

# E2R PGC

**Modular Software for Cooperation with Weighing Instruments**

**USER MANUAL**

ITKU-81-03-10-18-EN





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# 1. GENERAL INFORMATION

## 1.1. Main Functions

**E2R SYSTEM** comprehensively manages production processes related with weighing processes in certain phases. Due to a modular structure, the system is very flexible and can be easily adapted to a company profile, specifics and requirements, and to customer needs.

**E2R PGC** is a computer system consisting of **RADWAG**-manufactured weighing instruments and E2R SYSTEM. The system synchronizes databases of products, operators and schedules, and records measuring results and PGC controls carried out on the weighing instruments linked in **ETHERNET** network. The system enables real-time preview of particular weighing instruments statuses. With this the control process can be started and finished.

The network may contain different types of weighing instruments.



**Diagram of E2R PGC system in Ethernet network**

**E2R PGC** system enables preparation of: brief and detailed PGC control report, PGC control graph and statistics with graph for a product on the basis of the weighing records obtained within selected time interval.

The **E2R PGC** module, similarly to other **E2R SYSTEM** modules, is a multi-workstation software and can be integrated with multiple weighing instruments and computers.

Each weighing instrument is an independent workstation, able to operate continuously even in case of network or server breakdowns. Information on the control process is sent on a regular basis to a computer program. All messages regarding control process are simultaneously displayed on the balance and computer screen. Reports on carried out control processes are saved to the weighing instrument and to the database.

The operator decides about control start. This ensures his independence from the computer software. Computer software collects up-to-date information, which is saved to the database.

A control initiated using balance is automatically finished after a pre-set packages quantity (samples) has been controlled. Upon control finish, standard or detailed reports can be generated. The reports contain all crucial information on pre-packaged goods control.

Collected data allows you to assess quality of produced pre-packaged goods and their conformity with:

- 'Pre-Packaged Goods' regulation of 07.05.2009th May 2009 (Journal of Laws No 91, item 740), on the requirements concerning quantity inspection of **pre-packaged goods control**, which inspection is to be carried out by means of random selection of the measurement results and sending those results to pre-packaged goods control procedure compliant with the directives of the European Parliament and of the Council.
- a company quality control system (internal control) that can be modified in terms of:
  - batch quantity,
  - values of negative T errors,
  - values of positive T errors,
  - coefficient for calculation of permissible average limit,

## The software enables 2 ways of control start:

- the operator of the weighing instrument starts the control process by sending respective information to the software,
- the operator of the computer software starts the control process by determining the balance on which the control is to be carried out, and confirming the process on the balance.

## Program functions:

- Automation of the control process;
- Operator's errors control;
- Two-platform scale operation;
- Determining permissions for particular users,
- Printout of the control reports,
- Statistics printout,
- Reports and statistics preview carried out from anywhere within the company network.

## The computer software enables control in accordance with the following algorithms:

- control with average tare
  - ✓ Non-destructive average tare
- control with variable tare
  - ✓ Non-destructive Empty-Full
  - ✓ Destructive Full-Empty
  - ✓ Destructive Empty-Full

## **CAUTION:**

1. Due to the program update, some discrepancies may occur between this user manual's content and the actual state.
2. RADWAG does not bear responsibility for:
  - potential errors being a result of inappropriate use,
  - loss of the data being a result of inappropriate use of the software or a computer.
3. Mind that in case of loss of purchased medium, **RADWAG E2R** will not provide you with archive software versions. You will be required to use the latest **E2R SYSTEM** update.



## 1.2. Compatible Weighing Instruments

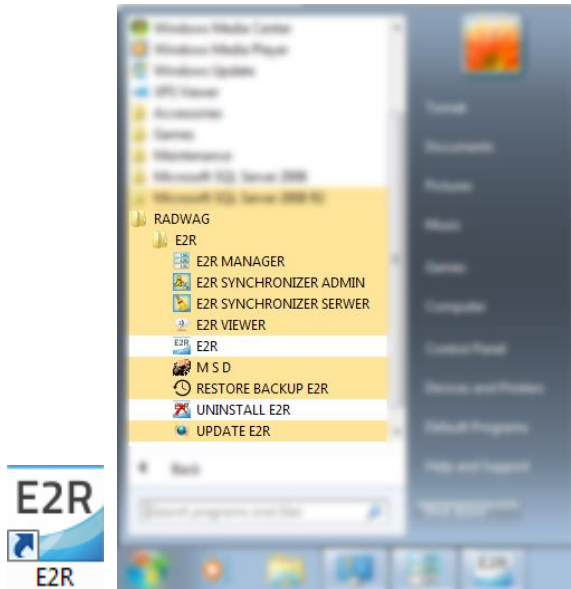
Due to the communication protocol, **E2R PGC** software is compatible only with **RADWAG-manufactured** weighing instruments. Compatible weighing instruments series: **WLY, WPY, HY10, HTY, 3Y, 4Y**.



Prior to software operation, set appropriate parameters on each of the weighing instruments in the network to ensure required measurement accuracy and correct integration. For detailed description of operating parameters refer to the user manual of a weighing instrument.

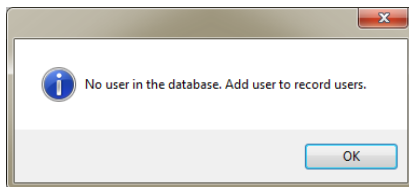
## 2. START-UP

To run the program press desktop icon or use Start Menu of the operating system: **START/PROGRAMS/RADWAG/E2R/E2R**.

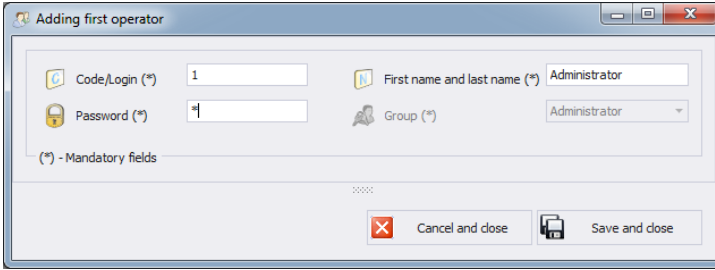


## 2.1. Adding the First User

When running the program for the first time, message informing on an empty Operator Database is displayed. Press OK button, the program shall guide you through adding procedure.



Fill in the following fields: **Code/Login, Password, First name and last name.**



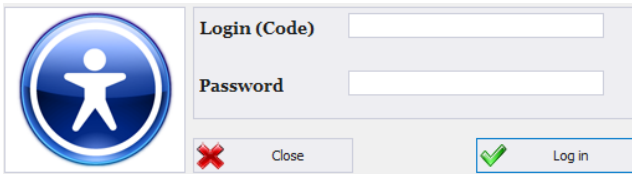
**Caution:**

*The first added user has administrator permissions level.  
Fill in all mandatory fields; the code is also a login.*

Press **Save and Close** button to confirm introduced modifications.

## 2.2. Logging in Procedure

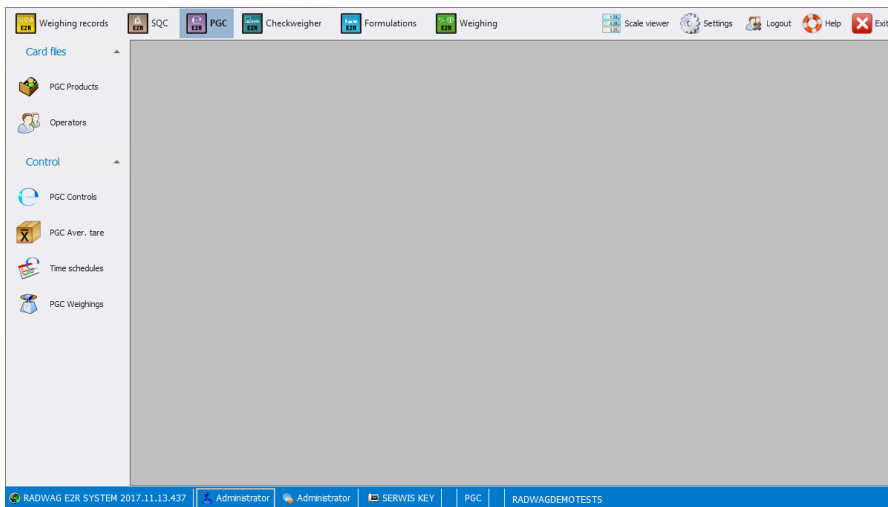
Upon running the program, it is obligatory to perform logging in operation.  
Enter **Login / Code** and **Password**.



Press **OK** button to confirm the entered values, the program displays Home Screen.

## 3. HOME SCREEN

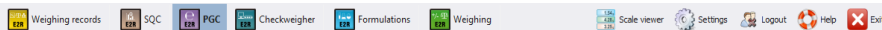
Home Screen of PGC software is displayed upon successfully completed logging in operation.



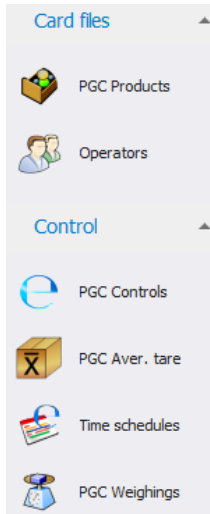
## The Home Screen has been divided into 4 sections:

- Top bar – System toolbar,
- Side bar – Navigation pane,
- Bottom bar – Status bar,
- Workpane.

System toolbar features exit button along with pictograms activating operation modes, scales preview, parameters setup and logout operation.



Navigation pane comprises modules featuring buttons for activation program functions.



Status bar displays information on software version, logged in user, user permissions level, current operation mode and license type.



Workpane has been designed to display windows triggered by Navigation Pane buttons. The windows provide all data and information.

### 3.1. Workpane

Data displayed in a workpane is taken from database. Measurements carried out using the system can be filtered and sorted. Filter mechanism has been designed to allow searching particular information for specified columns.

Sorting mechanism (grouping) features option of information summary for specified columns.

#### 3.1.1. Data Sorting

Data displayed in a workpane of any available module can be freely sorted.

To group displayed data, first select particular column header, next drag it over area marked with red border and drop it.

Drag a column header here to group by that column

Product code	Product name	Description (Full Name)	EAN code	Nominal mass Qn	Unit	Tare	Min	Max
▼								

Dropped header turns into a button with a name. Press the button once to enforce list sorting in either ascending or descending order.

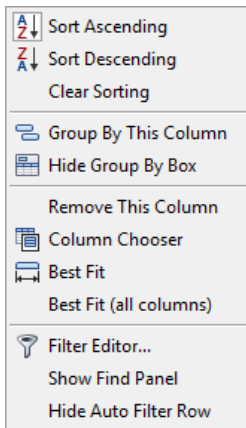
Product name ▾									
Product code	Product name ▾	Description (Full Name)	EAN code	Nominal mass Qn	Unit	Tare	Min	Max	
▼									

### 3.1.2. Data Filtering

In order to activate extra filtering options, press right hand top corner of particular column header. List of available options is displayed.



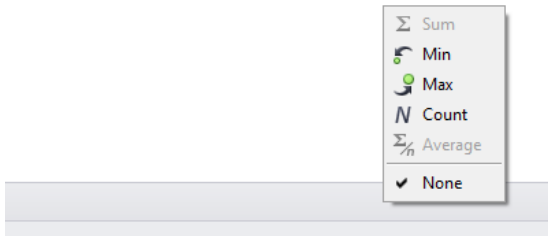
Click right mouse button to operate the following context menu with sorting options.



**Where:**

- Sort Ascending** Click to sort from A to Z
- Sort Descending** Click to sort from Z to A
- Clear Sorting** Click to delete grouping filter
- Group By This Column** Click to group data by selected column
- Hide Group By Box** Click to hide quick grouping option
- Remove This Column** Click to delete selected column, the column is no longer displayed in a window

<b>Column Chooser</b>	Click to run column view editor
<b>Best Fit</b>	Click to modify column width to get the most optimal view
<b>Best Fit (all columns)</b>	Click to modify all columns widths to get the most optimal view
<b>Filter Editor...</b>	Advanced filter
<b>Show Find Panel</b>	Click to run common filter field allowing search all columns for specified value
<b>Hide Auto Filter Row</b>	Click to hide filter row option



Bottom workpane area features handy data filter allowing to generate 5 basic statistics for a particular column. To select statistics type, move the cursor over the bottom bar of a workpane and press right mouse button.

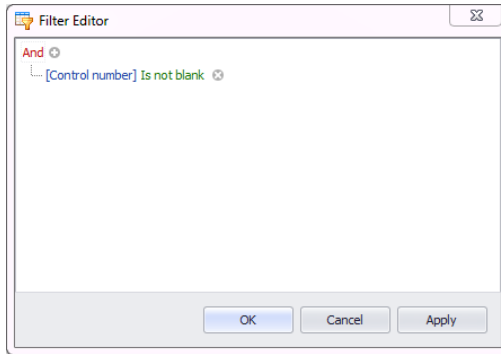
**Basic statistics:**

- Sum** Click to display sum of all values of particular column
- Min** Click to display minimum value of particular column
- Max** Click to display maximum value of particular column
- Count** Click to display quantity of rows of particular column
- Average** Click to display average value of particular column

Depending on data type there is a possibility of choosing all 5 options for a given column.

**3.1.3. Filter Editor**

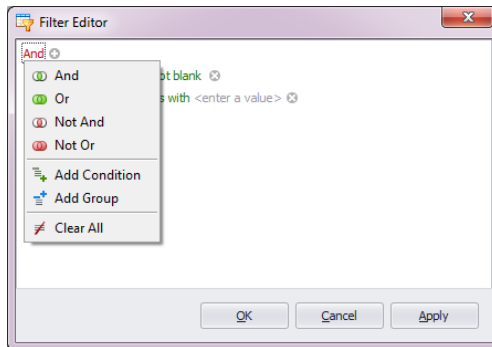
Upon setting a filter, Edit Filter button is displayed in the bottom part of a workpane. By means of this button Filter Editor window is activated where database data can be freely filtered.



Using the editor you can set one or many filtering conditions, this provides detailed filtering. It is possible to generate reports on the filtered data.

Filter Editor window provides the following filtering criteria:

**a) Filtering groups (and, or, not and, not or)**



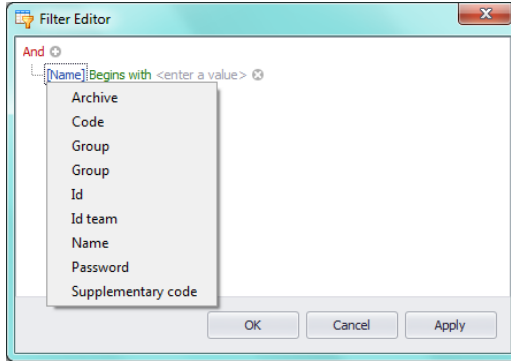
**Where:**

- And** all filter criteria are met
- Or** one of filter criteria is met
- Not And** opposites of all filter criteria are met
- Not Or** opposite of one filter criteria is met
- Add Condition** adding a new filter criteria
- Add Group** adding a new group of filtering criteria
- Clear All** deleting all filtering criteria

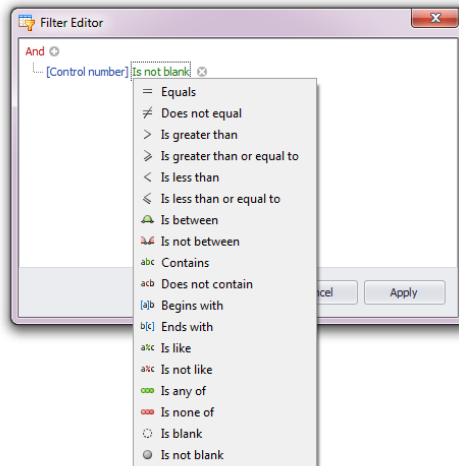
**b) Filtering conditions** – outlines the data to be filtered and the methods of filtering:



- selecting a column for filtering



- selecting filtering range and method



**Where:**

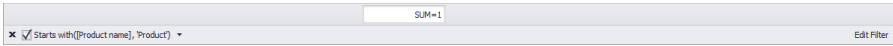
<b>Equals</b>	Displaying all records of the selected column which provide the very entered value
<b>Does not equal</b>	Displaying all records of the selected column which provide different than entered value (opposite to filter „Equal”)
<b>Is greater than</b>	Displaying all records of the selected column which provide values greater than the entered value,

<b>Is greater than or equal to</b>	Displaying all records of the selected column which provide values greater or equal to the entered value,
<b>Is less than</b>	Displaying all records of the selected column which provide values lower than the entered value,
<b>Is less than or equal to</b>	Displaying all records of the selected column which provide values lower or equal to the entered value,
<b>Is between</b>	Displaying all records of the selected column which provide values comprised within range specified by two given values
<b>Is not between</b>	Displaying all records of the selected column which provide values not comprised within range specified by two given values
<b>Contains</b>	Displaying all records of the selected column which include the given string of characters
<b>Does not contain</b>	Displaying all records of the selected column which do not include the given string of characters
<b>Begins with</b>	Displaying all records of the selected column which begin with the given string of characters
<b>Ends with</b>	Displaying all records of the selected column which end with the given string of characters
<b>Is like</b>	Displaying all records of the selected column which provide values of particular beginning and end, the filtering criterion has the following format „begin%end”
<b>Is not like</b>	Displaying all records of the selected column which do not provide values of particular beginning and end, the filtering criterion has the following format „begin%end”
<b>Is blank</b>	Displaying all records of the selected column which are empty
<b>Is not blank</b>	Displaying all records of the selected column which are not empty
<b>Is any of</b>	Displaying all records of the selected column which provide values that are the same as one of the given patterns
<b>Is none of</b>	Displaying all records of the selected column which provide values different from all of the given patterns – opposite to „Is any of” filtering


Here you can specify the exact criterion for filtering the selected column, e.g.: if you want to get a result concerning product „**Apple**” choose „**Name - Equals – value: Apple**”. Press „+” button, located next to the filtering group, to add another criterion.

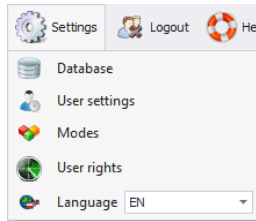
Having completed operating Filter Editor, when all necessary filters are set, press **Apply** button, the filter gets activated.

The bottom bar displays selected filter type.



## 4. PROGRAM SETUP

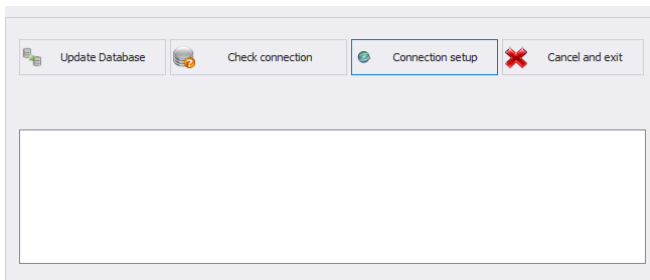
To run program setup, press  **Settings** button located on the system toolbar.



### 4.1. Database

Database function allows the following: checking connection with the database, database relocation when the program is run by an additional computer, providing backup copy and running server-stored copy.

To start database setup go to **Settings** module and press  **Database** button.



**Database setup features the following functions:**

#### **Update Database**

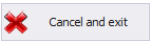
Press to update database to which E2R program is connected. Use this function upon swapping form one database to another one.

## Check connection


Press to check whether connection between E2R and database is correct.

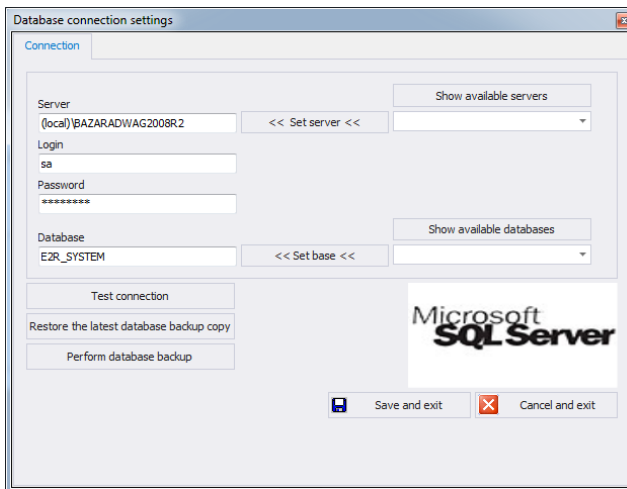
## Connection Setup

Press to establish connection with database when the database and E2R program are stored on separate computers.

Press  button to cancel introduced changes.

### 4.1.1. Setting up Connection

Press  button to activate window with database settings providing parameters for connection.



#### Where:

#### Show available servers

Press to find available local Ethernet servers.

#### Set server

Press to set server selected form list of available servers.

#### Server (IP)

IP or name of server with running SQL server (add also server instance if declared).

Format: SERVER\INSTANCE

By default: **(local)\bazaradwag2012**

#### Login

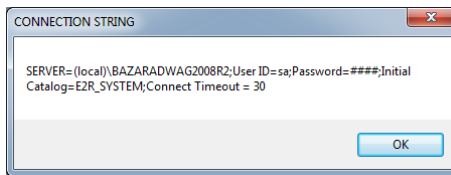
Operator's name, by default **sa**

<b>Password</b>	Operator's password, by default <b>Radwag99</b> The password is coded, it cannot be discovered by a random person.
<b>Show available databases</b>	Press to search server and find available databases.
<b>Set base</b>	Press to set database selected form list of available databases.
<b>Database</b>	SQL database name, by default <b>E2R</b>

**CAUTION!**

**When multiworkstation version has been installed, provide Server (IP) field with IP address or name of server with SQL database.**

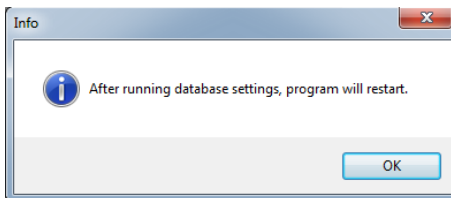
To check connection with database, press **Test connection** button. **Connection String** window, featuring previously specified data, is displayed.



Press **OK** button to confirm, window informing on connection status is displayed.

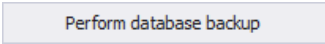


Close Database Settings window, you shall see message informing you about restart, press **OK** button to confirm.

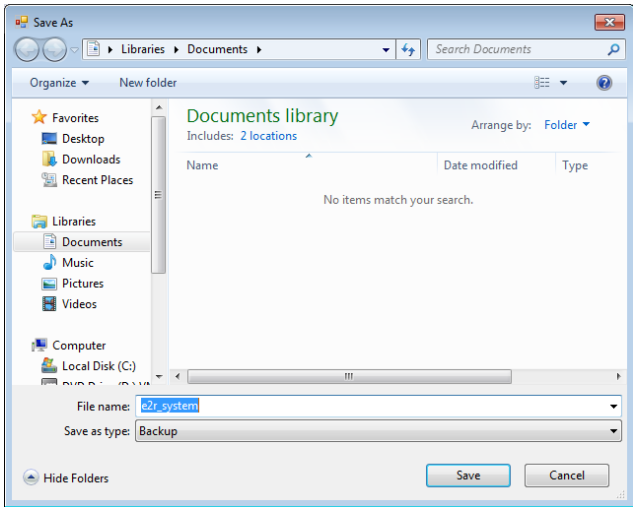


#### 4.1.1.1. Databases backup

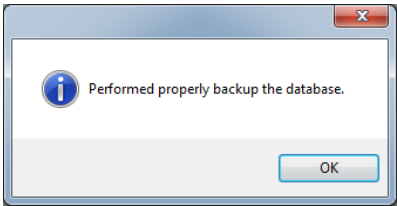
Complete backup copy of SQL database can be carried out by means of a computer with running SQL database engine. To provide backup copy, go to **Database Settings** window and press **Perform Database Backup** button.



Window allowing you to select backup copy destination folder is displayed. Select the folder and press **Save** button.



Message informing about completed backup copy creation is displayed.



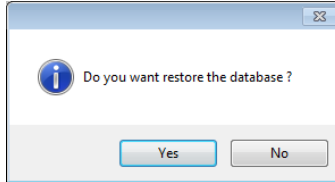
#### 4.1.1.2. Restoring database copy

Restoring complete backup copy of SQL database can be carried out by means of a computer with running SQL database engine. To provide

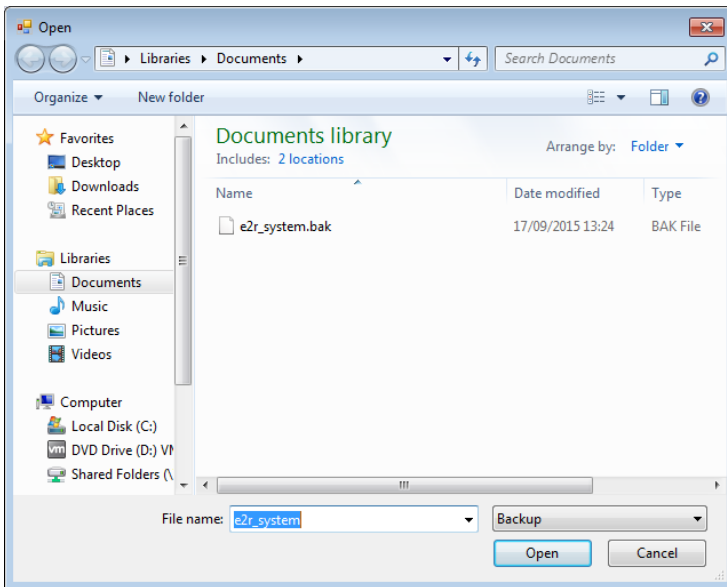
backup copy, go to **Database Settings** window and press **Restore the latest database backup copy** button.

Restore the latest database backup copy

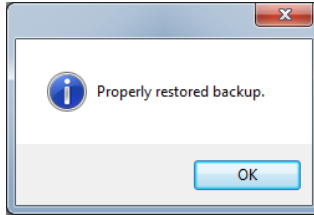
Respective request is displayed, press **Yes** button to confirm that you do want to restore the database.



Window allowing you to select destination folder for restored database is displayed.



Restoring the database takes from few seconds to several tens of seconds which is conditioned by database size. Successfully completed operation is signalled by the following message:




**CAUTION!**

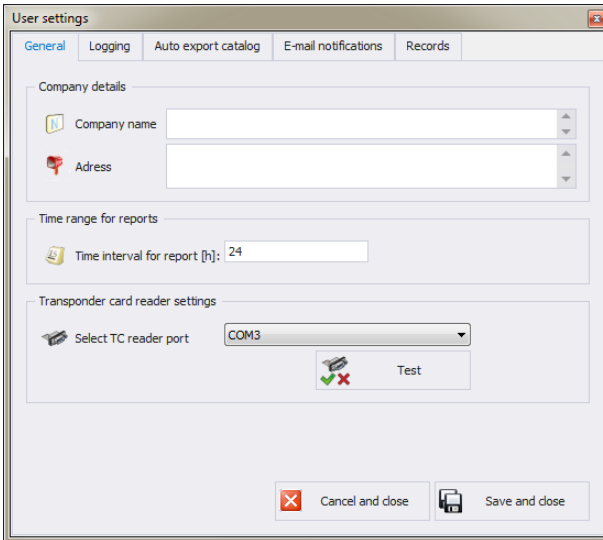
*While restoring database, all current data is substituted with the backup copy data.*

*If the system operates using HTY, WPY, WLY scales and 3Y balances, and if the data stored by them has not been removed then on connection establishment, supplementary weighings and info is loaded from the devices to the system.*

**4.2. User Settings**

To run **User Settings** go to **Settings** module and press  **User settings** button.

**Company Details tab:**



**Where:**

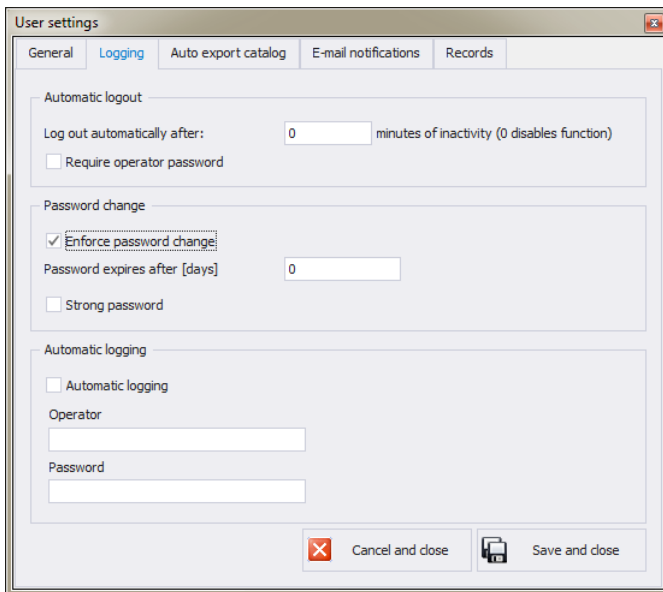
**General options tab:**



**Company Details**  
**Address**  
**Time interval for report [h]:**  
**Select TC reader port**

Company name displayed on PGC Reports.  
Company address displayed on PGC Reports.  
Default time interval for displaying windows containing date filter.  
Parameters for port to which transponder card reader is connected.

**Logging options tab:**



**Where:**

**Automatic logout**

Option providing auto logout. The operation is performed after passage of specified time interval where time is given in minutes. Countdown starts at the moment of the latest noted activity. Bottom bar displays remaining time. 0 value disables auto logout function.

**Password change**

Option ordering the operator to change the password.

**Password expires after [days]**

Option specifying for how many days the password is to be valid.

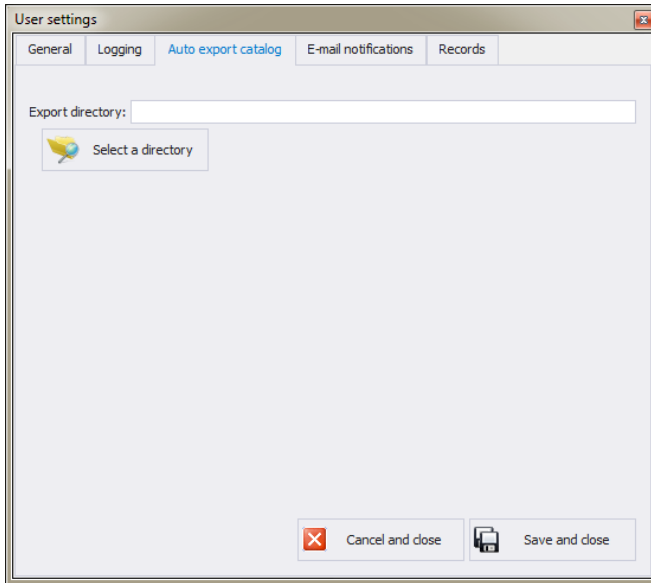
**Strong password**

6-character long password with at least one digit and one special sign is required.

**Automatic logging**

Option providing automatically carried out logging operation.

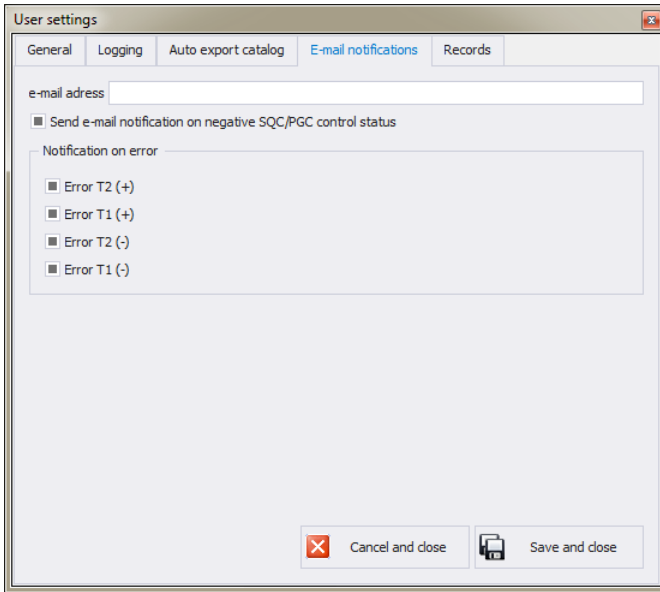
**Auto Export Folder bookmark:**



**Auto Export Folder**

Folder storing reports on dynamic scales control.

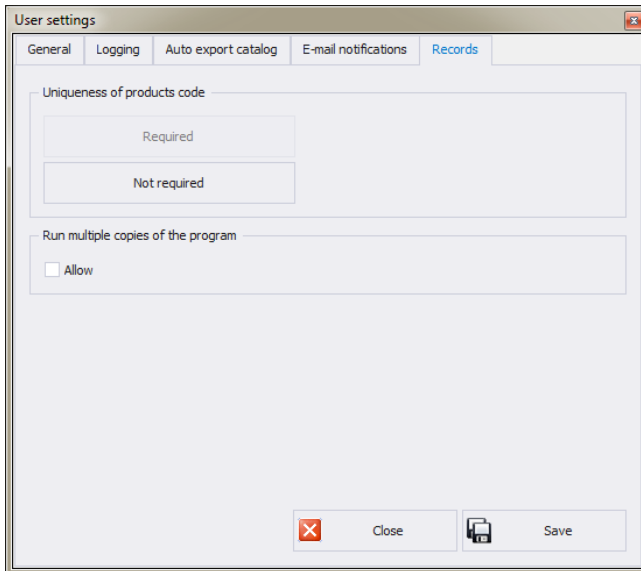
**E-mail Notification bookmark:**



**Where:**

- |  |  |
|--|--|
| <b>Target e-mail address</b>                                       | E-mail address to which the message is to be delivered;                        |
| <b>Send e-mail notification on negative SQC/PGC control status</b> | The message shall be sent upon completed SQC/PGC control with negative status; |
| <b>Error T2 (+)</b>  | The message shall be sent upon record of weighing with 'Error T2 (+)' status;  |
| <b>Error T1 (+)</b>  | The message shall be sent upon record of weighing with 'Error T1 (+)' status;  |
| <b>Error T2 (-)</b>  | The message shall be sent upon record of weighing with 'Error T2 (-)' status;  |
| <b>Error T1 (-)</b>  | The message shall be sent upon record of weighing with 'Error T1 (-)' status;  |

**Records settings tab:**




**Uniqueness of products code**

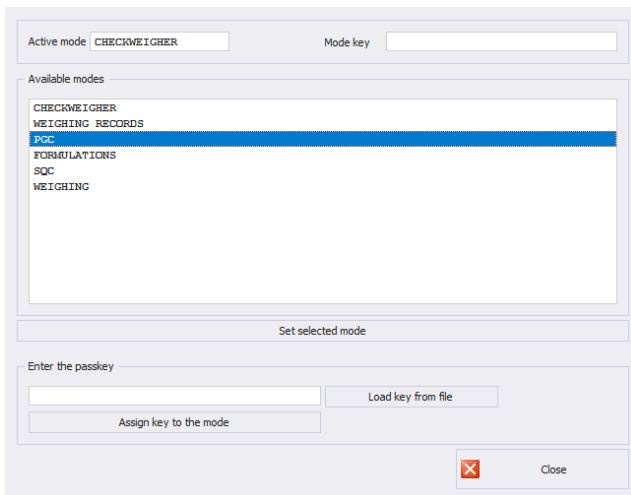
Enabling or disabling the need for providing unique products codes.

**Run multiple copies of the program**

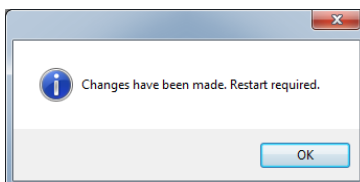
Enabling few software copies on one computer..

**4.3. Modes**

To swap between modes, go to **Settings/Service settings** menu and press  **Modes** button. Window providing list of available modes is displayed, select the mode you need and press **Set the Selected Mode** button.

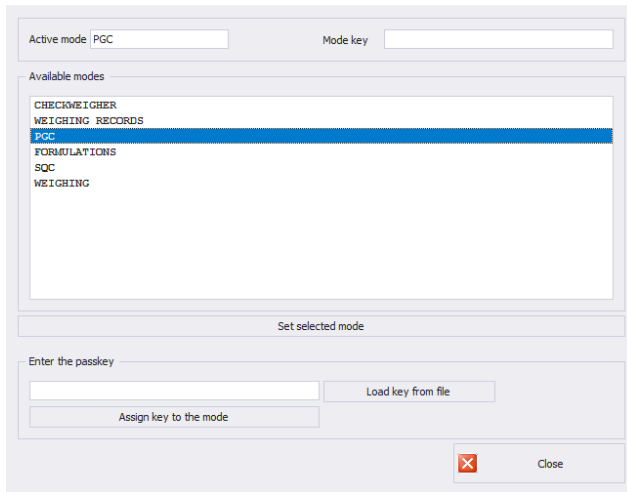


The following message is displayed, press **OK** button for confirmation.



### 4.3.1. Mode activation

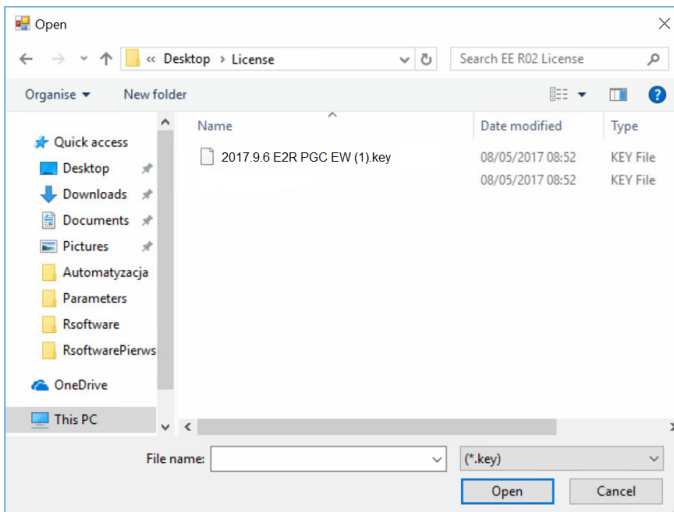
Mode activation is required during first installation of the E2R software and to increase the quantity of weighing instruments connected to the software. In case of the version for multiple workstations, the activation can be carried out on any computer connected to the system.



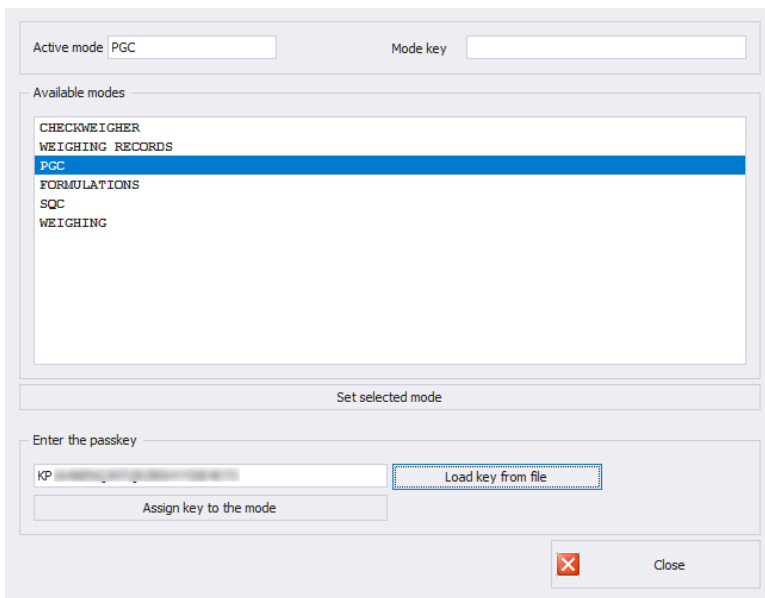
Select the mode out of available modes list, next enter passkey using a keyboard. Press **Assign Key to the Mode** button to activate selected mode.

Another method for mode activation is to load key from file. The licence file is to be found on a CD comprising the software, or it can be acquired by an e-mail.

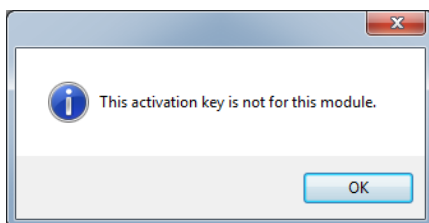
Press **Load Key From File** button, Windows OS dialog window opens, using it find directory storing file with the key. Select the respective file and press **Open** button.



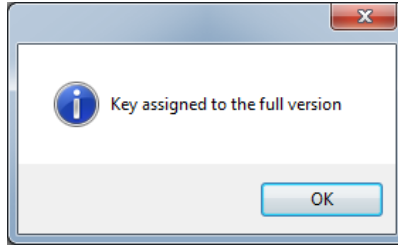
RADWAG licence is displayed in **Enter the Passkey** box.



Select a particular mode, next press **Assign Key to the Mode** button. If wrong mode has been selected, i.e. mode mismatching the key, you shall see the following message.



Now, modes list features the mode with assigned full program version licence.



Now, modes list features the mode with assigned full program version licence.

Select a particular mode and press **Set the Selected Mode** button, now close the window.

#### 4.4. Users Classes and Permissions Levels

This module has been designed to enable/disable access of each authorization group to particular program functions.

Permissions levels for scales-terminal:


Scales - Terminals	Authorization group			
	Administrator	Advanced	Standard	Basic
WPW - PUEC41H	Administrator	Advanced Operator	Standard Operator	Standard Operator
WLY, WPY - PUE7.1	Administrator	Advanced Operator	Standard Operator	None
HY10	Administrator	Advanced Operator	Standard Operator	None
3Y,4Y	Administrator	Advanced Operator	Standard Operator	None
TMX - PUE5	Administrator	Advanced Operator	Standard Operator	Basic Operator

#### **CAUTION!**

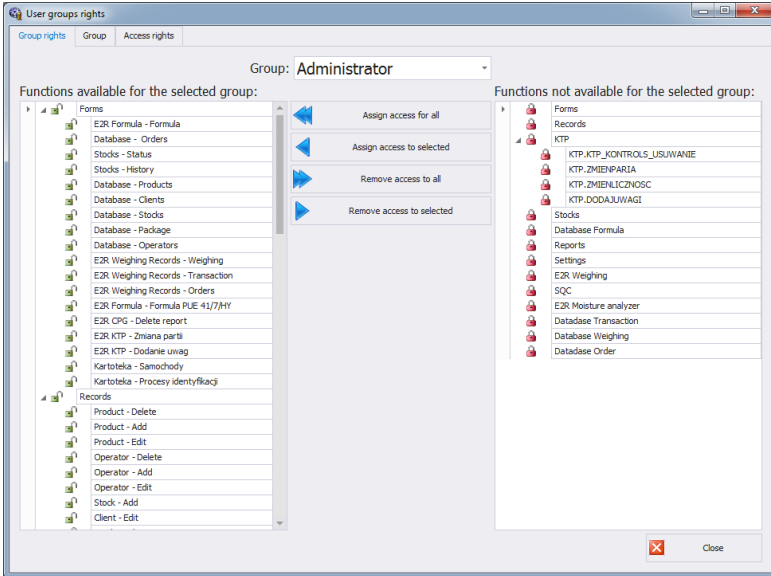
***It is not recommended to edit or delete already created authorization groups since they are strictly related to authorization groups on a computer and measuring devices.***

**By custom if any authorization group is modified or deleted the program restores it with a default name after computer restart. Group names can be modified, to do it contact RADWAG.**



To start authorization of users and groups click  **USER GROUPS RIGHTS** button located in **Settings/Service settings** menu.

**Group Rights** tab has been designed to allow setting permission rights with regard to particular program modules.



Select a given group using **Group** drop-down menu, add or remove permission levels for the selected group.

On the left there is a list of functions available for a given authorization group. In order to block access to a particular function, delete it.

On the right there is a list of functions unavailable for a given authorization group. It is possible to add a given function to the list on the left in order to make it accessible.

Buttons for disabling/enabling permissions levels:



Press to enable access to all functions (for a particular group).



Press to enable access to any function selected from the list on the right (for a particular group).

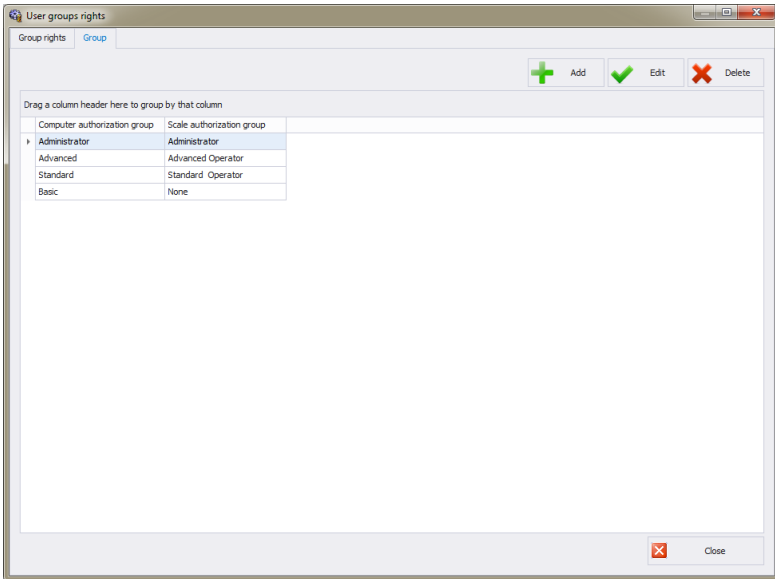


Press to block access to any function selected from the list on the left (for a particular group).



Press to block access to all functions (for a particular group).

**Group** tab provides list of defined groups of users.

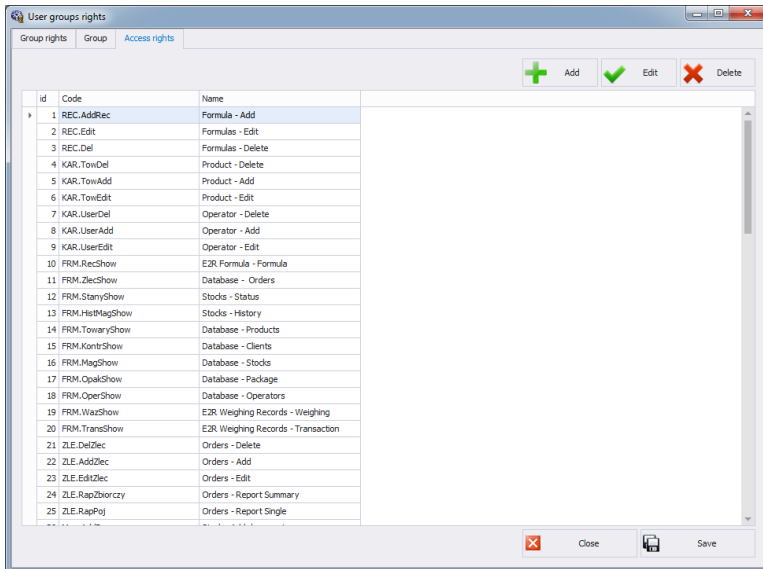


**Where:**

- Add** Press to add group of users
- Edit** Press to edit selected group of users
- Delete** Press to delete group of users
- Save** Press to save settings

When adding a new group of users first name it, next assign it to one of scale authorization groups.

**Access Rights** tab stores all codes and functions names assigned to the codes, the functions names are displayed on the list in **Group rights** tab.



## 4.5. Language

To swap between software languages go to **Settings** module and use **Language** combo box providing you with list of available languages.



Where:

- PL** Polish
- EN** English


## 4.6. Update

Use this option to either update your software version or to restore old copy.

**Caution!**

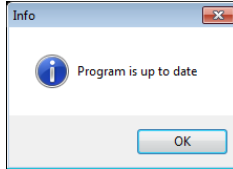
**The update is available for customers with the appropriate service package.**

### 4.6.1. Check Update

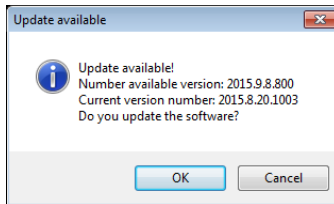
To check updates availability go to **Settings** module and press  Update check button or use Start Menu of the operating system:

**START/PROGRAMS/RADWAG/E2R/UPDATE E2R.**

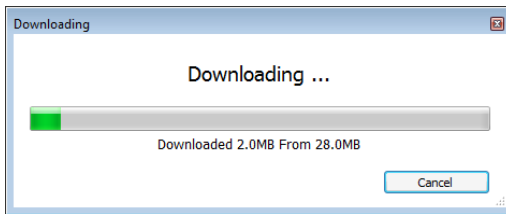
If you own the latest software version the following message is displayed:



If there are new software versions available the following message is displayed.



Press **OK** button to start updating your software version. Necessary files pack is downloaded from the server.

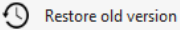


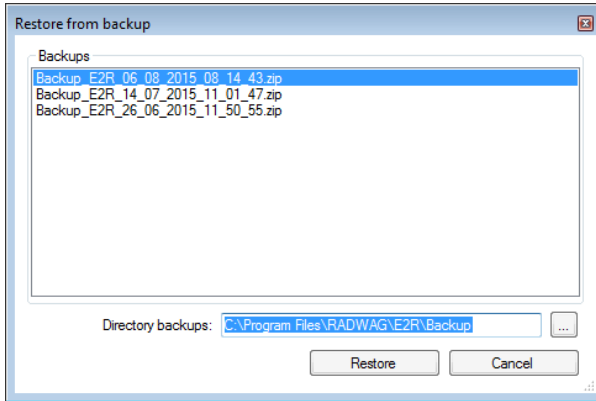
E2R, E2R Manager (scales viewer) and EP (parameters' editor) programs are archived prior to swapping old files with the newly downloaded ones. You can skip this step but remember that it would mean lack of possibility to restore previous software version.

#### **CAUTION!**

***Internet connection is necessary for update purposes. Backup copy is provided in case you shall need to restore old software version.***

## 4.6.2. Restoring Previous Software Version

To restore previous software version go to **Settings** module and press  button or use Start Menu of the operating system: **START/PROGRAMS/RADWAG/E2R/UPDATE E2R**.



### **CAUTION!**

*Files for previous software versions are stored at a default location: C:\Program Files\Radwag\E2R\Backup. At each update a new backup is created but only three latest copies are saved. Restore Old Version option restores the program only, data stays unchanged. For instruction on how to provide backup and restore backup copy read 4.1. section of this manual.*

## 4.7. Service Settings

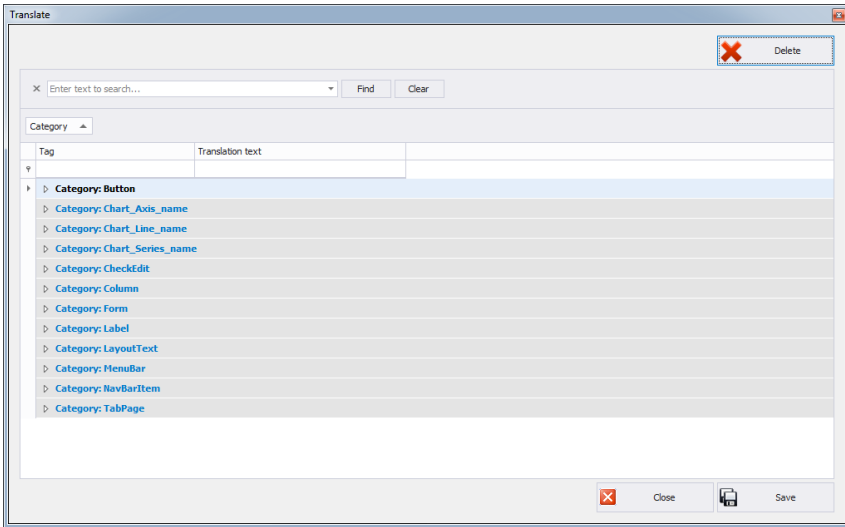
To run Service Settings go to **Settings** module and press  button.

### **CAUTION!**

*All service settings are intended for RADWAG employees exclusively.*

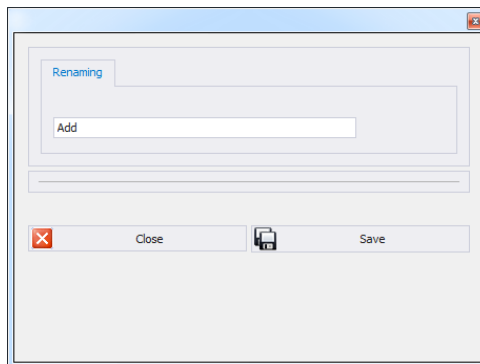
### 4.7.1. Translations

To run Translations, go to **Settings/Service Settings** module and press  button.



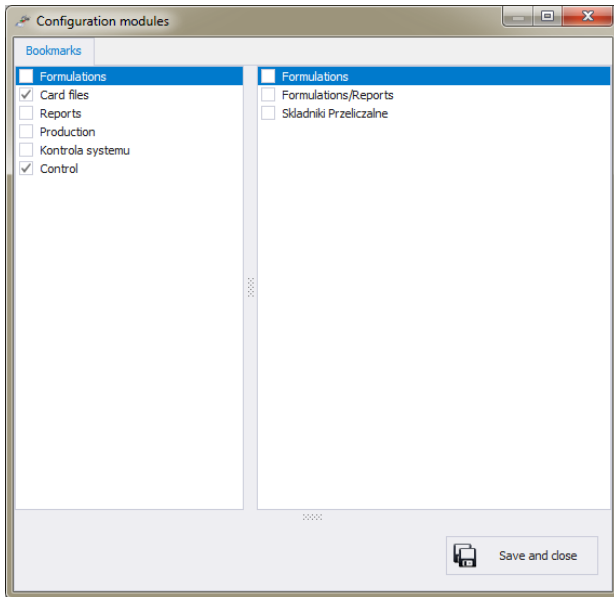
To rename particular word/caption/phrase use **Find** option of **Translate** window, first enter respective word/caption/phrase, next press Find button, finally rename the word writing new name version in Translation text column.

Another method for renaming word/caption/phrase requires pressing Ctrl+Alt buttons and clicking the name that is to be changed, both these operations performed simultaneously. **Renaming** window is displayed, enter the new name version.



#### 4.7.2. Mode Setup

To carry out setup of currently operated mode go to **Settings/Service settings** menu and press **Mode Setup** button.

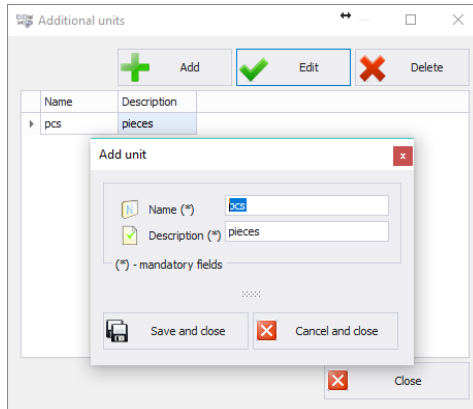


Mode setup consists in editing side toolbar pane, you can decide which modules and program functions are to be hidden, which visible. Mode setup window features two lists, one on the left - groups of functions, one on the right – functions. Functions list vary depending on selected group of functions.


### 4.7.3. Additional Units

Additional units are assigned to a product (description in section 5.1.1.) The value of the additional unit is the product of basic unit value (e.g. 1000g, 1kg) multiplied by the multiplier.

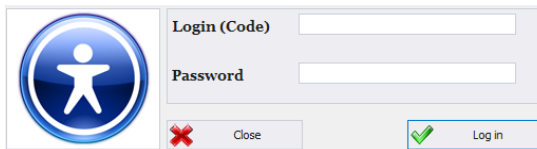
In order to add new additional unit, press **Add** button.




#### 4.8. Logout Procedure

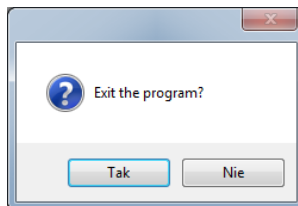
To log out press  **Logout** button, next press **Close** button to confirm.

If you do not want to stop operating the software, provide **Login (Code)** and **Password**, next press **Log in** button to confirm.



#### 4.9. Exit Operation

To exit the program press  **Exit** button, respective window requesting your confirmation is displayed.



Press **Yes** button to exit, press **No** button to display Home Screen of E2R SYSTEM software.



## 5. DATABASES

**E2R PGC** contains the following databases:

- PGC Products,
- Operators,

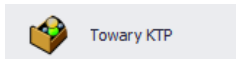
Card files may be edited on a computer, using scales for card files edition is impossible.

Upon adding new record or editing an existing one (e.g. product, warehouse, label, operator, universal variable) it will be updated in the weighing instrument after 1 minute maximum.

### 5.1. PGC Products

**PGC Products** database enables managing the database of products (packages) that are weighed using weighing instruments.

Select **PGC Products** option from the sidebar.

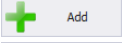


**Products window:**

The screenshot shows a software window titled 'PGC Products'. At the top, there is a toolbar with buttons for 'Report', 'Refresh', 'Clear filter', 'Add', 'Edit', and 'Delete'. Below the toolbar is a table with the following columns: Product code, Product name, Full name, EAN code, Quantity Qn, Unit, Tare, Min, Max, and Internal criteria. The table contains three rows of data.

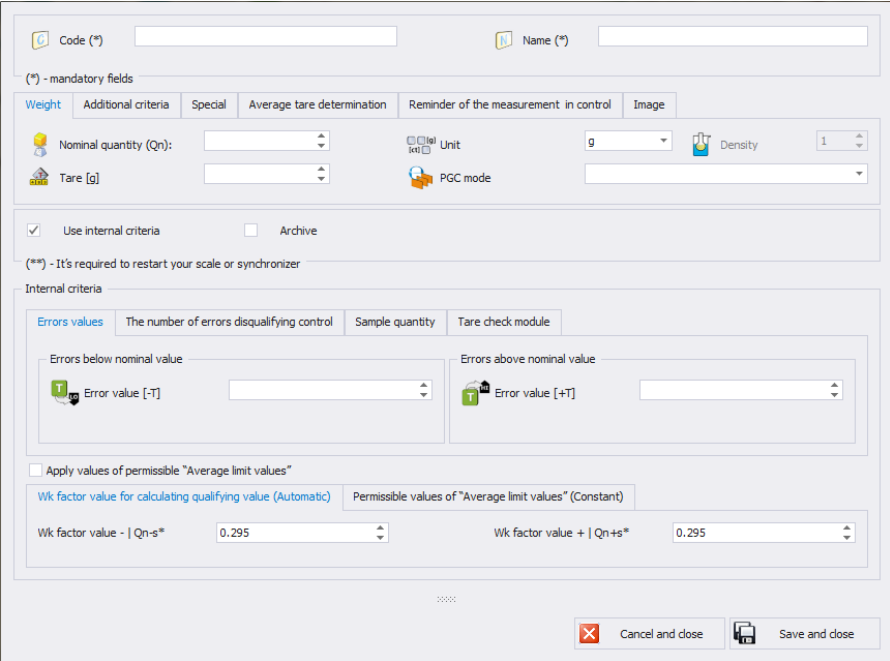
Product code	Product name	Full name	EAN code	Quantity Qn	Unit	Tare	Min	Max	Internal criteria
1	PGC Product 1			100	g	5			■
2	PGC Product 2			150	g	6			■
3	PGC Product 3			180	g	7			■

### 5.1.1. Adding/Editing Product

Press  button to add a new product to the database.

Press  button to edit a product in the database.

#### Product editor (window for adding and editing product records):



#### Where:

- Code \*** Product code.
- Name \*** Product name.
- Use internal criteria** Ticking the box launches advanced parameters of internal control.
- Archive** Marker set upon deletion of a product when weighing records for the product still exist in a database. When ticked, it prevents products from being sent to weighing instruments.

(\*) – mandatory fields.

**Weight tab:**

<b>Nominal quantity (Qn) *</b>	Product nominal mass or volume.
<b>Unit</b>	Unit of a product: [g] or [ml]
<b>Density</b>	Product density (field active if [ml] unit selected) It is recommended to use density value of the following range: 0.1g/cm <sup>3</sup> - 5g/cm <sup>3</sup> .
<b>Tare *</b>	Tare value (packaging mass) for products with constant tare in [g] (applies to: ' <b>Non-destructive Average Tare</b> ')
<b>PGC mode</b>	Drop-down menu containing PGC control modes. Options: 'Non-destructive Average Tare', 'Non-destructive Empty-Full', 'Destructive Full-Empty', 'Destructive Empty-Full'

(\*) – mandatory fields

**Additional criteria tab:**

<b>Batch default quantity</b>	Declaration of the quantity of controlled batch used to determine the quantity of control processes. Upon starting the control on the weighing instrument, the value can be modified by operators with permissions other than 'operator'. If the field is empty, <b>100</b> value is set on the weighing instrument by default. It is recommended to set value within the following range: <b>1 - 20 000</b> ,
<b>Portion</b>	The size of the batch portion (determined on the basis of series of weighings of products in packages first, and series of weighings of empty packages next). The field has to be filled for every control mode, except for: ' <b>Non-destructive Average Tare</b> ,

**Special tab:**

<b>Description (Full name)</b>	Product overview and full name
<b>Production line *</b>	Production line to which particular product is assigned.

<b>Internal code</b>	Internal code of a product
<b>EAN code</b>	Product EAN code
<b>PCGS</b>	Product number in the Polish Statistical Classification of Goods and Services
<b>Shelf-life in days</b>	Product shelf-life in days.

(\*) – product assigned to the production line is displayed on scales being part of the particular line exclusively.

#### **Average tare determination tab:**

<b>Cyclic determination of average tare</b>	Forcing the determination of average tare within determined intervals,
<b>Interval [h]</b>	Determination of the intervals for average tare checking,
<b>MAX tare</b>	Tare MAX threshold,
<b>MIN tare</b>	Tare MIN threshold.

#### **Reminder of the measurement in control tab:**

<b>Reminder [min]</b>	Displaying a reminder and setting output on the scale
-----------------------	---

#### **Image tab:**

<b>Basic image</b>	Small graphic displayed next to a product name in the weighing instrument database.
<b>Extra image</b>	Large graphic – can be displayed on the weighing instrument home screen (this applies to WLY, WPY and HY10 weighing instruments).

- **List of parameters defined for internal criteria**

#### **Errors values tab:**

<b>Error value [-T]</b>	Max permissible <b>-T</b> negative error given in <b>Qn</b> nominal quantity of a product. Measurements lower than <b>Qn-T</b> will be considered incorrect.
-------------------------	--

**Error value [+ T]** Max permissible **+T** positive errors given in **Qn** nominal quantity of a product. Measurements higher than **Qn+T** will be considered incorrect. If **0** is entered, the fields with positive errors will not be taken into account.

**The number of errors disqualifying control tab:**

**Quantity of samples [Qn-T] \*** Quantity of **-T** errors disqualifying tested sample  
**Quantity of samples [Qn-2T] \*** Quantity of **-2T** errors disqualifying tested sample  
**Quantity of samples [Qn+T] \*** Quantity of **+T** errors disqualifying tested sample  
**Quantity of samples [Qn+2T] \*** Quantity of **+2T** errors disqualifying tested sample

(\*) – 0 entry disables the option.

**Sample quantity tab:**

**Sample quantity** Sample quantity for a product, which determined the quantity of packages measurements independent from batch quantity.

**Tare check module tab:**

**Packaging quantity** Declaration of packages quantity that are to be subjected to process of average tare determination (for Non-destructive average tare type of control)

**Average limit values:**

**Apply values of permissible 'Average limit values'** Mode for determination of average limit value (constant or automatic).

**Wk factor value for calculating qualifying value (Automatic) tab:**

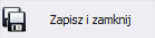
**Wk factor value - | Qn-s\*** Multiplier of standard deviation for value of average limit (minus) calculated automatically

**Wk factor value + | Qn+s\*** Multiplier of standard deviation for value of average limit (plus) calculated automatically

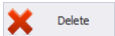
### Permissible values of 'Average limit values' (Constant)

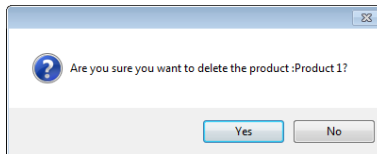
**Average limit value -** Average limit value (minus) for a tested sample (value of average limit as 'constant')

**Average limit value +** Average limit value (plus) for a tested sample (value of average limit as 'constant')

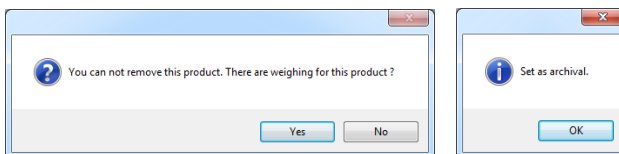
Upon entering/editing all respective product data, press  button to save the settings.

### 5.1.2. Deleting Product

To delete a particular product from a database press  button. The following message is displayed, press **Yes** button to confirm deletion of a selected product.




If a database stores weighing records of the selected product, then it cannot be erased, for such a case the record is attributed as an archive one.



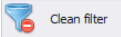
Products attributed as archive ones are not displayed on a balance.

### 5.1.3. Product Finding and Filtering

Each product registered by the system can be found by name, number etc., i.e. by an appropriate string of characters entered in a given column.

Code	Name	▲ Mass	Unit	Max	Min	Tare	Price	Archive
▼								


After typing the characters in the selected column, a list of products with the same string of characters is displayed.

To delete a filter for products display, press  button.

### **CAUTION!**

**Information displayed in Products window can be sorted and filtered with use of additional filtering options. For details read section Błąd! Nie można odnaleźć źródła odwołania. and Błąd! Nie można odnaleźć źródła odwołania. of this manual.**

## 5.1.4. Reports on Products

To generate report featuring list of products go to Products window and press  button. The report may be printed on a printer, sent via an e-mail or saved to file.



Quick launch bar is available in a preview window of a generated report.



Basic functions accessible directly via quick launch bar:



quick printout with the use of default printer,




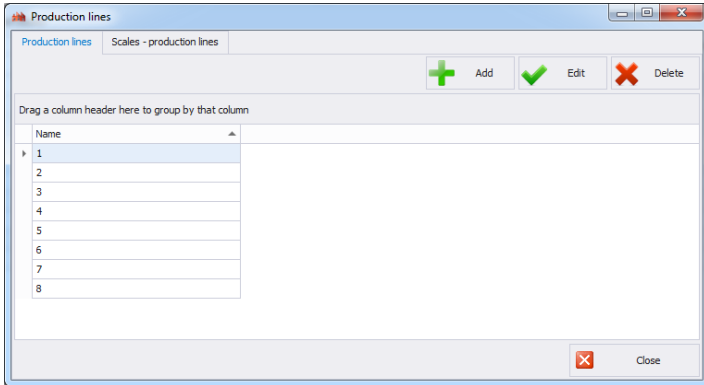
option for saving and reopening of a printout in a dedicated, for this kind of report, file format,



printout export to numerous file formats: PDF, HTML, MHT, RTF, Excel, CSV, Text, Image.

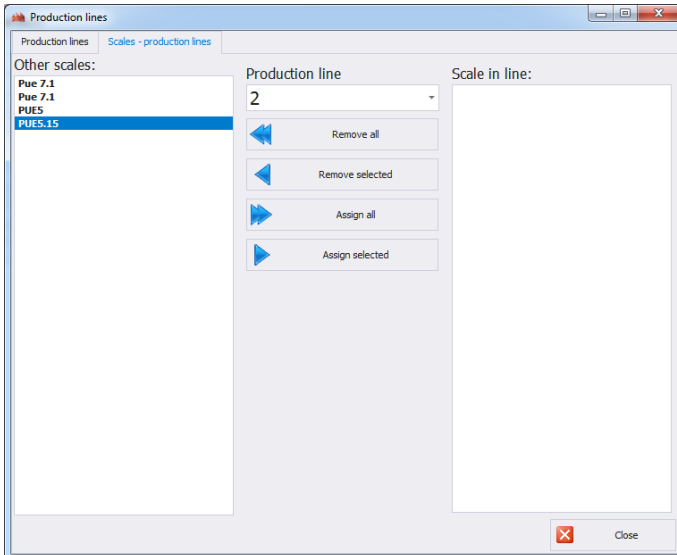
### 5.1.5. Production Line Editor

**PRODUCTION LINE EDITOR** has been designed to provide production line databases managing. Press  Edit production lines button, production lines window is displayed.







To add a new production line go to **Production Line** tab and press **Add** button, provide line name and press **Save and Close** button.

Now go to **Scales production lines** tab.

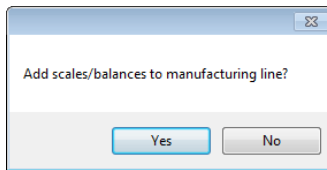




Using **Production line** combo box, select newly added production line name. To assign selected scales to the newly added production line use centrally located arrow buttons. With the arrow buttons move selected scales from the left pane to the right pane.

-  Press to delete all scales form the production line
-  Press to delete one selected scale form the production line
-  Press to assign all scales to the production line
-  Press to assign one selected scale to the production line

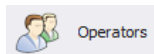
Press **Yes** button to make introduced changes valid.



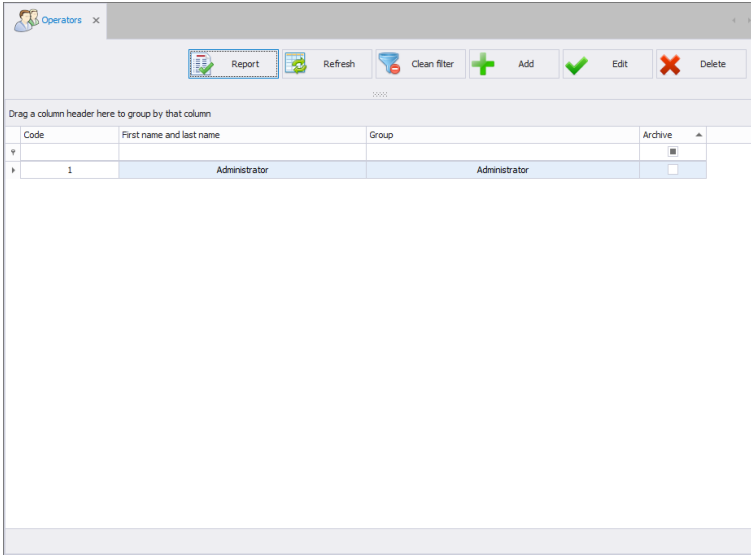
## 5.2. Operators

**Operators** database allows managing records of program users. All database-recorded operators can log in to the software and to the scales.

To run **Operators** module, press **Operators** button of the side toolbar.




**Operators window:**



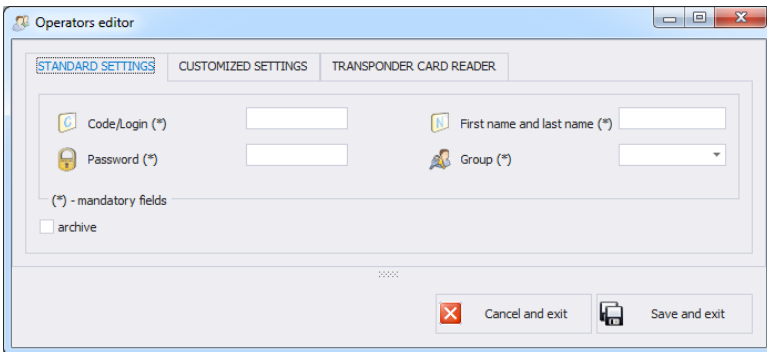
Operators window allows you to add, delete or modify operator's accounts along with permissions levels attributed.

### 5.2.1. Adding / Editing Operator

To add a new operator to the database, press  Add button.

To edit a particular operator, press  Edit button.

**Operator editor (window for adding and editing operators records):**



**Where:**

### Standard settings tab:

<b>Code / Login *</b>	Operator's code, login
<b>Password *</b>	Operator's password (for detailed information on password-related options read section <b>Błąd! Nie można odnaleźć źródła odwołania.</b> )
<b>First Name and Last Name *</b>	Operator's name and surname
<b>Group *</b>	Authorization group specifying permissions levels to particular program options. There are four basic groups: Administrator, Advanced, Standard and Basic. To setup permissions for particular group go to software settings.
<b>Archive</b>	This marker, when ticked, makes the particular operator inactive

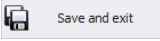
(\*) – mandatory fields

### Customized settings tab:

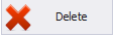
<b>Traceability</b>	Traceability process to which a particular operator is assigned
<b>Product</b>	Product to which a particular operator is assigned
<b>Shift</b>	Shift to which a particular operator is assigned
<b>Language 3Y, R</b>	Language for 3Y, R balance operation, set upon successfully carried out login operation.
<b>MAX deviation [%]</b>	MAX threshold deviation in percent. Enables increasing or decreasing the threshold for particular operator.
<b>MIN deviation [%]</b>	MIN threshold deviation in percent. Enables increasing or decreasing the threshold for particular operator.

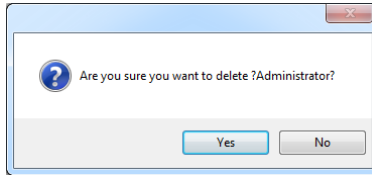
### Transponder Card Reader tab:

<b>Card reader settings</b>	Window with transponder card reader settings (refer to section <b>Błąd! Nie można odnaleźć źródła odwołania.</b> )
<b>Card code</b>	Card number assigned to an operator,

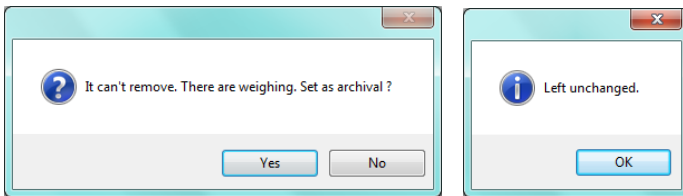
When all required operator data has been entered save the settings, to do it press  button.

### 5.2.2. Deleting Operator

To delete a particular operator from a database press  button. The following message is displayed, press **Yes** button to confirm deletion of a selected operator.



If a database stores weighings carried out by the selected operator, then the operator cannot be erased.



Prior to deleting a particular operator it is necessary to delete all weighings carried out by the operator first.

#### **CAUTION!**

***It is not possible to generate report on weighings that have been removed.***

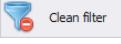
Alternative option is to use archive marker which when ticked prevents operator from being displayed by scales simultaneously allowing to generate reports on all performed weighings.

### 5.2.3. Operator Finding and Filtering

Each operator registered by the system can be found by name, number etc., i.e. by an appropriate string of characters entered in a given column.

Code	First name and last name	Group	Archive
▼			☐ ▲

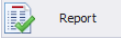
After typing the characters in the selected column, a list of operators with the same string of characters is displayed.

To delete a filter for operators display, press  button.

### **CAUTION!**

**Information displayed in Operators window can be sorted and filtered with use of additional filtering options. For details read section Błąd! Nie można odnaleźć źródła odwołania. and Błąd! Nie można odnaleźć źródła odwołania. of this manual.**

## **5.2.4. Reports on Operators**

To generate report featuring list of operators go to Operators window and press  button. The report may be printed on a printer, sent via an e-mail or saved to file.



Quick launch bar is available in a preview window of a generated report.



Basic functions accessible directly via quick launch bar:



quick printout with the use of default printer,



option for saving and reopening of a printout in a dedicated, for this kind of report, file format,



printout export to numerous file formats: PDF, HTML, MHT, RTF, Excel, CSV, Text, Image.

## 6. CONTROL

This part of the software contains reports of carried out PGC controls, tares controls and statistics.

### 6.1. Pre-Packaged Goods Control

**PGC** function enables generating:

- brief PGC report,
- detailed PGC report,,
- report with PGC graph,
- summary report from selected time interval,
- shift reports.

In order to run the module, select **PGC Controls** option from the sidebar.



To find respective control, set the date filter to the day when the PGC control was carried out.

A dialog box titled 'Time interval' with a light gray border. It contains two dropdown menus. The 'From:' dropdown is set to '17-09-2018 19:12:57' and the 'To:' dropdown is set to '25-09-2018 19:12:57'. Below the dropdowns is a 'Refresh' button with a circular arrow icon to its left.

**PGC control window:**

PGC control x

Time interval  
 From: 01-01-2017 19:15:52  
 To: 25-09-2018 19:15:52  
 Refresh

Reports on Control | Table reports | Summary/shift reports | Editor

Control report | Detailed report | Report with Graph  
 Report on TPS

Drag a column header here to group by that column

Document number	Start date	End date	Batch number	Quantity Qn	Unit	Tare	Operator code	Operator name	Product code	Product name	Wieg... OK	Scale name
U/27/09/17/09/51/04	9/27/2017 9:34:26 AM	9/27/2017 9:51:04 AM	2233	30	g	0.000	1	Hubert	101	PGC Product 1	<input checked="" type="checkbox"/>	WLY
U/27/09/17/08/41/40	9/26/2017 2:37:30 PM	9/27/2017 8:41:40 AM	2017.08.23	30	g	8.000	1	Hubert	101	PGC Product 1	<input type="checkbox"/>	HY10 2P
U/27/09/17/08/41/40	9/26/2017 2:37:30 PM	9/27/2017 8:41:40 AM	2017.08.23	30	g	8.000	1	Hubert	101	PGC Product 1	<input type="checkbox"/>	HY10 2P
U/26/09/17/14/36/59	9/26/2017 2:35:23 PM	9/26/2017 2:36:59 PM	2017.08.23	30	g	65.200	1	Hubert	101	PGC Product 1	<input type="checkbox"/>	HY10 2P
U/26/09/17/14/36/59	9/26/2017 2:35:23 PM	9/26/2017 2:36:59 PM	U/26/09/17...	30	g	65.200	1	Hubert	101	PGC Product 1	<input checked="" type="checkbox"/>	WPY
Z/26/09/17/14/35/02	9/26/2017 2:33:35 PM	9/26/2017 2:35:02 PM	2017.08.23	30	g	8.000	1	Hubert	101	PGC Product 1	<input type="checkbox"/>	HY10 2P
Z/26/09/17/14/33/00	9/26/2017 2:32:37 PM	9/26/2017 2:33:30 PM	2017.08.23	30	g	8.000	1	Hubert	101	PGC Product 1	<input type="checkbox"/>	HY10 2P
Z/26/09/17/14/32/22	9/26/2017 2:31:58 PM	9/26/2017 2:32:22 PM	2017.08.23	30	g	8.000	1	Hubert	101	PGC Product 1	<input type="checkbox"/>	HY10 2P
U/26/09/17/13/05/51	9/26/2017 1:04:54 PM	9/26/2017 1:05:51 PM	2017.08.23	30	g	0.000	1	Hubert	101	PGC Product 1	<input type="checkbox"/>	HY10 2P
U/23/08/17/12/05/11	8/23/2017 12:03:37 PM	8/23/2017 12:05:11 PM	2017.08.23	20	g	18.000	1	Hubert	103	PGC Product 3	<input type="checkbox"/>	HY10 2P
Z/23/08/17/11/47/19	8/23/2017 11:47:10 AM	8/23/2017 11:47:19 AM	2017.08.23	20	g	18.000	1	Hubert	103	PGC Product 3	<input type="checkbox"/>	HY10 2P
U/23/08/17/11/46/46	8/23/2017 11:46:01 AM	8/23/2017 11:46:46 AM	2017.08.23	20	g	18.000	1	Hubert	103	PGC Product 3	<input type="checkbox"/>	HY10 2P
U/23/08/17/11/45/40	8/23/2017 11:45:01 AM	8/23/2017 11:45:40 AM	2017.08.23	20	g	18.000	1	Hubert	103	PGC Product 3	<input type="checkbox"/>	HY10 2P
U/23/08/17/11/45/40	8/23/2017 11:45:01 AM	8/23/2017 11:45:40 AM	2017.08.23	20	n	18.000	1	Hubert	103	PGC Product 3	<input type="checkbox"/>	HY10 2P

Reports can be generated via the top panel:

Reports on Control | Table reports | Summary/shift reports | Editor

Control report | Detailed report | Report with Graph  
 Report on TPS

**Reports tab:**

<b>Control report</b>	General PGC control report
<b>Detailed report</b>	Detailed PGC control report with list of weighings
<b>Report with graph</b>	Report with graph of PGC control weighings
<b>Report on TPS</b>	Summary report of technological process stability.

**Table reports tab:**

<b>Free-form report</b>	Report containing table with PGC controls
<b>Export to XLS</b>	Report can be saved as Excel file

**Summary/shift reports:**

<b>Shift 1</b>	Presentation of weighings carried out during shift 1 (6 a.m. - 2 p.m.) for the day starting the time period,
<b>Shift 2</b>	Presentation of weighings carried out during shift 2 (2 p.m. - 10 p.m.) for the day starting the time period,
<b>Shift 3</b>	Presentation of weighings carried out during shift 3 (10 p.m. - 6 a.m.) for the day starting the time period,
<b>Brief summary report</b>	Summary report from selected time period containing brief information on the control.
<b>Detailed summary report</b>	Summary report from selected time period containing detailed information on the control.
<b>Shift reports notes</b>	Adding and editing notes of all PGC controls for selected shift.

#### **Edit tab:**

<b>Change batch number</b>	Editing batch number for a selected PGC control,
<b>Batch size change *</b>	Editing batch quantity for a selected PGC control,
<b>Add notes to the report</b>	Adding notes to a selected PGC control,
<b>Delete report</b>	Deleting report from selected PGC control.

(\*) – Batch quantity can be set within the following ranges: 0-99, 100-500, 501-3200 and 3201-∞.

#### **6.1.1. Brief Control Report**

To generate brief report that does not contain weighings, select PGC control from the list and press  **Control report** button.

#### ***An exemplary report of PGC control***





# CPG CONTROL REPORT

## NUMBER : U/27/09/17/09/51/04



Print date : 2018-09-24 19:25:41

Page: 1/1

RADWAG

Bracka 28

Start Date: 9/27/2017 9:34:26 AM  
Stop Date: 9/27/2017 9:51:04 AM

Scale: WLY  
Operator: Hubert

Product

### PGC Product 1

Declared quantity Qn: 30 g  
Average tare: 0.000 g

The limit values		Description of control	
Error value T1:	2.7 g	Batch number:	2233
Error value 2T1:	5.4 g	Batch size :	15 pcs
Quantity errors : Qn-2T1<=x<Qn-T1	0 pcs	No. of weighings :	15 pcs
Quantity errors : x<Qn-2T1	0 pcs	Total quantity :	465.00 g
<b>Value qualifying average :</b>	<b>30.000 g</b>	Max.:	31.00 g
		Min.:	31.00 g
<b>The actual results</b>		<b>Standard Deviation :</b>	<b>0.000</b>
Quantity defective:Qn-2T1<=x<Qn-T1	0 pcs	<b>Control mode: Nondestructive Average Tara</b>	
Quantity disqualifying:x<Qn-2T1	0 pcs		
<b>Average quantity actual :</b>	<b>31.000 g</b>		

Result of control: **POSITIVE**

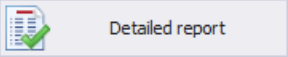
To control the scale was used: **RADWAG Balances and scales** Scale name: **WLY**  
Symbol of the scale: **PUE7** Parameters: **d=?; e=?** Serial number: **127766**

Signature of approval

Annotations

0

## 6.1.2. Detailed Control Report

To generate detailed report containing weighings, select PGC control from the list and press  button.

***An exemplary detailed report of PGC control***



# CPG DETAIL CONTROL REPORT

## NUMBER : U/27/09/17/09/51/04



Print date : 2018-09-24 19:30:39

Page: 1/1

RADWAG

Bracka 28

Start Date: 9/27/2017 9:34:26 AM  
Stop Date: 9/27/2017 9:51:04 AM

Scale: WLY  
Operator: Hubert

Product

### PGC Product 1

Declared quantity Qn: 30 g  
Average tare: 0.000 g

The limit values		Description of control	
Error value T1:	2.7 g	Batch number:	2233
Error value 2T1:	5.4 g	Batch size :	15 pcs
Quantity errors : Qn-2T1<=x<Qn-T1	0 pcs	No. of weighings :	15 pcs
Quantity errors : x<Qn-2T1	0 pcs	Total quantity :	465.00 g
<b>Value qualifying average :</b>	<b>30.000 g</b>	Max.:	31.00 g
<b>The actual results</b>		Min.:	31.00 g
Quantity defective:Qn-2T1<=x<Qn-T1	0 pcs	<b>Standard Deviation :</b>	<b>0.000</b>
Quantity disqualifying:x<Qn-2T1	0 pcs	<b>Control mode: Nondestructive Average Tara</b>	
<b>Average quantity actual :</b>	<b>31.000 g</b>		

Result of control: **POSITIVE**

#### Weighings

No.	Date / Time	Quantity	Result	No.	Date / Time	Quantity	Result	No.	Date / Time	Quantity	Result
1	9/27/2017 9:34:58 AM	31.0 g	OK	2	9/27/2017 9:35:00 AM	31.0 g	OK	3	9/27/2017 9:35:01 AM	31.0 g	OK
4	9/27/2017 9:35:02 AM	31.0 g	OK	5	9/27/2017 9:35:03 AM	31.0 g	OK	6	9/27/2017 9:50:55 AM	31.0 g	OK
7	9/27/2017 9:50:56 AM	31.0 g	OK	8	9/27/2017 9:50:57 AM	31.0 g	OK	9	9/27/2017 9:50:58 AM	31.0 g	OK
10	9/27/2017 9:50:59 AM	31.0 g	OK	11	9/27/2017 9:51:00 AM	31.0 g	OK	12	9/27/2017 9:51:01 AM	31.0 g	OK
13	9/27/2017 9:51:02 AM	31.0 g	OK	14	9/27/2017 9:51:03 AM	31.0 g	OK	15	9/27/2017 9:51:04 AM	31.0 g	OK

To control the scale was used: **RADWAG Balances and scales** Scale name: **WLY**  
Symbol of the scale: **PUE7** Parameters: **d=?; e=?** Serial number: **127766**

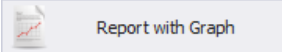
Signature of approval .....

Annotations

0

### 6.1.3. Control Graph

To generate report with graph, select PGC control from the list and press



button.

**An exemplary report of PGC control with graph**



# CPG DETAIL CONTROL GRAPH

NUMBER: U/27/09/17/09/51/04



Print date : 2018-09-24 19:33:00

Page : 1/1

RADWAG

Bracka 28

Start Date: 9/27/2017 9:34:26 AM  
Stop Date: 9/27/2017 9:51:04 AM

Scale: WLY  
Operator: Hubert

Product

## PGC Product 1

Declared quantity Qn: 30 g  
Average tare: 0.000 g

The limit values		Description of control	
Error value T1:	2.7 g	Batch number:	2233
Error value 2T1:	5.4 g	Batch size :	15 pcs
Quantity errors : $Qn-2T1 \leq x < Qn-T1$	0 pcs	No. of weighings :	15 pcs
Quantity errors : $x < Qn-2T1$	0 pcs	Total quantity :	465.00 g
<b>Value qualifying average :</b>	<b>30.000 g</b>	Max.:	31.00 g
<b>The actual results</b>		Min.:	31.00 g
Quantity defective: $Qn-2T1 \leq x < Qn-T1$	0 pcs	<b>Standard Deviation :</b>	<b>0.000</b>
Quantity disqualifying: $x < Qn-2T1$	0 pcs	<b>Control mode: Nondestructive Average Tara</b>	
<b>Average quantity actual :</b>	<b>31.000 g</b>		

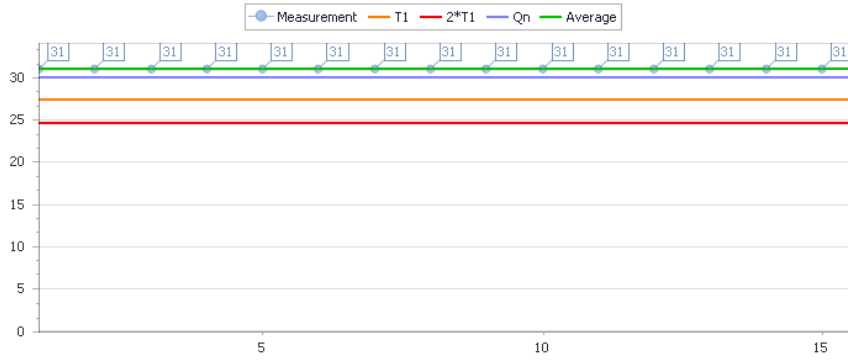
Result of control: **POSITIVE**

To control the scale was used : **RADWAG Balances and scales** Scale name : **WLY**

Symbol of the scale: **PUE7**

Parameters: **d=?; e=?**

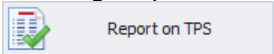
Serial number: **127766**





Annotations


Signature of approval

## 6.1.4. Report of Technological Process Stability

To generate report of technological process stability select PGC control from the list and press  button.

## 6.1.5. Free-Form Report

To generate a free-form report, set date filter, add function of grouping by a given column and hide unnecessary column, press  button to confirm. Press  button to export the report to an Excel document.

button to confirm. Press  button to export the report to an Excel document.

### An exemplary free-form PGC report

**Report**  
**1/1/2017 7:15:52 PM 9/25/2018 7:15:52 PM**

Document number	Start date	End date	Batch number	Quantity Qn	Unit	Tare	Operator code	Operator name	Product code	Product name	Weighting OK	Scale name	Control type	Control status	Comments	Mass Index
U/27/09/17/09/51/04	9/27/2017 9:34:26 AM	9/27/2017 9:51:04 AM	2233	30 g		0.00	1	Hubert	101	PGC Product	<input checked="" type="checkbox"/>	WLY	Nondestructive	POSITI		1.0333
U/27/09/17/08/41/40	9/26/2017 9:26:20 PM	9/27/2017 8:34:30 AM	2017.08.	30 g		8.00	1	Hubert	101	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	VE		24.6656
U/27/09/17/08/36/59	9/26/2017 2:37:30 PM	9/26/2017 8:41:40 AM	2017.08.	30 g		8.00	1	Hubert	101	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	VE		24.6656
U/26/09/17/14/36/59	9/26/2017 2:32:37 PM	9/26/2017 2:36:58 PM	2017.08.	30 g		65.00	1	Hubert	101	PGC Product	<input type="checkbox"/>	HY10 2P	Nondestructive	POSITI		21.8244
U/26/09/17/14/36/59	9/26/2017 2:35:23 PM	9/26/2017 2:36:58 PM	17/14/3	30 g		8.00	1	Hubert	101	PGC Product	<input checked="" type="checkbox"/>	WPY	Average Tara	VE		21.8244
U/26/09/17/14/33/30	9/26/2017 2:26:09 PM	9/26/2017 2:33:30 PM	2017.08.	30 g		8.00	1	Hubert	101	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	VE		0.0000
U/26/09/17/14/33/30	9/26/2017 2:32:37 PM	9/26/2017 2:33:30 PM	2017.08.	30 g		8.00	1	Hubert	101	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	NATED	TERMI	0.0000
U/26/09/17/14/33/30	9/26/2017 2:26:09 PM	9/26/2017 2:33:30 PM	2017.08.	30 g		8.00	1	Hubert	101	PGC Product	<input type="checkbox"/>	HY10 2P	Nondestructive	NATED	TERMI	0.0000
U/26/09/17/13/05/51	9/25/2017 11:04:54 PM	9/25/2017 11:05:51 PM	2017.08.	30 g		0.00	1	Hubert	101	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	POSITI		4.6000
U/23/08/17/12/95/13	8/23/2017 10:58:57 PM	8/23/2017 10:59:11 PM	2017.08.	20 g		18.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	VE		25.5578
U/23/08/17/11/47/19	8/23/2017 11:47:10 AM	8/23/2017 11:47:19 AM	2017.08.	20 g		0.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Nondestructive	TERMI		0.0250
U/23/08/17/11/45/40	8/23/2017 11:45:01 AM	8/23/2017 11:45:40 AM	2017.08.	20 g		18.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	NATED	NEGATI	0.0500
U/23/08/17/11/45/40	8/23/2017 11:45:01 AM	8/23/2017 11:45:40 AM	2017.08.	20 g		18.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	VE		27.2742
U/23/08/17/11/45/40	8/23/2017 11:45:01 AM	8/23/2017 11:45:40 AM	2017.08.	20 g		18.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	VE		27.2742
U/23/08/17/11/45/40	8/23/2017 11:43:36 AM	8/23/2017 11:44:15 AM	2017.08.	20 g		0.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	VE		0.0250
U/23/08/17/11/45/40	8/23/2017 11:43:36 AM	8/23/2017 11:44:15 AM	2017.08.	20 g		18.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Nondestructive	Przerwa	DB	0.0250
U/23/08/17/11/45/40	8/23/2017 11:43:36 AM	8/23/2017 11:44:15 AM	2017.08.	20 g		18.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Nondestructive	POSITI		2.2250
U/23/08/17/10/10/29	11:10:55 AM	11:11:47 AM	2017.08.	20 g		18.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	VE		1.1100
2017.08.23	9:02:23 AM	9:25:58 AM		10 g		0.00	2	Tomek	101	PGC Product	<input type="checkbox"/>	HY10 2P	Average Tara	NATED	POSITI	1.0388
5	11:43:40 AM	11:44:11 AM		20 g		18.00	1	Hubert	103	PGC Product	<input type="checkbox"/>	WPY	Nondestructive	VE		0.9000

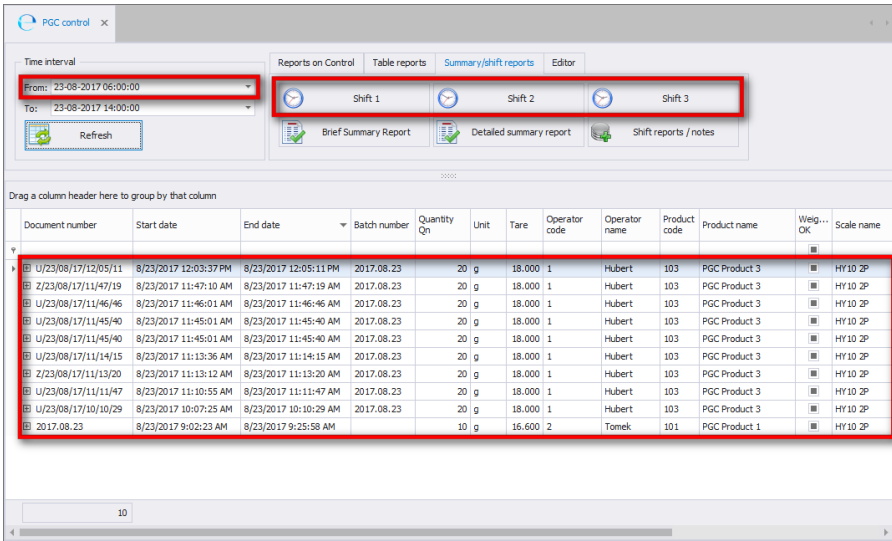
## 6.1.6. Shifts

There are three default shifts in the software:

- Shift 1 - 06:00:00 a.m. - 02:00:00 p.m.
- Shift 2 - 02:00:00 p.m. - 10:00:00 p.m.
- Shift 3 - 10:00:00 p.m. - 06:00:00 a.m.

You can display controls carried out for each shift.

Select date in the date filter **From.**, next select **Shift 1**, **Shift 2** or **Shift 3** button. Next, all controls fulfilling the criteria are displayed.




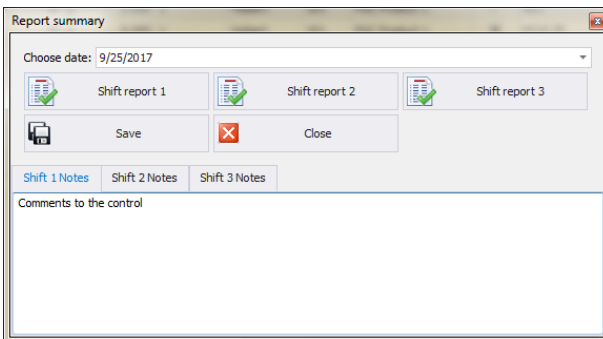
Automatically change date filter using buttons.

## 6.1.7. Shift Reports Notes


### 6.1.7.1. Adding Notes to Shifts

You can add notes to each group of PGC controls. The note is saved for all PGC controls carried out during single shift, and displayed in the shift report.

In the date filter **From:** select date and press  **Shift reports / notes** button.



In Shift reports window set date. Add notes to shifts in three tabs: '**Shift report 1**', '**Shift report 2**' and '**Shift report 3**'.

Press  Save button to add notes to shift reports.

### 6.1.7.2. Generating Shift Report

In the same window you can generate reports that can be printed or exported to a file.



Set date and press **Shift report 1, 2, 3.**

### 6.1.8. Brief Summary Report

For controls carried out in any time period you can generate brief summary report.

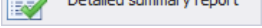
Set required date filter and press  Brief Summary Report button.

#### *An exemplary brief summary report of PGC control*



		<b>PGC BRIEF SUMMARY REPORT</b>			
		From: 3/15/2018 6:00:00 AM		To: 3/15/2018 2:00:00 PM	
Print date : 2018-09-25 20:10:00 <span style="float: right;">Page: 1/1</span>					
<b>Number: U/15/03/18/13/45/58</b> Product:					
<b>Result of control: POSITIVE</b> Operator: Administrator					
Start:	3/15/2018 1:45:38 PM	Stop:	3/15/2018 1:45:58 PM	Scale:	HY10
Declared quantity Qn:	100.00 g	Average quantity of actual:	113.660 g	Batch number:	10
comments :					
<b>Number: U/15/03/18/13/51/35</b> Product:					
<b>Result of control: NEGATIVE</b> Operator: Administrator					
Start:	3/15/2018 1:51:22 PM	Stop:	3/15/2018 1:51:35 PM	Scale:	HY10
Declared quantity Qn:	100.00 g	Average quantity of actual:	96.490 g	Batch number:	10
comments :					
Annotations					
-----					
-----					
Signature of approval -----					

### 6.1.9. Detailed Summary Report

For controls carried out in any time period you can generate detailed summary report.

Set required date filter and press  button.

**An exemplary detailed summary report of PGC control**

		<b>PGC DETAILED SUMMARY REPORT</b>			
From : 3/15/2018 6:00:00 AM		To : 3/15/2018 2:00:00 PM			
Print date : 2018-09-25 20:14:03				Page : 1/2	
<b>Number : U/15/03/18/13/45/58</b>		Product :			
<b>Result of control : POSITIVE</b>		Product code :			
		Operator : Administrator			
Start :	3/15/2018 1:45:38 PM	Stop :	3/15/2018 1:45:58 PM	Scale :	HY10
Declared quantity Qn :	100.00 g	Batch number :	10	Total quantity :	1,136.60 g
Average tare :	0.000 g	Batch size :	10 szt. Max :		113.80 g
		No. of weighings :	10 szt. Min :		113.50 g
Control mode : Nondestructive Average Tara		Qualifying / permissible batch value			
Standard deviation :	0.128	Error value T :	4.5 g		
Average quantity actual :	113.660 g	Error value 2T :	9.0 g		
<b>Quantity defective: Qn-2T&lt;=x&lt;Qn-T</b>	<b>0 szt.</b>	Quantity permissible errors T : Qn-2T<=x<Qn-T	0 szt.		
<b>Quantity disqualifying: x&lt;Qn-2T</b>	<b>0 szt.</b>	Quantity qualifying errors T :	0 szt.		
		Quantity permissible errors 2T : x<Qn-2T	0 szt.		
<b>Annotations :</b>		<b>Value qualifying average :</b>	<b>100.000 g</b>		
<b>Number : U/15/03/18/13/51/35</b>		Product :			
<b>Result of control : NEGATIVE</b>		Product code :			
		Operator : Administrator			
Start :	3/15/2018 1:51:22 PM	Stop :	3/15/2018 1:51:35 PM	Scale :	HY10
Declared quantity Qn :	100.00 g	Batch number :	10	Total quantity :	964.90 g
Average tare :	0.000 g	Batch size :	10 szt. Max :		99.40 g
		No. of weighings :	10 szt. Min :		94.70 g
Control mode : Nondestructive Average Tara		Qualifying / permissible batch value			
Standard deviation :	1.568	Error value T :	4.5 g		
Average quantity actual :	96.490 g	Error value 2T :	9.0 g		
<b>Quantity defective: Qn-2T&lt;=x&lt;Qn-T</b>	<b>4 szt.</b>	Quantity permissible errors T : Qn-2T<=x<Qn-T	0 szt.		
<b>Quantity disqualifying: x&lt;Qn-2T</b>	<b>0 szt.</b>	Quantity qualifying errors T :	0 szt.		
		Quantity permissible errors 2T : x<Qn-2T	0 szt.		
<b>Annotations :</b>		<b>Value qualifying average :</b>	<b>100.000 g</b>		
<b>SUMMARY REPORT ANNOTATIONS :</b>					
Signature of approval -----					



# PGC SUMMARY OF CONTROL

From: 3/15/2018 6:00:00 AM To: 3/15/2018 2:00:00 PM



Print date : 2018-09-25 20:14:03

Page : 2/2

<b>Average tare :</b>	<b>0.000 g</b>		
<b>No. of weighings :</b>	<b>20 szt.</b>	<b>Standard deviation :</b>	<b>0.8481</b>
<b>Total quantity :</b>	<b>2,101.500 g</b>	<b>Average quantity actual :</b>	<b>105.075 g</b>
<b>Max:</b>	<b>113.800 g</b>	<b>Quantity defective: <math>Q_n - 2T &lt;= x &lt; Q_n - T</math></b>	<b>4 szt.</b>
<b>Min:</b>	<b>94.700 g</b>	<b>Quantity disqualifying: <math>x &lt; Q_n - 2T</math></b>	<b>0 szt.</b>

## 6.1.10. Changing Batch Number in the Control

To change batch number in a report, select report from the list and press



Change batch number

button.

Insert new batch number and press



Save and close

button to confirm.

## 6.1.11. Changing Batch Quantity in the Control

To change batch quantity in a report, select report from the list and press



Batch size change

button.

Insert new batch quantity and press



Save and close

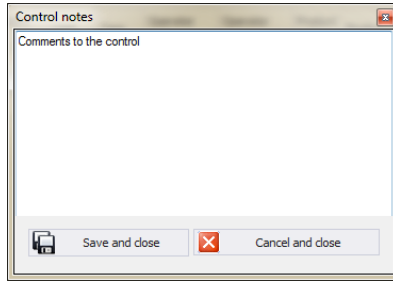
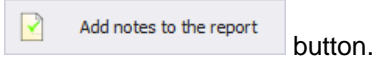
button to confirm.


Batch quantity can be modified within the following ranges: 0-99, 100-500, 501-3200 and 3201-∞.



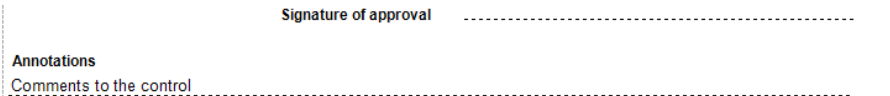
### 6.1.12. Notes in the Control

To add notes to a report, select respective report from the list and press



Press  button.

The notes are added to the comment section on general and summary report and on report with graph.

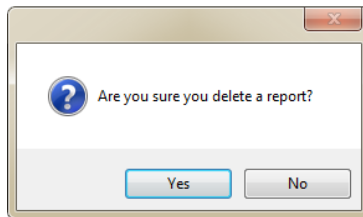


### 6.1.13. Deleting a Report

To delete a report, select control from the list and press



A message to confirm deleting operation is displayed.



## 6.2. PGC Average Tares

There are two methods of determining average tare:

- prior to PGC control, on the weighing instrument,
- using module for tare verification in E2R PGC.

Average tare determination using weighing instrument is described in weighing instrument's user manual. Determination of average tare using E2R PGC is described below.

In order to run the module, select **PGC Aver. tare** option from the sidebar.

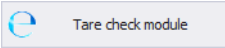


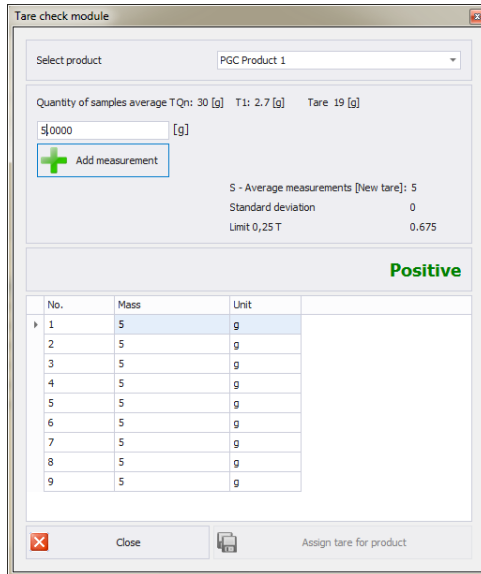
### PGC Average tares window:

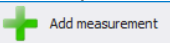
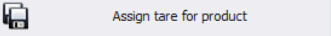
 A screenshot of the "PGC Average tare" window. At the top, there is a "Time interval" section with "From:" set to "Sunday, January 01, 2017 5:40:33 PM" and "To:" set to "Thursday, September 27, 2018 5:40:33 PM". A "Refresh" button is below. To the right are "Tare check module" and "Report" buttons. Below this is a table with columns: Date and time, Control number, Scale name, Product, Operator n..., Average tare..., Quantity of m..., Standard deviation, and Std. deviation limit. The table contains 8 rows of data.
 

Date and time	Control number	Scale name	Product	Operator n...	Average tare...	Quantity of m...	Standard deviation	Std. deviation limit
1/8/2018 8:30:21 PM	U/08/01/18/20/30/21/T		PGC Product 1	Hubert	19.000	10	28.461	
9/26/2017 2:35:50 PM	U/26/09/17/14/35/50/T	HY10 2P	PGC Product 1	Hubert	65.200	10	0.258	
8/23/2017 9:03:53 AM	U/23/08/17/09/03/53/T	HY10 2P	PGC Product 1	Tomek	16.600	10	0.211	
8/23/2017 9:03:20 AM	U/23/08/17/09/03/20/T	HY10 2P	PGC Product 1	Tomek	17.750	10	0.635	
8/23/2017 8:58:38 AM	Z/23/08/17/08/58/38/T	HY10 2P	PGC Product 1	Tomek	0.000	0	0.000	
8/21/2017 11:43:56 AM	U/21/08/17/11/43/56/T	WPY	PGC Product 3	Hubert	18.000	1	0.000	
8/17/2017 7:40:09 AM	U/17/08/17/07/40/00/T		PGC Product 3	Hubert	10.700	10	26.205	

### 6.2.1. Average Tare Determination

Press  button to open an edit box for determining average tare.



Select product from the list, enter required mass in grams and press  button to confirm. Upon adding 10 tare values, you can assign determined tare to a product by pressing  button.

### 6.2.2. Report of Average Tare Determination

Set time period using date filter. From the list, select control number preceding the control for which average tare was determined.

Press  button to generate the report.

***An exemplary report of PGC average tare determination.***



# CONTROL REPORT AVERAGE TARE

## NUMBER : U/26/09/17/14/35/50/T



Print date : 2018-09-26 17:57:11

Page : 1/1

RADWAG

Bracka 28

Date: 9/26/2017 2:35:50 PM

Operator: Hubert

Product

### PGC Product 1

Average tara 65.200 g

Number of weighings : 10 szt  
 Limit 0,25 T1 : 0.675 g  
 Standard Deviation : 0.2582

Result of control : **POSITIVE**

#### Tare weighing

No.	Mass	Unit
1	65.5	g
2	65.5	g
3	65.5	g
4	65.5	g
5	65	g
6	65	g
7	65	g
8	65	g
9	65	g
10	65	g

To control the weights was used : **RADWAG Balances and scales** Scale : HY10 2P

Scale symbol : HY 10

Parameters : d=?; e=?

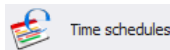
Serial number : 999999990

Signature of approval

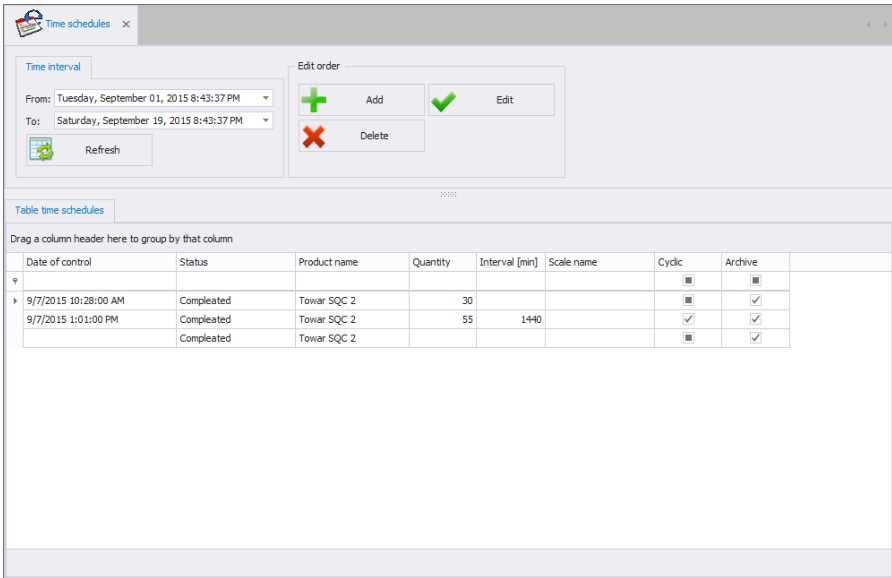
Remarks:

## 6.3. Time Schedules

To run **Time schedules** window, select **Time schedules** from the side bar.



***Time Schedules window:***

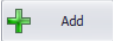


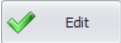
SQC Time Schedule is plan of control. The main reason for time waste when it comes to manufacturing process is lack of particular operations coordination.

With SQC Time Schedules it is possible to:

- Plan single or cyclic control;
- Display message reminding operator about scheduled control;
- Display message reminding operator to carry out weighing upon control start.

### 6.3.1. Adding / Editing Time Schedules

To add a new Time Schedule to the database, press  button.

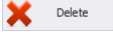
To edit a particular Time Schedule, press  button.

**Time Schedule editor (window for adding and editing Time Schedules records):**

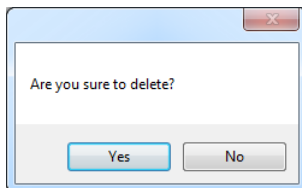
**Where:**

- Date** Date and time of control performance.
- Scale** Scale intended for control performance.
- Product** Product that is to be subjected to control.
- Quantity** Declaration of controlled batch quantity.  
Quantity value can be modified by any but basic operator prior control start.  
For blank field left, a default quantity value specified for a particular product is set.  
Recommended values range is **1 – 20 000**.
- Cyclic** Planned control can be either a single or cyclic event (carried out in specified time intervals).
- Day [0-6]** Day based time interval for cyclic control.
- Hour [0-23]** Hour based time interval for cyclic control.
- Minute [0-59]** Minute based time interval for cyclic control.
- Archive** This marker, when ticked, prevents time schedule from being sent to scales.

**6.3.2. Deleting Time Schedules**

To delete a particular Time Schedule from a database press  button.

The following message is displayed, press **Yes** button to confirm deletion of a selected extra variable.

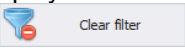


### 6.3.3. Time Schedules Finding and Filtering

Each Time Schedule registered by the system can be found by name, number etc., i.e. by an appropriate string of characters entered in a given column.

Date of control	Status	Product name	Quantity	Interval [min]	Scale name	Cyclic	Archive
▼						■	■

After typing data on particular Time Schedule in the selected column, a list of Time Schedules matching specified criteria is displayed.

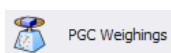
To delete a filter for Time Schedule display, press  button.

#### **CAUTION!**

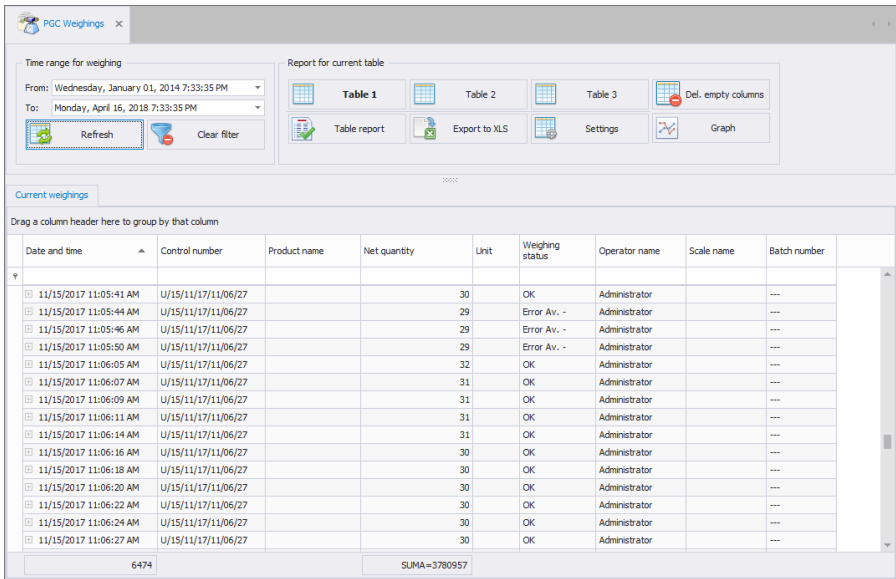
***Information displayed in Time Schedules window can be sorted and filtered with use of additional filtering options. For details read section 3.1.2 and Błąd! Nie można odnaleźć źródła odwołania. of this manual.***

### 6.4. Weighings

To run **weighings reports** window, press **PGC Weighings** button of the side toolbar.



***Weighings window:***



Weighings window provides display of all SQL database stored weighings. The weighings can be grouped to provide simple reports (table report).

### 6.4.1. Reports for a Current Table

Main window for basic reports provides possibility to display weighings in three configurable tables. To swap between the tables use the following buttons:

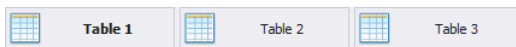


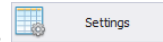


Table 1, Table 2, Table 3 display all weighings.

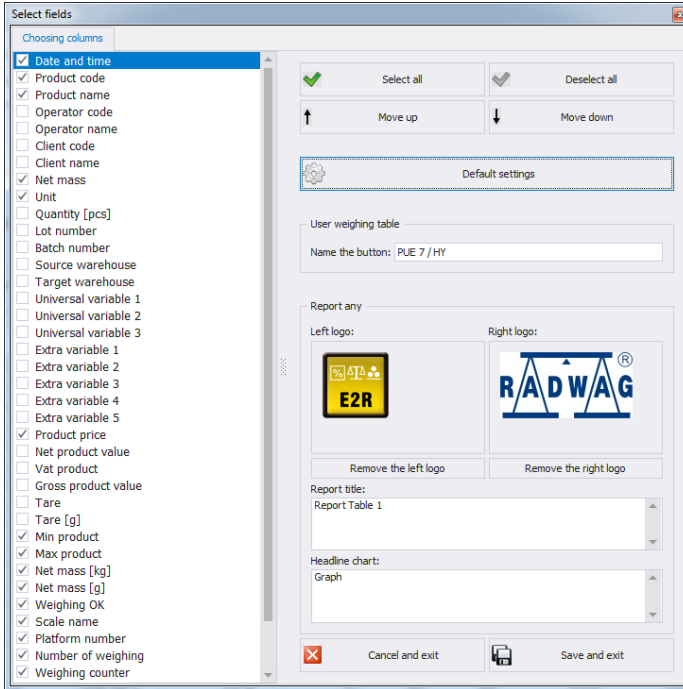
Each table of weighing records can be sorted, it is possible to sort the records by measurement date or by product name, etc. Sorting conditions are grouped depending on order of addition. Section enabling operator to set time interval for the report is to be found at the top. When all the conditions for grouping have been specified, press  Report button, the report is generated to PDF file. It can be either saved or printed by means of a local printer connected to computer with E2R software installed. To generate .xls file, operated by Excel, press  Eksport do XLS button.



To open settings for table of weighing records press



button:



**Where:**

**Select all**

Press to select all columns in a column chooser bookmark,

**Deselct all**

Press to deselect all columns in a column chooser bookmark,

**Move up**

Press to move given column one level up,

**Move down**

Press to move given column one level down,

**Default settings**

Press to provide default columns arrangement,

**Button name**

Button name change (table)

**Left logo**

Press to select png file with left logo image,

**Right logo**

Press to select png file with right logo image,

**Remove left logo**

Delete left logo, it is no longer displayed on a report,

**Remove right logo**

Delete right logo, it is no longer displayed on a report,


**Report header**

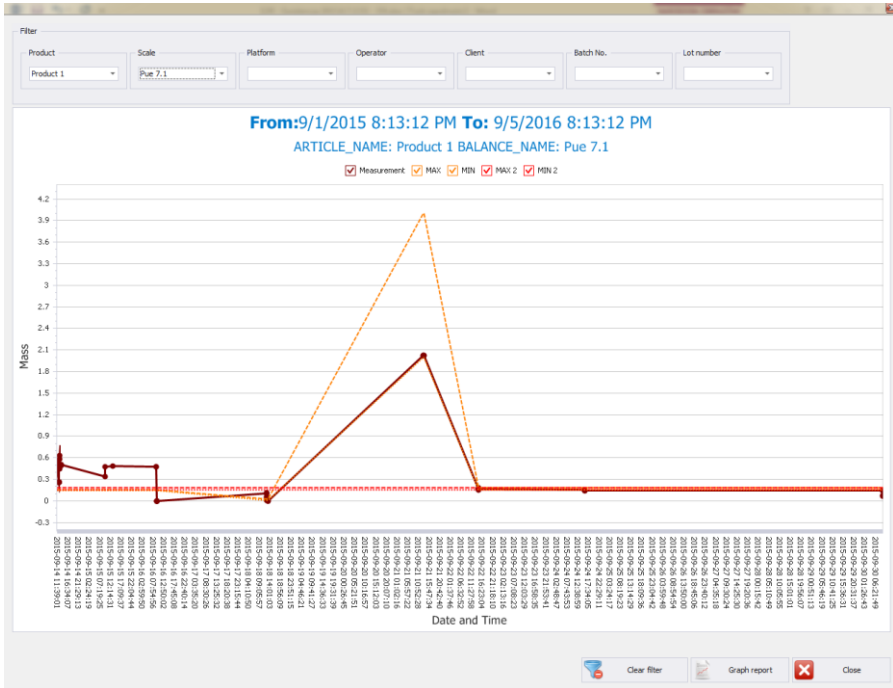
Use to add Report Header. Each table can be supplied with different header.

**Graph header**

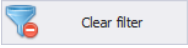
Use to add Graph Header.

### 6.4.2. Graph

To open a window with graph, press  **Graph** button.



The graph displays weighings carried out for specified time interval. The weighings can be filtered using respective combo boxes: product, scale, platform, operator, customer, batch, lot. To clear all the filters press

 **Clear filter** button.

To generate report based on graph press  **Graph report** button.

## 7. TOOLS

### 7.1. Scale Viewer

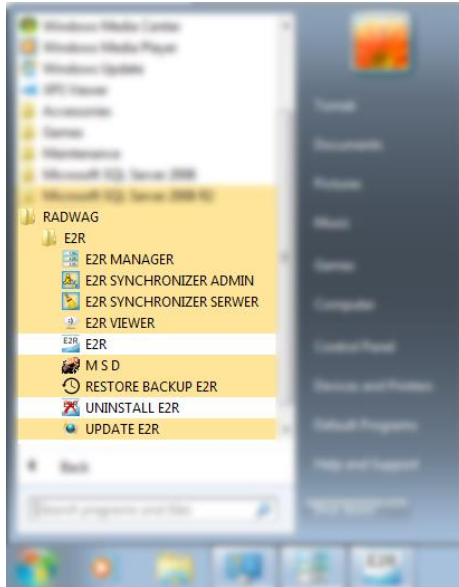
Scale preview is intended for displaying status of communication with weighing instruments and for previewing currently carried out weighing.

Additionally it provides information on:

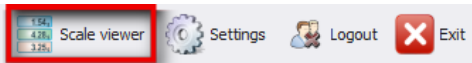
- logged in operator,
- controlled product,
- current control status (e.g. Load full 1/ ...),
- current control status (e.g. Accepted)
- tare or product control,
- current warning status (approaching permissible maximum),
- presentation of current control graph,
- current gross weight,
- Qn net nominal mass,
- product tare,
- batch number of the controlled product,
- density [g/ml],
- criteria (e.g. law-specified),
- control type (e.g. Non-destructive average tare),
- -T and +T error value,
- average negative and positive limit value,
- sample no. (1 or 2),
- measurement in a sample,
- measurement mean,
- standard deviation,
- total weight value
- minimum measurement,
- maximum measurement,
- -T qualifying quantity,
- -T disqualifying quantity,
- +T disqualifying quantity,
- -2T disqualifying quantity,
- +2T disqualifying quantity.

All messages serve informative purposes, this means that they cannot be saved or printed.

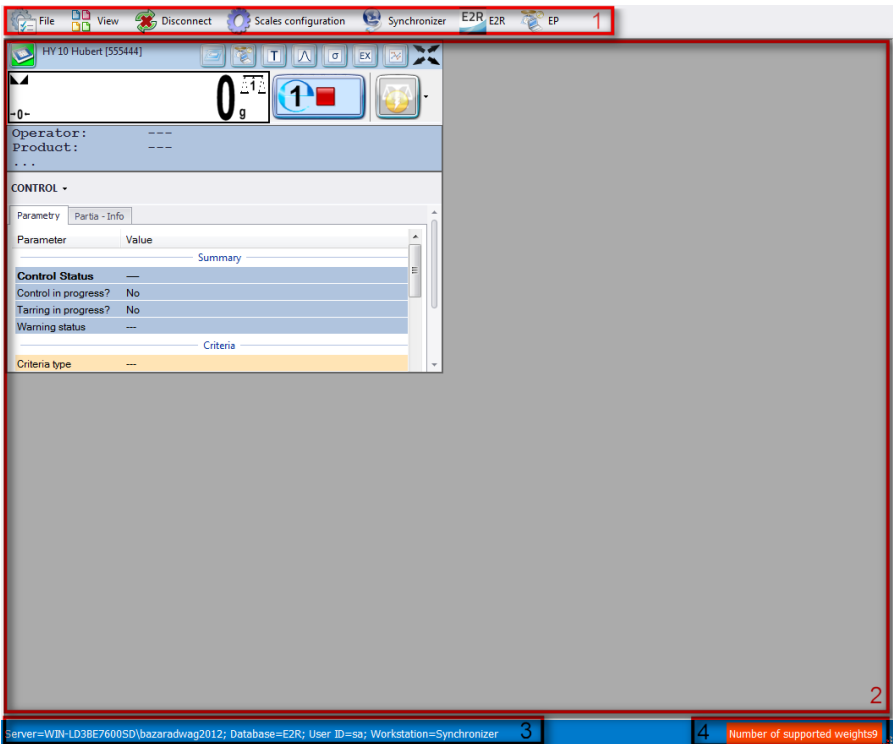
Upon **E2R SYSTEM** installation, a shortcut is created in the Start menu.



Another option for accessing **E2R Manager** is to press **Scale viewer** button.



**E2R Manager home screen:**



**Where:**

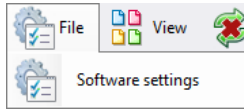
- 1 - Function buttons
- 2 - Operated weighing instruments
- 3 - Connection parameters
- 4 - Maximum quantity of operated weighing instruments

**Caution:**

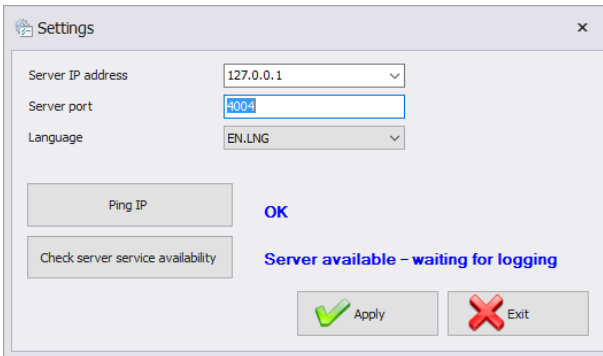
Scale panel is displayed only upon communication between **E2R Manager** and **Radwag Synchronizer** is established, provided that the scale is on.

### 7.1.1. Setting Connection with E2R SYNCHRONIZER

To run E2R SYNCHRONIZER software settings, press **File** button, next press **Software settings** button.



Software settings editor opens, set **IP** address and **communication port** for computer used to support connection with scales (server service).

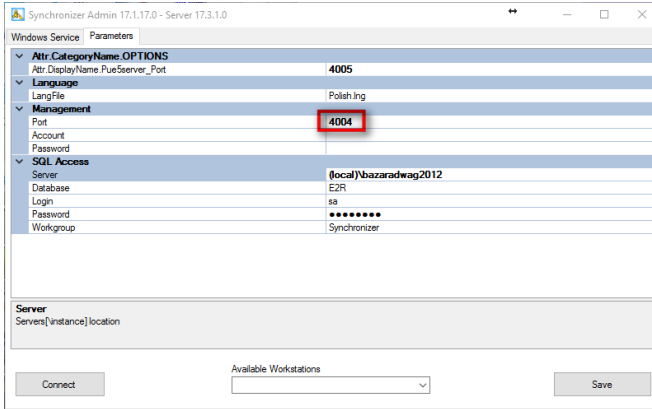


**Where:**

Server IP address	IP address of computer running the Synchronizer. Combo box provides list of available synchronizers.
Server port	TCP port of computer running the Synchronizer.
Language	Language of E2R Manager PC software.
Ping IP	Test of connection for selected IP address, by default: local IP address;
Check server service availability	Test of E2R Synchronizer availability

If **E2R SYNCHRONIZER** and **E2R MANAGER** are installed on the same computer then the default IP address remains unchanged - **127.0.0.1**.

Default server port, **4004**, shall be changed only if it has been previously changed in **E2R SYNCHRONIZER**. The ports have to match each other.



**Caution:**

*4001 and 4005 ports cannot be used as TCP Port. They serve different purposes.*

The software provides various languages. To change language use **Language** option.

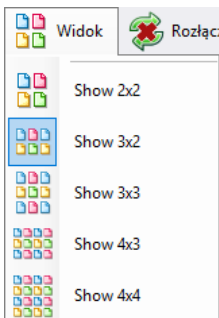
**Available languages:**

<b>PL</b>	Polish
<b>EN</b>	English

Press **Save** button to confirm modifications and exit the software. All modifications are implemented upon restarting the software.

**7.1.2. Scales Layout**

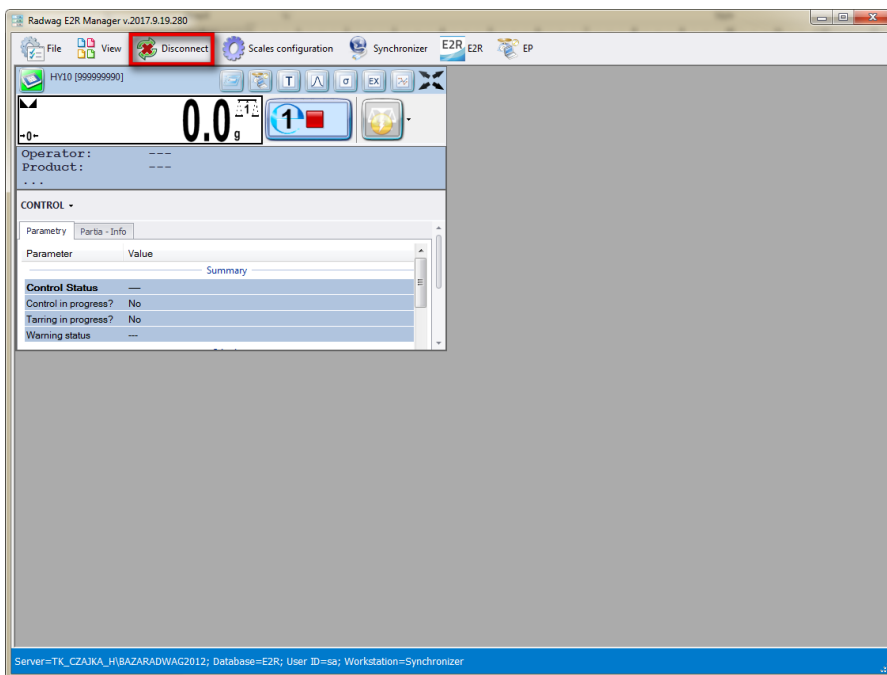
Scales layout can be freely customized. To view layout options press **View** button.



There are 5 standard layout options: 2x2, 3x2, 3x3, 4x3, 4x4.

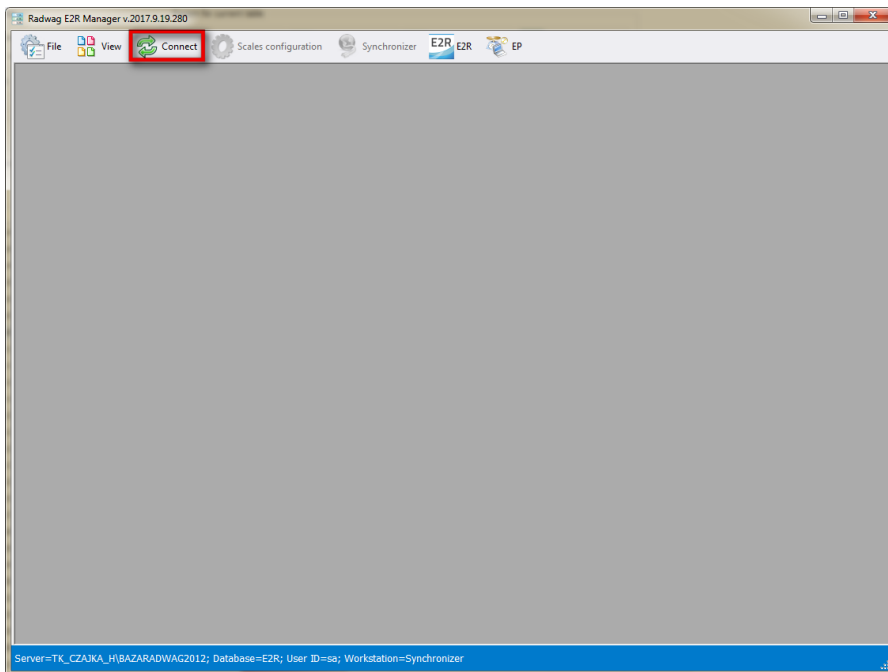
### 7.1.3. Connecting/Disconnecting E2R SYNCHRONIZER

In order to disconnect synchronizer without exiting the program press **Disconnect** button.



In order to run an on-line preview when the program is being operated, press **Connect** button.

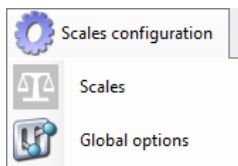




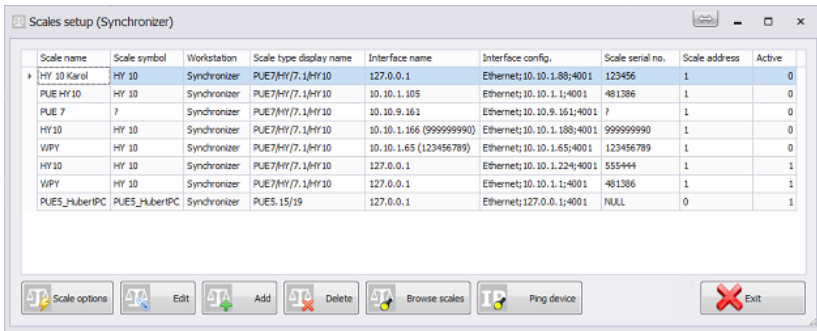
## 7.1.4. Scales Configuration

### 7.1.4.1. Scales

To configure a scale select **Scales** option in **Scales configuration** menu.

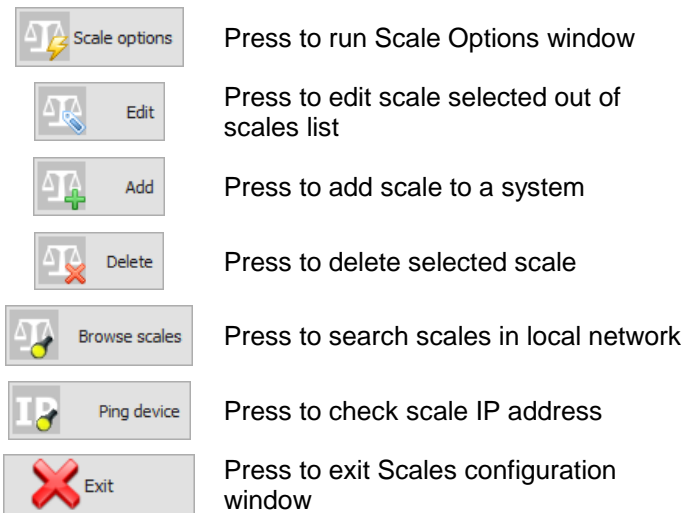


**Scales configuration (Synchronizer)** window opens, list of scales that can be integrated with the system is displayed.



Select the scale that is to be edited or deleted.






### Buttons' functions



#### 7.1.4.1.1 Adding a Scale

10

Weighing instruments can be added automatically or manually. Prior adding the weighing instrument to the system, make sure it is correctly configured. Required settings for HY10:


Settings/ Peripherals/ Computer/ Port	 RS 232 (1)	 RS 232 (2)	 Tcp
Settings/ Peripherals/ Computer/ E2R System	 System is active 		

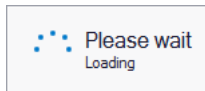
Correctly configured Communication settings.



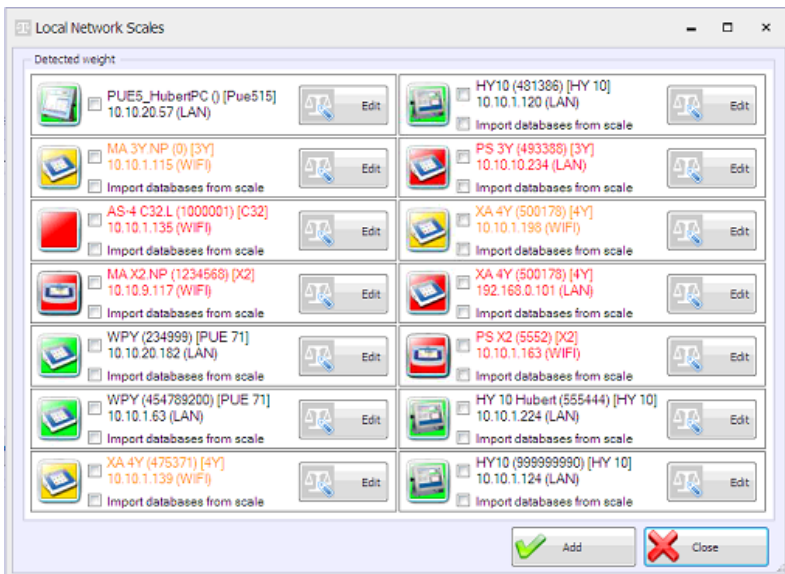
**Automatic method:**

Weighing instruments connected to the local Ethernet network can be searched and added automatically.





Press  **Browse scales** button, the following message is displayed:



Next Local Network Scales window featuring list of available scales is opened:



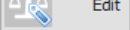
**Where:**

 <input checked="" type="checkbox"/> HY10 (999999990) [HY 10] 10.10.1.124 (LAN) <input type="checkbox"/> Import databases from scale	Scale already integrated with the system,
 <input type="checkbox"/> HY10 (481386) [HY 10] 10.10.1.120 (LAN) <input checked="" type="checkbox"/> Import databases from scale	Detected scale, the scale parameters read correctly
 <input type="checkbox"/> XA 4Y (500178) [4Y] 10.10.1.198 (WiFi) <input type="checkbox"/> Import databases from scale	Detected scale, prior adding the scale to the system some of the parameters need to be completed
 <input type="checkbox"/> PS 3Y (493386) [3Y] 10.10.10.234 (LAN) <input type="checkbox"/> Import databases from scale	Detected scale, the scale parameters read incorrectly

(\*) – Incorrectly configured weighing instrument does not connect with the database. Connection parameters have to be set manually:


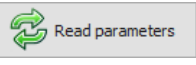
**Settings/Databases/Database configuration/SQL connection.**

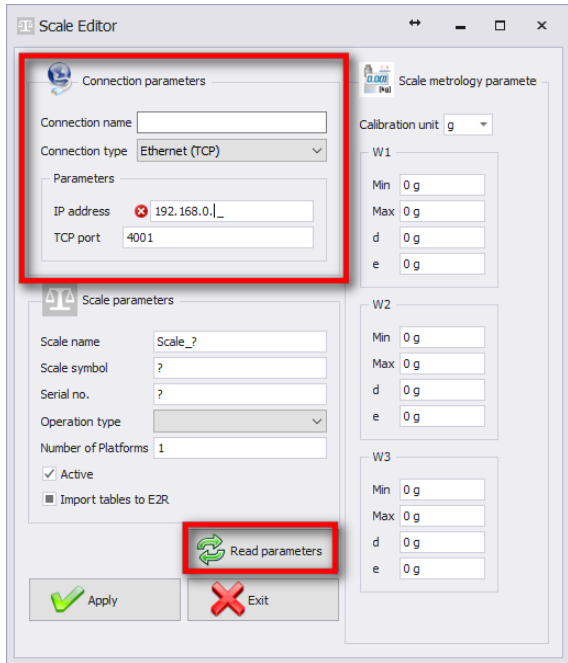
Select scales that are to be added and press **Add** button.

Prior adding the scale you can press  button to verify its configuration. For description of Scale Editor read manual method instruction.

**Manual method:**

WPW scales and Checkweighers have to be added manually.

Press  Add button. Scale Editor opens, modify the parameters and press  Read parameters button.



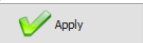

**Where:**

Connection name	Freely designed name of communication interface.
Connection type	Combo box enabling selection of interface for scale connection: Serial – scale connected via RS232, Ethernet – scale connected via Ethernet.
IP address	IP address set in Ethernet interface on a scale.


TCP port	TCP port set on a scale (by default: <b>4001</b> ).
Scale name	Scale name presented on reports.
Scale symbol	Scale symbol exposed on the scale housing. Required by PGC system.
Serial no.	Serial number of the scale.
Operation type	<p>Type of connection with a scale:</p> <ul style="list-style-type: none"> <li>• <i>PUEC41</i> – connection with WPW scale,</li> <li>• <i>Pue7/HY/7.1/HY10</i> – connection with industrial weighing instruments of WLY, WPY, HTY and HY10 series with standard program version,</li> <li>• <i>3Y/4Y</i>– connection with laboratory balances of 3Y and 4Y series,</li> <li>• <i>Pue7/HY/7.1/HY10 PGC/SQC</i> – connection with industrial scales of WLY, WPY, HTY and HY10 series operating in PGC mode,</li> <li>• <i>3Y/4Y PGC</i> – connection with laboratory balance of 3Y and 4Y series operating in PGC mode,</li> <li>• <i>DynPGC</i>– connection with dynamic scale,</li> <li>• <i>MAX</i> – connection with moisture analyzer of MAX, PMC series,</li> <li>• <i>Pue4 Land</i> – connection with scales based on PUE4L indicator,</li> <li>• <i>Pue7 (PCS)</i> – connection with scales based on PUE7 and HY terminal (version with Parts Counting program), <i>Disabled for Parts Counting mode of standard scale program,</i></li> <li>• <i>PUE-5</i> – connection with TMX scale with version 3 or earlier of the software,</li> <li>• <i>OCS/ISHIDA</i> – connection with OCS/ISHIDA scale and metal detector,</li> <li>• <i>R</i> – connection with laboratory balance of R series</li> <li>• <i>R Dryer</i>– connection with moisture analyzer of R series</li> <li>• <i>X2</i>– connection with laboratory balance of X2 series</li> <li>• <i>PUE5.15/19</i> – connection with TMX scale with version 3 or later of the software.</li> </ul>

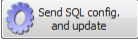
Number of platforms	Quantity of platforms supported by the scale
Active	Select the option if the weighing instrument is to be previewed.
Import tables to E2R*	Import of the weighing instrument database
Scale metrology parameters	Scale parameters section: Max, Min, d, e; Required by PGC system

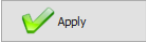

(\*) – it is possible to import database of the weighing instrument only when adding the instrument to the E2R.

Press  button to make introduced modifications valid, press  button to exit Scale Editor without saving changes.

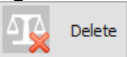
### 7.1.4.1.2 Editing Scales

Select scale which parameters are to be modified and press  button.

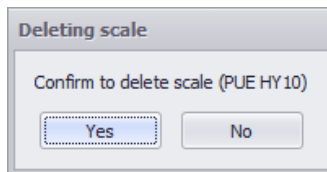
Press  to send connection settings with E2R database to the scale. Upon pressing the button, full data synchronization is carried out on the scale. This option is available for HY10, WLY, WPY weighing instruments exclusively.

Press  button to make introduced modifications valid, press  button to exit Scale Editor without saving changes.

#### 7.1.4.1.3 Deleting Scales

In configuration window select scale that is to be deleted from the list and press  button.

Press **Yes** button to confirm.

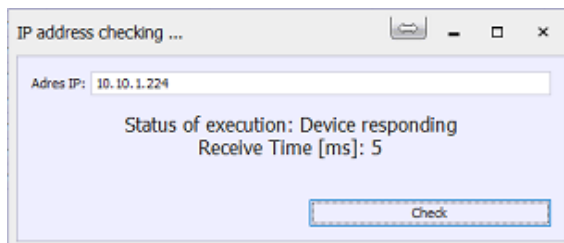


#### **Caution!**

*Be especially careful while deleting scales, along with the scale all scale-related information displayed on a report is deleted.*

#### 7.1.4.1.4 IP Address Check

In a configuration window press  button. The following window is displayed:

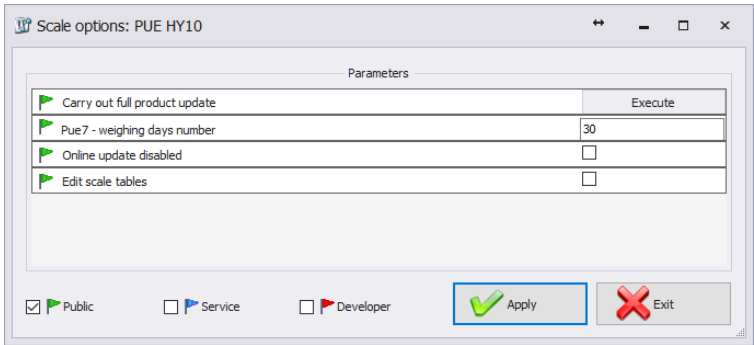




Enter scale IP address and press **Check** button. Information on status and time is displayed.

### 7.1.4.1.5 Scale Options

Scale Options window features three buttons for three different option groups: Public, Service, Developer.



Enabling/disabling options:



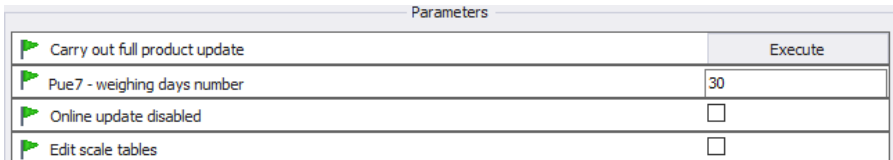
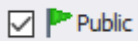
Option enabled,



Option disabled.

- **Public**

Public options are enabled by default. Public options modification does not influence system operation negatively.



**Carry out full product update\***

Complete update of products carried out for a particular scale

**Pue 7 - Weighing days number**

Specifying how long the weighings are to stay archive

**Online update disabled**

Disabling scale database synchronization

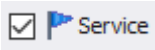
**Edit scale tables**

Enabling database editing on a balance

(\*) – update of products on scales is carried out regularly therefore there is no need to use this parameter

- **Service**

To enable Service options it is necessary to tick **Service** box. Option of selected information update, wherein system information is updated with scale information, has to be set in global options settings.



Parameters	
Kronopol Scale 1-order start, 2-order stop	0
Enable data update: scale-system	<input type="checkbox"/>
Enable tare update: scale-system	<input type="checkbox"/>
Enable thresholds update: scale-system	<input type="checkbox"/>
Enable nominal weight update: scale-system	<input type="checkbox"/>
Use scale-declared thresholds	<input type="checkbox"/>
Pue7 option - Nestle Bars	<input type="checkbox"/>
Pue7 option - EspersenMode	<input type="checkbox"/>
Record weighings to Fast Weighings Table – E2R WEIGHING RECORDS	<input type="checkbox"/>

**Kronopol Scale 1-order start, 2-order stop**

Customized settings for Kronopol scales.

**Enable data update: scale-system**

Enabling update of system information with scale information. Updated values: tare, thresholds, weight.

<b>Enable tare update: scale-system</b>	Enabling update of system information with scale information. Updated value: tare.
<b>Enable thresholds update: scale-system</b>	Enabling update of system information with scale information. Updated value: thresholds.
<b>Enable nominal weight update: scale-system</b>	Enabling update of system information with scale information. Updated value: nominal weight.
<b>Use scale-declared thresholds</b>	Enabling operation with thresholds set on a scale, instead of operation with thresholds set in the system.
<b>PUE 7 option – Nestle/bars</b>	Customized settings for Nestle scales.
<b>PUE 7 option – Espersen</b>	Customized settings for Espersen scales.
<b>Record weighings to Fast Weighings Table – E2R WEIGHING RECORDS</b>	Customized settings for WPW scales, for E2R Weighings software.






























**Caution!**

**Do not tick “Record Weighings to Fast Weighings Table” option for WEIGHING RECORDS, FORMULATIONS, PGC, MOISTURE ANALYZERS or CHECKWEIGHER modes.**

- **Developer**

To enable Developer (programming) options it is necessary to tick **Developer** box. These options serve informative purposes, they shall not be modified.



Parameters	
 Version No. of database of products	0
 Version No. of database of operators	0
 Version No. of database of clients	0
 Synchronize universal variables changes	0
 Synchronize vehicle changes	0
 Synchronize traceability changes	0
 Synchronize package changes	0
 Synchronize warehouse changes	0
 Full scale update	0
 Status Description	WAGA WYŁĄCZONA
 Set a batch	
 Set a lot	11111
 Set package ID	
 Set Client ID	
 Scale serial no.	481386
 Weight high threshold - MAX	200
 Weight low threshold - MIN	100
 Refresh data	1
 Scale-set order ID	0
 System-set order ID	0
 ID of last acquired weighment from PUE7/HY	44
 ID of last formulation report acquired from PUE7/HY	0
 Last vehicle measurement report ID	0
 Scale-set product ID	0
 System-set product ID	1
 Status	1
 Scale-set operator ID	0
 System-set operator ID	0
 Package ID	0

### Database Version No. ...

Version number of database taken from scale, the number serves as base for scale databases synchronization.

### Scale Serial No.

Serial number taken from scale.

### Weight high threshold - MAX

High threshold value taken from scale.

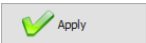
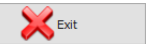
### Weight low threshold - MIN

Low threshold value taken from scale.

<b>Scale-set order ID</b>	ID of current order taken from scale.
<b>System-set order ID</b>	ID of current order set in the system.
<b>Scale-set product ID</b>	ID of current product taken from scale.
<b>System-set product ID</b>	ID of current product set in the system.
<b>Scale-set operator ID</b>	ID of current operator taken from scale.
<b>System-set operator ID</b>	ID of current operator set in the system.
<b>Last report, weighing... ID</b>	Number of PUE7/HY records or 3Y records saved to a system. Having noticed that weighings or reports are not acquired, although automatic algorithm for capturing scale data is in use, set 0 value for particular database.

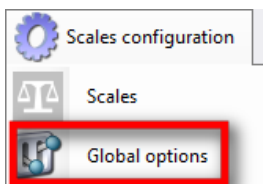
**Caution!**

***Setting 0 value for last report or weighing ID results with acquisition of the same set of weighings from scale to system again.***

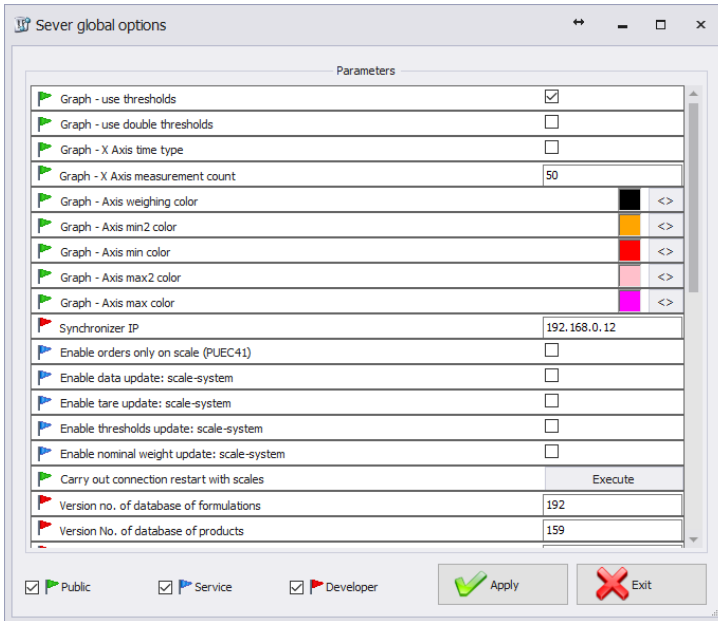
Press  button to confirm introduced modifications, press  button to exit Scale Options window without saving changes.

7.1.4.2. Global Options

System configuration is carried out upon selecting **Global options** in **Scales configuration** menu.



**Server global options** window is opened and list of available parameters is displayed.



Server Global Options window features three buttons for three different option groups: Public, Service, Developer.

Enabling/disabling options:



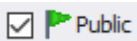
Option enabled,



Option disabled.

- **Public**

Public options are enabled by default. Public options modification does not influence system operation negatively.



Parameters	
Graph – thresholds display	<input checked="" type="checkbox"/>
Graph – extra thresholds display	<input type="checkbox"/>
Graph – X axis displayed as time	<input type="checkbox"/>
Graph – measurements quantity	<input type="text" value="50"/>
Graph – weighing series colour	<input type="color" value="black"/> <>
Graph – MIN 2 threshold colour	<input type="color" value="orange"/> <>
Graph – MIN threshold colour	<input type="color" value="red"/> <>
Graph – MAX 2 threshold colour	<input type="color" value="pink"/> <>
Graph – MAX threshold colour	<input type="color" value="magenta"/> <>
Perform complete product update	<input type="button" value="Execute"/>

**Graph – thresholds display**

Graph with MIN and MAX thresholds displayed

**Graph – extra thresholds display**

Graph with MIN2 and MAX2 thresholds displayed

**Graph – X axis displayed as time**

Scaling X axis by measurement time

**Graph – measurements quantity**

Determining quantity of simultaneously displayed measurements

**Graph – weighing series colour**

Specifying colour for series of weighings

**Graph – MIN 2 threshold colour**

Specifying colour for MIN 2 threshold

**Graph – MIN threshold colour**

Specifying colour for MIN threshold

**Graph – MAX 2 threshold colour**

Specifying colour for MAX 2 threshold

**Graph – MAX threshold colour**

Specifying colour for MAX threshold

**Perform complete product update\***

Forcing performance of complete update of products for a particular scale.

- **Service**

To enable Service options it is necessary to tick **Service** box.

Parameters	
Enable only orders on scale (PUEC41)	<input type="checkbox"/>
Enable data update: scale-system	<input type="checkbox"/>
Enable tare update: scale-system	<input type="checkbox"/>
Enable thresholds update: scale-system	<input type="checkbox"/>
Enable nominal weight update: scale-system	<input type="checkbox"/>
Restore tare after zeroing (WPW)	<input type="checkbox"/>
Transaction synchronization: PUE5-system	<input checked="" type="checkbox"/>
Orders synchronization: PUE5-system	<input checked="" type="checkbox"/>
Use product name with code instead of product name (PUEC41)	<input type="checkbox"/>
On scale, use product ID instead of Code (PUEC41)	<input type="checkbox"/>
On scale, use operator ID instead of Code (PUEC41)	<input type="checkbox"/>
Multeafil statistics restart (PUEC41)	Execute
Weighings counter for product (PUEC41)	<input type="checkbox"/>
PUE7 option - Use supplementary thresholds	<input type="checkbox"/>

**Enable only orders on scale (PUEC41)**

Manual selection of a product on a scale is blocked.

**Enable data update: scale-system**

Enabling update of system information with scale information. Updated values: tare, thresholds, weight.

**Enable tare update: scale-system**

Enabling update of system information with scale information. Updated value: tare.

**Enable thresholds update: scale-system**

Enabling update of system information with scale information. Updated value: thresholds.

**Enable nominal weight update: scale-system**

Enabling update of system information with scale information. Updated value: nominal weight.

**Restore tare after zeroing (WPW)**

Restoring product tare value that was valid prior zeroing.

**Transaction synchronization: PUE5-system**

Enabling synchronization of transaction, synchronization with PUE5.



**Orders synchronization: PUE5-system**

Enabling synchronization of orders, synchronization with PUE5.

**Use product name with code instead of product name (PUEC41)**

Modification of name field for PUEC41 indicator, change result: ID + PRODUCT NAME. Function active only when you select option: *Use product ID instead of product code, for scale.*

**Use product ID instead of code (PUEC41)**

Modification of product code field for PUEC41 indicator, change result: product ID.

**Use operator ID instead of code (PUEC41)**

Modification of operator code field for PUEC41 indicator, change result: operator ID.

**Multeafil statistics restart (PUEC41)**

Use of PGC intended software to zero statistics of WPW scale.

**Weighings counter for product (PUEC41)**

Synchronization of number of weighings for product from WPW scale.

**PUE7 option - Use supplementary thresholds**

Activation of MIN 2 and MAX 2 thresholds.

**Caution!**

*For WPW scale, code field is limited in databases, the limitation allows 6-character long codes maximum.*

- **Developer**

To enable Developer (programming) options it is necessary to tick **Developer** box. These options serve informative purposes, they shall not be modified.



Parameters	
Synchronizer IP	192.168.0.12
Version no. of database of formulations	192
Version No. of database of products	159
Version No. of database of operators	44
Version No. of database of clients	3
Synchronize additional variables changes	0
Synchronize package changes	2
Synchronize warehouse changes	555
Refresh data	1

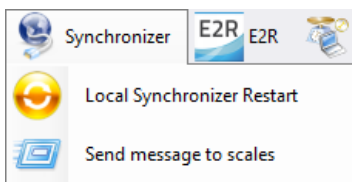
Synchronizer IP                      IP address of computer operating synchronizer.

Database version number ...                      System database version number, on the basis of this number all scale databases are synchronized.

**Caution!**  
***With completed settings modification restart the software.***

### 7.1.5. Synchronizer

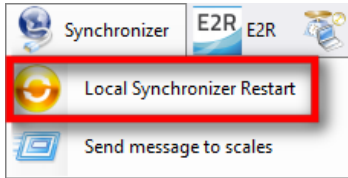
**Synchronizer** menu features option for connection restart used to update databases on scales, and option for sending messages to all scales networking in the system.



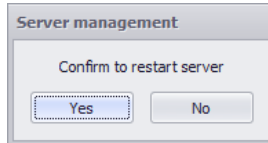
#### 7.1.5.1. Local Synchronizer Restart

Local synchronizer restart option is available for computer with running **E2R SYNCHRONIZER**. With this option it is possible to reboot server setup and to update scales databases.


Go to **Synchronizer** menu and press **Local Synchronizer Restart**.

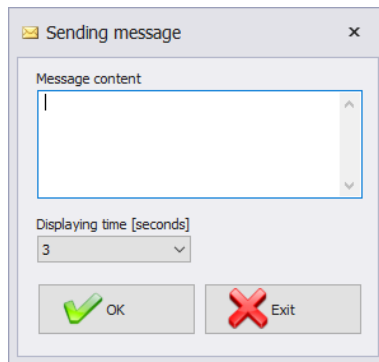


Press Yes button to restart.

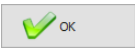



### 7.1.5.2. Sending Messages to Scales

It is possible to send message to scales cooperating in the system. To do that, go to **Synchronizer** menu and press  **Roześlij wiadomość na wagi** button.



Message display time range is 3-3600 seconds.

Press  button to send the message, press  button to exit Sending Message window.

### 7.1.6. E2R Manager: Scales Status

Status informing on establishing computer-scale communication:



Communication established.  
Correct scale setup.  
Correct scale setup for E2R Synchronizer.



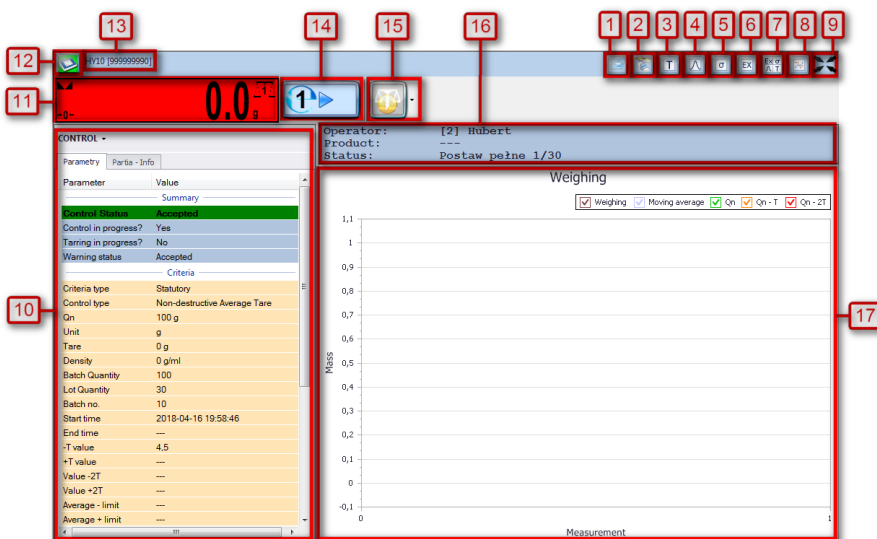
Communication established.  
Temporary lack of response.  
Incorrect scale setup or incorrect scale setup for E2R Synchronizer.



Communication not established.  
Scale switched off or no communication interface connection.  
Incorrect scale setup or incorrect scale setup for E2R Synchronizer.

### 7.1.1.7. Scale Panel

Scale panel overview:



- 1 - Launching a remote preview of the weighing instrument - RadViewer,
- 2 - EP software launch, the software automatically connects with the scale\*

- 3 - Taring graph,
- 4 - Gaussian distribution graph,
- 5 - Stability graph,
- 6 - Weighings graph,
- 7 - Displaying all graphs at the same time,
- 8 - Show/hide parameters,
- 9 - Full screen,
- 10 - Current scale parameters,
- 11 - Current scale-displayed weight value,
- 12 - Scale status/ function button,
- 13 - Name and serial number of the scale,
- 14 - PGC control pictogram,
- 15 - Sending message to selected scale,
- 16 - General information about the control process,
- 17 - Measurements presented in a form of graph,

(\*) – when connection between EP software and a scale gets established, the scale disconnects from E2R

**Caution:**

Scale panel is displayed only upon establishment of communication between **E2R Manager** and **Radwag Synchronizer** provided that the scale is on.

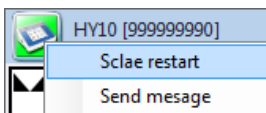
**For key service settings, read E2R SYSTEM service manual.**

#### 7.1.7.1. Connection Restart and Scale Update for E2R

It is possible to restart scale in course of system operation, to do it press



button. Next press **Scale restart** button.



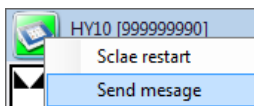
After few seconds the scale is connected to the system and all databases are updated.

#### 7.1.7.2. Sending Messages to Scales

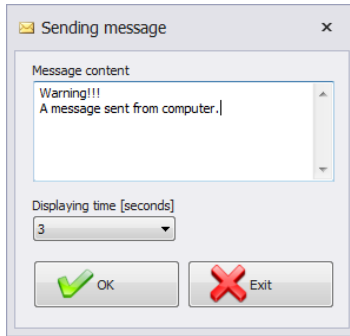
It is possible to send message to one particular scale.

To do it press  button.

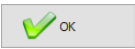
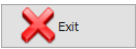
Next press **Send message** button:



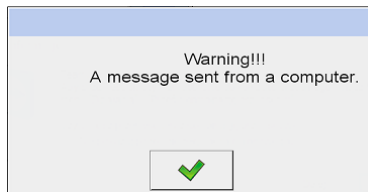
Enter respective text that is to be displayed on a given scale.



Message display time range is 3-3600 seconds.

Press  button to send the message, press  button to exit Sending Message window.

The following message is displayed on a selected scale:





**RADWAG BALANCES AND SCALES**  
ADVANCED WEIGHING TECHNOLOGIES

