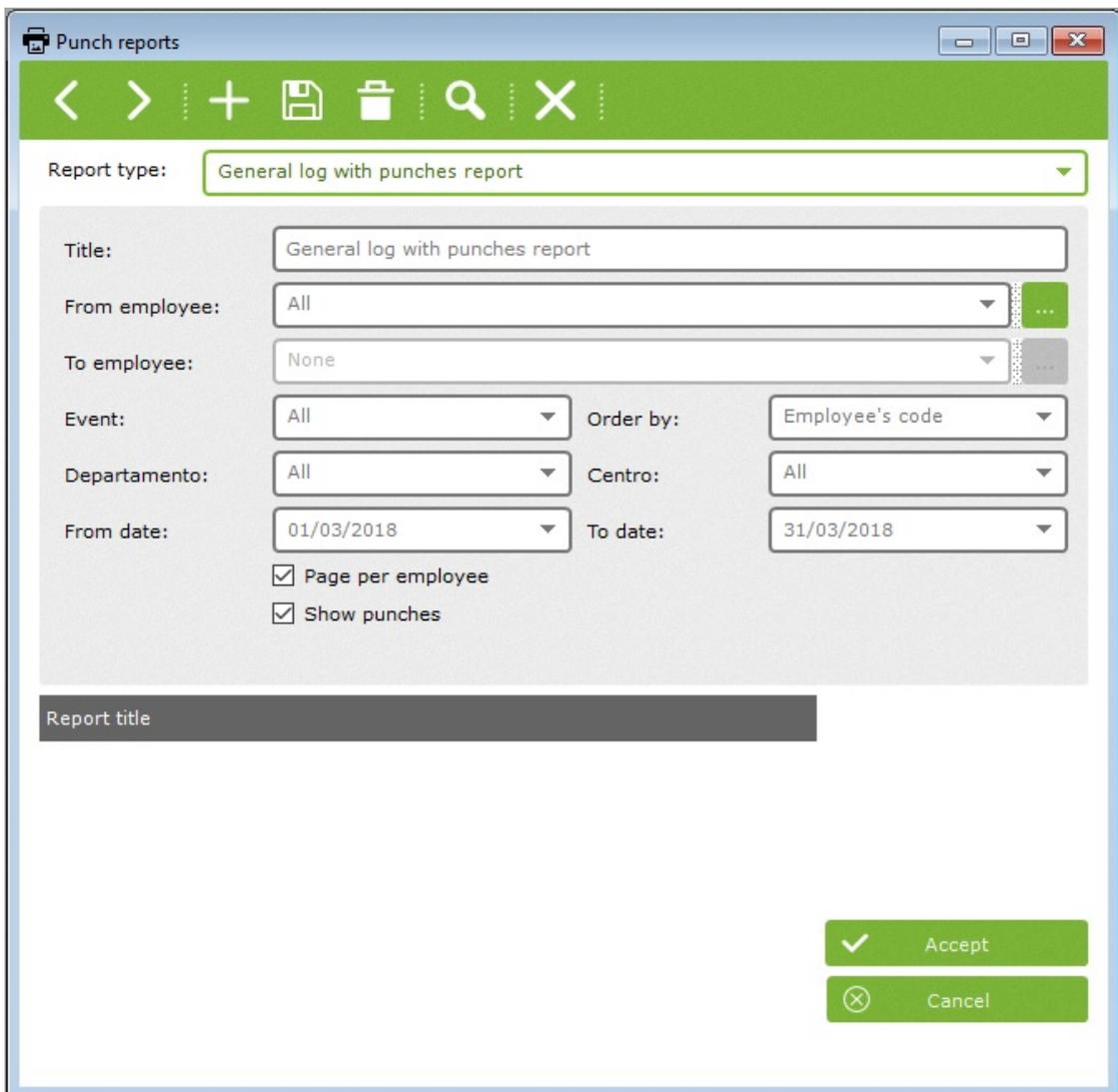
This type of reports displays different information in relation with the punches and we can find divided into 4 sub-categories:

- General log with punches report.
- Absenteeism report
- Access punches report
- Access report

12.2.1 General log with punches report

This report will display the relevant information broken down by day, within the selected dates and for the picked employees of all the accruals which have registered punches.

As you will be able to appreciate from the picture below, there are several options which will allow you to sort out and arrange the information in order to obtain a friendlier display.



12.2.2 Absenteeism report

This report will display a relation of days stating the employees' situation for each of those days. On the picture below you will be able to see a standard display, the one shown by default when you choose this type of report.

The screenshot shows a web browser window displaying an Absenteeism report. The report includes a header with filters and a table of data.

Filters:

- From: All
- From day: 01/03/2018
- Company: 001 - ZKTeco
- Departamento: All
- Centro: All
- To: None
- To day: 31/03/2018
- Issue date: 19/03/2018
- Issue time: 13:42:36

Table:

Accrual	Time	Times	Accrual	Time	Times
▶ 000000001 - 000000001					
▶ From: 01/03/2018 - To: 31/03/2018					
0001 - Accrual 1	02:45	0	S003 - Lack of workday	13:15	0

The screenshot shows the 'Punch reports' configuration window. The 'Report type' is set to 'Absenteeism report'. The configuration fields are as follows:

- Report type:** Absenteeism report
- Title:** Absenteeism report
- From employee:** All
- To employee:** None
- Departamento:** All
- Centro:** All
- From date:** 01/01/2018
- To date:** 31/03/2018
- Only employees with at least one absence
- Page per employee

At the bottom, the 'Report title' is confirmed as 'Absenteeism report'. There are 'Accept' and 'Cancel' buttons at the bottom right.

12.2.3 Access punches report

This report will display a list with all the punches made by the employees during the range of days previously selected. It will show to you the terminal involved and if the punch was denied or not. On the following picture you will be able to see an example of a report customized for all employees, from Feb. 1, 2012 to Feb. 29, 2012; from 00:00 hours to 23:59 hours; for all departments, centers, terminals end events.

From: All To: None
 Company: 001 - ZKTeco
 Departamento:
 Centro:

Date	Time	Event	Terminal	Denied
▶ 000000001 000000001				
16/03/2018	08:09:10	0000 - Work	001 - Terminal1	No
16/03/2018	08:09:27	0000 - Work	001 - Terminal1	No
16/03/2018	08:09:44	0000 - Work	001 - Terminal1	No
16/03/2018	08:11:37	0000 - Work	001 - Terminal1	No
16/03/2018	08:11:56	0000 - Work	001 - Terminal1	No
16/03/2018	08:12:29	0000 - Work	001 - Terminal1	No
16/03/2018	08:15:51	0000 - Work	001 - Terminal1	No
16/03/2018	08:17:47	0000 - Work	001 - Terminal1	No
16/03/2018	08:23:46	0000 - Work	001 - Terminal1	No
16/03/2018	08:25:49	0000 - Work	001 - Terminal1	No
16/03/2018	08:29:18	0000 - Work	001 - Terminal1	No
16/03/2018	08:31:05	0000 - Work	001 - Terminal1	No
16/03/2018	08:32:32	0000 - Work	001 - Terminal1	No
16/03/2018	08:32:48	0000 - Work	001 - Terminal1	No
16/03/2018	08:33:05	0000 - Work	001 - Terminal1	No
16/03/2018	08:33:23	0000 - Work	001 - Terminal1	No
16/03/2018	08:33:36	0000 - Work	001 - Terminal1	No

Punch reports

Report type: Access punches report

Title: Access punches report

From employee: All

To employee: None

From date: 01/03/2018 To date: 31/03/2018

From time: 00:00 To time: 23:59

Departamento: All Centro: All

Terminal: All Event: All

Order by: Order by employee

Report title

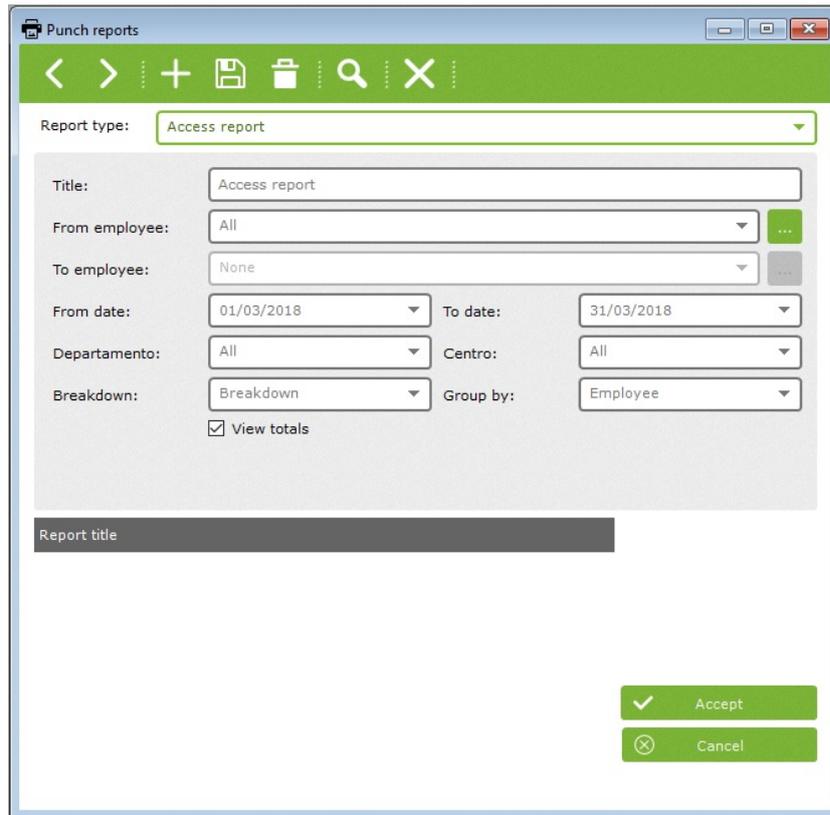
Accept

Cancel

12.2.4 Access report

This report will display the amount of punches made on the different terminals as well as the allowed and denied accesses. You will be able to sort out the information by employees, dates, departments, centers and possibly breakdown all that information by employee or terminal. The picture below shows a report with all the options selected.

<i>From:</i> All		<i>To:</i> None		
<i>Company:</i>	001 - ZKTeco			
<i>Departamento:</i>	All			
<i>Centro:</i>	All			
Date	Terminal	Granted	Denied	Total
▶ 000000001 000000001				
16/03/2018 <Fr>	Day punches	145	0	145
	001 - Terminal1	105	0	105
	002 - Terminal2	40	0	40
	Total punches	145	0	145
▶ 000000002 2				
16/03/2018 <Fr>	Day punches	162	0	162
	001 - Terminal1	100	0	100
	002 - Terminal2	62	0	62
	Total punches	162	0	162
▶ 000000003 3				
16/03/2018 <Fr>	Day punches	160	0	160
	001 - Terminal1	111	0	111
	002 - Terminal2	49	0	49
	Total punches	160	0	160
▶ 000000004 4				
16/03/2018 <Fr>	Day punches	168	0	168
	001 - Terminal1	118	0	118
	002 - Terminal2	50	0	50
	Total punches	168	0	168



12.3 Payroll and time report

This type of reports will display processed information related to workday schedules and payrolls. Within this type of reports there are 4 sub-categories:

- 12.3.1 Events and payroll with punches report
- 12.3.2 Accruals report
- 12.3.3 Expected workday and real workday report
- 12.3.4 Accrual balance overflow record

12.3.1 Events and payroll with punches report

Main utility of this report is to display workday schedules and payrolls broken down in a friendly and useful way. Reports of events or payroll can be shown separately and not necessarily at the same time.

This might be the most useful report. Also is the most customizable, you will be able to choose the columns to show and even define your own formulas. Furthermore, you will be able to define conditions for the information that, even complying with the already set filters, you do not want to display. For example, we have a configuration to show employees 4 to 16, but only want to see those who surpassed their lunchtime.

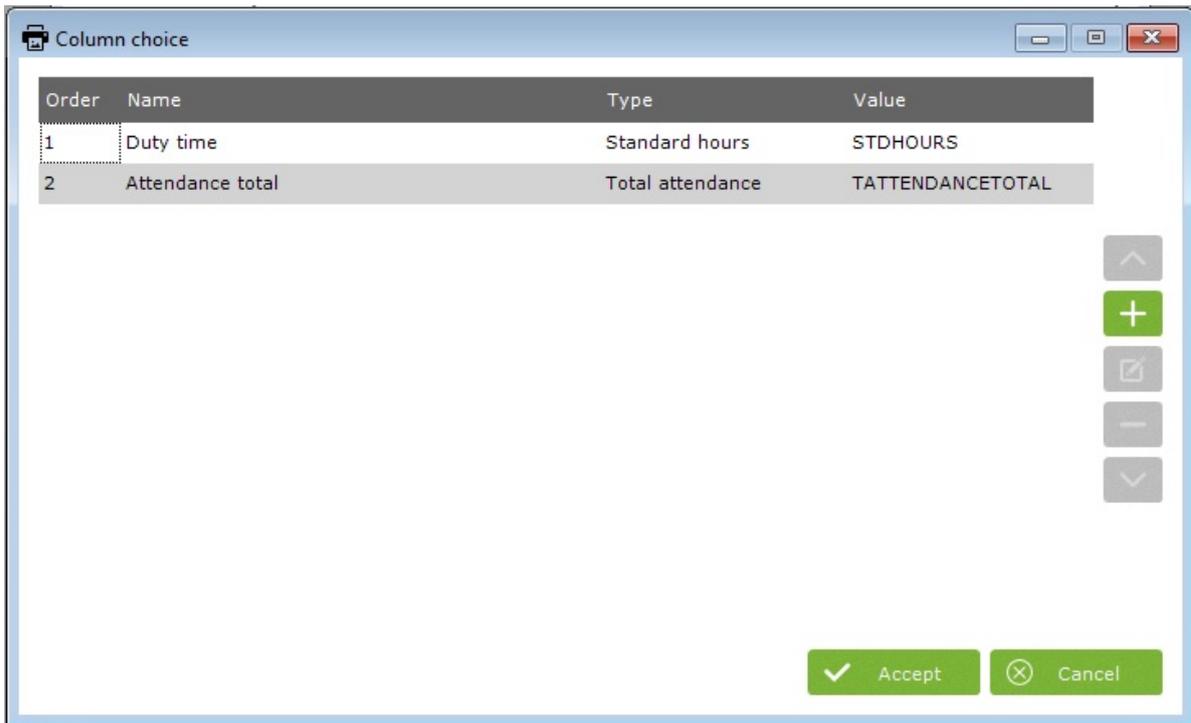
The picture below gives an example of the options available. We will explain one by one.

In order to do a basic filter of employees you can choose the range of employees you wish to display. This is possible from the menu options 'From employee' and 'To employee'. Likewise, you will be able to sort out the information by department and center. To continue customizing your report, you should choose the lapse of time from which you want the information on the report. This can be done from the 'From date' and 'To date' options.

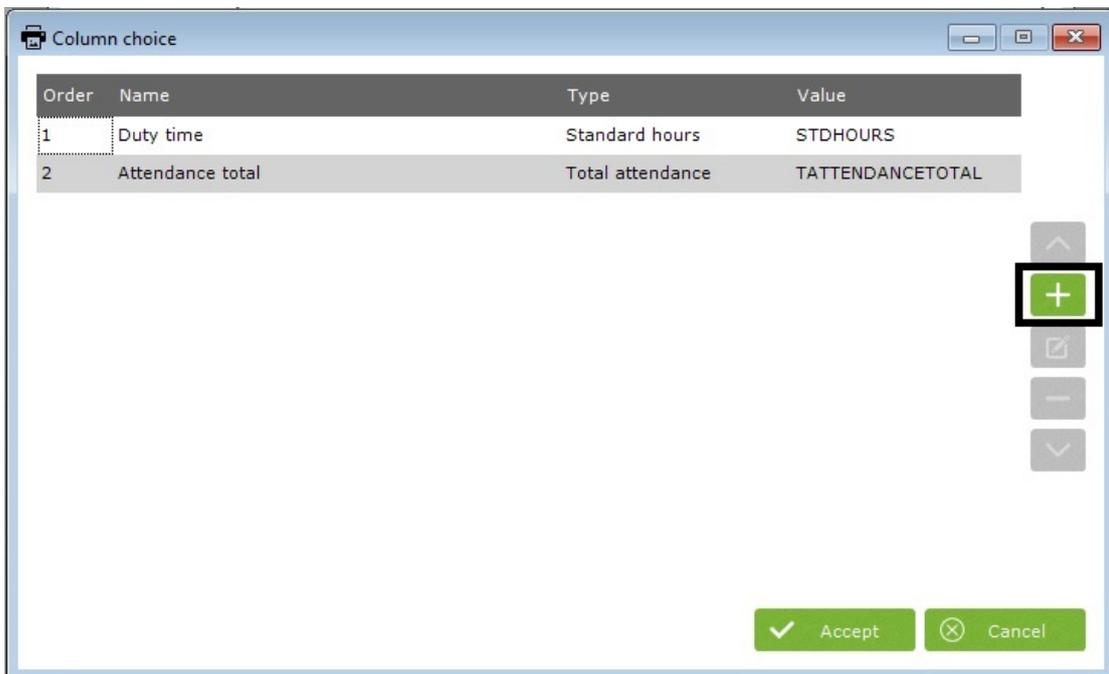
On the workday and payroll reports you will be able to choose how the information will be broken down. There are several options, daily, weekly and monthly. Depending on the type of break down chosen, you will have the possibility to calculate total amounts for workday schedules and payrolls, weekly and monthly. Moreover, you will have the chance to display the total amounts of every column for every employee related to the lapse of time selected.

12.3.1.1 Column choice

Workdays and payroll reports offer the possibility to choose what information you want displayed on each column. For it, you will have to click on 'customizable columns'. The picture below shows the resulting pop up window.



To add a new column, click on the 'new column' icon, as shown on the above picture. Immediately, the window shown on the picture below will pop up.



- To add a column, choose the desired type of column from the drop-down menu, which contains all possible columns of this type. Select the column, give it a name and click on accept.
- To add a new formula, choose the type of formula and then <<New formula>> and press accept or double click. This will display the window below.

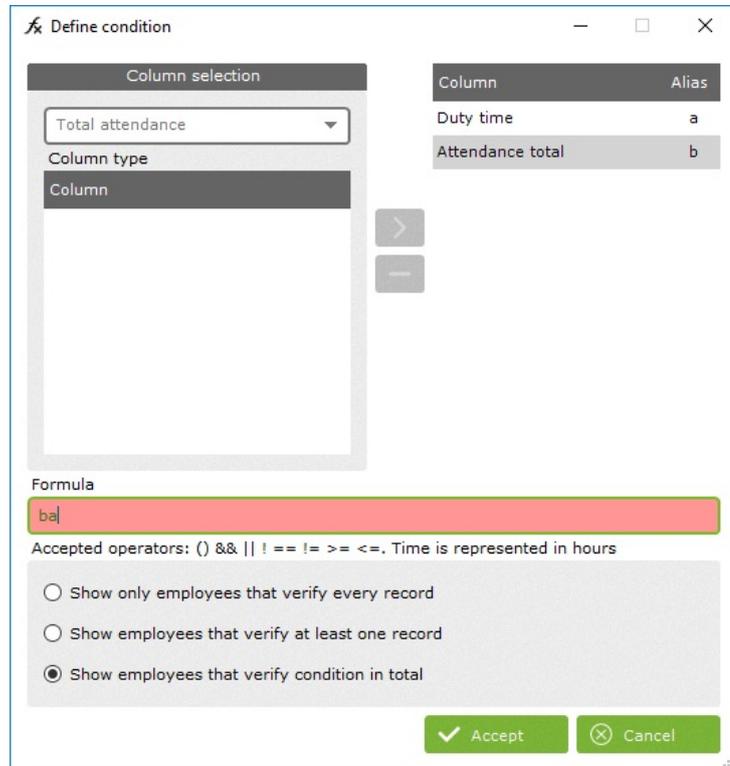
The 'Add column' dialog box features a title bar with a printer icon, the text 'Add column', and standard window controls (minimize, maximize, close). Below the title bar, there is a 'Column type' dropdown menu currently set to 'Standard hours'. Underneath, there is a 'Name' label and a 'Duty time' label. At the bottom, there is a 'Column name' text input field and two buttons: 'Accept' (with a checkmark icon) and 'Cancel' (with an 'X' icon).

To use a formula just add the columns that you wish to use the formula on from the left-hand side to the right-hand side selection menu.

The 'Define condition' dialog box has a title bar with a formula icon, the text 'Define condition', and standard window controls. It is divided into two main sections. The left section, titled 'Column selection', contains a 'Formula' dropdown menu, a 'Column type' label, and a 'Column' list area with right and left arrow buttons. The right section contains a table with two columns: 'Column' and 'Alias'. The table lists 'Attendance total' with alias 'a' and 'Duty time' with alias 'b'. Below the table is a 'Formula' text input field containing 'a'. Underneath the formula field, it states 'Accepted operators: () && || != >= <='. Below this, there are three radio button options: 'Show only employees that verify every record', 'Show employees that verify at least one record', and 'Show employees that verify condition in total' (which is selected). At the bottom right, there are 'Accept' and 'Cancel' buttons.

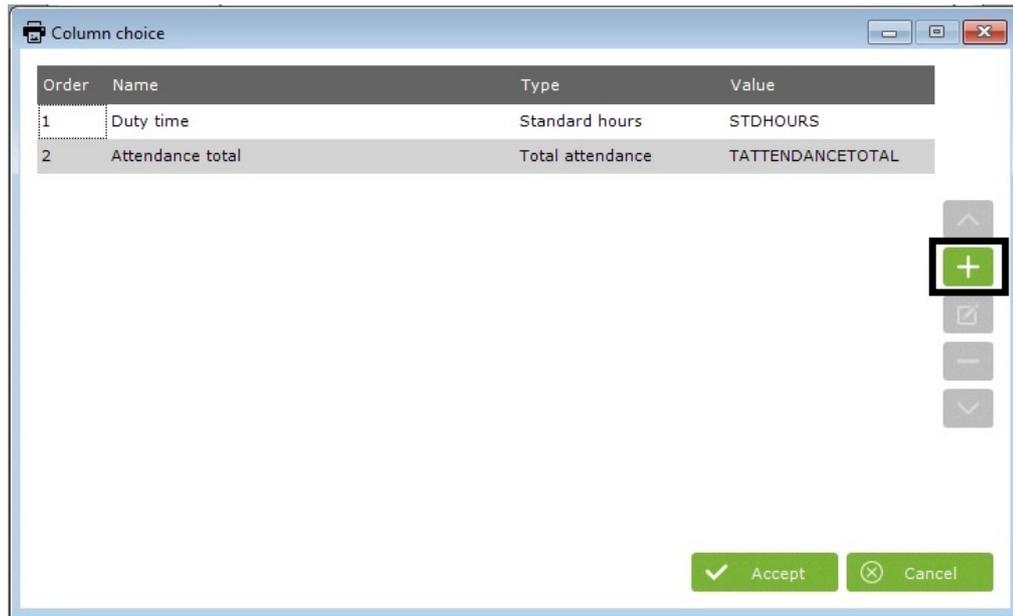
Column	Alias
Attendance total	a
Duty time	b

On former picture you can see that the field containing the formula is green. This means that it is correct. If the field looks red, as in the picture below, would mean that it is incorrect and thus it will have to be corrected.



You can include formulas inside other formulas, increasing the possibilities and capabilities of the system, besides decreasing at the same time the complexity of the interpretation required.

- **Edit column:** To edit columns which have already been added click on the 'edit' icon as shown on the picture below or otherwise double click upon the column you wish to edit. In case you desire to edit a formula, a window as the one below will show up.



12.3.1.2 Data filter through conditional operators.

In addition to the basic data filter, the workday and payroll report will allow you to do a further filter of the previous results through the definition of a conditioning rule.

To include this condition, you will have to click on “Define condition”. On section 11.3.1, you can find the picture which shows the window from which you can select this option.

To add a condition, you will have to proceed as with the formulas. Pick the desired columns from the left-hand side menu and add them on to the right-hand side menu.

On this case, the operator values vary in relation to regular formulas, as this are conditional operators.

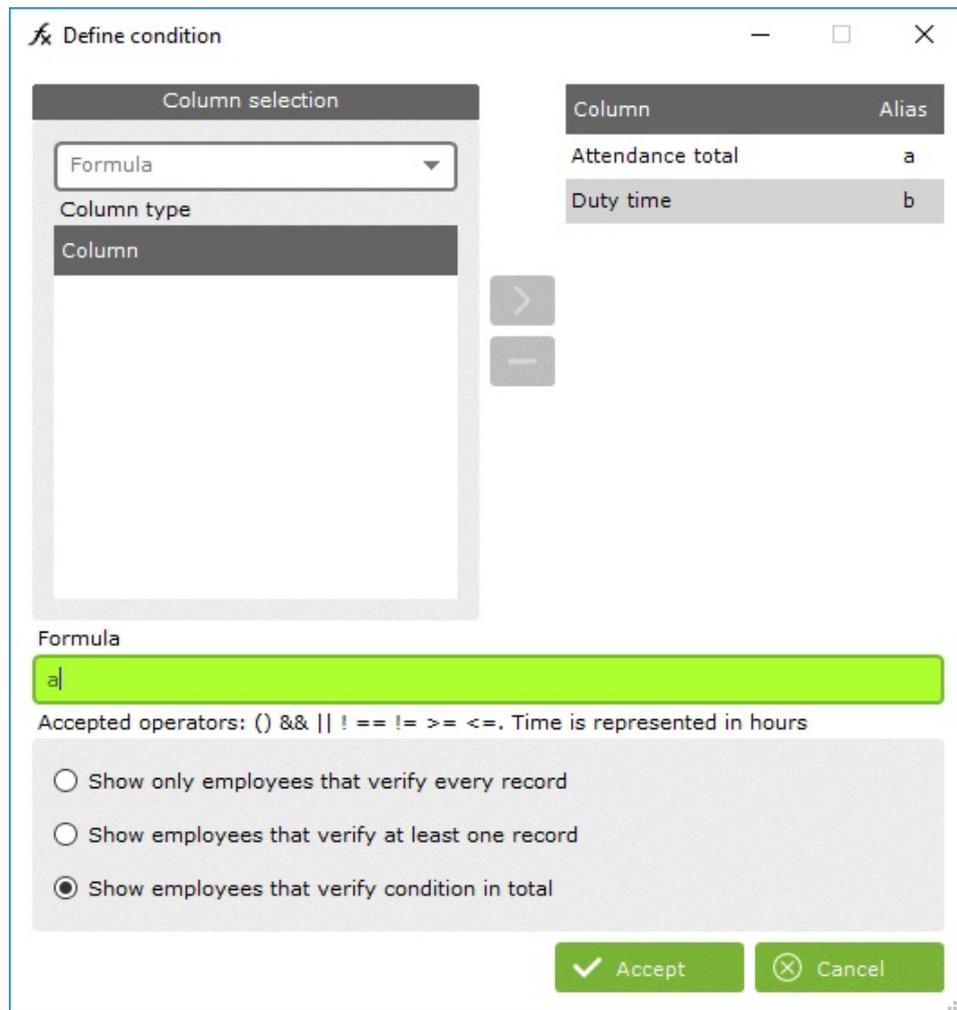
The accepted operator values are:

- AND: &
- OR: |
- NOT: j
- Different: j=
- Equal: ==
- Greater than: >=
- Less than: <=

Time should be expressed on minutes and prices on Euros.

Once written down, you should choose which employees you want to be displayed: the ones who fulfill the condition for all reports, the ones who comply with it on at least one report or the ones who comply only on the total amounts.

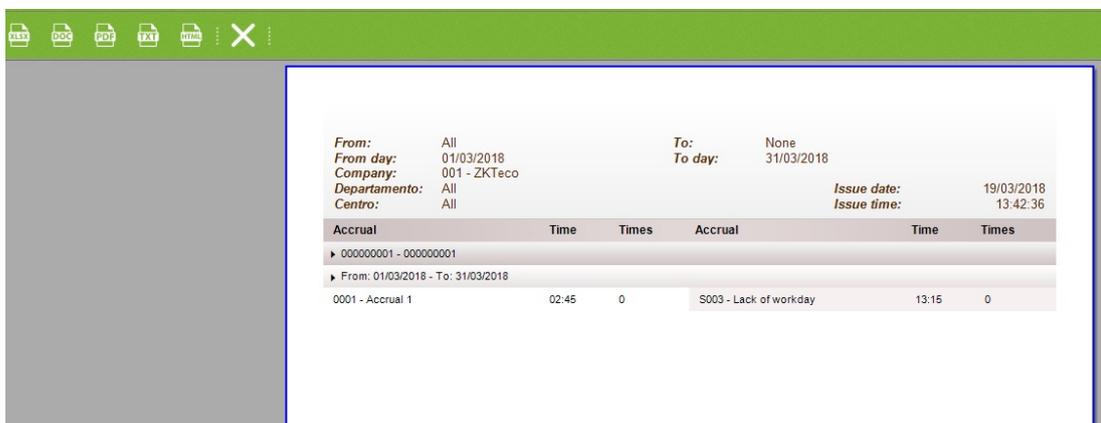
The picture below shows an example of a condition defined to display just the employees who have above 10 minutes of overtime in all break downs.



12.3.2 Accruals report

This type of report displays a list with the accruals associated to an employee, which will also show the amount of time and number of times registered on each accrual.

The picture below shows an example of this type of reports.



You have the option to choose which accruals you wish to display as well as the common options already explained for former reports.

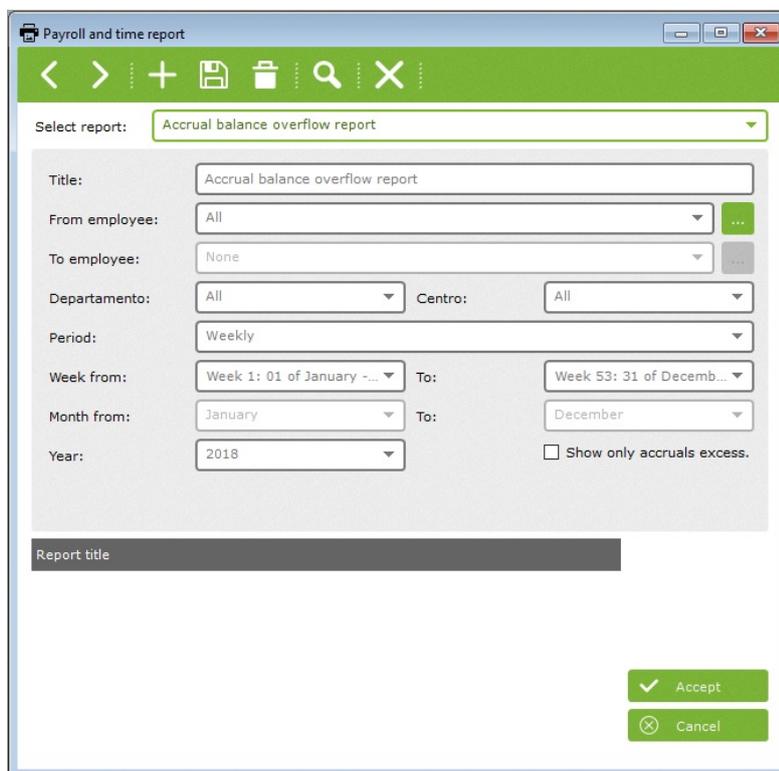
12.3.3 Expected workday and real workday report

This report will display a relation of the calendars and workday schedules that an employee should comply with, and the real work time fulfilled.

12.3.4 Accrual balance overflow record

This type of report displays a relation of the employees who have surpassed the allowed limits of their accruals.

Upon the filter options on this report, we would like to highlight the possibility that you have to show this relation in 3 different periods of time, weekly, monthly or annually. Depending on the type of period chosen you will be able to decide the starting and ending week, month or year. You can see an example of this on the picture below.



The screenshot shows a software window titled "Payroll and time report". The interface includes a green header bar with navigation icons (back, forward, home, search, close). Below the header, a dropdown menu is set to "Accrual balance overflow report". The main area contains several filter fields:

- Title: Text input field containing "Accrual balance overflow report".
- From employee: Dropdown menu set to "All".
- To employee: Dropdown menu set to "None".
- Departamento: Dropdown menu set to "All".
- Centro: Dropdown menu set to "All".
- Period: Dropdown menu set to "Weekly".
- Week from: Dropdown menu set to "Week 1: 01 of January -...".
- To: Dropdown menu set to "Week 53: 31 of Decemb...".
- Month from: Dropdown menu set to "January".
- To: Dropdown menu set to "December".
- Year: Dropdown menu set to "2018".
- Checkbox: "Show only accruals excess." (unchecked).

At the bottom of the form, there is a "Report title" label and a dark grey input field. At the bottom right, there are two green buttons: "Accept" (with a checkmark icon) and "Cancel" (with an 'X' icon).

12.4 Report of punch modifications

This report will display a breakdown of all the modified punches within a specified period of time. Added punches will show up in blue and edited punches will show up in grey, the previous punch, and in yellow the modified punch.

If a punch has been edited or added, the user who modified it will be identified.

12.5 Punches of the day

This report will display the desired punches for a specific day. On this report you will be able to choose what type of information to display, being able to filter the information by employees who are working at the office, out of the office, absent or arrived late to work.

On the picture below you can see an example of this type of report.

View/Report configuration

Centro: All
 Departamento: All
 Order by: Code
 Event: All
 Workday: All
 Date: 19/03/2018
 Ignore dismissed employees

All employees
 Out at the time:
 In at the time:
 Late arrivals
 Absent employees

Employees without special circumstances
 Employees with justified absence
 Absent employees

Refresh Generate report

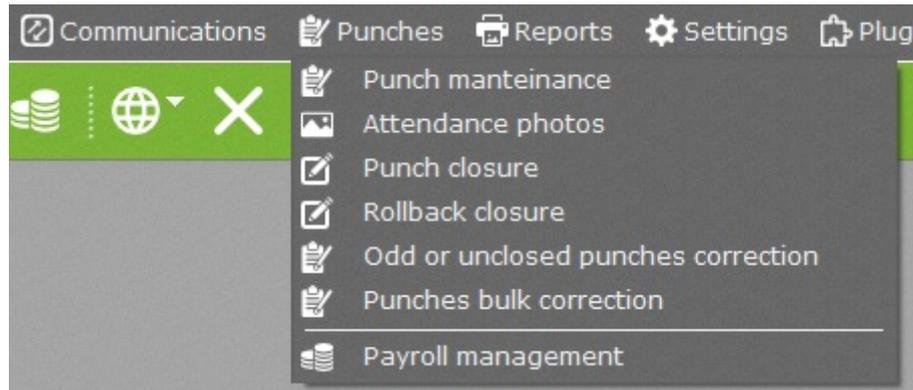
Code	Name	First	Late	Abs	Second	Late	Abs	Workday/Event	Status	Last punch
00000... 000000001				x				S004-Unjustified absence	Out	
00000... 2				x				S004-Unjustified absence	Out	
00000... 3				x				S004-Unjustified absence	Out	
00000... 4				x				S004-Unjustified absence	Out	
00000... 000000005				x				S004-Unjustified absence	Out	
00000... 6				x				S004-Unjustified absence	Out	
00000... 123				x				S004-Unjustified absence	Out	
00000... 234		11:31	02h 31mi...					0001-Morning shift	In	
00000... 000000333				x				S004-Unjustified absence	Out	
Total people working: 1										

Close

13 Punches

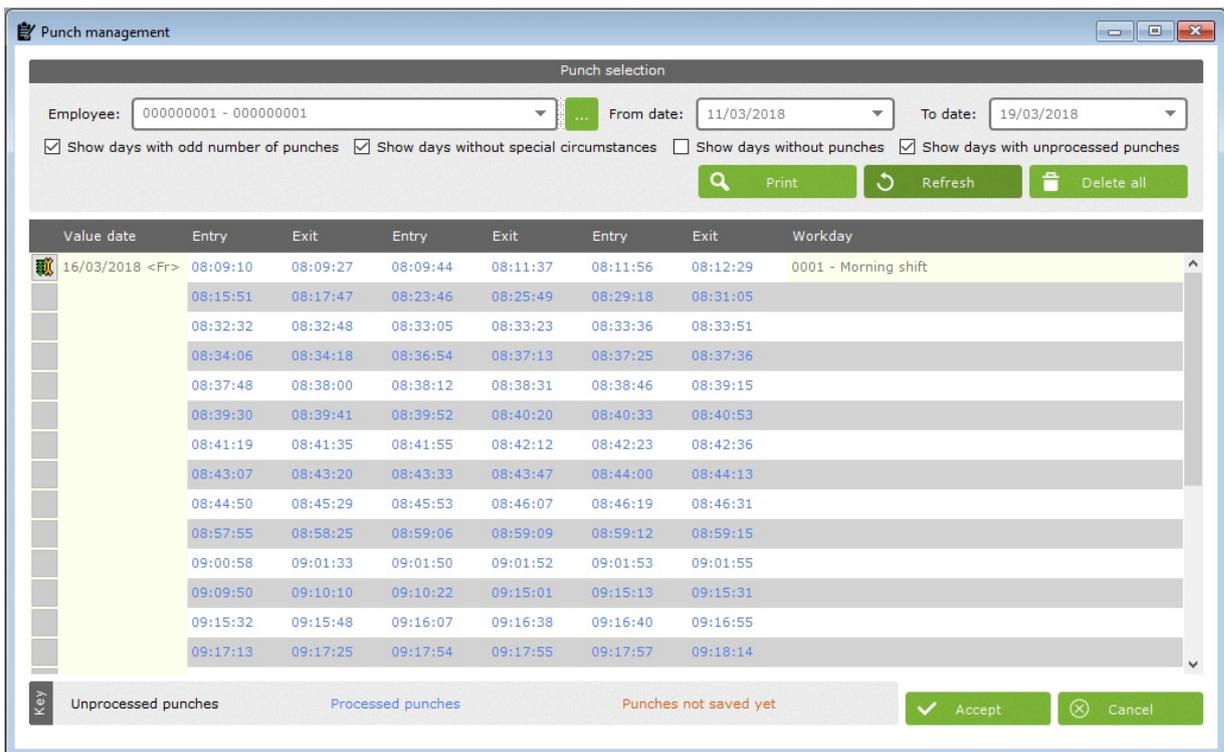
Punches are the core element of any Time and Attendance control system; with them the employees will identify their arrival and/or leaving time and any possible event which might occur throughout their workday, such as lunchtime or any justified delays.

On the main menu you will find the Punches tab, with it you will be able to perform the following options:



13.1 Punch management

It is not uncommon to start experiencing troubles over time related to punches and attendance control; some employees will forget to punch; others will do it twice by mistake or will select a wrong event. In order to solve these problems and let ZKTime Enterprise do proper calculations, you can use the following option:



The punches selection options appearing will allow you to filter the punches, after which will be available for editing.

The options available are:

- **Employee:** The employee whose punches you will edit.
- **From/ To:** The space of time which you want to edit. Note that this filter will be applied over the value-date not the real date, meaning it is possible that on a night shift an exit punch over midnight could be included even though the value 'To' is set on the day before to the lunch.
- **Show days with odd number of punches:** If enabled, the involved employee's punches and the dates, within the space of time chosen, which have registered an uneven number of punches will be shown. This is an anomaly which must be fixed, as every day must have an even number of punches, consistent with the entries and exits of the employee.
- **Show days without special circumstances:** If enabled, the involved employee's punches and the dates, within the space of time chosen, which have registered an even number of punches, being all correctly made, will be shown.
- **How days without punches:** If enabled, dates without registered punches will be shown, allowing you to add them in case necessary.
- **Show days without processed punches:** If enabled, this option will show you each day with registered punches that were not processed. Being the most common reasons, punches out the time limits or made once the employee has stopped working for the company.

Now that we have explained the relevant filters to define the punches you wish to display; we will continue explaining the punches table and how you can edit your employee's punches.

13.1.1 Punch tables

This columns states the value date to which the punches on a line are assigned. It does not necessarily need to meet the real date of the punches

This column represents the workday schedule associated to the value date

Value date	Entry	Exit	Entry	Exit	Entry	Exit	Workday
16/03/2018 <Fr>	08:09:10	08:09:27	08:09:44	08:11:37	08:11:56	08:12:29	0001 - Morning shift
	08:15:51	08:17:47	08:23:46	08:25:49	08:29:18	08:31:05	
	08:32:32	08:32:48	08:33:05	08:33:23	08:33:36	08:33:51	
	08:34:06	08:34:18	08:36:54	08:37:13	08:37:25	08:37:36	
	08:37:48	08:38:00	08:38:12	08:38:31	08:38:46	08:39:15	

As you can see, punches appear as a data table with its lines and columns. Being each line a value-date, capable of containing up to six punches with a last column that states a workday schedule. Otherwise, a 'not processed' text will appear, informing that no value was assigned to that date.

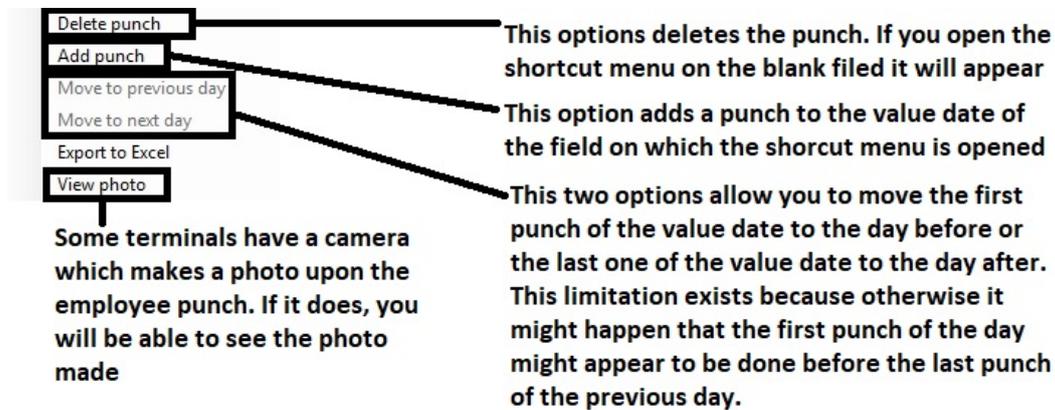
In the case for a date an employee has punched more than six times, a new line will be created without any defined value in the column date-value, this way you will know it belongs to the previous line. It will work this way with as much lines as they are needed.

On the above picture we can also see a superimposed window. This will show up whenever you keep the mouse cursor on top of any of the punches field. It will display relevant details on the punch: its real date, time of the punch, terminal in which it was done, if it was processed and the description of the event assigned to the punch.

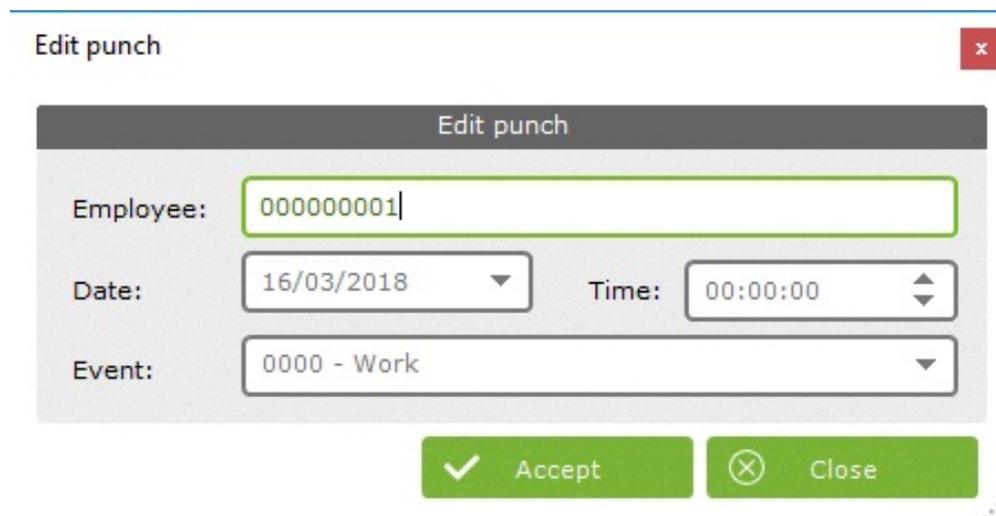
13.2 Edit Punch

How to create, delete or edit punches? There are three actions that you might want to do: delete a punch, create a punch or delete an existing one.

By clicking on the mouse right button over a punch field, a shortcut menu will appear. This shortcut menu is shown on the picture below with a brief explanation of the options it offers.



When editing or creating a punch you will be able to decide the date, time and event linked to it, as shown in the picture below.

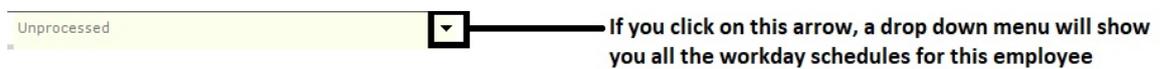


By accepting, the changes made to the punch will pass on to the table. If you click on close, all changes will be cast-off.

It's important to note that the punches modified or transferred from one day to another will remain orange-colored advising that changes await to be saved. This will not happen until you click on the accept button on the bottom right corner of the window.

13.2.1 Edit the workday schedule assigned to a date.

You have the option to edit the workday schedule assigned on a day. This is done on the Time/Event column.



You can see on the picture above a list with all possible workday schedules for an employee. You will be able to choose the most convenient one. If you have been adding punches on a day which didn't have any before and leave the time/event blank, ZKTime Enterprise will decide which workday Schedule should be assigned based on its configuration, the same way it will work after receiving punches directly on from the terminal.