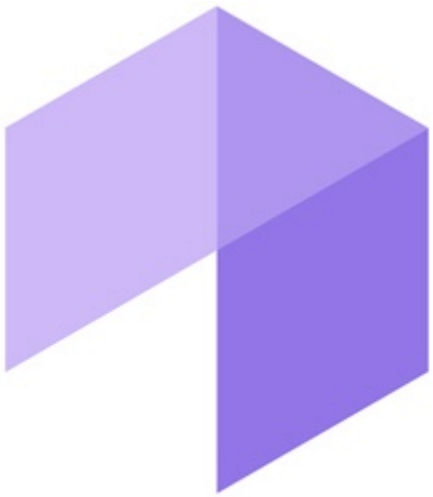


Report System

Intellect Web Report System. User Guide

Last update 03/03/2021

Table of contents

1 Introduction 9
1.1 The purpose of the document 9
1.2 Purpose of the Intellect Web Report System 9
1.3 Components of the Intellect Web Report System 10
2 Requirements for Intellect Web Report System implementation 11
2.1 The web server of the Intellect Web Report System 11
2.2 The client of the Intellect Web Report System 12
2.2.1 General requirements 12
2.2.2 Setting up security parameters in Internet Explorer 13
3 Intellect Web Report System installation and removal 15
3.1 Installation 15
3.2 Repairing 23
3.3 Updating 25
3.4 Removal 26
3.5 Installation in silent mode 28
4 Intellect Web Report System licensing 29
4.1 Activation key 29
4.2 Activation of Intellect Web Report System functionality 29
5 Intellect Web Report System startup and shutdown 30
5.1 Ways of starting 30
5.2 Authorization 30
5.3 Shutdown 32
5.4 User switching 32
6 Intellect Web Report System interface 33
6.1 Context menu 33
6.2 Reports page 33
6.3 Administration page 34
6.4 Scheduler page 35
6.5 User profile page 36
6.6 Change the Intellect Web Report System interface language 37
7 Intellect Web Report System administration 39

7.1 Set up the roles and users 39
7.1.1 Adding new users 39
7.1.2 Set up the roles 42
7.1.2.1 Role registration 42
7.1.2.2 Role editing 43
7.1.2.3 Role removal 44
7.1.3 Configure roles and users compliance 45
7.1.3.1 Assigning the roles to the user 45
7.1.3.2 Adding the users to the role 46
7.1.4 Change the administrator password 47
7.1.5 Setting up the user email 48
7.2 Setting up Intellect Web Report System operation in the automatic mode 49
7.2.1 Intellect Web Report System setting up procedure in the automatic mode 49
7.2.2 SMTP Server setup 49
7.2.3 Auto-generated reports setup 51
7.2.3.1 Creating the report 51
7.2.3.2 Editing the report 53
7.2.3.3 Deleting the report 54
7.2.4 Setting up the schedule of operation in the automatic mode 55
7.2.4.1 Creating the schedule item 55
7.2.4.2 Editing the schedule item 56
7.2.4.3 Deleting the schedule item 57
7.2.5 Setting up the automatically executed tasks 57
7.2.5.1 Creating the task 58
7.2.5.2 Checking the task execution 60
7.2.5.3 Running and stopping the task execution 60
7.2.5.4 Editing the task 60
7.2.5.5 Deleting the task 61
7.3 Setting up the Access Manager reports 62
7.3.1 Setting up user access to departments 62
7.3.2 Setting up user access to Access Manager reports 63
7.3.3 Setting up the Issued pass cards report 64
7.3.3.1 Activating the Issued pass cards report 64
7.3.3.2 Adding fields to the user database templates file 65
7.3.3.3 Editing a registry key 65

7.4 Setting up the Auto reports 66
7.4.1 Setting up user access to AUTO reports 66
7.4.2 Configuring the storage source for Recognized number plates report and Recognized railway numbers report 66
7.4.3 Configuring the Recognized railway numbers report 67
7.4.4 Configuring numbers filtering for Recognized number plates report and Recognized railway numbers report 67
7.5 Setting up the General reports 67
7.5.1 Setting up user access to General reports 67
7.5.2 Selecting the view of the list of objects and events for the Protocol report 68
7.5.3 Configuring the date and time format in General Reports 69
7.6 Setting up the reports by Queue Length detectors 70
7.6.1 Disabling the zero value filter 70
7.7 Setting up the Visitors behavior analysis reports 70
7.7.1 Setting up user access to Visitors behavior analysis 70
7.7.2 Cleaning up the database for the Visitors behavior analysis reports 71
7.8 Setting up the Visitors counting detectors reports 72
7.8.1 Setting up user access to Visitors counting detectors reports 72
7.8.2 Configuring the Gender analytics report 73
7.8.2.1 Configuring the IP Address of the Face Recognition Server 73
7.8.3 Configuring the Face recognition report and Report by employee passes with photo 74
7.9 Setting up the POS reports 74
7.9.1 Creating the list of POS operators 74
7.9.2 Setting up the cashiers in the POS reports 75
7.9.2.1 Setting up the cashiers list 75
7.9.2.2 Setting up the new cashiers 76
7.9.3 Setting up the statuses of POS events 77
7.9.3.1 Creating the user status 78
7.9.3.2 Editing the status 79
7.9.4 Setting up the groups of statuses of POS events 80
7.9.4.1 Creating a group of statuses 80
7.9.4.2 Editing a group of statuses 81
7.9.4.3 Deleting a group of statuses 82
7.9.5 Setting up the filter of events 82
7.9.5.1 Creating a filter of events 83

7.9.5.2 Editing a filter of events ... 84
7.9.5.3 Deleting a filter of events ... 84
7.9.6 Selecting layouts in POS reports ... 85
7.9.7 Selecting items for report creating ... 85
7.9.8 Setting up parameters of report by potential violations ... 86
7.9.9 Setting up the user interface of POS reports ... 87
7.9.10 Setting up user access to POS reports ... 89
7.9.11 Setting up the Sweethearting report ... 89
7.9.11.1 Enabling the Sweethearting report ... 89
7.9.11.2 Filtering the sweethearting events ... 91
7.9.11.3 Setting the timeout for sweethearting event addition to report ... 92
7.9.11.4 Disabling sound notification about new events in Sweethearting report ... 93
7.9.11.5 Configuring the events preloaded on first Sweethearting report launch ... 93
7.9.12 Setting up the Statistics by cashiers report ... 94
7.9.13 Setting up the currency format for Report by the number of goods with specific action ... 96
7.10 Setting up the Time and Attendance reports ... 97
7.10.1 Setting up the user access rights to departments ... 97
7.10.2 Setting up user access to Time and Attendance reports ... 98
7.10.3 Configuring the Extended report on the presence at the workplace and Total report on the presence at the workplace ... 99
7.10.3.1 Enabling the Extended report on the presence at the workplace and Total report on the presence at the workplace ... 99
7.10.3.2 Adding the fields to the custom database template file ... 100
7.10.4 Setting up the Presence at workplace report and Personal presence-at-workplace report ... 101
7.11 Selecting the camera stream in live video reports ... 101
7.12 Updating the report database ... 102
7.13 Video Player Settings ... 103
8 Working with Intellect Web Report System ... 104
8.1 Working with POS reports ... 104
8.1.1 General reports ... 104
8.1.1.1 Selecting a type of general POS report ... 104
8.1.1.2 Statistics by cashiers ... 106
8.1.1.3 Report by cashier ... 108
8.1.1.4 Report by event ... 110
8.1.1.5 Report by the number of goods with specific action ... 112

8.1.1.6 Goods weight report ... 114
8.1.1.7 Report by the number of canceled goods sum ... 115
8.1.1.8 Report by the time of canceling goods ... 116
8.1.1.9 Report by POS ... 116
8.1.1.10 Report by operator ... 118
8.1.1.11 Report by number of open POS terminals ... 120
8.1.1.12 Detail report ... 123
8.1.1.13 Report by potential violations ... 123
8.1.2 Detailed reports ... 126
8.1.2.1 Viewing a detailed report ... 126
8.1.2.2 Viewing data from the POS terminal and the video of event ... 128
8.1.2.3 Changing the event status and the comment ... 129
8.1.2.4 Viewing the history of event status or comment changing ... 130
8.1.2.5 Filtering and sorting events in detailed reports ... 131
8.1.2.6 Select columns in detailed reports ... 133
8.1.2.7 Disabling captions in the video surveying window ... 134
8.1.2.8 Operations with data from POS terminal ... 135
8.1.3 Sweethearting monitor ... 137
8.2 Working with Time and Attendance reports ... 139
8.2.1 Selecting a type of Time and Attendance report ... 139
8.2.2 Creating a Time and Attendance report ... 141
8.2.3 Viewing a Time and Attendance report ... 145
8.2.3.1 Time and Attendance report toolbar ... 145
8.2.3.2 Detailed general report ... 145
8.2.3.3 General report ... 147
8.2.3.4 Report by person quantity ... 149
8.2.3.5 Work schedule violations ... 150
8.2.3.6 Hours-worked report ... 152
8.2.3.7 Official acts report ... 154
8.2.3.8 Error report ... 155
8.2.3.9 Latecomers report ... 156
8.2.3.10 Personal presence-at-workplace report ... 157
8.2.3.11 Presence at workplace report ... 158
8.2.3.12 Extended report on the presence at the workplace ... 161
8.2.3.13 Total report on the presence at the workplace ... 162

8.2.3.14 Employee time clock report ... 163
8.2.3.15 T-12 and T-13 reports ... 164
8.2.3.16 Generalized report ... 165
8.2.3.17 General report by discipline and overtime ... 167
8.2.3.18 Simple generalized report ... 168
8.3 Working with Access Manager reports ... 170
8.3.1 Selecting the type of Access Manager report ... 170
8.3.2 Creating the Access Manager report ... 172
8.3.2.1 Access Manager report toolbar ... 172
8.3.2.2 Issued pass cards report ... 172
8.3.2.3 Report by employee passes ... 174
8.3.2.4 Report by first and last card presenting per calendar day ... 179
8.3.2.5 Employee statuses report ... 181
8.3.2.6 Report by users, access levels and readers ... 183
8.3.2.7 Report by actions of Event Manager operator ... 188
8.3.2.8 Report by users access levels ... 192
8.3.2.9 Employees absent for too long report ... 196
8.3.2.10 Access point ... 197
8.4 Working with reports by Queue Length detectors ... 199
8.4.1 Selecting a type of reports by Queue Length detectors ... 199
8.4.2 Average queue length in time interval ... 200
8.4.3 Queue length threshold crossing ... 203
8.5 Working with reports by Visitors counting detectors ... 205
8.5.1 Selecting a type of reports by Visitors counting detectors ... 205
8.5.2 Creating a Report on people counting ... 207
8.5.3 Creating an Visitors counting report with the point of sale data ... 210
8.5.4 Creating a Face counter report (common report by all counting points) ... 213
8.5.5 Creating a Face counter report (detailed by cameras) ... 217
8.5.6 Creating a Face counter report (detailed by detectors) ... 220
8.5.7 Gender analytics report ... 222
8.5.8 Face recognition report ... 225
8.5.9 Report by employee passes with photo ... 231
8.6 Working with AUTO reports ... 236
8.6.1 Selecting the type of Auto report ... 236
8.6.2 Traffic statistics by vehicles groups ... 238

8.6.3 Traffic statistics by vehicles type ... 240
8.6.4 Recognized number plates report ... 242
8.6.5 Recognized railway numbers report ... 246
8.6.6 Report by road congestion ... 249
8.6.7 Working with the generated Recognized number plates report and Recognized railway numbers report ... 249
8.6.7.1 Filter and sort the license plate numbers ... 249
8.6.7.1.1 Filter the numbers ... 249
8.6.7.1.2 Sort the numbers ... 250
8.6.7.2 Customize, group, and freeze the columns ... 251
8.6.7.2.1 Customize the columns ... 251
8.6.7.2.2 Group the columns ... 252
8.6.7.2.3 Freeze the columns ... 253
8.7 Working with General reports ... 253
8.7.1 Selecting the type of general report ... 253
8.7.2 Protocol report ... 255
8.7.3 Change protocol report ... 258
8.7.4 Report of current objects state ... 261
8.7.5 Graphic report on events ... 262
8.7.6 Operator actions report ... 265
8.7.7 Report by camera ... 269
8.8 Working with Visitors behavior analysis reports ... 270
8.8.1 Selecting a type of Visitors behavior analysis reports ... 270
8.8.2 Creating the Customer activity statistics report ... 271
8.8.3 Creating a Heat map report ... 275
8.9 Exporting of reports ... 277
9 Conclusion ... 279
10 Appendix 1. The RemoteProtocolConnector utility for extracting event protocol to a separate database ... 280
10.1 Extracting event protocol to a separate DB with RemoteProtocolConnector ... 280
10.2 Purpose of the RemoteProtocolConnector. Start and shutdown ... 282

1 Introduction

1.1 The purpose of the document

Intellect Web Report System. User guide document contains information that is necessary for setting and further operation of *Intellect* software package report system and its vertical solutions. In the system working with reports is made through Web interface.

The structure of the document allows the user to skim over the provided information about *Intellect Web Report System* and select, according to degree of training, interesting parts for detailed study. Chapters in the guide are of information or reference content. They have their own internal structure.

The Introduction chapter is for general examination of the user with *Intellect Web Report System* system functionality and implementation features.

Recommendations that are necessary to user-administrator for *Intellect Web Report System* system installation are given in details in the Requirements for Intellect Web Report System realization and Intellect Web Report System installation and removing chapters of this guide.

Description of startup and shutdown of *Intellect Web Report System* system is given in Intellect Web Report System startup and shutdown chapter.

A brief excursus into system interface is given in Intellect Web Report System interface chapter.

Further in the Intellect Web Report System administration chapter there are step-by-step instructions for setting user private parameters and activation of required functionality. This information is useful both for system administrator and for operator who has rights to administrate system settings.
Information about using *Intellect Web Report System* functionality is given in the Working with Intellect Web Report System chapter.

1.2 Purpose of the Intellect Web Report System

Intellect Web Report System is a site that is located in the local network or Internet according to requirements to security system that is performed on the basis of *Intellect* software package. Administration and working with this system is performed entirely through the Web interface.

Web interface of *Intellect Web Report System* allows accomplishing the following tasks:

1. Creating and exporting reports of *Access Manager* module (Access Manager reports). The base *ACFA Intellect* software package is required for working.
2. Creating and exporting general and detailed reports by work time accounting (Time and Attendance reports). The *ACFA Intellect* software package is required for working.
3. Creating and exporting reports by performed changes, by event log and viewing video archive from registration time of the selected event in the report (General reports). The base *Intellect* software package is required for working.
4. Creating and exporting reports of *Auto-Intellect* module ("Auto" reports). The *Auto-Intellect* software package is required for working.
5. Creating and exporting general and detailed reports by count of people in the monitored object (Visitors counting detectors). The *Intellect Detector Pack*, Face-Intellect and *POS Intellect* software package are required for working.
6. Creating and exporting reports by queue length (Queue length detectors). The Intellect Detector Pack software package is required for working.
7. Creating and exporting general and detailed reports by POS-events (POS reports). The *POS Intellect* and Intellect Detector Pack software package are required for working.
8. Creating and exporting customer behavior reports (Visitors behavior analysis). The *Intellect Detector Pack* software package is required for working.
9. Setting up the varied user access to all reports.
10. Setting up the *Intellect Web Report System* operation in the auto mode.

Note.

In *Intellect Web Report System* one can generate reports automatically on the schedule with subsequent saving report files on local computer and/or sending them by e-mail.

1.3 Components of the Intellect Web Report System

The following components perform *Intellect Web Report System* realization:

1. Web server – computer that is supposed to be used for location of system site.
2. Clients – computers that are supposed to display Web interface of system.

In particular case Client and Web server of *Intellect Web Report System* can coincide. In other cases Web server should be available for Clients through network.

Installation of *Intellect Web Report System* is performed only on computer that is supposed to be used as Web server (see Intellect Web Report System installation and removal chapter).

Requirements for realization of Web server and Client are given in details in Requirements for Intellect Web Report System implementation chapter.

2 Requirements for Intellect Web Report System implementation

2.1 The web server of the Intellect Web Report System

The web server of the *Intellect Web Report System* is installed automatically when installing the *Intellect Web Report System* distribution kit.

> **Attention!**
>
> It is strongly recommended to install the web server of the *Intellect Web Report System* on Windows OS server platforms. This requirement is due to the limitation of the Microsoft Internet Information Services (IIS) servers set to 10 simultaneous connections on any other Windows OS platforms.
>
> In general, the *Intellect Web Report System* is compatible with the same operating system versions as *Intellect.*

Before *Intellect Web Report System* installation it is necessary to make sure that the following components are installed on computer:

1. Microsoft.NET Framework 4 platform;

   > **Note.**
   >
   > Microsoft.NET Framework 4 platform is available for download at http://www.microsoft.com/.

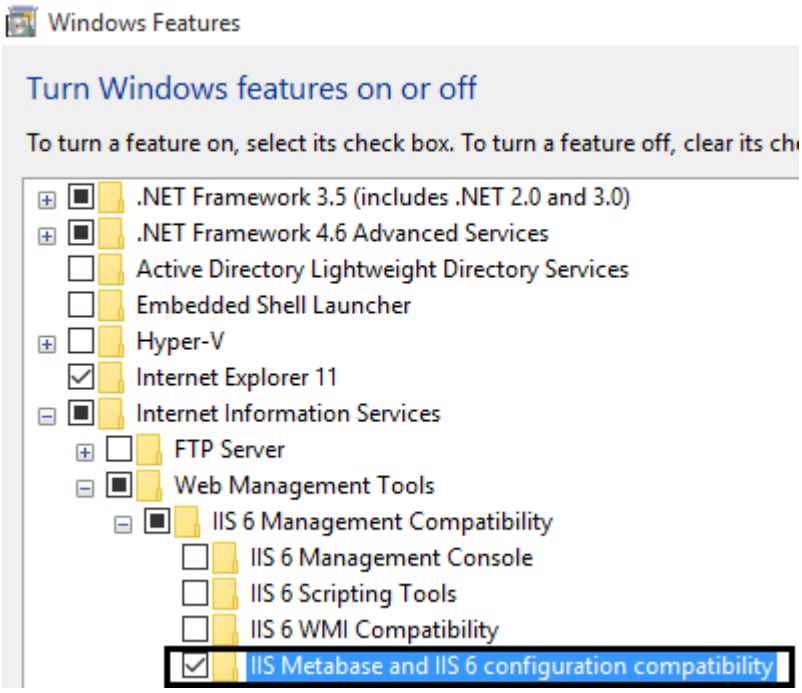
2. Set of Microsoft Internet Information Services (IIS) servers;

   > **Note.**
   >
   > A set of IIS servers is distributed along with the operating systems of the Windows family, being their optional component. The set of IIS servers is installed according to the manufacturer's instructions.
   >
   > If the set of Microsoft Internet Information Services (IIS) servers is installed but disabled, then during the installation of the *Intellect Web Report System* distribution kit it will be enabled automatically.

3. ASP.NET 4.5 module.

   > **Note.**
   >
   > Installation of ASP.NET 4.5 module which is a submodule to the IIS servers set, is performed in accordance with the following vendor website.
   >
   > ASP.NET 4.5 module is to be enabled in the following places for Windows 8/8.1 OS:
   >
   > - .NET Framework 4.5 add-on services;
   > - IIS services -> Internet Services -> Application development components.

The IIS Metabase and IIS 6 configuration compatibility component is to be enabled for Windows 10 OS.



For correct creation of reports in *Intellect Web Report System,* the Web server should be connected via the network with all the database servers used in its operation. At the moment this is mandatory for SQL servers that store the database of *Intellect software package* configuration and the subsystem itself, and optionally for SQL servers that host the *Time and Attendance* and/or receipts databases. In special cases both Web server and SQL server can be located on the same computer.

The internal database of the server has the MS SQL format. A list of versions MS SQL Server, supported in *Intellect Web Report System* subsystem is identical with the list of versions for the Intellect software (see the Internal video Server database section).

Corresponding *Intellect* video servers (registered in the database of the *Intellect* configuration connected while installation) must be started in order to display the event video archive in detailed reports.

If the Clients connection to the Web server is supposed to be via network it is necessary to make sure that the Web server has the static IP address. Moreover it must be available on the Internet if it is specified in the security system project.

2.2 The client of the Intellect Web Report System

2.2.1 General requirements

The following is required to ensure the ability to view the video archive of events in the *Internet Explorer* browser:

1. *Internet Explorer* browser of 8.0 version and later.

   Attention!

   When working with *Intellect Web Report System* in the 64-bit operating system, it is recommended to use the *Internet Explorer* 32-bit browser.

2. The use of ActiveX components in the browser should be permitted.
3. The ActiveX *CamMonitor* component should be installed.

   Note

   The *CamMonitor* component is installed automatically with *Intellect* software package.
   If *Intellect* software package is not installed on the Client, it is necessary to install the *CamMonitor* component separately.

To be able to view the video archive of events in browsers based on the Blink and Gecko browser engines (Google Chrome, Yandex Browser, Firefox, Opera, etc.), it is necessary to configure the video player (see Video Player Settings).

> **Note**
>
> Currently the video player is implemented only for the **General reports** and **Auto reports**.

2.2.2 Setting up security parameters in Internet Explorer

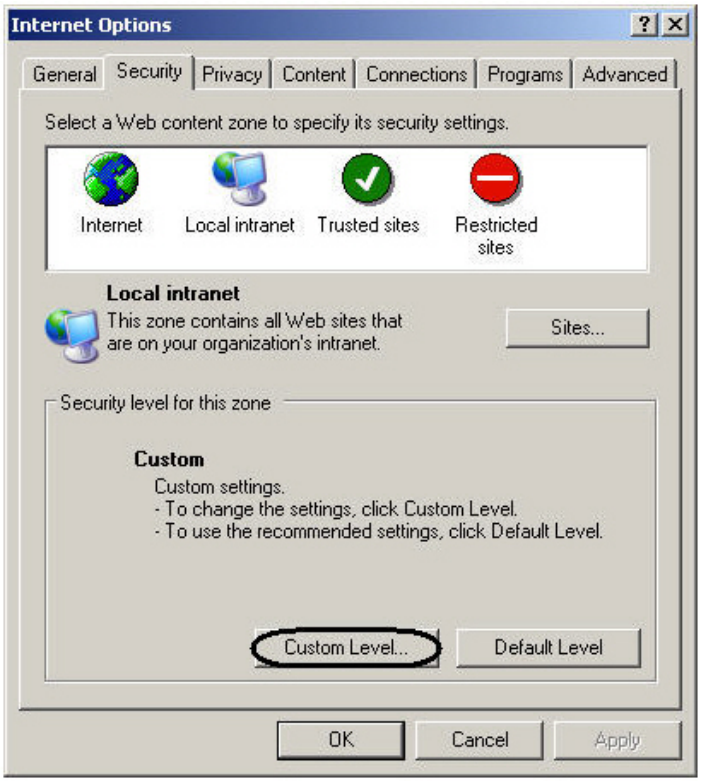
By default the use of ActiveX components is forbidden in *Internet Explorer*, that is why it's necessary to set extra security parameters.

For this do the following:

1. Execute the **Tools** –> **Internet options** command in main menu of *Internet Explorer* browser.

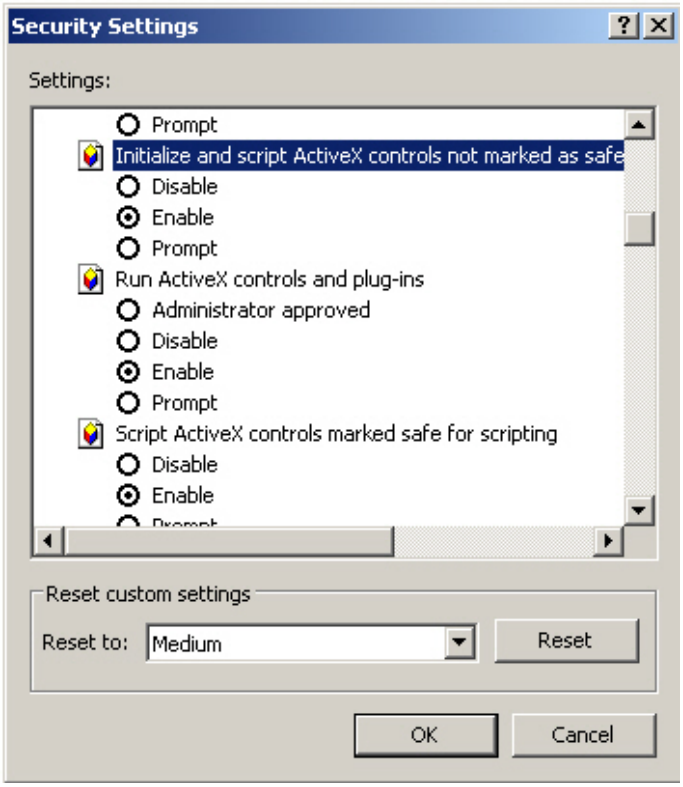


2. In the **Internet options** dialog box go to the **Security** tab.



3. In selected zone of dialog box (selected on default) click **Custom level**.
4. In the **Security settings**dialog box execute the following settings:
   4.1 Set the **Script ActiveX controls marked safe for scripting** checkbox to the **Enable** position.

4.2 Set the **Initialize and script ActiveX controls not marked as safe** checkbox to the **Enable** position.



5. Click **OK** in **Security settings**, and then in **Internet options.**
6. Restart browser.

Setting security parameters in Internet Explorer browser is completed.

3 Intellect Web Report System installation and removal

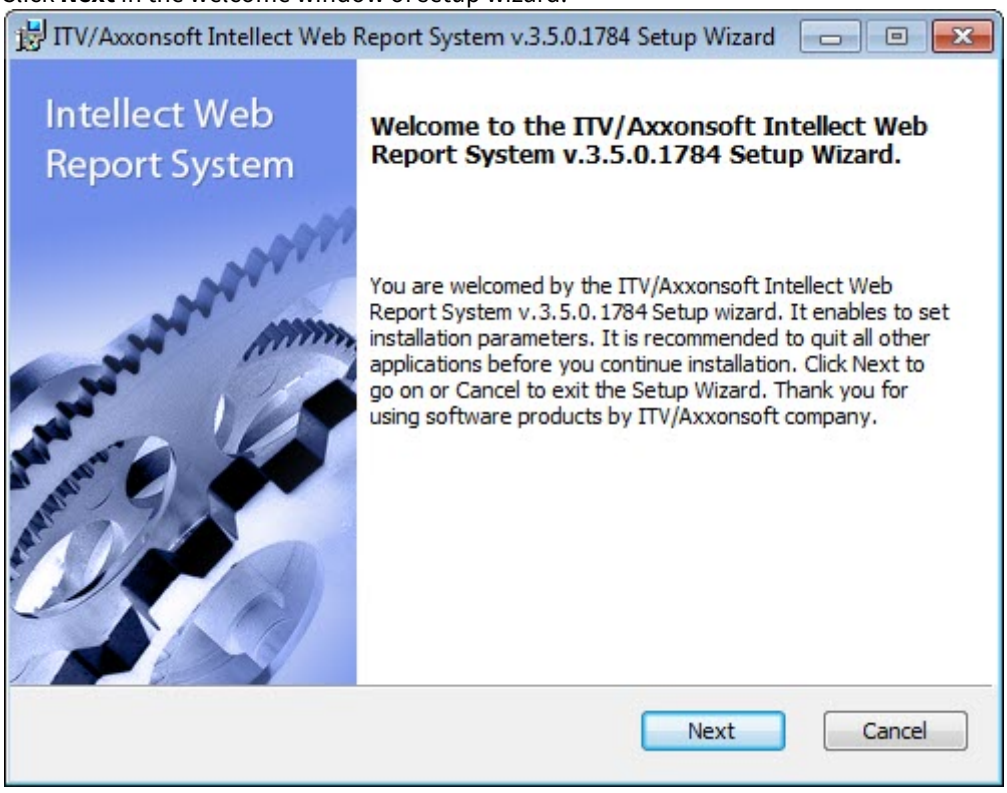
3.1 Installation

The *Intellect Web Report System* is installed as a part of the *Intellect* software. Information about compatibility of the *Intellect* software versions and *Intellect Web Report System* is presented by link: General information about product releases and versions compatibility.

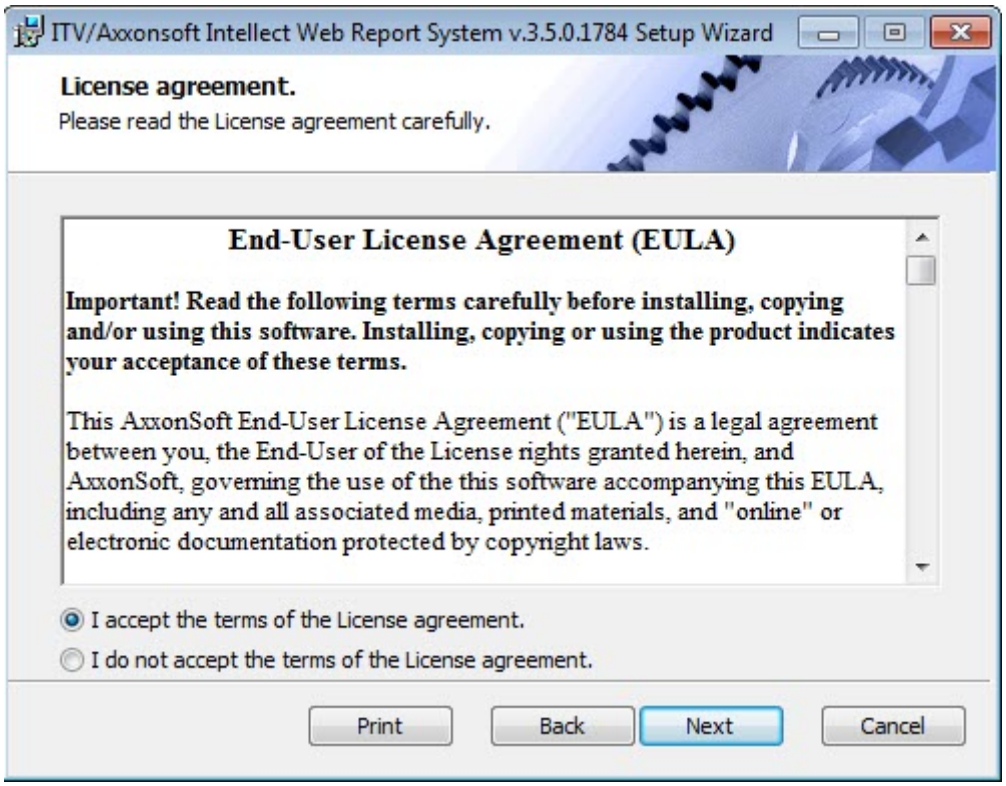
> **Important!**
>
> The *Intellect Web Report System* should be installed only on **Server/Remote administrator workplace** (for details, see Intellect software. Administrator's Guide).

To install *Intellect Web Report System* do the following:

1. Run the *setup.exe* installation package.
2. Click **Next** in the welcome window of setup wizard.



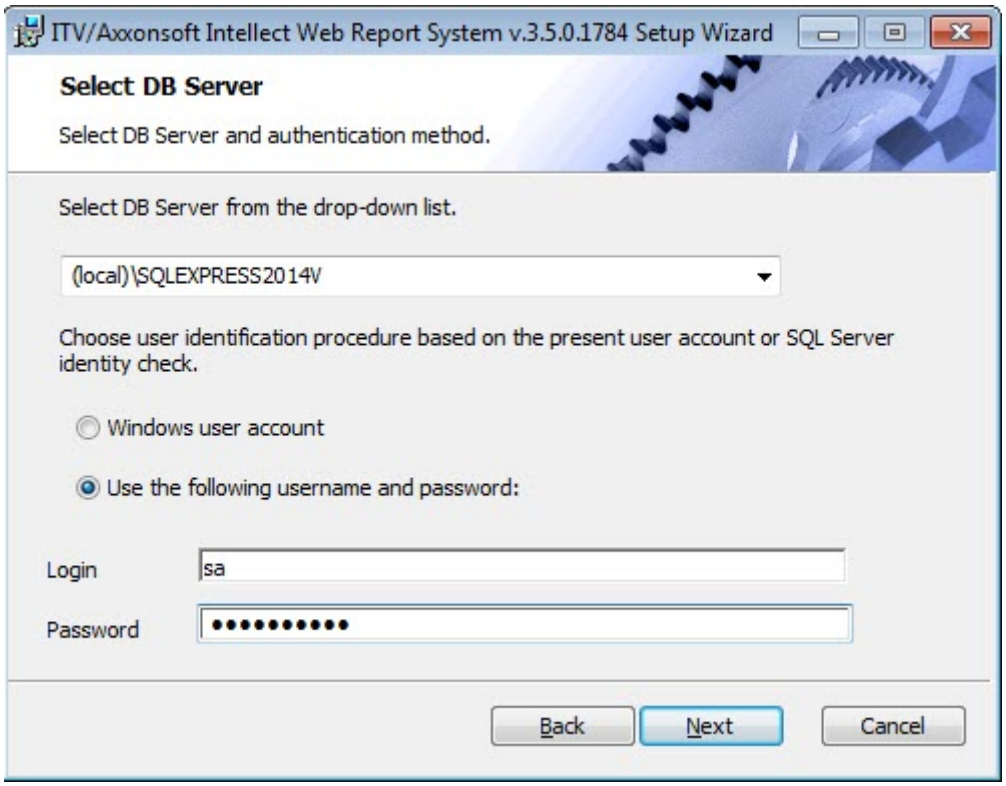
3. To continue the installation one should accept the terms of the License agreement by setting the switch into **I accept the terms of the License agreement** position. Then click **Next**.



The **Select DB Server** window is displayed.

4. From the **Select DB Server from the drop-down list** select SQL server where the database of the *Intellect* software package configuration is located. The database of *Intellect Web Report System* will be created on the same SQL server.

> **Note.**
>
> Later it's possible to move the database of *Intellect Web Report System* to another SQL server. The changes should be made in *<Intellect installation directory>|Modules|Wt2|Web.config* file by correcting the ReportSystemConnectionString connection string:
>
> - <add name="ReportSystemConnectionString" connectionString="Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=ReportSystem;Data Source=(local)\SQLEXPRESS2014;" providerName="System.Data.SqlClient"/>



5. Set the authentication method that will be used by the *Intellect Web Report System* while connecting to SQL server with the database of the *Intellect* software package configuration.
   Connecting by the **Windows Account information** method there is a confirmation of user identity by using current account information of Windows OS. Method of using specified user name and password allows confirming SQL server authenticity.

   Note.

   Windows Account information method is used in the following cases:

   a. When SQL server where it's necessary to create *Intellect Web Report System* database and system itself are installed on one computer.
   b. When SQL server and *Intellect Web Report System* system are installed on different computers connected by TCP/IP and located in one network domain. An account for user that is authorized in Windows OS on computer where *Intellect Web Report System* is installed should be created in Windows OS on computer with installed SQL server.

   Note.

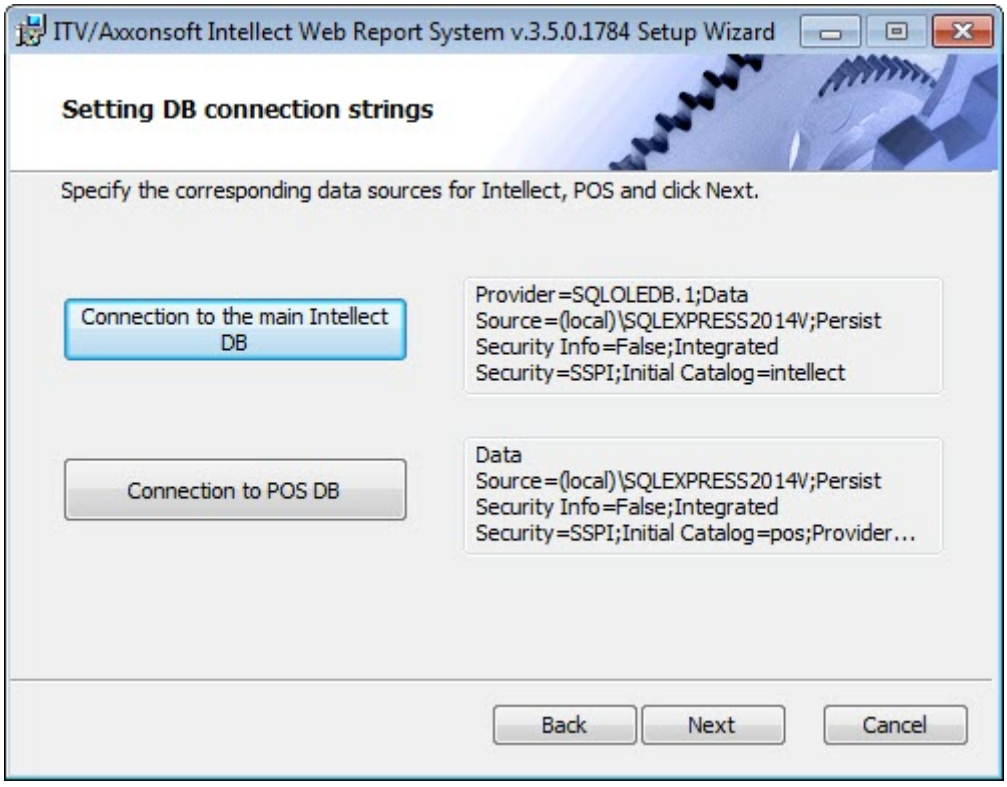
   Method of using login and password is for the following cases:

   a. When SQL server where it's necessary to create *Intellect Web Report System* system database and system itself are installed on one computer.
   b. When SQL server and *Intellect Web Report System* system are installed on different computers connected by TCP/IP and located in one network domain. At the same time specified user name (login) and password should be the same as user name (login) and password that are used to SQL server access.

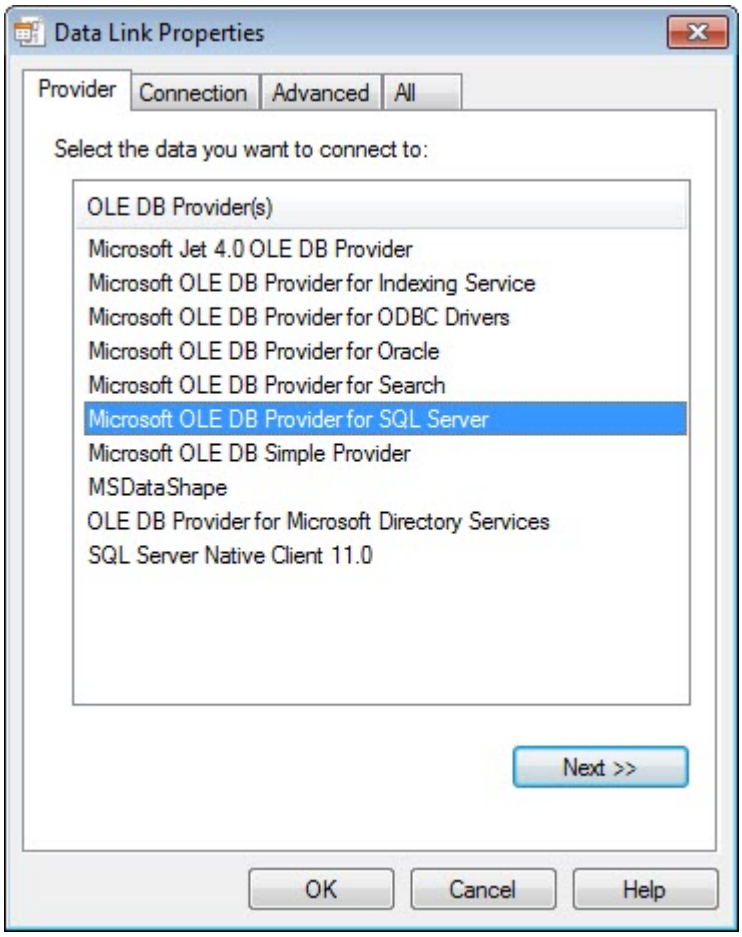
6. To continue the installation process click **Next.**
   A window will appear in which it is necessary to set the connection string of the *Intellect Web Report System* to the main *Intellect* database, to the *POS Intellect* receipts database, and to the *Auto Intellect* databases. The connected databases will serve as a data source when creating reports.

Note.

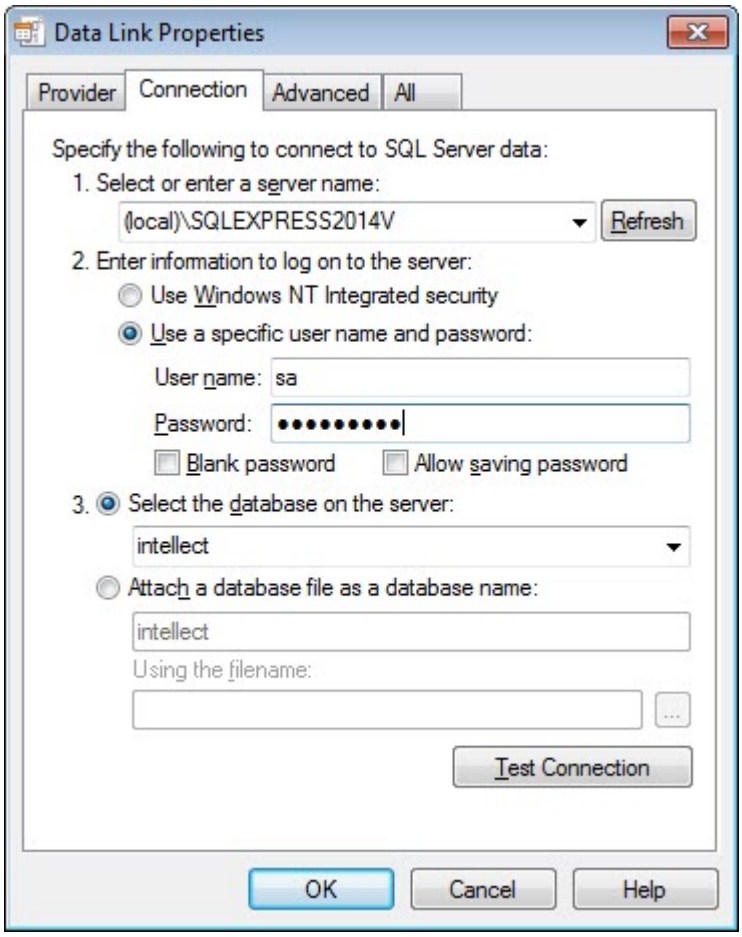
If the *POS Intellect* software and the *Auto Intellect* software are installed after the *Intellect Web Report System* installation, the connection of *Intellect Web Report System* database to the corresponding module is to be performed. Launch the Repairing mode of *Intellect Web Report System* and enter the corresponding connection strings (see Repairing).



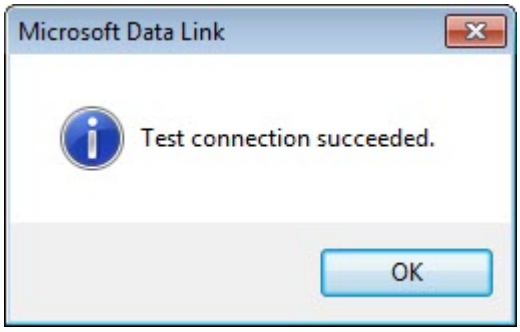
7. To set connection string to the main *Intellect* database, do the following:
   8.1 Click **Connection to the main Intellect DB**.
   8.2 As a result the **Data link properties** dialog box is displayed.



8.3 In the **Data provider** tab select **Microsoft OLE DB Provider for SQL Server**. Click **Next**.
8.4 As a result there will be an automatic switch to **Connection**.



8.5 In **1. Select or enter a server name** line select from the list or enter manually the name of SQL server where the main *Intellect* database is stored.
8.6 To log on SQL server it is necessary to set authentication parameters. For this set switch into **Use a specific user name and password** position. In the **User name** and **Password** fields enter username (login) and password in order to connect to SQL server. Set the **Allow saving password** checkbox.
8.7 To check connection to SQL server click **Test connection**.
In case of successful connection the window with the **Test connection succeeded** message will be displayed.



It's necessary to click **OK** in the window of message and as a result the window will be shut down automatically.
If the name of SQL server and/or authentication parameters that are used in order to connect to it were set wrong then the corresponding message is displayed.



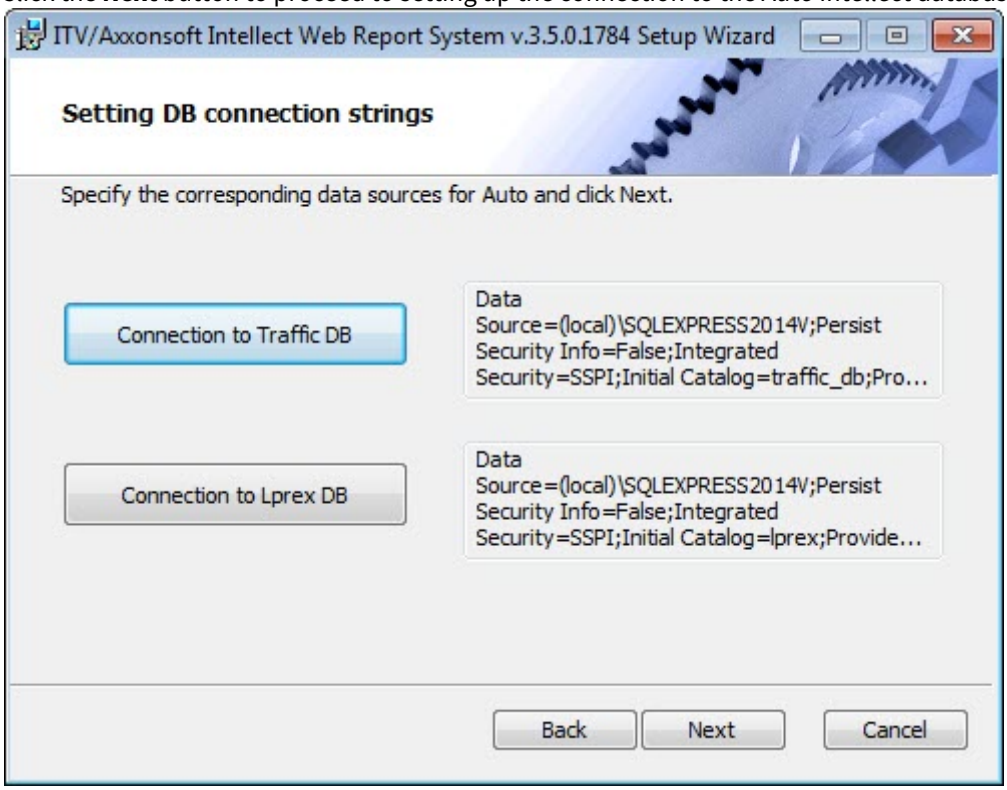
To shut down the window with the message, click **OK**. Then correct the data and check connection to SQL server once again.

8.8 If check of connection to SQL server is successful, select from the **Select database on server** list the name of connected database.

> **Note.**
>
> Database of the *Time and Attendance* module coincides with the database of Intellect configuration (name by default is intellect).

8.9 Click **OK** in the **Data connection properties** dialog box. As a result of this operation the dialog box will shut down. Setting connection string to the main *Intellect* database is completed.

8. In the same way, set the connection string to the *POS Intellect* database of receipts (the default database name is *pos).*
9. Click the **Next** button to proceed to setting up the connection to the *Auto Intellect* databases.



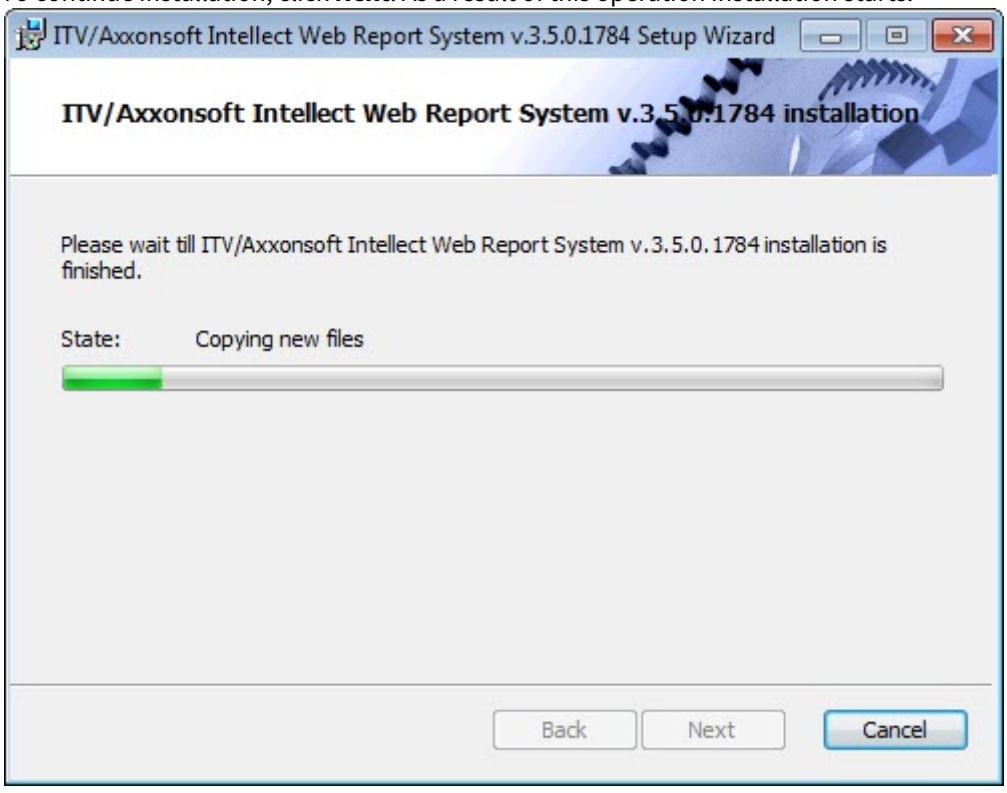
10. In the same way, set the connection string to the Traffic Detection database (the default database name is *traffic_db*).
11. In the same way, set the connection string to the License Plate Recognizer database (the default database name is *lprex).*
12. Set the connection string to the Intellect Detector Pack database (the default database name is *detectorpack)* using *Web.config* configuration file.

Note.

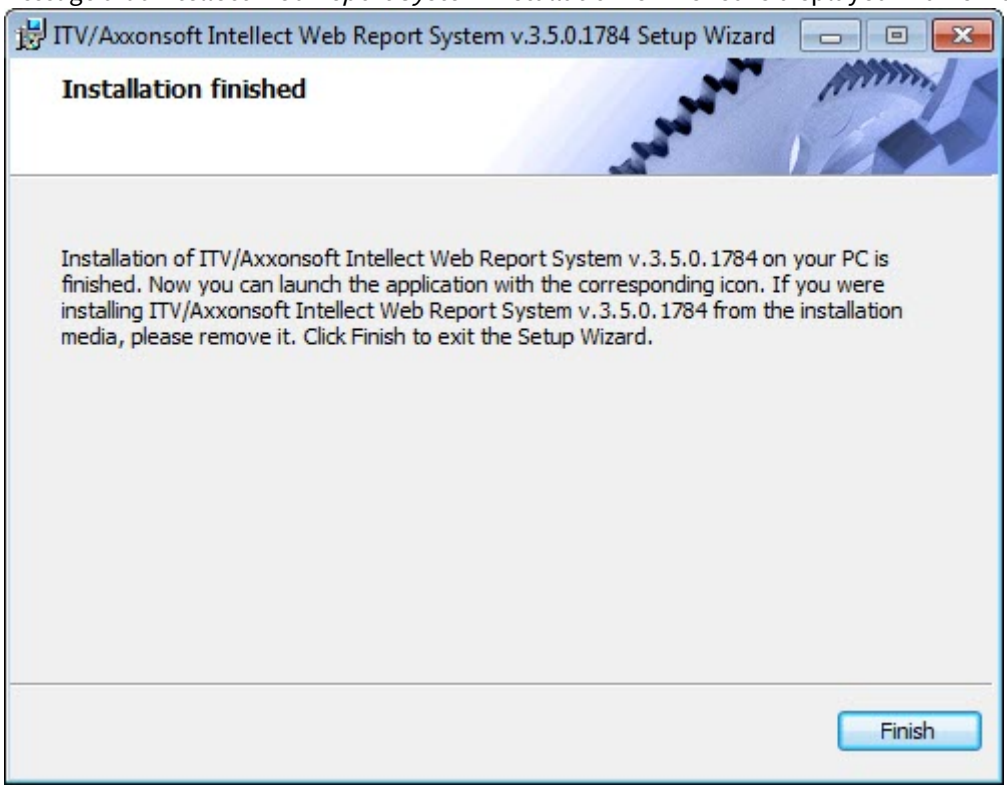
You can set the connection strings to the databases using the *<Intellect installation directory>|Modules|Wt2|Web.config* file. Examples of connection strings are given below:

- <add name="IntellectDB" connectionString="Provider=SQLOLEDB.1;Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=intellect;Data Source=(local)\SQLEXPRESS2014" />
- <add name="PosDB" connectionString="Data Source=(local)\SQLEXPRESS2014;Persist Security Info=False;Integrated Security=SSPI;Initial Catalog=pos;Provider=SQLOLEDB.1" providerName="System.Data.SqlClient" />
- <add name="TrafficDB" connectionString="Provider=SQLOLEDB.1;Data Source=(local)\SQLEXPRESS2014;Persist Security Info=False;Integrated Security=SSPI;Initial Catalog=traffic_db" />
- <add name="DtDB" connectionString="Provider=SQLOLEDB.1;Data Source=(local)\SQLEXPRESS2014;Persist Security Info=False;Integrated Security=SSPI;Initial Catalog=dt" />
- <add name="ReportSystemConnectionString" connectionString="Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=ReportSystem;Data Source=(local)\SQLEXPRESS2014;" providerName="System.Data.SqlClient" />
- <add name="Analytics" connectionString="Server=localhost;Port=15432;User id=postgres;Password=Analytics_default_DB_4;Database=analytics;CommandTimeout=600;" providerName="Npgsql" />
- <add name="lprex" connectionString="Provider=SQLOLEDB.1;Data Source=(local)\SQLEXPRESS2014;Persist Security Info=False;Integrated Security=SSPI;Initial Catalog=lprex" />
- <add name="detectorpack" connectionString="Provider=SQLOLEDB.1;Data Source=(local)\SQLEXPRESS2014;Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=detectorpack;" />

13. To continue installation, click **Next**. As a result of this operation installation starts.



14. Message that *Intellect Web Report System* installation is finished is displayed in a new dialog box.



Intellect Web Report System installation is finished and system is installed in *C:\Program Files (x86)\Intellect\Modules\Wt2* folder.

Note.

If there is no folder it will be created automatically.

Attention!

After *Intellect Web Report System* is installed, it's necessary to restart *Intellect* software package.

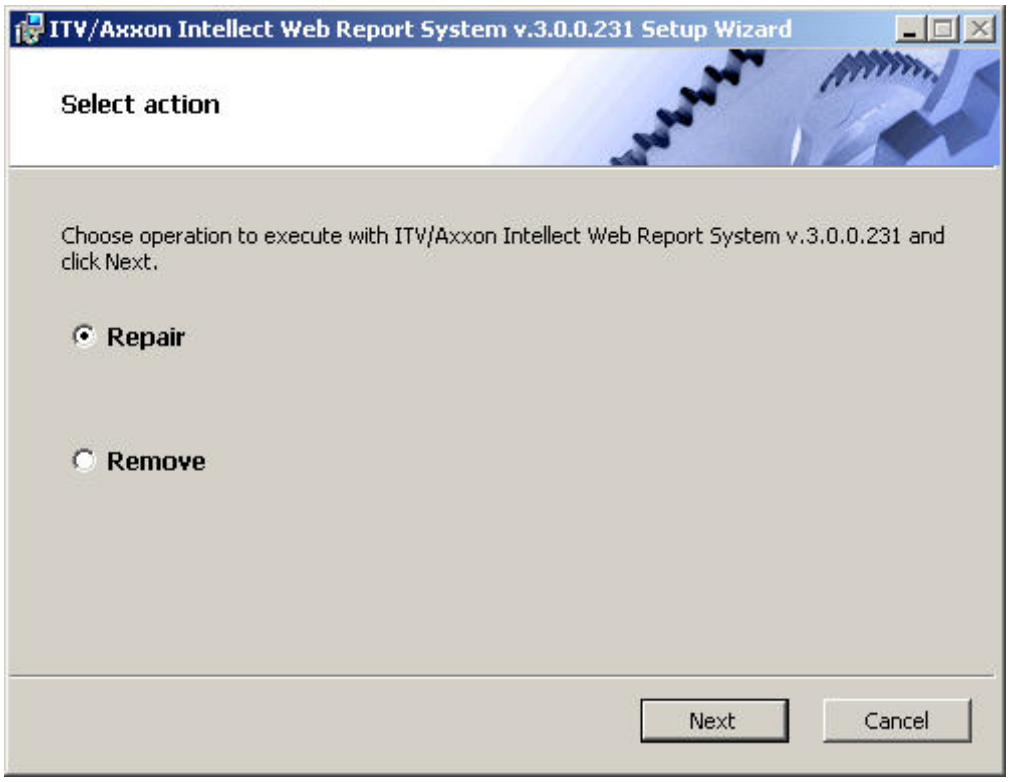
3.2 Repairing

Repairing mode is designed for reinstallation of all components of *Intellect Web Report System*.

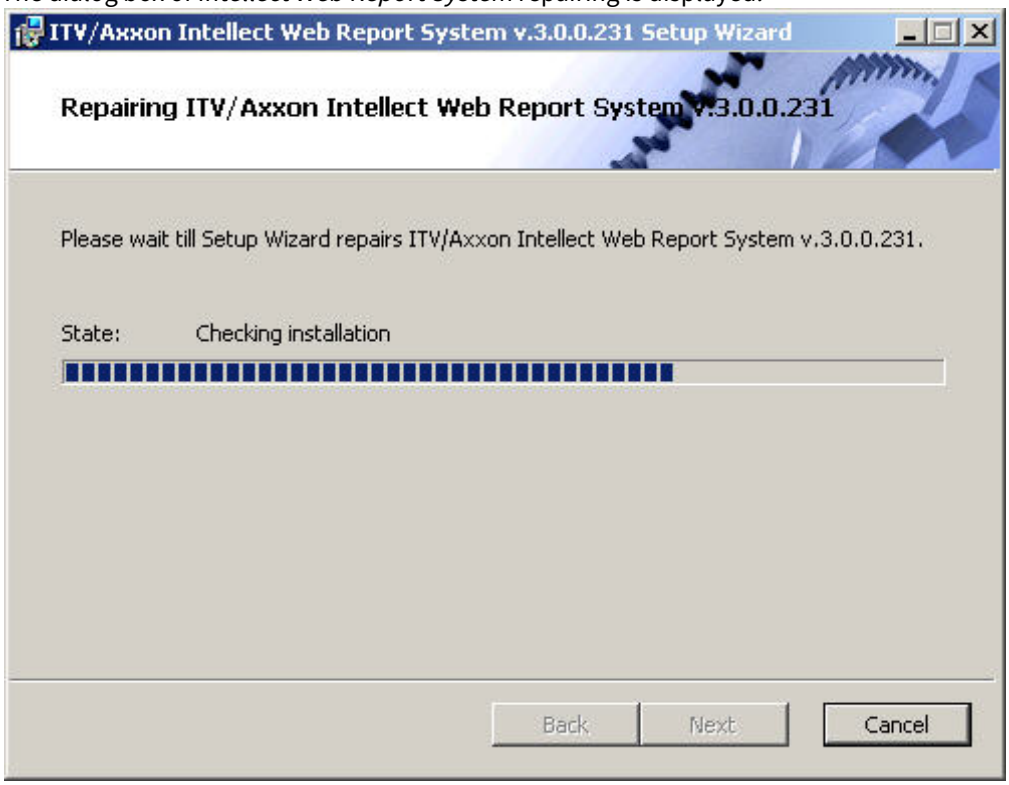
To start repairing mode it's necessary to start *Intellect Web Report System* installation once again without removing previous version of system.

To repair *Intellect Web Report System* do the following:

1. Start the ReportSystem.msi installation package.
   The dialog box of action selection is displayed.



2. Select **Repair** type and click **Next**
   The **Selection DB server** box is displayed.
3. In this and following boxes repeat 4-9 steps of *Installation* part.
   The dialog box of *Intellect Web Report System* repairing is displayed.



When repairing is finished the dialog box, where it's necessary to click **Ready**, is displayed.

Intellect Web Report System repairing is completed.

Attention!

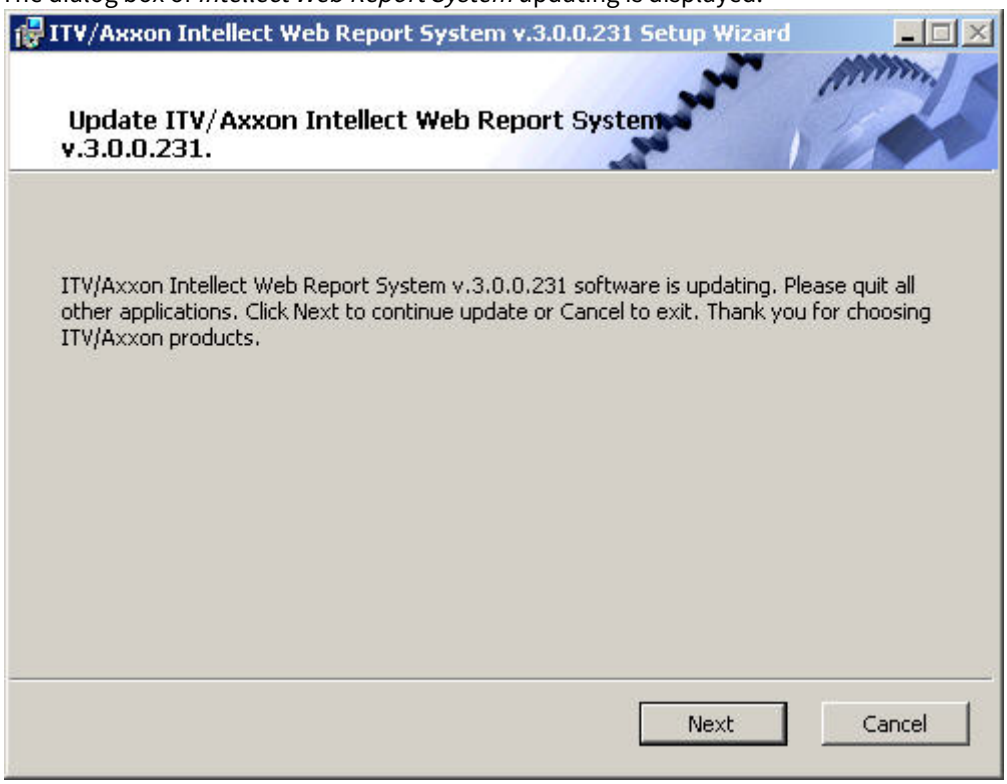
After *Intellect Web Report System* repairing it's necessary to restart Intellect software package.

3.3 Updating

Updating mode is used for installation of *Intellect Web Report System* new version without removing the previous one.

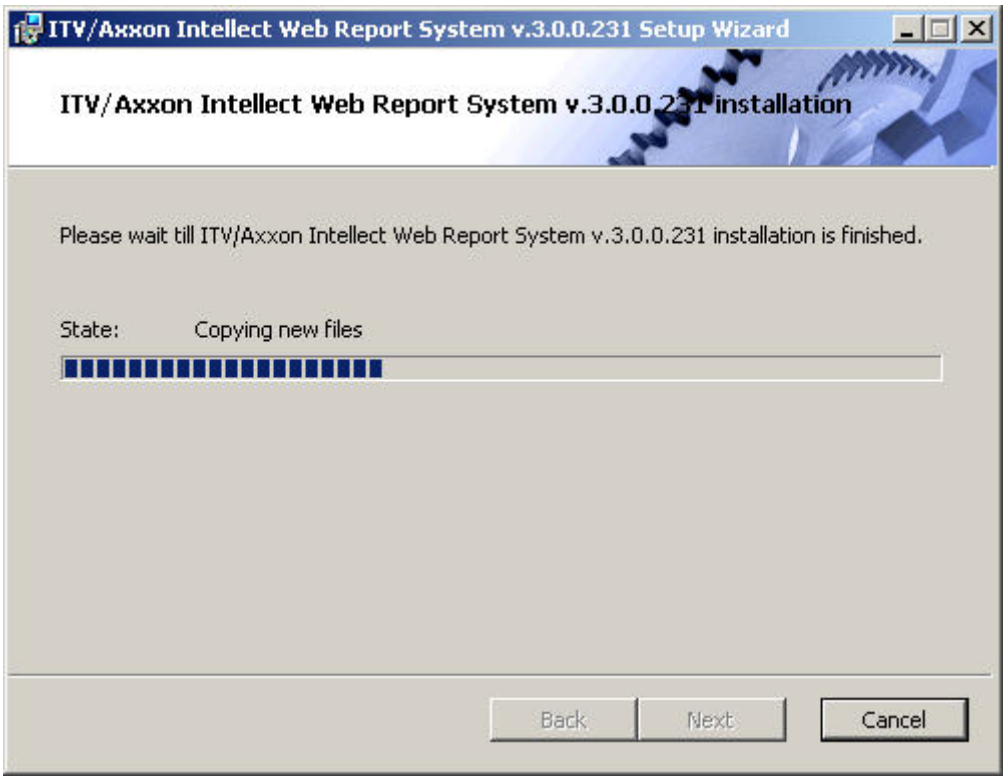
To update *Intellect Web Report System* do the following:

1. Start the ReportSystem.msi installation package.
   The dialog box of *Intellect Web Report System* updating is displayed.



2. Click **Next**.
   The **Selection DB server** box is displayed**.**
3. Repeat steps 4 and 5 of *Installation* part.

The dialog box of *Intellect Web Report System* updating is displayed.



When updating is finished the dialog box, where it's necessary to click **Ready**, is displayed.

Intellect Web Report System updating is completed.

> **Attention!**
>
> After *Intellect Web Report System* updating it's necessary to restart Intellect software package.

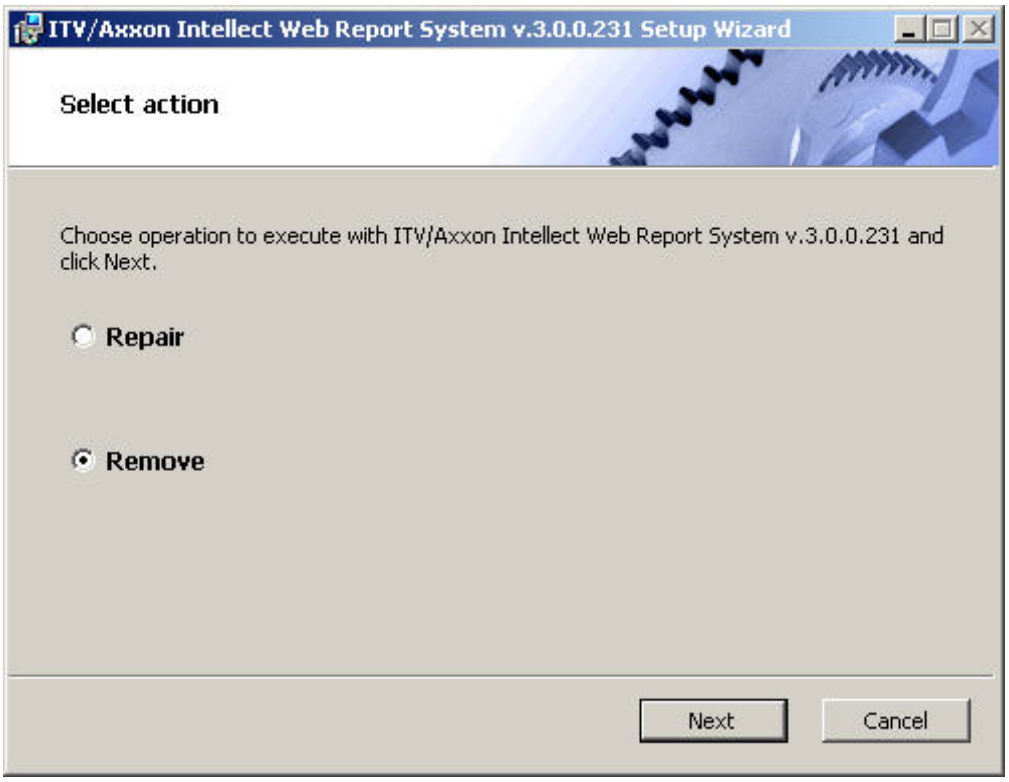
3.4 Removal

Intellect Web Report System installation wizard also operates in removing mode. This mode is necessary when you need to remove all *Intellect Web Report System* components on your Computer.

Starting removal is performed by using one of the following ways:

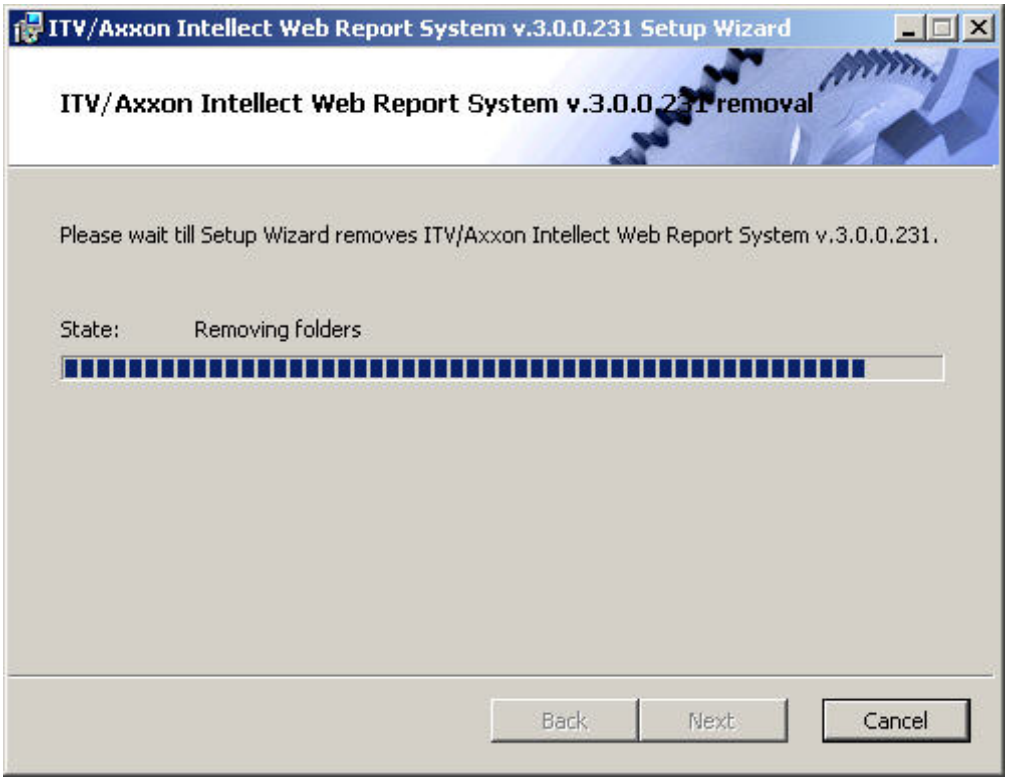
1. Using *Add or Remove Programs application* of Windows OS control panel;
2. Using ReportSystem.msi installation package.

As a result of one of these actions the dialog box of action selection is displayed.



Select **Remove** type and click **Next**.

The dialog box of removing process of *Intellect Web Report System* will be displayed.



When removing is finished the dialog box, where it's necessary to click **Ready**, is displayed.

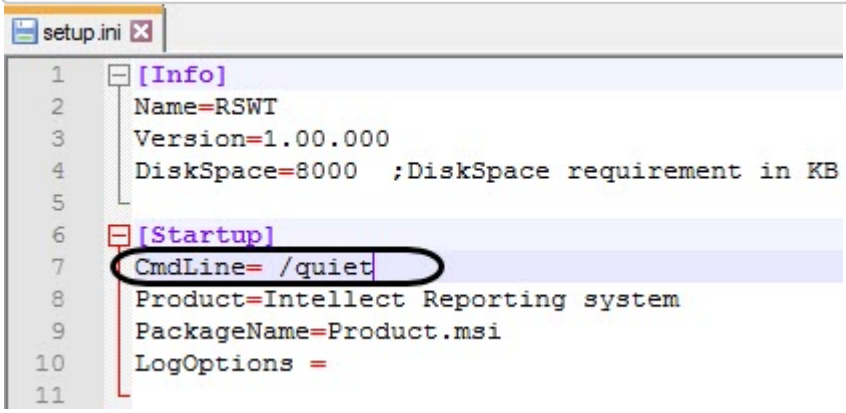
Intellect Web Report System removing is completed.

3.5 Installation in silent mode

It is possible to install *Intellect Web Report System* in silent mode. To do this, select one of the following options:

1. In the **setup.ini** file, located in the directory with the *Intellect Web Report System* distribution kit, specify the following:

```
CmdLine= /quiet
```



When you run the **Setup.exe** file, the *Intellect Web Report System* installation in silent mode will begin.

2. Go to the directory with the *Intellect Web Report System* distribution kit, and enter the following command at the Windows command prompt:

```
setup.exe /quiet
```

Immediately after running this command, the *Intellect Web Report System* installation in silent mode will begin.

4 Intellect Web Report System licensing

4.1 Activation key

Intellect Web Report System functionality is restricted by the activation key that is bundled with the *Intellect* installation kit.

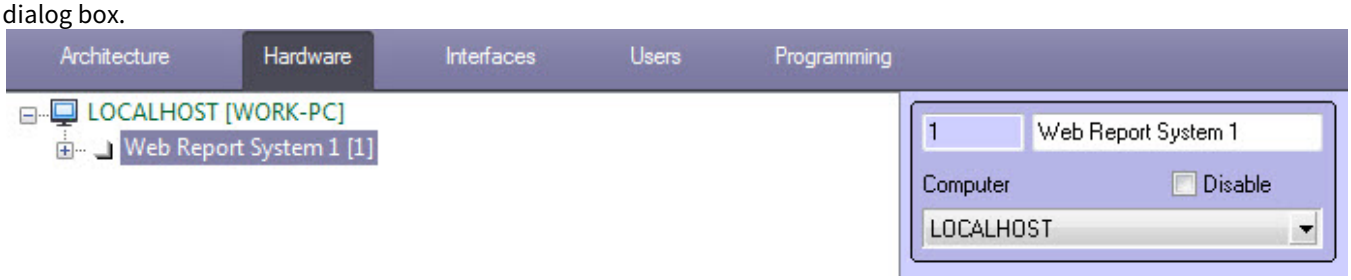
If the *Intellect Web Report System* is extended (for example if it is necessary to add some types of reports) then it is necessary to replace the previous activation key with a new one that will restrict the updated system functionality.

4.2 Activation of Intellect Web Report System functionality

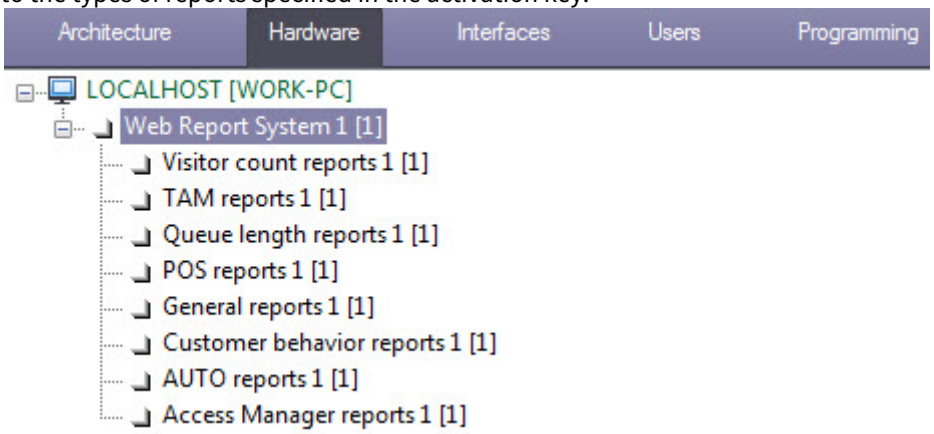
> **Attention!**
>
> The activation of *Intellect Web Report System* functionality is possible only if there is the corresponding activation key.

To activate *Intellect Web Report System* functionality do the following:

1. Start *Intellect*.
2. Create the **Web report system** object on the basis of the **Computer** object on the **Hardware** tab of the **System settings** dialog box.



3. Create the objects (**Visitor count reports**, **TAM reports**, **Queue length reports**, **POS reports**, **General reports**, **Customer behavior reports**, **AUTO reports**, **Access Manager reports**) on the basis of the **Web report system** object corresponding to the types of reports specified in the activation key.



Activation of *Intellect Web Report System* functionality is completed.

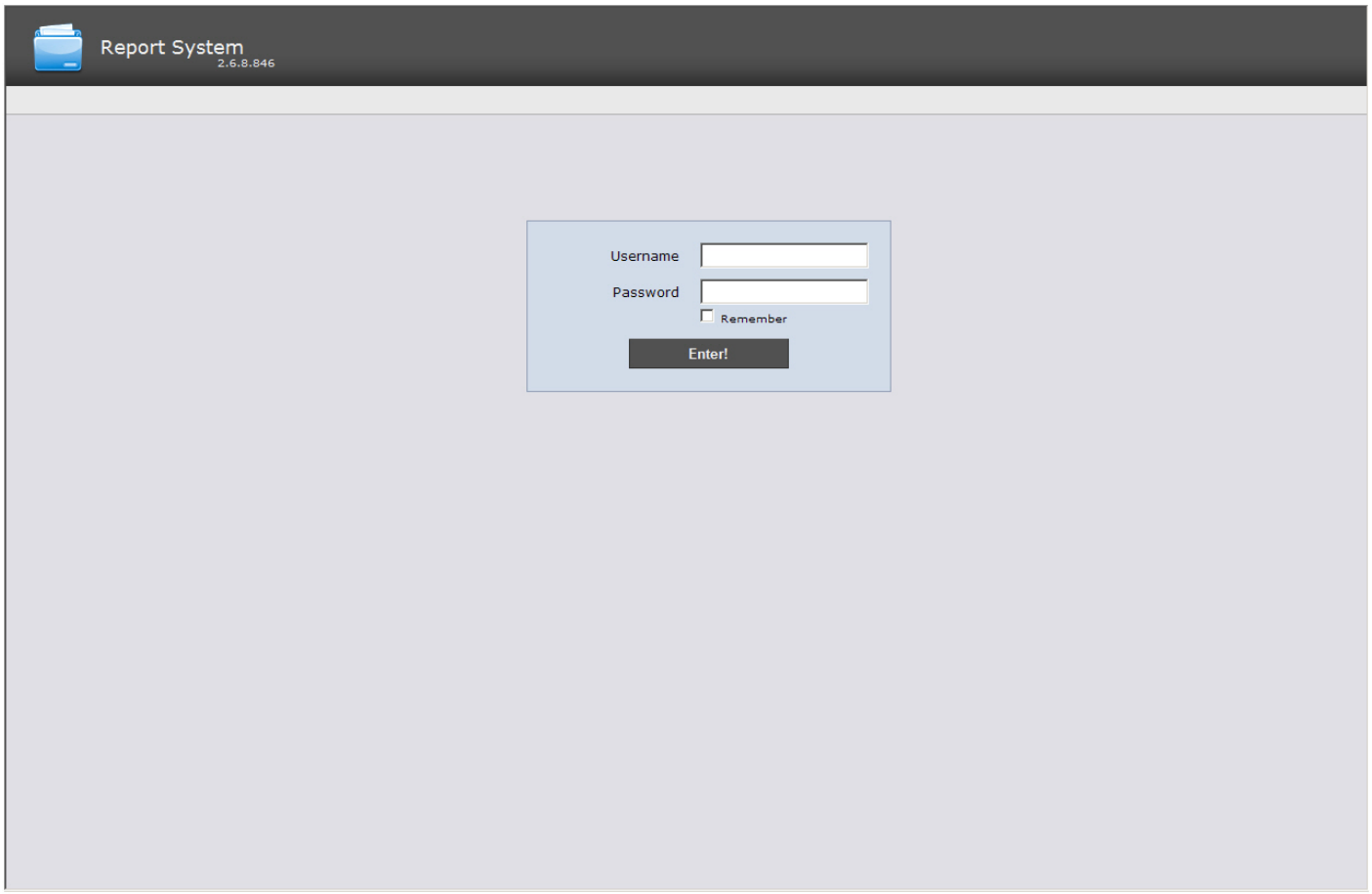
5 Intellect Web Report System startup and shutdown

5.1 Ways of starting

Starting of *Intellect Web Report System* is carried out in one of two ways:

1. If the Client coincides with the Web server – through the Start menu of Windows OS: Start -> All Programs -> Intellect -> Reports system;
2. On any Client – through the connection string of the browser: http://< Web server IP address>:8081/Reports.

As a result of one of these actions *Intellect Web Report System* authorization page is displayed.



5.2 Authorization

> **Note**
>
> The authorization page is displayed in the language selected in the browser by default or specified in **Web.config** file (see details in Change the Intellect Web Report System interface language).

For *Intellect Web Report System* authorization do the following:

1. Start *Intellect Web Report System in one of the available ways* (see Ways of starting).
2. Type the username, password.

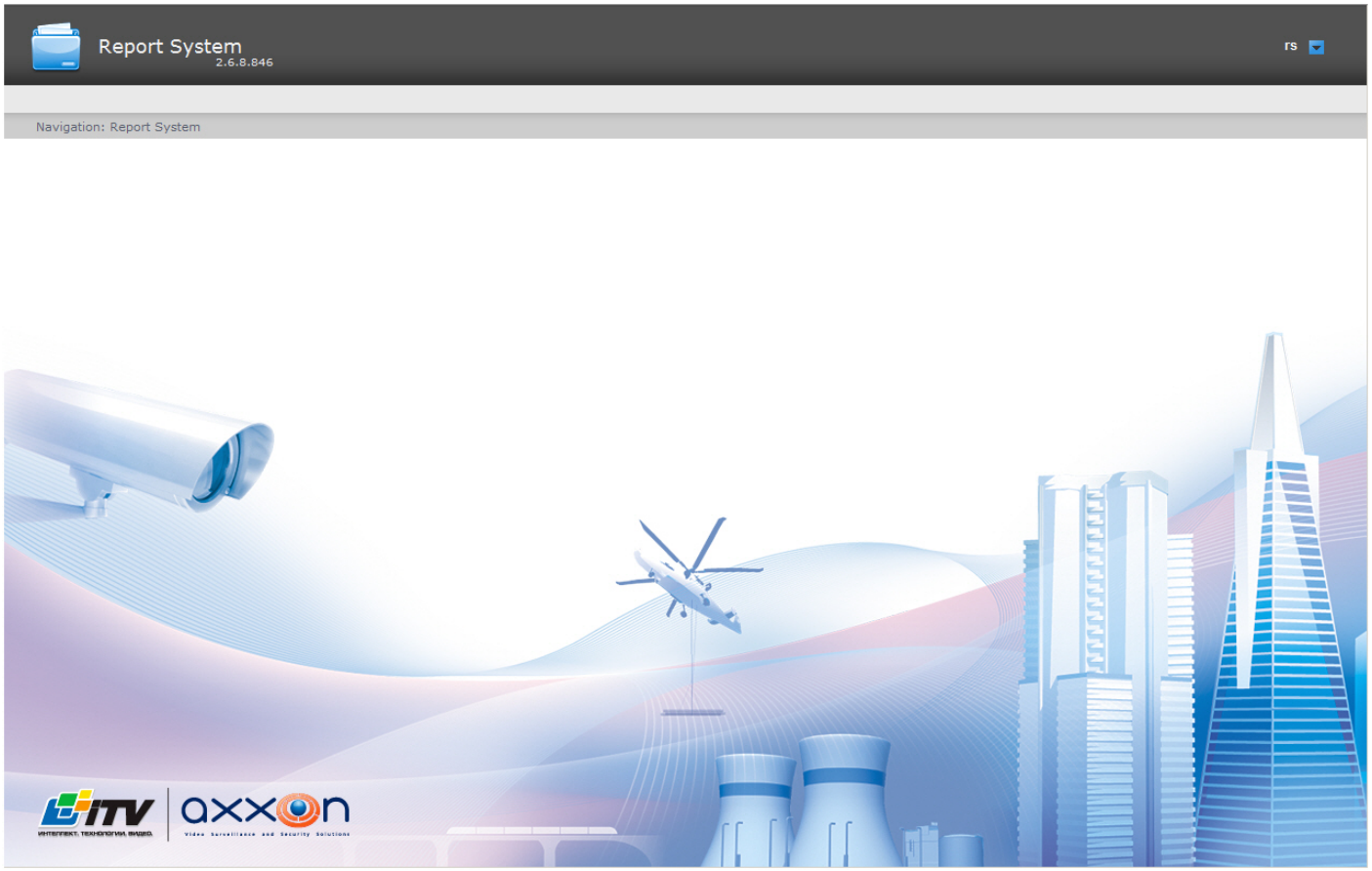
Note

Initial entry to *Intellect Web Report System* is under **rs** user who has administrative rights. In the **Username** and **Password** fields one should type **rs**. Further the administrator has to set the system for a multiuser mode (for more details see Set up the roles and users section).



3. Set the **Remember** checkbox if the automatic authorization in Report System (with parameters specified in the step 2) is required.
4. Click **Enter!**

As a result one goes on the *Intellect Web Report System* document page.



Note

The interface of the document page is described in Intellect Web Report System interface chapter.

5.3 Shutdown

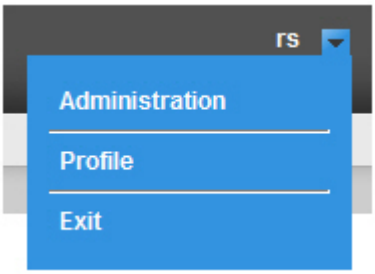
To shutdown *Intellect Web Report System* close the window in the browser.

5.4 User switching

One can quickly switch between user accounts of the *Intellect Web Report System*.

For this do the following:

1. In the right upper corner of the Web interface hover cursor over the current username or over  icon.



2. In the context menu select the **Exit** item.
3. *Intellect Web Report System* authorization box is displayed. Type the username under which one should enter the system, password and click **Enter** (see the Authorization chapter).

User switching is completed.

6 Intellect Web Report System interface

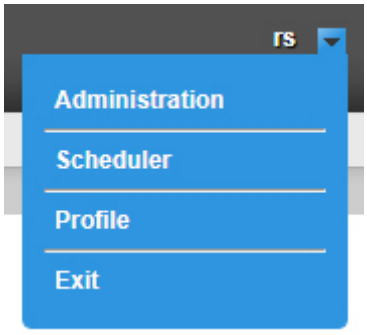
Intellect Web Report System interface consists of the following elements*:*

1. Context menu;
2. Reports page;
3. Administration page;
4. Scheduler page;
5. User profile page.

6.1 Context menu

Intellect Web Report System context menu is available both on the page of documents and on the administration page.

In order to display the context menu hover cursor over the current username in the right upper corner or over icon.



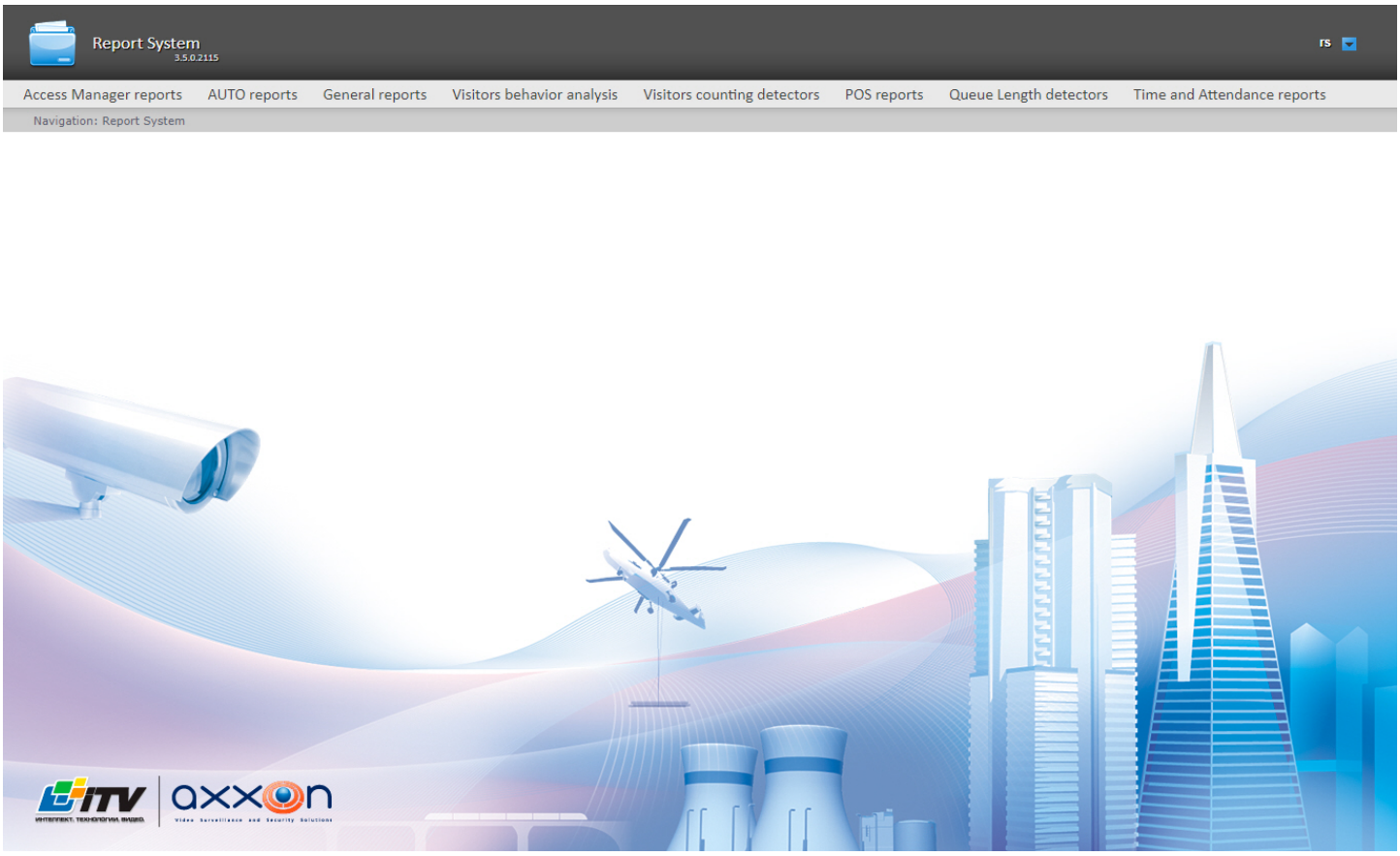
The following operations are available from the context menu:

1. Switch to the administration page – the **Administration** item is used;
2. Switch to the user scheduler page – the **Scheduler** item is used;
3. Switch to the user profile page – the **Profile** item is used;
4. Switch to the authorization page – the **Exit** item is used.

6.2 Reports page

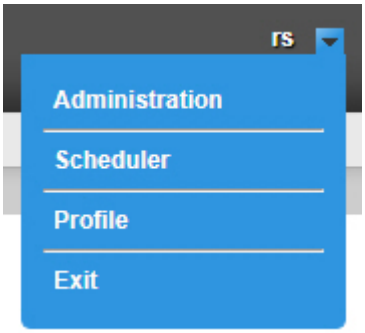
Reports page is displayed automatically after the authorization in *Intellect Web Report System*.

Besides the context menu the reports menu is also displayed on the reports page.

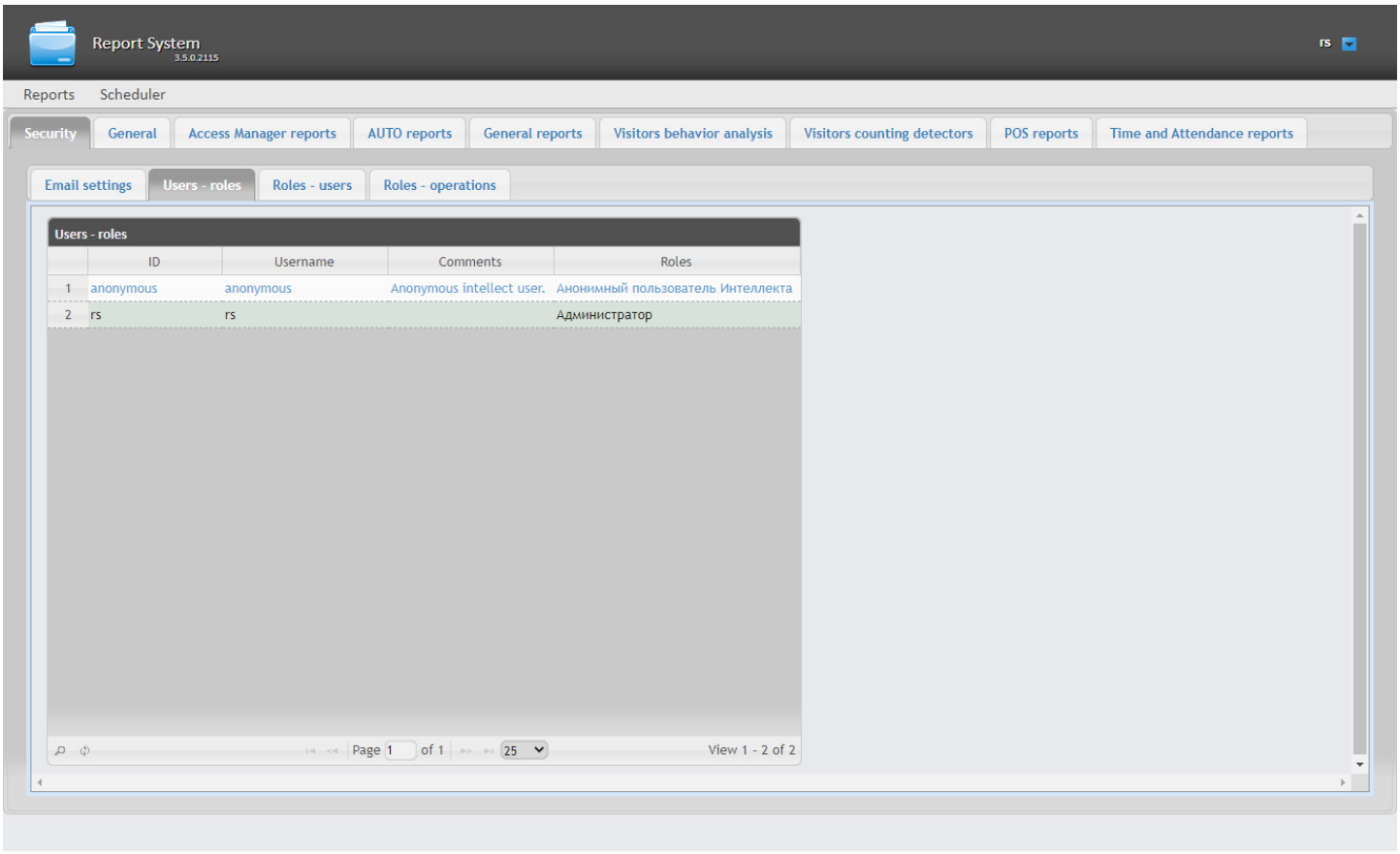


6.3 Administration page

Switch to the *Intellect Web Report System* administration page is carried out through the context menu by selecting the **Administration** item.

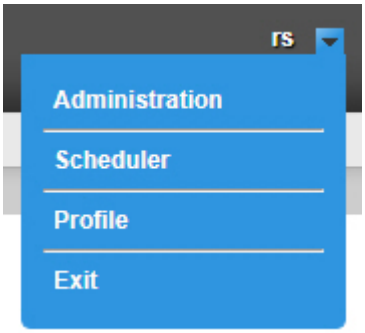


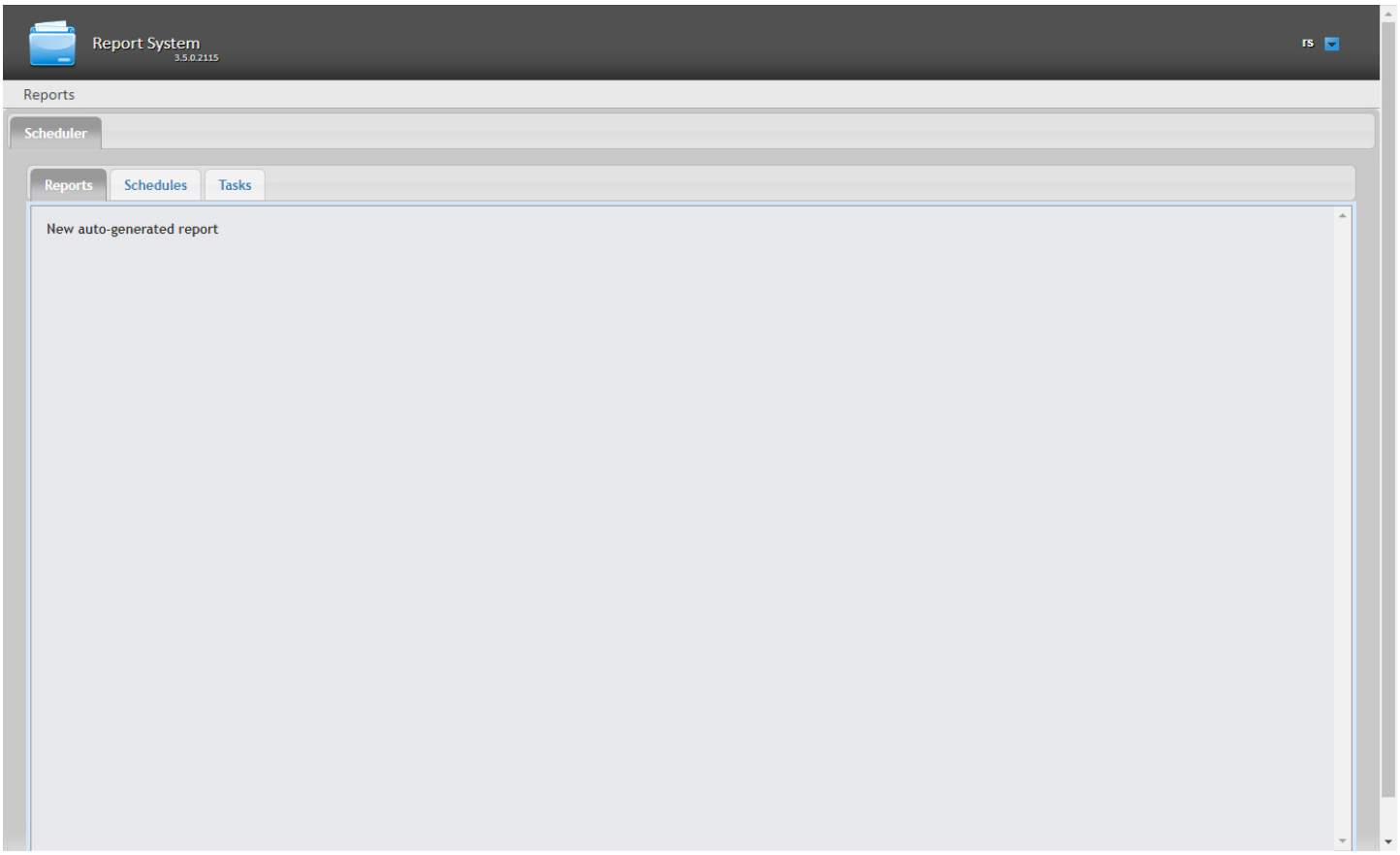
> **Note.**
>
> For some users this item can not be displayed (it depends on the availability of the administration rights).



6.4 Scheduler page

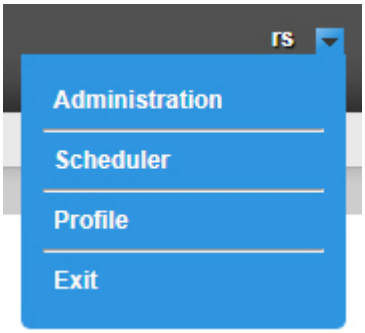
Switch to the *Intellect Web Report System* scheduler page is carried out through the context menu by selecting the **Scheduler** item.



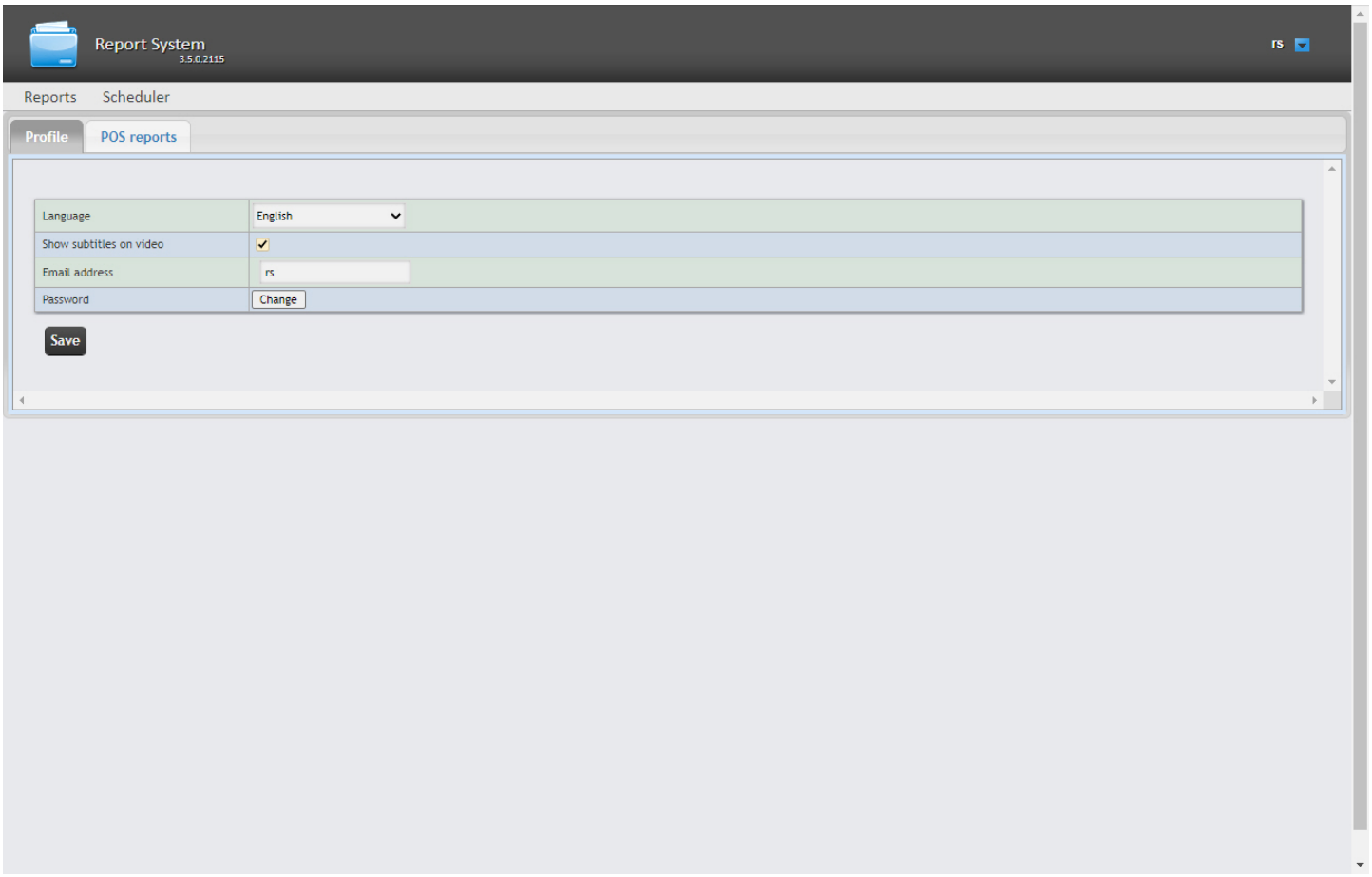


6.5 User profile page

Switch to the *Intellect Web Report System* user profile page is carried out through the context menu by selecting the **Profile** item.



Changing the interface language of *Intellect Web Report System* and others settings is performed in the user profile page.



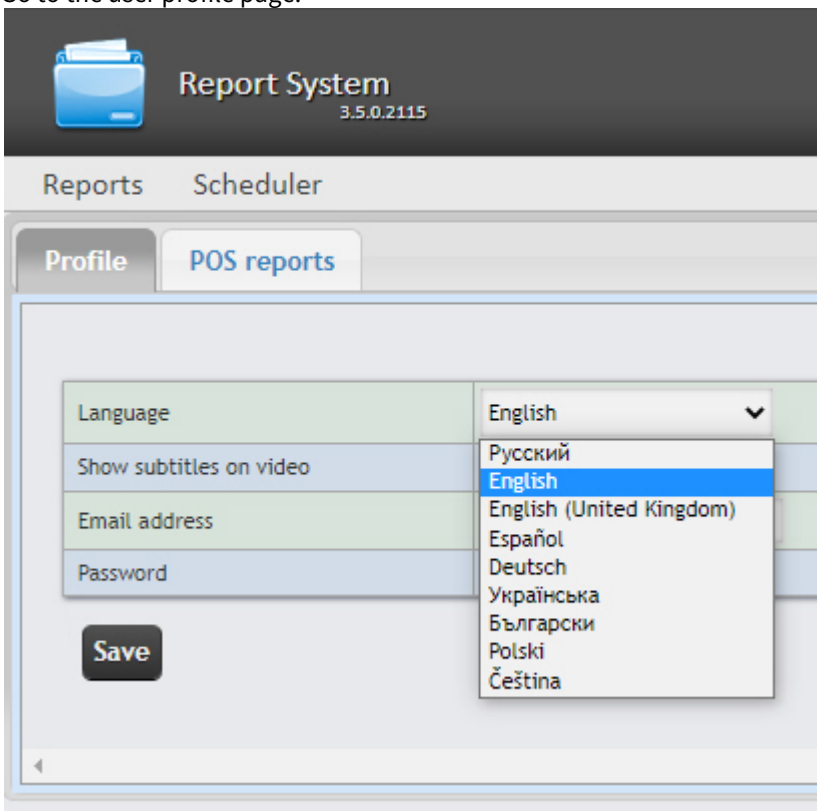
6.6 Change the Intellect Web Report System interface language

Important!

When changing the language of *Intellect Web Report System* interface, the language of interface of the authorized user is changed too. The authorization page (see Authorization) is displayed in the language selected in the browser by default. The language of the authorization page can also be changed in **Web.config** file located in <*Intellect* installation folder>\Modules\Wt2. For this specify the required value of available languages (en, en-GB, es, de, ru, uk, bg, pl) instead of "auto" value in the <globalization culture="auto" uiCulture="auto"/> line.

To change the interface language, do the following:

1. Go to the user profile page.



2. In the **Language** dropdown list select the required interface language (1).
3. Click **Save** (2).

Changing the interface language is completed.

> **Note**
>
> The selected interface language affects regional standards, specifically, in date and time formats which are used for report generation.
>
> The table below lists the date and time formats for all languages available in the subsystem.

Local	Data format	Time format
Русский	dd.mm.yyyy	24-hour
English	mm/dd/yyyy	12-hour
English (United Kingdom)	mm/dd/yyyy	24-hour
Español	dd/mm/yyyy	24-hour
Deutsch	dd.mm.yyyy	24-hour
Українська	dd.mm.yyyy	24-hour
Блъгарски	dd.mm.yyyy	24-hour

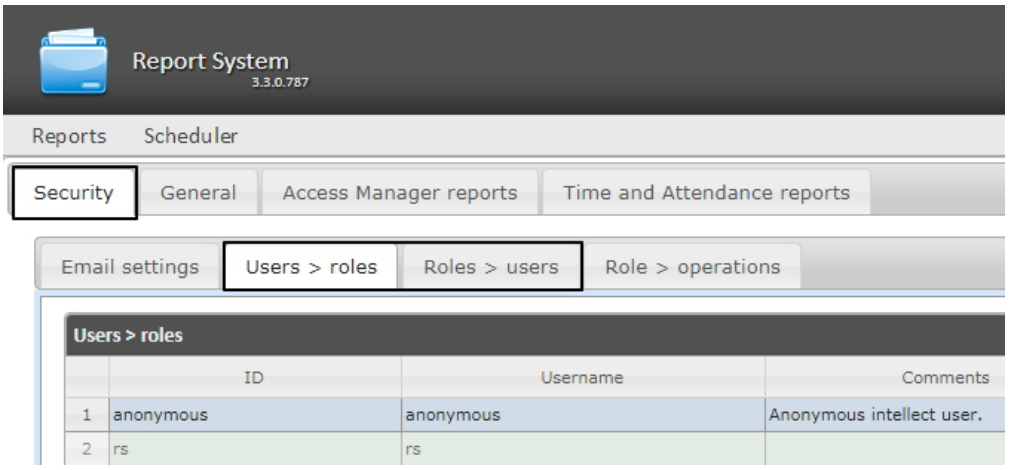
7 Intellect Web Report System administration

7.1 Set up the roles and users

Setting up the roles and users is carried out in the **Security** tab on the administration page.

7.1.1 Adding new users

The list of users of the *Intellect Web Report System* is available on the **Users > Roles** and **Roles > Users** of the **Security** tab**.**



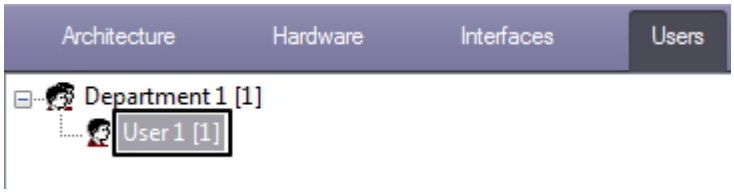
By default the *Intellect Web Report System* contains two users, **rs** and **anonymous**, none of which can be deleted.

The **rs** user in *Intellect Web Report System* performs the administrator functions, while **anonymous** is a dummy operator account.

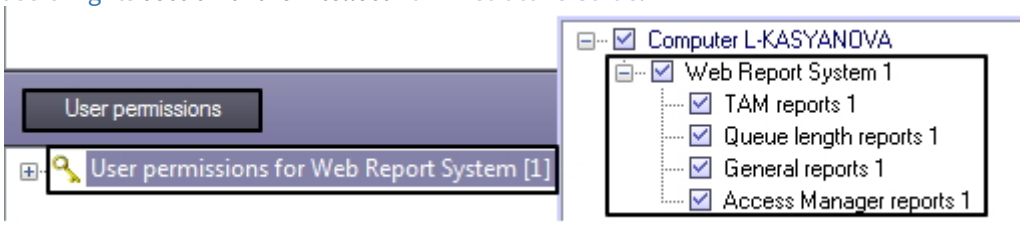
New users can be added to *Intellect Web Report System* by means of *Intellect* system settings only.

Adding a new user to *Intellect Web Report System* is performed in the following way:

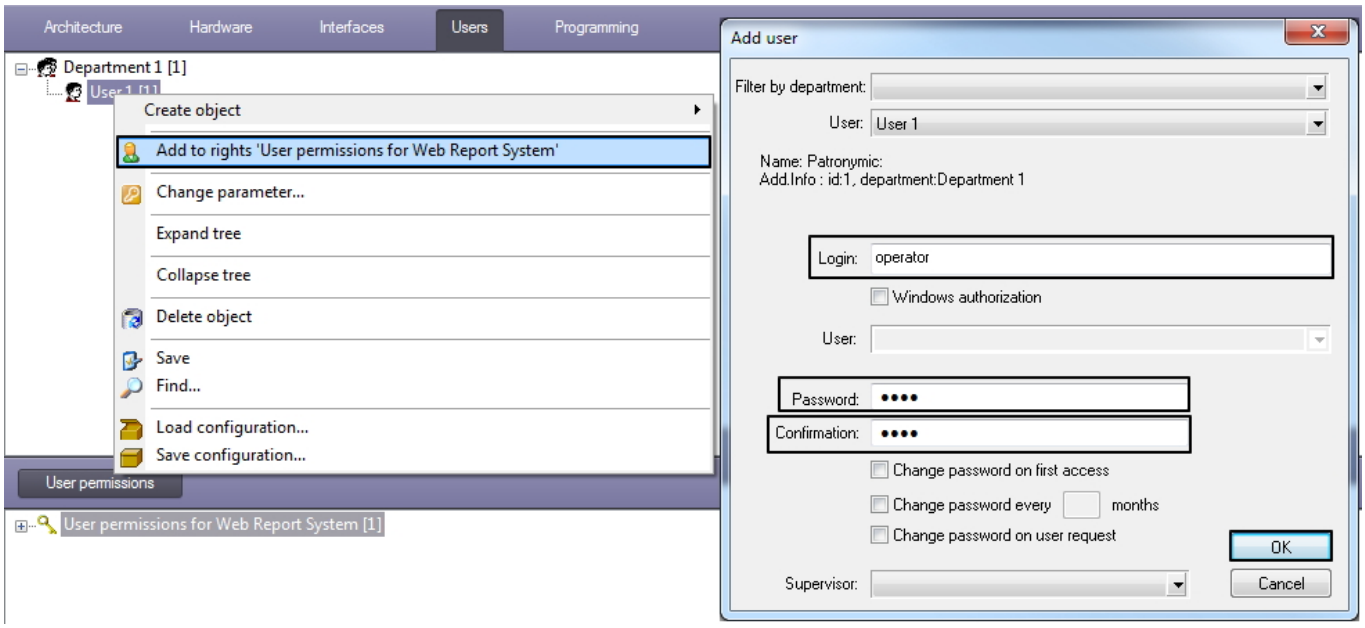
1. Registration of an new user in *Intellect.* This procedure is described in detail in the User registration and removal section of the *Intellect* Administrator's Guide.



2. Registration of the right to use *Intellect Web Report System.* This procedure is described in detail in the Registration of users' rights section of the *Intellect* Administrator's Guide.



3. Assigning the right to to use *Intellect Web Report System* to the new user. This procedure is described in detail in the Assigning the rights and password to operators for authorization in the Intellect section of the *Intellect* Administrator's Guide.



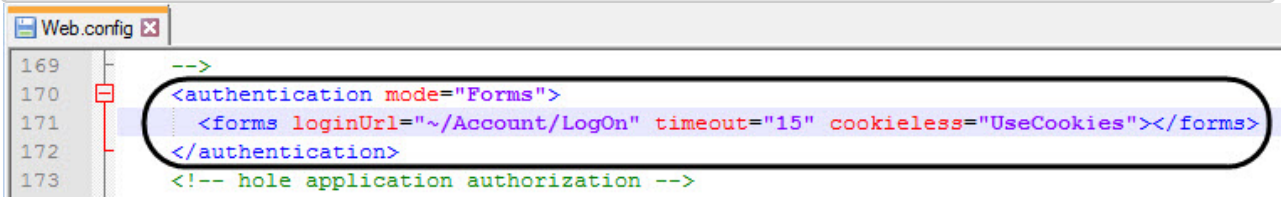
Note

It is recommended to take into account the following specifics while adding a new *Intellect Web Report System* user by means of *Intellect:*

a. The **anonymous** user is a dummy operator account. Once the first operator will be created with *Intellect,* the dummy will be replaced with the account data of the first added user.
b. The user login in *Intellect Web Report System* is similar to the login assigned to the user when he is granted the right in *Intellect*.
c. The username and login are subject to the same rules as the Windows login.

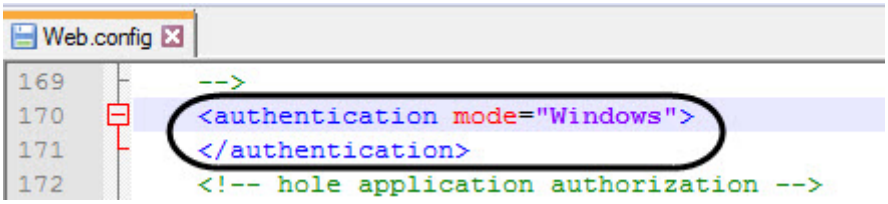
4. If the **Windows Authorization** method was selected, then do the following:
   a. Go to the <*Intellect* installation directory>\Modules\Wt2 and open the **Web.config** file for editing.
   b. Replace the following strings:

```
<authentication mode="Forms">
<forms loginUrl="~/Account/LogOn" timeout="15" cookieless="UseCookies"></forms>
</authentication>
```

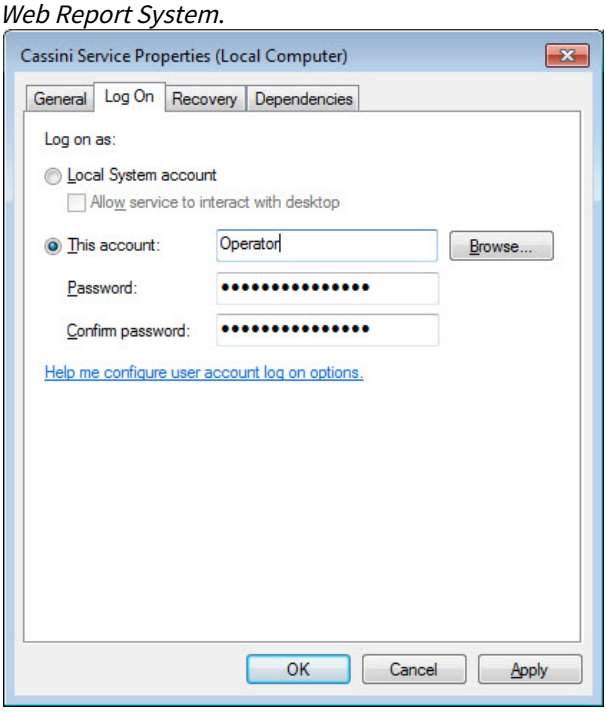


with the following strings:

```
<authentication mode="Windows">
</authentication>
```



c. Save the changes in the **Web.config** file.
d. Log in to Windows with the user account under which you are planning to work with the *Intellect Web Report System*.
e. Restart the **Cassini Service** utility with the user account under which you are planning to work with the *Intellect Web Report System*.

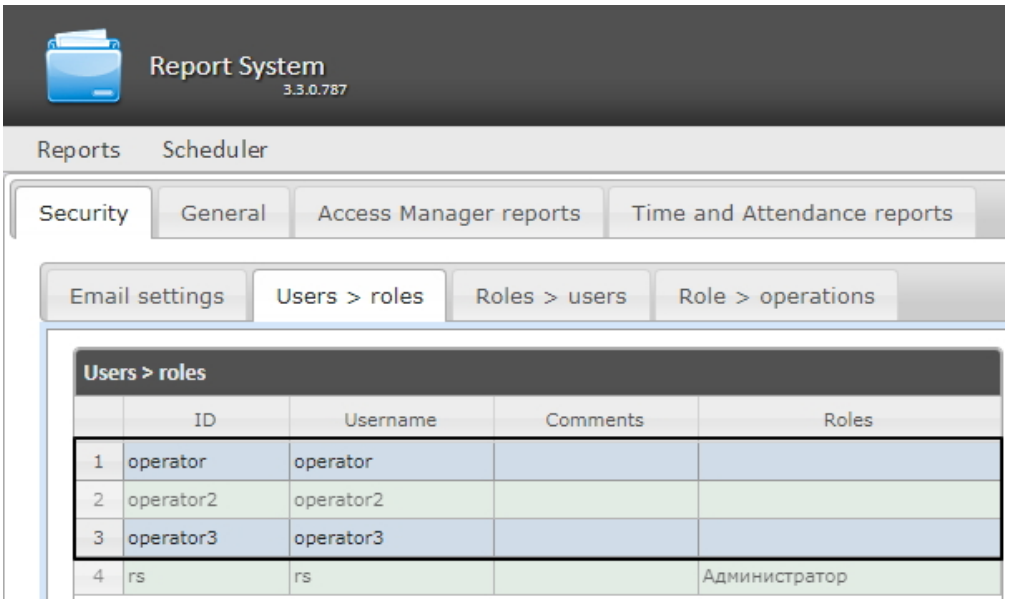


> **Note**
>
> If it is planned to work with the *Intellect Web Report System* by several users, then after each authorization in Windows of another user, it is necessary to restart the **Cassini Service** with the required user account.

f. As a result, when you open the *Intellect Web Report System* in the browser, you will be automatically logged in under the specified Windows user account.

> **Note**
>
> - If no user is added to the *Intellect* user rights, then by default this user is assigned the **Administrator** role.
> - If there is at least one user in *Intellect*, and this user is not the one which was used in Windows authorization, then this user will not have access to the Administration panel.
> - If there is a user in *Intellect* who is logged using Windows authorization, but not given access to the *Intellect Web Report System*, then this user will not have access to the Administration panel.

Any required number of users may be added to *Intellect Web Report System* in this manner.



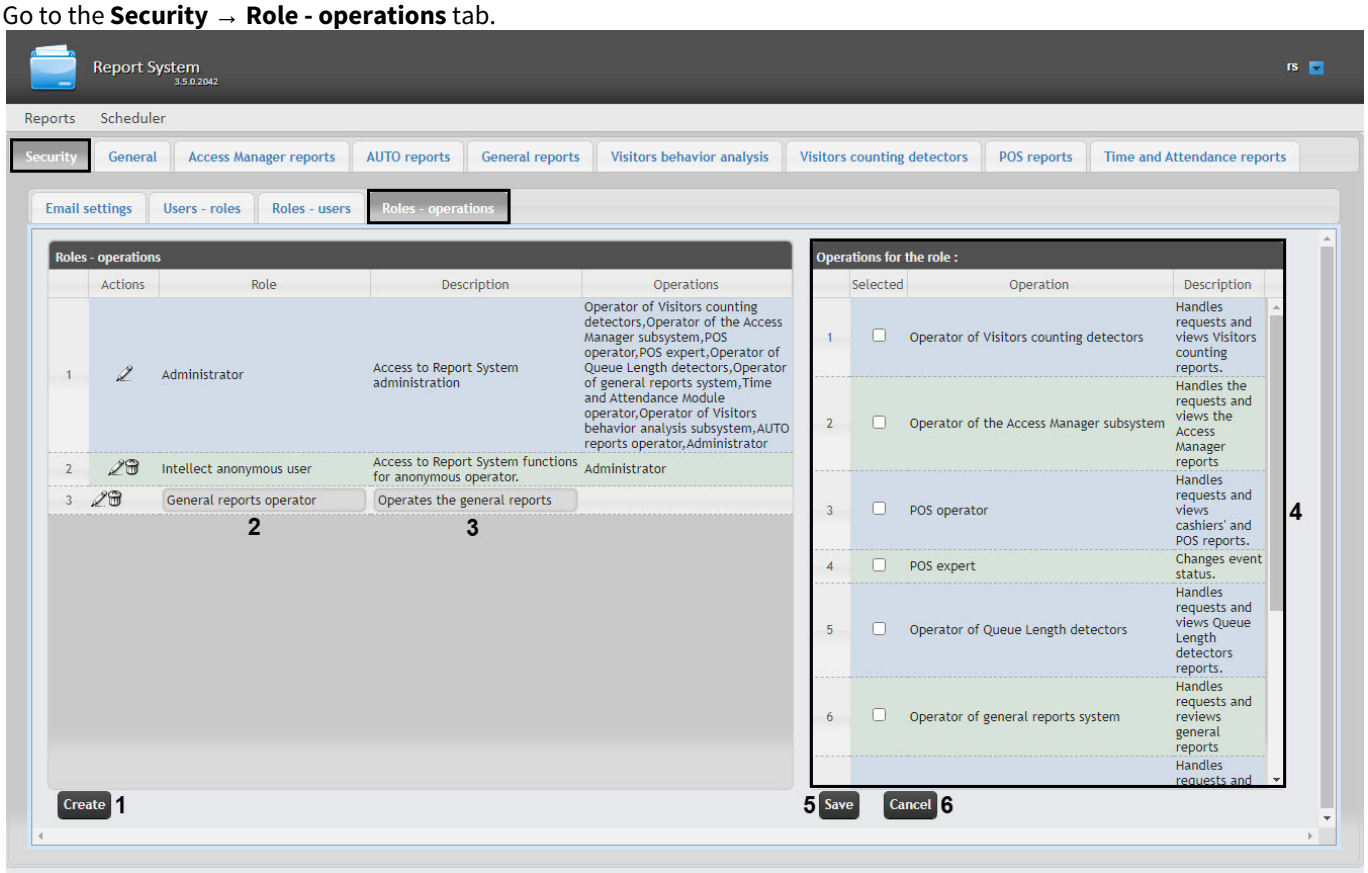
7.1.2 Set up the roles

Setting up the roles is carried out in the **Roles > operations** nested tab of the **Security** tab.

7.1.2.1 Role registration

In order to register a new role in *Intellect Web Report System* do the following:

1. Go to the **Security** → **Role - operations** tab.



2. Click **Create** (**1**).
3. As a result a new line will be added to the **Role - operations** table. Fill in its fields:

a. In the **Description** field type a brief description of the operations that will be available to the users with a new role (**3**).

> **Note.**
>
> This field is optional for filling in.

b. In the **Role** field type the name of a new role (**2**).

4. In the **Operations for the role** table (**4**) in the **Selected** column set checkboxes for those operations that should be solved by users with a new role.

> **Note.**
>
> It is recommended to study the description of operations beforehand in the **Description** column of the same table.

5. In order to register a role click **Save** (**5**).

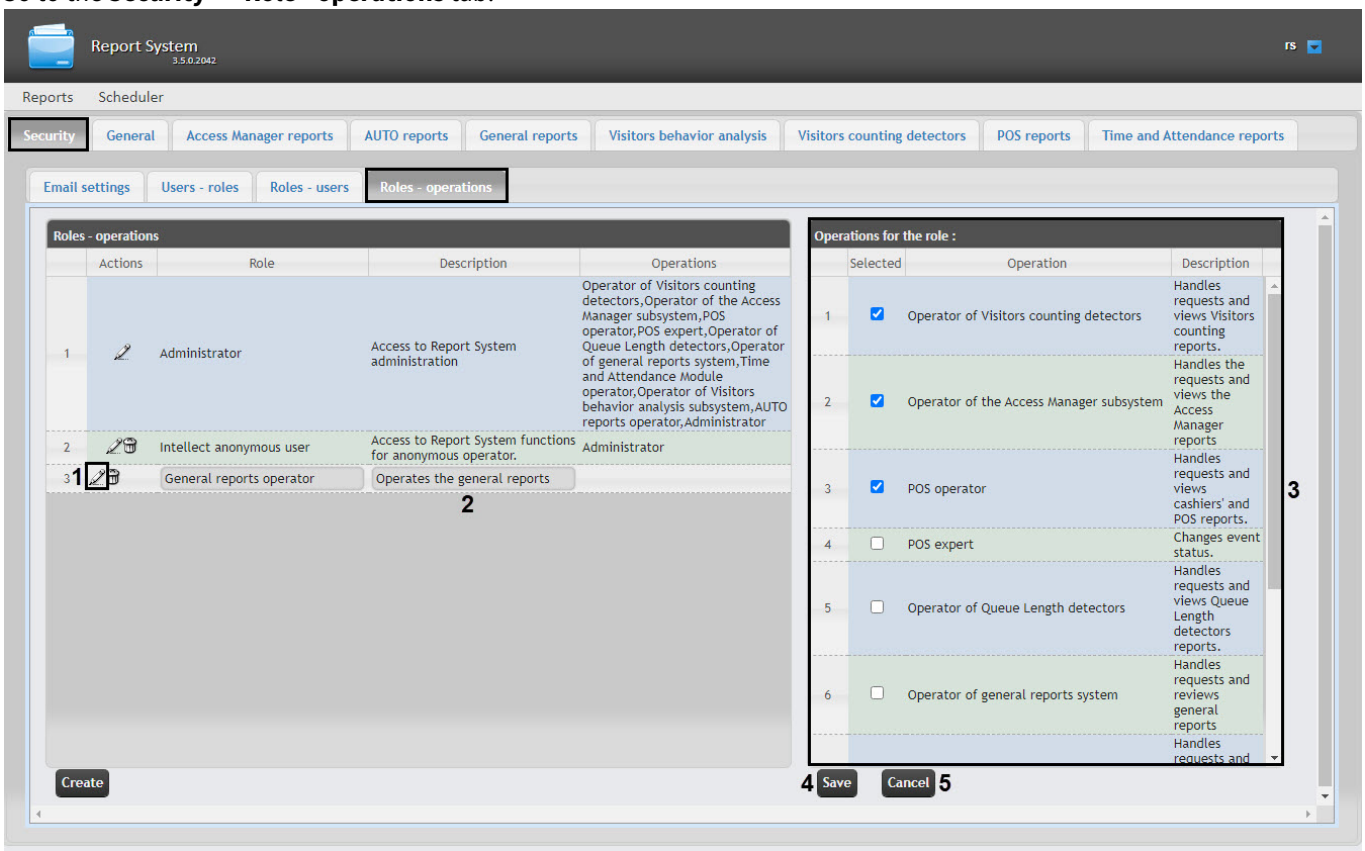
> **Note.**
>
> In order to cancel the registration of a new role click **Cancel** (**6**).

Role registration in *Intellect Web Report System* is completed.

7.1.2.2 Role editing

In order to edit a role do the following:

1. Go to the **Security** → **Role - operations** tab.



2. For the required role click  button in the **Actions** column of the **Role - operations** table (**1**).

3. As a result you will be able to edit some role parameters. For example:
    a. In the **Description** field one can edit a brief description of operations that will be available for users with this role (**2**).
    b. In the **Operations for the role** table (**3**) in the **Selected** column one can edit the list of operations that should be solved by users with this role by setting or deselecting the corresponding checkboxes.
    c. In order to save the changes in role parameters click **Save** (**4**).

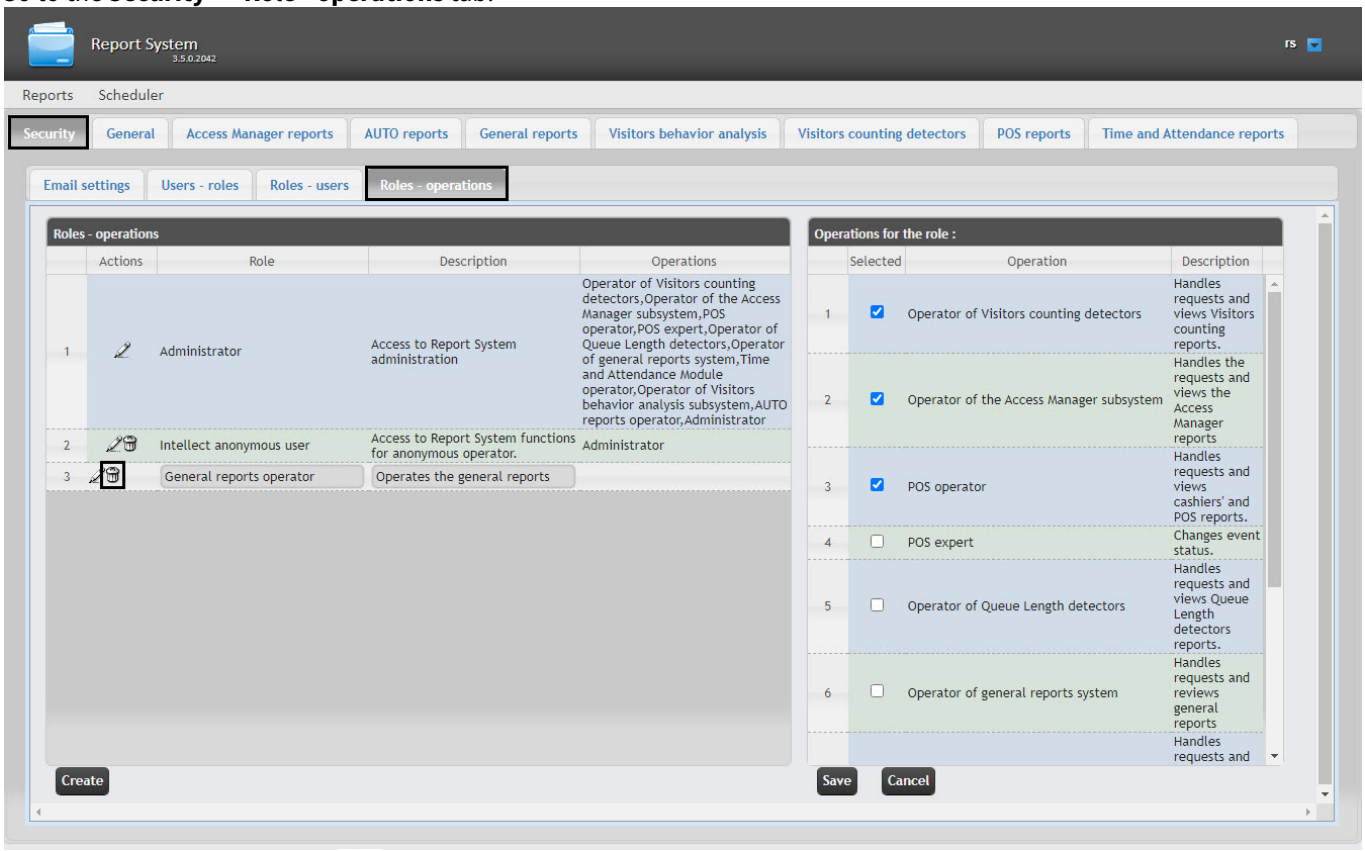
> **Note.**
>
> In order to cancel the changes in the role click **Cancel** (**5**).

Role editing is completed.

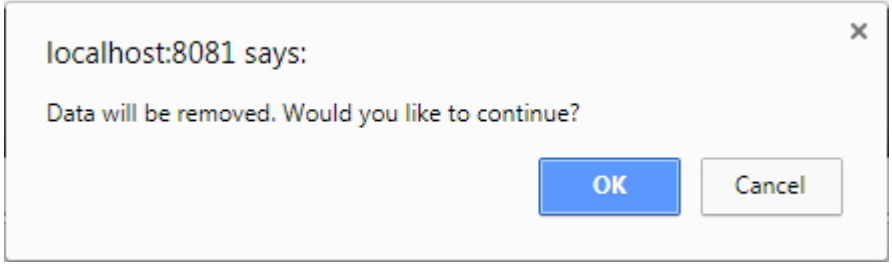
7.1.2.3 Role removal

In order to remove the role, do the following:

1. Go to the **Security** → **Role - operations** tab.



2. For the required role click the  button in the **Actions** column of the **Role - operations** table.
3. In the appeared box confirm the role removal by clicking **OK**.



Role removal is completed.

7.1.3 Configure roles and users compliance

Roles and users compliance is confugured on the **Security** tab of the administration page. It can be carried out in two ways:

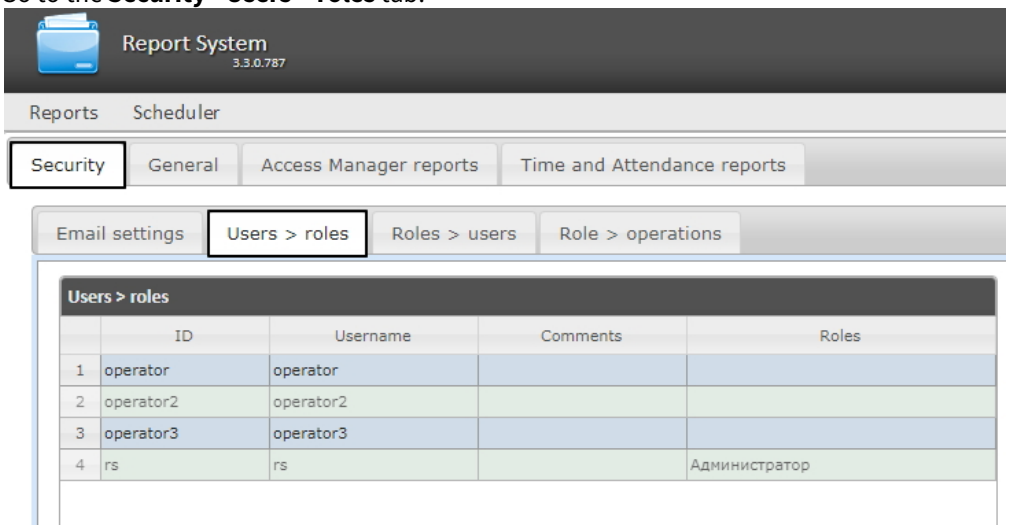
1. If the roles are assigned to a user, then the **Users > roles** tab is used.
2. If the users are added to a role, then the **Roles > Users** tab is used.

The choice of method is due to the convenience of administration.

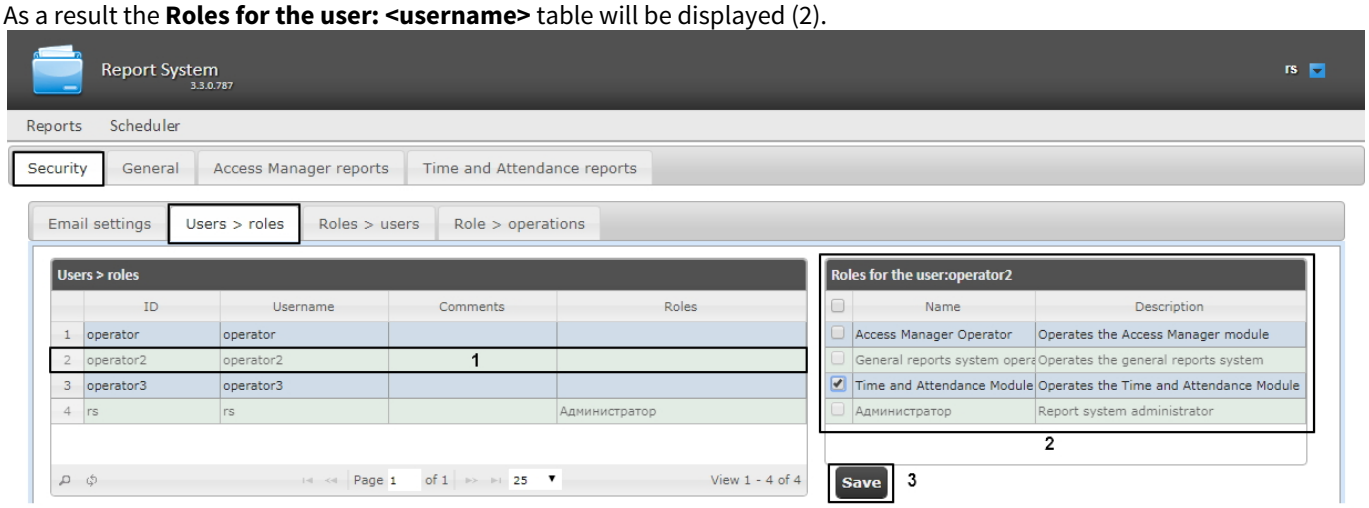
7.1.3.1 Assigning the roles to the user

In order to assign the roles to the user do the following:

1. Go to the **Security >Users > roles** tab.



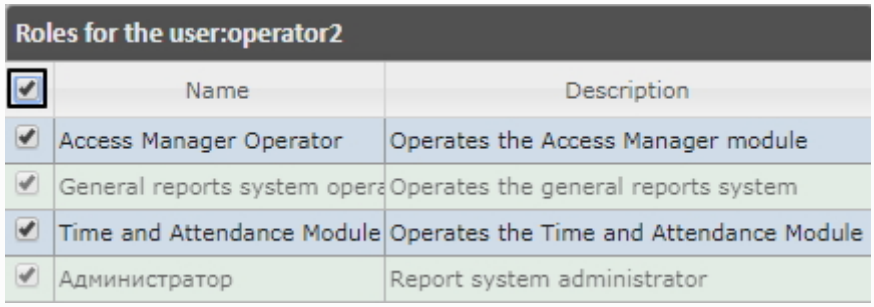
2. Left-click the required user (1).
3. As a result the **Roles for the user: <username>** table will be displayed (2).



4. Check or uncheck the required roles in the list to assign them to the selected user.

Note.

To assign all possible roles to the user set the checkbox in the table head at the **Name** field.



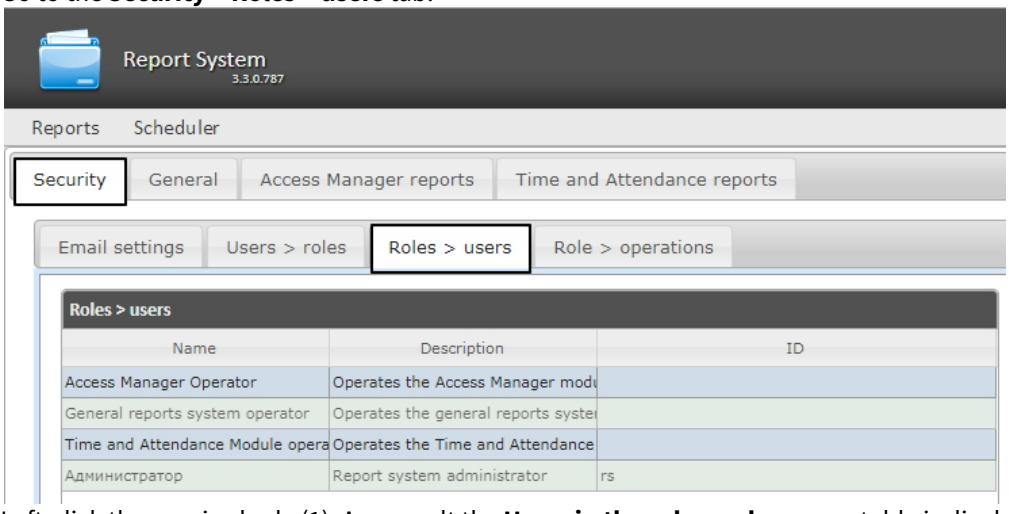
5. Click **Save** to save the changes (3).

Assigning the roles to the user is completed.

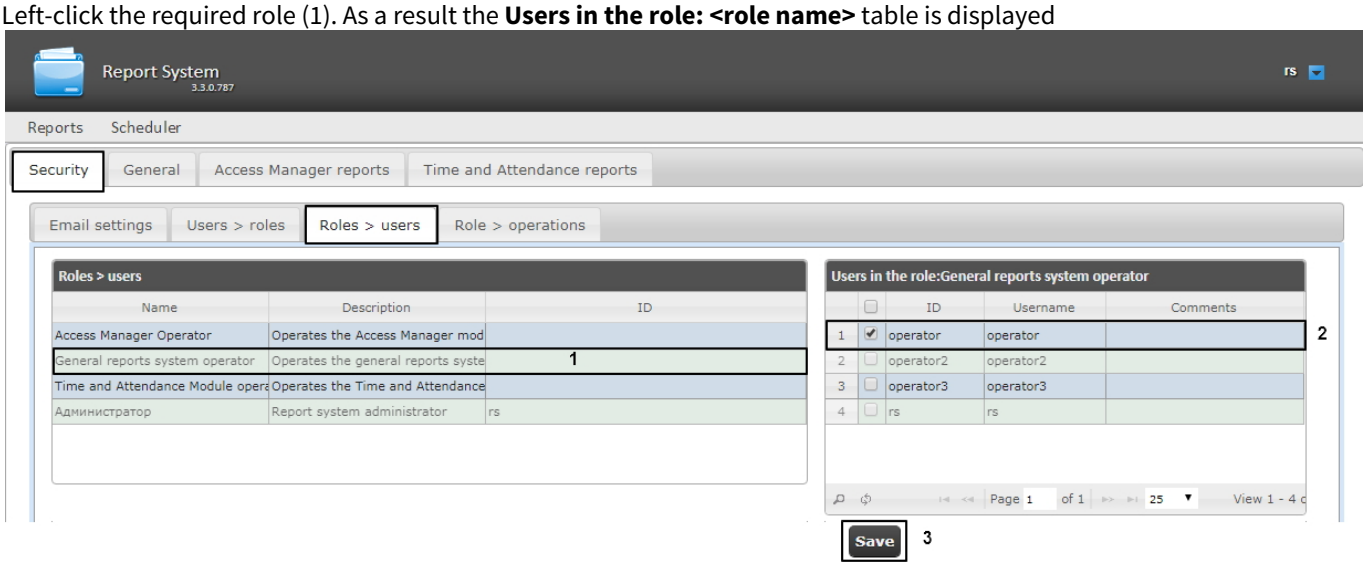
7.1.3.2 Adding the users to the role

In order to add the users to the role do the following:

1. Go to the **Security > Roles > users** tab.



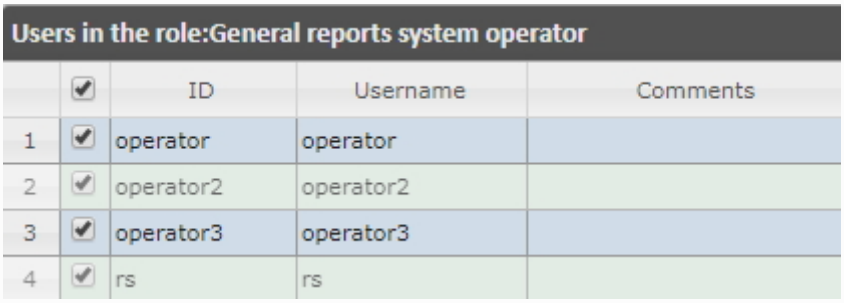
2. Left-click the required role (1). As a result the **Users in the role: <role name>** table is displayed



3. Change the list of users added to the role by setting or deselecting the corresponding checkboxes (2).

Note.

To add all possible users to the role set the checkbox in the table head at the ID field.



4. Click **Save** (3).

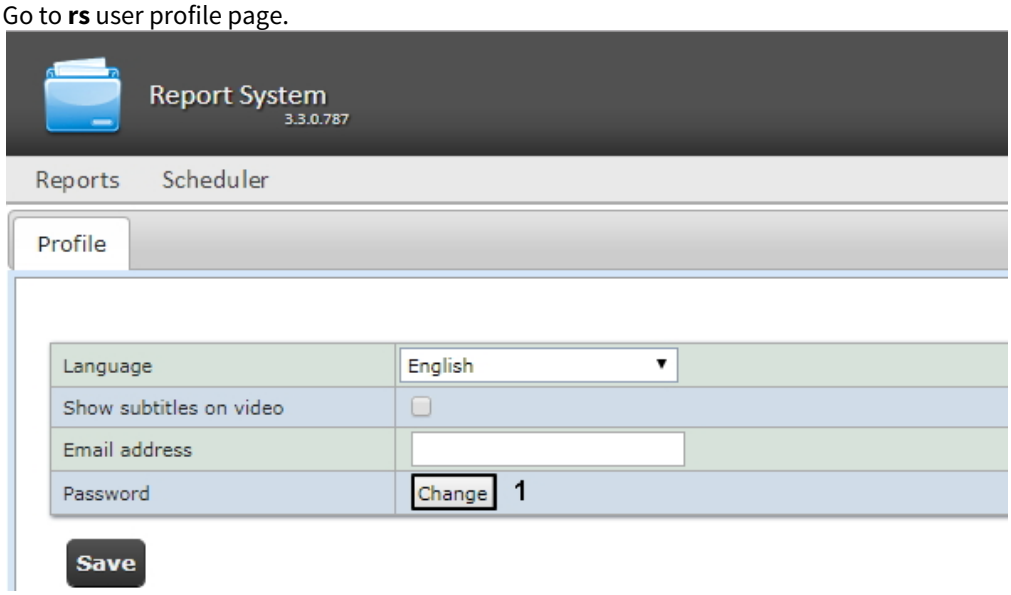
Adding the users to the role is completed.

7.1.4 Change the administrator password

The password can be changed in the **Profile** page only for the **rs** user, which is the overall administrator of the subsytem. Password changing for other users is performed only on the **Users** tab of the *Intellect* software.

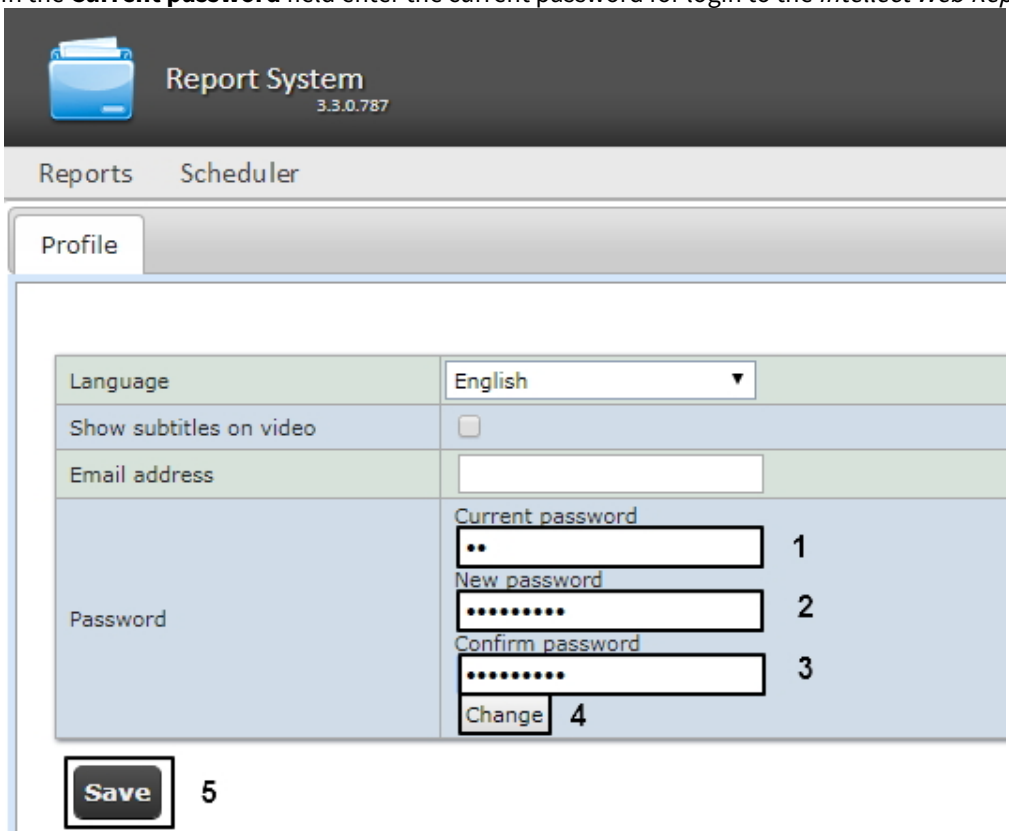
To change the password for **rs** user login to the *Intellect Web Report System* subsystem, do the following:

1. Go to **rs** user profile page.



2. In the **Password** field click the **Change** button (1).

3. In the **Current password** field enter the current password for login to the *Intellect Web Report System* (1).



4. In the **New password** field enter the new password for login to the *Intellect Web Report System* (2).
5. In the **Confirm password** field enter again the new password (3).

> **Attention!**
>
> The new password should contain at least 6 symbols.

6. Click the **Change** button (4).
7. Click the **Save** button to save changes (5).

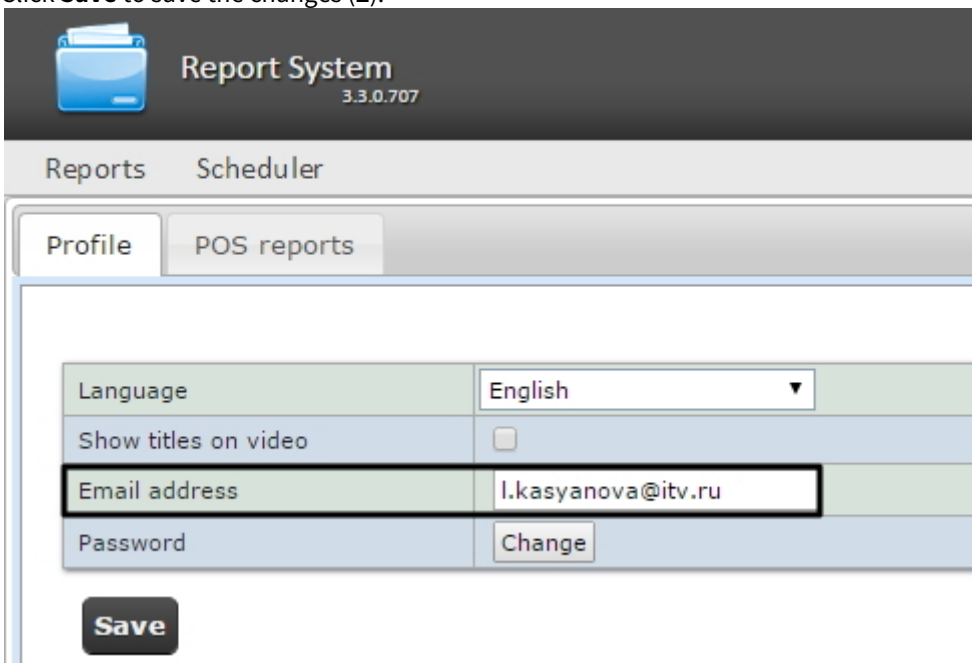
Changing the password for **rs** user is completed.

7.1.5 Setting up the user email

To set up the user email address in the *Intellect Web Report System*, do the following:

1. Switch to the user profile page.
2. Enter the email address of the current user in the **Email address** field (**1**).

3. Click **Save** to save the changes (**2**).



User email setup is complete.

7.2 Setting up Intellect Web Report System operation in the automatic mode

7.2.1 Intellect Web Report System setting up procedure in the automatic mode

Setting up the *Intellect Web Report System* operation in the automatic mode is carried out in the **Scheduler** tab on the administration page.

The following succession is recommended while setting up:

1. On the **Security** > **Email settings** tab setup the SMTP Server used for sending the auto-generated reports.

   > **Note.**
   >
   > This step can be missed if there is no need to send the reports by e-mail in the automatic mode.

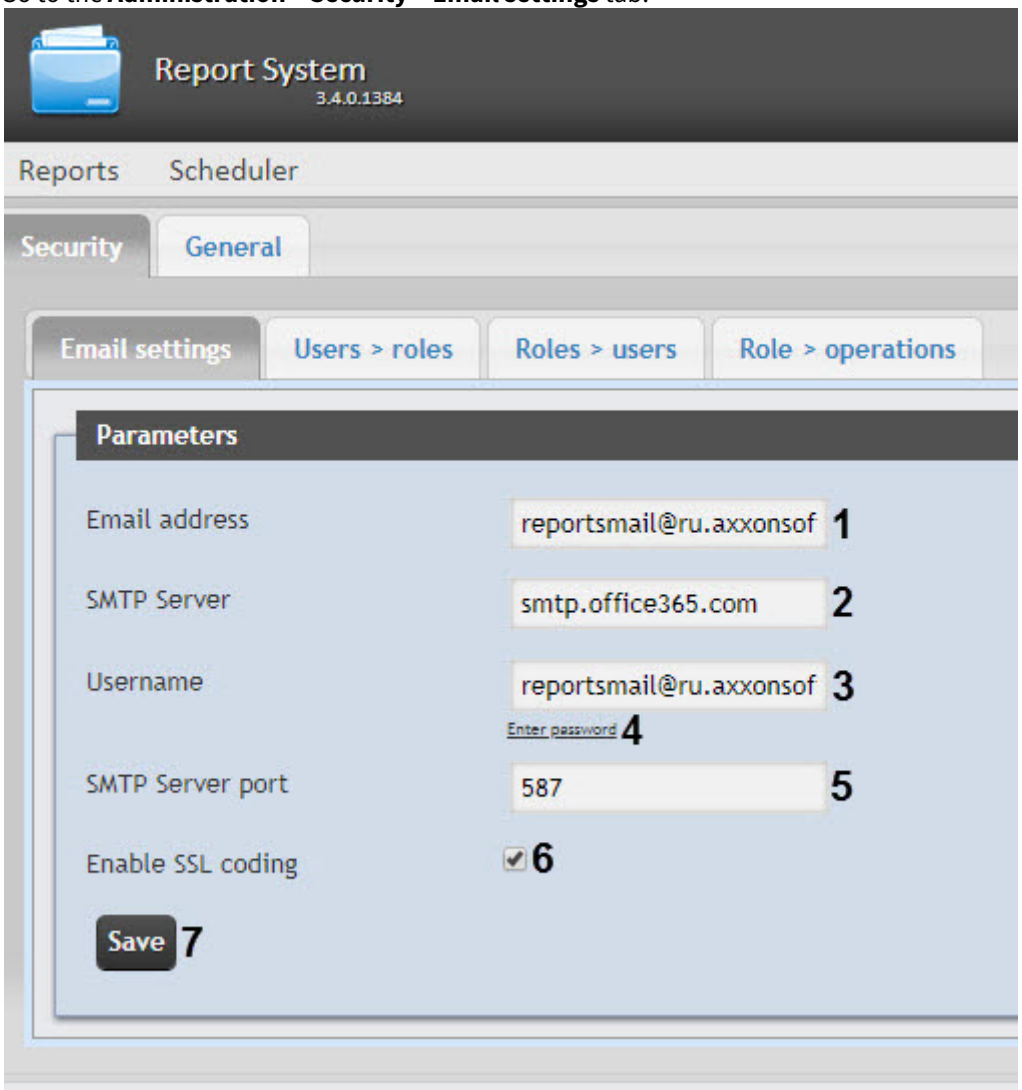
2. On the **Reports** tab create the list of auto-generated reports.
3. On the **Schedules** tab setup the schedule of *Intellect Web Report System* operation in the automatic mode.
4. On the **Tasks** tab create the tasks for auto-generating the reports. Start their execution.

7.2.2 SMTP Server setup

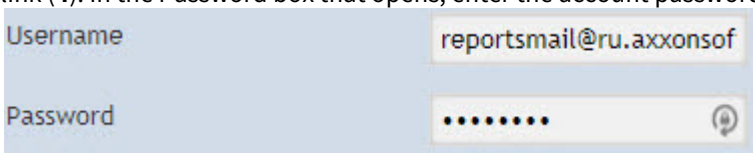
Setting up the SMTP server for sending the autogenerated reports via email is performed in the **Administration** > **Security** section.

In order to set up the SMTP server, do the following:

1. Go to the **Administration** > **Security** > **Email settings** tab.



2. In the **Email address** field (**1**) type the e-mail address from which the auto-generated reports will be sent.
3. In the **SMTP Server** field (**2**) enter the name of SMTP Server.
4. In the **Username** field (**3**) enter the name of account used for sending the messages to SMTP Server.
5. Specify the password of the account used for sending the messages to SMTP Server. For this, click the **Enter password** link (**4**). In the Password box that opens, enter the account password.



6. In the **SMTP Server port** field (**5**) enter the port number used by SMTP Server.
7. If the SSL encoding is required to connect to the SMTP Server, then set the **Enable SSL coding** checkbox (**6**).
8. Click **Save** (**7**).

> **Note**
>
> You can also set up the SMTP server directly using the **web.config** configuration file which is located in the <*Intellect* installation directory>\Modules\Wt2\App_Data\Mail\ directory (see XML-file parameters reference guide).

SMTP Server setup for autogenerated reports sending via email is completed.

7.2.3 Auto-generated reports setup

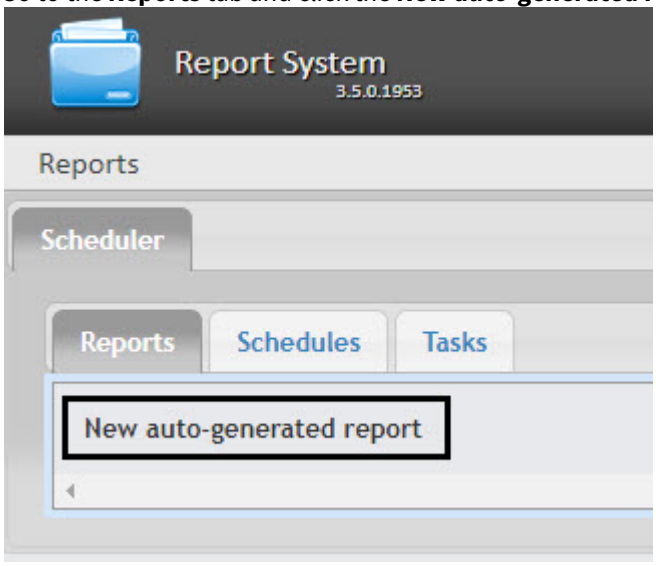
One can assign and setup the reports that will be auto-generated on the schedule.

> **Note.**
>
> Schedule setup is given in details inSetting up the schedule of operation in the automatic mode. The connection between the report and the schedule element is setup at the final stage when the task is created (see the Setting up the automatically executed tasks chapter).
>
> Auto-generated scheduled reports may be created by the adminisrator of the system (the **rs** user), as well as by ordinary users, given that they have the roles with the required operations.

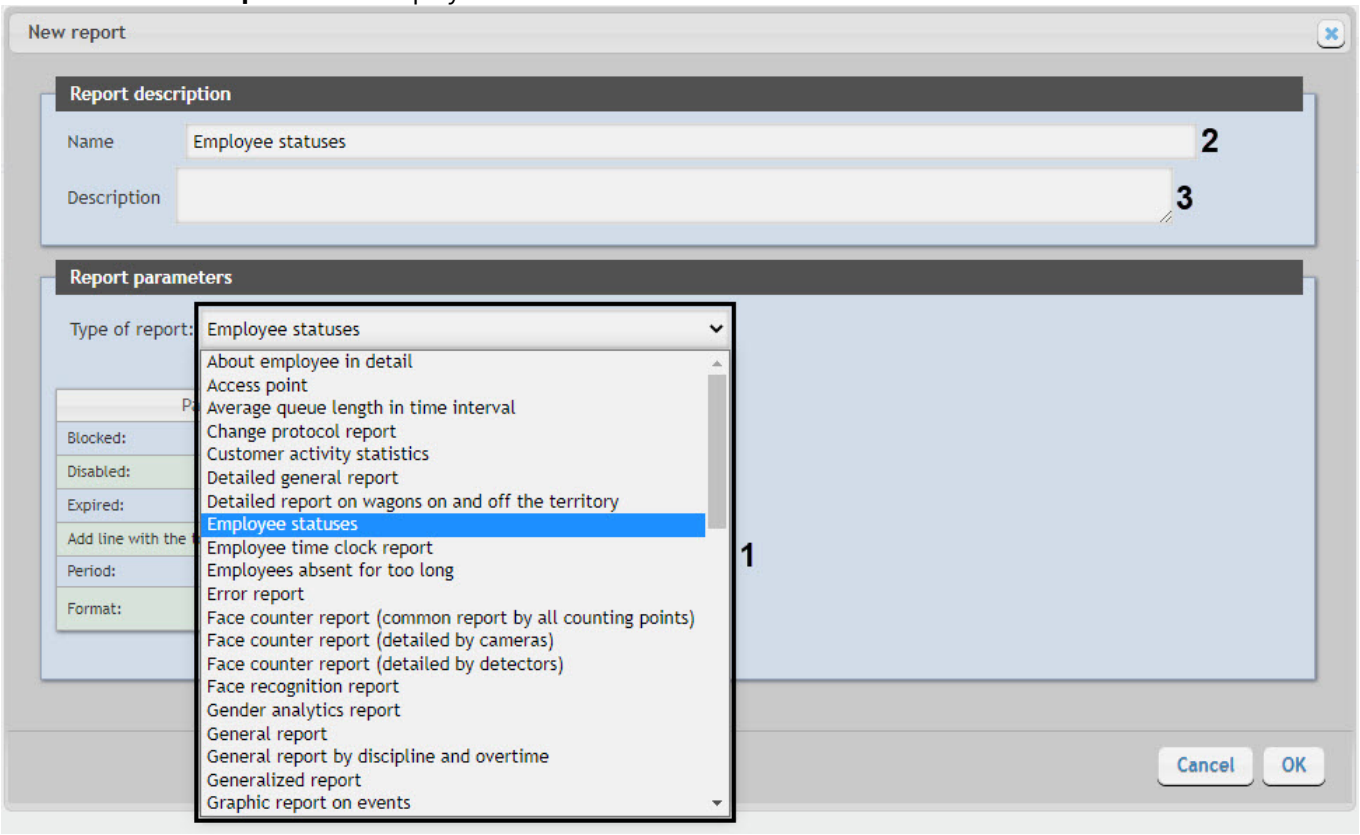
7.2.3.1 Creating the report

Make an auto-generated report as follows:

1. Go to the **Reports** tab and click the **New auto-generated report** link.



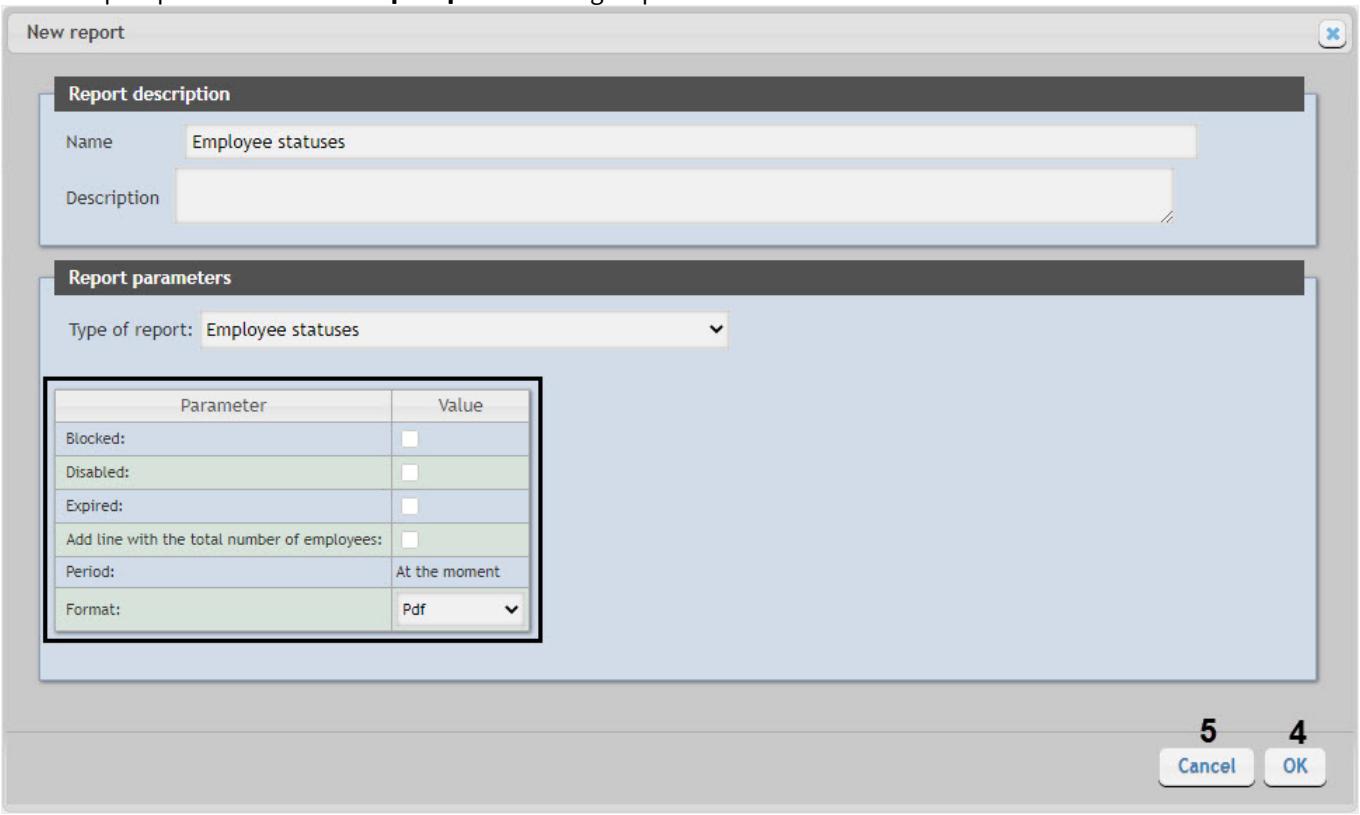
2. As a result the **New report** form is displayed.



3. In the **Report parameters** group select the required type of report from the **Type of report** list (**1**).
4. In the **Name** field (**2**) of the **Report description** group the prior report name is displayed automatically. It can be edited if necessary.
5. In the **Description** field (**3**) of the **Report description** group specify the description of the report contents.

> **Note**
>
> This field is optional.

6. Set the report parameters in the **Report parameters** group.



> **Note**
>
> The list of parameters is individual for every type of report and the same as the list of parameters of the corresponding report when working with reports (see Working with Intellect Web Report System) with one exception: the **Format** drop-down list is available, in which you can select the required export format for this report. Depending on the selected report type, this list can contain the following formats:
>
> - PDF:
> - CSV:
> - Excel.
>
> Images are only supported in PDF format. If you export the report in a format other than PDF, only the text will be saved.

7. In order to save the description and new report parameters click **OK** (**4**).

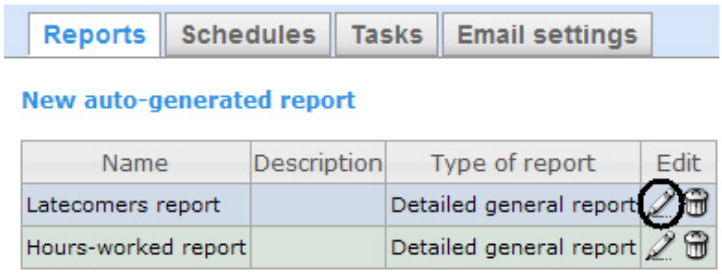
> **Note**
>
> In order to cancel making the report click **Cancel** (**5**).

Making the auto-generated report is completed.

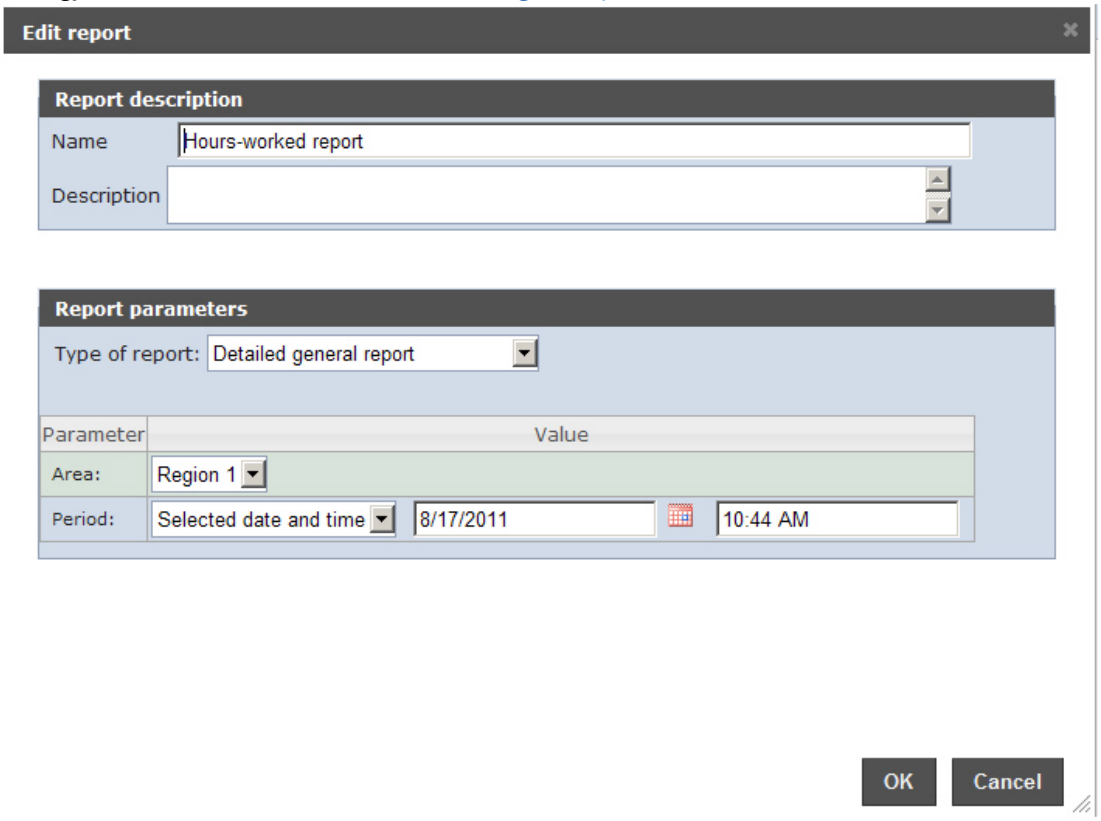
7.2.3.2 Editing the report

In order to edit the auto-generated report do the following:

1. Go to the **Reports** tab.



2. Click  for the required report in the **Edit** column**.**
3. As a result the **Edit report** form is displayed**.** In this form one should edit the description and report parameters by analogy with the **New report** form (see Creating the report section).



4. In order to save the report changes click **OK**.

> **Note.**
>
> In order to cancel the report changes click **Cancel**.

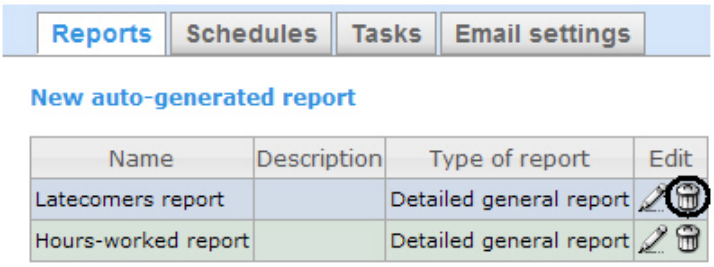
In order to change the language of the auto-generated report select the corresponding language in the profile page of the *rs* user (see User profile page section).

Editing the auto-generated report is completed.

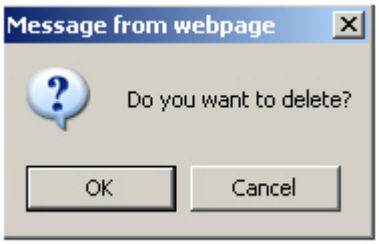
7.2.3.3 Deleting the report

In order to delete the auto-generated report do the following:

1. Go to the **Reports** tab.



2. Click  for the required report in the **Edit** column.
3. In the appeared window confirm the report deleting by clicking **OK.**



Deleting the auto-generated report is completed.

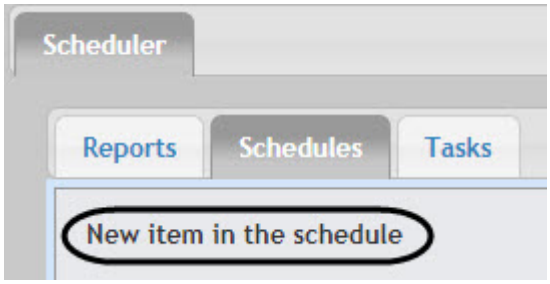
7.2.4 Setting up the schedule of operation in the automatic mode

Setting up the schedule of *Intellect Web Report System* operation in the automatic mode is performed by creating the schedule items. Later on any of created items in the schedule can be used while creating the task that should be executed in the automatic mode (see Setting up the automatically executed tasks section).

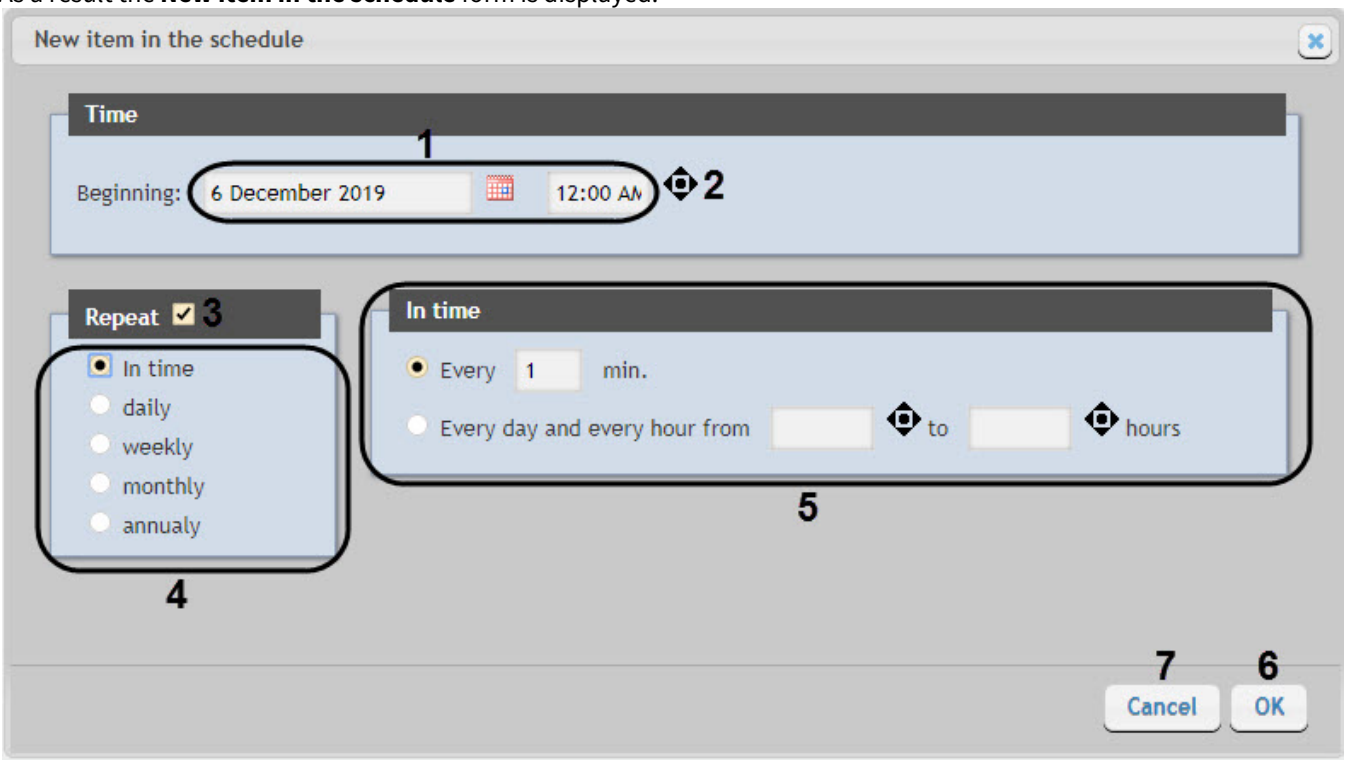
7.2.4.1 Creating the schedule item

In order to create the schedule item do the following:

1. Go to the **Schedules** tab and click the **New item in the schedule** link.



As a result the **New item in the schedule** form is displayed.



Note

- The selection of required reports will be performed when the tasks are created (see Setting up the automatically executed tasks section).
- In order to set current time it is convenient to use button (**2**).

2. In the **Time** group (**1**) enter the instant approaching which the required reports will be generated automatically.
3. If reports should be generated regularly with a certain repetition period, set the **Repeat** checkbox (**3**) and select the required repetition period (**4**).
4. As a result, a form for tweaking the repetition period will be displayed (**5**). The parameters of this form depend on the selected period and are set intuitively.
5. In order to save the schedule item click **OK** (**6**)**.**

Note.

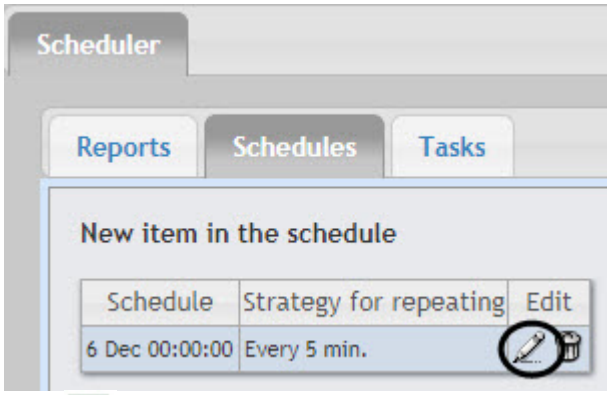
In order to cancel creating of the schedule item click **Cancel** (**7**).

Creating the schedule item is completed.

7.2.4.2 Editing the schedule item

In order to edit the auto-generated report do the following:

1. Go to the **Schedules** tab.



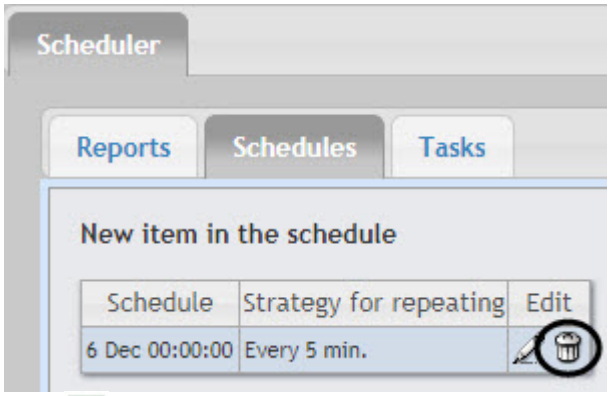
2. Click  for the required schedule item in the **Edit** column**.**
3. As a result the **Edit the schedule item** form is displayed**.** Editing a schedule item is similar to creating a schedule item (see Creating the schedule item).

Editing the schedule item is completed.

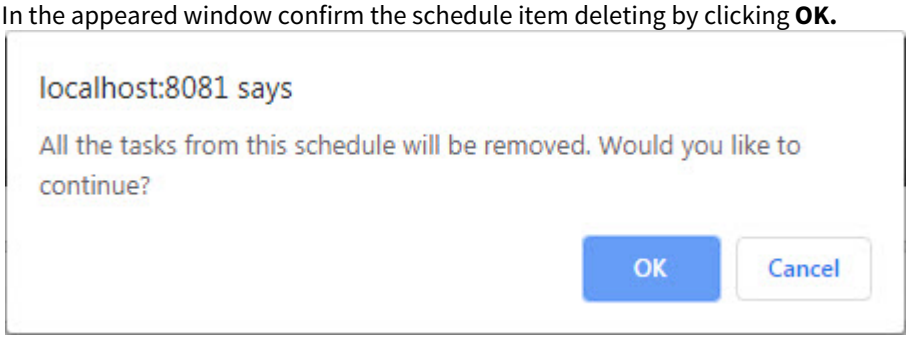
7.2.4.3 Deleting the schedule item

In order to delete the schedule item do the following:

1. Go to the **Schedules** tab.



2. Click  for the required schedule item in the **Edit** column.
3. In the appeared window confirm the schedule item deleting by clicking **OK.**



Deleting the schedule item is completed.

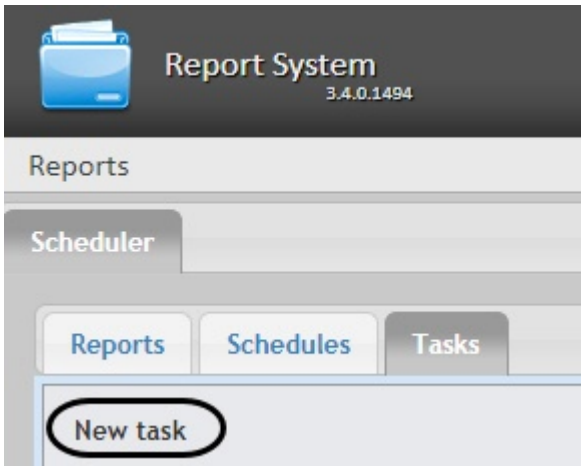
7.2.5 Setting up the automatically executed tasks

If the required reports should be auto-generated according to the specified schedule then it is necessary to create, set up and run a task.

7.2.5.1 Creating the task

In order to create the auto-executed task do the following:

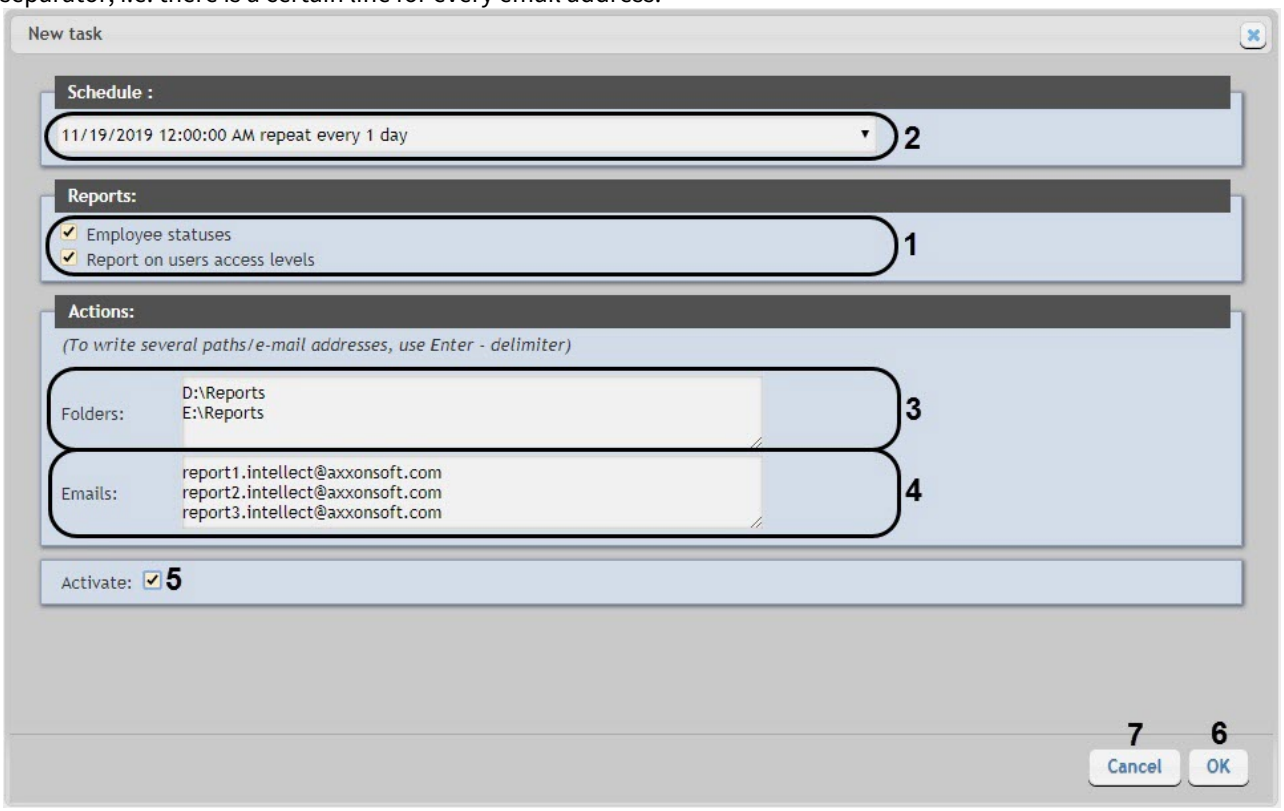
1. Go to the **Tasks** tab.



2. Click the **New task** link.
3. As a result the **New task** form is displayed.
4. In the **Reports** group (**1**) select the reports that should be auto-generated by setting the checkboxes.
5. From the **Schedule** list (**2**) select the schedule according to which the selected reports should be generated.
6. In the **Actions** group, set up at least one action with the reports:
    a. In the **Folders** field (**3**) enter the path for the folders where the generated reports should be stored. Use **Enter** key as a separator, i.e. there is a certain line for every folder.

> **Attention!**
>
> If a network folder is selected, then it is necessary to launch the CassiniService utility on behalf of a user who has access to this network folder, because by default, this utility is launched on behalf of a system user who does not have access to network folders.

b. In the **Emails** field (**4**) enter the email addresses to which the generated reports should be sent. Use **Enter** key as a separator, i.e. there is a certain line for every email address.



> **Note.**
>
> Generated reports that are sent to emails are PDF and XLS files.

7. In order to run the task execution right after its creation set the **Activate** checkbox (**5**).

> **Note.**
>
> Later one can run the task execution at any moment (see the Running and stopping the task execution section).

8. In order to save the task parameters click **OK** (**6**).

> **Note.**
>
> In order to cancel the task creation click Cancel (**7**).

> **Note.**
>
> If there are no folders that are set at 6.a step then the following message is displayed when the task parameters are saved. In order to auto create folders click OK.



Creating the automatically executed task is completed.

7.2.5.2 Checking the task execution

One can check the task execution at any time without taking into account the selected schedule. For this do the following:

1. Go to the **Tasks** tab.



2. For the required task click  in the **Edit** column.
3. Reports specified in the task will be generated and saved in the folders and/or sent to the e-mail addresses. If it is not happening one should check whether the actions with reports are set up correctly (see Creating the task section).

Checking the task execution is completed.

7.2.5.3 Running and stopping the task execution

One can run and stop the task execution without editing them. For this do the following:

1. Go to the **Tasks** tab.



2. In the **Active** column set the checkboxes checked for the tasks that should be run and unchecked for the tasks that should be stopped.

Running or/and stopping the task execution are completed.

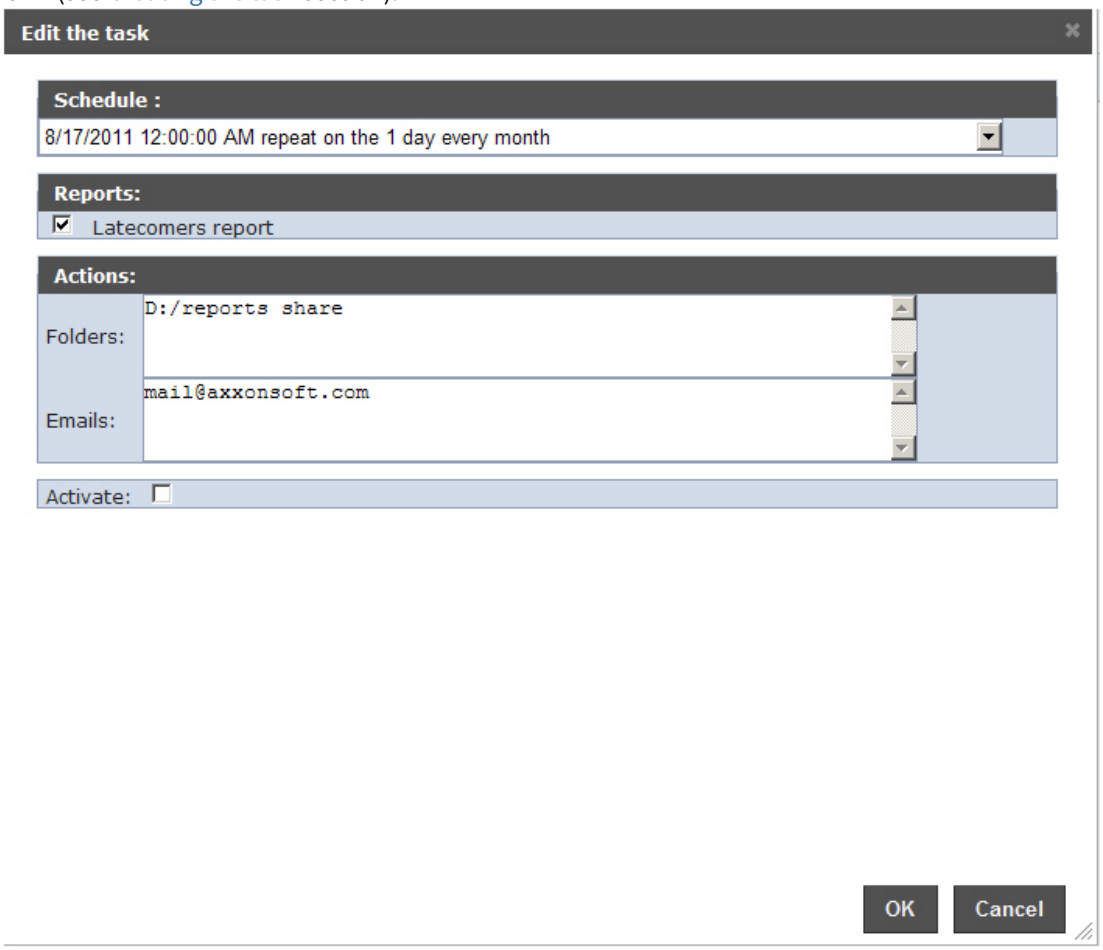
7.2.5.4 Editing the task

In order to edit the auto-executed task do the following:

1. Go to the **Tasks** tab.



2. For the required task click  in the **Edit** column**.**
3. As a result the **Edit the task** form is displayed**.** The task parameters should be changed by analogy with the **New task** form (see Creating the task section).



4. In order to save the changes click **OK.**

> **Note.**
>
> In order to cancel the changes in the task click **Cancel**.

Editing the auto-executed task is completed.

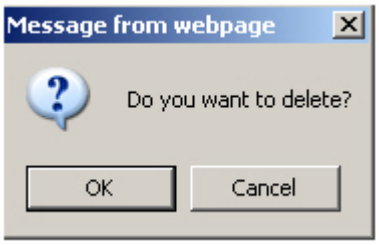
7.2.5.5 Deleting the task

In order to delete the task do the following:

1. Go to the **Tasks** tab.



2. For the required task click  in the **Edit** column.
3. In the appeared box confirm the task deleting by clicking **OK.**



Deleting the task is completed.

7.3 Setting up the Access Manager reports

> **Attention!**
>
> Prior to setting up the Access Manager reports, it is necessary to update the report database as described in Updating the report database.

Setting up the Access Manager reports is performed in the **Access Manager reports** tab on the administration page.

Access Manager reports setup is performed in the following sequence:

1. Setting up user access to departments
2. Setting up user access to Access Manager reports

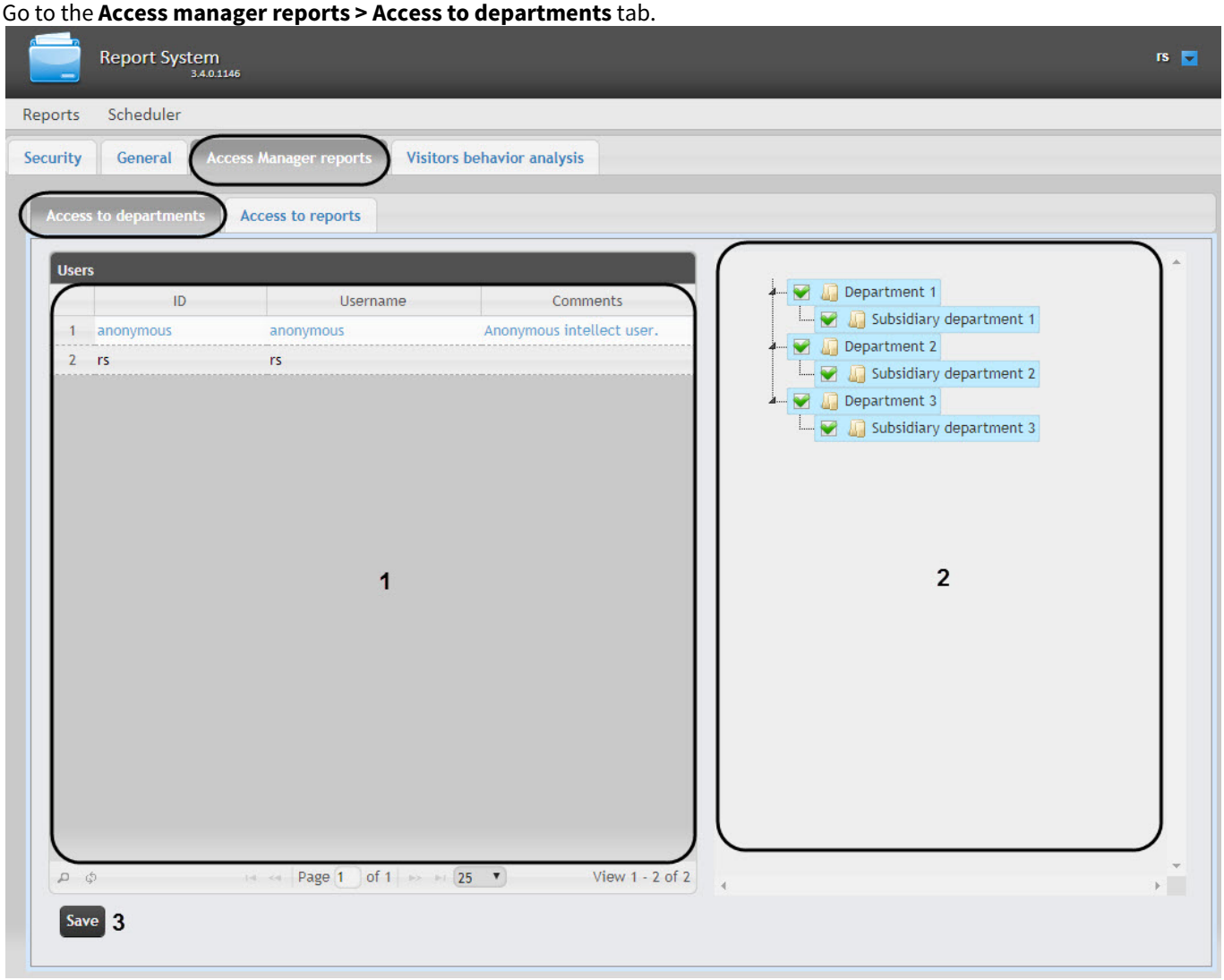
> **Note**
>
> To perform the configuration, the *Access Manager* interface object must be created and configured on the Server, see Configuration of the Access Manager module.

> **Note**
>
> In order to be able to work with Access Manager reports, the role with the right to perform the **Access Manager operator** operations should be created and assigned to users, as described in Set up the roles.

7.3.1 Setting up user access to departments

To configure user access to departments do the following:

1. Go to the **Access manager reports > Access to departments** tab.



2. In the **Users** table select user for which access is to be configured (**1**).

> **Note**
>
> The user must have a role with the right to perform the **Access Manager operator** operations. For details on role configuration, see Set up the roles.

3. The list of available departments for the selected user is displayed in the **Access to user departments** table (**2**).
4. Set the checkboxes close to departments to which access will be allowed for the selected user.
5. Click the **Save** button (**3**).
6. Repeat steps 2-5 for all users.

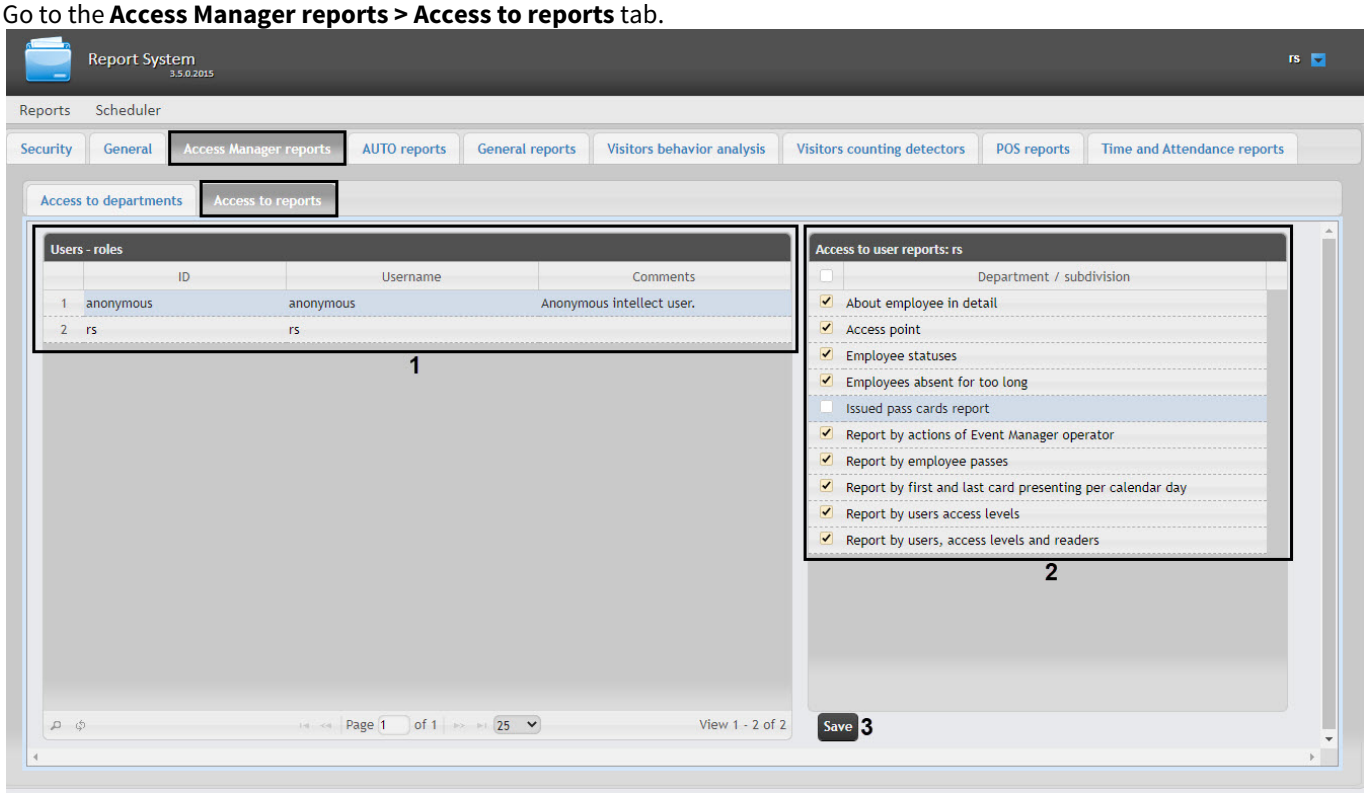
> **Note**
>
> The **rs** user has access to all departments by default.

Configuring user access to departments is completed.

7.3.2 Setting up user access to Access Manager reports

To configure user access to *Access Manager reports* do the following:

1. Go to the **Access Manager reports > Access to reports** tab.



2. In the **Users** table select user for which the access is configured (**1**).

> **Note**
>
> The user must have a role with the right to perform the **Operator of the Access Manager subsystem** operations. For details on role configuration, see Set up the roles.

3. The list of available reports for the selected user is displayed in the **Access to user reports** table (**2**).
4. Set the checkboxes next to reports which will be enabled for the selected user.
5. Click the **Save** button (**3**).

Setting up user access to *Access Manager reports* is complete.

7.3.3 Setting up the Issued pass cards report

On this page:

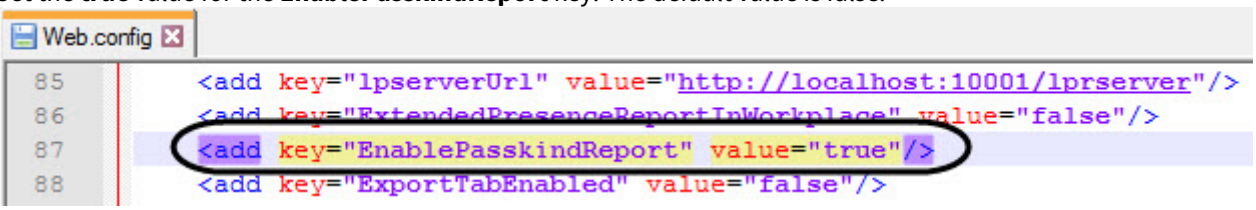
- Activating the Issued pass cards report
- Adding fields to the user database templates file
- Editing a registry key

7.3.3.1 Activating the Issued pass cards report

> **Attention!**
>
> The **Issued pass cards report** should be set up on the same computer on which this report will be operated.
>
> After making any changes to the **Web.config** configuration file, it is necessary to restart the **Cassini Service**.

To activate the **Issued pass cards report**, do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2 path.
2. Open the **Web.config** file for editing.
3. Set the **true** value for the **EnablePasskindReport** key. The default value is false.



4. Save the changes to the edited **Web.config** file.

7.3.3.2 Adding fields to the user database templates file

To ensure the correct operation of the **Issued pass cards report**, do the following:

1. In the root directory of the *Intellect* installation **C:\Program Files (x86)\Intellect** create a text document with the dbi extension, for example, **ext.dbi**.

> **Note**
>
> The following indicated below can be added to the **intellect.ext.dbi** file, which is specially designed for custom tables and fields (see The ddi.exe utility for editing database templates and external settings files).

2. Open this dbi file in a text editor.

> **Attention!**
>
> Before you start entering data, make sure that the text encoding of Windows-1251 is selected. Otherwise, when adding additional fields to the database, the text will be recognized incorrectly.

3. Copy the following code block into a dbi file:

```
[OBJ_PERSON]
passkind, CHAR, 255 // Pass card type{C%Visitor single entry|Car single entry|Truck single
entry|Temp. with photo|Temp. without photo|Temp. bicycle|Temp. car|Temp. truck up to 10
tons|Temp. truck above 10 tons|Temp. NSP|Perm. car|Perm. bicycle|Duplicate}

[UPDATE_PERSON_LOG]
passkind, CHAR, 255
```

4. After all necessary additional fields are created, save the changes.

> **Attention!**
>
> After you save the dbi file, it is necessary to update the main database. To do this, use the idb.exe utility (see The idb.exe utility for converting databases, selecting database templates and making backup copies of databases).

7.3.3.3 Editing a registry key

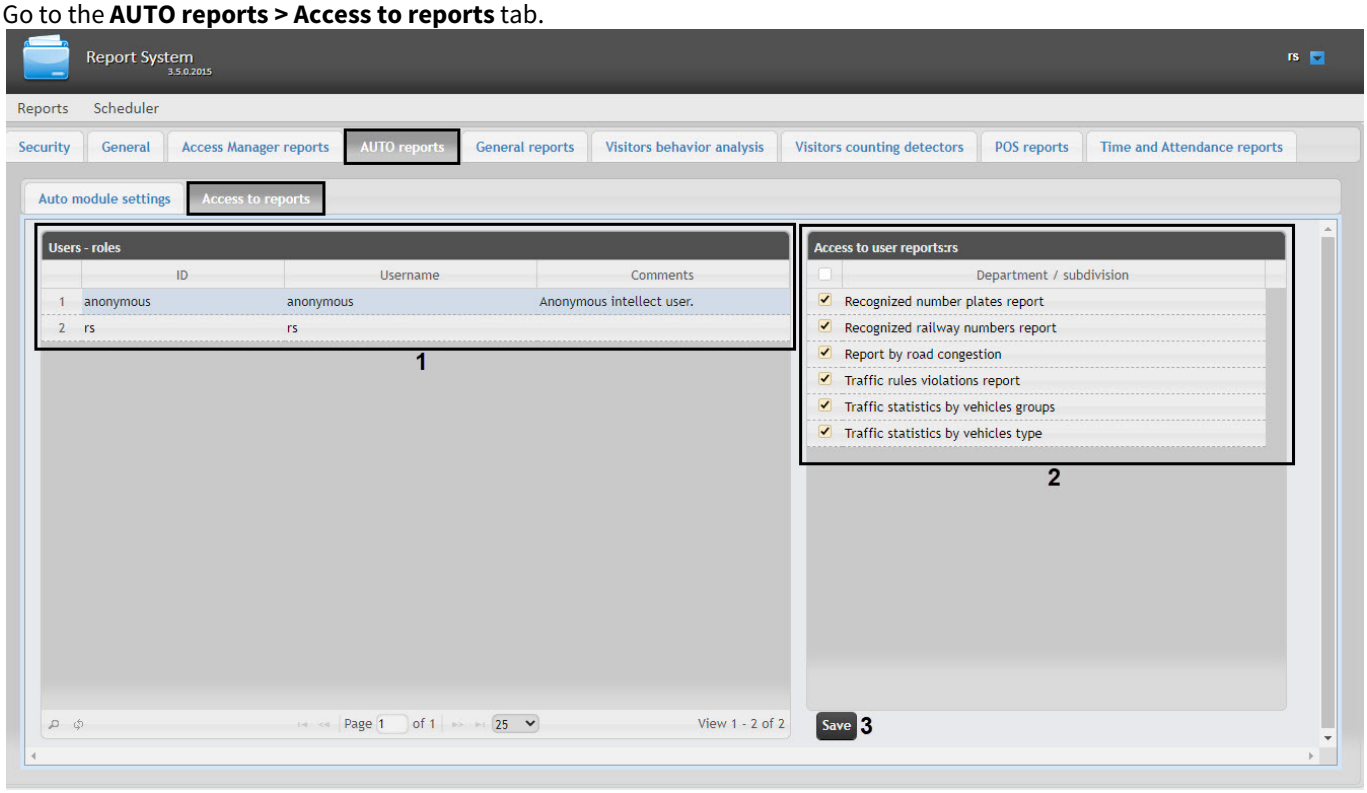
To ensure the correct operation of the **Issued pass cards report**, it is necessary to change the value of the **LogingPersonChangesRequired** key to **1** (for more details, see Registry keys reference guide, for more information about working with the registry, see Working with Windows OS registry).

7.4 Setting up the Auto reports

7.4.1 Setting up user access to AUTO reports

To configure user access to *Auto reports* do the following:

1. Go to the **AUTO reports > Access to reports** tab.



2. In the **Users** table select user for which the access is configured (**1**).

> **Note**
>
> The user must have a role with the right to perform the **AUTO reports operator** operations. For details on role configuration, see Set up the roles.

3. The list of available reports for the selected user is displayed in the **Access to user reports** table (**2**).
4. Set the checkboxes next to reports which will be enabled for the selected user.
5. Click the **Save** button (**3**).

Setting up user access to *AUTO reports* is complete.

7.4.2 Configuring the storage source for Recognized number plates report and Recognized railway numbers report

> **Attention!**
>
> This setting should be configured on the computer where it is planned to work with the **Recognized number plates report** and/or **Recognized railway numbers report**.

If the recognized railway number images and frames are stored in a folder on a disk (see Configuring the recognized LP images and vehicle images storage on disk), then for the correct operation of the **Recognized number plates report** and **Recognized railway numbers report**, it is necessary to do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2.

2. Open the **Web.config** file for editing.
3. For the **lpServerUrl** key specify the server address where the recognized railway number images and frames are stored. The default key value is **http://localhost:10001/lprserver**.



4. Save the changes in the **Web.config** file.

7.4.3 Configuring the Recognized railway numbers report

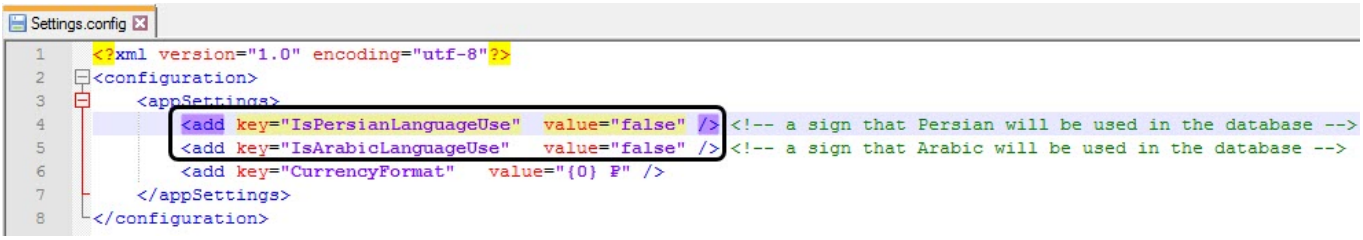
7.4.4 Configuring numbers filtering for Recognized number plates report and Recognized railway numbers report

> **Attention!**
>
> This setting should be configured on the computer where it is planned to work with the **Recognized number plates report** and **Recognized railway numbers report**.
>
> After making any changes to the **Settings.config** file, it is necessary to restart the **Cassini Service**.

Configure numbers filtering for the Recognized number plates report and Recognized railway numbers report as follows:

1. Go to the *<Intellect installation directory>|Modules|Wt2|App_Data|Settings.*
2. Open the **Settings.config** file for editing.
3. If it is necessary to use the Arabic alphabet and numbers to filter numbers, set the **IsArabicLanguageUse** key to true. The default is **false.**
4. If it is necessary to use the Persian alphabet and numbers to filter numbers, set the **IsPersianLanguageUse** key to true. The default is **false.**

> **Attention!**
>
> The simultaneous use of Arabic and Persian alphabets and numbers is not allowed.



5. Save changes to **Settings.config** file.
6. Update the Auto reports database (see Updating the report database).

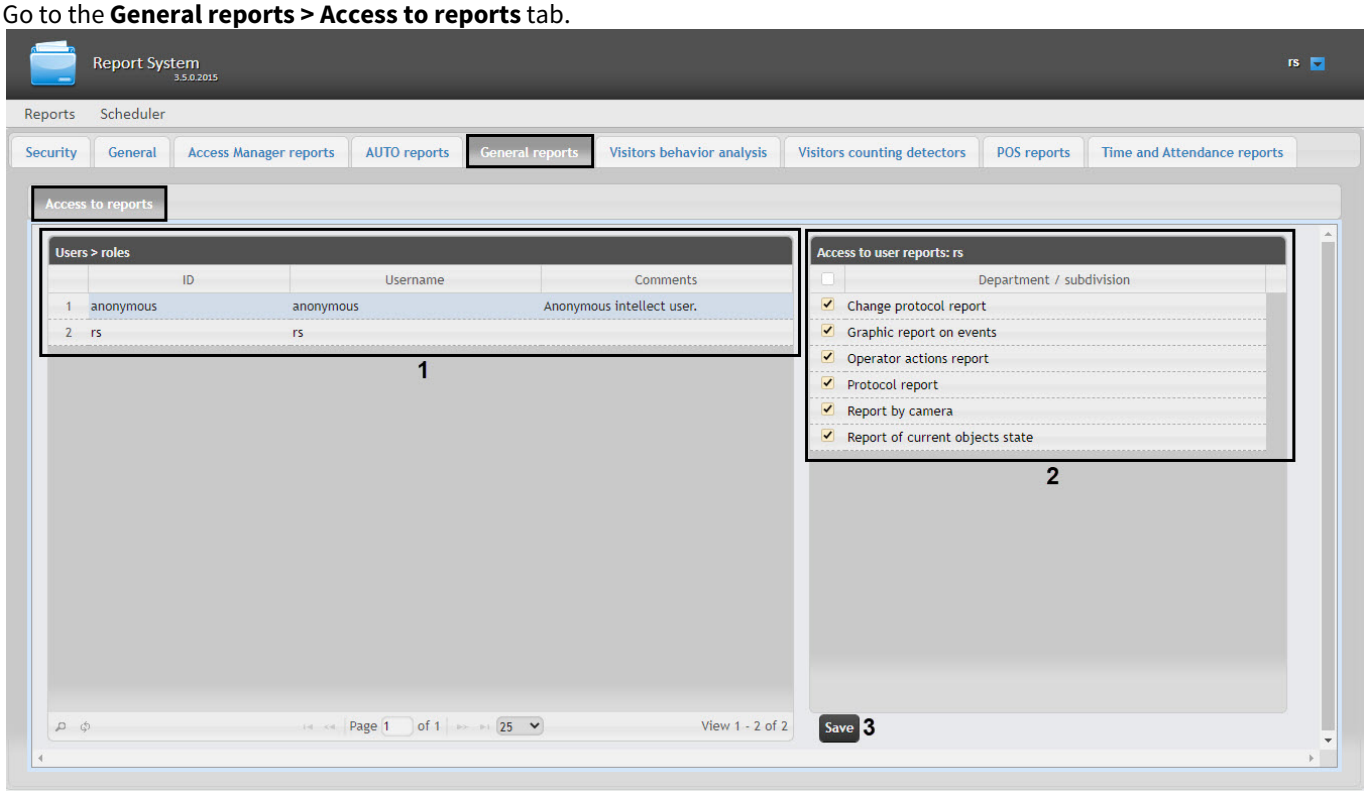
Configuring numbers filtering for the **Recognized number plates report** and **Recognized railway numbers report** is complete.

7.5 Setting up the General reports

7.5.1 Setting up user access to General reports

To configure user access to *General reports* do the following:

1. Go to the **General reports > Access to reports** tab.



2. In the **Users** table select user for which the access is configured (**1**).

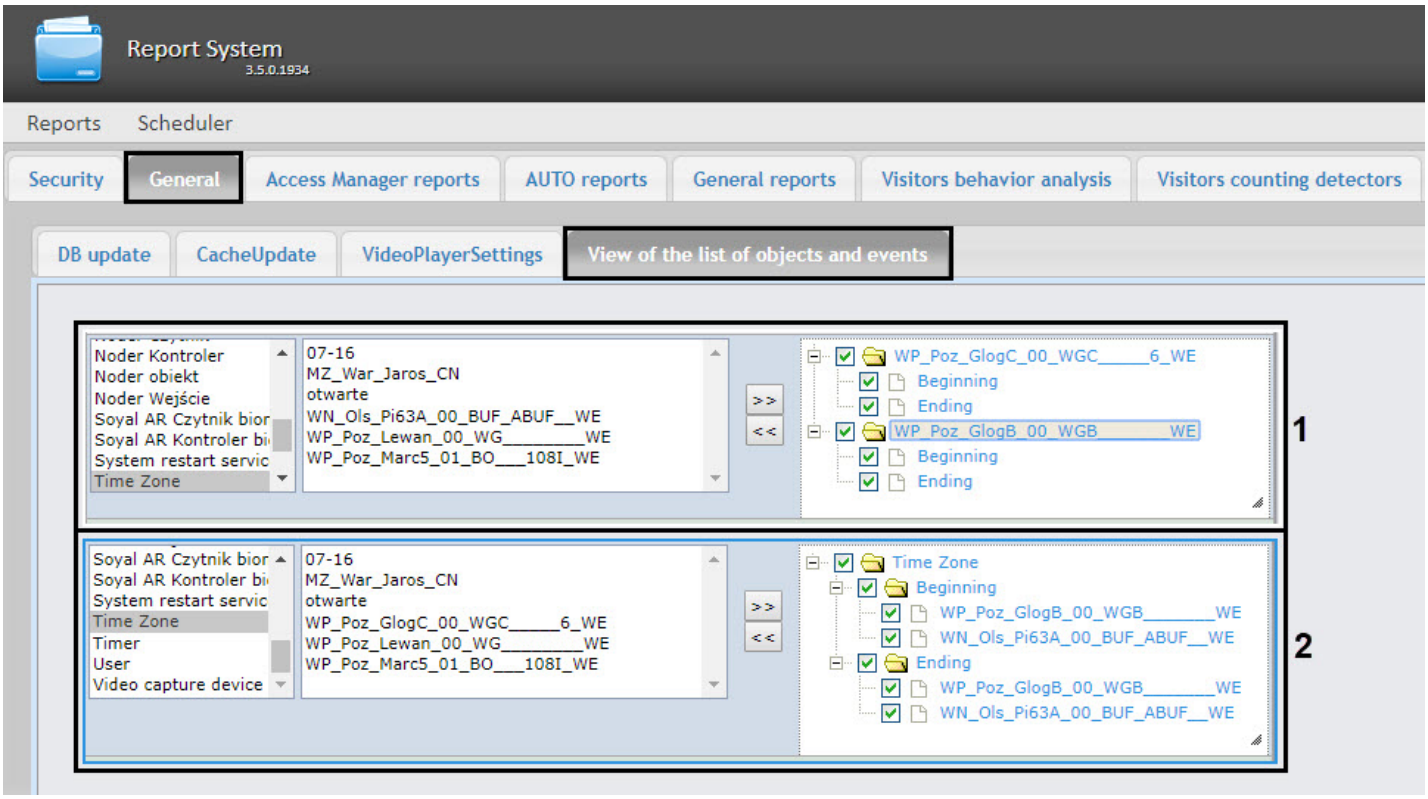
> **Note**
>
> The user must have a role with the right to perform the **Operator of general reports system** operations. For details on role configuration, see Set up the roles.

3. The list of available reports for the selected user is displayed in the **Access to user reports** table (**2**).
4. Set the checkboxes next to reports which will be enabled for the selected user.
5. Click the **Save** button (**3**).

Setting up user access to *General reports* is complete.

7.5.2 Selecting the view of the list of objects and events for the Protocol report

It is possible to select the view of the list of objects and events for the Protocol report. This can be set up on the **General** > **View of the list of objects and events** tab.



To select the view of the list of objects and events, left-click on the required view: (**1**) or (**2**).

> **Note**
>
> The selected view is highlighted with a blue frame.

7.5.3 Configuring the date and time format in General Reports

> **Attention!**
>
> The **DateFormat.config** file configuration must be performed on the computer where it is planned to work with the General Reports.
>
> After making any changes in the **DateFormat.config** file, it is necessary to restart the **Cassini Service** utility.

To configure the date and time format in General Reports, do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2\App_Data\Settings.
2. Open the **DateFormat.config** file for editing.
3. Set the value for the **ServerDateTimeFormat** key, which corresponds to the required date and time format, where:
   - **d** is the day of the month.
   - **MMM** is the name of the month.
   - **yyyy** is year.
   - **HH** is hours.
   - **mm** is minutes.
   - **ss** is seconds.

Note

The number of identical characters sets the format for a short date and time display in the report.

For example: **MMM** means that only 3 characters are allocated to the month name, and all subsequent characters will not be displayed. **dddd** means that the day of the week will be displayed. **yy** means that only the last 2 digits of the year will be displyed.

DateFormat.config

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
    <appSettings>
        <!-- Use a separator valid in your culture -->
        <add key="ServerDateFormat"             value="d MMM yyyy" /> <!-- use in calendar widget -->
        <add key="ServerDateFormatDayAndMonth"  value="d MMMM" />
        <add key="ServerDateFormatMonthFull"    value="d MMMM yyyy" /> <!-- use in header report -->
        <add key="ServerDateTimeFormat"         value="d MMM yyyy HH:mm:ss" />
        <add key="ServerDateTimeFormatNoSecond" value="d MMM yyyy HH:mm" />
        <add key="ServerDateTimeNoYear"         value="d MMM  HH:mm" />
        <add key="ServerDayAndTimeFormat"       value="dddd H:mm" />
        <add key="ServerMonthFormat"            value="M.yyyy" />
    </appSettings>
</configuration>
```

4. Save the changes in the **DateFormat.config** file.

7.6 Setting up the reports by Queue Length detectors

7.6.1 Disabling the zero value filter

Attention!

The **Web.config** file configuration must be performed on the computer where it is planned to work with the reports by Queue Length detectors.

To include the 0 values to the table reports by Queue Length detectors, do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. Set the **0** value for the **QueueLengthDelta** key. The default value is **0.5** (which means that only the values greater than 0.5 are included in the report).

Web.config

```
    <add key="CommonReplaceCameraIpTo" value="" />
    <add key="QueueLengthDelta" value="0.5" />
    <add key="ShowIconNewCashier" value="true" />
```

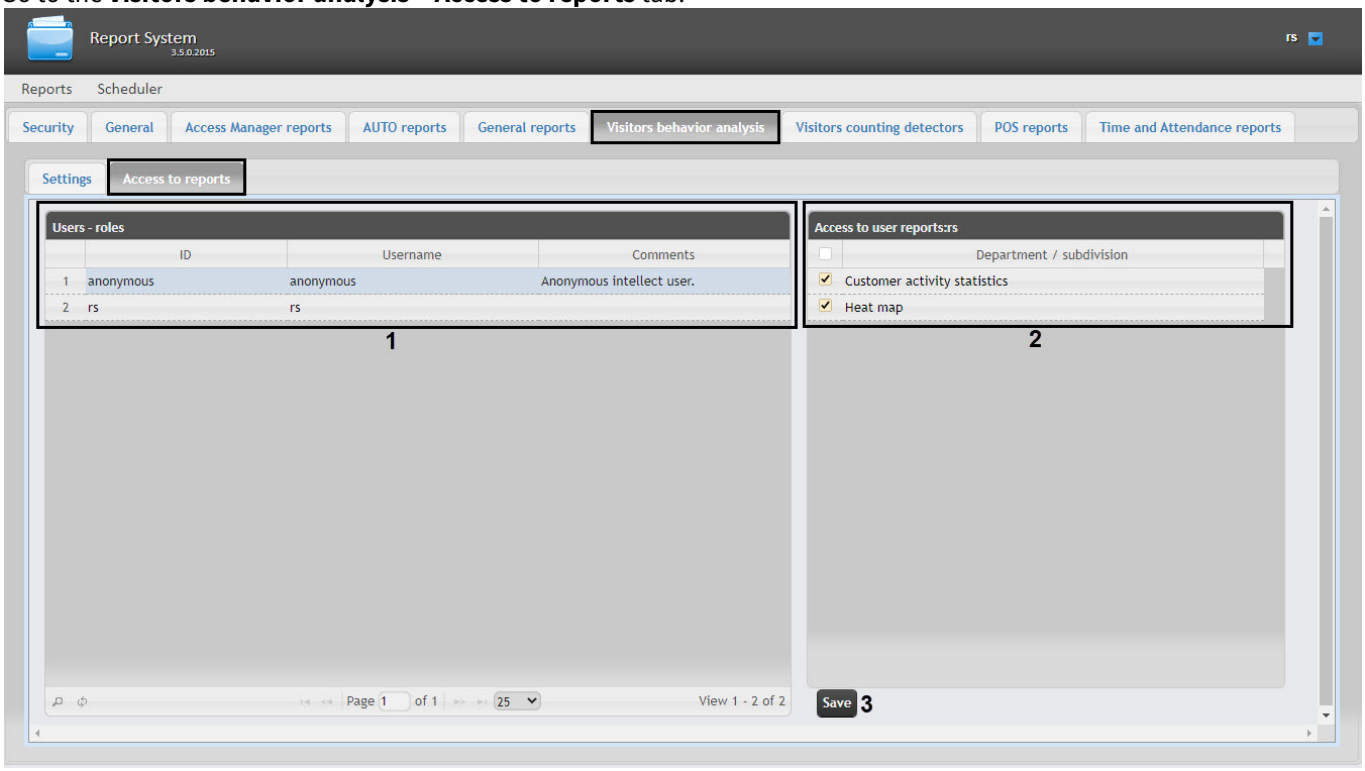
4. Save the changes in the **Web.config** file.

7.7 Setting up the Visitors behavior analysis reports

7.7.1 Setting up user access to Visitors behavior analysis

To configure user access to *Visitors behavior analysis* reports do the following:

1. Go to the **Visitors behavior analysis > Access to reports** tab.



2. In the **Users** table select user for which the access is configured (**1**).

> **Note**
>
> The user must have a role with the right to perform the **Operator of Visitors behavior analysis subsystem** operations. For details on role configuration, see Set up the roles.

3. The list of available reports for the selected user is displayed in the **Access to user reports** table (**2**).
4. Set the checkboxes next to reports which will be enabled for the selected user.
5. Click the **Save** button (**3**).

Setting up user access to *Visitors behavior analysis* is complete.

7.7.2 Cleaning up the database for the Visitors behavior analysis reports

Cleaning up the database for the *Visitors behavior analysis* reports allows you to avoid the situation when the surveillance areas of the **Heat map detection** object (see Configuring the «Heat map detection» module) remain in the database after their deletion from *Intellect* and are displayed in the *Visitors behavior analysis* reports (see Working with Customer behavior reports).

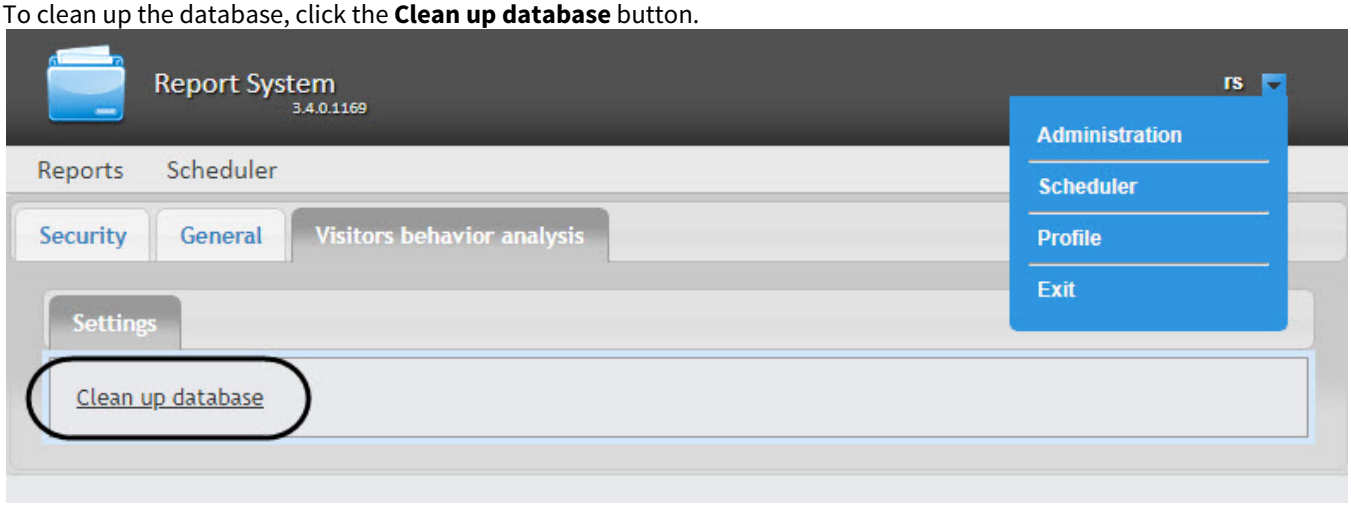
> **Important!**
>
> The database is cleaned up on the server which is specified in the *Intellect Web Report System* connection string in the file C:\Program Files(x86)\Intellect\Modules\Wt2\Web.config (see Intellect Web Report System installation).

> **Note**
>
> Only the data related to the **Heat map detection** object is deleted from the database.

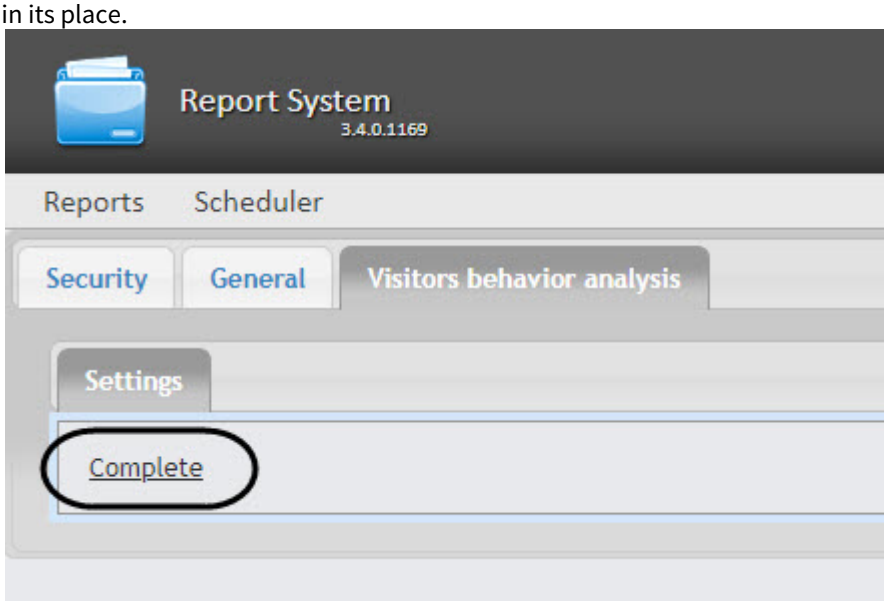
To clean up the database for the *Visitors behavior analysis* reports, do the following:

1. Go to the **Administration**, then open the **Visitors behavior analysis** tab, then open the **Settings** tab.

2. To clean up the database, click the **Clean up database** button.



3. After you click the **Clean up database** button, the database should be cleaned up, and the **Complete** sign should appear in its place.



4. After the database clean up, the computer with the database server should be restarted.

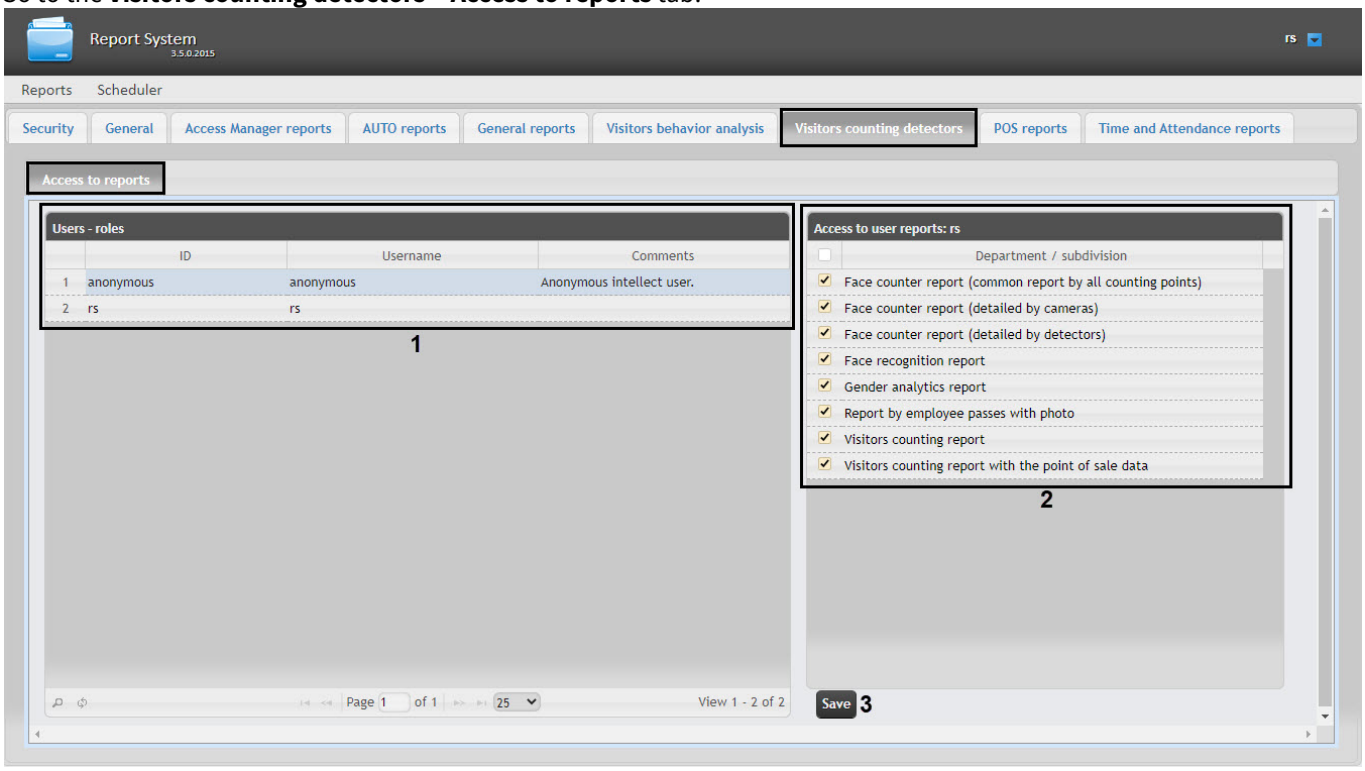
Cleaning up the database for the *Visitors behavior analysis* reports is completed.

7.8 Setting up the Visitors counting detectors reports

7.8.1 Setting up user access to Visitors counting detectors reports

To configure user access to *Visitors counting detectors* reports do the following:

1. Go to the **Visitors counting detectors > Access to reports** tab.



2. In the **Users** table select user for which the access is configured (**1**).

> **Note**
>
> The user must have a role with the right to perform the **Operator of Visitors counting detectors** operations. For details on role configuration, see Set up the roles.

3. The list of available reports for the selected user is displayed in the **Access to user reports** table (**2**).
4. Set the checkboxes next to reports which will be enabled for the selected user.
5. Click the **Save** button (**3**).

Setting up user access to *Visitors counting detectors* reports is complete.

7.8.2 Configuring the Gender analytics report

Page contents

- Configuring the IP Address of the Face Recognition Server

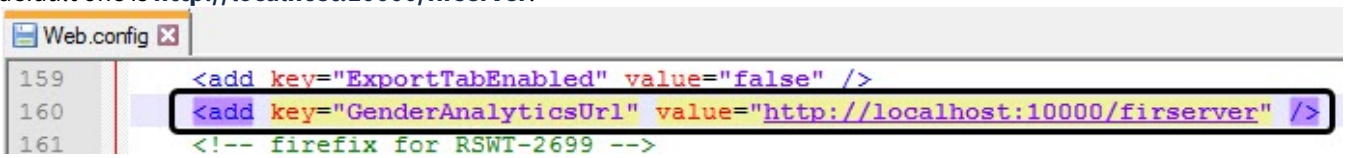
7.8.2.1 Configuring the IP Address of the Face Recognition Server

If you work with the **Gender analytics report** on one computer and the Face Recognition Server is located on another, then to ensure the operation of this report it is necessary to set the corresponding IP address of the Face Recognition Server.

> **Attention!**
>
> The **Web.config** file configuration must be performed on the computer where it is planned to work with the **Gender analytics report**.
>
> After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

To change the IP address of the Face Recognition Server, do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. For the **GenderAnalyticsUrl** key, specify the IP address of the server, where the Face Recognition Server is located. The default one is **http://localhost:10000/firserver**.



4. Save the changes in the **Web.config** file.

7.8.3 Configuring the Face recognition report and Report by employee passes with photo

XML-file parameters reference guide

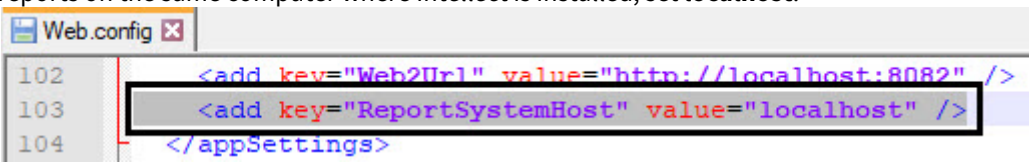
Attention!

The **Face recognition report** and **Report by employee passes with photo** configuration must be performed on the computer where it is planned to work with these reports.

After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

For the **Face recognition report** and **Report by employee passes with photo** to work, it is necessary to specify the address of the server where the *Intellect* software package is located. To do this:

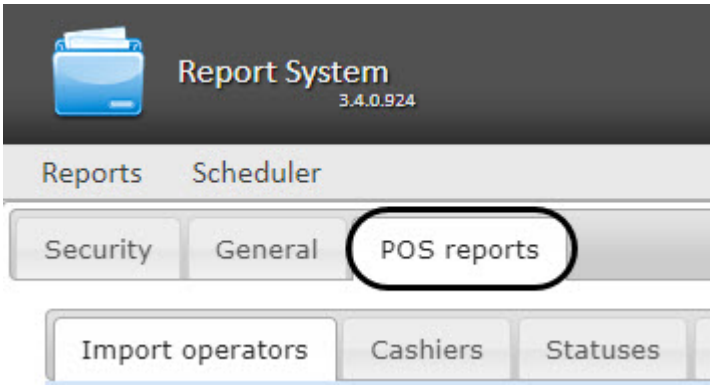
1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. For the **ReportSystemHost** key, set the IP address of the server on which *Intellect* is located. If you are working with the reports on the same computer where *Intellect* is installed, set **localhost**.



4. Save the changes in the **Web.config** file.

7.9 Setting up the POS reports

Setting up the POS reports is performed in the **POS reports** tab on the administration page.



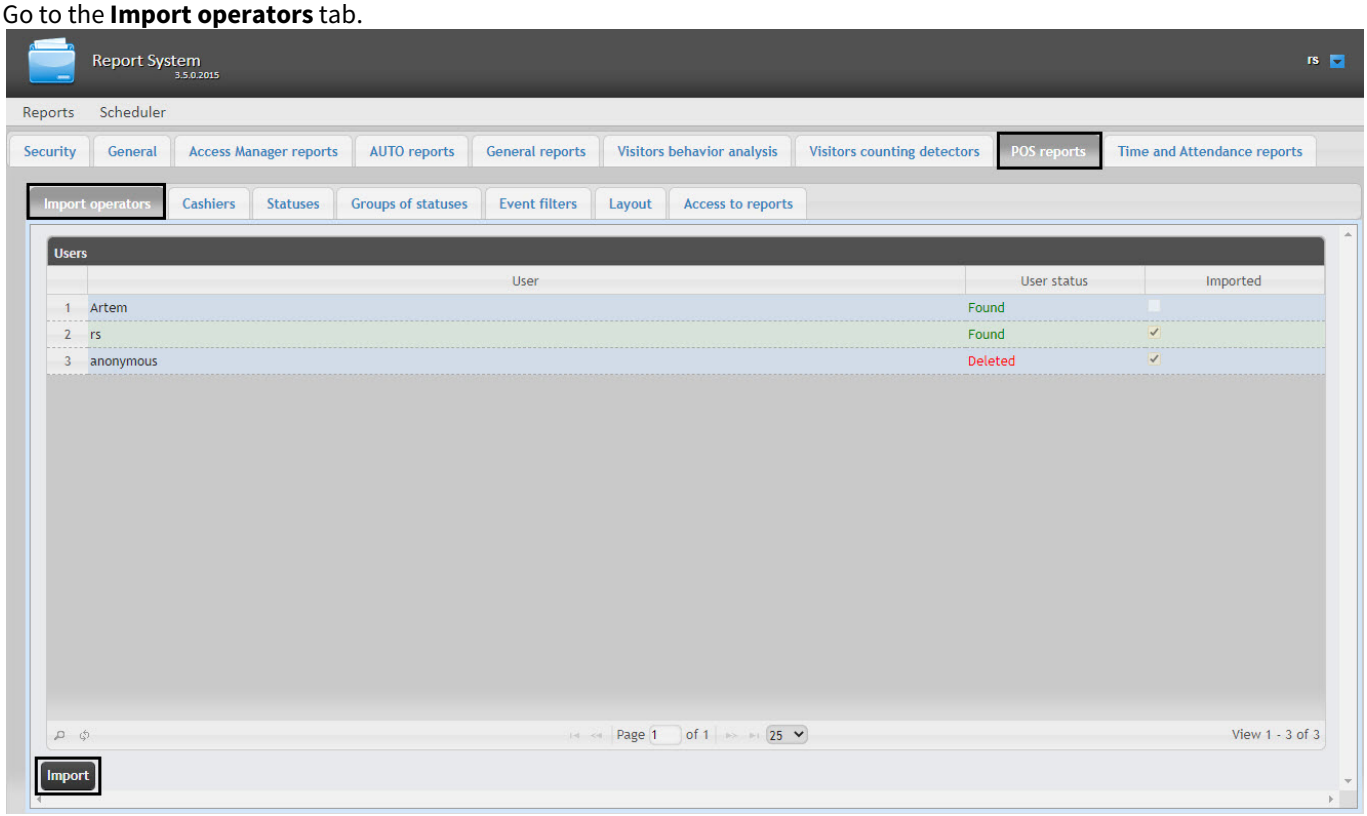
7.9.1 Creating the list of POS operators

The user that is not in the list of POS operators can not change statuses of POS events in reports whether he has the **POS expert** role or not (see Set up the roles and users section).

The list of POS operators is empty by default. In order to fill it in it is necessary to import users from the general list of *Intellect Web Report System* users.

In order to import users do the following:

1. Go to the **Import operators** tab.



2. The list of users registered in *Intellect Web Report System* including those who do not have the rights of POS operator or POS expert, is displayed. If the user is imported into the list of POS operators then there will be the checked checkbox in the **Imported** column.
3. In order to import remaining users click **Import**.

Users import into the list of POS operators is completed.

7.9.2 Setting up the cashiers in the POS reports

Содержание страницы

- Setting up the cashiers list
- Setting up the new cashiers

7.9.2.1 Setting up the cashiers list

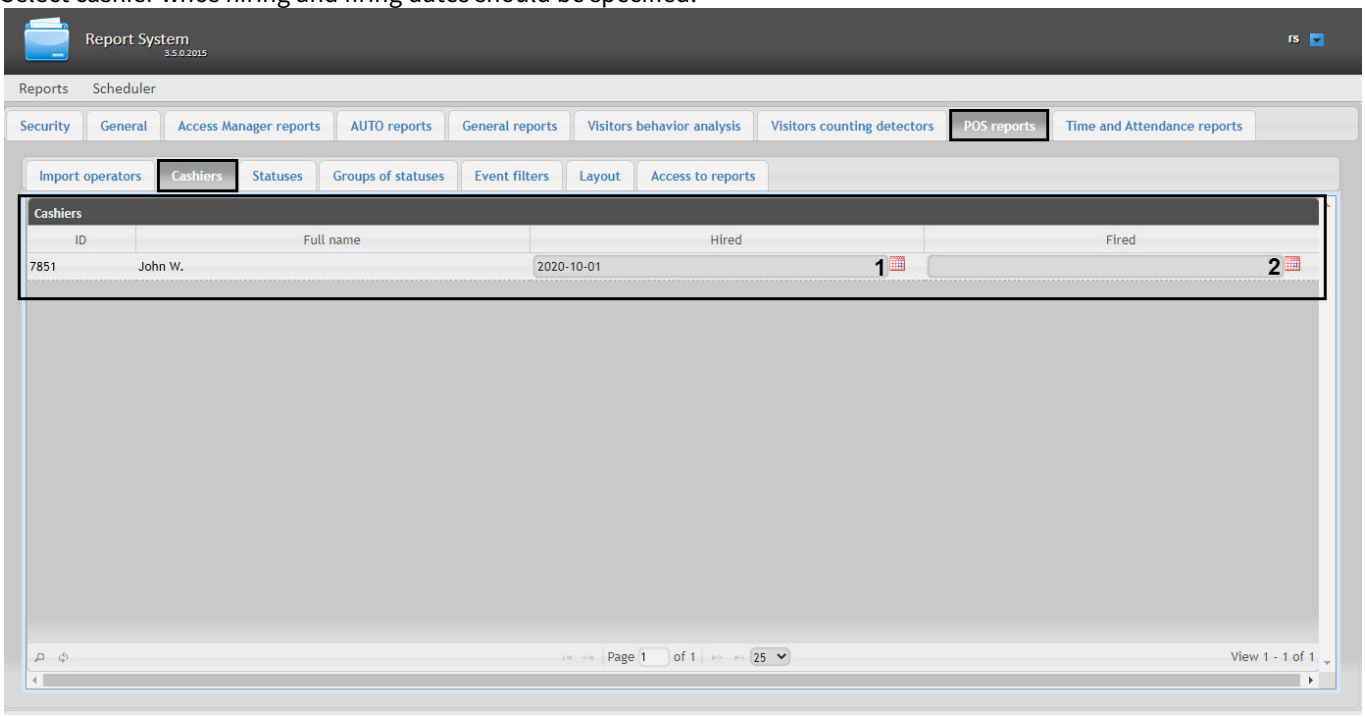
The list of all cashiers from the database is displayed in the **Cashiers** tab.

To display only the working cashiers in the settings panel of the cashiers report or the potential violations report, it is possible to specify the cashiers' hiring and firing dates. In this case, the fired cashiers will not be available for selection when building the report.

To do this:

1. Go to the **Cashiers** tab.

2. Select cashier whos hiring and firing dates should be specified.



3. Specify the hiring using the **Calendar** tool in the area (**1**).
4. Specify the firing date using the **Calendar** tool in the area (**2**).

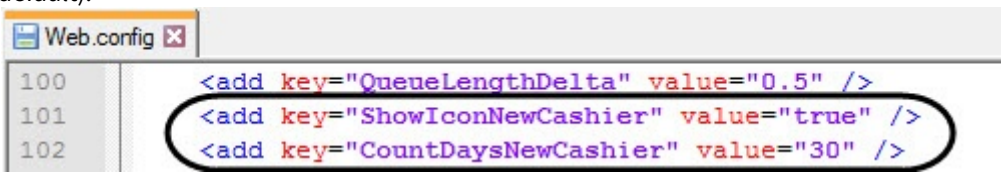
7.9.2.2 Setting up the new cashiers

In **POS** reports, you can highlight the new cashiers who work less than a specified number of days. To do this:

1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. Set the **true** value for the **ShowIconNewCashier** key to highlight the new cashier's name with the asterisk and the different color.

> **Note**
>
> The default key value is **true**. If you set the **false** value, the new cashiers will not be highlighted in the **POS** reports.

4. For the **CountDaysNewCashier** key, set the number of days within which the cashier is considered a new one (30 days by default).

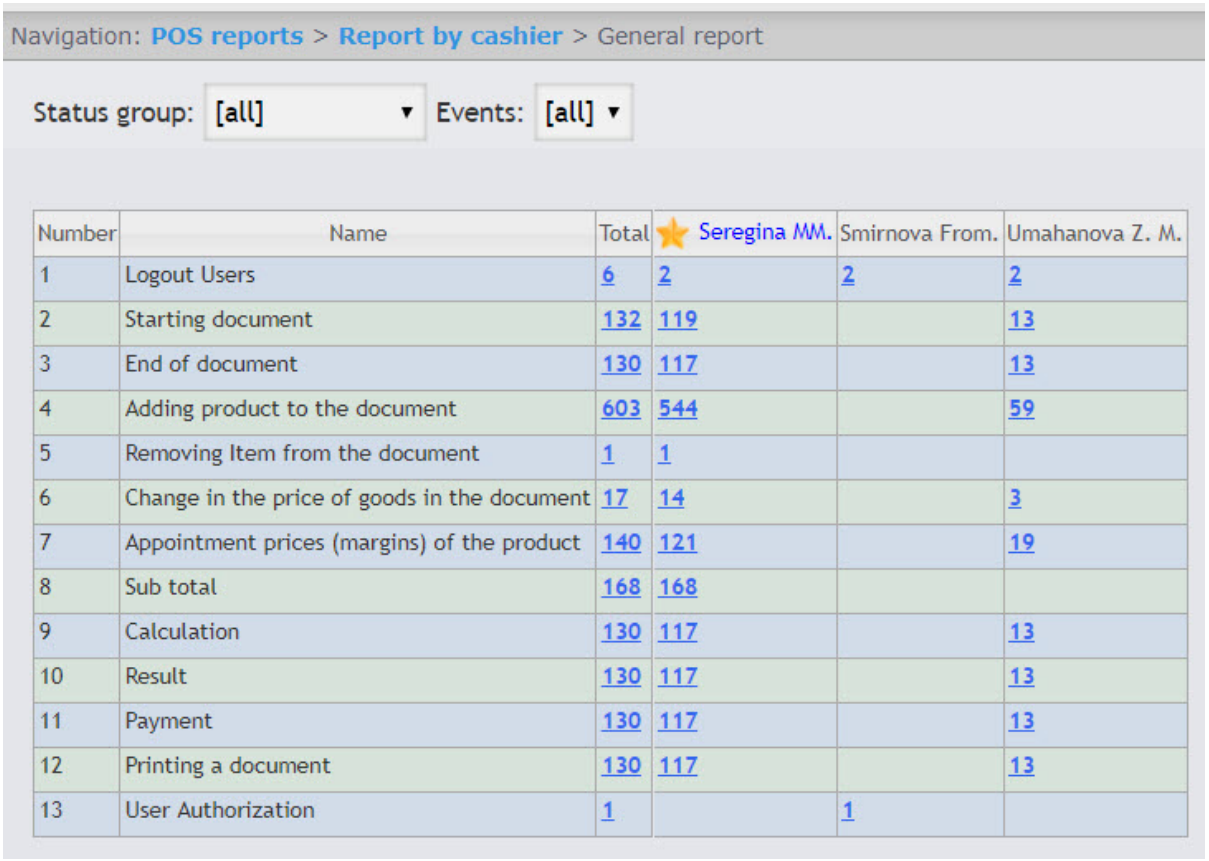


5. Save the changes in the **Web.config** file.

> **Attention!**
>
> The **Web.config** file configuration must be performed on the computer where it is planned to work with the **POS** reports.

> **Note**
>
> For the new cashiers, the date of hiring should be specified.

As a result, when generating **POS** reports, the new cashiers' names will be highlighted with the asterisk and the different color. See the example below:



Number	Name	Total	Seregina MM.	Smirnova From.	Umahanova Z. M.
1	Logout Users	6	2	2	2
2	Starting document	132	119		13
3	End of document	130	117		13
4	Adding product to the document	603	544		59
5	Removing Item from the document	1	1		
6	Change in the price of goods in the document	17	14		3
7	Appointment prices (margins) of the product	140	121		19
8	Sub total	168	168		
9	Calculation	130	117		13
10	Result	130	117		13
11	Payment	130	117		13
12	Printing a document	130	117		13
13	User Authorization	1		1	

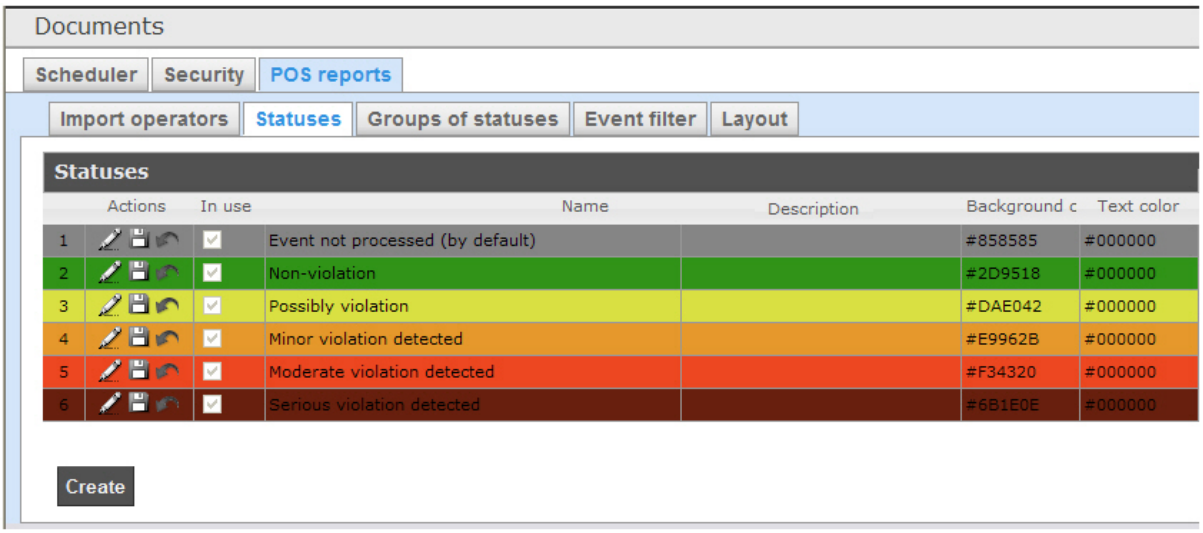
7.9.3 Setting up the statuses of POS events

Every POS event has the status. By default all POS events have the **Event not processed** status. In order to change this status POS operator should be added to the **POS expert** role.

> **Note.**
>
> This role allows changing the statuses of events repeatedly.

The following statuses processed by the operator of POS events are already registered in *Intellect Web Report System*:

1. Non- violation.
2. Possibly violation.
3. Minor violation detected.
4. Moderate violation detected.
5. Serious violation detected.

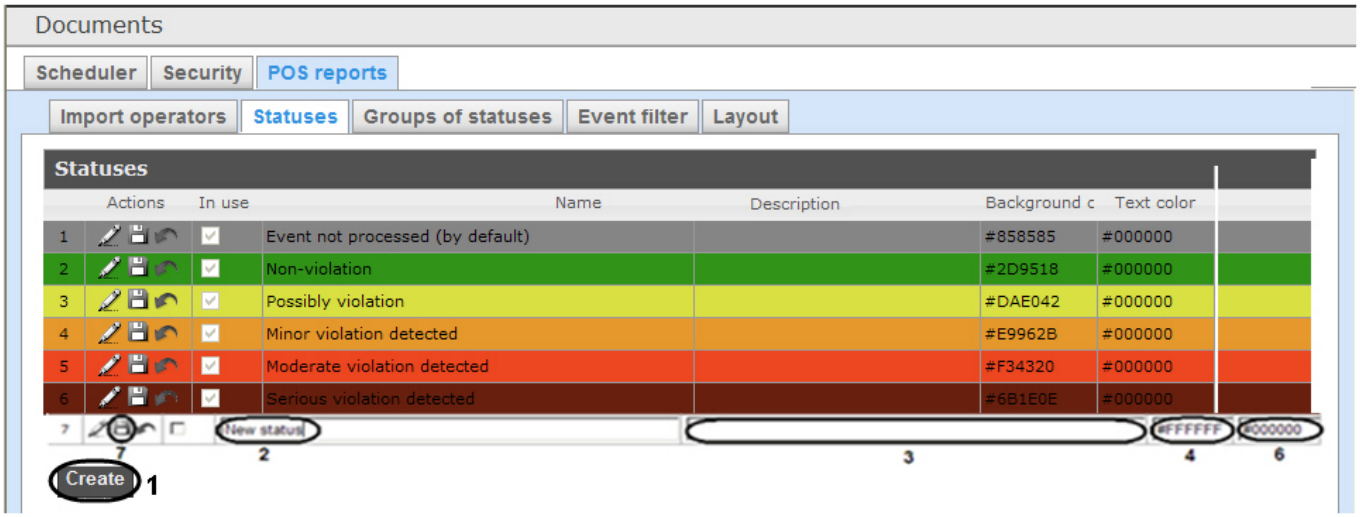


One can create user statuses and edit all existing ones.

7.9.3.1 Creating the user status

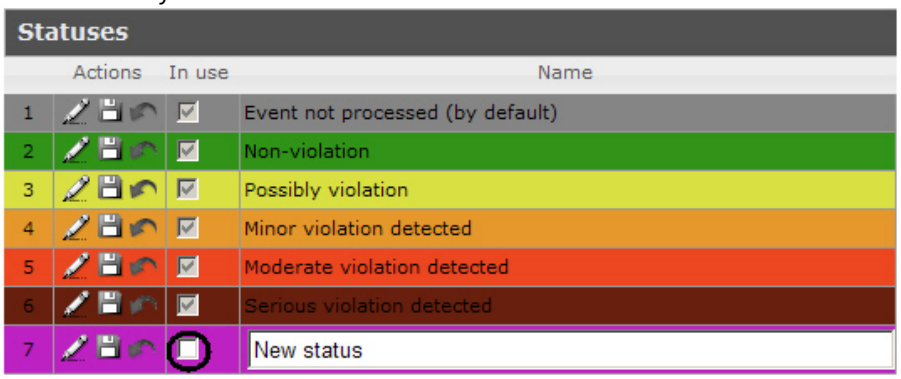
In order to create the user status do the following:

1. Go to the **Statuses** tab.



2. Click **Create** (**1**).
3. As a result a new line is added to the **Statuses** table.
4. In the **Name** field (**2**) enter a status name.
5. In the **Description** field (**3**) enter a short status description.
6. Set a color in which the line with event when it is moved to the created status will be colored. For this enter HTML color code in the **Background color** field (**4**) or use a color selection window.
   In the latter case left-click in the **Background color** field (**4**) and set the necessary color in the appeared window (**5**). For setting a color one can use both a color palette and RGB/HSB/HTML codes. In order to apply a color to a status and close a color selection window click  .
7. By analogy with the step 6 set a color in which the text of event when it is moved to the created status will be colored (**6**).

8. If it is necessary to use the status after its creation then set the checkbox checked in the **In use** column.



> **Note.**
>
> One can both activate and deactivate the status afterwards when it is edited (see Editing the status section).

9. In order to save the status click (**7**) in the **Actions** column.

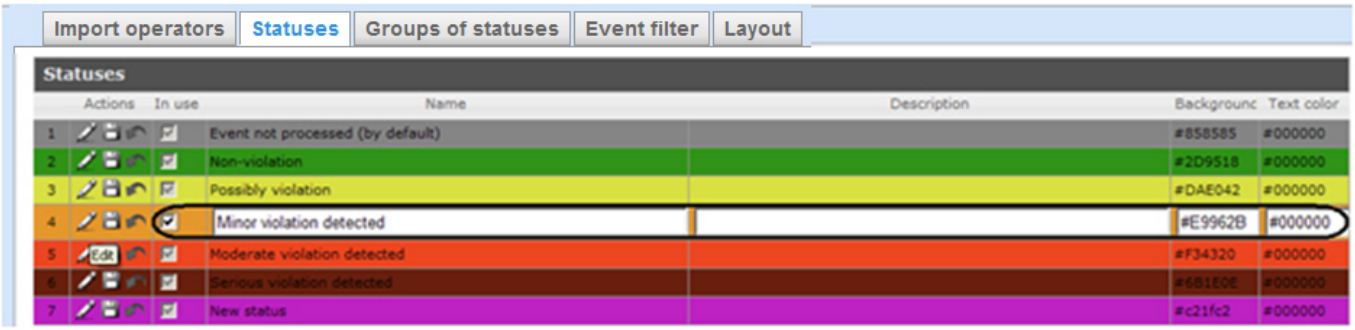
> **Note.**
>
> In order to cancel the status creation click in the same column.

User status creating is completed.

7.9.3.2 Editing the status

In order to edit a status do the following:

1. Go to the **Statuses** tab.



2. Click for a required status in the **Actions** column.
3. As a result it will be possible to edit a status. The editing procedure of any status is similar to creating the user status (see Creating the user status section).
4. In order to save the status changes click in the **Actions** column.

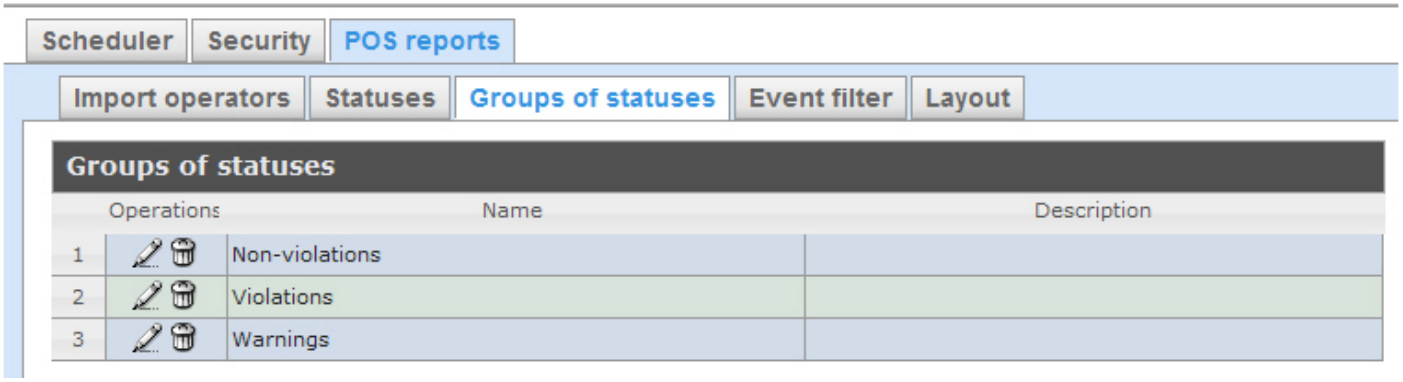
> **Note.**
>
> In order to cancel the changes in the status click in the same column.

Status editing is completed.

7.9.4 Setting up the groups of statuses of POS events

One can group statuses of POS events on the basis of one or another feature to make *Intellect Web Report System* more convenient to use. Created groups are used for making reports.

Setting up the groups of statuses of POS events is carried out in the **Groups of statuses** tab.



By default three groups of statuses of POS events are already created in *Intellect Web Report System*.

Groups of statuses of POS events are presented in the following table.

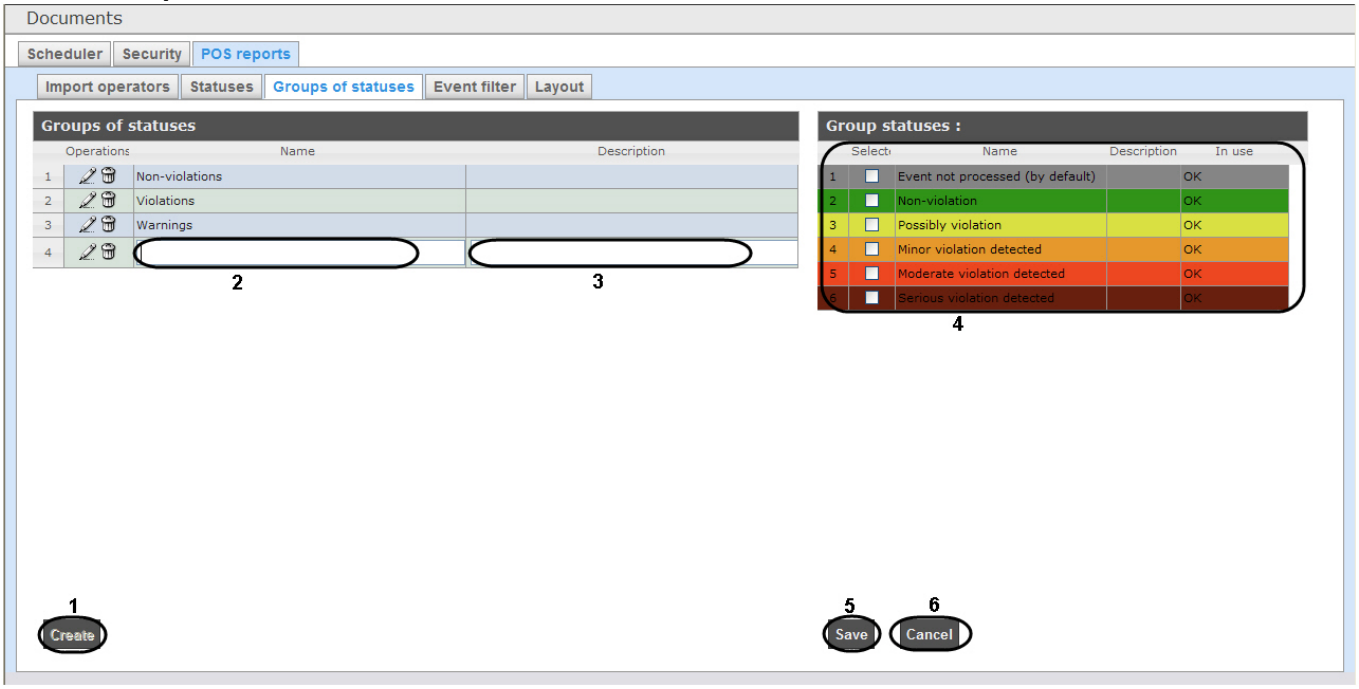
Group of statuses	**Statuses**
Non-violations	Non-violation
Violations	Minor violation detected
	Moderate violation detected
	Serious violation detected
Warnings	Event not processed
	Possibly violation

One can create other groups and also edit and delete the existing ones.

7.9.4.1 Creating a group of statuses

In order to create a group of statuses do the following:

1. Go to the **Groups of statuses** tab.



2. Click **Create** (**1**).
3. As a result a new line is added to the **Groups of statuses**table. Fill in its fields:
   3.1 In the **Name** field enter the name of a new group of statuses (**2**).
   3.2 In the **Description** field enter a short description of a group of statuses (**3**).

> **Note.**
>
> This field is optional for filling in.

4. In the **Selected** column of the **Group statuses** table (**4**) set checkboxes checked for those statuses that should be added to the group.

> **Note.**
>
> One should make sure that these statuses are in use (in the **In use** field there is **OK**). Otherwise the statuses will be ignored while making a report by group.

5. In order to save parameters of a new group of statuses click **Save** (**5**).

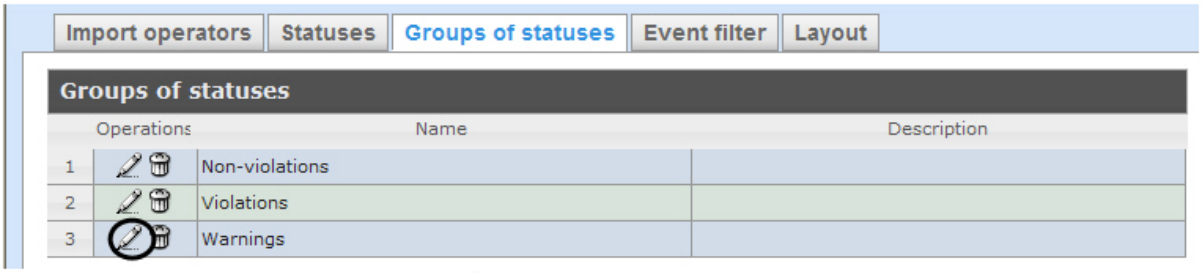
> **Note.**
>
> In order to cancel the creating a new group of statuses click **Cancel** (**6**).

Creating a new group of statuses is completed.

7.9.4.2 Editing a group of statuses

In order to edit a group of statuses do the following:

1. Go to the **Groups of statuses** tab.



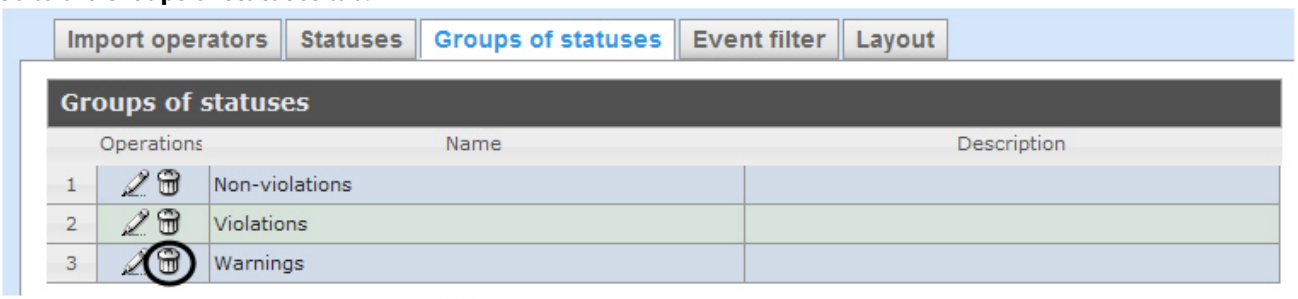
2. For the required group of statuses click  in the **Operations** column.
3. As a result it will be possible to edit all parameters of a group of statuses. One can edit the group of statuses by analogy with its creation (see Creating a group of statuses section).

Editing a group of statuses is completed.

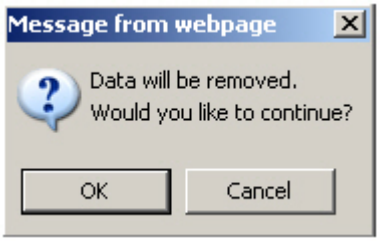
7.9.4.3 Deleting a group of statuses

In order to delete a group of statuses do the following:

1. Go to the **Groups of statuses** tab.



2. For the required group of statuses click  in the **Operations** column.
3. In the appeared window confirm deleting a group of statuses by clicking **OK**.

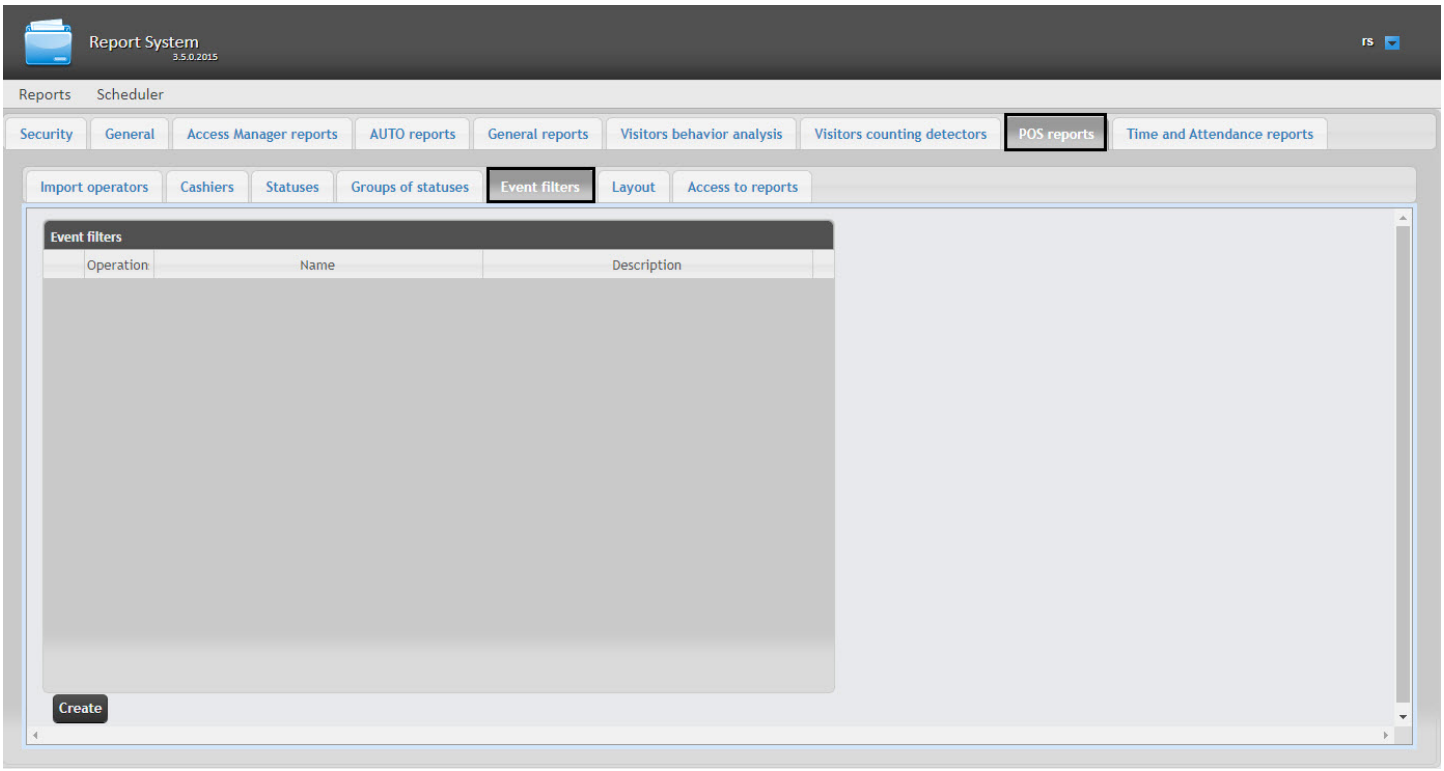


Deleting a group of statuses is completed.

7.9.5 Setting up the filter of events

One can create filters of function events and make general reports by these filters.

Setting up the event filters is carried out in the **Event filter** tab.



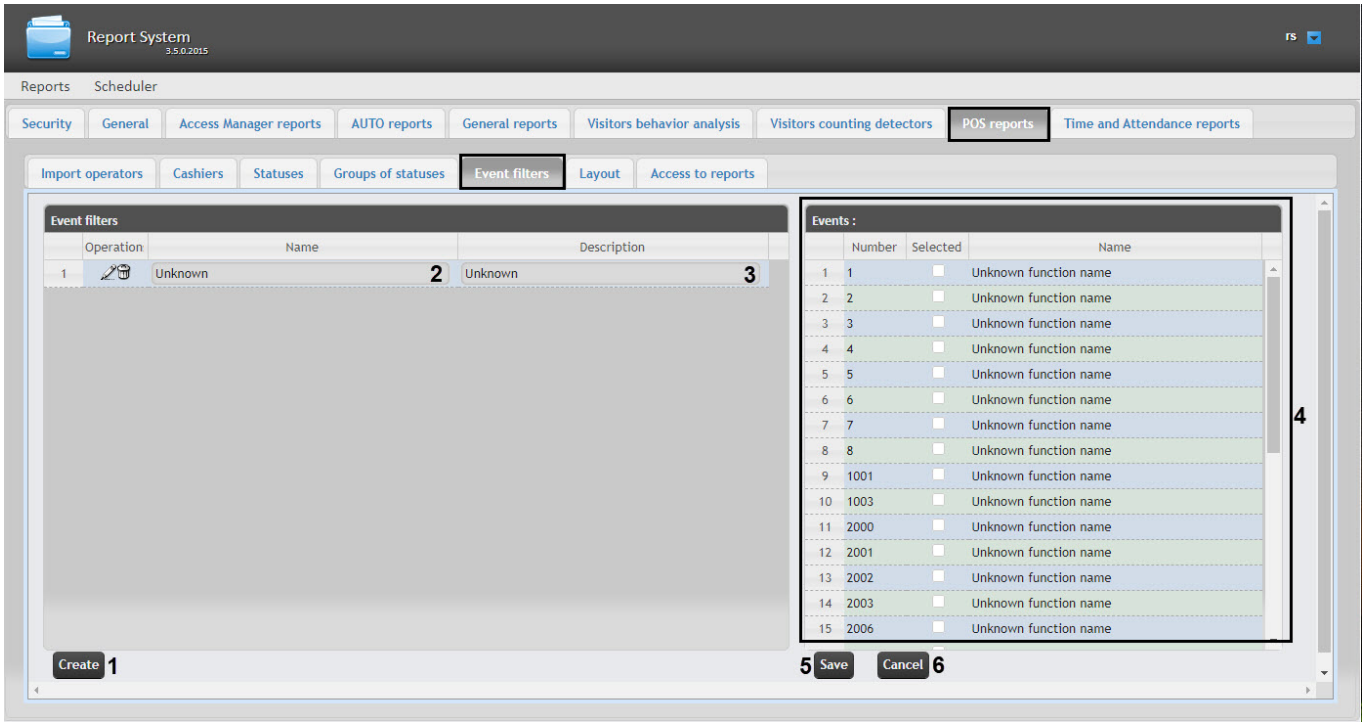
By default none filters are created in *Intellect Web Report System*.

One can create event filters and also edit and delete them.

7.9.5.1 Creating a filter of events

In order to create a filter of events do the following:

1. Go to the **Event filter** tab.



2. Click **Create** (**1**).

3. As a result a new line is added to the **Event filter** table. Fill in its fields:
   3.1 In the **Name** field enter the name of a new filter of events (**2**).
   3.2 In the **Description** field enter a short description of a filter of events (**3**).

   > **Note.**
   >
   > This field is optional for filling in.

4. In the **Selected** column of the **Event filter** table (**4**) set checkboxes checked for those events that should be added to the filter.
5. In order to save parameters of a new filter of events click **Save** (**5**).

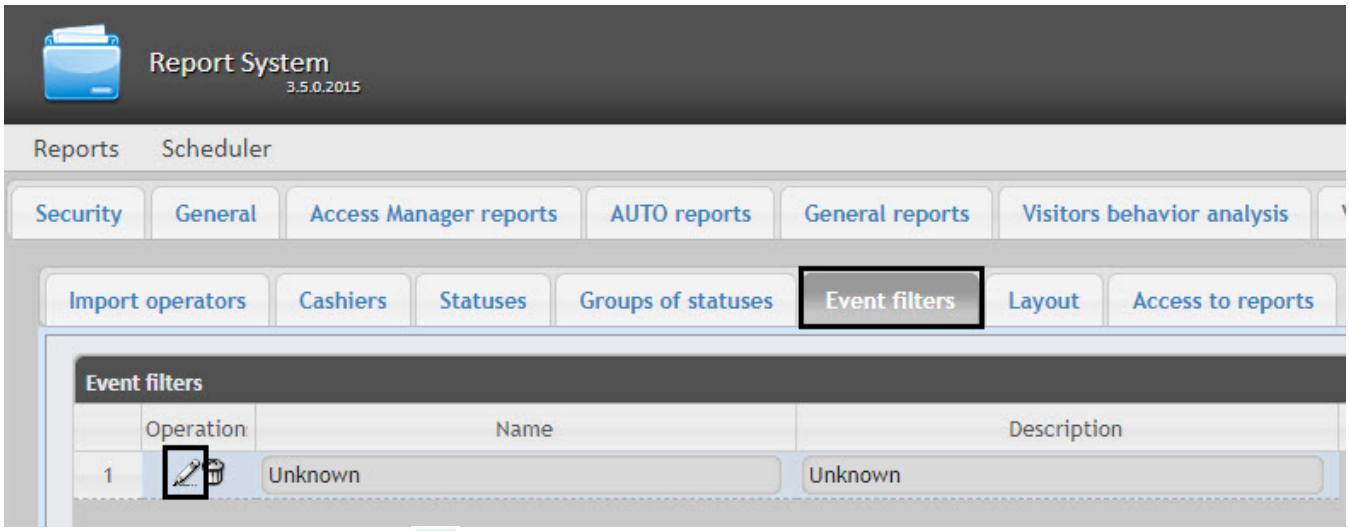
> **Note.**
>
> In order to cancel the creating a new filter of events click **Cancel** (**6**).

Creating a new filter of events is completed.

7.9.5.2 Editing a filter of events

In order to edit a filter of events do the following:

1. Go to the **Event filter** tab.



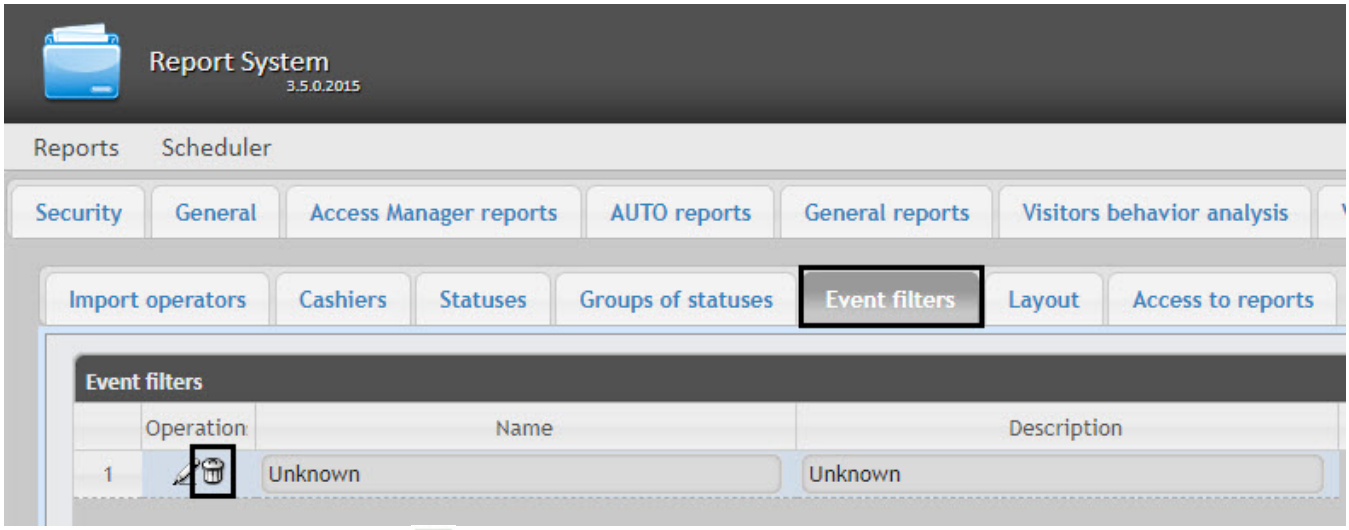
2. For the required filter of events click  in the **Operations** column.
3. As a result it will be possible to edit all parameters of a filter of events. One can edit the filter of events by analogy with its creation (see Creating a filter of events section).

Editing a filter of events is completed.

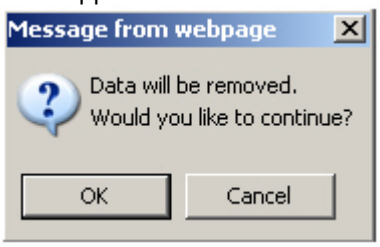
7.9.5.3 Deleting a filter of events

In order to delete a filter of events do the following:

1. Go to the **Event filter** tab.



2. For the required filter of events click  in the **Operations** column.
3. In the appeared window confirm deleting a filter of events by clicking **OK**.

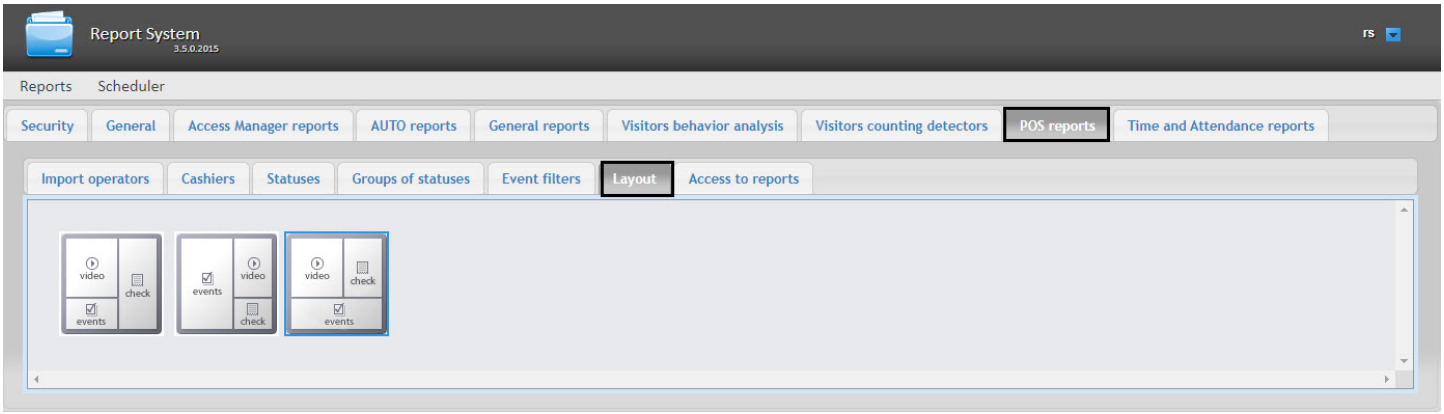


Deleting a filter of events is completed.

7.9.6 Selecting layouts in POS reports

One can select the layout of POS reports to make *Intellect Web Report System* more convenient to use.

Selecting the layouts POS events is carried out in the **Layout** tab.

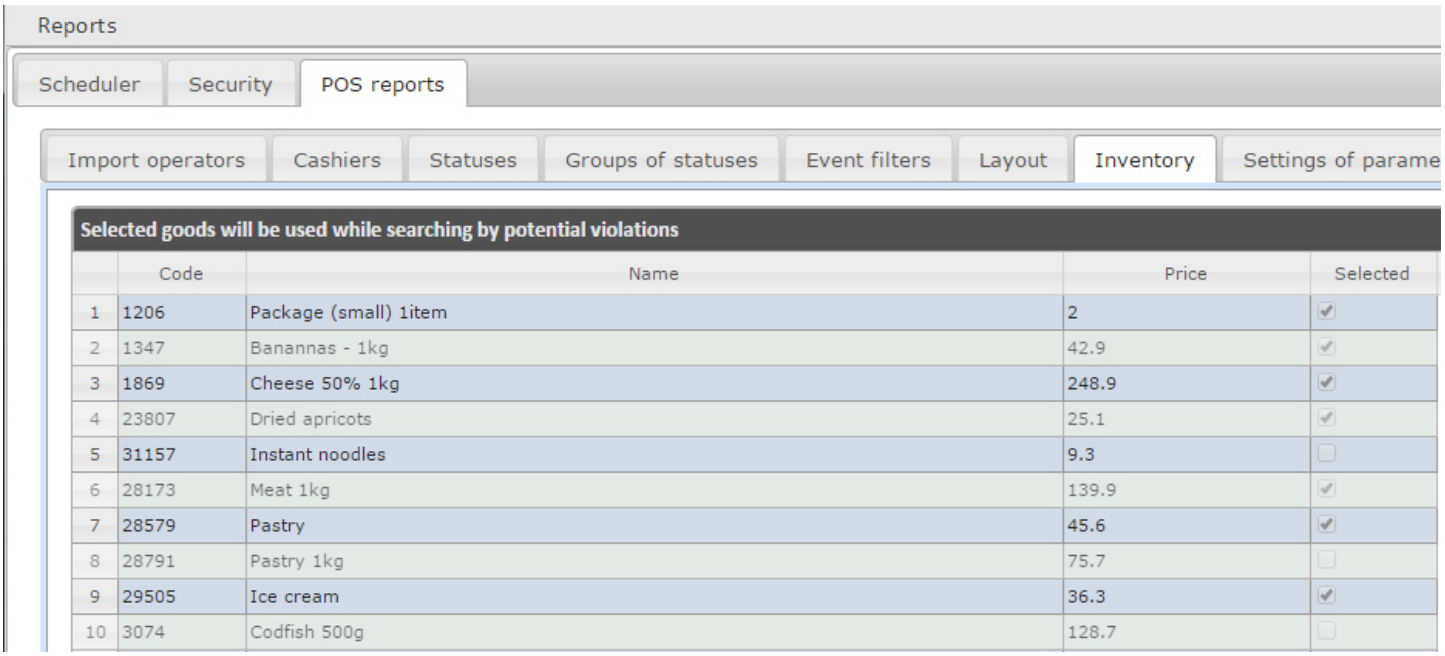


By default three layouts of POS reports are already created in *Intellect Web Report System*.

Select the needed layout by clicking the left mouse button.

7.9.7 Selecting items for report creating

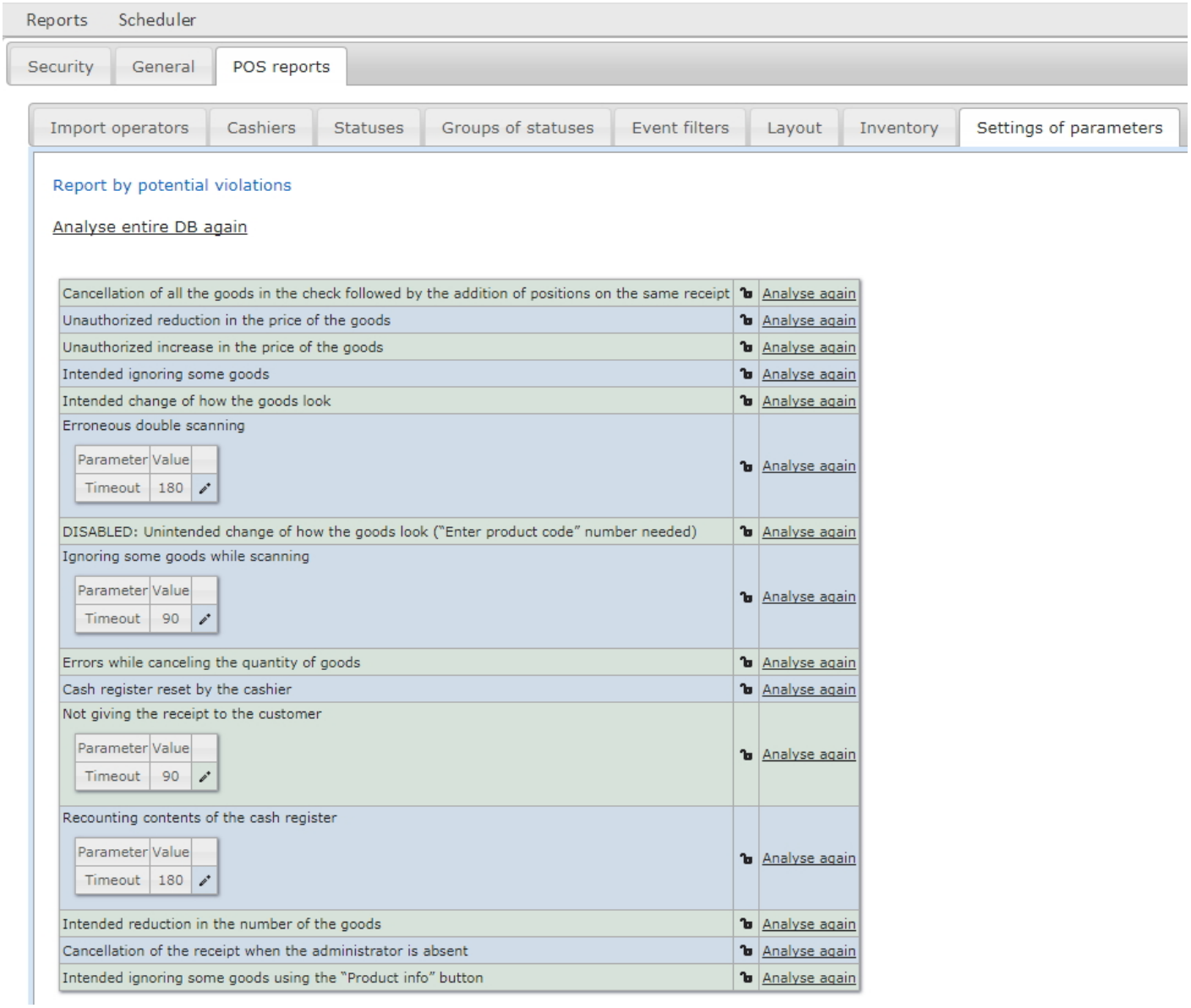
Selecting items by which the report by suspicious events is created is performed in the **Inventory** tab.



Set a checkbox close to the required name to select this item.

7.9.8 Setting up parameters of report by potential violations

Setting up parameters of report by potential violations is performed on the **Settings of parameters** tab.



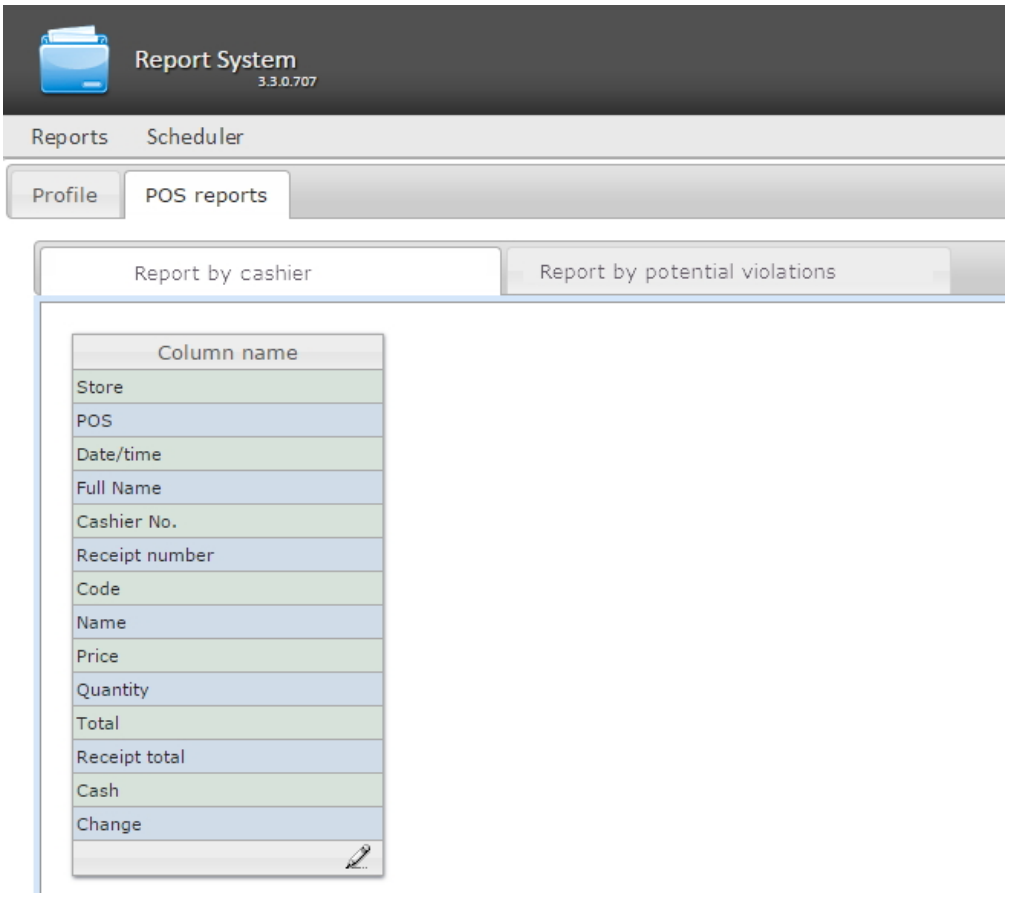
Click the sign close to the corresponding violation to disable it for selecting while creating the report by potential violations.

> **Note.**
>
> Report by **Unintended change of how the goods look** violation type is not available to create. To enable this violation type refer to the technical support department of the *AxxonSoft* company.

7.9.9 Setting up the user interface of POS reports

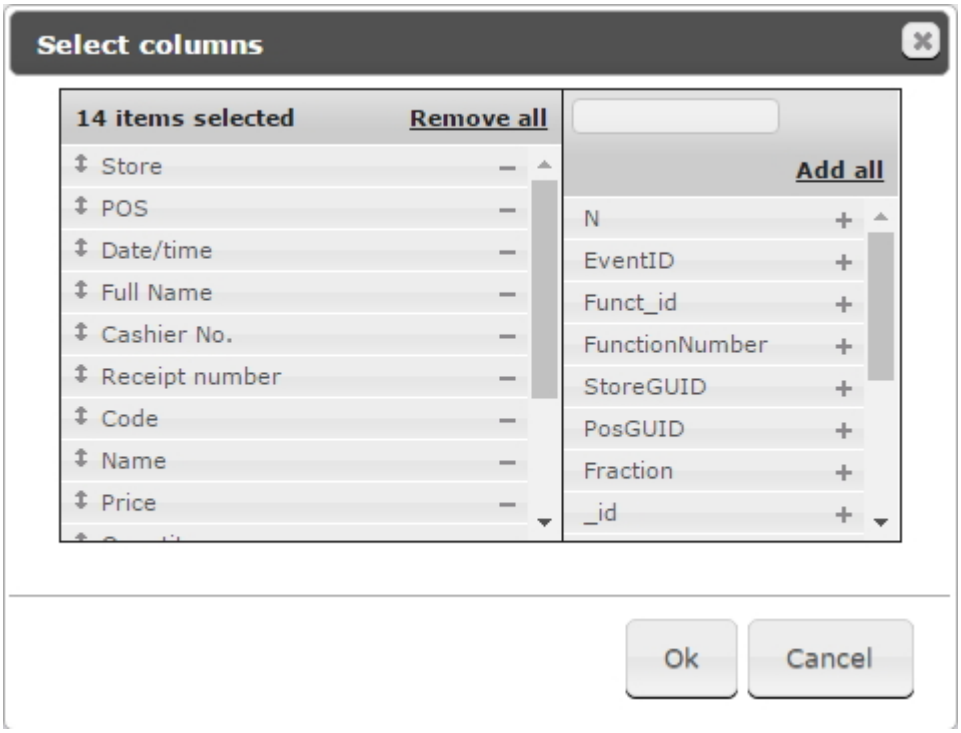
A unique interface of POS reports can be configured for every user.

User interface setup is performed on the **Profile** > **POS reports** tab.



To edit the list of columns in the report, do the following:

1. Click the  icon at the bottom of the list.
2. In the window that appears, add the required columns by clicking + and remove the unnesserary ones by clicking −. It is possible to add/remove all the columns.
3. Click **OK** to save the changes.

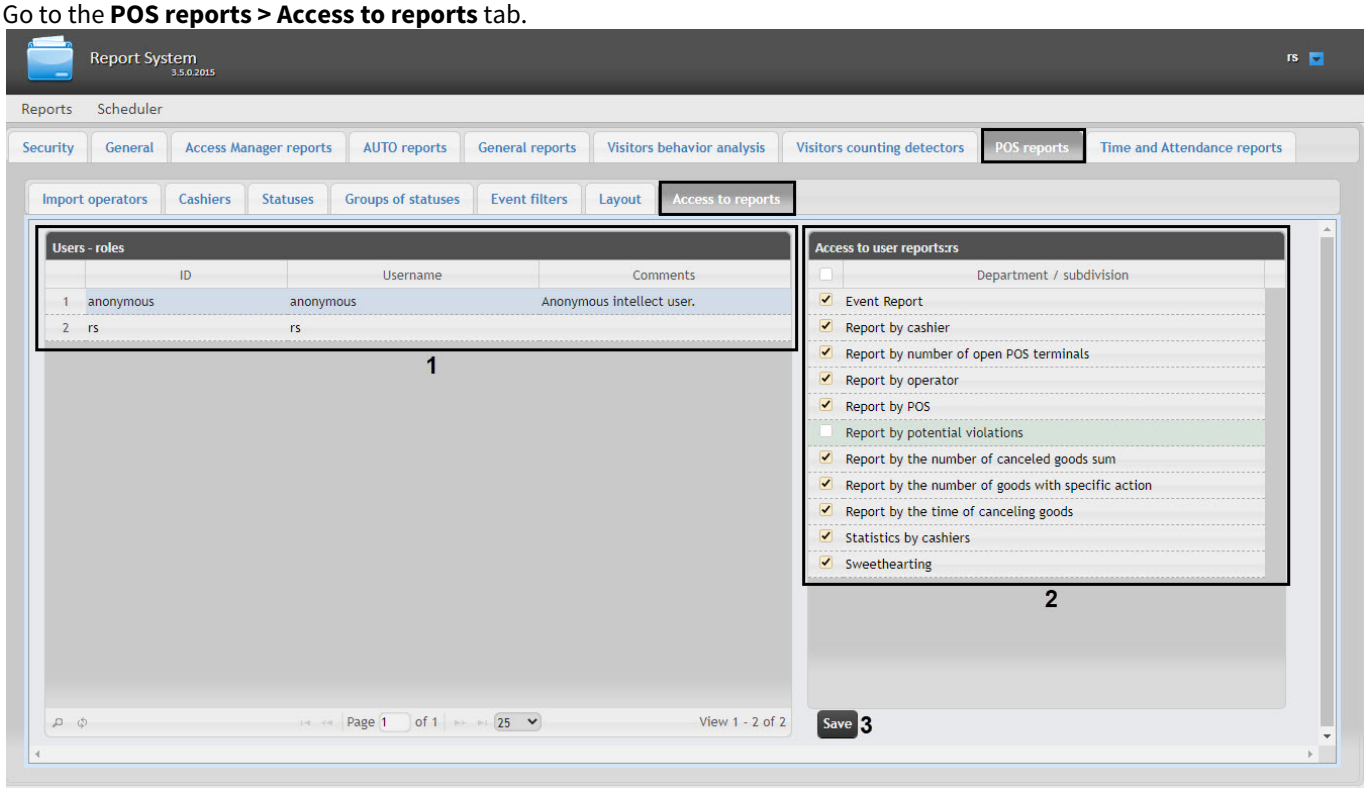


The list of columns can be edited in a similar way by clicking the **Edit columns** button right on the report page.

7.9.10 Setting up user access to POS reports

To configure user access to *POS reports* do the following:

1. Go to the **POS reports > Access to reports** tab.



2. In the **Users** table select user for which the access is configured (**1**).

> **Note**
>
> The user must have a role with the right to perform the **POS reports** and/or **POS expert** operations. For details on role configuration, see Set up the roles.

3. The list of available reports for the selected user is displayed in the **Access to user reports** table (**2**).
4. Set the checkboxes next to reports which will be enabled for the selected user.
5. Click the **Save** button (**3**).

Setting up user access to *POS reports* is complete.

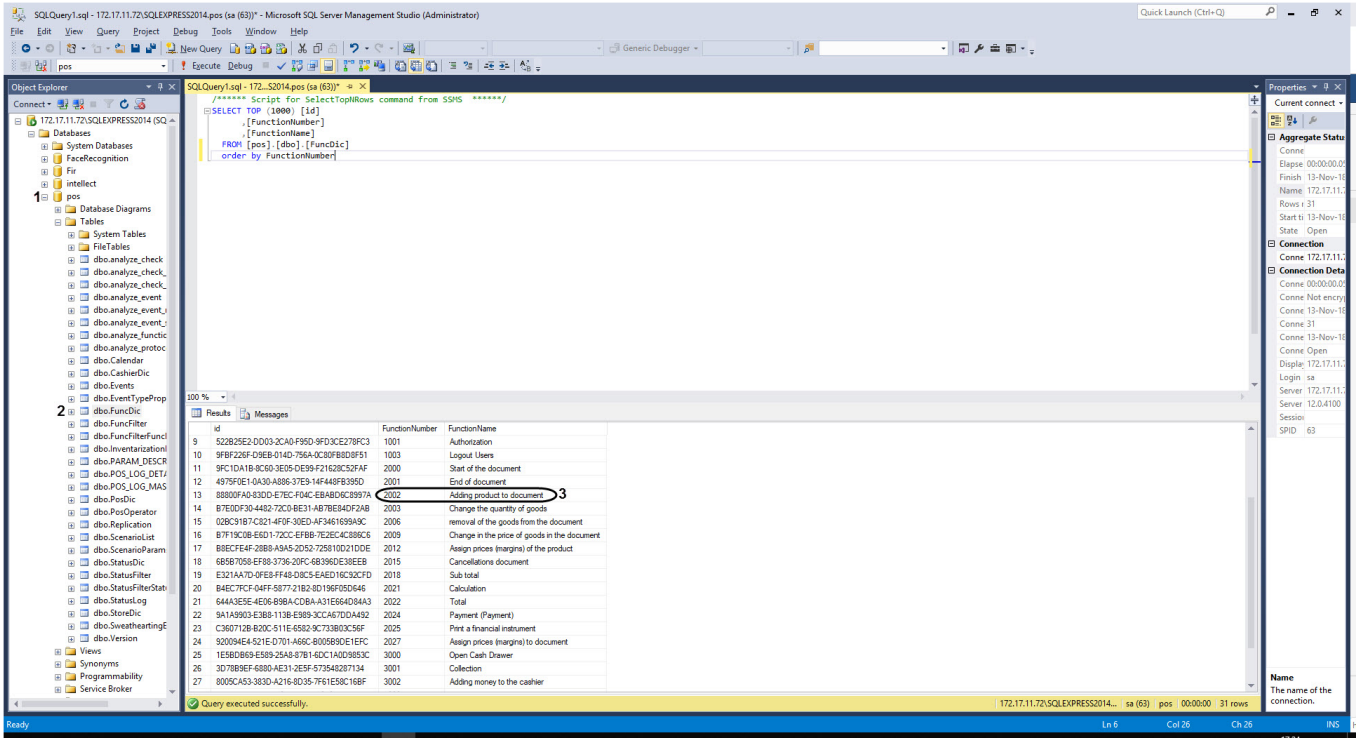
7.9.11 Setting up the Sweethearting report

7.9.11.1 Enabling the Sweethearting report

> **Important!**
>
> The **Web.config** file configuration must be performed on the computer where it is planned to work with the **Sweethearting** report.
>
> After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

By default, the **Sweethearting** report is disabled. To enable it, do the following:

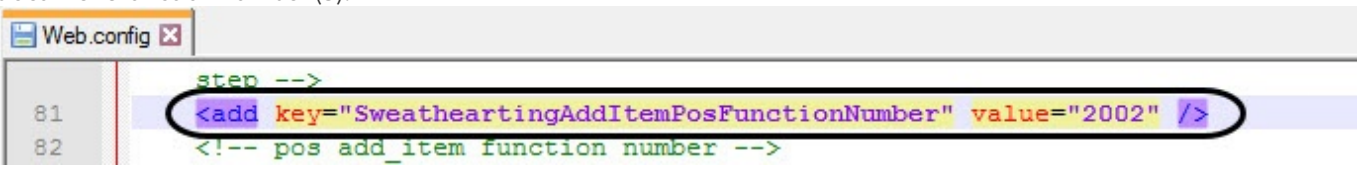
1. Open the **POS** database in the SQL Server Management Studio software (**1**).



2. Open the **dbo.FuncDic** table (**2**).
3. Copy to the clipboard or memorize the **Adding product to document** function number (**3**).

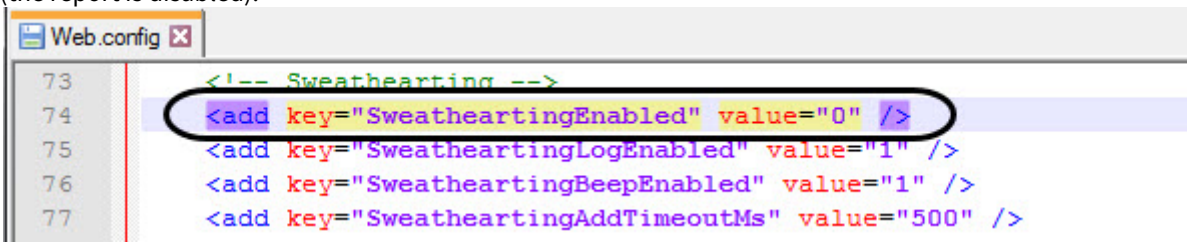
> **Note**
>
> The **Adding product to document** function name can differ depending on the localization.

4. Go to the <*Intellect* installation directory>\Modules\Wt2.
5. Open the **Web.config** file for editing.
6. For the **SweatheartingAddItemPosFunctionNumber** key specify the value corresponding to the **Adding product to document** function number (**3**).



> **Important!**
>
> If the **Adding product to document** function number is specified incorreclty, the **Sweethearting** report will not be enabled, because only the receipts with the item adding event number specified in the **SweatheartingAddItemPosFunctionNumber** key are added to the report.

7. To enable the **Sweethearting** report, specify the **1** value for the **SweatheartingEnabled** key. The default key value is **0** (the report is disabled).



8. Save the changes in the **Web.config** file.

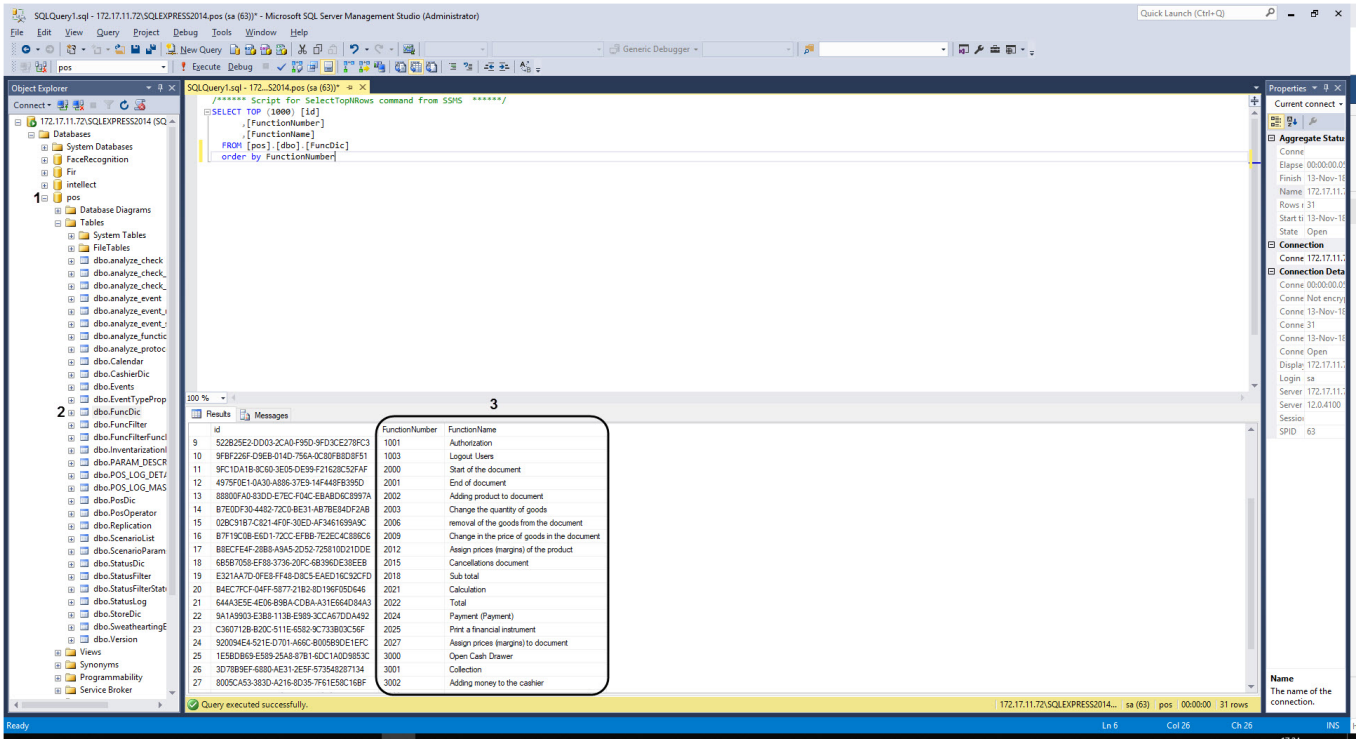
7.9.11.2 Filtering the sweethearting events

> **Important!**
>
> The **Web.config** file configuration must be performed on the computer where it is planned to work with the **Sweethearting** report.
>
> After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

You can filter the sweethearting events in order to build the **Sweethearting** report only by the events which occured while the receipt was open.

To filter the sweethearting events, do the following:

1. Open the **POS** database in the SQL Server Management Studio software (**1**).

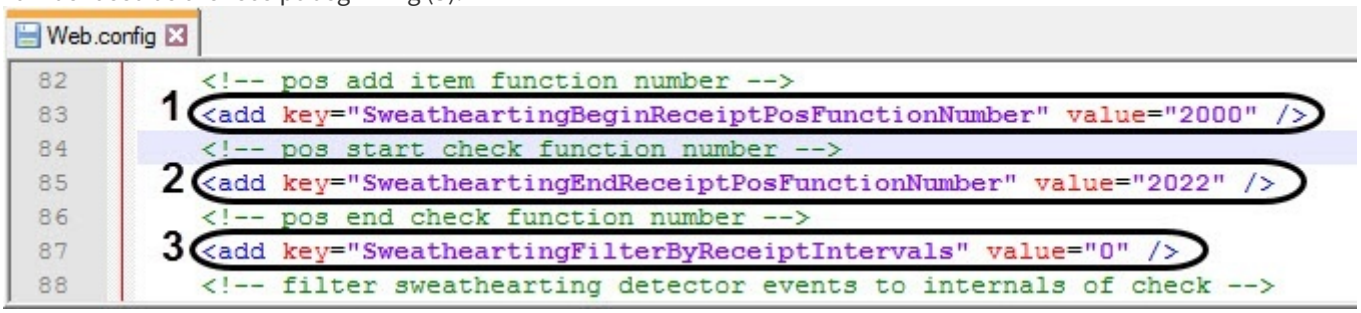


2. Open the **dbo.FuncDic** table (**2**).
3. Copy to the clipboard or memorize the function numbers in the **FunctionNumber** column (**3**) which will indicate the beginning and the end of the receipt.

> **Note**
>
> For example, the **Document start** function with the corresponding function number **2000** can be used as the receipt beginning, and the **Result** function with the corresponding function number **2022** can be used as the receipt end.

4. Go to the <*Intellect* installation directory>\Modules\Wt2.
5. Open the **Web.config** file for editing.

6. For the **SweatheartingBeginReceiptPosFunctionNumber** key (**1**) specify the value corresponding to the function number used as the receipt beginning (**3**).



7. For the **SweatheartingEndReceiptPosFunctionNumber** key (**2**) specify the value corresponding to the function number used as the receipt end (**3**).
8. To enable filtering, specify the **1** value for the **SweatheartingFilterByReceiptIntervals** key (**3**). The default key value is **0** (filtering is disabled).
9. Save the changes in the **Web.config** file.

> **Note**
>
> As a result, only the events which occured while the receipt was open will be displayed in the **Sweethearting** report. If the sweethearting event occured when the receipt was closed, such event will not be displayed in the report.

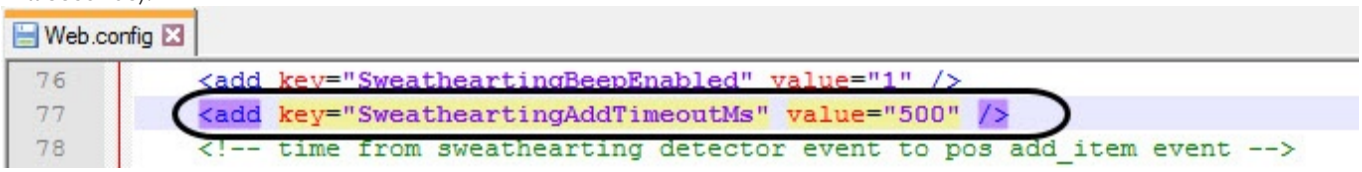
> **Note**
>
> The receipts which do not have their beginning and end specified in the **Web.config** file will be considered incorrect and will not be processed. Meanwhile, the receipt with several beginnings and ends specified will be processed.

7.9.11.3 Setting the timeout for sweethearting event addition to report

> **Important!**
>
> The **Web.config** file configuration must be performed on the computer where it is planned to work with the **Sweethearting** report.
>
> After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

You can set the timeout between the sweethearting detector event and the POS event. If this timeout is exceeded, the sweethearting event will be added to the report. To set the timeout, do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. For the **SweatheartingAddTimeoutMs** key specify the required value in milliseconds. The default value is **500** (500 milliseconds).



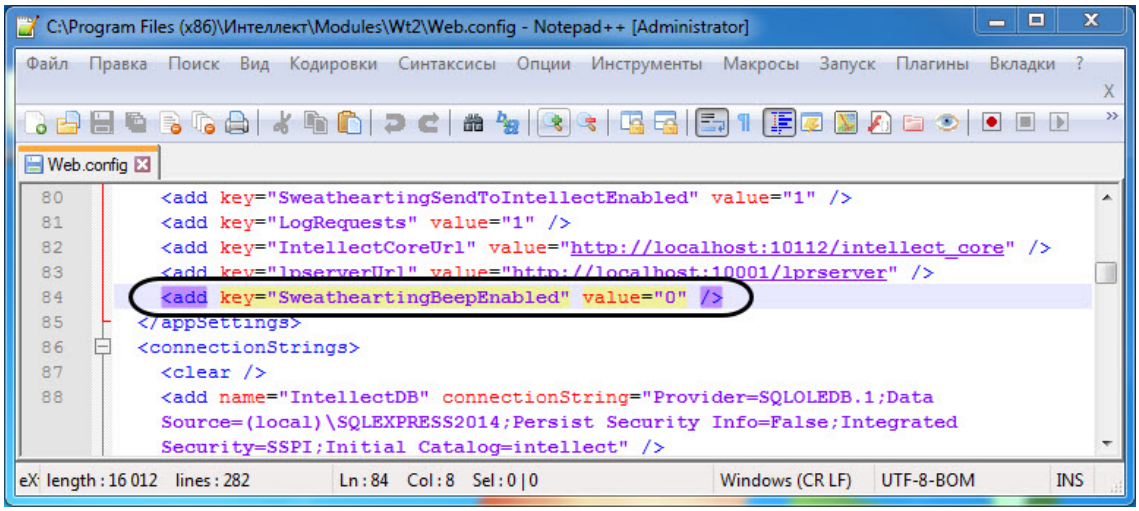
4. Save the changes in the **Web.config** file.

7.9.11.4 Disabling sound notification about new events in Sweethearting report

> **Important!**
>
> The **Web.config** file configuration must be performed on the computer where it is planned to work with the **Sweethearting** report.
>
> After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

To disable the sound notification about new events in **Sweethearting** report, do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. Set the **0** value for the **SweatheartingBeepEnabled** key. The default value is **1** (the sound notification is enabled).



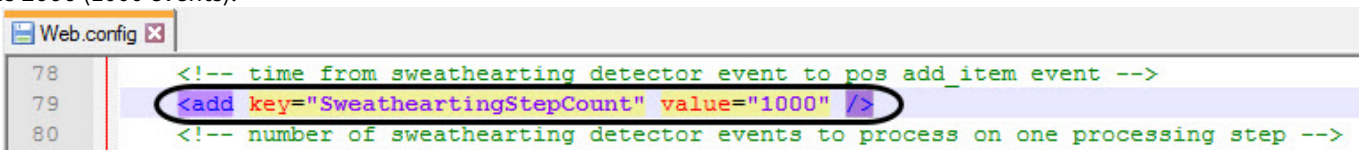
4. Save the changes in the **Web.config** file.

7.9.11.5 Configuring the events preloaded on first Sweethearting report launch

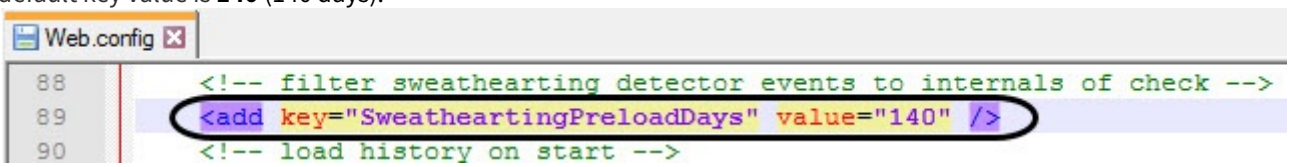
> **Important!**
>
> The **Web.config** file configuration must be performed on the computer where it is planned to work with the **Sweethearting** report.
>
> After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

To configure the events which should be preloaded on the first **Sweethearting** report launch, do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. For the **SweatheartingStepCount** key specify the required number of preloaded events. The default key value is **1000** (1000 events).



4. For the **SweatheartingPreloadDays** key specify the required number of days which events should be displayed. The default key value is **140** (140 days).



> **Note**
>
> For example, if the **1** (1 day) value is specified for the **SweatheartingPreloadDays** key, then on the first **Sweethearting** report launch all events occurred within the past 24 hours will be displayed. However, the number of preloaded events is limited by the value specified for the **SweatheartingStepCount** key. Therefore, if within the specified number of days the number of occurred events exceeds the **SweatheartingStepCount** key value, only the most recent events will be displayed in the report.

5. Save the changes in the **Web.config** file.

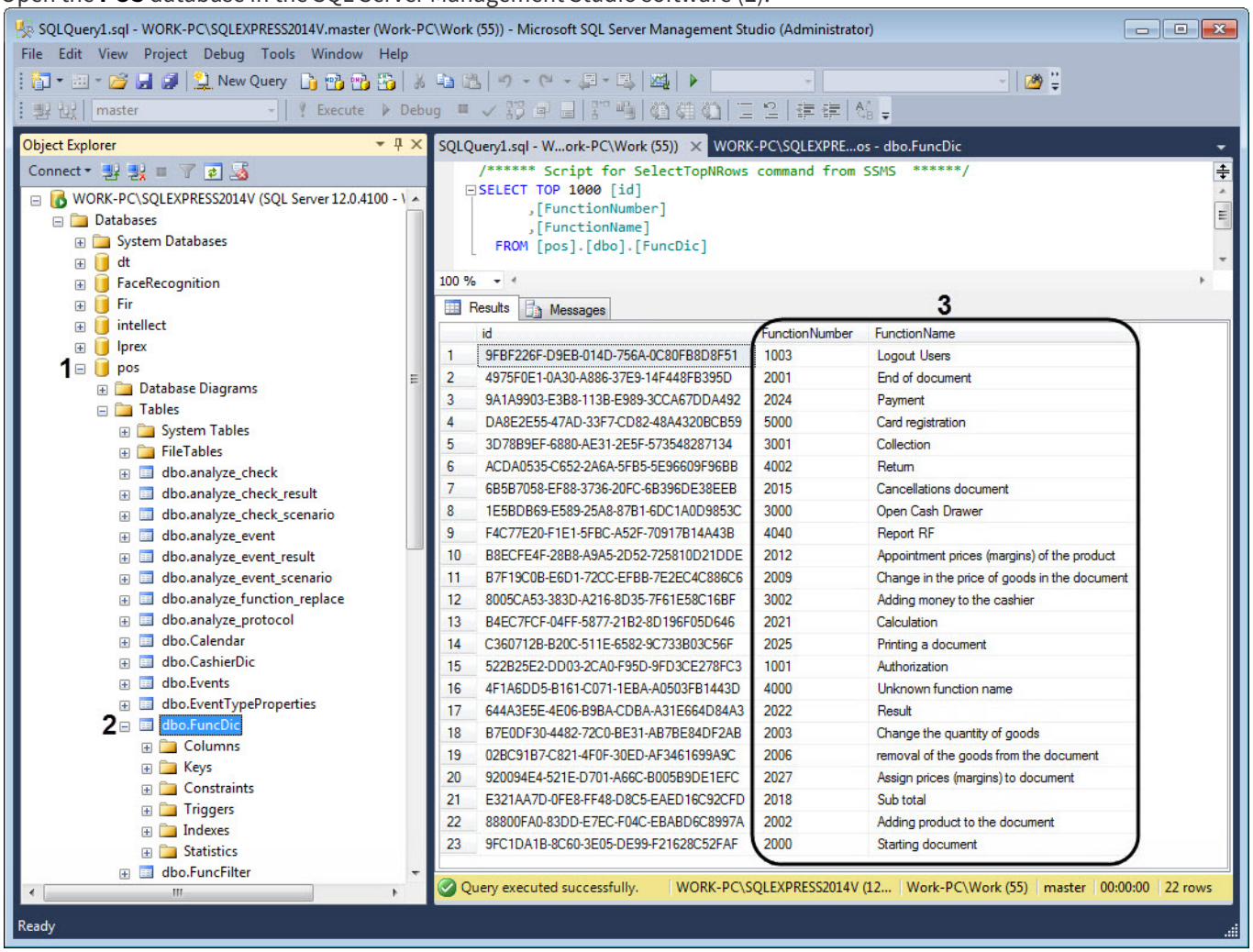
> **Note**
>
> This configuration applies to the events which are preloaded only on the first **Sweethearting** report launch. After you specify any filters in the report interface, they will be applied to the report.

7.9.12 Setting up the Statistics by cashiers report

> **Attention!**
>
> The **known-functions.json** file configuration must be performed on the computer where it is planned to work with the **Statistics by cashiers** report.
>
> After making any changes to the **known-functions.json** file, it is necessary to restart the **Cassini Service** utility.

Set up the **Report by cashier** as follows:

1. Open the **POS** database in the SQL Server Management Studio software (**1**).



2. Open the **dbo.FuncDic** table (**2**).
3. Copy to the clipboard or memorize the function numbers in the **FunctionNumber** column in area (**3**).
4. Go to the <*Intellect* installation directory>*Modules*|*Wt2*|*App_Data*|*Pos*.
5. Open the **known-functions.json** file for editing.

6. For each function, set the **function-number** corresponding to the function number from the **dbo.FuncDic** table.

known-functions.json

```
[
  {
    "known-id": "print_document",
    "comment": "Печать документа",
    "function-number": 2025
  },
  {
    "known-id": "payment",
    "comment": "Оплата",
    "function-number": 2024
  },
  {
    "known-id": "change_item_price_in_the_document",
    "comment": "Изменение цены товара в документе",
    "function-number": 2009
  },
  {
    "known-id": "add_item",
    "comment": "Добавление товара в документ",
    "function-number": 2002
  },

  {
    "known-id": "login",
    "comment": "Авторизация пользователя",
    "function-number": 1001
  },
  {
    "known-id": "logout",
    "comment": "Разрегистрация пользователя",
    "function-number": 1003
  },
  {
    "known-id": "start_check",
    "comment": "Начало документа",
    "function-number": 2000
  },
  {
    "known-id": "annulate_check",
    "comment": "Аннулирование документа",
    "function-number": 2015
  },
  {
    "known-id": "annulate_item",
    "comment": "Удаление товара из документа",
    "function-number": 2006
  },
  {
    "known-id": "total_check",
    "comment": "Итог",
    "function-number": 2022
  }
]
```

7. Save the changes to the **known-functions.json** file.

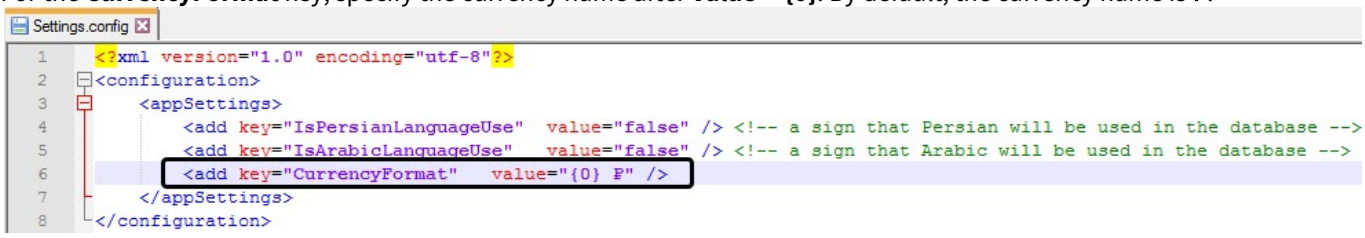
Setting up the **Statistics by cashiers** report is completed.

7.9.13 Setting up the currency format for Report by the number of goods with specific action

> **Attention!**
>
> The **Settings.config** file configuration must be performed on the computer where it is planned to work with the report by the number of goods with specific action.
>
> After making any changes in the **Settings.config** file, it is necessary to restart the **Cassini Service** utility.

To set up the currency display format for the report by the number of goods with specific action, do the following:

1. Go to the *<Intellect installation directory>\Modules|Wt2|App_Data|Settings*.
2. Open the **Settings.config** file for editing.
3. For the **CurrencyFormat** key, specify the currency name after **value="{0}**. By default, the currency name is **₽**.



4. Save the changes in the **Settings.config** file.

The currency display format for the report by the number of goods with specific action is now configured.

7.10 Setting up the Time and Attendance reports

Setting up the Time and Attendance reports is performed in the **Time and Attendance reports** tab on the administration page.

Time and Attendance reports setup is performed in the following sequence:

1. Setting up the user access rights to departments
2. Setting up user access to Time and Attendance reports

> **Note**
>
> In order to perform the setup, you need to create the *Time and Attendance* interface object in the server, see Time and Attendance object settings.

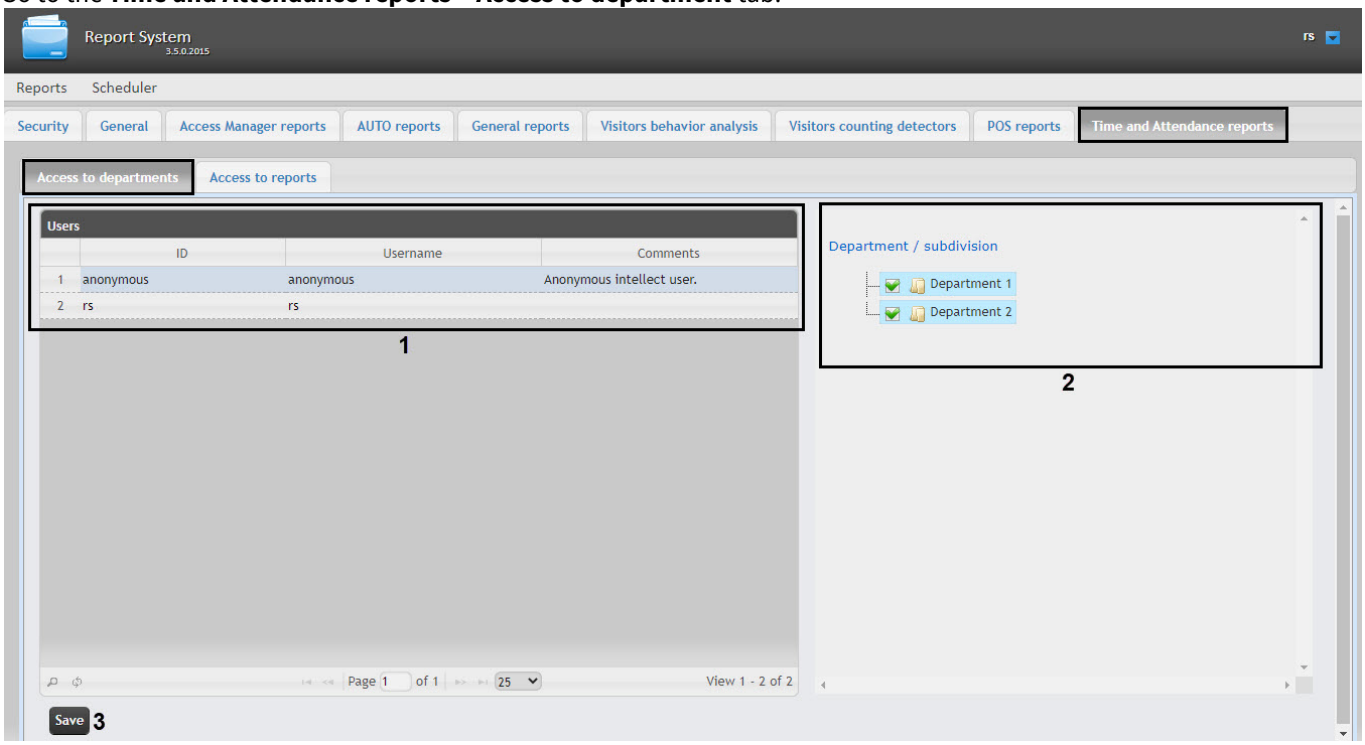
> **Note**
>
> In order to be able to work with Time and Attendance reports, the role with the right to perform the **Time and Attendance Module operator** operations should be created and assigned to users, as described in Set up the roles.

> **Note**
>
> Once the configuration is complete, update the report database as described in Updating the report database.

7.10.1 Setting up the user access rights to departments

To configure user access to departments do the following:

1. Go to the **Time and Attendance reports > Access to department** tab.



2. In the **Users** table select the user for which access is to be configured (**1**).

> **Note**
>
> The user must have a role with the right to perform the **Time and Attendance Module operator** operations. For details on role configuration, see Set up the roles.

3. The list of available departments for the selected user is displayed in the **Department / subvision** table (**2**).

> **Note.**
>
> Only departments selected while configuring the *Time and Attendance* program module display in the **Department / subvision** table.

4. Set checkboxes close to departments to which access will be allowed for the selected user.
5. Click the **Save** button (**3**).

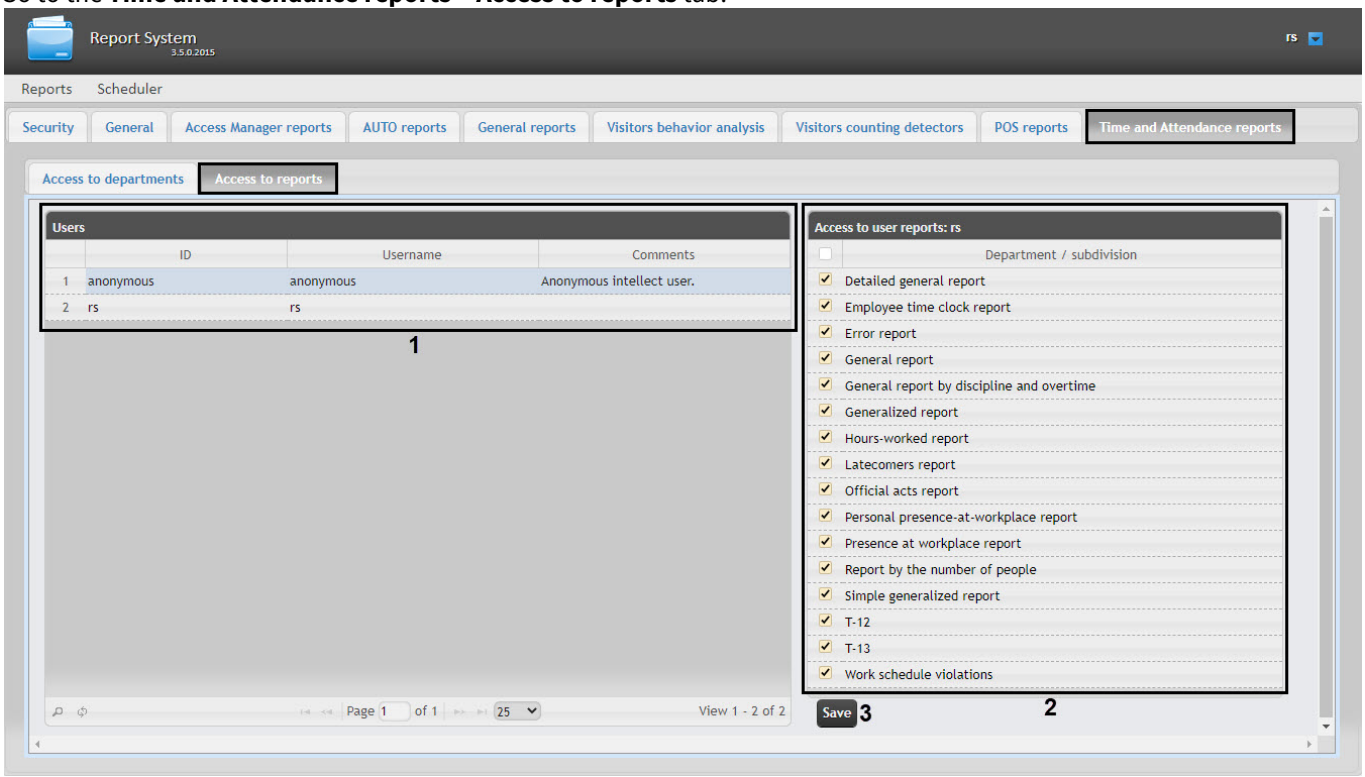
> **Note**
>
> The **rs** user has access to all departments by default, this can not be changed.

Configuring of user access to departments is completed.

7.10.2 Setting up user access to Time and Attendance reports

To configure user access to *Time and Attendance reports* do the following:

1. Go to the **Time and Attendance reports > Access to reports** tab.



2. In the **Users** table select user for which the access is configured (**1**).

> **Note**
>
> The user must have a role with the right to perform the **Time and Attendance Module operator** operations. For details on role configuration, see Set up the roles.

3. The list of available reports for the selected user is displayed in the **Access to user reports** table (**2**).
4. Set the checkboxes next to reports which will be enabled for the selected user.
5. Click the **Save** button (**3**).

Setting up user access to *Time and Attendance reports* is complete.

7.10.3 Configuring the Extended report on the presence at the workplace and Total report on the presence at the workplace

Page contents

- Enabling the Extended report on the presence at the workplace and Total report on the presence at the workplace
- Adding the fields to the custom database template file

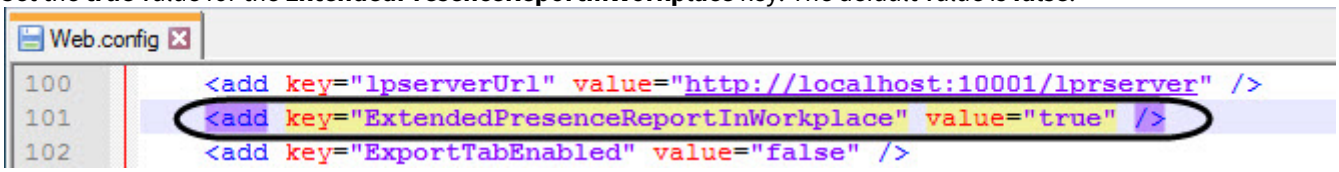
7.10.3.1 Enabling the Extended report on the presence at the workplace and Total report on the presence at the workplace

> **Attention!**
>
> The **Web.config** file configuration must be performed on the computer where it is planned to work with the **Extended report on the presence at the workplace** and **Total report on the presence at the workplace**.

> **Note**
>
> After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

To enable these reports, do the following:

1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. Set the **true** value for the **ExtendedPresenceReportInWorkplace** key. The default value is **false**.



4. Save the changes in the **Web.config** file.
5. As a result, it will be possible to provide the access to these reports to the user (see Setting up the access rights to Time and Attendance reports).

> **Attention!**
>
> After activating these reports, the **Presence at workplace report** will become unavailable.

7.10.3.2 Adding the fields to the custom database template file

For the **Extended report on the presence at the workplace** report and **Total report on the presence at the workplace** operation, it is necessary to do the following:

1. Create a text document with the .dbi extension (for example **ext.dbi**) in the root directory of the *Intellect* installation — **C:\Program Files (x86)\Intellect**.

   > **Note**
   >
   > You can add the fields to the **intellect.ext.dbi** file, which is specifically designed for custom tables and fields (see The ddi.exe utility for editing database templates and external settings files).

2. Open this dbi file in a text editor.

   > **Attention!**
   >
   > Before you enter any data, make sure that the Windows-1251 text encoding is selected. Otherwise, when adding additional fields to the database, the text will be recognized incorrectly.

3. Copy the following code block to the dbi file:

```
[OBJ_PERSON]
personnelCat, CHAR, 64 //Personnel category{C%Workers|Employees|Managers|Other}
course, CHAR, 255 //Activity area
contractNum, CHAR, 255 //Contract number
specialty, CHAR, 255 //Speciality
```

4. After the fields are created, it is necessary to save the changes in the dbi file.

Attention!

After you save the dbi file, it is necessary to update the main database. To do this, use the idb.exe utility (see The ddi.exe utility for editing database templates and external settings files).

7.10.4 Setting up the Presence at workplace report and Personal presence-at-workplace report

Attention!

The **Web.config** file configuration must be performed on the computer where it is planned to work with the **Presence at workplace report** and **Personal presence-at-workplace report**.

After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

The **Presence at workplace report** and **Personal presence-at-workplace report** have two appearances: **Standard** or **With page header**. In the **With page header** option, photos of users can be displayed in the report. To display user photos, do the following:

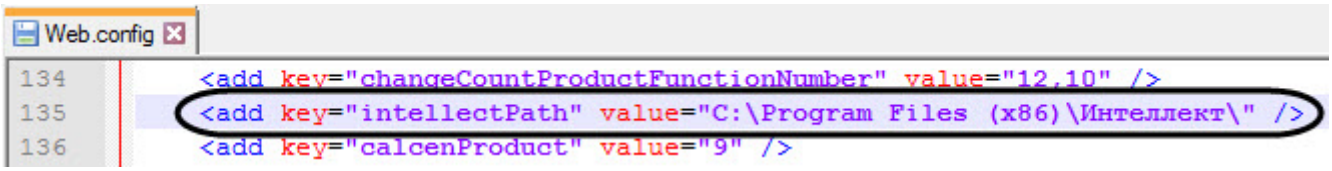
1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. Add the following key to the **<appSettings>** key group:

```
<add key="intellectPath" value="C:\Program Files (x86)\Intellect\" />
```

where "C:\Program Files (x86)\Intellect\" is the *Intellect* installation directory.

Note

Photos are assigned to users in the *Access Manager* module (see Assigning a photograph to a user in the Access Manager software module).



4. Save the changes in the **Web.config** file.

7.11 Selecting the camera stream in live video reports

To select the camera stream in live video reports, do the following:

1. Go to *<Intellect installation directory>*\Modules\Wt2.
2. Open the **Web.config** configuration file for editing.

3. For the **IntellectVideoStreamNumber** key specify the required camera stream number from **1** to **4**. By default, the value is **0** (the first camera stream).

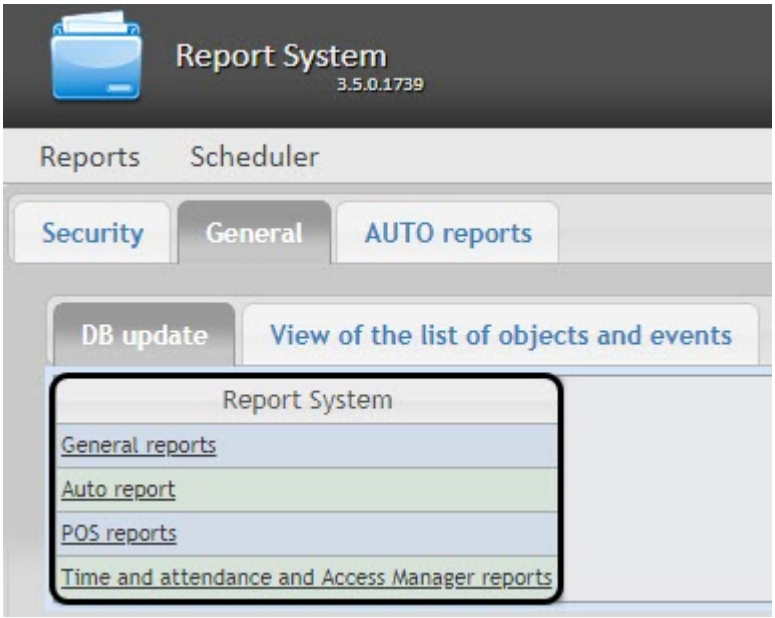
```
Web.config
41      <add key="IntellectPassword" value=""/>
42      <add key="IntellectArchivePassword" value=""/>
43      <!-- compression values [0..5] -1 means send without recompression -->
44      <add key="IntellectVideoCompression" value="-1"/>
45      <!-- stream number [0..4]; 0 - default. -->
46      <add key="IntellectVideoStreamNumber" value="0"/>
47      <add key="PosShowCodeColumn" value="false"/>
48      <add key="ScreenshotInCheckDetailsEnabled" value="1"/>
49      <add key="WebConfigVersion" value="30300"/>
50      <!-- firefix for RSWT-2069 -->
```

4. Save the changes in the **Web.config** file.

> **Important!**
>
> This configuration must be performed on the computer where it is planned to work with reports and where the live video is available for viewing.

7.12 Updating the report database

Stored procedures for *Intellect Web Report System* reports are updated in the database on the **General** tab of the administration page.



In order to update the stored procedures in the database for a specific type of reports, click the corresponding link in the **DB update** table.

The stored procedures for Time and Attendance reports and Access Manager reports are stored in a single database. If any of the two modules is absent, it will not hamper the update procedure: the stored procedure for the absent module will not be loaded in the database.

> **Warning!**
>
> The **General reports** database must be updated after each new installation of the Web Report System or re-installation with configuration update.

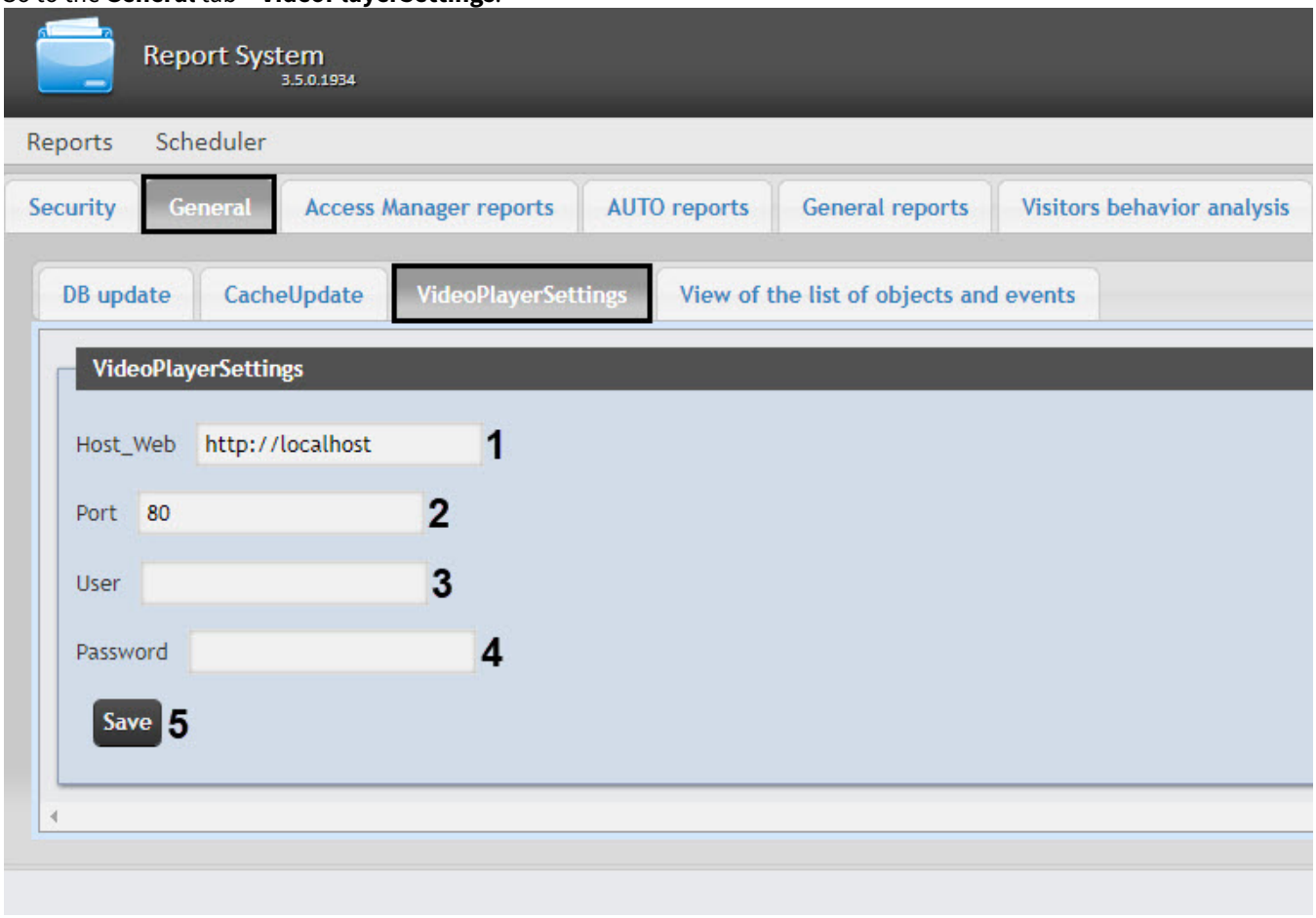
7.13 Video Player Settings

Setting up the Video Player is necessary in the following cases:

- To be able to view the video archive of events in browsers based on the Blink and Gecko browser engines (Google Chrome, Yandex Browser, Firefox, Opera, etc.).
- To display frames from cameras in the built general **Report by camera**.

The Video Player is configured as follows:

1. Go to the **General** tab > **VideoPlayerSettings**.



2. In the **Host_Web** field (**1**), enter the IP address of the Server on which the **Web-server** module is configured (for details, see Configuring the Web-server module). Default: **http://localhost**.
3. In the **Port** field (**2**), enter the port number for connecting to the HTTP server, which is specified on the settings panel of the **Web-server** object (see Setting the parameters of connecting Clients to the Web-server).

   > **Note**
   >
   > If the **Web-server** module is configured on the same Server where the *Intellect Web Report System* is installed, then the **Port** value is filled in automatically after restarting the *Cassini Service*.

4. In the **User** (**3**) and **Password** (**4**) fields, enter the username and password for the *Intellect* user, who has the rights to perform video surveillance from a Web browser. If you log into *Intellect* without authorization, leave the field blank.
5. Click **Save** (**5**) to apply the changes.

The video player is configured.

8 Working with Intellect Web Report System

Working with *Intellect Web Report System* is performed on the document page (see Intellect Web Report System interface section).

Opportunities of the *Intellect Web Report System* are described in the Purpose of the Intellect Web Report System section.

> **Note.**
>
> For proper operation of the Web Report System you may need to edit the configuration file (**Web.config**) by increasing the value of the **CommandTimeout** parameter (see the XML-file parameters reference guide)

8.1 Working with POS reports

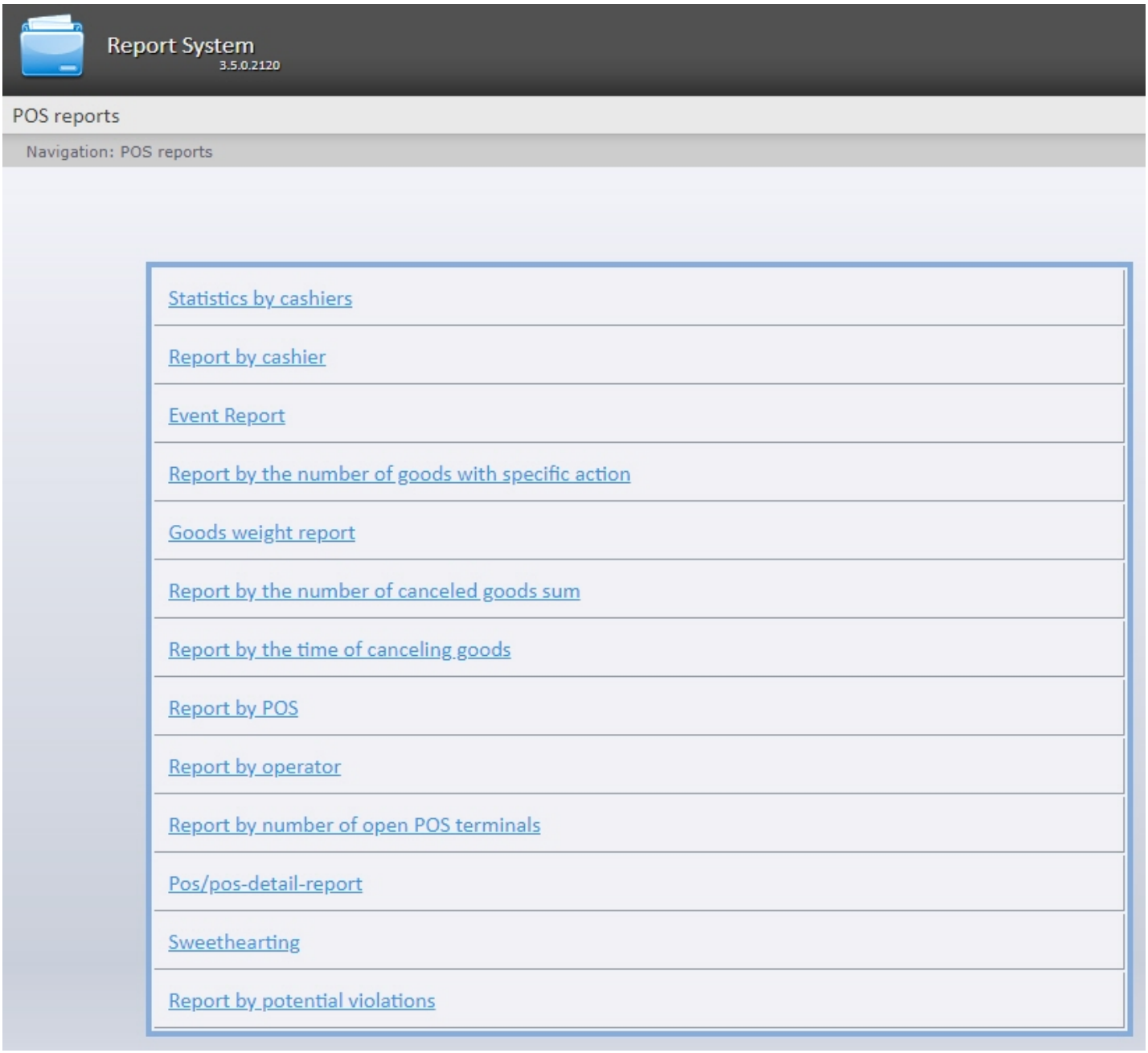
POS reports are created by the local database of the *Intellect* software package, but it is also possible to use data from remote servers. Configuration of database replication is needed (see Configuring the POS Replicator system object).

Working with POS reports starts with selection of summary report type.

8.1.1 General reports

8.1.1.1 Selecting a type of general POS report

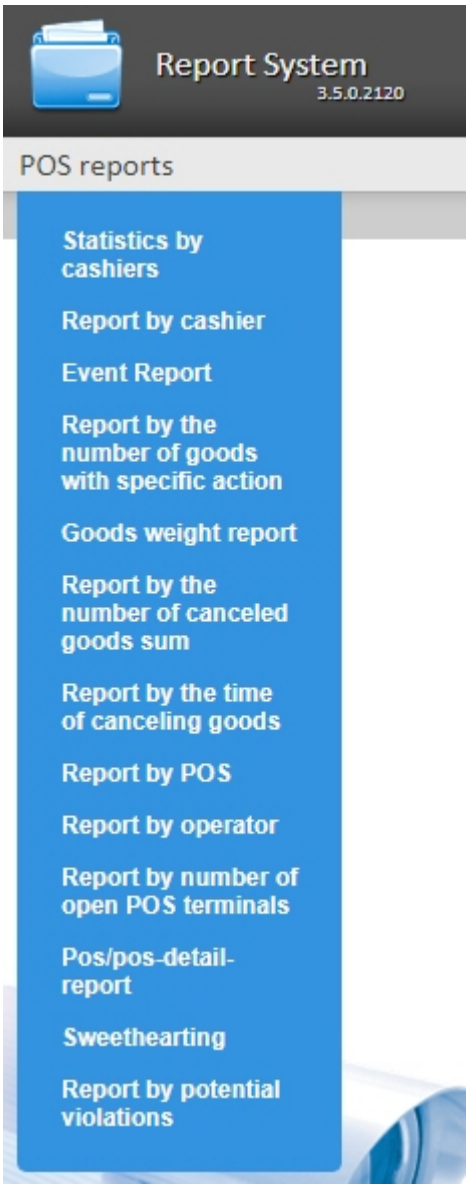
In order to select type of general POS report click **POS reports** in the menu of reports.As a result the list of available general POS reports (with a short description of each one) is displayed.



In order to switch to the required report click the corresponding link.

Note.

The list of links for switching to general POS reports is also available when hovering over a link to **POS reports** in the reports menu.

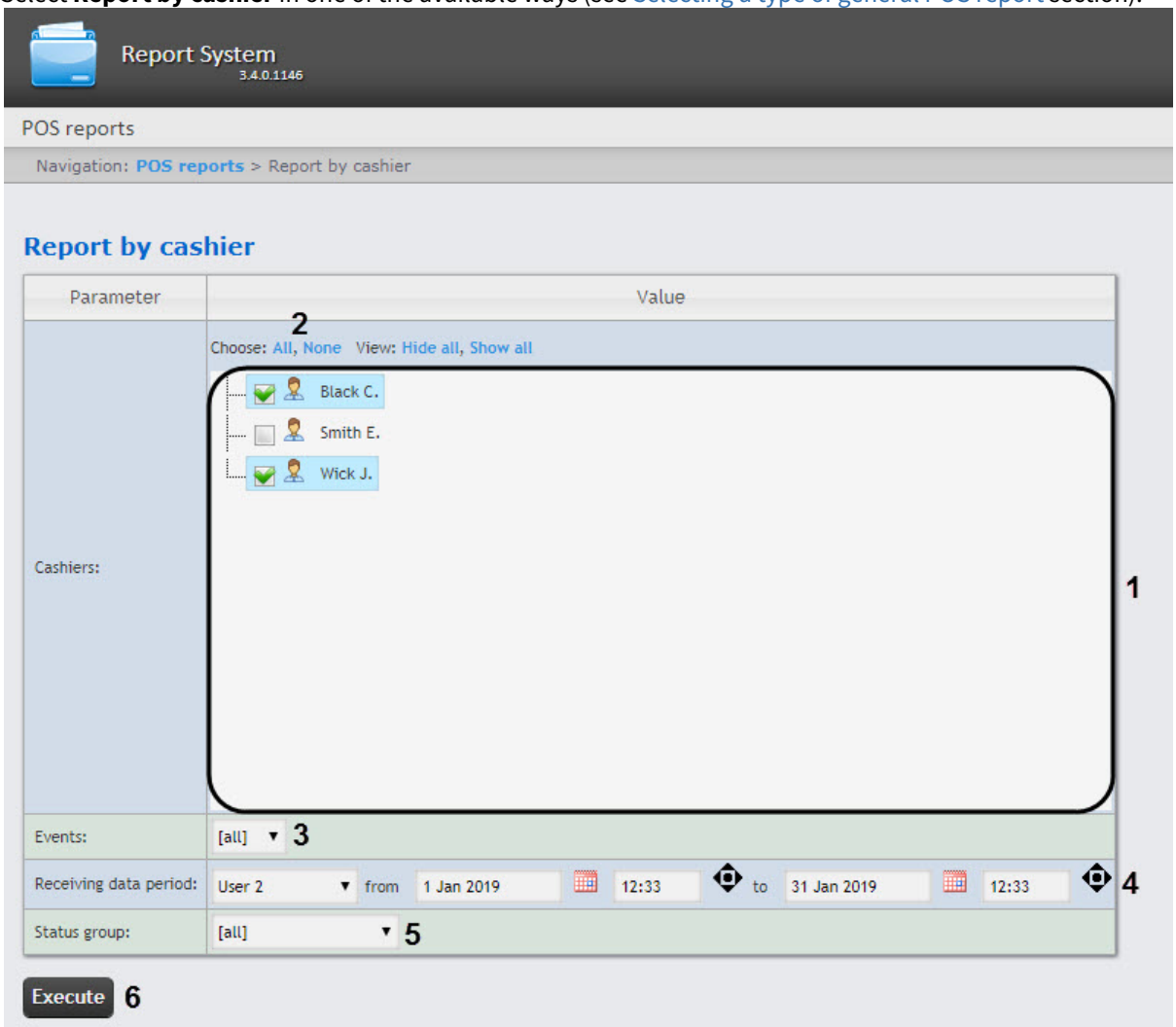


8.1.1.2 Statistics by cashiers

> **Important!**
>
> To enable the displaying of the cashier statistics, the **POS-terminal** object should be created and configured in the *Intellect* (see The POS-terminal object setup), and this report should be configured (see Setting up the Statistics by cashiers report).

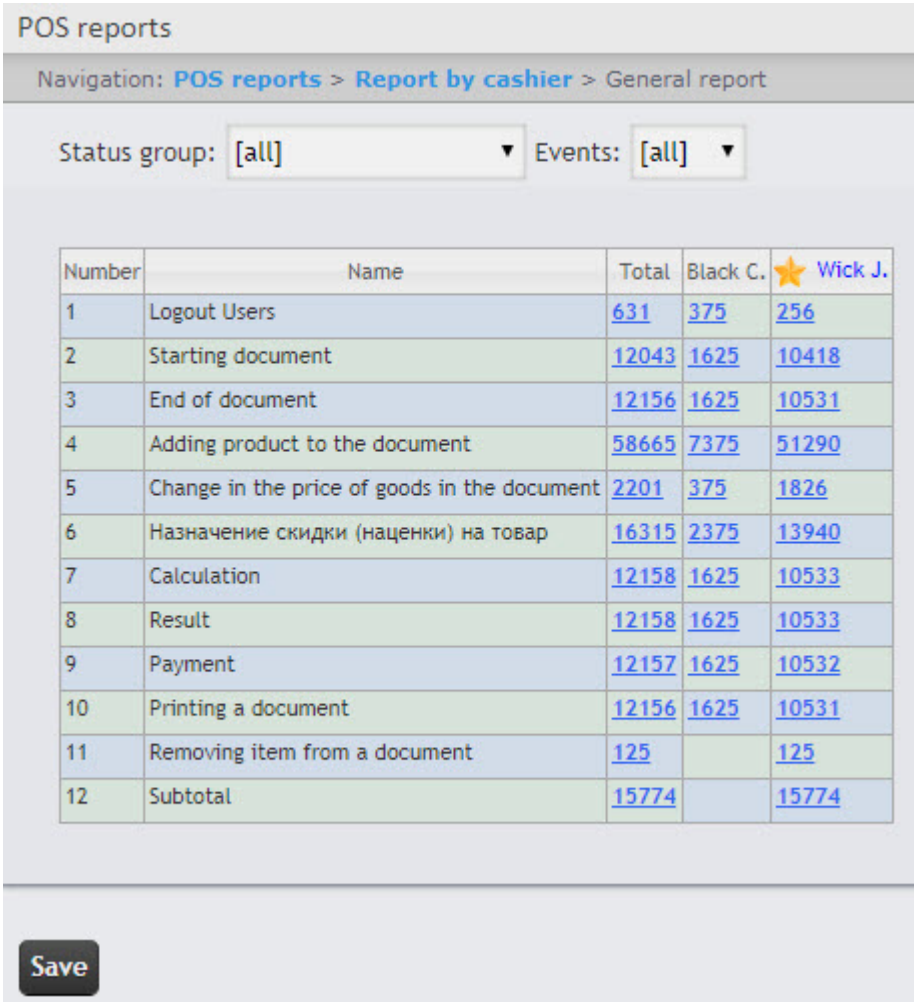
In order to display the cashier statistics do the following:

1. Select **Report by cashier** in one of the available ways (see Selecting a type of general POS report section).



2. Specify the period in one of the following ways (**1**):
   a. By default, the **User defined** period is selected. Enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
   b. There is also a possibility to build a report for a fixed period of time (a week, a month, etc.). These periods are selected in the drop-down list.
   c. Finally, the **User defined 2** period enables to enter the start and end time of period for which the report is to be created using the button.
3. Click **Execute** to run the report (**2**).

As a result of the operation, a summary table of events will be displayed for all the cashiers in accordance with predefined parameters. The number of events registered for each cashier will be displayed in the corresponding column. The **Total** column for each type of event will indicate the total number of events for each cashier.To view them, click the **[all]** link.



Number	Name	Total	Black C.	Wick J.
1	Logout Users	631	375	256
2	Starting document	12043	1625	10418
3	End of document	12156	1625	10531
4	Adding product to the document	58665	7375	51290
5	Change in the price of goods in the document	2201	375	1826
6	Назначение скидки (наценки) на товар	16315	2375	13940
7	Calculation	12158	1625	10533
8	Result	12158	1625	10533
9	Payment	12157	1625	10532
10	Printing a document	12156	1625	10531
11	Removing item from a document	125		125
12	Subtotal	15774		15774

In order to save a general report by cashier in.xls format click **Save**.

8.1.1.3 Report by cashier

> **Important!**
>
> In order to generate a report by cashier, the **POS-terminal** object should be setup and configured in the Intellect (see The POS-terminal object setup).

In order to display a report by cashier do the following:

1. Select **Report by cashier** in one way (see Selecting a type of general POS report section).

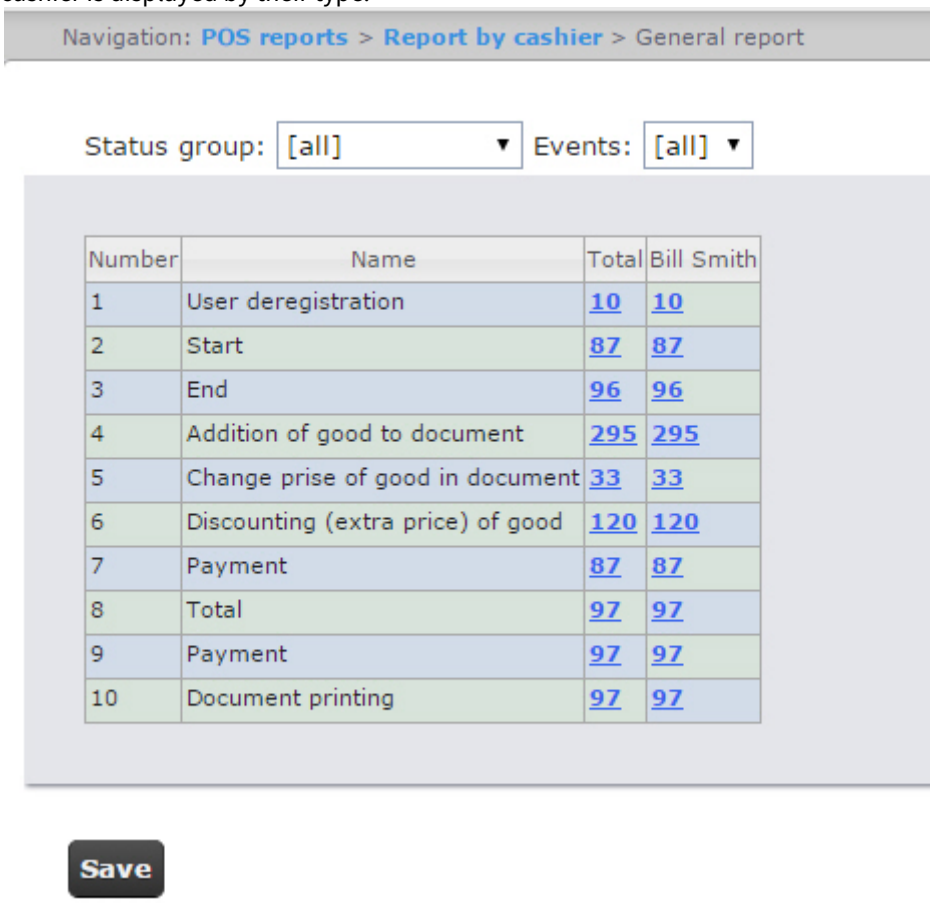


2. Select cashiers by whom it is necessary to display a report by setting corresponding checkboxes checked in the list (**1**).
3. Specify a filter of those events that should be displayed in a report (**2**). If **All** is selected then filter of events is not considered and report is created by all events.
4. From the **Period:** drop-down list select the time period for which the report is to be created (**3**).

> **Note**
>
> If the **Custom** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.

5. Specify a group of statuses of those events that should be displayed in a report (**4**). If **All** is selected then all POS events are displayed regardless of their status.

6. Click **Execute** (**5**).
   As a result a general table of by-cashier events (according to the parameters) is displayed. In the **Total** column the total amount of events is displayed by their type. In the column called by cashier name the amount of events registered for this cashier is displayed by their type.



   In order to save a general report by cashier in .xls format, click **Save**.

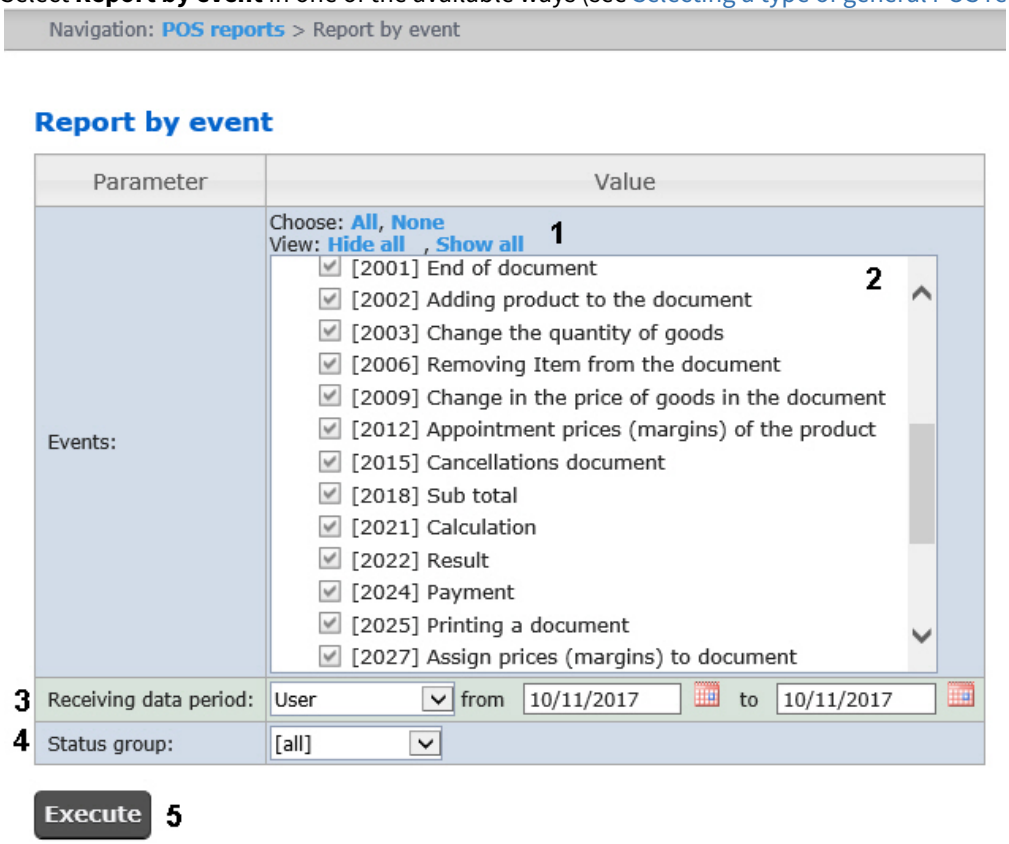
8.1.1.4 Report by event

Report by event allows viewing information on selected events including what shop and checkout lane they took place in, what cashier performed specified actions.

> **Important!**
>
> In order to generate a report by event, the **POS-terminal** object should be setup and configured in the *Intellect* (see The POS-terminal object setup).

In order to display a report by event do the following:

1. Select **Report by event** in one of the available ways (see Selecting a type of general POS report section).

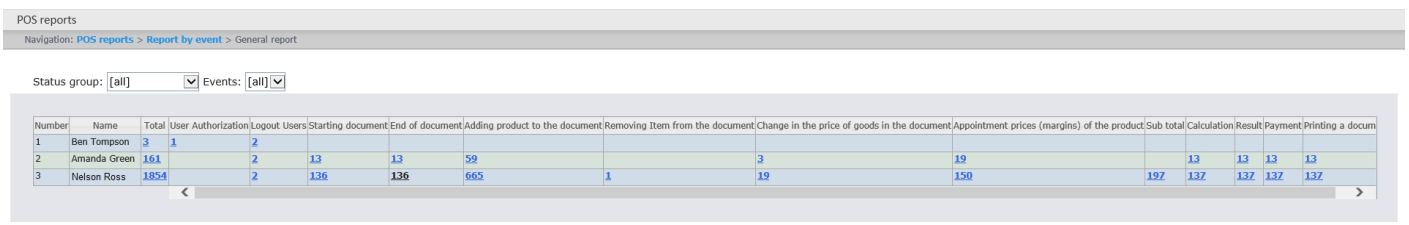


2. Select events to be displayed in the report by checking corresponding boxes in the list (**2**).

> **Note.**
>
> Click **All** to select every item on the list or **None** to remove selection (**1**).

3. Specify the period in the following way:
   a. From the **Receiving data period:** drop-down list select the time period for which the report is to be created (**3**).
   b. If the **User** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
   c. If the **User 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the button.
   If another period type is selected, specifying the date of start and end periods is not needed.
4. Specify a group of statuses of those events that should be displayed in a report (**4**). If **All** is selected then all POS events are displayed regardless of their status.
5. Click **Execute** (**6**).

As a result a general table of cashiers and events is displayed according to the specified parameters. A total of events for a cashier is displayed in the event type column.

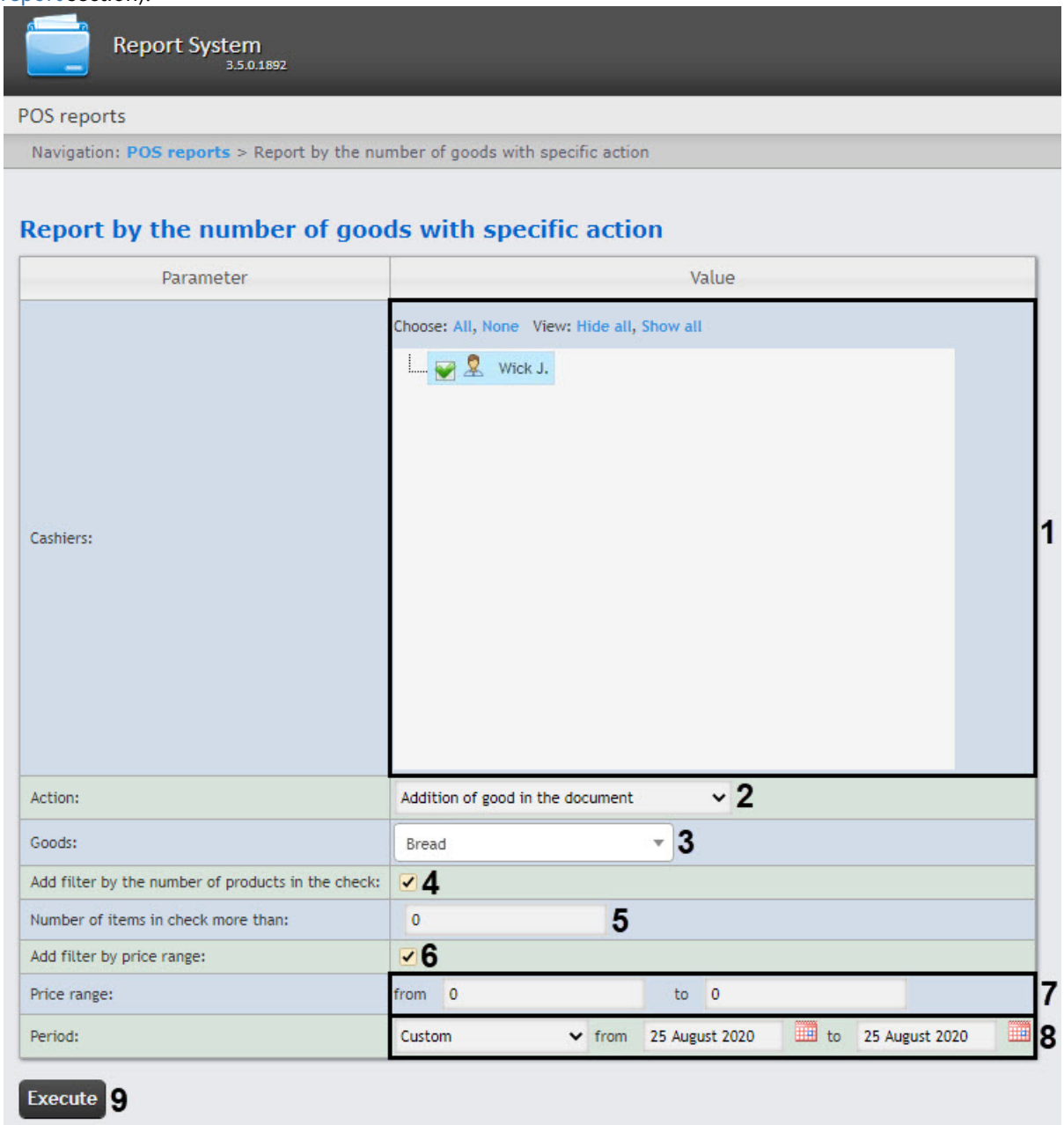


8.1.1.5 Report by the number of goods with specific action

> **Attention!**
>
> In order to generate a report by the number of goods with specific action, the **POS-terminal** object should be setup and configured in *Intellect* (for details, see The POS-terminal object setup).

In order to display a report by the number of goods with specific action, do the following:

1. Select **Report by the number of goods with specific action** in one way (see Selecting a type of general POS report section).



2. Select the cashiers by whom the report will be generated by checking the corresponding boxes in the list (**1**).
3. From the **Action** drop-down list (**2**), select the required cashier action.
4. From the **Goods** drop-down list (**3**), select a specific product, the action on which should be displayed in the report. You can also enter a substring of the product name to build a report on all goods, the names of which contain this substring.

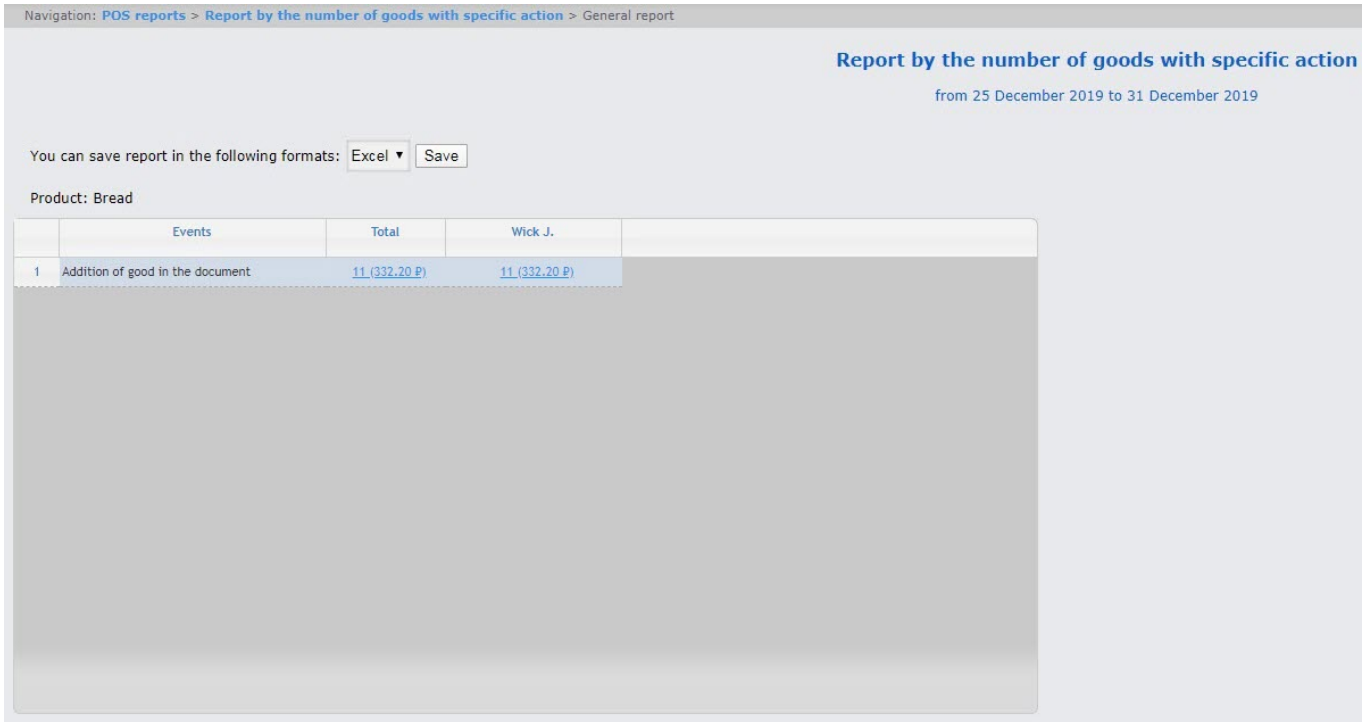
> **Note**
>
> The substring should be at least 4 characters long.

5. Set the **Add filter by the number of products in the check** checkbox (**4**) if it is necessary to set a filter by the minimum quantity of products in a receipt. When this checkbox is set, the field **Number of items in check more than** (**5**) will be displayed; in this field, enter the corresponding value.
6. Set the **Add filter by price range** checkbox (**6**) if it is necessary to set filter by the minimum and maximum prices of products in a receipt. When this checkbox is set, the **Price range** field (**7**) will be displayed; in this field, enter the corresponding values.
7. From the **Period** drop-down list (**8**) select the time period for which the report is to be created.

> **Note**
>
> If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.

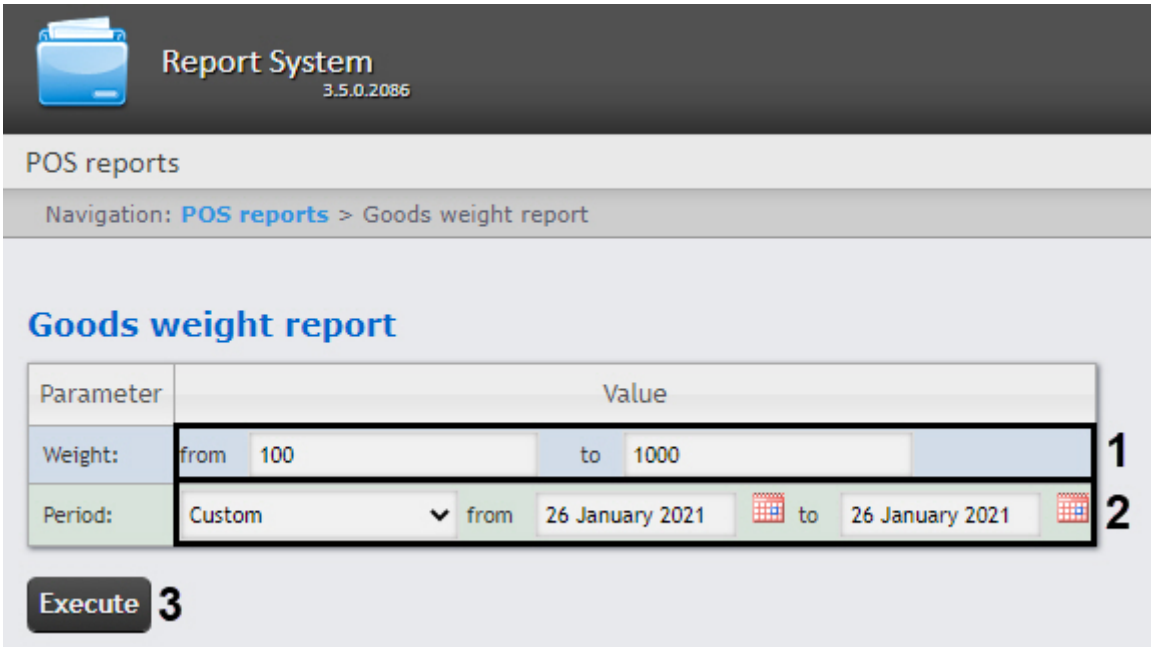
8. Click the **Execute** button (**9**). As a result, a summary table of the selected action by cashiers will be displayed in accordance with the specified parameters. The **Total** column will show the amount of the goods for the selected action for all cashiers. In the column named after the cashier, the amount of the goods for the selected action for this cashier will be displayed.

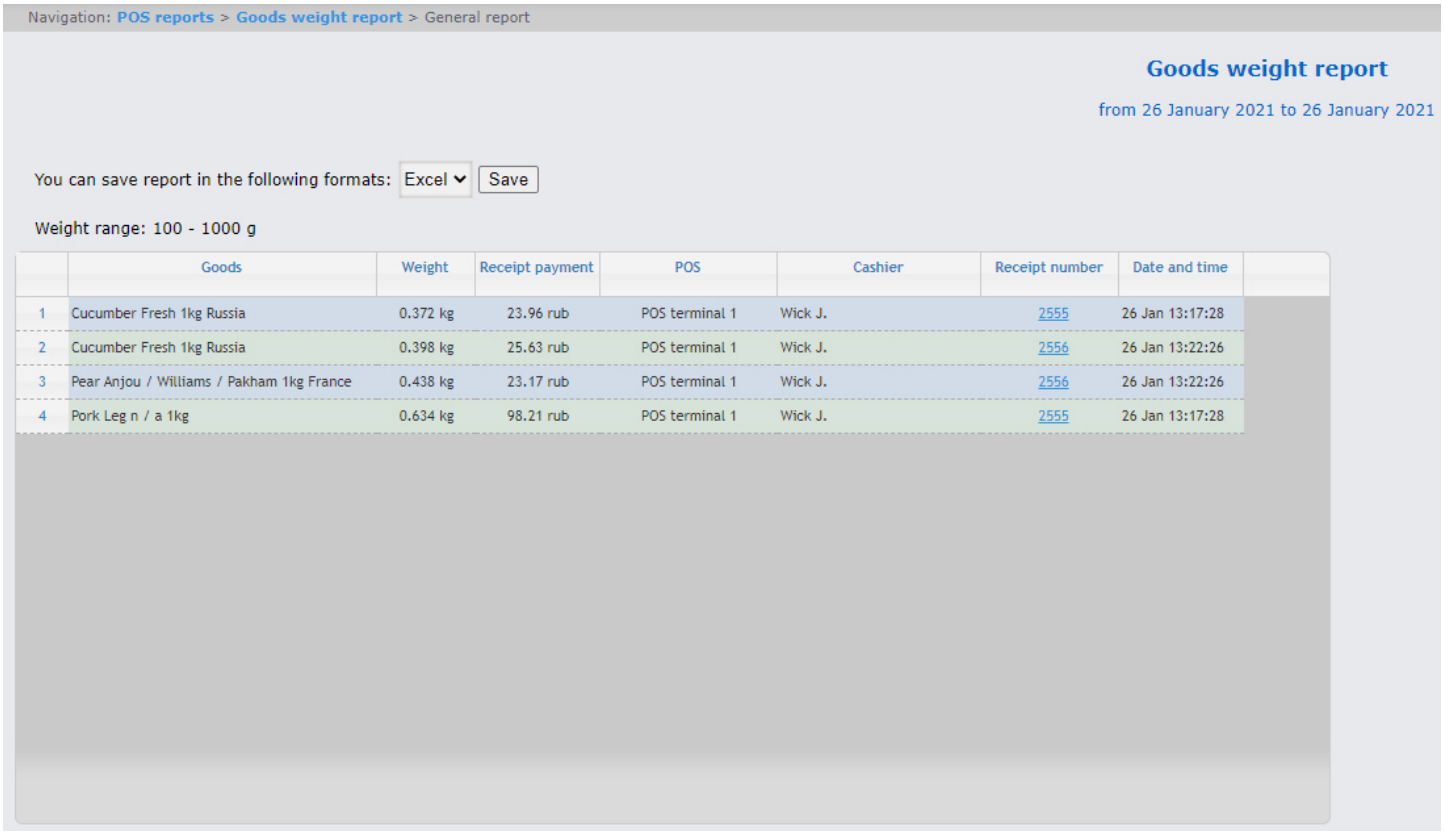
> **Note**
>
> To change the currency display name, see Setting up the currency format for Report by the number of goods with specific action.



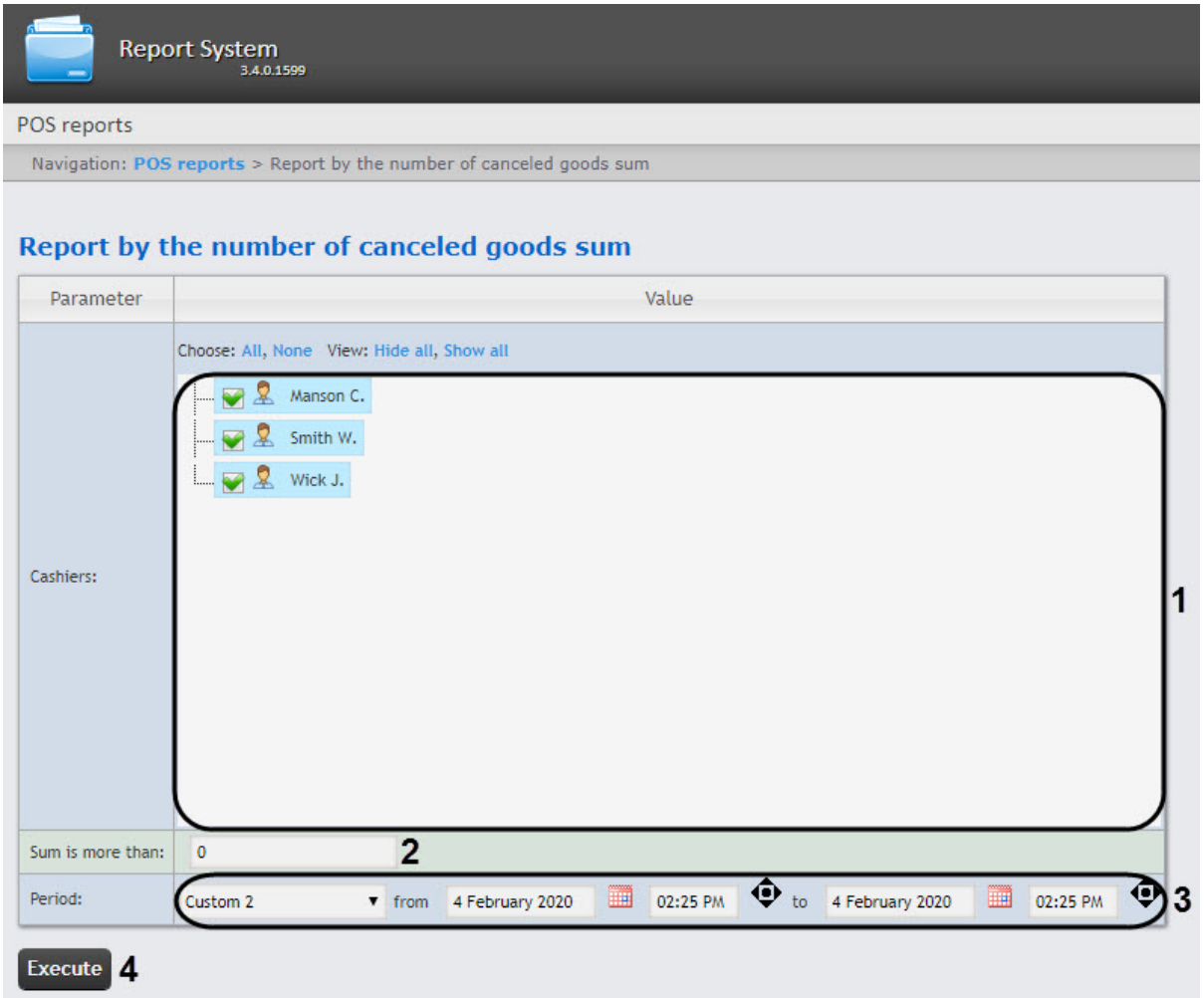
To save a report by the number of goods with specific action in .xls format, click **Save**.

8.1.1.6 Goods weight report





8.1.1.7 Report by the number of canceled goods sum





8.1.1.8 Report by the time of canceling goods

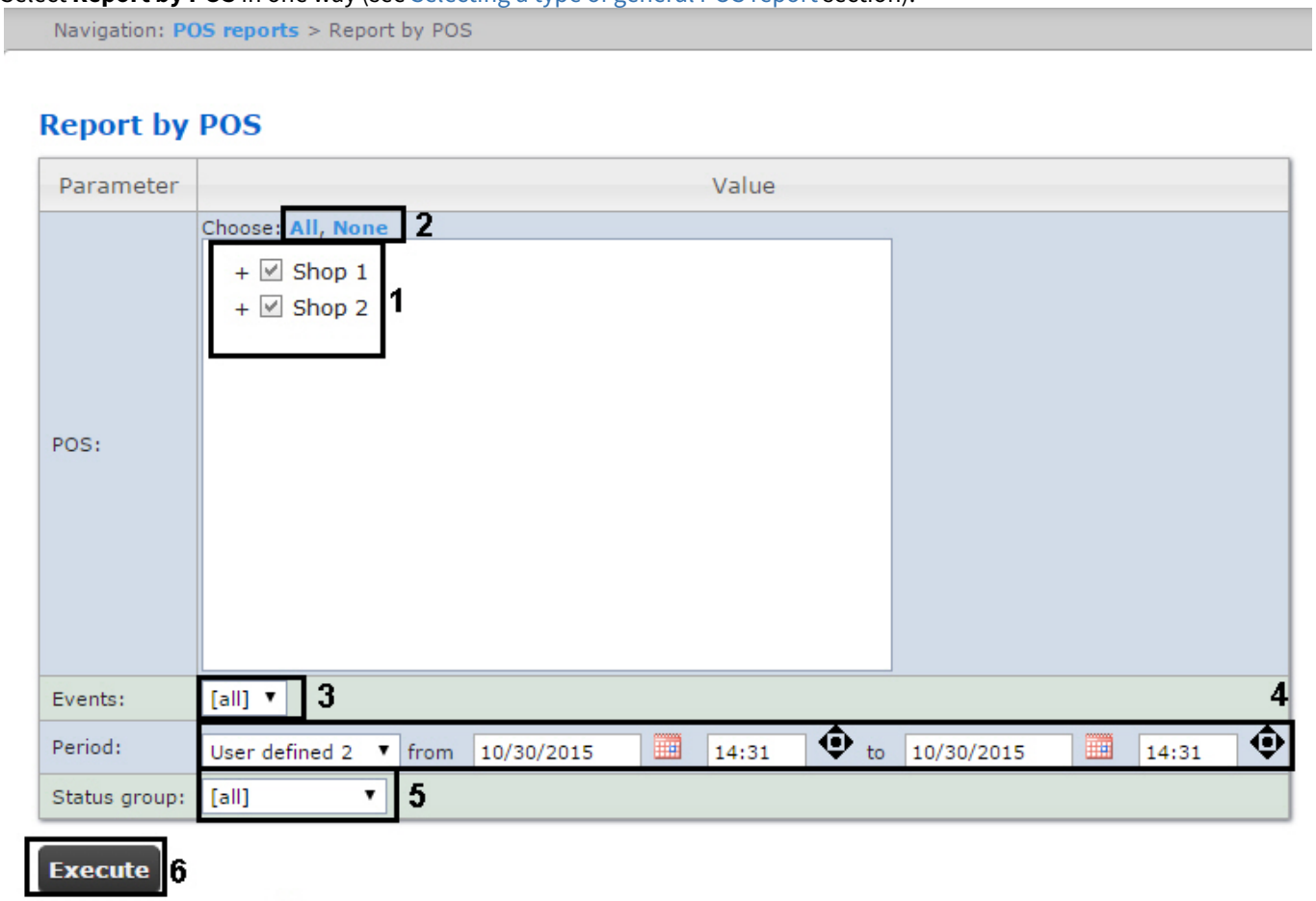
8.1.1.9 Report by POS

Important!

In order to generate a report by POS terminal, the **POS-terminal** and **Shop** objects should be setup and configured in the *Intellect* (see The POS-terminal object setup and Setting up the Shop system object).

In order to display a report by POS do the following:

1. Select **Report by POS** in one way (see Selecting a type of general POS report section).



2. Select POS terminals (cash desks) by which it is necessary to display a report by setting corresponding checkboxes checked in the list (**1**).

> **Note.**
>
> In order to set checkboxes checked in every item of the list click **All**, to set all checkboxes unchecked click **None** (**2**).

> **Note.**
>
> In order to select all POS terminals in one shop set a checkbox for this shop. In order to delete all POS terminals of a shop from report do vice versa: set a checkbox unchecked for this shop.

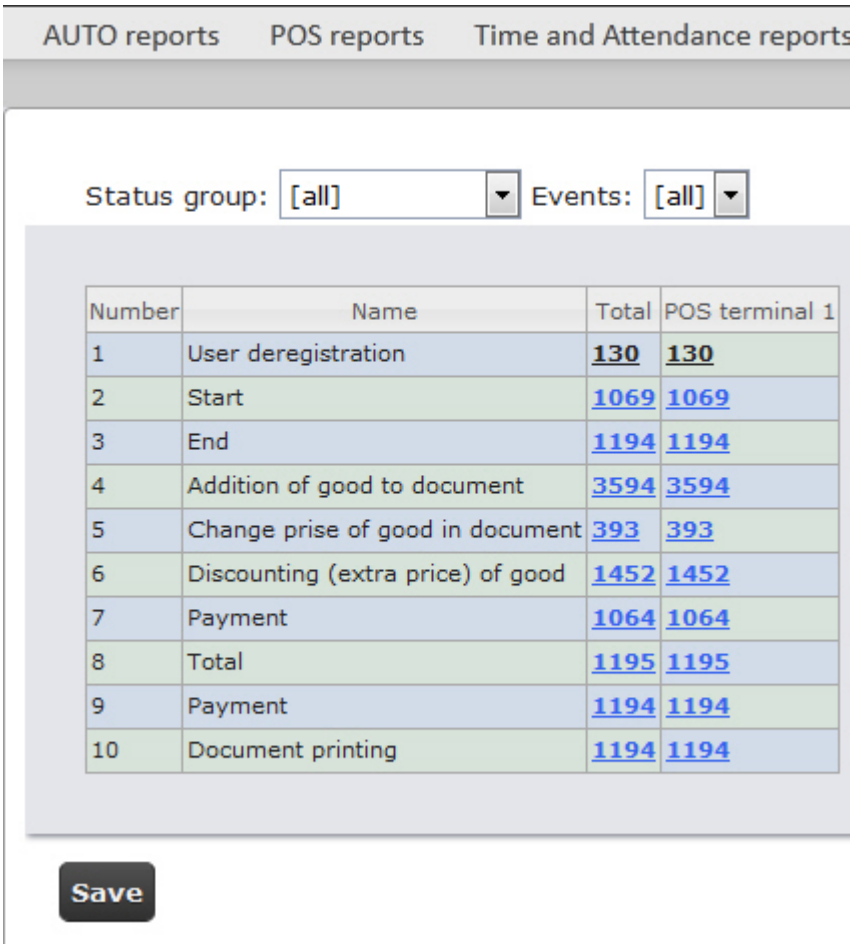
> **Note.**
>
> POS terminals which do not related with the shop are not available in the list.

3. Specify a filter of those events that should be displayed in a report (**3**). If **All** is selected then filter of events is not considered and report is created by all events.
4. Specify the period in the following way:
   a. From the **Period:** drop-down list select the time period for which the report is to be created (**4**).
   b. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.

c. If the **User defined 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the button.
If another period type is selected, specifying the date of start and end periods is not needed.

5. Specify a group of statuses of those events that should be displayed in a report (**5**). If **All** is selected then all events are displayed regardless of their status.
6. Click **Execute** (**6**).

As a result a general table of by POS events (according to the parameters) is displayed. In the **Total** column the total amount of events is displayed by their type. In the column called by cash desk name the amount of events registered for this cash desk is displayed by their type.



Number	Name	Total	POS terminal 1
1	User deregistration	130	130
2	Start	1069	1069
3	End	1194	1194
4	Addition of good to document	3594	3594
5	Change prise of good in document	393	393
6	Discounting (extra price) of good	1452	1452
7	Payment	1064	1064
8	Total	1195	1195
9	Payment	1194	1194
10	Document printing	1194	1194

In order to save a general report by POS terminals in.xls format click **Save**.

8.1.1.10 Report by operator

One can create reports by POS operators that gave one or another status to POS events.

Important!

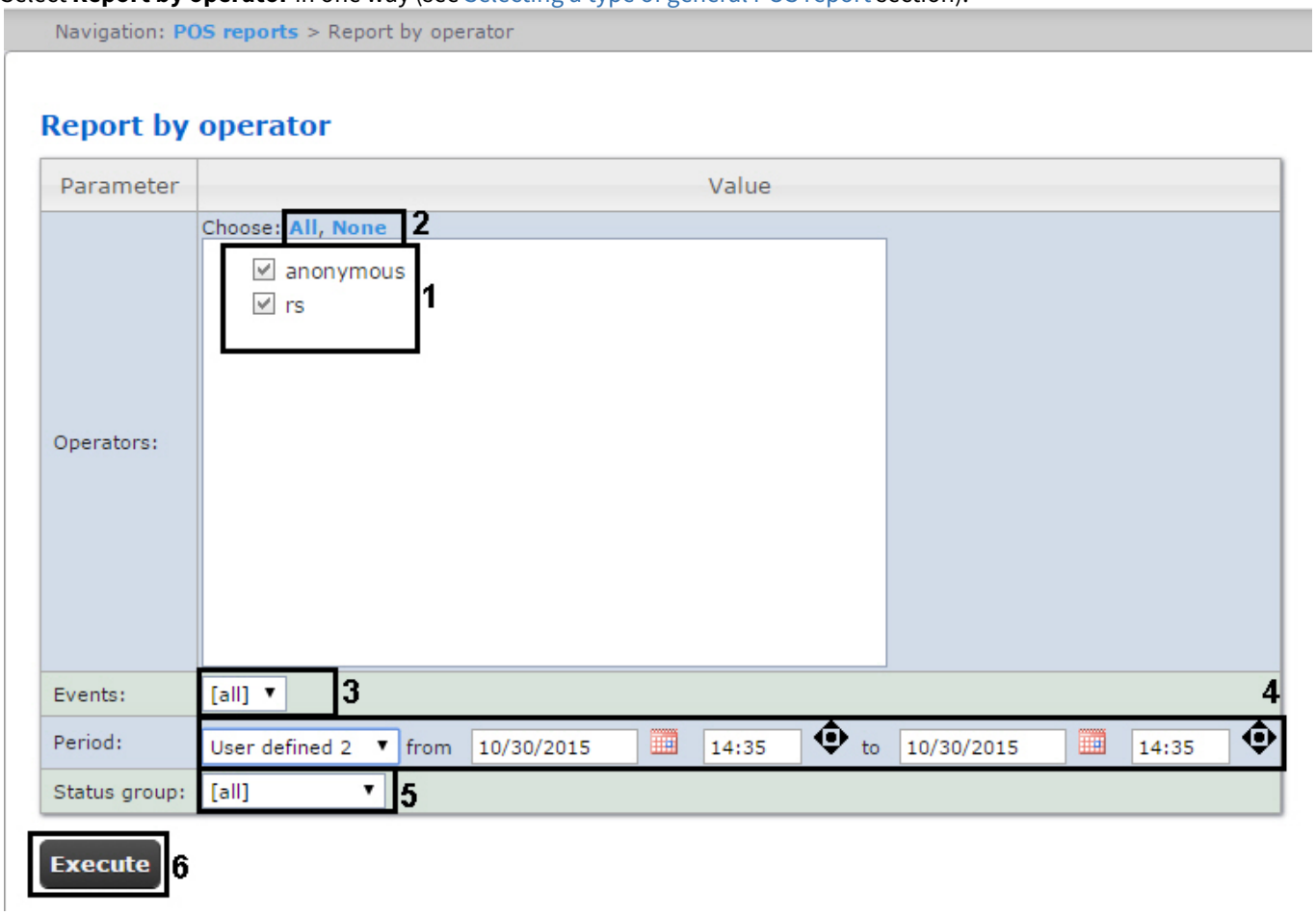
In order to generate a report by POS operator, the **POS-terminal** object should be setup and configured in the *Intellect* (see The POS-terminal object setup).

Note

To configure the list of POS operators, see Creating the list of POS operators.

In order to display a report by POS operator do the following:

1. Select **Report by operator** in one way (see Selecting a type of general POS report section).

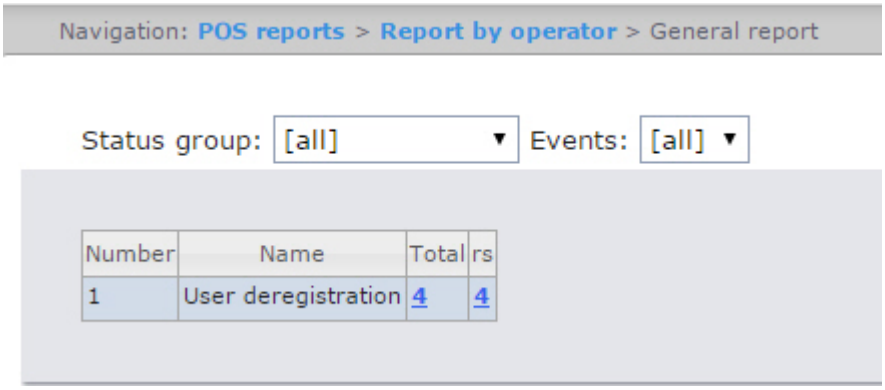


2. Select POS operators by which it is necessary to display a report by setting corresponding checkboxes checked in the list (**1**).

> **Note.**
>
> In order to set checkboxes checked in every item of the list click **All**, to set all checkboxes unchecked click **None** (**2**).

3. Specify a group of those events that should be displayed in a report (**3**). If **All** is selected then filter of events is not considered and report is created by all events.
4. Specify the period in the following way:
   a. From the **Period:** drop-down list select the time period for which the report is to be created (**4**).
   b. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
   c. If the **User defined 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the button.
   If another period type is selected, specifying the date of start and end periods is not needed.
5. Specify a group of statuses of those events that should be displayed in a report (**5**). If **All** is selected then all events are displayed regardless of their status.
6. Click **Execute** (**6**).

As a result a general table of by-operator events (according to the parameters) is displayed. In the **Total** column the total amount of events is displayed by their type. In the column called by POS operator name the amount of events processed by this operator (changed a status) is displayed by their type.



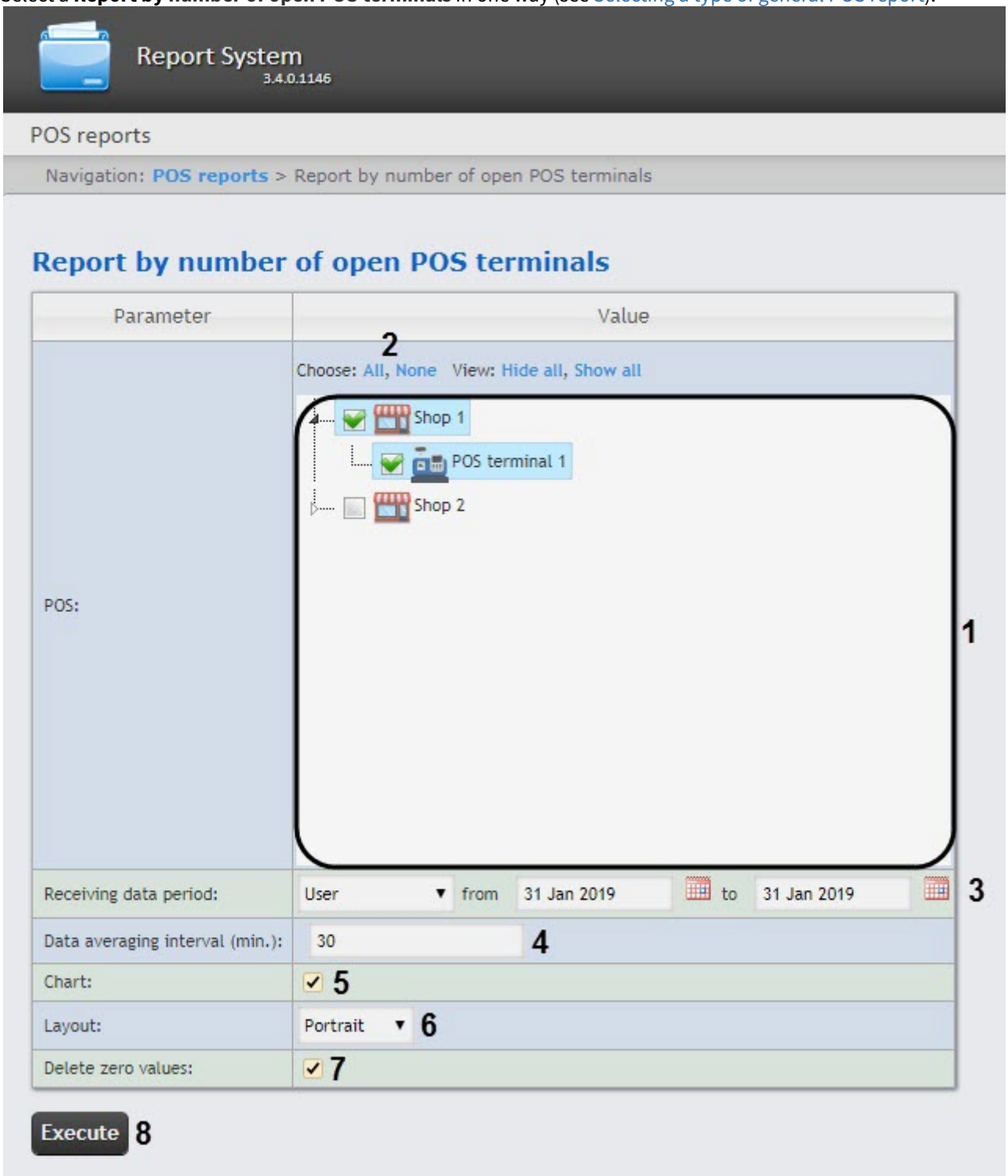
In order to save a general report by POS operators in.xls format click **Save**.

8.1.1.11 Report by number of open POS terminals

> **Important!**
>
> In order to generate a report by number of open POS terminals, the **POS-terminal** and **Shop** objects should be set up and configured in the *Intellect* (see The POS-terminal object setup and Setting up the Shop system object).

In order to display a report by number of open POS terminals, do the following:

1. Select a **Report by number of open POS terminals** in one way (see Selecting a type of general POS report).



2. Select POS terminals (cash desks) by which it is necessary to display a report by setting corresponding checkboxes checked in the list (**1**).

> **Note**
>
> In order to set checkboxes checked in every item of the list click **All**, to set all checkboxes unchecked click **None** (**2**).

> **Note**
>
> In order to select all POS terminals in one shop set a checkbox for this shop. In order to delete all POS terminals of a shop from report do vice versa: set a checkbox unchecked for this shop.

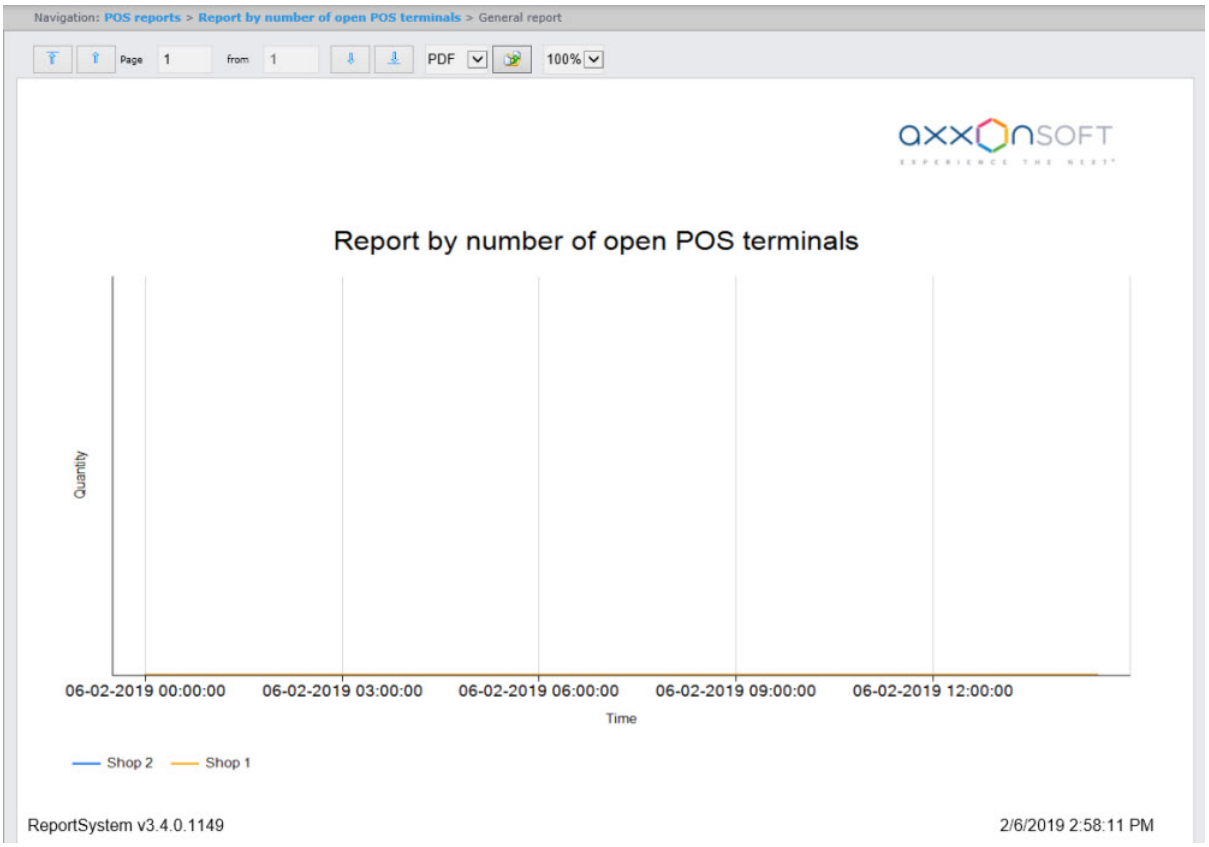
> **Note**
>
> POS terminals which do not related with the shop are not available in the list.

3. Specify the period in the following way:
   a. From the **Receiving data period** drop-down list select the time period for which the report is to be created (**3**).
   b. If the **User** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
   c. If the **User 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the button.
   d. Other options are also available:



4. Specify the data averaging interval in minutes (**4**).
5. Set the **Chart** checkbox to display the report as a chart (**5**).
6. In the **Layout** drop-down list select the report orientation (landscape or portrait) (**6**).
7. Set the **Delete zero values** checkbox in order to not display the open POS terminals in the report if their number equals zero (**7**).
8. Click **Execute** to start the report generation (**8**).

As a result, a summary table or a chart will be displayed containing the number of open POS terminals in accordance with the specified parameters. In the report is displayed as a chart, then the number of open POS terminals will be displayed along the vertical line, and the time corresponding to the number of open POS terminals will be displayed along the horizontal line.



You can export the generated report (see Exporting of reports).

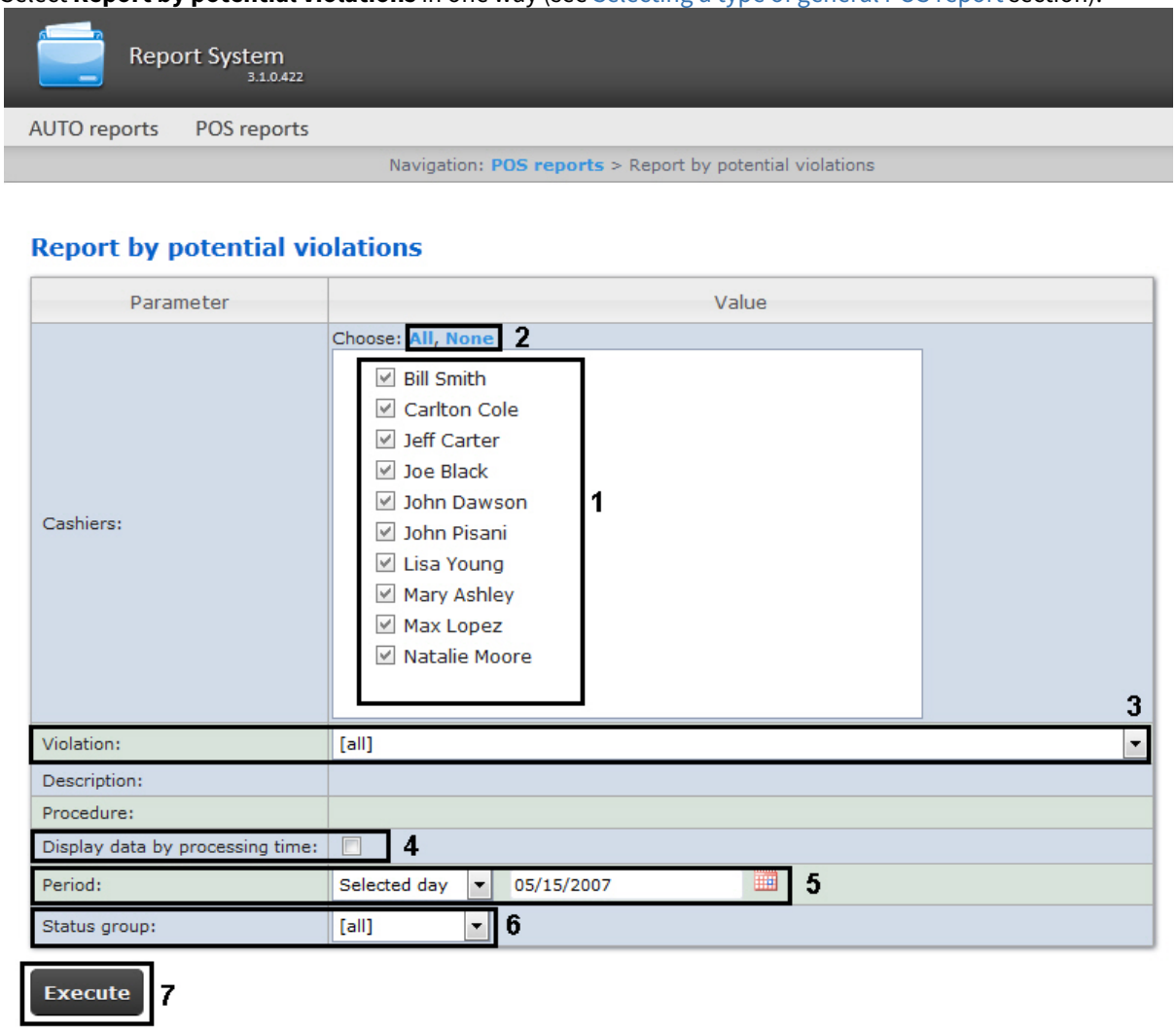
8.1.1.12 Detail report

8.1.1.13 Report by potential violations

> **Important!**
>
> In order to generate a report by potential violations, the **POS-terminal** object should be setup and configured in the *Intellect* (see The POS-terminal object setup).

In order to display a report by potential violations, do the following:

1. Select **Report by potential violations** in one way (see Selecting a type of general POS report section).



2. Select cashiers by whom it is necessary to display a report by setting corresponding checkboxes checked in the list (**1**).

> **Note.**
>
> In order to set checkboxes checked in every item of the list click **All**, to set all checkboxes unchecked click **None** (**2**).

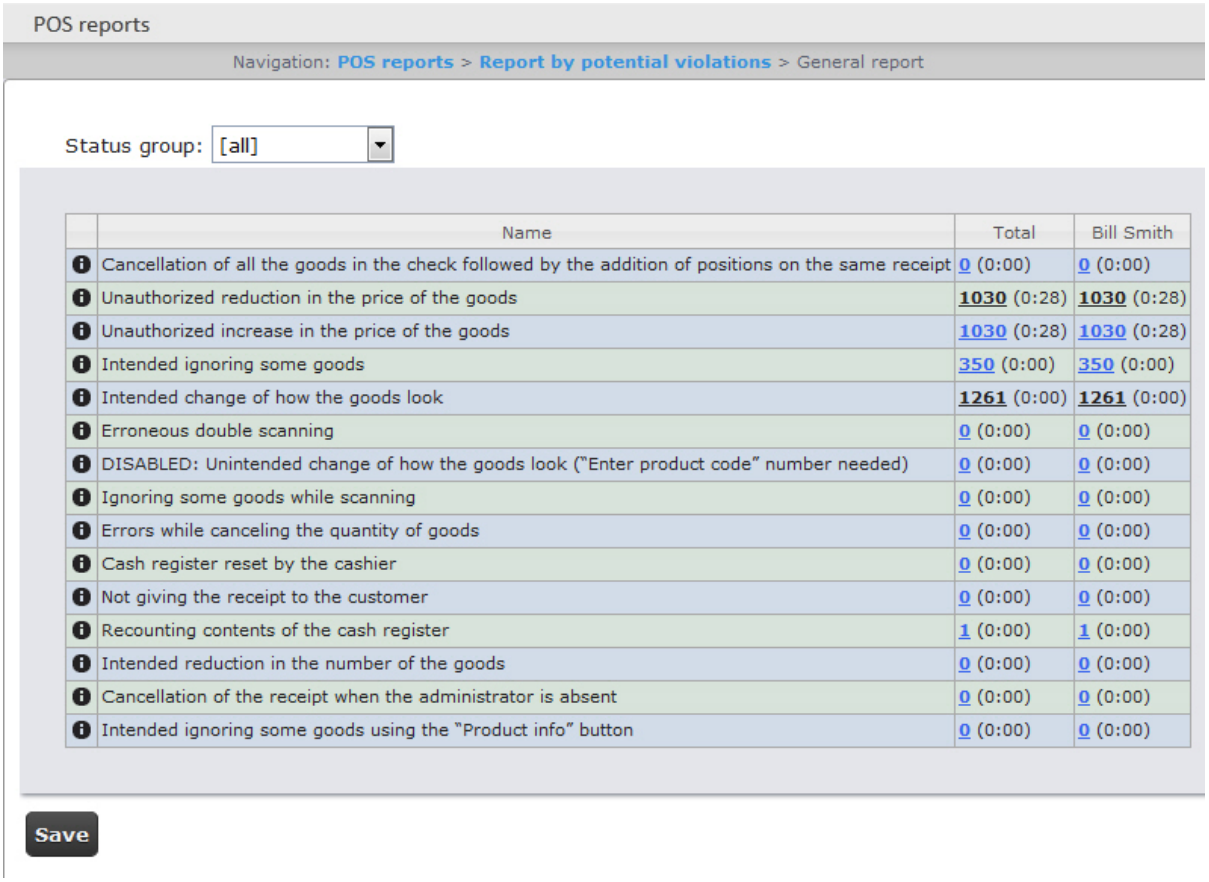
3. Select potential violations which should be displayed in a report (**3**). If **All** is selected then all types of violations will be displayed in a report:
   - **Cancellation of all the goods in the check followed by the addition of positions on the same receipt** - cashier cancels all positions in receipt taking advantage of the fact of customer leaving before the receipt printing. After that cashier adds goods of nest customer on the same receipt or closes the receipt with minimal sum. Money get for the purchase from the first customer goes to category of unaccounted money surplus.
   - **Unauthorized reduction in the price of the goods** - cashier enters price manually to reduce price of good (while selling to accomplice).
   - **Unauthorized increase in the price of the goods** - cashier enters price manually to increase price of good. If customer left before receipt printing cashier returns correct price of good and receives unaccounted money surplus.
   - **Intended ignoring some goods** - cashier includes only one good with the smallest price (e.g. package) from all positions of goods. The rest of goods cashier misses without payment for accomplices.
   - **Intended change of how the goods look** - cashier read barcode from another good or from prepared label instead of good which lies on the counter. If price of added position is less than price of purchased good the

cashier can give to accomplice expensive good at a low price. Goods which are to be inspected in this type of violation are determined while inventory.

- **Erroneous double scanning** - cashier erroneously scans the same good two times. Doesn't perform cancellation of extra good. Cheating in accounts is performed.
- **DISABLED: Unintended change of how the goods look ("Enter product code" number needed)** - as a result of error while manual entering the code of good due to the casher error some good can be sold as another.
- **Ignoring some goods while scanning** - barcode of good is not scanned, but cashier doesn't pay attention to it and starts processing of next good. As a result the good is sold without payment.
- **Errors while canceling the quantity of goods** - cashier makes an error while entering the quantity of goods (e.g. enters 56 instead of 5), cancels this operation and forget to enter the correct number and starts to process the next good. As a result the good is sold without payment.
- **Cash register reset by the cashier** - cashier restarts the cash register when the administrator is absent.
- **Not giving the receipt to the customer** - cashier settles account with customer and doesn't give him a receipt. Receipt is not closed, after the customer leaving cashier can cancel goods, discount goods and performs other actions to make an unaccounted money surplus.
- **Recounting contents of the cash register** - cashier recount money when the administrator is absent. Probably with purpose of taking out unaccounted money surplus.
- **Intended reduction in the number of the goods** - customer leaving before the receipt printing. Cashier reduces quantity of goods (e.g. from 2 items to 1 item) and print receipt. Than take the money surplus for 1 item of goods.
- **Cancellation of the receipt when the administrator is absent** - "cancellation of receipt when the administrator is absent" (Key of administrator is freely moving between cashiers).
- **Intended ignoring some goods using the "Product info" button** - cashier presses the "Product info" button. Scans good, entitles a price. Receives cash. Receipt doesn't print, surplus assumes.

4. Set the **Display data by processing time:** checkbox to add time wasted by operator for choosing the event status (**4**). Time between selecting the string in the detailed report and changing the event status of this string is counted. If the checkbox is not set, the processing time will not be calculated and displayed in the report.
5. Specify the period in the following way:
    a. From the **Period:** drop-down list select the time period for which the report is to be created (**5**).
    b. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the  button near the corresponding field to use the **Calendar** tool.
    c. If the **User defined 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the  button.
    If another period type is selected, specifying the date of start and end periods is not needed.
6. Specify a group of statuses of those potential violations that should be displayed in a report (**6**). If **All** is selected then all violations are displayed regardless of their status.
7. Click **Execute** (**7**).

As a result a general table of potential violations according to the specified parameters is displayed. In the **Total** column the total amount of potential violations is displayed by their type. In the column called by cashier name the amount of potential violations registered for this cashier is displayed by their type.



	Name	Total	Bill Smith
ⓘ	Cancellation of all the goods in the check followed by the addition of positions on the same receipt	0 (0:00)	0 (0:00)
ⓘ	Unauthorized reduction in the price of the goods	**1030** (0:28)	**1030** (0:28)
ⓘ	Unauthorized increase in the price of the goods	1030 (0:28)	1030 (0:28)
ⓘ	Intended ignoring some goods	350 (0:00)	350 (0:00)
ⓘ	Intended change of how the goods look	**1261** (0:00)	**1261** (0:00)
ⓘ	Erroneous double scanning	0 (0:00)	0 (0:00)
ⓘ	DISABLED: Unintended change of how the goods look ("Enter product code" number needed)	0 (0:00)	0 (0:00)
ⓘ	Ignoring some goods while scanning	0 (0:00)	0 (0:00)
ⓘ	Errors while canceling the quantity of goods	0 (0:00)	0 (0:00)
ⓘ	Cash register reset by the cashier	0 (0:00)	0 (0:00)
ⓘ	Not giving the receipt to the customer	0 (0:00)	0 (0:00)
ⓘ	Recounting contents of the cash register	1 (0:00)	1 (0:00)
ⓘ	Intended reduction in the number of the goods	0 (0:00)	0 (0:00)
ⓘ	Cancellation of the receipt when the administrator is absent	0 (0:00)	0 (0:00)
ⓘ	Intended ignoring some goods using the "Product info" button	0 (0:00)	0 (0:00)

In order to save a general report by cashier in .xls format click **Save**.

8.1.2 Detailed reports

One can view and process the following detailed reports by event:

1. for specific cashier/POS terminal/POS operator;
2. for all cashiers/POS terminals/POS operators.

A detailed report enables viewing data from the POS terminal that corresponds to the POS event. It also enables viewing an event archive (if there are relevant settings in *POS Intellect* software package).

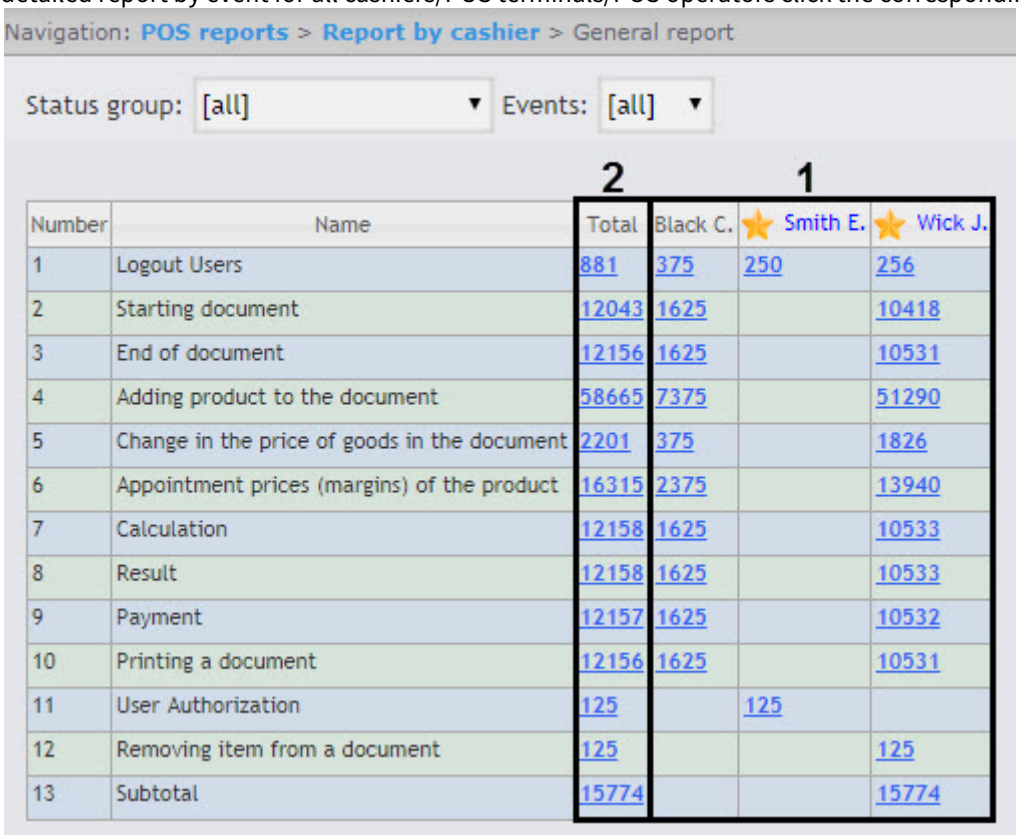
Detailed reports are created on the basis of corresponding general reports (e.g. a detailed report by cashier is created on the basis of a general report by cashier).

8.1.2.1 Viewing a detailed report

In order to view a detailed report, do the following:

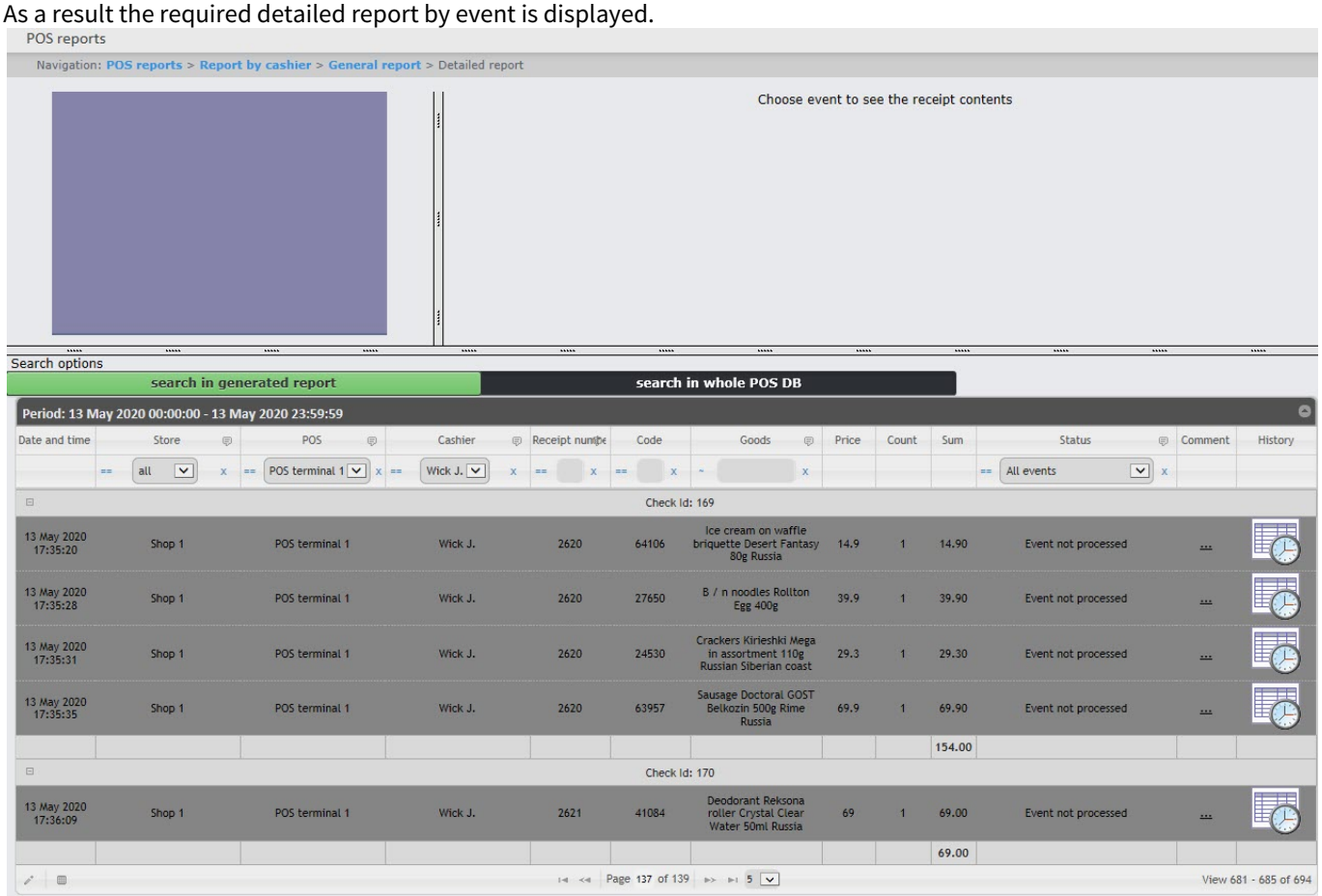
1. Generate a general report of the required type (see General reports).

2. Click the link in the cell corresponding to a necessary event and a cashier/POS terminal/POS operator (**1**). To display a detailed report by event for all cashiers/POS terminals/POS operators click the corresponding link in the **Total** cell (**2**).



Number	Name	Total	Black C.	Smith E.	Wick J.
1	Logout Users	881	375	250	256
2	Starting document	12043	1625		10418
3	End of document	12156	1625		10531
4	Adding product to the document	58665	7375		51290
5	Change in the price of goods in the document	2201	375		1826
6	Appointment prices (margins) of the product	16315	2375		13940
7	Calculation	12158	1625		10533
8	Result	12158	1625		10533
9	Payment	12157	1625		10532
10	Printing a document	12156	1625		10531
11	User Authorization	125		125	
12	Removing item from a document	125			125
13	Subtotal	15774			15774

3. As a result the required detailed report by event is displayed.

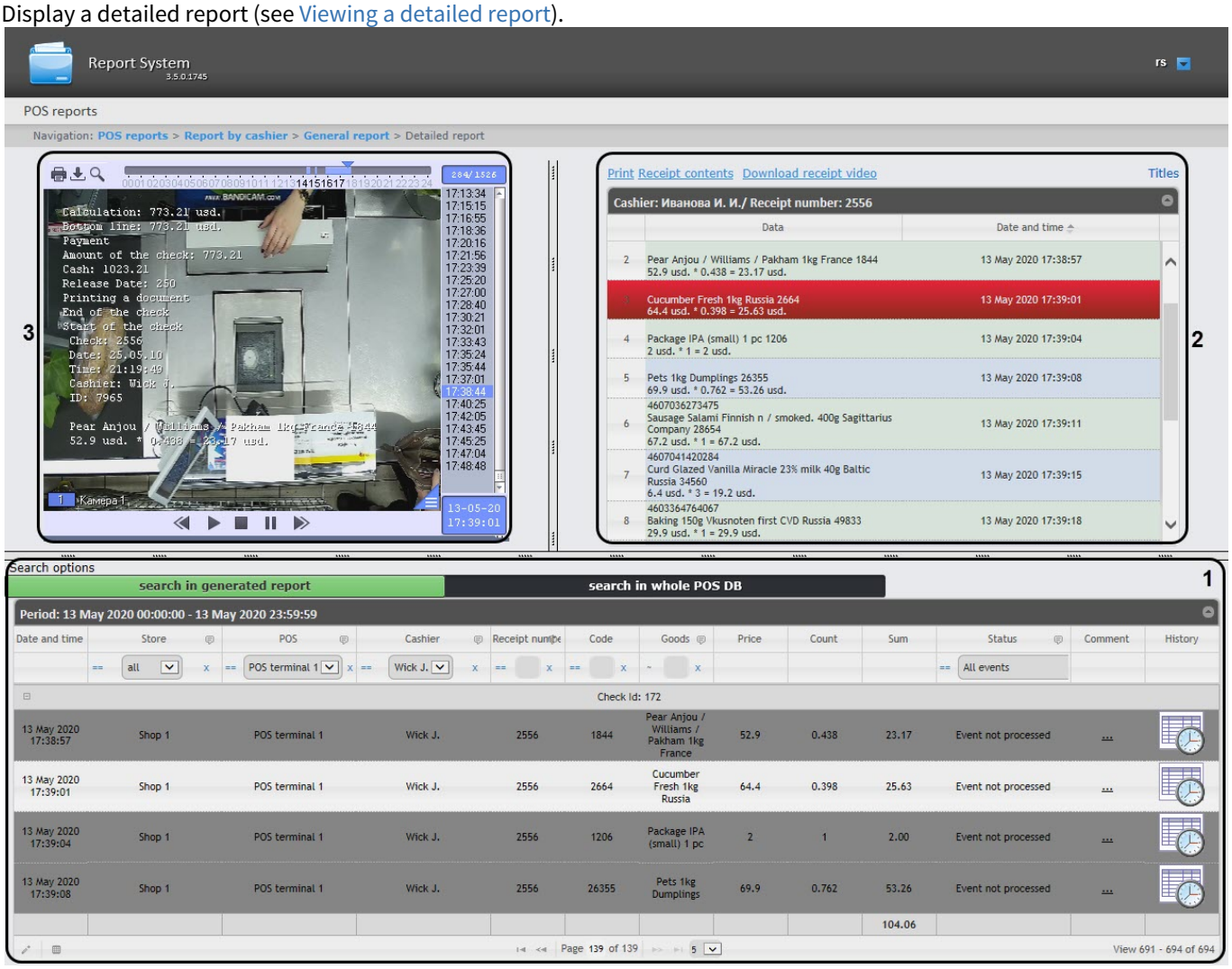


All detailed reports are identical in structure and represent the table. To configure the columns displayed in the table, see Select columns in detailed reports.

8.1.2.2 Viewing data from the POS terminal and the video of event

In order to view data from the POS terminal and video of event, do the following:

1. Display a detailed report (see Viewing a detailed report).



2. Left-click the line with the required event (**1**).
3. As a result data from the POS terminal by event (**2**) and video events (**3**) are displayed in the provided windows.

Window for viewing the video by event is a standard *Intellect* video surveying window that is open in the archive mode. One can view the archive not only by the current event but also by other events.

> **Note.**
>
> Working with video surveying window in the archive mode is given in details in Intellect software package. Operator's guide.

> **Note.**
>
> Video can not be displayed (it depends on whether the requirements for Web server and/or Client realization are performed – see the Requirements for Intellect Web Report System implementation section).

Note.

The view of displayed data from the POS terminal and video events can be changed by selecting the needed layout (see Selecting layouts in POS reports section).

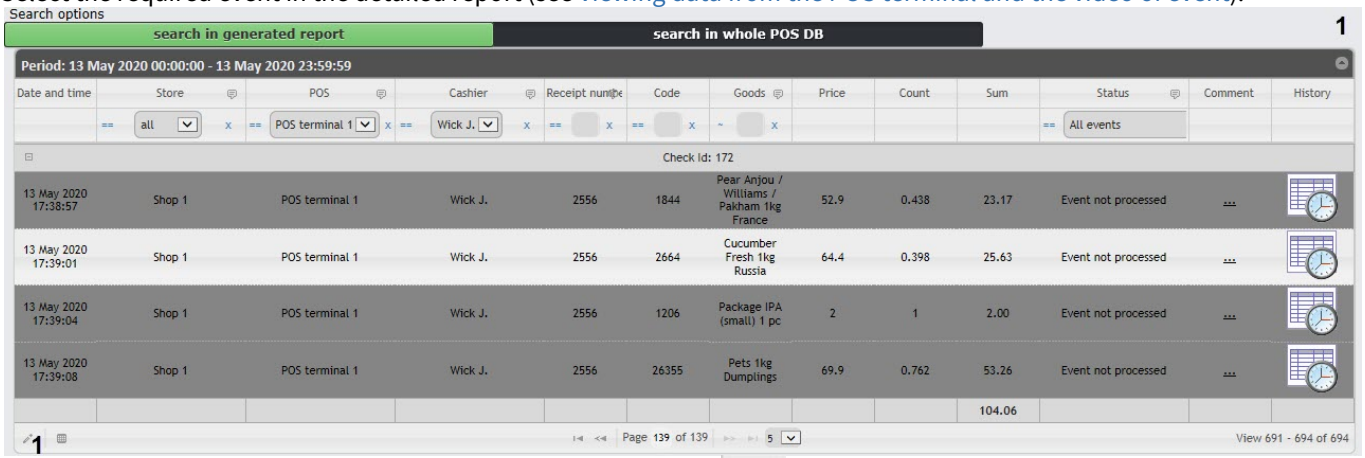
8.1.2.3 Changing the event status and the comment

Attention!

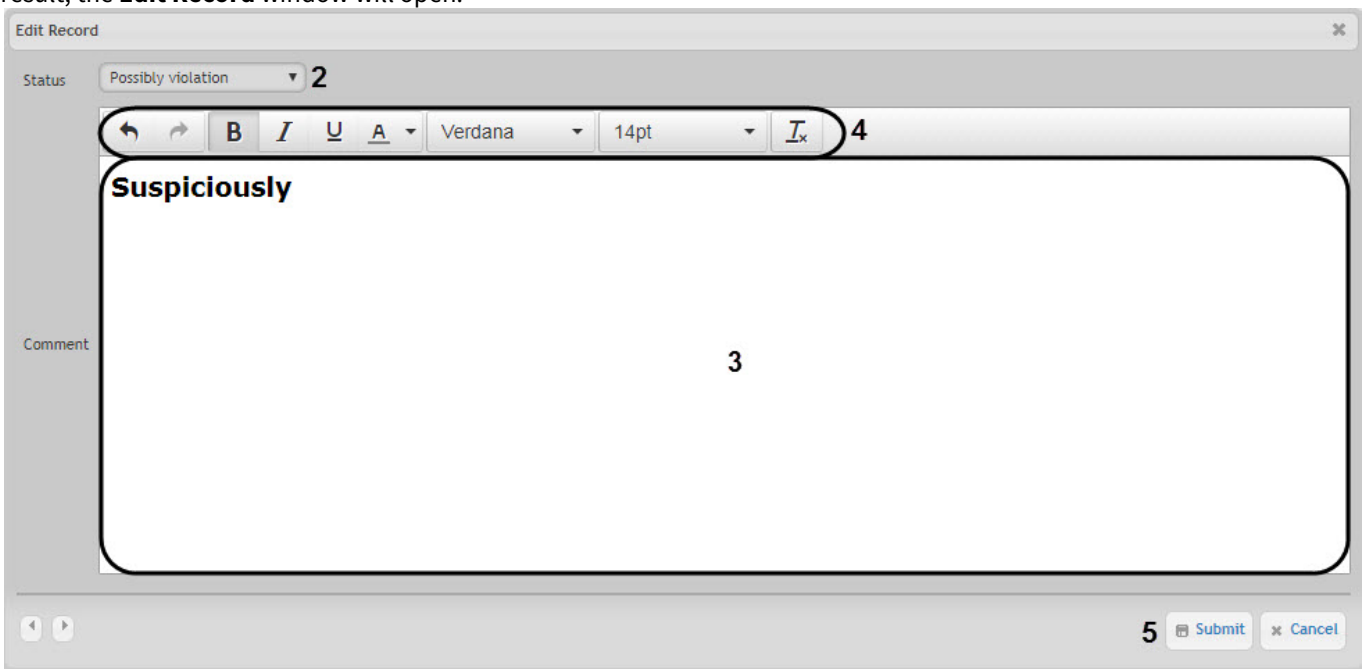
For this operation the user should be added to the POS expert role.

In order to change the event status and the comment, do the following:

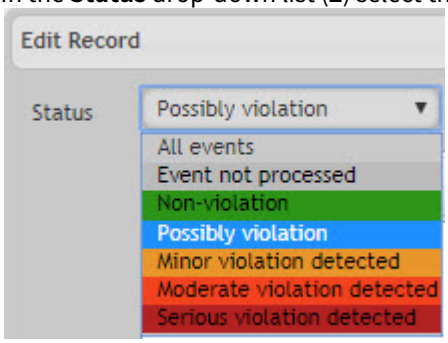
1. Select the required event in the detailed report (see Viewing data from the POS terminal and the video of event).



2. In the lower left part of the event list, click the **Edit selected row** button (**1**) or double-click the required event. As a result, the **Edit Record** window will open.



3. In the **Status** drop-down list (**2**) select the required event status.

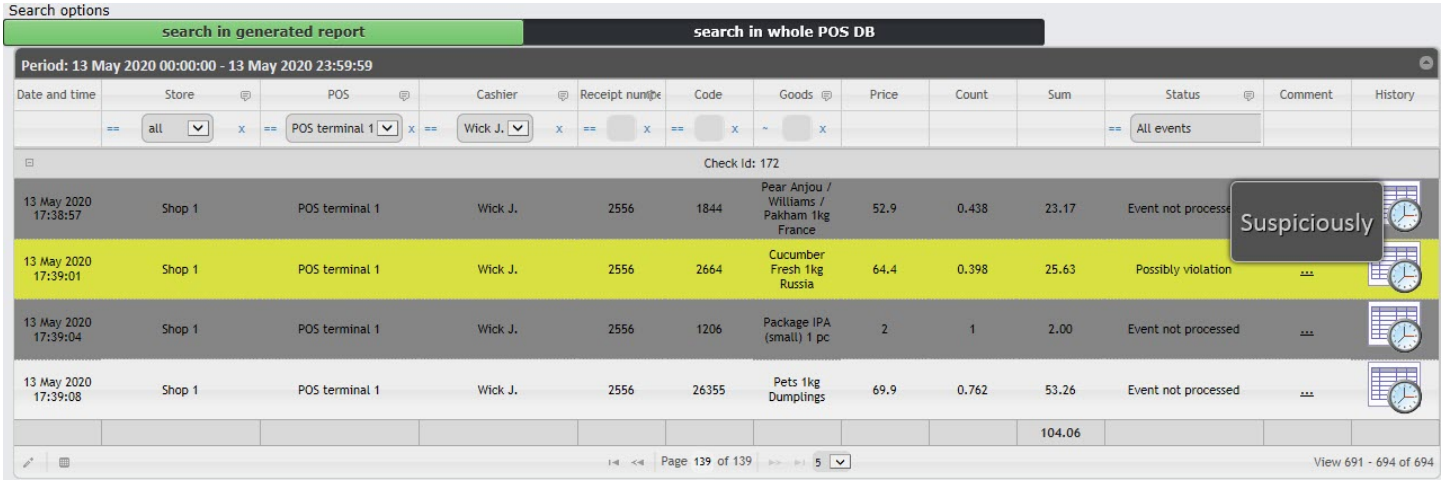


> **Note**
>
> The statuses in the list can be changed (see Setting up the statuses of POS events).

4. If necessary, enter a comment in the field (**3**). Text formatting tools are displayed on the panel (**4**).
5. Click **Submit** (**5**) to apply the changes.

As a result, the status for the specified event will be changed and the comment will be specified.

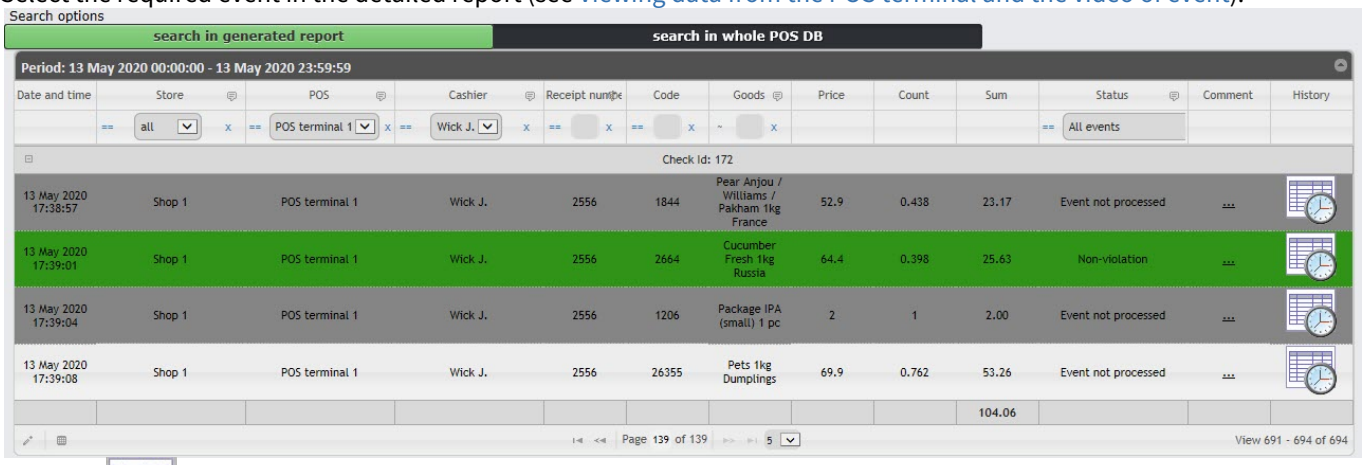
> **Note**
>
> To view a comment, click the ellipsis ... in the **Comment** column of the corresponding event. As a result, a pop-up window containing the comment text will appear.



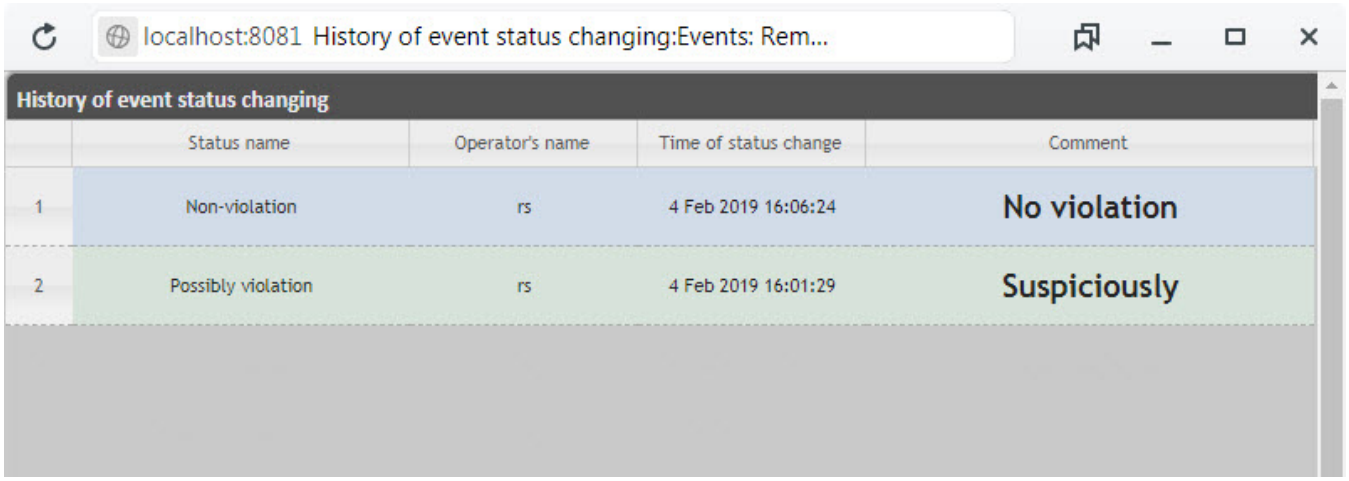
8.1.2.4 Viewing the history of event status or comment changing

In order to view the history of the event status or the comment changing, do the following:

1. Select the required event in the detailed report (see Viewing data from the POS terminal and the video of event).



2. Click the  button in the **History** column of the corresponding event.
3. As a result, the **History of event status changing** page will open. The following data is displayed on the page:
   - Status name;
   - Operator's name;
   - Time of status change;
   - Comment.

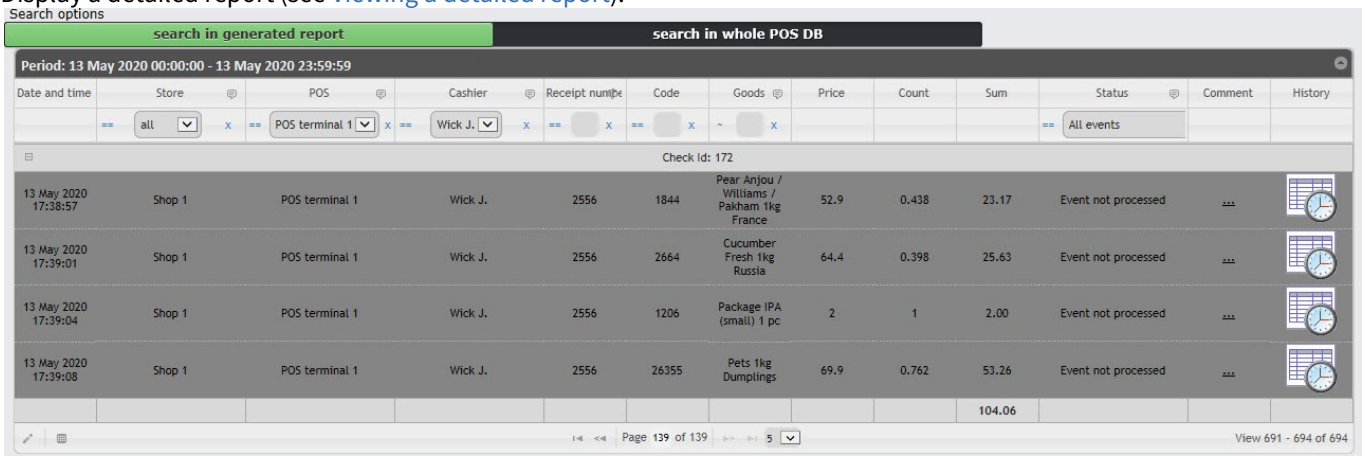


> **Note**
>
> If the event status or comment has not changed, then the **History of event status changing** page will be empty.

8.1.2.5 Filtering and sorting events in detailed reports

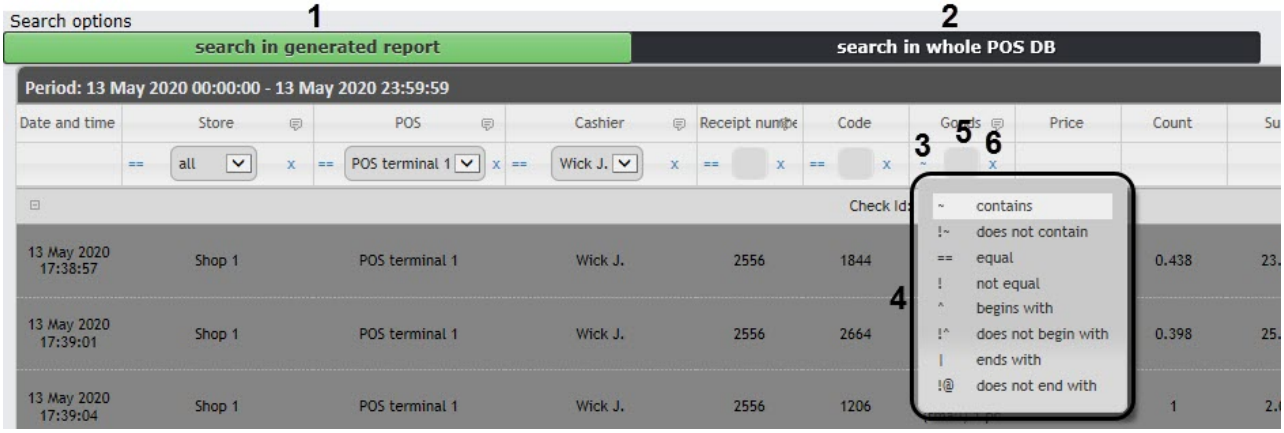
To filter and sort events in the detailed POS report, do the following:

1. Display a detailed report (see Viewing a detailed report).



2. Select a location to search/filter events:
   - **search in generated report** (**1**);
   - **search in whole POS DB** (**2**).

> **Note**
>
> The location selection for searching/filtering the events is available in some detailed reports



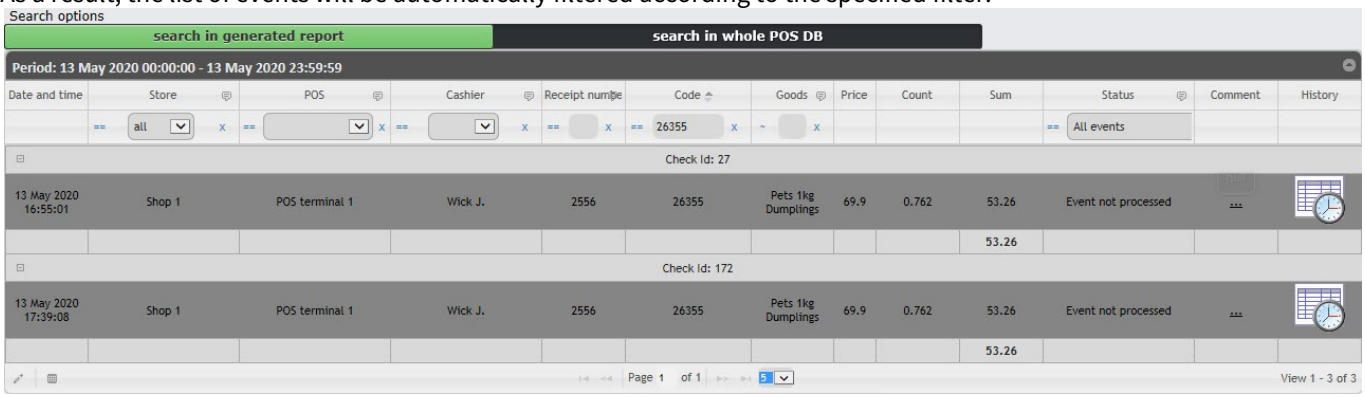
3. In the column containing the data required for filtering, click on the icon (**3**) and select the filtering condition from the drop-down list (**4**).

> **Note**
>
> - For some columns, the filtering is not available.
> - The list of filtering conditions (**4**) may differ depending on the selected column. For example, for the **Receipt number**, **Code**, and **Status**, columns only 2 conditions are available: **equal "=="** and **not equal "!"**.

4. In the field (**5**) specify the required filter value and press the Enter key.

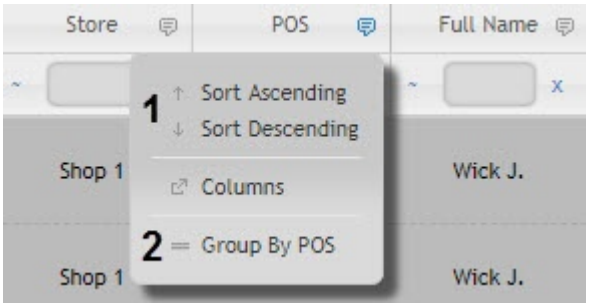
> **Note**
>
> The filter values of the **Status** column depend on the specified statuses in the *Intellect Web Report System* (see Setting up the statuses of POS events).

5. As a result, the list of events will be automatically filtered according to the specified filter.



6. To reset the filter, click the (**6**) button.
7. To sort the events in the detailed POS report, left-click on the column name.
   - - Descending.
   - - Ascending. As a result, the event list will be automatically sorted. The icon corresponding to the current sorting condition will appear next to the column name:

> **Note**
>
> The data in some columns can also be sorted by clicking the button next to the column name. In this case, the ascending and descending sorting (**1**) and grouping option (**2**) will be available for the selected column.

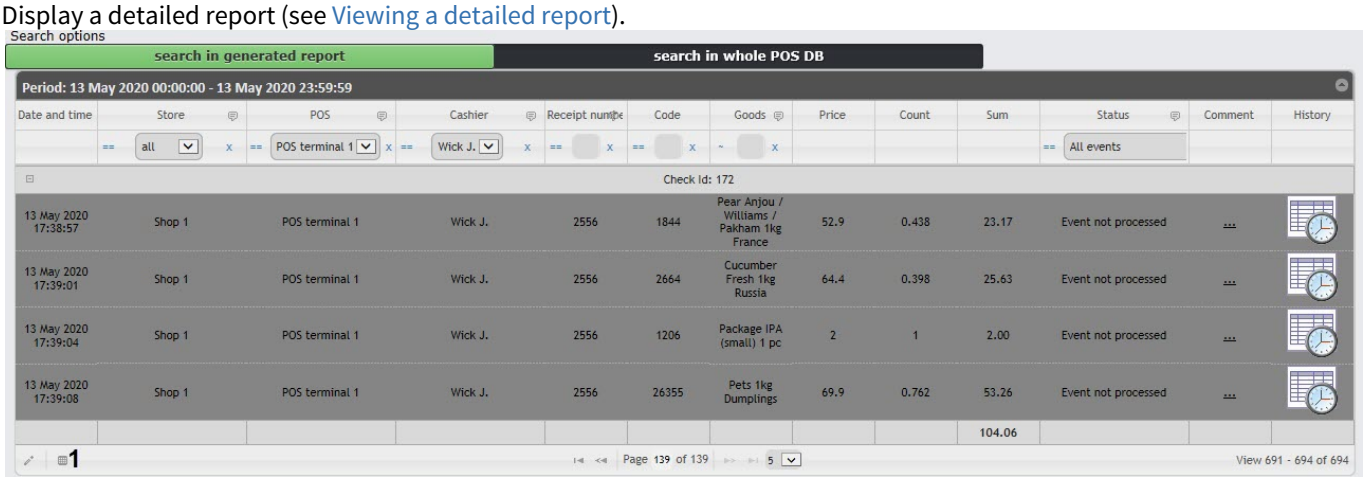


The filtering and sorting the events in the detailed reports is complete.

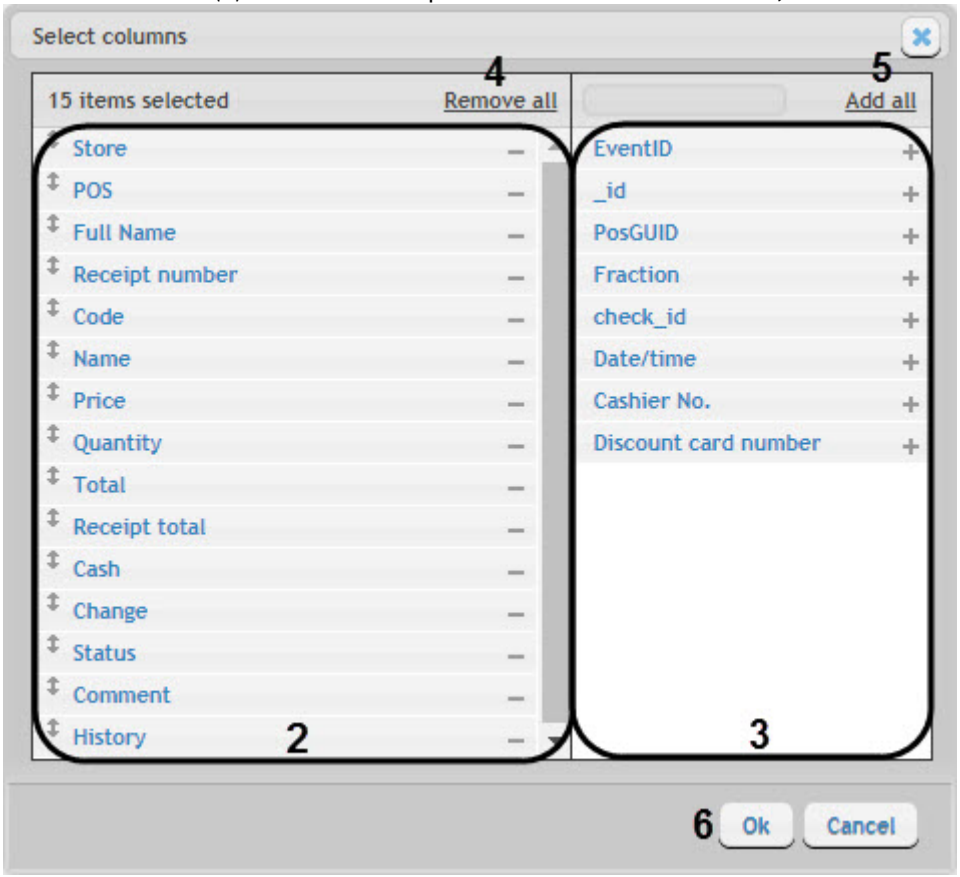
8.1.2.6 Select columns in detailed reports

To select the columns displayed in the detailed POS report, do the following:

1. Display a detailed report (see Viewing a detailed report).



2. Click the button (**1**) in the lower left part of the event list. As a result, the **Select columns** window will open.



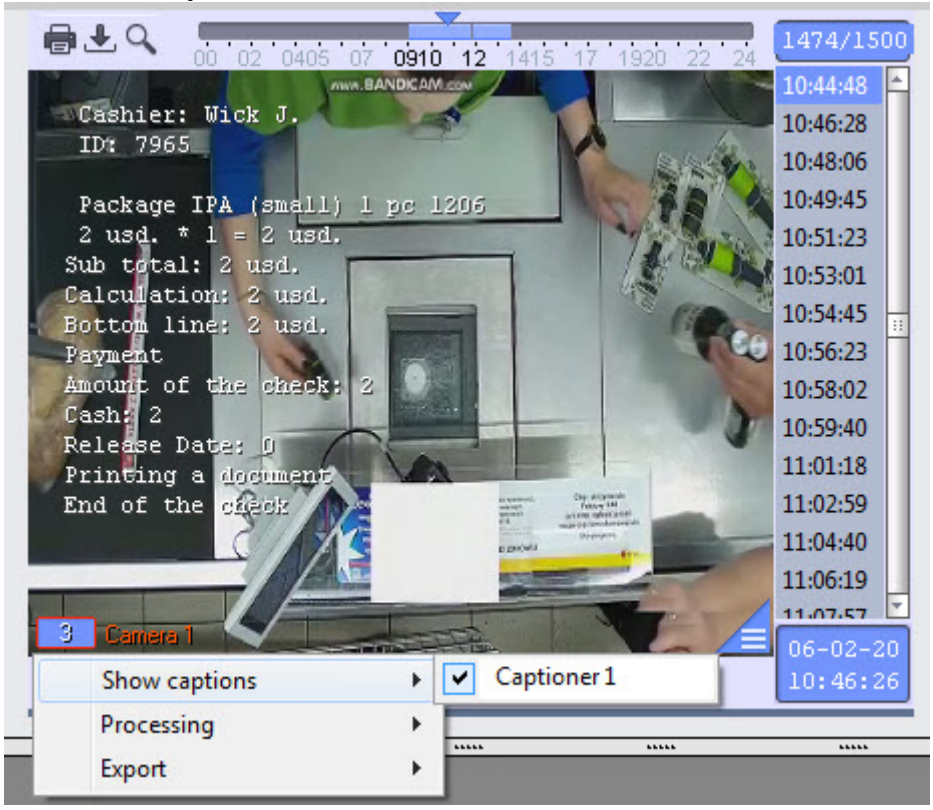
3. The active (displayed) columns are displayed in the (**2**) field.
   - To remove a column, click on the − icon next to the name of the corresponding column in the field (**2**).
   - To remove all columns, click **Remove all** (**4**).
   - To change the order of the columns, in the field (**2**) drag the column name up and down to the required position.
4. The inactive (not displayed) columns are displayed in the (**3**) field.
   - To add a column, click on the + icon next to the name of the corresponding column in the field (**3**).
   - To add all columns, click **Add all** (**4**).
5. To save changes, click **Ok** (**6**).

Selecting the columns to be displayed in the detailed reports is completed.

8.1.2.7 Disabling captions in the video surveying window

To disable captions in the video surveying window, do the following:

1. Choose **Show captions** in the functions menu of the video surveillance window.



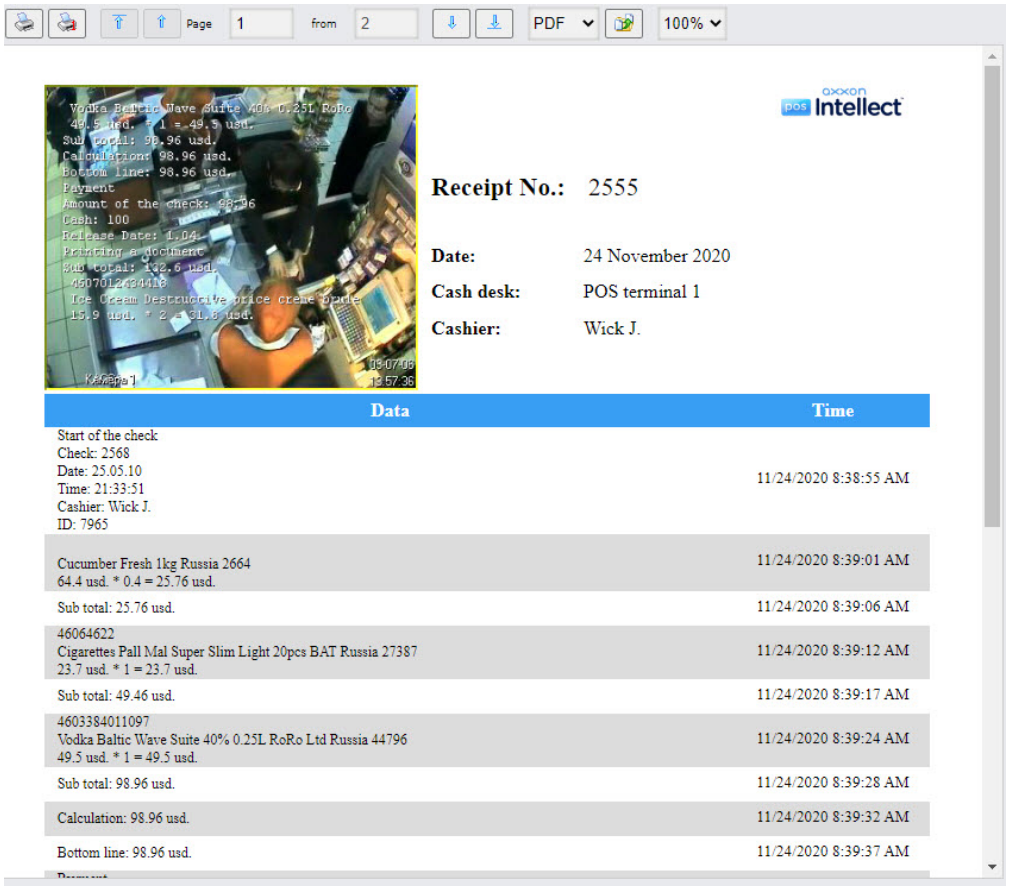
2. In the displayed list of available captioners select those from which captions are to be received.
3. To disable captions from some captioners left-click the line with the required captioner.

8.1.2.8 Operations with data from POS terminal

To work with data from the POS terminal by event, the following operations are possible:



- **Print** (**1**) - Opens a window for printing a receipt with all the data from the POS terminal, including the image from a video camera.



- **Receipt contents** (**2**) - Opens a window for printing only the list of items in the receipt.



- **Download receipt video** (**2**) - Saves a segment of a video with a receipt from the archive to a file. The video file has the following naming: id<receipt>_<cashier>_<POS terminal id>_<receipt beginning time>_<receipt ending time>.avi.

> **Note**
>
> The video file is exported to the *<C:|Users|<user name>|Documents|Export>* folder.

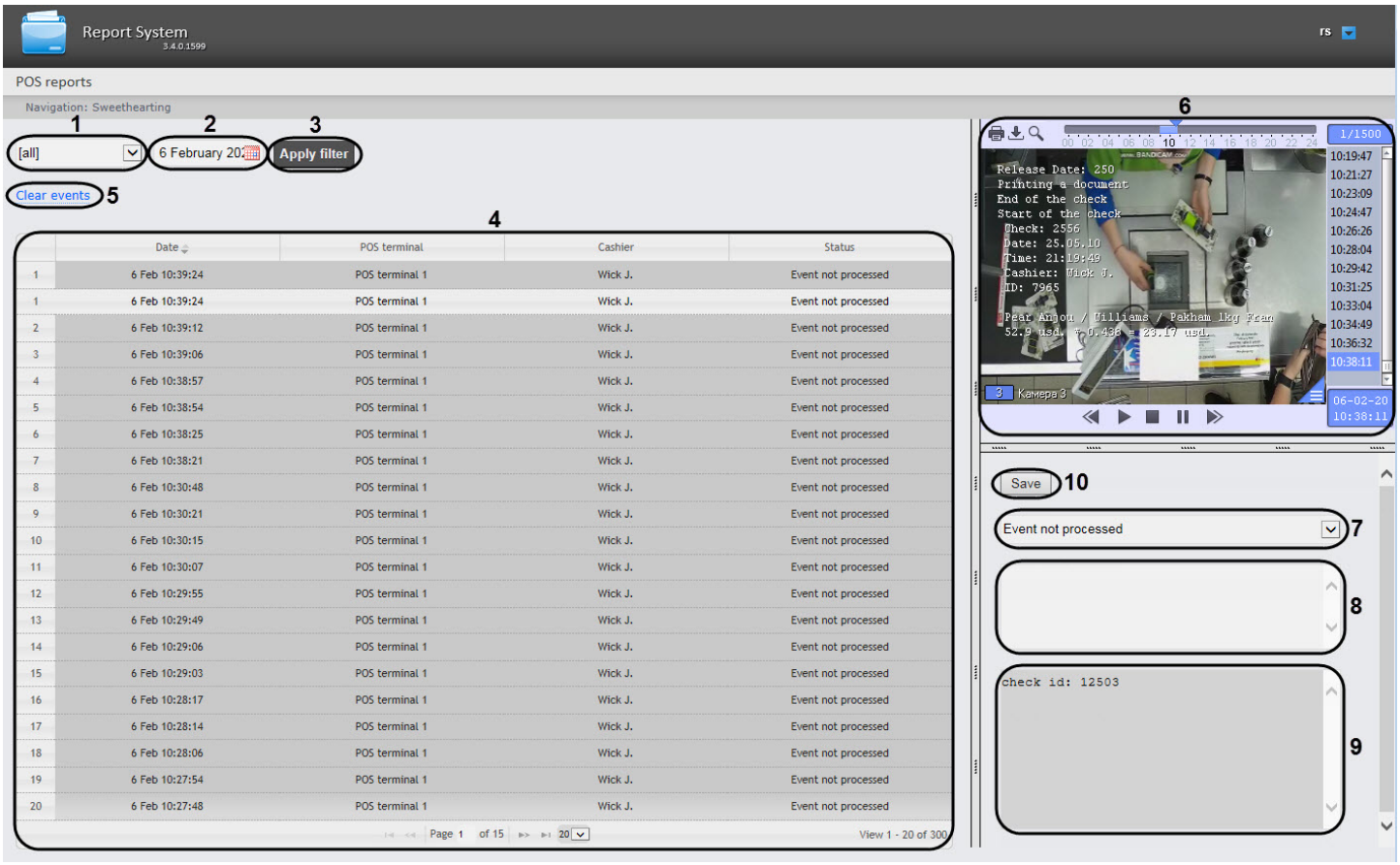
- **Titles** (**4**) - Enables or disables displaying captions on the video of the receipt when it is saved using the **Download receipt video** link.

8.1.3 Sweethearting monitor

> **Important!**
>
> The **Sweethearting** report is generated automatically based on the data from the **Sweetherting detection module**, which is part of the *Intellect Detector Pack* (see Configuring the «Sweethearting detection» module for details).

The **Sweethearting** detailed report enables real-time monitoring of goods scanning events by cashiers in order to prevent intentional theft by carrying goods past the barcode scanner (so-called *sweethearting*).

Open the **Sweethearting** report (see Selecting a type of general POS report). The interface of the **Sweethearting monitor** is shown in the picture below.



Important!

Events appear in the report only if there is no **Add goods** event at the same second as the event from the **Sweetherting detection** object of POS-Intellect.

Note

It is possible to enable sound notification about new events (see Setting up the Sweethearting report).

The goods scanning events are loaded into the table (**1**), ranging from the newest to the oldest. Each of the events is provided with the following summary information:

- **Date** - the date and time at which the goods were recognized and identified at the cash register;
- **POS terminal** - the POS-terminal on which the goods were recognized;
- **Cashier** - the full name of the cashier, who was supposed to make a scan;
- **Status** - the status of the event, which is determined by the operator of the Web Report System, working with the **Sweethearting** monitor.

In order to load events into the table, click the **Show new events** link in the upper-right part of the table (**2**). Similarly, you can optionally update the event table.

In order to clear the event table, click the **Clear events** link in the upper-left part of the table (**3**).

In order to view the details of an event and a video image, select the event in the list by clicking on the corresponding row in the table. After that, the following elements will become available in the right part of the screen:

1. The video of the event with the indication of the time when the event was recorded and the possibility of viewing in the archive mode (**4**).

   > **Note**
   >
   > Working with video surveillance window in the archive mode is given in details in Intellect software package. Operator's guide.

2. The dropdown list for selecting the status of the event (**5**). By default, all events have the **Event not processed (by default)** status. Having examined the video, the operator of the Web Report System, working with the **Sweethearting** monitor, can manually assign the event one of the following statuses:
   a. Non-violation
   b. Possibly violation
   c. Minor violation detected
   d. Moderate violation detected
   e. Serious violation detected
3. The text field for operator comment (**6**). If necessary, the operator can leave his comment to the event (no more than five lines).
4. The field for program log output, unavailable for editing (**7**).
5. The **Save** button to save the event changes (new status and comment) (**8**).

The **Sweethearting** report is unavailable for export and can only be viewed in the monitoring mode. It is possible to export the video image from the event processing window, as described in the Export and print out section.

> **Note**
>
> On default, exporting the video is performed to the *My documents*|*Export* folder.

8.2 Working with Time and Attendance reports

Working with Time and Attendance reports consists of three stages:

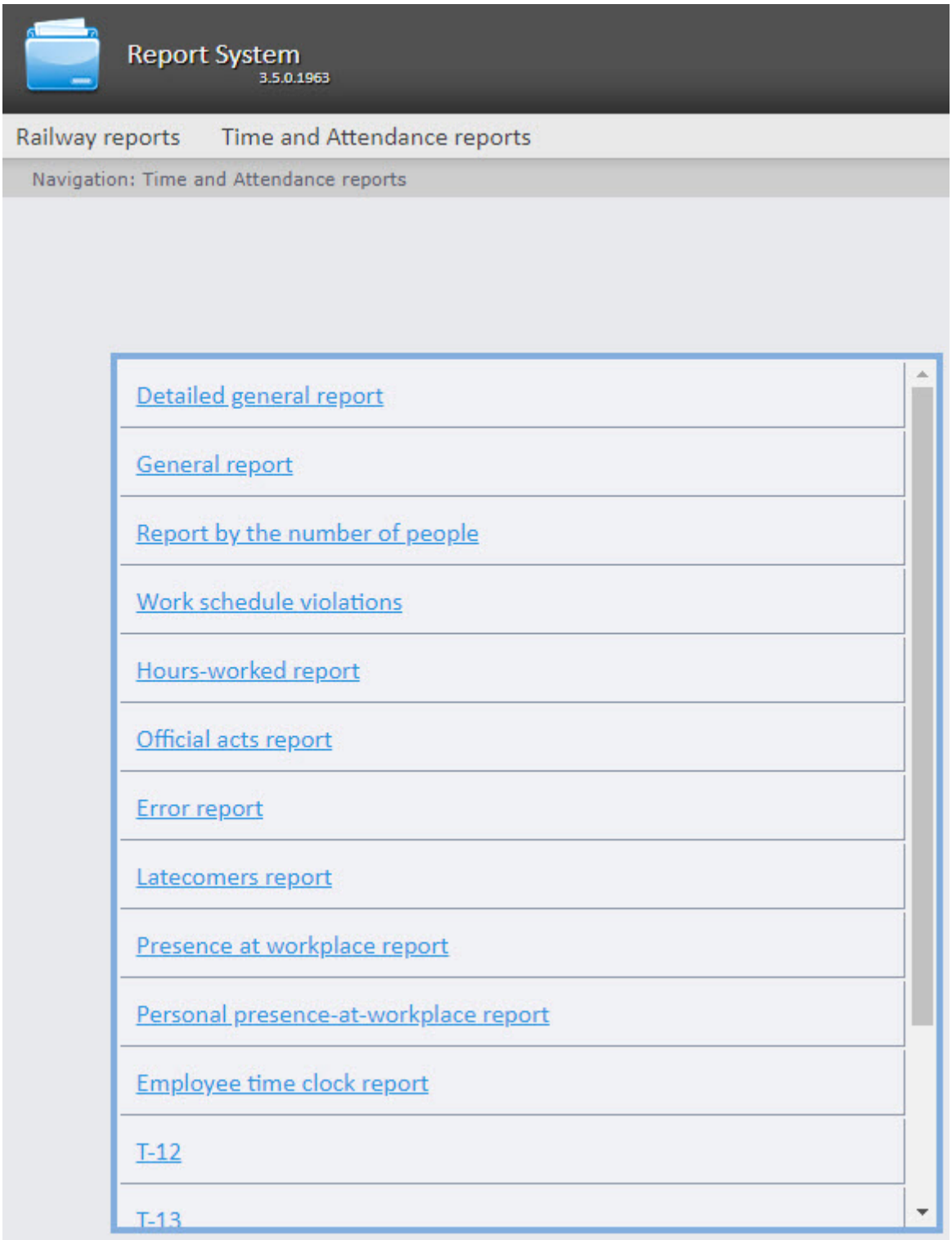
1. Selecting a type of report.
2. Creating a report.
3. Viewing a report.

> **Attention!**
>
> It's required to configure user access to departments for working with Time and Attendance reports (see the Setting up the Time and Attendance reports section).

8.2.1 Selecting a type of Time and Attendance report

In order to select a type of Time and Attendance report click on **Time and Attendance reports** link in *Report System* menu.

As a result the list of available Time and Attendance reports is displayed. For switching to the required report click the corresponding link.



Note.

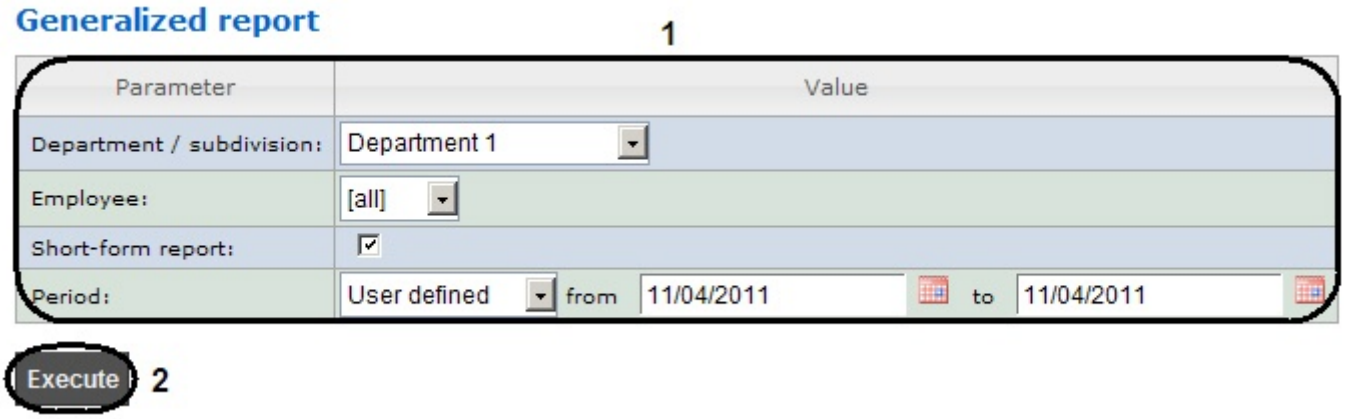
List of links for switching to Time and Attendance reports is available when hovering over the **Time and Attendance reports** link in the report menu.



8.2.2 Creating a Time and Attendance report

In order to create a Time and Attendance report, do the following:

Select a Time and Attendance report in one way (see Selecting a type of Time and Attendance report section).
Set required values to the parameters that are necessary for displaying the report of selected type (**1**).

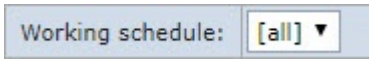
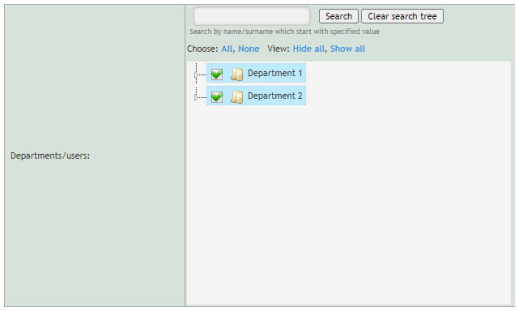
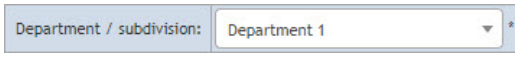


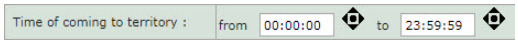
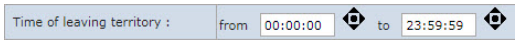
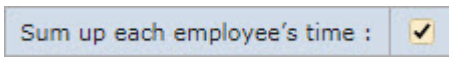
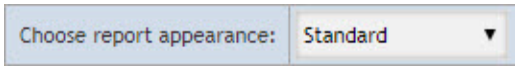
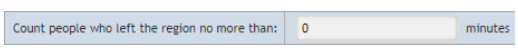
Note.

The figure illustrates the parameters of a **Generalized report**.

Set of parameters depends on the type of Time and Attendance report. Description of parameters used for creating reports is given in the table.

Parameter	Description	Used in reports
Area: Region 1	Used for selecting the area by which data is displayed in the report	• Detailed general report • General report • Presence at workplace report • Extended report on the presence at the workplace • Report by person quantity • Personal presence-at-workplace report
Period: Current date and time	Used for setting the period by which the report is displayed	Used in all reports
Only working area:	When the box is checked, the data only by working area is displayed in the report	• Presence at workplace report • Personal presence-at-workplace report
Short-form report:	When the box is checked, some report fields are hidden.	• Detailed general report • General report
Add a Comment column:	When the box is checked, the Comment column will be displayed in the report, which is used to manually add a comment to the printed report.	• General report • Detailed general report
Print the departments on separate sheets:	When the box is checked, each department will be displayed on a separate sheet	• Detailed general report

Parameter	Description	Used in reports
	Used for selecting the work schedule of employees whose information is to be displayed in the report. You can select one of the available schedule or all the work schedules at once.	• Detailed general report • General report
	Used for selecting the department or employee whose information is to be displayed in the report. The structure of the departments in the reports corresponds to the structure of the departments in the Time and Attendance module. You can select all departments at once, or single departments or employees separately, both parent and child.	• Work schedule violations • Hours-worked report • Official acts report • Error report • Latecomers report • Presence at workplace report • Extended report on the presence at the workplace • Total report on the presence at the workplace • Employee time clock report • General report by discipline and overtime • Simple generalized report • General report • Report by person quantity
	Used for selecting the department or subdivision which information is to be displayed in the report. You can select only the whole department/subdivision. You can also use the search for the required department/ subdivision by substring.	• Generalized report • T-12 • T-13
	Used to select an employee whose information is to be displayed in the report from a previously selected department/subdivision. If there are more than 100 employees, then the entire list is not displayed. To search for an employee, enter at least 3 first letters of the last name. As a result, employees with matching names will be displayed in the drop-down list.	• Generalized report • Personal presence-at-workplace report
	When the box is checked, only those employees who were not present at their workplace will be displayed in the report.	• Hours-worked report
	Used to set the exact timestamp (hours, minutes) the information of which is to be displayed in the report.	• Report by person quantity

Parameter	Description	Used in reports
	Used to filter the data by the employee's personnel number and display this information in the report.	• Extended report on the presence at the workplace • Total report on the presence at the workplace *Note. To access these reports, it is necessary to configure them (see Configuring the Extended report on the presence at the workplace and Total report on the presence at the workplace).*
	Used to filter the data by the agreement number and display this information in the report.	
	Used to filter the data by the employee's name and display this information in the report.	
	Used to filter the data by the employee's surname and display this information in the report.	
	Used to filter the data by the employee's patronymic name and display this information in the report.	
	Used to filter the data by the employee's job position and display this information in the report.	
	Used to filter the data by the employee's job activity area and display this information in the report.	
	Used to filter the data by the employee's category and display this information in the report.	
	Used to filter the data by the employee's specialty and display this information in the report.	
	Used to filter the data by the employee's time of arrival and display this information in the report.	
	Used to filter the data by the employee's time of leaving and display this information in the report.	
	Used to filter the data by the time employee's spent on site and display this information in the report.	
	When the box is checked, the information is grouped by department.	
	When the box is checked, the total time of all employees' presence on site is displayed in the report.	
	Used to select the appearance of the report: "Standard" or "With page header"	• Presence at workplace report • Personal presence-at-workplace report
	Used to include in the report employees who arrived later than the start of the working day	• Employee time clock report
	If an employee has left the work region for a time not exceeding the specified time, then this time will be counted as spent in the work region	• General report

Click **Execute** (**2**).

As a result a report is created and displayed (see Viewing a Time and Attendance report).

8.2.3 Viewing a Time and Attendance report

8.2.3.1 Time and Attendance report toolbar

The toolbar on the top of a page is used for report navigating, scaling the displayed page and Time and Attendance report exporting.



In order to switch to the previous and next report page click  and  correspondingly (**1**). In order to go back to the first report page click  . In order to go to the last report page click  .

Intellect Web Report System allows exporting the created Time and Attendance report to computer in the following formats:

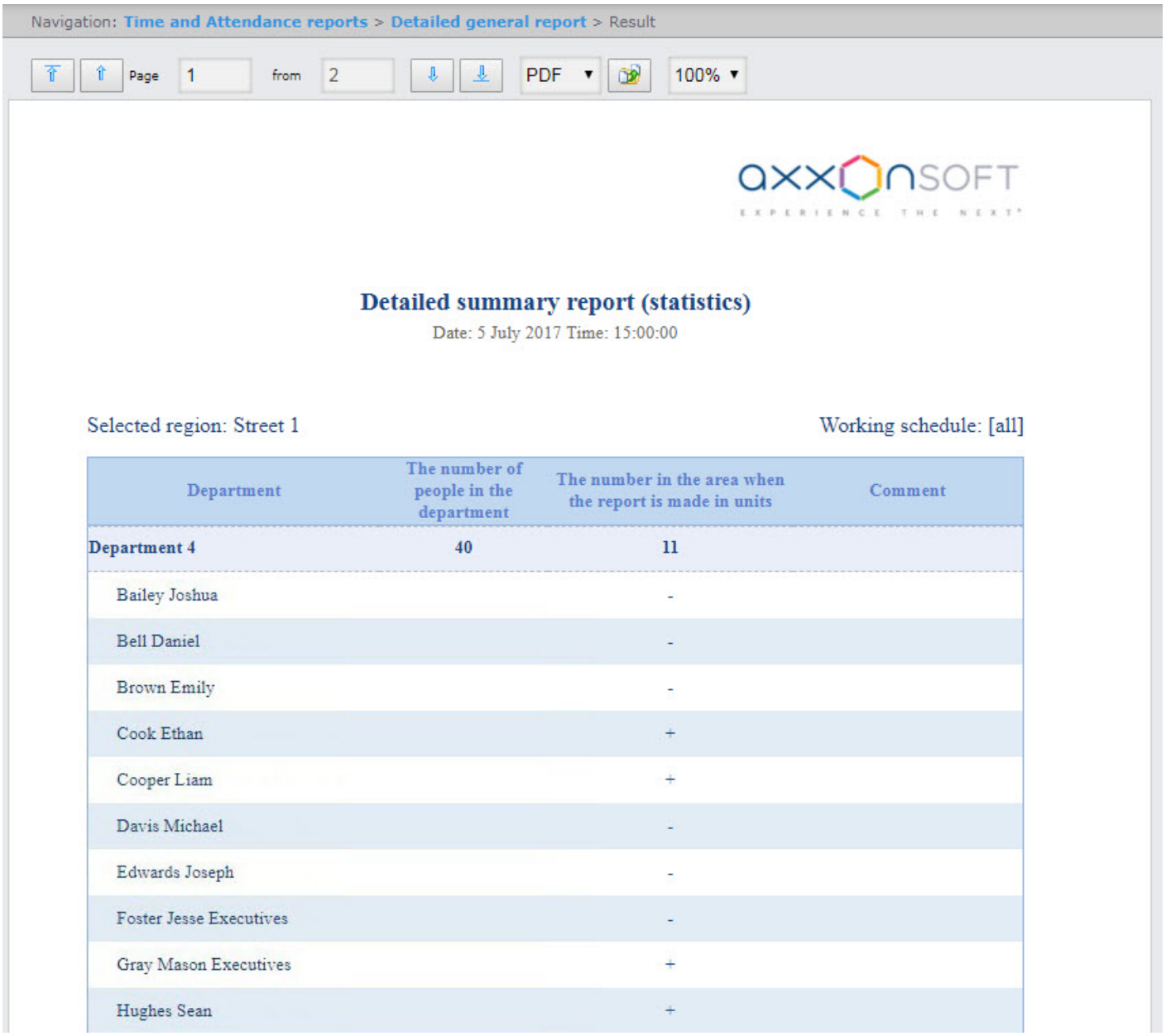
- PDF;
- RTF;
- HTML;
- Excel;
- CSV;
- Text.

For this select a format in which the report is exported and click  (**2**).

Zooming in/out the displayed page is performed through the choosing the required scale in the list (**3**).

8.2.3.2 Detailed general report

A **Detailed general report** contains the information about the total number of people in the department, with the specified work schedule, the number of department's employees in the selected region at the time of the report creation or on the specified date and time.



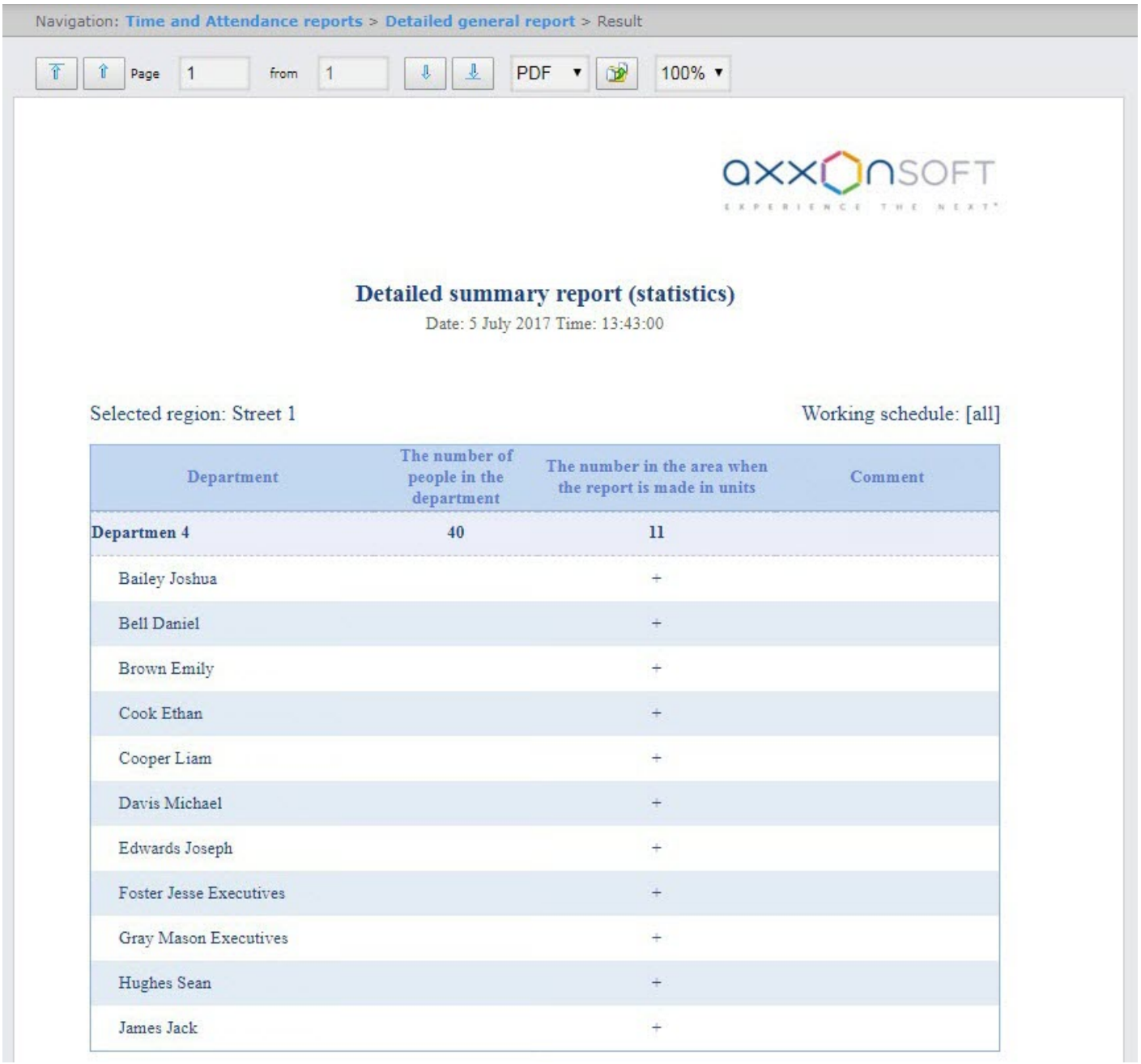
The report fields are described in the table.

Field name	Description
Department	The name of the department and the full names of its employees
The number of people in the department	Total number of people in the department
The number in the area when the report is made in units	The number of people present in the selected region at the time of the report creation or on the specified day and time
Comment	Empty uneditable field for manual input of comments (e.g. on the printed report)

Примечание

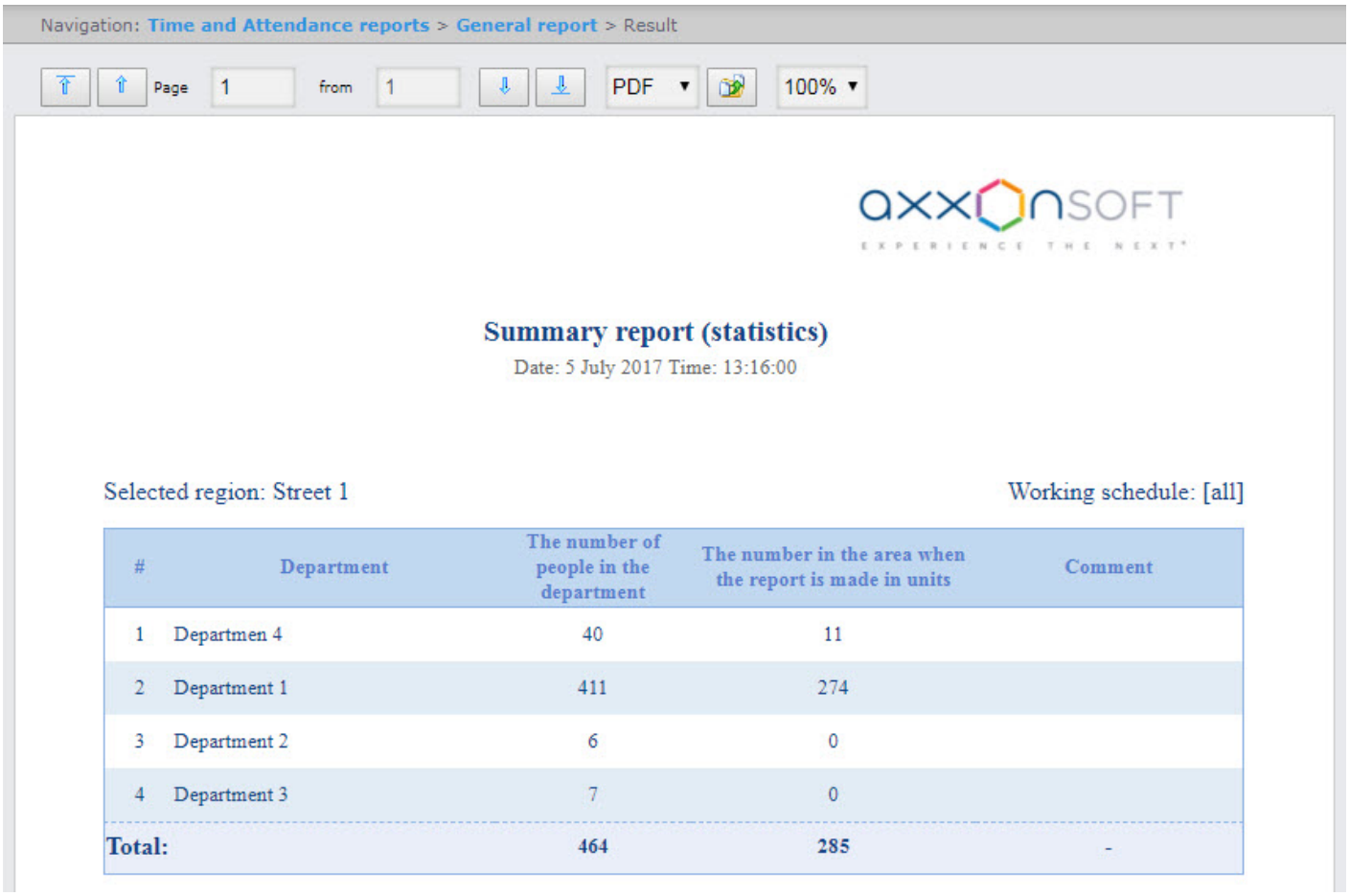
The employees that are present in the area are marked with "+", those who are absent are marked with "-".

In the short report, the employees who are not present in the selected region are hidden:



8.2.3.3 General report

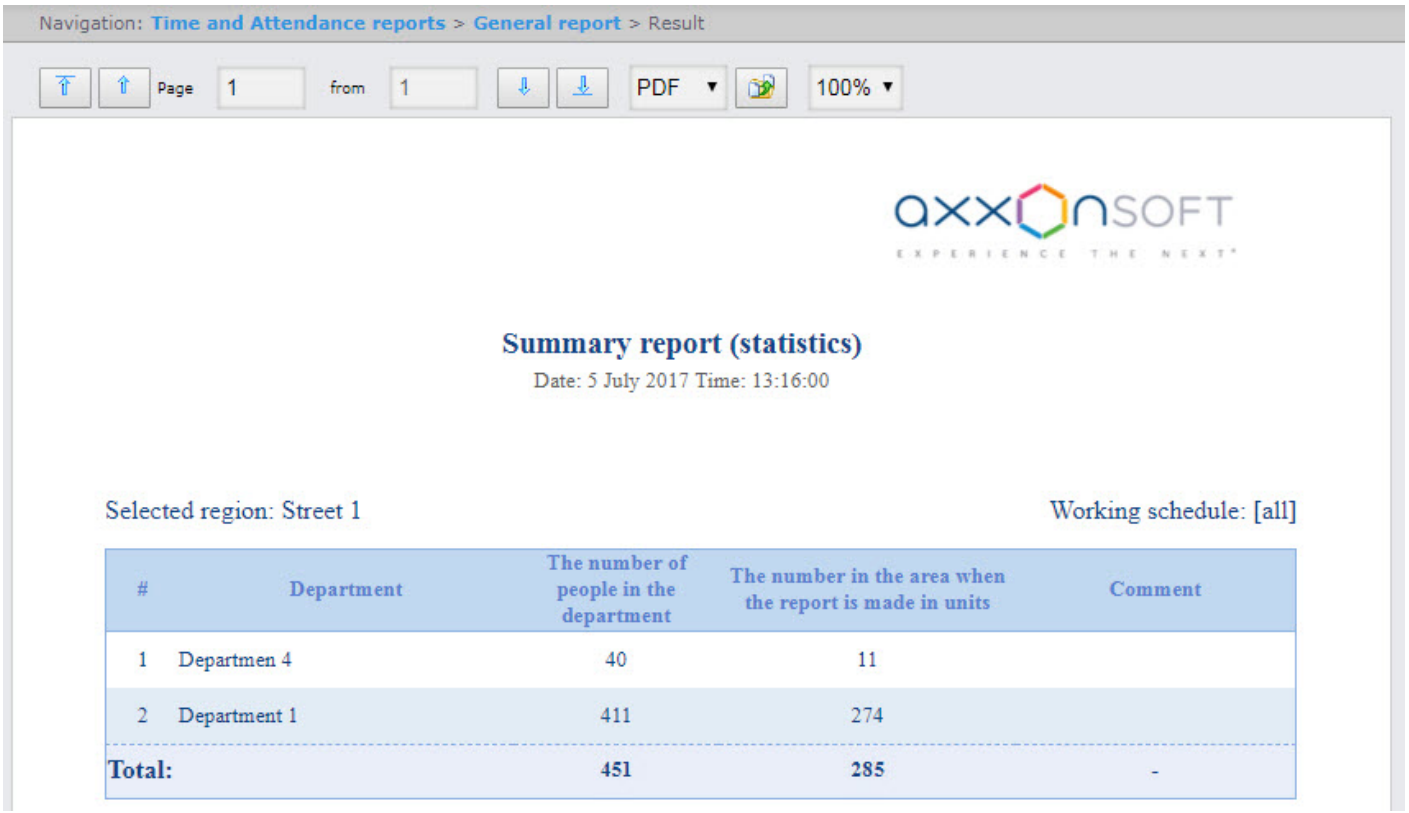
A **General report** contains the information about the total number of people in the departments, with the specified work schedule, the number of department's employees in the selected region, and the percentage of the employees present at the workplace at the time of the report creation or on the specified date and time.



The report fields are described in the table.

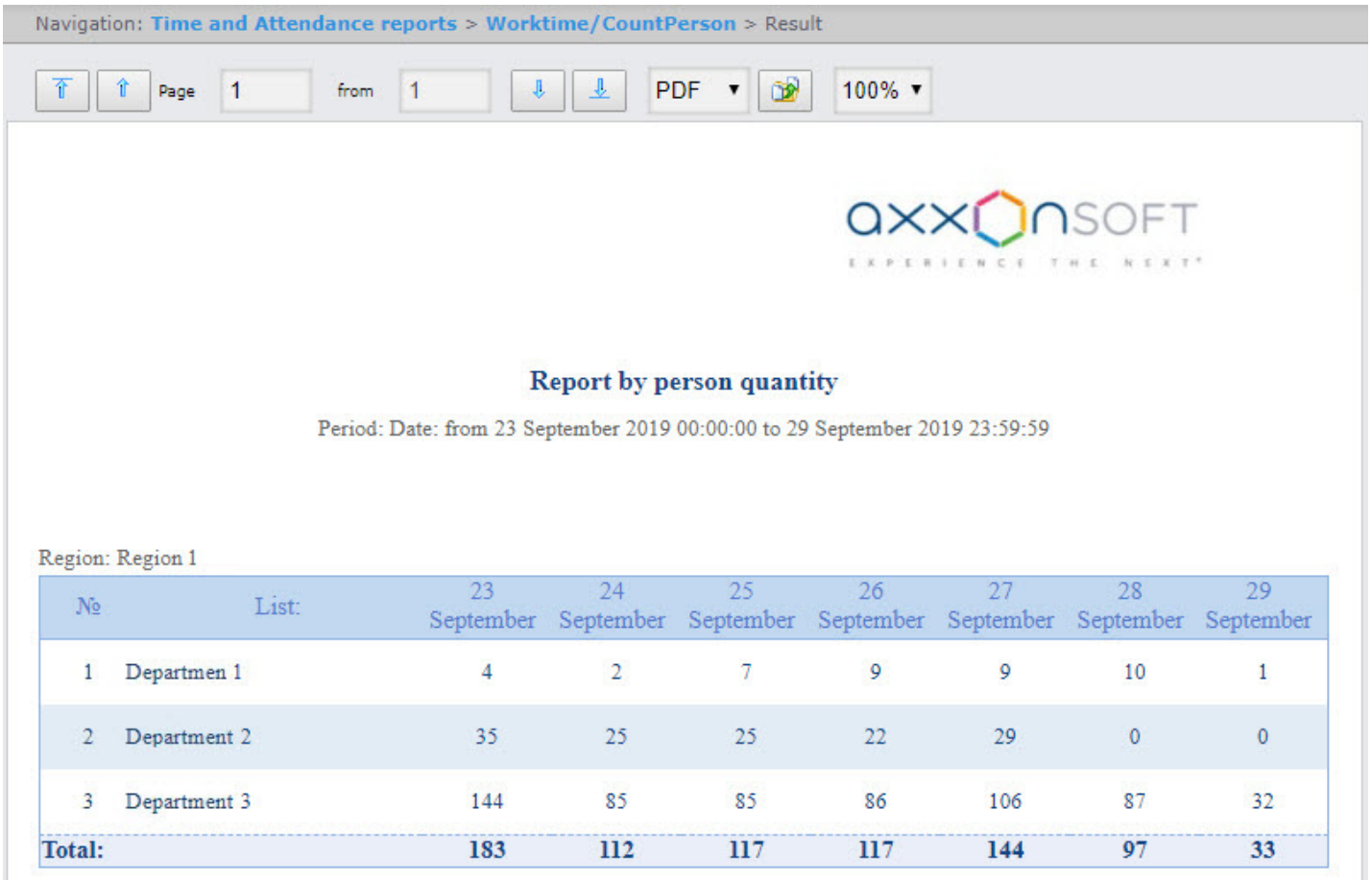
Field name	Description
Department	The name of the department
The number of people in the department	Total number of people in the department
The number in the area when the report is made in units	The number of people present in the selected region at the time of the report creation or on the specified day and time
Comment	Empty field for manual input of comments
The **Total** line indicates the total number of people in all departments and the total number of people present in the selected region	

In the short General report, the departments with no employees present in the selected region are hidden:



8.2.3.4 Report by person quantity

The **Report by person quantity** contains the information on the total number of employees in the departments who were present in the selected region within a specified period of time.



№	List:	23 September	24 September	25 September	26 September	27 September	28 September	29 September
1	Departmen 1	4	2	7	9	9	10	1
2	Department 2	35	25	25	22	29	0	0
3	Department 3	144	85	85	86	106	87	32
Total:		**183**	**112**	**117**	**117**	**144**	**97**	**33**

The report fields are described in the table.

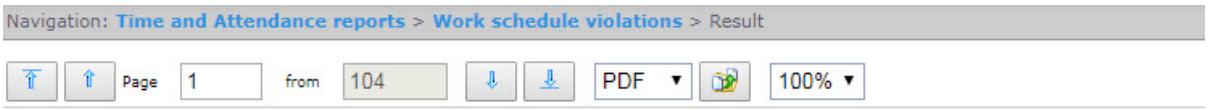
Field name	Description
List	Department Name
Date and month	The number of people present in the selected region on the corresponding day
The **Total** line indicates the total number of people in all departments who were present in the selected region for each day of the specified time period	

Note

The maximum period of time for which the report can be displayed is one week.

8.2.3.5 Work schedule violations

A **Work schedule violations** report contains the information about the employees that violated the work schedule in the specified time period, the violation type and its duration.



Violating working regulations

Date: from 5 July to 5 July

Department: Department_6

Bailey Joshua — Working schedule:

Date; hours to scheduled completion	Actual date and time	Violation type	Duration	Code
5 July 09:00:00	5 July 17:41	Leaving earlier	00:18:10	

Total by employee	Amount	Duration
Coming late	0	00:00:00
Time of absence	0	00:00:00
Leaving earlier	1	00:18:10
Absence	0	00:00:00
Underworking	0	00:00:00

Bell Daniel — Working schedule:

Date; hours to scheduled completion	Actual date and time	Violation type	Duration	Code
5 July 09:00:00	5 July 12:47	Leaving earlier	05:12:11	

Total by employee	Amount	Duration
Coming late	0	00:00:00
Time of absence	0	00:00:00
Leaving earlier	1	05:12:11
Absence	0	00:00:00
Underworking	0	00:00:00

Total by employee	Amount	Duration
Coming late	0	00:00:00
Time of absence	0	00:00:00
Leaving earlier	0	00:00:00
Absence	1	09:00:00
Underworking	0	00:00:00

Total by department	Amount	Duration
Coming late	4	11:12:18
Time of absence	2	00:14:40
Leaving earlier	68	118:15:43
Absence	344	3096:00:00
Underworking	0	00:00:00

Total by report	Amount	Duration
Coming late	4	11:12:18
Time of absence	2	00:14:40
Leaving earlier	68	118:15:43
Absence	344	3096:00:00
Underworking	0	00:00:00

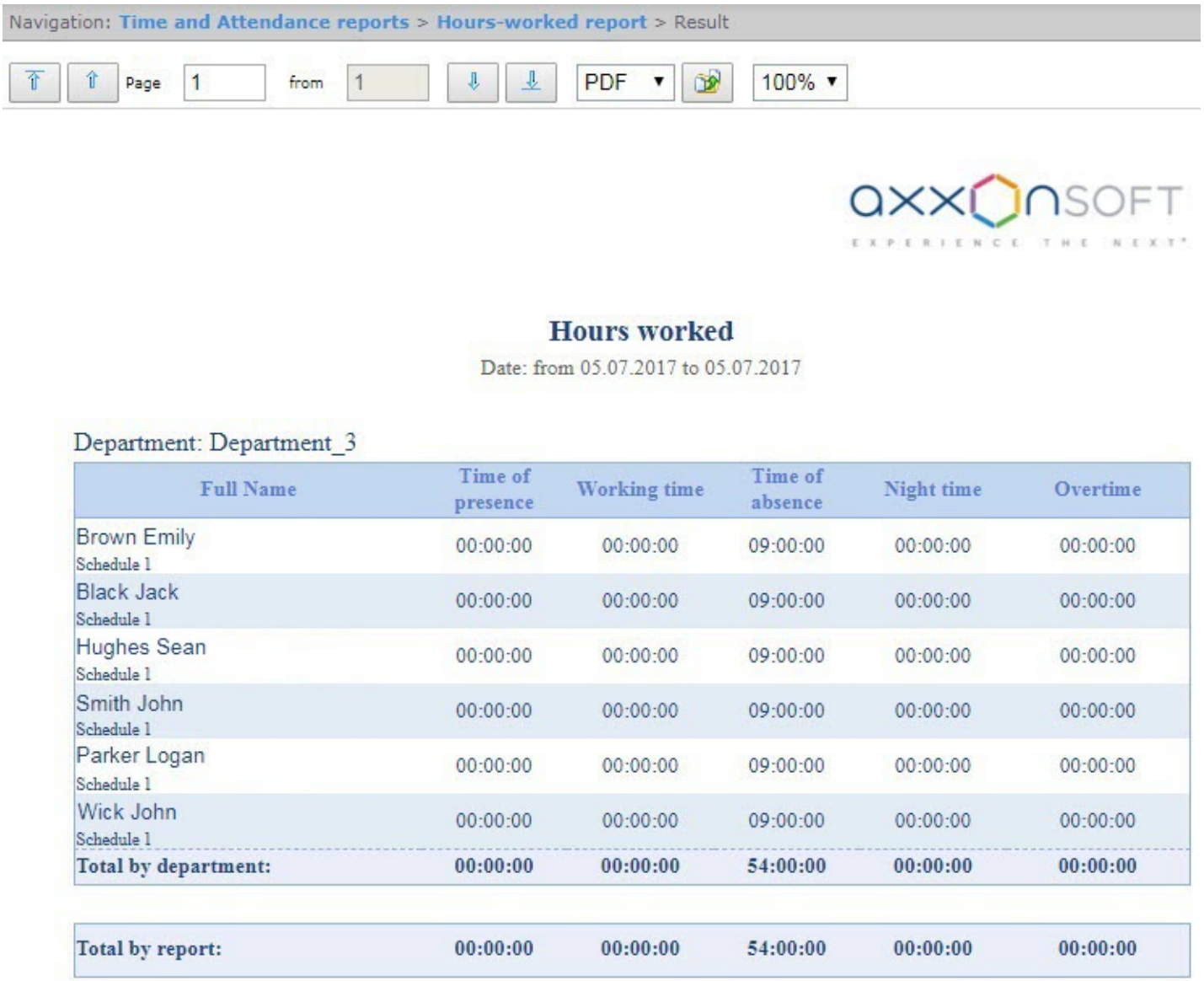
Report fields are described in the table.

Field name	Description
Date; hours to scheduled completion	Planned duration of a workday for the specified date
Actual date and time	Date and time when violation was registered
Violation type	Type of registered violation
Duration	Violation duration
Code	Violation code

In the report there are separate tables with information about total amount of violations by employee, department and report as a whole.

8.2.3.6 Hours-worked report

An **Hours-worked report** is a table that contains the information on hours worked by employees of the selected department with details for each employee for a specified period of time.



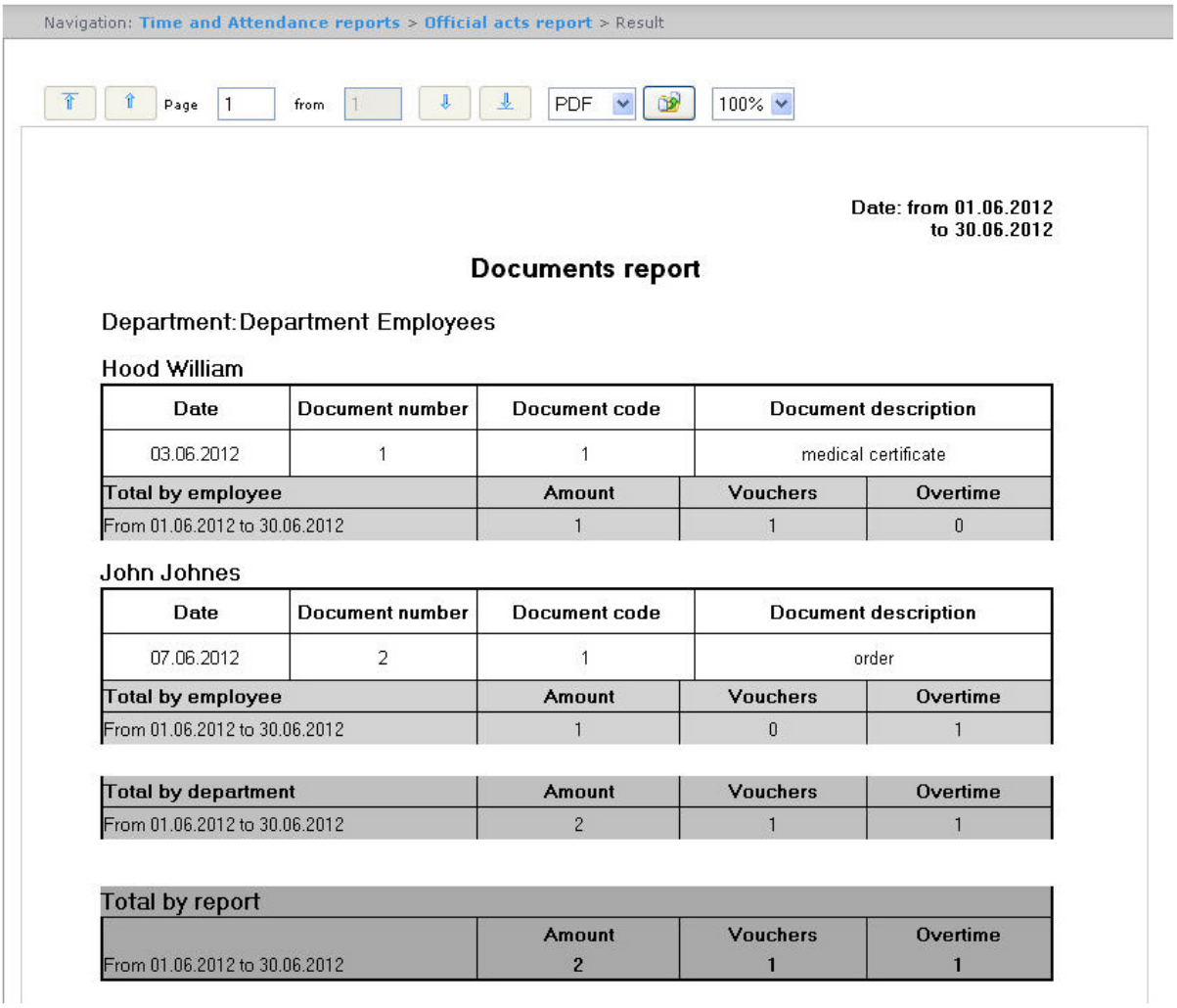
Report fields are described in the table.

Field name	**Description**
Full name	Full name of an employee
Time of presence	Time that was spent in the workplace. If time of presence is more than planned working hours for specified period then the field is marked red
Working time	Time that was spent in the workplace according to the work plan (schedule)
Time of absence	Difference between the planned work hours and time of presence in the workplace
Night time	Time that was worked at night
Overtime	Time that was worked overtime
The **Total by department** line displays the sum values by each department's employee.	

Field name	Description
The **Total by report** line displays the sum values by each department.	

8.2.3.7 Official acts report

The **Official acts report** contains the information about the vouchers and overtime documents that were drawn by employees in the specified time period.



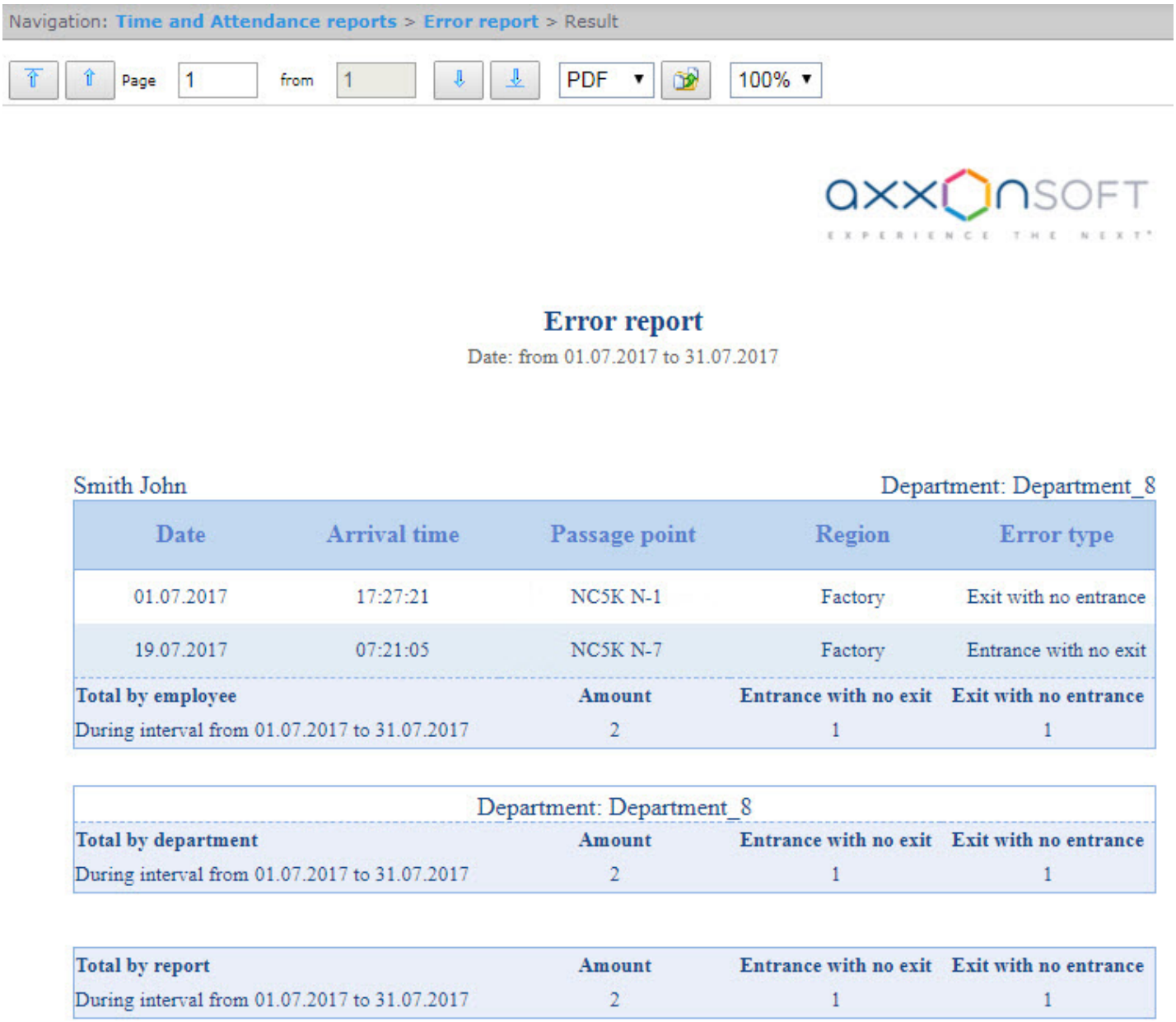
Report fields are described in the table.

Field name	Description
Date	Date of document creation
Document number	Document number given in Time and Attendance program module
Document code	Document code given in Time and Attendance program module
Document description	Document name

In the report there are separate tables with information about total amount of documents by employee, department and report as a whole.

8.2.3.8 Error report

An **Error report** contains the information about the employees' incorrect passes/exits to/from the region within the specified time period.



Report fields are described in the table.

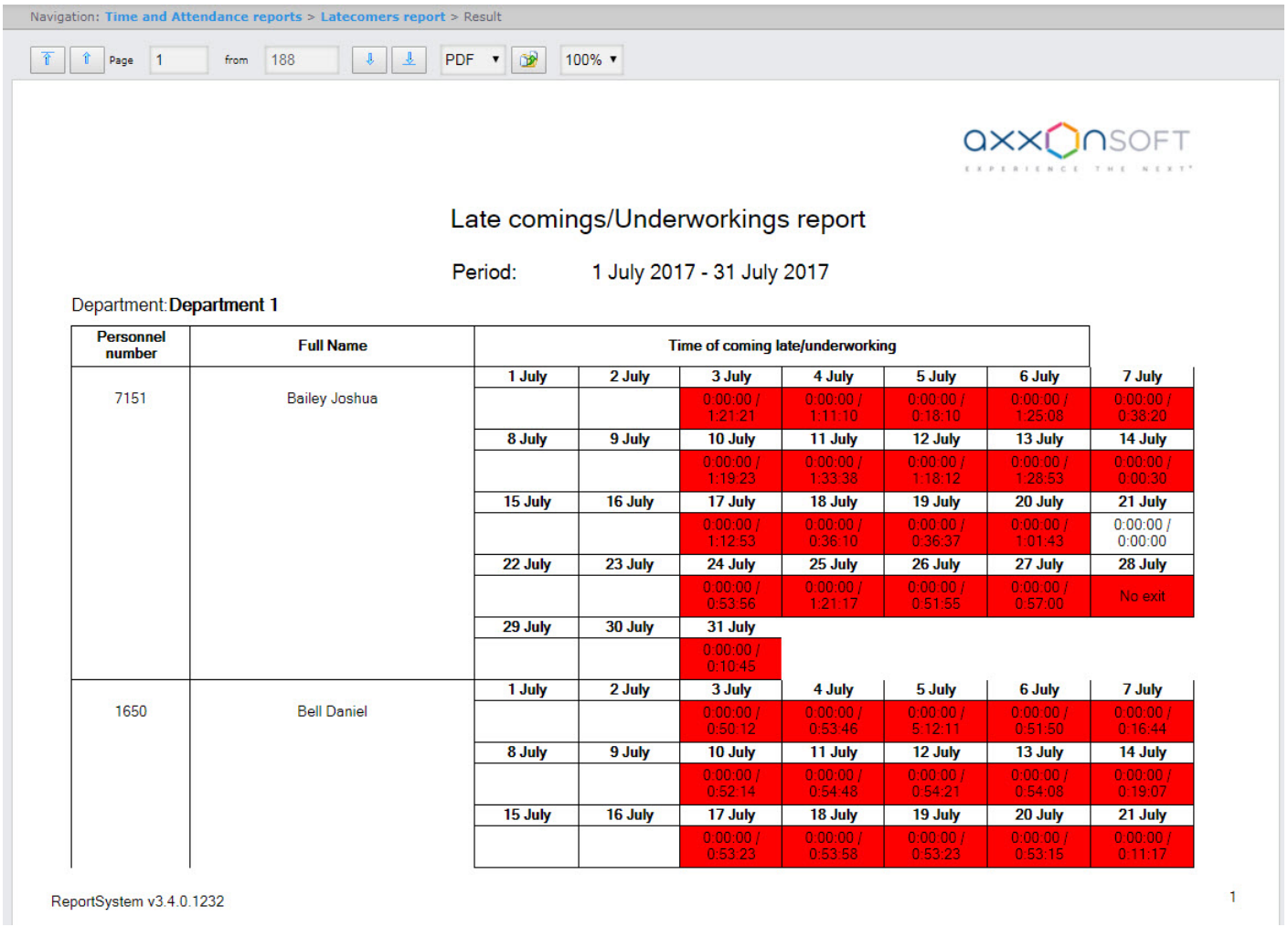
Field name	Description
Date	Date when an error was registered
Arrival time	Time when there was a passage to the region that caused an error
Passage point	Name of a passage point
Region	Name of a region where an error was registered

Field name	Description
Error type	Type of a registered error

In the report there are separate tables with information about total amount of errors by department and report as a whole.

8.2.3.9 Latecomers report

A **Latecomers report** contains the information about how late an employee came and how much time he underworks for every day of a specified period.



Personnel number	Full Name	Time of coming late/underworking						
		1 July	2 July	3 July	4 July	5 July	6 July	7 July
7151	Bailey Joshua			0:00:00 / 1:21:21	0:00:00 / 1:11:10	0:00:00 / 0:18:10	0:00:00 / 1:25:08	0:00:00 / 0:38:20
		8 July	9 July	10 July	11 July	12 July	13 July	14 July
				0:00:00 / 1:19:23	0:00:00 / 1:33:38	0:00:00 / 1:18:12	0:00:00 / 1:28:53	0:00:00 / 0:00:30
		15 July	16 July	17 July	18 July	19 July	20 July	21 July
				0:00:00 / 1:12:53	0:00:00 / 0:36:10	0:00:00 / 0:36:37	0:00:00 / 1:01:43	0:00:00 / 0:00:00
		22 July	23 July	24 July	25 July	26 July	27 July	28 July
				0:00:00 / 0:53:56	0:00:00 / 1:21:17	0:00:00 / 0:51:55	0:00:00 / 0:57:00	No exit
		29 July	30 July	31 July				
				0:00:00 / 0:10:45				
1650	Bell Daniel	1 July	2 July	3 July	4 July	5 July	6 July	7 July
				0:00:00 / 0:50:12	0:00:00 / 0:53:46	0:00:00 / 5:12:11	0:00:00 / 0:51:50	0:00:00 / 0:16:44
		8 July	9 July	10 July	11 July	12 July	13 July	14 July
				0:00:00 / 0:52:14	0:00:00 / 0:54:48	0:00:00 / 0:54:21	0:00:00 / 0:54:08	0:00:00 / 0:19:07
		15 July	16 July	17 July	18 July	19 July	20 July	21 July
				0:00:00 / 0:53:23	0:00:00 / 0:53:58	0:00:00 / 0:53:23	0:00:00 / 0:53:15	0:00:00 / 0:11:17

The report fields are described in the table.

Field name	Description
Personnel number	Employee personnel number
Full name	Employee full name
Time of coming late/underworking	Date and information about the employee's latecoming or underworking for each day of the specified period

Note.

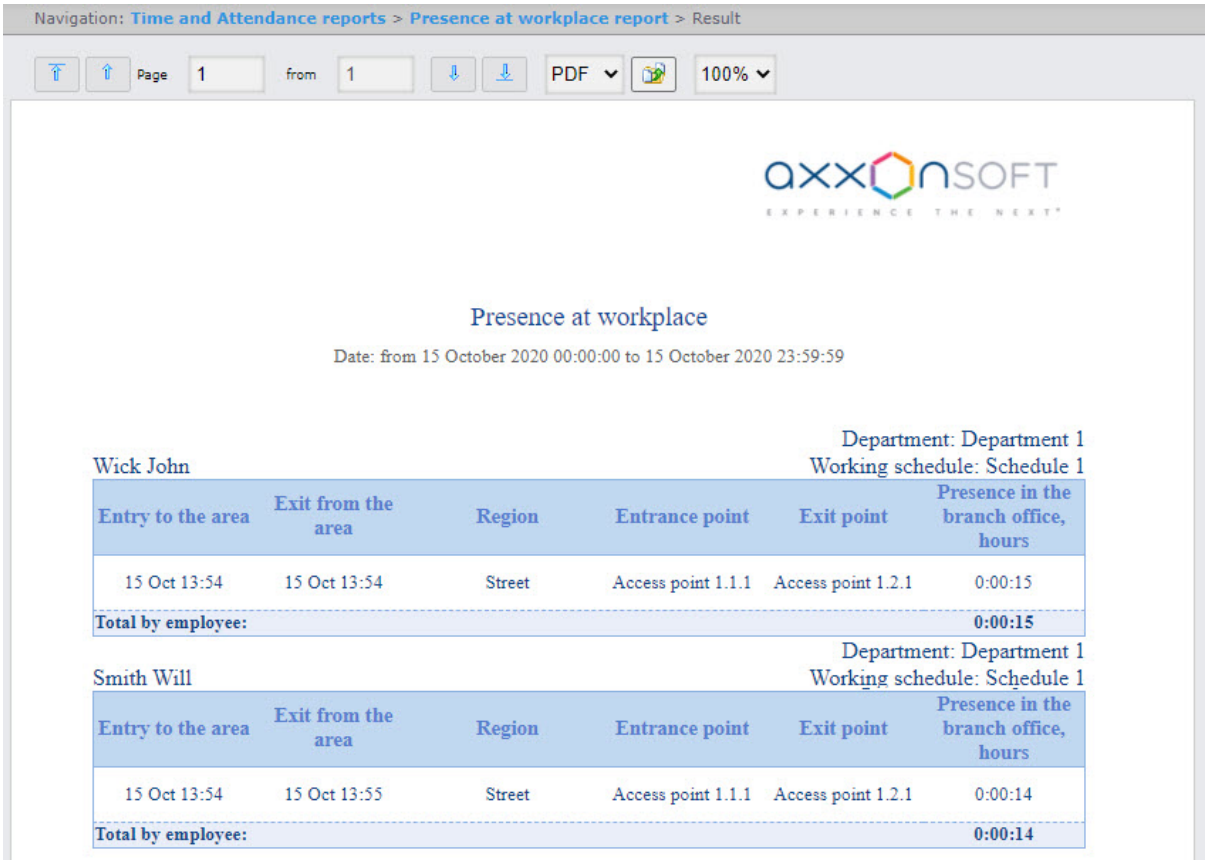
Minimal time period for which the report can be displayed is one week.

8.2.3.10 Personal presence-at-workplace report

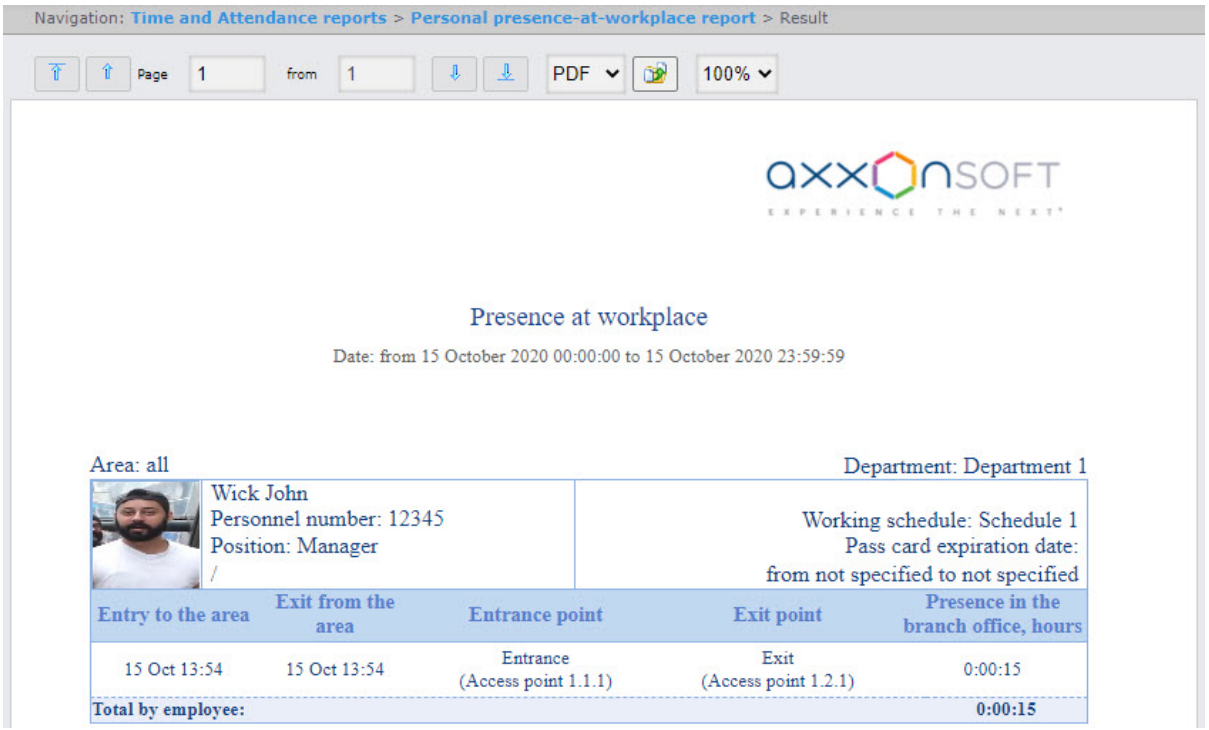
Personal presence-at-workplace report contains the information about periods when a selected employee visited and left a specified region during a day and how long an employee was in a selected region for a specified period.

> **Note**
>
> Each employee should have the date of hiring filled in. Employees whose date of hiring is not filled in, or is set for a date later than actual passes, are not displayed in the report.

Example of report with the **Standard** appearance.



Example of report with the **With page header** appearance.



Note

In order for employee photos to be displayed, it is necessary to configure the report (see Setting up the Presence at workplace report and Personal presence-at-workplace report).

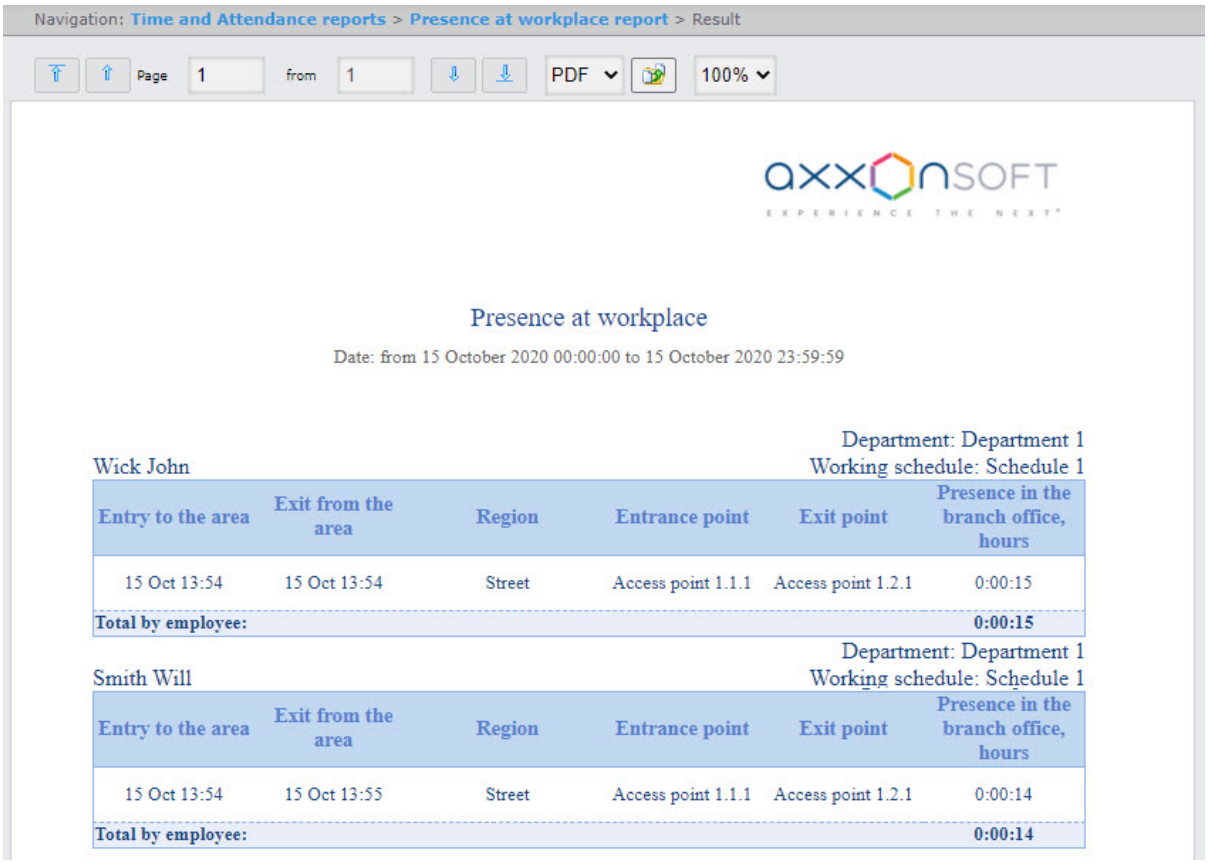
Report fields are described in the table.

Field name	Description
Entry to the area	Date and time the employee entered the region
Exit from the area	Date and time the employee left the region
Entrance point	Name of passage point through which the employee entered the region
Exit point	Name of passage point through which the employee left the region
Presence in the branch office, hours	The time period during which the employee was present in the region
The **Total by employee** line displays the total time spent by the employee in the region for the selected period of time.	

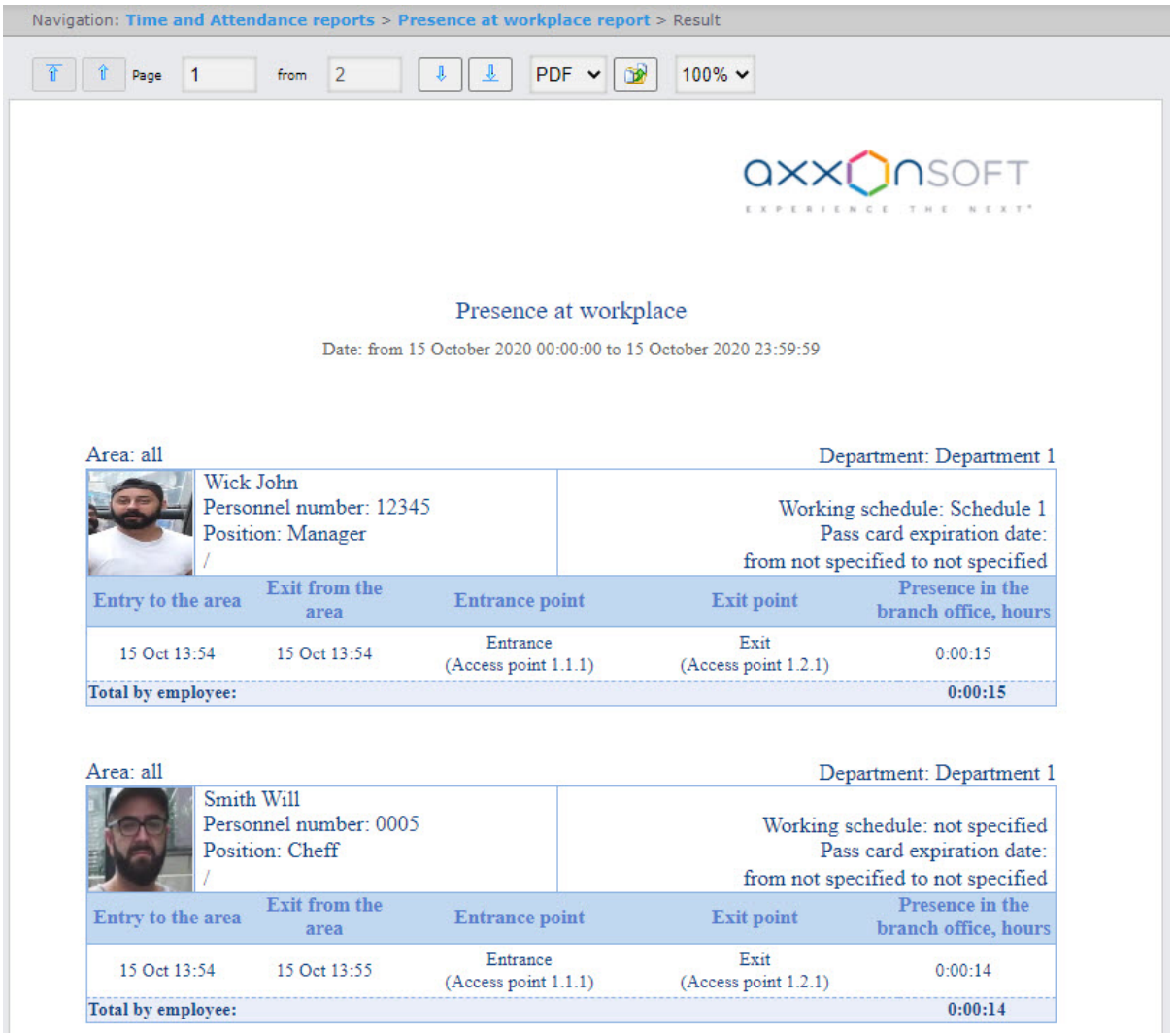
8.2.3.11 Presence at workplace report

The **Presence at workplace report** contains the information about the times when the employee left the selected region during the day, and how much time the employee spent in the selected region within the specified time period.

The report example with the **Standard** appearance.



The report example with the **With page header** appearance.



Note

In order for the photos of employees to be displayed, it is necessary to configure the report (see Setting up the Presence at workplace report and Personal presence-at-workplace report).

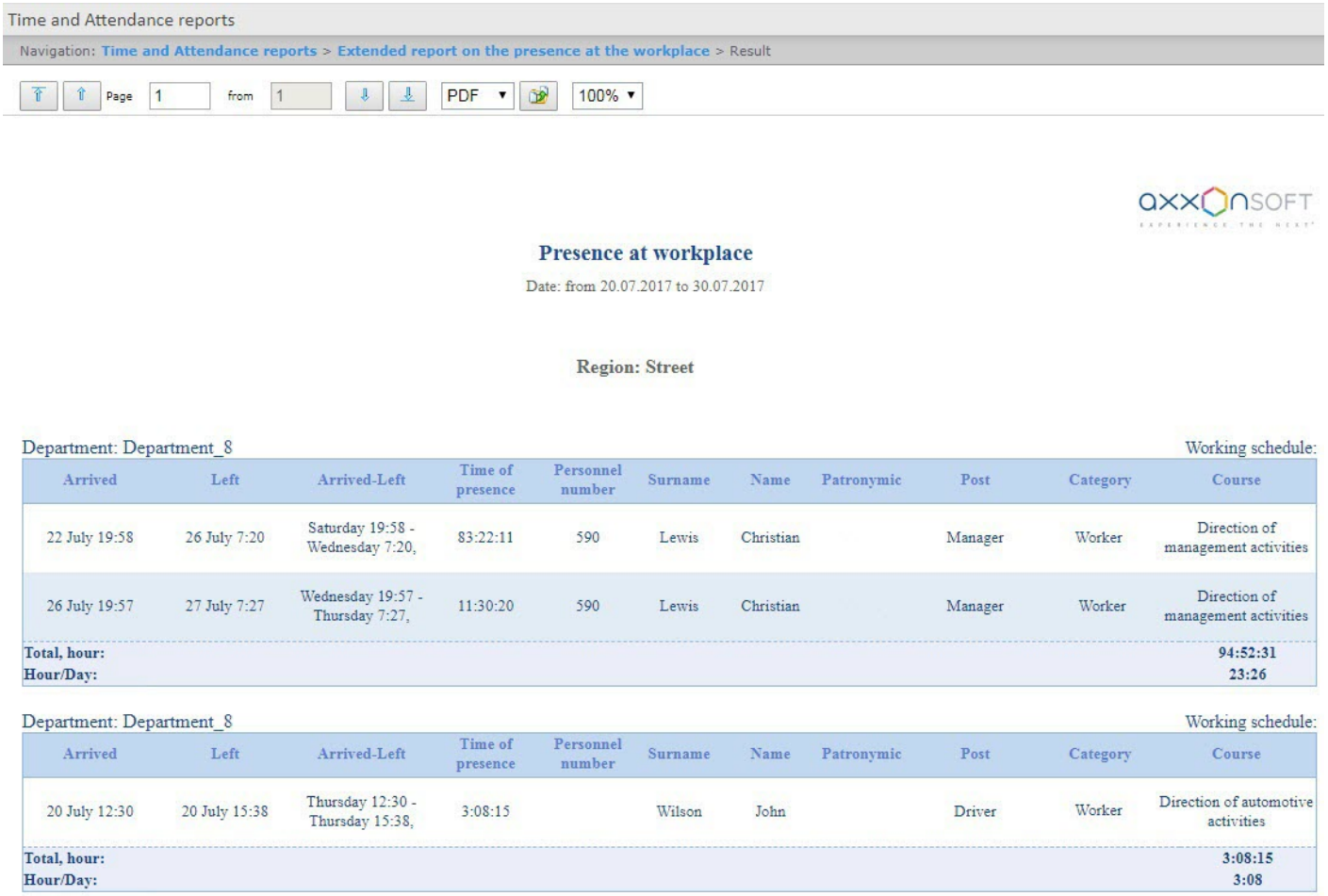
Report fields are described in the table.

Field name	Description
Entry to the area	Date and time of an employee's entrance to the region
Exit from the area	Date and time an employee's exit from the region
Entrance point	Name of an entrance point to the region
Exit point	Name of an exit point from the region
Presence in the branch office, hours	The time the employee spent in the selected region
The **Total by employee** line displays the total time spent by the employee in the region for the selected time period.	

8.2.3.12 Extended report on the presence at the workplace

> **Note**
>
> This report replaces the **Presence at workplace report** (see Presence at workplace report and Configuring the Extended report on the presence at the workplace and Total report on the presence at the workplace).

An **Extended report on the presence at the workplace** contains the information about the times when the employee left the selected region during the day, and how much time the employee spent in the selected region within the specified period.


Time and Attendance reports

Navigation: Time and Attendance reports > Extended report on the presence at the workplace > Result

Page 1 from 1 PDF 100%

Presence at workplace

Date: from 20.07.2017 to 30.07.2017

Region: Street

Department: Department_8 Working schedule:

Arrived	Left	Arrived-Left	Time of presence	Personnel number	Surname	Name	Patronymic	Post	Category	Course
22 July 19:58	26 July 7:20	Saturday 19:58 - Wednesday 7:20,	83:22:11	590	Lewis	Christian		Manager	Worker	Direction of management activities
26 July 19:57	27 July 7:27	Wednesday 19:57 - Thursday 7:27,	11:30:20	590	Lewis	Christian		Manager	Worker	Direction of management activities
Total, hour:										**94:52:31**
Hour/Day:										**23:26**

Department: Department_8 Working schedule:

Arrived	Left	Arrived-Left	Time of presence	Personnel number	Surname	Name	Patronymic	Post	Category	Course
20 July 12:30	20 July 15:38	Thursday 12:30 - Thursday 15:38,	3:08:15		Wilson	John		Driver	Worker	Direction of automotive activities
Total, hour:										**3:08:15**
Hour/Day:										**3:08**

Report fields are described in the table.

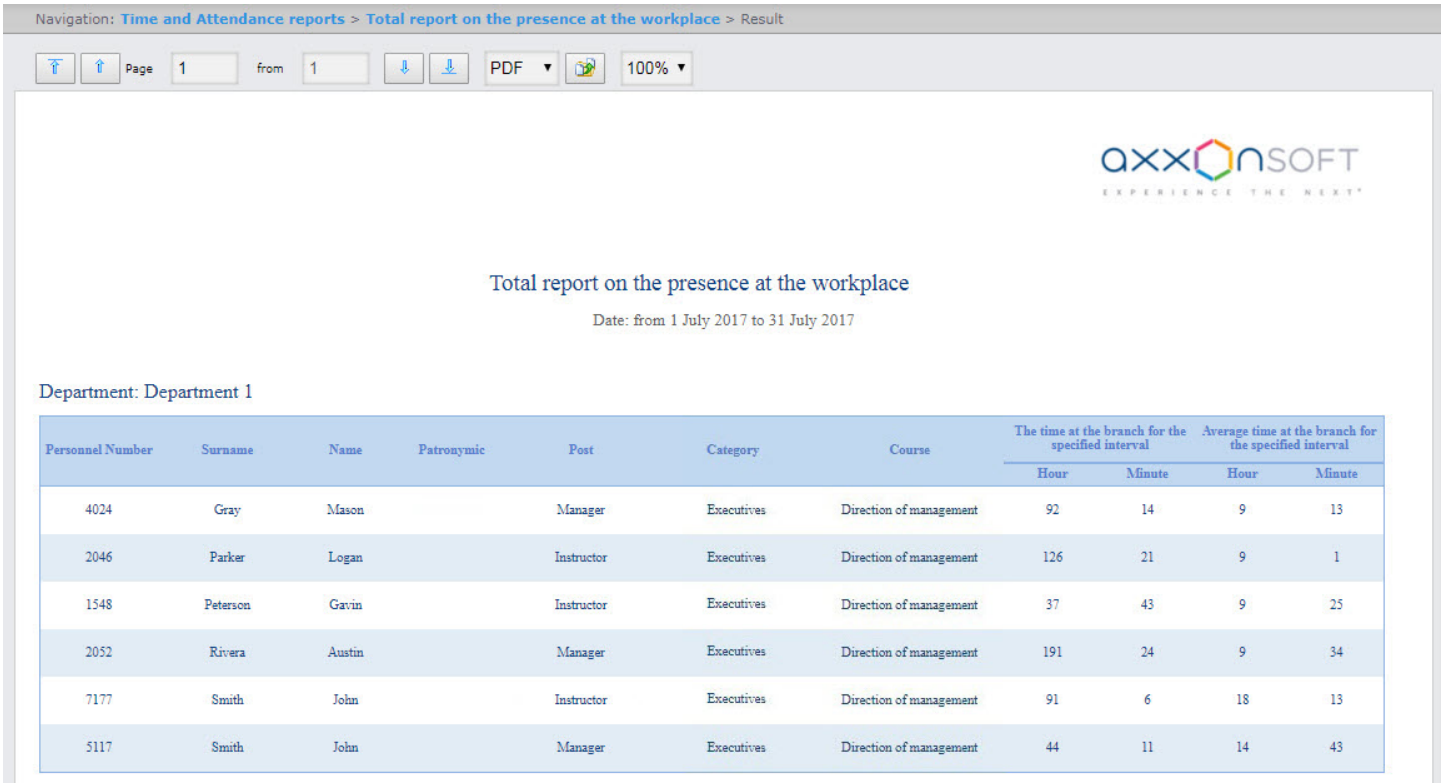
Field name	Description
Arrived	Date and time of an employee's arrival to a region
Left	Date and time of an employee's leaving a region
Arrived-Left	Date and time of an employee's arrival and leaving
Time of presence	Difference between the passage and leaving time
Personnel number	Employee's personnel number
Surname	Employee's surname
Name	Employee's name

Field name	Description
Patronymic	Employee's patronymic name
Post	Employee's job title
Category	Employee's job category
Course	Employee's job description
The **Total, hour** line displays the total time spent by the employee in the region for the selected time period.	
The **Hour/Day** line displays how many hours a day the employee was in the region relative to the total time spent in the region.	

8.2.3.13 Total report on the presence at the workplace

> **Note**
>
> To access this report, it is necessary to configure it (see Configuring the Extended report on the presence at the workplace and Total report on the presence at the workplace).

The **Total report on the presence at the workplace** contains the information about the time the employee spent at the workplace within the specified time period.



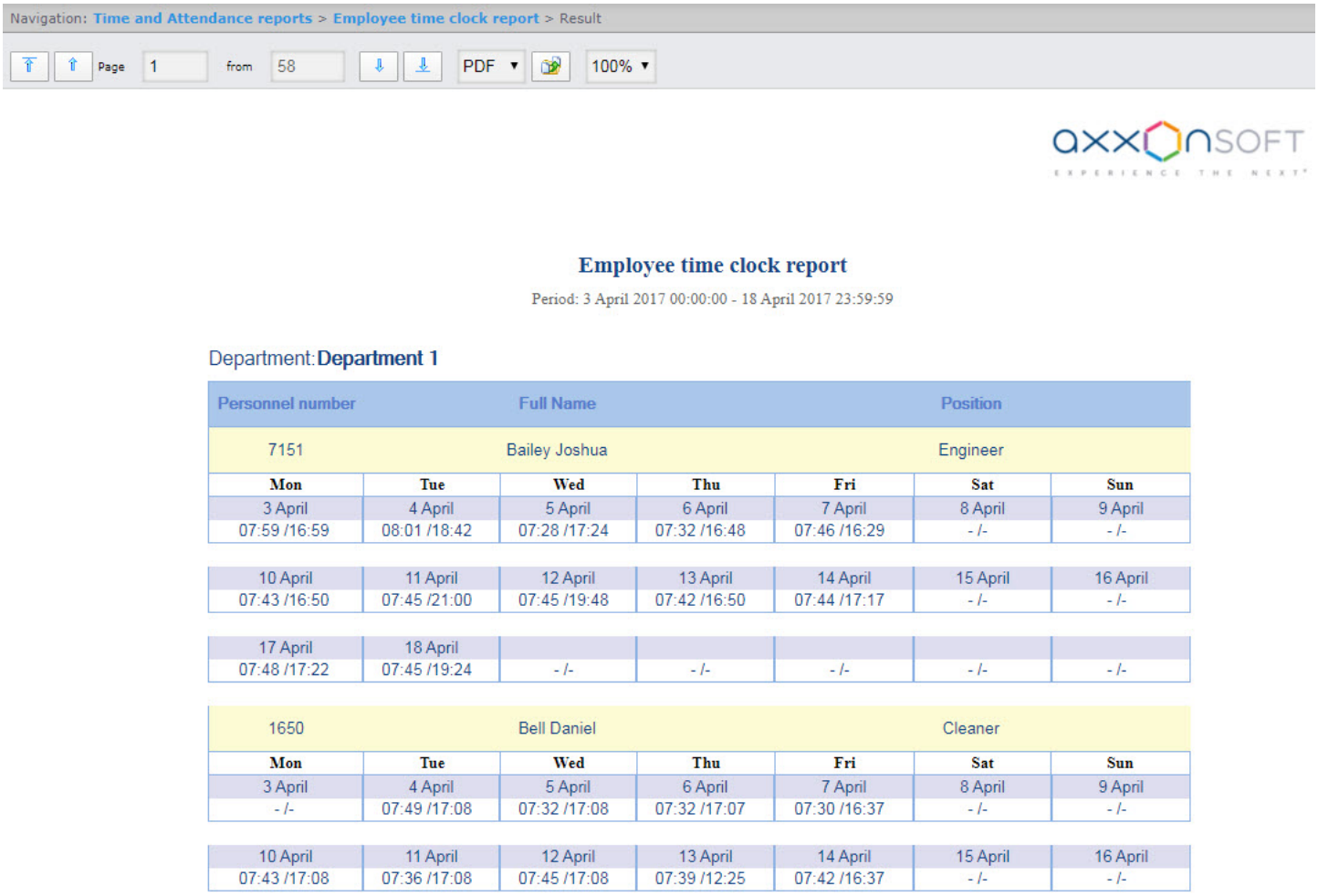
Report fields are described in the table.

Field name	Description
Personnel Number	Employee's personnel number

Field name	Description
Surname	Employee's surname
Name	Employee's name
Patronymic	Employee's patronymic name
Post	Employee's job title
Category	Employee's job category
Course	Employee's job description
The time at the branch for the specified interval	Total time spent by the employee at the branch for the specified time interval
Average time at the branch for the specified interval	Average time spent by the employee at the branch for the specified time interval

8.2.3.14 Employee time clock report

The **Employee time clock report** contains the information about employee's arrival and leaving for every day of the specified time period.



The report fields are described in the table.

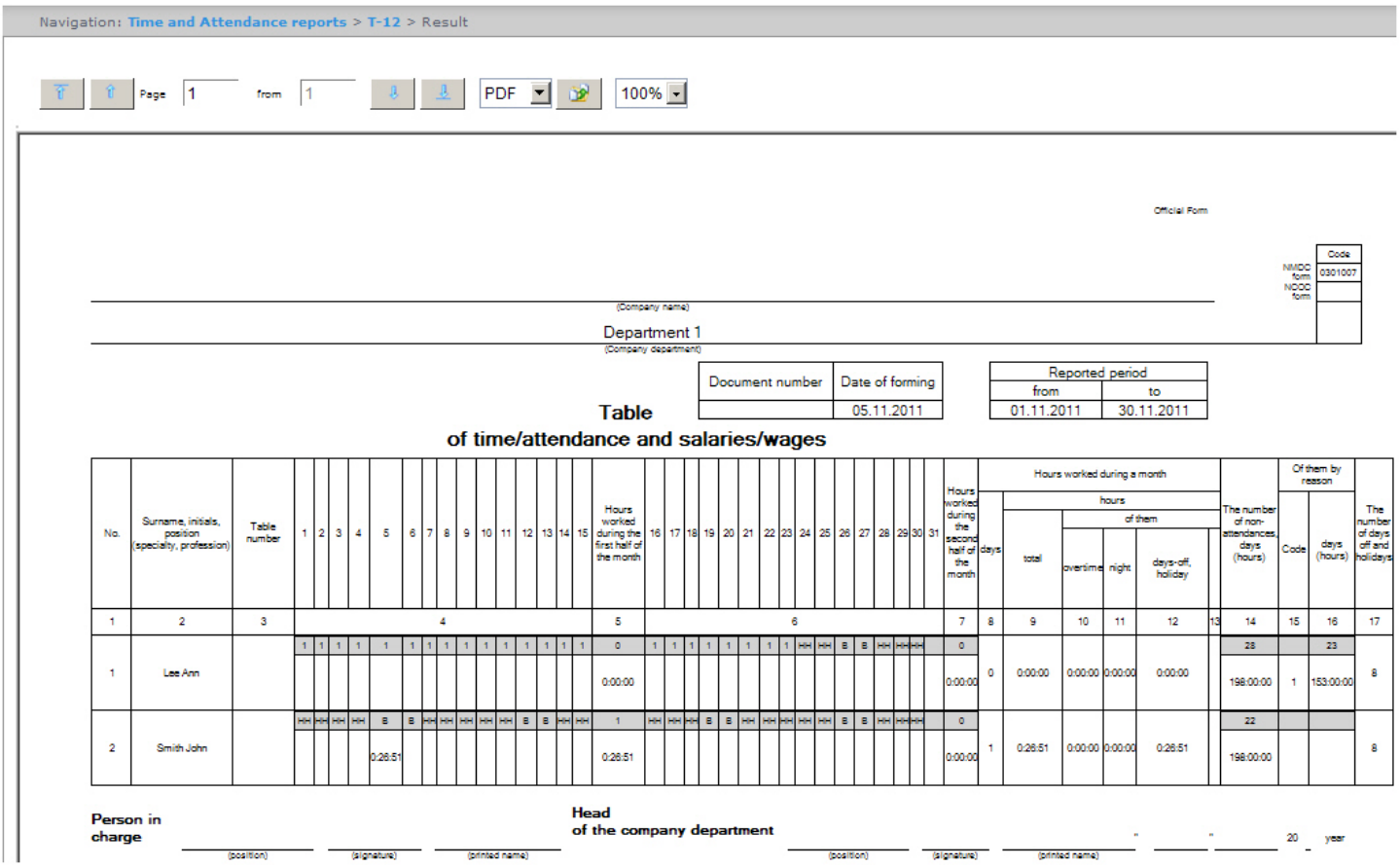
Field name	Description
Personnel number	Employee personnel number
Full name	Employee full name
Position	Employee's position
Time of arrival/leaving	Date and information on the arrival and departure of the employee for each day of the specified period

8.2.3.15 T-12 and T-13 reports

Intellect Web Report System allows create **T-12** and **T-13** reports that represent time and attendance reports.

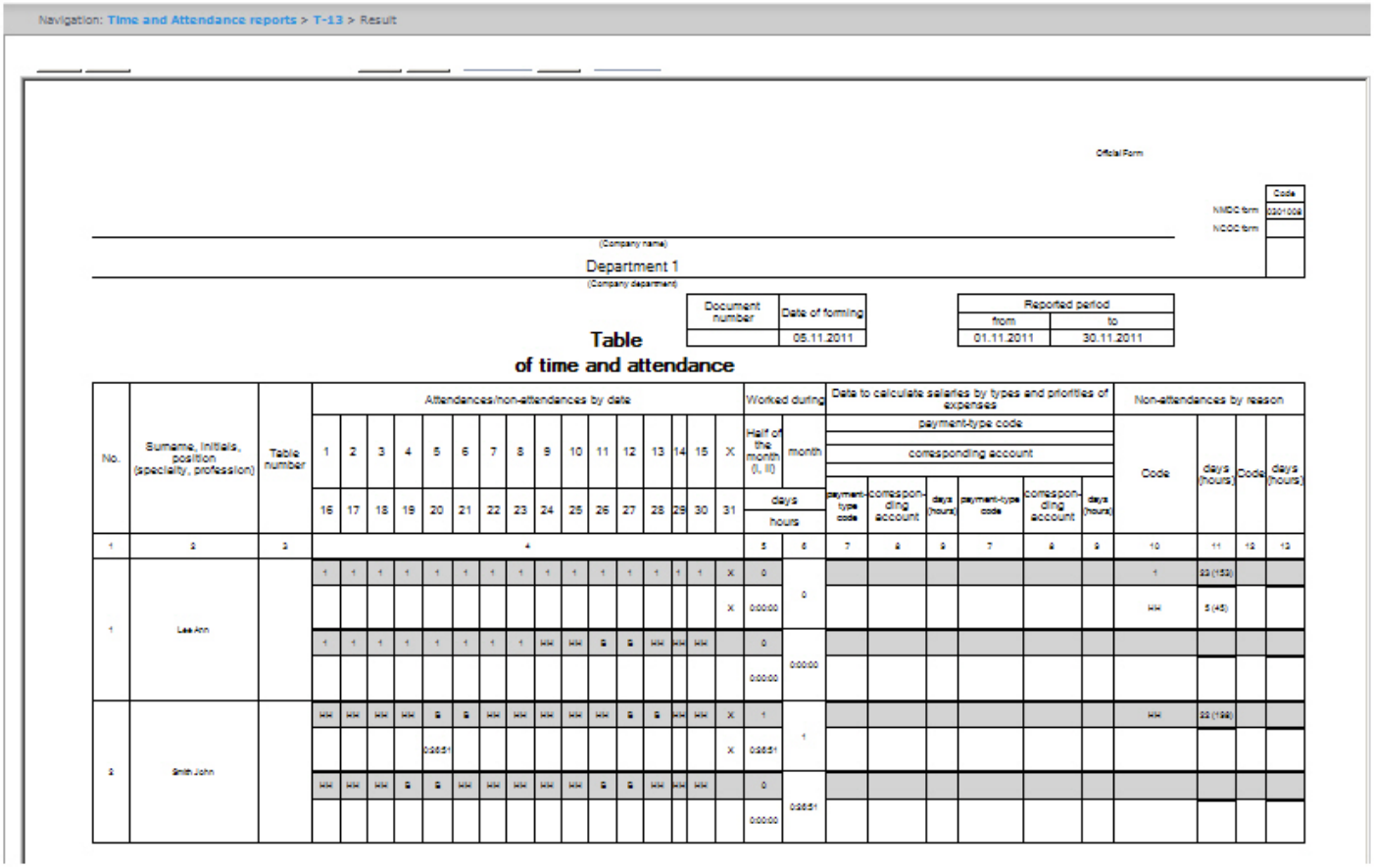
In **T-12** and **T-13** reports the information on worked time for every calendar day in a month is given. Also in **T-12** and **T-13** reports the total of worked hours (days) in a month and number of absences from work is given. Examples of **T-12** and **T-13** reports are given in the following figures correspondingly.

The **T-12** report is presented in the following figure.



In the 4 and 6 columns of **T-12** report and in the 4 column of **T-13** report the letter code (note of presence and absence, etc.) is given in the upper line, worked time is given in the bottom line.
In the 5 and 7 columns of **T-12** report and in the 5 column of **T-13** report the number of worked days is given in the upper line, time worked for half of a month is given in the bottom line. The 6 column of **T-13** report contains number of days and total time worked by every employee in a month.

The **T-13** report is presented in the following figure.



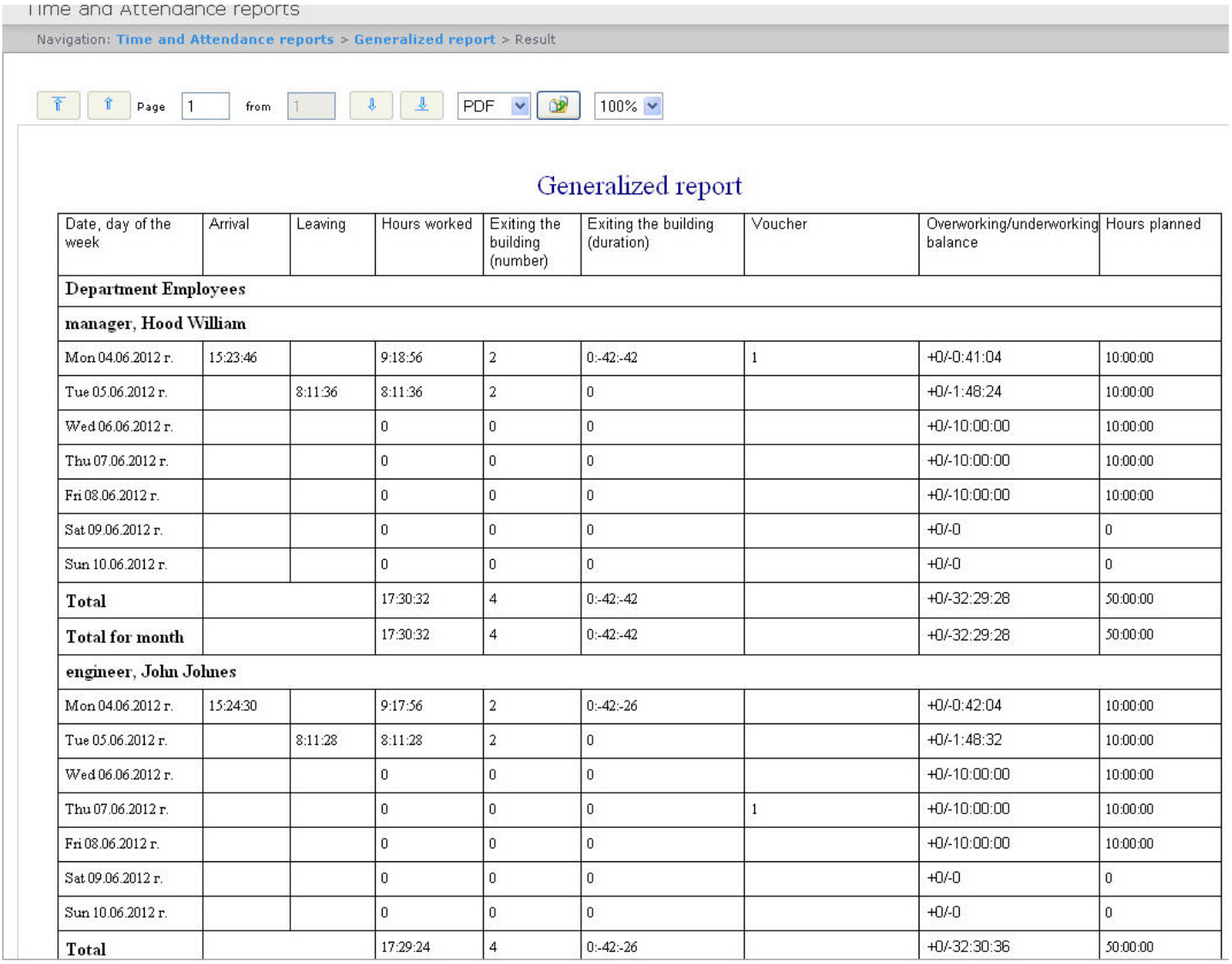
Information on salary accounting by expense kinds is given in the 7-9 columns of **T-13** report.

Total by worked time for a month is given in the 8-13 columns of **T-12** report.

Total by employee's absence from work is given in the 14-16 columns of **T-12** report and in the 10-13 columns of **T-13** report.

8.2.3.16 Generalized report

Generalized report is a table that contains information on carrying out the workday order by employees for every day of selected period.



Generalized report

Date, day of the week	Arrival	Leaving	Hours worked	Exiting the building (number)	Exiting the building (duration)	Voucher	Overworking/underworking balance	Hours planned
Department Employees								
manager, Hood William								
Mon 04.06.2012 r.	15:23:46		9:18:56	2	0:-42:-42	1	+0/-0:41:04	10:00:00
Tue 05.06.2012 r.		8:11:36	8:11:36	2	0		+0/-1:48:24	10:00:00
Wed 06.06.2012 r.			0	0	0		+0/-10:00:00	10:00:00
Thu 07.06.2012 r.			0	0	0		+0/-10:00:00	10:00:00
Fri 08.06.2012 r.			0	0	0		+0/-10:00:00	10:00:00
Sat 09.06.2012 r.			0	0	0		+0/-0	0
Sun 10.06.2012 r.			0	0	0		+0/-0	0
Total			17:30:32	4	0:-42:-42		+0/-32:29:28	50:00:00
Total for month			17:30:32	4	0:-42:-42		+0/-32:29:28	50:00:00
engineer, John Johnes								
Mon 04.06.2012 r.	15:24:30		9:17:56	2	0:-42:-26		+0/-0:42:04	10:00:00
Tue 05.06.2012 r.		8:11:28	8:11:28	2	0		+0/-1:48:32	10:00:00
Wed 06.06.2012 r.			0	0	0		+0/-10:00:00	10:00:00
Thu 07.06.2012 r.			0	0	0	1	+0/-10:00:00	10:00:00
Fri 08.06.2012 r.			0	0	0		+0/-10:00:00	10:00:00
Sat 09.06.2012 r.			0	0	0		+0/-0	0
Sun 10.06.2012 r.			0	0	0		+0/-0	0
Total			17:29:24	4	0:-42:-26		+0/-32:30:36	50:00:00

Report fields are described in the table.

Field name	**Description**
Date, day of the week	Date, day of the week
Arrival	Time of arrival
Leaving	Time of leaving
Hours worked	Hours worked by employee
Leaving the building (number)	Number of leavings out of the building (region)
Leaving the building (duration)	Time when the employee is absent in the region
Explanation	Explanations made by employee
Overworking/underworking balance	Time of overwork/underwork

Field name	Description
Hours planned	Planned workday duration

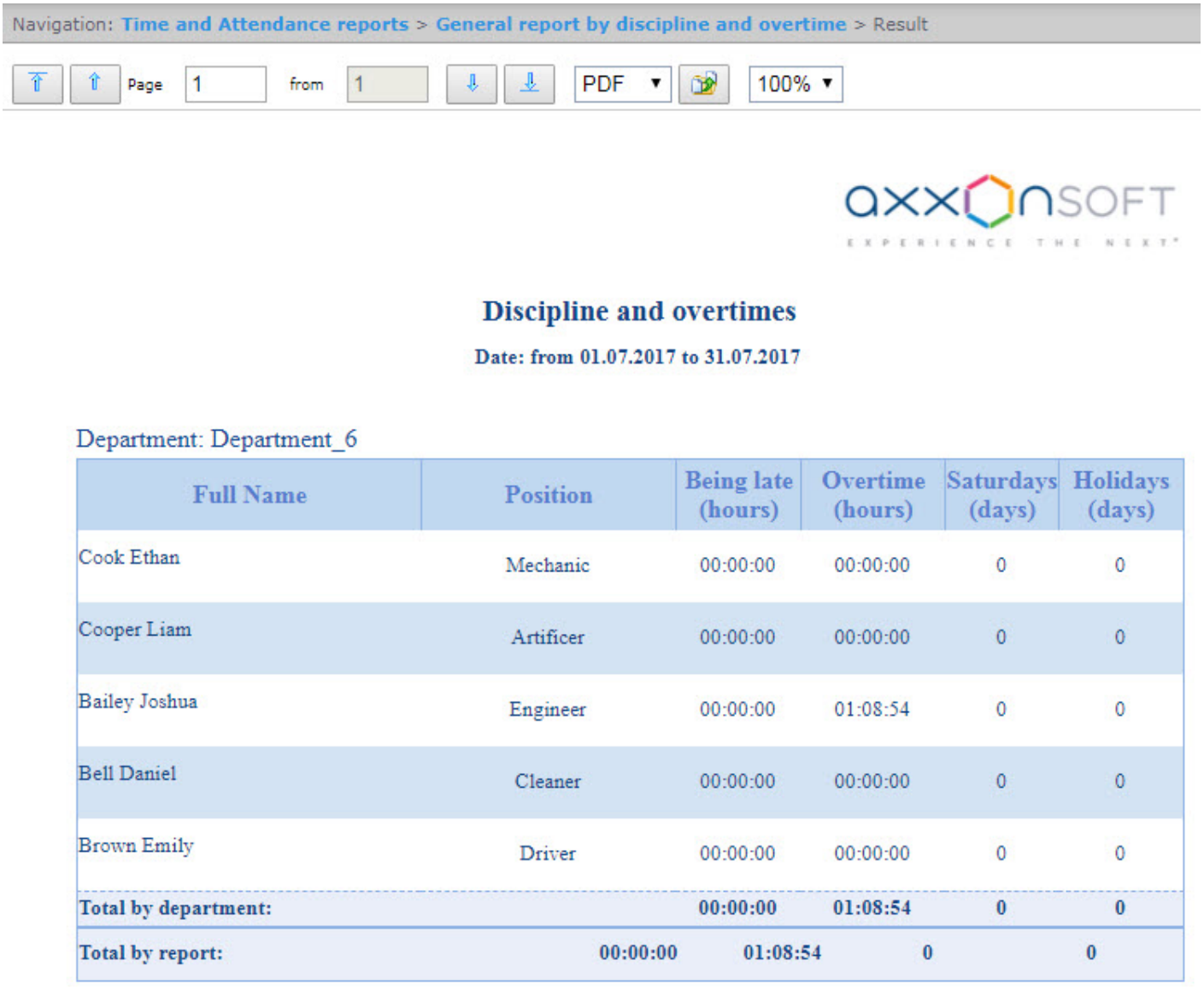
Note.

Note. Short form of the report contains the following fields:

1. Date, day of the week.
2. Hours worked.
3. Overworking/underworking balance.
4. Hours planned.

8.2.3.17 General report by discipline and overtime

General report by discipline and overtime is a table that contains information on overtimes and beings late, about working of employee on weekend and holidays for the specified time period.

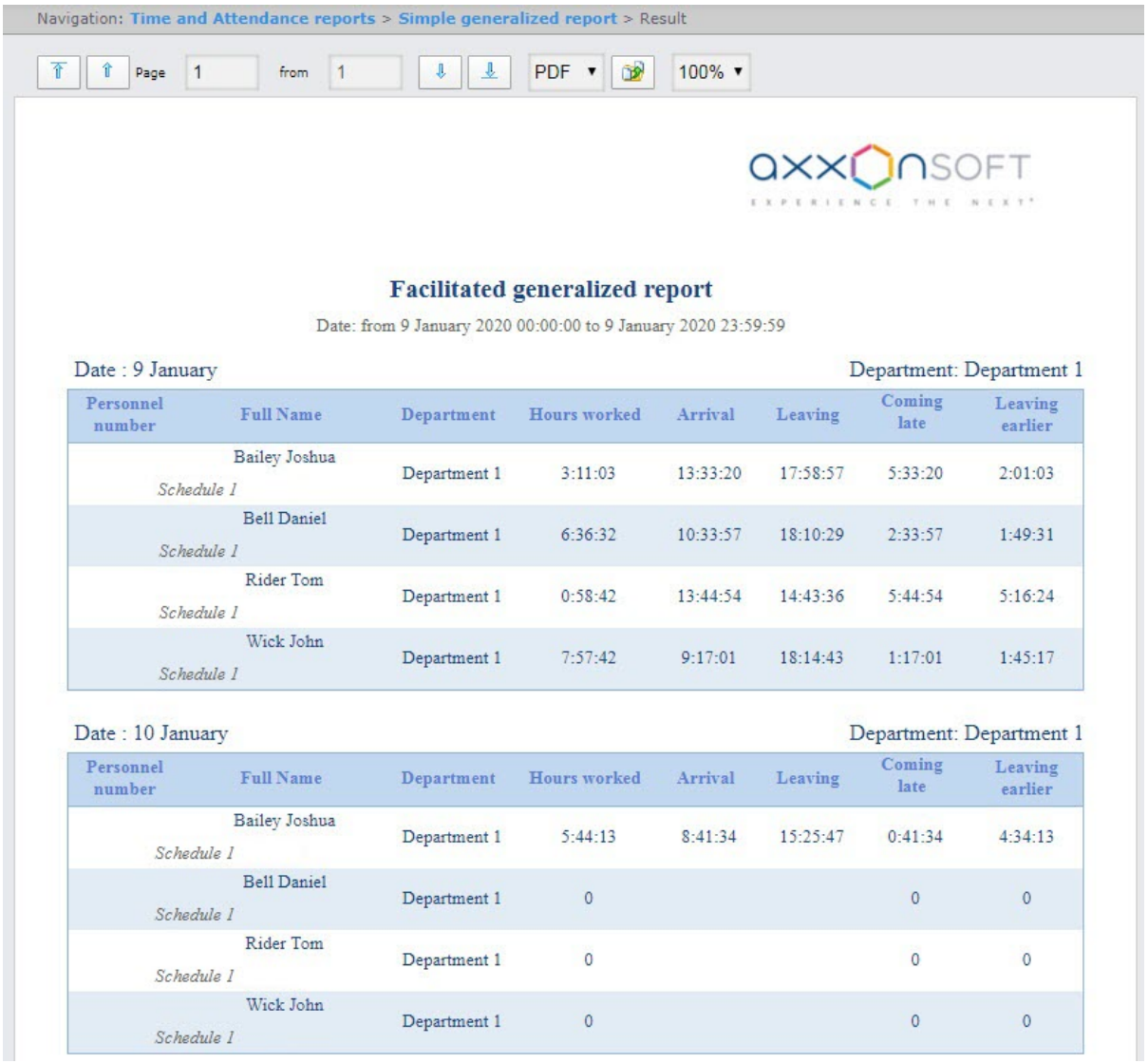


The report fields are described in the following table.

Field name	Description
Full name	Employee full name
Position	Employee position
Being late (hours)	General time if being late during the specified period (in hours)
Overtime (hours)	General time of overtime during the specified period (in hours)
Saturdays (days)	Number of worked weekend days
Holidays (days)	Number of worked holidays
The **Total by department** line displays the total sum by each employee of the department.	
The **Total by report** line displays the total sum by each department.	

8.2.3.18 Simple generalized report

Simple generalized report is a table that contains information about worked hours, time of employee arrival and leaving, and information about being late and underwork for each day of the specified period.



Report fields are described in the table.

Field name	Description
Personnel number	Employee personnel number
Full name	Employee full name
Department	Employee department
Hours worked	Hours worked by employee
Arrival	Time of arrival
Leaving	Time of leaving
Coming late	Time of coming late
Leaving earlier	Time on which employee left work earlier

8.3 Working with Access Manager reports

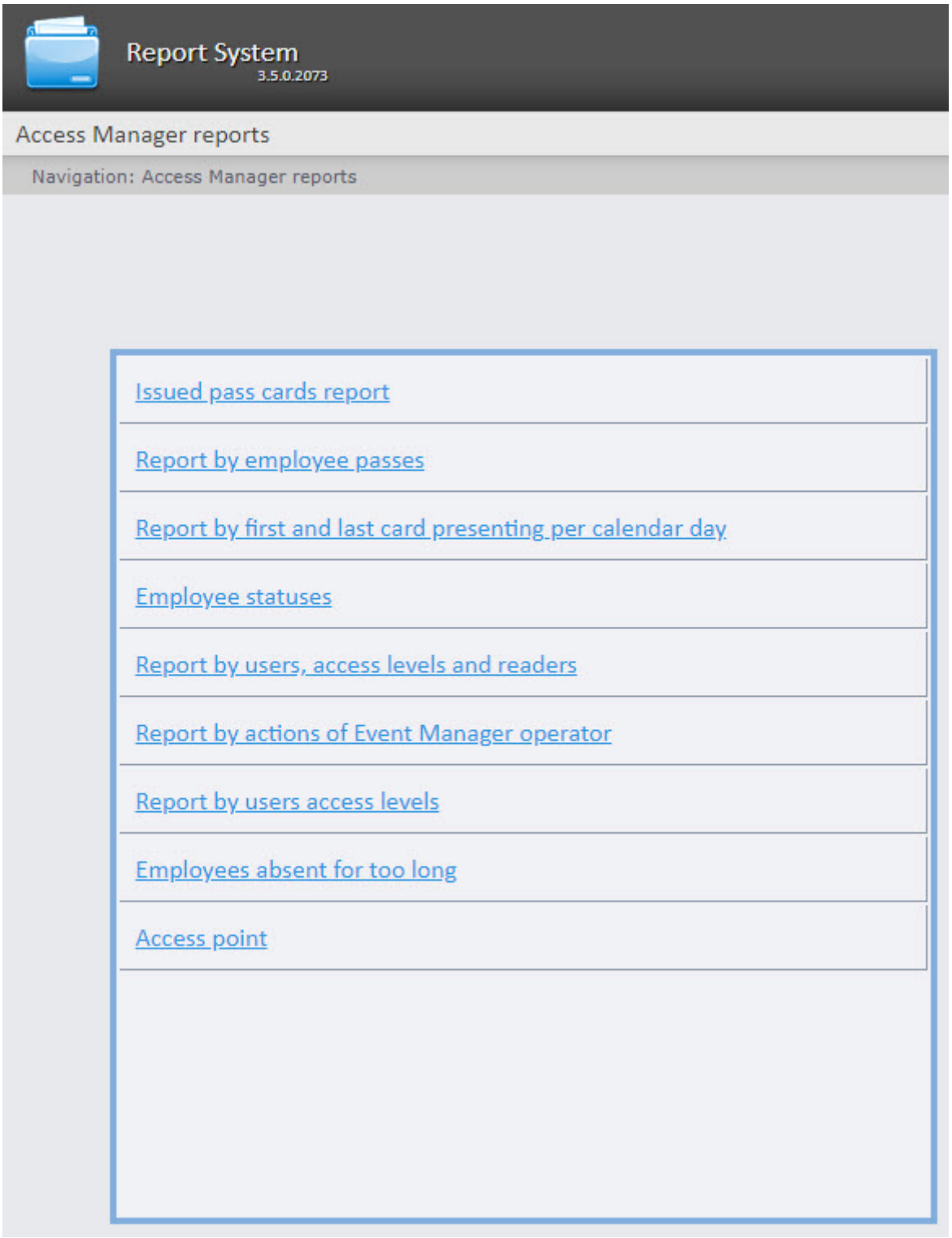
Working with the **Access Manager** reports consists of the following stages:

1. Selecting the report type.
2. Creating a report.

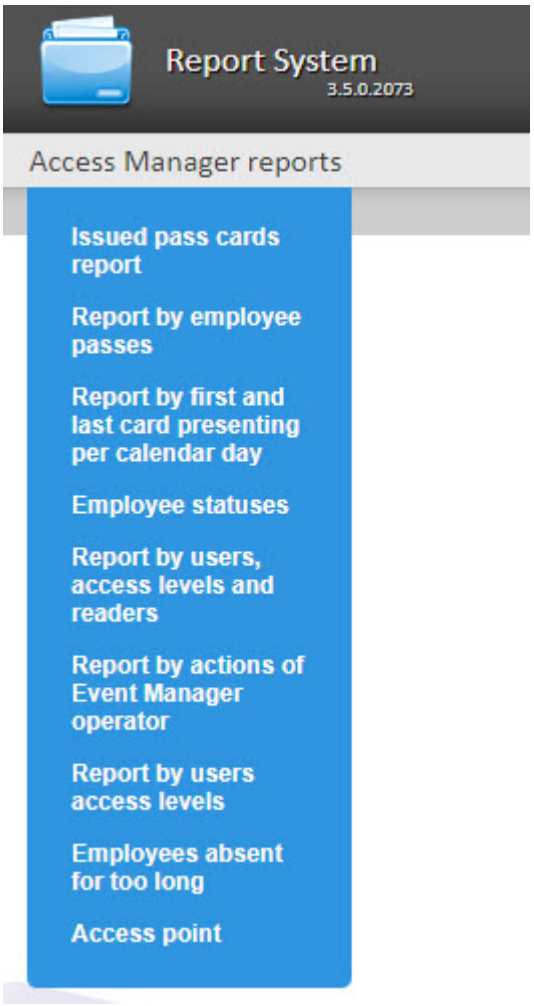
8.3.1 Selecting the type of Access Manager report

To select the **Access Manager** report type, click the **Access Manager reports** link in the *Intellect Web Report System* menu.

As a result the list of available **Access Manager** reports is displayed. To select the required report, click the corresponding link.



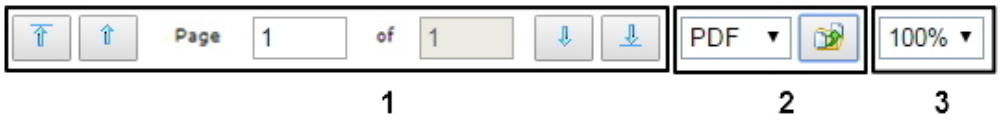
The list of the **Access Manager** reports is also displayed when hovering over the **Access Manager reports** link in the report menu.



8.3.2 Creating the Access Manager report

8.3.2.1 Access Manager report toolbar

The toolbar displayed at the page top is used for the report navigation, scaling the report page and exporting the **Access Manager** report.



To switch to the previous and next report page click  and  correspondingly (**1**). To go back to the first report page click  . To go further to the last report page click  .

The created **Access Manager** report can be exporting on computer (**2**), for more information see Exporting of reports).

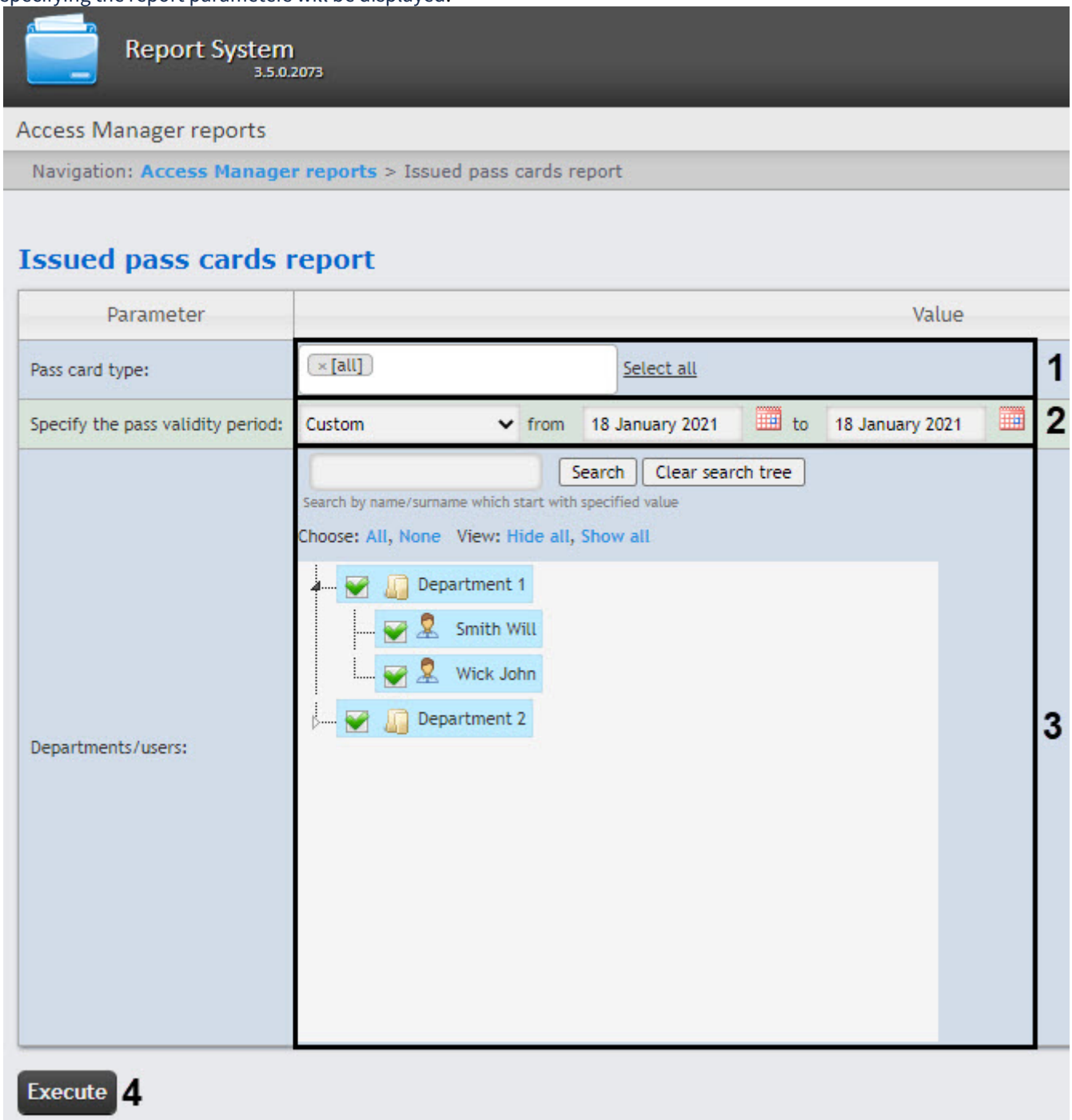
To zoom in/zoom out the report page, choose the required scale in the drop-down list (**3**).

8.3.2.2 Issued pass cards report

The **Issued pass cards report** is a table that contains the information about the time of issuing the pass card for the selected employees or departments, its type and period of validity.

To build the **Issued pass cards report**, do the following:

1. Select the **Issued pass cards report** (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.



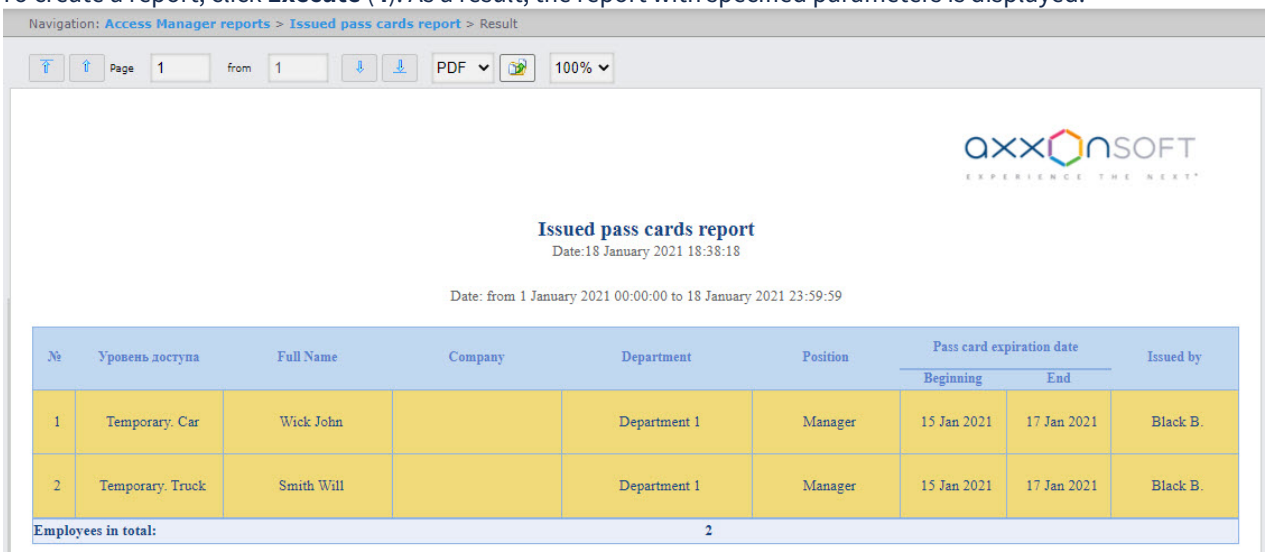
2. Set the report parameters in the following way:
   a. From the **Pass card type** drop-down list (**1**), select the type of issued pass card.
   b. From the **Specify the pass validity period** drop-down list (**2**) select the time period for which the report is to be created.

Note

- If the **Custom** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields (**5**) using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
- The minimum period of time that can be set is one week.

c. In the **Departments/users** field (**3**) set checkboxes for the departments and employees, the information on which should be displayed in the report.

d. To create a report, click **Execute** (**4**). As a result, the report with specified parameters is displayed.



The report fields are described in the table.

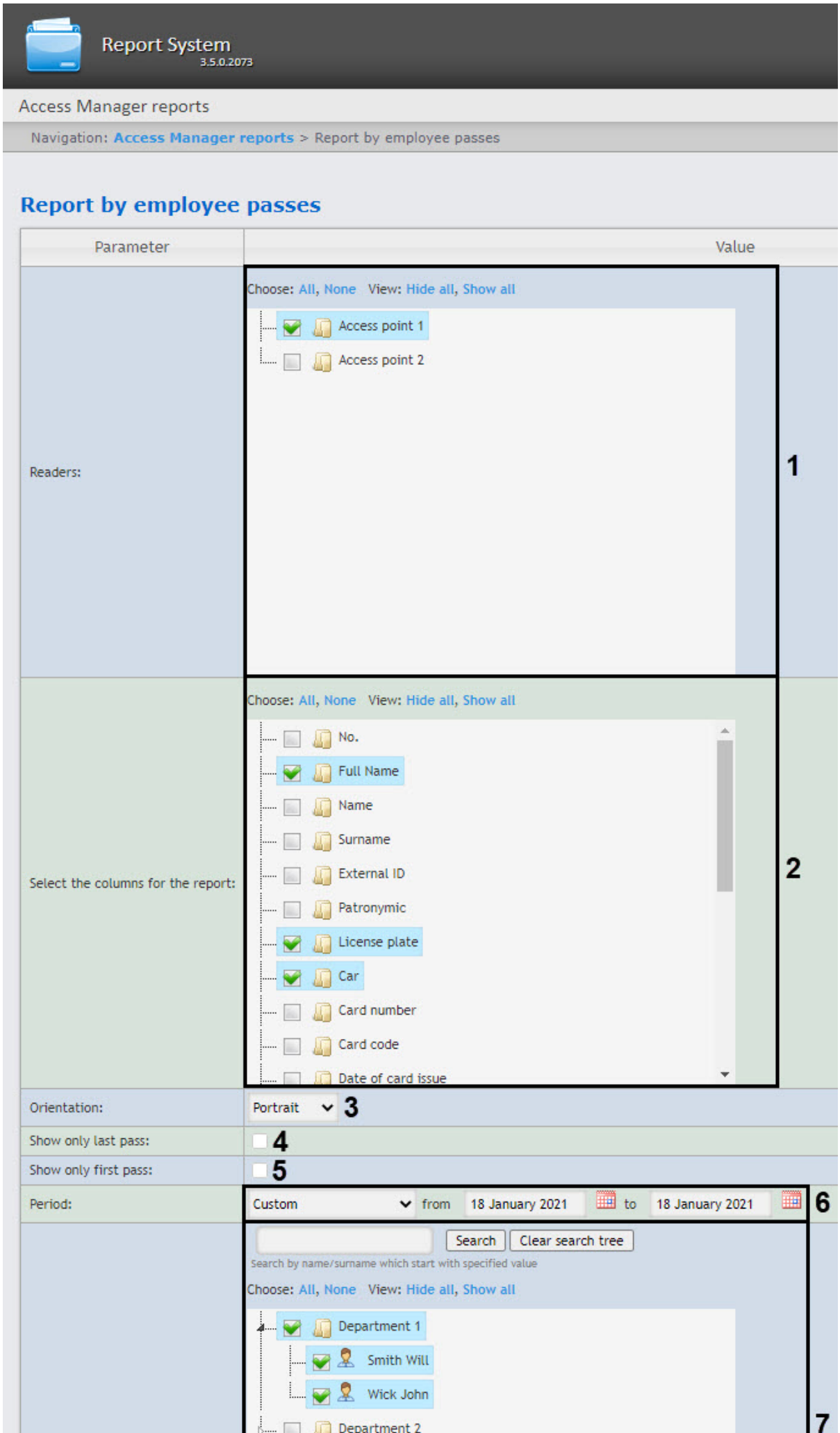
Field name	Description
Issued pass card type	Type of pass card
Date/Time of issue	Date and time of pass card issue
Period of validity (the number of days)	Pass card validity period
Issuing authority (individual)	Full name fo employee
Issuing authority (department)	Department to which the employee belongs
Issuing authority (access manager employee)	Full name of employee who issued the pass card
The **Total on department** line indicates the number of issued pass cards of each type within current department	

8.3.2.3 Report by employee passes

The **Report by employee passes** displays all interactions between the selected employee and the selected passage points. The report allows you to track the movement of the selected employee within a specified zone.

To create the **Report by employee passes**, do the following:

1. Select the **Report by employee passes** (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.


Report System
3.5.0.2073
Access Manager reports
Navigation: Access Manager reports > Report by employee passes
Report by employee passes
Parameter
Value
Readers:
Choose: All, None View: Hide all, Show all
Access point 1
Access point 2
1
Select the columns for the report:
Choose: All, None View: Hide all, Show all
No.
Full Name
Name
Surname
External ID
Patronymic
License plate
Car
Card number
Card code
Date of card issue
2
Orientation:
Portrait
3
Show only last pass:
4
Show only first pass:
5
Period:
Custom
from
18 January 2021
to
18 January 2021
6
Search
Clear search tree
Search by name/surname which start with specified value
Choose: All, None View: Hide all, Show all
Department 1
Smith Will
Wick John
Department 2
7

2. Set the report parameters in the following way:
   a. In the **Readers** field (**1**), set checkboxes for those access points, the information on which should be displayed in the report.

      Attention!

      This field displays only the access points which are added to any access level in the *Access Manager* module (see Creating access levels).

   b. In the **Select the columns for the report** field (**2**), set the checkboxes for those columns that should be displayed in the report. You can also change the order of columns: to do this, left-click and hold the column name and drag it higher or lower relative to other columns.
   c. From the **Orientation** drop-down list (**3**), select the report display orientation: **Portrait** (vertical) or **Landscape** (horizontal).

      Attention!

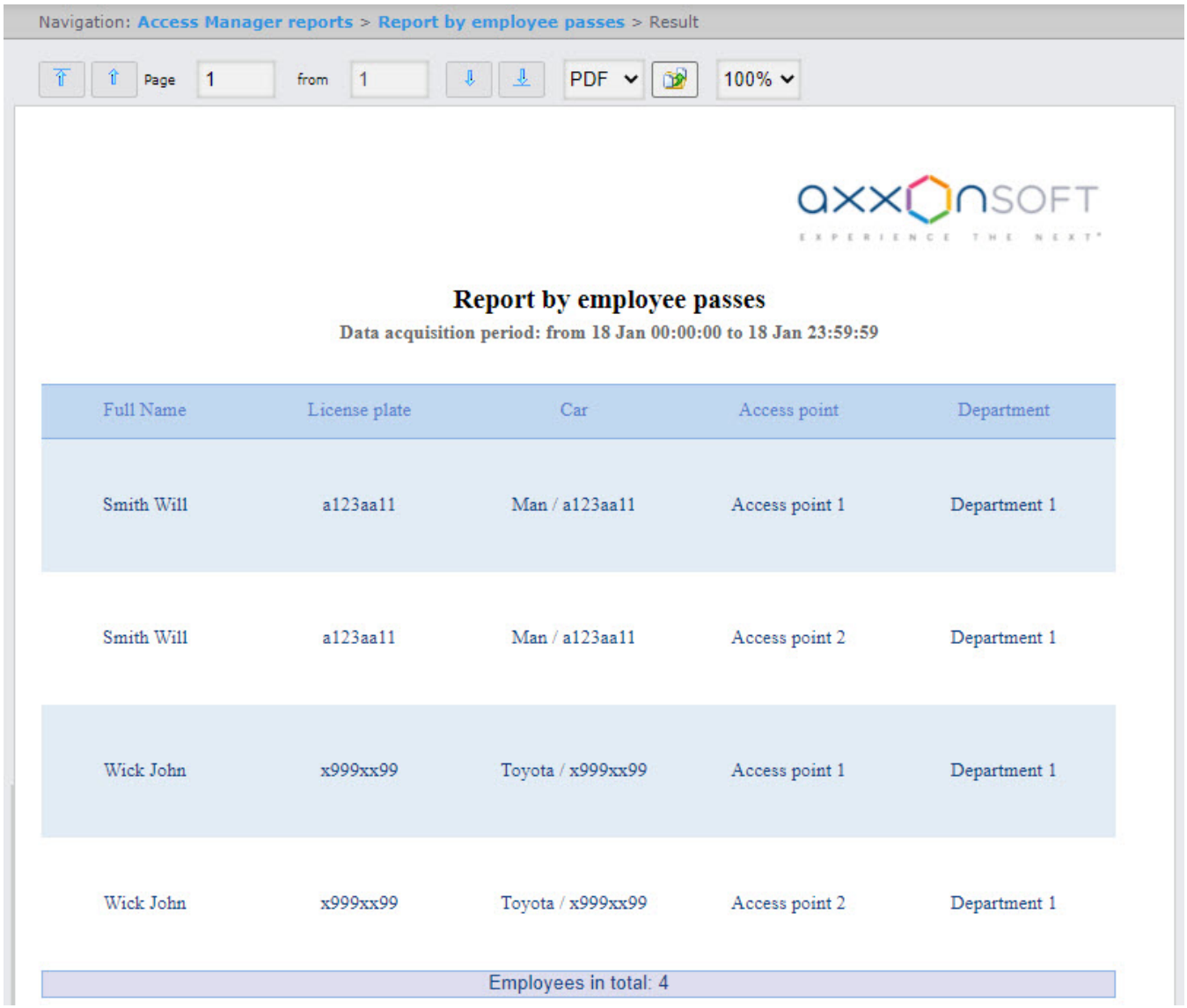
      - In **Portrait** orientation, you can select up to 5 columns.
      - In **Landscape** orientation, you can select up to 7 columns.

   d. Set the **Show only last pass** check box (**4**) if it is necessary to show only the last pass of employees.
   e. Set the **Show only first pass** check box (**5**) if it is necessary to show only the first pass of employees.
   f. In the **Departments/users** field (**6**) set checkboxes for the departments and employees, the information on which should be displayed in the report.
   g. From the **Period** drop-down list (**7**) select the time period for which the report is to be created.

      Note

      - If the **Custom** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the  button near the corresponding field to use the **Calendar** tool.
      - If the **Custom 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the  button.
      - If this report is setup to be auto-generated on the schedule (see Auto-generated reports setup), then the **Custom 3** period becomes available, which allows you to set the time interval from **Yesterday (time)** to **Today (time)** relative to the date of the report creation.

3. To create a report, click **Execute** (**8**). As a result, the report with specified parameters is displayed.
   Example of a report:



All possible report fields are described in the table.

Field name	Description
No.	Line number
Full name	Full name of the employee
Name	First name of the employee
Surname	Last name of the employee
External ID	
Patronymic	
License plate	License plate number of the employee's vehicle
Car	Employee's vehicle brand
Card number	Employee's access card number
Card code	Employee's access card code

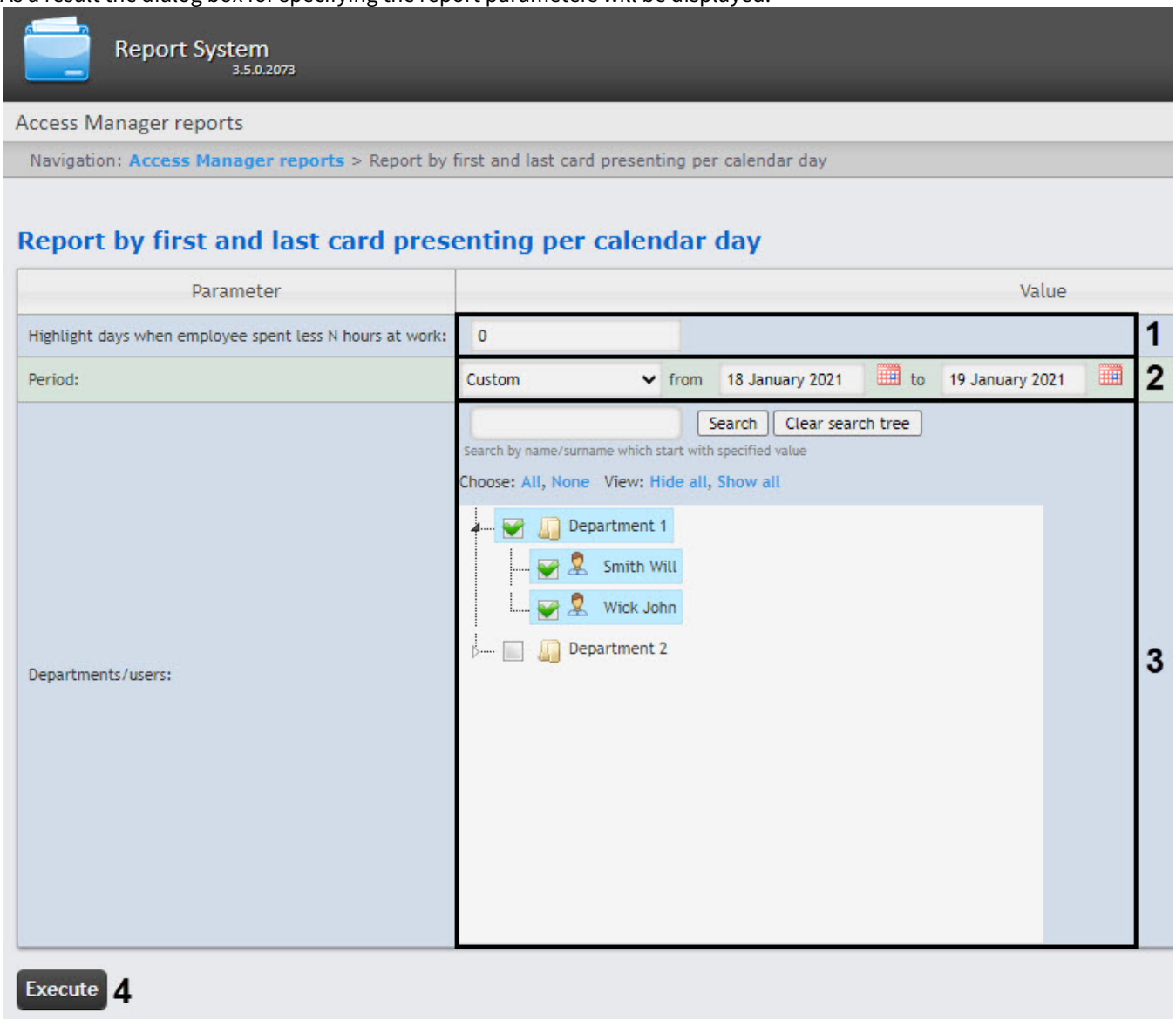
Field name	Description
Date of card issue	Date when the card was issued to the employee
Access point	Access point through which the employee has passed
Date	Date of employee passage
Date and time	Date and time of employee passage
Time	
Access levels	Access level of the employee
Phone	Phone number of the employee
Company	
Department	Department to which the employee belongs
Comment	
Card start date	
Card expiration date	
Pin code	

8.3.2.4 Report by first and last card presenting per calendar day

The **Report by first and last card presenting per calendar day** is a table which contains the information about the first and last time the selected employee presented the card to the passage point. Working schedules are ignored in the report, the data is displayed per calendar day. All passage points are analyzed during the report generation.

To create the **Report by first and last card presenting per calendar day**, do the following:

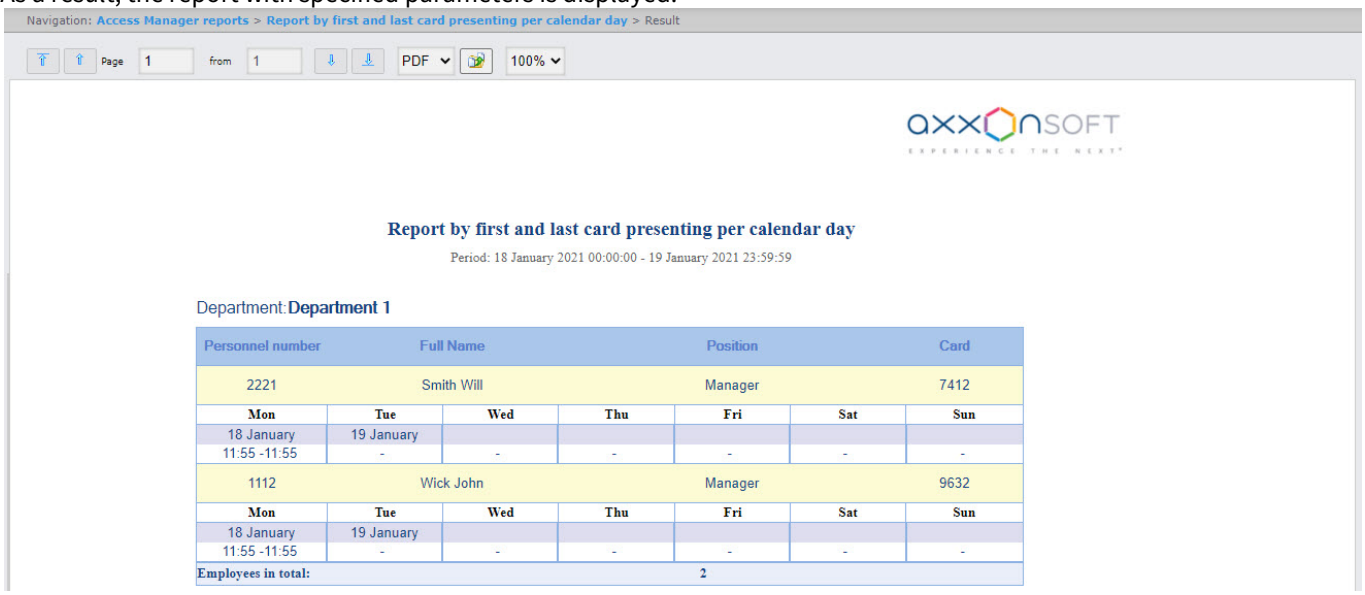
1. Select the **Report by first and last card presenting per calendar day** (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the report parameters in the following way:
   a. In the **Departments/Employees** field (**1**) set checkboxes for the departments and employees, the information on which should be displayed in the report.
   b. From the **Period** drop-down list (**2**) select the time period for which the report is to be created.

> **Note**
>
> If the **Custom** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields (**3**) using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.

3. To create a report, click **Execute** (**4**).
   As a result, the report with specified parameters is displayed.

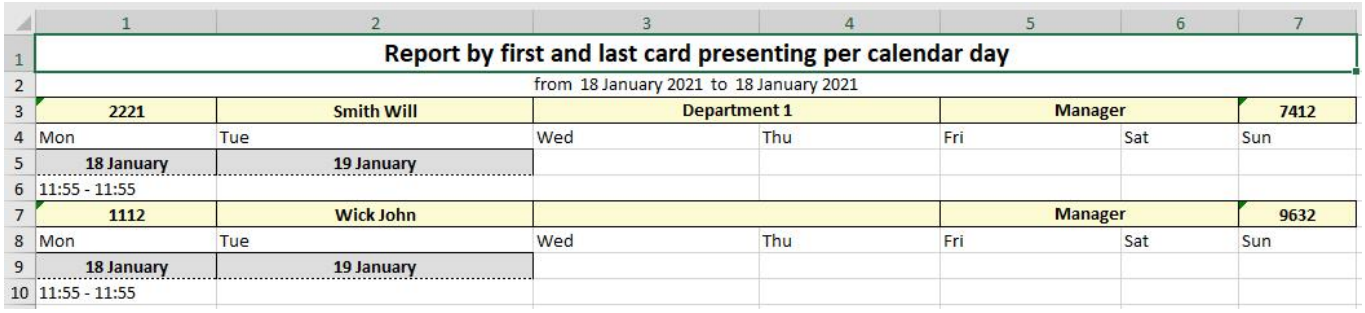


The report fields are described in the table.

Field	Description
Personnel number	Personnel number of the employee
Full Name	Full name of the employee
Position	Position of the employee
Card	Employee card number
Time of first/last presenting of card	A table indicating the time of the first/last presenting of the card on each day within the selected time period

Note

If the report was created automatically in Excel format (see Setting up Intellect Web Report System operation in the automatic mode), the Department/subdivision field will be displayed in the report. It contains the name of the department to which the employee belongs.



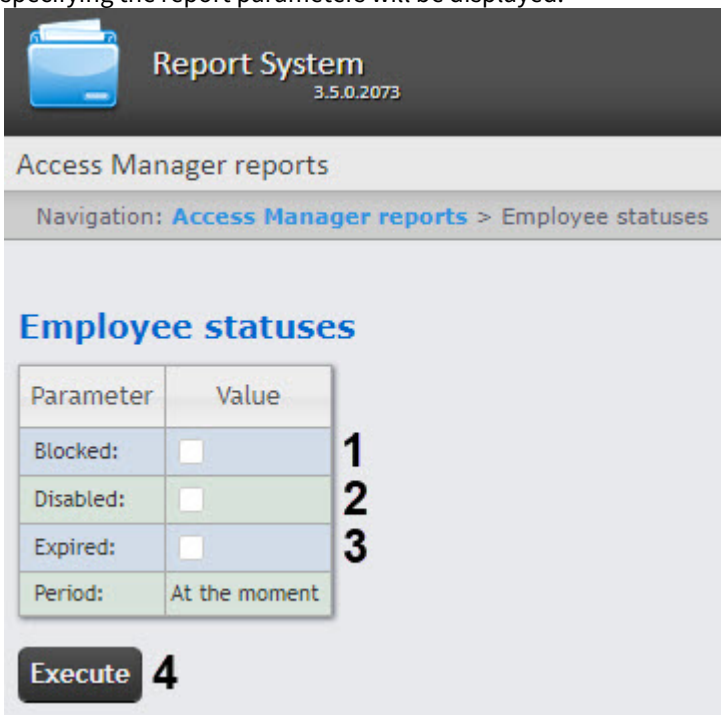
	1	2	3	4	5	6	7
1	Report by first and last card presenting per calendar day						
2	from 18 January 2021 to 18 January 2021						
3	2221	Smith Will	Department 1		Manager		7412
4	Mon	Tue	Wed	Thu	Fri	Sat	Sun
5	18 January	19 January					
6	11:55 - 11:55						
7	1112	Wick John			Manager		9632
8	Mon	Tue	Wed	Thu	Fri	Sat	Sun
9	18 January	19 January					
10	11:55 - 11:55						

8.3.2.5 Employee statuses report

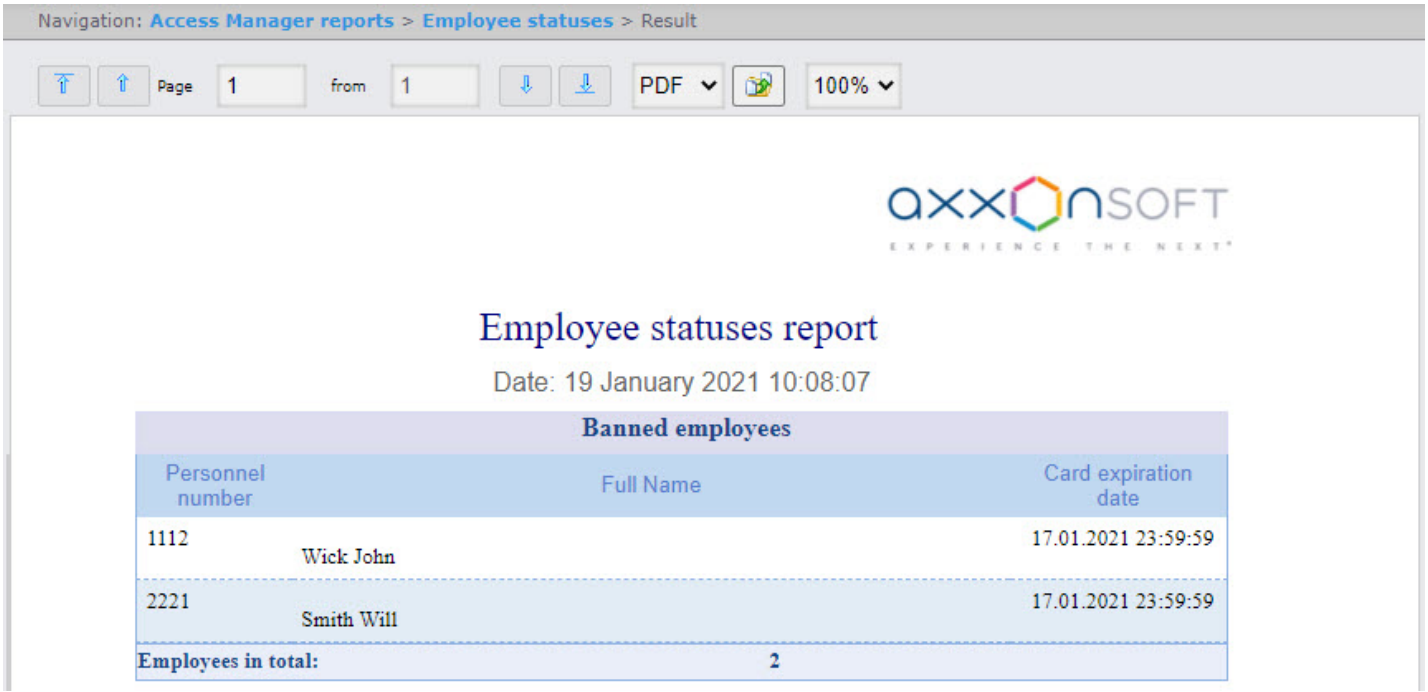
The **Employee statuses** report is a table which contains the information about the current status of employees' cards (expired, disabled, locked) and the dates of their expiration.

To create the **Employee statuses** report, do the following:

1. Select the **Employee statuses** report (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the report parameters in the following way:
   a. Set the **Blocked** checkbox (**1**) to display the employees with locked cards.
   b. Set the **Disabled** checkbox (**2**) to display the employees with disabled cards.
   c. Set the **Expired** checkbox (**3**) to display the employees with expired cards.
3. To create a report click **Execute** (**4**).
4. As a result the report with specified parameters is displayed.



The report fields are described in the table.

Field name	Description
Personnel number	Employee number in the *Access Manager* module

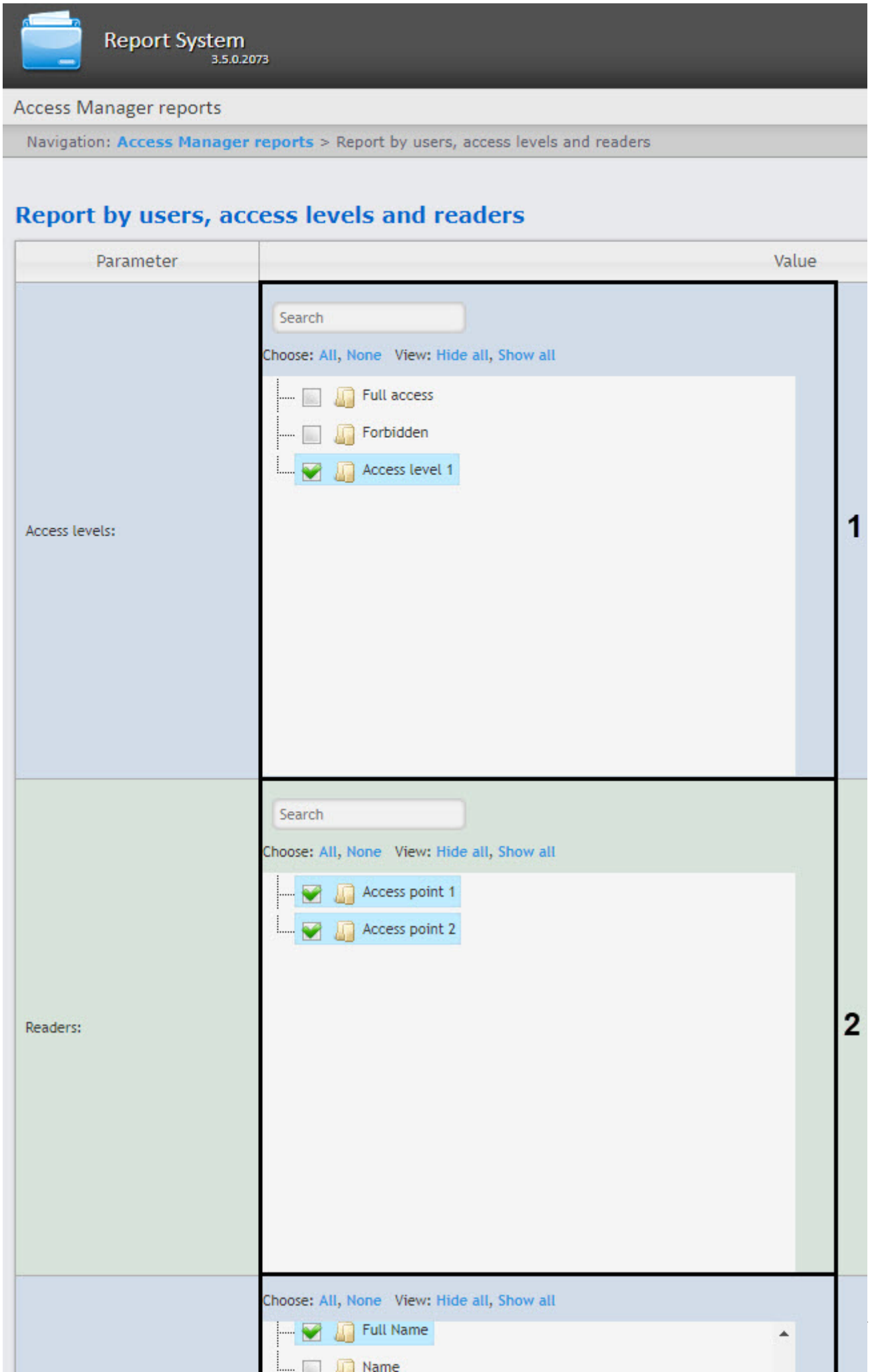
Field name	Description
Full Name	Full name of the selected employee
Expire date of card	Expiration date of the employee card

8.3.2.6 Report by users, access levels and readers

The **Report by users, access levels and readers** is a table which contains the information about users with the selected access levels or selected passage points assigned to them.

To create the **Report by users, access levels and readers**, do the following:

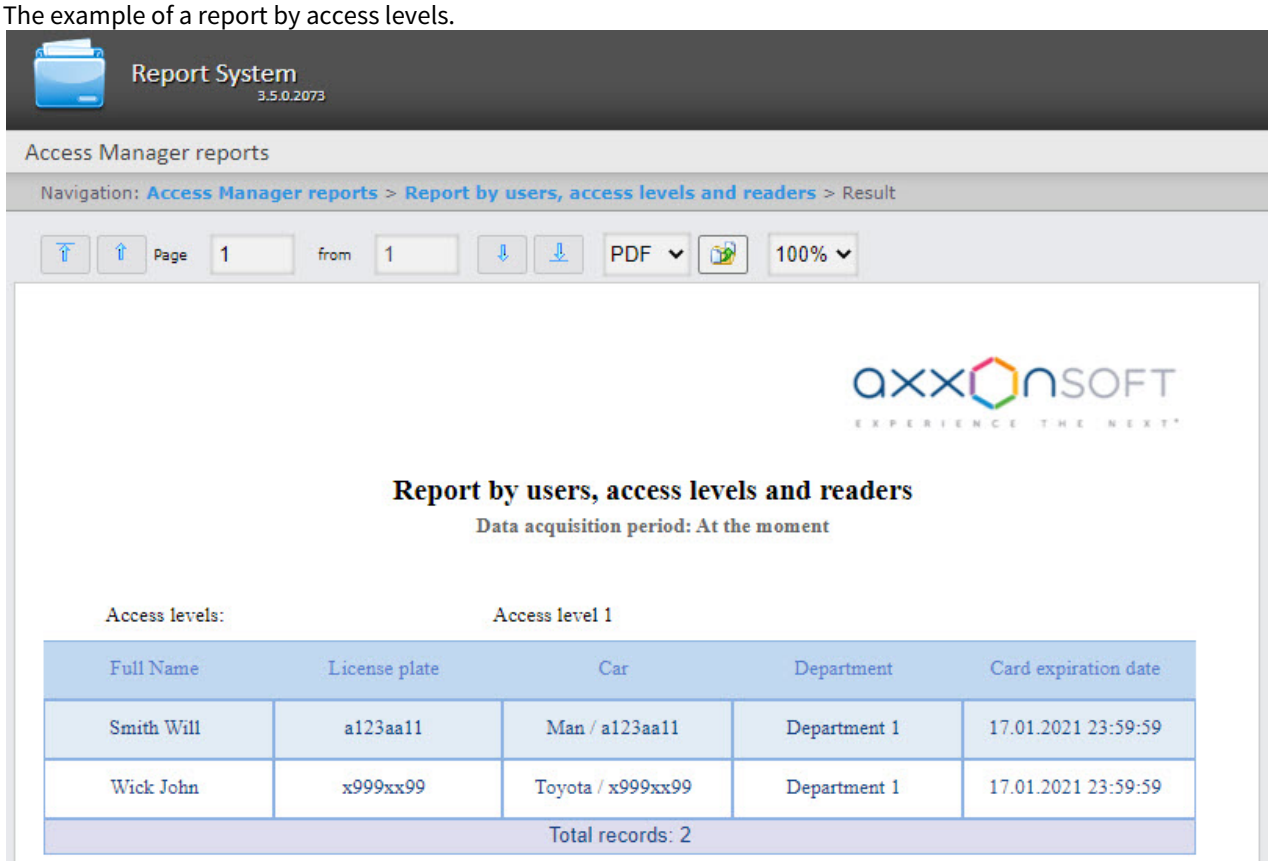
1. Select the **Report by users, access levels and readers** (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.


Report System
3.5.0.2073
Access Manager reports
Navigation: Access Manager reports > Report by users, access levels and readers
Report by users, access levels and readers
Parameter
Value
Access levels:
Search
Choose: All, None View: Hide all, Show all
Full access
Forbidden
Access level 1
1
Readers:
Search
Choose: All, None View: Hide all, Show all
Access point 1
Access point 2
2
Choose: All, None View: Hide all, Show all
Full Name
Name

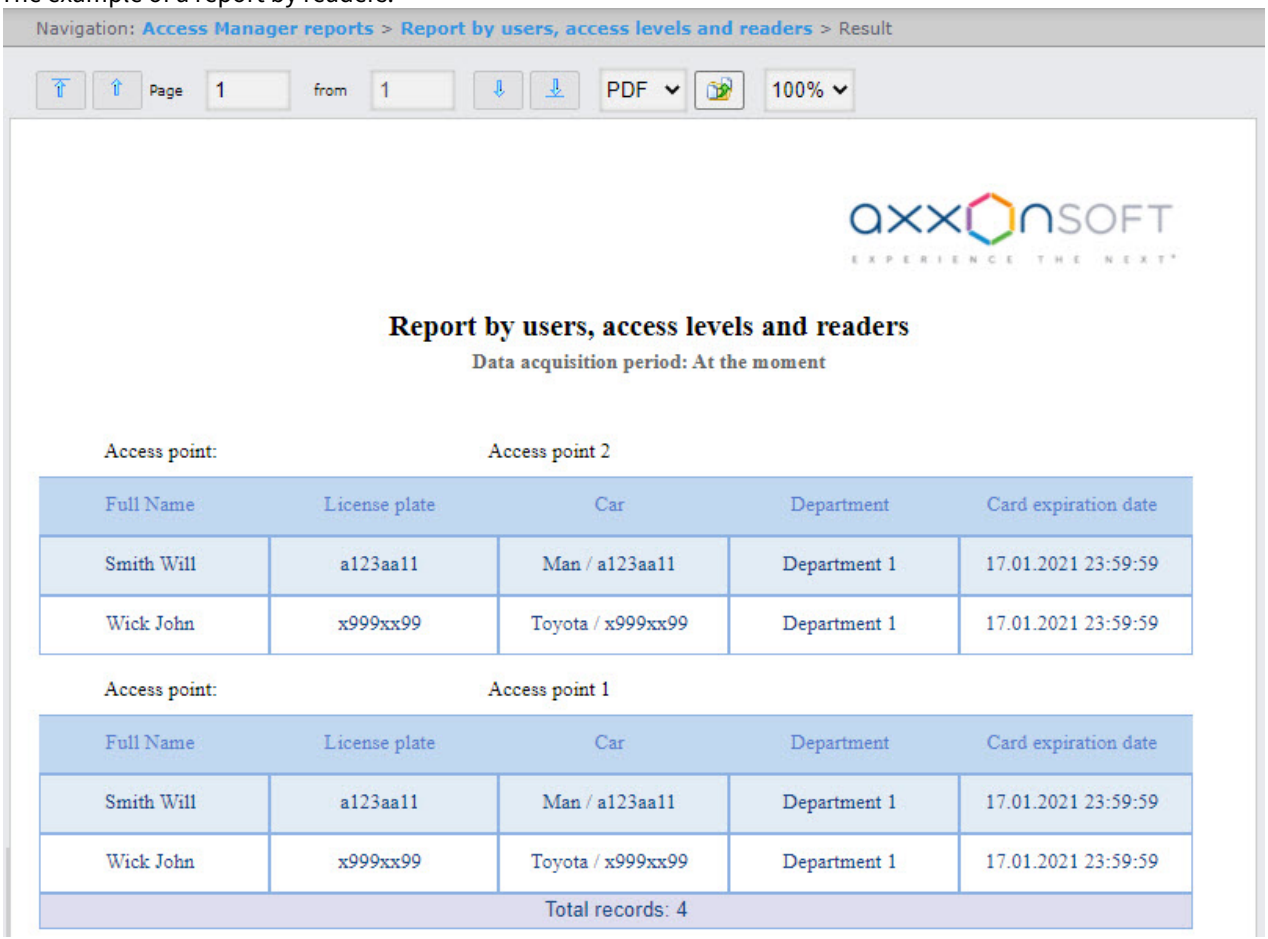
2. Set the report parameters in the following way:
    a. In the **Access levels** field (**1**) check the boxes for the access levels the information on which should be displayed in the report.
    b. In the **Readers** field (**2**) check the boxes for the readers the information on which should be displayed in the report.
    c. In the **Select the columns for the report** field (**3**), check the boxes for the columns that should be displayed in the report. You can also change the order of the columns: to do this, use the left mouse button to move the column name up or down.

    > **Note**
    >
    > You can select up to 5 columns.

    d. From the **Type of report** drop-down list (**4**) select the required report type: **By access levels** or **By readers**.
3. To create a report click **Execute** (**5**).
4. As a result the report with specified parameters is displayed.
    a. The example of a report by access levels.



b. The example of a report by readers.



All possible report fields are described in the table.

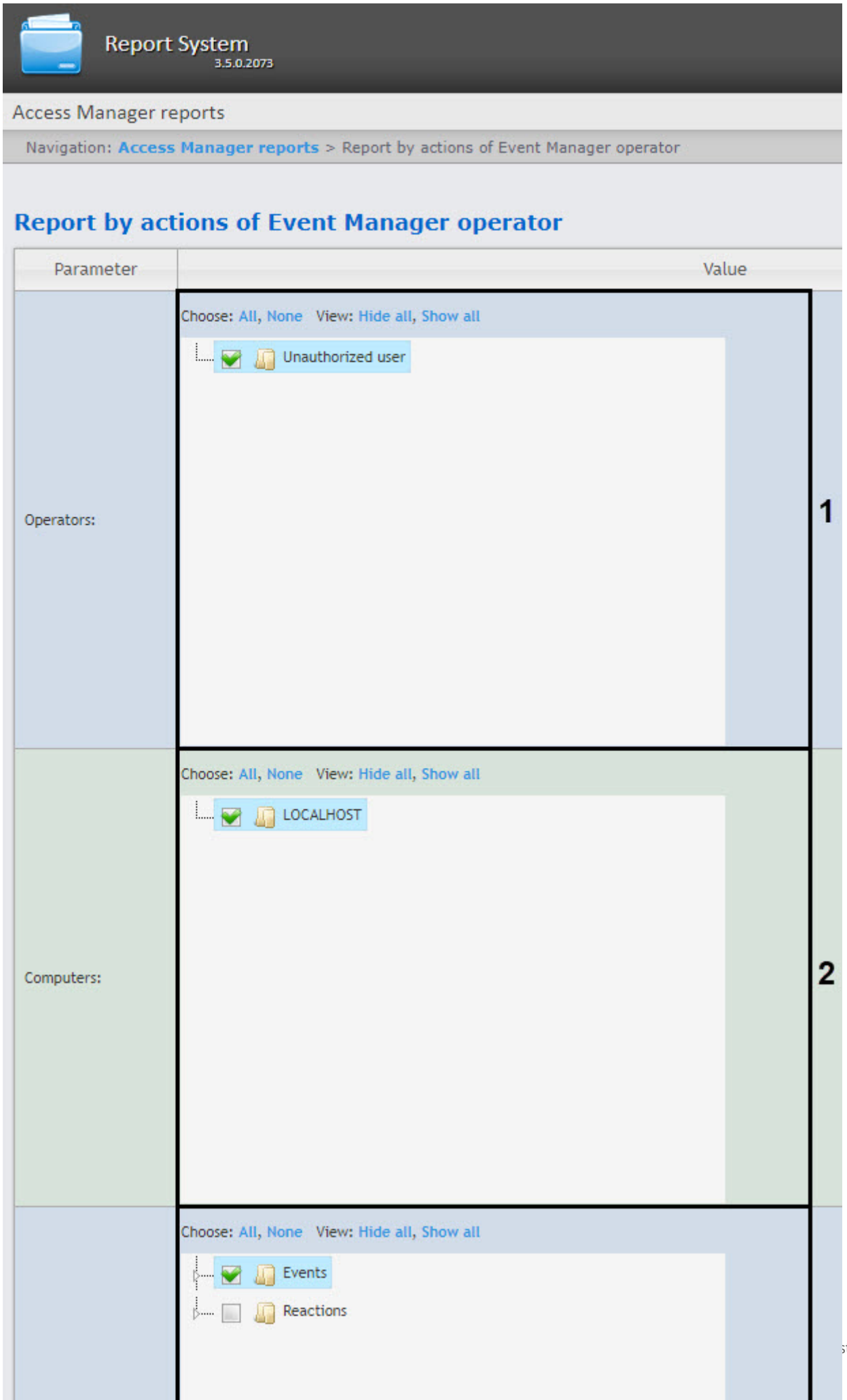
Field name	Description
No.	String number
Full name	Full name of the employee
Name	Employee name
Surname	Employee last name
Patronymic	Employee patronymic name
License plate	Employee car license plate number
Car	Employee car make
Card number	Employee access card number
Department	Employee department
Personal number	Personal employee number
Card expiration date	Access card expiration date
Status of blocking	Employee status (blocked or not)

8.3.2.7 Report by actions of Event Manager operator

The **Report by actions of Event Manager operator** is a table which displays the requests received by the **Event Manager** operator and his reactions to them.

To create the **Report by actions of Event Manager operator**, do the following:

1. Select the **Report by actions of Event Manager operator** (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.


Report System
3.5.0.2073
Access Manager reports
Navigation: Access Manager reports > Report by actions of Event Manager operator
Report by actions of Event Manager operator
Parameter
Value
Operators:
Choose: All, None View: Hide all, Show all
Unauthorized user
1
Computers:
Choose: All, None View: Hide all, Show all
LOCALHOST
2
Choose: All, None View: Hide all, Show all
Events
Reactions

2. Set the report parameters in the following way:
    a. In the **Operators** field (**1**) set the checkboxes for the operators whose actions should be displayed in the report.
    b. In the **Computers** field (**2**) set the checkboxes for the computers the information on which should be displayed in the report.
    c. In the **Events and reactions** field (**3**) set the checkboxes for the events and reactions the information on which should be displayed in the report.
    d. In the **Departments/Employees** field (**4**) set the checkboxes for the departments and employees the information on which should be displayed in the report.
    e. From the **Period** drop-down list (**5**) select the time period for which the report is to be created.
        i. If the **User** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields (**6**) using the **Calendar** tool.

        > **Note**
        >
        > Click the
        > 
        > button near the corresponding field to use the **Calendar** tool.

        ii. If the **User 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the  button.
        iii. If another period type is selected, specifying the date of start and end periods is not needed.
3. To create a report click **Execute** (**7**).
4. As a result the report with specified parameters is displayed.



Date	Passage point	Event	Full Name	Department	Card	Operator	Action	Workstation
10.09.2017 10:59:26	entrance	Passage request	Darcy Johnson		(200)0000	Mark Harrington	'Allow'	Computer 1
10.09.2017 11:01:08	exit	Passage request	Darcy Johnson		(200)0000	Mark Harrington	'Deny'	Computer 1
10.09.2017 12:35:33	exit	Passage request	Darcy Johnson		(200)0000	Mark Harrington	'Allow'	Computer 1
10.09.2017 12:41:24	exit	Passage request	Darcy Johnson		(200)0000	Mark Harrington	'Deny'	Computer 1
10.09.2017 12:41:46	entrance	Passage request	Darcy Johnson		(200)0000	Mark Harrington	'Deny'	Computer 1

The report fields are described in the table.

Field name	Description
Date	Date of the request received by the operator
Passage point	The passage point controlled by the **Event Manager** module
Event	Request received by the operator
Full Name	Full name of the requesting person
Department	Department of the requesting person

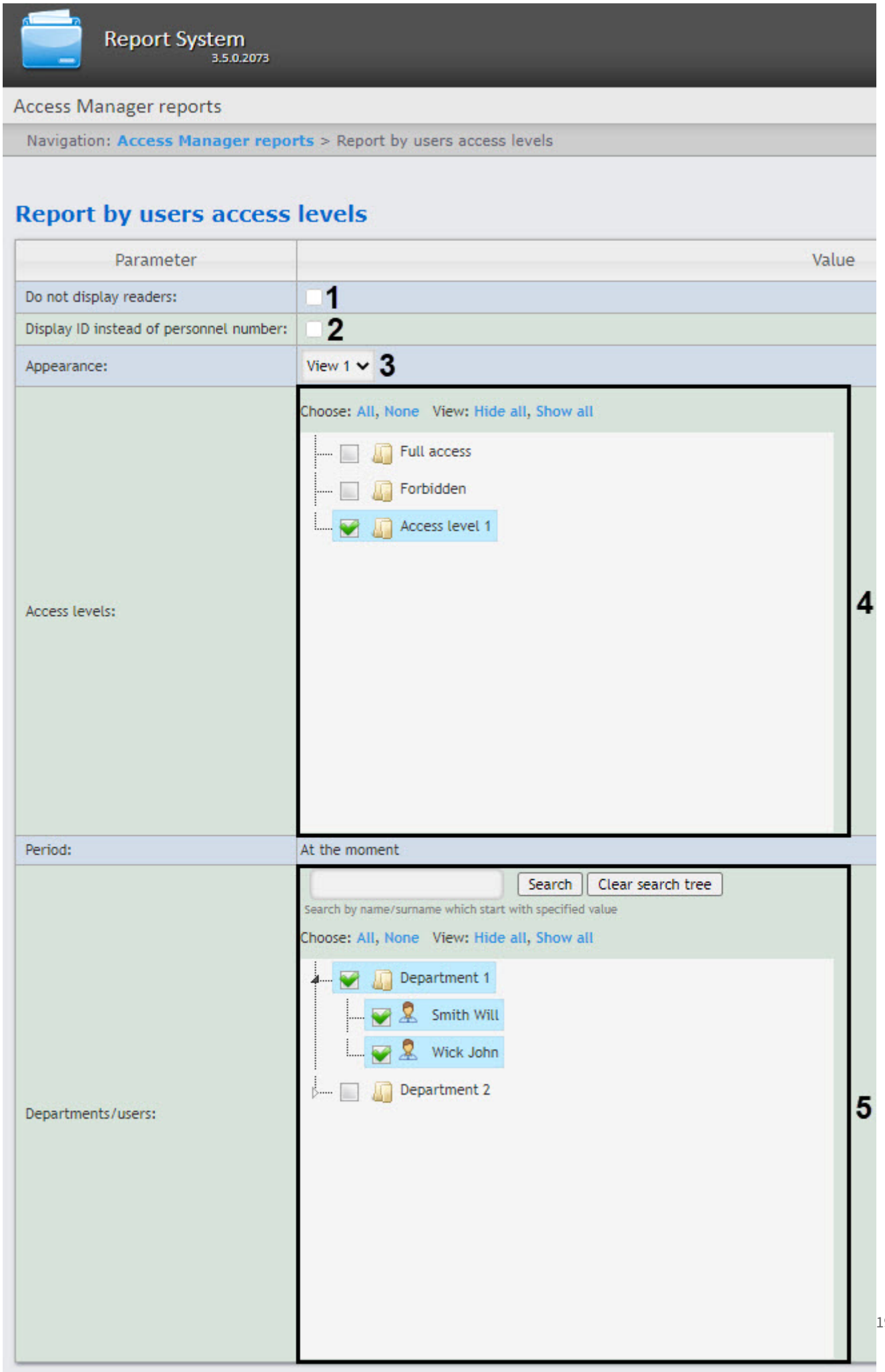
Field name	Description
Card	Card number of the requesting person
Operator	Full name of the operator
Action	Operator reaction to a request
Workstation	The name of the computer on which the operator action was performed

8.3.2.8 Report by users access levels

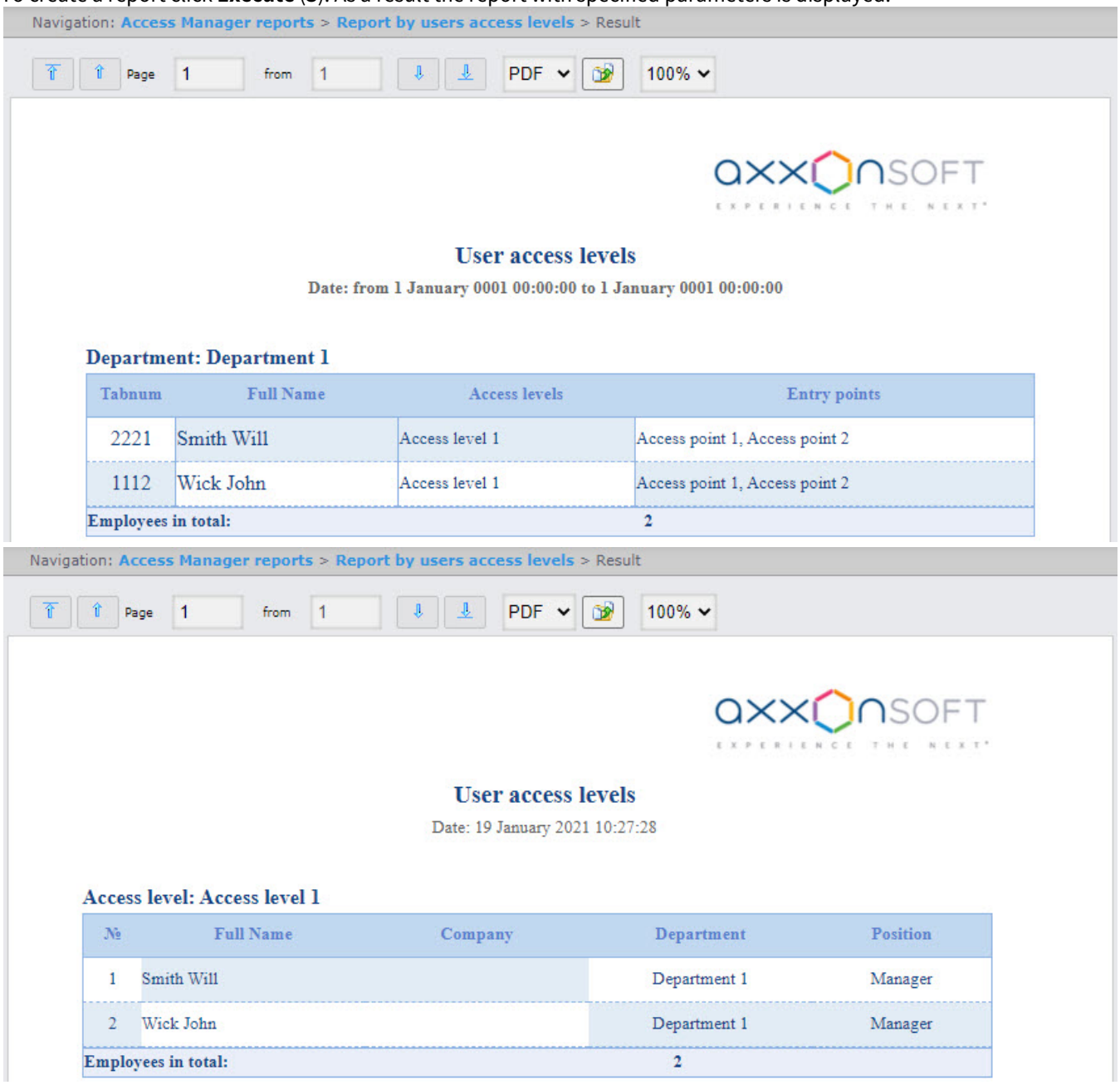
The **Report by users access levels** is a table which contains the information about the access levels of the selected employees, and the passage points which are available for passing for the selected employees.

To create the **Report by users access levels**, do the following:

1. Select the **Report by users access levels** (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.


Report System
3.5.0.2073
Access Manager reports
Navigation: Access Manager reports > Report by users access levels
Report by users access levels
Parameter
Value
Do not display readers:
1
Display ID instead of personnel number:
2
Appearance:
View 1
3
Access levels:
Choose: All, None View: Hide all, Show all
Full access
Forbidden
Access level 1
4
Period:
At the moment
Departments/users:
Search
Clear search tree
Search by name/surname which start with specified value
Choose: All, None View: Hide all, Show all
Department 1
Smith Will
Wick John
Department 2
5

2. Set the report parameters in the following way:
   a. Set the **Do not display readers** checkbox (**1**) to hide the readers in the report.
   b. In the **Departments/Employees** field (**2**) set the checkboxes for the departments and employees the information on which should be displayed in the report.
3. To create a report click **Execute** (**3**). As a result the report with specified parameters is displayed.



The report fields are described in the table.

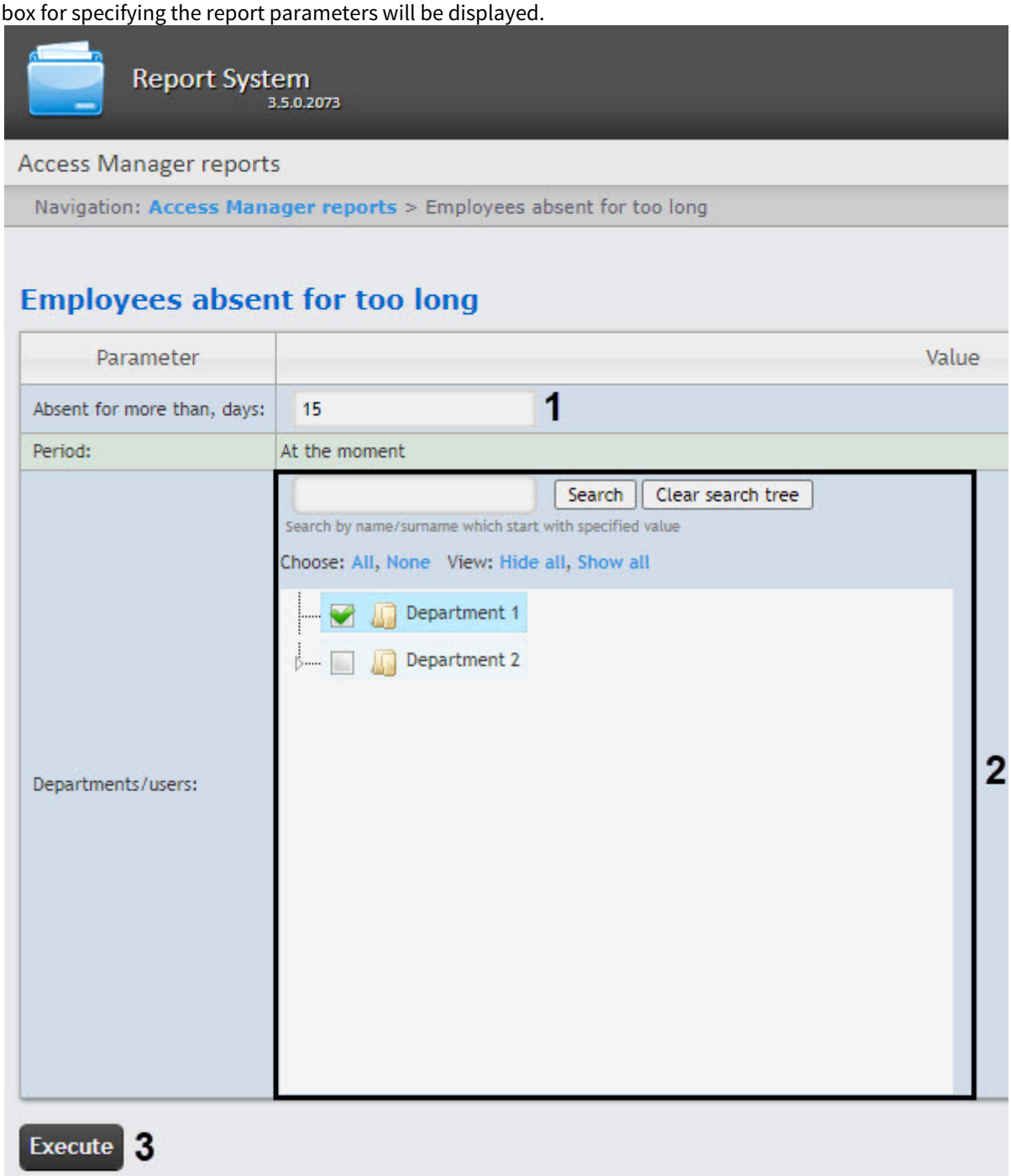
Field name	Description
Personnel number	Employee number
Full name	Full name of the employee
Access levels	Access level of the selected employee
Passage points	Passage points (readers) through which the employee can pass

8.3.2.9 Employees absent for too long report

The **Employees absent for too long** report is a table which contains the information about the last passes of the employees who are absent for a long time. Absent means that their cards were not used for a specified number of days.

To create the **Employees absent for too long** report, do the following:

1. Select the **Employees absent for too long** report (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.



2. In the **Absent for more than, days** (**1**) specify the required number of days.

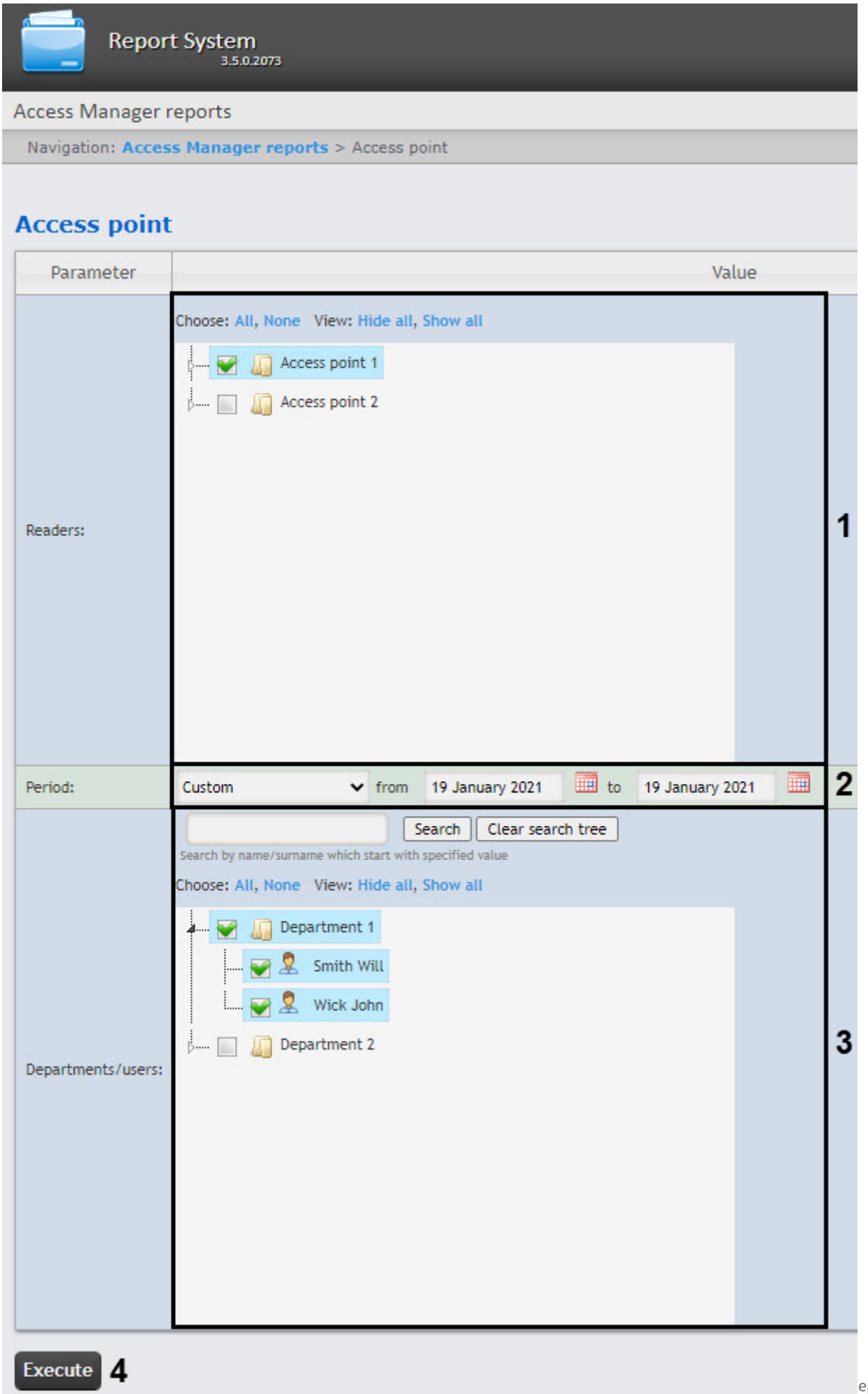
3. To create a report click **Execute** (**2**). As a result the report with specified parameters is displayed.

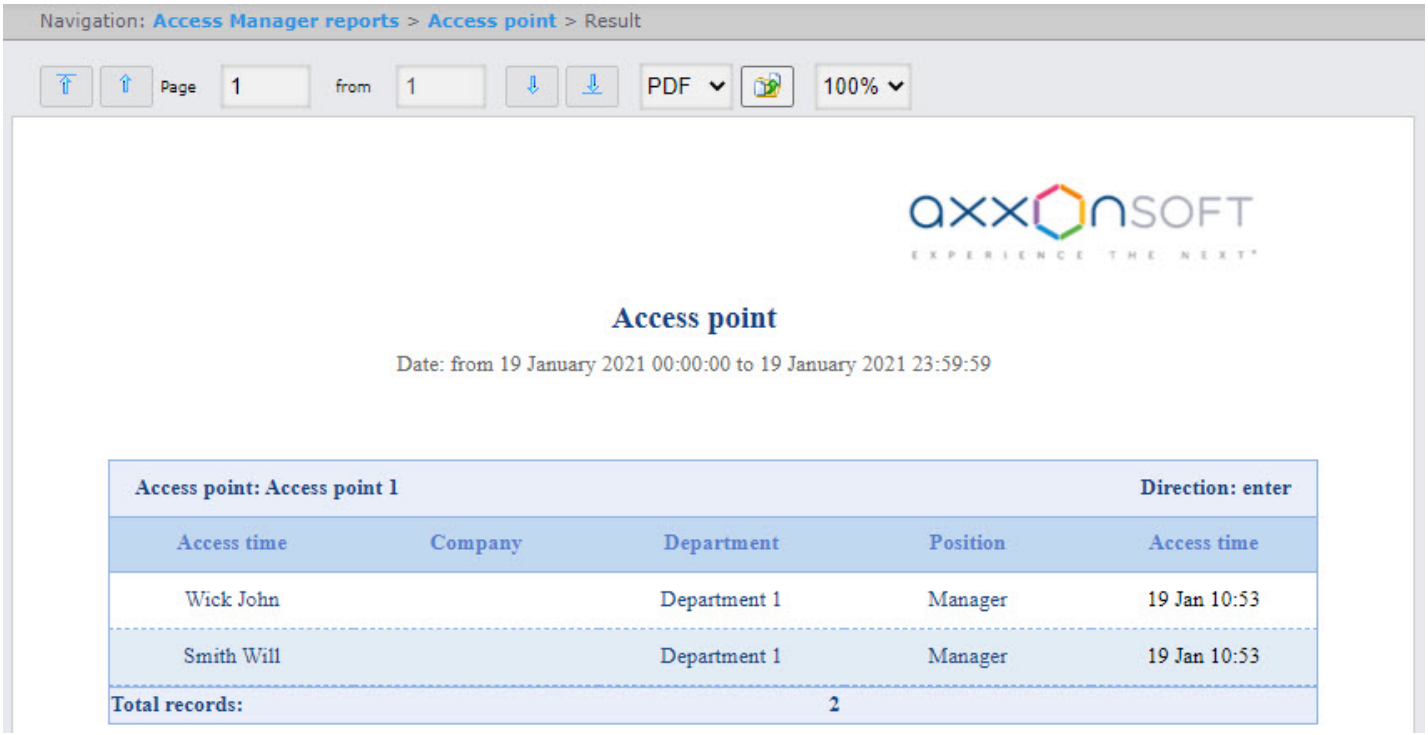


The report fields are described in the table.

Field name	Description
Personnel number	Employee number
Full Name	Full name of the selected employee
Card	Number of the employee card
Last coming	Date of the employee last pass through the passage point
Last device	Identifier of the passage point that registered the last employee pass

8.3.2.10 Access point


Report System
3.5.0.2073
Access Manager reports
Navigation: Access Manager reports > Access point
Access point
Parameter
Value
Choose: All, None View: Hide all, Show all
Access point 1
Access point 2
Readers:
1
Period:
Custom
from
19 January 2021
to
19 January 2021
2
Search
Clear search tree
Search by name/surname which start with specified value
Choose: All, None View: Hide all, Show all
Department 1
Smith Will
Wick John
Department 2
Departments/users:
3
Execute
4



8.4 Working with reports by Queue Length detectors

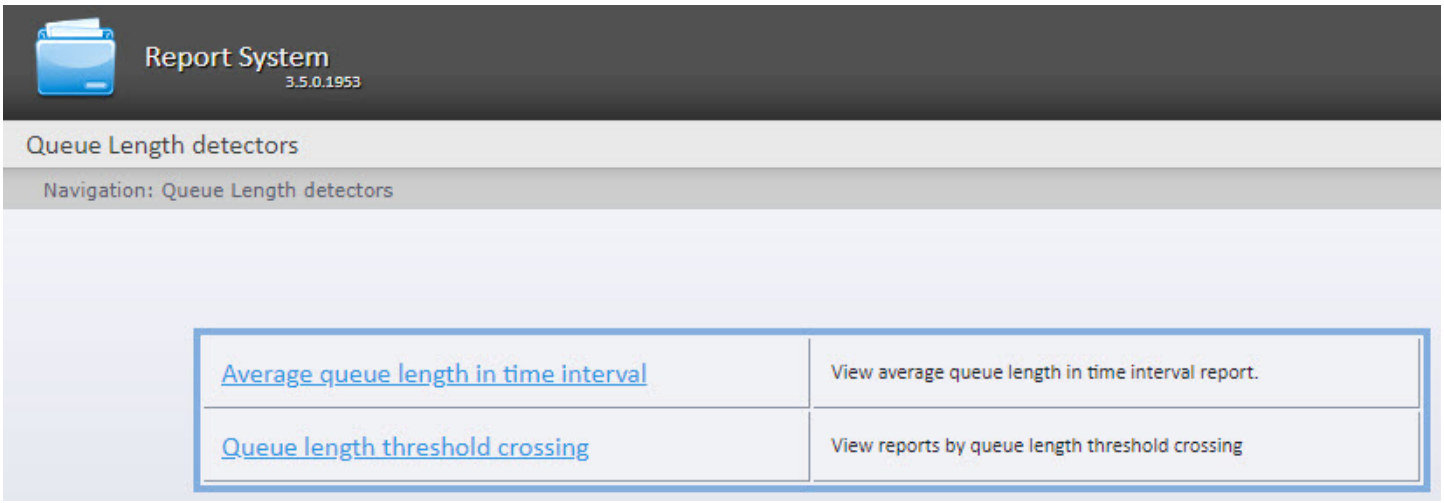
In order to be able to view and generate reports by Queue Length detectors, you should install and configure the **Analytics Pack subsystem**, as described in the Detector Pack user's manual.

> **Note**
>
> By default, in the reports by Queue Length detectors, the values equal to 0 are not included to the report table. To include the zero values in the report, it is necessary to perform the configuration (see Disabling the zero value filter).

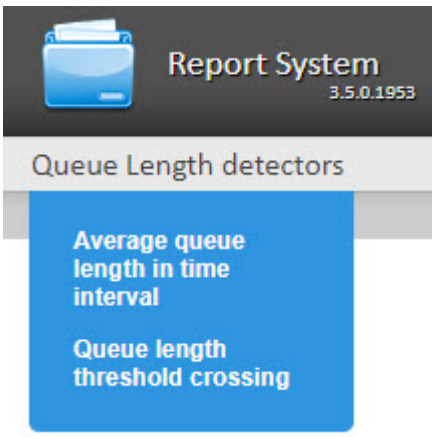
8.4.1 Selecting a type of reports by Queue Length detectors

To select a type of report by queue Length detectors click **Queue Length detectors** link in the report menu of *Intellect Web Report System*.

As a result the list of available reports by people counter detectors is displayed. For switching to the required report click the corresponding link.

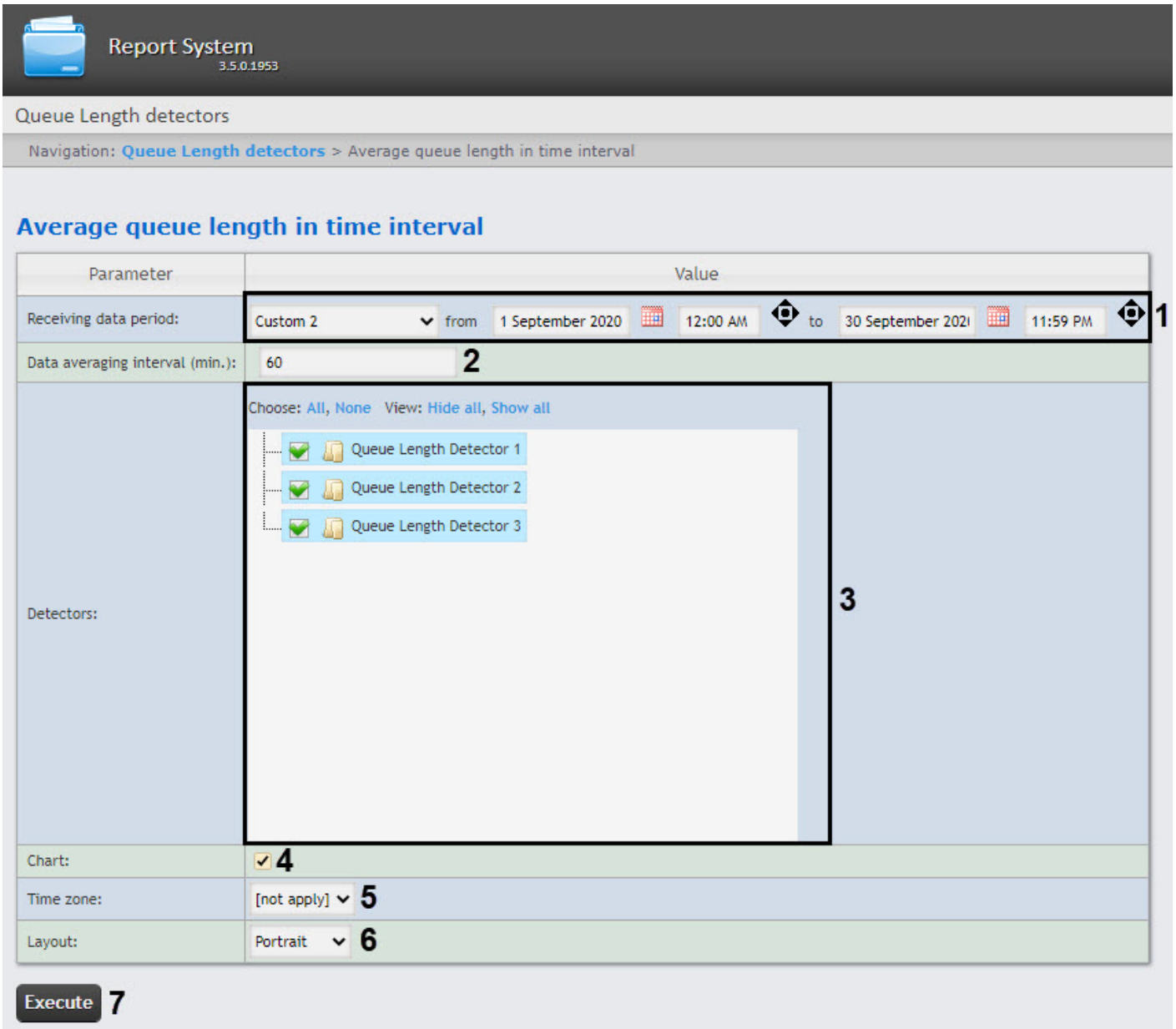


List of links for switching to reports by queue Length detectors is available when hovering over the **Queue Length detectors** link in the report menu.



8.4.2 Average queue length in time interval

The report by average queue length in time interval page will open.



Set the following report parameters:

1. Specify the period in the following way:
   a. From the **Period:** drop-down list select the time period for which the report is created (**1**).
   b. If the **User defined** period is selected, enter the date of start and end periods for which the report is created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
   c. If the **User defined 2** period is selected, additionally enter the time of start and end periods for which the report is created using the button.
   If another period type is selected, specifying the date of start and end periods is not needed.
2. Enter a period of time (in minutes) between load values in the **Step (min.)** field (**2**). The average values of queue length for the specified interval are displayed in the report.

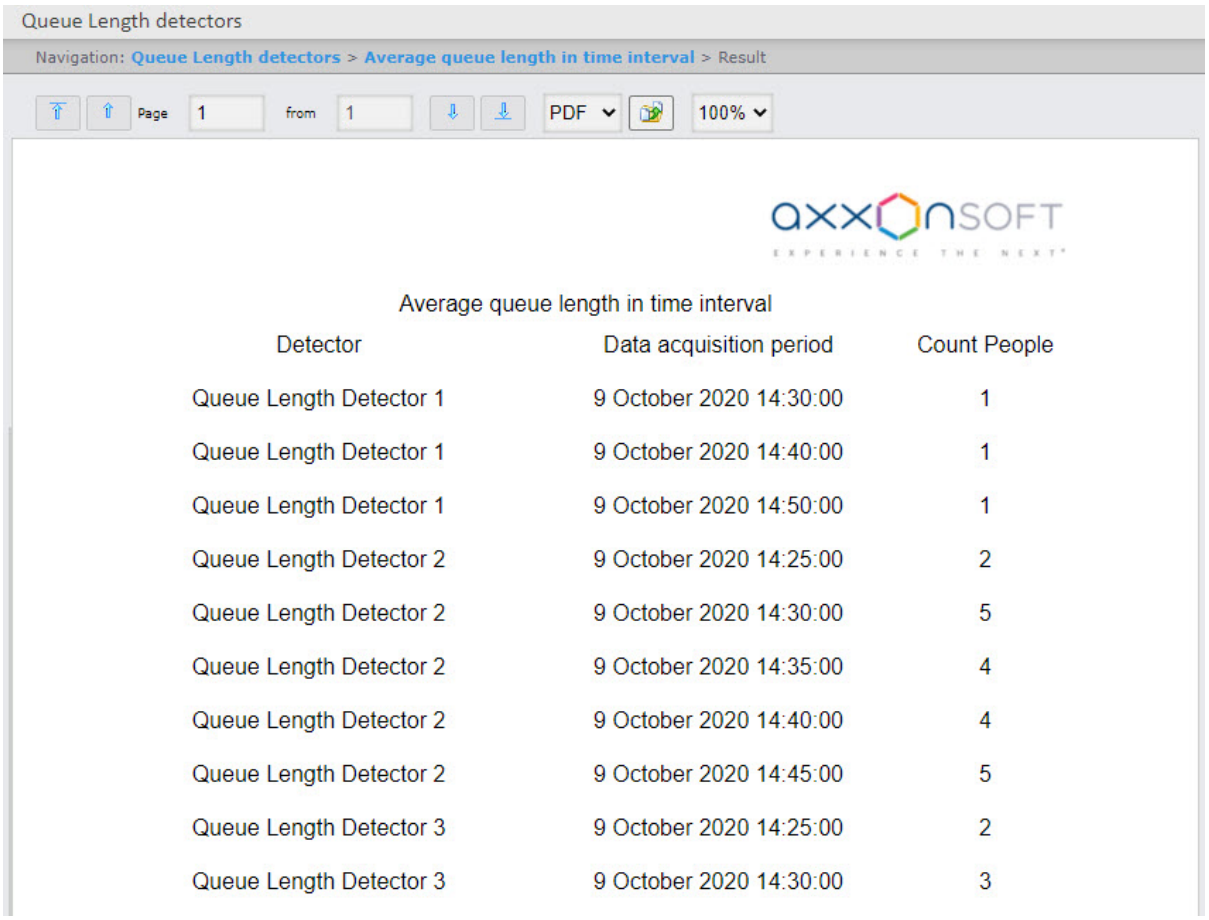
> **Note.**
>
> If the average value is null for all such intervals in the specified period, this period will not be reflected in the report. It is recommended to change the step in this case.

3. In the **Detectors** field set checkboxes for the **Queue Length Detector** objects that will supply the information for the report (**3**).
4. If you want to view a report as a chart, set the corresponding checkbox (**4**).
5. From the **Time zone** drop-down list, select time zone by which report is to be created (**5**).

> **Note.**
>
> Time zones created in the *Intellect* software package which have only one time period and haven't got any inclusions are available to select. Selection of week days is not performed. Detailed information about creation and using of time zones is presented in the Creating and using time zones section.

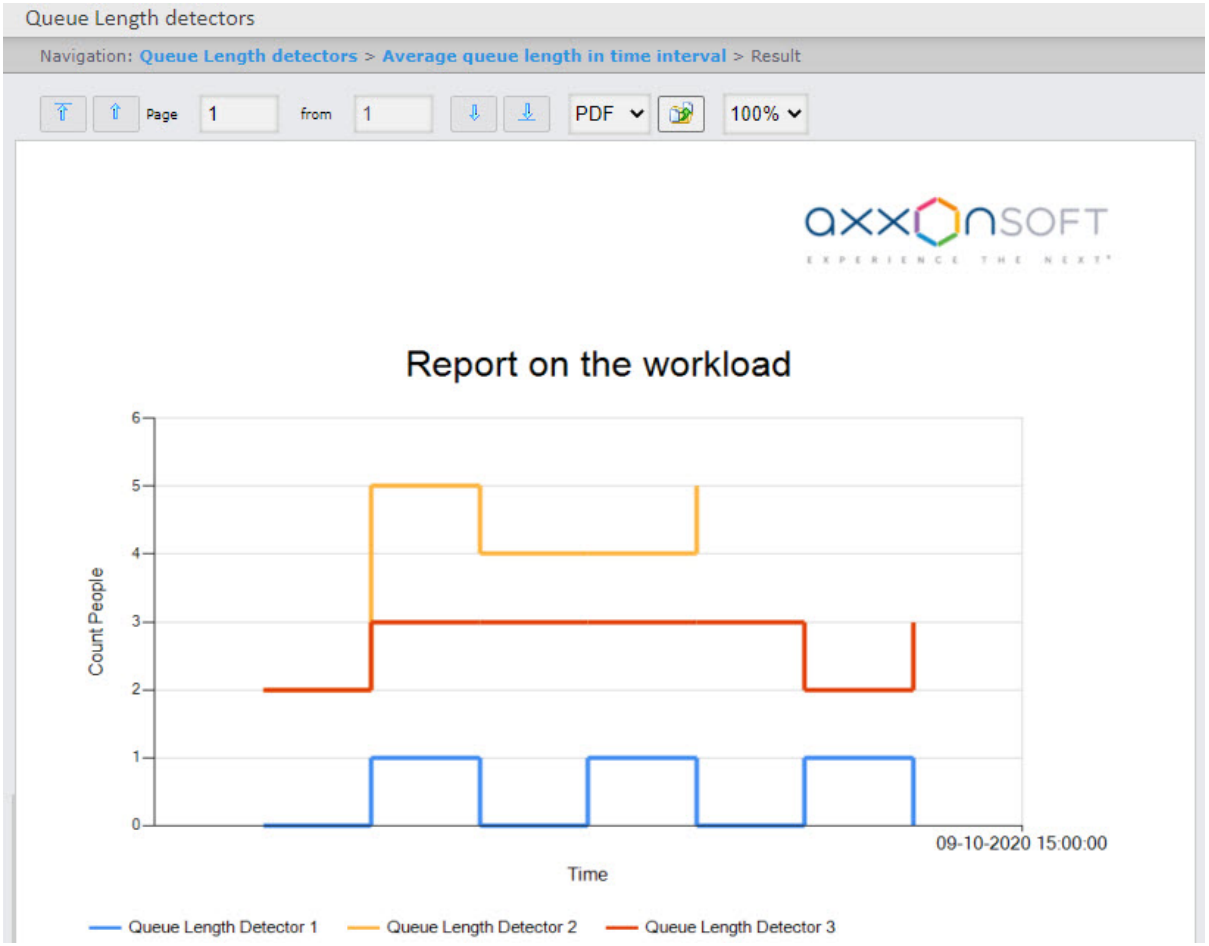
6. From the **Orientation** drop-down list, select the orientation of the printed report page: **Portrait**, **Landscape** (**6**).
7. To create a report click **Execute** (**7**).

As a result, the report by the average queue length in time interval with specified parameters will be displayed.



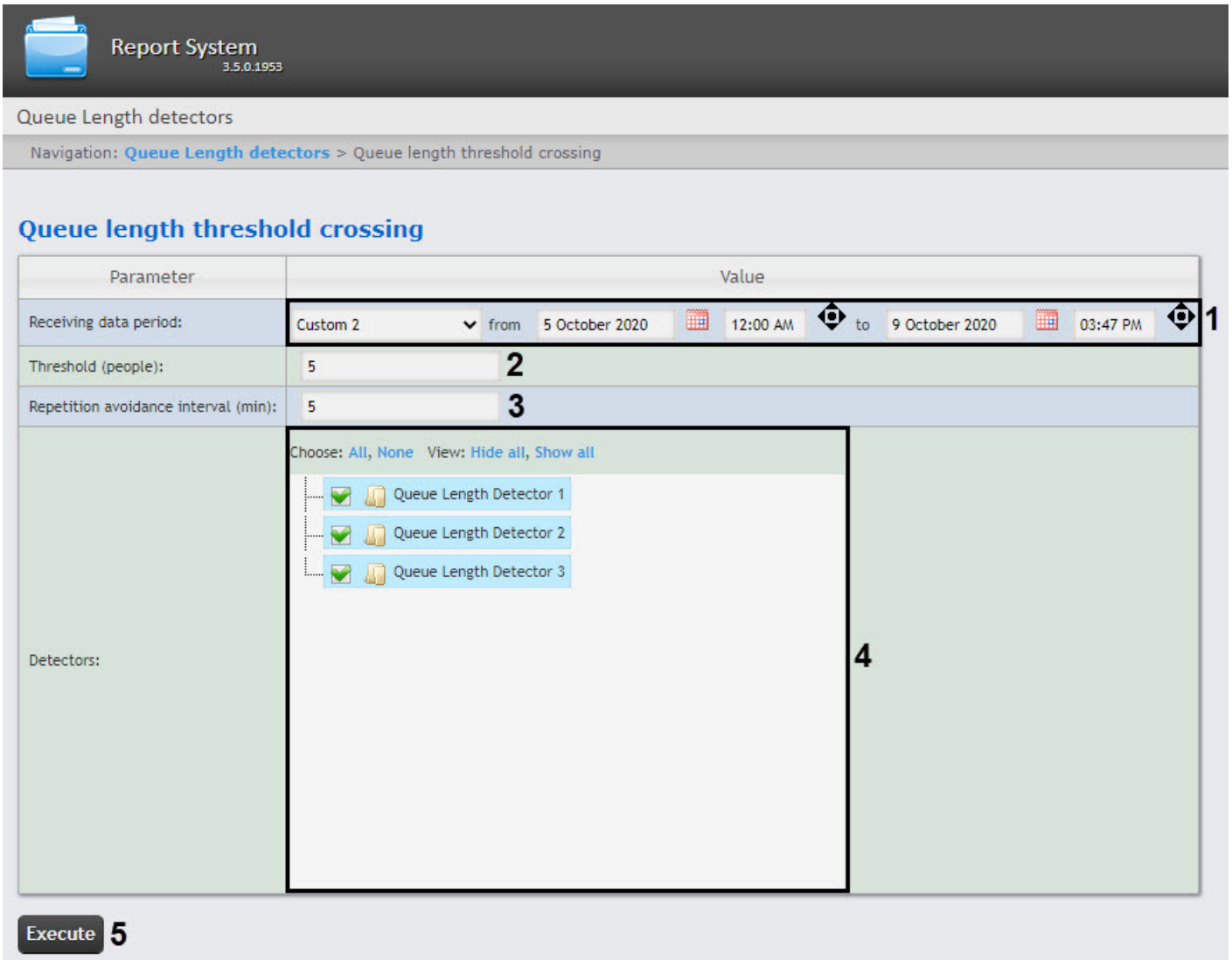
Detector	Data acquisition period	Count People
Queue Length Detector 1	9 October 2020 14:30:00	1
Queue Length Detector 1	9 October 2020 14:40:00	1
Queue Length Detector 1	9 October 2020 14:50:00	1
Queue Length Detector 2	9 October 2020 14:25:00	2
Queue Length Detector 2	9 October 2020 14:30:00	5
Queue Length Detector 2	9 October 2020 14:35:00	4
Queue Length Detector 2	9 October 2020 14:40:00	4
Queue Length Detector 2	9 October 2020 14:45:00	5
Queue Length Detector 3	9 October 2020 14:25:00	2
Queue Length Detector 3	9 October 2020 14:30:00	3

Example of a report of average queue length in time interval as a chart is given in the following figure. If more than one detector is used, the data from each detector will be displayed in its own color.



8.4.3 Queue length threshold crossing

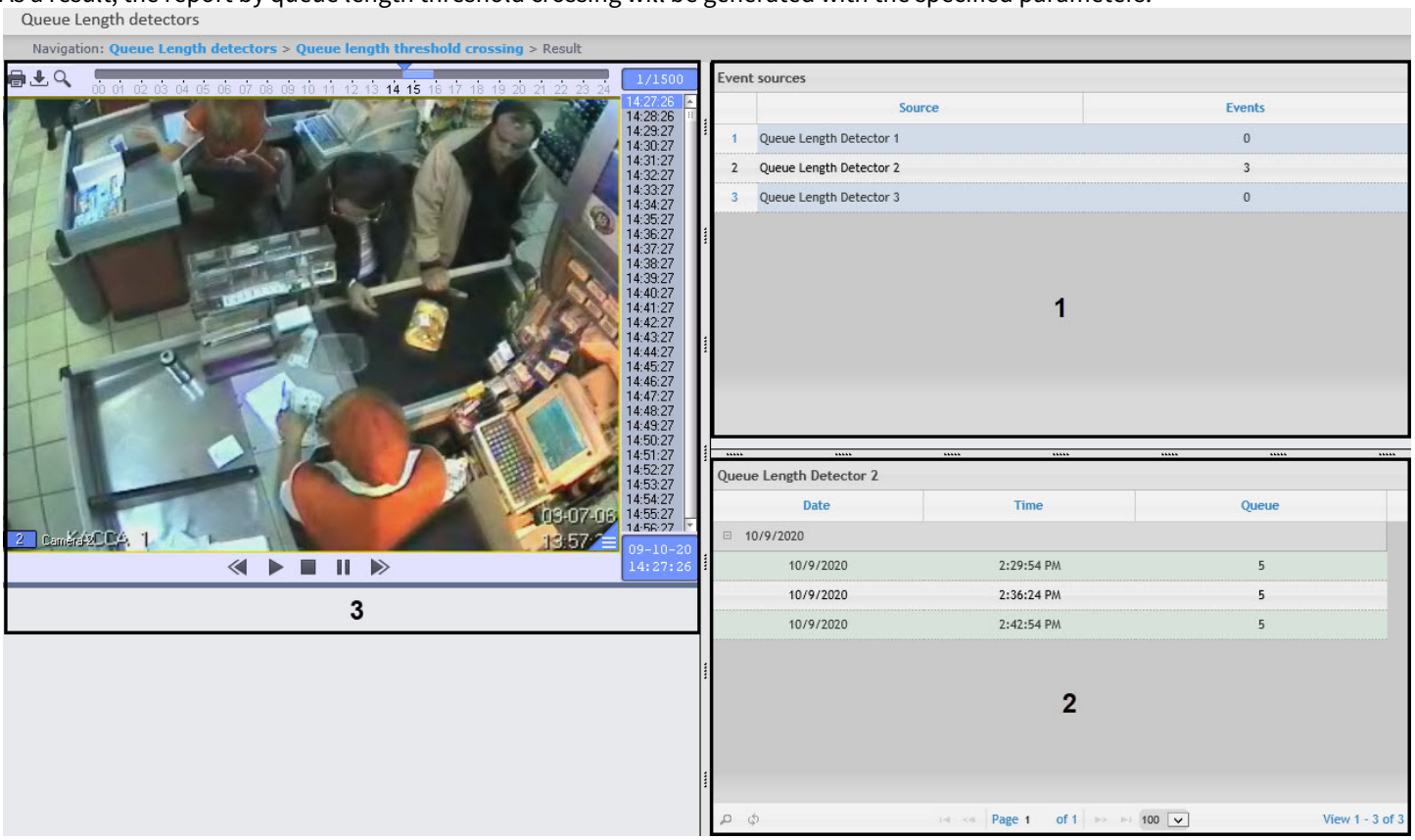
The report by queue length threshold crossing page will open.



Set the following report parameters:

1. Specify the period in the following way:
   a. From the **Period:** drop-down list select the time period for which the report is created (**1**).
   b. If the **User defined** period is selected, enter the date of start and end periods for which the report is created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
   c. If the **User defined 2** period is selected, additionally enter the time of start and end periods for which the report is created using the button.
   If another period type is selected, specifying the date of start and end periods is not needed.
2. In the **Threshold (people)** field set the number of people in the queue, which is considered a threshold (**2**).
3. In the **Repetition avoidance interval (min.)** field enter the time in minutes, during which the event of exceeding the threshold of the queue length will not be generated (**3**).
4. In the **Detectors** field set checkboxes for the **Queue Length Detector** objects that will supply the information for the report (**4**).
5. To create a report click **Execute** (**5**).

As a result, the report by queue length threshold crossing will be generated with the specified parameters.



The report has a three-sectioned structure:

1. Section **1** displays a list of queue length detectors that have recorded exceeding the threshold events for the specified period, and the number of recorded events.
2. Section **2** displays a detailed table of events recorded by the detector selected in section **1**, the time of recording for each event, and the number of people in the queue at the specified time. The maximum number of entries on one page of the table is 100.
3. In section **3**, you can watch the video of the event selected in section **2**.

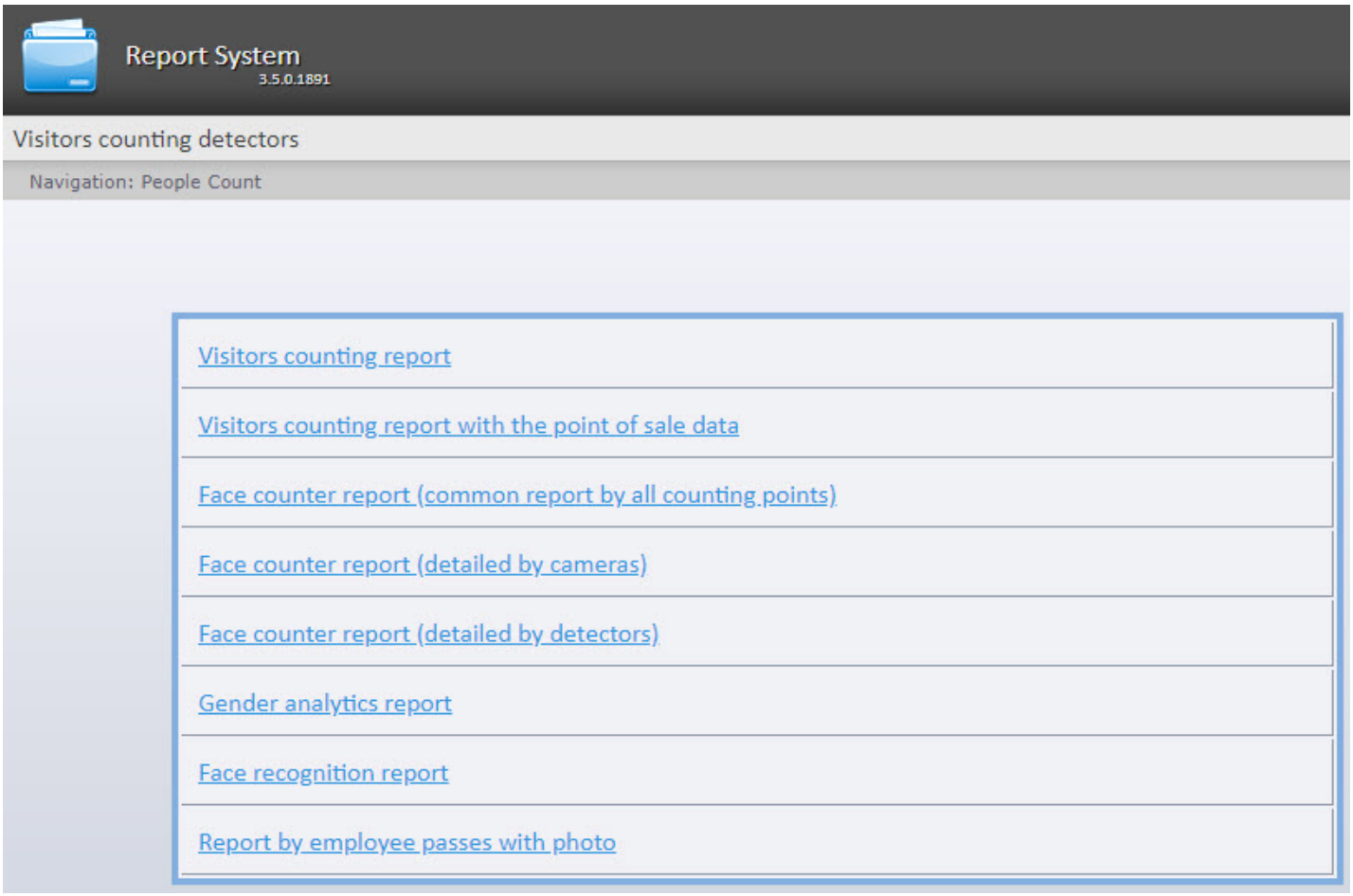
8.5 Working with reports by Visitors counting detectors

To work with the reports by the *Visitors counting detectors*, select and build the required report. The description and purpose of each report is presented on the corresponding page.

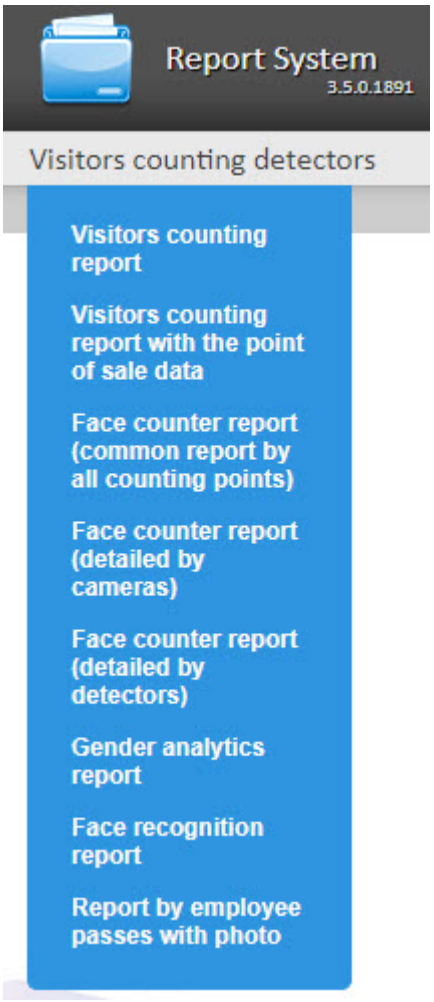
8.5.1 Selecting a type of reports by Visitors counting detectors

To select a type of report by people counter detectors click **Visitors counting detectors** link in the report menu of *Intellect Web Report System*.

As a result the list of available reports by *Visitors counting detectors* is displayed. For switching to the required report click the corresponding link.



List of links for switching to reports by *Visitors counting detectors* is available when hovering over the **Visitors counting detectors** link in the report menu.



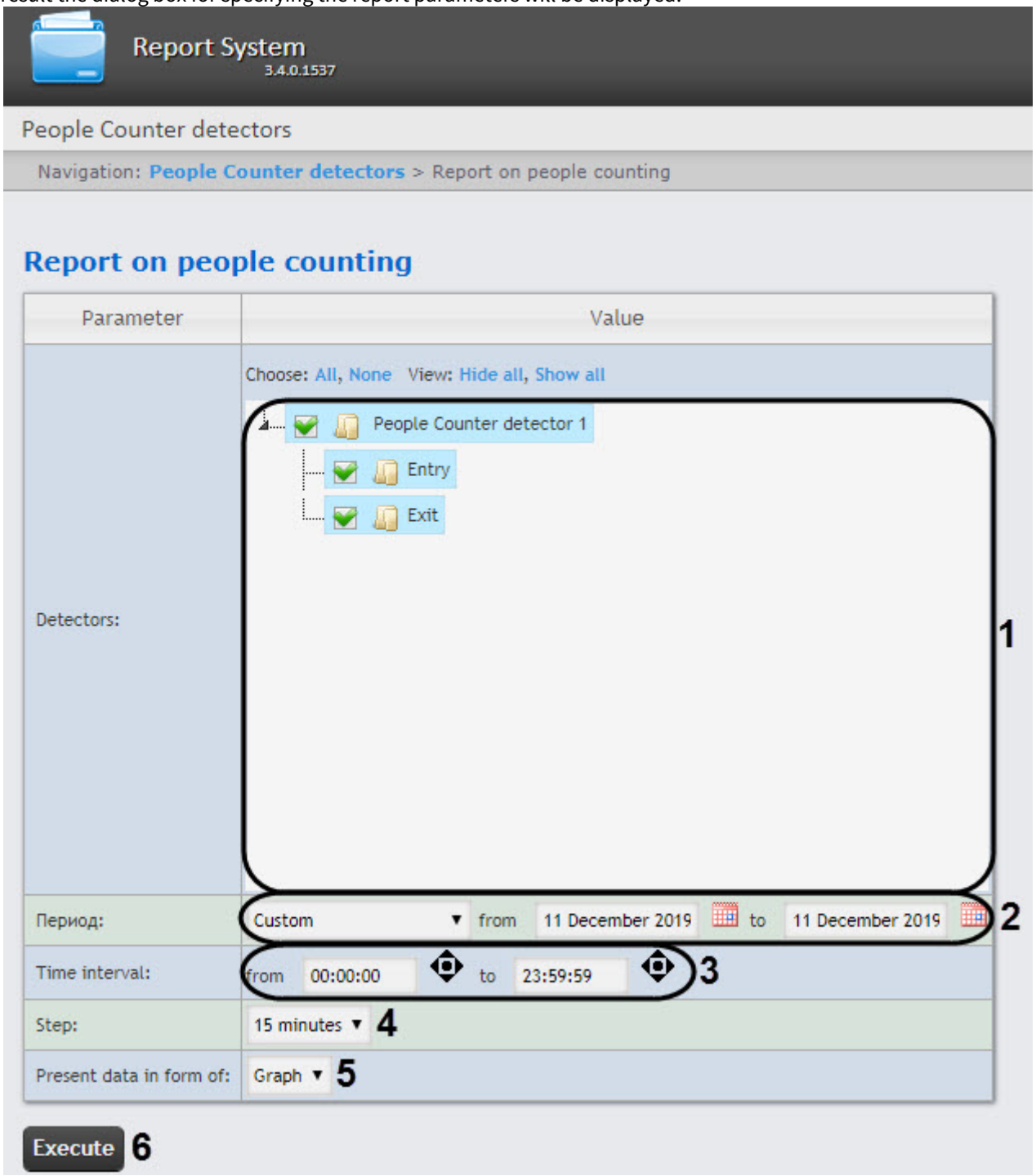
8.5.2 Creating a Report on people counting

The **Report on people counting** allows getting the data about the number of entering people. The data can be presented only as a chart.

> **Note**
>
> The **Report on people counting** report is related to the **Visitors counting detectors** (it is necessary to create the corresponding object in the *Intellect* software).

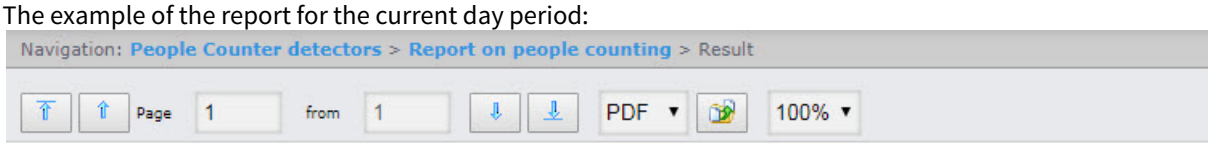
To create a **Report on people counting** report, do the following:

1. Select the **Report on people counting** report type (see Selecting a type of reports by Visitors counting detectors). As a result the dialog box for specifying the report parameters will be displayed.



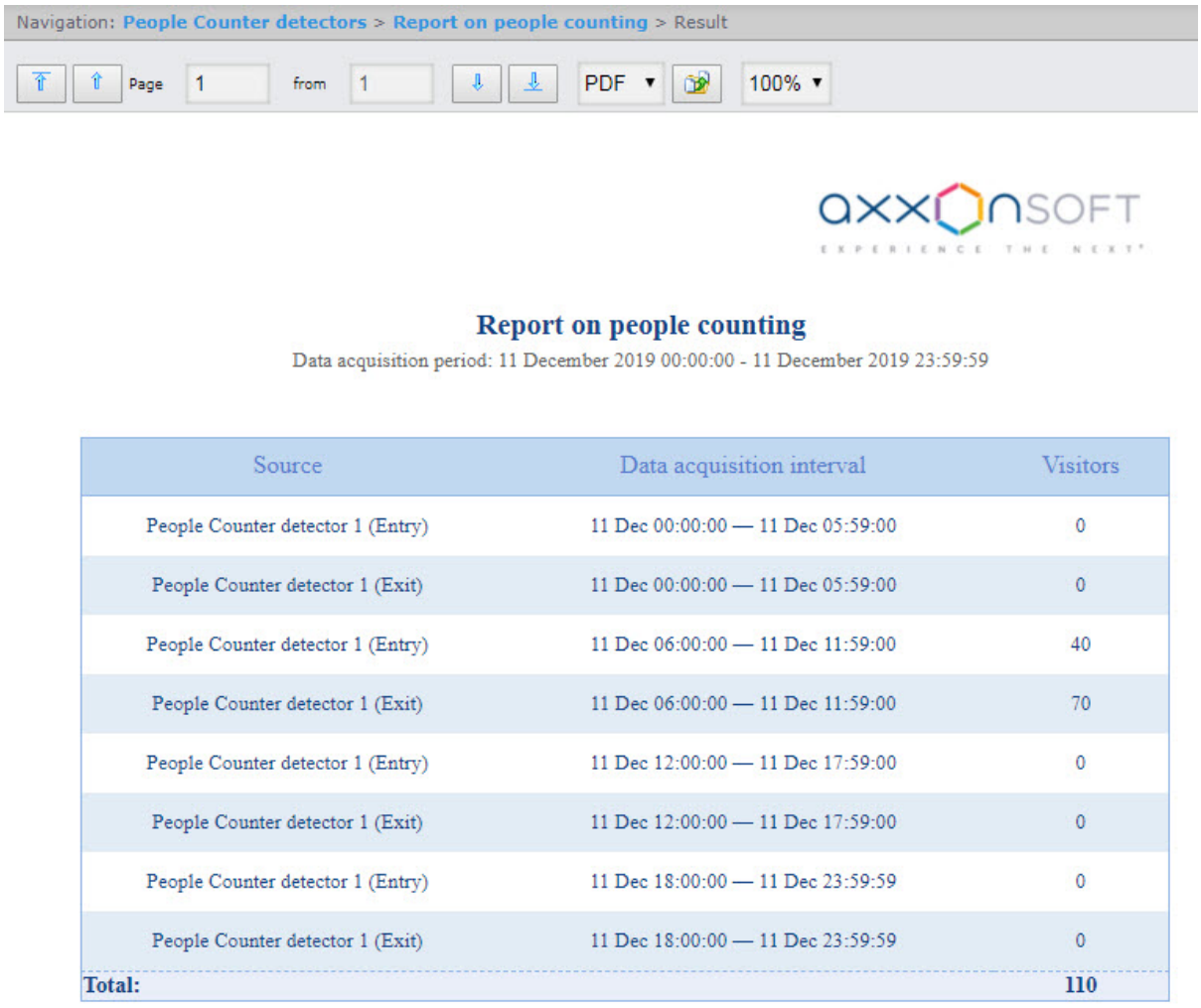
2. Set the report parameters in the following way:
   a. In the **Detectors** field (**1**) set the checkboxes for those **People counter** objects which data should be displayed in the report. You can also set the **Entry** and/or **Exit** checkboxes to build a report on the number of entered and/or exited visitors.
   b. From the **Receiving data period** drop-down list select the time period for which the report is to be created (**2**).
   c. In the **Time interval** field (**3**), enter the time interval within the day; the passes made during this interval will be displayed in the report.
   d. From the **Step** drop-down list (**4**) select the time period during which the values received from people counter detector will be summed (depends on the **Receiving data period** parameter, see 2.b).
   e. From the **Present data in form of** drop-down list (**5**), select the report format: **Table** or **Graph**.

3. To create a report click **Execute** (**6**).
   As a result the report with specified parameters will be displayed.
   The example of the report for the current day period:





   The example of the report for the current week period presented as a graph:



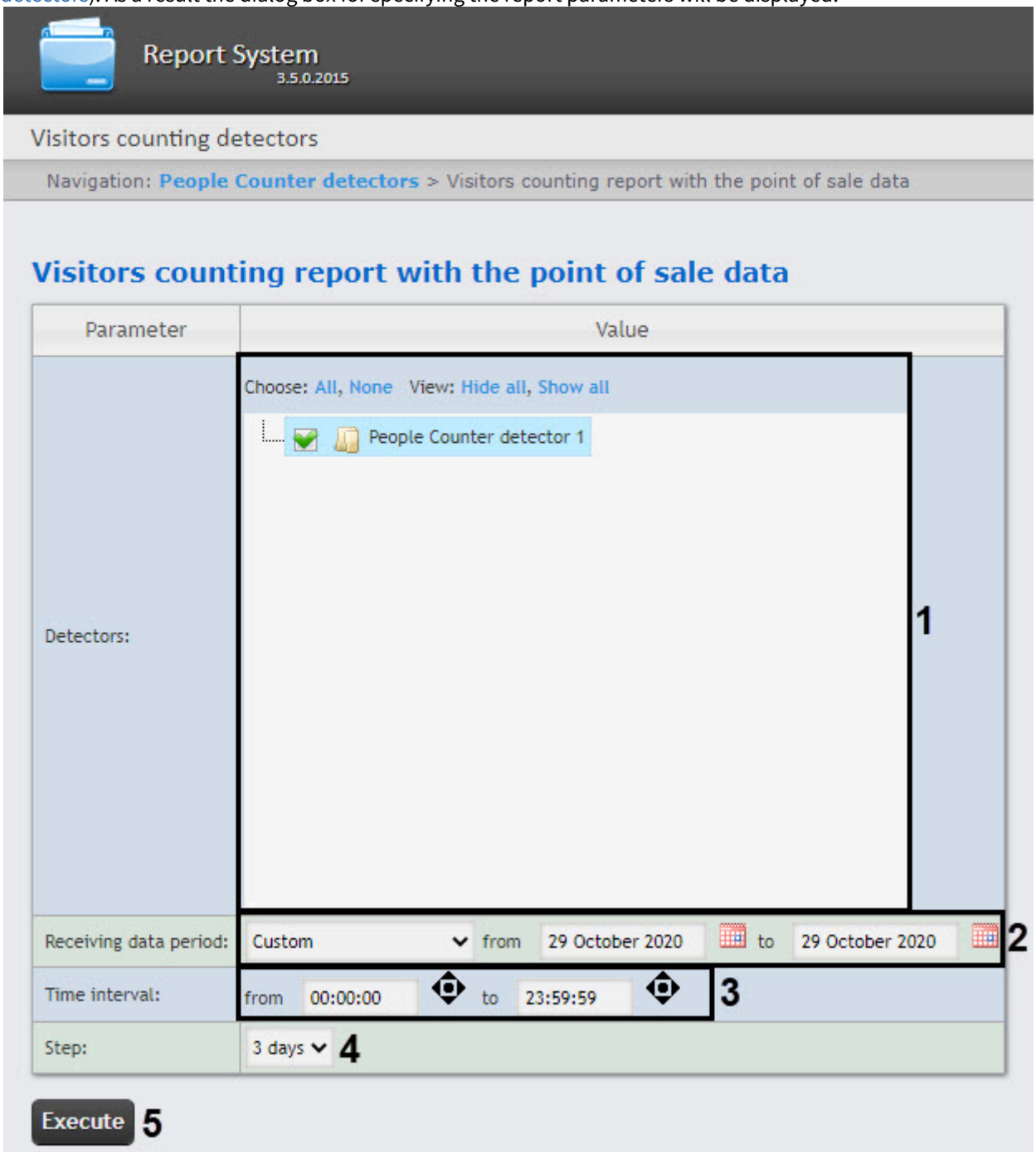
8.5.3 Creating an Visitors counting report with the point of sale data

The **Visitors counting report with the point of sale data** is a variation of the Entering/Exiting People Count report, which, in addition to data on the number of visitors, can provide information about the profits brought by visitors. The data can be presented only as a table.

> **Note**
>
> The **Visitors counting report with the point of sale data** is related to the **People Counter detector** and the *POS Intellect* software (it is necessary to create the corresponding objects in the *Intellect* software and configure the *POS Intelect* software (for derails, see Administrator's Guide)). The information about the profits brought by visitors is received from the database of the Server which was specified during the POS Intellect installation.

To create an **Visitors counting report with the point of sale data**, do the following:

1. Select the **Visitors counting report with the point of sale data** (see Selecting a type of reports by Visitors counting detectors). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the report parameters in the following way:
   a. In the **Detectors** field set checkboxes in those **People counter** objects information on which should be displayed in the report (**1**). For each detector select a value on which the report is to be created: entry, exit, entry+exit.

      Note.

      Select the **Entry+Exit** value if the report is to be created on total number of passes.

   b. Set the **Add total per day** checkbox to display sum of positions per day (**2**).
   c. Set the **Show only total per day** to display the sum of positions per day taking into account the time filtering (**3**).
   d. Specify the period in the following way:

i. From the **Receiving data period:** drop-down list select the time period for which the report is to be created (**4**).
ii. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool.

> **Note**
>
> Click the button near the corresponding field to use the **Calendar** tool.

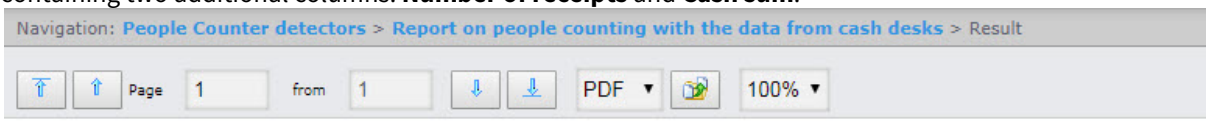
iii. If the **User defined 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the button.
iv. If another period type is selected, specifying the date of start and end periods is not needed.

e. Enter a time period (in minutes) during which the values received from people counter detector will be summarized in the **Step** field (**5**).
f. From the **Time zone** drop-down list select time zone by which report is to be created (**6**).

> **Note.**
>
> Time zones created in the *Intellect* software package which have only one time period and haven't got any inclusions are available to select. Selection of week days is not performed. Detailed information about creation and using of time zones is presented in the Creating and using time zones section.

g. Set the **Sum result** checkbox to display sum result by selected detections in the report (**7**).

3. To create a report click **Execute** (**8**).
4. As a result an **Visitors counting report with the point of sale data** with specified parameters will be displayed, containing two additional columns: **Number of receipts** and **Cash sum**.



Entering/Exiting People Count report with Point of Sale data

Data acquisition period: 9 December 2019 00:00:00 - 11 December 2019 11:33:41

Source	Data acquisition interval	Visitors	Number of receipts	Sum
People Counter detector 1	9 Dec 00:00:00 — 9 Dec 23:59:00	128	0	0
People Counter detector 1	10 Dec 00:00:00 — 10 Dec 23:59:00	689	0	0
People Counter detector 1	11 Dec 00:00:00 — 11 Dec 11:33:41	55	0	0
Total:		**872**	**0**	**0**

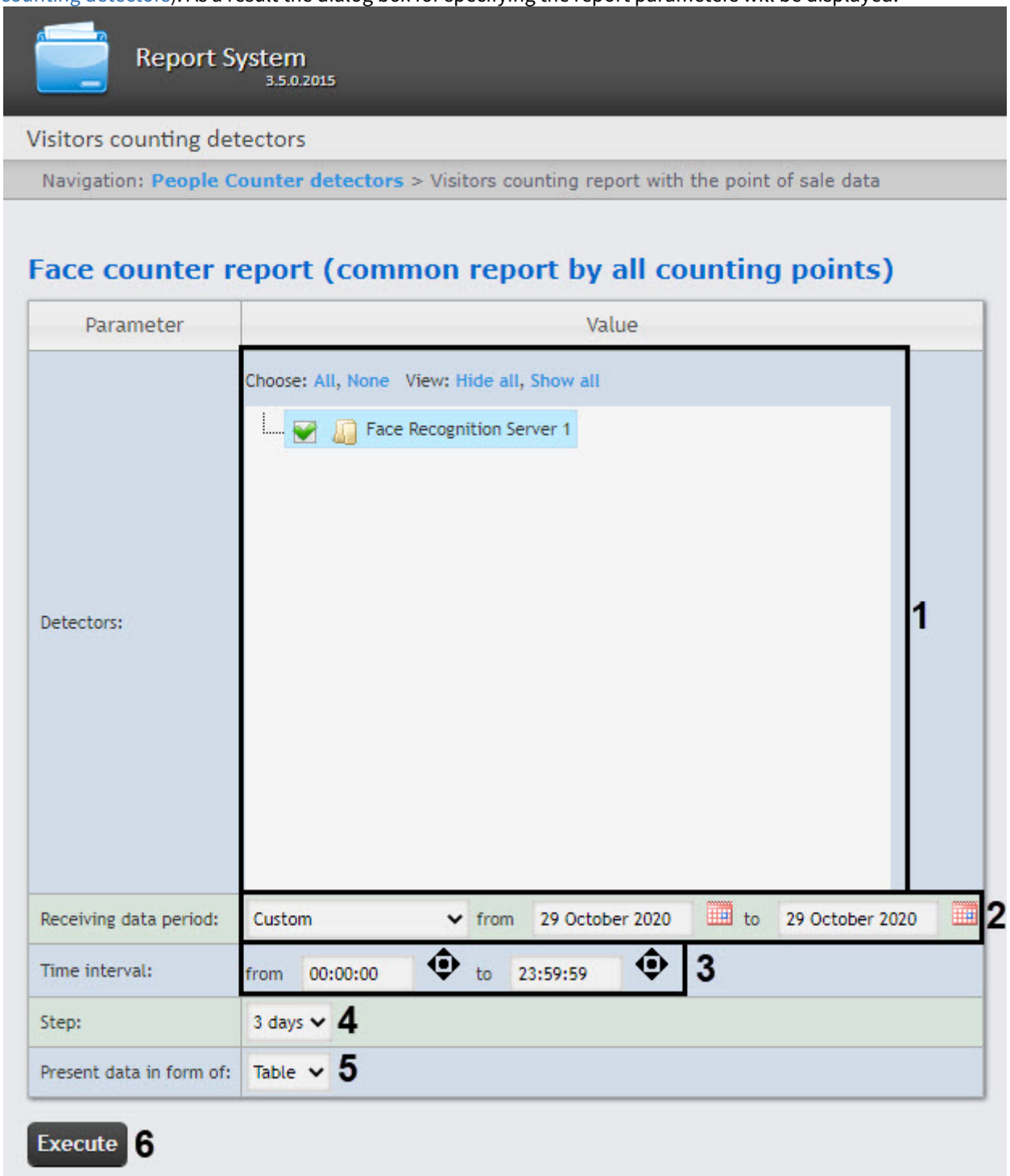
8.5.4 Creating a Face counter report (common report by all counting points)

The **Face counter report (common report by all counting points)** allows getting data about the number of captured faces (people/persons) using the data from the face recognition servers. The data can be presented as a table and a chart.

> **Note**
>
> The **Face counter report (common report by all counting points)** is related to the **Face Recognition Server** object (it is necessary to create the corresponding object in the *Intellect* software).

To create the **Face counter report (common report by all counting points)**, do the following:

1. Select the **Face counter report (common report by all counting points)** (see Selecting a type of reports by Visitors counting detectors). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the report parameters in the following way:
   a. In the **Detectors** field set checkboxes in those **Face Recognition Server** objects information on which should be displayed in the report (**1**).
   b. Set the **Add total per day** checkbox to display sum of positions per day (**2**).
   c. Specify the period in the following way:
      i. From the **Receiving data period** drop-down list select the time period for which the report is to be created (**3**).
      ii. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool.

> **Note**
>
> Click the button near the corresponding field to use the **Calendar** tool.

iii. If the **User defined 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the button.

iv. If another period type is selected, specifying the date of start and end periods is not needed.

d. Enter a time period (in minutes) during which the values received from people counter detector will be summarized in the **Step** field (**4**).

e. From the **Maximum value** drop-down list select a maximum value of people that will be displayed in a chart (**5**).

f. From the **Time zone** drop-down list select time zone by which report is to be created (**6**).

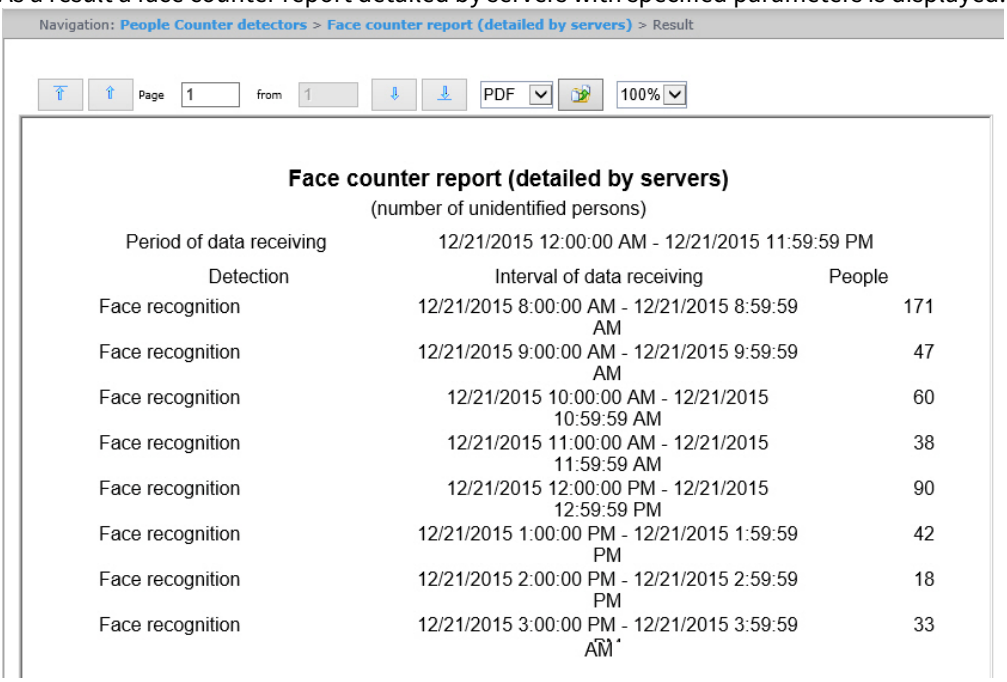
> **Note.**
>
> Time zones created in the *Intellect* software package which have only one time period and haven't got any inclusions are available to select. Selection of week days is not performed. Detailed information about creation and using of time zones is presented in the Creating and using time zones section.

g. If it is necessary to view a report as a chart, set the corresponding checkbox (**7**).

h. In the **Layout** field, select the print layout of the report: **Portrait**, **Landscape** (**8**).

i. Set the **Sum results** checkbox to display sum result by selected detections in the report (**9**).

3. To create a report click **Execute** (**10**).
4. As a result a face counter report detailed by servers with specified parameters is displayed.

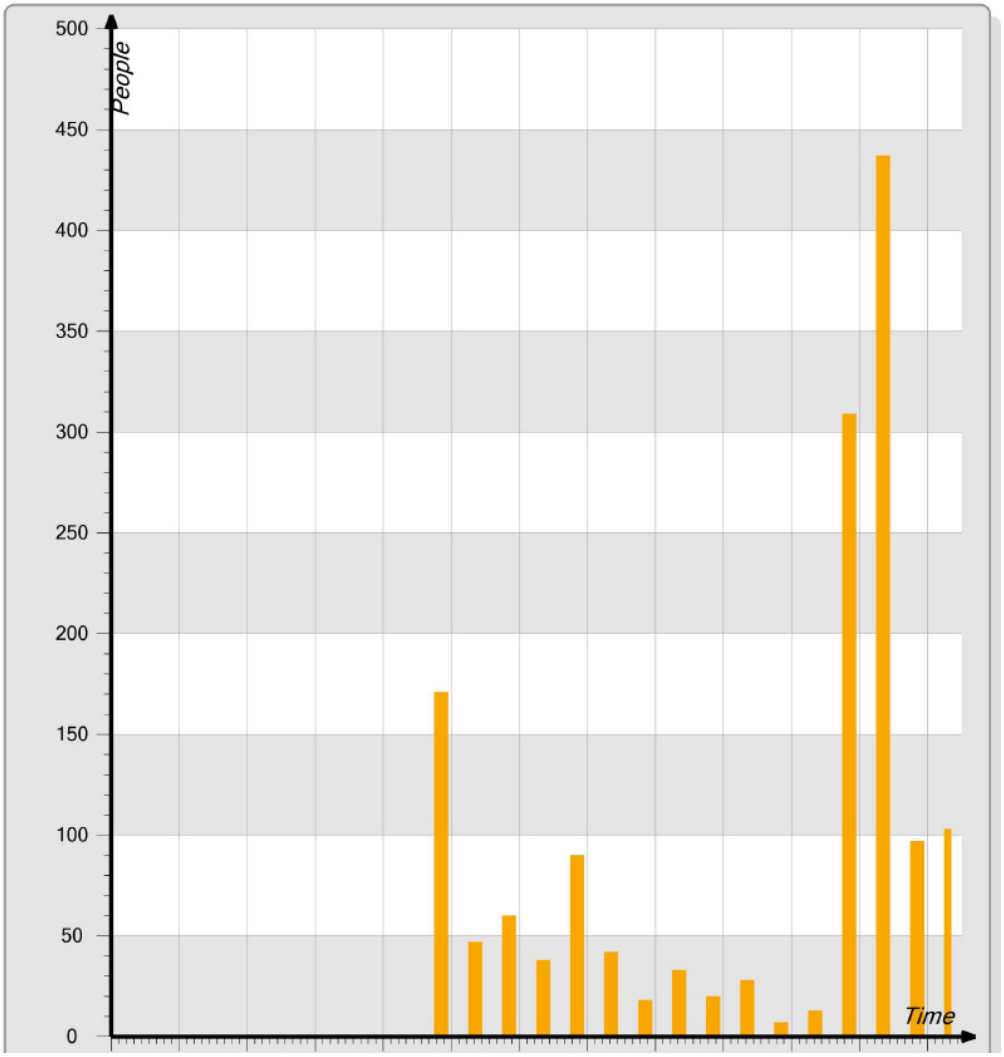


Face counter report (detailed by servers)

(number of unidentified persons)

Period of data receiving	12/21/2015 12:00:00 AM - 12/21/2015 11:59:59 PM	
Detection	Interval of data receiving	People
Face recognition	12/21/2015 8:00:00 AM - 12/21/2015 8:59:59 AM	171
Face recognition	12/21/2015 9:00:00 AM - 12/21/2015 9:59:59 AM	47
Face recognition	12/21/2015 10:00:00 AM - 12/21/2015 10:59:59 AM	60
Face recognition	12/21/2015 11:00:00 AM - 12/21/2015 11:59:59 AM	38
Face recognition	12/21/2015 12:00:00 PM - 12/21/2015 12:59:59 PM	90
Face recognition	12/21/2015 1:00:00 PM - 12/21/2015 1:59:59 PM	42
Face recognition	12/21/2015 2:00:00 PM - 12/21/2015 2:59:59 PM	18
Face recognition	12/21/2015 3:00:00 PM - 12/21/2015 3:59:59 AM	33

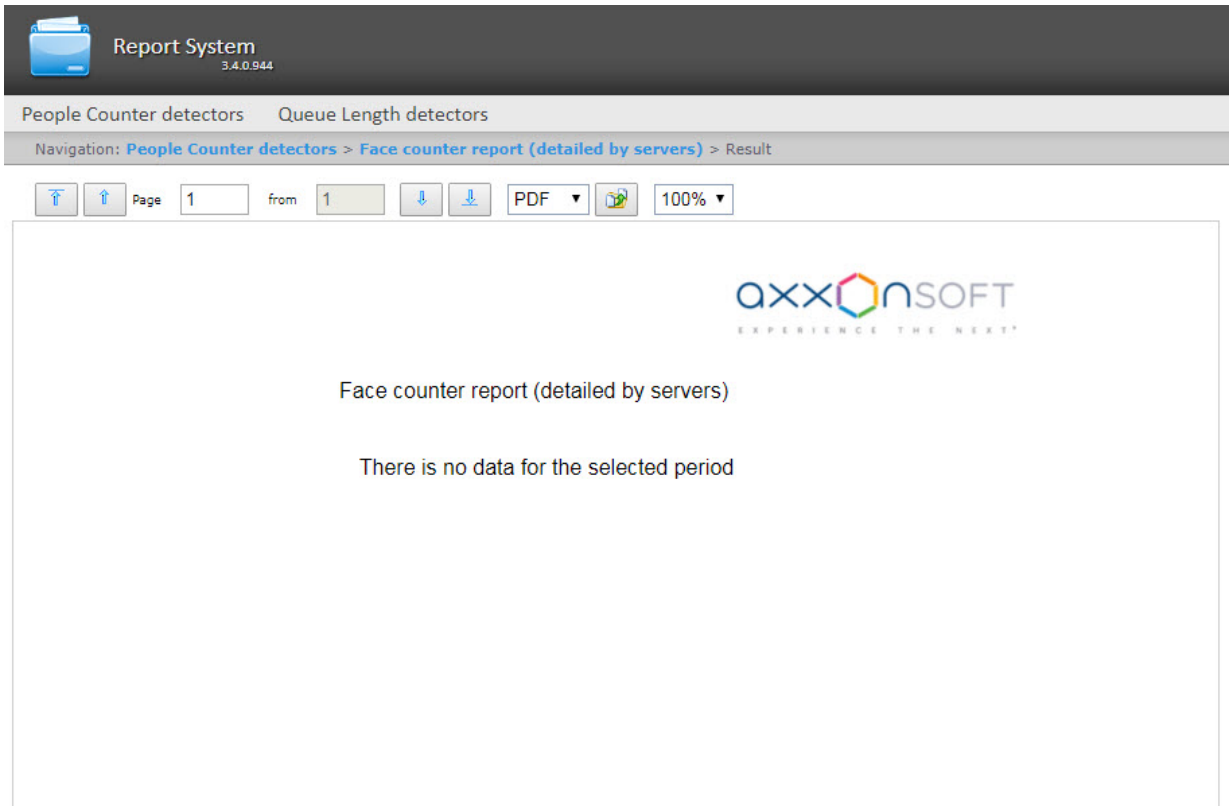
Example of a face counter report detailed by servers as a chart is given in the following figure.



Note

The number of people (persons) in the report means the number of captured faces, not the number of unique visitors.

If there is no data for specified time period, the report will be displayed as in the following figure.



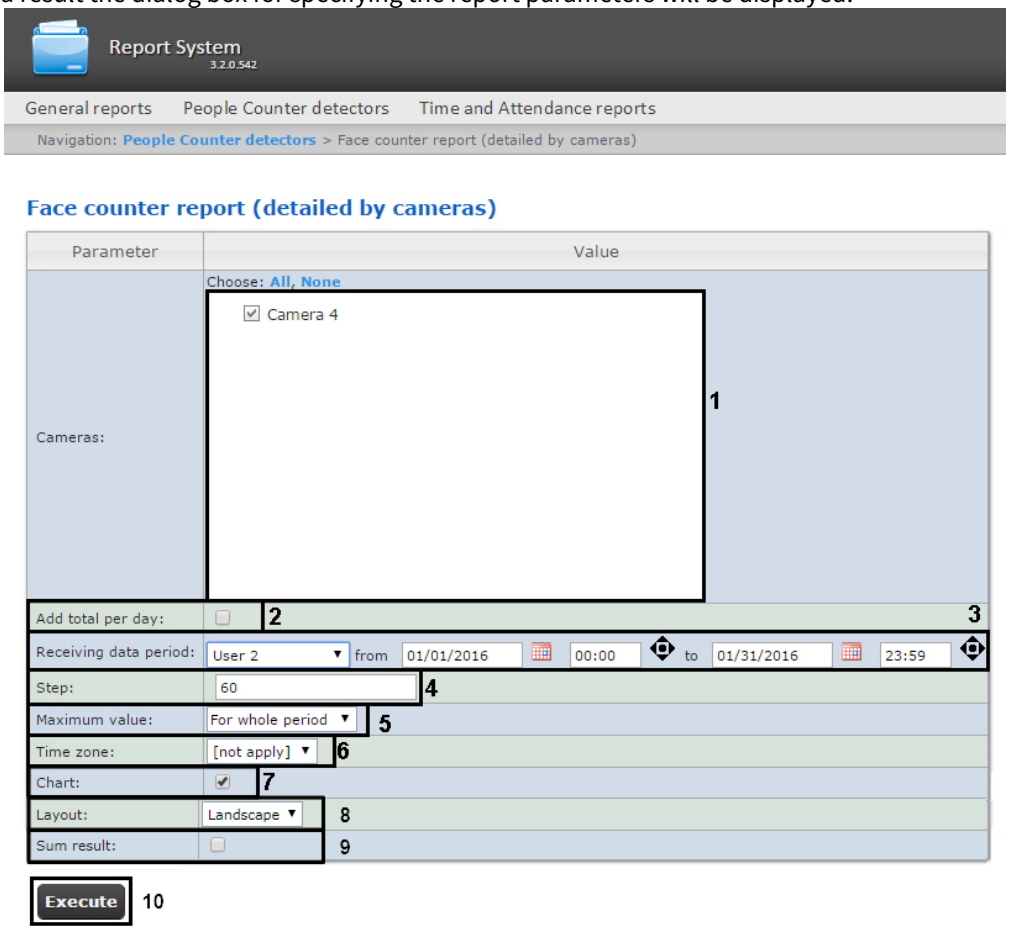
8.5.5 Creating a Face counter report (detailed by cameras)

The **Face counter report (detailed by cameras)** allows getting data about the number of captured faces (people/persons) using data from the video cameras. The data can be presented as a table and a chart.

> **Note**
>
> The **Face counter report (detailed by cameras)** is related to the **Camera** object (it is necessary to create the corresponding object in the *Intellect* software).

To create the **Face counter report (detailed by cameras)**, do the following:

1. Select the **Face counter report (detailed by cameras)** (see Selecting a type of reports by Visitors counting detectors). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the report parameters in the following way:
   a. In the **Cameras** field set checkboxes for those **Camera** objects, the information on which should be displayed in the report (**1**).
   b. Set the **Add total per day** checkbox to display sum of positions per day (**2**).
   c. Specify the period in the following way:
      i. From the **Receiving data period** drop-down list select the time period for which the report is to be created (**3**).
      ii. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool.

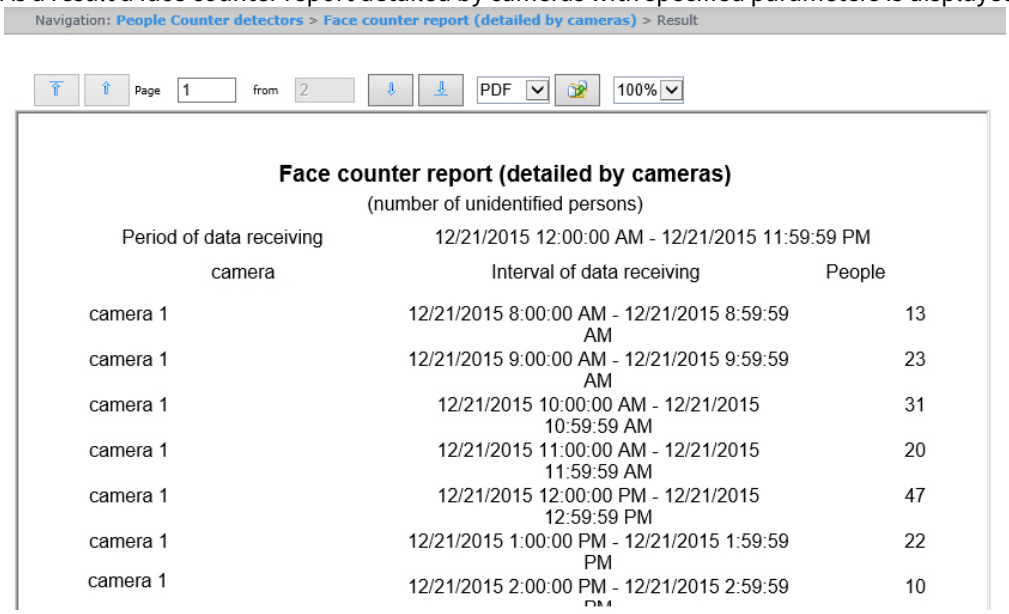
> **Note**
>
> Click the button near the corresponding field to use the **Calendar** tool.

      iii. If the **User defined 2** period is selected, enter additionaly the time of start and end periods for which the report is to be created using the button.
      iv. If another period type is selected, specifying the date of start and end periods is not needed.
   d. Enter a time period (in minutes) during which the values received from people counter detector will be summarized in the **Step** field (**4**).
   e. From the **Maximum value** drop-down list select a maximum value of people that will be displayed in a chart (**5**).
   f. From the **Time zone** drop-down list select time zone by which report is to be created (**6**).

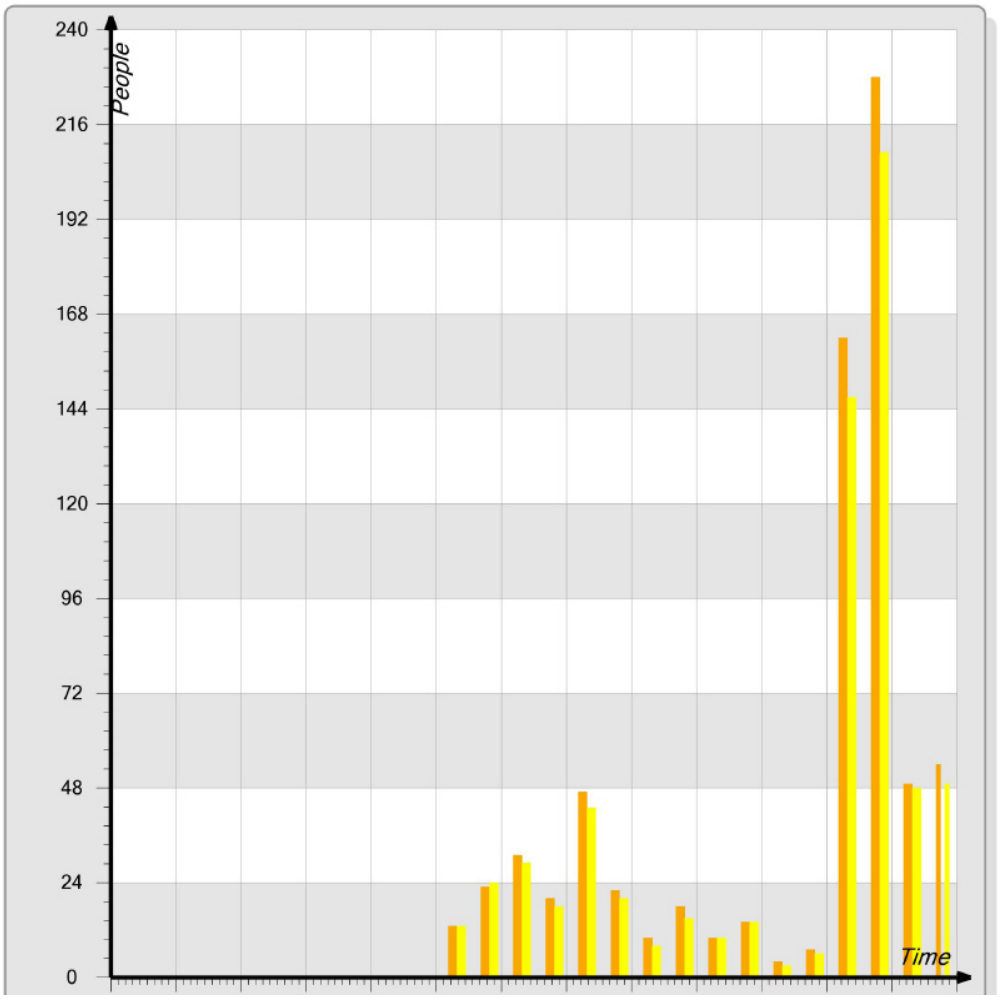
> **Note**
>
> Time zones created in the *Intellect* software package which have only one time period and haven't got any inclusions are available to select. Selection of week days is not performed. Detailed information about creation and using of time zones is presented in the Creating and using time zones section.

g. If it is necessary to view a report as a chart, set the corresponding checkbox (**7**).
h. In the **Layout** field, select the print layout of the report: **Portrait**, **Landscape** (**8**).
i. Set the **Sum result** checkbox to display sum result by selected detections in the report (**9**).

3. To create a report click **Execute** (**10**).
4. As a result a face counter report detailed by cameras with specified parameters is displayed.



5. Example of a face counter report detailed by cameras as a chart is given in the following figure.



Note

The number of people (persons) in the report means the number of captured faces, not the number of unique visitors.

8.5.6 Creating a Face counter report (detailed by detectors)

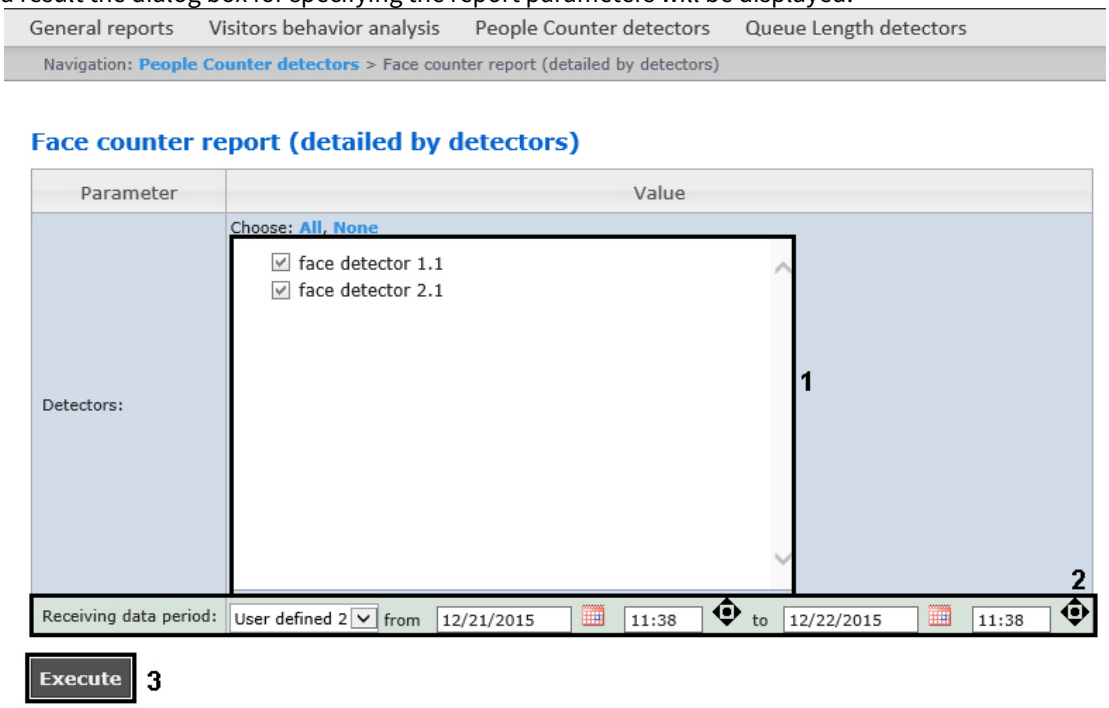
The **Face counter report (detailed by detectors)** allows getting the data about the number of captured faces (people/persons) using the data from the face detectors. The data can be presented only as a table.

Note

The **Face counter report (detailed by detectors)** is related to the **Face detector** object (it is necessary to create the corresponding object in the *Intellect* software).

To create the **Face counter report (detailed by detectors)**, do the following:

1. Select the **Face counter report (detailed by detectors)** (see Selecting a type of reports by Visitors counting detectors). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the following report parameters:
   a. In the **Detectors** field set checkboxes in those **Face detectors** objects information on which should be displayed in the report (**1**).
   b. Specify the period in the following way:
      i. From the **Receiving data period** drop-down list select the time period for which the report is to be created (**2**).
      ii. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool.

> **Note**
>
> Click the button near the corresponding field to use the **Calendar** tool.

      iii. If the **User defined 2** period is selected, enter additionaly the time of start and end periods for which the report is to be created using the button.
      iv. If another period type is selected, specifying the date of start and end periods is not needed.

3. To create a report click **Execute** (**3**).
4. As a result a face counter report detailed by detectors with specified parameters is displayed.

Face counter report (detailed by detectors)

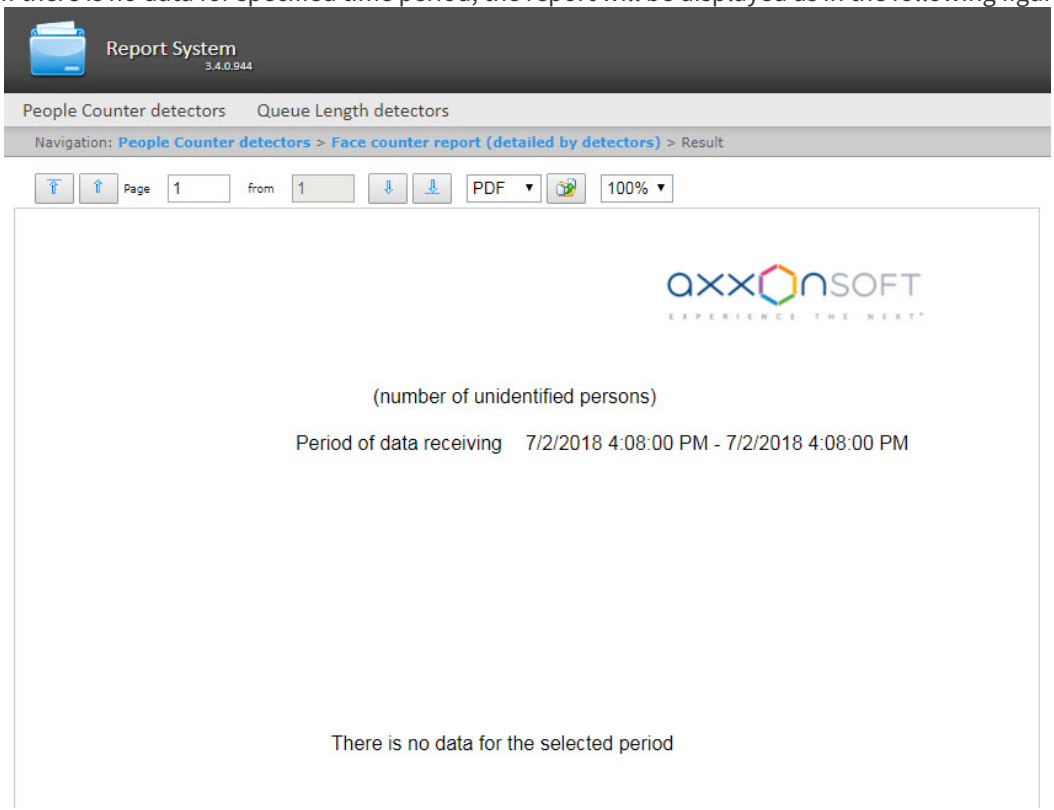
(number of unidentified persons)

Period of data receiving	12/21/2015 11:38:00 AM - 12/22/2015 11:38:00 AM	
Detection	Interval of data receiving	People
face detector 1.1	12/21/2015 11:38:00 AM - 12/22/2015 11:37:59 AM	663
face detector 2.1	12/21/2015 11:38:00 AM - 12/22/2015 11:37:59 AM	605

Note

The number of people (persons) in the report means the number of captured faces, not the number of unique visitors.

If there is no data for specified time period, the report will be displayed as in the following figure.



8.5.7 Gender analytics report

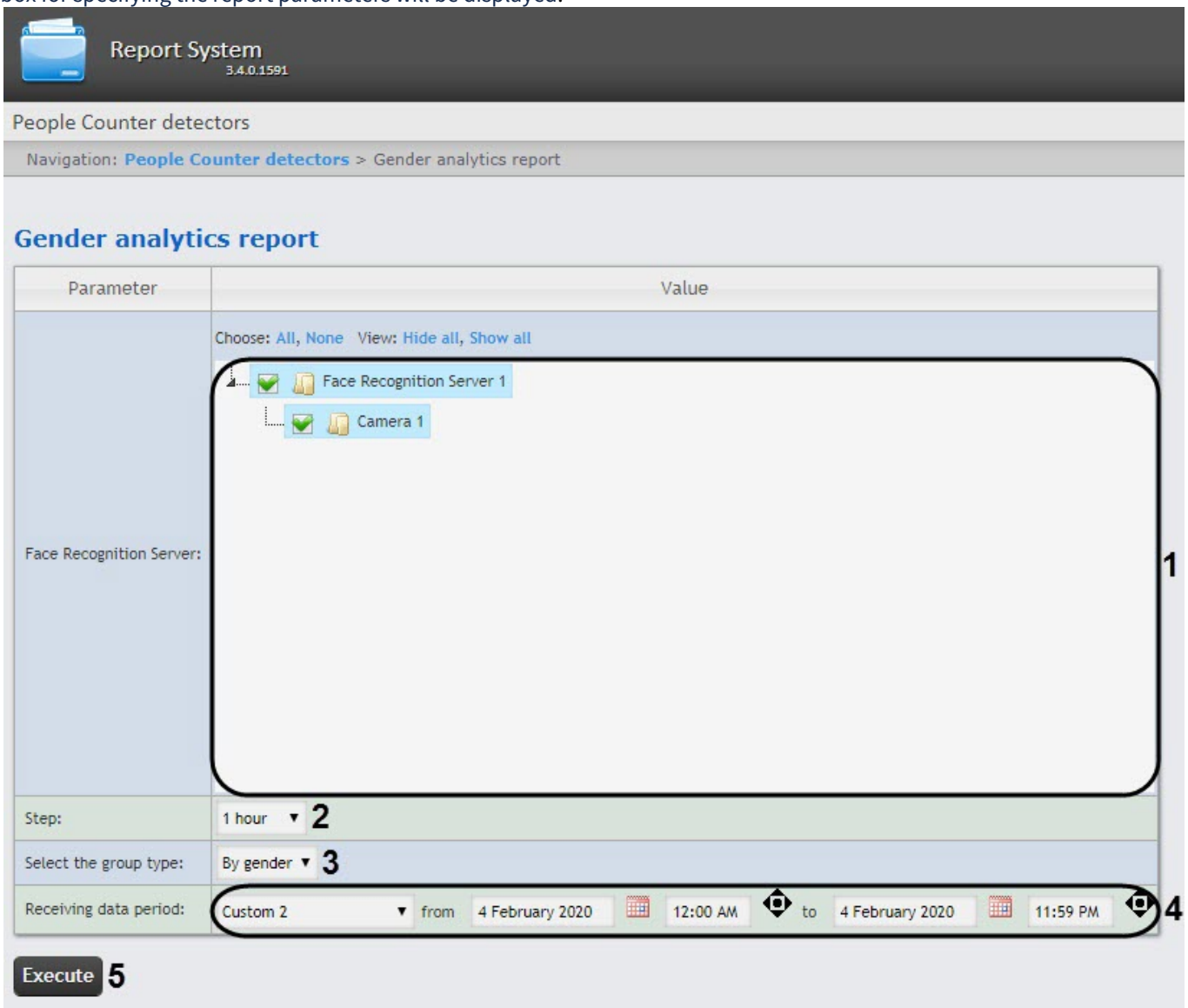
The **Gender analytics report** allows you to receive the data on gender analytics from *Face-Intellect* for a certain time period. The data is displayed in graph.

Note

The **Gender analytics report** refers to the **People Counter detectors** module and **Face Recognition Server** (it is necessary to create and configure the corresponding objects in *Intellect*).

To build the **Gender analytics report**, do the following:

1. Select the **Gender analytics report** (see Selecting a type of reports by Visitors counting detectors). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the report parameters in the following way:
   a. In the **Face Recognition Server** field (**1**), set the checkboxes for those **Face Recognition Server** and **Camera** objects, the information from which should be displayed in the report.
   b. From the **Step** drop-down list (**2**), select the time period within which the data for the report will be summarized.
   c. From the **Select the group type** drop-down list (**3**), select the type of data grouping: **By gender** or **By age**.

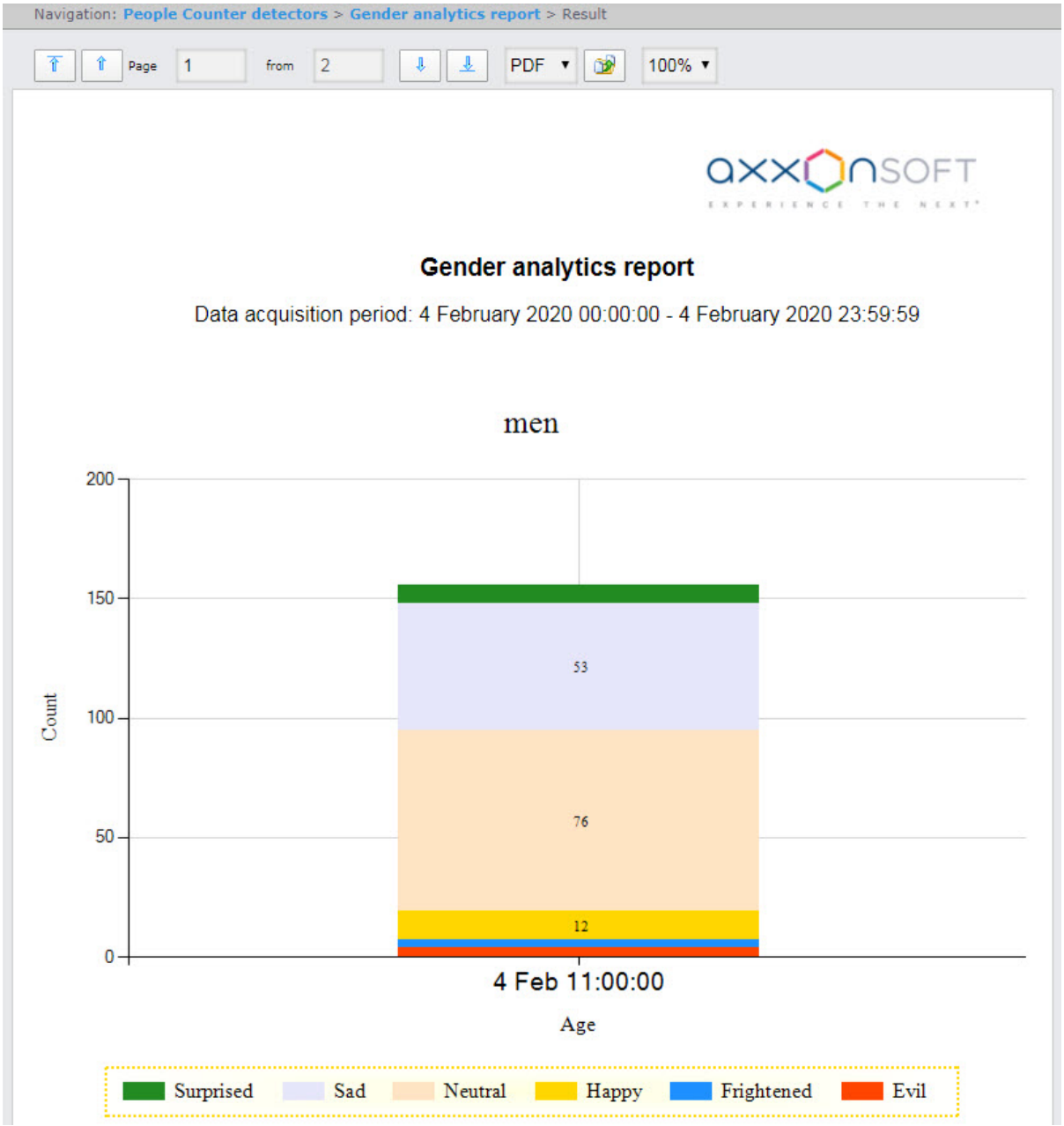
      Note

      If the **By gender** grouping type is selected, the report will also contain data on the face emotions.

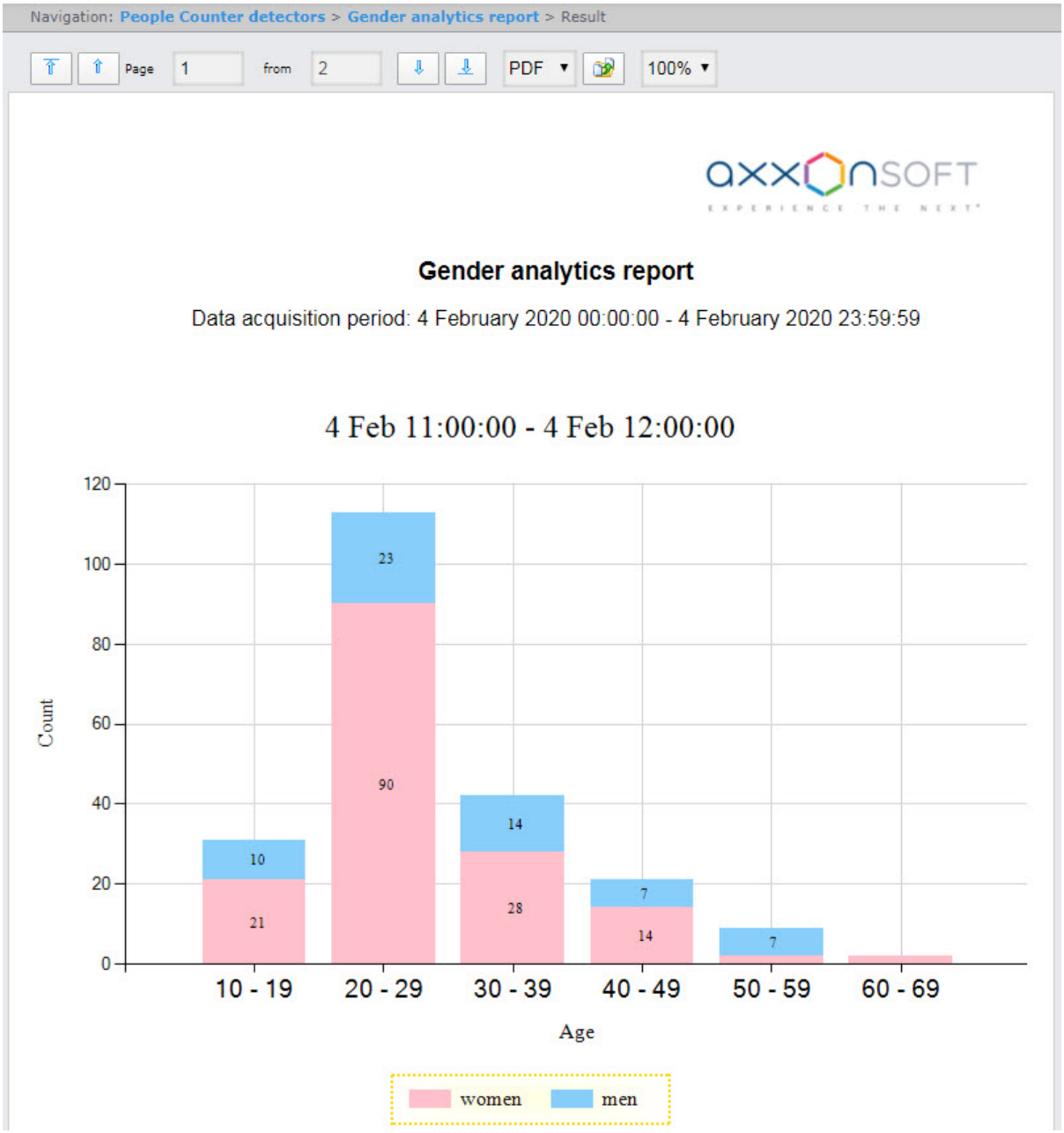
   d. From the **Receiving data period** drop-down list (**4**), select the time period for which you want to build a report.

> **Note**
>
> If the **Custom 2** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields (**5**) using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool. Enter the start and end time of the period using the button.

3. To create a report, click **Execute** (**5**). As a result, the report with specified parameters is displayed.
   The report example of the **By gender** grouping type:



The report example of the **By age** grouping type:



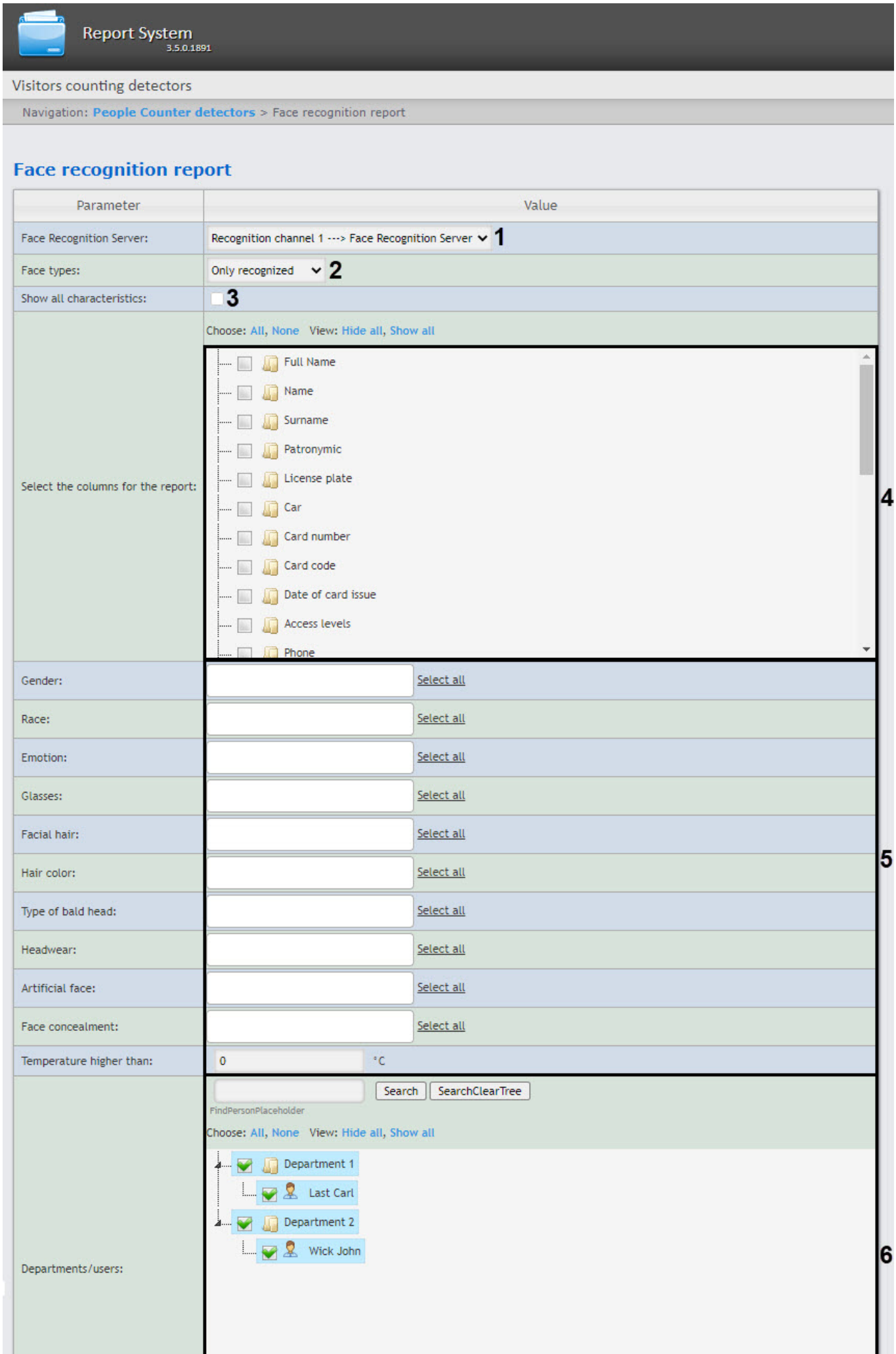
8.5.8 Face recognition report

The **Face recognition report** allows you to receive the data on recognized/unrecognized faces from *Face Intellect* for a certain time period. The data are presented in the form of a table.

> **Note**
>
> The **Face recognition report** refers to the **Face characteristics recognition channel** module and **Face Recognition Server** (it is necessary to create and configure the corresponding objects in *Intellect*).

To build the **Face recognition report**, do the following:

1. Select the **Face recognition report** (see Selecting a type of reports by Visitors counting detectors). As a result the dialog box for specifying the report parameters will be displayed.


Report System
3.5.0.1891
Visitors counting detectors
Navigation: People Counter detectors > Face recognition report
Face recognition report
Parameter
Value
Face Recognition Server:
Recognition channel 1 ---> Face Recognition Server
1
Face types:
Only recognized
2
Show all characteristics:
3
Choose: All, None View: Hide all, Show all
Select the columns for the report:
Full Name
Name
Surname
Patronymic
License plate
Car
Card number
Card code
Date of card issue
Access levels
Phone
4
Gender:
Race:
Emotion:
Glasses:
Facial hair:
Hair color:
Type of bald head:
Headwear:
Artificial face:
Face concealment:
Select all
5
Temperature higher than:
0
°C
Departments/users:
Search
SearchClearTree
FindPersonPlaceholder
Choose: All, None View: Hide all, Show all
Department 1
Last Carl
Department 2
Wick John
6

2. Set the report parameters in the following way:
    a. From the **Face Recognition Server** drop-down list (**1**), select the **Face Recognition Server** object, the information from which should be displayed in the report.
    b. From the **Face types** drop-down list (**2**), select the face types which information should be displayed in the report:
        - **All faces**;
        - **Only unrecognized**;
        - **Only recognized**.
    c. Set the **Show all characteristics** checkbox (**3**) if it is necessary for the report to contain all possible face characteristics.
    d. In the **Select the columns for the report** field (**4**), check the boxes next to the columns that should be displayed in the report. You can also change the order of the columns: to do this, use the left mouse button to move the column name up or down.

    Note

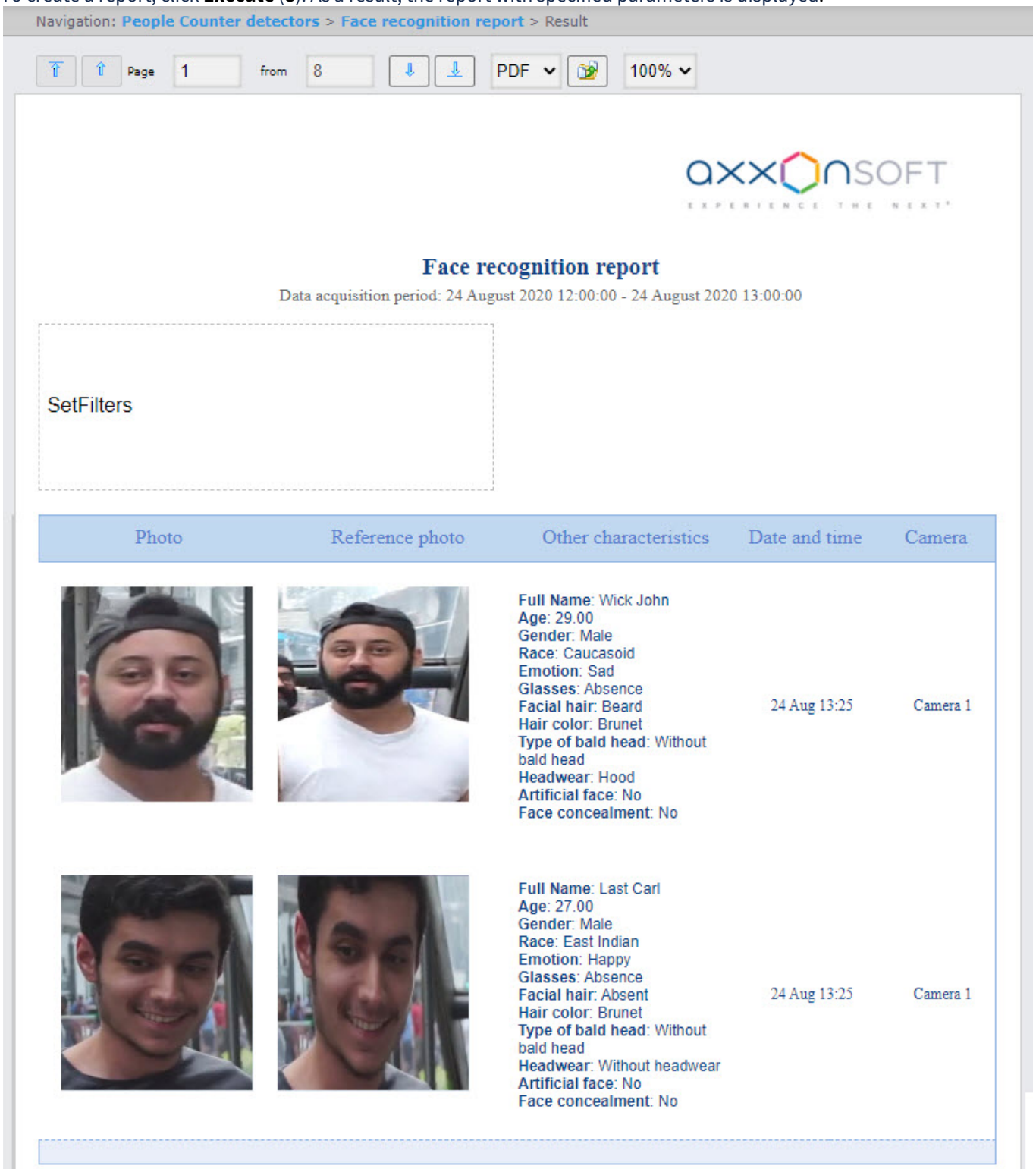
    - Column selection is not available when **Only unrecognized** face type is selected.
    - You can select up to 5 columns.

    e. If necessary, in area (**5**), set a filter by face characteristics and temperature, selecting only those face characteristics that should be displayed in the report.
    f. In the **Departments/users** field (**6**), select the departments or users, information on which should be displayed in the report. If necessary, you can use the search for a user by first/last name.
    g. In the **Period** fields (**7**) select the time period for which you want to build the report.

    Note

    - If the **Custom 2** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the  button near the corresponding field to use the **Calendar** tool. Enter the start and end time of the period using the  button.
    - The **Custom 3** period allows you to set the time interval from **Yesterday (time)** to **Today (time)** relative to the report date.

3. To create a report, click **Execute** (**8**). As a result, the report with specified parameters is displayed.



All possible fields of the report are described in the table.

Field name	Description
Photo	Photo from the camera
Reference photo	Employee photo from the *Face Intellect* database
Other characteristics	Includes the employee name and other face characteristics, if **Show all characteristics** option is selected

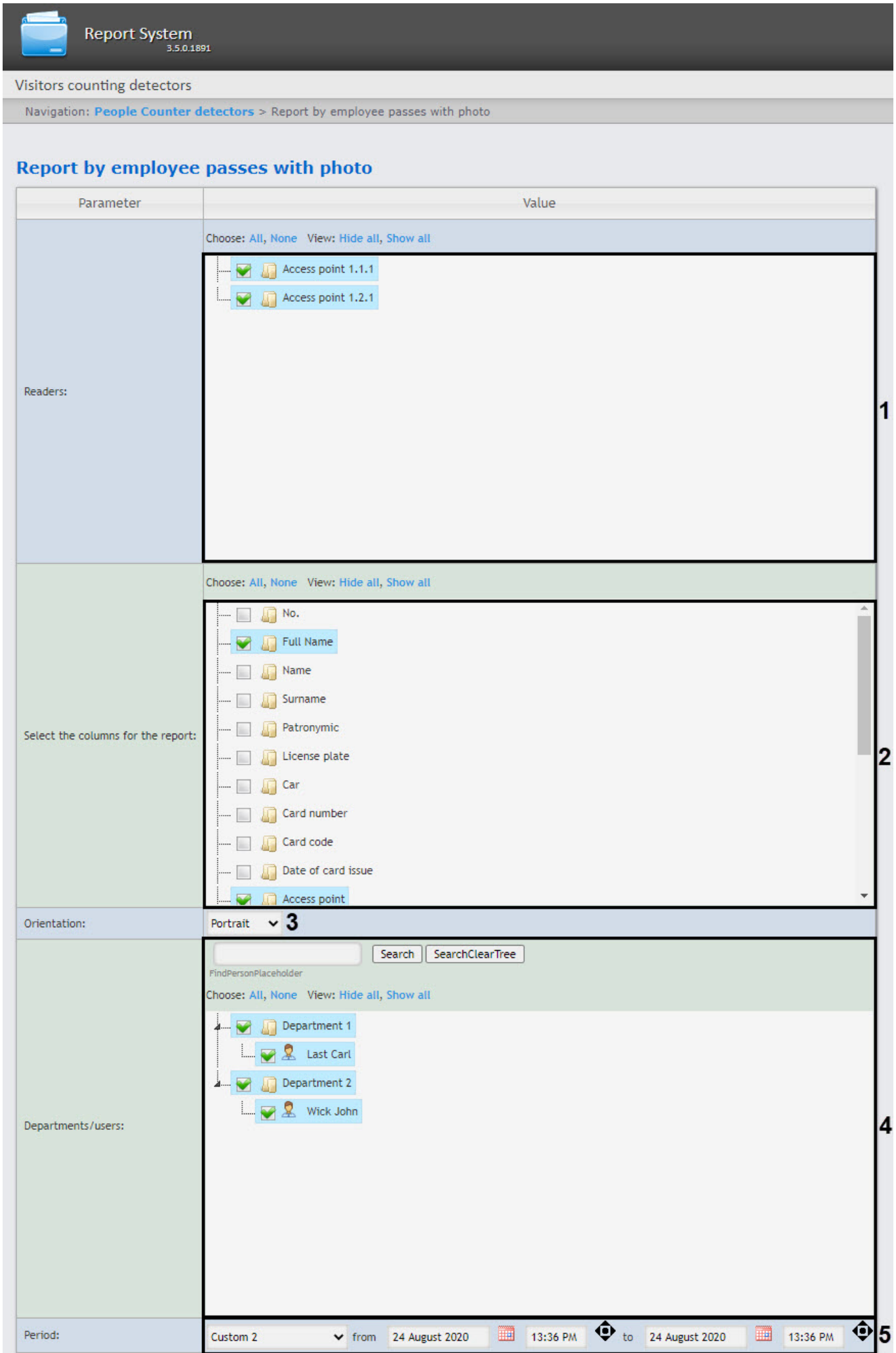
Field name	Description
Full Name	Employee full name
First name	Employee first name
Last name	Employee last name
Patronym	Employee patronymic name
LP number	Employee's vehicle license plate number
Vehicle	Employee's vehicle model
Card number	Employee's access card number
Card code	Employee's access card code
Card issue date	Employee's access card issue date
Access levels	Employee's access level
Phone	Employee's phone number
Company	The name of the parent department, if the employee's department is a subsidiary
Department	Department that the employee belongs to
Comment	Commentary
Card expiration date	Employee's access card expiration date
Card pin code	Employee's access card pin code
Gender	Gender of face
Race	Race of face
Emotion	Emotion on face
Glasses	Glasses on face
Facial hair	Facial hair
Hair color	Hair color
Type of bald head	Type of bald head
Headwear	Headwear
Artificial face	Artificial face
Face concealment	Face concealment
Temperature	Face temperature in degrees Celsius

8.5.9 Report by employee passes with photo

The **Report by employee passes with photo** displays all interactions of the selected employee with the selected readers, displaying a photo from the video archive at the time they have passed the reader. The report allows you to track the movement of the selected employee within the specified zone.

To build the **Report by employee passes with photo**, do the following:

1. Select the **Report by employee passes with photo** (see Selecting a type of reports by Visitors counting detectors). As a result the dialog box for specifying the report parameters will be displayed.


Report System
3.5.0.1891
Visitors counting detectors
Navigation: People Counter detectors > Report by employee passes with photo
Report by employee passes with photo
Parameter
Value
Readers:
Choose: All, None View: Hide all, Show all
Access point 1.1.1
Access point 1.2.1
1
Select the columns for the report:
Choose: All, None View: Hide all, Show all
No.
Full Name
Name
Surname
Patronymic
License plate
Car
Card number
Card code
Date of card issue
Access point
2
Orientation:
Portrait
3
Departments/users:
Search
SearchClearTree
FindPersonPlaceholder
Choose: All, None View: Hide all, Show all
Department 1
Last Carl
Department 2
Wick John
4
Period:
Custom 2
from
24 August 2020
13:36 PM
to
24 August 2020
13:36 PM
5

2. Set the report parameters in the following way:
   a. In the **Readers** field (**1**), check the boxes next to the access points, information on which should be displayed in the report.

      Attention!

      This field displays only those access points that have been added to any access level in the *Access Manager* module (see Creating access levels).

   b. In the **Select the columns for the report** field (**2**), check the boxes next to the columns that should be displayed in the report. You can also change the order of the columns: to do this, use the left mouse button to move the column name up or down.
   c. From the **Orientation** drop-down list (**3**) select the report orientation: **Portrait** (vertical) or **Landscape** (horizontal).

      Attention!

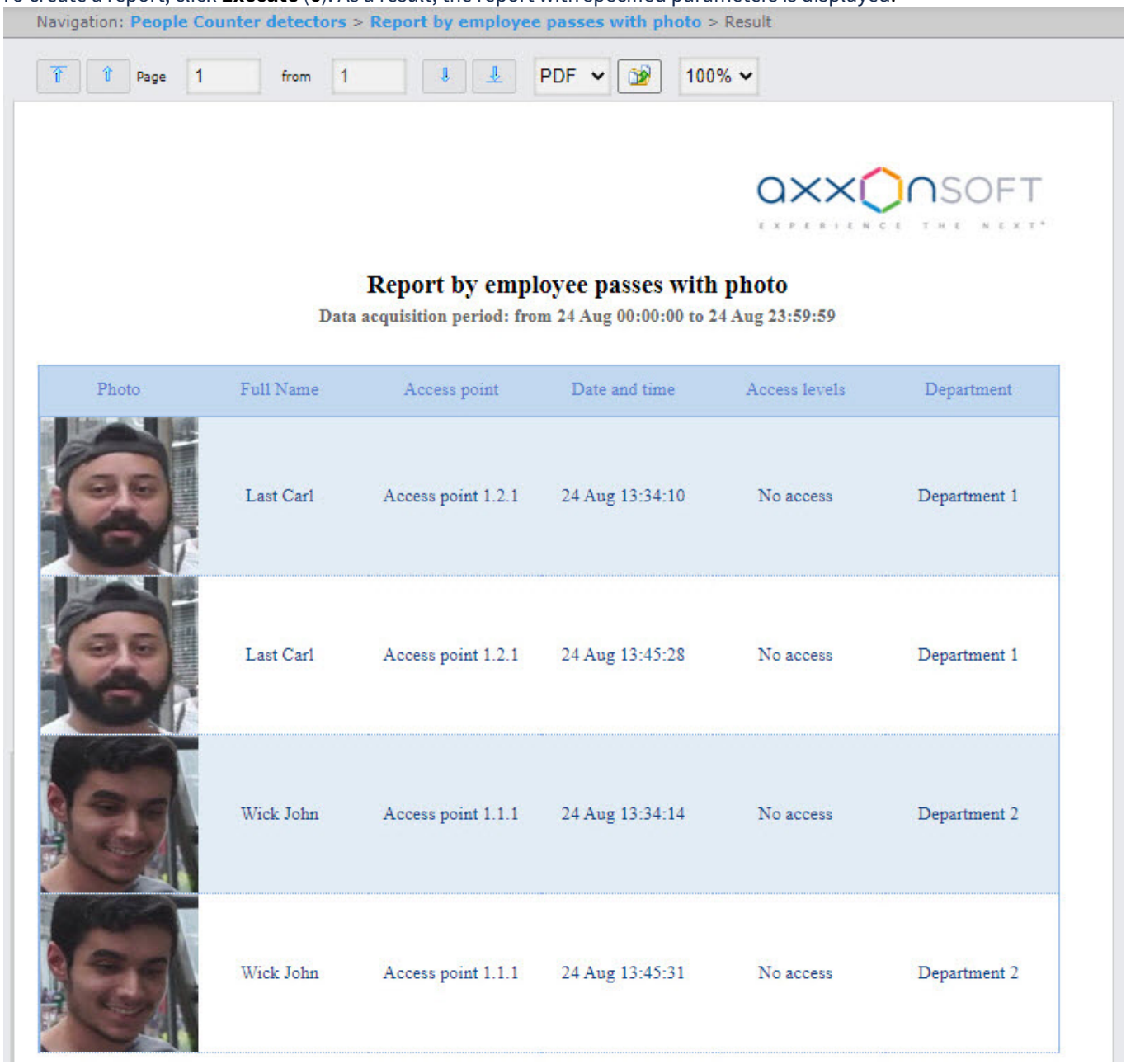
      - In **Portrait** orientation, you can select up to 5 columns.
      - In **Landscape** orientation, you can select up to 7 columns.

   d. In the **Departments/users** field (**4**), select the departments or users, information on which should be displayed in the report. If necessary, you can use the search for a user by first/last name.
   e. In the **Period** fields (**5**) select the time period for which you want to build the report.

      Note

      - If the **Custom** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the  button near the corresponding field to use the **Calendar** tool.
      - If the **Custom 2** period is selected, additionally enter the start and end time of the period for which the report is to be created using the  button.
      - The **Custom 3** period allows you to set the time interval from **Yesterday (time)** to **Today (time)** relative to the report date.

3. To create a report, click **Execute** (**6**). As a result, the report with specified parameters is displayed.



All possible fields of the report are described in the table.

Field name	Description
Photo	Photo from the camera
Number	Order number
Full Name	Employee full name
First name	Employee first name
Last name	Employee last name
Patronym	Employee patronymic name
LP number	Employee's vehicle license plate number

Field name	Description
Vehicle	Employee's vehicle model
Card number	Employee's access card number
Card code	Employee's access card code
Card issue date	Employee's access card issue date
Access point	Access point through which the employee has passed
Date	Date of the passage
Date and time	Date and time of the passage
Time	Time of the passage
Access levels	Employee's access level
Phone	Employee's phone number
Company	The name of the parent department, if the employee's department is a subsidiary
Department	Department that the employee belongs to
Comment	Commentary
Card expiration date	Employee's access card expiration date
Card pin code	Employee's access card pin code

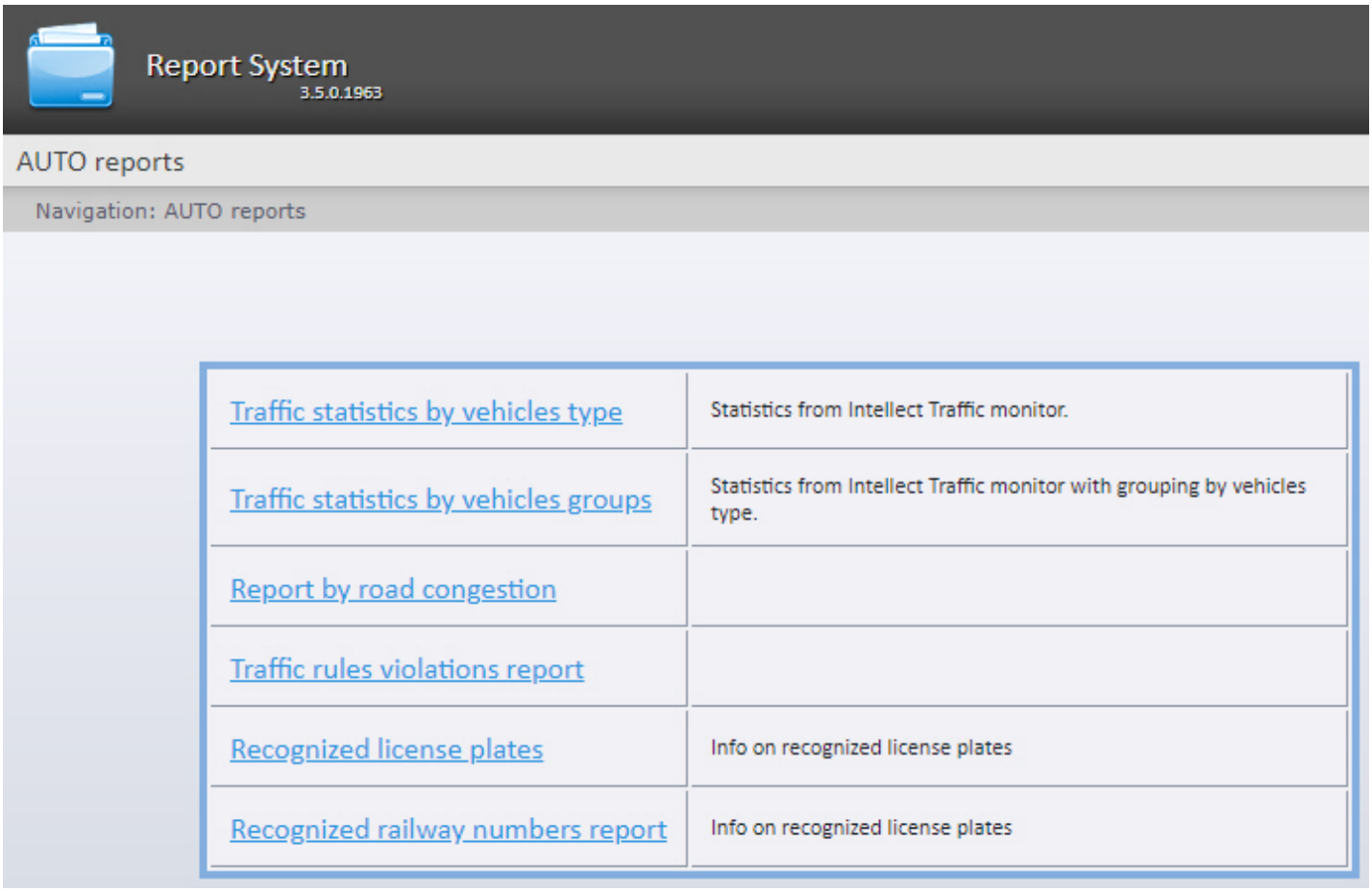
8.6 Working with AUTO reports

Working with AUTO reports consists of selecting the necessary report type and creating a report. You can find the description of each report type on the corresponding page.

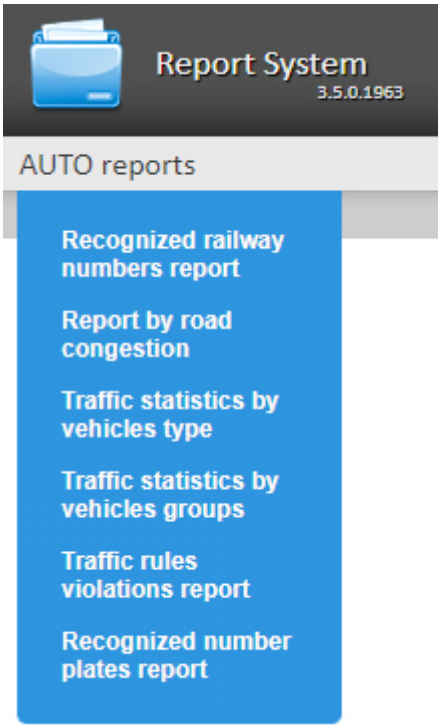
8.6.1 Selecting the type of Auto report

To select the type of Auto report click **AUTO reports** link in the report menu of *Intellect Web Report System.*

As a result the list of available Auto reports is displayed. For switching to the required report click the corresponding link.



List of links for switching to Auto reports is also available when hovering over the **AUTO reports** link in the report menu.



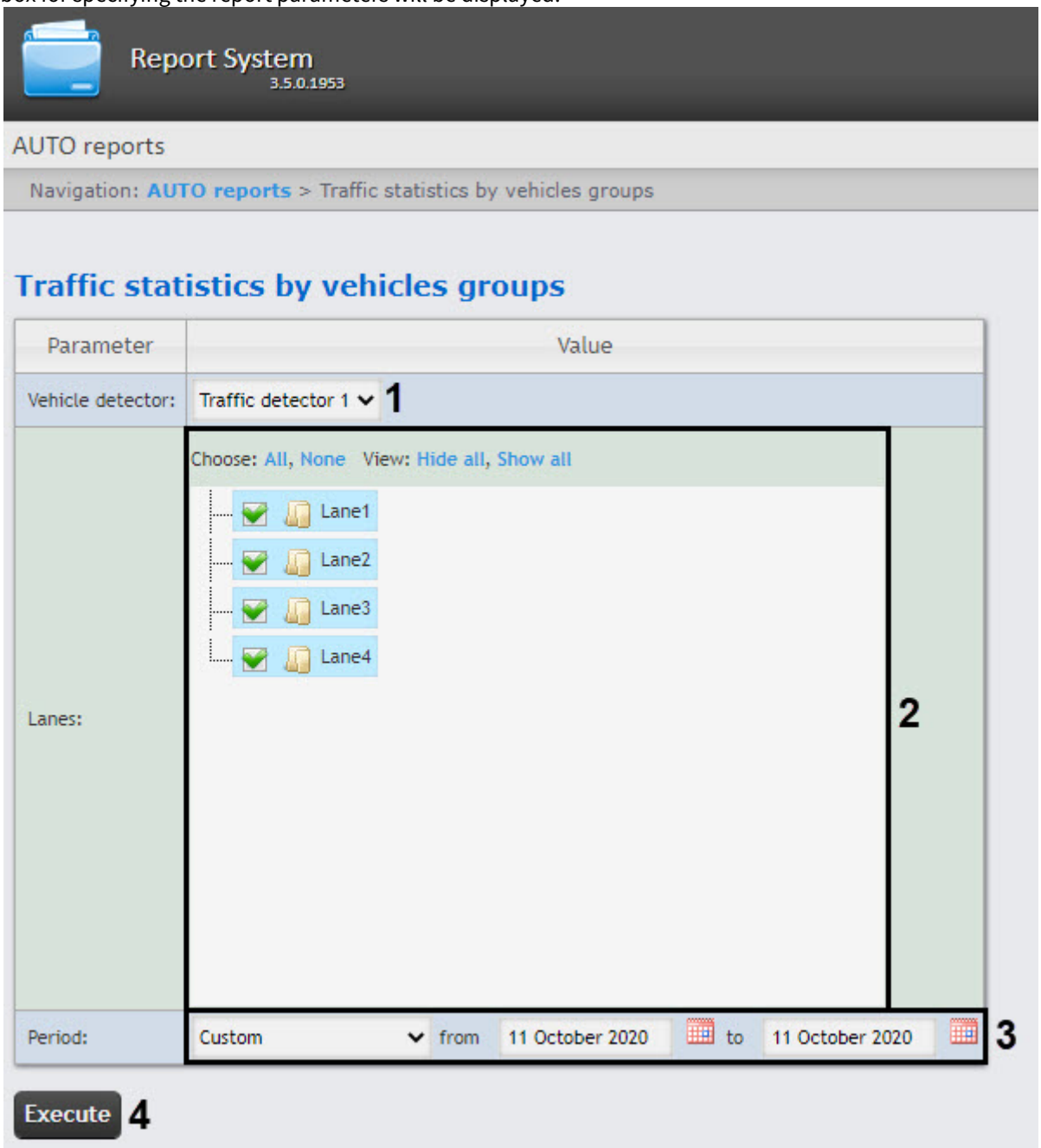
8.6.2 Traffic statistics by vehicles groups

The **Traffic statistics by vehicles groups** report allows getting statistical data for each group of vehicles. Vehicles group is a set of several vehicles types.

> **Note**
>
> The **Traffic statistics by vehicles groups** report is related to the **Traffic detector** module (it is necessary to create the corresponding object in the *Intellect* software).

To create the **Traffic statistics by vehicles groups** report, do the following:

1. Select the **Traffic statistics by vehicles groups** report type (see Selecting the type of Auto report). As a result the dialog box for specifying the report parameters will be displayed.

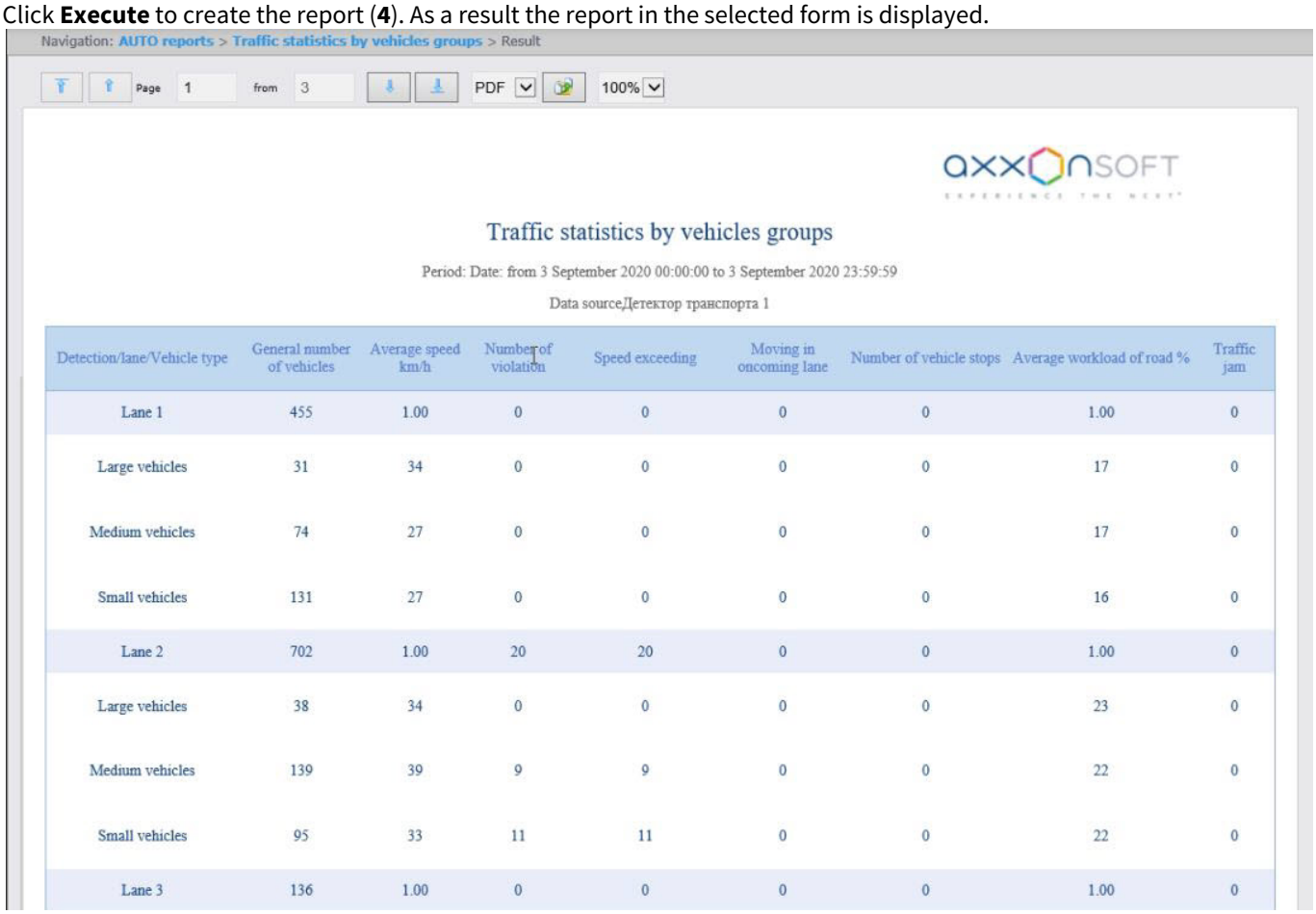


2. From the **Vehicle detector** drop-down list (**1**), select the **Traffic detector** object, which data should be used in the report.
3. In the **Lanes** list (**2**), set the checkboxes next to those lanes, which data should be included in the report.

4. In the **Period** drop-down list (**3**), select the time period for which the report is to be created.

> **Note**
>
> If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button next to the corresponding field to use the **Calendar** tool.

5. Click **Execute** to create the report (**4**). As a result the report in the selected form is displayed.



Detection/lane/Vehicle type	General number of vehicles	Average speed km/h	Number of violation	Speed exceeding	Moving in oncoming lane	Number of vehicle stops	Average workload of road %	Traffic jam
Lane 1	455	1.00	0	0	0	0	1.00	0
Large vehicles	31	34	0	0	0	0	17	0
Medium vehicles	74	27	0	0	0	0	17	0
Small vehicles	131	27	0	0	0	0	16	0
Lane 2	702	1.00	20	20	0	0	1.00	0
Large vehicles	38	34	0	0	0	0	23	0
Medium vehicles	139	39	9	9	0	0	22	0
Small vehicles	95	33	11	11	0	0	22	0
Lane 3	136	1.00	0	0	0	0	1.00	0

This report contains the following information for each selected lane and vehicle type:

Column name	Description
General number of vehicles	Total number of recorded vehicles
Average speed, km/h	Average vehicle speed in km/h
Number of violation	The total number of recorded traffic violations
Speed exceeding	Number of recorded speeding
Moving in oncoming lane	The number of recorded vehicles moving towards the main traffic
Number of vehicle stops	The number of recorded stops of the vehicle
Average workload of road, %	Average road congestion in percent
Traffic jam	The total number of vehicles that caused the congestion

This report can be saved to a file in the following formats:

- PDF;
- Excel;
- Csv.

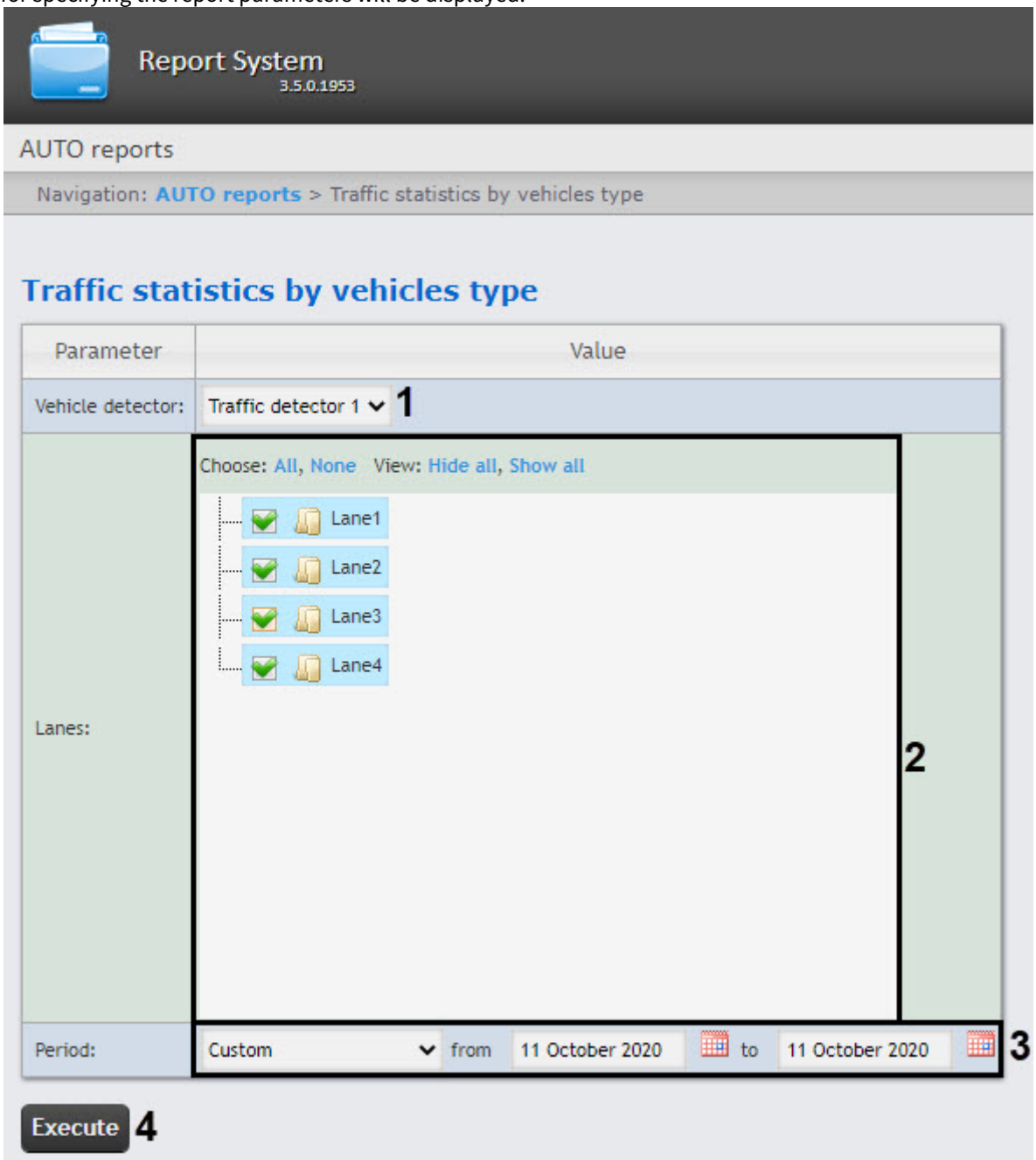
8.6.3 Traffic statistics by vehicles type

The **Traffic statistics by vehicles type** report allows getting statistical data for each type of vehicles. Vehicle type is a set of vehicles the sizes of which are within the certain intervals.

> **Note**
>
> The **Traffic statistics by vehicles type** report is related to the **Traffic detector** module (it is necessary to create the corresponding object in the *Intellect* software).

To create the **Traffic statistics by vehicles type** report, do the following:

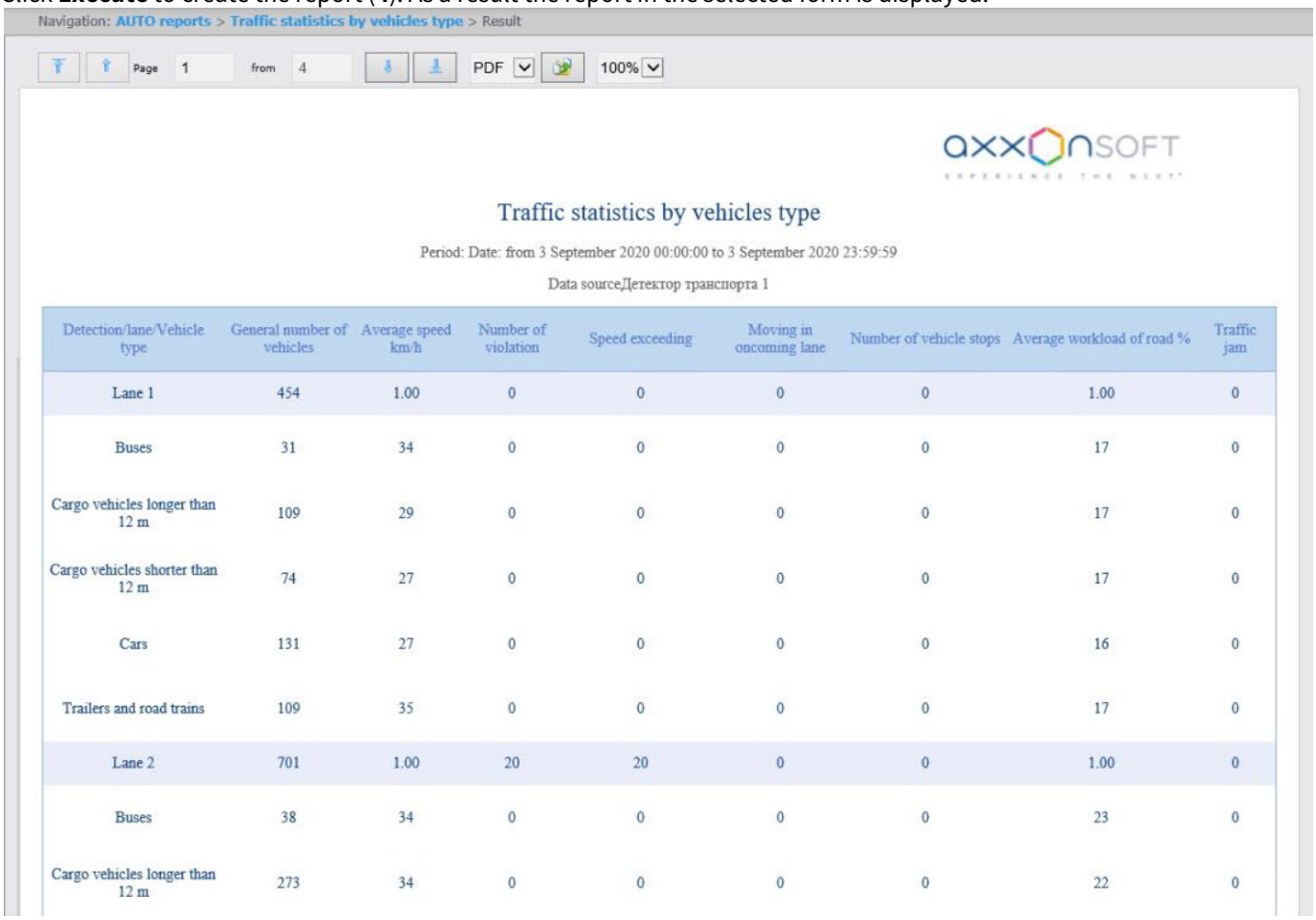
1. Select the **Traffic statistics by vehicles type** report type (see Selecting the type of Auto report). As a result the dialog box for specifying the report parameters will be displayed.



2. From the **Vehicle detector** drop-down list (**1**) select the **Traffic detector** object, which data should be used in the report.
3. In the **Lanes** list (**2**) set the checkboxes next to those lanes, which data should be included in the report.
4. In the **Period** drop-down list (**3**) select the time period for which the report is to be created.

> **Note**
>
> If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button next to the corresponding field to use the **Calendar** tool.

5. Click **Execute** to create the report (**4**). As a result the report in the selected form is displayed.



Detection/lane/Vehicle type	General number of vehicles	Average speed km/h	Number of violation	Speed exceeding	Moving in oncoming lane	Number of vehicle stops	Average workload of road %	Traffic jam
Lane 1	454	1.00	0	0	0	0	1.00	0
Buses	31	34	0	0	0	0	17	0
Cargo vehicles longer than 12 m	109	29	0	0	0	0	17	0
Cargo vehicles shorter than 12 m	74	27	0	0	0	0	17	0
Cars	131	27	0	0	0	0	16	0
Trailers and road trains	109	35	0	0	0	0	17	0
Lane 2	701	1.00	20	20	0	0	1.00	0
Buses	38	34	0	0	0	0	23	0
Cargo vehicles longer than 12 m	273	34	0	0	0	0	22	0

This report contains the following information for each selected lane and vehicle type:

Column name	Description
General number of vehicles	Total number of recorded vehicles
Average speed, km/h	Average vehicle speed in km/h
Number of violation	The total number of recorded traffic violations
Speed exceeding	Number of recorded speeding
Moving in oncoming lane	The number of recorded vehicles moving towards the main traffic
Number of vehicle stops	The number of recorded stops of the vehicle
Average workload of road, %	Average road congestion in percent
Traffic jam	The total number of vehicles that caused the congestion

This report can be saved to a file in the following formats:

- PDF;
- Excel;
- Csv.

8.6.4 Recognized number plates report

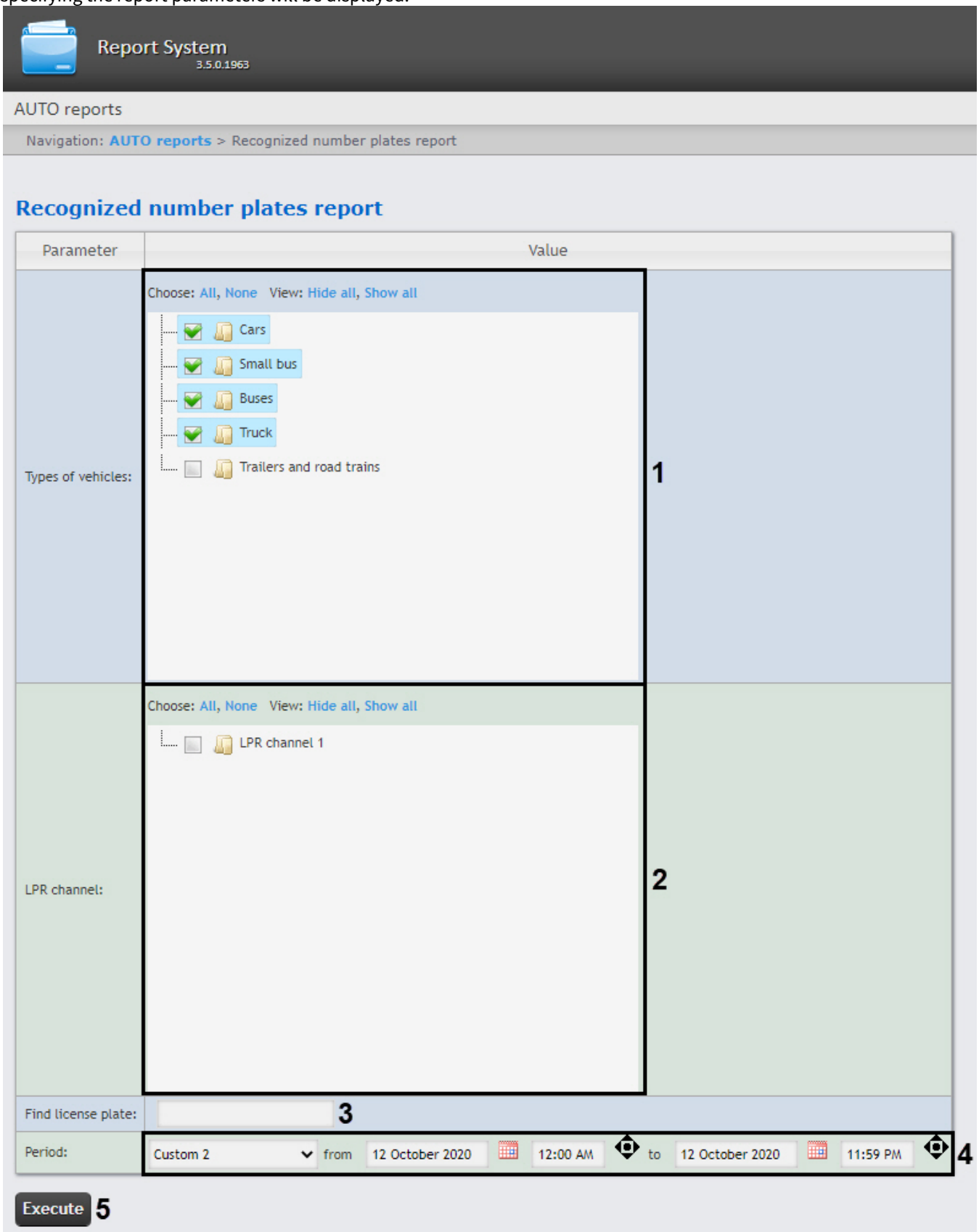
The **Recognized number plates report** allows getting data about the license plates recognized within a specified time period.

Note

The **Recognized number plates report** is related to the **LPR channel** system object. To obtain the information about vehicle types, use the **RoadAR vendor and model recognizer** module or the **Vehicle type recognition module** (it is necessary to create and configure the corresponding objects in *Intellect*).

To create the **Recognized number plates report**, do the following:

1. Select the **Recognized number plates report** type (see Selecting the type of Auto report). As a result the dialog box for specifying the report parameters will be displayed.



2. Specify the report parameters in the following way:

a. From the **Type of vehicles** list (**1**), select the required vehicle types, the data for which should be included in the report.
b. In the **LPR channel** field (**2**), set the check boxes for the license plate readers according to which the report will be built.
c. In the **Find license plate** field (**3**), you can specify a certain LP number by which all recognition events will be searched. Otherwise, the report will be built by all LP numbers recognized at the specified time interval.
d. From the **Period** drop-down list (**4**), select the time interval for which the report should be built.

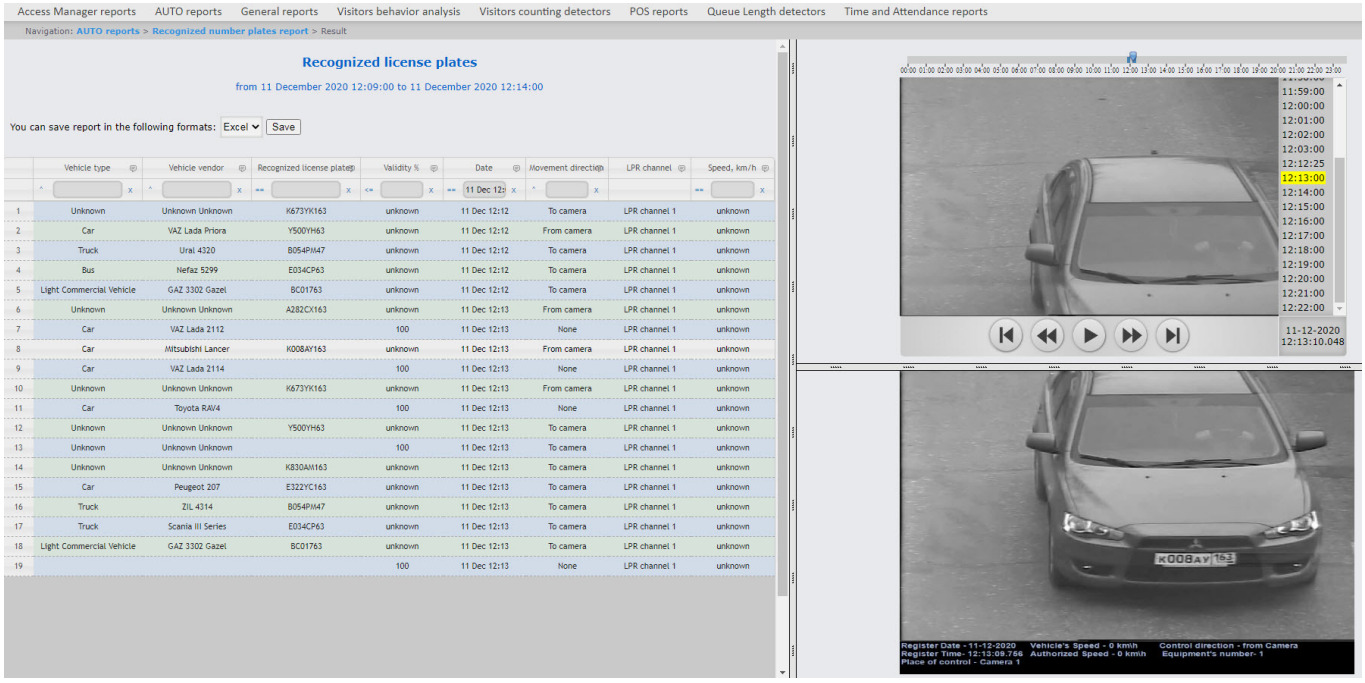
> **Note**
>
> If the **Custom** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.

3. Click **Execute** (**5**) to run the report. As a result the report in the selected form is displayed.

> **Attention!**
>
> If the recognized LP images and the vehicle frames are stored in a folder on a disk, then to display the screenshots from the camera, it is necessary to configure the storage source for license plates and frames (see Configuring the storage source for Recognized number plates report and Recognized railway numbers report).

4. The report table will contain the vehicle type, vehicle vendor, recognized LP number, recognition accuracy (validity %), date, direction of movement, recognizer, speed (km/h). When you click on a row in the table, a screenshot from the camera will be displayed (in the lower right corner of the report) and, if there is access to the video archive, the video will be played (in the upper right corner of the report).

> **Note**
>
> Working with this table is described in the Working with the generated Recognized number plates report and Recognized railway numbers report section.



To save the report to a file, select the appropriate report format and click the **Save** button.

> **Note**
>
> You can export up to 50 records in PDF format at a time.

8.6.5 Recognized railway numbers report

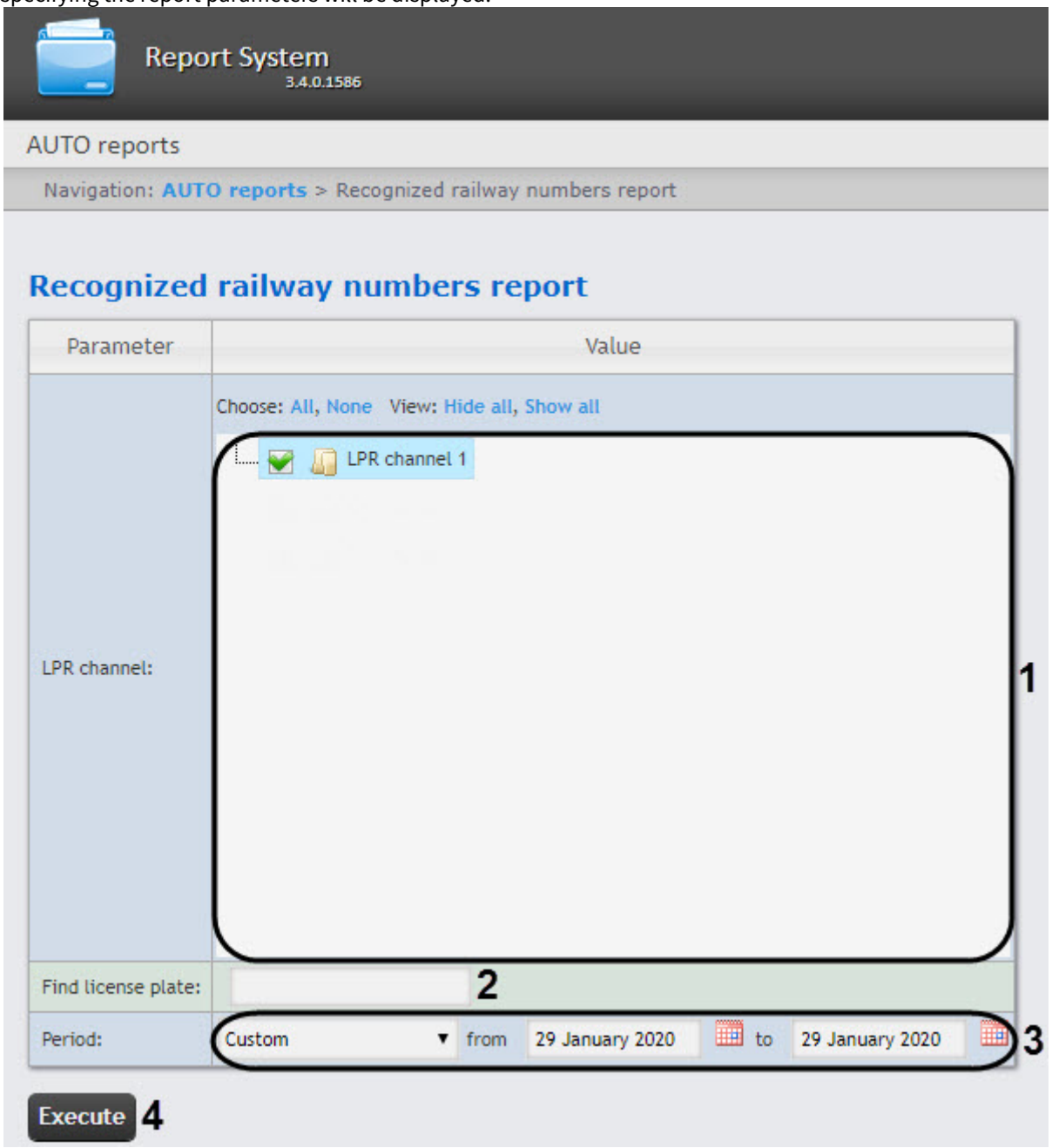
> **Note**
>
> To access the **Recognized railway numbers report**, it is necessary to activate it (see Configuring the Recognized railway numbers report).

The **Recognized railway numbers report** allows getting data about the railway numbers recognized within a specified time period.

> **Note**
>
> The **Recognized railway numbers report** is related to the **LPR channel** module (it is necessary to create and configure the corresponding object in *Intellect*).

To create the **Recognized railway numbers report**, do the following:

1. Select the **Recognized railway numbers report** type (see Selecting the type of Auto report). As a result the dialog box for specifying the report parameters will be displayed.



2. Specify the report parameters in the following way:
   a. In the **LPR channel** field (**1**), set the check boxes for the necessary LPR channels according to which the report will be built.
   b. In the **Find license plate** field (**2**), you can specify a certain number by which all recognition events will be searched. Otherwise, the report will be built by all numbers recognized at the specified time interval.
   c. From the **Period** drop-down list (**3**), select the time interval for which the report should be built.

> **Note**
>
> If the **Custom** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.

3. Click **Execute** (**4**) to run the report. As a result the report in the selected form is displayed.

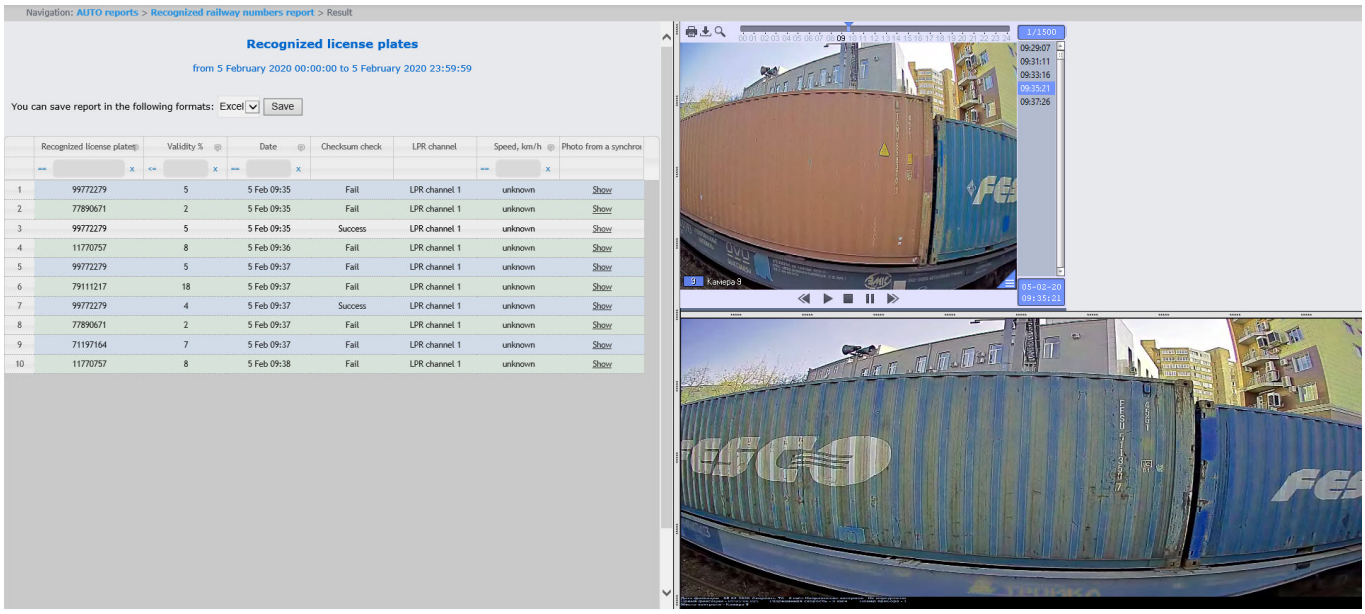
Attention!

If the recognized railway number images and frames are stored in a folder on a disk, then to display the screenshots from the camera, it is necessary to configure the storage source for number plates and frames (see Configuring the storage source for Recognized number plates report and Recognized railway numbers report).

The report table will contain railway numbers, the accuracy of number recognition, date, checksum check, recognizer, railway speed and photos from the linked camera. When you click on a row in the table, a screenshot from the camera will be displayed (in the lower right corner of the report) and, if there is access to the video archive, the video will be played (in the upper right corner of the report).

Note

Working with this table is described in the Working with the generated Recognized number plates report and Recognized railway numbers report section.

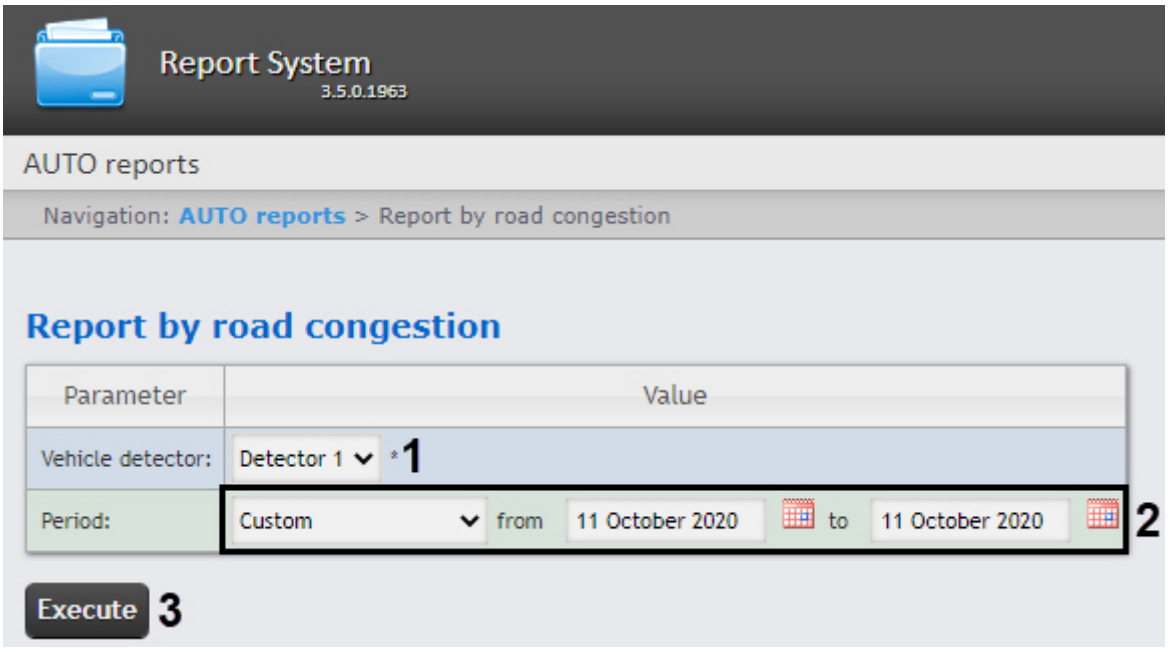


To save the report to a file, select the appropriate report format and click the **Save** button.

Attention!

This report cannot be generated automatically.

8.6.6 Report by road congestion



8.6.7 Working with the generated Recognized number plates report and Recognized railway numbers report

> **Note**
>
> All actions are performed in the already built **Recognized number plates report** (see Recognized number plates report) and **Recognized railway numbers report** (see Recognized railway numbers report).

8.6.7.1 Filter and sort the license plate numbers

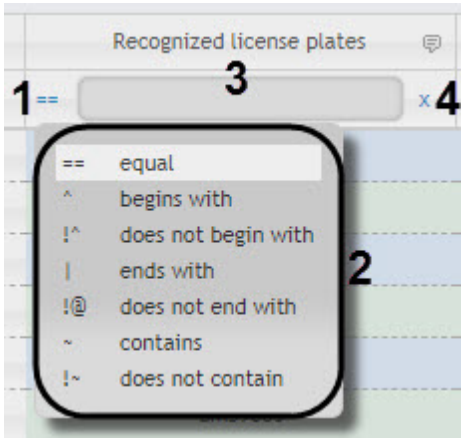
On this page:

- Filter the numbers
- Sort the numbers

8.6.7.1.1 Filter the numbers

Filter the numbers as follows:

1. In the column the data in which you want to filter, click on the icon (**1**) and from the drop-down list (**2**) select the filtering condition.



Note

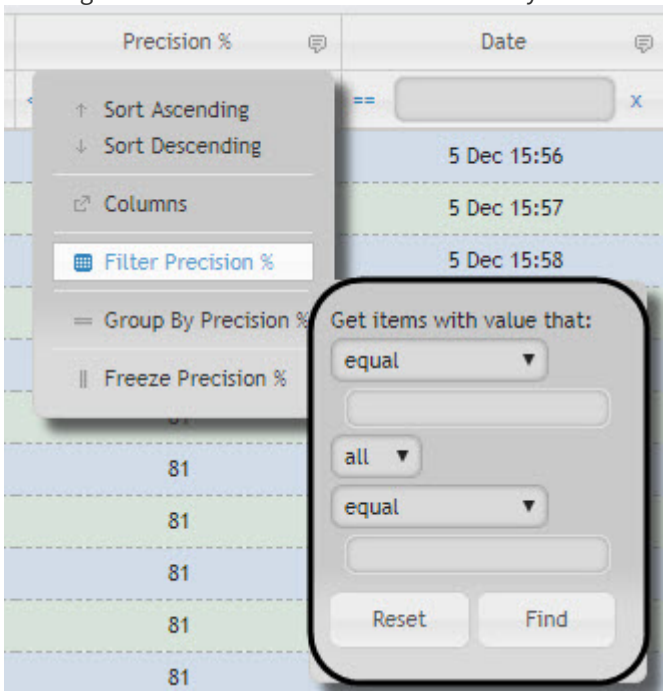
- The list of filtering conditions (**2**) may differ depending on the selected column.
- To be able to filter numbers using the Arabic or Persian alphabet and numbers, it is necessary to configure the corresponding settings (see Configuring numbers filtering for Recognized number plates report and Recognized railway numbers report).

2. In the field (**3**), enter the required filter value.
3. As a result, the list of numbers will be automatically filtered according to the specified filter.

Note

To reset the filter, click the button (**4**).

4. Filtering is also available in the submenu when you click the button next to the names of some columns.



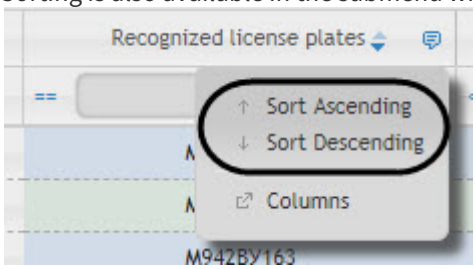
8.6.7.1.2 Sort the numbers

Sort the numbers as follows:

1. Left-click on the name of the column the data in which you want to sort. As a result, the list of numbers will be automatically sorted. An icon for the current sorting condition will be displayed next to the column name:

- - Descending sorting.
- - Ascending sorting.

2. Sorting is also available in the submenu when you click the button next to the names of some columns.



8.6.7.2 Customize, group, and freeze the columns

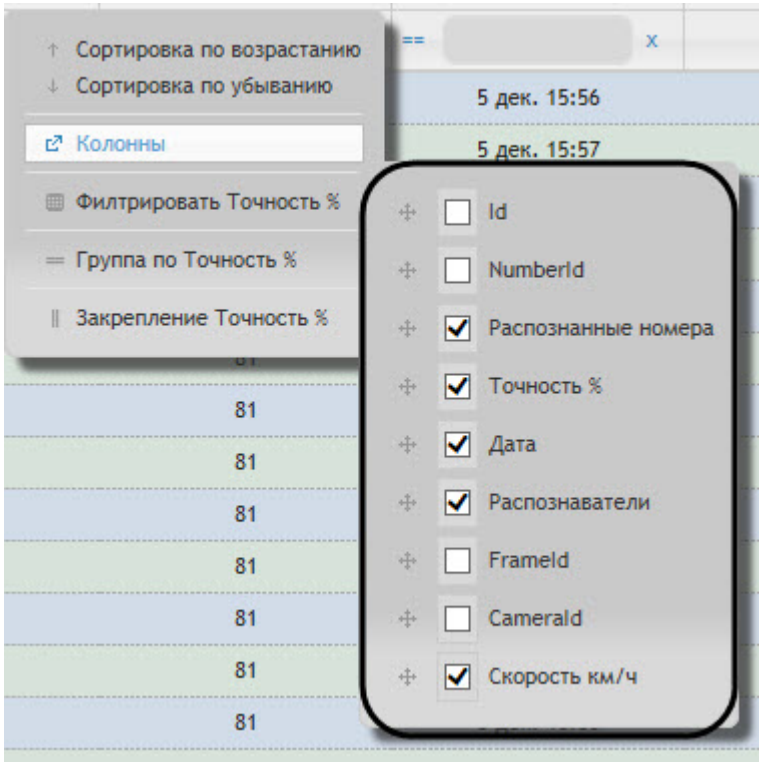
On this page:

- Customize the columns
- Group the columns
- Freeze the columns

8.6.7.2.1 Customize the columns

Customize the columns as follows:

1. Click the button next to the name of some columns.



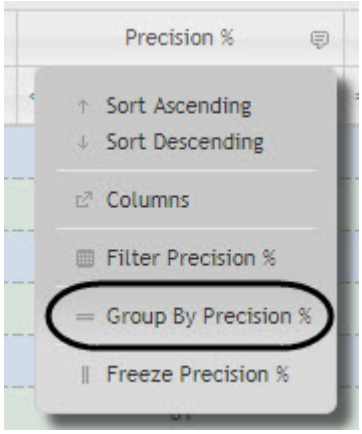
2. In the **Columns** submenu, select the necessary columns that will be displayed in the generated report.

> **Note**
>
> You can also set the order of the columns by moving the column names higher or lower in the list.

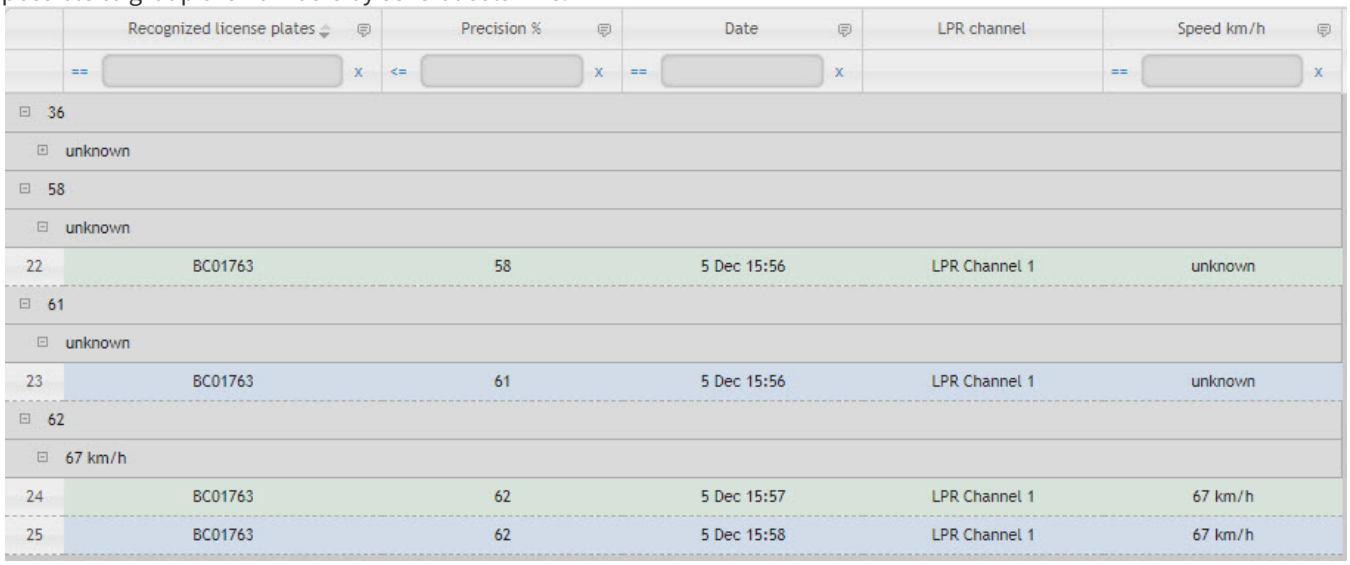
8.6.7.2.2 Group the columns

Group the columns as follows:

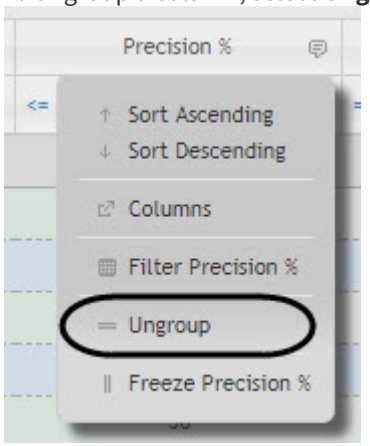
1. Click the button next to the name of some columns.



2. Select the **Group By "Column Name"** item. As a result, the numbers will be grouped by the specified column. It is possible to group the numbers by several columns.



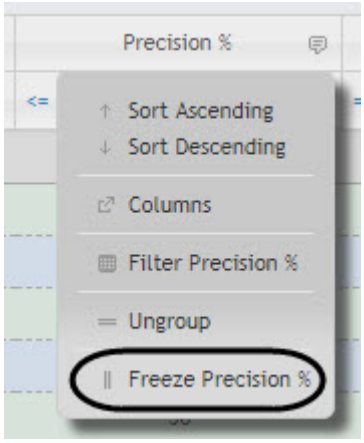
3. To ungroup a column, select **Ungroup**.



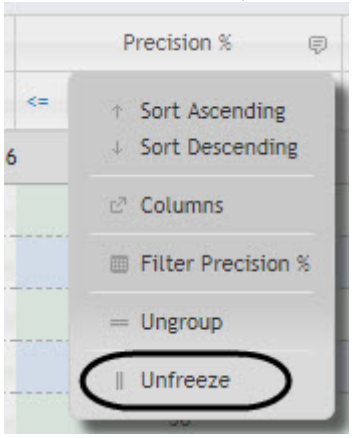
8.6.7.2.3 Freeze the columns

Freeze the columns as follows:

1. Click the button next to the name of some columns.



2. Select the **Freeze "Column Name"** item. As a result, the frozen column will move to the leftmost position and this column cannot be hidden.
3. To unfreeze a column, select **Unfreeze**.



8.7 Working with General reports

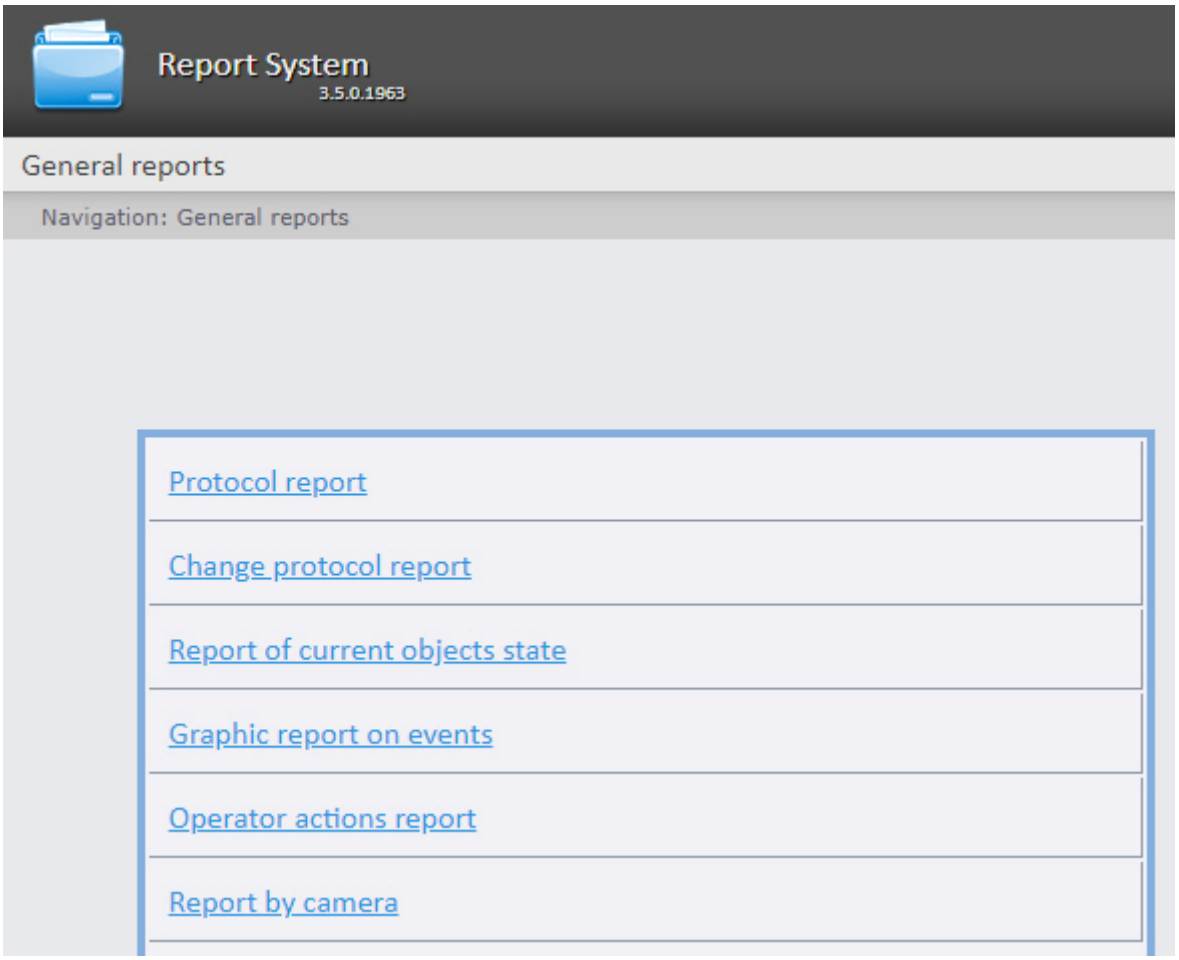
8.7.1 Selecting the type of general report

It is possible to create the following general reports:

1. Protocol report. This report allows getting information on events presence from specified objects.
2. Change protocol report. This report allows getting information on performed object changes.
3. Report of current objects state. This report allows getting information about current status of objects.
4. Graphic report on events. This report allows getting information about the specified objects events in the form of a chart.
5. Operator actions report. This report allows getting information on events presence from specified objects by selected operators.

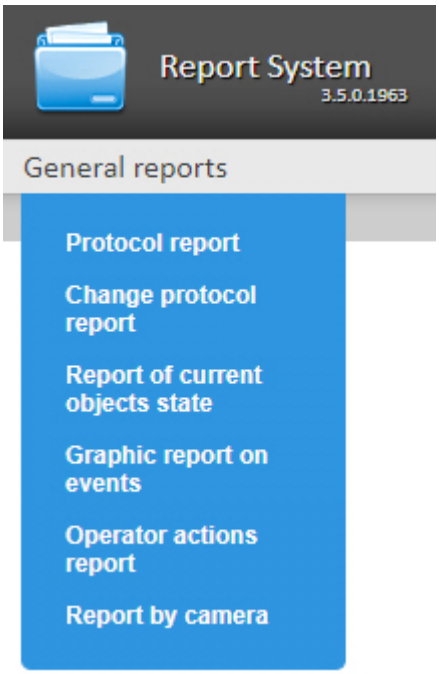
To select a type of general report click **General reports** link in the report menu of *Intellect Web Report System.*

As a result the list of available general reports is displayed. For switching to the required report click the corresponding link.



Note.

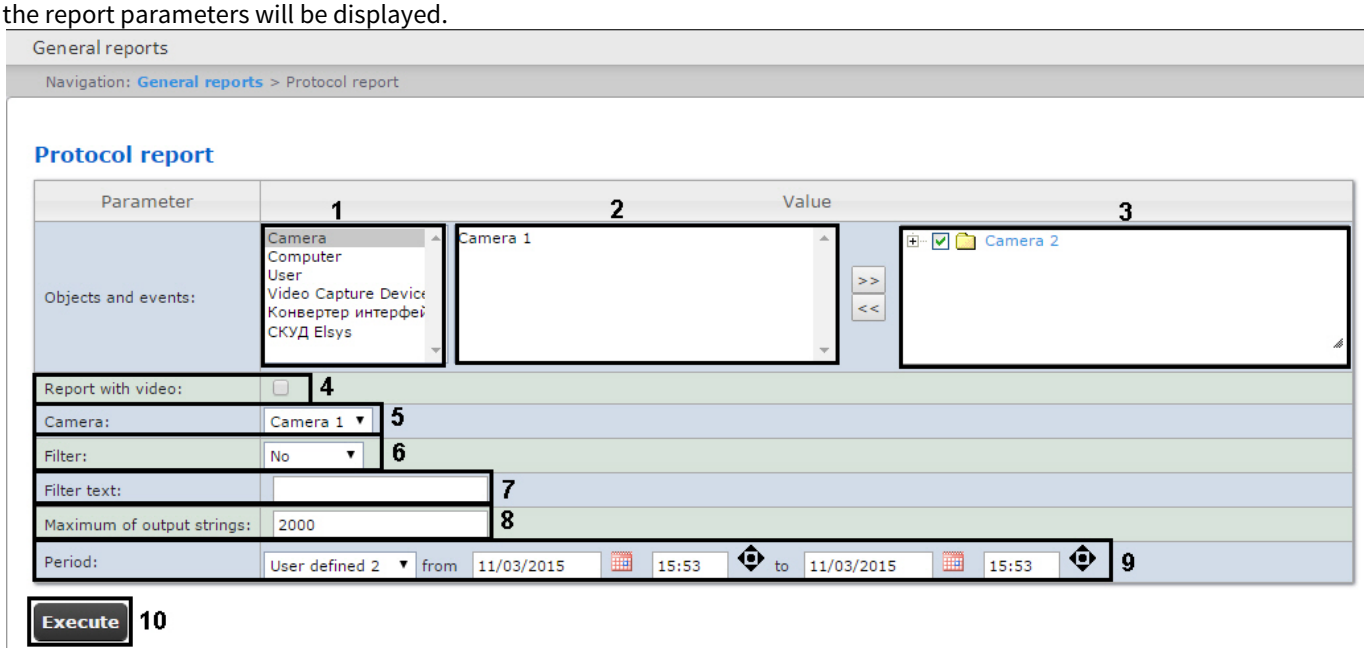
List of links for switching to General reports is available when hovering over the **General reports** link in the report menu.



8.7.2 Protocol report

In order to create a protocol report, do the following:

1. Select the **Protocol report** type (see Selecting a type of general report section). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the following report parameters:
   a. Select the necessary object type from the objects and events list (**1**).

      > **Note**
      >
      > It is possible to select the view of the list of objects and events (see Selecting the view of the list of objects and events for the Protocol report).

   b. Select objects on which the report is to be created from the objects list of corresponding type (**2**).
   c. Click the >> button to display events corresponding to the selected object.
   d. Set the checkboxes in those events of the selected object on which information is to be displayed in the report (**3**).
   e. Set the **Report with video:** checkbox to create the report which will be contain video image from the camera (**4**).
   f. From the **Camera:** drop-down list select the camera from which the video will be displayed in the report (**5**).
   g. From the **Filter:** drop-down list select the rule by which the filter will be applied when generating the report (**6**).
      - **No** - the filter will not be applied.
      - **Equals** - the report will be generated only for those events where the Information column content is strictly equal to the filter value specified in the **Filter text** field (**7**).
      - **Contains** - the report will be generated only for those events where the Information column contains the filter value specified in the **Filter text** field (**7**).

      > **Note**
      >
      > The report is filtered only by the Information column (see the report fields description in the table below).

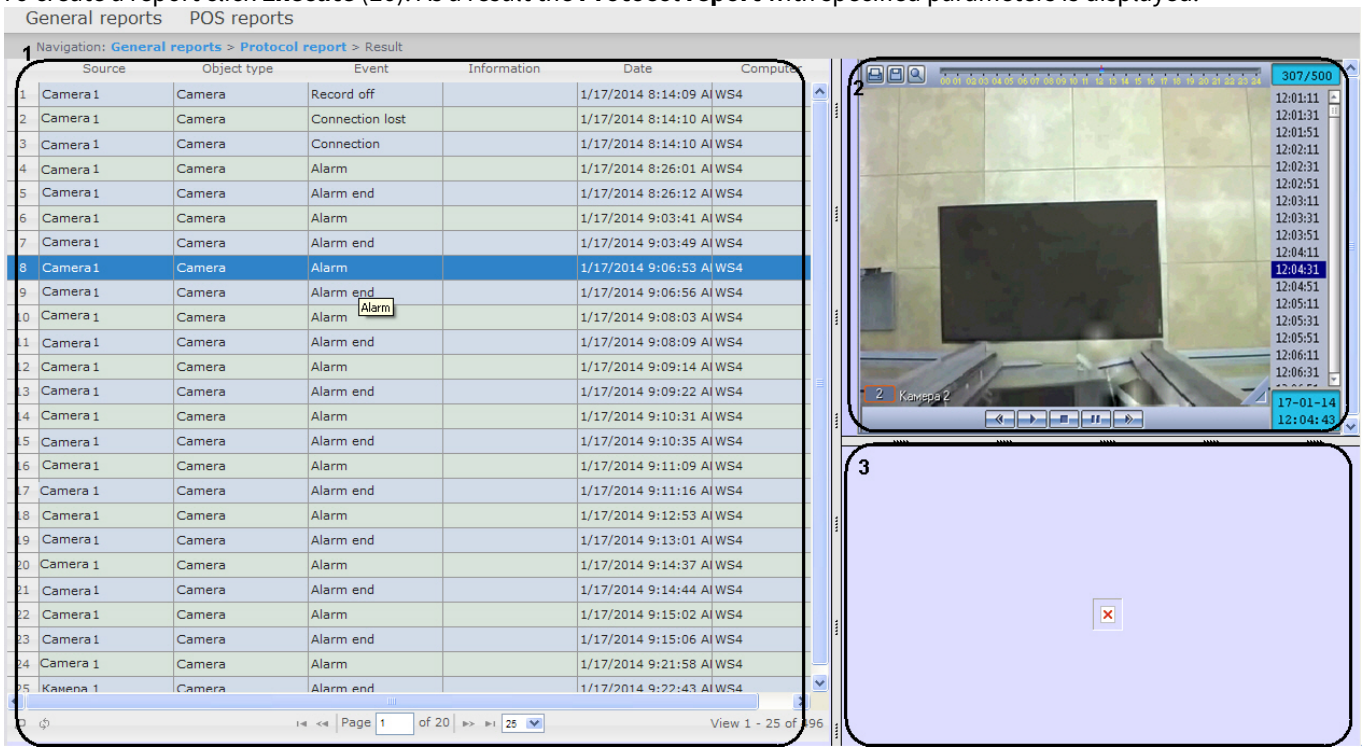
   h. In the **Filter text:** field enter the value for the report filtering (**7**).
   i. In the **Maximum of output strings:** field enter the number of output strings in the protocol report (**8**).
   j. Specify the period as follows:
      i. From the **Period** dropdown list select the time period for which the report is to be created (**9**).
      ii. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button next to the corresponding

field to use the **Calendar** tool.



iii. If the **User defined 2** period is selected, specify the time of start and end periods for which the report is to be created using the button.
If another period type is selected, specifying the date of start and end periods is not needed.

3. To create a report click **Execute** (**10**). As a result the **Protocol report** with specified parameters is displayed.



A form of the **Protocol report** with video displaying consists of three parts. Part **1** is equal to the print form of protocol reports without video displaying. Part **2** displays video from the selected camera. Part **3** displays image.

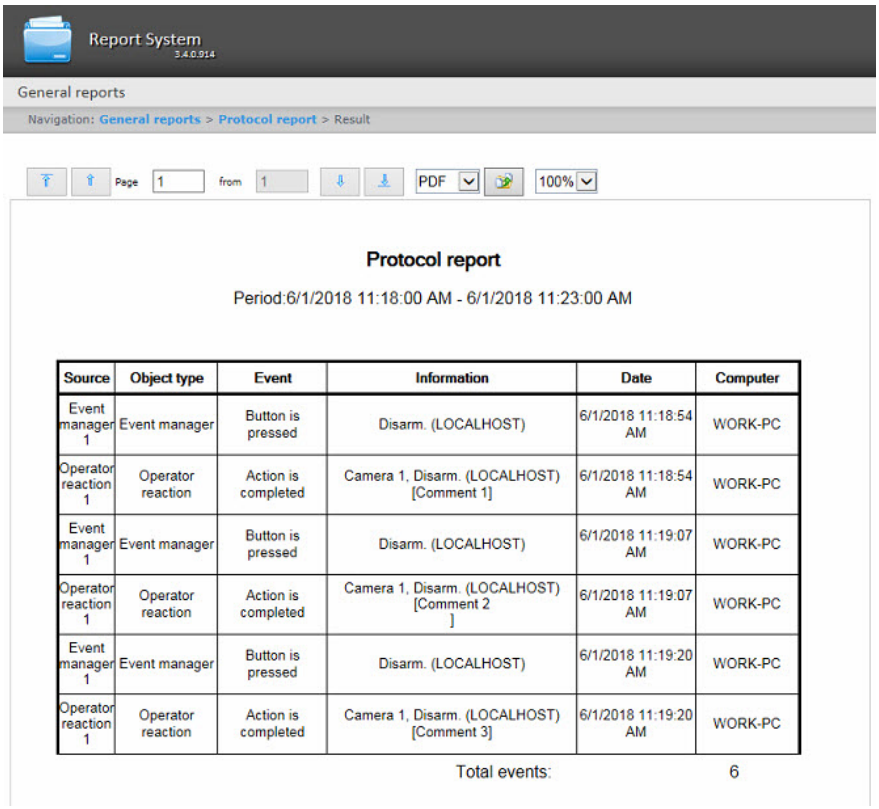
Video is displayed in case of the video archive for the specified period is existed. Otherwise, the last frame from archive is displayed.

Images corresponding to events of employee passes will be displayed while using the FSA/ACS module. Specify the path to the folder with images in the <add key="PathToPhotos" value ="" /> parameter in the web.config file to display images. On default, the "/BMP/Person/" path is specified.

Names of files should correspond to ID of employees whose passes are displayed in report.

Attention!

It is impossible to print the form of **Protocol report** with video displaying. If it is needed to get the pint form of the **Protocol report** create the report without video, i.e. the **Report with video:** checkbox should be deselect.



The description of report fields is given in the table.

Field name	Description
Source	Source object of the event *Note. The information in this column is received from the objid column of the dbo.PROTOCOL table of the Intellect database*
Object type	Type of source object of the event *Note. The information in this column is received from the objtype column of the dbo.PROTOCOL table of the Intellect database*
Event	Name of the event *Note. The information in this column is received from the action column of the dbo.PROTOCOL table of the Intellect database*
Information	Information on the event *Note. The information in this column is received from the param0 column of the dbo.PROTOCOL table of the Intellect database*
Date	Date and time of the event *Note. The information in this column is received from the date column of the dbo.PROTOCOL table of the Intellect database*
Computer	Name of the computer where the event happens

Note

For details about the dbo.PROTOCOL table, see Base Intellect database tables.

Note

The operator's comment confirming the event in Event Manager module is specified in square brackets in the **Information** field (see Example of working with the Event manager module).

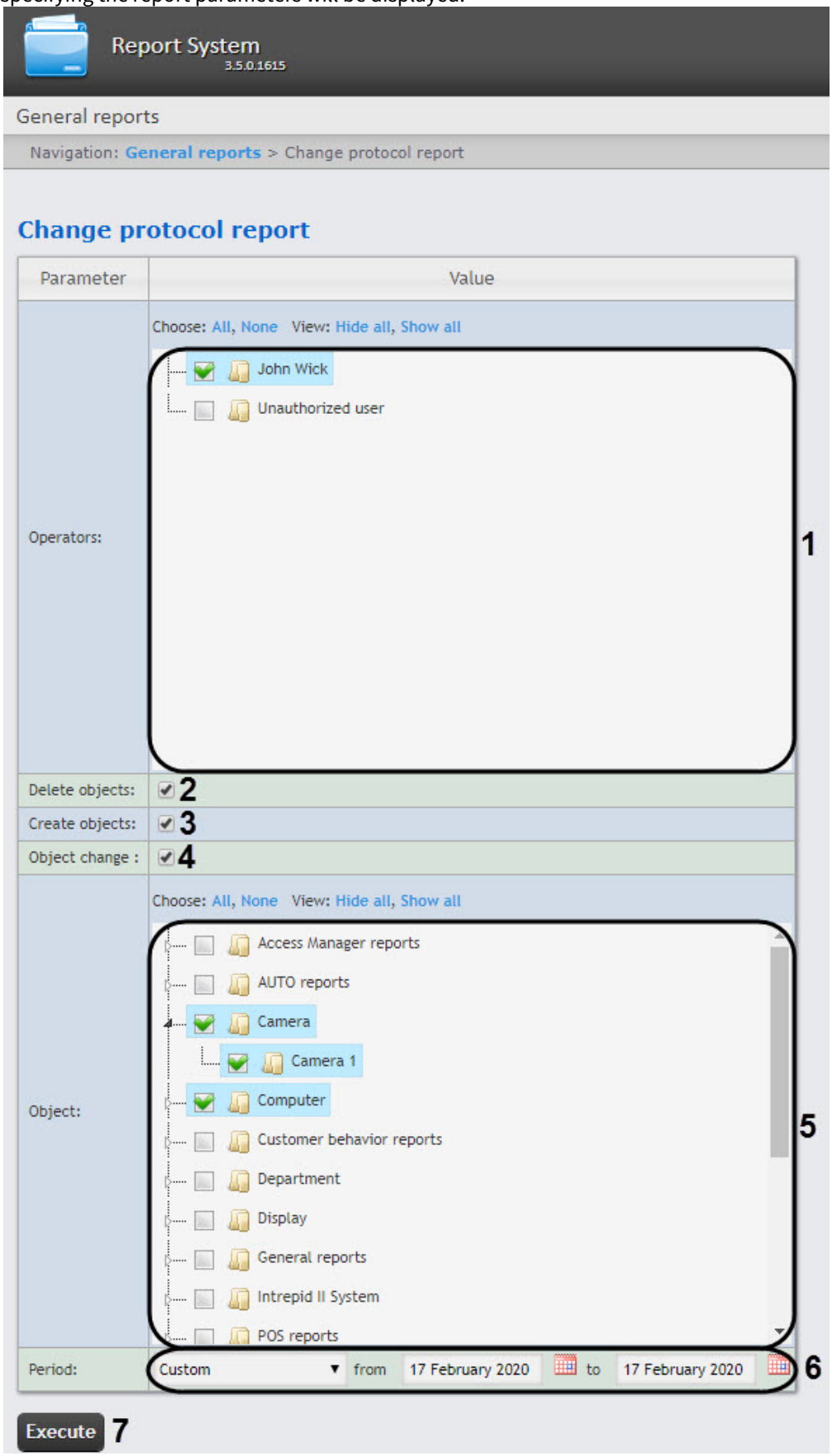
Attention!

To create the auto generated protocol report you should select the report without video displaying.

8.7.3 Change protocol report

In order to create a protocol report, do the following:

1. Select the **Change protocol report** type (see Selecting a type of general report section). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the following report parameters:

a. In the **Operators** field (**1**) set checkboxes in those users who have rights to change objects.

> **Note**
>
> The **Unauthorized user** value means change of system by unauthorized user, deleted user and/or user with deleted rights.

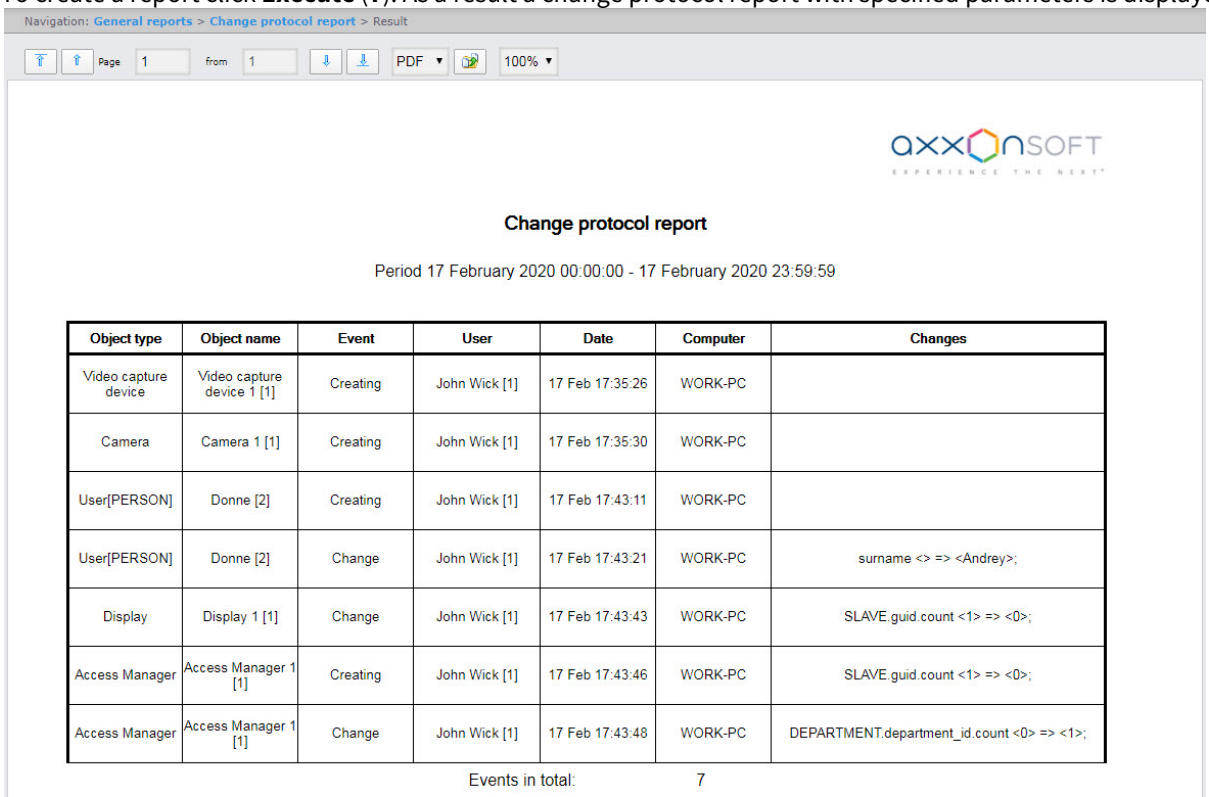
b. To display deleted objects in the report, set the **Delete objects** checkbox (**2**).
c. To display created objects in the report, set the **Create objects** checkbox (**3**).
d. To display edited objects in the report, set the **Objects change** checkbox (**4**).
e. In the **Object** field set checkboxes in those types of objects to which the changed, created or removed object belongs (**5**).

> **Note**
>
> Any objects can be selected by expanding the object type list.

f. From the **Period** drop-down list select the time period for which the report is to be created (**6**).

> **Note**
>
> If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.

3. To create a report click **Execute** (**7**). As a result a change protocol report with specified parameters is displayed.



Object type	Object name	Event	User	Date	Computer	Changes
Video capture device	Video capture device 1 [1]	Creating	John Wick [1]	17 Feb 17:35:26	WORK-PC	
Camera	Camera 1 [1]	Creating	John Wick [1]	17 Feb 17:35:30	WORK-PC	
User[PERSON]	Donne [2]	Creating	John Wick [1]	17 Feb 17:43:11	WORK-PC	
User[PERSON]	Donne [2]	Change	John Wick [1]	17 Feb 17:43:21	WORK-PC	surname <> => <Andrey>;
Display	Display 1 [1]	Change	John Wick [1]	17 Feb 17:43:43	WORK-PC	SLAVE.guid.count <1> => <0>;
Access Manager	Access Manager 1 [1]	Creating	John Wick [1]	17 Feb 17:43:46	WORK-PC	SLAVE.guid.count <1> => <0>;
Access Manager	Access Manager 1 [1]	Change	John Wick [1]	17 Feb 17:43:48	WORK-PC	DEPARTMENT.department_id.count <0> => <1>;

Events in total: 7

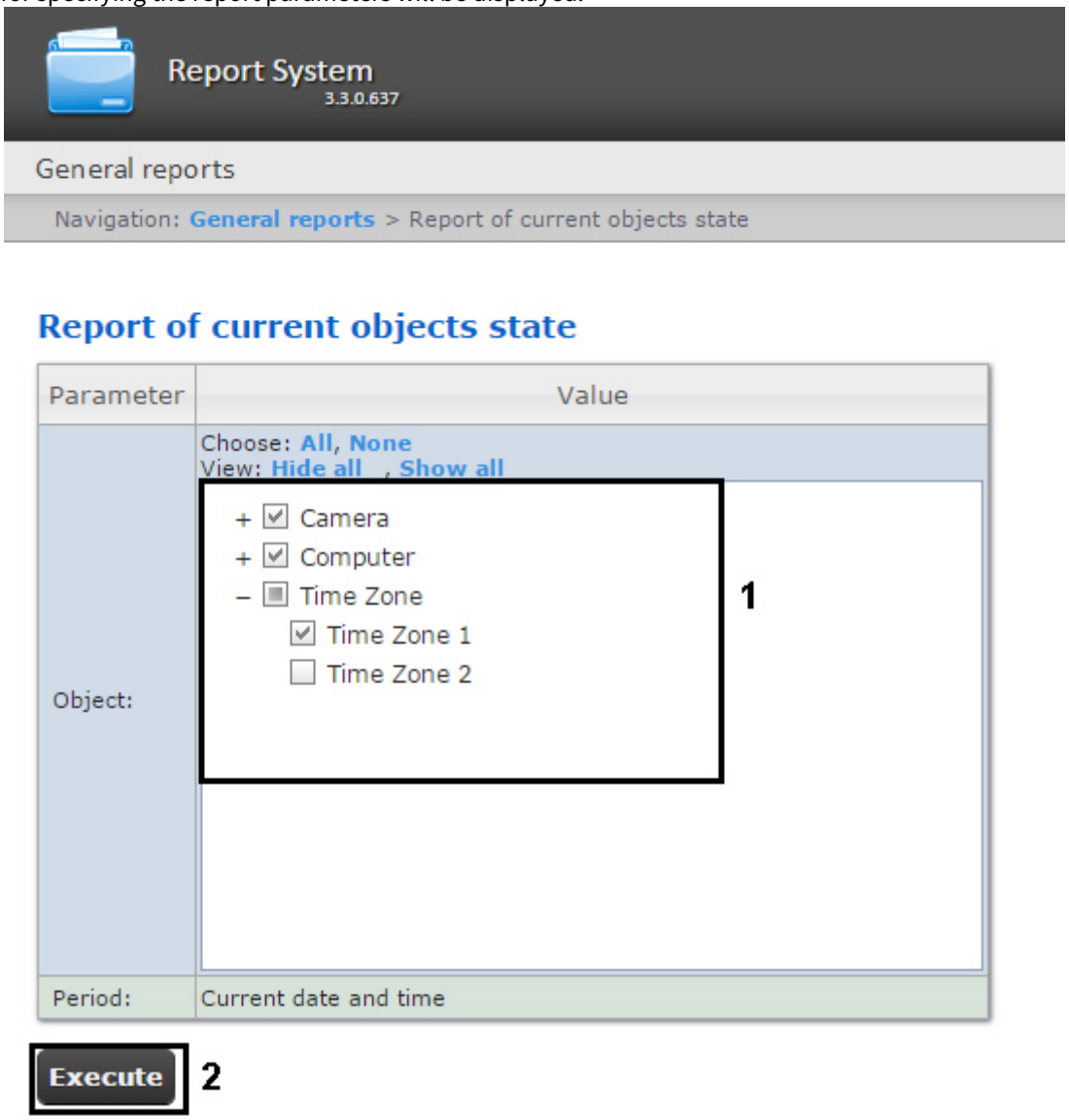
> **Note**
>
> The ID of the object is indicated in square brackets in the end of the object name in the **Object name** field.
>
> The identification number of the user is indicated in square brackets at the end of the user name in the **User** field.

> **Note**
>
> In the created report objects are sorted by their ID and by the event date.

8.7.4 Report of current objects state

In order to create a report of current objects state, do the following:

1. Select the **Report of current objects state** type (see Selecting a type of general report section). As a result the dialog box for specifying the report parameters will be displayed.

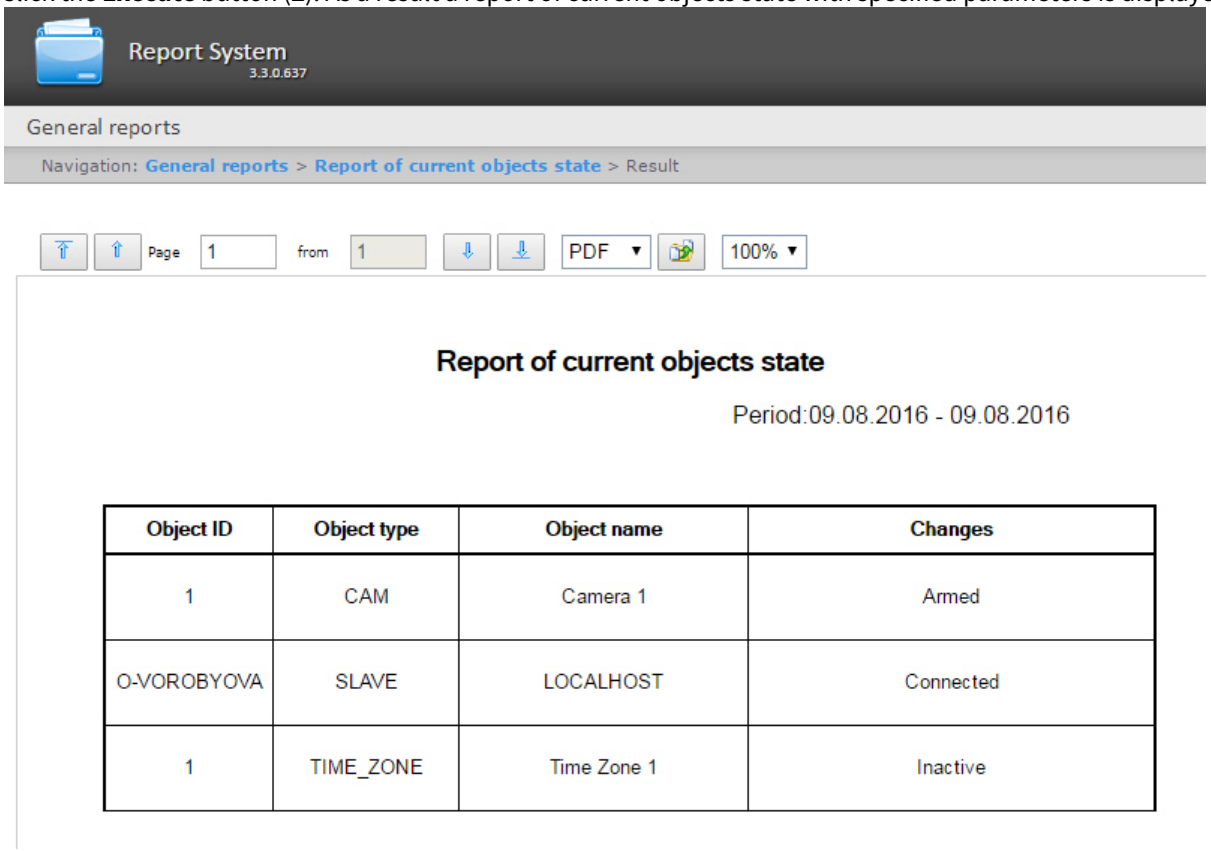


2. In the **Object:** field set checkboxes in those objects which current state is to be displayed in the report (**1**).

Note.

Only objects with status displayed on the map are given in the **Object** field.

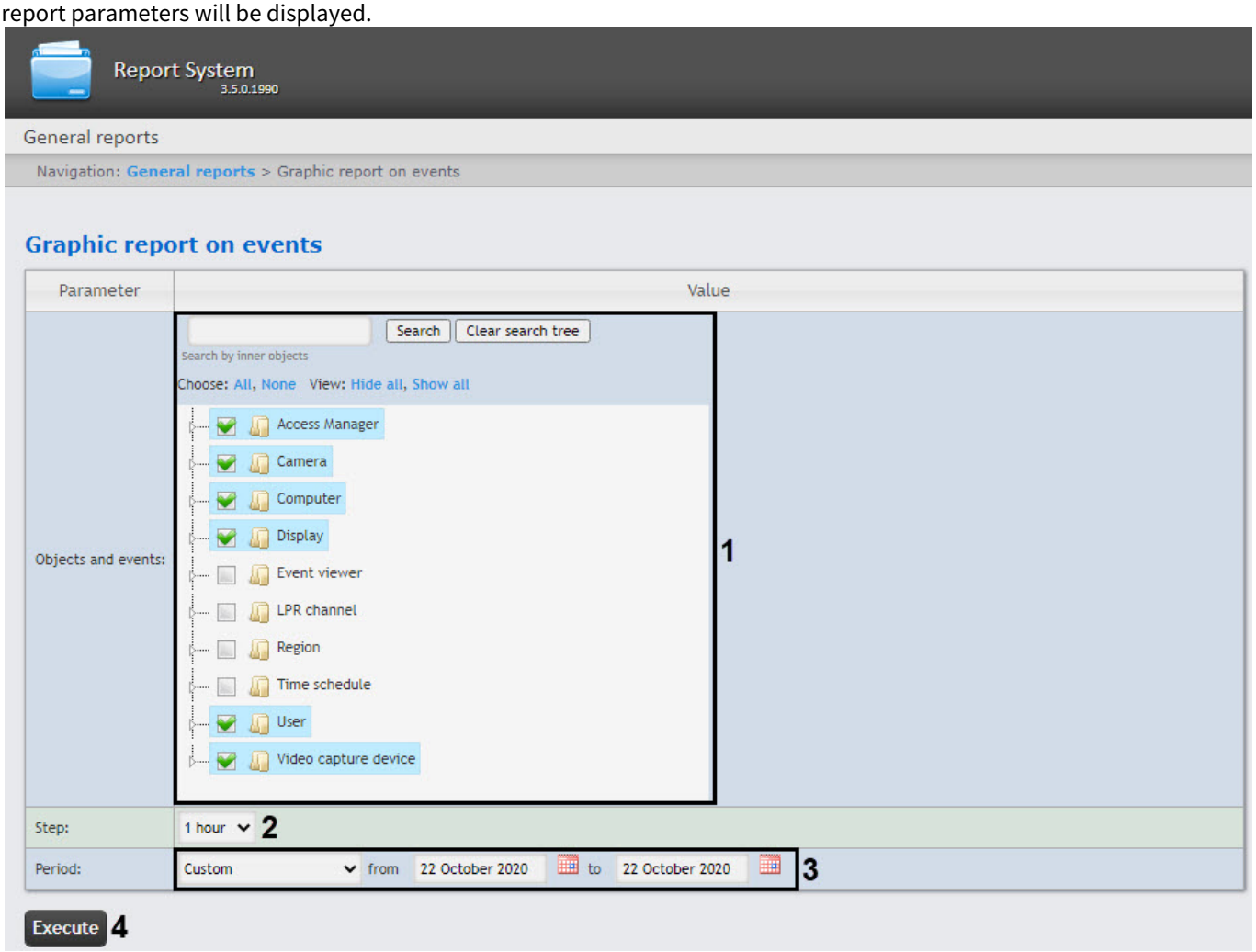
3. Click the **Execute** button (**2**). As a result a report of current objects state with specified parameters is displayed.



8.7.5 Graphic report on events

To create the **Graphic report on events**, do the following:

1. Select the **Graphic report on events** (see Selecting the type of general report). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the following report parameters:
   a. In the **Objects and events** field (**1**) set the checkboxes for the objects and their events the information on which should be displayed in the report.

      Note

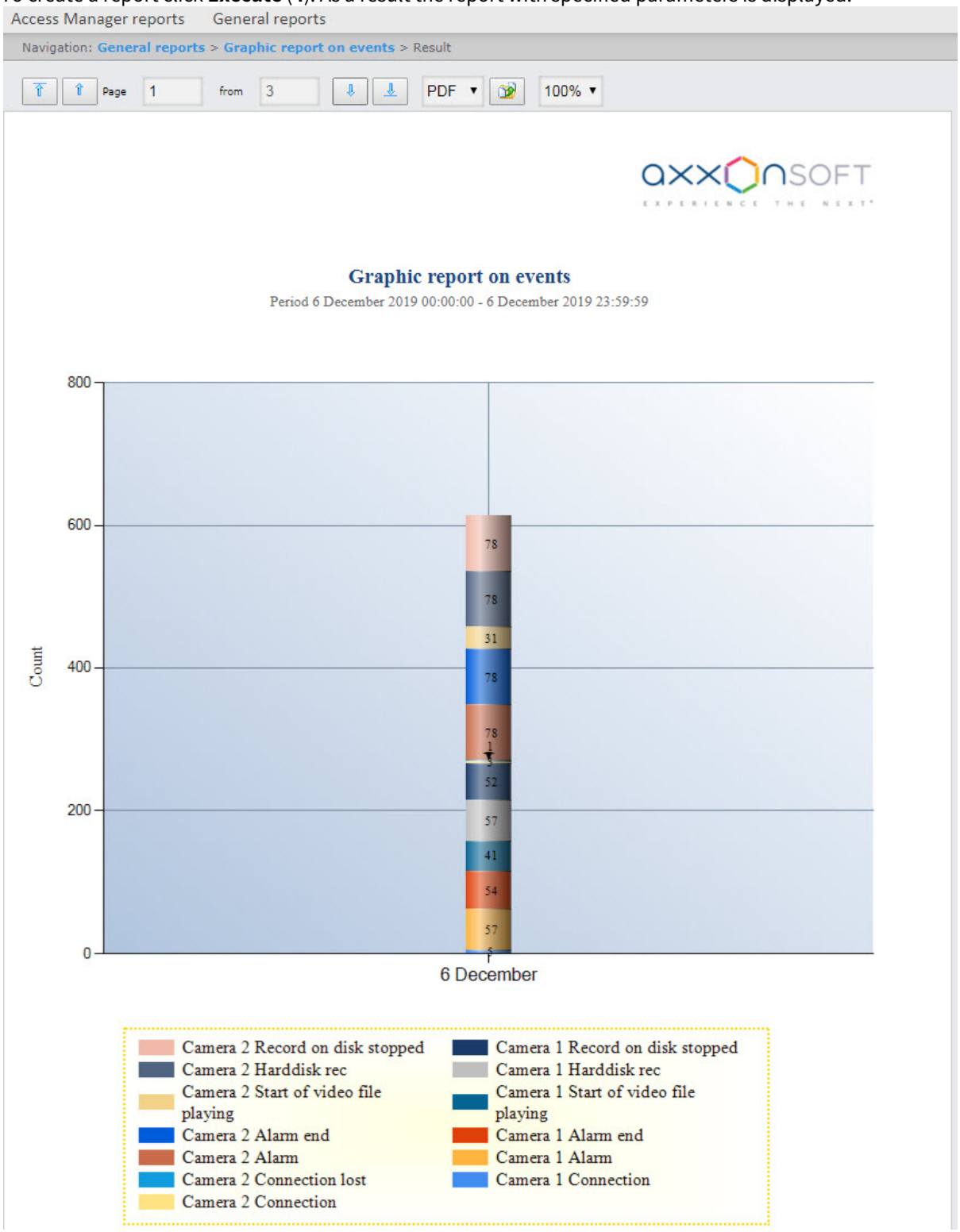
      You can select any event by expanding the object type list.

   b. From the **Step** drop-down list (**2**) select the time period during which the data for the report will be summarized. The list of available steps depends on the selected period (**3**).
   c. From the **Period** drop-down list (**3**) select the time period for which the report is to be created.
      i. If the **User** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool.

         Note

         Click the button near the corresponding field to use the **Calendar** tool.

3. To create a report click **Execute** (**4**). As a result the report with specified parameters is displayed.



If the report is exported (see Exporting of reports), the report file will also contain the events table, sorted by the event

source. This table contains the event name, event date and events number for each event source.

Source: **Camera 2**

Event: Connection

Date	Amount
6 December 2019 00:00:00	3

Event: Connection lost

Date	Amount
6 December 2019 00:00:00	1

Event: Alarm

Date	Amount
6 December 2019 00:00:00	95

Event: Alarm end

Date	Amount
6 December 2019 00:00:00	95

Event: Start of video file playing

Date	Amount
6 December 2019 00:00:00	35

Event: Harddisk rec

Date	Amount
6 December 2019 00:00:00	95

Event: Record on disk stopped

Date	Amount
6 December 2019 00:00:00	95

Source: **Camera 1**

Event: Connection

Date	Amount
6 December 2019 00:00:00	5

Event: Alarm

8.7.6 Operator actions report

To create an **Operator actions report**, do the following:

1. Select the **Operator actions report** type (see Selecting the type of general report). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the report parameters as follows:
   a. In the **Operators** field (**1**), set the checkboxes for those users who have been assigned rights to make edits. The **Unauthorized user** value means that the edits in the system were made by a user who has not been authorized, or by those users who have been removed from the system and/or by users who have had their rights deleted.

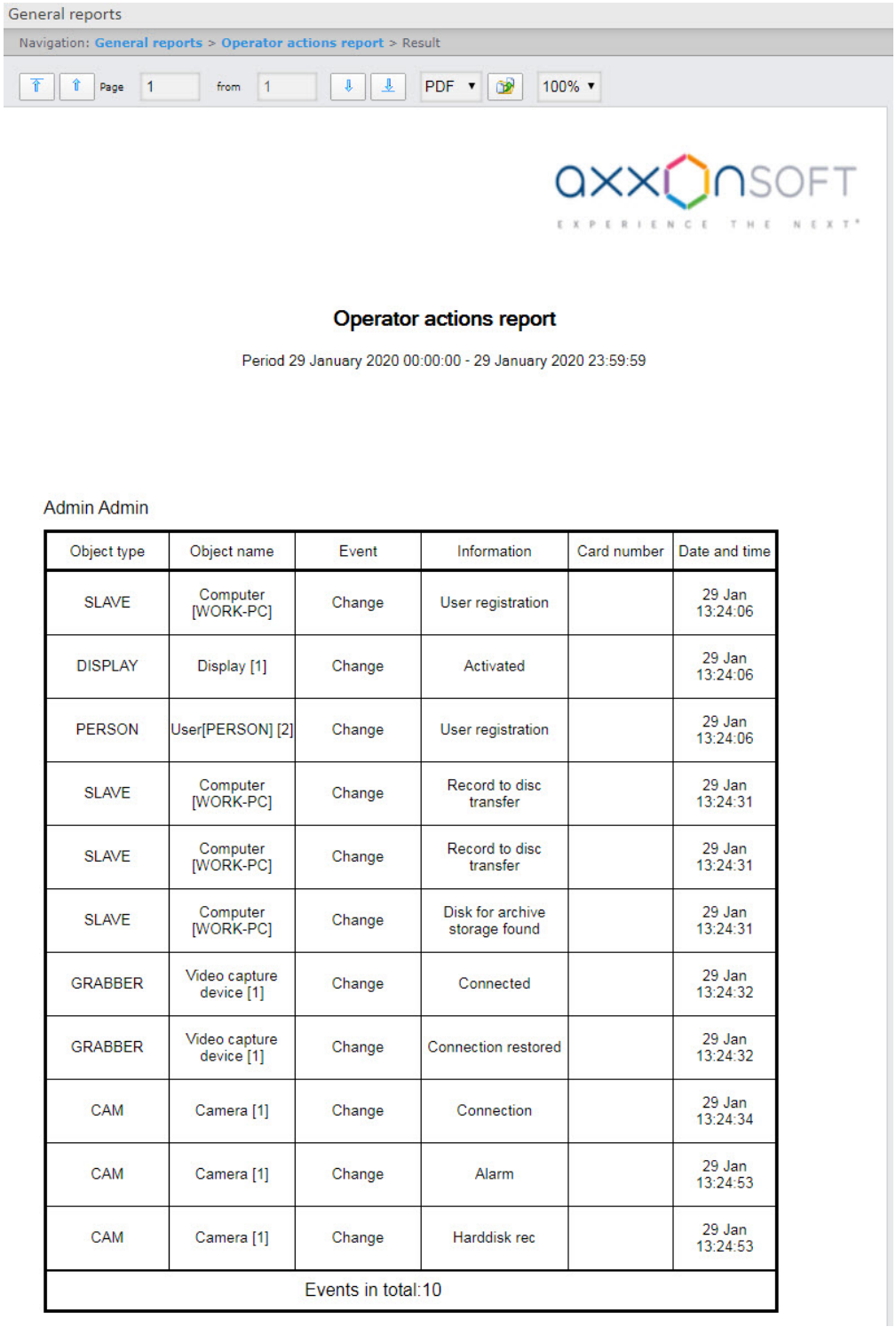
b. In the **Objects and events** field (**2**), set the checkboxes for those types of objects and their events for which the information should be displayed in the report.

> **Note**
>
> You can select arbitrary objects and their events by expanding the list.

c. From the **Period** drop-down list (**3**) select the time period for which it is necessary to build a report.

> **Note**
>
> If the **Custom** period is selected, it is necessary to enter the start and end dates of the time period in the **from** and **to** fields using the **Calendar** tool. Open the **Calendar** tool by clicking the button next to the corresponding field.

3. To build a report, click the **Execute** button (**4**). As a result, the report with specified parameters is displayed.



Report fields are described in the table.

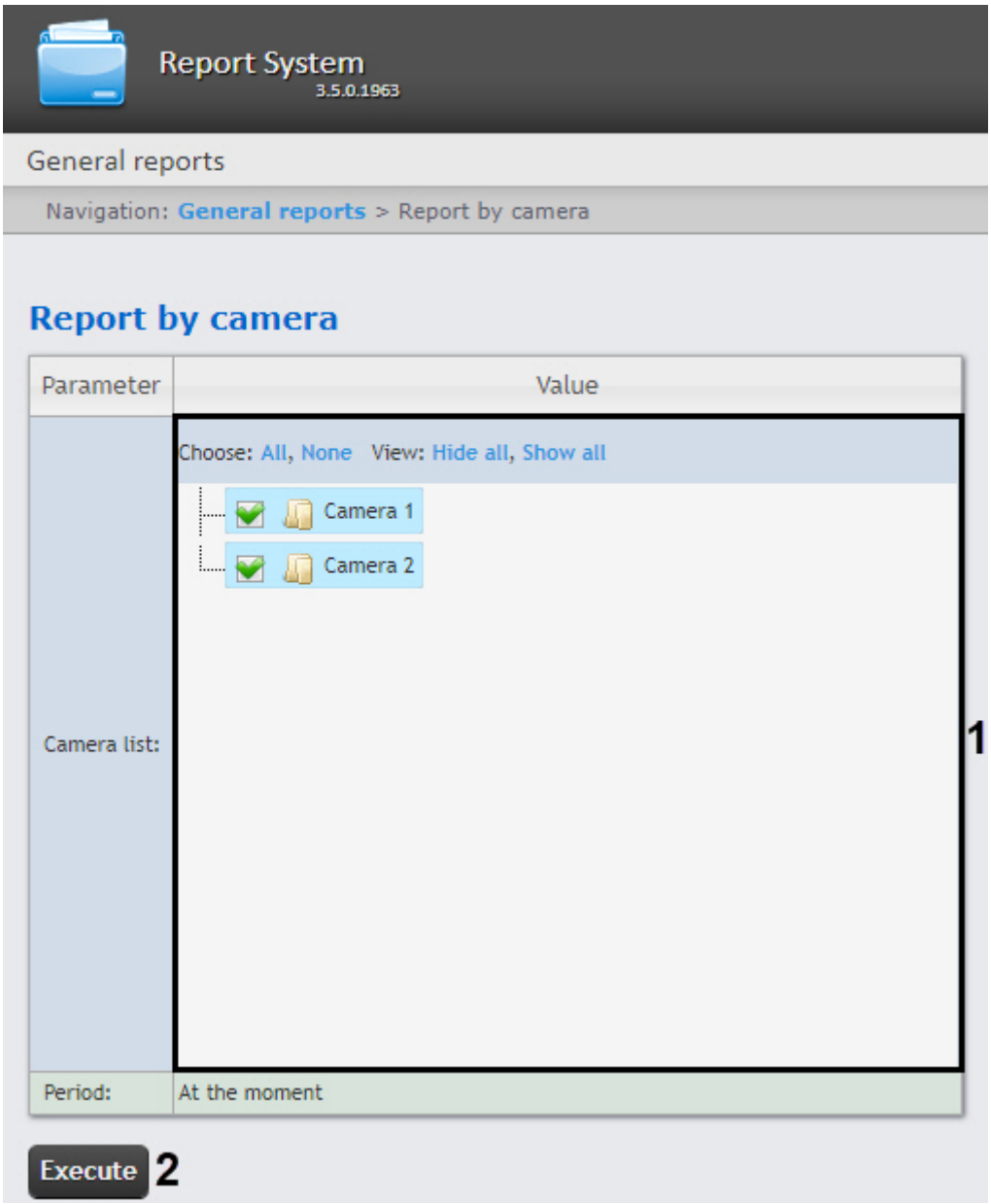
Field	Description
Object type	Type of object in the system
Object name	Name of object. *Note. The object's identifier is displayed at the end of the object name in square brackets.*
Event	Event type

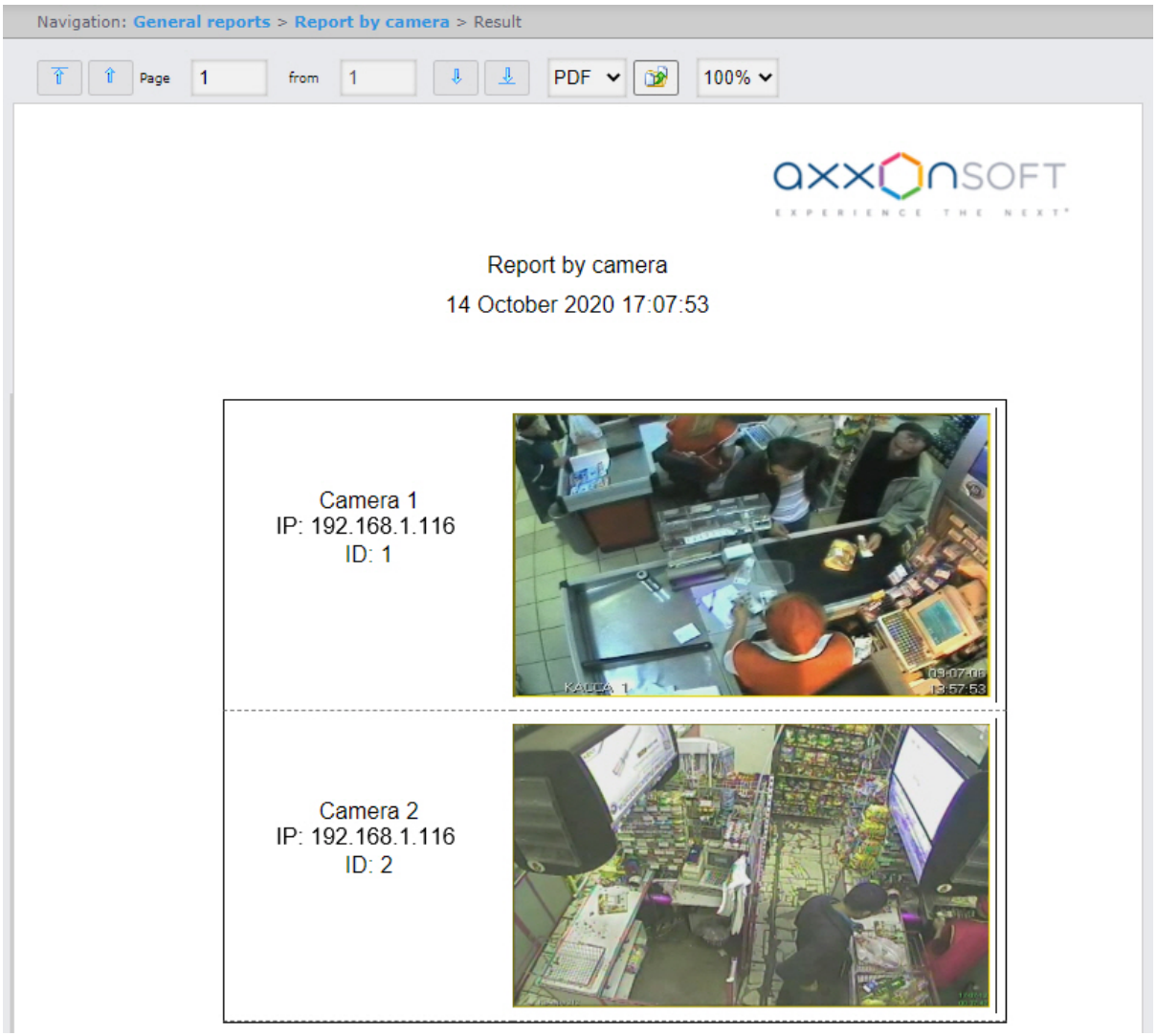
Field	Description
Information	Event name
Card number	Operator Access Card Number
Date and time	Date and time of the event

Note

In the report, the objects are sorted by their identifier and by the event date.

8.7.7 Report by camera





8.8 Working with Visitors behavior analysis reports

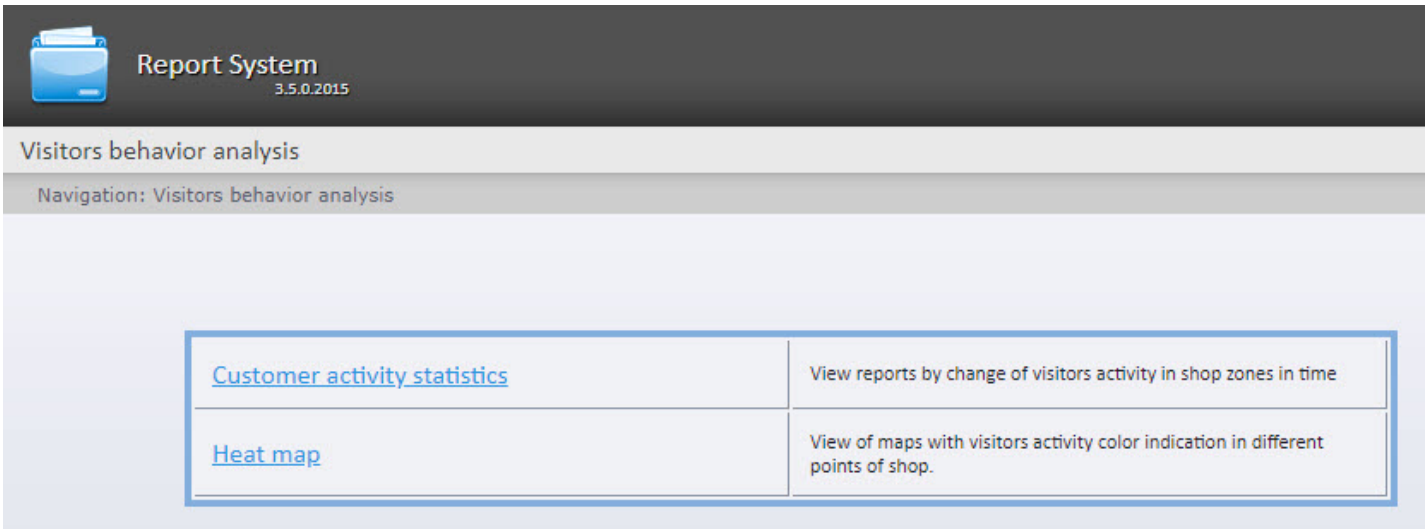
8.8.1 Selecting a type of Visitors behavior analysis reports

It is possible to create the following visitors behavior analysis reports:

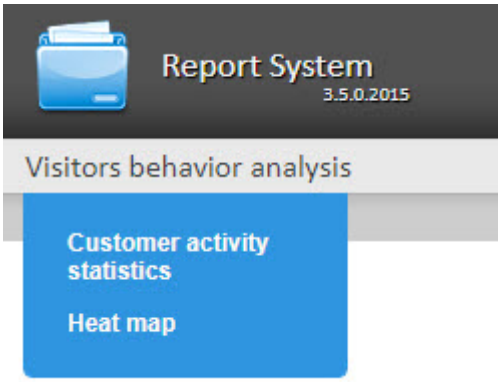
1. Customer activity statistics report is used to inspect the change of customer activity over time and quantitatively estimate activity in different zones of monitored area.
2. Heat map report decides the issue of quick and auality comparison of customer activity in different zones of monitored area.

To select a type of visitors behavior analysis report click **Visitors behavior analysis** link in the report menu of *Intellect Web Report System*.

As a result the list of available visitors behavior analysis reports is displayed. For switching to the required report click the corresponding link.



List of links for switching to visitors behavior analysis reports is available when hovering the **Visitors behavior analysis** link in the report menu.

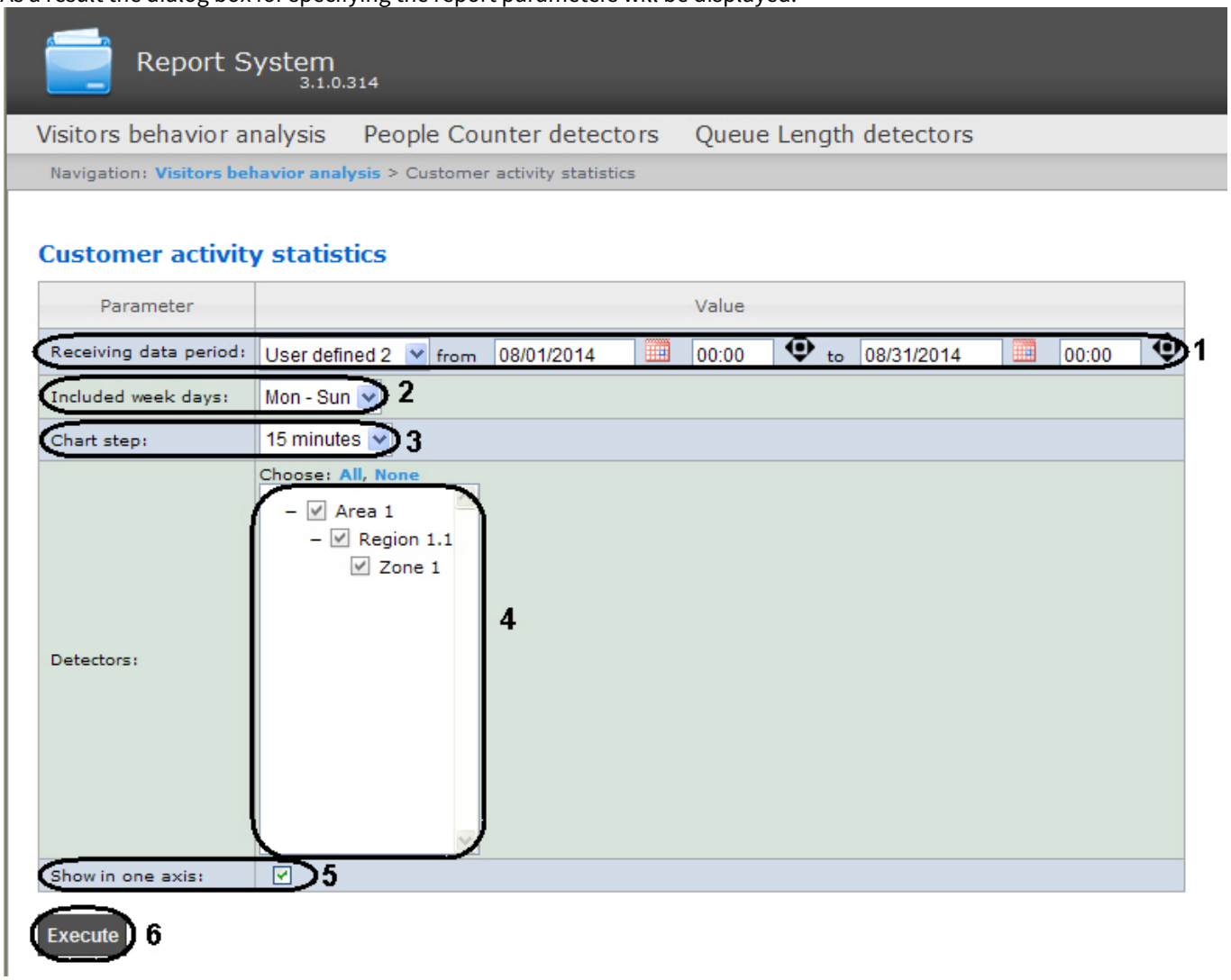


8.8.2 Creating the Customer activity statistics report

To create the customer activity statistics report, do the following:

1. Select the **Customer activity statistics** type (see Selecting a type of Visitors behavior analysis reports section).

2. As a result the dialog box for specifying the report parameters will be displayed.



Set the following report parameters:

1. Specify the period in the following way:
   a. From the **Receiving data period:** drop-down list select the time period for which the report is to be created (**1**).
   b. If the **User defined** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
   c. If the **User defined 2** period is selected, enter additionally the time of start and end periods for which the report is to be created using the button.

   If another period type is selected, specifying the date of start and end periods is not needed.

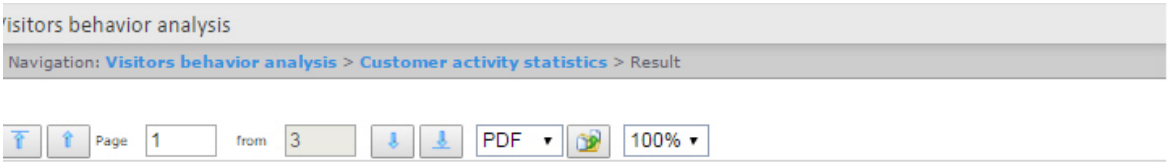
1. From the **Included week days:** drop-down list select days when most customers work (or conversely, not work) to consider in statistics (**2**).
2. From the **Chart step:** drop-down list select the time interval in which data will be averaged (**3**).

> **Note.**
>
> If receiving data period and specified included week days are not crossed the empty report will be created and message with proposal to change the **Included week days** parameter or specify another **Receiving data period** parameter.

3. In the **Detectors:** field set checkboxes in those zones information on which should be displayed in the report (**4**).

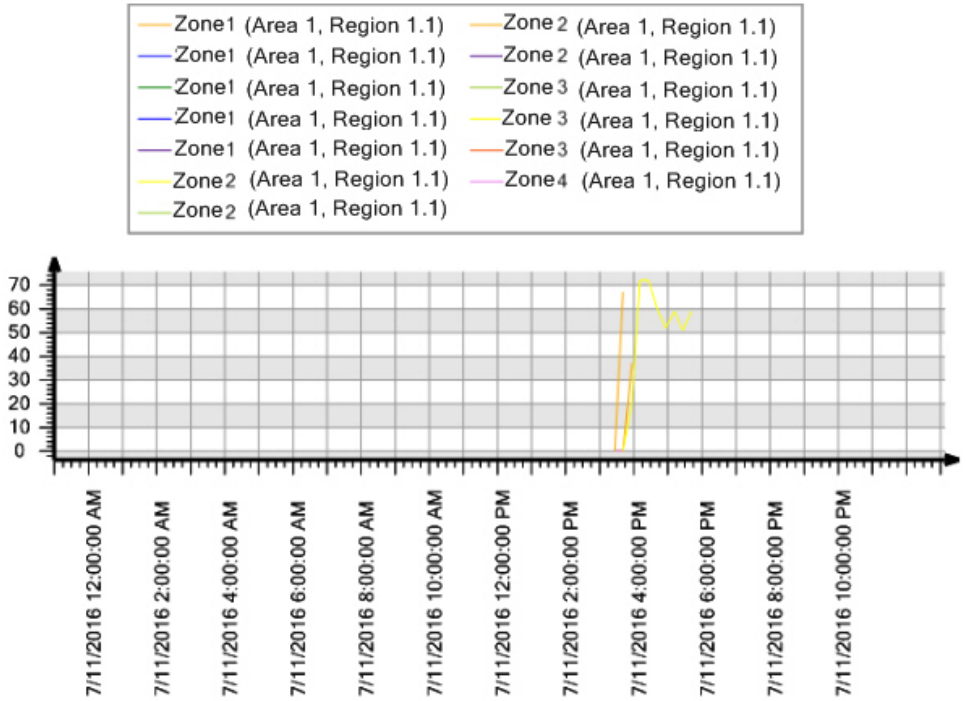
4. Set the **Show in one axis:** checkbox to display data from different areas in one chart (**5**).
5. To create a report click **Execute** (**6**).

As a result a **Customer activity statistics** report with specified parameters is displayed. The report displays average results for whole period and detailed statistics for each time interval.



Customer activity statistics

Period: 7/11/2016 12:00:00 AM 7/11/2016 11:59:59 PM
Included weekdays Mon - Sun
Chart step: 15 minutes
Data source:

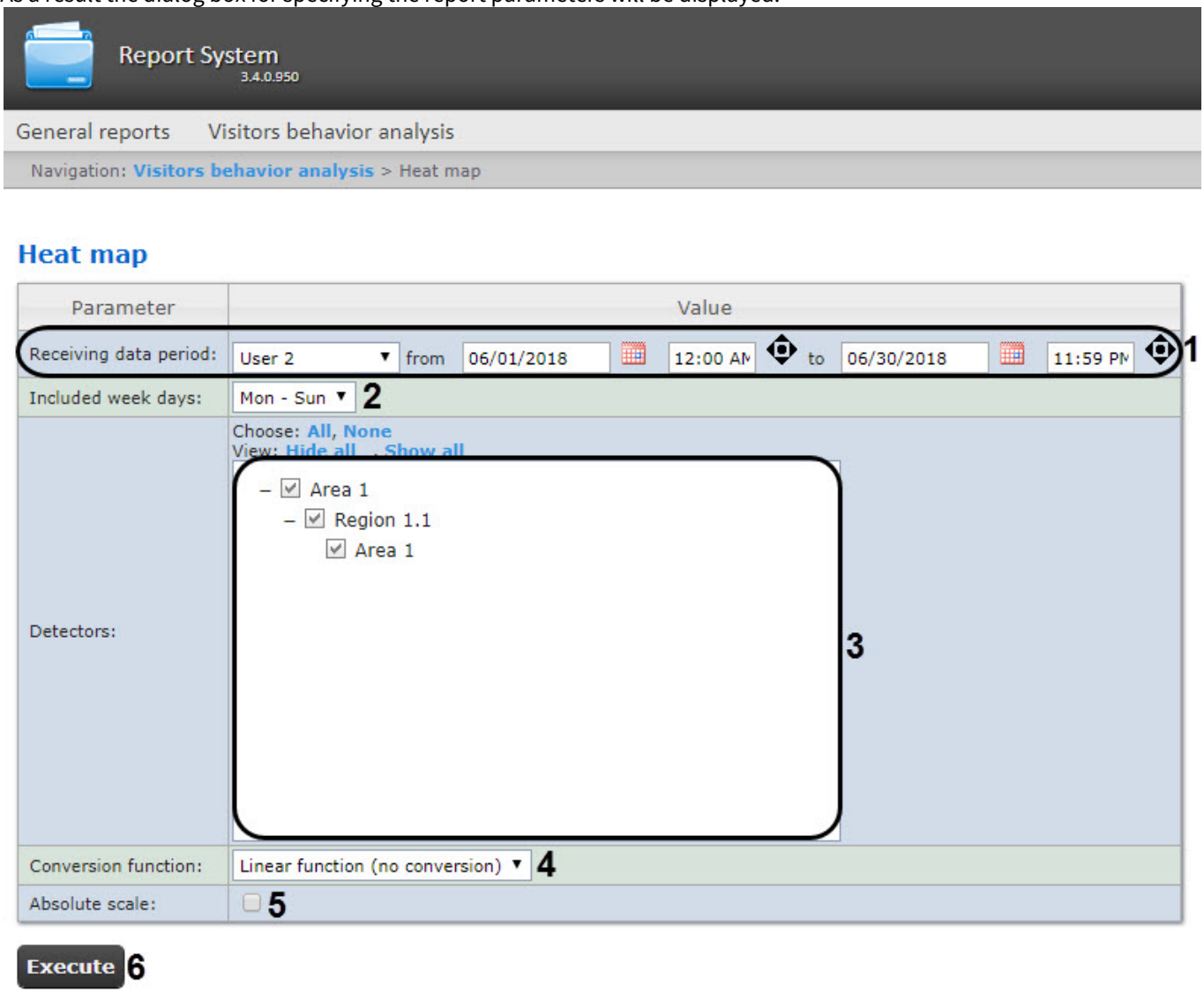


Detection	Period of data receiving	People
Average results for whole period		
Zone 1	7/11/2016 12:00:00 AM 7/11/2016 11:59:59 PM	19%
Zone 1	7/11/2016 12:00:00 AM 7/11/2016 11:59:59 PM	0%
Zone 1	7/11/2016 12:00:00 AM 7/11/2016 11:59:59 PM	0%
Zone 2	7/11/2016 12:00:00 AM 7/11/2016 11:59:59 PM	49%
Zone 2	7/11/2016 12:00:00 AM 7/11/2016 11:59:59 PM	0%
Zone 2	7/11/2016 12:00:00 AM 7/11/2016 11:59:59 PM	34%
Detailed statistics by points		
Zone 1	7/11/2016 3:30:00 PM 7/11/2016 3:44:59 PM	0%
Zone 1	7/11/2016 3:45:00 PM 7/11/2016 3:59:59 PM	37%
Zone 1	7/11/2016 3:30:00 PM 7/11/2016 3:44:59 PM	0%
Zone 1	7/11/2016 3:15:00 PM 7/11/2016 3:29:59 PM	0%
Zone 2	7/11/2016 3:30:00 PM 7/11/2016 3:44:59 PM	0%
Zone 2	7/11/2016 3:45:00 PM 7/11/2016 3:59:59 PM	20%
Zone 2	7/11/2016 4:00:00 PM 7/11/2016 4:14:59 PM	72%

8.8.3 Creating a Heat map report

To create the heat map report, do the following:

1. Select the **Heat map** report type (see the Selecting a type of Visitors behavior analysis reports section).
2. As a result the dialog box for specifying the report parameters will be displayed.



Set the following report parameters:

1. Specify the period as follows:
   a. From the **Receiving data period:** dropdown list select the time period for which the report is to be created (**1**).
   b. If the **User defined** period is selected, specify the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button next to the corresponding field to use the **Calendar** tool.
   c. If the **User defined 2** period is selected, specify additionally the time of start and end periods for which the report is to be created using the button.

   If another period type is selected, specifying the date of start and end periods is not needed.
2. From the **Included week days:** dropdown list select days when most customers work (or do not work) to consider in statistics (**2**).

> **Note**
>
> If receiving data period and specified included week days are not crossed the empty report will be created and there will be the message suggesting to change the **Included week days** parameter or specify another **Receiving data period** parameter.

3. In the **Detectors:** field set checkboxes in those zones information on which should be displayed in the report (**3**).
4. From the **Conversion function:** drop-down list select the function of converting initial data to relative values (**4**).

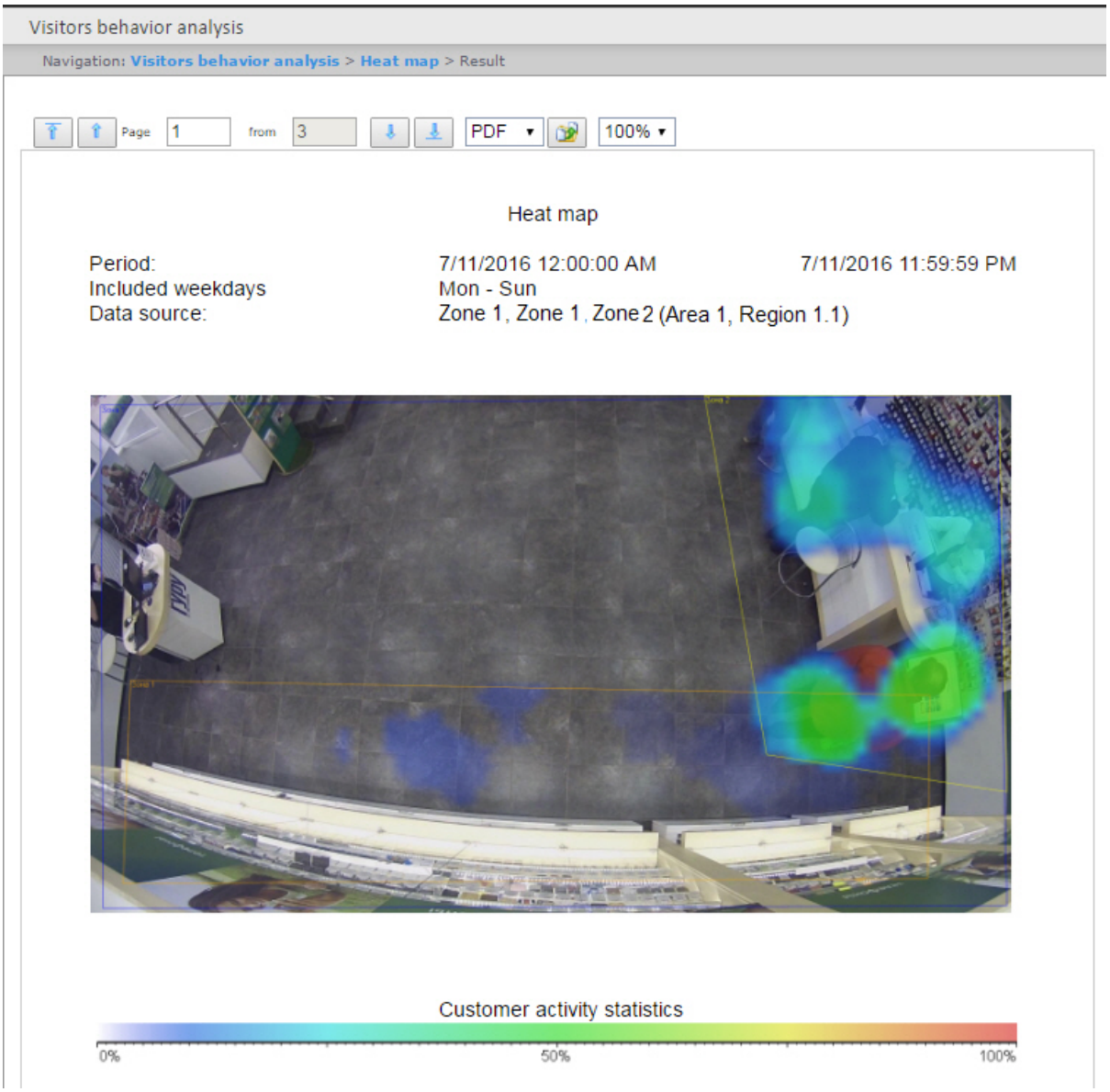
> **Note**
>
> Different conversion functions are designed to drag special attention to various aspects of a store customers behavior statistics.

5. Set the **Absolute scale** checkbox if it is required to dispaly initial data without any changes (**5**). By default, the checkbox is not set.

> **Note**
>
> This option is recommended to be used only when there is high customer activity in the store. If customer activity is low, it is not recommended to set the **Absolute scale** checkbox. If a person is in the area 100% of the time, then the area will be red, if the person is not in the area at all, then it will not be colored. As practice shows, a person can not be in a certain area 100% of the time, hence, there will never be red zones. Use the conversion function to better demonstrate this (**4**). For example, if the customer activity fluctuates in a range from 0% to 20%, each activity value will be multiplied by 100% / 20% = 5 and earlier the blue zone corresponding to 20% of activity will be displayed as 100% and red, but not blue. Find more information about the conversion functions at http://easings.net/en or https://wiki.multitheftauto.com/wiki/Easing.

6. To create a report click **Execute** (**6**).

As a result a Heat map report with specified parameters is displayed. Customer activity in different areas of the observed area is highlighted in corresponding color.



8.9 Exporting of reports

Intellect Web Report System allows exporting the created reports to computer in the following formats:

- PDF;
- RTF;
- HTML;
- Excel;
- CSV;
- Text.

From the dropdown list (**1**) select a format in which the report is exported and click the button (**2**).



Note

If there is *"System.OutOfMemoryException"* message when trying to export created **Report by users access levels** or **Report by users of access levels and readers reports** in PDF, then it is necessary to reduce exported data by splitting the report into several documents. For instance, create reports by less departments and then merge PDFs in one file using the third-party software.

9 Conclusion

Please send your comments or requests concerning this Guide to the AxxonSoft Training and documentation development division at documentation@itv.ru.

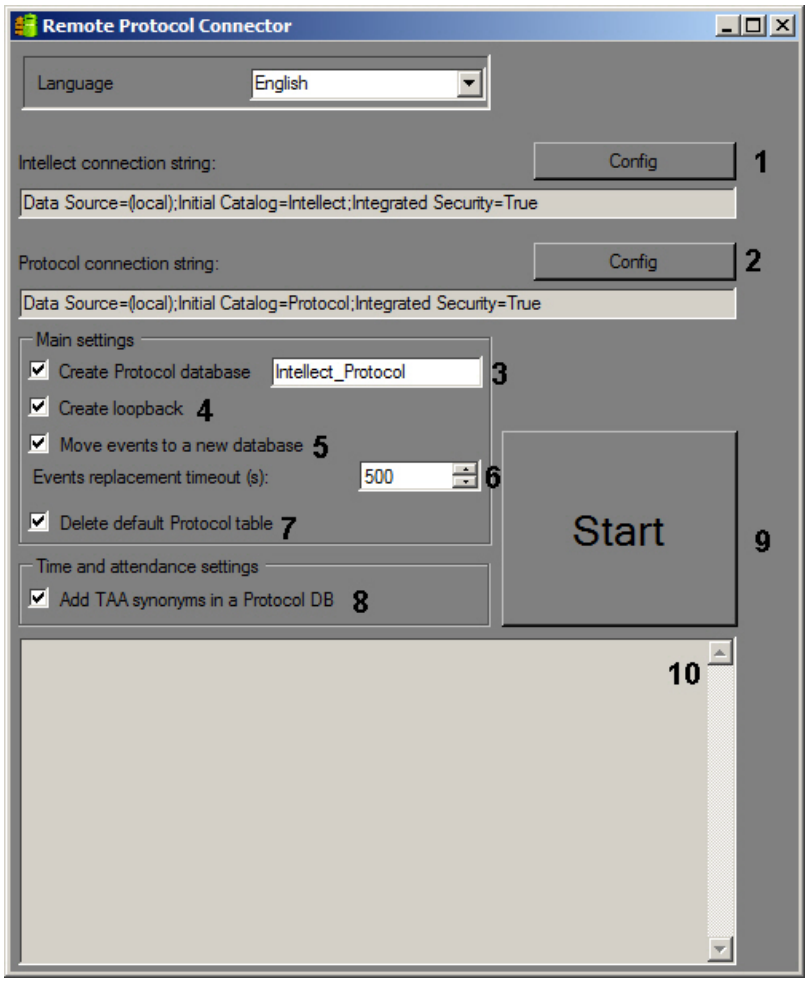
Axxon Soft Inc., Beryozovaya alleya, building 5, section 5a, Moscow, Russia, 127273
Tel/fax: (495) 775-61-61
www.axxonsoft.com

10 Appendix 1. The RemoteProtocolConnector utility for extracting event protocol to a separate database

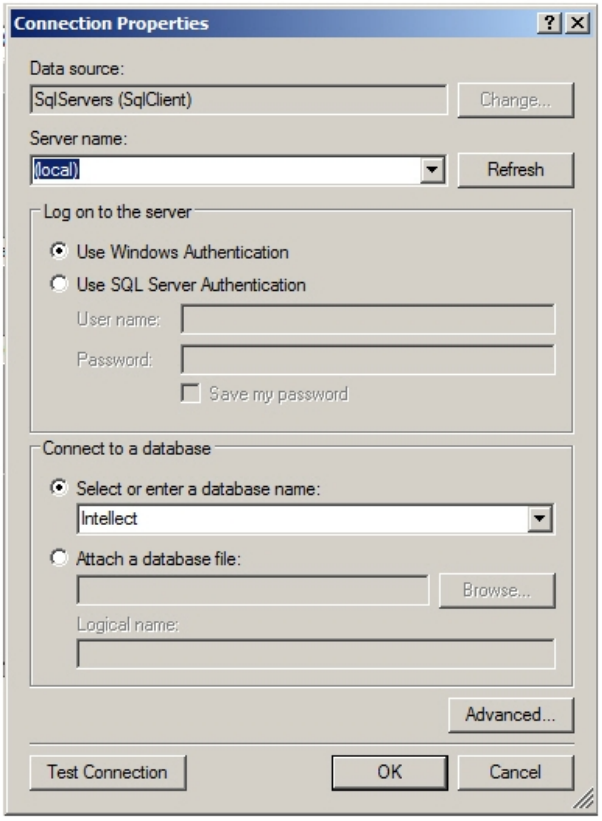
10.1 Extracting event protocol to a separate DB with RemoteProtocolConnector

Extracting event protocol to a separate DB with RemoteProtocolConnector is carried out as follows:

1. Run the the RemoteProtocolConnector.

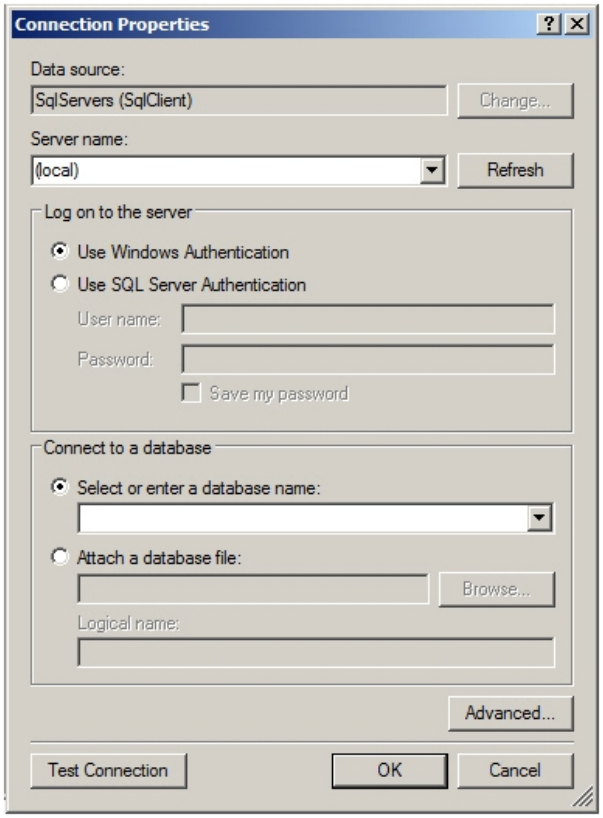


2. Check the connection string for *Intellect* software database. If the connection string is not correct, click **Config** (1) and set parameters of connection in the **Connection Properties** dialog box.



3. Specify the connection string to the database server on which the new event log database is to be created. To do that, click **Config** (2), then select database server and connection parameters in the **Connection Properties** dialog box. The **Select or enter a database name** field must be empty.

> **Note.**
>
> After moving the event protocol to a separate database, the connection string to created database is displayed in the **Protocol connection string** field.



4. Set the **Create Protocol database** checkbox and enter the name of new database in the corresponding field (3).
5. Set the **Create loopback** checkbox (4). This checkbox is required for creation of event protocol database synonym in order to write new events to a new database.
6. If events from the old event protocol database are to be transferred to a new one, set the **Move events to a new DB** checkbox (5). If this check box is not selected, the created database will initially be empty, and the events registered before the protocol transfer to a separate database will not be available in the system.
7. In the **Events replacement timeout field (s)** field, specify the time period in seconds to wait for the transfer of events into the new database to be completed (6). If there are many events that are transferred, this process can take a long time, so the timeout should be increased to avoid errors when executing SQL queries.
8. If after transferring the event protocol database into the new database it is required to delete the old database, check the **Delete default Protocol table** (7) checkbox.
9. Set the **Add TAA synonyms in a Protocol DB** sheckbox (8). This checkbox is required to ensure that events of user passes are copied to the appropriate database table.
10. Click **Start** (9).
11. Data transferring process and errors that occur are displayed in (10) field.

Important!

After performing the above actions start idb.exe utility and extract the event protocol database to the created database – see Appendix 2 of the *Intellect software. Administrator's Guide* (the most relevant version of this document is available in AxxonSoft documentation repository).

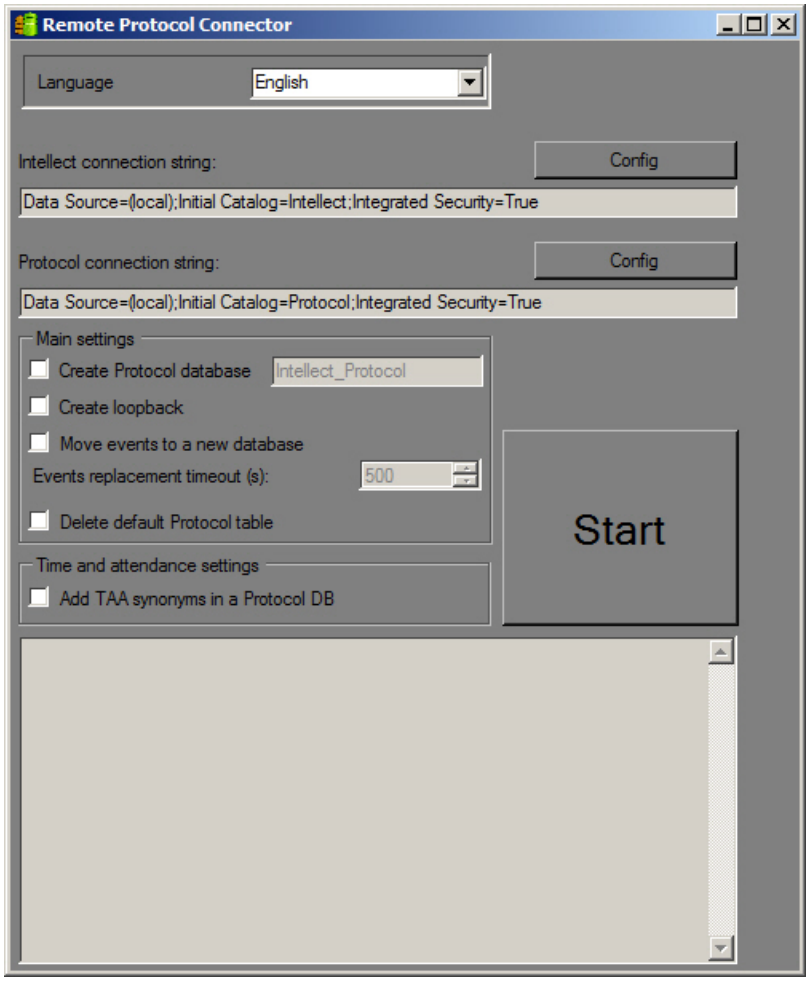
Extracting event protocol to a separate DB with RemoteProtocolConnector is completed.

10.2 Purpose of the RemoteProtocolConnector. Start and shutdown

Intellect software allows extracting event protocol into a separate database using the idb.exe utility – see Intellect software. Administrator's Guide (the most relevant version of this document is available in AxxonSoft documentation repository). However, this method can lead to troubles in operation of the *Time&Attendance* module which is the part of *ACFA-Intellect* software (see Time and Attendance Module Settings and Operation Guide). If this module is in use in the system, use the RemoteProtocolConnector utility to extract event protocol to a separate database.

To start the utility, run the RemoteProtocolConnector.exe executable file in the <*Intellect* installation>\Tools folder.

The utility window is shown in the picture below.



To stop the RemoteProtocolConnector utility, click the button.