

# USER MANUAL

## ZKTime Enterprise

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Management Software for Time&Attendance  
and/or Access Control

Version: English

Date: September 2015

Index

<b>0.</b>	<b>INTRODUCTION</b>	2	10.3	Calendar	40
<b>1</b>	<b>SETUP</b>	2	10.4	Duty time	40
<b>1.1</b>	Prerequisites	2	10.5	Status	40
<b>1.2</b>	Installation	2	10.6	Terminal	41
<b>1.3</b>	Database Engine	4	10.6.1	Fingerprint management	41
<b>1.4</b>	First run	5	10.7	Importing employees	42
<b>1.5</b>	Company creation	7	10.7.1	File Format	42
<b>2</b>	<b>COMPANIES</b>	9	10.7.2	Column titles	42
<b>2.1</b>	Companies data transfer	9	10.7.3	Column order	43
<b>3</b>	<b>TERMINALS</b>	10	10.7.4	Required columns	43
<b>3.1</b>	Terminal management	10	10.7.5	Duplicated data	43
<b>3.2</b>	Buzzers	12	10.7.6	Employees import process	44
<b>3.3</b>	No access days	12	<b>11</b>	<b>REPORTS</b>	45
<b>3.4</b>	Time Slots	12	11.1	Master reports	45
<b>3.5</b>	Access groups	12	11.1.1	Employee report	46
<b>3.6</b>	Copying access settings	13	11.1.2	Employee notes report	46
<b>4</b>	<b>CONNECTING TERMINALS</b>	14	11.1.3	Standard hour reports	47
<b>5</b>	<b>DEVICE STATUS</b>	14	11.1.4	Workday report	47
<b>6</b>	<b>EVENTS</b>	15	11.1.5	Calendar report	47
<b>6.1</b>	System Events	15	11.1.6	Event reports	48
<b>6.2</b>	Accruals and reports	16	11.1.7	Calendar events report	48
<b>6.3</b>	Events management	16	11.1.8	Payroll report	49
<b>7</b>	<b>WORKDAY</b>	19	11.2	Punch reports	49
<b>7.1</b>	Workday management	19	11.2.1	General log with punches report	50
<b>7.2</b>	Variants	21	11.2.2	Absenteeism report	50
<b>7.3</b>	Payroll	22	11.2.3	Access punches report	51
<b>7.4</b>	Events	22	11.2.4	Access report	52
<b>7.5</b>	Obligatory time	23	11.3	Payroll and time report	53
<b>8</b>	<b>CALENDARS</b>	24	11.3.1	Events and payroll with punches report	53
<b>8.1</b>	Personal and public calendars	24	11.3.1.1	Column choice	54
<b>8.2</b>	Day type	25	11.3.1.2	Data filter through conditional operators	57
<b>8.3</b>	Calendar management	25	11.3.2	Accruals report	58
<b>8.4</b>	Automatic Calendar generation	28	11.3.3	Expected workday and real workday report	58
<b>8.5</b>	Apply and assign calendar	29	11.3.4	Accrual balance overflow record	58
<b>9</b>	<b>PROFILES</b>	30	11.4	Report of punch modifications	59
<b>9.1</b>	Rounding	30	11.5	Punches of the day	59
<b>9.2</b>	Automatic event	31	<b>12</b>	<b>BACKUPS</b>	60
<b>9.3</b>	Absence	31	12.1	Manual backup	60
<b>9.4</b>	Accrual balance	31	12.1.1	Full backup	60
<b>9.5</b>	Breaks	32	12.1.2	Partial backup	62
<b>9.5.1</b>	Break management	32	12.1.3	Generate backup	62
<b>9.6</b>	Payroll	33	12.1.4	Automatic backup	62
<b>9.6.1</b>	Payroll items	34	12.1.5	Restore backup	63
<b>9.6.2</b>	Payroll lines	35	<b>13</b>	<b>PUNCHES</b>	65
<b>9.6.3</b>	Payroll compensation	37	13.1	Punch management	66
<b>10</b>	<b>STAFF</b>	39	13.1.2	Punch tables	67
<b>10.1</b>	Data	39	13.2	Edit punch	68
<b>10.2</b>	Profile	40			

# ZKTime Enterprise: Management

## Software for Time&Attendance and / or Access Control

### 0. Introduction

ZKTime Enterprise is a software application for T&A and access control. With this application you will be able to monitor and manage your employee's work-time.

### 1. Setup

#### 1.1. Prerequisites

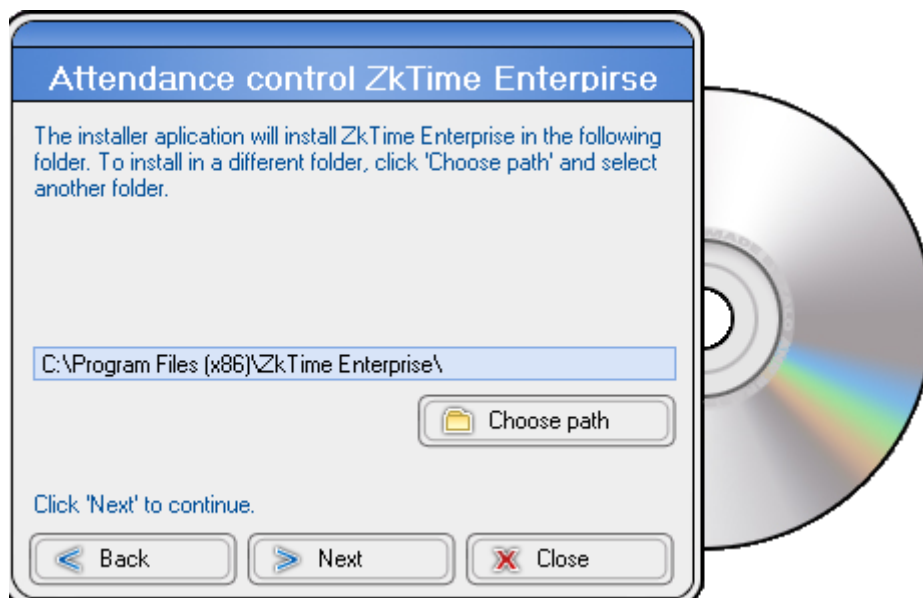
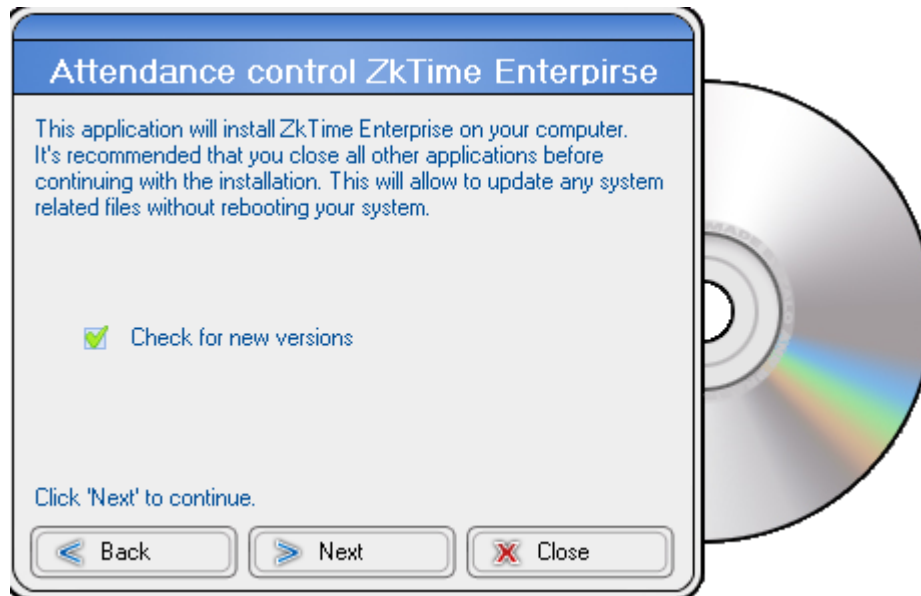
Depending on the operating system in which you want to install ZKTime Enterprise you might have to install previously some of the following:

- 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.

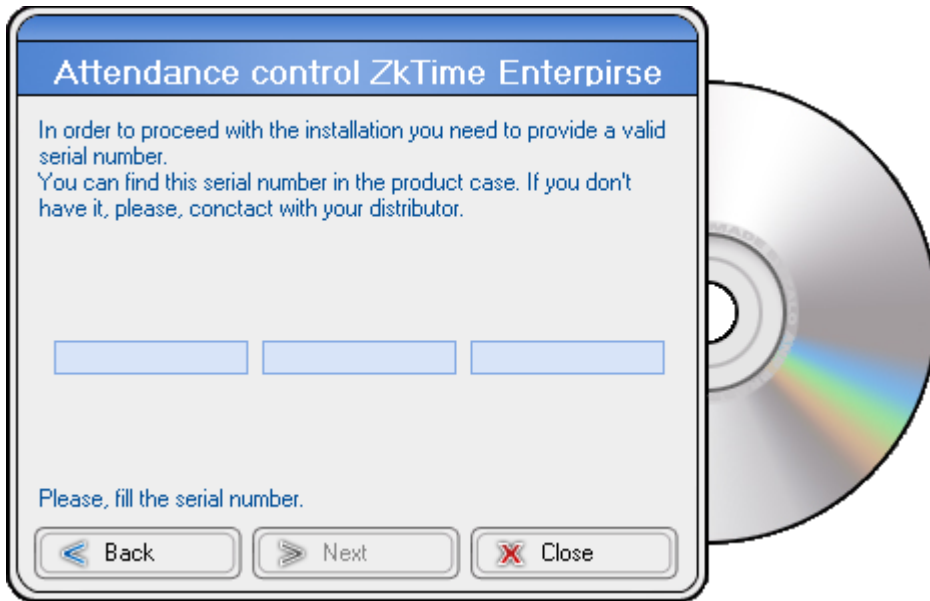
#### 1.2. Installation

Once we count with the previous requirements we can proceed to install ZKTime Enterprise. The install guide will lead us throughout the process. The first step will be to select the installation language; our decision here will define the language that ZKTime Enterprise will use by default the first time you run it.

The next decision to make is whether you want the installer to connect to the ZKSoftware Server and download the latest version. This is recommended as long as you are performing a clean new installation of the program.



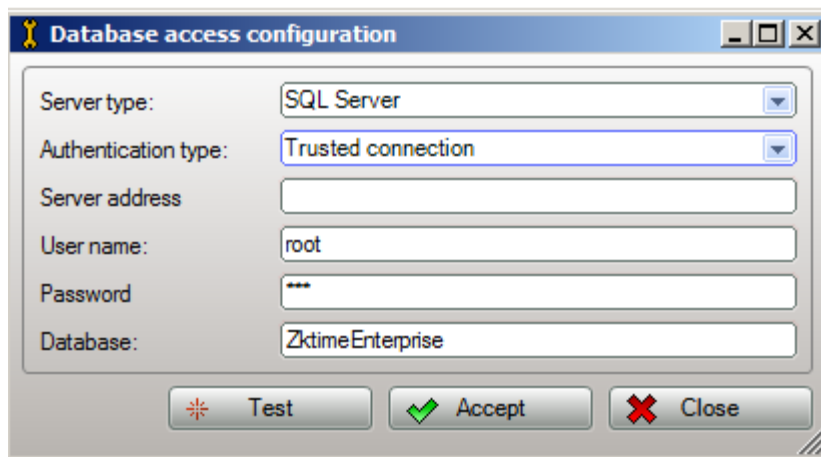
Finally, select a folder and enter the required serial/ license number to proceed with the installation.



### 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



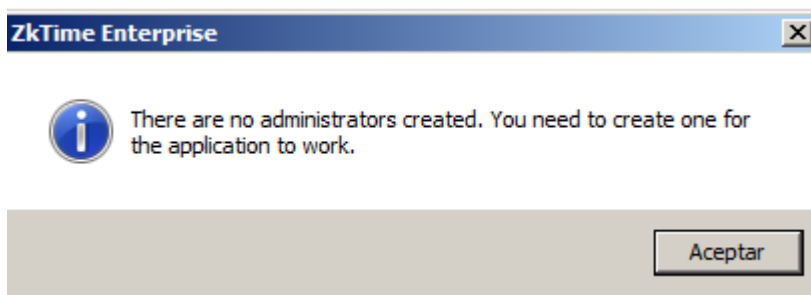
When using SQL Server or MySQL you can use any of the following methods of authentication on the server:

- 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.

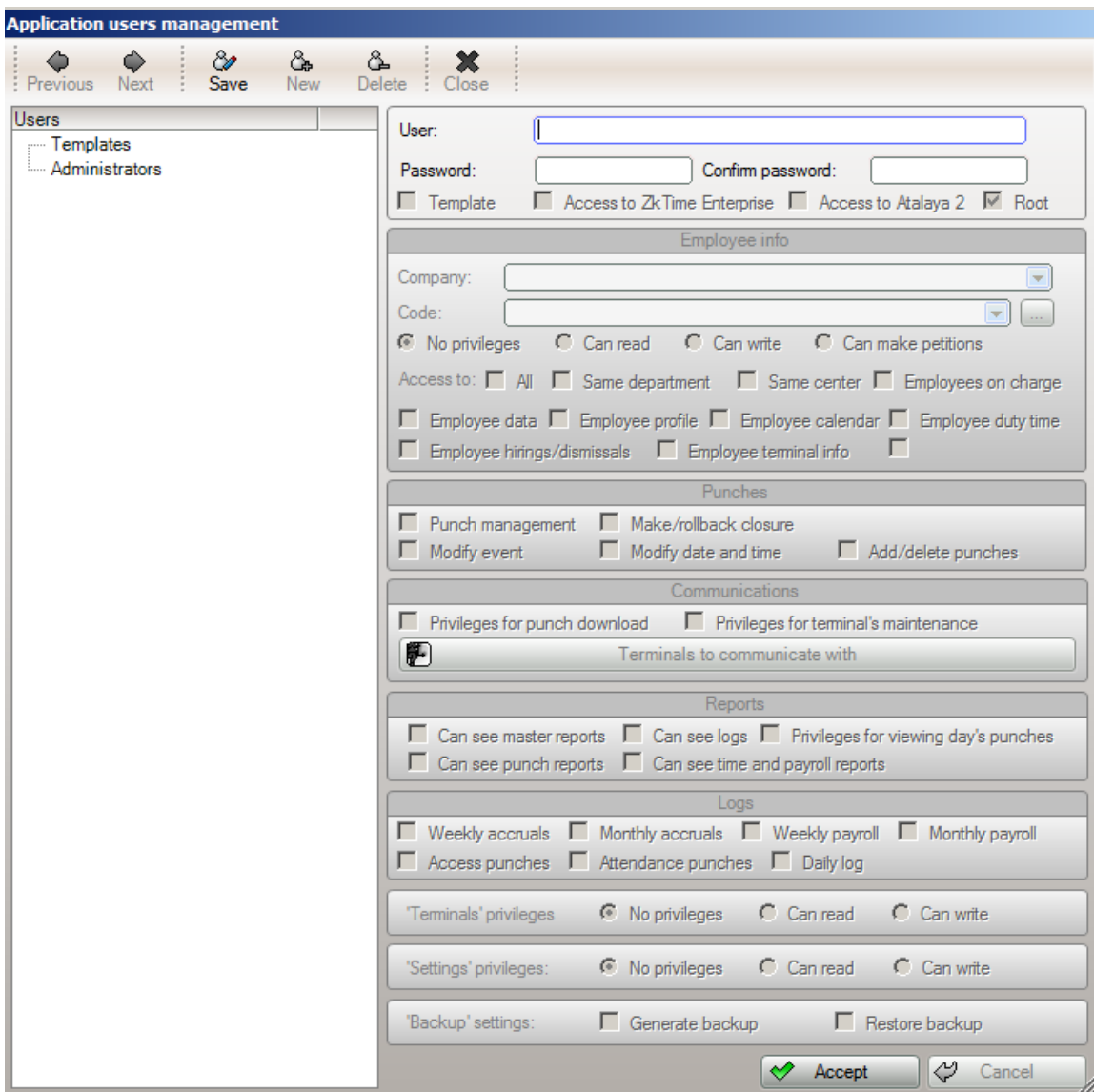
Once you have configured the database connection you may start working with the platform.

#### 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.

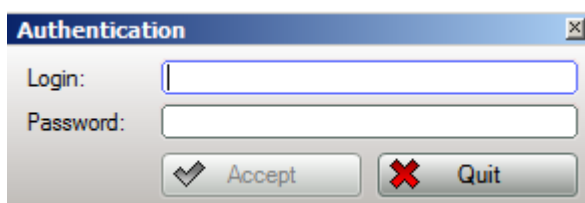


It will immediately be followed by another window where you will be able to introduce username and password for the administrator.

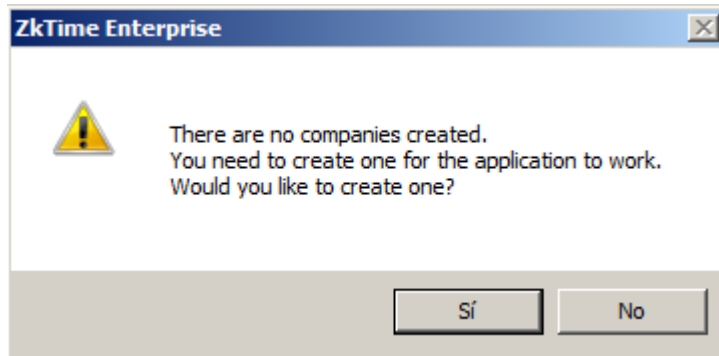


As you will be able to see on the above picture, most of its fields are disabled. This is because they are not needed for the creation of an administrator, later on we will go into further detail about these other options.

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



Once logged in correctly ZKTime Enterprise will ask if you want to create a "company", by clicking on "Yes" you will be taken to the Company management window. Otherwise, by clicking on "No" it will close the application.



Hereafter you will find the standard ZKTime Enterprise operative.

### 1.5. Company creation

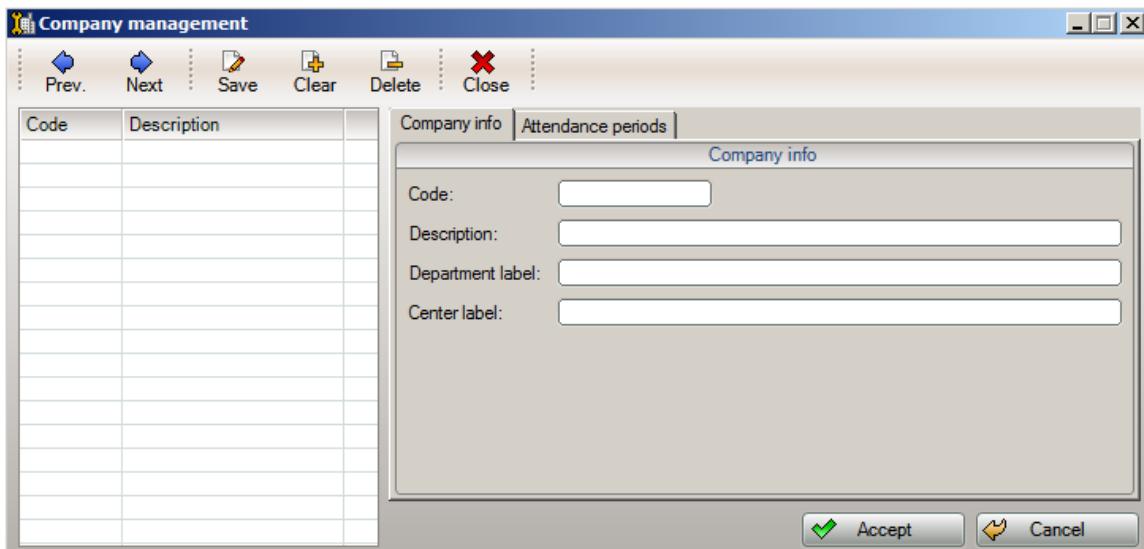
On the Company management window you will find the following options:

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





Once you have finished installing the program, setting the connection to the database, defining an administrator and creating a company you can start working with the program normally.

## ZKTime Enterprise

On use, the first thing you will find is the ZKTime Enterprise homepage, from which you will be able to move all over the application.



The following options are displayed:

- Companies: From here you can manage everything related to companies, create new companies, remove or edit existing ones or transfer information from one to another.
- Staff: From here you can 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: From here you can manage our terminals, choose those with whom you want to communicate or gather information from.
- Communications: From here you will be able to communicate with the terminals, send them information, retrieve information from them or make backup copies of the data stored in the terminal.
- Punches: From here you can edit punches or closures.
- Reports: From here you can access different reports offered by ZKTime Enterprise.
- Settings: From here you can manage ZKTime Enterprise settings.
- Help: From here you can contact ZKSoftware support center and obtain general information regarding the program.
- Windows: It shows all the windows open and allows bringing up the one you wish.

## 2. Companies

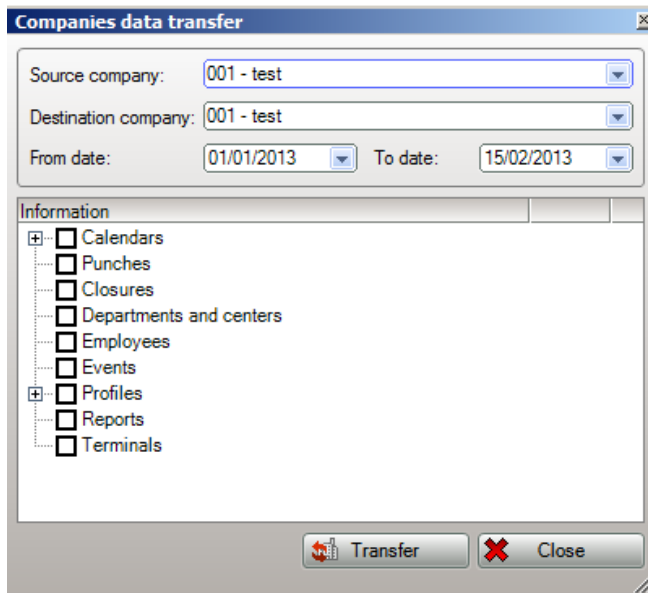
In section 1.5 we explained how to create a company, but did not get into further detail about what it's use is. The company is the core of ZKTime Enterprise, each one has its own tables and works independently.

### 2.1 Companies data transfer

At some point you may want to send data from one company to another, this can be done through the "Companies data transfer" tab.

To do this you have the following options:

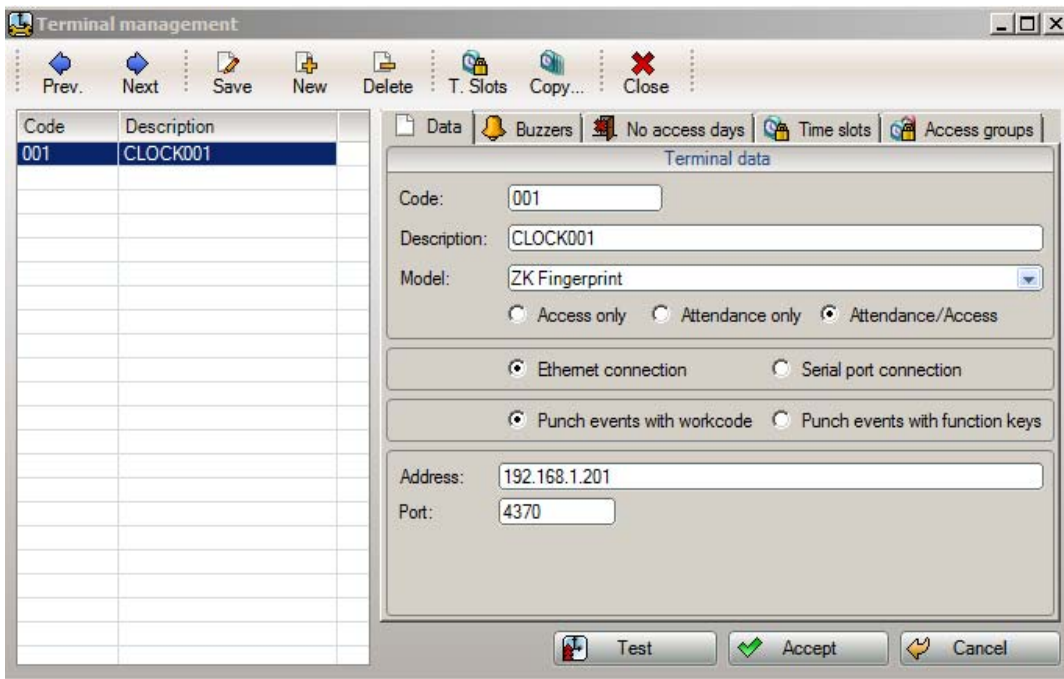
- Source company: This is the company from which you are going to export the selected information.
- Destination company: This is the company in which you will import the desired information.
- 'From date' and 'To date': Here you can set a date interval for the information you want to transfer in case you do not want to transfer closures or punches.
- Information: Here you will be able to select the information you want to transfer from the source company to the destination one.



### 3. Terminals

The terminals are one of the key points at any attendance and access control solution. They are responsible for identifying the employees either through fingerprint recognition, face recognition or by using a proximity card reader. With these, the employee gets access to controlled rooms or is enabled to punch.

#### 3.1 Terminal management



Upon registering the terminal, 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 needs. However, ZKTime Enterprise has no way to know with which terminal it is working with. This is why you need to specify the model. 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 is included in this category.

ZK Card: Any terminal with a black and white screen display or no screen at all and no fingerprint reader is included within this category.

ZK IClock footprint: Most terminals with a screen color display and fingerprint reader are included within this category.

ZK IClock card: Any terminal with a screen color display without fingerprint reader is included within this category.

ZK IFace: Any facial recognition camera-type terminal is included within this category.

ZK Series C: Some terminals with screen color display and all C Series models such as the FP85 or FP-C-560C are included within this category.

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

- Terminal Type: Depending on its functionality, ZKTime Enterprise distinguishes three types of terminals and will generate two different types of punches: T&A or Access:

Access control terminal: This terminal supports an access configuration, it is connected to a door which opens, or not, depending on this configuration. All punches are considered of access.

T&A and Access control terminal: This terminal generates access or T&A punches depending on the event marked by the employee.

T&A terminal: This terminal is not connected to any door; it does not 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 an 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 its connection type is obsolete and instable.

There is one last option, mark events using a workcode or function key, however this option will not be explained further because it's maintained only due to its 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 it to ring, it will allow you to define up to 12 events per day.

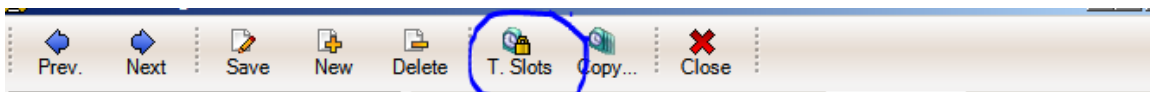
### 3.3 No access days

In every company there are days in which the company is to remain closed forbidding any access to it. For these circumstances there is the "no access days" option. You will define a range of dates in which none of the registered users can access the terminal, as a result the terminal will recognize the user and record the attempt as a punch with access denied and will not open the door.

### 3.4 Time Slots

The time slots are basic for the access configuration, each one will store a time slot for each day of the week in which the employee can access the terminal.

Each terminal stores its own time slots and you can set, from the management window, which slots can be accessed from this button.



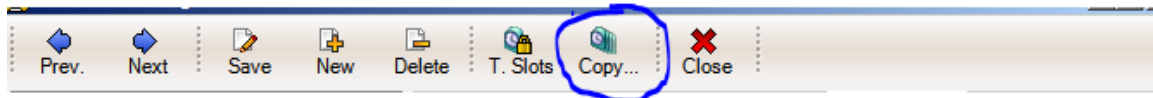
### 3.5 Access Groups

In order to explain the access groups you need to understand better how does the access control work: each employee has its own configuration in which it is allowed to have up to three access time slots, prevailing always the least restrictive one. Therefore, in the event of an employee trying to access the terminal-controlled room and two of the slots assigned to him denying him access but the third, at the time allowing it, the employee will be granted access to the room.

To avoid having to establish three time slots for each employee when they enjoy the same configuration or circumstances, groups have been created. These groups contain three time slots which you can later assign to as many employees as you need.

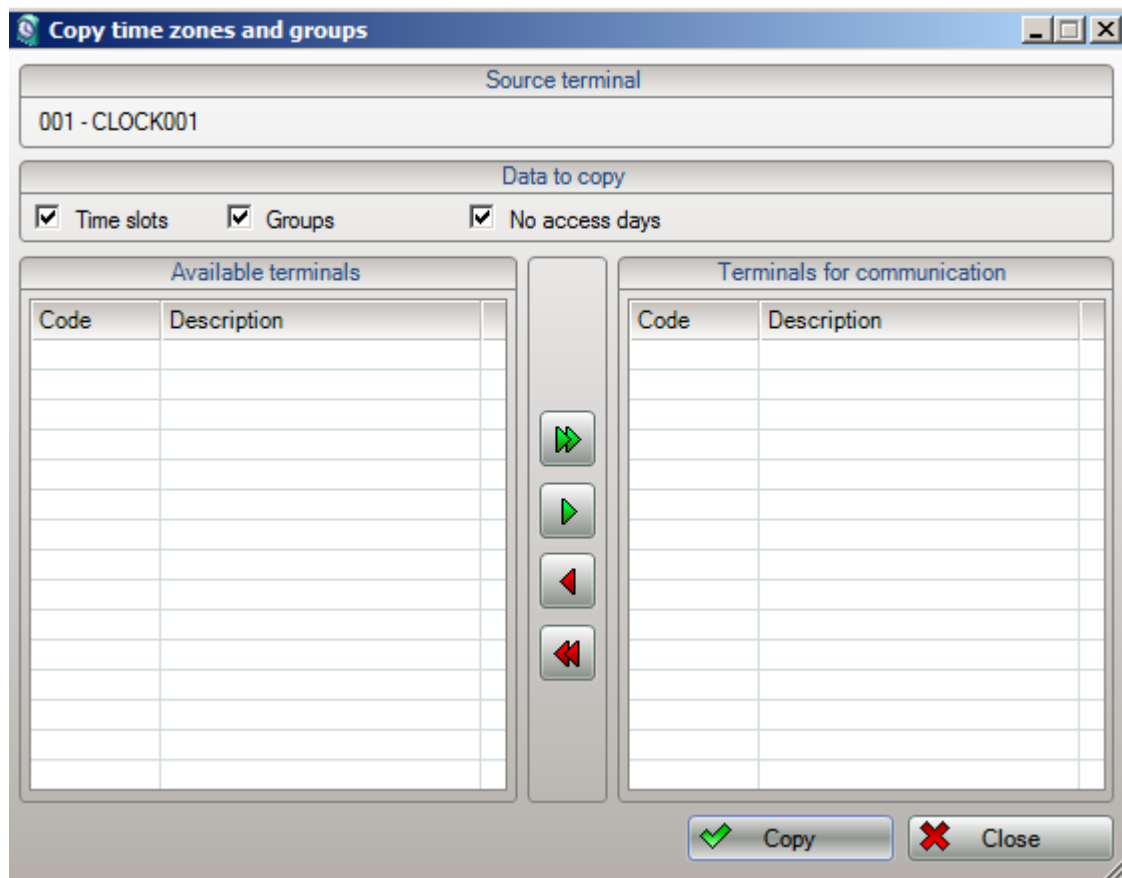
### 3.6 Copy access settings

If you have several terminals with the same configuration but do not want to enter it twice, we have a "Copy" tab in the Terminal management window.



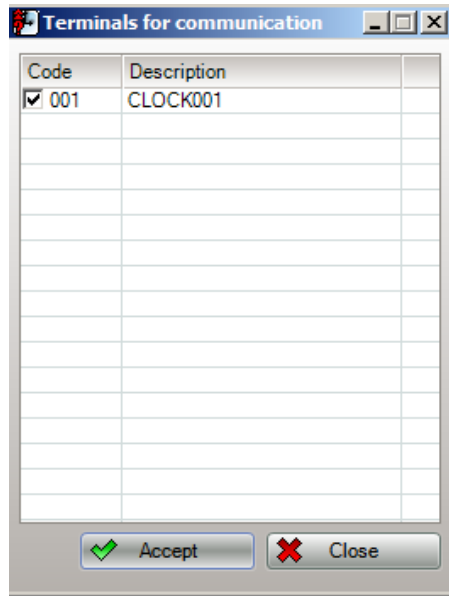
Once you have clicked on the "Copy" button a new window pops up which will offer you the following options:

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



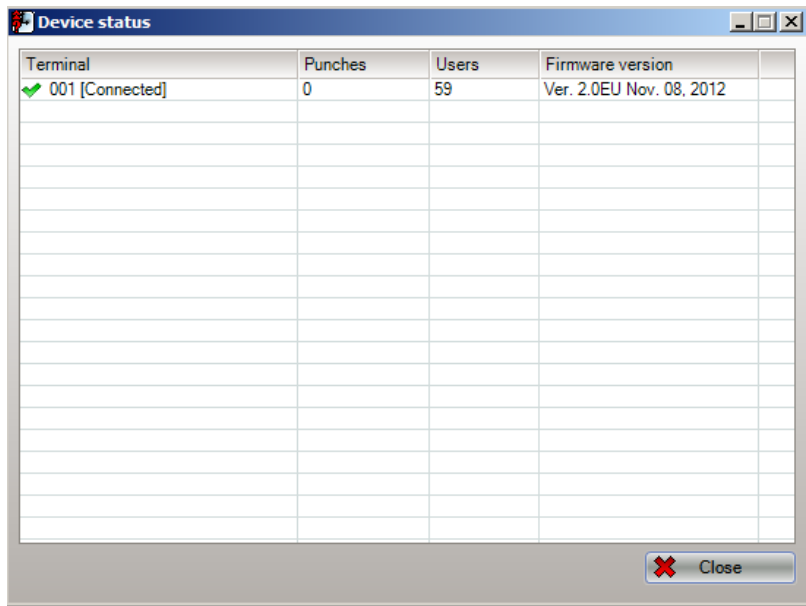
### 4. Connecting terminals

From 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 mean that you can connect all terminals defined for a company.



### 5. Device status

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



## 6. Events

Events are another of the key points of ZKTime Enterprise. 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. They 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 types and a 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 have to 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 on when we get to explain workdays.

With the exception of 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**

We have previously explained that the events can be assigned to a punch or a particular day of the calendar and we have also discussed about the "reports". But what can we do with all these tools? What are the events for? What is a report? To understand all these we must first explain the concept of accruals.

- Accruals

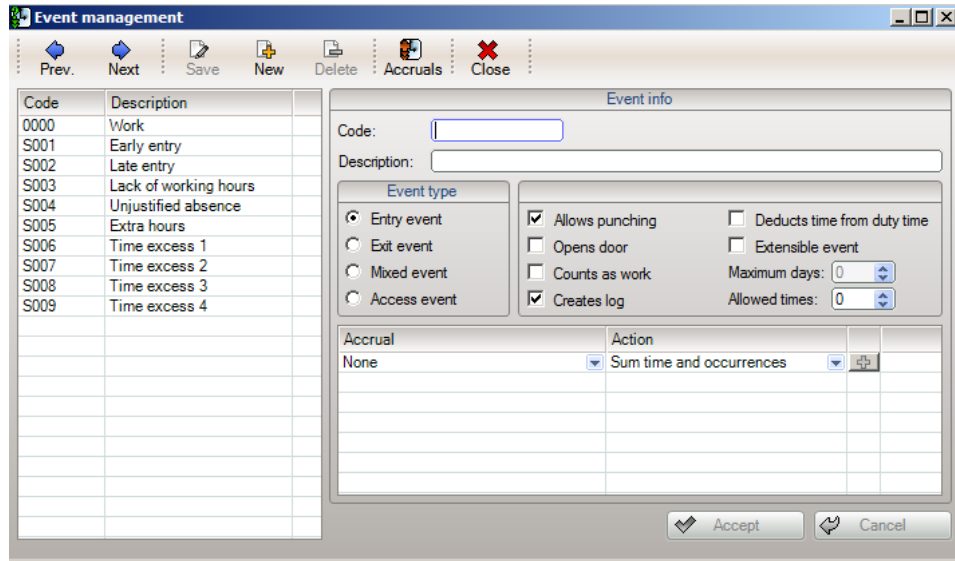
An Accrual is an accumulator of either amount of time or number of times a particular event takes/ occurs. Each event can update one or more accruals so that when an event is generated; either because it is entered by a punch, created by association to a specific day on the employee's calendar or automatically by ZKTime Enterprise, it 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 organized for every employee. Any further desired 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: 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 its punch. We can distinguish up to four types of events:

**Entry events:** These can only be selected by way of entry punches. It will gauge the time from the moment of the entry punch until the departure one.

**Mixed events:** These are allowed to be selected on both entry and departure punches. In either case the absence will be calculated upon the employee's workday schedule. In the case of an entry punch, it will serve to justify the time lapse between the theoretical beginning of the employee's workday 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 workday 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 workday 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 whether a punch may have an event assigned. If left unmarked, the event will not get uploaded into the terminals which allow event logs. On terminals with no event logs, 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 whether or not to activate the relay which opens the door when the event is punched. For this option to be effective, it will be necessary to upload the event into the terminal. However, note that not all terminals support this configuration.

- Counts as work: This option controls whether 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.

Now it is mandatory to distinguish 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 affect negatively on the time considered as worked for the company. We will return to this in further depth when we explain workday schedules.

- Creates log: This option can only be enabled for system events. If unchecked the program will ignore the event when selected 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 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 mount to 0.

- Extensible event: Some events do not only justify the whole day in which they occur, but extend for 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 you to create several types of shifts depending upon a number of circumstances: if the employee has one or several shifts, if these are fixed or variable in the employee's calendar or if it works on day or night shifts.

### 7.1. Workday management

On this window you will be able to manage work schedules. We will explain below all the options available.

- Workday types: There are three types, namely:

Day shift: We understand for day shift one in which the date of the workday is the date of the later limit of the shift. The commonly known as 'office hours' are day shifts.

Night shift: We understand for a night shift one in which the date of the workday is the date of the earliest 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 to have one or two sessions upon which all further calculations will be made. 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 the employee's arrival is considered to have been late at the start of his shift.

Session start: The time at which the shift starts, all times are calculated upon this, both delays and 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 at which the session ends. When an employee is absent, the event will be calculated up to this time.

Total time: Here you will be able to state the total number of hours which an employee has to work in each session. The sum of both 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 employees free disposal along the workday.

- Workday 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 beginning at 0:00 and the workday ending at 23:59. However, in some cases where there is a rotating shift, with

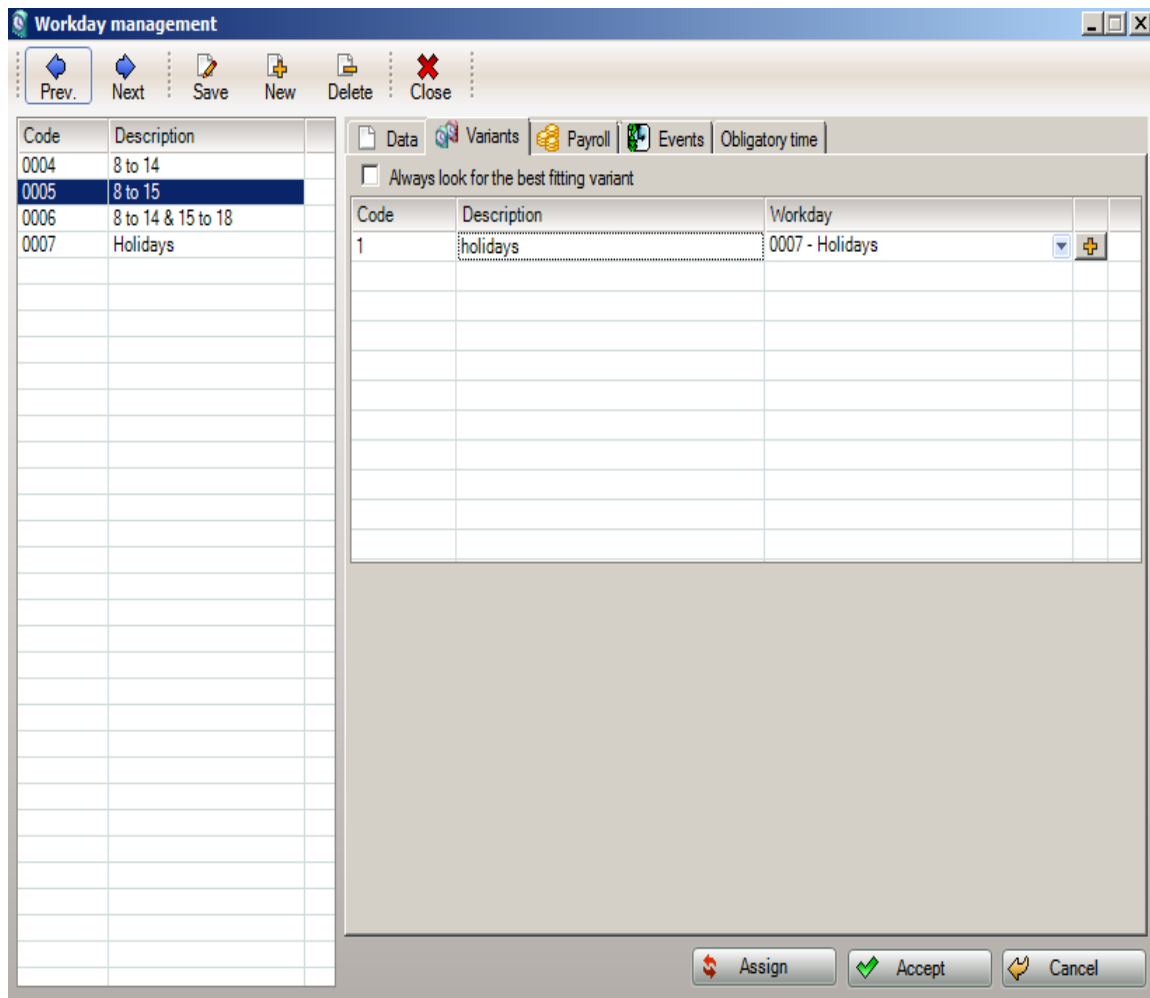
morning, evening and night shifts, it will be convenient to adjust a bit the beginning and end limits for the workday to the start of the first session and end of the second one.

- Extend workday 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. This is why ZKTime Enterprise offers the tab of variants involving:

- 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.

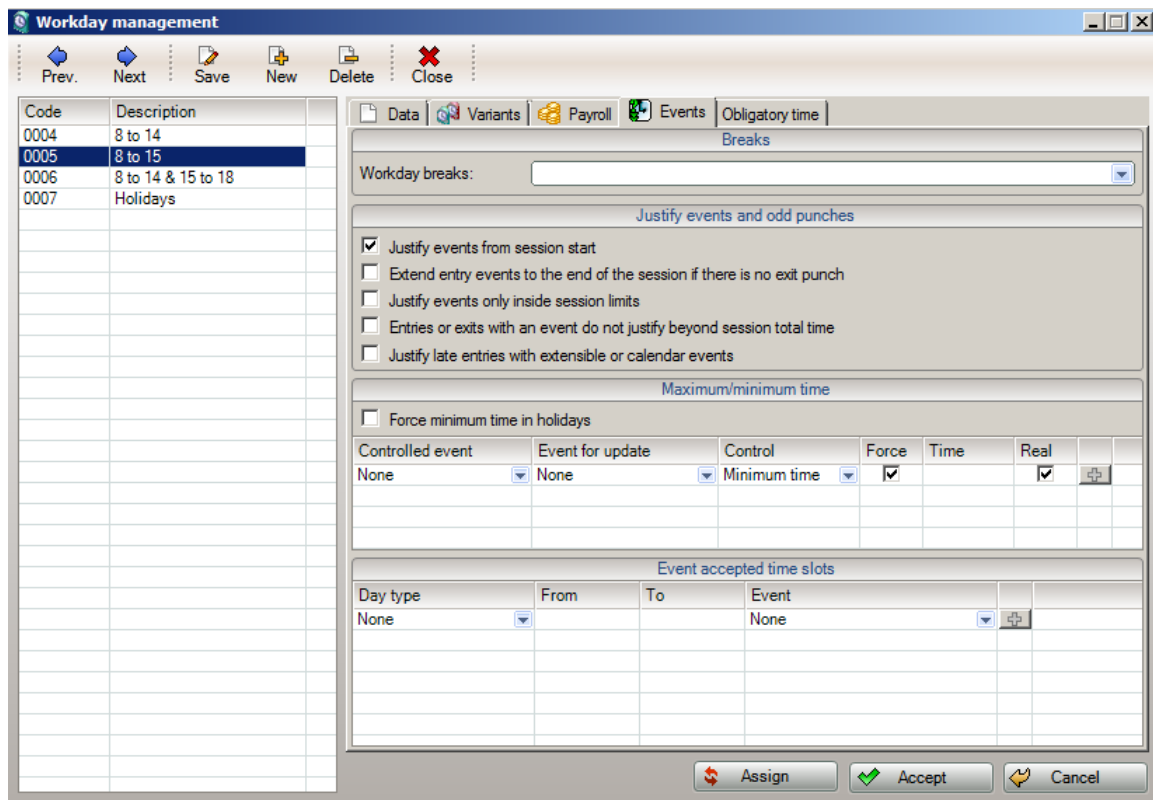


ZKTime Enterprise enables you to define up to 9 different variants for a workday, codified from 1 to 9. These variants can be marked into the calendar establishing one of the shifts for a specific workday or otherwise, choose the 'Always look for the best fitting variant' option. Upon the selection of 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.

### 7.3. Payrolls

This concept is very closely related to the 'Profiles' one, therefore we will explain them both later on, in section 9 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 section 8 of this manual.
- Justify late entries with extensible or calendar events: Formerly, on section 6.3 of this manual, we explained the extensible events and how do they justify the absence of employees. Events from session start (which will be explained in further detail later on, on section 8 of this manual) have the same purpose. Anyway, if you enable this option, these events will not only justify the employee's absence but also its delays.

For example, a salesman checks-outs 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. Barracks 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 event marked will justify all of the employee's absences following the rules explained before in section 6.3 of this manual.

- Justify events only inside session limits: When this option is enabled the program will not take into account any circumstances outside of the session times. This way, an event will not be able to be taken into account before the session begins.

- Entries or exits with an event do not justify beyond session total time: If enabled, this option prevents events that count as work to add up 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 it can arrive between 08:30 and 09:00 in the morning, and has to complete a workday of five hours, session ending at 14:00. If the employee arrives at 08:45, but leaves early punching an event 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 effects from the moment of the entry punch instead of the time of the session beginning. This option is quite useful when you have flexibility on the time to get to work.

### 7.5. Obligatory Time

In some cases you may want to control when an employee is absent at certain points of the day, whether or not within the limits of each session. ZKTime Enterprise allows defining 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 affected under an event which counts as work.

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

- User defined incident: Here you can 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.

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.

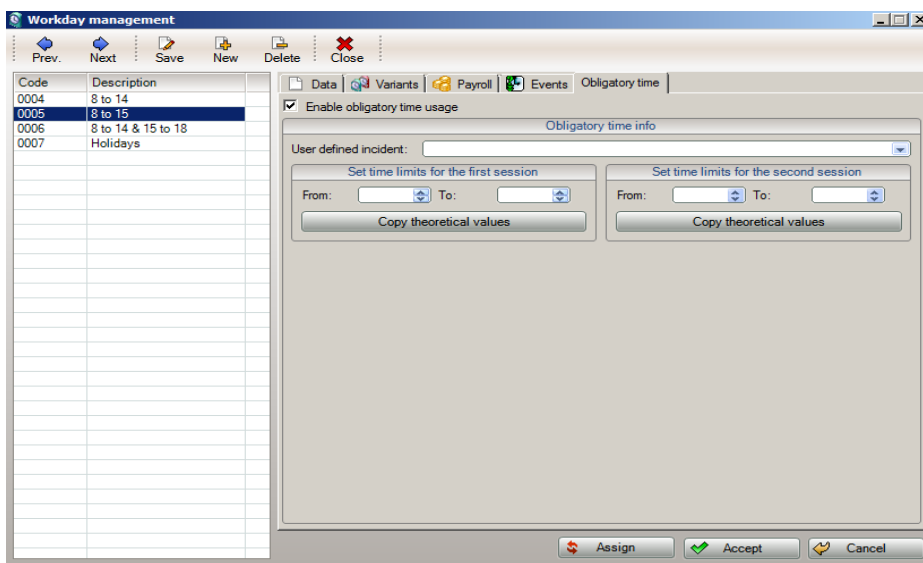
## 8. Calendars

Throughout this manual we have mentioned the calendars, how do they relate to events, or how do they influence the employee's duty time, but we have not stopped to explain it thoroughly yet. 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...

### 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, however, 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...

It is important to understand that personal calendars only register alterations regarding the public calendar which uses as template. Any changes made in a public calendar will be automatically updated to all the employees whom have it as a template, unless of course they have a different configuration in their personal calendars for the days involved in the modification.

## 8.2. Day type

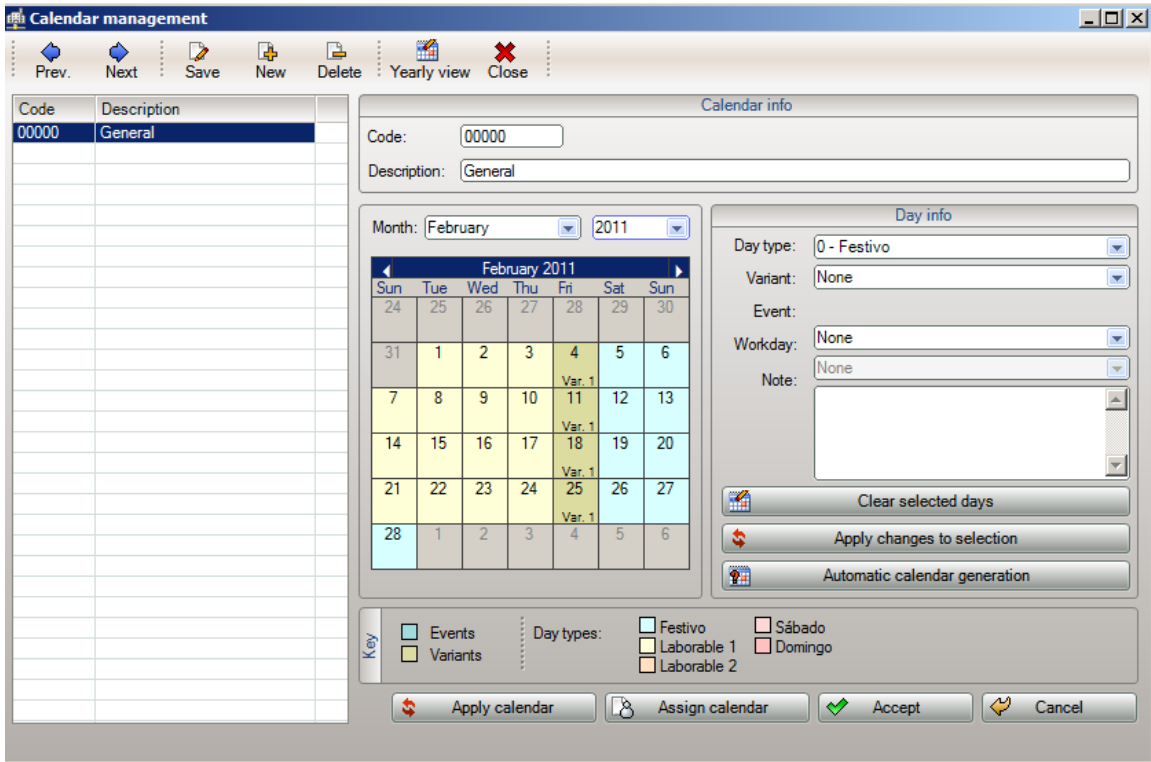
Regarding the calendars it is important to have clear the significance of 'day types'. They involve a code, a description and there are three different types:

- Workday: In these days, reporting to work is considered a duty for employees. Any delays 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.
- Holiday: In these days employees should not report to work. In case they do, all the time spent working will be considered as overtime and no delays or absences will be reported.
- Optional: These days are a special case. If an employee does an entry punch they 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 to be. Furthermore, you will be able to assign the calendars to your employees.



When editing a calendar, the first thing you have to know is what you will be able to edit, and which options will you have for every day. ZKTime Enterprise will allow you to edit up to six parameters for each day:

- Day type: Every day of the year can be assigned a 'day type'. You will usually group under the same 'day type' days with similar circumstances. 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 shifts. 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 at all. 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 of the selected 'Always look for the best fitting variant' option in the employee's shift. If this option is not enabled, the program will consider the variant as the expected shift and will take into account 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: There might be some cases in which you might don't want the program, when an event occurs in the calendar, to justify the event upon the regular shift. This option allows you to define an alternative workday schedule for these occasions.

- Note: Here you will be able to make brief notes on particular days in case you need to.

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

The screenshot shows the 'Day info' panel with the following fields:

- Day type: 1 - Working day 1
- Variant: None
- Event: (empty)
- Workday: None
- Note: (empty text area)

Buttons at the bottom of the panel include:

- Clear selected days
- Apply changes to selection
- Automatic calendar generation

Callouts in the image:

- 'days selected for editing' points to the selected days in the calendar.
- 'editing area' points to the 'Day info' panel.
- 'unselect the selected days' points to the 'Clear selected days' button.
- 'Apply changes to the editing area of days selected' points to the 'Apply changes to selection' button.

### 8.4. Automatic Calendar Generation

To generate calendars can be a tiresome and monotonous job, ZKTime Enterprise eases the process by enabling the possibility to automatically generate a calendar. With this option you will be able to define the patterns which the program will use to create the calendar every year, simplifying the entire process.

Automatic calendar generation

Take as reference for assigning day types

The first Monday  This date: 07/01/2013

Day types			
Quan.	Day type	Variant	Force
5	1-Working day 1	None	Force variant
1	3-Saturday	None	Force variant
1	4-Sunday	None	Force variant

Holidays	
Holiday dates	Day type
None	None

Add national public holidays

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

Accept Cancel

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 that 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.

The total number of consecutive days of its kind to be introduced

The type of day selected

assigned time variant

If the employee's base time will have the option to consider or not:  
Always look for the best fitting variant

Take as reference for assigning day types			
<input checked="" type="radio"/> The first <span>Monday</span>		<input type="radio"/> This date: <span>07/01/2013</span>	
Day types			
Quan.	Day type	Variant	Force
5	1-Working day 1	None	Force variant
1	3-Saturday	None	Force variant
1	4-Sunday	None	Force variant

Holidays	
Holiday dates	Day type
None	None

Add national public holidays

– Holidays: Here you will be able to determine the holidays you wish, however, ZKTime Enterprise only works with fixed holidays, not with those, like the Easter holidays, which varies its dates and need to be calculated every year.

– Variants: It is common that at some periods of the year, shifts might change, for example during the summer some companies apply a different workday schedule from that of the rest of the year. With this option we will be able to establish a shift variant, with the usual variant configuration options, which will always apply in a fixed range of dates.

– Events: Some events which affect all the company can be foreseen, such as summer shut down, reform closures, closed season... This option will enable us to create a calendar including this type of events; specifying if it will affect to all the days, or just to workdays within the defined range.

### 8.5. Apply and assign calendar

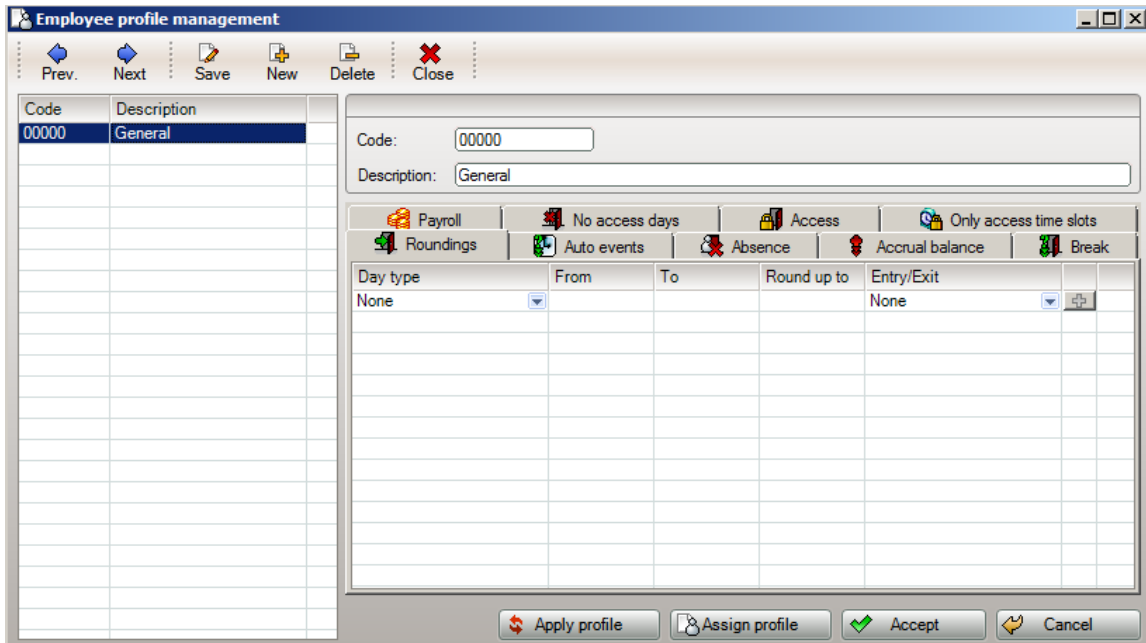
Once you have created all the public calendars, you will be able to assign them to your employees. We explained before the difference between a public and a personal calendar, keep it in mind because it is relevant for the following options:

Assign calendar: When assigning a public calendar to an employee you will be changing the template it uses for its personal one. All changes made by the employee on his calendar will remain unchanged.

Apply calendar: When applying a public calendar to an employee you will be deleting all changes made on the personal calendar and bringing up a new template.

## 9. Profiles

Employee profiles encompass a range of configurations that can be assigned to each employee. You will be able to define as much general and particular profiles as you wish or need, and assign them to your employees.



### 9.1. Roundings

It could be the case that you are not interested on the exact moment of the punch, for example: All punches made between 08:45 and 09:05 should be rounded up or down to 09:00, which is the session start time. This way, all times associated to a punch made between quarter to nine and five past nine will be calculated as if the punch was made at 09:00.

Each rounding has the following options:

- Day type: Here you will decide to which type of day you want the rounding to apply.
- 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 time frame defined previously.
- Entry/Exit: Defines whether the punches to be rounded are the ones of entry or exit.

### 9.2. Automatic Events.

In some cases it could be possible that at certain hours all punches would be considered along 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 13:00 and 14:00 should be considered as a lunch event. At any rate, if an employee punches an event in the space of time defined for an automatic event, the former will have preference over the latter.

The options allowed are:

- Day type: Here you will decide to which type of day you want the automatic event to apply.
- 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: Defines whether the punches that will generate the automatic event are the ones of entry or exit.

### 9.3. Absence

By default, Enterprise ZKTime will associate the 'S004' system event, unjustified absence, to every workday in which an employee has not registered any punches or extensible or calendar events. Could be that you do not want this to happen. For example, if a group of employees can have their overtime rewarded with days off. In order to control this we can decide for the program to mark the absence as one of the events of your own creation.

### 9.4. Accrual balance

On this tab you will be able to set limits on the accruals: being these limits on the total amount of time, the number of times or both. The options that we can define are:

- Accrual: The one you want to edit.
- Times allowed: Fixes the maximum number of times that you will allow that accrual to be updated within a specified period of time. If you do not want to control the number of times it's 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 period of time. If you do not want to control the total amount of time accumulated, leave it in blank.
- Time: Fixes the period of time in which you will control the accrual balance (weekly,



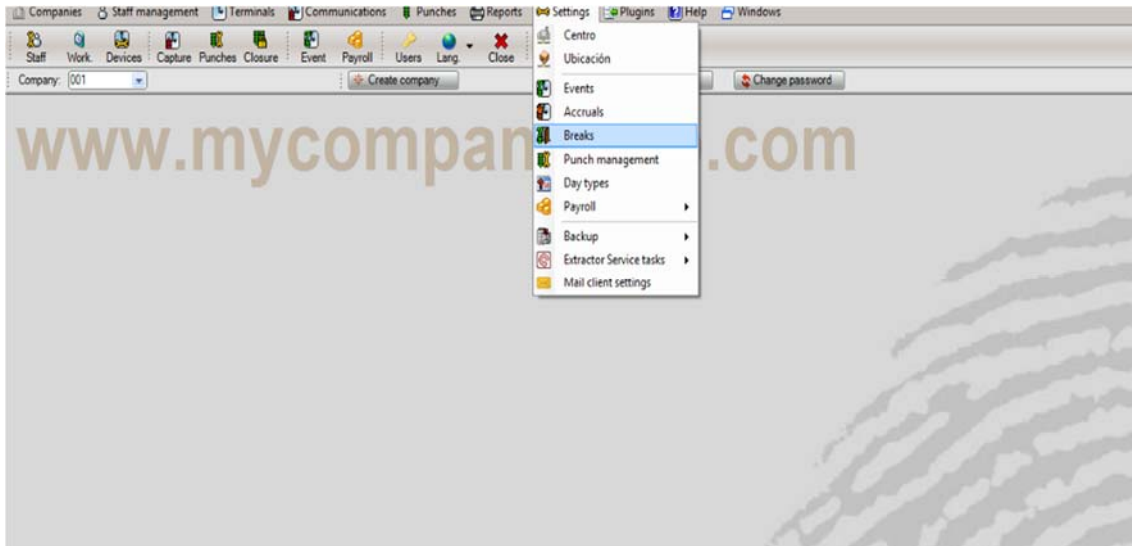
monthly or annually). Once the period comes to an end, the balance resumes to the initial value.

### 9.5. Breaks

These are automatic entry and exit punches set for breaks that you will always want to deduct from the workday schedule. For instance, if your company has a kitchen inside the premises there might be employees who would not hit an exit punch at lunchtime. By using this option, you will program a break which will make the program automatically assume that the employee has, for example, left for lunch at 13:00 and returned at 14:00. However, if an employee is reported to have an exit punch but has not returned by the time of the break beginning, it will not have any effect.

The options we have are:

- Day type: Fixes the type of day to which to apply the event.
- Break: To define the break you want to apply. You can find the editor through the Settings tab-> Breaks (follow picture below)

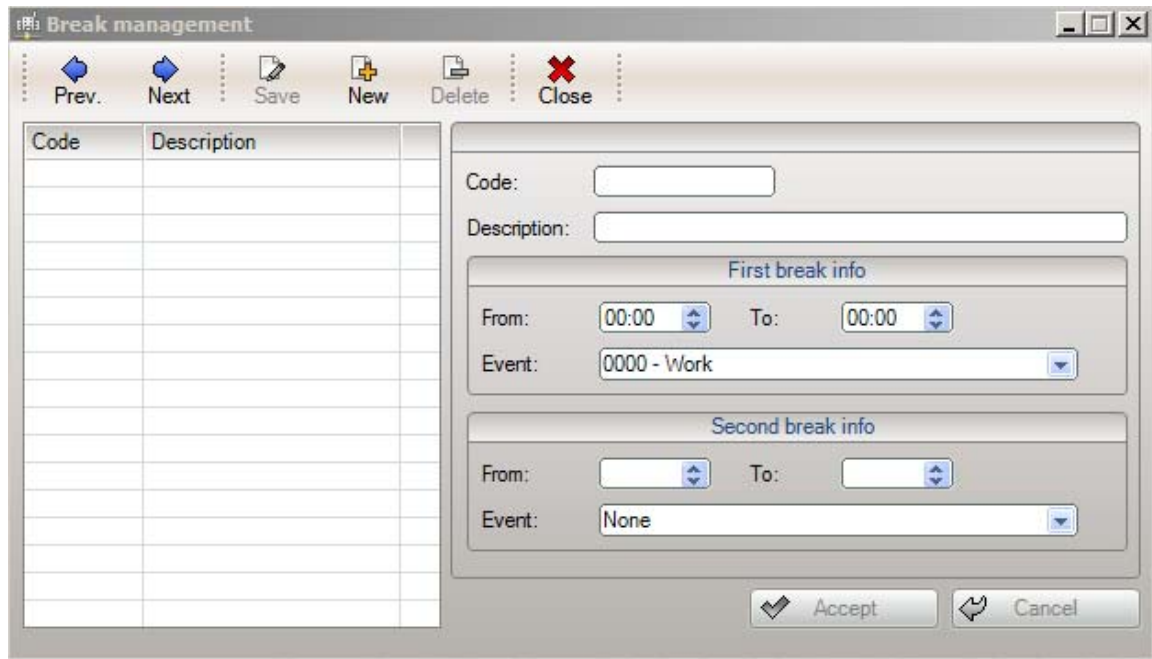


#### 9.5.1 Break management

On this window you will be able to edit up to two pauses for each break that later will be assigned to the profiles. You will find the following options to edit each pause:

- From: The break beginning time. If the break is applied, exit punches will match the time set here.
- To: The time of the break end. 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.

While having the possibility to edit two different pauses, you can perfectly just edit the first one and leave the second one blank.



### 9.6. Payroll

We have mentioned it before, when we explained workdays and said that they were closely related with profiles. This one is a special option, as it's related to both profiles and workdays and depends upon the configuration of both of them. Broadly a payroll is a way of dividing the work time into different cost concepts such as: standard hours, extra hours, night hours...

We will begin by explaining all the options offered on the profiles and workday tabs. Later we will move on to explain in further detail how do payrolls work. For now it will be enough to know that you will be able to define different payrolls which will divide the worked hours into different cost concepts. The first thing you will find in this tab is the option to choose between the following two payroll assignation methods:

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

Should you choose the 'workday and day type' option the choices you can see on the

Day type	Payroll		
None	None		

picture below will be disabled, as it won't have any effect and, from now on, the payroll assignation will be based on what was defined upon the employee's workday schedule.

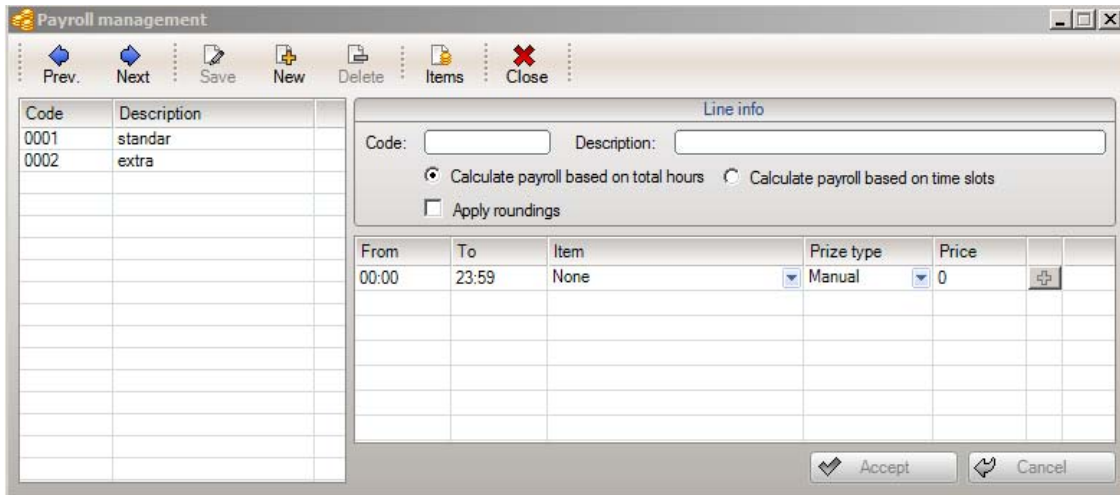
Nevertheless, both work in the same way. You will find two options:

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

Once clarified how to assign payroll lines, we will move on to explain how payrolls work.

### 9.6.1 Payroll Items

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



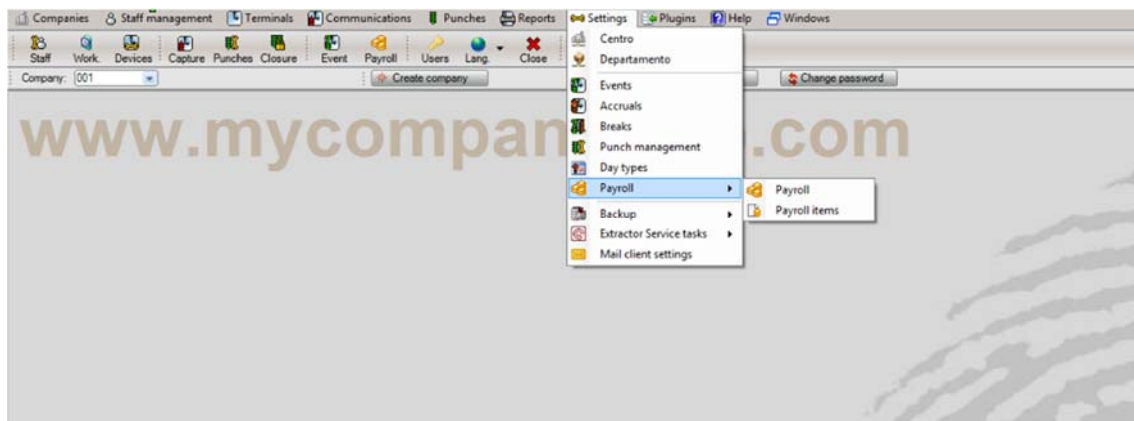
The following options are available:

- Minimum time: Here you will be able to set the minimum time slot that must be reached for an item to be taken into account. For example, if we create the payroll item 'extra hour' and fix a minimum time slot of 30 minutes for it, in case an employee at the end of the day adds up to 29 minutes, or less, on this item that time will be cast-off and the program will calculate 0 minutes for that item. Nonetheless, if you do not want to establish a minimum time slot you just have to leave the option unchecked.
- Roundings: Depending on how you want to calculate the amount of time involved on a payroll item you will have different options.
  - 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:

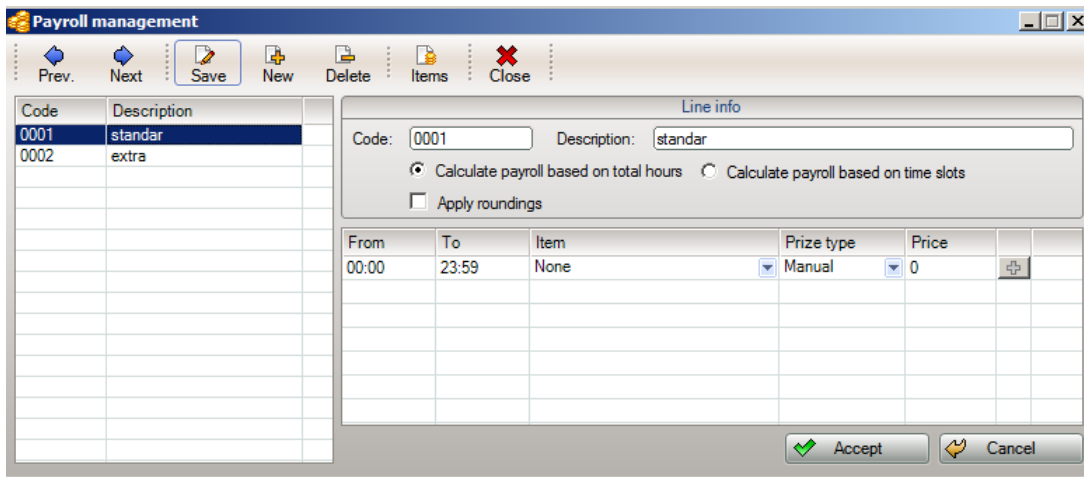
- Round down: It will discard the time already passed between the time defined in the 'time' field and the one established for the payroll item.
- Round up: This will add up the remaining amount of time between the time defined for the payroll item and the one defined on the 'time' field until the difference is '0'. Therefore, if for example you set to do the rounding up every 30 minutes and an employee has 45 minutes worked under that payroll item, the program will automatically add the remaining 15 minutes until it reaches 60 minutes.
- Round according to value: In this case, if the remaining amount of time between the time defined for the payroll item and the one stated on the 'time' field is different to '0', it will be rounded down if the remaining value is higher than the value set on the 'value' field and round it up if it is lower.

### 9.6.2 Payroll lines

Payroll lines collect one or more payroll items which will divide the workday time into different payroll items. You can find the settings on the payroll management window, to which you will have access from the main menu.



The following options will help you define each payroll line:



- Calculation method: There are two ways to calculate a payroll, based on total hours or time slots. The former is based on the amount of hours worked, for example the first 8 hours could be standard, over that and until 10 they might be considered extra hours and over 10 hours of work, double extra hours. On the latter, the payroll will depend on the time slot where those hours were worked. For example, from 8 am to 5 pm the hours could be considered standard, from 5 pm to 7 pm, extra hours and anything beyond that, double extra hours.

- 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; upon the calculation method the values involved 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 amount of hours.

Price type: Here you can set the price you are valuing each hour. You will be able to choose amongst 5 types for each employee, a percentage of those or introduce a price manually.

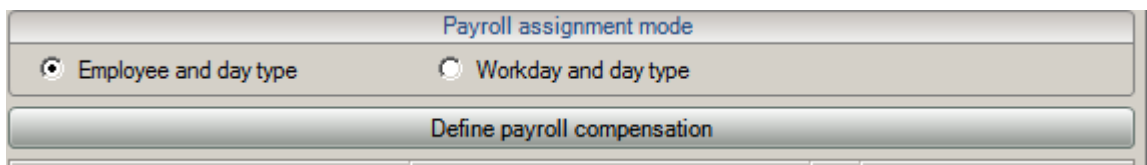
Price: The content of this field will change upon the selection you made on the previous one, 'price type'. If you chose to introduce the price manually, you will have to introduce the price per hour. However, if you chose to use percentages, you will have to introduce the percentage value of the hourly cost.

The program will let us establish as many payroll items as we might need within the same payroll line with two limitations regardless of the calculation method. Firstly, you only have from 00:00 to 23:59 and secondly, there cannot be any empty time spaces, you will have to account for the full day.

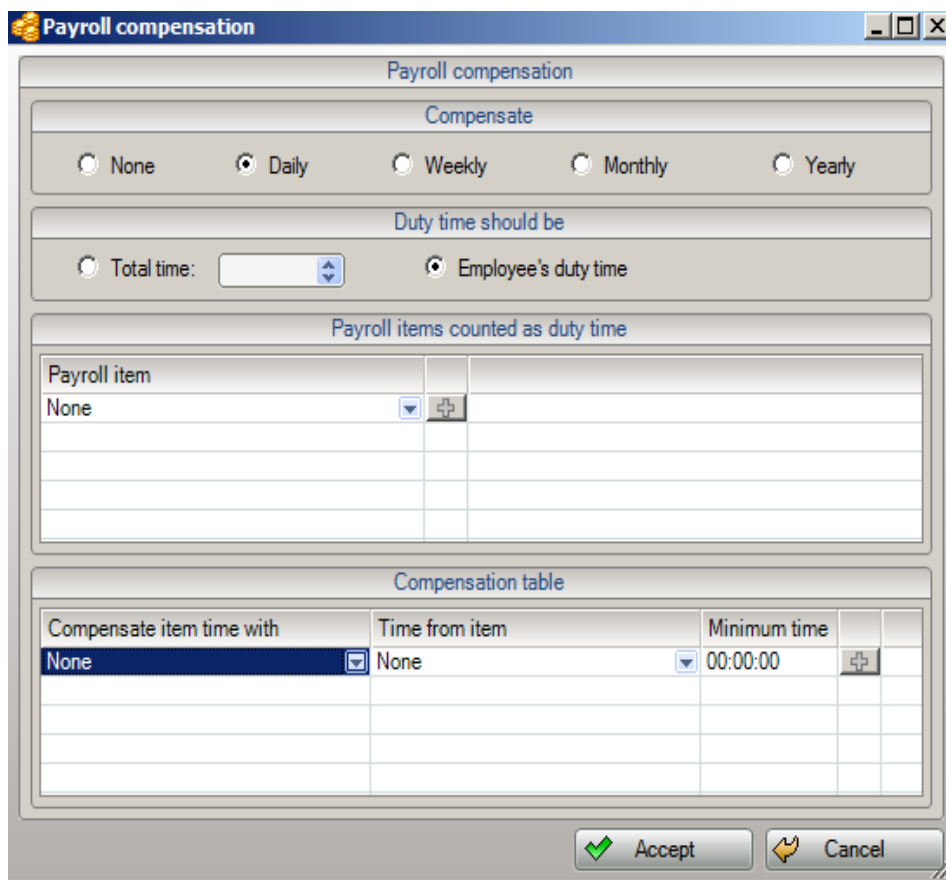
Nevertheless, the program will make sure that you fulfill these constraints. If you have just one payroll cost item defined, you will be forced to set the 'From' field on 0:00 and the 'To' one at 23:59. If the payroll has several items and you delete one of them, the program will extend the beginning 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 so far: Define payroll compensation.



Once explained how to set up different payroll lines for different day types, with their corresponding items, we can continue to explain what payroll compensations are.



Payrolls as explained so far run daily. This might fall short some times, because if an employee works overtime one day but along the whole week does not comply fully with its duty time, you may not want time assigned to the payroll item that accounts for the overtime.

For this purpose ZKTime Enterprise includes the payroll compensation option. This option works mainly around two ideas: standard hours, which have to achieve a minimum value and extra hours, which are accounted for once the standard hours have achieved that minimum level.

To set the payroll compensation we have the following options:

- Compensate: Sets the period of time over which you want to apply the compensation, daily, weekly, monthly or yearly. If you do not want to set payroll compensation select the option 'never'.
  
- Duty time should be: In order to set payroll compensation it will be required to introduce a minimum number of standard hours to comply with. In case it's not reached, it applies the compensation. You have two options to define what the duty time should be, introduce manually the total time in hours, regardless of the shift, or choose employee's duty time, where ZKTime Enterprise will establish the minimum requirement based on the employee's workday and calendar.
  
- Payroll items counted as duty time: What we consider standard hours does not necessarily have to imply a single payroll item. For example we may have defined two different types: Normal hours and night hours, which have to add 40 hours per week before considering any type of overtime. You can add as many different types as you wish or need.
  
- Compensation table: Here you will decide how to compensate payrolls.
  - o Compensate item time with: Sets the item which will receive the offset time.
  - o Time from item: Sets the item from which the time will be withdrawn until its value matches the established standard hours.
  - o 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

Everything that we have explained up to here will be applied to the employees, whom in last instance are the core point of the program.

The screenshot displays the 'Staff management' application window. On the left, a table lists staff members with columns for 'Code' and 'Name'. The first entry is '00001' for 'Oscar Colins'. The main area is a form titled 'Employee data' for this specific employee. The form includes fields for Code (00001), Name (Oscar), Last name (Colins), Date of birth (15/02/2013), Address, Province, Town, Phone, Cell phone, E-Mail, Calendar (00000 - General), Profile (00000 - General), Workday (0001 - test), and a checkbox for 'Has night shift'. There are also five Rate fields (Rate 1 to Rate 5), Department (01 - department01), Center (01 - center01), and Employee in charge (None). The form has 'Accept' and 'Cancel' buttons at the bottom right.

### 10.1 data

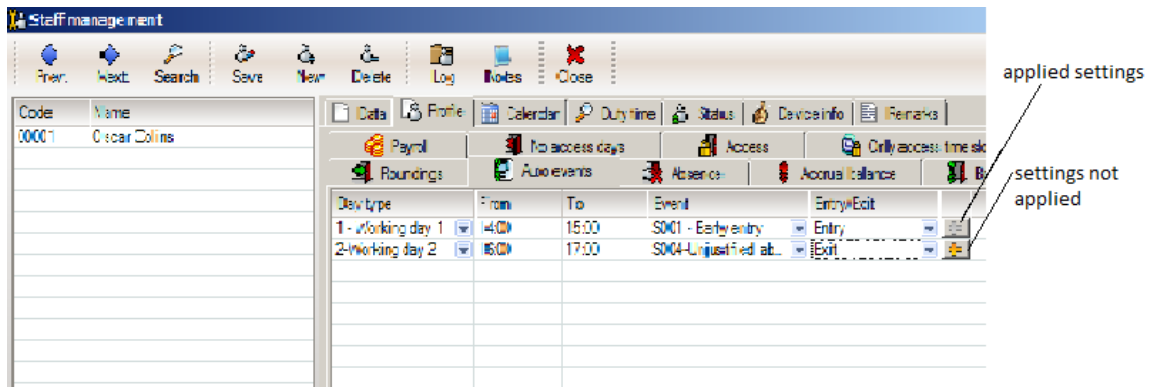
The information on each employee will contain personal details which we are not going to explain. However, there are some details which will affect the configuration of how the program will run and therefore we will get into some detail:

- Calendar: Sets the public calendar upon which the employee will configure its own personal calendar.
- Workday: Sets the basic shift of an employee. Note that this basic workday might have up to 9 variants.
- Profile: Sets the public profile upon which the employee will obtain its personal settings.
- Department / Center: These fields enable to group employees based upon their position in the company.
- Employee in charge: Sets a hierarchical responsible for an employee.



## 10.2 Profile

In Section 9 we explained the meaning of all profile settings, therefore we will not stop here for further explanations. However we would like to remind you that the public profile settings will, by default, be automatically applied, although they can be edited, created and/or deleted from here. Any configuration not in use will be grayed, whilst the ones in use will appear with the usual black color font.



## 10.3 Calendar

Here you will be able to see the personal calendar of an employee which, by default, is a template of the public calendar assigned to that employee but updated with the changes done.

All existing options in this window are the same that we face in the calendar management window which we have already explained in section 8, so we will not go into further details.

## 10.4 Duty time

The Duty time is an estimation of the hours that an employee should work based on its calendar. It's important to note that the information shown in this window is just for informational purposes and might not be completely reliable as in, for example, cases where there are optional days on the calendar, or rotating work shifts or variants which make it impossible to calculate this information until all punches are collected.

## 10.5 Status

Here you set when an employee joins or leaves the company. By default it will always give the date in which its profile was created as the date in which it joined the company. However you can edit this. An employee can even join and leave the company several times, as it might occur with seasonal workers.

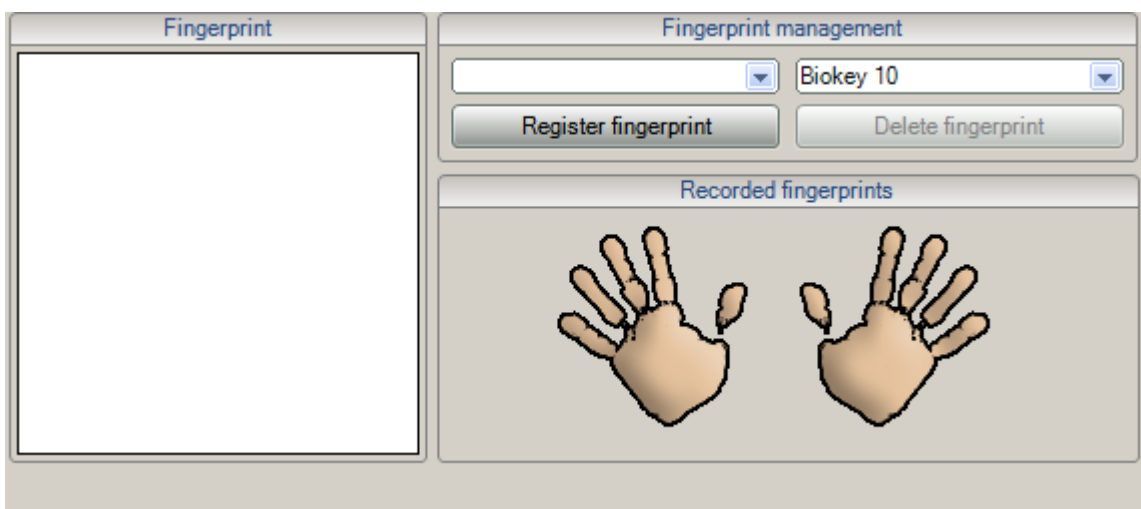
## 10.6 Terminal

In this window you will be able to edit information which will later be uploaded into the terminal:

- Alias: The name that will be uploaded into the terminal and displayed upon the employee's punches, it can have a length of up to 8 characters.
- Password: The password which the employee may use to identify itself on the terminal.
- Privileges: Defines the level of user privileges held by an employee within the terminal.
- Delete template: In case there is a fingerprint template stored in the database, you can choose to remove a template and the next time you send data to the terminal it will be also be removed from it.
- Fingerprint Management: This point will be explained apart in the following section.

### 10.6.1 Fingerprint Management

This option will allow you to collect users fingerprints through a USB fingerprint reader. ZKTime Enterprise has a storage capacity of up to 10 fingerprint templates for each user, which later you will be able to send to each terminal.



The recorded fingerprint tab will mark in red the fingerprints of those fingers already stored in the database.

### 10.7 Importing employees

This option allows us to import employees in our system from a file generated manually or through a third party application.

#### 10.7.1 File Format

The file format must be CSV styled. 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 of some kind and the fields by a literal comma (in locales 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 quoted (enclosed within double-quote characters).

#### 10.7.2 Column titles

In order to assure a successful data import is essential that the column titles match the following. Please note that the program will only recognize these titles which are currently in Spanish, in brackets their meaning:

- 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 (if available or assigned) in the company.
- Alias (Alias): The name which will be displayed when the employee punches on the terminals.
- Privilegios (Privileges): Employee's user privileges on the terminal
- Activo (Status): This field specifies whether the employee is currently working in the company or has left.
- IdPerfil (Profile), IdCalendario (Calendar), IdHorario (Workday), IdResponsable (Employee in charge), IdUbicacion (Location), IdCentro (Center): These fields correspond to the ID of the different profiles, workdays, 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.

### 10.7.3 Column order

There is no obligation to keep a specific column order. The system will upload them automatically from the database either way.

### 10.7.4 Required columns

The minimum required columns for the employee data import task to work 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. This means that you will be able to import a database which only contains the CODIGO (code) and NOMBRE (name) columns.

### 10.7.5 Duplicated data

The program will not let you introduce duplicated information for the CODIGO (code) and TARJETA (card) columns. If the program detects information that might be duplicated it will launch a pop up window example below), to show you a list of fields that must be modified in order to continue.

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

Example of a database correctly imported

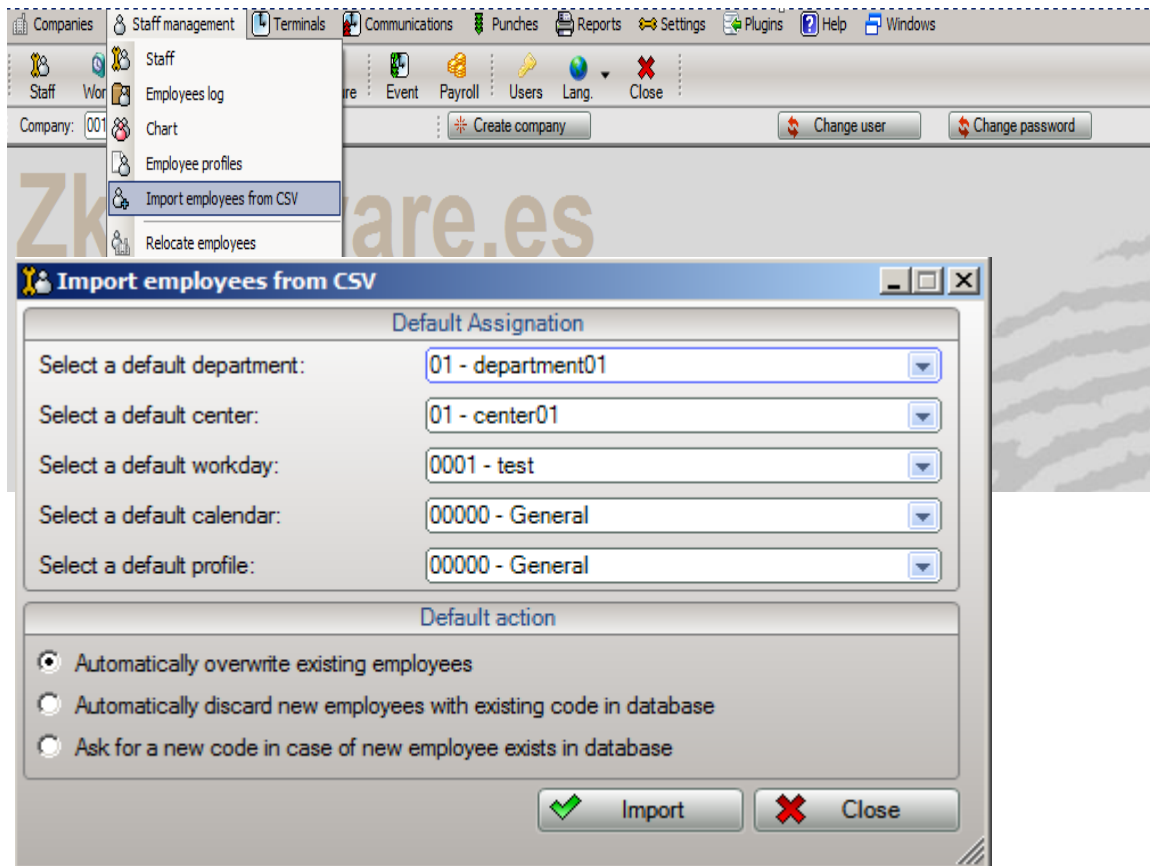
Codigo; TARJETA, nombre, apellidos, Direccion

00 001, 060; Robert; Longbow; Old St

00 003, 070, Woodrow, Wilson, Wigmore St

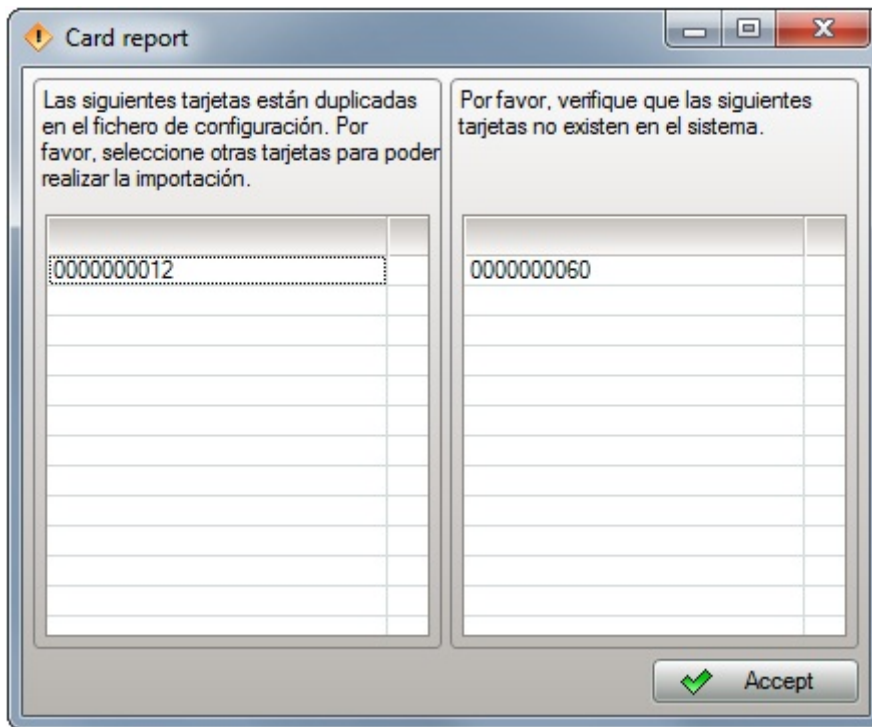
### 10.7.6 Employee Import Process

Once you have the database on the required file format and the employee data you will be able to upload all the information into the system. Inside the staff management tab you will find the 'import employees from CSV' option, you can click on it to begin with.



The window below will pop up. In it 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.

Once selected the default values, you will have to choose the file where you previously created the database. By clicking on the import button a folder selection window will appear. Once selected the relevant file the system will automatically proceed with the task of uploading the data into the system. A final window will appear informing of the results of the process.



## 11. Reports

The information collected on ZKTime Enterprise will usually display on a format from which you will not always be able to obtain the required information.

Reports are the tools which will allow you to see and work with, all the information gathered, in a user friendly display. There are different types:

- 1.1 Master reports.
- 1.2 Punch reports.
- 1.3 Payroll and time report
- 1.4 Report of punch modifications
- 1.5 Punches of the day

### 11.1 Master reports

This type of reports will display basic non processed information. Some of its handy applications will be to obtain a relation of your employees filtered by a determined department, center or the different payrolls registered in the system.

Master reports are divided in its turn into 8 subcategories:

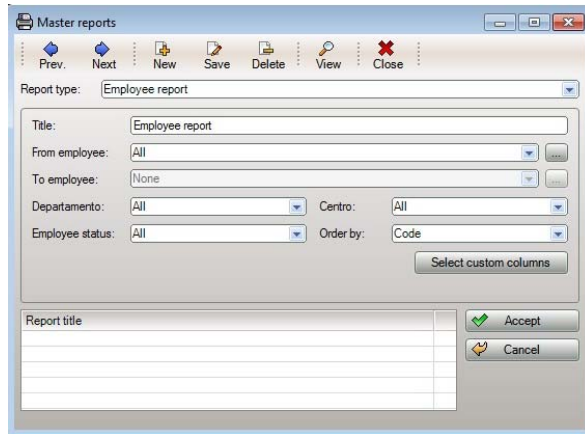
- 11.1.1 Employee report.
- 11.1.2 Employee notes report

- 11.1.3 Standard hour reports
- 11.1.4 Workday report
- 11.1.5 Calendar report
- 11.1.6 Event reports
- 11.1.7 Calendar events report
- 11.1.8 Payroll report

*11.1.1 Employee report*

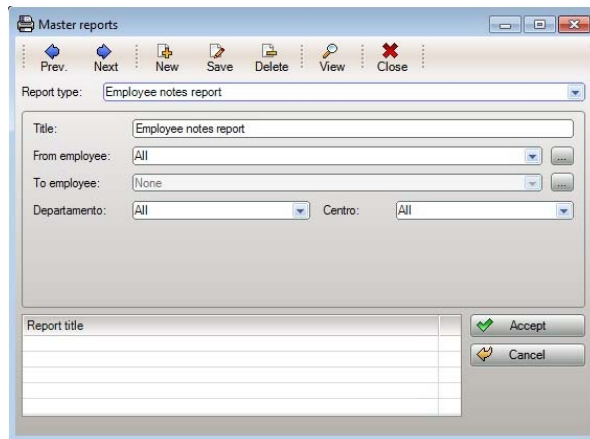
This report will display a relation of the employees stored in the system. They can be filtered by department, center, code, by creating a range of employees or through a combination of all the former.

Beyond the basic employee information: Code, Name and Last name; you will be able to create up to 8 further columns with any of the personal data from the employees.



*11.1.2 Employee notes report*

This report will show you the notes associated to the employees. As above, you will be able to choose the information to be displayed.



### 11.1.3 Standard hours report

This report will display an estimation of the hours which an employee should work, based on its workday schedule and its calendar. Again, you will be able to choose the information to show up.

The screenshot shows the 'Master reports' dialog box with the 'Report type' set to 'Standard hours report'. The fields are filled with the following values:

- Title: Standard hours report
- From employee: All
- To employee: None
- Departamento: All
- Centro: All
- Year: 2013
- Show only employees hired on selection

At the bottom, there is a table with the header 'Report title' and two buttons: 'Accept' and 'Cancel'.

### 11.1.4 Workday report

This report displays a relation of the existing workday schedules. As in previous reports, you will be able to choose the information to show up.

The screenshot shows the 'Master reports' dialog box with the 'Report type' set to 'Workday report'. The fields are filled with the following values:

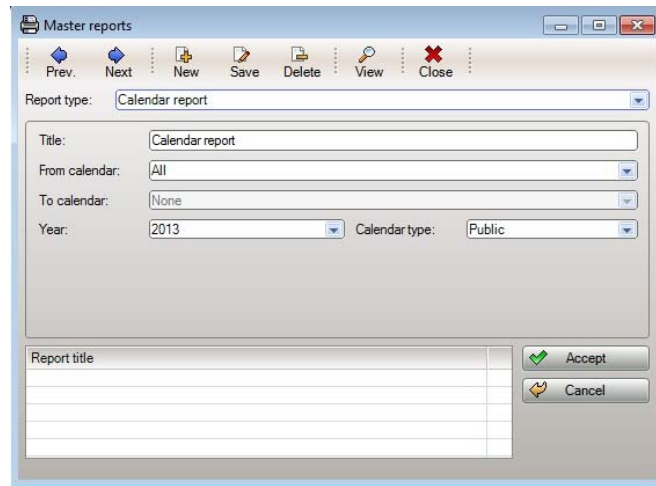
- Title: Workday report
- From workday: All
- To workday: None
- Order by: Code
- 

At the bottom, there is a table with the header 'Report title' and two buttons: 'Accept' and 'Cancel'.

### 11.1.5 Calendar report

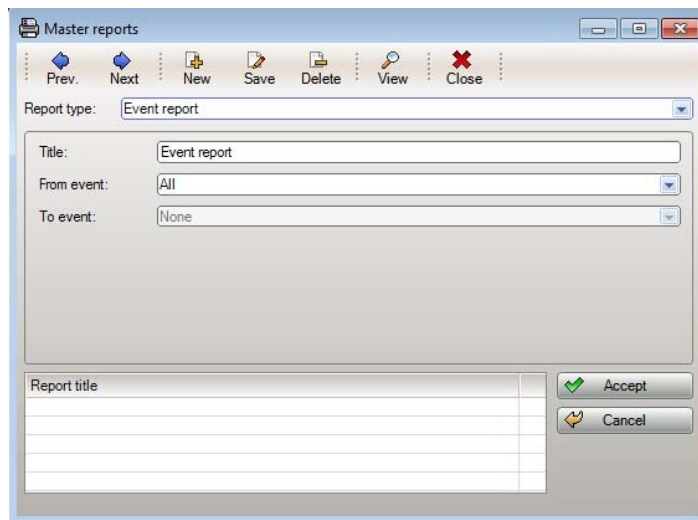
This report displays a relation of the existing calendars. In this one you will be able to sort the calendars by year, type and over a range.





### 11.1.6 Event reports

This report will display the events stored in the system. You will be able to sort them over a range.



### 11.1.7 Calendar events report

This report will display a relation of the existing calendar events.

The screenshot shows the 'Master reports' dialog box with the following fields and options:

- Report type: Calendar events report
- Title: Calendar events report
- From employee: All
- To employee: None
- Ubicación: All
- Centro: All
- Event: All
- Order by: Code
- From date: 01/10/2013
- To date: 31/10/2013

At the bottom, there is a table for 'Report title' and two buttons: 'Accept' and 'Cancel'.

### 11.1.8 Payroll report

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

The screenshot shows the 'Master reports' dialog box with the following fields and options:

- Report type: Payroll report
- Title: Payroll report
- From payroll: All
- To payroll: None

At the bottom, there is a table for 'Report title' and two buttons: 'Accept' and 'Cancel'.

### 11.2 Punch reports

This type of reports will display different information involving the punches. In them, you will be able to find from accrual reports to staff absenteeism.

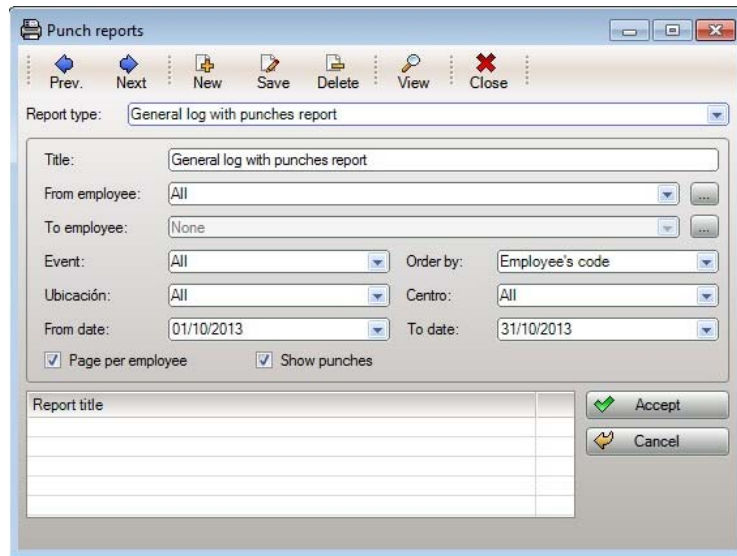
It is further divided into 4 sub-categories:

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

### 11.2.1 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.

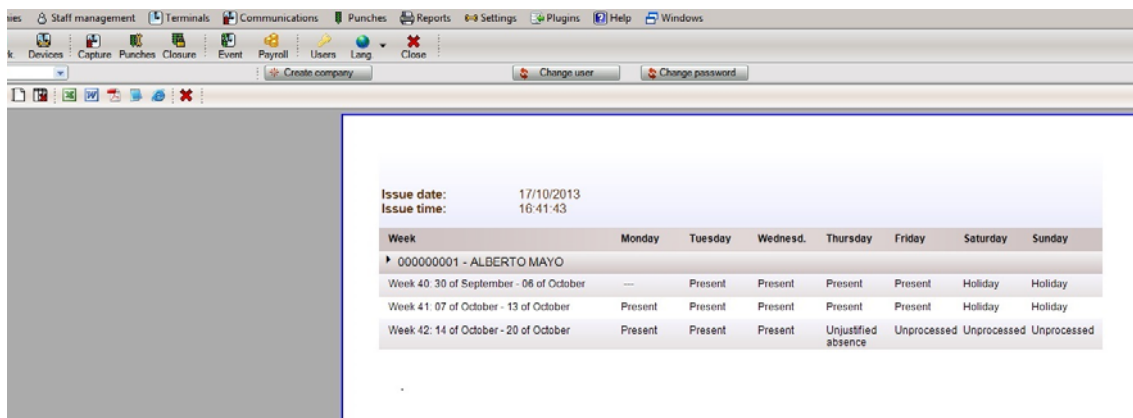
As you will be able to appreciate from the picture below, there are several options which will allow you to sort out and arrange the information in order to obtain a friendlier display.

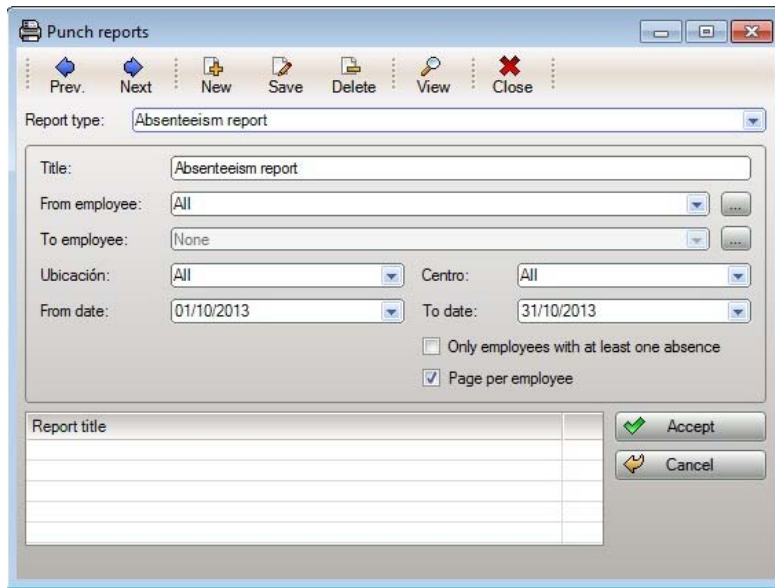


### 11.2.2 Absenteeism report

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.



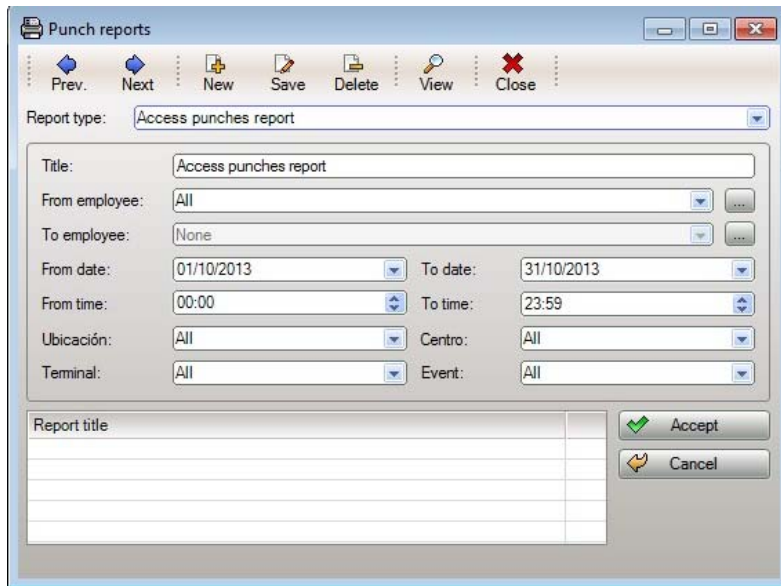


### 11.2.3 Access punches report

This report will display a list with all the punches made by the employees during the range of days previously selected. It will show 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.

Date	Time	Event	Terminal	Denied
000000001 ALBERTO MAYO				
01/10/2013	08:37:33	0000 - Work	005 - Main door	No
01/10/2013	16:03:14	0000 - Work	005 - Main door	No
02/10/2013	08:31:09	0000 - Work	005 - Main door	No
02/10/2013	15:33:43	0000 - Work	005 - Main door	No
03/10/2013	08:35:55	0000 - Work	005 - Main door	No
03/10/2013	16:06:04	0000 - Work	005 - Main door	No
04/10/2013	08:37:19	0000 - Work	005 - Main door	No
04/10/2013	15:30:52	0000 - Work	005 - Main door	No
07/10/2013	08:34:09	0000 - Work	005 - Main door	No



### 11.2.4 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.

Date	Terminal	Granted	Denied	Total
<b>Issue date:</b> 17/10/2013				
<b>Issue time:</b> 17:38:28				
▶ 000000001 ALBERTO MAYO				
01/10/2013 <Tu>	Day punches	2	0	2
	005 - Main door	2	0	2
02/10/2013 <We>	Day punches	2	0	2
	005 - Main door	2	0	2
03/10/2013 <Th>	Day punches	2	0	2
	005 - Main door	2	0	2
04/10/2013 <Fr>	Day punches	2	0	2
	005 - Main door	2	0	2
07/10/2013 <Mo>	Day punches	2	0	2
	005 - Main door	2	0	2
08/10/2013 <Tu>	Day punches	2	0	2
	005 - Main door	2	0	2
09/10/2013 <We>	Day punches	2	0	2
	005 - Main door	2	0	2

### 11.3 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:

- 1.3.1 Events and payroll with punches report
- 1.3.2 Accruals report
- 1.3.3 Expected workday and real workday report
- 1.3.4 Accrual balance overflow record

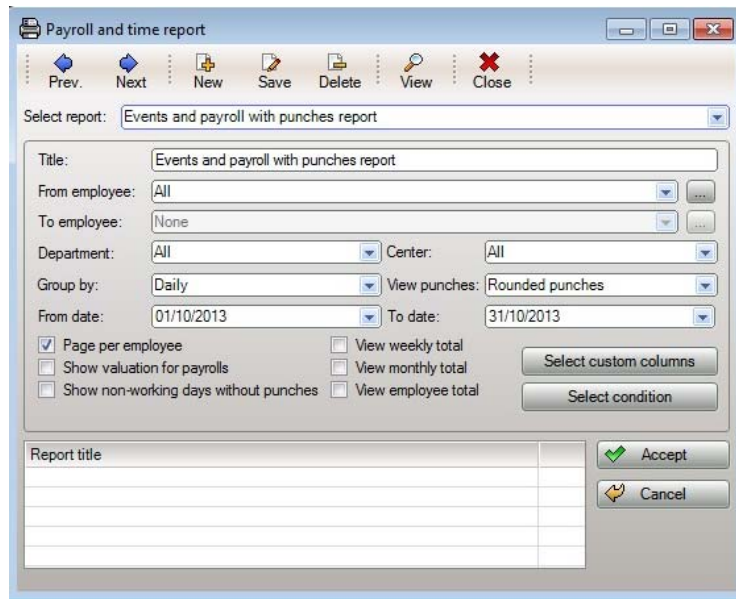
#### 11.3.1 Events and payroll with punches report

This report main utility is to display workday schedules and payrolls broken down in a friendly and useful way.

Though its name presumes both payrolls and workday schedules, it does not have to be this way inevitably. You will be able to obtain a report containing only payroll or workday schedules.

This might be the single most useful report. The most customizable, where 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 that 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.

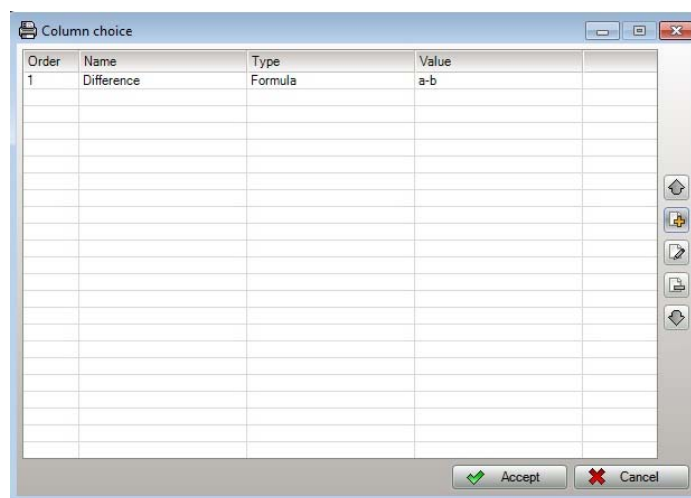


In order to do a basic filter of employees you can choose the range of employees you wish to display. This is possible from the menu options 'From employee' and 'To employee'. Likewise, you will be able to sort out the information by department and center. To continue customizing your report, you should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

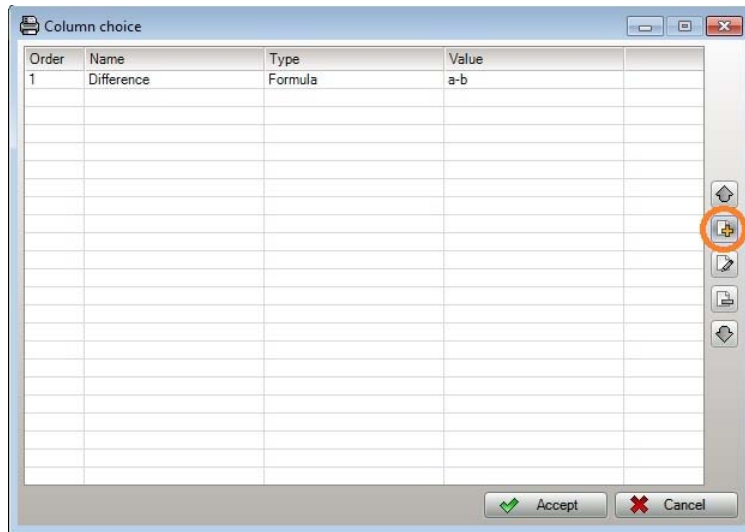
On the workday and payroll reports you will be able to choose how the information will be broken down. There are several options, daily, weekly and monthly. Depending on the type of break down chosen, you will have the possibility to calculate total amounts for workday schedules and payrolls, weekly 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.

11.3.1.1 Column choice

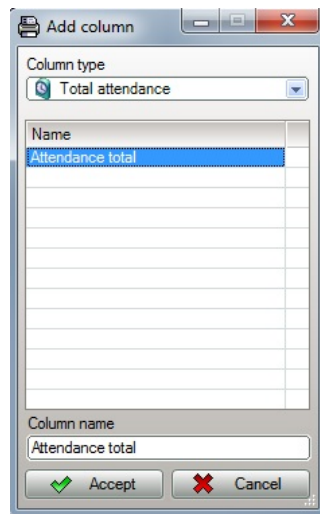
Workdays and payroll reports offer the possibility to choose what information you want displayed on each column. For it, you will have to click on 'customizable columns'. The picture below shows the resulting pop up window.



## New column



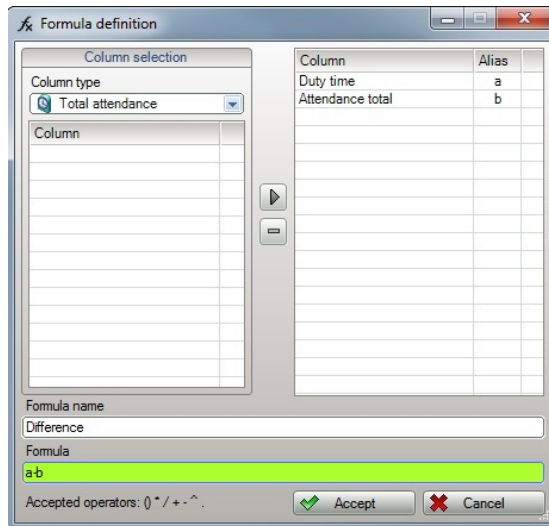
To add a new column, click on the 'new column' icon, as shown on the above picture. Immediately, the window shown on the picture below will pop up.



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.

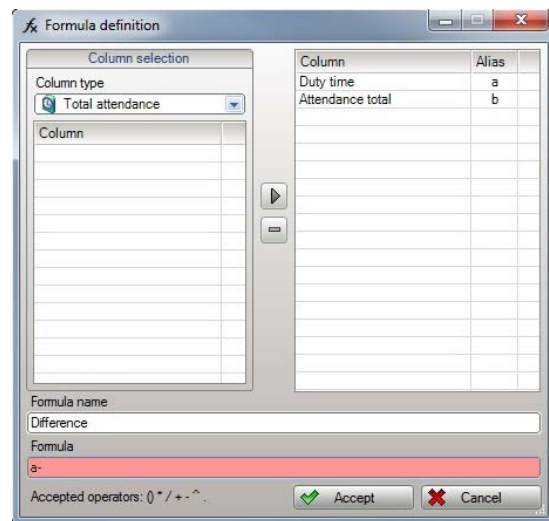




To use a formula just add the columns that you wish to use the formula on from the left hand side to the right hand side selection menu.

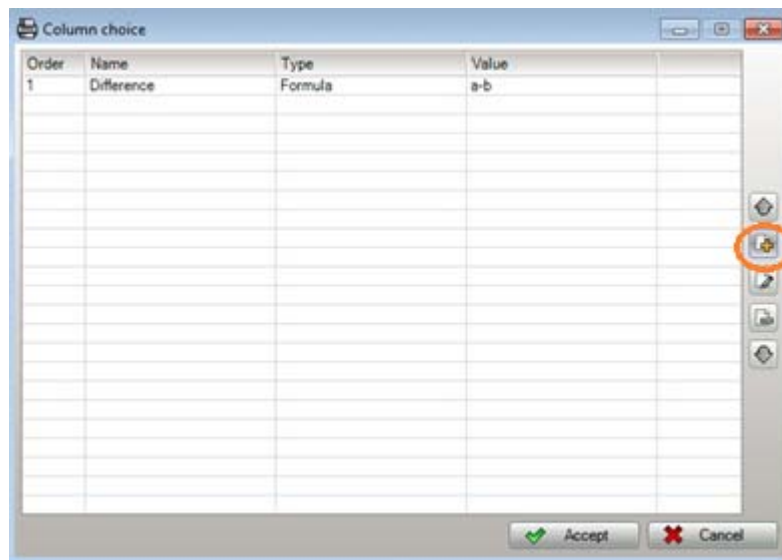
On the picture above you can see that the field containing the formula is green. This means that it is correct. If the field looks red, as in the picture below, would mean that it is incorrect and thus it will have to be corrected.

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.

*11.3.1.2 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.

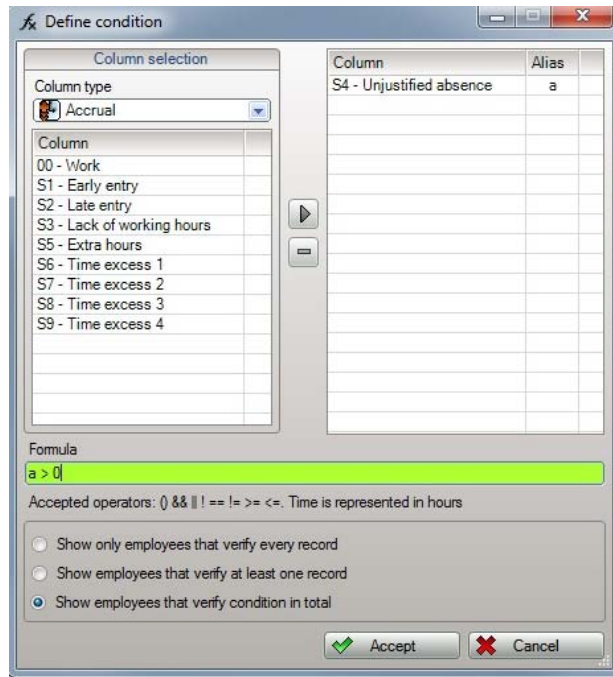
The accepted operator values are:

- AND: &
- OR: |
- NOT: ¡
- Different: !=
- 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.

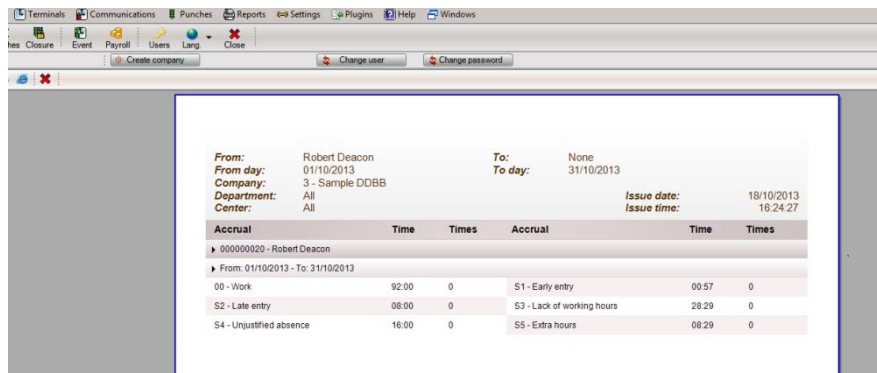
The picture below shows an example of a condition defined to display just the employees who have above 10 minutes of overtime in all break downs.



### 11.3.2 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.

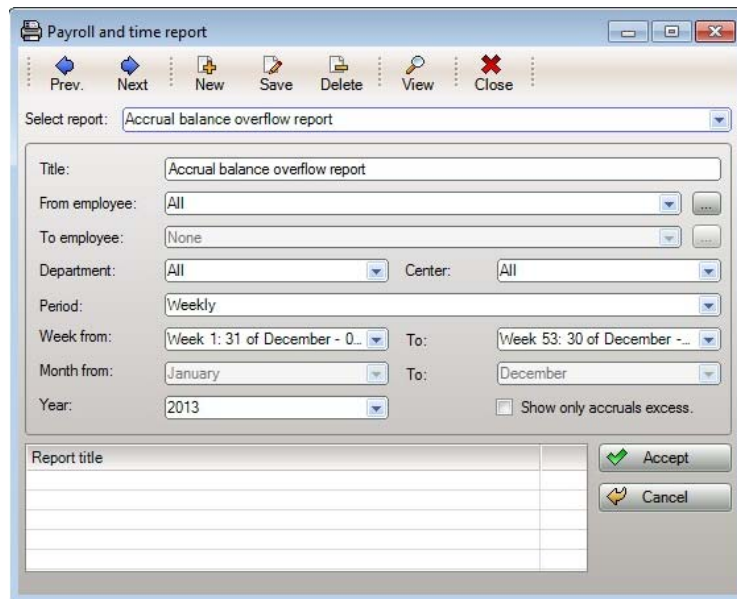
### 11.3.3 Expected workday and real workday report

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

### 11.3.4 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.



#### 11.4 Report of punch modifications

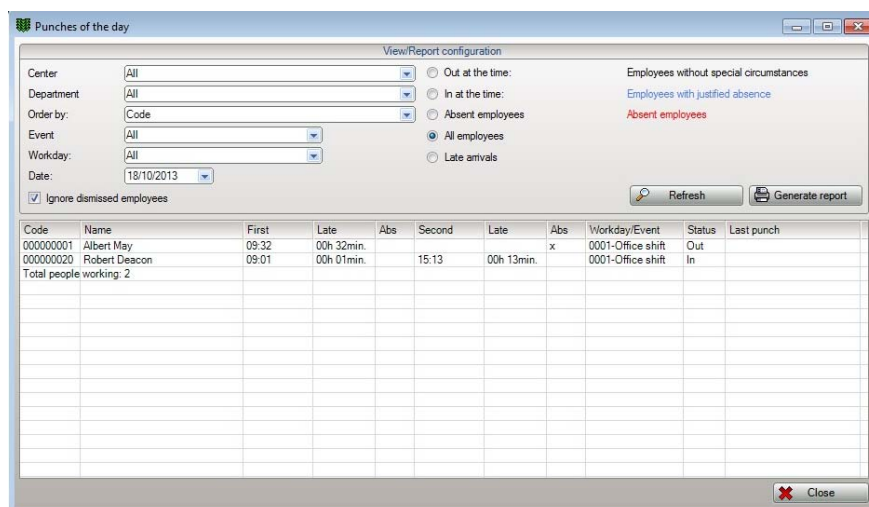
This report will display a breakdown of all the modified punches within a specified period of time. Added punches will show up in blue and edited punches will show up in grey, the previous punch, and in yellow the modified punch.

As long as a punch has been edited or added it will specify the user who modified it.

#### 11.5 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.

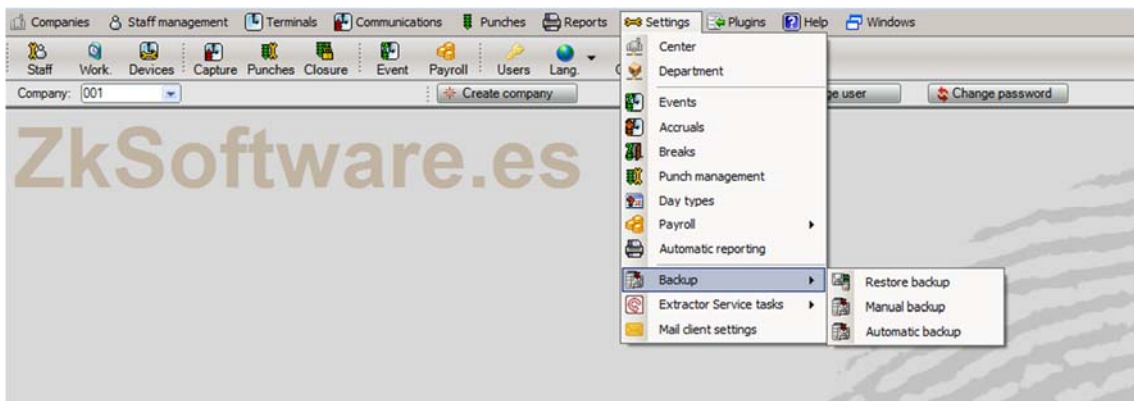


## 12. Backups

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

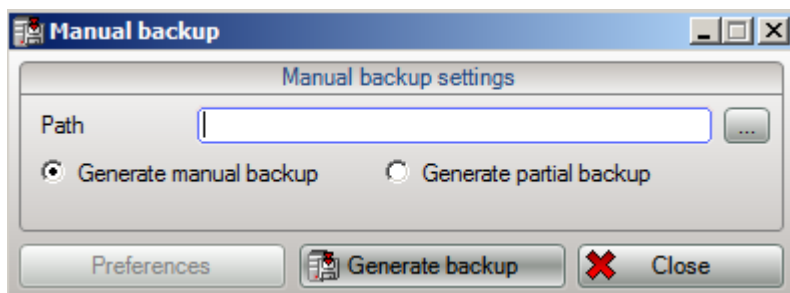
To do a backup copy, click on the settings tab of the main menu. Now, on the drop-down menu, click on 'backup' and choose one of the following options:

- Manual Backup.
- Automatic Backup
- Restore Backup



### Manual Backup 12.1

If you choose this option the window below will pop up. It will give you the option to pick a path to carry on a full or partial backup.

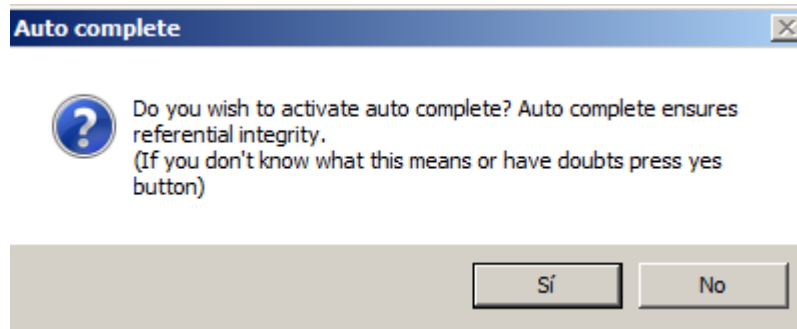


#### 12.1.1 Full backup

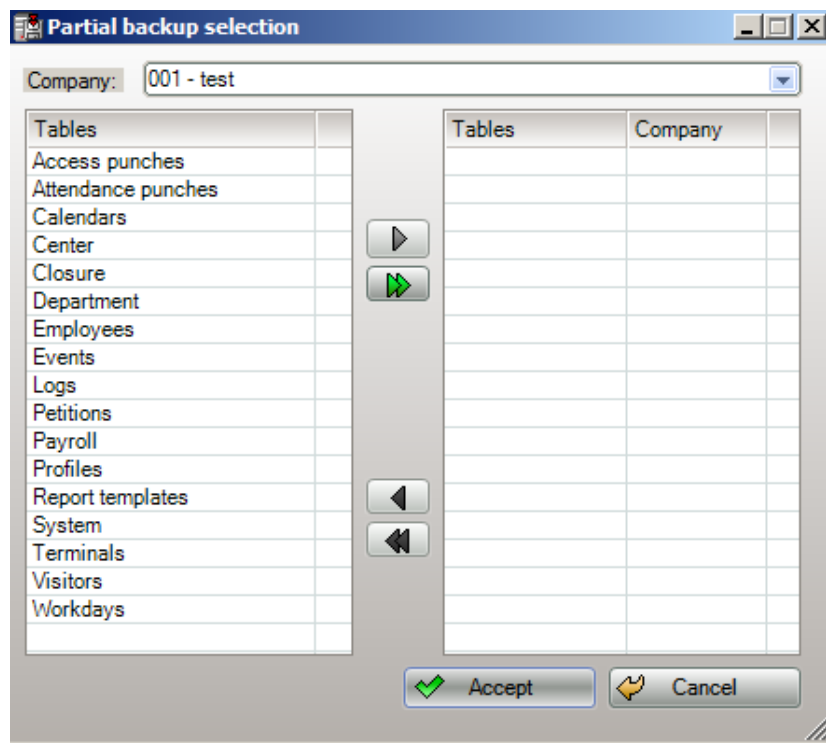
The manual backup makes a complete copy of the database, including all system users and all existing companies.

### 12.1.2 Partial Backup

Should you choose a partial backup, the preferences button will be enabled. By clicking on it, a new window will appear which will ask you to choose 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 will always be accurate, without repetitions, lost information or relations ill linked. 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 workday 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 into to the selection of tables for the backup, simply pick the company from which you wish to do the backup, choose the tables and click on the Add button. Your choice will pass on to the right side showing its name and the company to which it belongs. Should you want to add all tables just click on the Add all button.

However, if you want to delete a table you can follow the same procedure as the above explained 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, only the profiles one. This is not due to a malfunction of the program, although the employees table depends upon other tables, these other tables might not depend on it. If you want to delete those you will have to do it manually.

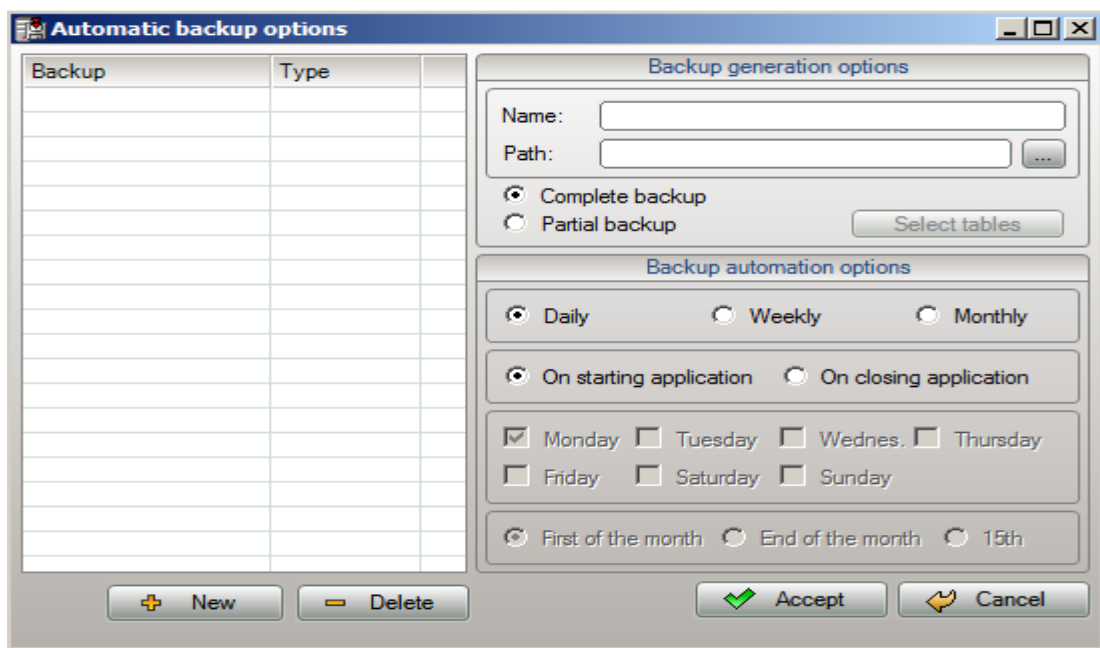
NOTE: WHEN CHOOSING THE TABLE 'SYSTEM' IN A COMPANY, you will be specifying to the program that you want to back up the data related to that company thus being able to restore it WITHOUT THE NEED to create it again. (For further information check section 12.1.5)

### 12.1.3 Generate backup

To begin the backup process click the Generate button. The time taken will depend on the size of the database and the computer.

### 12.1.4 Automatic Backup

From the automatic backup management window, on the picture below, you will be able to control the backup copies which you wish to be run automatically.

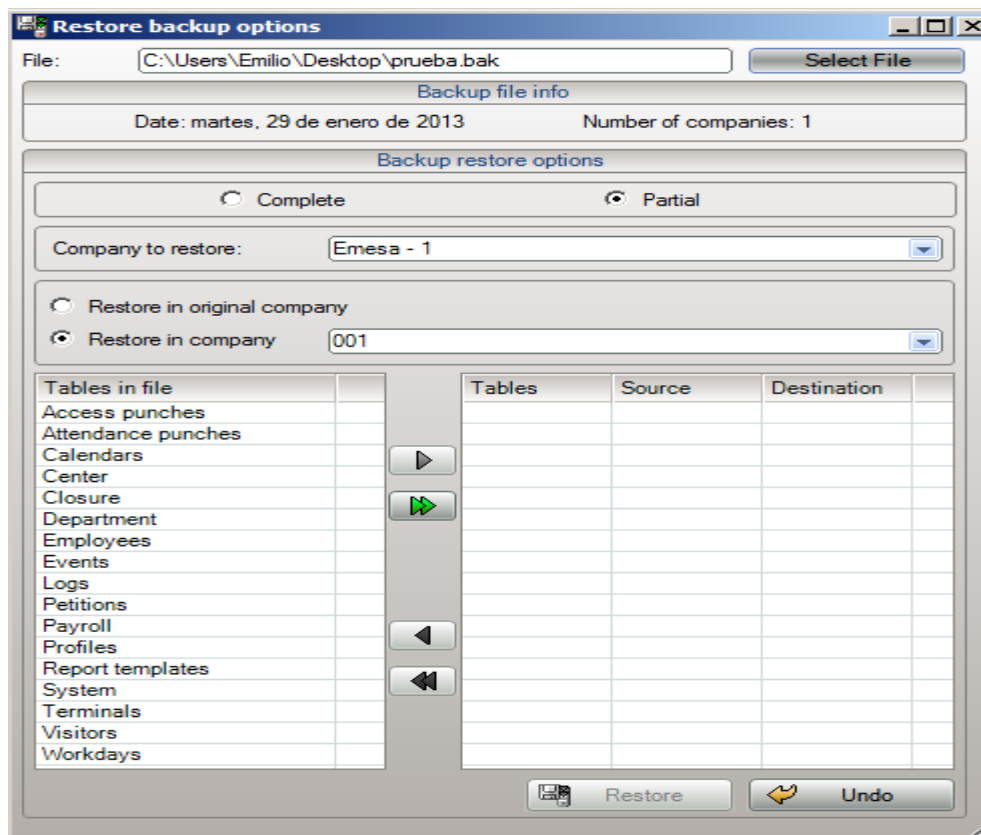


On this management window you will find the following options::

- Backup generation options: From this group of options we will only stop to explain the 'Name' field, which will be used to identify the backup copy, it must be unique. We have already explained the rest of the options previously on section 12.1, so we will continue.
- Backup automation options: Here you will be able to choose the regularity with which you want the program to 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.

### 12.1.5 Restore Backup

Upon the selection of this option, the program will ask you if you want to maintain the referential integrity (see section 12.1.2). Once you make your choice you will be on the window below.





Once you have selected the backup file which you want to restore, several options will be activated, or not, depending on the type of backup made. You will have two possible options:

- Complete restoration: If the backup chosen was a complete backup copy of the system, this option will be enabled at the same time as the rest of the options are disabled, leaving only the Restore button enabled. When doing a complete restoration you will be replacing the whole information stored in the system and the companies created. This is why it is highly recommended to use this option only if you really know what you are doing.
- Partial Restoration: By selecting this, the following options will be available:

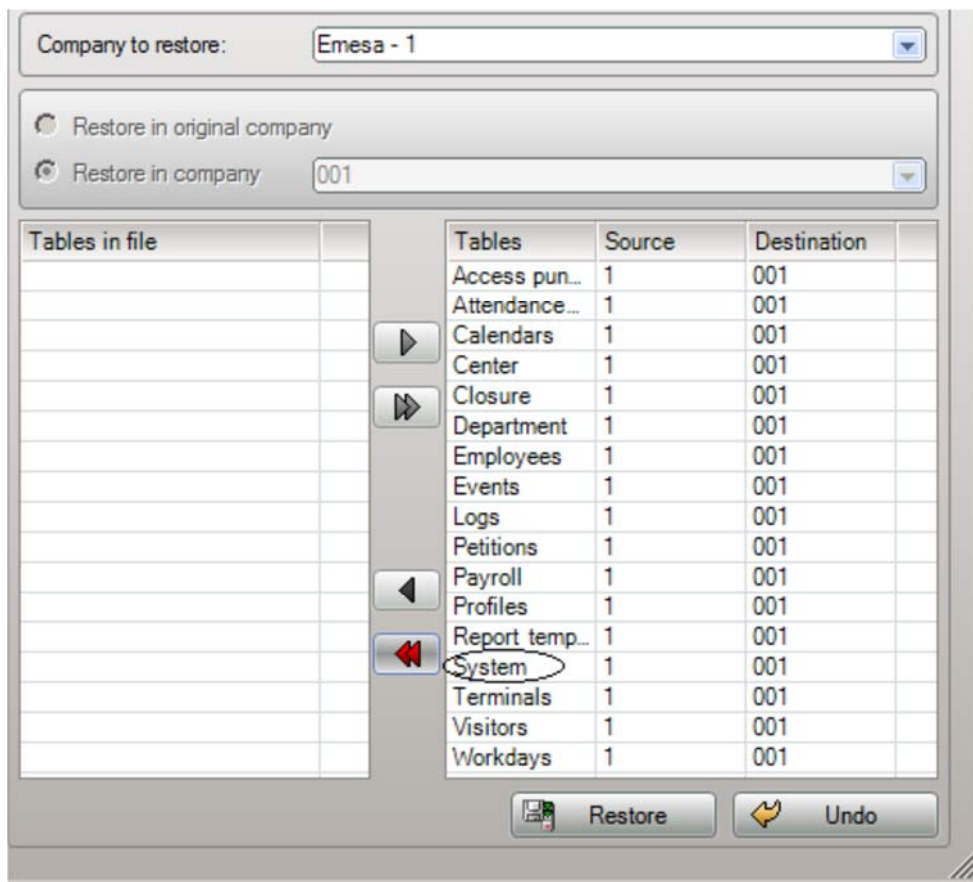
Company to restore: Here you will find all the companies stored in the backup copy.

Restore in original company: This option will only be enabled if the backup contains the system tables related to the company involved. In the given case that the code of the company which we are trying to restore already exists in the system, a window will pop up to inform of the existence of that code and will subsequently offer the possibility to override it or otherwise to introduce a new company code.

Restore in company: Here you will find a list of all existing companies in the system, in order to choose among them on which will you restore the data.

Whether you choose to restore the data in the original company or 'in company' ... all you are doing is deciding the company on which you want to restore the data. In order to select what data you wish to restore select the relevant tables from the list and add them to the selection list.

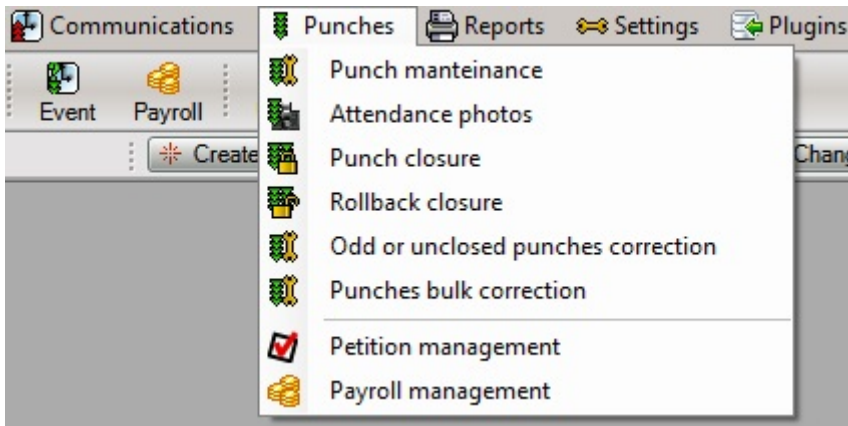
If we want to override an existing company in the system with the information contained in the company in the backup you must choose the "restore in company ..." and make sure to put into the selection the system tables (see image below).



## 13 Punches

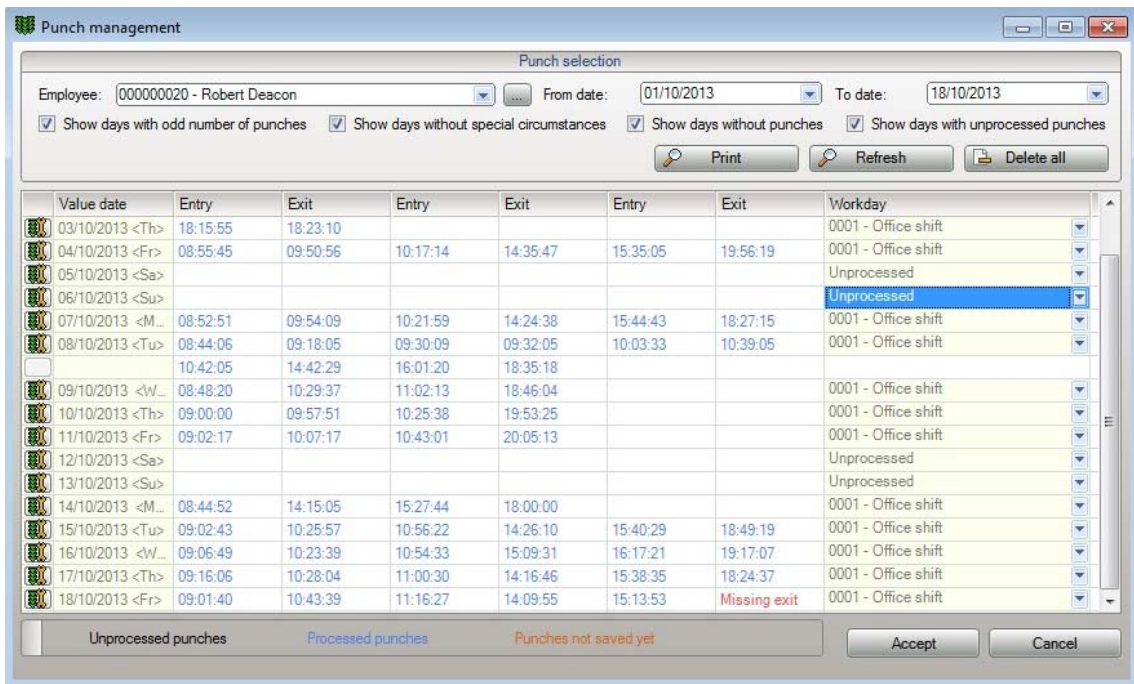
Punches are the core element of any Time and Attendance control system; with them the employees will tag whether they arriving and/ or leaving together with any possible event which might occur throughout their workday, such as lunchtime or any justified delays.

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 get the event wrong. In order to solve these and let ZkTime Enterprise do proper calculations you can use the following option:



Upon the punch management window the first thing you will be able to see are the punches selection options, which will allow you to filter the punches which will hereafter 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 punch.
- 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.
- Show 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 can you edit your employee's punches.

### 13.1.1 Punch tables.

This column 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
03/10/2013 <Th>	18:15:55	18:23:10					0001 - Office shift
04/10/2013 <Fr>	08:55:45	09:50:56	10:17:14	14:35:47	15:35:05	19:56:19	0001 - Office shift
05/10/2013 <Sa>							Unprocessed
06/10/2013 <Su>							Unprocessed
07/10/2013 <M...>	08:52:51	09:54:09	10:21:59	14:24:38	15:44:43	18:27:15	0001 - Office shift
08/10/2013 <Tu>	08:44:06	09:18:05	09:30:09	09:32:05	10:03:33	10:39:05	0001 - Office shift
09/10/2013 <W...>	10:42:05	14:42:29	16:01:20	18:35:18			0001 - Office shift
	08:48:20	10:29:37	11:02:13	18:46:04			

As you can see on the above picture, punches will 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.

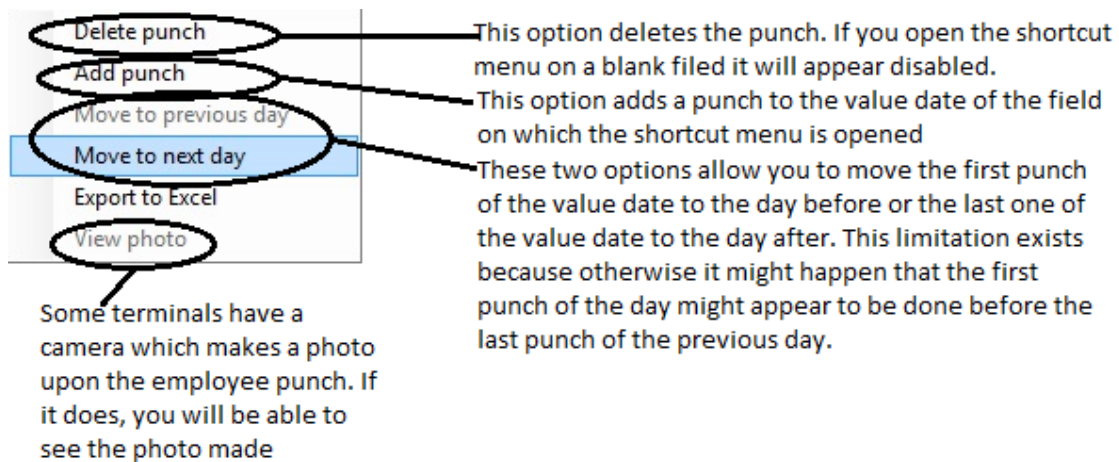
### 13.2 Edit Punch

*How to create, delete or edit punches.*

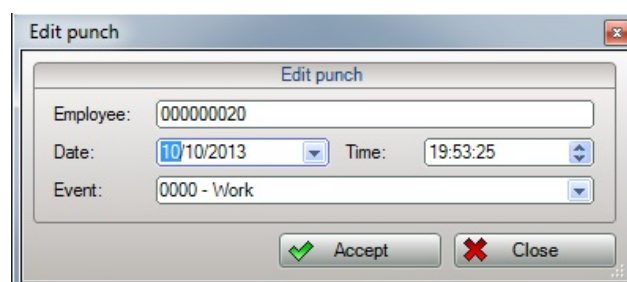
Now that you should have an approximate idea of what does the information displayed on the window mean. We will proceed to explain how to edit it.

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.

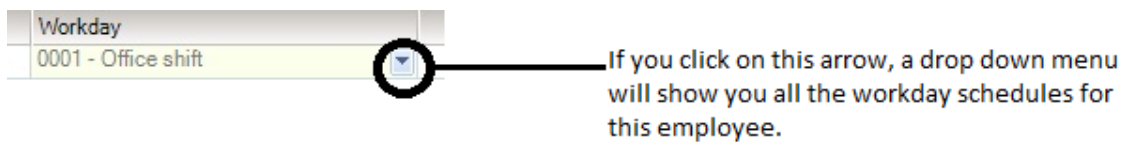


By accepting, the changes made to the punch will pass on to the table. If otherwise you click on close, all changes will be cast-off.

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.

*Edit the workday schedule assigned to a date.*

Finally 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 had 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 would work after receiving punches directly on from the terminal.