



# Self-service scale with touch screen Right-One.Sensor

## **User manual**

Windows 2000/XP/2003/Vista/7

Saint Petersburg 2011



This guide is a description of hardware and software "Self-service scale with touch screen - Right-One. Sensor".

Assumes that the reader has the skills to work on a PC in one or more operating systems: Windows 2000/XP/2003/Vista/7.

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# 1 Overview

Hardware-software complex "Self-service scale with touch screen - Right-One.Sensor" (here in after "Complex") consists of a weighted platform providing a measurement of weight and label printing, and control computer with touch screen, pre-installed software on it (here in after "Software"). Software provides an interface that allows customers to print own labels for products whose weight is measured on the weighing platform. Database products (product name, price, picture, etc.), label format and configuration software are imported from the file lay out the server software to catalog exchange. Shared files are formatted as XML, which allows, if necessary, edit them manually.

In the Software built mechanism for self-update. To use this feature, you must on it in the settings of software, specify the directory with the update file and put in this directory kit files received from the manufacturer or integrator of the Complex.

All significant events are recorded in the log file (setup in the Software) to detect possible errors in the user and/or Software.

In the software built mechanism of file flags as a reaction to specific events. At present, the formation of two files flags:

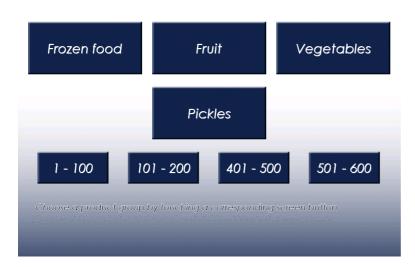
- First: is created when you click "call service" on the screen of choice of products;
- Second: creates when it detects the end labels.

File names, flags, and their location specified in the configuration Software.

After the launch control computer software starts automatically. If necessary, start the software manually, run the program «SelfServiceSoft», the label is located on the desktop Windows.

#### Main screen:

Friday, May 20, 2011 10:25



# 2 Configuring network interfaces of control computer (version with Ethernet interface)

This chapter is useful for configuring network interfaces of control computer if Ethernet interface is used for connection between weighted platform and computer. When RS-232 interface is used for connection, no creating of network bridge required.

In control computer two network Ethernet interfaces are used. First is to connect weighted platform, second is to connect Complex to LAN of a shop.

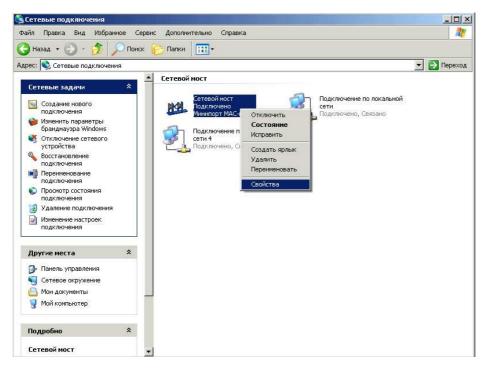
For your usability both network interfaces is combined into network bridge. Bridge has only one IP address and it lets you to connect to weighted platform from LAN if necessary.

To connect to LAN of a shop you need a usual network cable (patch-cord).

To connect to computer to weighted platform you need a crossover network cable (patch-cord), which is supplied with Complex.

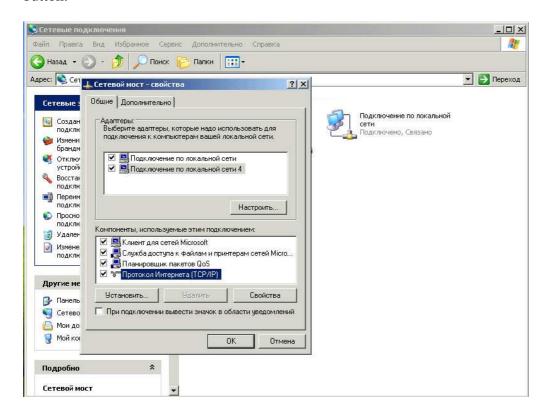
To change network address of the computer you need to do following (example is for Windows XP, in other operating systems you need to act by analogy with this example).

• Enter the "Start" menu->"Settings"->"Network connections"->choose the connection named "Network bridge" and go to it's properties.

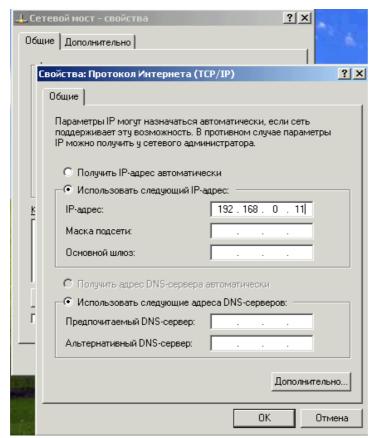




• In the properties of this connection you must choose "TCP/IP Internet Protocol" and click "Properties" button.



• You must set-up IP address and other network settings if necessary (in order Complex to work properly you can assign IP address and network mask only).





• Exit, by pressing "OK" buttons sequentially in each window.

**Warning:** by default (at delivery from the manufacturer) following IP addresses are assigned:

Control computer: 192.168.0.247

Weighted platform 192.168.0.248



### 3 Setting the IP-address of the weight platform

To change the IP-address of the weight of the platform software to the first: to know its current IP-address, the second: a control computer and the weighing platform must have addresses that are in the same subnet. If the IP-address of the weighing platform is unknown, it can be changed by connecting to the platform screen andentering the IP-address using the keypad of the weight platform.

Для изменения IP-адреса весовой платформы из ПО необходимо, первое: знать ее текущий IP-адрес, второе: управляющий компьютер и весовая платформа должны иметь адреса, находящиеся в одной подсети. Если IP-адрес весовой платформы неизвестен, его можно поменять, подключив к платформе дисплей и введя IP-адрес с клавиатуры весовой платформы.

#### To configure IP-address on the weight platform, you must perform these steps:

- shutdown weight platform;
- off weight platform from the control computer;
- connect the display. There are two options display: rectangular and square. If the connected display is not working, try plugging the display of another type.
- remove (if installed) handout from the keyboard weight platform;
- power on weight platform;
- enter to the programming mode (hold down "PROG").
   WARNING! If the scales do not respond to keystrokes, you must unlock the weights. To do this, press and hold "0" in the weight platform until the long beep;
- C keys "10 (<-)» and "11 (->)» select "Pr.21 IP-address of the weights;
- Press "25 (ENTER)";
- Enter the new IP-address (input is performed without separation of groups offigures points). Enter numbers by numeric keys on the right side of the keyboard;
- Press "25 (ENTER). After changing the IP address of the weighing platform emitsa long beep. To use the new IP-address must be switched off and on againweighing platform.



#### To change IP address of weighted platform from Software you need to do the following:

• Enter the settings of the Software (see the Confugure the Software chapter)



- In the field «Scale module IP-address» enter your current IP;
- In the field «Scale module IP-address change» enter your new IP;
- Press "Set" button. The weighted platform will make long beep. To apply new IP address you must off and on again the weighted platform.

**Warning:** by default (at delivery from the manufacturer) following IP addresses are assigned:

Control computer: 192.168.0.247

Weighted platform 192.168.0.248

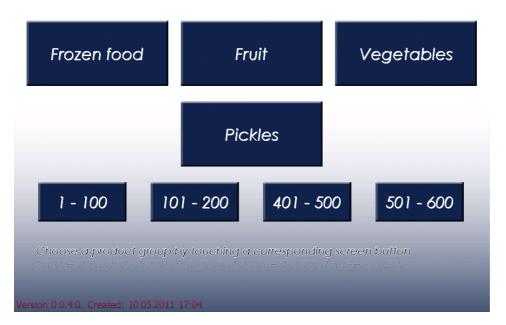


# 4 Configure the Software

To enter the settings of the Software on Control computer, you need to be at the Main menu of the software. Click at the top-right screen area and hold left mouse button within 3 seconds, then click on the word "product" at the bottom of the screen.

System mode

Friday, May 20, 2011 10:27



System menu must appear.

roduc	t aroun by touching a co	rroer
roduc ogno	<u>E</u> dit goods database	niest 1626
	Show scale keyboard	
eated:	Se <u>t</u> tings	
Ja CCa .	Quit to Windows	

To configure the scale, choose "Settings" item. Item "Show scale keyboard" serves for viewing scale screen information and for emulation scales buttons. "Quit to Windows" item shuts down the Software.

Information about settings of the Software is splitted up a few tabs for usability. To enter numbers, is a special virtual keyboard. If you need to enter letters, use the standard Windows virtual keyboard. All settings can be loaded in Software, using the import file, placed in folder which can be assigned in "Folders" tab.

Warning: if you manually set up the Software, after importing settings from file, all settings will be replaced with imported ones. Settings data is imported from InSettings.xml file or InSettings.zip (file will be unzipped before import), placed in path, which you can change in settings. Goods database data is imported

from InScale.xml or InScale.zip file (file will be unzipped before import), placed in path, which you can change in settings. File names are programmed in the Software and cannot be changed.

Данные базы данных товаров импортируются из файла InScale.xml или InScale.zip (перед импортом файл разархивируется), помещенного по заданному настройках пути. Имена файлов жестко запрограммированы в ПО и изменению не подлежат. Upper case and lowercase letters in file names are ignored.

#### **Settings Tabs:**

#### • Tab «Main»:

Basic settings of the Software can be changed here:

- \* Assign current IP address of weighted platform.
- \* Assign new IP address of weighted platform when you need to change it.
- \* Change names of file-flags created when you click "Ask for assistance" button and end of labeling tape.
- \* Set up limit of the amount of weight, with is reset after a preset. In allows to compensate for the slight change in weight unloaded weight bowl, emerging due to pollution from the bowl, stuck labels, etc. Limit of the amount of weight cannot be more than 15 grams.
- \* On/Off automatic Software update and logging.
- \* On/Off the use of choice of products for digital groups, as well as a range of numbers given for breaking the digital group.
- \* On/Off maintain a record of weight measurements (the number of printed labels). Report is placed in import file folder. File named according to weighted platform ID and has "csv" extension.

#### • "Folders" tab:

Here you can define the path to the folder sharing (for automatic update of the Software and database, file-flags and logs).

• "Times" tab.

All timers required for Software functioning are defined here.

#### • "Mail" tab:

Here you can see the settings, associated with e-mailing of the log-file and free disk space report. This transmission goes after finishing the import of database. Log-file transmitted in zipped form as a attachment to the letter (using 7-zip free achiever). Free disk space (where you installed the Software) transmitted in letter body.

In the settings you can assign address and port of mail server, from and to letter will be sent and, if necessary, authorization mode for mail server when letter is being send. "Test send" button used for test sending a message to the configured parameters. In "Test send" log file is not deleted, regardless of the settings.

#### • "Scale status" tab:

Here you can see the information from the weighted platform screen and

Здесь можно посмотреть информацию с дисплея весовой платформы и perform some actions with it:

- \* «C» Reset info about current error or current goods.
- \* «Paper feed» Perform the initial positioning of the label after refueling.
- \* «>0<» Current weight reset.
- \* «Full load scale» Load all database to the scale.

#### • "Log" tab:

Here you can see log-file of the Software (errors, important events, etc.). If logging is disabled, data window will be empty.

To save new settings - press "Save" button, for exit without saving – "Cancel" button.

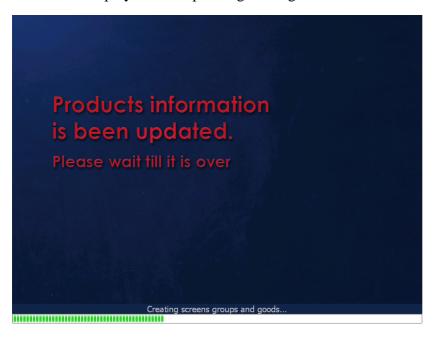
If there is no action within 5 minutes, Software goes to Main screen (Goods choice), all changes will be lost.



# 5 Using the Software

Each time when the Software starts, it loads data to weighted platform (when data is present if local Sofware base). Also is loads the settings of weighted platform (hard-coded in the Software) and label templates. Local base is in "AclasDB.xml" file.

The screen displays a corresponding message:



If local base is empty (or no file present), then you can see error message and Software waits when import file, containing goods data, appear.





Then, after the Software finds import file, containing goods data, it blocks the Complex and imports data. After that the Software transmits data to weighted platform.

#### Import is only possible when the Software is in Mail screen (Goods choice is shown).

Advertising info is being shown on the screen after a specified period of time. The Software must be in Main screen to do this.

Automatic update of the Software works (if it is enabled in the settings) if there is a package, containing newer version of the software then the current one, appears in the specified folder. Update also can be made from the Main screen if there were no operations made with the scale during timer, specified in the settings. The Software updates files and reloads the Software.



# 6 Importing data

Date can be imported from xml files. Location and timer for checking the availability of files is specified in the Software settings.

File names:

- InSettings.xml or InSettings.zip Contains the Software settings;
- InScale.xml or InScale.zip Contains goods data and label templates.

If a zip-file is imported, then before importing it will be unzipped into the temporary folder and deleted after importing automatically.

After the Software finds the file, it blocks Complex till the processing file will be finished (weighing goods and label printing cannot be made).

File, containing goods data must contain at least one goods group and one goods item, or error appears and Complex will be blocked till correct data will be received.

For goods bitmap (picture) it is recommended to use .bmp format.

Size of the bitmap is 159x96 pixels.

Before saving imported goods data into the local goods base (contained in the «AclasDB.xml» file), the Software backup old local base in «AclasDB.bak» file.

After successful processing files will be deleted, and file, containing processing data file report, will be created. Name of the answering file is: AnswerLoading.xml. If the answering file exists, information in it will be added without erasing the previous reports.

Examples of files are in Appendix №1

•



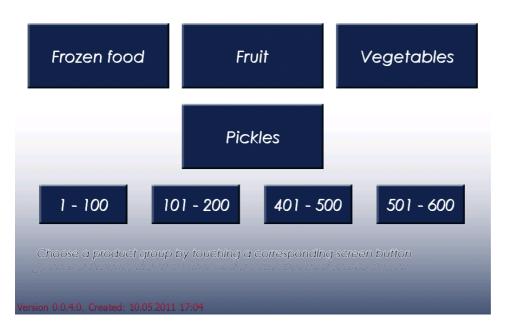
# 7 Changing goods base and prices in "offline" mode.

Ability to edit goods items database added to the Software from version 0.0.4.0.

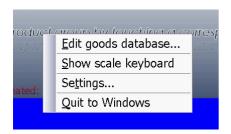
To enter the editor of the goods base on Control computer, you need to be at the Main menu of the software. Click at the top-right screen area and hold left mouse button within 3 seconds, then click on the word "product" at the bottom of the screen.

System mode

Friday, May 20, 2011 10:27



System menu must appear.



To enter editor, choose "Edit goods database..." item.



#### Database editor main screen:

Goods	Groups							
No	Name	Name for print	Price	Shop ID	Group	Action	Picture	
8	Oranges ??	Oranges Turkey ??	0.00	1353	Fruit			
10	Oranges	Oranges	0.00	27795	Fruit		-	
12	Bananas	Bananas1 Ecuador	0.00	1347	Fruit			
<del>4</del> 50	Cowberry frozen	Cowberry frozen	0.00	33355	Frozen			
454	Potato curd dumpling	Potato curd dumpling	0.00	27780	Frozen			
16	White Grapes	White Grapes	0.00	2314	Fruit			
17	Sultana grapes	Sultana grapes Turkey	0.00	24013	Fruit			
18	Red Grapes	Red Grapes Italy	0.00	2313	Fruit		ALC:	
22	Grapefruit	Grapefruit Turkey	0.00	1348	Fruit			
23	Grapefruit for juce	Grapefruit for juce	2.00	40319	Fruit			
95	Champignons	Champignons	0.00	7126	Vegetables	<u> </u>	40	~
	Add PLU D	d image		Save		Cancel		
~ [1	# \$ 96 ^     2 3 4 5 6	8. * ( ) _ 7 8 9 0 -	+     Ba	ack /				
÷ .>	q w e r t	y u i o p {	) ]	7 8	9			
Caps Lock	asdfg	h j k l ; ;	Bec	4 5	6			
Shift	z x c v b	n m < > ?	Shift	1 2	3			
Ctrl	Ak	Alt	Rus Ctrl	0				

Editor contains several basic areas:

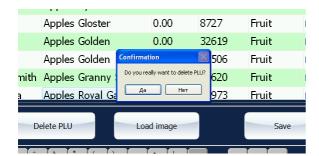
- Goods and groups list;
- Control buttons;
- Virtual keyboard.

To change price, name and other goods options: select goods in the list, select desired goods option and type a new value, using the virtual keyboard.

To change the image of the goods item, select desired goods item and click "Load image" button.

To add new goods item: Click "Add ALU" button and fill in the goods options.

To delete goods item: click "Delete PLU" button.





To change goods group, you must select "Groups" tab in the top of the screen.

Editing goods groups produced is similar to editing products. Unable to delete goods group, if it exists at least one item.

After all necessary changes were made, click "Save" button. All the information is saved in goods base and weighted platform reloads with a new data.

If all changes must be discarded – click "Cancel" button.



# 8 Basic algorithm of the Complex

- Place goods into the weight bowl. If commercial is being shown on the screen, it will be disabled and the Software goes to the Main screen Goods choice.
- Select desired goods group by pressing according button.
- Select desired goods item by pressing according button. If there is no goods item on the screen, go to
  next or previous screen using "Previous page" and "Next page" buttons. If desired goods item cannot
  be found, probably wrong goods group is selected. By pressing "Back to the main page" button, you
  can go back to the Goods choice screen and select another goods group.
  - If there were no operations made with the weighting and no buttons were pressed, during timer, specified in the settings scales goes to the Goods groups choice mode.
- To call the assistant you need to press "Ask for assistance" button. During this operation, file-flag will be created. File name and location can be specified in the settings. Server Software plays programmed message on the paging system store when file is found.
- After you select goods item the label will be printed.
- You must remove the preprinted label from the printer (right side of the weighted platform) and pasted on the goods. When the sticker labels, choose a prominent and desirable level place on the goods. If the label is strongly deformed, it cannot be read on the scanner on the cash control.



# 9 Possible Errors

There are 2 types of error messages:

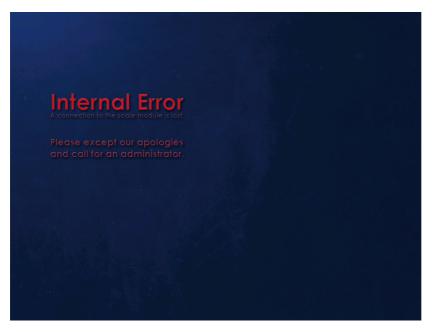
• 1 type: non critical errors during the selection of the goods. Errors are displayed in line with the name of the goods.



#### Possible errors:

- o «Put item on the scale» it occurs when you try to print a label without the goods on the weighted platform. Place goods on the weighted platform and press a button with the goods you selected.
- o **«Put new next item on the scale»** it occurs when you trying to print labels for the same goods, without changing the weight on the weighted platform.
- o **«No PLU»**, **«No PLU price»**, **«Error PLU tare»** It occurs when errors in goods database exists. You need to perform full load of the database in the Software.
- o **«Overload scale»** weight on the weighted platform is exceeded (maximum is 15 kg). You need to unload the weighted platform.
- 2 type: errors that require user intervention. The derivation of these errors is carried out on individual screens.





#### Possible errors:

- «Please remove a label from the printer prior to the further operations» Occurs when you
  try to print new label without removing the previous one. Remove the printed label and press
  necessary goods item button.
- o **«Out of labels»** Printer of the weighted platform is out of labels. Load new roll of labels and select necessary goods again.
- o «Internal error. A connection to the scale module is lost» A connection error between control computer and the weighted platform. This error occurs if there is no connection when you try to print label. Check network cable, which connects weighted platform and control computer, check the power supply of the weighted platform, check if IP addresses of weighted platform and control computer are assigned correctly (must necessarily be in the same subnet)
  In cases, when connection is lost during Software is in the Main screen (Goods choice), following message is shown on the screen:

Friday, May 20, 2011 10:40

#### Connection to the scale module lost



When connection is restored – message will be removed from the screen automatically.

o «Scale is out of order» - Goods database error or importing goods data error. This error occurs if no local good base «AclasDB.xml» file found, or file contains bad data/ else bad data could be imported from import files. To go on you must place into specified folder the import file, which contains correct data or replace file of local base (after replacement of local base you need to reload the Software).

To clarify the causes of the error you must to view the importing report, located in «AnswerLoading.xml» file. Also, all errors are logged into the main log-file of the Software «AclasService.log». You can specify location of the file in the settings of the Software.







# 10 Maintenance Complex.

Complex requires periodic maintenance. It includes the following procedures:

- Cleaning the print mechanism. Mechanism is cleared of dust and dirt with a brush and vacuum cleaner. The print head is cleaned by special cleaning tool in the nursery under the metal tray on the weighed platform. It is advisable to clean the print head after every labeling tape roll change. In cases of late cleaning the print head it is possible premature failure. The printer is cleaned as required (determined visually)
- Clean the screen of the control computer. Cleaning is performed by special cleaning wipes for LCD SCREEN (sold separately). Frequency of cleaning the screen is determined visually. In cases of delayed treatment touch screen you may not see reaction on pressing the buttons on the screen.

**Warning:** Avoid pasting labels on touch screen, because with the possible mechanical damage to the touch screen, so that touch screen stops responding to clicks or a reaction to pressing of the buttons is getting worse.

- Clean the case and the weighted platform. Clean it with a soft damp cloth.
- If logging is enabled, you need to check the free disk space of the control computer periodically. When free space is not enough, delete the log-file and temporary files in Windows temporary folders.



# 11 Appendix №1

#### Answering file example:

```
<DateTime>21.04.2010 15:58:58</DateTime>
<Result>True</Result>
<SentNo>1</SentNo>
<IdScale></IdScale>
<Log>
```

- Processing date/time
- Processing result
- Transmission number, taken from import file;
- Serial number of weighted platform;
- Branch, which contains detailed processing report. If you are processing multiple files or an answer file was not removed this thread saved reports for all treatments produced since the creation of a file.

Example of report, containing in the "Log" branch after importing goods data file:

#### Example of file-import, containing good data:

```
<?xml version="1.0"?>
Basic branch of XML document.
< Body >
      Date/time of creation file-import.
      <DateUnLoad>2010-03-31T11:52:06</DateUnLoad>
      true – erase data in weighted platform before loading, false – do not erase.
      <ClearDataInScale>true</ClearDataInScale>
      Transmission number
      <SentNo>1</SentNo>
      Branch, containing label data templates
      <Labels>
             Branch, containing label template.
             < Row >
                    Template number.
                     <Label>6</Label>
                    Template data. Data is encoded in BASE64 encoding.
                     <FileLabel>BsABQAH/DAD......</FileLabel>
             </Row>
             ...... Other label templates data. Maximum is 8 templates.
      </Labels>
      Branch, containing goods groups data.
      <NomGroup>
```



Branch, containing description of the goods groups.

```
<Row>
                    Name of the goods group
                    <Name>Oвощи</Name>
                    Number of goods group.
                    <Code>2</Code>
             </Row>
             . . . . . . .
      </NomGroup>
      Branch, containing goods data.
      <Produce>
             Branch, containing goods item data.
             <Row>
                    Goods item name printed on the label.
                    <NameFull>Цуккини кабачки</NameFull>
                    Goods item name, shown on the screen.
                    <Name>Цуккини кабачки. Испания</Name>
                    Goods item price.
                    <Price>199,9</Price>
                    Goods item number, shown on the screen.
                    <Number>199</Number>
                    Goods group number.
                    <CodeNomGroup>2</CodeNomGroup>
                    Goods item number, used for calling goods item in weighted platform.
                    <Code>09899</Code>
                    Shelf life.
                    <ShlefTime>3</ShlefTime>
                    Image goods item data, shown in the goods choice screen. Data is encoded in BASE64 encoding.
                    For goods bitmap (picture) it is recommended to use ".bmp" format.
                    Size of the bitmap is 159x96 pixels.
                    <Picture>Qk0AgwAAAAA......</Picture>
                    Department of the goods item. Used as a prefix barcode.
                    <Dep>23</Dep>
                    Goods item tare (not present in the current version).
                    <Tare>0</Tare>
                    Label template number.
                    <Label>6</Label>
                    Barcode type.
                    <BarCodeType>7</BarCodeType>
                    Goods item type.
                    <Unit>4</Unit>
                    Promotional goods item (on the product image appears, indicating the discount).
                    <ActionPLU>true</ActionPLU>
             </Row>
             ...... Other groups data. Maximum is 6 goods groups.
      </Produce>
</Body>
```

Example of file-import, containing settings of the Software:

```
<?xml version="1.0"?>
Basic branch of XML document.
```



< Body >

Date/time of creation file-import.

<DateUnLoad>2010-03-31T11:52:03</DateUnLoad>

Transmission number.

<SentNo>1</SentNo>

Folder, where import files, containing goods data are located.

<CatalogForImport>.\Import</CatalogForImport>

Importing goods data files Timer.

<TimeWaitingCatalogForImport>130</TimeWaitingCatalogForImport>

Importing Software settings files Timer.

<TimeWaitingSettings>30</TimeWaitingSettings>

Folder where files-flags are placed.

 $<\!CatalogForExportSeller\!>. \backslash Import<\!/\ CatalogForExportSeller\!>$ 

Timer of showing "Ask for assistance" message.

<TimeWaitingPictureSeller>10</TimeWaitingPictureSeller>

Timer then go back to the Main screen when weighted platform is loaded.

<TimeReturnWithWeight>30</TimeReturnWithWeight>

Timer then go back to the Main screen when weighted platform is unloaded.

<TimeReturnWithoutWeight>30</TimeReturnWithoutWeight>

Timer till commercials will be shown..

<TimeWaitingSleep>40</TimeWaitingSleep>

Advertising images switching timer.

<TimeWaitingChange>5</TimeWaitingChange>

File-flag name "Ask for assistance".

<FlagWaitingSeller>flagWaitingSeller.flg</FlagWaitingSeller>

File-flag name "Out of labels".

<NoPaper>flagWaitingSeller.flg</NoPaper>

Zero weight timer.

<RecalibrateWeightInterval>15</RecalibrateWeightInterval>

Limit of the amount of weight (in grams), which is reset after a preset.

 $<\!RecalibrateWeightValue\!>\!7<\!/RecalibrateWeightValue\!>$ 

Automatic Software updates enable..

<EnableAutoUpdate>true</EnableAutoUpdate>

Checking Software updates timer (in munutes).

<TimeUpdateCheck>3</TimeUpdateCheck>

Folder where Software updates files are placed.

<CatalogForSoftUpdate>.\Updates</CatalogForSoftUpdate>

Logging enable (log-file).

<EnableLog>true</EnableLog>

Folder where log-files are placed.

 $<\!CatalogForLog\!>.\!\backslash Log\!<\!\!/CatalogForLog\!>$ 

IP address of the weighted platform.

<IPAddressScale>192.168.0.248</IPAddressScale>

Parameters for e-mailing reports.

<AutoSendLogOnMail>true</ AutoSendLogOnMail>

<AutoDelLogOnSend>true</AutoDelLogOnSend>

<SMTPHost>192.168.0.1</ SMTPHost>

<SMTPPort>25</SMTPPort>

<SMTPFrom>pcscale@aclas.ru</ SMTPFrom>

<SMTPTo>admin@aclas.ru</SMTPTo>

<SMTPAuth>false</ SMTPAuth>

<SMTPUsername>user</ SMTPUsername>

<SMTPPassword></SMTPPasword>

Branch, containing commercial images data.

<Pictures>

Commercial image data (sown in full screen). Data is encoded in BASE64 encoding.



<FilePicture>Qk04+RUAA..... </FilePicture>
...... Other commercial images data.
</Pictures>
</Body>



# 12 Technical support

All the users that purchased the Aclas scale software are eligible for the technical support by the engineers of ZAO "ETIM".

In order to get assistance please contact us:

phone: +7 (812) 334-2222 e-mail: e-support@etim.ru

or through the web: <a href="http://www.aclas.ru/">http://www.etim.ru/</a>

If you would encounter any mistakes or flows in our products please let ZAO "ETIM" technical support know about it.