RCP Master User Manual
ver. 1.0.0
Rev. B

Table of contents

Introduction

Purpose

RCP Master is a software tool for Time and Attendance (T&A) reporting and analysis.

Modules

The software incorporates the following modules:
- Employee data configuration,
- Control point list (T&A readers),
- T&A event register.

Data storage

All application data are stored in a MS Access file format (database file extension: `*.rta`).

Therefore, the application is capable of connecting to many databases at a time. Opening a database is by clicking **New** on the **File** menu. The **Tools** menu makes the following commands available:
- data file encoding/decoding (Note, however, working with an encoded database may slow you down by as much as 15%)
- setting a password for data file access
- data file compacting/repairs (recovery).

Databases can be accessed on a software level by any IDE (*Integrated Development Environment*) capable of connecting to MS Access databases or ODBC (*Open Database Connectivity*) capable data sources. By default, a new database is password-protected. The default password is `roger`.

Concurrent connections

The application permits concurrent connections to one database at a time. To enable concurrent connections, a database should be made available on a networked location with relevant read/write access rights for software operators. Once the database is available on the network, it can be opened by clicking **Open** on the **File** menu.

Data import and export

RCP Master features manual data input and modification as well as XML-based import/export mechanisms. In addition to that, group data, employee data and control point data imports, respectively, from PR Master by Roger are fairly straightforward with the application. Finally, the software features the capability of importing T&A data from the following tools:

- PR Master by <u>Roger</u>, starting from release 4.2.5.22
- T&A Access Pro by <u>Polman</u>.

Prerequisites

RCP Master requires the Microsoft .NET Framerwork 2.0 platform on your computer (available for download from:
http://www.microsoft.com/downloads/details.aspxdisplaylang=pl&FamilyID=0856eacb-4362-4b0d-8edd-aab15c5e04f5.

Below you may find the **.NET Framework 2.0** requirements:

| Windows 2000	Service Pack 3
Windows 98	Second Edition
Windows	Server 2003 and ME XP Service Pack 2
Windows Vista	Starter Business Business 64-bit edition Enterprise Enterprise 64-bit edition Home Basic Home Basic 64-bit edition Home Premium Home Premium 64-bit edition Ultimate Ultimate 64-bit edition

Required software:
- Windows Installer 3.0 (Windows 98/ME requires Windows Installer 2.0 or better). Windows Installer 3.1 (or later) recommended
- Internet Explorer IE 5.01 or later
- Vista Service Pack 1 is required for Windows Vista users.

Disc space requirements: 280 MB (x86), 610 MB (x64)

Installation and first steps

RCP Master is installed by executing the installer (`setup.exe`). On completing the installation, running the software for the first time make the application display a dialog window to load example data from `Demo.rta`. Each time a data file gets opened, the application invokes a login dialog as shown below.
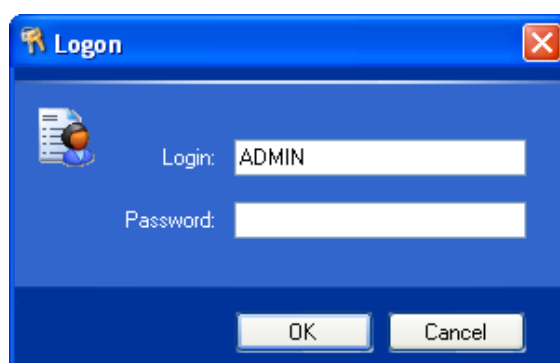
The demo application (`Demo.rta`) features an empty password for the **ADMIN** operator – leave the *Password* field empty and confirm your choice by clicking **OK**. Configuration steps involve defining operators (no limit on the maximum number of database operators), setting operator passwords and access rights for performing particular tasks on the application database.

Working with RCP Master

Preparing to work

In order to start working with RCP Master, the software needs to be well configured and setup. To configure it, carry out the following steps:
1. Create a new data file by clicking **New** on the **File** menu.
2. Manually input or import data from PR Master (from configuration files: `Backup.zip` or `Config.xml`).The imported data would include group data, employee details, control point lists as well as T&A event types.
3. Define calendar day types – select **Calendar day type definitions** on the **Tools** menu.
4. Define work calendars – click **Calendars** on the **View** menu.
5. Assign calendars to employee groups (or individual's employees) – use the **Assign calendar to employees** command on the shortcut menu.
6. Check data integrity (calendar assignments, etc.) – click **Verify data integrity** on the **Tools** menu.

T&A analysis and reporting

The core purpose of RCP Master is generating time an attendance (T&A) reports based on employee T&A event registrations. Clearly, correct calculations of working hours require complete entry/leave event registrations. Therefore, the tool is capable of detecting incomplete events (with missing or incomplete entries) – the above **Verify data integrity command** is used solely for that purpose. All incomplete events are highlighted in a report by a warning marker. The marker is an exclamation mark icon on a red background accompanied by an appropriate comment. Missing entries can be completed by an operator manually, i.e. by marking the entry as an absence or inserting an appropriate T&A event (in the **Work history** tab – **View**>**Employees**>**Work history**).

To generate T&A reports, you should perform the following steps:
1. Import registered T&A events from a data file.
2. Check data integrity – use the **Verify data integrity** command.
3. Send notices to employees with missing/incomplete entries in the event register for explanation wherever appropriate.
4. Correct the data manually (by an absence input or insert missing entries in the T&A register)
5. Generate reports (using a creator for selected employee groups); the creator would also send the reports to employees, respectively, using their e-mail addresses found in configured employee data.

RCP Master functionality

Introduction

Start page

By default, the software displays the **Start page** on the application's start-up. The start page contains common commands, links to recent documents as well as links to online help items.
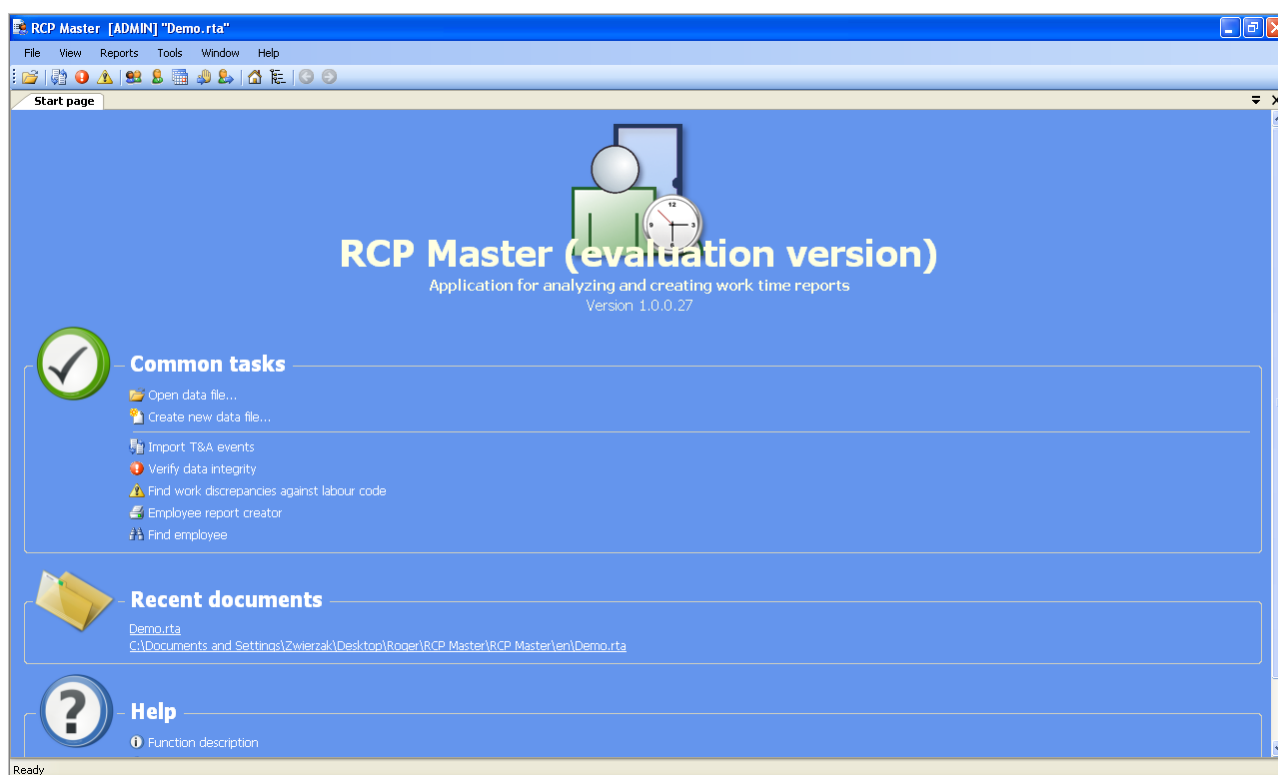

Main window

The main window (visible on user login and opened database) displays the following items:
- The application title bar features the application name (RCP Master), the logged in operator ID enclosed in square brackets, and the active database path in apostrophe.
- Underneath the title bar, you may find the application's main menu – refer to the <u>Functionality description</u> section for more details on the menu contents.
- The toolbar located below the menu contains shortcuts (toolbar buttons) to the application's common commands and functions.

- The panel on the left-hand side features a tree view list to reveal the data hierarchic structure to users. Each section on the tree view control is assigned a shortcut (popup) menu with context-sensitive items. The menus are invoked by clicking the right button on your mouse while over a particular control. A left button double-click on a tree view item, for example, invokes a window associated with the item, e.g. double-clicking on the **Groups** item displays the **Employee group list** window panel.
- The panel on the right hand side contains documents in the form of tab page controls. In some cases (**Groups**) the panel is split into two parts incorporating a data list in the upper control panel, whereas the lower panel reveals a detailed information on the item selected in the upper control. Typically, the lower panels incorporate buttons to invoke context sensitive commands (appropriate for the item selected in the upper panel).
- By convention, the application status bar features messages on execution progress as well as a progress bar.
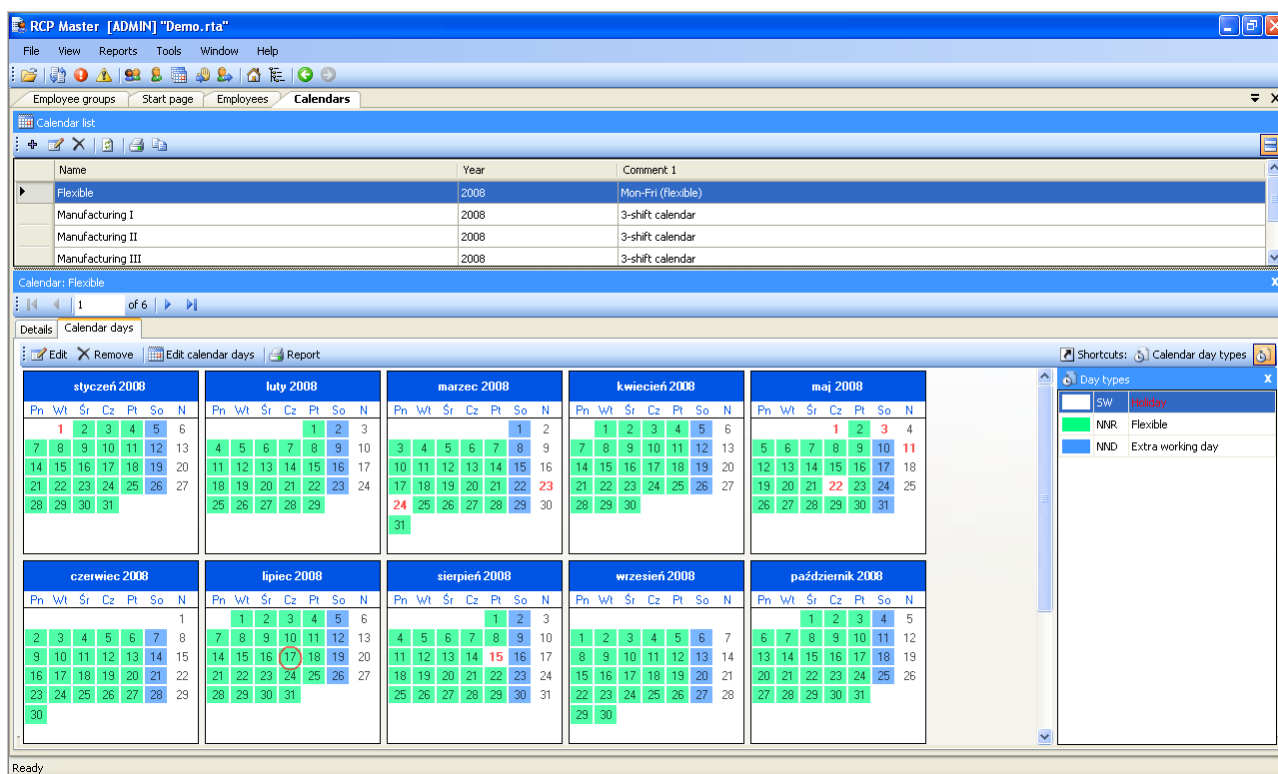
Reporting errors

RCP Master features an error reporting mechanism as well. Raising an exception displays the dialog window below. The window includes all relevant information on the error/exception context and origin. All users are encouraged to send error reports to the software vendor (Roger). To send a report, you should click on the **Send report** button. Clicking on the button invokes the MS Outlook mail client. To send your mail, click the **Send** button in Outlook. Both recipient's e-mail and the mail contents have been already filled in for you.
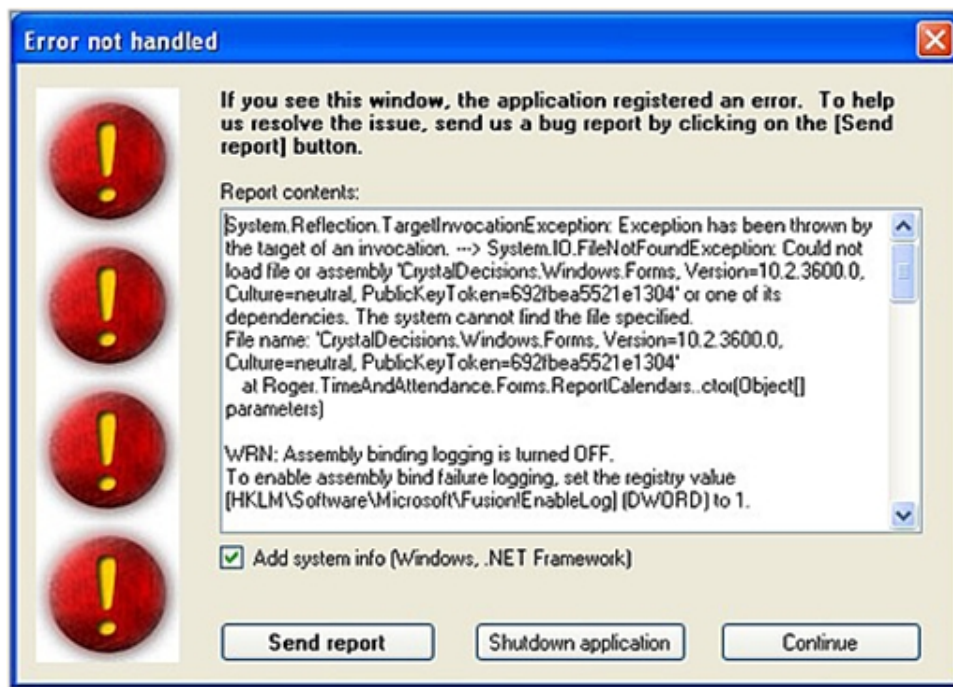
Functionality description

File Menu
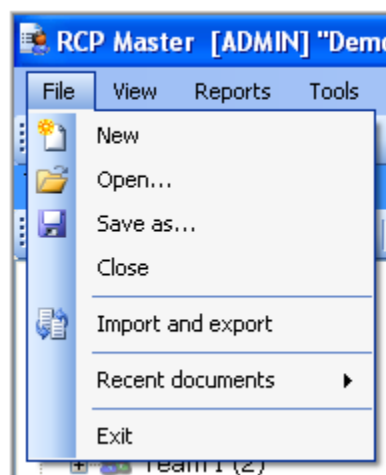
New Command

New - command creates a new file and opens it.

Open Command

Open... - command opens an existing *.rta data file.

Save as Command

Save as... - command saves an instance of an existing *.rta data file to a selected data file.
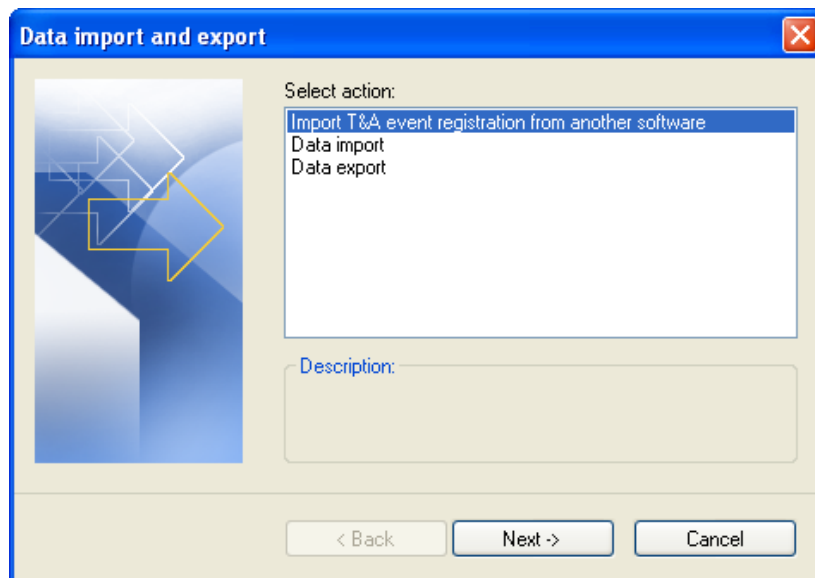
Close Command

**Close** - command closes the active document window and displays the start page.

Import and Export Command

Import and export – command opens the data import/export creator window. To import T&A events by clicking on **Import T&A event registration from another software**:

Step 1: Choose T&A data import/export option

Step 2: Select data file format (when importing data from PR Master)
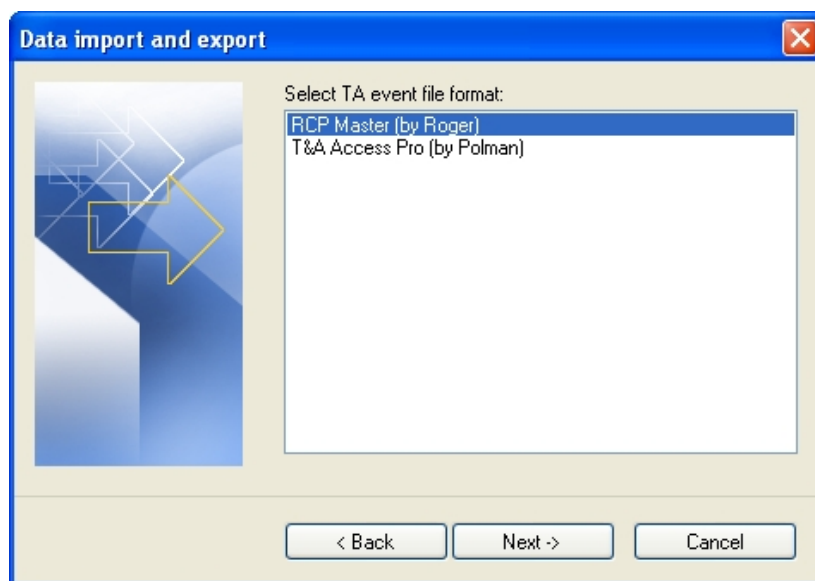
Step 3: Select a path to your T&A data file.If any conflicts during the data import operation are discovered, e.g. the imported record is already in the database, you may indicate your preferred method of resolving conflicts in the database by selecting appropriate options in the creator. The **Replace duplicates with imported items** option allows users to override all existing records in the database with the new data. The **Do not import duplicates** option skips duplicated records. Two T&A events are assumed equal whenever their date/time of origin, reader ID and event type are identical.
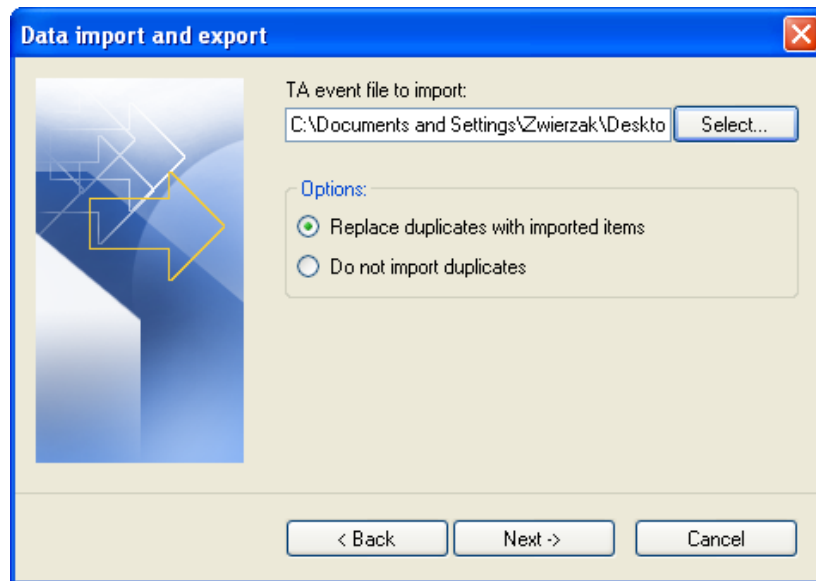
Recent documents command

Recent documents - command shows a list of recent documents. Clicking an item on the list opens the selected document.

Exit Command

Exit – command closes the active document and terminates the application.

View Menu
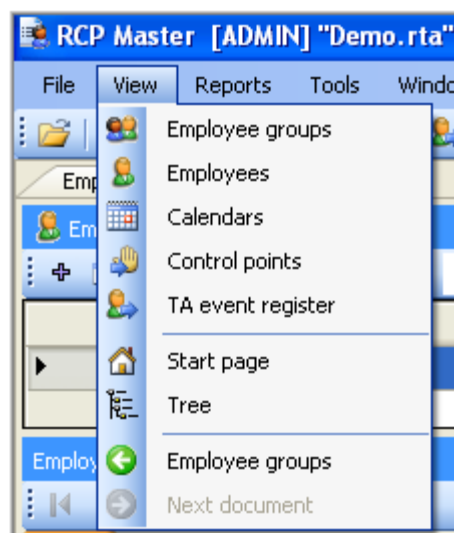
Employee groups command

The **Employee groups** command opens the **Employee groups** window. As mentioned above, the window panel has been split into two parts – the upper control is usually a list (e.g. a list of employee groups), whereas the lower control is a detail panel. The detail panel shows data for the item already selected in the upper panel (e.g. *No group, Administration, Engineering)*. The detail panel can be closed at any time by clicking on the white cross icon on blue background located in the title bar of the detail panel. To reopen it, click the **Show/hide details** button in the toolbar section of the upper panel.
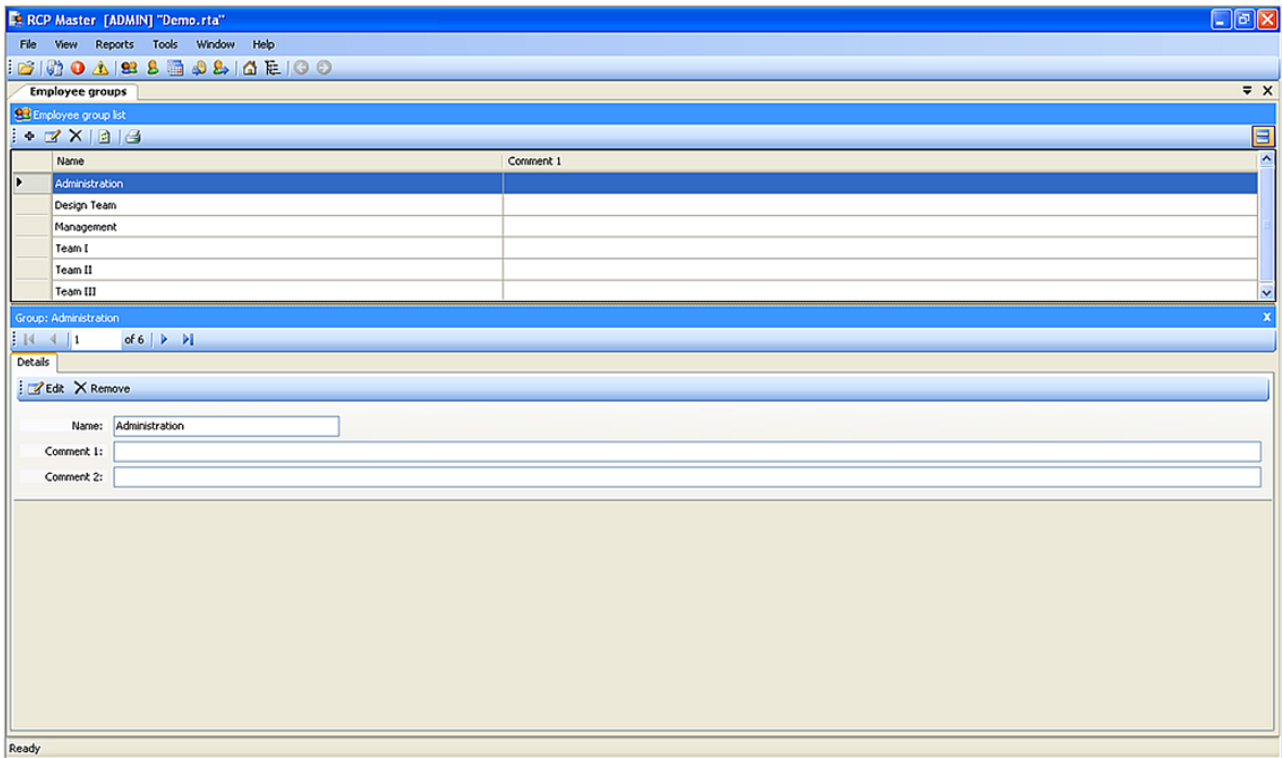
All items on the list can be added, edited or removed. In most case the upper panel toolbar contains a number of utility commands: **Refresh**, **Create report**, etc. The toolbar contents may vary with the upper panel content type. Clicking on the **Edit** employee group button in the example below displays the **Edit employee group** dialog window.
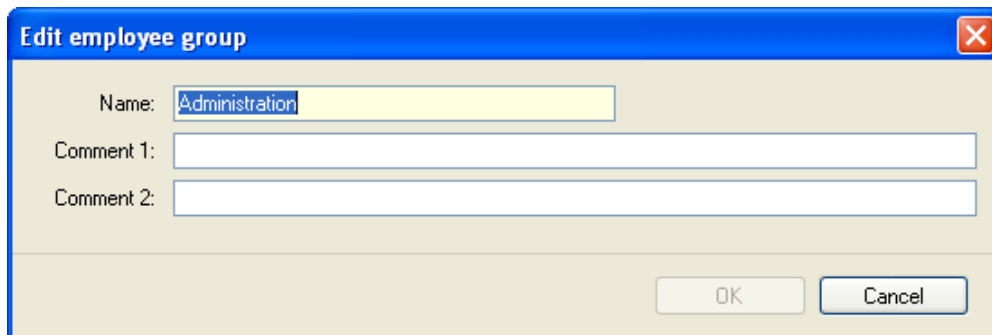
Employees command

Employees command opens the employee data window.

The **detail** panel is split into three tabbed sections as follows:

1. Details :

The window contains the following data to be accessed on the panel:

- Photo – employee's photography (automatically resized to match the required size in the database). As every other information, all photographs are stored in the active database.
- T&A ID – employee's unique ID. The unique ID is a prime source of employee identification. As such, a database may incorporate two employees with identical first/last names but different IDs. Therefore, changing last name by an employee, e.g. through marriage, has no effect on the identification process.
- First name and Last name
- Group – determines the group a particular employee belongs to. Grouping accelerates calendar assignments, reporting, etc.
- Calendar – used for employee work schedule assignments. T&A calculations are based on calendar contents as well as a T&A event register.
- Release/Hire date (optional fields) – are used for defining a time interval for T&A calculations on a particular employee. *Example*: To create a report for an employee hired in mid January, you should input a release date as well. Failing to do so results in missing entries in a T&A register throughout the first half of the month.
- E-mail – sets an employee's e-mail address for the PDF report delivery.
- Comment – some additional information.

Clicking the **Edit** button in the detail panel invokes an employee data dialog. All required inputs are shown in yellow. The red icon incl. the exclamation mark indicates possible discrepancies in the employee data. For example, moving the mouse cursor over the icon would show a comment on no calendar assigned to the edited employee. The red icon accompanied by a comment note is always used to indicate problems in the other view windows of the application as well.
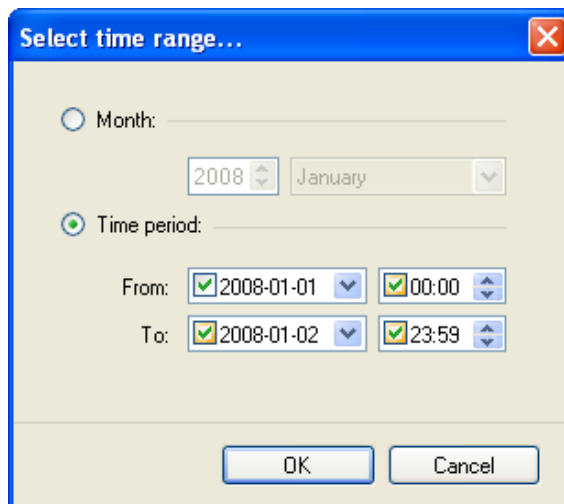
2. Work history:

The history tab includes the hours-in-the-office calculation result for a prescribed time span. The panel's title bar shows the calendar name. The **Time range** dropdown can be located next to the calendar name label. All items on the dropdown's list include month names *(January through December)*. The last item on the dropdown's list is the **Select time range** command. Selecting a particular month on the list starts the calculation process and displays the T&A results for the requested time period. For comparison, clicking the **Select time range** command shows a dialog window with the **Month** and extra **Time period** inputs.
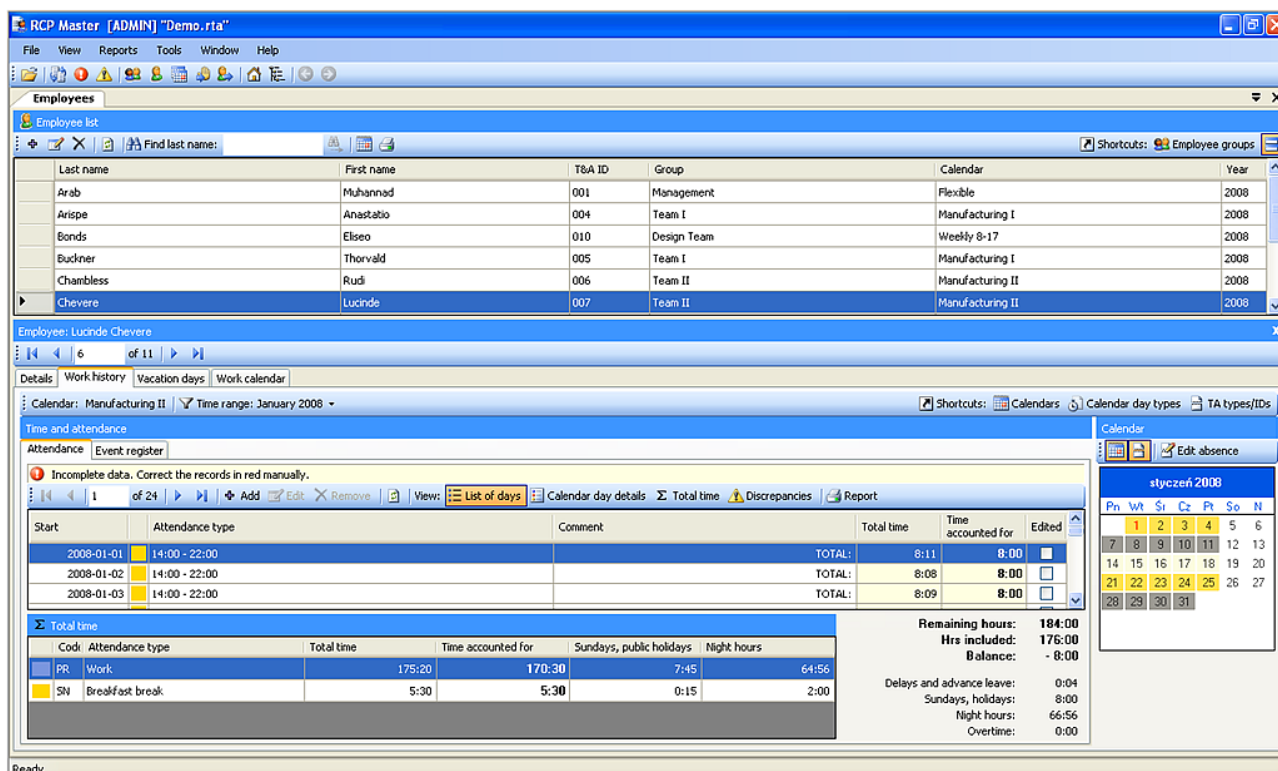
The work history panel is split into two principal data views – *Time and attendance* (a calculation result), *Event register* (a filtered event list for a requested employee in a given time span). The attendance calculation result can be shown in various illustration modes (by clicking the **View** button on the toolbar).

View: List of days

The **List of days** view is the most generic hours-in-the-office type data view. In this case the information is shown in the following manner (order): *start data – attendance – total time – time accounted for*. The right hand side section of the panel includes a calendar, where particular items (days) are marked (coloured) according to a day type (regular, holiday) as well as an absence type. The lower section of the window incorporates a summary for your calculations (*remaining hours, total time accounted for, balance, night working hours, overtime, weekends,* etc.).

View: Calendar day details

The **Calendar day details** view contains all the information from the **List of days** view. Moreover, each day item is detailed based on calendar day definitions as well as T&A events. Therefore, the list accounts for regulatory breaks, working hours, overtime, etc. A delay, premature leave as well as other discrepancies are automatically marked by a yellow icon accompanied by an appropriate comment note. The very same icon is displayed next to the calendar (see the image below). Clicking a particular day on the calendar makes the list scroll down to the selection.

View: Total time

The **Total time** view contains the information from the **List of days** view, again. Moreover, the information included here shows the number of total hours in the office, e.g. cigarette breaks, regulatory breaks, working hours, time outside the office, etc.

View: Discrepancies

The **Discrepancies** view reveals all labour (*work schedule*) discrepancies (*delay, premature leave, exceeded time limit, etc.*). The image below illustrates a premature leave case registered on the day of 23, January. The view is most often used for attendance analysis and correcting incomplete entries – T&A events can be inserted using the **Add** button on the toolbar, whereas an absence can be inserted/corrected by the **Edit absence** command above the right-hand side calendar panel or selecting the command from a right-clicked popup menu.

3.Vacation days:

Vacation days tab - as stated in the labour code, employees own paid/unpaid vacation days. The **Vacation days** tab is used to input/define vacation days in a given calendar year. It displays the number of used/remaining vacation days. Additionally, a vacation type is defined by clicking **T&A type definitions** on the **Tools** menu.

Reports

Attendance history calculations are illustrated in the example above. To generate a report, click the printer icon on the data view toolbar. This invokes the **Create report** command. Alternatively, use a report creator for more complex reports. Reporting commands are available virtually at any time and location - a tree view list, group view, employee detail panel, data views. Creators are used for generating summary reports on per-group basis, for all employee groups or individual employees. The reports can be mailed as PDF attachments to the e-mail addresses set in the employee data panel. The example below illustrates a sequence of steps required to generate a report for one employee. The creator gets invoked by clicking the **Report** button in the first tab on the employee's **Details** tab, or selecting an employee on the tree view list and using the **Report creator** command on the control's shortcut menu.

Step 1: Select report type. The example in the image below shows total time, numerous discrepancies (delays, exceeded time limits, etc.), vacation days, and a work calendar.
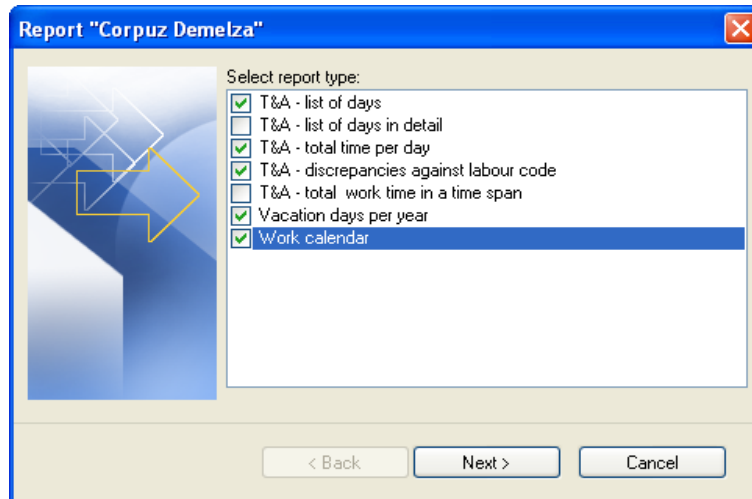

Step 2: Select the reporting interval (time period).
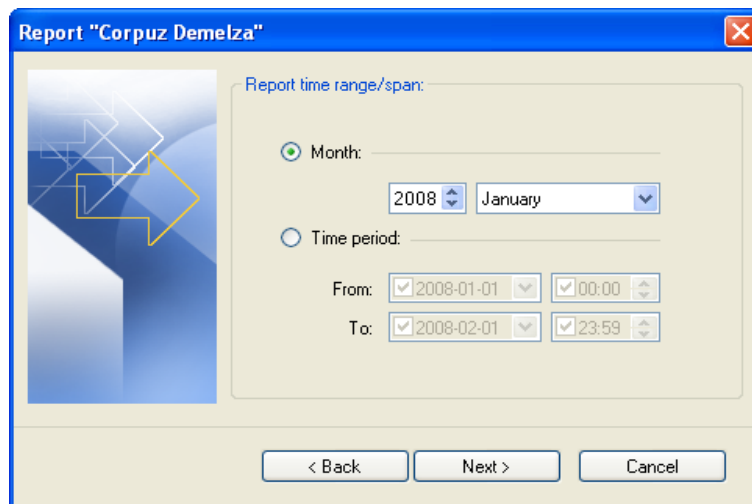
Step 3: Select your destination directory for the generated PDF reports. If required, the generated reports can be e-mailed to employees on selecting the **Send reports to employees as attachments** checkbox.
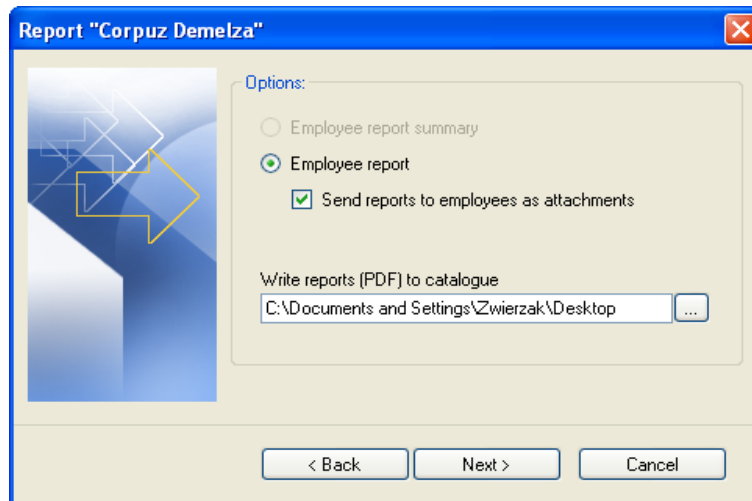
Step 4: The reporting progress window shows up. Once the report generation process is completed, the application displays a status report.
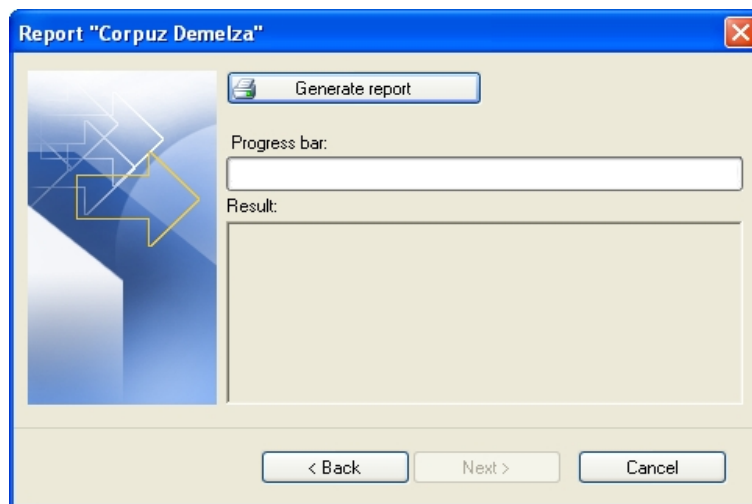

The application features two methods of creating reports using *report creators* or *report documents*. The creators are usually used for element lists, namely, calendars, control points, employees, etc. The other method uses application commands for reporting. The image below reveals an example of an employee list created by invoking the **Report** button at the top of the employee window.

Any report is sorted by employee group names (displayed on the tree view control in the left-hand side portion of the main window). Clicking on a particular group makes the control scroll down to the group report location. Reports can be printed and exported to the following data formats: *Crystal Reports (.rpt)*, *Adobe Acrobat files (.pdf), Microsoft Excel spreadsheets (.xls), Microsoft Word documents (.doc),* and *Rich Text Format files (.rtf)*.

Calendars command

The command opens the **Calendars** view. The right hand side portion of the control includes the color key that is used for marking particular days on a calendar.
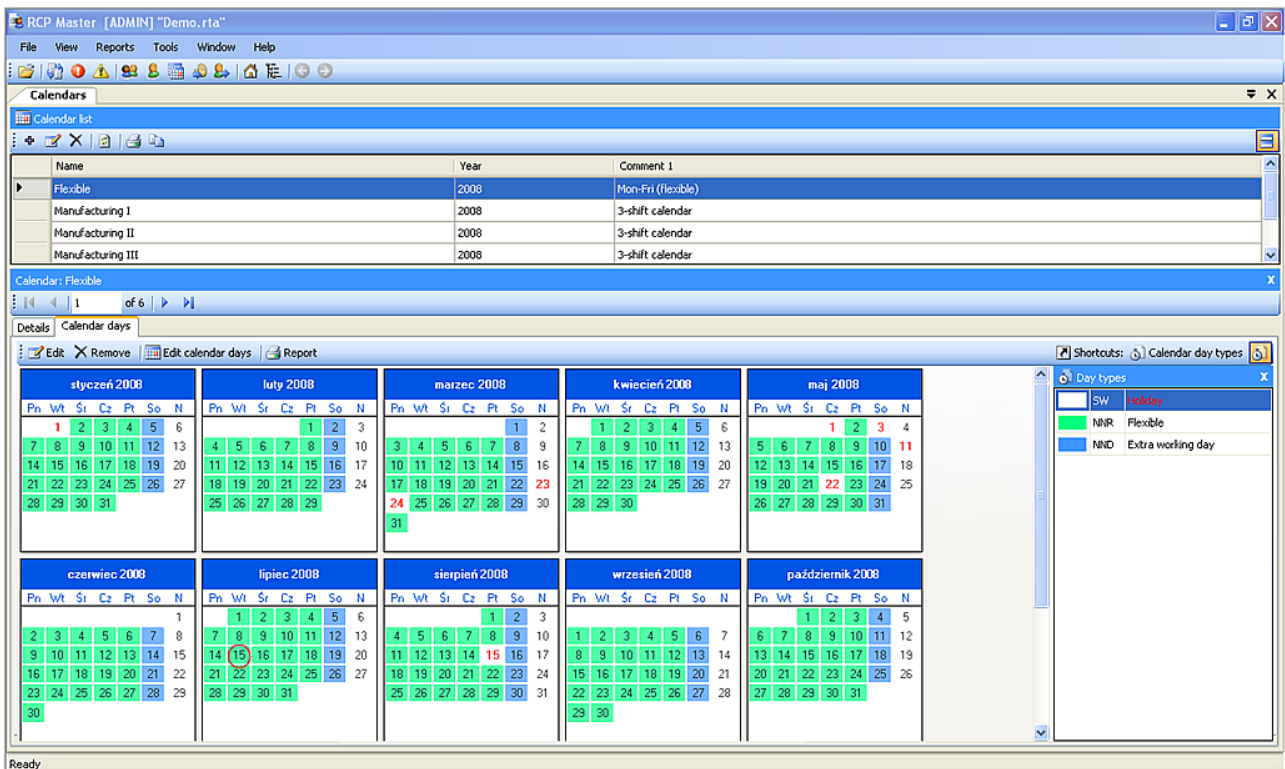
Clicking the **Edit** button opens the dialog window for editing a calendar. The right-hand side of the control includes a day type key used in a calendar. To assign a day type to a day on a calendar, you should select a day of your choice on the calendar with your mouse's left button, and then right-click to invoke a context (popup) menu incl. a list of day types available for selection. To remove an assignment, you should select a particular day (or days) on a calendar followed by clicking the **Remove assignment** command from the popup menu. The **Edit calendar days** shows a calendar editor. At the top of the window you may find the **Insert holidays** dropdown menu. Expanding it allows you to select predefined public holidays for adding them to the calendar.
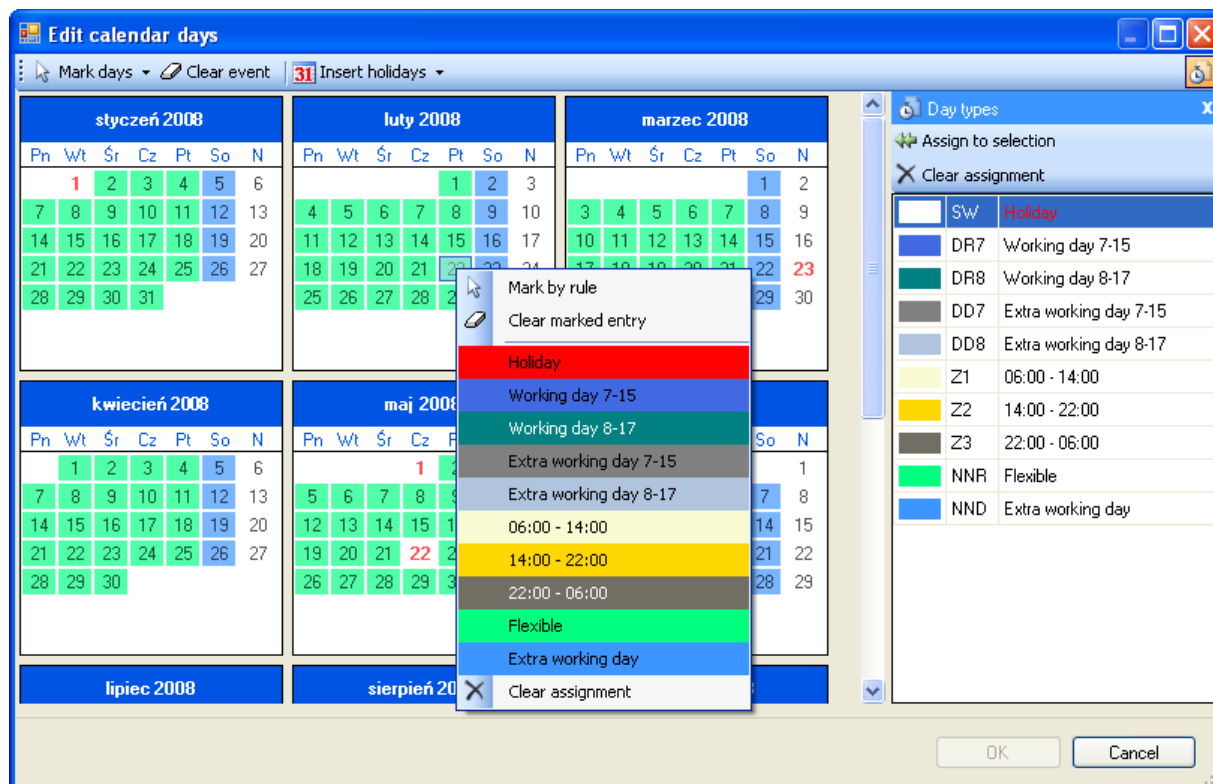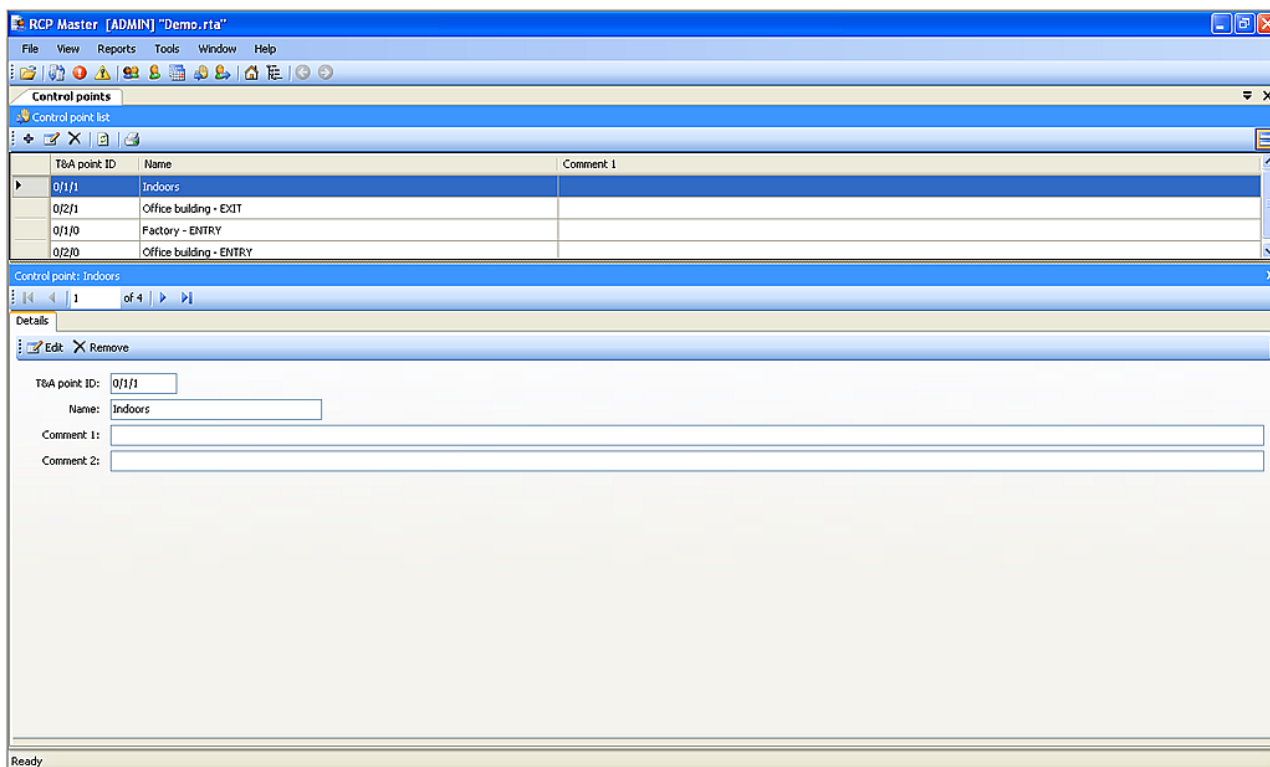

To facilitate selecting days throughout the whole year according to a prescribed rule, e.g. *all Mondays, Wendesdays and Fridays in the month of July or August*, use the **By rule** command available in the **Mark by rule** dropdown menu.
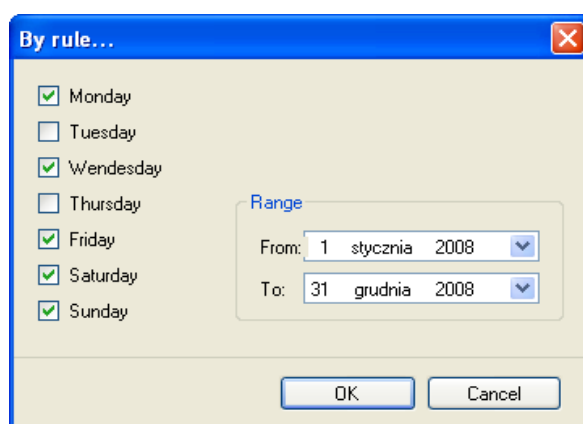
Control points command

The command opens the **Control points** window.

To open a control point editor, click on the **Edit** button on the toolbar of the control point detail panel. In the dialog the T&A ID is an unique control point number. Therefore, changing a control point name has no effect on any future T&A calculations and reporting. The ID is an arbitrary sequence to be set in the following fashion: *subsystem ID/controller ID/reader ID.*


T&A event register command

The command opens the **T&A event register** tab. All T&A events are displayed in the upper portion of the data view in a chronological order. Users can filter the events by setting the **From - To** dates on the toolbar. The detail panel (lower portion of the data view) contains all necessary information on a particular event, i.e. *a T&A ID of an employee, first name, family name, a photograph, group name, time, control point ID and a T&A event type.* In addition to that, the application features two system flags (available through the checkboxes in the data panel) to mark the status of an event as **Edited** or **Removed by operator**. If an event is removed, both checkboxes are disabled.
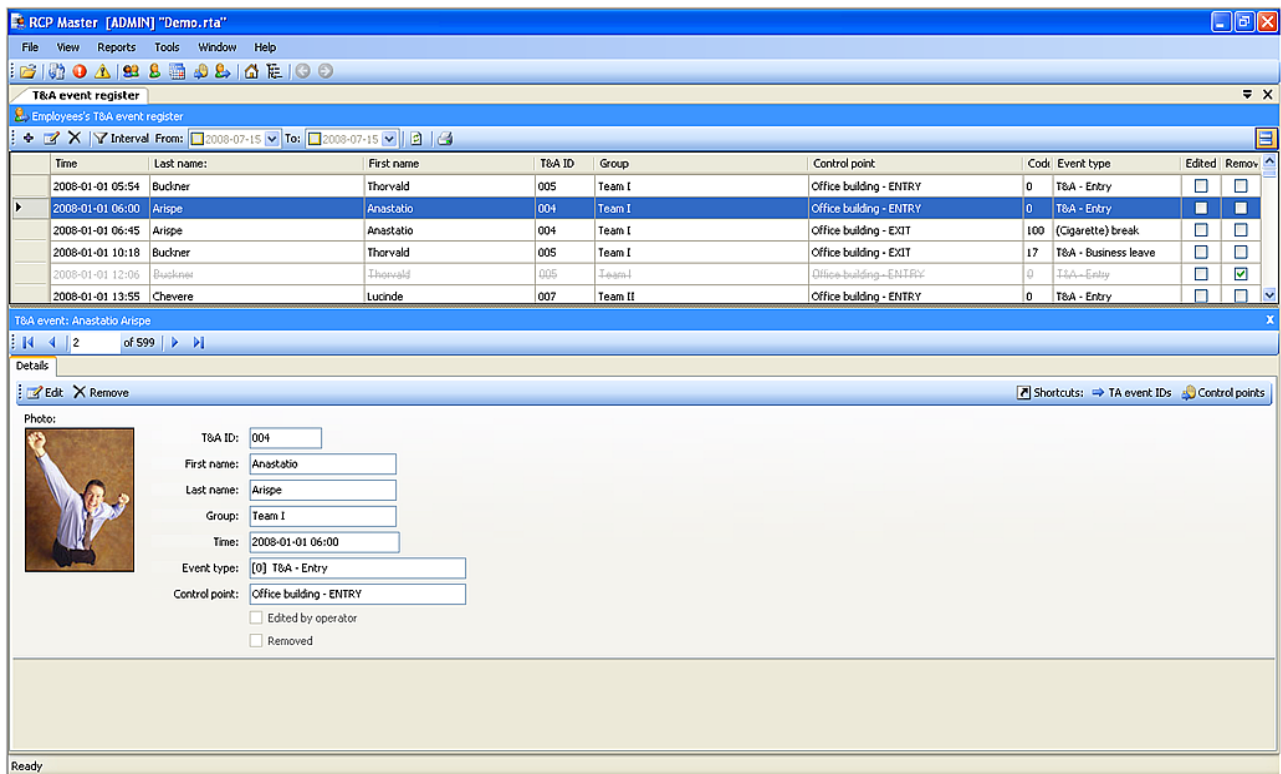
Clicking the **Edit** button on the toolbar opens the **Edit T&A event** dialog window.
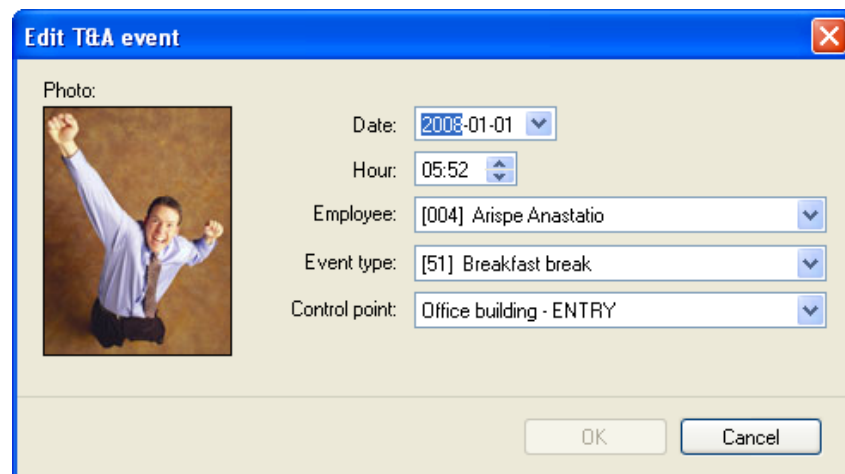

Start page command

The command opens the **Start page** tab. The command items on the start page are set into three sections.

The **Common tasks** section contains shortcuts to common commands in the application, namely:
- Open data file – opens the dialog window to select the `*rta` data file you intend to work with.
- Create new data file – invokes the dialog window to save your work in a new data file.
- Import T&A events – executes the T&A event import creator.
- Verify data integrity – invokes the data integrity check (calendar assignments, entry/leave registrations) and displays the result in a list shown at the bottom of the main window.
- Find work discrepancies against labour code – performs a test on the data for possible labour code violations, namely, a delay, premature leave, missing registration, exceeded time limit, and displays the test result in a list shown at the bottom of the main window.
- Employee report creator – opens the report creator to generate reports for all employees.
- Find employee – opens an employee search dialog.
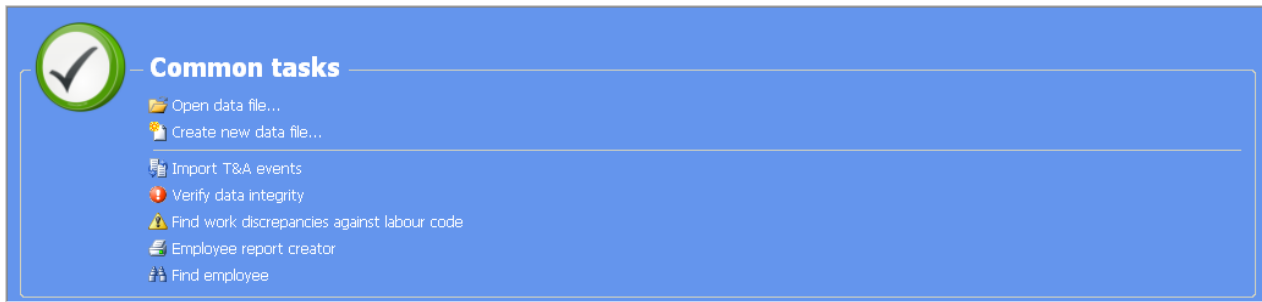
Executing the **Find employee** command invokes the following dialog:
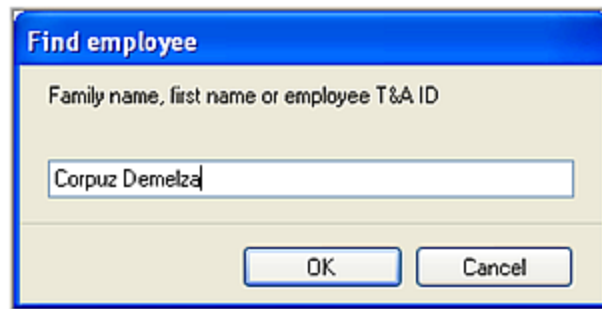
To find an employee, the software accepts the individual's last name (or a portion of it). If the employee is found, it expands the group section the person belongs to in the tree view list, selects it, and then activates the employee data view.

The **Recent documents** section includes a list of system paths to recently opened `*.rta` documents. Clicking on a particular item invokes the login dialog and starts the data import process if successful.
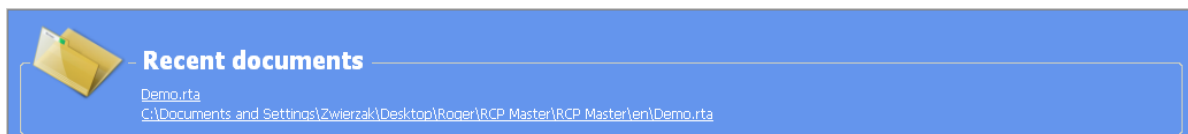
The **Help** group includes the following commands:
● Function description – opens a browser window with the user manual in it describing the functionality of the software.
● FAQ – opens the document browser window with the Frequently Asked Questions (FAQ) document.
● Troubleshooting – displays the document view window incl. common problems and problem solutions.
● Open example (demo) – loads a demo database (including T&A events) for software testing purposes.
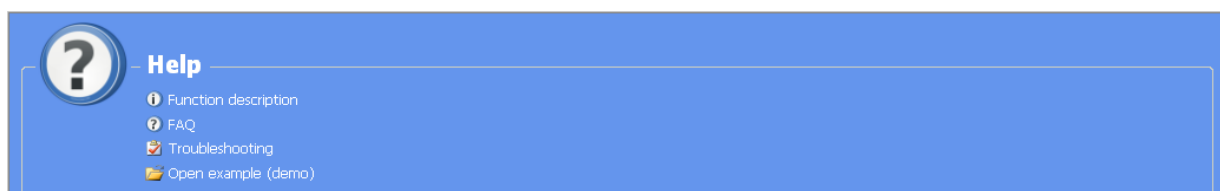
Tree command

The **Tree command** shows the tree view list control. The control is used to reveal the hierarchic structure of your data. The main sections on the tree type control are the following items: **Groups**, **Calendars**, **Control points** and **T&A event register**. The tree view list contains a filter in the control's toolbar. To search for a particular item on the tree, input the (full or partial) item name in the filter, press the **Return** key or click the **Search** button. If multiple entries are found on the list, keep clicking on the **Search** button until you are set on the item you are looking for. *Moving down/up* the tree can be accomplished using a mouse or arrow keys on a keyboard. Hitting the **Enter** *key* (or a double-click) invokes the data view that is associated with the item. For example, double-clicking on an employee displays the employee data view panel.
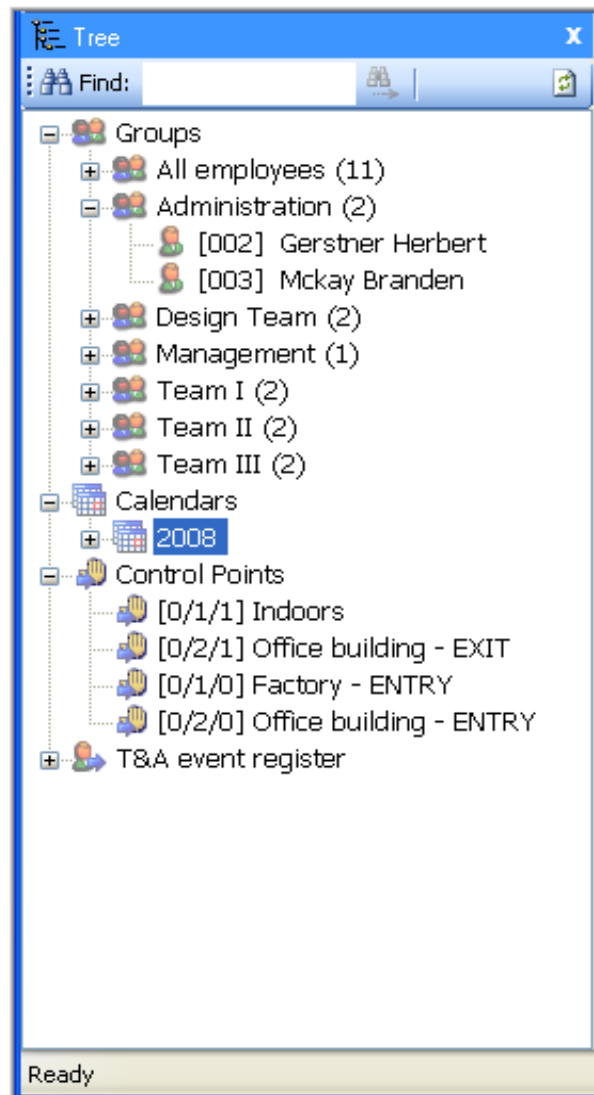
To display a list of active command for a selected item left-click on a particular child item on the tree. This will display a pop-up menu associated with the current selection – see below for an example.
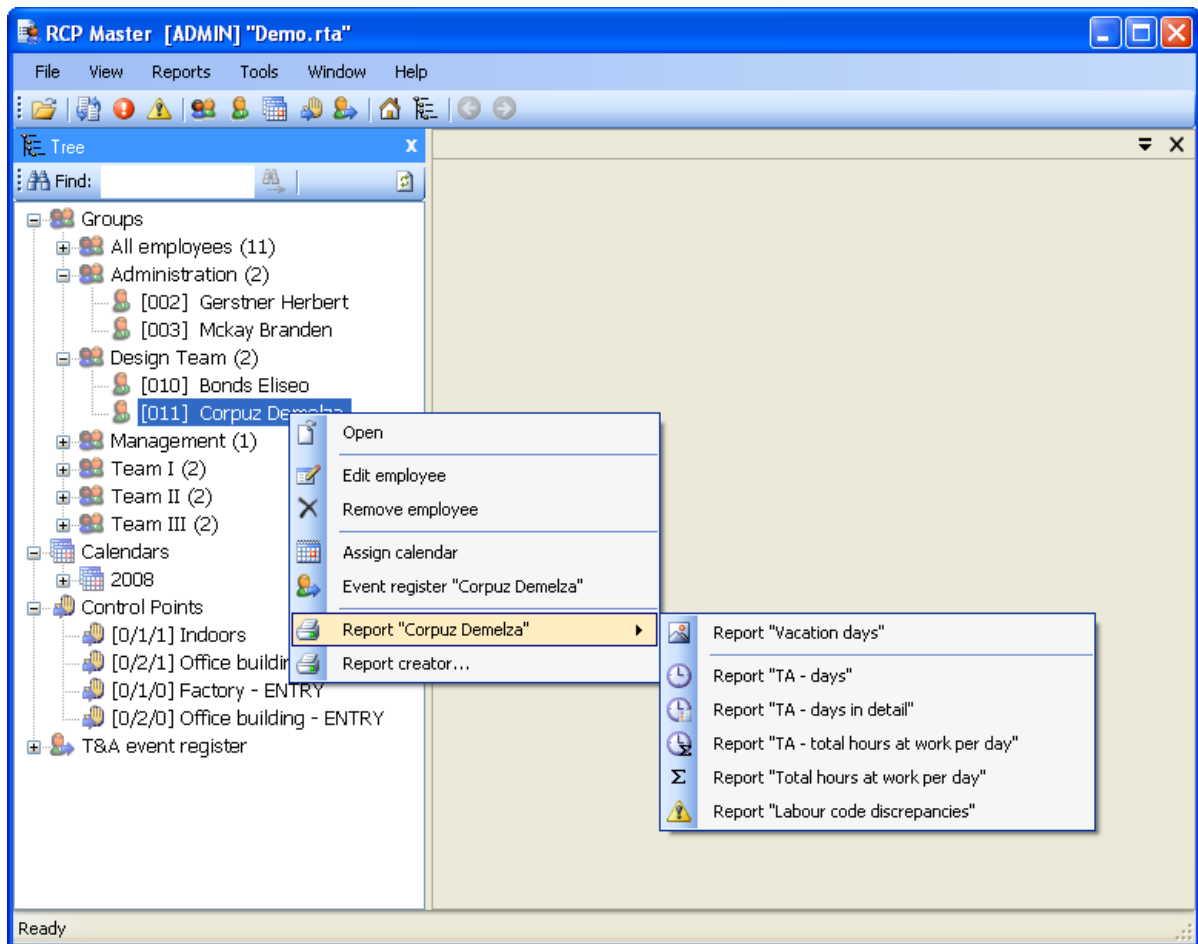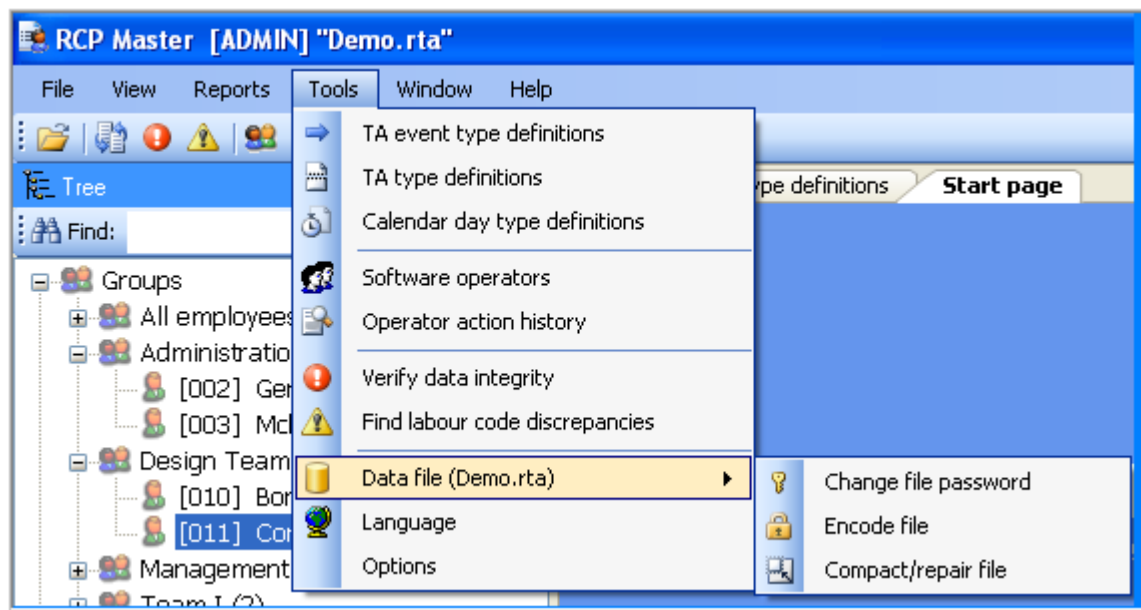
Selecting a particular item on a menu invokes a command to operate on the selection, e.g. **Assign calendar**.
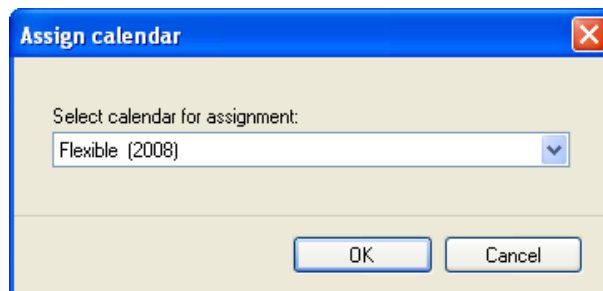

Last document/Next document command

The **Last document/Next document commands** are used for working with multiple data files. Invoking them allows you to switch between the data files in the order they were opened with RCP Master.
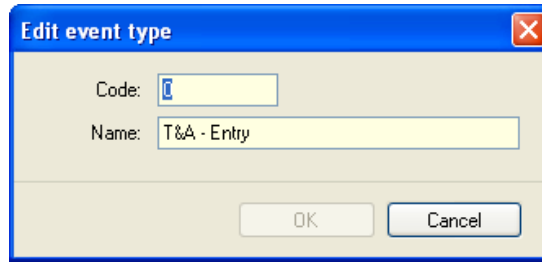
Tools menu

T&A event type definitions command

T&A event type definitions displays the event type definition view. The T&A event type is used for proper interpretation of a registered T&A event (*Entry, Leave, Business leave*). All events are identified according to their numeric IDs. RCP Master permits any number of T&A event type definitions.
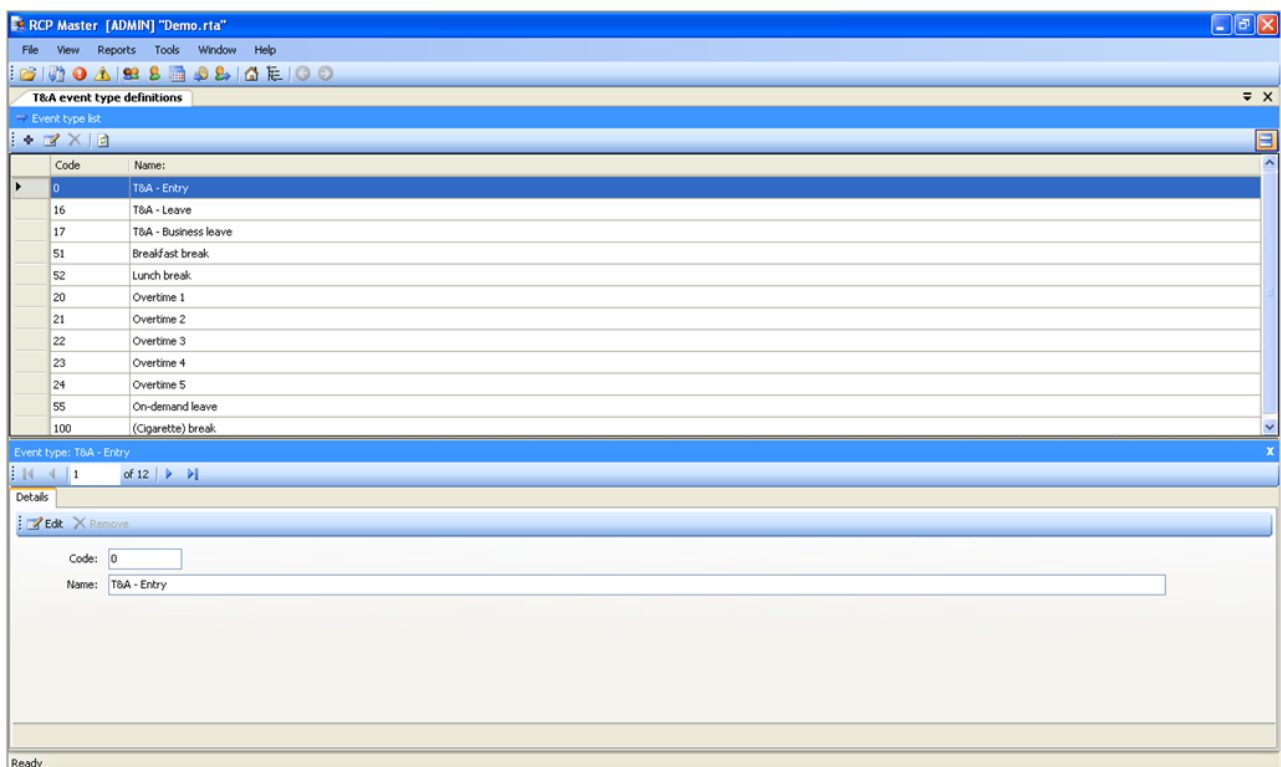
Clicking the **Edit** button activates the event type dialog window.
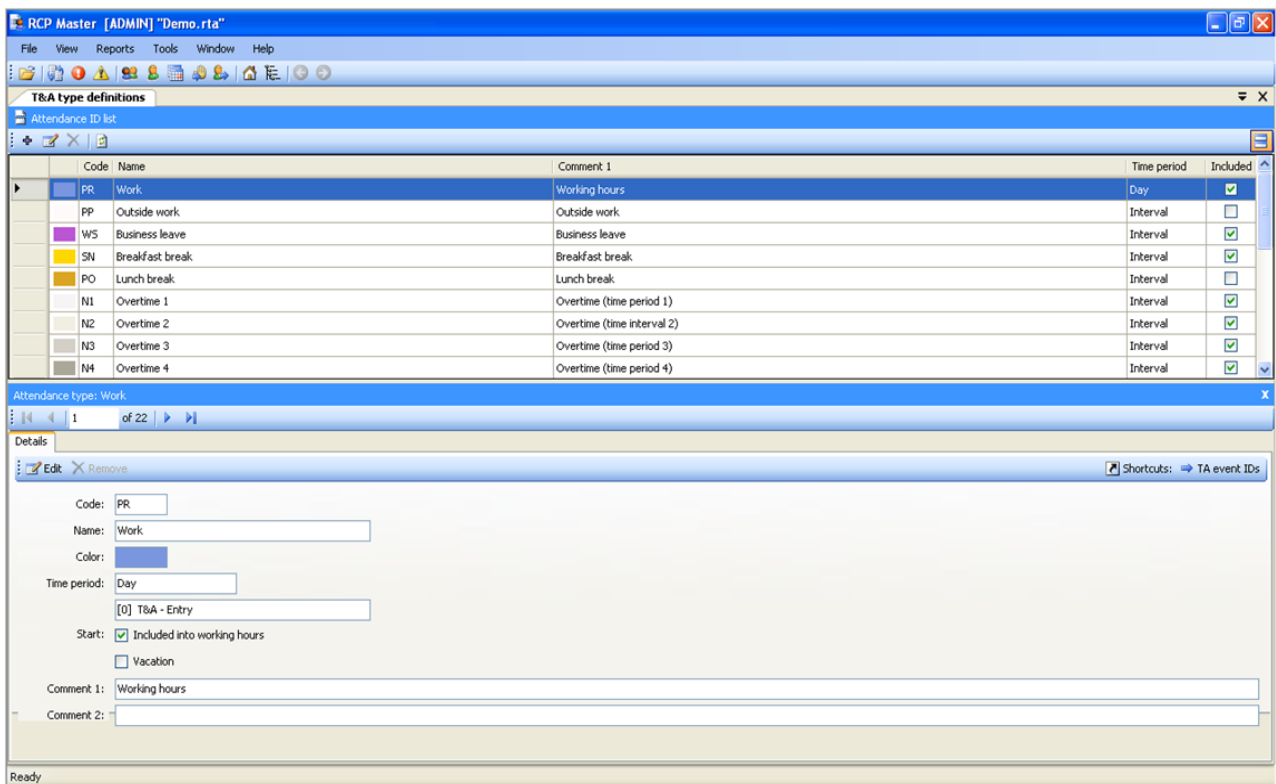
T&A type definitions command

The command invokes the **T&A type definition** view. The T&A attendance type is used for calculating or classifying working hours (hours in the office) of a particular employee. Valid examples are as follows: *Work*, Business *leave, Breakfast, Overtime, Vacation, Sick leave*, etc. Users are allowed to define any number of T&A attendance types. The detail panel features the following information for a given attendance type:

- Code – unique ID
- Name – text name
- Color – item color in a calendar
- Time period – accepts two sorts of input values. For time interval type inputs the attendance type defines time ranges at one minute intervals (*Work, Breakfast*, etc.). Day type inputs denote attendance types on whole-day basis (*Vacation, Sick leave, Business trip/leave*, etc.).
- Start – (optional) defines an event type to initialize a particular attendance type, e.g. the *Entry* type event is an attendance type, whereas the *Business leave* event denotes your business hours outside the main office.
- Included – used for determining the number of working hours for a particular attendance type. For example, a breakfast is usually included into working hours, whereas a lunch break is not, etc.
- Vacation – used for attendance classification purposes. If classified as such, it is displayed in the employee list of vacation days.
- Comment – some additional information.
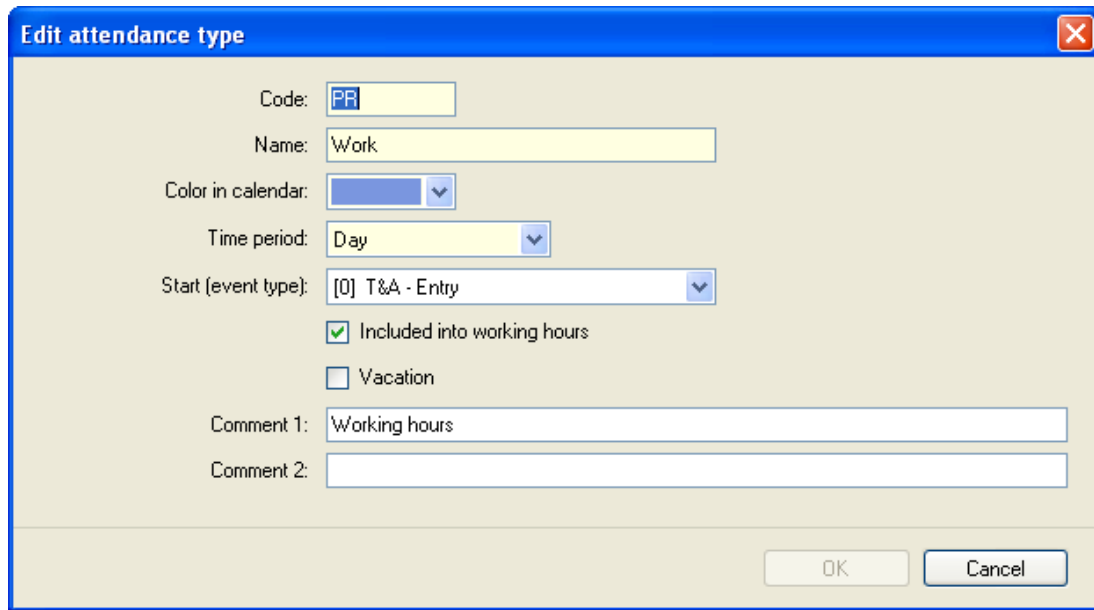

Clicking the **Edit** button opens **Edit attendance type** window for editing any defined attendance type event.
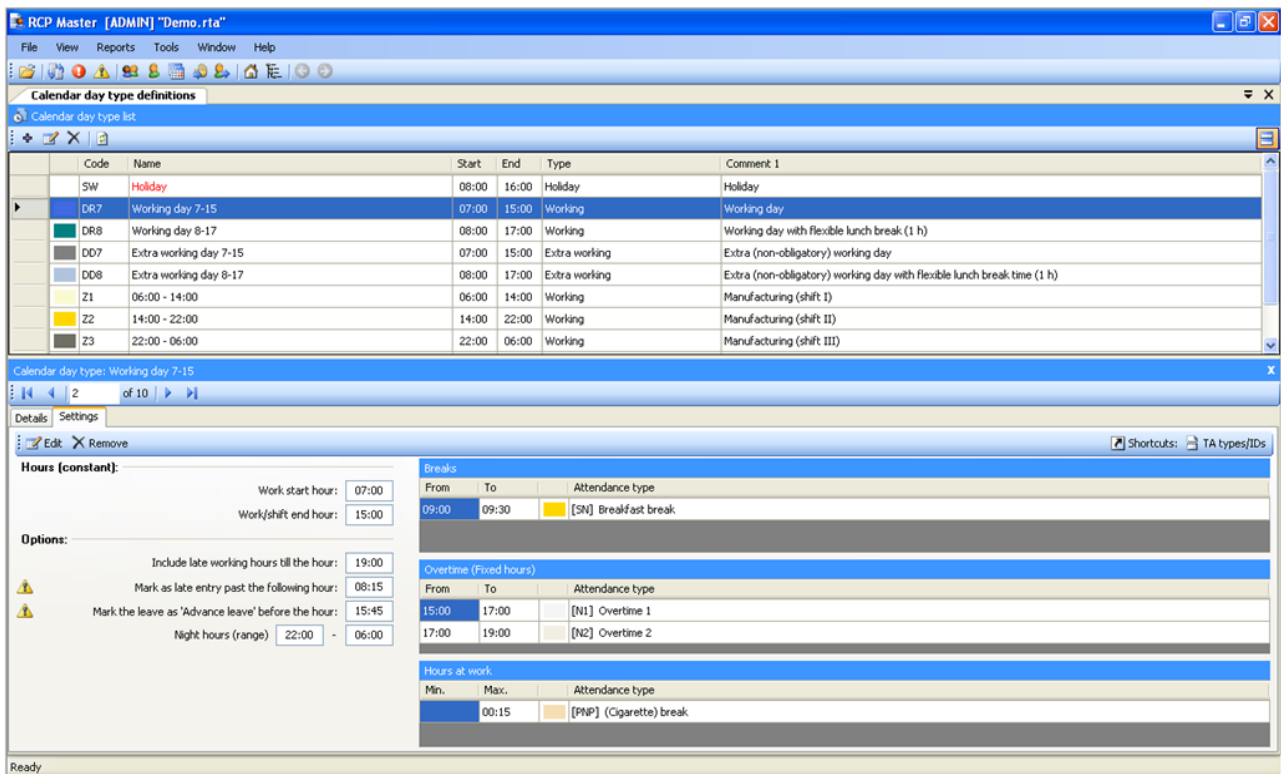
Edit calendar day type command

The **Edit calendar day type** command opens the **Calendar day type definitions** window. A calendar day type is a work pattern (a schedule) on a particular **working day from 8:00 h till 17:00 h.** For example, a regular unpaid lunch break would last one hour from 12:00 h till 13:00 h. Clearly, calendar day types are used for defining work calendars. Setting up a calendar is accomplished by assigning a particular day type to a weekday. For example, all working weekdays (*Mon-Fri*) can be assigned the following type: *Working day 8-16*. For more information, refer to the calendar information in the calendar section.

Clicking the **Edit** button invokes the **Edit calendar day type** dialog. The type definition incorporates the following inputs:

- Code – unique day type code.
- Name –unique day type name.
- Color in calendar – color used for marking a particular weekday on a calendar.

- Comments – some additional information, comments, notes.
- Type – may assume one of the following three states: *Working* (used for marking regular working days), *Extra working* (for marking extra working days), *Holidays* (for marking public/national holidays).
- Hours – is a two-state parameter for describing the attendance type on a given weekday: **Fixed** (working hours in the **From - To** manner), **Flexible working hours** (working hours with no fixed *Start*/*End* working hours).

In addition to that, a day definition may incorporate a number of tabbed configuration parameters to be revealed by clicking the **Show details** button to see the **Details** window:

Options tab

The **Options tab** contains numerous settings for working hour calculations and displaying discrepancies against the labour code.

- Include advanced working hours before the hour – allows users to define working hours time span prior to the regular date/time inputs to begin registering valid T&A entries.
- Include late working hours till – allows users to define working hours (past the end of the late shift) to stop registering T&A entries on the list.
- Mark as late entry past the hour – a late entry is an entry event past the allowed time interval.
- Mark the leave as 'Advance leave' before the hour – an advance/premature leave is a leave event before the preset hour.
- Night hours (range) – defines so-called night working hours (night shifts).

Regulatory breaks tab

The **Regulatory breaks** tab defines obligatory breaks, e.g. breakfast break on working hours.

Overtime tab

The **Overtime** tab defines an overtime on a particular weekday item. The current *RCP Master* release defines the overtime as working hours past fixed working schedule. Given the overtime settings and the number of working hours, the application calculates the overtime automatically.


Hours at work tab

The **Hours at work** tab defines time limits for particular attendance types. It is used for setting a maximum total time for a cigarette break, lunch break or a minimum estimated number of working hours.

Software operators command

The command opens the operator data view. The upper section of the panel contains a list of all operators, whereas the lower section is used for displaying command access rights of a particular operator.
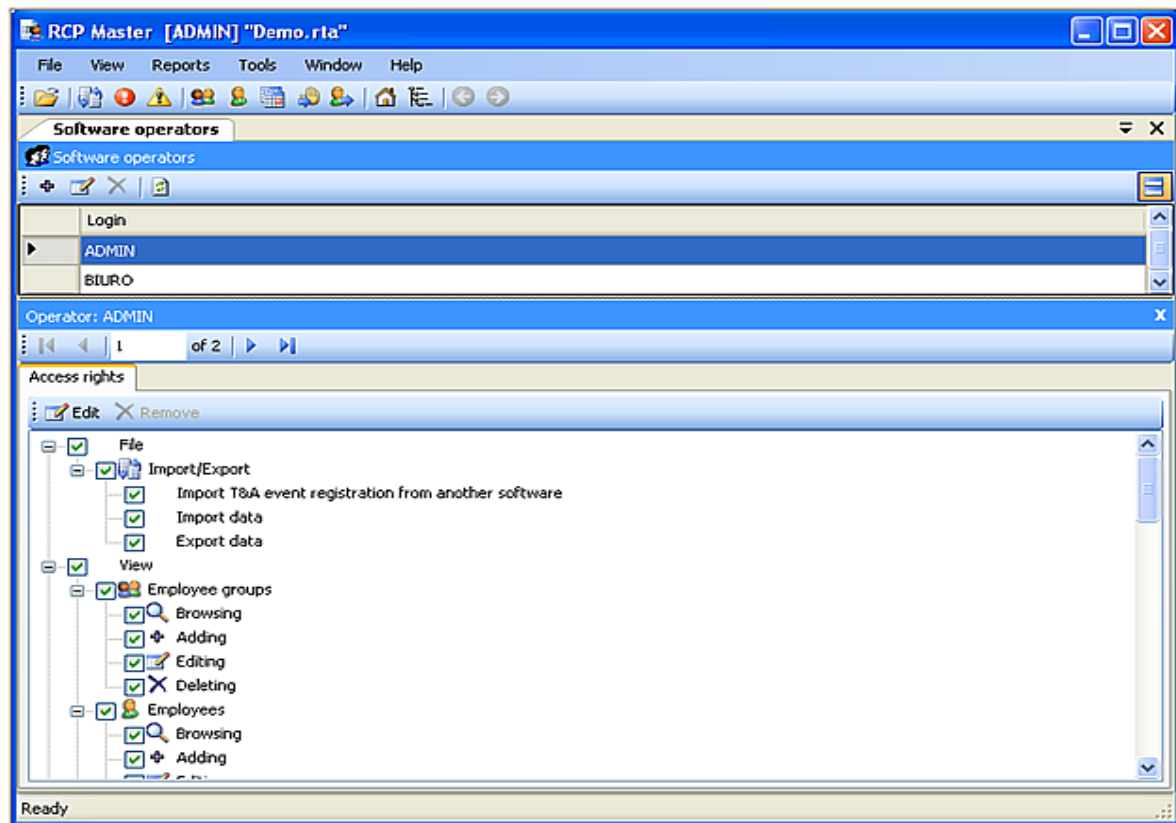
Clicking on the **Edit** button on the lower toolbar opens the operator editor window for operator setting modifications: password and available commands (defined by clicking relevant checkboxes).
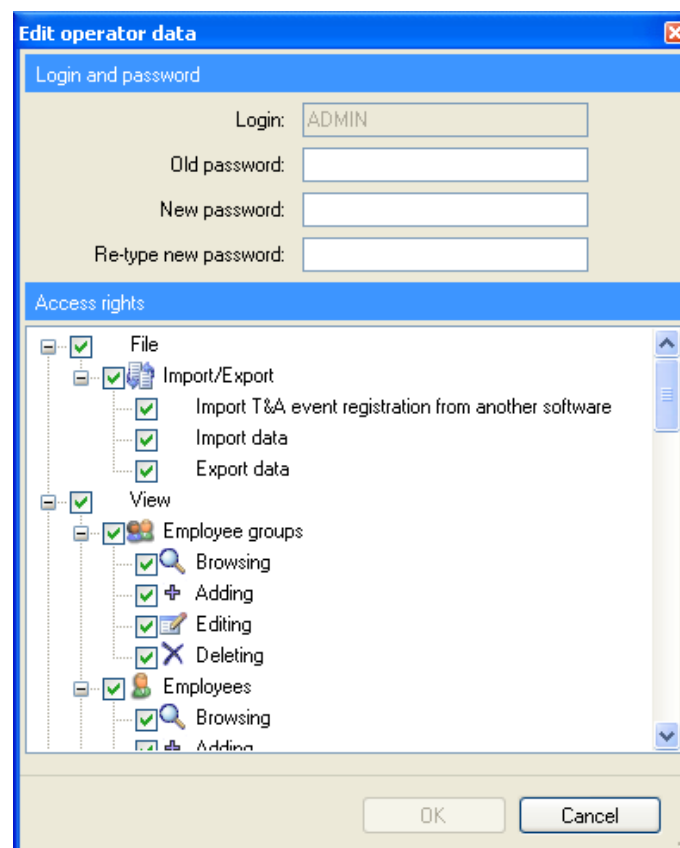
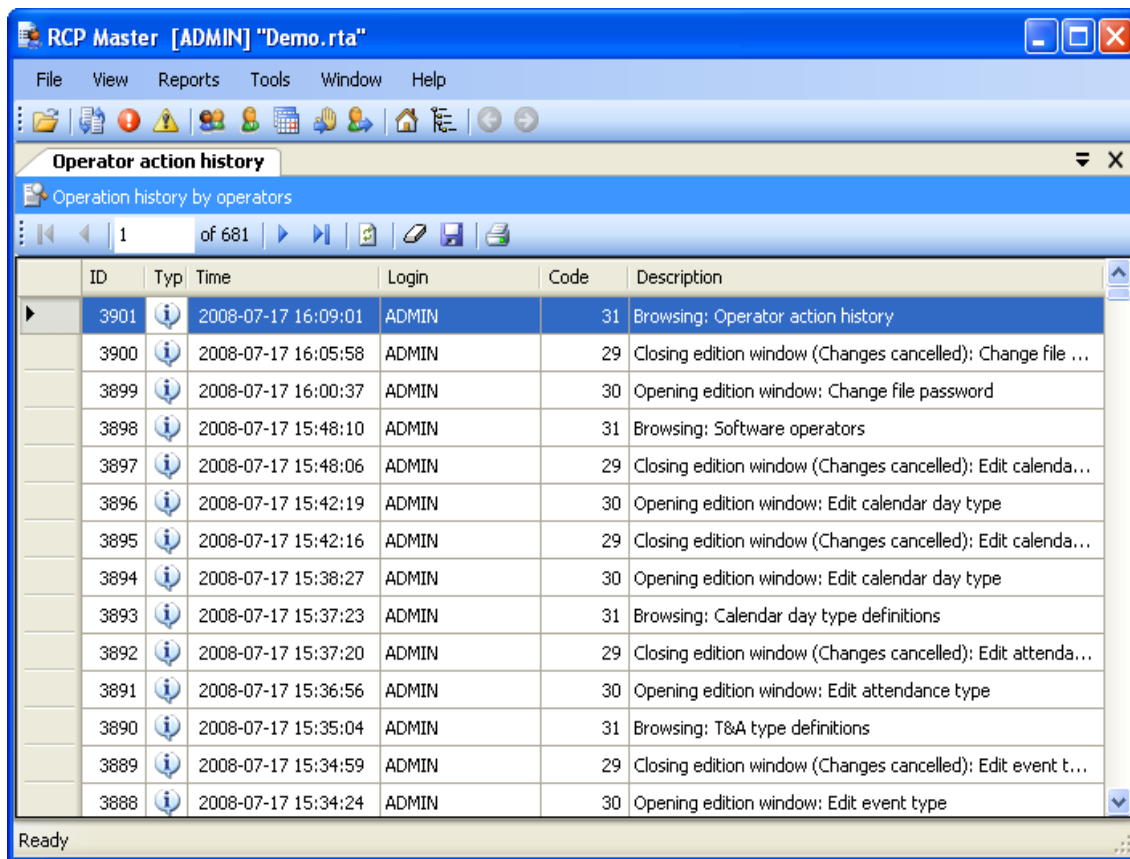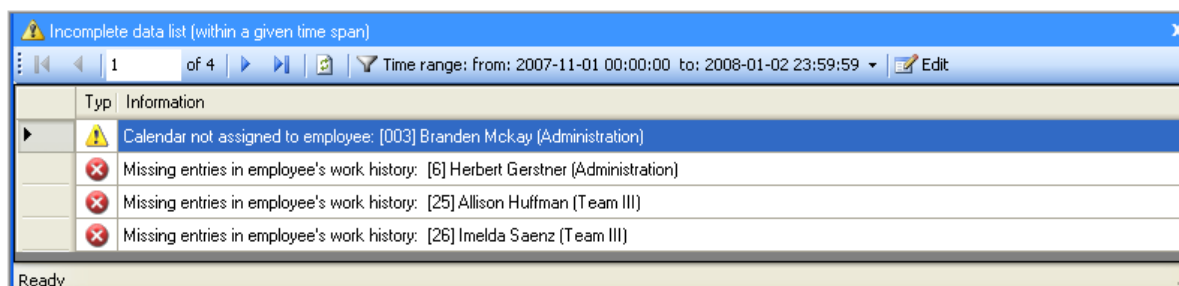## Operator action history command

The **Operator action history** command displays the operator history data view. The component is used for tracking operator actions, commands. The application keeps track of all events starting from user login to log-off. Moreover, the history keeps track of all errors/exceptions registered while running the application. The history can be exported to an external coma-separated data file (extension: `*.csv`).

Verify data integrity command

The **Verify data integrity** command performs a data integrity test (*calendar assignments, missing entry/leave registrations*), and then displays the test result in a window in the lower section of the main window.

Then, click the **Edit** button in the lower panel to correct the data on the list.

Find labour code discrepancies command

The **Find labour code discrepancies** command carries out a discrepancy test (*delay, premature leave, missing registration, exceeded min/max time limits*), and then displays the test results in a tabbed window in the lower section of the main window. Double-clicking on a selected item in the window invokes an appropriate data view, incl. employee data in the upper panel.

Data file (Demo.rta) menu
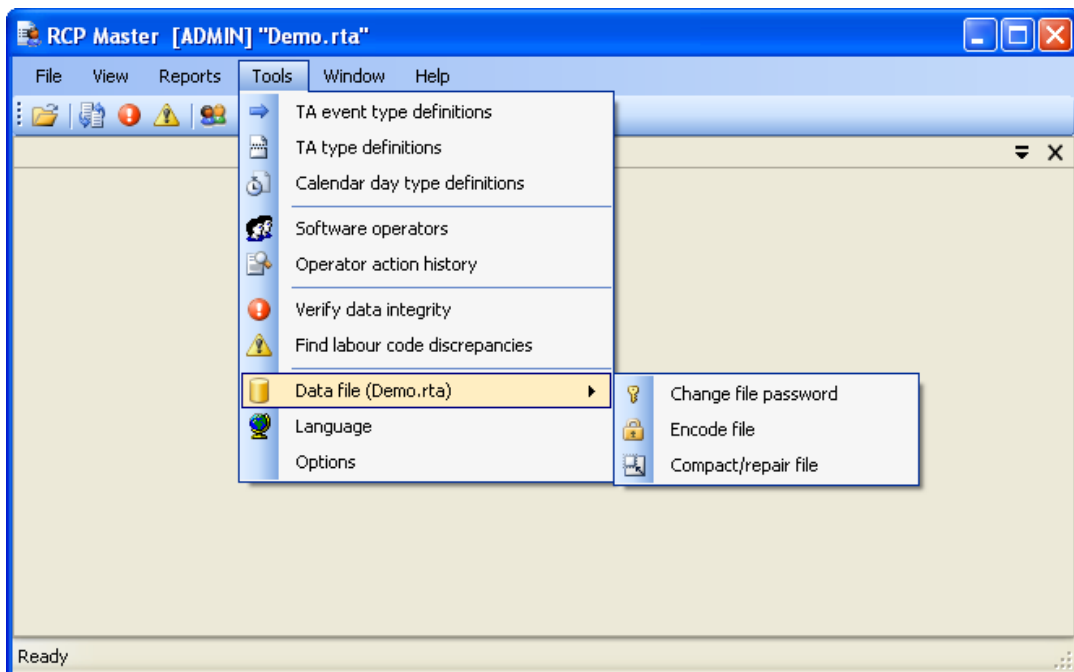
Change file password command

The **Change file password** command displays a user password dialog window. By default, the default password in a new data file is `roger`.

Encode file command

The **Encode file command** displays a dialog to encode a data file. Select a relevant option on the window and confirm your selection to carry out the requested command.

Compact/Repair file command

The **Compact/Repair file** command shows a dialog window for file compacting and repairs. Select a relevant option on the window and confirm your selection to carry out the requested command.

Language command

The **Language command** changes the application culture (language). The combo box in the dialog window includes all ava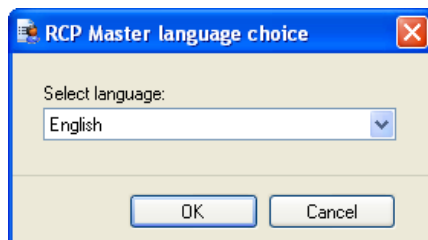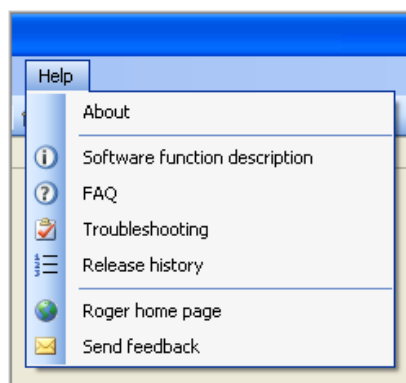ilable languages. Changing the current language results in an immediate translating the contents of all opened windows of the applications.

Options command

The **Options command** displays a window for setting various options in the application, e.g. SMTP mail server parameters. *Note the feature is under development*.

Help menu

- <u>About</u> – command displays a dialog window, incl. the RCP Master release information (vendor, license type, version).
- <u>Software function description</u> – command opens the RCP Master User Manual (PDF) in a built-in document view window. Acrobat Reader is required for this functionality.
- <u>FAQ</u> – command displays the FAQ document in a document view window.
- <u>Troubleshooting</u> - command displays a document window incl. description of most common problems and solutions.
- <u>Release history</u> – command opens the RCP Master Release Notes document.
- <u>Roger home page</u> – command displays the <u>Roger Web site</u> using the RCP Master's internal web browser.
- <u>Send feedback</u> – command displays an e-mail client (MS Outlook) preconfigured with the software vendor's e-mail address and a default message title. The command is used for sending your feedback (comments, questions, error reports) back to the vendor (*Roger*).

Glossary

C

Calendar day type – pattern or a schedule used on a particular weekday, e.g. a regular working day from 8:00 h till 17:00 h incl. (unpaid) lunch breaks from 12:00 h till 13:00 h.

Control point – a reader device for employee identification purposes using so-called PIN codes, code cards, biometric cards, etc.

D

Data file compacting – operation used for decreasing the data file size. The other use of compacting is for a record removal operation. The removal process in a large database file is a time-consuming process. That is why deleting a record in a database is accomplished by setting a record flag (to the deleted status) rather than physically removing it from the file. To remove deleted records from a database, click **Compact/repair** on the **Tools** menu.

T

T&A event type – type used for interpreting an event registered by a control point in access control systems. Valid examples are as follows: *Entry, Leave, Business leave*. A T&A system identifies an event according to its unique numeric code (ID).

T&A attendance type – used for determining the type of hours in the office for a particular employee in a defined time span. Valid examples are as follows: *Work, Business leave, Breakfast, Overtime, Vacation, Sick leave*, etc.

Time and Attendance – a set of technical and information technology media for attendance control (presence/absence) during working hours (see also: http://en.wikipedia.org/wiki/Time_and_attendance).

T&A event register – a list of events registered by control points.