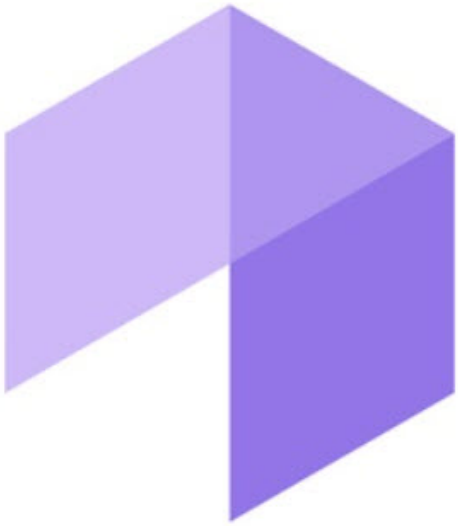


Report System

Intellect Web Report System. User Guide

Intellect Web Report System 3.5

Last update 07/06/2023

Table of Contents

1 Introduction 10
1.1 The purpose of the document 10
1.2 Purpose of Intellect Web Report System 10
1.3 Components of the Intellect Web Report System 11
2 Requirements for Intellect Web Report System implementation 12
2.1 The Web-Server of Intellect Web Report System 12
2.2 The client of the Intellect Web Report System 13
2.2.1 General requirements 13
2.2.2 Setting up security parameters in Internet Explorer 14
3 Intellect Web Report System installation and removal 17
3.1 General description of Intellect Web Report System distribution kit 17
3.2 Installation 17
3.3 Updating 25
3.4 Repairing 28
3.5 Removal 30
3.6 Installation in silent mode 32
3.7 Remote installation, deinstallation and update of Intellect Web Report System 32
3.7.1 Remote installation of Intellect Web Report System 33
3.7.2 Remote update of Intellect Web Report System 34
3.7.3 Remote deinstallation of Intellect Web Report System 34
4 Intellect Web Report System licensing 35
4.1 Activation key 35
4.2 Activation of Intellect Web Report System functionality 35
5 Intellect Web Report System startup and shutdown 36
5.1 Ways of starting 36
5.2 Authorization 36
5.3 Shutdown 38
5.4 User switching 38
6 Intellect Web Report System interface 39

6.1 Context menu 39
6.2 Reports page 39
6.3 Administration page 40
6.4 Scheduler page 41
6.5 User profile page 42
6.6 Change the Intellect Web Report System interface language 43
7 Intellect Web Report System administration 45
7.1 Set up the roles and users 45
7.1.1 Adding new users 45
7.1.2 Set up the roles 48
Role registration 48
Role editing 49
Role removal 50
7.1.3 Configure roles and users compliance 51
Assigning the roles to the user 51
Adding the users to the role 53
7.1.4 Change the administrator password 54
7.1.5 Setting up the user email 55
7.2 Setting up Intellect Web Report System operation in the automatic mode 55
7.2.1 Intellect Web Report System setting up procedure in the automatic mode 55
7.2.2 Configuring the SMTP Server 56
7.2.3 Auto-generated reports setup 57
Creating the report 57
Editing the report 59
Deleting the report 60
7.2.4 Setting up the schedule of operation in the automatic mode 61
Creating the schedule item 61
Editing the schedule item 62
Deleting the schedule item 63
7.2.5 Setting up the automatically executed tasks 64
Creating the task 64
Checking the task execution 66
Running and stopping the task execution 66
Editing the task 67

Deleting the task 68
7.3 Setting up the Access Manager reports 68
7.3.1 Setting up user access to departments 68
7.3.2 Setting up user access to Access Manager reports 69
7.3.3 Setting up the Issued pass cards report 70
Activating the Issued pass cards report 71
Adding fields to the user database templates file 71
Editing a registry key 72
7.4 Setting up the Auto reports 72
7.4.1 Setting up user access to AUTO reports 72
7.4.2 Configuring the storage source for Recognized number plates report and Recognized railway numbers report 73
7.4.3 Configuring the Recognized railway numbers report 73
7.4.4 Configuring numbers filtering for Recognized number plates report and Recognized railway numbers report 74
7.5 Setting up the General reports 75
7.5.1 Setting up user access to General reports 75
7.5.2 Selecting the view of the list of objects and events for the Protocol report 75
7.5.3 Configuring the date and time format in General Reports 76
7.5.4 Configuring the maximum number of events 77
7.6 Setting up the Visitors behavior analysis reports 78
7.6.1 Setting up user access to Visitors behavior analysis 78
7.6.2 Cleaning up the database for the Visitors behavior analysis reports 78
7.7 Setting up the Incident manager reports 79
7.7.1 Setting up user access to Incident manager reports 79
7.8 Setting up the Visitors counting detectors reports 80
7.8.1 Setting up user access to Visitors counting detectors reports 80
7.8.2 Configuring the Gender analytics report 81
Configuring the IP address of the Face Recognition Server 81
7.8.3 Configuring the Face recognition report and Report by employee passes with photo 82
7.9 Setting up the POS reports 82
7.9.1 Creating the list of POS operators 83
7.9.2 Setting up the cashiers in the POS reports 84
Setting up the cashiers list 84
Setting up the new cashiers 84

7.9.3 Setting up the statuses of POS events ... 86
Creating the user status ... 87
Editing the status ... 88
7.9.4 Setting up the groups of statuses of POS events ... 89
Creating a group of statuses ... 89
Editing a group of statuses ... 90
Deleting a group of statuses ... 91
7.9.5 Setting up the filter of events ... 91
Creating a filter of events ... 92
Editing a filter of events ... 93
Deleting a filter of events ... 93
7.9.6 Selecting layouts in POS reports ... 94
7.9.7 Selecting items for report creating ... 94
7.9.8 Setting up parameters of report by potential violations ... 95
7.9.9 Setting up the user interface of POS reports ... 96
7.9.10 Setting up user access to POS reports ... 98
7.9.11 Setting up the Sweethearting report ... 99
Enabling the Sweethearting report ... 99
Filtering the sweethearting events ... 100
Setting the timeout for sweethearting event addition to report ... 102
Disabling sound notification about new events in Sweethearting report ... 102
Configuring the events preloaded on the first Sweethearting report launch ... 103
7.9.12 Setting up the Statistics by cashiers report ... 104
7.9.13 Setting up the currency format for Report by the number of goods with specific action ... 107
7.10 Setting up the reports by Queue Length detectors ... 107
7.10.1 Disabling the zero value filter ... 107
7.11 Setting up the Time and Attendance reports ... 108
7.11.1 Setting up the user access rights to departments ... 108
7.11.2 Setting up user access to Time and Attendance reports ... 109
7.11.3 Setting up the Presence at workplace report and Personal presence-at-workplace report ... 110
Selecting a report format ... 110
Adding the fields to the custom database template file ... 111
7.11.4 Enabling the Employee details (full report) ... 111
7.12 Selecting the camera stream in live video reports ... 112
7.13 Updating the report database ... 113

7.14 Video Player Settings 113
8 Working with Intellect Web Report System 115
8.1 Working with Access Manager reports 115
8.1.1 Selecting the type of Access Manager report 115
8.1.2 Creating the Access Manager report 117
Access Manager report toolbar 117
Issued pass cards report 118
Report by employee passes 119
Report by first and last card presenting per calendar day 125
Employee statuses report 127
Report by users' access levels and readers 128
Report by actions of Event Manager operator 136
Employees absent for too long report 139
8.2 Working with AUTO reports 142
8.2.1 Selecting the type of Auto report 142
8.2.2 Traffic statistics by vehicles groups 143
8.2.3 Traffic statistics by vehicles type 146
8.2.4 Recognized number plates report 149
8.2.5 Recognized railway numbers report 152
8.2.6 Report by road congestion 154
8.2.7 Working with the generated Recognized number plates report and Recognized railway numbers report 156
Filter and sort the license plate numbers 156
Customize, group, and freeze the columns 158
8.2.8 Traffic rules violations report 160
8.2.9 The Auto operators actions report 162
8.3 Working with General reports 163
8.3.1 Selecting the type of general report 163
8.3.2 Protocol report 165
8.3.3 Change protocol report 169
8.3.4 Report of current objects state 173
8.3.5 Graphic report on events 175
8.3.6 Operator actions report 179
8.3.7 Report by camera 181
8.4 Working with Visitors behavior analysis reports 183

8.4.1 Selecting a type of Visitors behavior analysis reports ... 183
8.4.2 Creating the Visitors activity statistics report ... 184
8.4.3 Creating a Heat map report ... 188
8.5 Working with the Incident manager reports ... 192
8.5.1 Selecting the type of the Incident manager reports ... 192
8.5.2 The Incident manager report ... 193
8.5.3 The Incident manager report with selected events ... 196
8.6 Working with reports by Visitors counting detectors ... 199
8.6.1 Selecting a type of reports by Visitors counting detectors ... 199
8.6.2 Creating a Visitors counting report ... 200
8.6.3 Creating Visitors counting report with the point of sale data ... 203
8.6.4 Creating a Face counter report (common report by all counting points) ... 205
8.6.5 Creating a Face counter report (detailed by cameras) ... 209
8.6.6 Creating a Face counter report (detailed by detectors) ... 212
8.6.7 Gender analytics report ... 216
8.6.8 Face recognition report ... 219
8.6.9 Report by employee passes with photo ... 224
8.7 Working with POS reports ... 229
8.7.1 General reports ... 230
Selecting a type of general POS report ... 230
Statistics by cashiers ... 231
Report by cashier ... 233
Report by event ... 236
Report by the number of goods with specific action ... 237
Goods weight report ... 240
Report by the number of canceled goods sum ... 242
Report by the time of canceling goods ... 244
Report by POS ... 248
Report by operator ... 251
Report by number of open POS terminals ... 253
Detailed report ... 256
Report by potential violations ... 259
8.7.2 Detailed reports ... 263
Viewing a detailed report ... 263
Viewing data from the POS terminal and the video of event ... 265

Changing the event status and the comment 267
Viewing the history of event status or comment changing 268
Filtering and sorting events in detailed reports 269
Select columns in detailed reports 271
Disabling captions in the video surveying window 272
Operations with data from POS terminal 273
8.7.3 Sweethearting monitor 275
8.8 Working with reports by Queue Length detectors 277
8.8.1 Selecting a type of reports by Queue Length detectors 277
8.8.2 Average queue length in time interval 278
8.8.3 Queue length threshold crossing 282
8.8.4 Queue length in time interval 284
8.9 Working with Time and Attendance reports 287
8.9.1 Selecting a type of Time and Attendance report 288
8.9.2 Creating a Time and Attendance report 290
8.9.3 Viewing a Time and Attendance report 296
Time and Attendance report toolbar 296
Detailed general report 297
General report 299
Report by the number of people 301
Work schedule violations 302
Hours-worked report 304
Official acts report 306
Error report 308
Latecomers report 309
Personal presence-at-workplace report 310
Presence at workplace report 312
Employee time clock report 314
T-12 and T-13 reports 316
Generalized report 319
General report by discipline and overtime 320
Simple generalized report 322
Employee details 323
Employee details (full report) 325
8.10 Exporting of reports 327

9 Appendix 1. The RemoteProtocolConnector utility for extracting event protocol to a separate database 329

9.1 Extracting event protocol to a separate DB with RemoteProtocolConnector..... 329

9.2 Purpose of the RemoteProtocolConnector. Start and shutdown 332

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 Intellect Web Report System

Intellect Web Report System is a site that is located in the local network or Internet according to the requirements of the security system that is performed on the basis of *Intellect*. 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* is required for working.
2. Creating and exporting general and detailed reports by work time accounting (Time and Attendance reports). *ACFA Intellect* 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* is required for working.
4. Creating and exporting reports of *Auto Intellect* module (Auto reports). *Auto Intellect* is required for working.
5. Creating and exporting general and detailed reports by count of people in the monitored object (Visitors counting detectors). The Detector Pack, Face Intellect and *POS Intellect* are required for working.
6. Creating and exporting reports by queue length (Queue length detectors). The Detector Pack is required for working.
7. Creating and exporting general and detailed reports by POS-events (POS reports). *POS Intellect* and Detector Pack are required for working.
8. Creating and exporting customer behavior reports (Visitors behavior analysis). The Detector Pack is required for working.

9. Creating and exporting incident manager reports (Incident manager service reports). The base Intellect is required for working.
10. Setting up the varied user access to all reports.
11. Setting up *Intellect Web Report System* operation in the auto mode.

> **Note**
>
> In *Intellect Web Report System* you can generate reports automatically on the schedule with subsequent saving report files on the 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 Intellect Web Report System

The Web-Server of *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 *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, *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/.

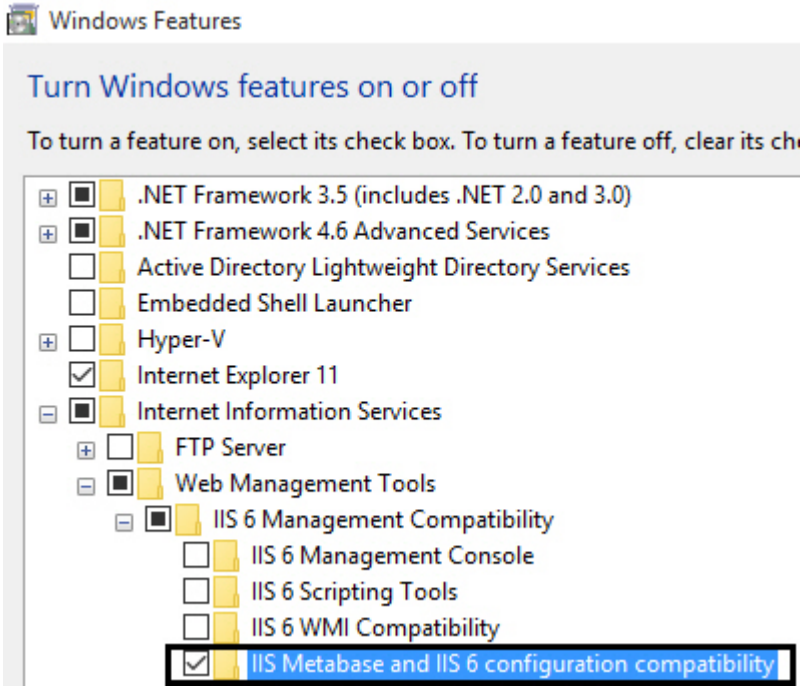
2. Set of Microsoft Internet Information Services (IIS) servers;

   > **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* 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 *Intellect* (see Internal video Server database).

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

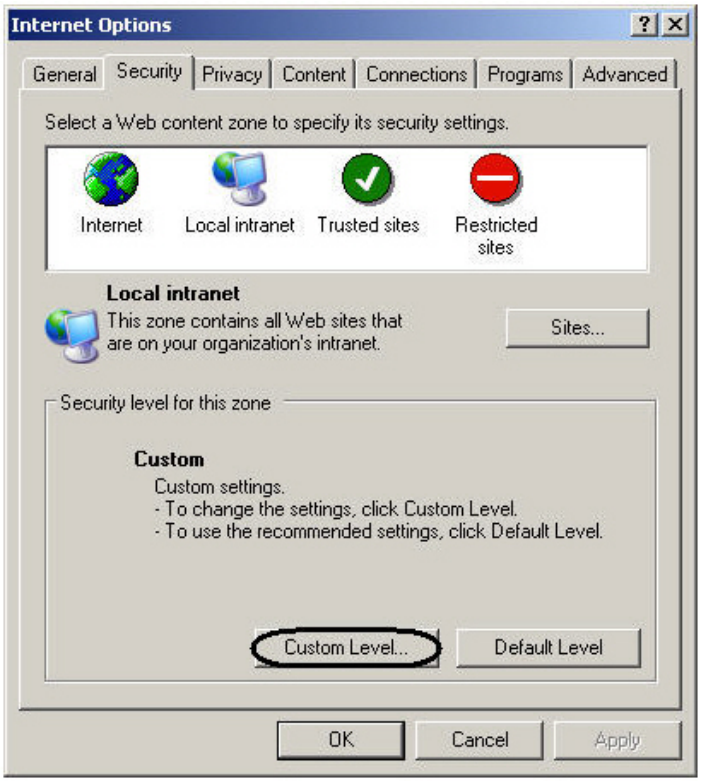
By default the use of ActiveX components is forbidden in *Internet Explorer*, that is why it's necessary to set extra security parameters.

For this do the following:

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

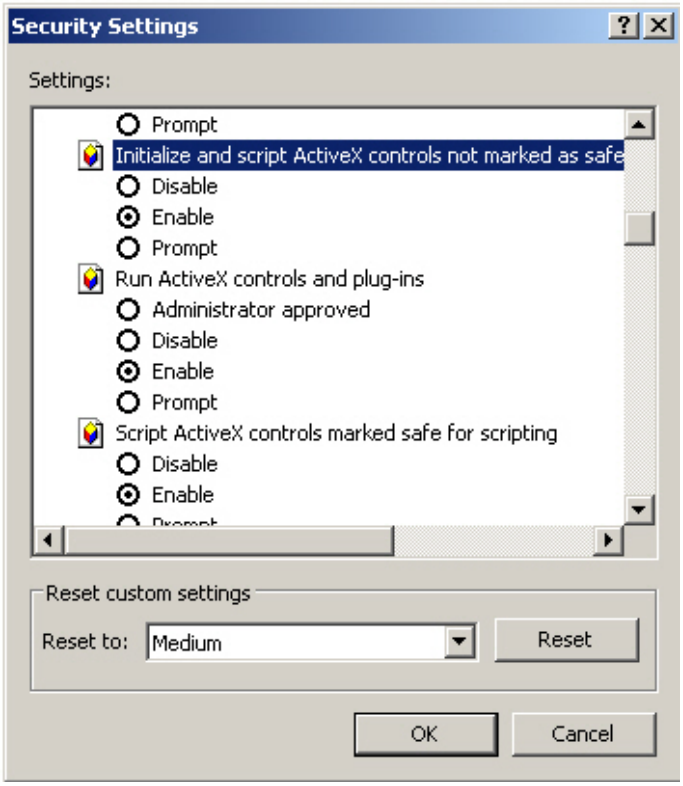


2. In the **Internet options** dialog box go to the **Security** tab.



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 General description of Intellect Web Report System distribution kit

Intellect Web Report System is supplied as a software installation package (distribution kit). The current version of the distribution kit can be downloaded from the official AxxonSoft website.

The distribution kit contains all the necessary software components for installing the *Intellect Web Report System* software package on a base computer.

The distribution kit allows you to install, restore and remove the *Intellect Web Report System* software package.

> **Attention!**
>
> - Prior to installing, restoring or removing the *Intellect Web Report System* software package, the *Intellect* operation should be shut down.
> - Administrator rights are required for installing, restoring or removing *Intellect Web Report System*.

3.2 Installation

Intellect Web Report System is installed as a part of *Intellect.* Information about compatibility of *Intellect* versions and *Intellect Web Report System* is presented at Obsolete. General information about product releases and versions compatibility.

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

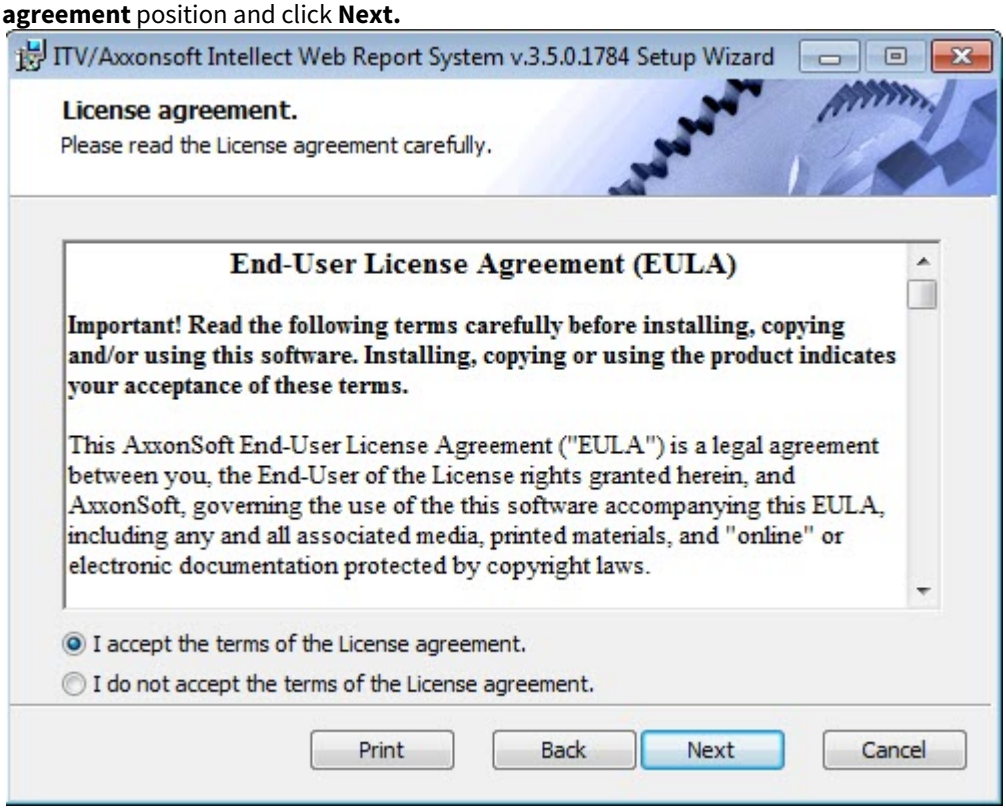
To install *Intellect Web Report System,* do the following:

1. Run the setup.exe executable file in the distribution root directory.

2. To continue the installation process, click **Next.**

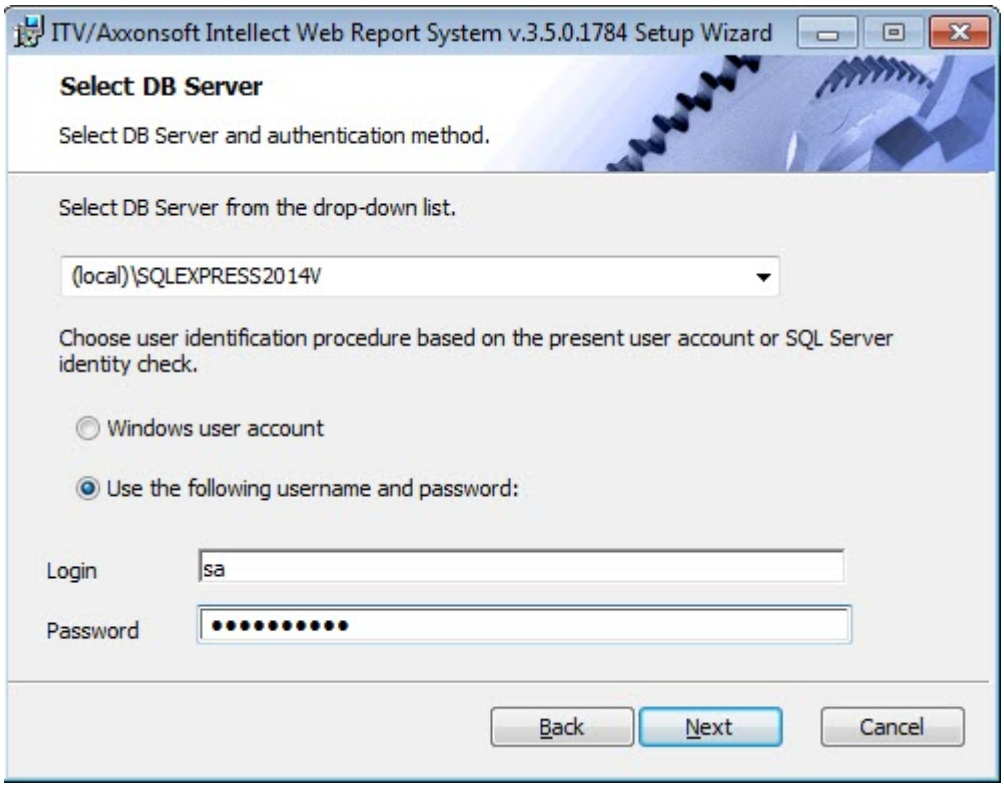


3. Read the terms of the license agreement carefully. Then set the switch to **I accept the terms of the License agreement** position and click **Next.**

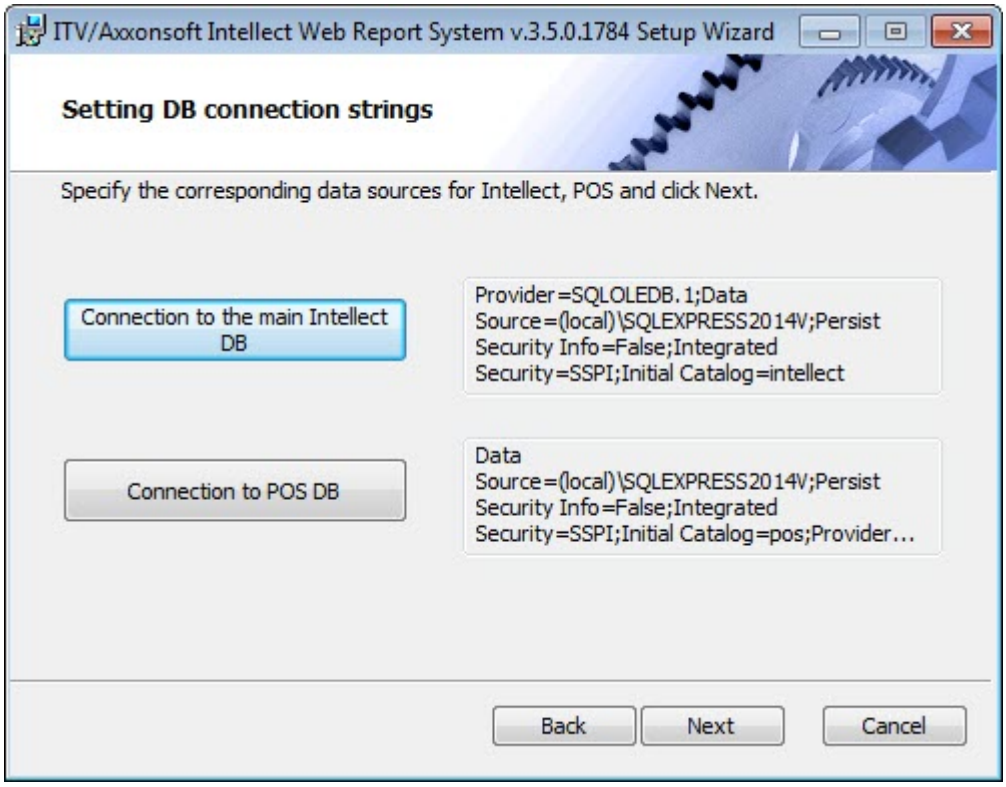


4. Select MS SQL Server DB server and set the connection parameters (for details, see Installation of Intellect as a Server/Remote Administrator's workstation). To continue the installation process, click **Next.**

> **Note**
>
> The *Intellect Web Report System* database will be created on the selected SQL server.
> Later it's possible to move the database of *Intellect Web Report System* to another SQL server. After that, it is necessary to make changes to the *<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"/>

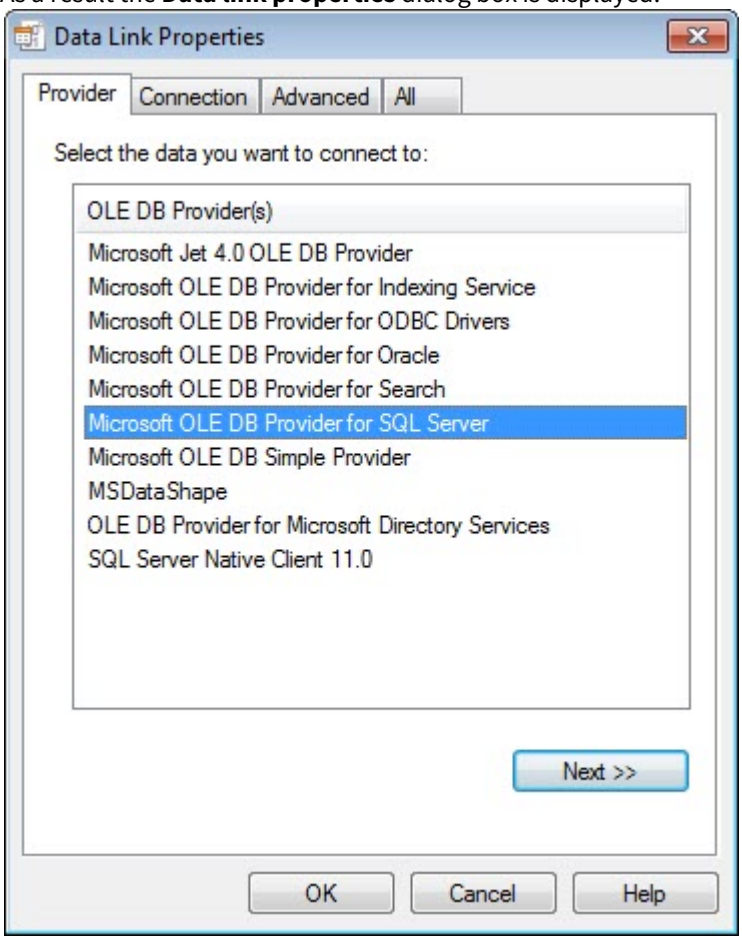


5. Specify the connection strings to the main *Intellect* database and the *POS Intellect* receipts database. The connected databases will serve as a data source when creating reports.



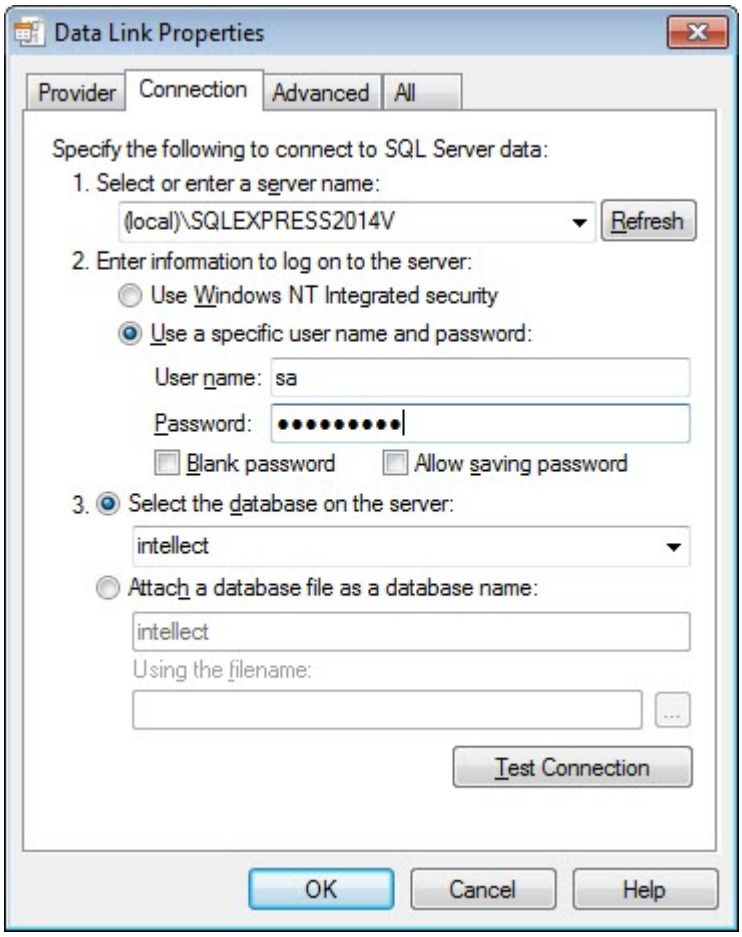
6. To set connection string to the main *Intellect* database, do the following:
    a. Click **Connection to the main Intellect DB**.

b. As a result the **Data link properties** dialog box is displayed.



c. In the **Data provider** tab select **Microsoft OLE DB Provider for SQL Server**. Click **Next**.

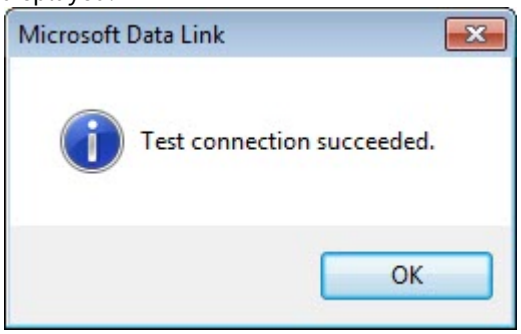
d. As a result there will be an automatic switch to **Connection**.



e. 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.

f. 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.

g. 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.

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

i. 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.

7. In the same way, set the connection string to the *POS Intellect* database of receipts (the default database name is *pos).*
8. Click the **Next** button to proceed to setting up the connection to the *Auto Intellect* databases.
9. In the same way, set the connection string to the Traffic Detection database (the default database name is *traffic_db*).
10. In the same way, set the connection string to the License Plate Recognizer database (the default database name is *lprex).*
11. Click **Next** to proceed to configuring the connection to the *DetectorPack* databases.
12. In the same way, set the connection string to the *DetectorPack* database (the default database name is *detectorpack).*

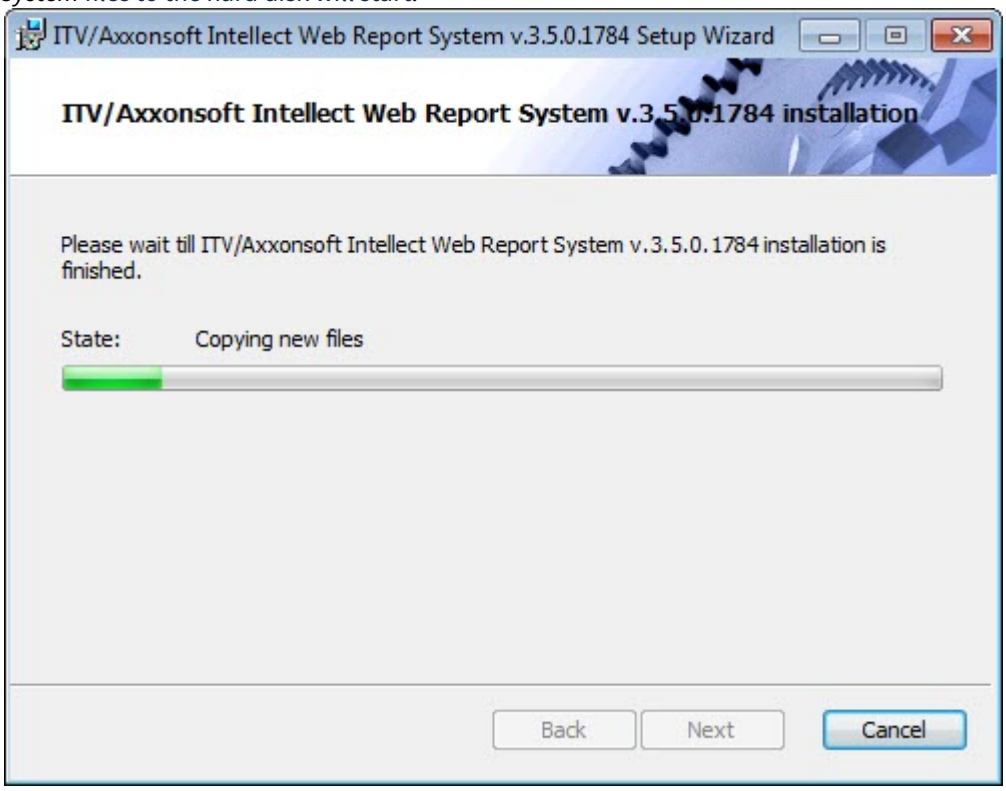
Note

If you install *POS Intellect*, *Auto Intellect* and *DetectorPack* after the *Intellect Web Report System*, it is necessary to connect the *Intellect Web Report System* database to the corresponding modules. To do this, start the repairing mode of the reporting subsystem and specify the appropriate connection strings (see Repairing).
You can also set the connection strings to all databases through the *<Intellect installation directory>\Modules\Wt2\Web.config* file. Examples of connection strings are given below:

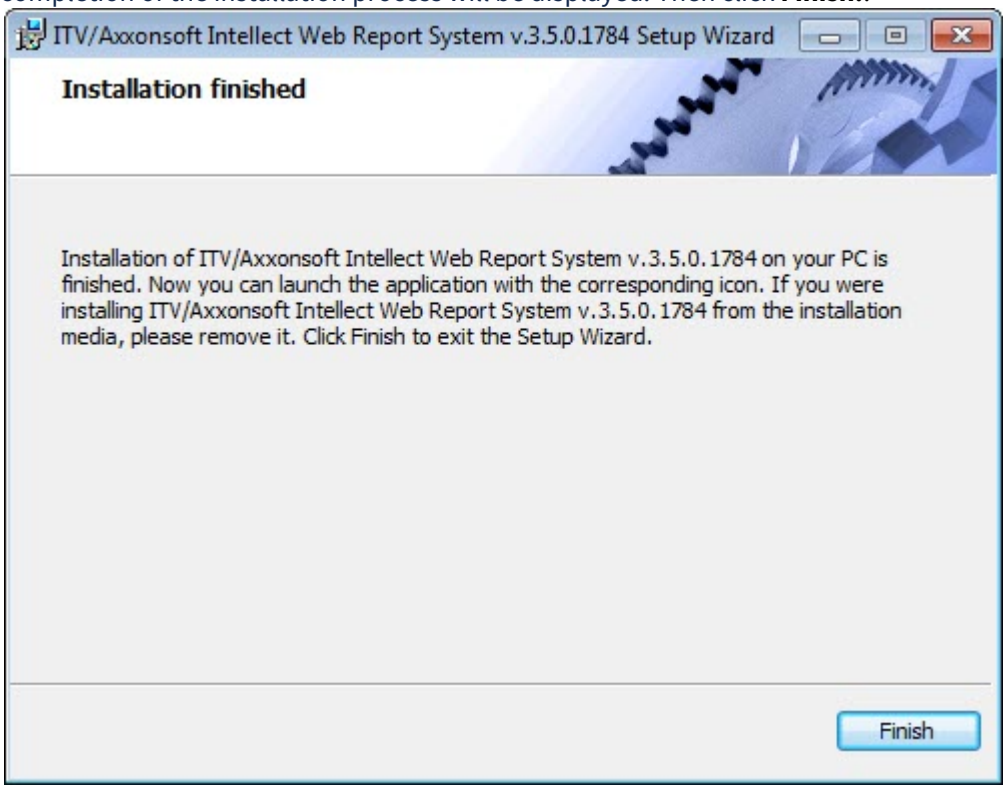
- <add name="IntellectDB" connectionString="Provider=SQLOLEDB.1;Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=intellect;Data Source=(local)\SQLEXPRESS2014" />
- <add name="PosDB" connectionString="Data Source=(local)\SQLEXPRESS2014;Persist Security Info=False;Integrated Security=SSPI;Initial 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 the installation process, click **Next**. As a result, the copying of the necessary *Intellect Web Report System* files to the hard disk will start.



14. After successful copying of the *Intellect Web Report System* components, a message about the completion of the installation process will be displayed. Then click **Finish.**.



The installation of *Intellect Web Report System* is completed.

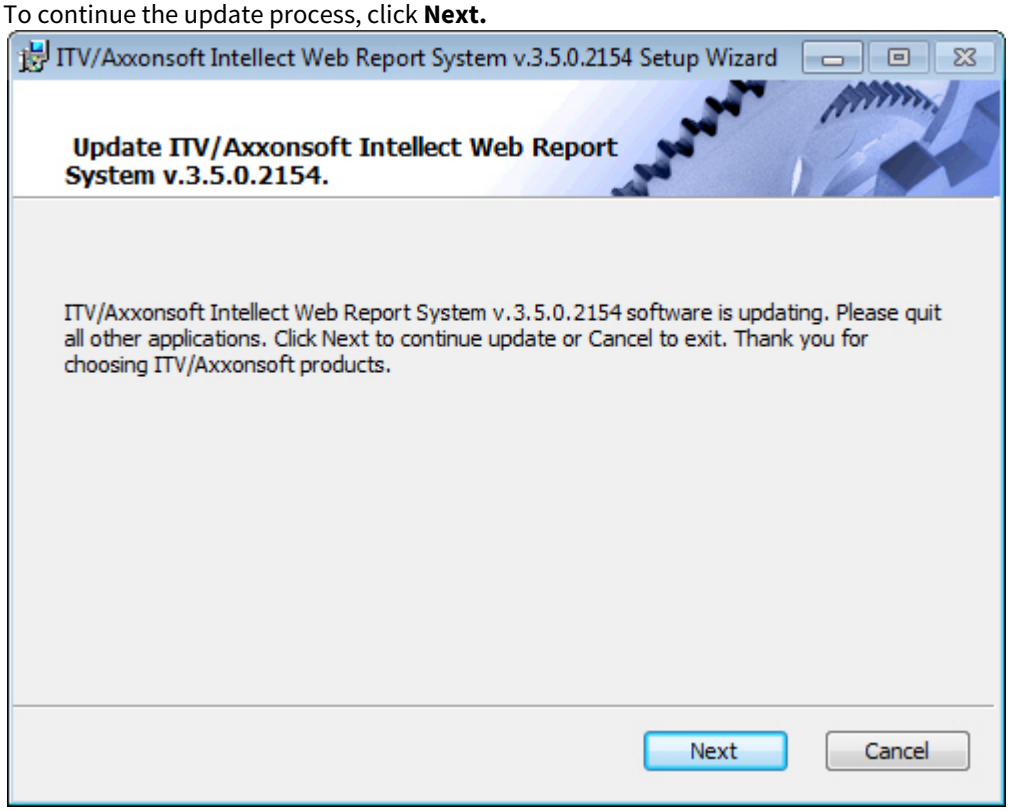
3.3 Updating

Updating mode is used to install a new version of *Intellect Web Report System* without removing the previous one.

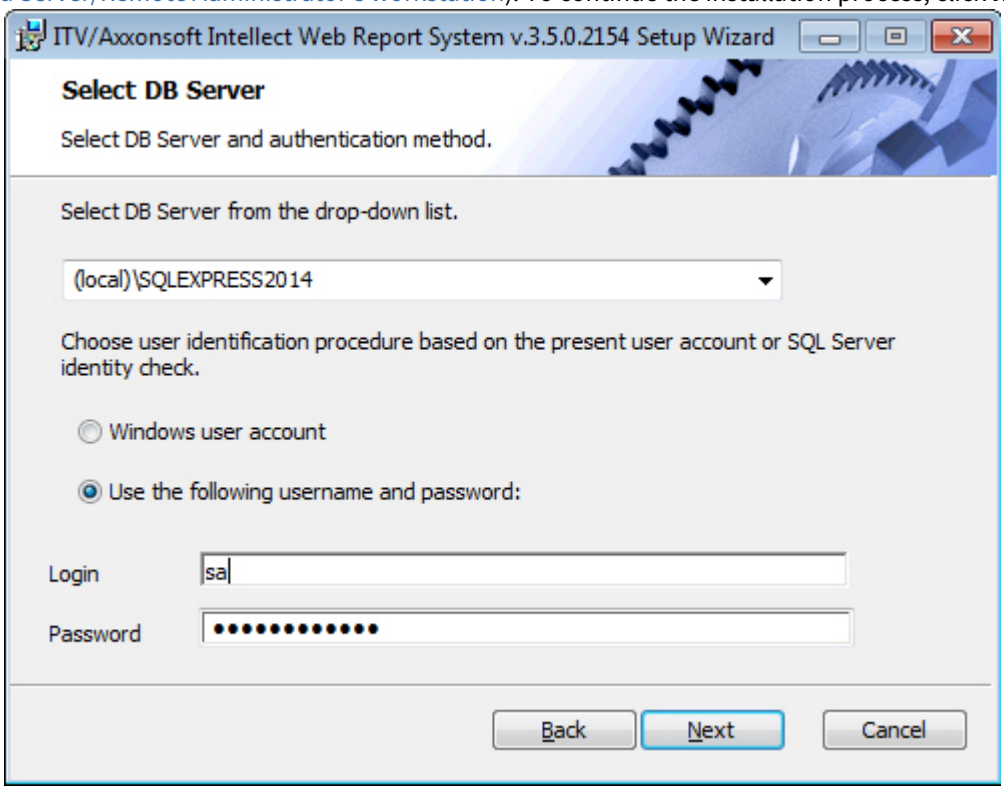
To update the *Intellect Web Report System*, do the following:

1. Run the setup.exe executable file in the distribution root directory. The version of the distribution kit should be newer than the version of currently installed *Intellect Web Report System*.

2. To continue the update process, click **Next.**

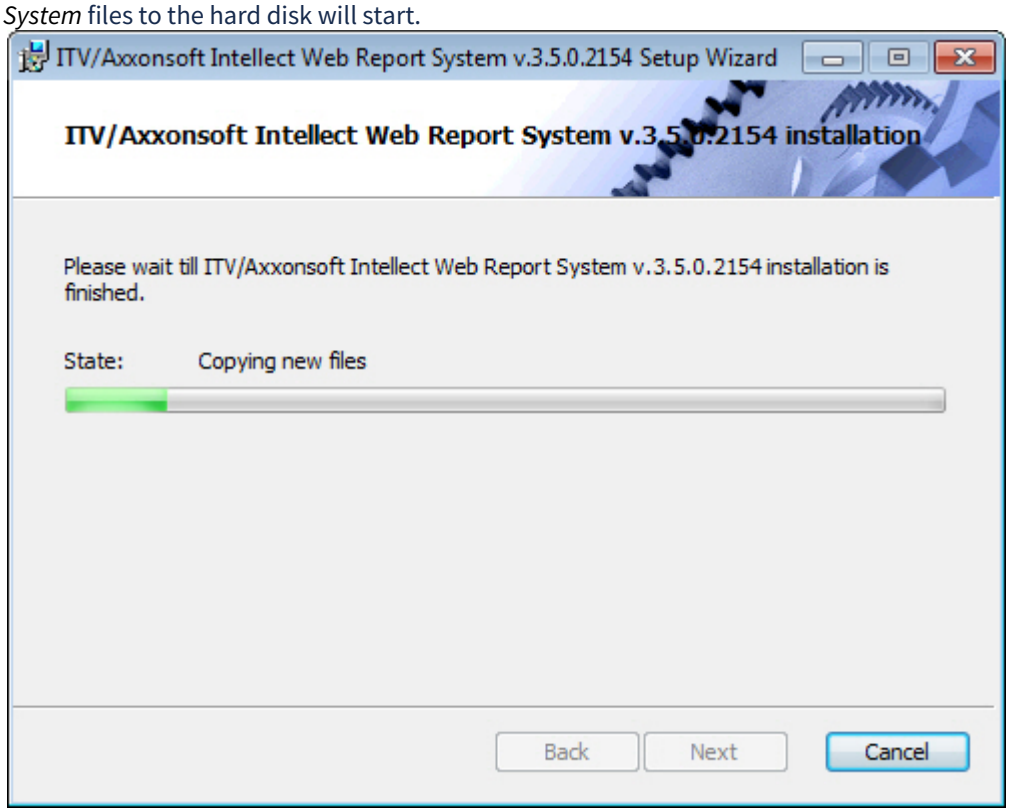


3. Select MS SQL Server DB server and set the connection parameters (for details, see Installation of Intellect as a Server/Remote Administrator's workstation). To continue the installation process, click **Next.**

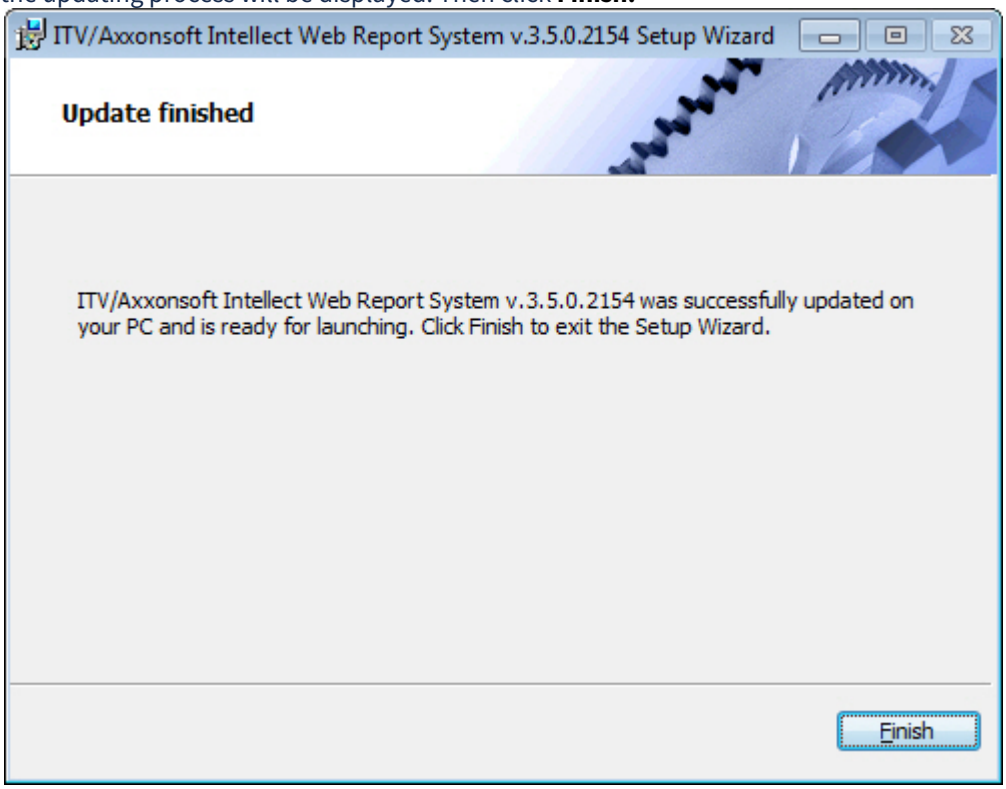


As a result, the check of the installed components and the copying of the necessary *Intellect Web Report*

System files to the hard disk will start.



4. After successful copying of the *Intellect Web Report System* components, a message about the completion of the updating process will be displayed. Then click **Finish.**



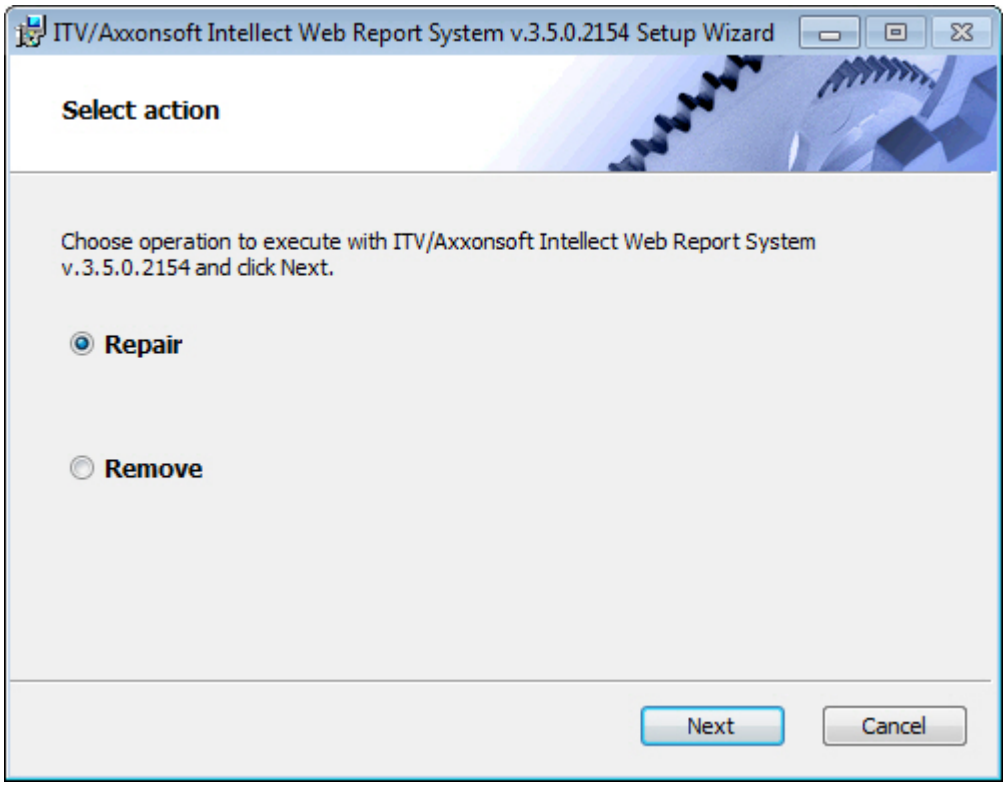
The updating of *Intellect Web Report System* is completed.

3.4 Repairing

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

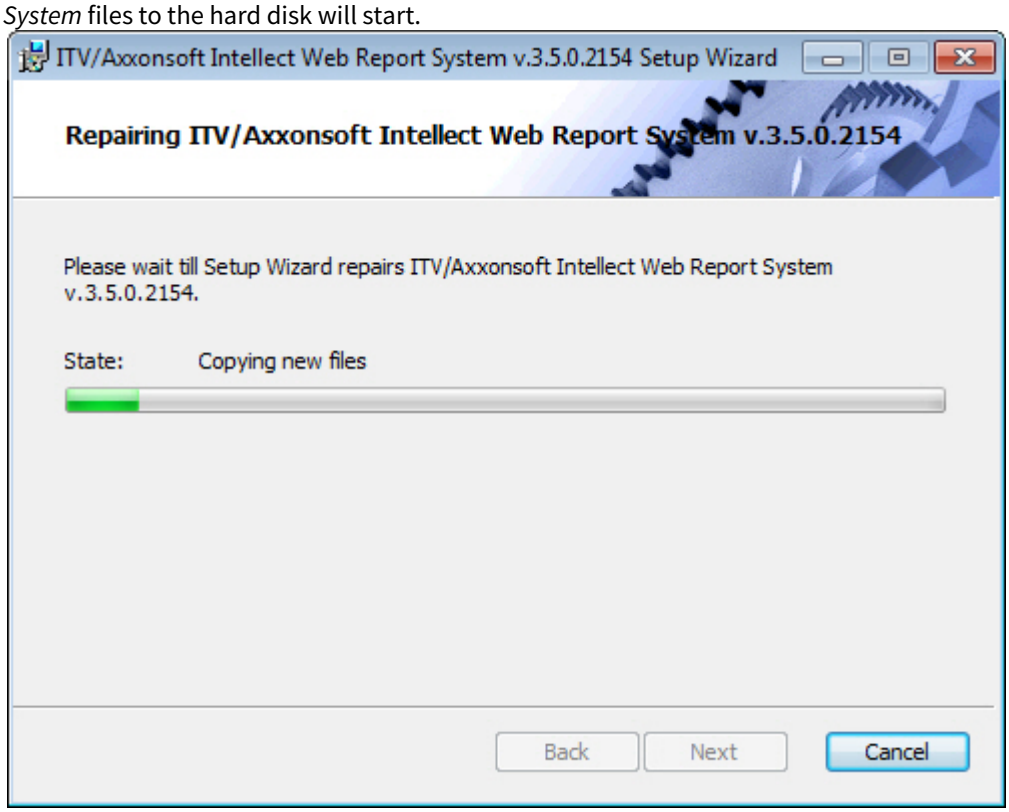
To repair *Intellect Web Report System,* do the following:

1. Launch the *Intellect Web Report System* repairing process in one of the following ways:
   - Run: **Start → Intellect → Delete the reporting subsystem**.
   - Run the setup.exe executable file in the distribution root directory. The version of the distribution kit and the version of currently installed *Intellect Web Report System* should match.
2. As a result of one of these actions the dialog box of action selection is displayed. Select the **Repair** operation and click **Next**.

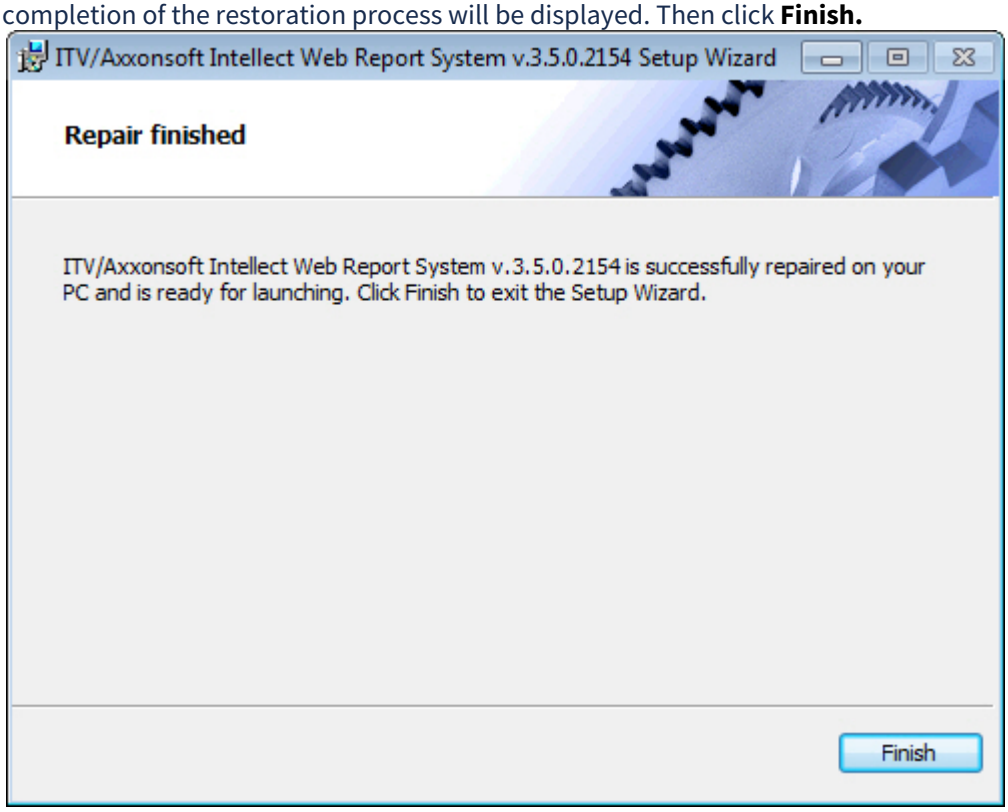


3. The **Selection DB server** box is displayed. In this and following boxes repeat 4-13 steps of Installation guide.

4. As a result, the check of the installed components and the copying of the necessary *Intellect Web Report System* files to the hard disk will start.



5. After successful copying of the *Intellect Web Report System* components, a message about the completion of the restoration process will be displayed. Then click **Finish.**

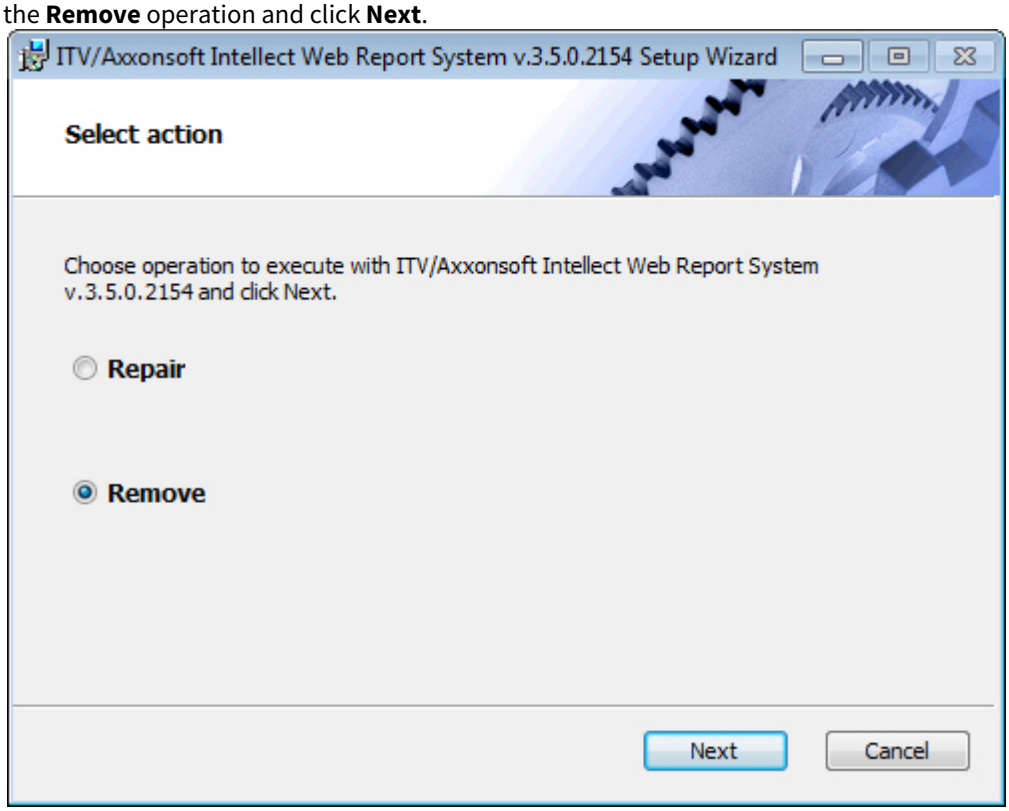


The repairing of *Intellect Web Report System* is completed.

3.5 Removal

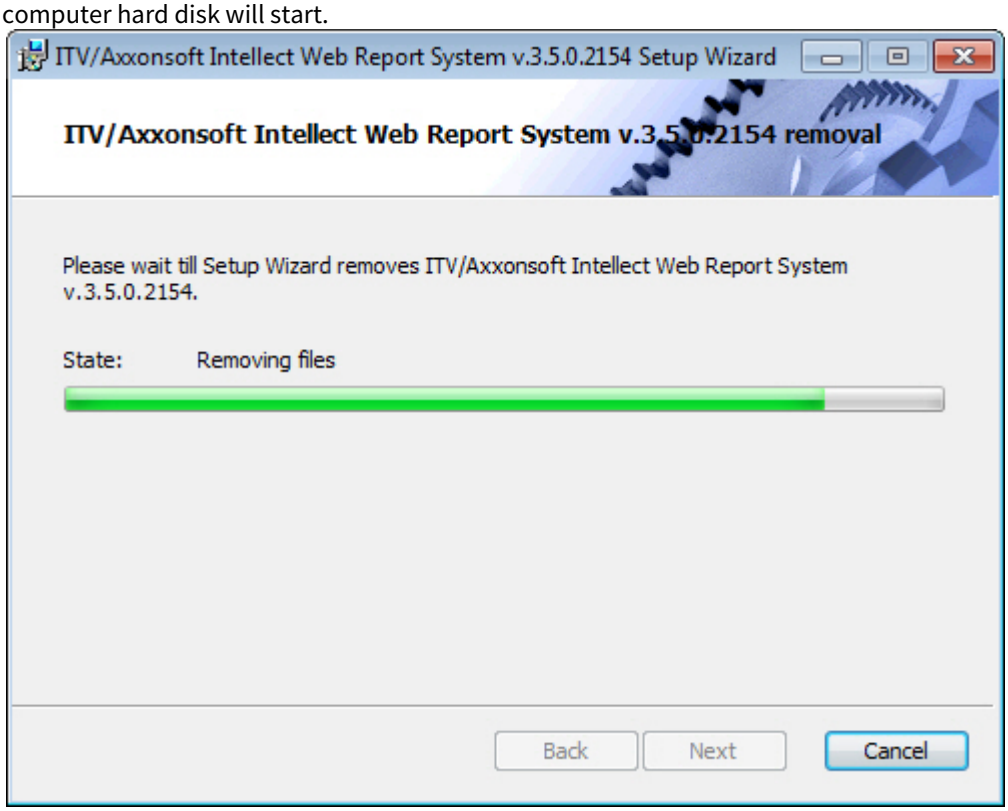
To remove the *Intellect Web Report System*, do the following:

1. Launch the *Intellect Web Report System* removal process in one of the following ways:
   - Run: **Start** → **Intellect** → **Delete the reporting subsystem**.
   - Run the setup.exe executable file in the distribution root directory. The version of the distribution kit and the version of currently installed *Intellect Web Report System* should match.
2. As a result of one of these actions the dialog box of action selection is displayed. Select the **Remove** operation and click **Next**.

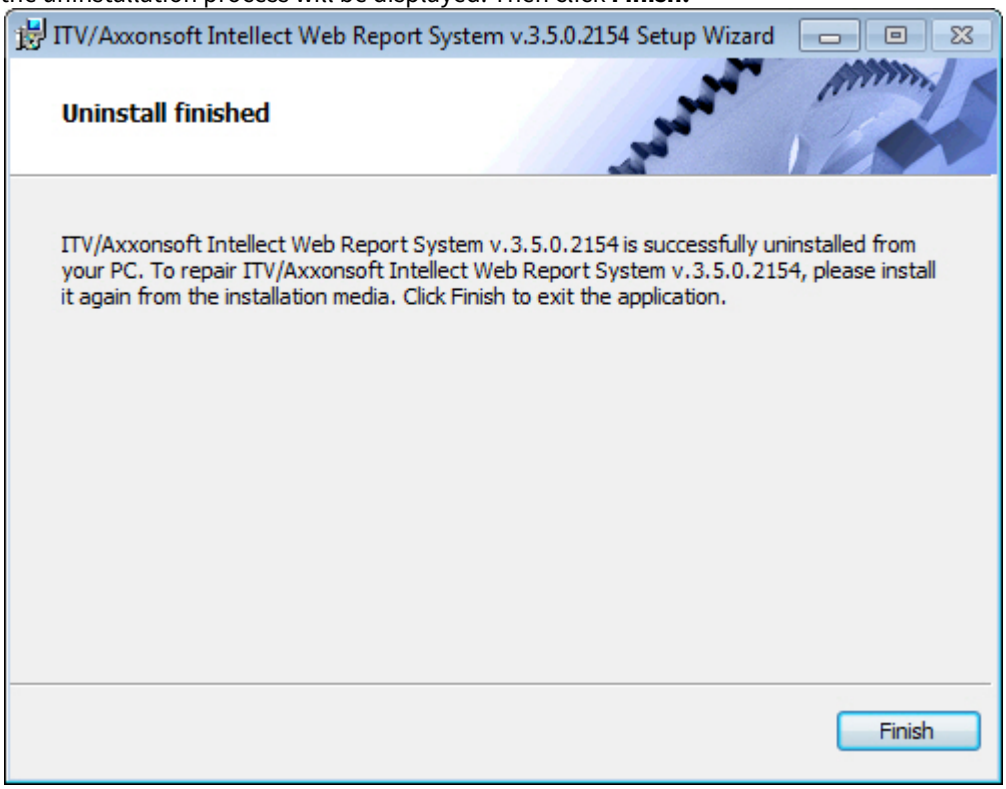


As a result, the process of removing the installed *Intellect Web Report System* components from the

computer hard disk will start.



3. After successful removal of the *Intellect Web Report System* components, a message about the completion of the uninstallation process will be displayed. Then click **Finish.**



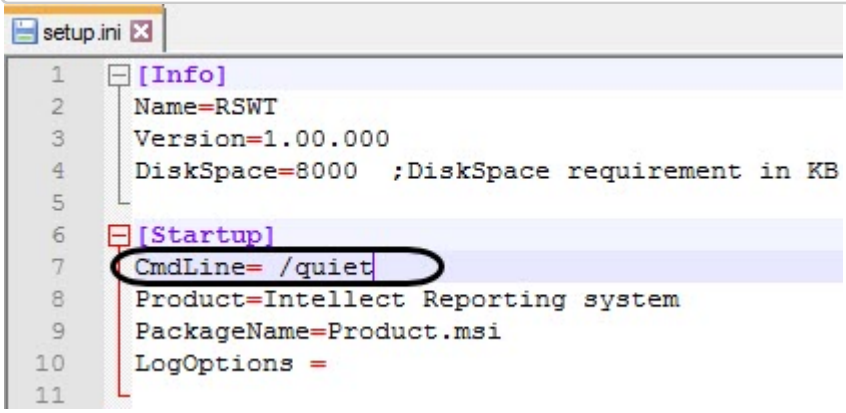
The removal of *Intellect Web Report System* is completed.

3.6 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.

3.7 Remote installation, deinstallation and update of Intellect Web Report System

You can remotely install, deinstall and update *Intellect Web Report System* using the wmic.exe command line utility. This utility is a part of Windows OS. To run the utility, enter "wmic" without quotation marks in Windows command line.

Detailed information about this utility can be found on Microsoft technical documentation page https://docs.microsoft.com/en-us/. At the moment of creating this section, the description of the utility is available at https://docs.microsoft.com/en-us/windows/win32/wmisdk/wmic.

> **Note**
>
> The wmic.exe utility does not work correctly with VMware virtual machines. It is not guaranteed to work with other virtual machines.

To run wmic on a remote computer, you should disable UAC (for instructions on how to do this, see OS settings for correct operation of Remote Admin Workstation or Server).

The installation, deinstallation, and upgrade methods described in this section apply to domain and extra-domain computers.

It is necessary to copy *Intellect Web Report System* distribution kit to the computer local disks where the installation will be performed in advance.

To do this, you can use the following command line script:

```
xcopy %Path_to_folder_with_distribution_kit% %Network_folder_on_the_target_PC% /e
```

where:

- *%Path_to_folder_with_distribution_kit%* is the path to the folder with the distribution kit on the local computer.
- *%Network_folder_on_the_target_PC%* is the path to the folder on the computer where you want to install the software. You should have the write access to it.
- The */e* attribute copies all subdirectories and their contents, including empty directories.

> **Note**
>
> The UNC path is in the format \\<server IP address>\<Shared folder on this server>\... . The ellipses here represent the path from the shared folder to the folder with the distribution kit. If you are installing on the computers in the domain, specify the address of the server that contains the distribution kit folder available to all computers.

Detailed information about the xcopy utility can be found on Microsoft technical documentation page. At the moment of creating this section, the description of the utility is available at https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-xp/bb491035(v=technet.10).

Note that the installation method described in this section allows you to install or upgrade only the core product without any add-ons.

3.7.1 Remote installation of Intellect Web Report System

In order to install *Intellect Web Report System* on a remote computer, run the following command with the wmic.exe utility:

```
/NODE:"Computer_name" /USER:"User_name" /PASSWORD:"Password" product call
install true, "%installer parameters%", "%Path_to_folder_with_distribution_kit%
\Product.msi"
```

Here:

- /NODE – the name of the target computer on which *Intellect Web Report System* is being installed.

> **Note**
>
> The NODE list can be a text file that specifies the names of the target computers in column.

- /USER and /PASSWORD – login and password of the user who has the rights to install the software on the remote computer.
- "%Path_to_folder_with_distribution_kit%\Product.msi" – path to the Product.msi installer file you need to run. It is the local path to the folder to which you copied the distribution kit.
- %installer parameters% – installer options. The following parameters can be applied to Product.msi:
    a. The parameters that can be applied to any msi file (for reference, run the msiexec.exe /? command in the command line from <WINDOWS>\system32\ directory).
    b. The parameters described in the setup.exe help article in the /CMD="[commands]" section (for reference, run the setup.exe /? command in the command line from the installer folder. These commands are also described in Installing INTELLECT™ software in a silent mode section).

c. The parameters that are set in setup.exe during installation:
   - CMD_INSTALLTYPE – Client, Server, Admin.
   - REMOVEALL (0, 1) – removal with/without saving the configuration.
   - NOOSCHECK=1 – disable the OS compatibility check.

Note

The operation of these parameters is not guaranteed if there is a branch in the registry:
- For x86 system: HKEY_LOCAL_MACHINE\SOFTWARE\ITV\INTELLECT\InstallPropertyInfo
- For x64 system: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ITV\INTELLECT\InstallPropertyInfo

The branch has the parameters of the previous installation.

Example

Example of an installer parameter string:
REBOOT=ReallySuppress LANGUAGE="de" TRANSFORMS="%Path_to_folder_with_distribution_kit% \languages\Setup\en\en.mst" CMD_INSTALLTYPE="Server"
In the example above:
REBOOT=ReallySuppress cancels computer reset at the end of installation.
LANGUAGE="de" selects the product language. The default product language is English.
TRANSFORMS="%Path_to_folder_with_distribution_kit%\languages\Setup\en\en.mst" specifies the path to the installer language mst-patch (specifies the installer language).
CMD_INSTALLTYPE="Server" specifies *Intellect* installation type – Server. It can also take the Admin value (if Remote Administrator's workplace installation type is required) and Client (if Remote Client installation type is required).

3.7.2 Remote update of Intellect Web Report System

In order to update *Intellect Web Report System* to a newer version remotely, do the following:

1. Run the installation of the new version as described in Remote installation of Intellect Web Report System.
2. In the installation command, specify the path to Product.msi for the newer version.

The old version will be deleted automatically. The configuration will be saved. The newer version will be installed.

3.7.3 Remote deinstallation of Intellect Web Report System

In order to deinstall *Intellect Web Report System*, run the following command in the wmic.exe utility:

```
/NODE:"Computer_name" /USER:"User_name" /PASSWORD:"Password" product where name="Product_name" call uninstall
```

Here Product_name is the name under which *Intellect Web Report System* is installed. In the English version, this is usually "Axxonsoft Intellect Web Report System v.Build_number". The name can be found in the registry in HKEY_LOCAL_ MACHINE\Software\Microsoft \Windows\CurrentVersion\Uninstall section.

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.

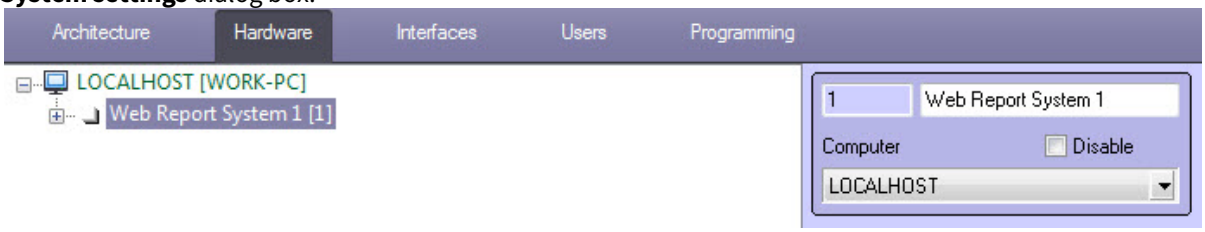
If the *Intellect Web Report System* is extended (for example if it is necessary to add some types of reports) then it is necessary to replace the previous activation key with a new one that will restrict the updated system functionality.

4.2 Activation of Intellect Web Report System functionality

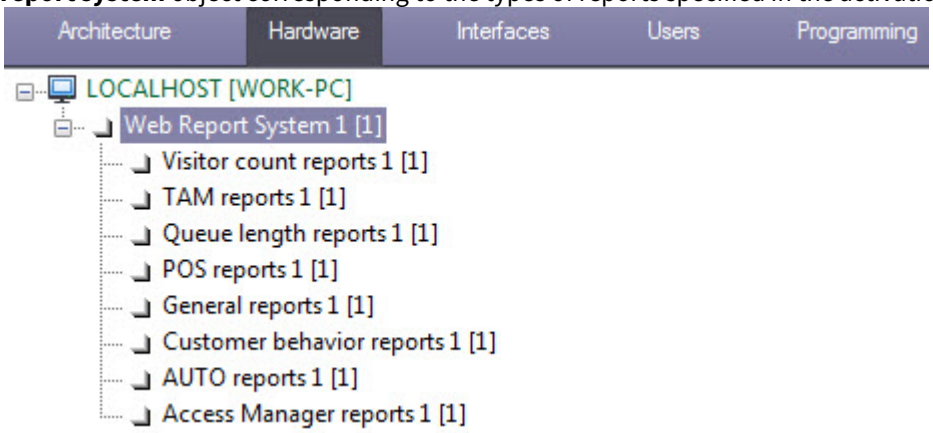
> **Attention!**
>
> The activation of *Intellect Web Report System* functionality is possible only if there is the corresponding activation key.

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.

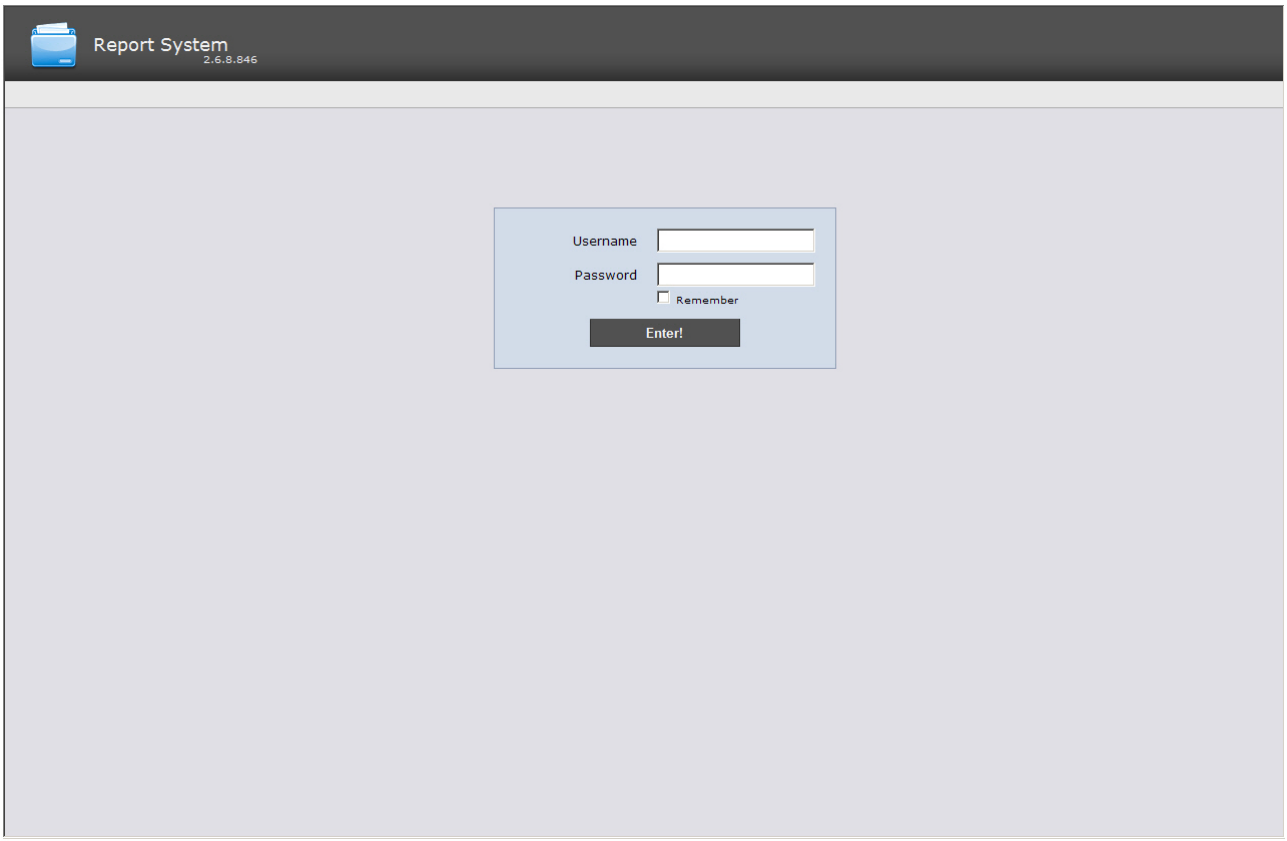
5 Intellect Web Report System startup and shutdown

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

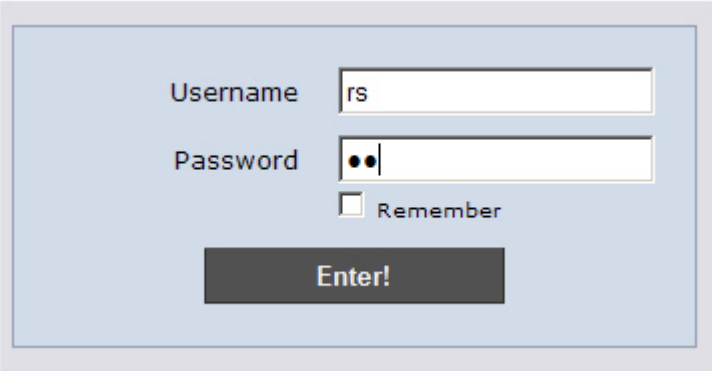
> **Note**
>
> The authorization page is displayed in the language selected in the browser by default or specified in **Web.config** file (see details in Change the Intellect Web Report System interface language).

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.

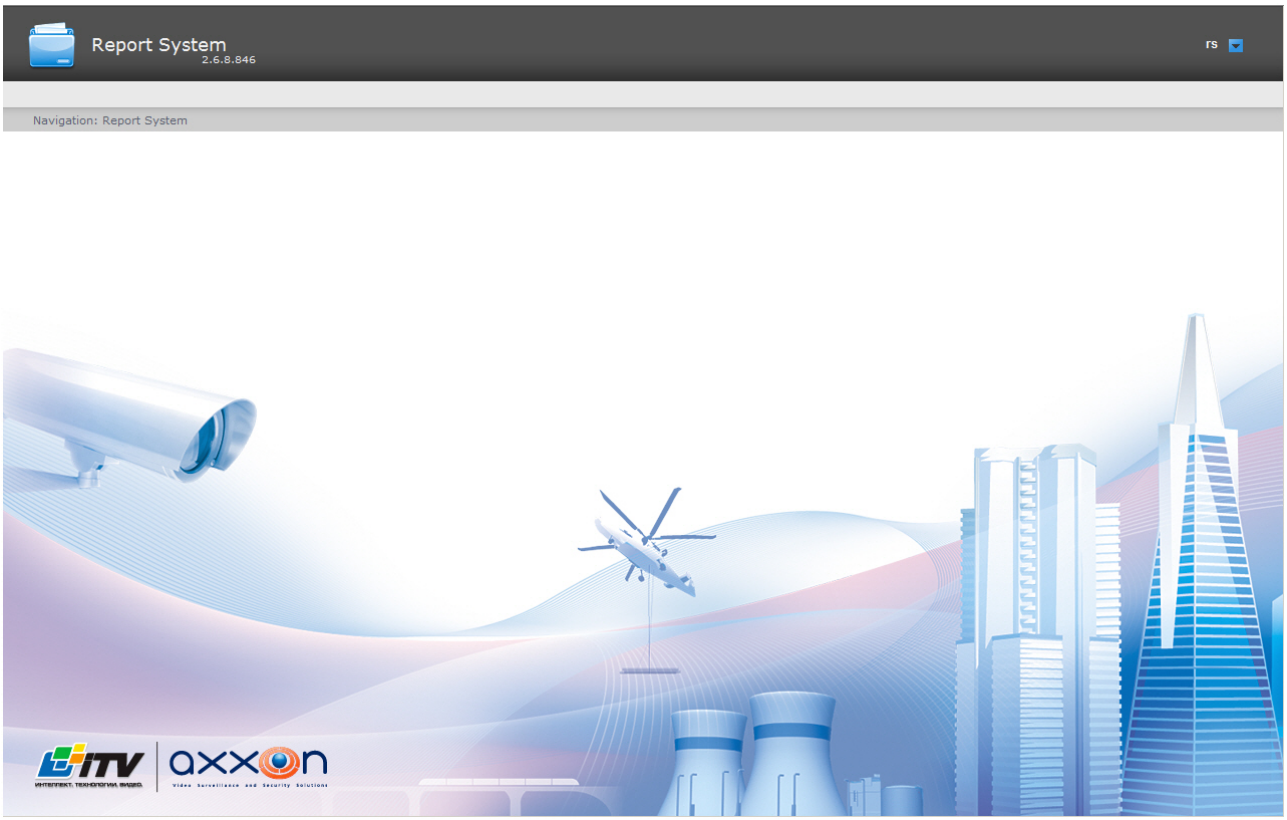
> **Note**

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.

Attention!

The user session will be ended automatically if the user's credentials have changed. To continue working, log in with new credentials.

5.3 Shutdown

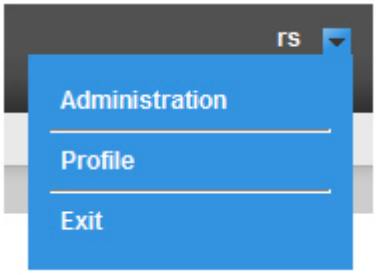
To shutdown *Intellect Web Report System* close the window in the browser.

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

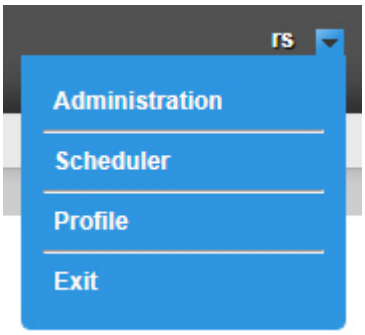
Intellect Web Report System interface consists of the following elements*:*

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.



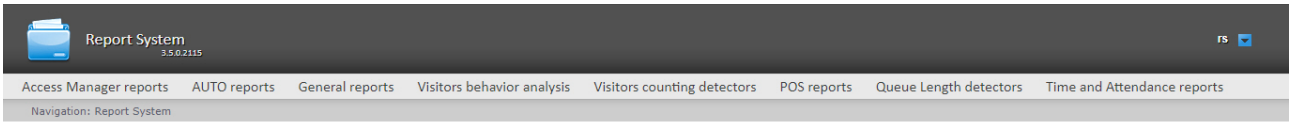
The following operations are available from the context menu:

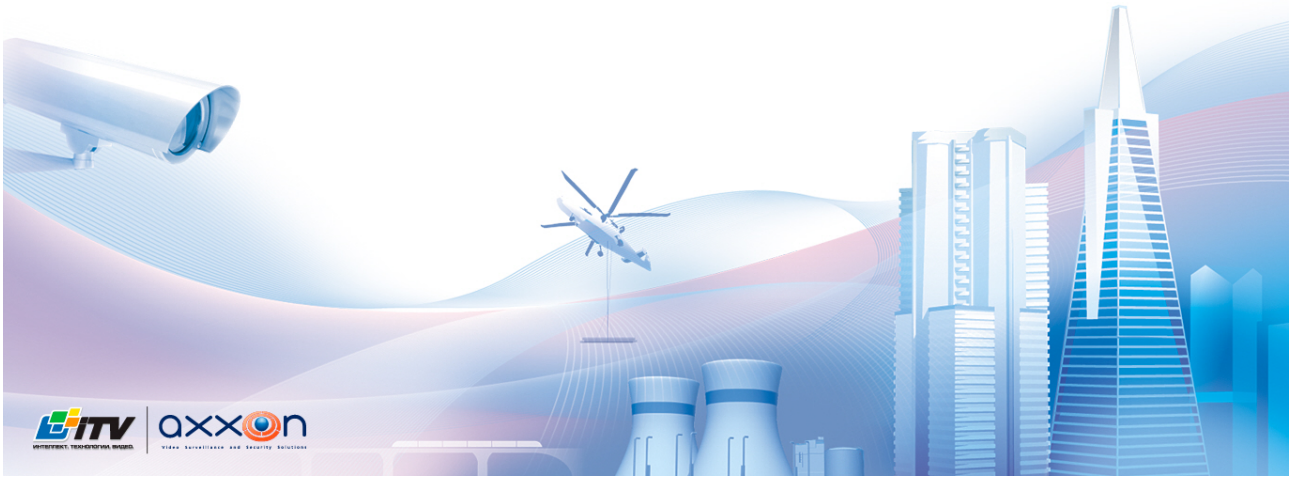
1. Switch to the administration page – the **Administration** item is used;
2. Switch to the user scheduler page – the **Scheduler** item is used;
3. Switch to the user profile page – the **Profile** item is used;
4. Switch to the authorization page – the **Exit** item is used.

6.2 Reports page

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

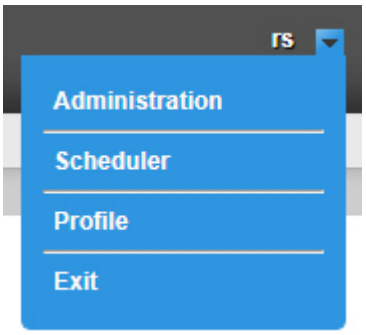
Besides the context menu the reports menu is also displayed on the reports page.



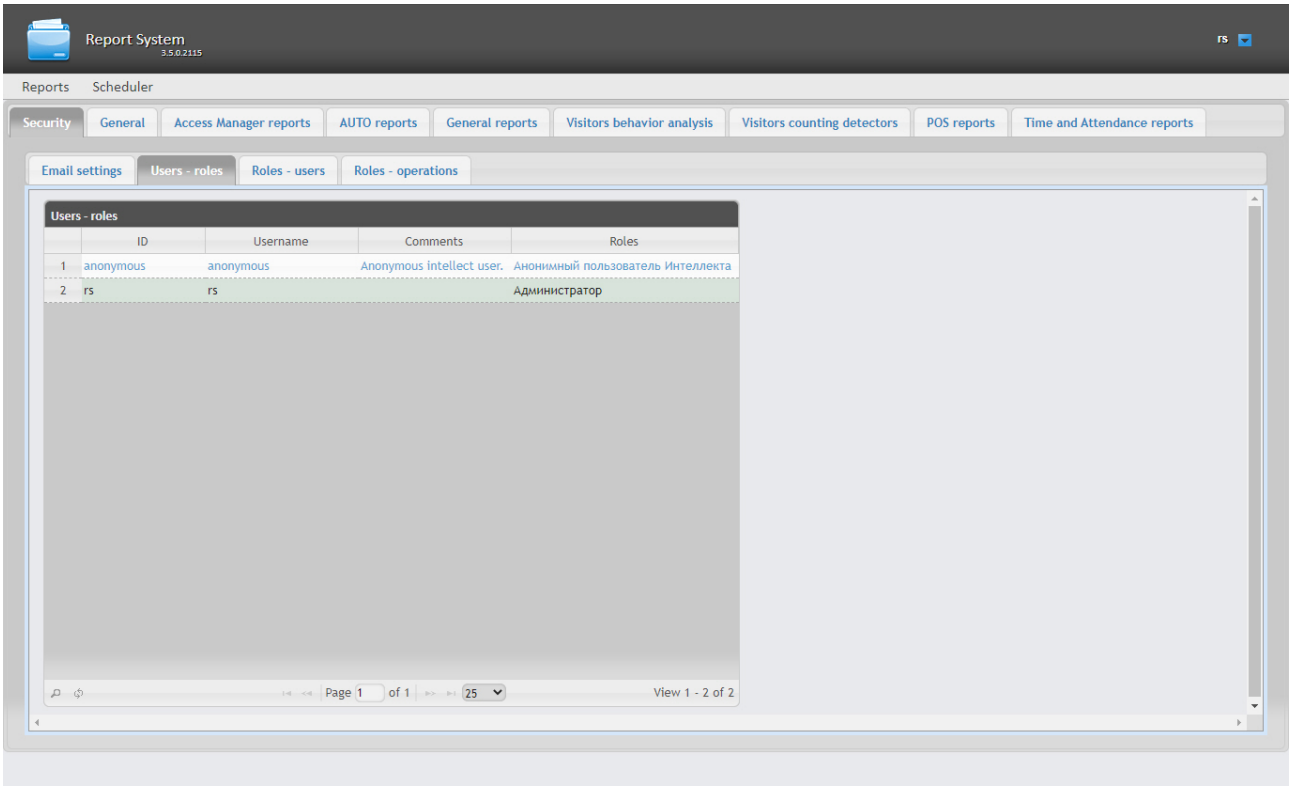


6.3 Administration page

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

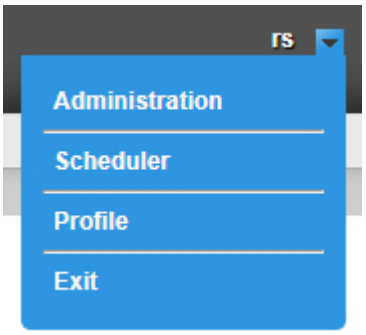


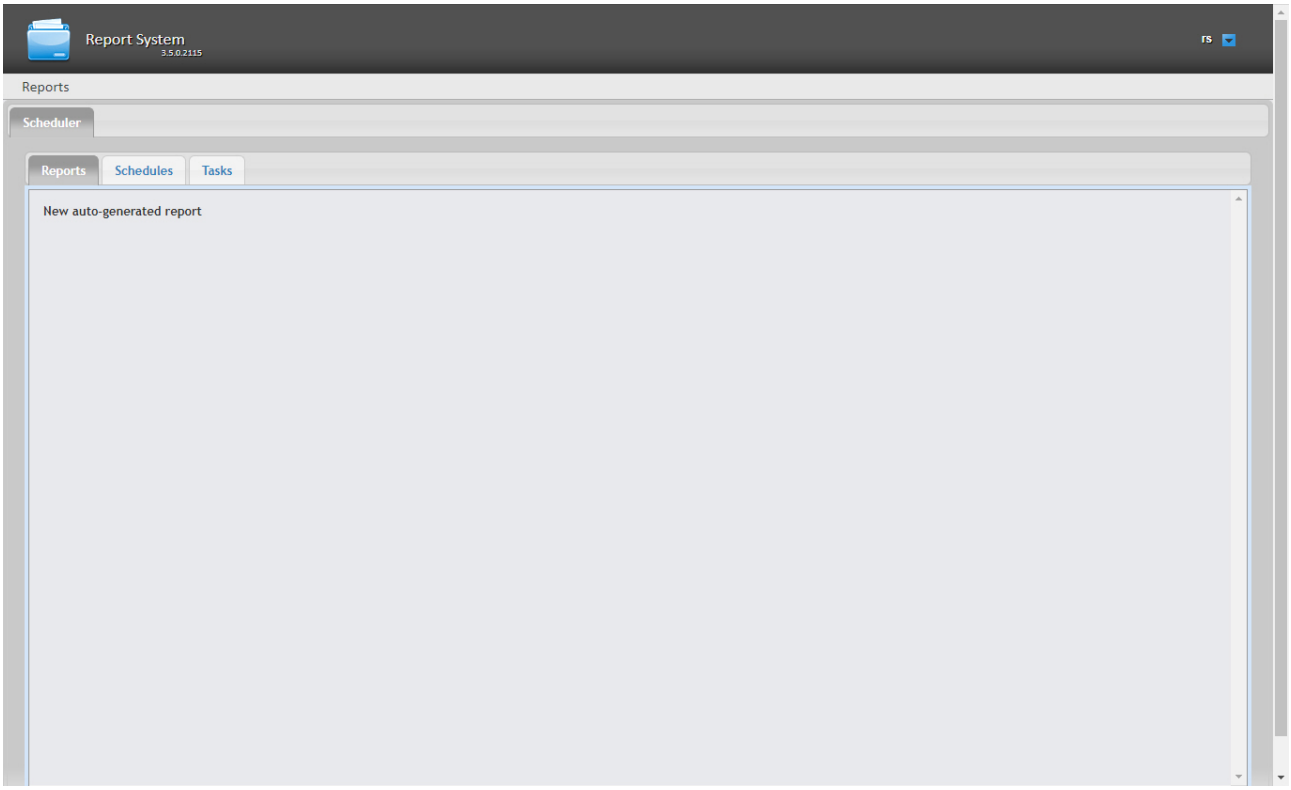
> **Note.**
>
> For some users this item can not be displayed (it depends on the availability of the administration rights).



6.4 Scheduler page

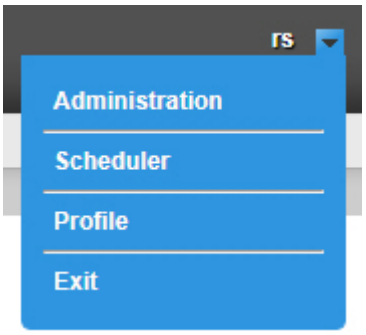
Switch to the *Intellect Web Report System* scheduler page is carried out through the context menu by selecting the **Scheduler** item.



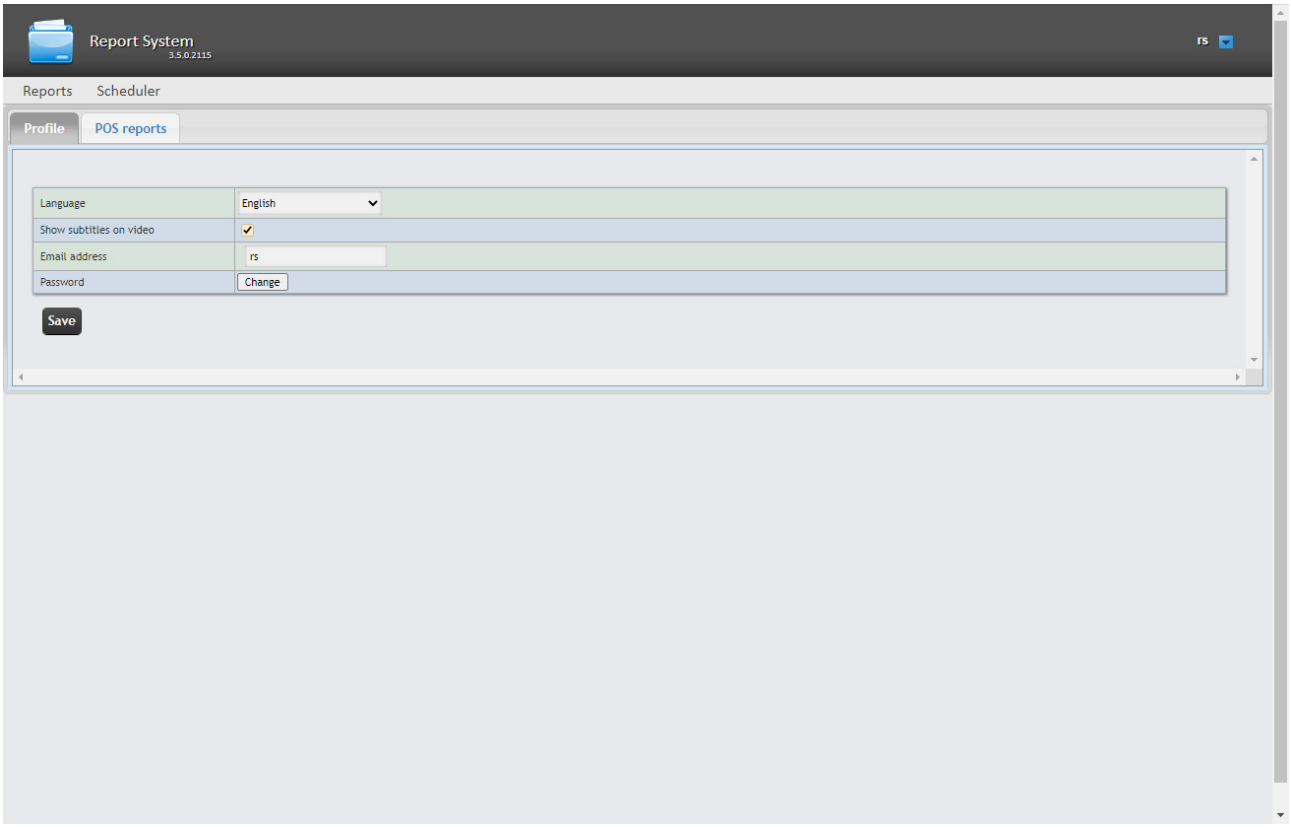


6.5 User profile page

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.

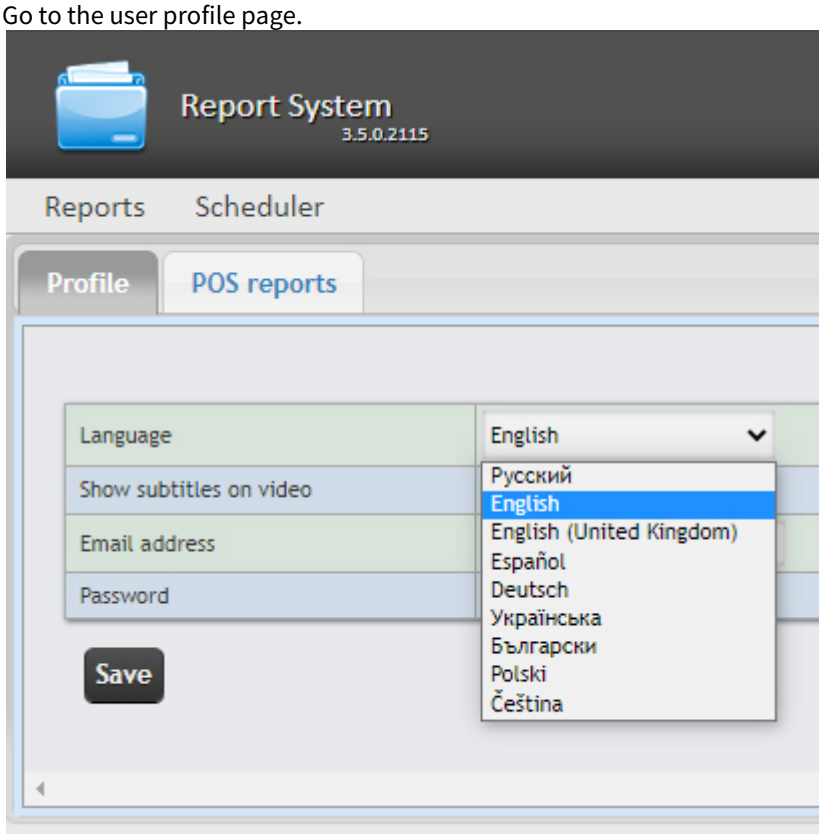


6.6 Change the Intellect Web Report System interface language

> **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
Ukrainian	dd.mm.yyyy	24-hour
Bulgarian	dd.mm.yyyy	24-hour

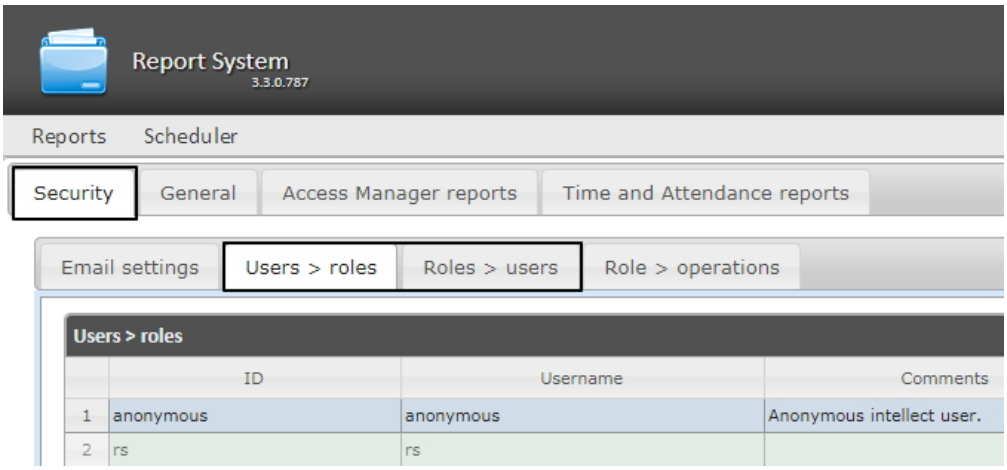
7 Intellect Web Report System administration

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.

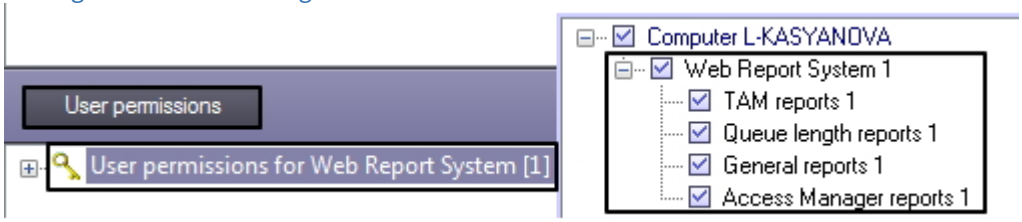
New users can be added to *Intellect Web Report System* by means of *Intellect* system settings only.

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

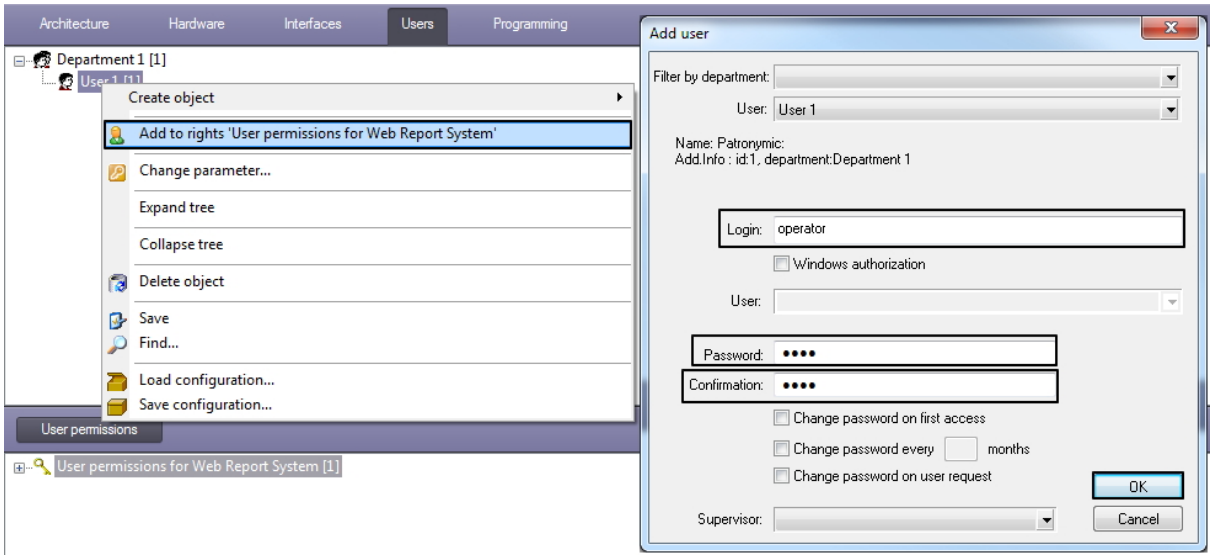
1. Registration of an new user in *Intellect.* This procedure is described in detail in the User registration and removal section of the *Intellect* Administrator's Guide.



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.



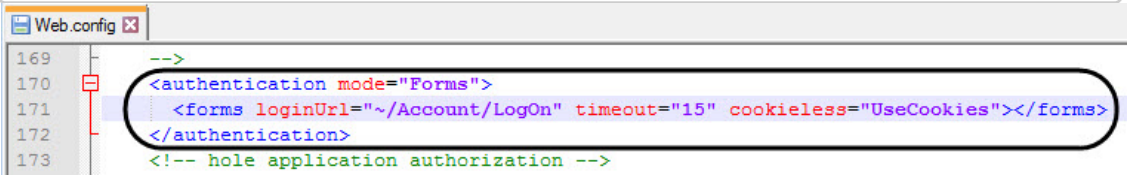
3. Assigning the right to to use *Intellect Web Report System* to the new user. This procedure is described in detail in the Assigning the rights and password to operators for authorization in the Intellect section of the *Intellect* Administrator's Guide.



> **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.

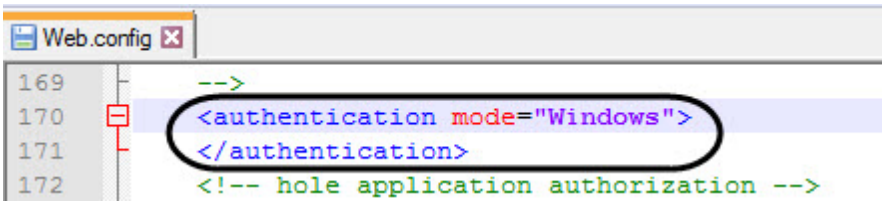
4. If the **Windows Authorization** method was selected, then do the following:
   a. Go to the <*Intellect* installation directory>\Modules\Wt2 and open the **Web.config** file for editing.
   b. Replace the following strings:

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

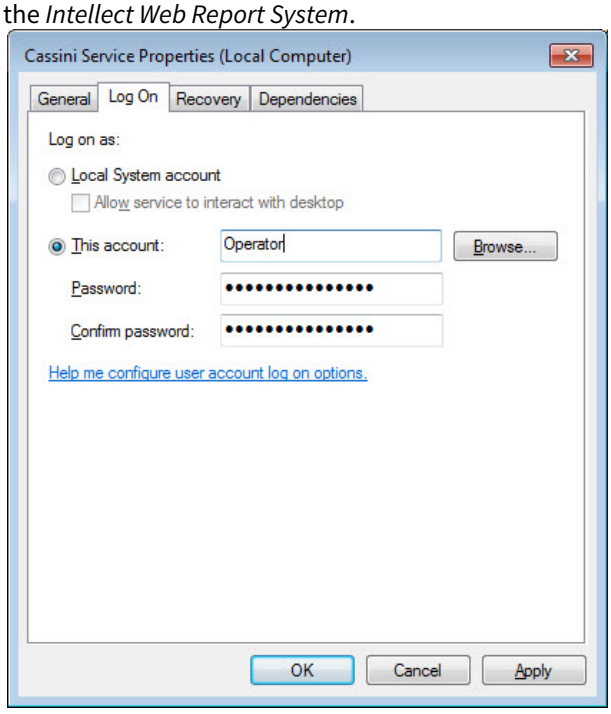


   with the following strings:

```
<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*.

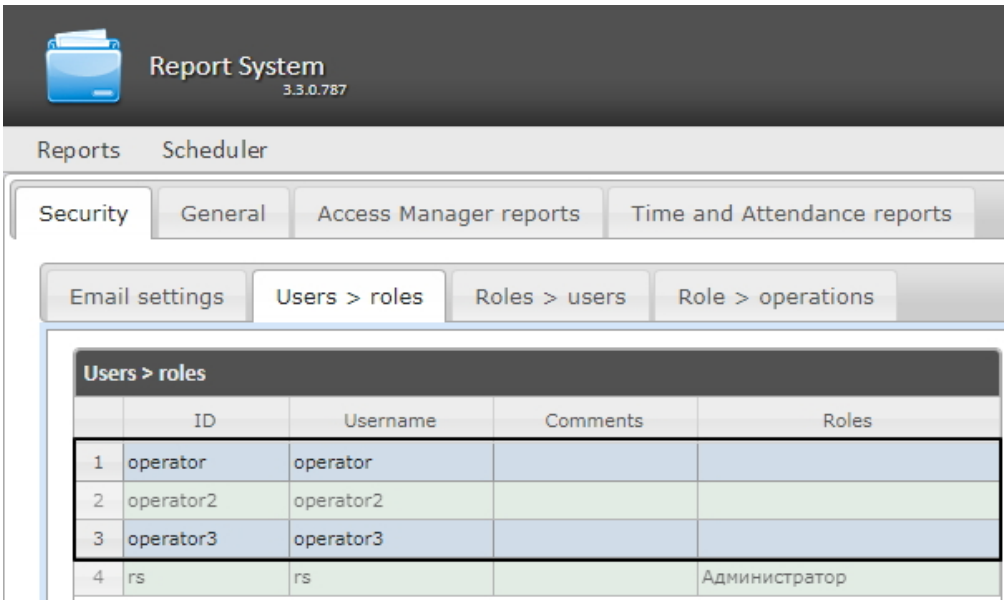


> **Note**
>
> If it is planned to work with the *Intellect Web Report System* by several users, then after each authorization in Windows of another user, it is necessary to restart the **Cassini Service** with the required user account.

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.



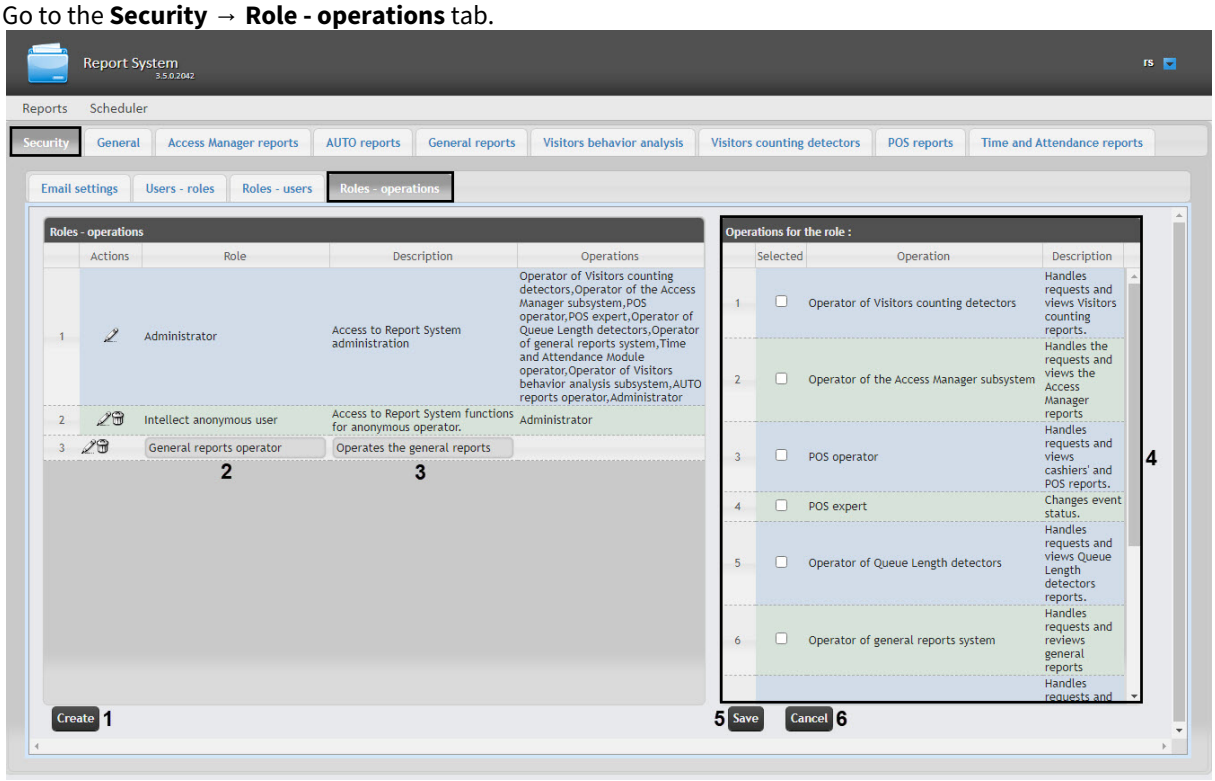
7.1.2 Set up the roles

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

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**).

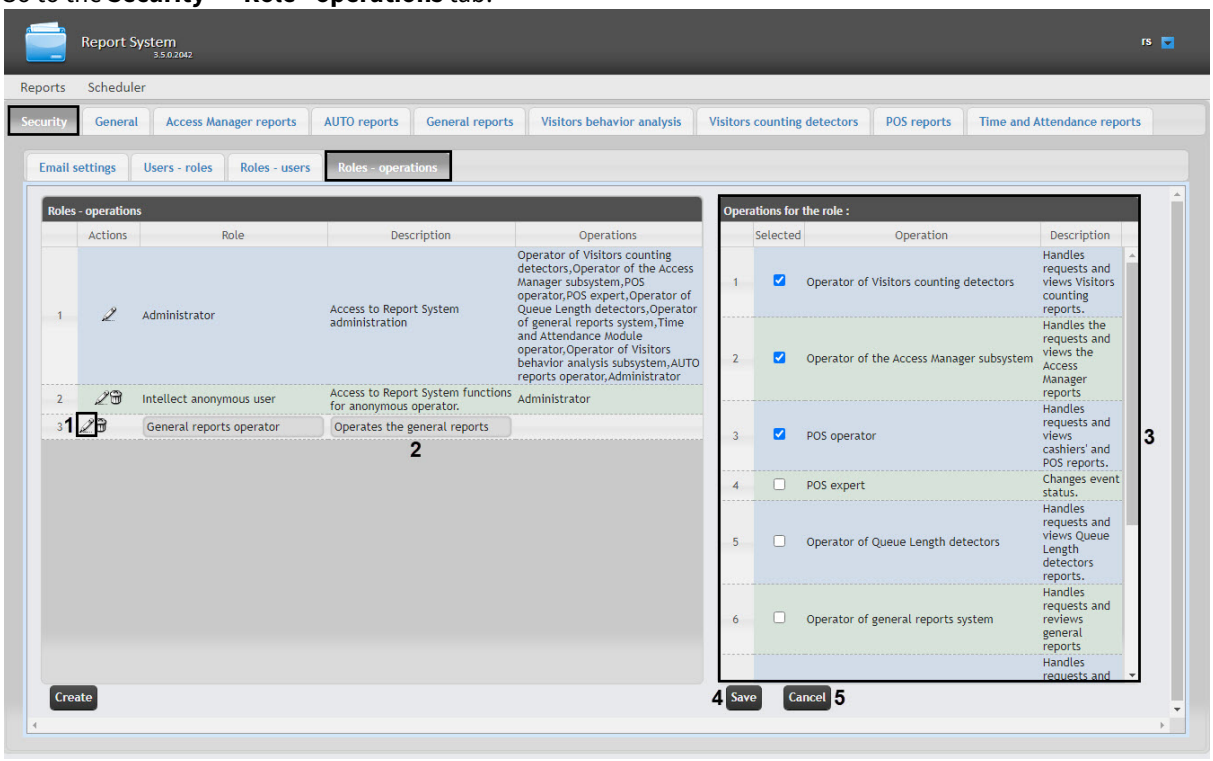
> **Note.**
>
> In order to cancel the registration of a new role click **Cancel** (**6**).

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

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**).

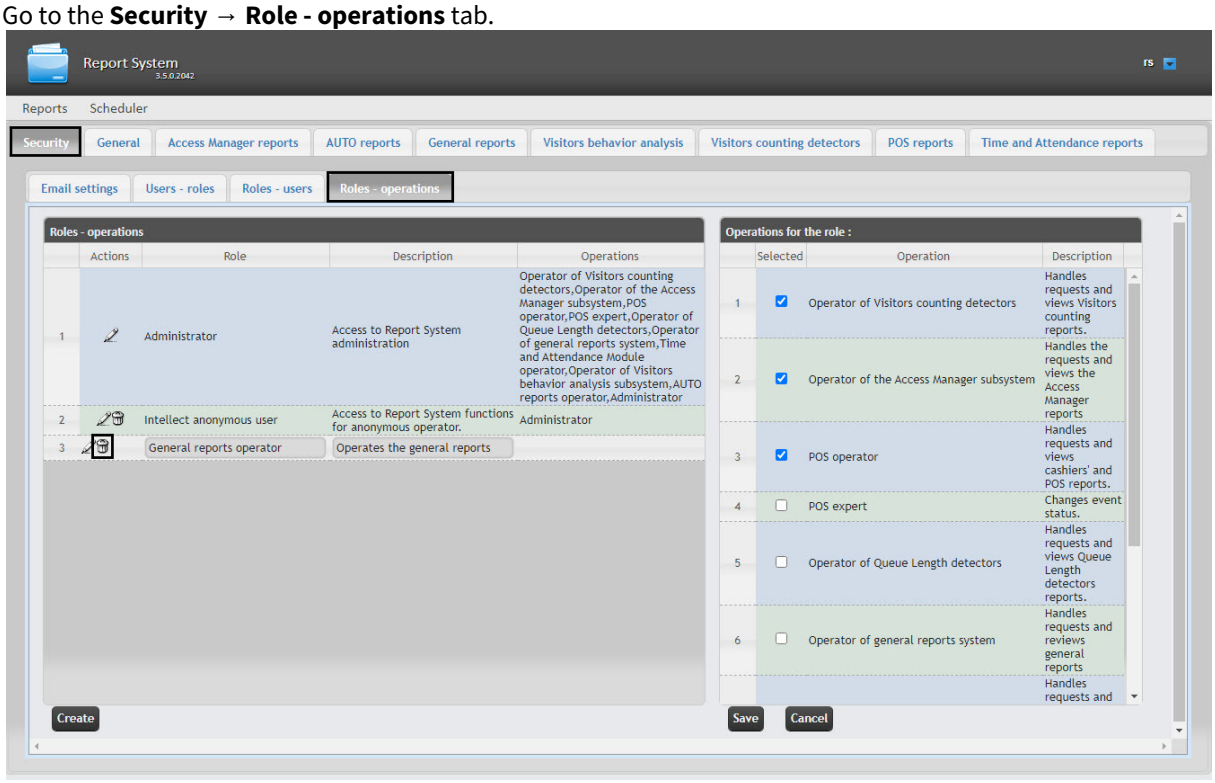
> **Note.**
>
> In order to cancel the changes in the role click **Cancel** (**5**).

Role editing is completed.

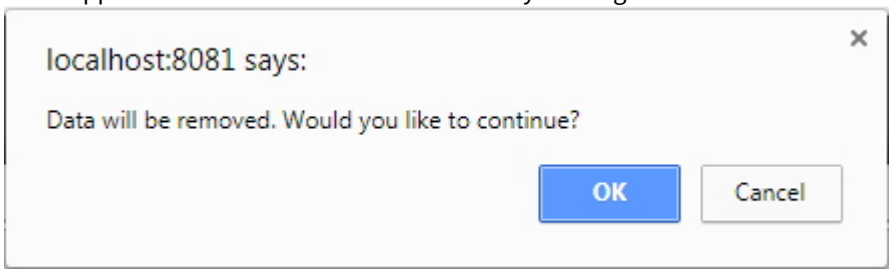
Role removal

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:

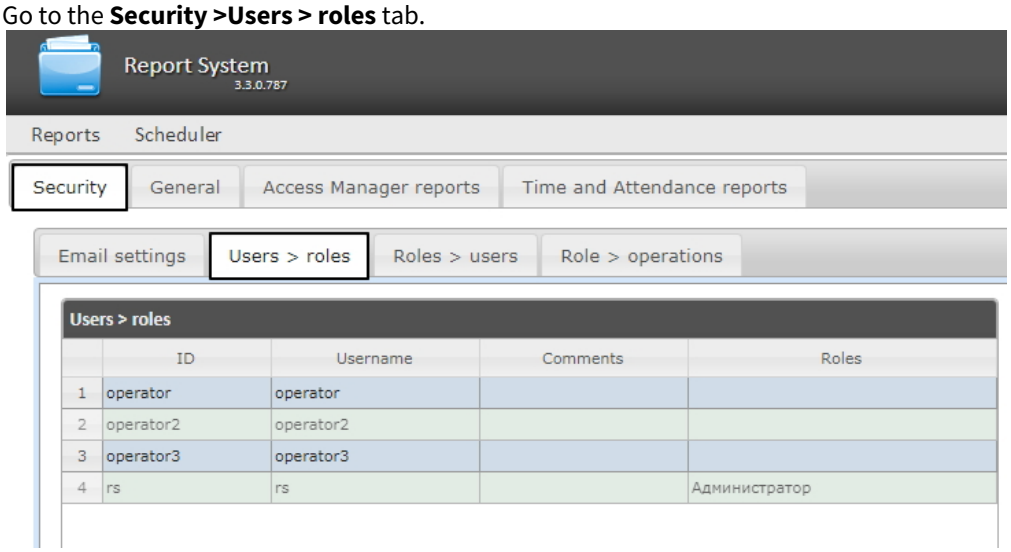
1. If the roles are assigned to a user, then the **Users > roles** tab is used.
2. If the users are added to a role, then the **Roles > Users** tab is used.

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

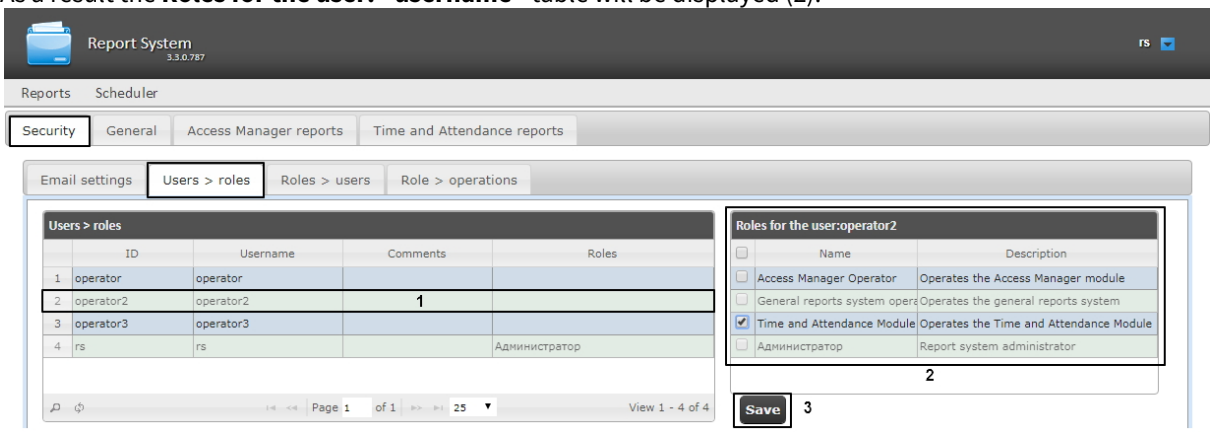
Assigning the roles to the user

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

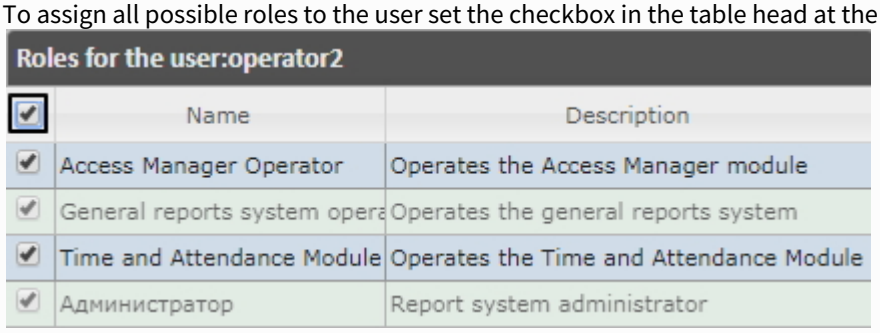
1. Go to the **Security >Users > roles** tab.



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.
>
> 
>

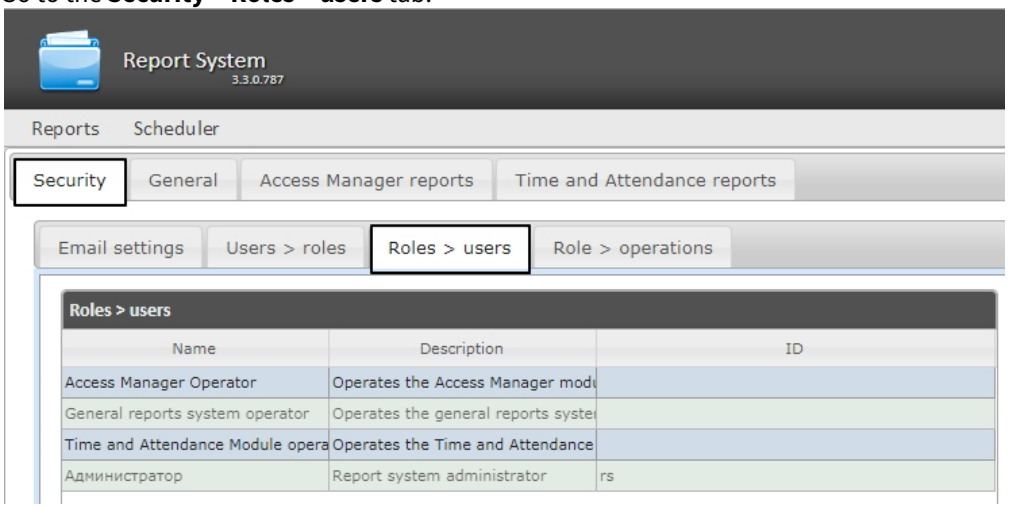
5. Click **Save** to save the changes (3).

Assigning the roles to the user is completed.

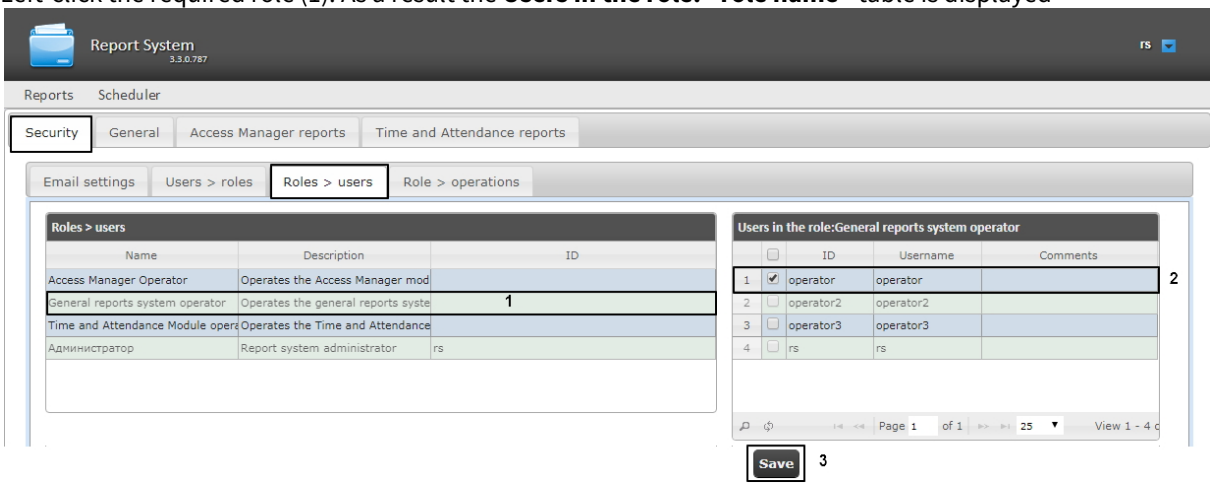
Adding the users to the role

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.
>
> **Users in the role:General reports system operator**
>
		ID	Username	Comments
1	☑	operator	operator	
2	☑	operator2	operator2	
3	☑	operator3	operator3	
4	☑	rs	rs	

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

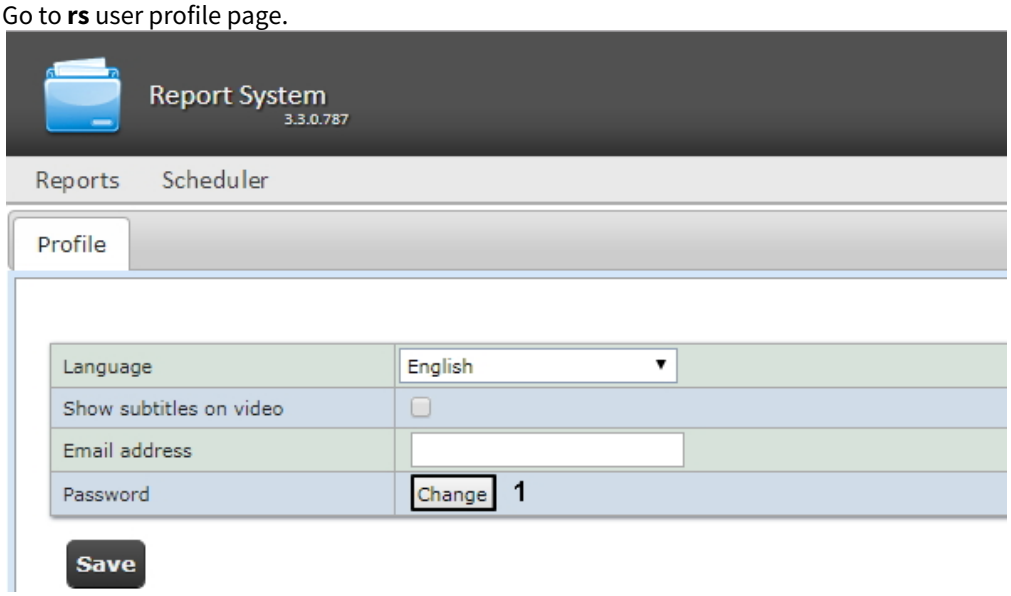
Adding the users to the role is completed.

7.1.4 Change the administrator password

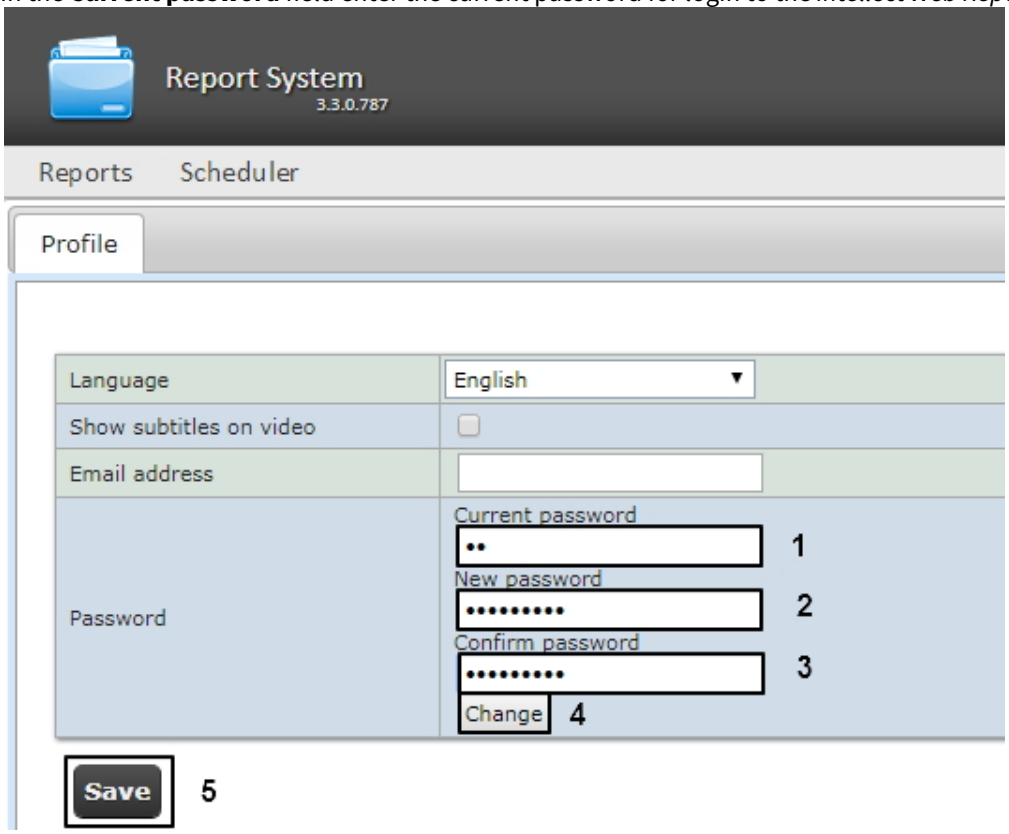
The password can be changed in the **Profile** page only for the **rs** user, which is the overall administrator of the subsytem. Password changing for other users is performed only on the **Users** tab of the *Intellect* software.

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.

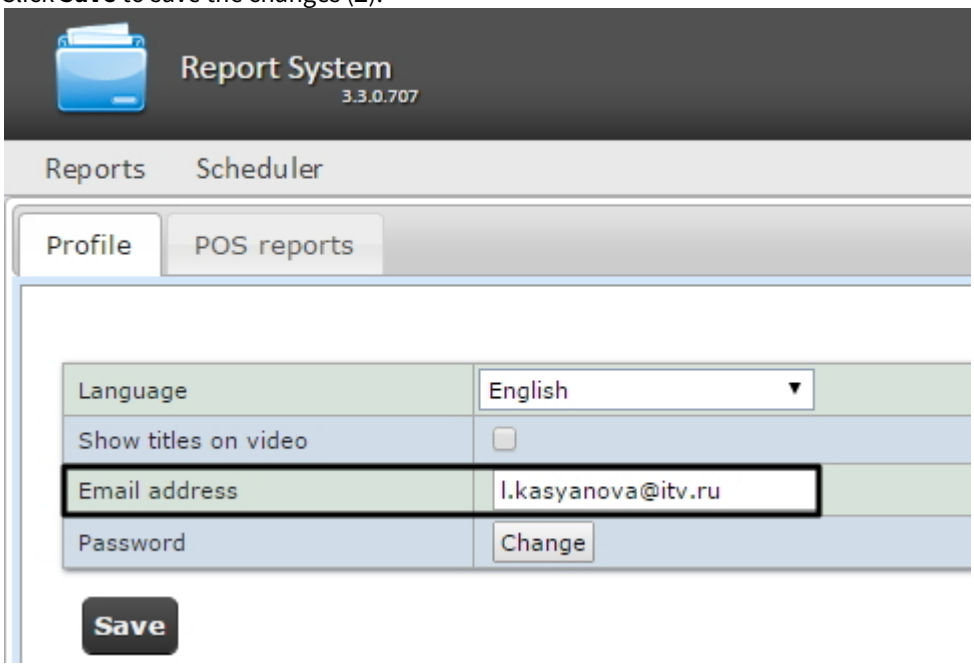
6. Click the **Change** button (4).
7. Click the **Save** button to save changes (5). For the changes to take effect, it is necesary to manually end the current *Intellect Web Report System* session and log in with a new password.

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.

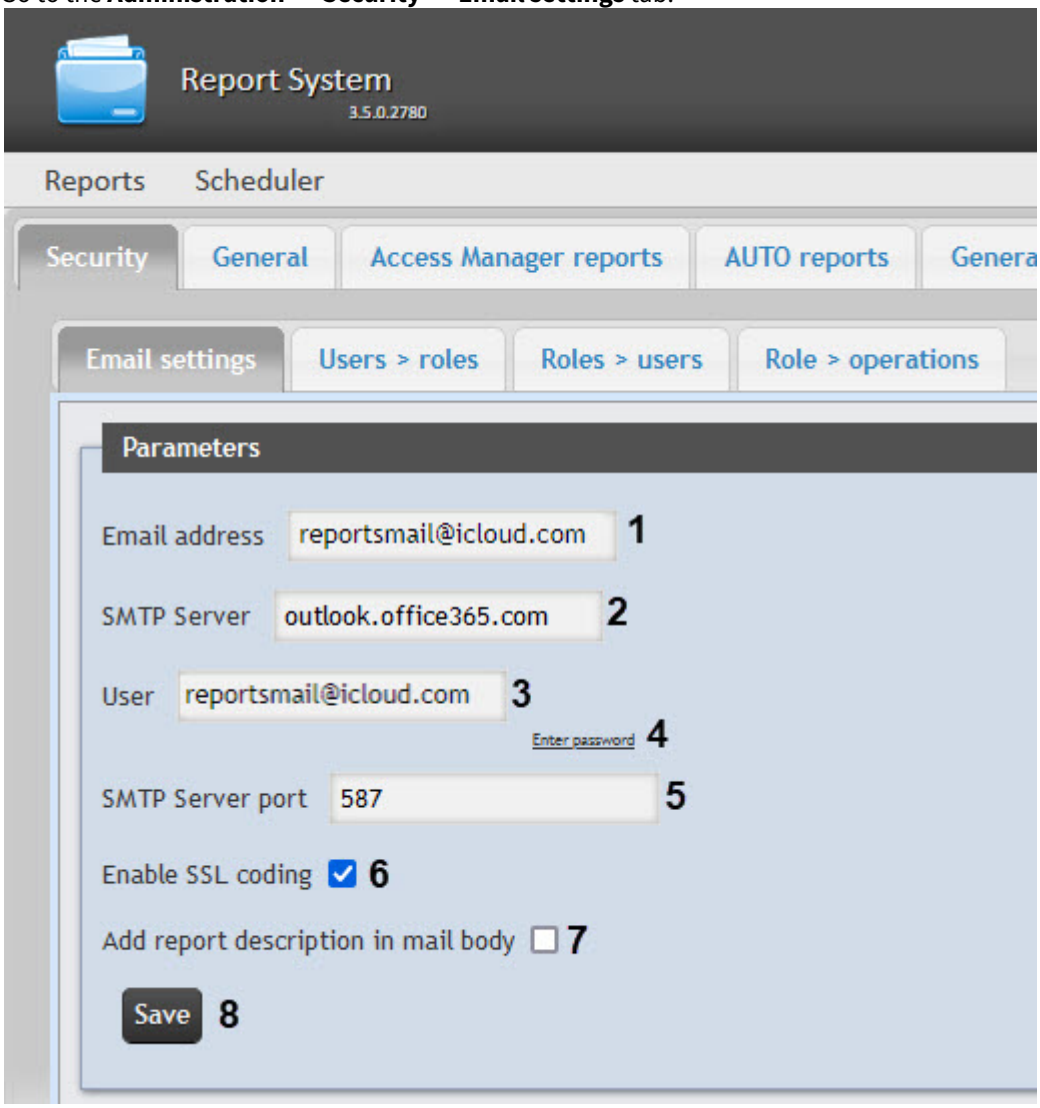
2. On the **Reports** tab create the list of auto-generated reports.
3. On the **Schedules** tab setup the schedule of *Intellect Web Report System* operation in the automatic mode.
4. On the **Tasks** tab create the tasks for auto-generating the reports. Start their execution.

7.2.2 Configuring the SMTP Server

You can configure the SMTP Server for sending the auto-generated reports via email in the **Administration → Security** section.

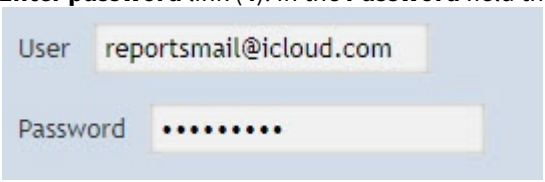
To configure the SMTP Server, do the following:

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



2. In the **Email address** field (**1**), enter the email address from which the auto-generated reports will be sent.
3. In the **SMTP Server** field (**2**), enter the name of the SMTP Server.
4. In the **User** field (**3**), enter the name of the account used for sending the messages to the SMTP Server.

5. Specify the password of the account used for sending the messages to the SMTP Server. For this, click the **Enter password** link (**4**). In the **Password** field that appears, enter the account password.



6. In the **SMTP Server port** field (**5**), enter the port number used by the SMTP Server.
7. To use an encoded SSL connection when connecting to the SMTP Server, set the **Enable SSL coding** checkbox (**6**).
8. If necessary, set the **Add report description in mail body** checkbox (**7**) to add the information about the report to the mail body. By default, the setting is disabled.
9. Click the **Save** button (**8**).

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

Configuring the SMTP Server for sending the auto-generated reports via email is complete.

7.2.3 Auto-generated reports setup

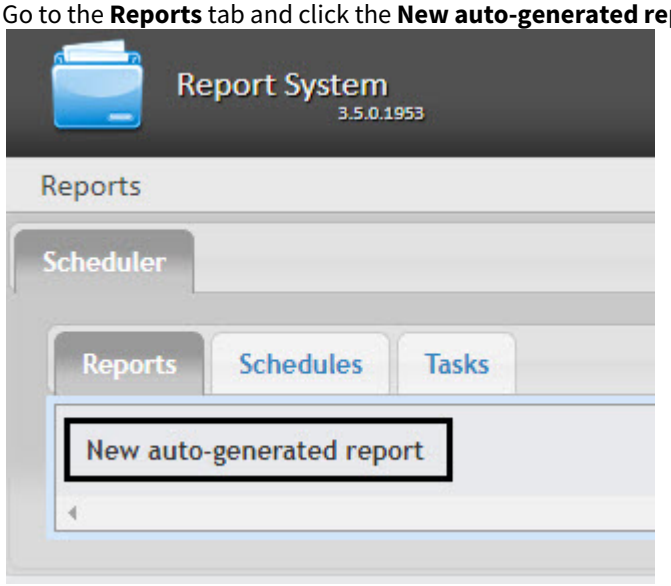
One can assign and setup the reports that will be auto-generated on the schedule.

> **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.

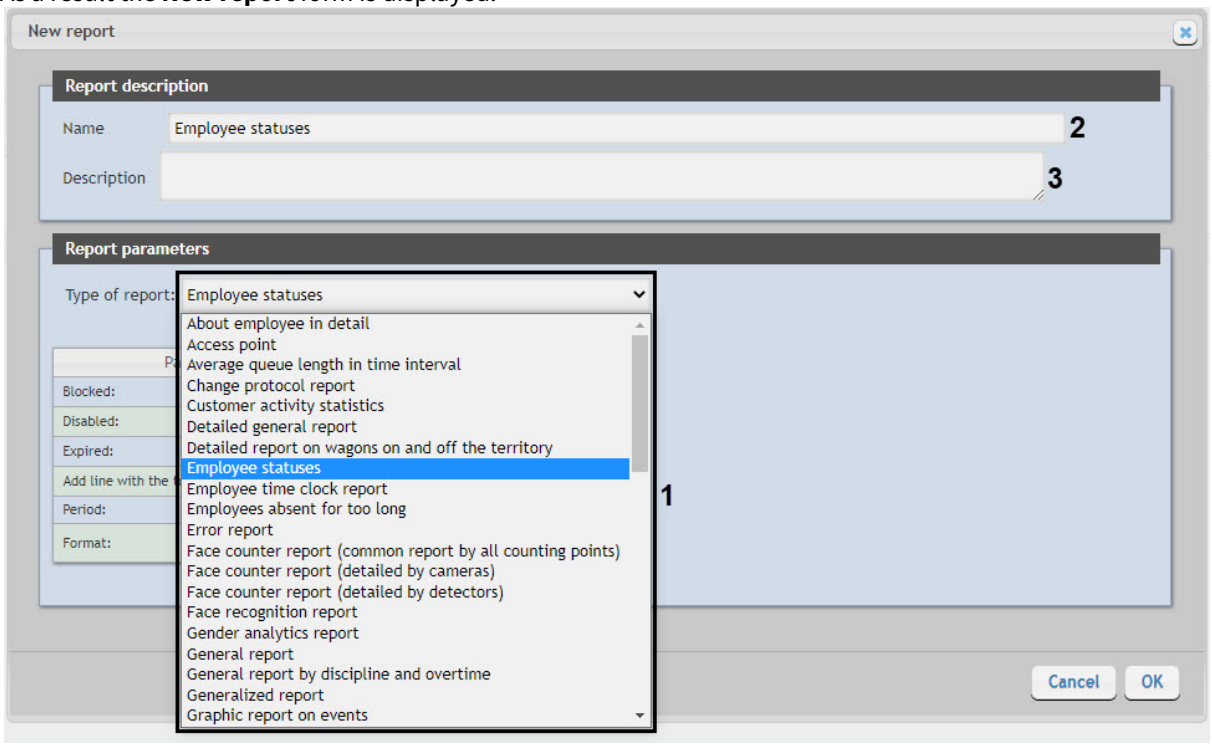
Creating the report

Make an auto-generated report as follows:

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



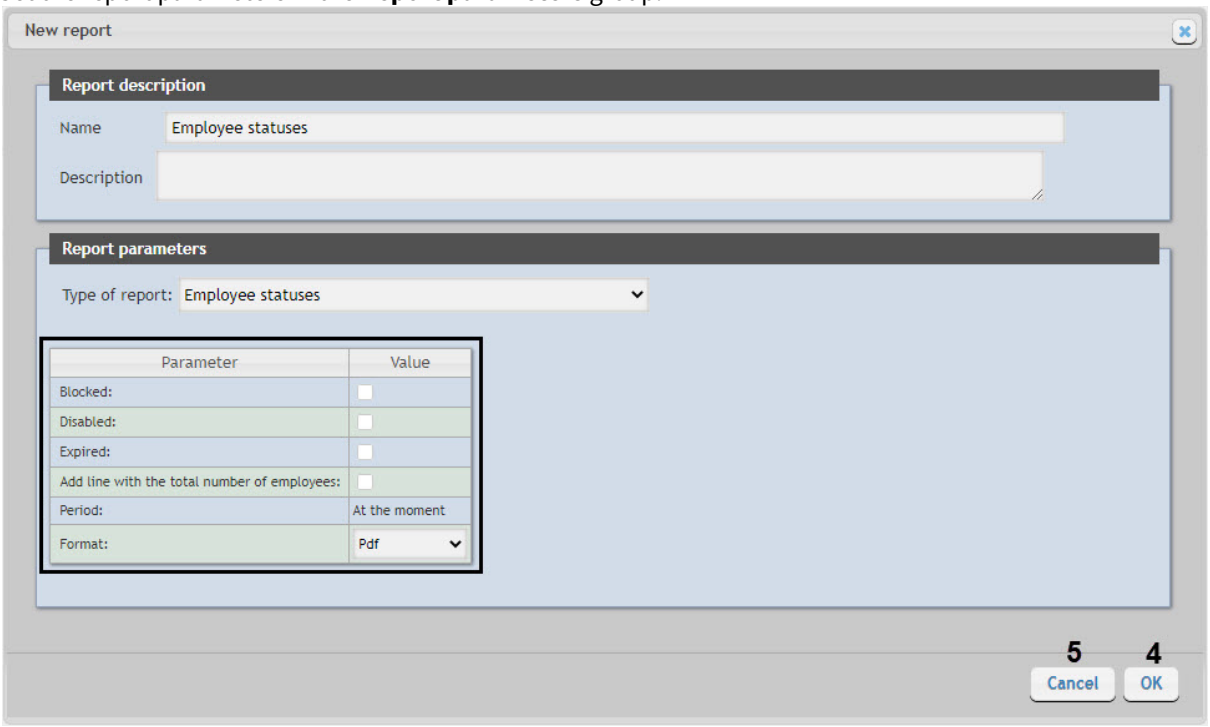
2. As a result the **New report** form is displayed.



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. The list of available formats may differ depending on the generated report type:
>
> - 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**).

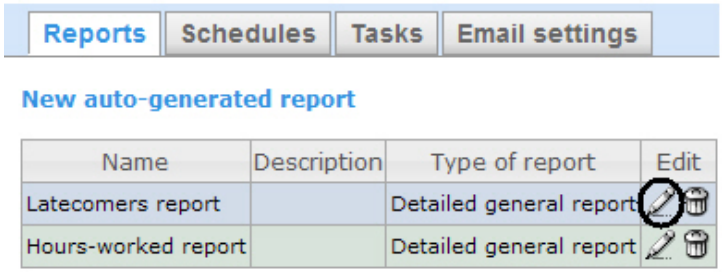
> **Note**
>
> In order to cancel making the report click **Cancel** (**5**).

Making the auto-generated report is completed.

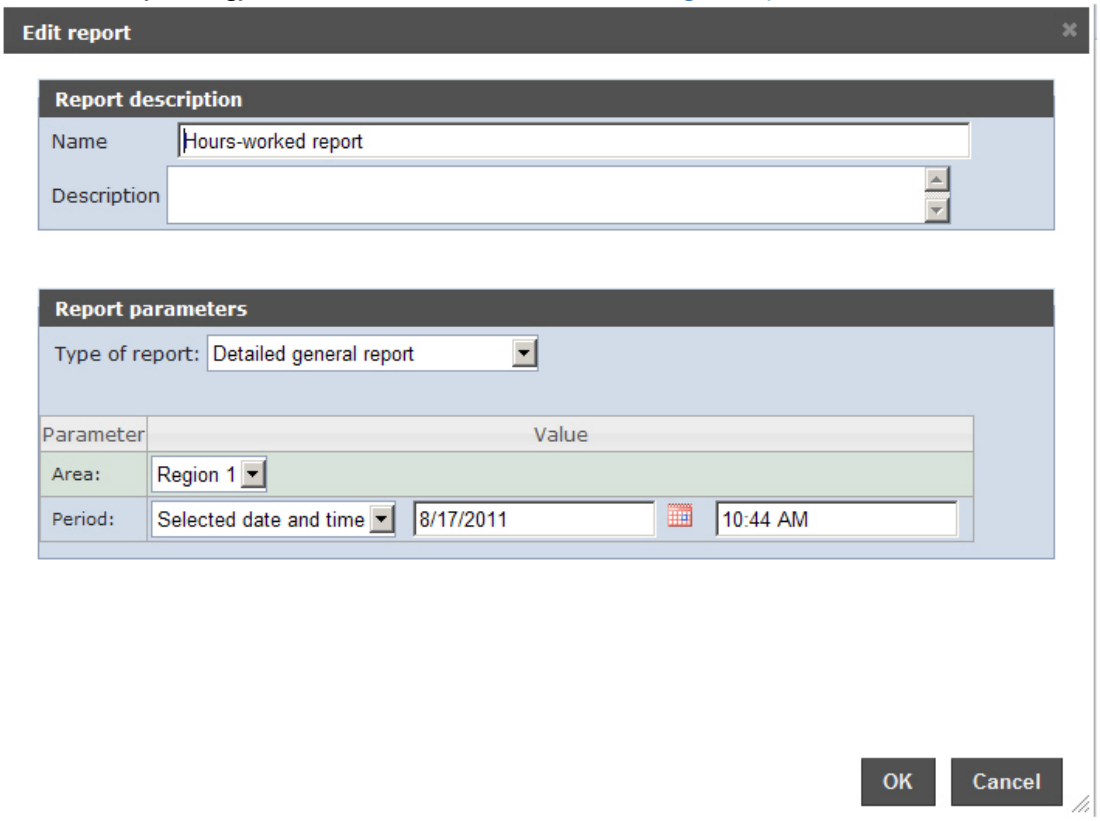
Editing the report

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**.

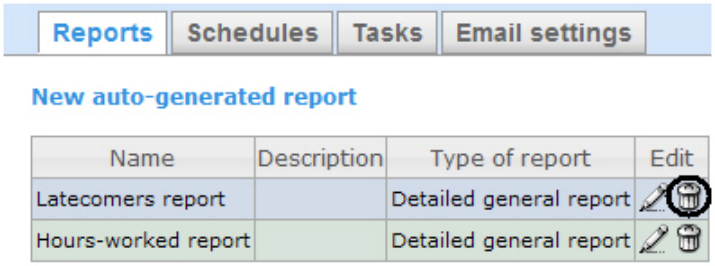
In order to change the language of the auto-generated report select the corresponding language in the profile page of the *rs* user (see User profile page section).

Editing the auto-generated report is completed.

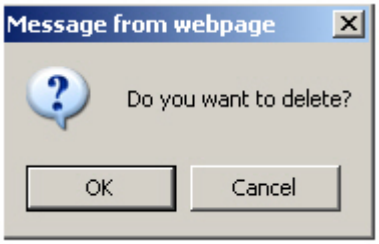
Deleting the report

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.

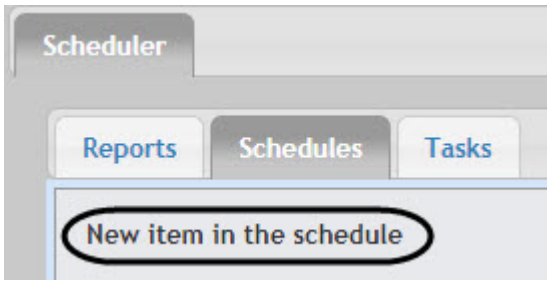
7.2.4 Setting up the schedule of operation in the automatic mode

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).

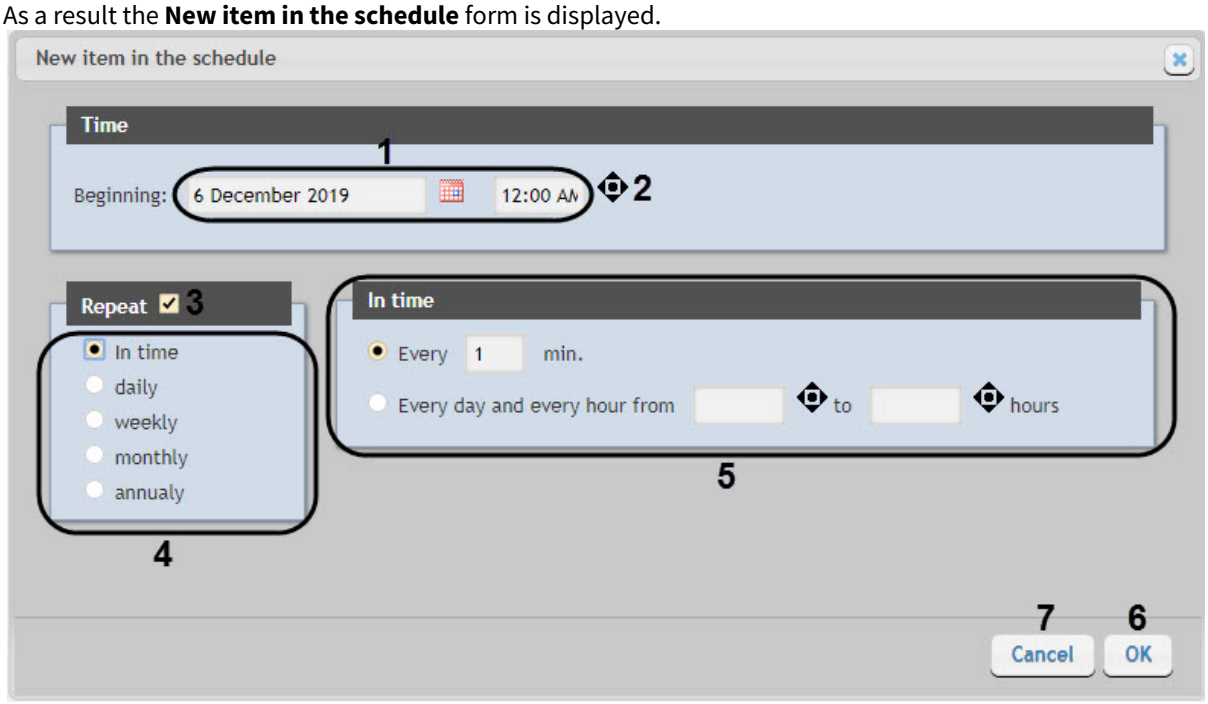
Creating the schedule item

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**)**.**

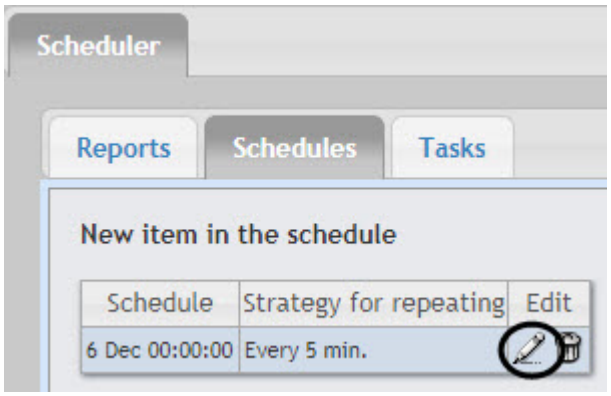
> **Note.**
>
> In order to cancel creating of the schedule item click **Cancel** (**7**).

Creating the schedule item is completed.

Editing the schedule item

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

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



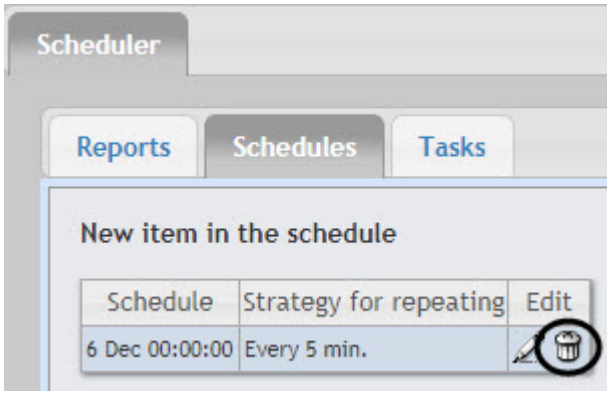
2. Click  for the required schedule item in the **Edit** column**.**
3. As a result the **Edit the schedule item** form is displayed**.** Editing a schedule item is similar to creating a schedule item (see Creating the schedule item).

Editing the schedule item is completed.

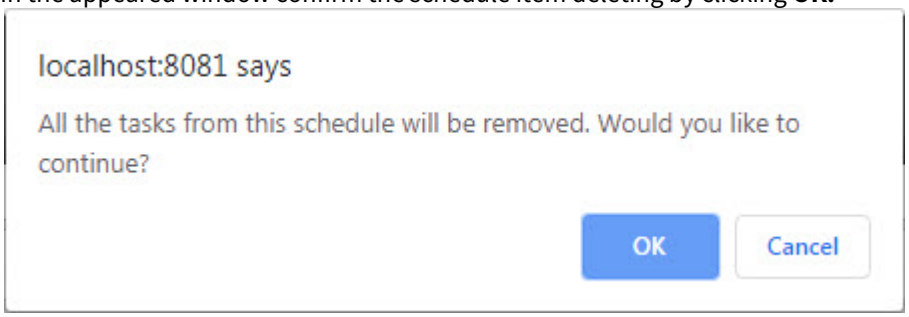
Deleting the schedule item

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.

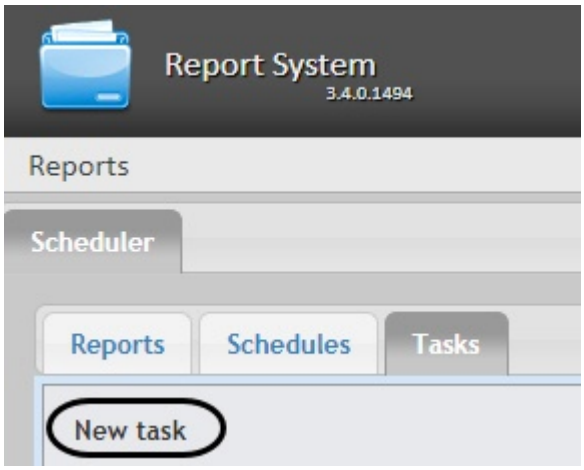
7.2.5 Setting up the automatically executed tasks

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.

Creating the task

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

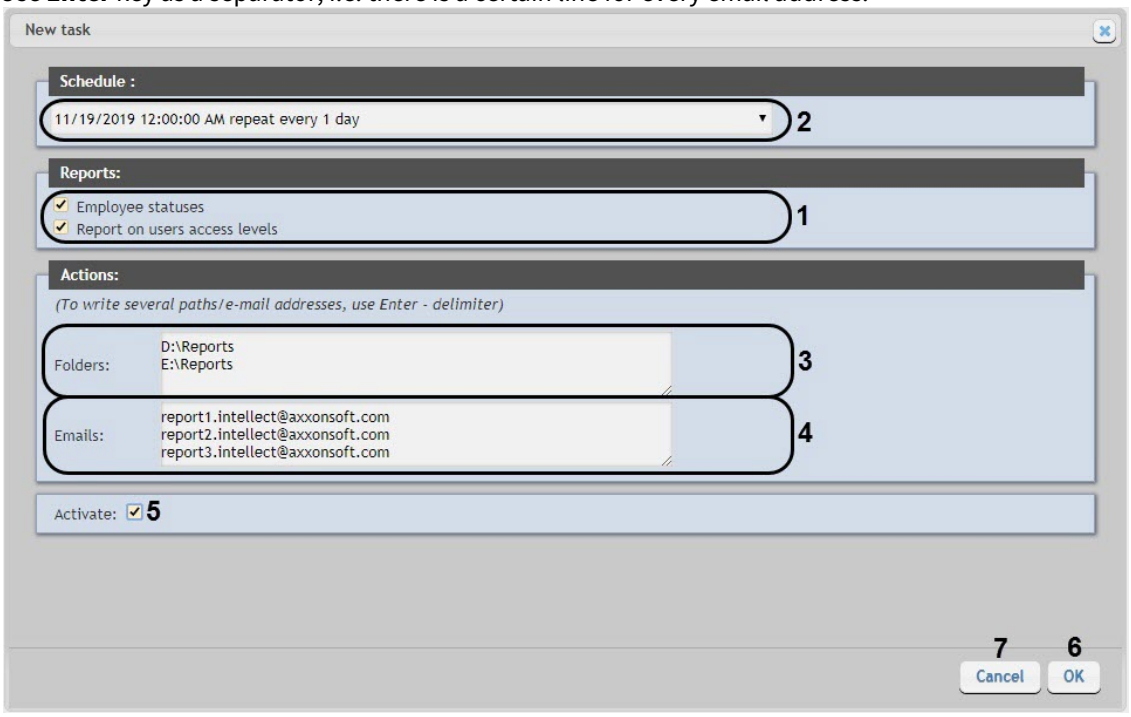
1. Go to the **Tasks** tab.



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.

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.

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.

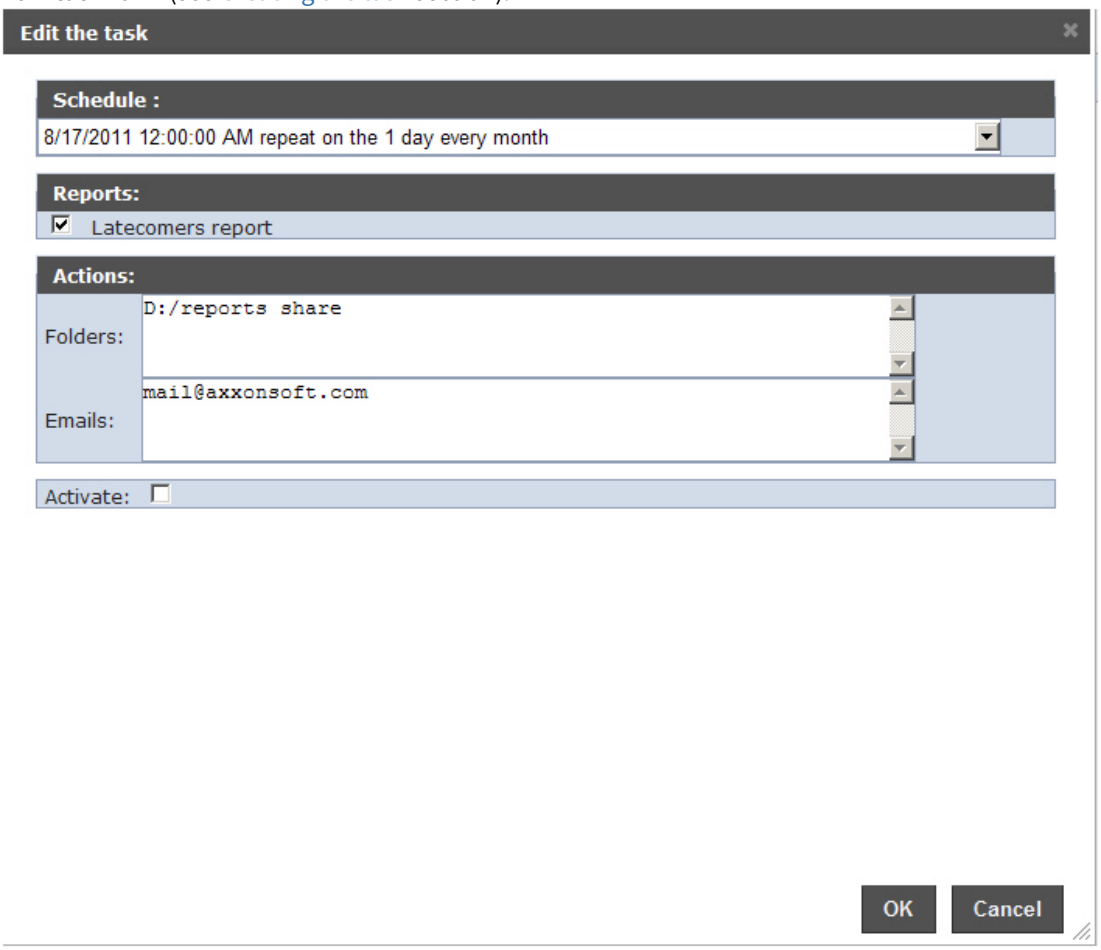
Editing the task

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.

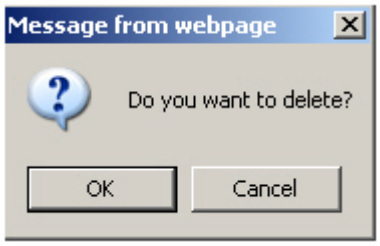
Deleting the task

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

Requirements for the Access Manager reports operation:

1. ☐ Prior to setting up the Access Manager reports, it is necessary to update the report database as described in Updating the report database.
2. To perform the setting up, the *Access Manager* interface object must be created and configured on the Server, see Configuration of the Access Manager module.
3. In order to be able to work with Access Manager reports, in the reports subsystem, the role of the operator in the access manager subsystem should be created and assigned to users, as described in Set up the roles.
4. In the **Web.config** file at <*Intellect* installation directory>\Modules\Wt2, the server address **http://localhost:22441/core** should be specified in the **lpServerUrl** parameter. This parameter is specified by default (see XML-file parameters reference guide).

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

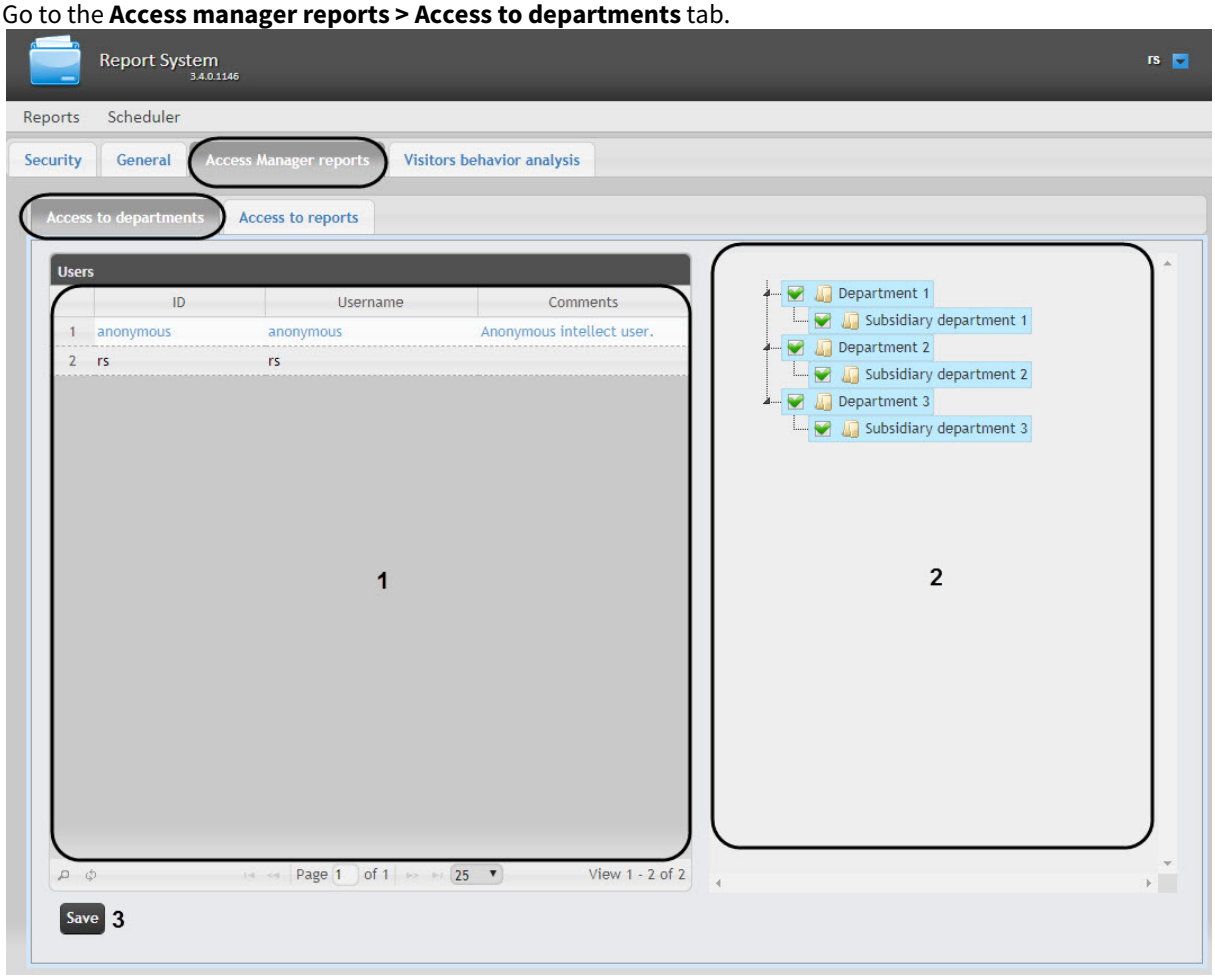
Access Manager reports setup is performed in the following sequence:

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

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.

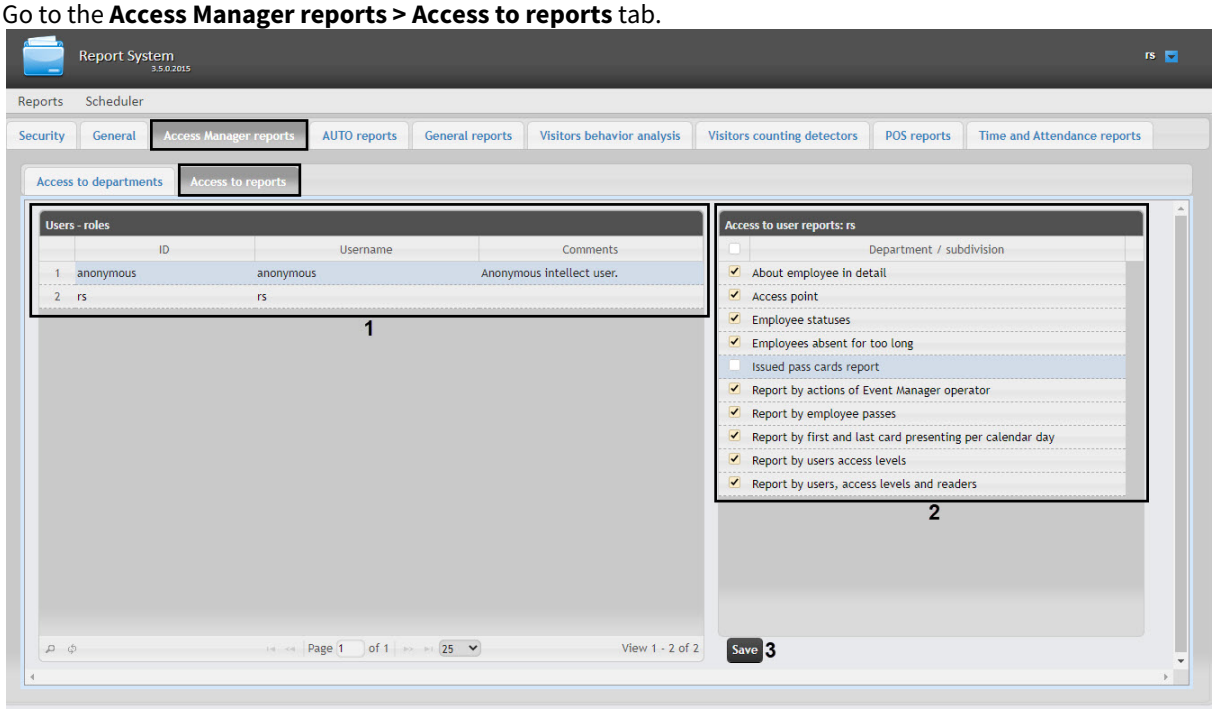
> **Note**
>
> The **rs** user has access to all departments by default.

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 the page:

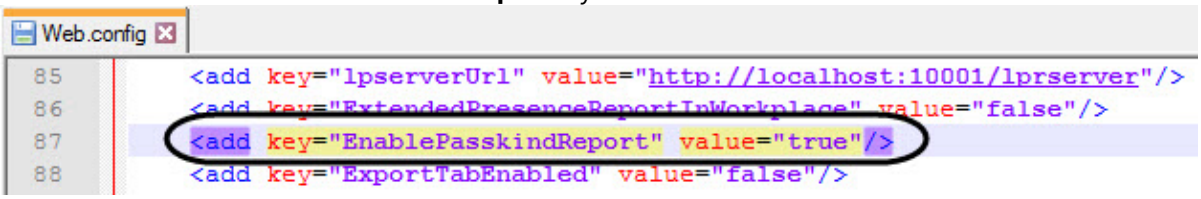
- Activating the Issued pass cards report
- Adding fields to the user database templates file
- Editing a registry key

Activating the Issued pass cards report

> **Attention!**
>
> The **Issued pass cards report** should be set up on the same computer on which you will work with this report.
> 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.

> The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

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 and a name beginning with the word "intellect", for example, intellect.reports.dbi. Otherwise, the file will not be recognized by the idb.exe utility.

   > **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).

Editing a registry key

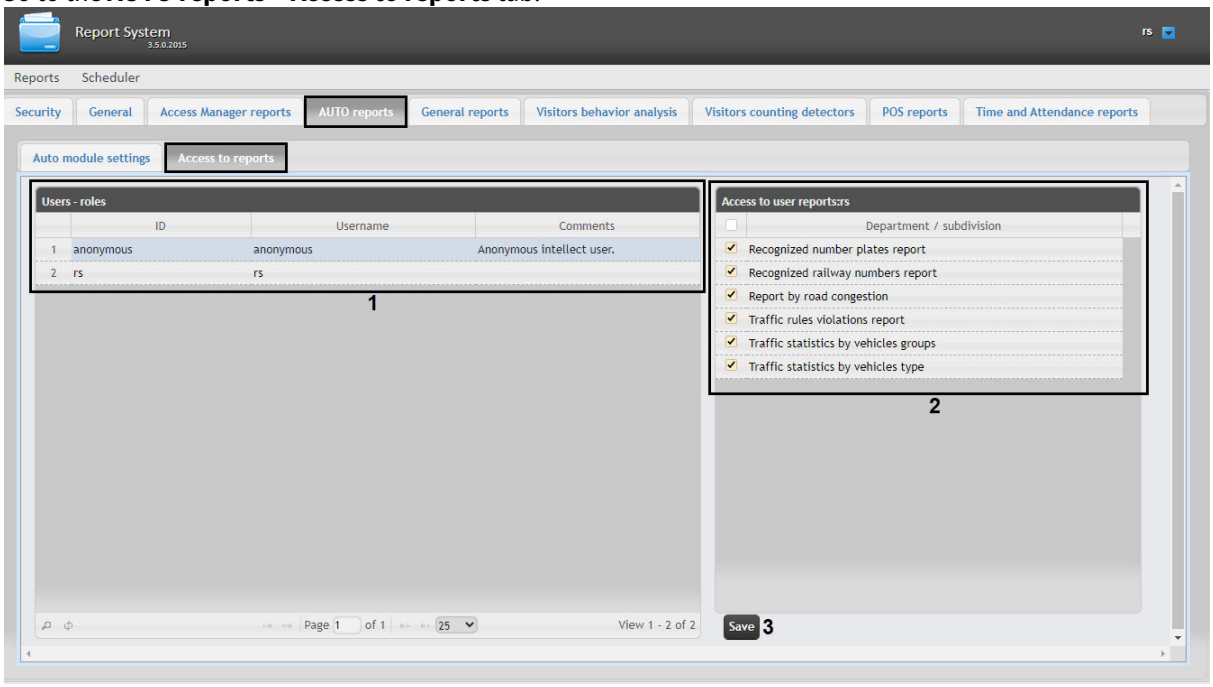
To ensure the correct operation of the **Issued pass cards report**, it is necessary to change the value of the **LogingPersonChangesRequired** key to **1** (for more details, see Registry keys reference guide, for more information about working with the registry, see Working with Windows OS registry).

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.

> The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

7.4.3 Configuring the Recognized railway numbers report

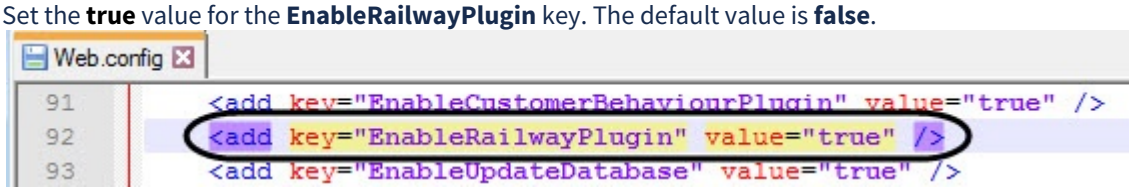
Activating the Recognized railway numbers report

> **Attention!**
>
> The **Recognized railway numbers** report should be configured on the same computer on which you will work with this report.
> After making any changes to the **Web.config** configuration file, it is necessary to restart the **CassiniService**.

To activate the **Recognized railway numbers**, 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 **EnableRailwayPlugin** key. The default value is **false**.



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

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

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

Attention!

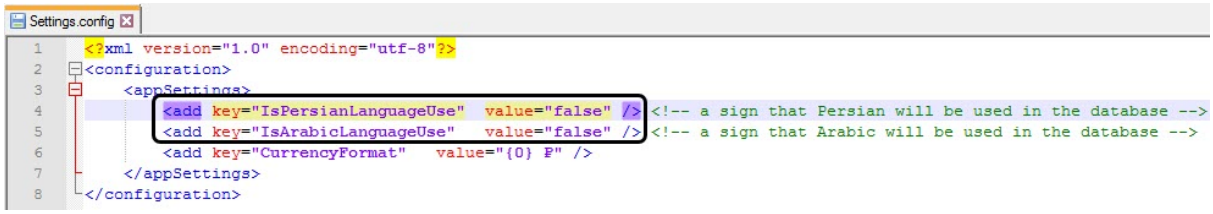
This setting should be configured on the computer where it is planned to work with the **Recognized number plates report** and **Recognized railway numbers report**.
After making any changes to the **Settings.config** file, it is necessary to restart the **Cassini Service**.

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.

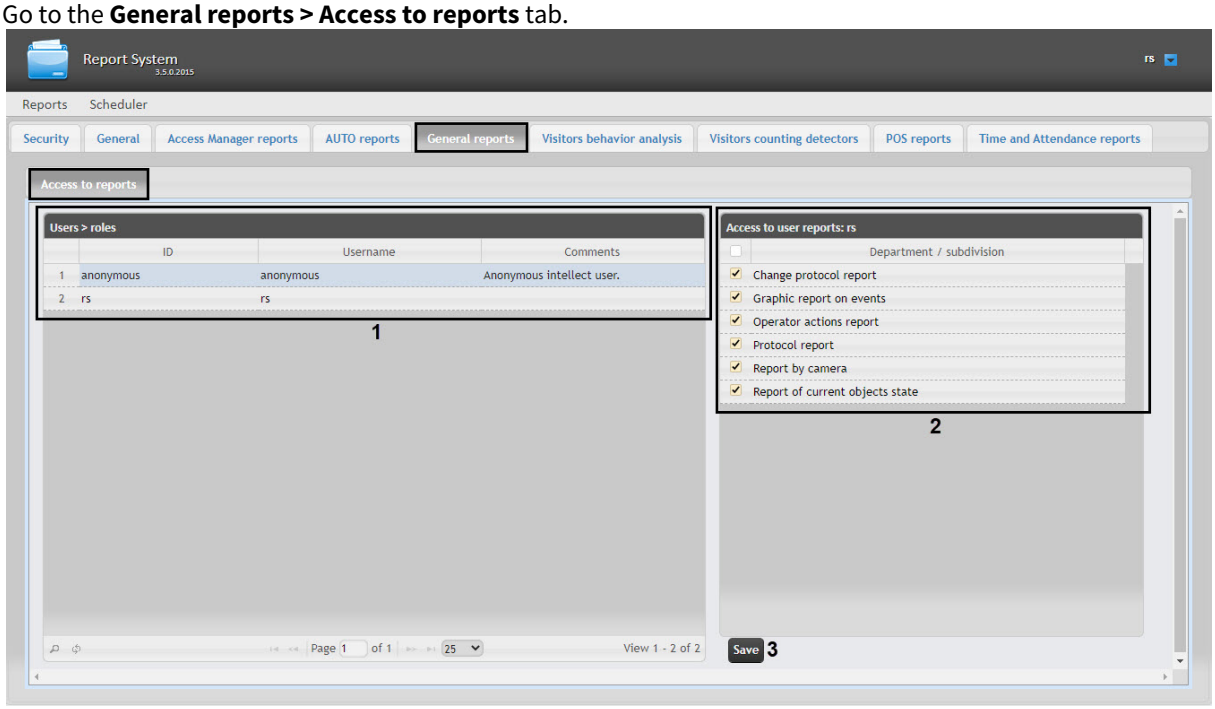
The parameters of the **Settings.config** file are described on the page XML-file parameters reference guide.

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**).

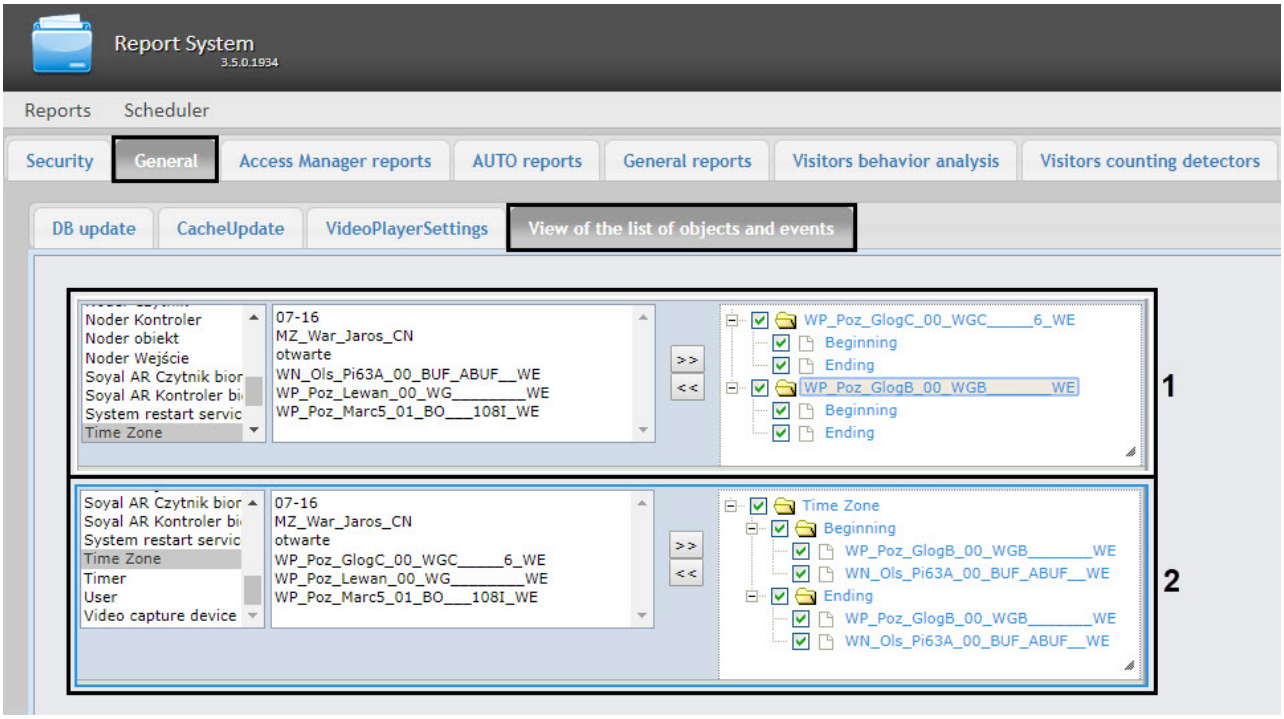
> **Note**
>
> The user must have a role with the right to perform the **Operator of general reports system** operations. For details on role configuration, see Set up the roles.

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.

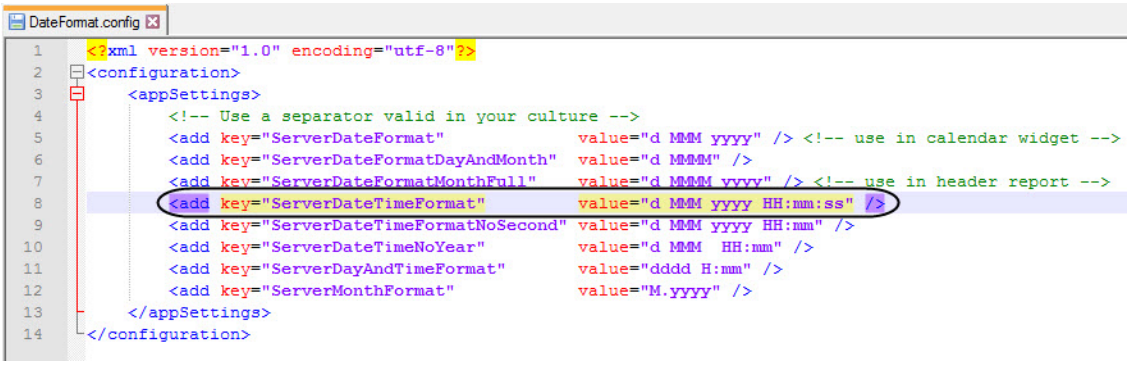
7.5.3 Configuring the date and time format in General Reports

> **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.

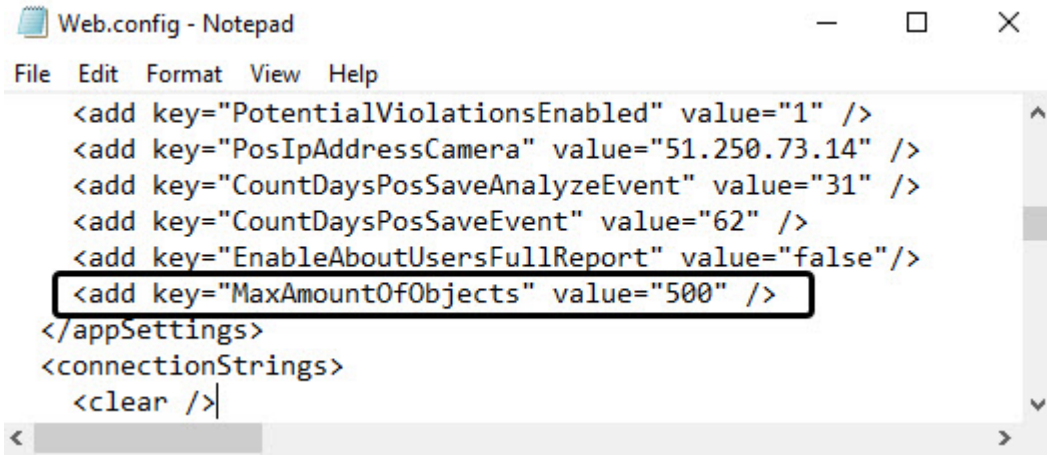


4. Save the changes in the **DateFormat.config** file.

7.5.4 Configuring the maximum number of events

You can set the maximum number of events in the **Operator actions report**. For this, do the following:

1. Go to <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** configuration file for editing.
3. Set the required value of the **MaxAmountOfObjects** key. The default value is 500.



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

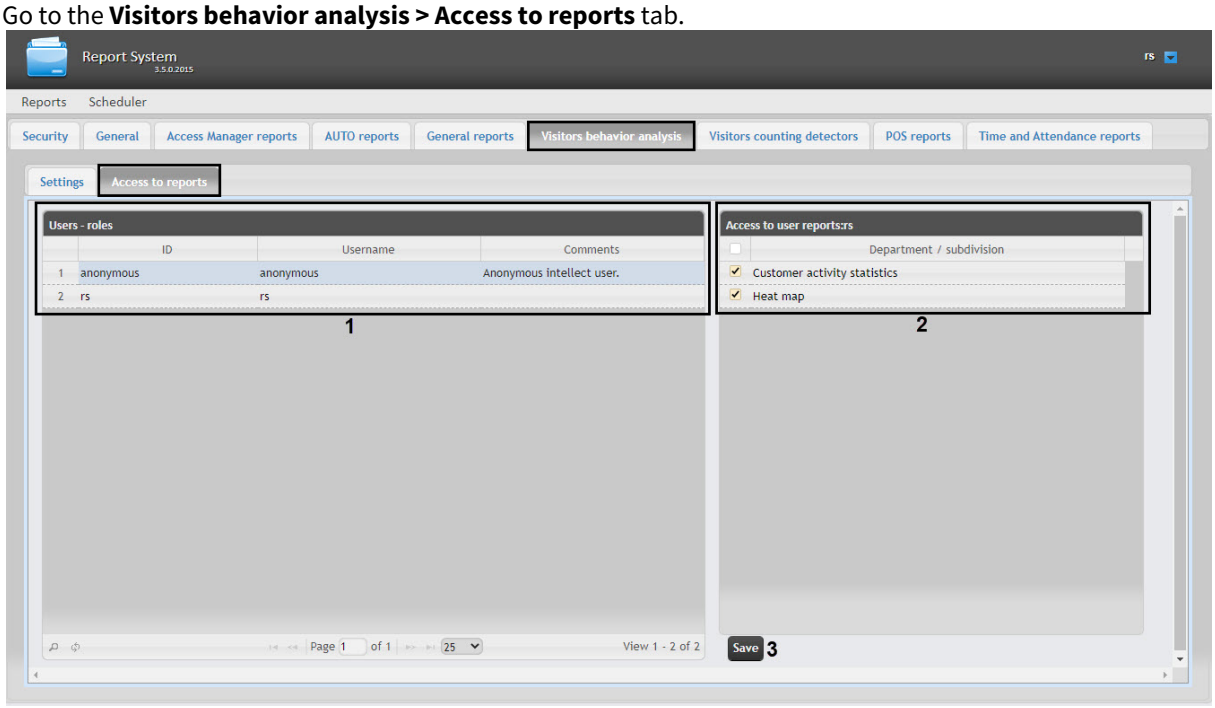
> **Note**
>
> After making any changes to the **Web.config** configuration file, you must restart Cassini Service.

7.6 Setting up the Visitors behavior analysis reports

7.6.1 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.

7.6.2 Cleaning up the database for the Visitors behavior analysis reports

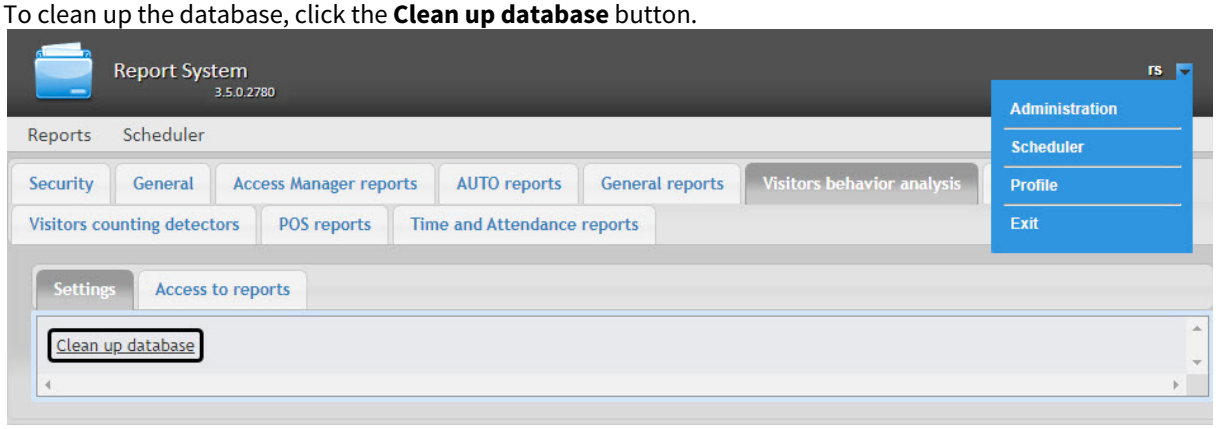
Cleaning up the database for the *Visitors behavior analysis* reports allows you to avoid the situation when the surveillance areas of the **Heat map detection** object (see Configuring the Heat map detection module) remain in the database after their deletion from *Intellect* and are displayed in the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

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

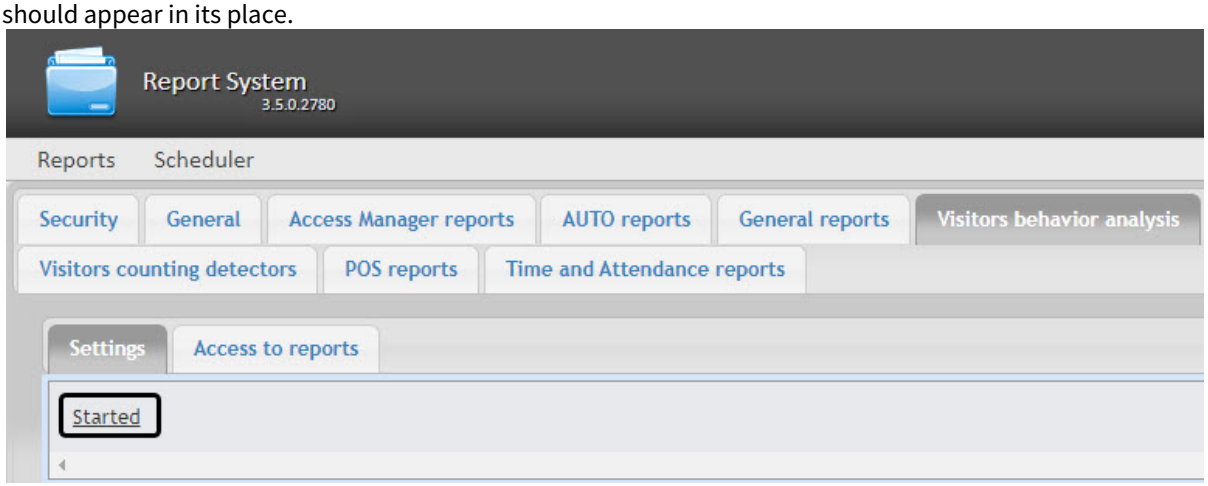
> **Note**
>
> Only the data related to the **Heat map detection** object is deleted from the database.

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 **Started** sign should appear in its place.



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

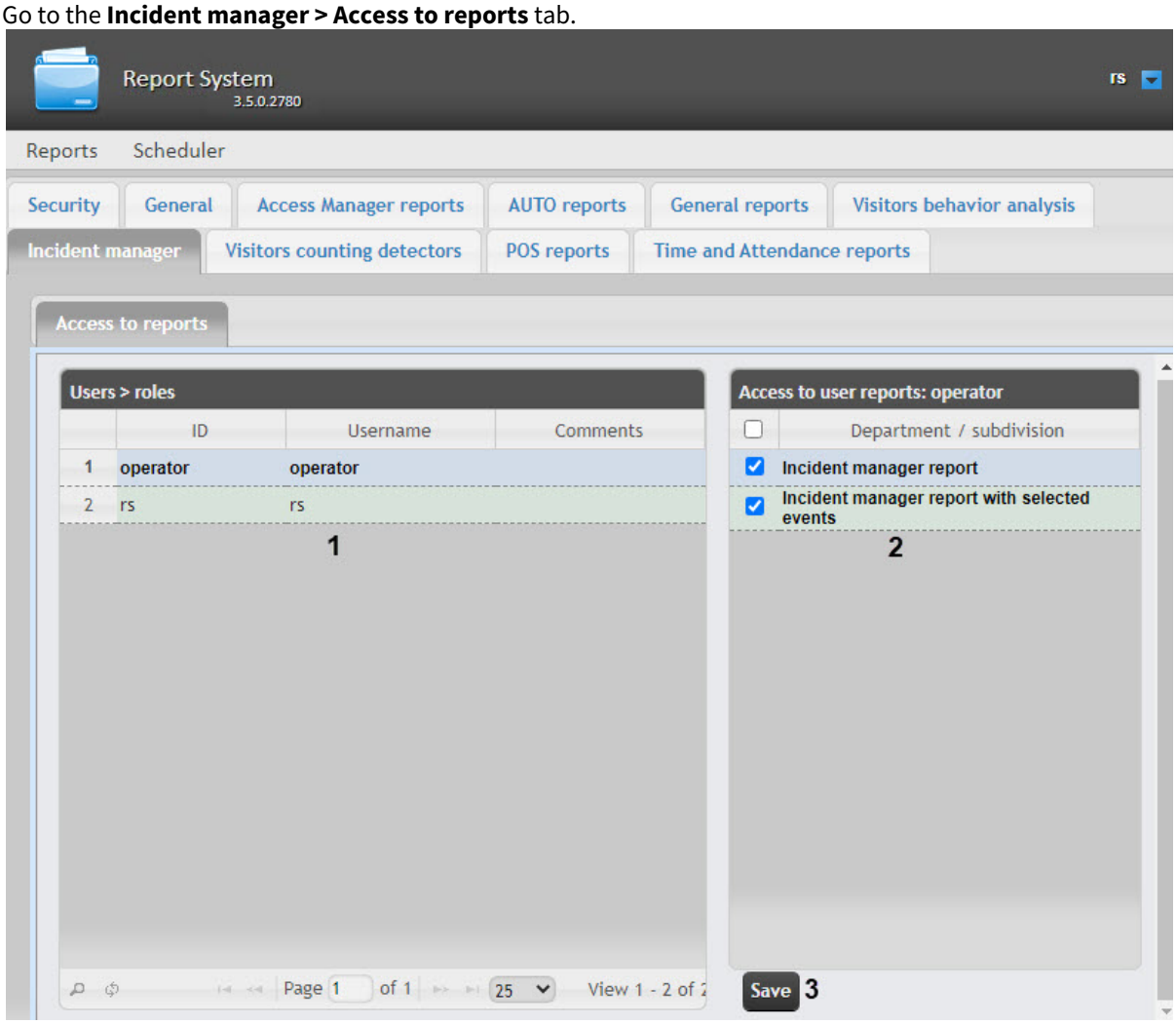
Cleaning up the database for the *Visitors behavior analysis* reports is completed.

7.7 Setting up the Incident manager reports

7.7.1 Setting up user access to Incident manager reports

To configure user access to *Incident manager* reports do the following:

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



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

> **Note**
>
> The user must have a role with the right to perform the **Incident management 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**).

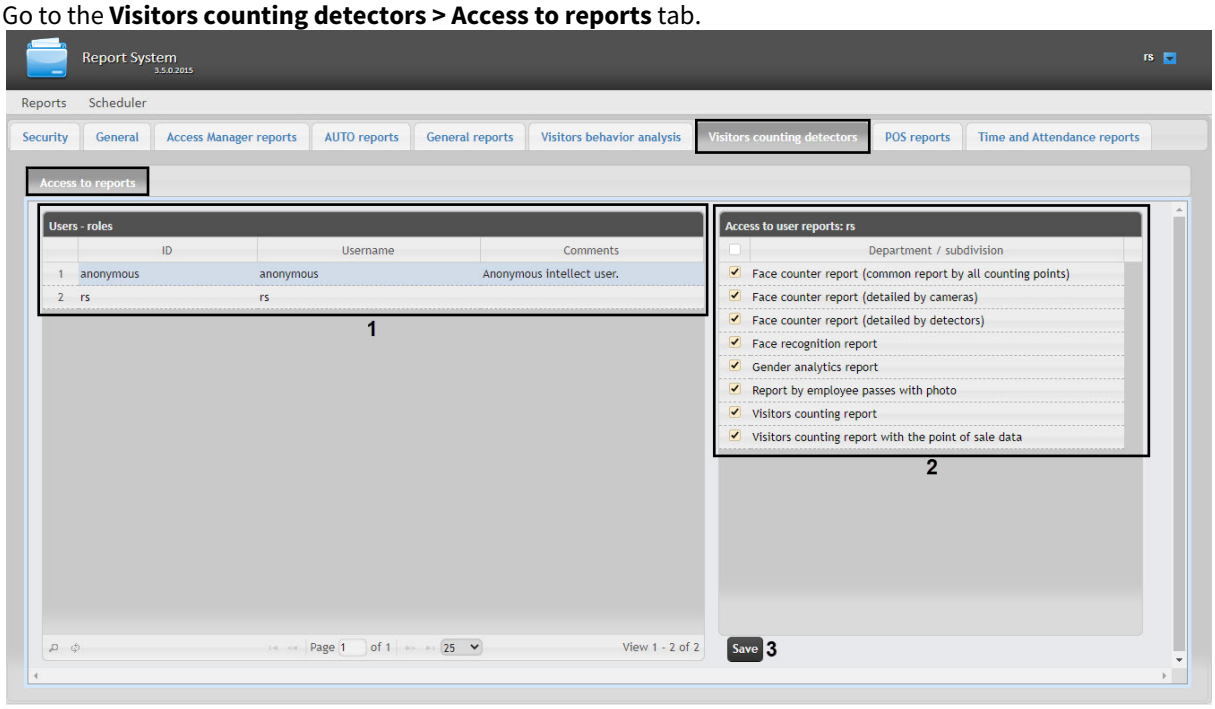
Setting up user access to *Incident manager* reports is complete.

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

On the page:

- Configuring the IP address of the Face Recognition Server

Configuring the IP address of the Face Recognition Server

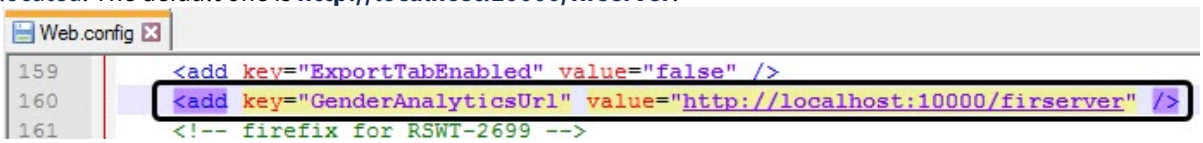
If you work with the **Gender analytics report** on one computer and the Face Recognition Server is located on another, then to ensure the operation of this report it is necessary to set the corresponding IP address of the Face Recognition Server.

Attention!

The **Web.config** file configuration must be performed on the computer on which you will 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.

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

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

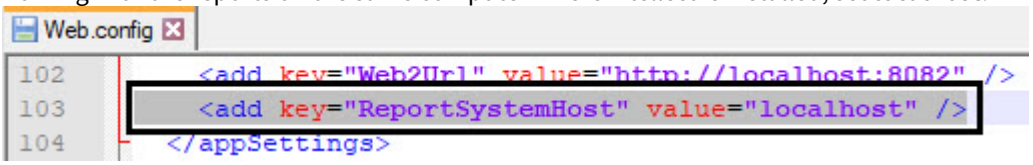
XML-file parameters reference guide

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:

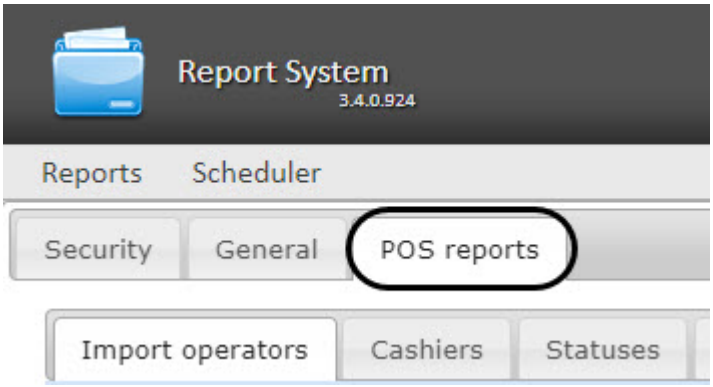
1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. For the **ReportSystemHost** key, set the IP address of the server on which *Intellect* is located. If you are working with the reports on the same computer where *Intellect* is installed, set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



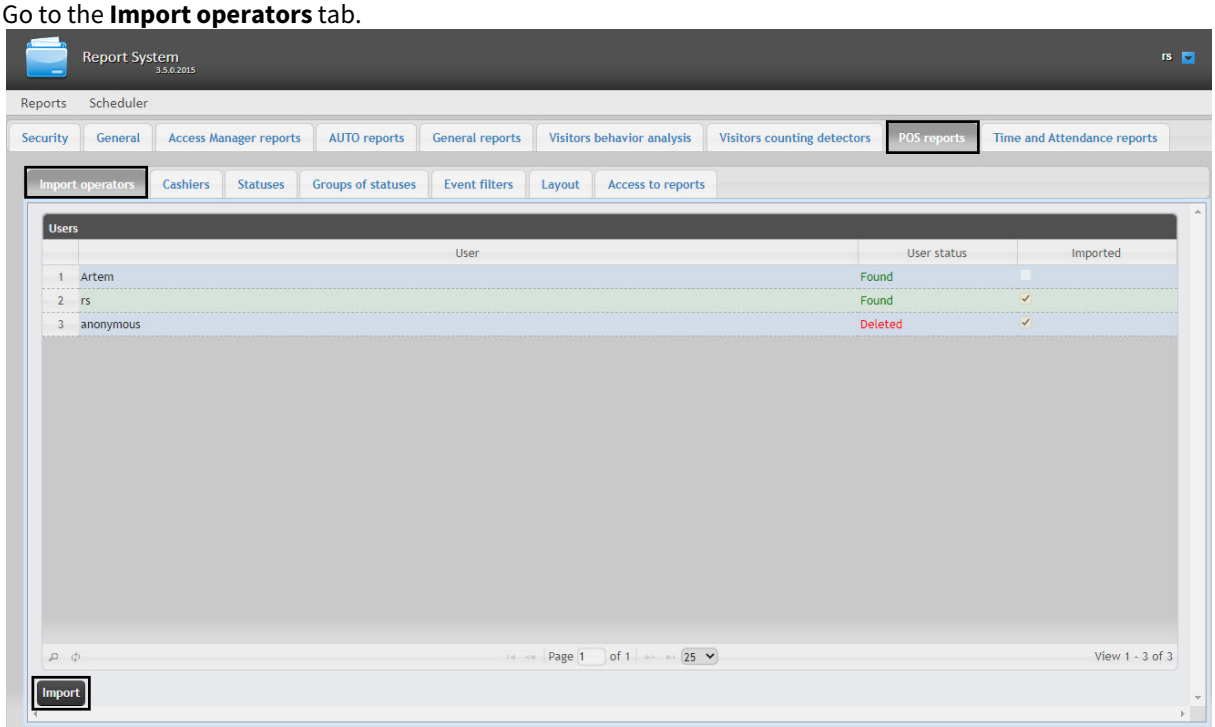
7.9.1 Creating the list of POS operators

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

On the page:

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

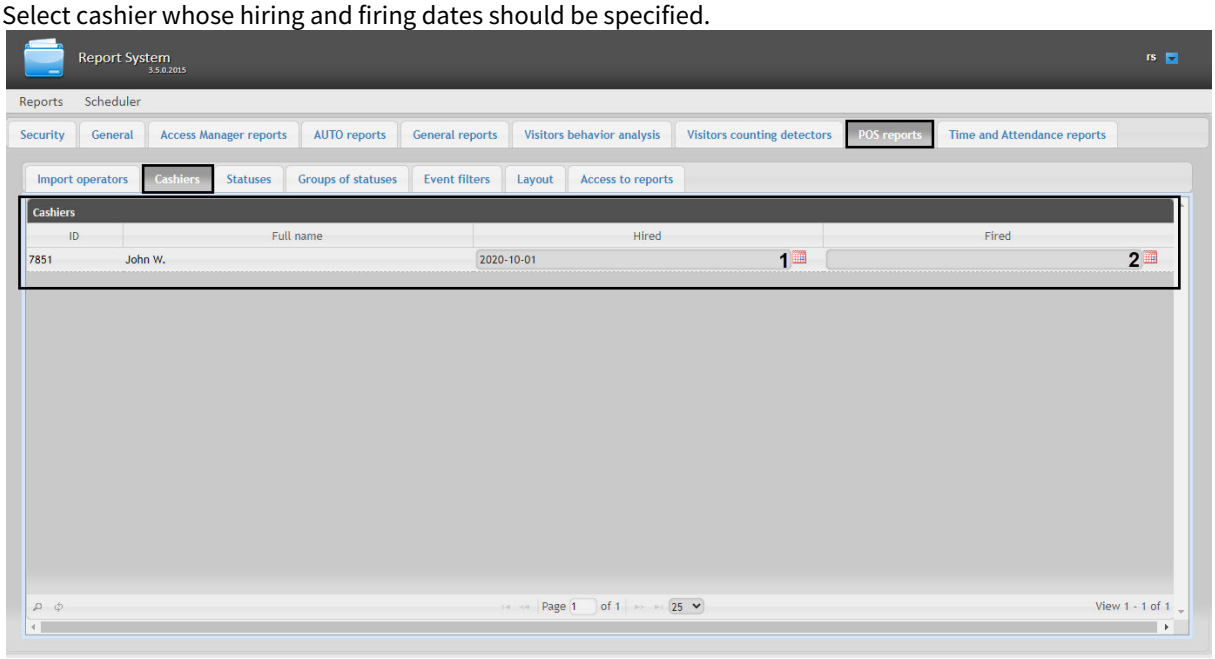
Setting up the cashiers list

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 whose hiring and firing dates should be specified.



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

Setting up the new cashiers

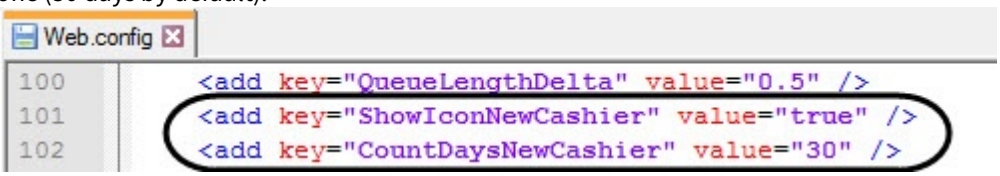
In **POS** reports, you can highlight the new cashiers who work less than a specified number of days. To do this:

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).

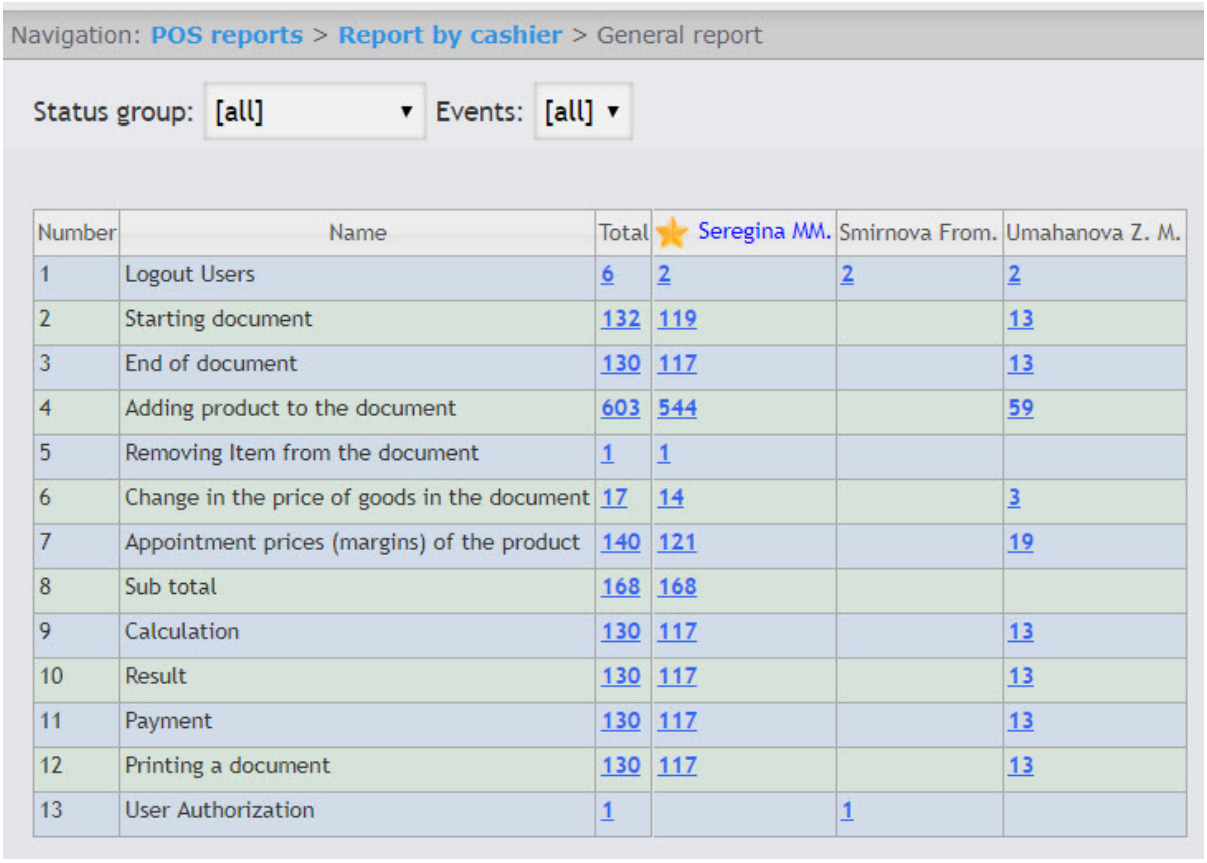


5. Save the changes in the **Web.config** file.

> **Attention!**
>
> The **Web.config** file configuration must be performed on the computer on which you will 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	

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

7.9.3 Setting up the statuses of POS events

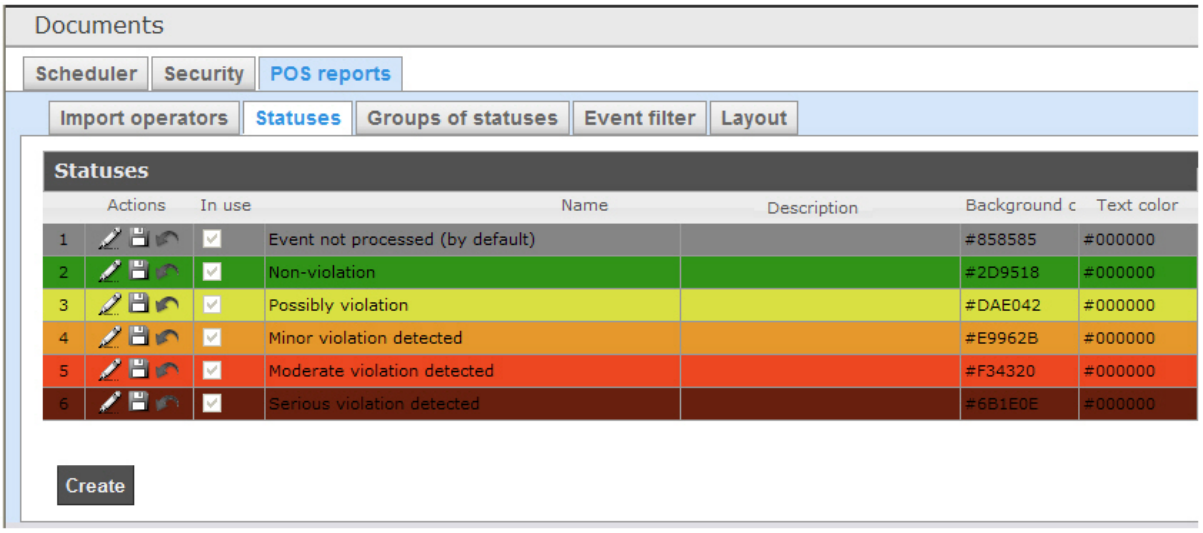
Every POS event has the status. By default all POS events have the **Event not processed** status. In order to change this status POS operator should be added to the **POS expert** role.

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.

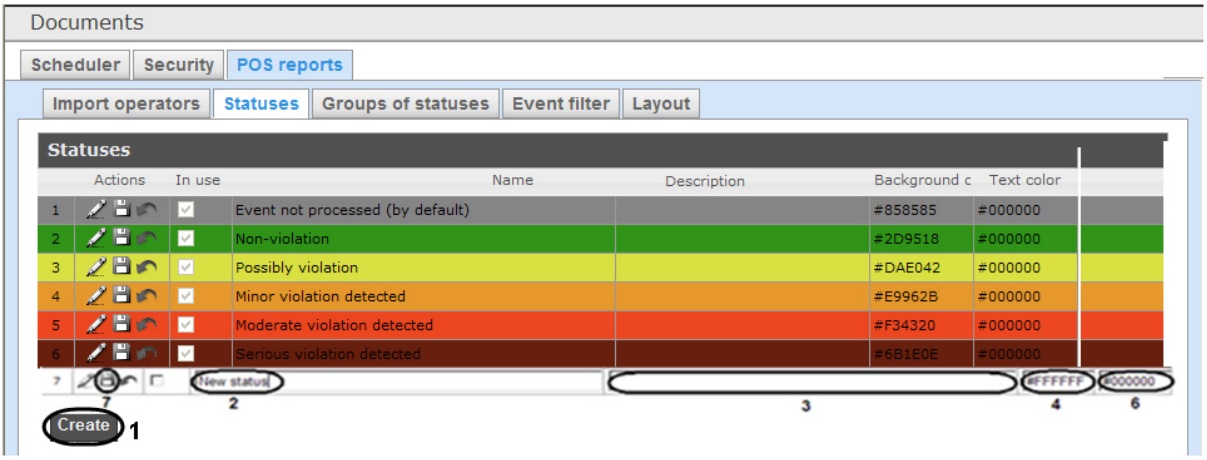


One can create user statuses and edit all existing ones.

Creating the user status

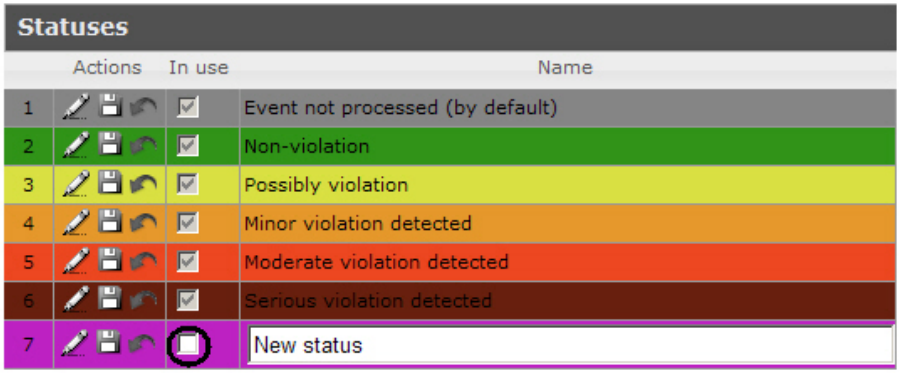
In order to create the user status do the following:

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.

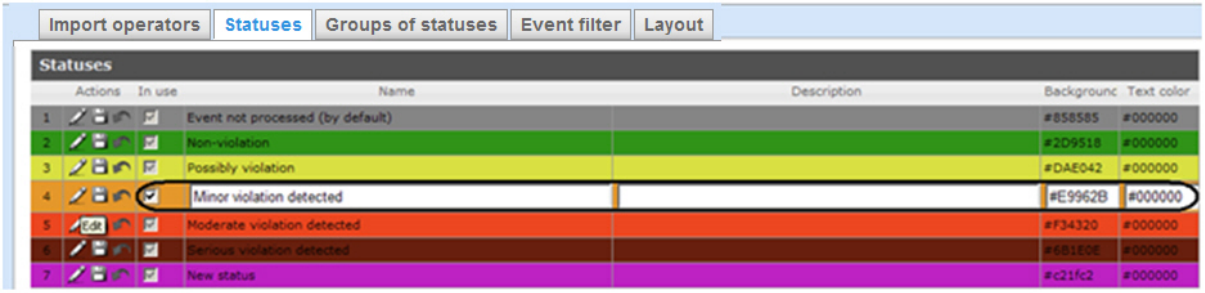
> **Note.**
>
> In order to cancel the status creation click  in the same column.

User status creating is completed.

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.

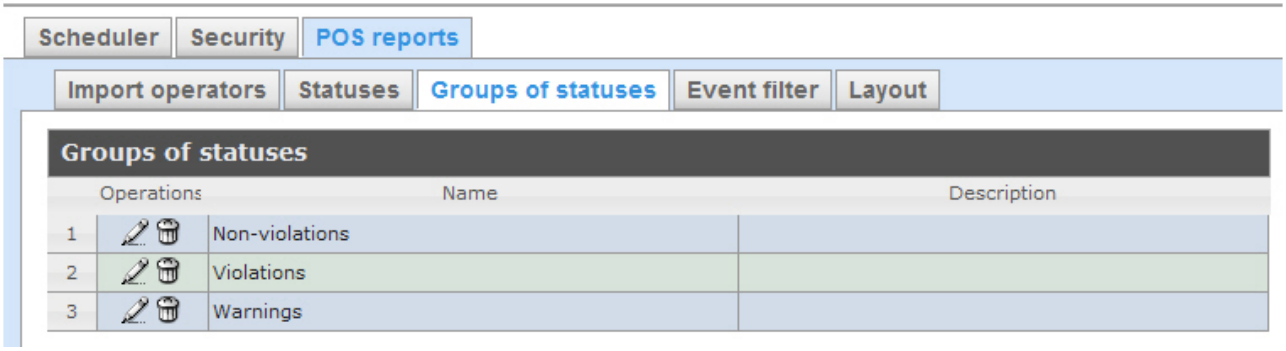
> **Note.**
>
> In order to cancel the changes in the status click  in the same column.

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.

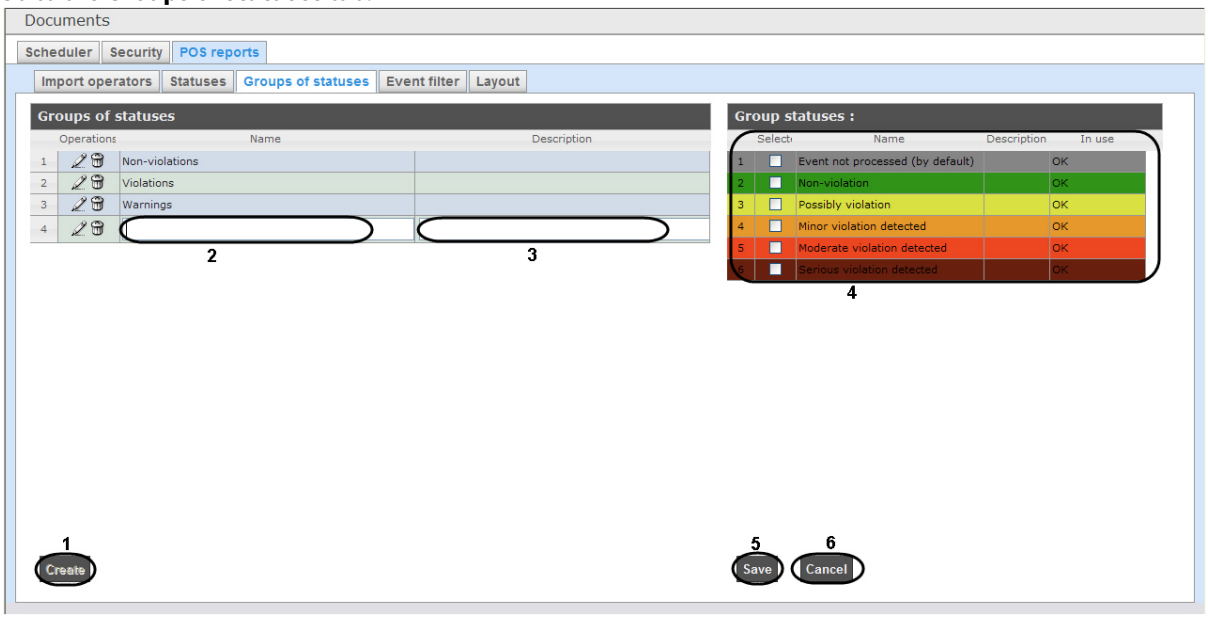
Group of statuses	**Statuses**
Non-violations	Non-violation
Violations	Minor violation detected
	Moderate violation detected
	Serious violation detected
Warnings	Event not processed
	Possibly violation

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

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

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

3. 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.

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

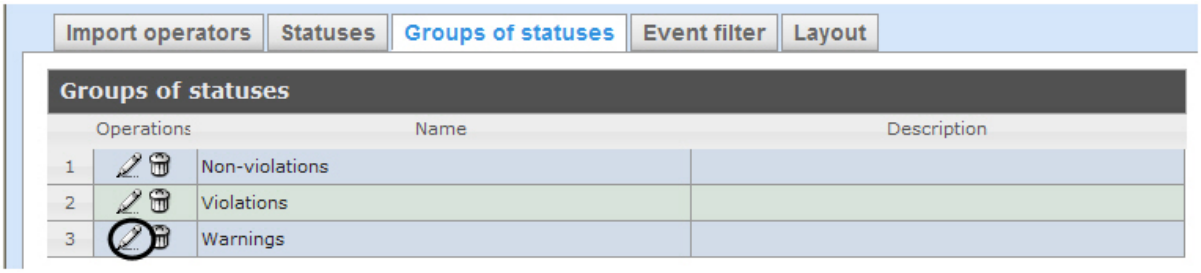
> **Note.**
>
> In order to cancel the creating a new group of statuses click **Cancel** (**6**).

Creating a new group of statuses is completed.

Editing a group of statuses

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

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



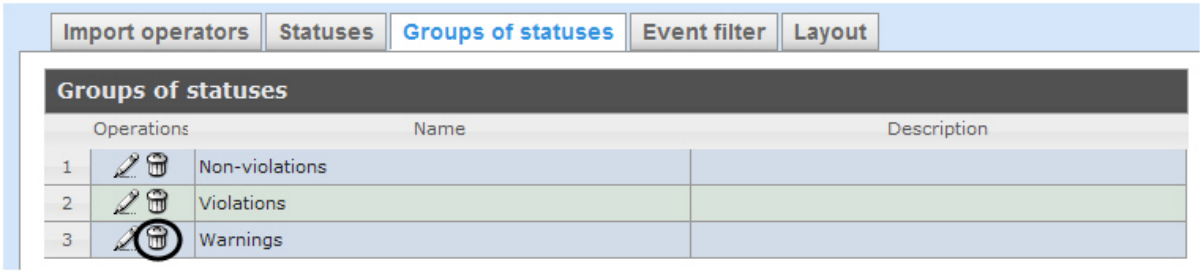
2. For the required group of statuses click  in the **Operations** column.
3. As a result it will be possible to edit all parameters of a group of statuses. One can edit the group of statuses by analogy with its creation (see Creating a group of statuses section).

Editing a group of statuses is completed.

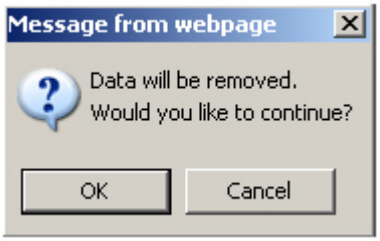
Deleting a group of statuses

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**.

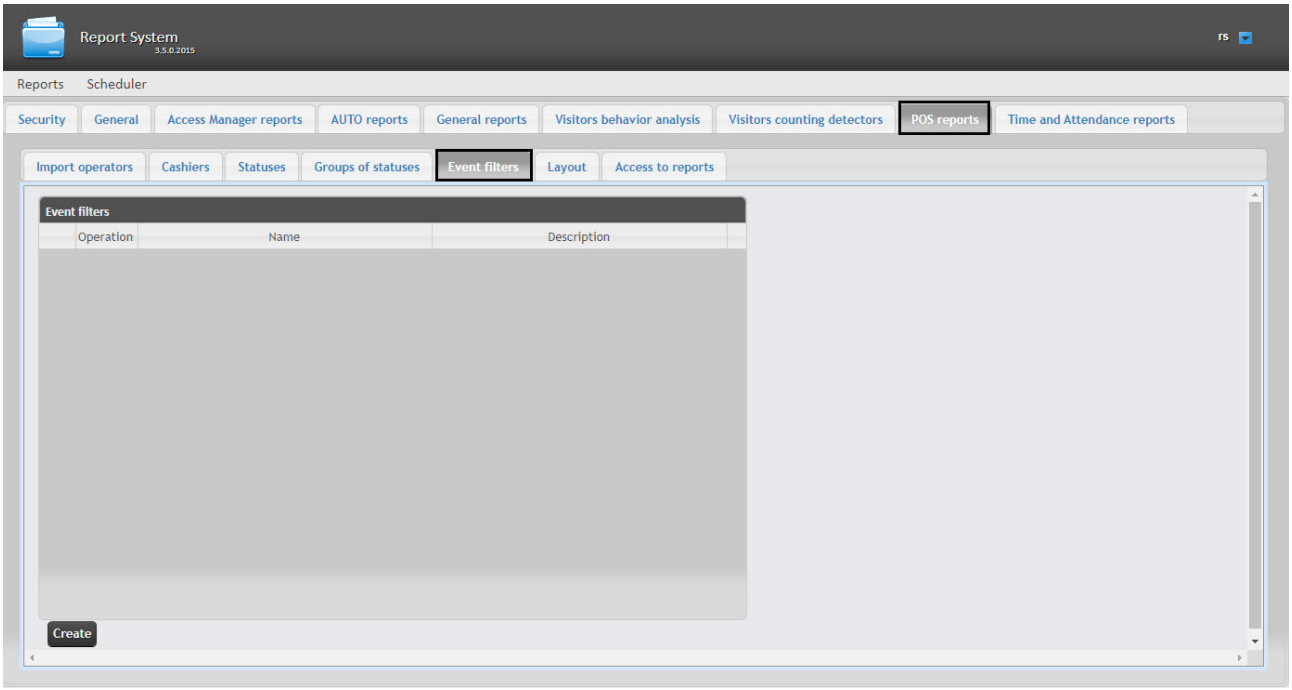


Deleting a group of statuses is completed.

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.



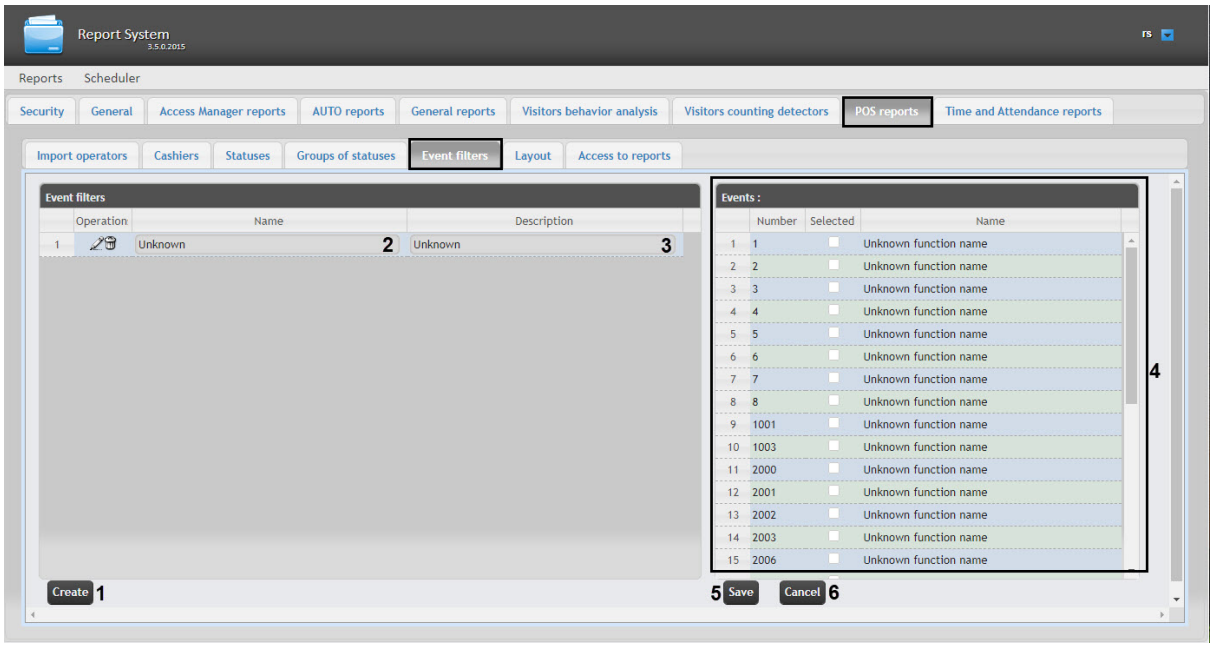
By default none filters are created in *Intellect Web Report System*.

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

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**).

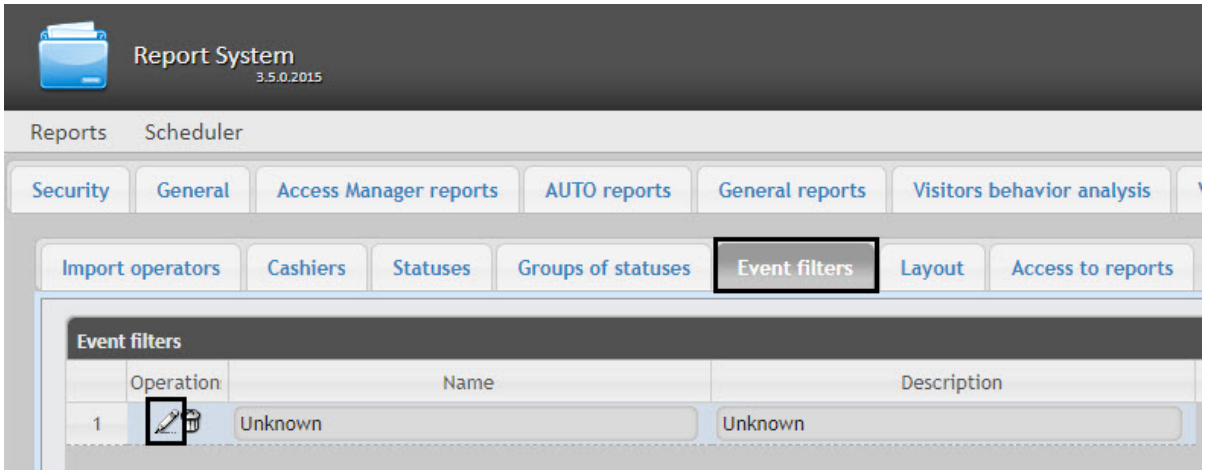
> **Note.**
>
> In order to cancel the creating a new filter of events click **Cancel** (**6**).

Creating a new filter of events is completed.

Editing a filter of events

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

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



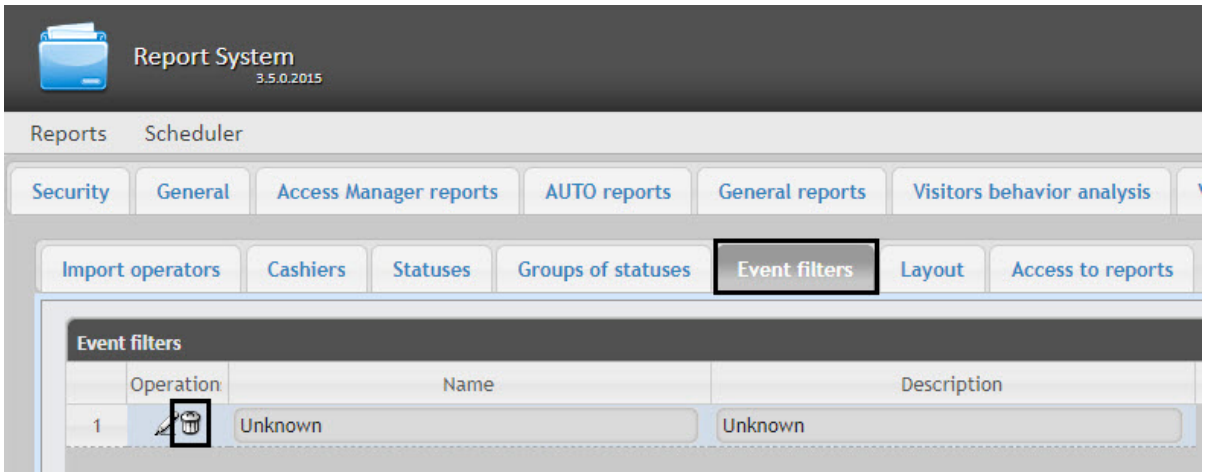
2. For the required filter of events click  in the **Operations** column.
3. As a result it will be possible to edit all parameters of a filter of events. One can edit the filter of events by analogy with its creation (see Creating a filter of events section).

Editing a filter of events is completed.

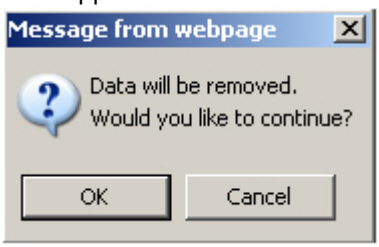
Deleting a filter of events

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**.

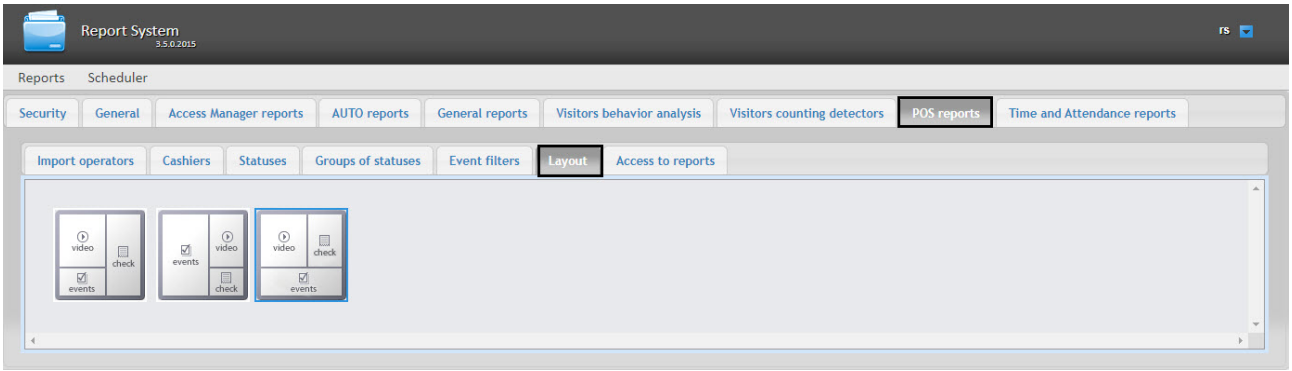


Deleting a filter of events is completed.

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.

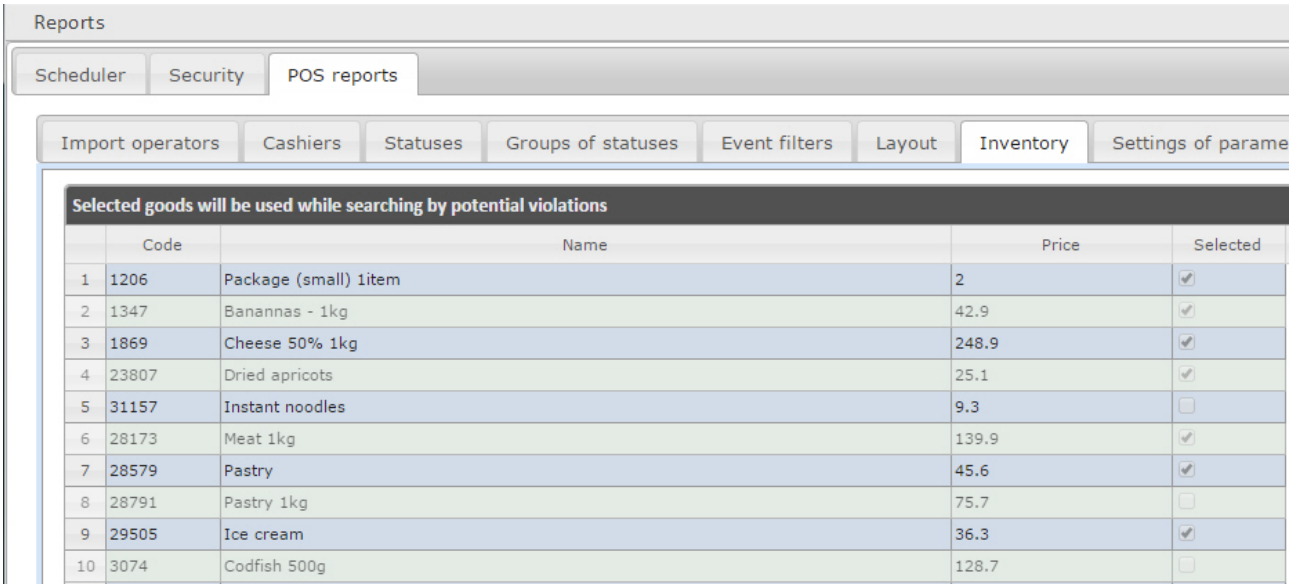


By default three layouts of POS reports are already created in *Intellect Web Report System*.

Select the needed layout by clicking the left mouse button.

7.9.7 Selecting items for report creating

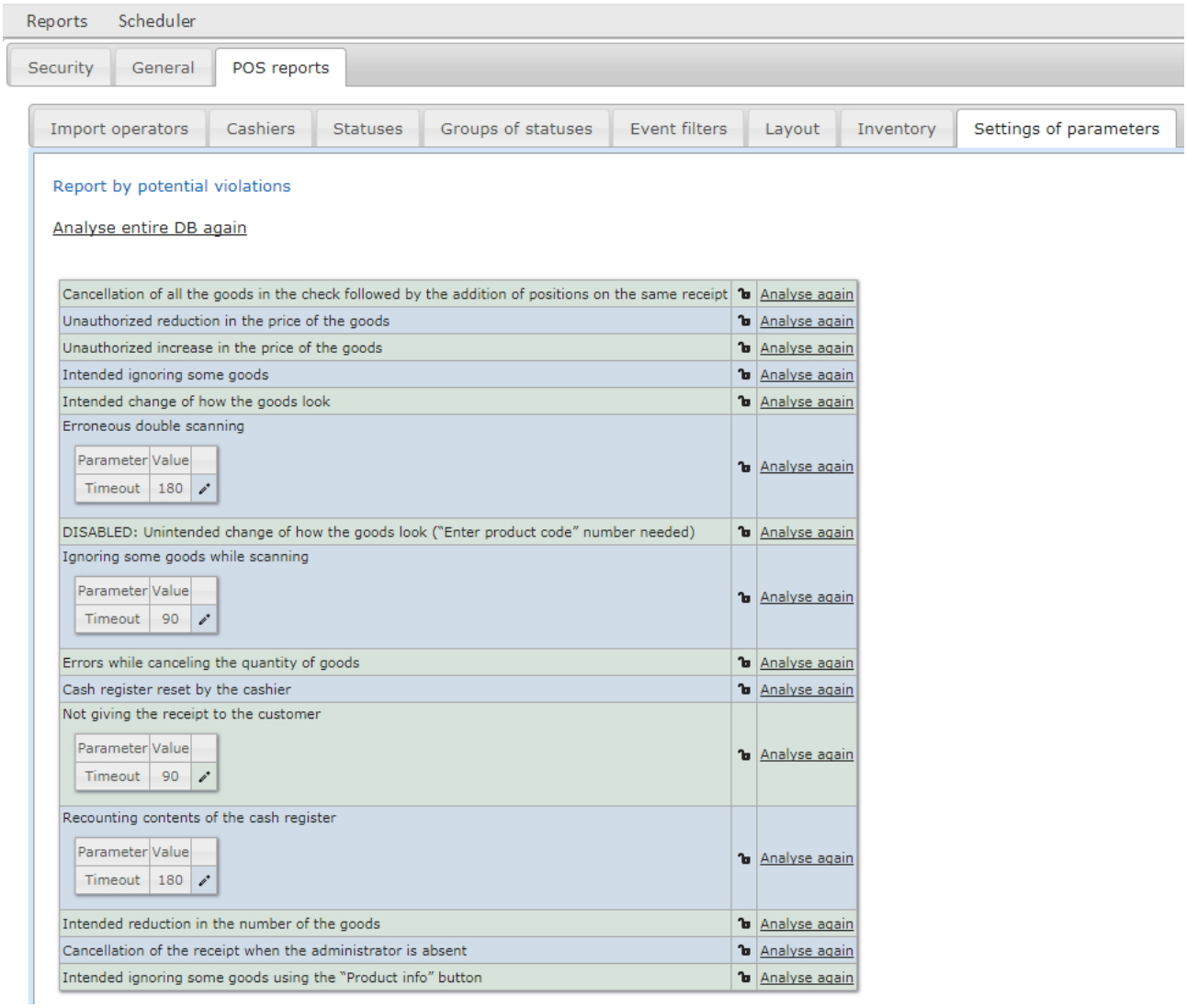
Selecting items by which the report by suspicious events is created is performed in the **Inventory** tab.



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.

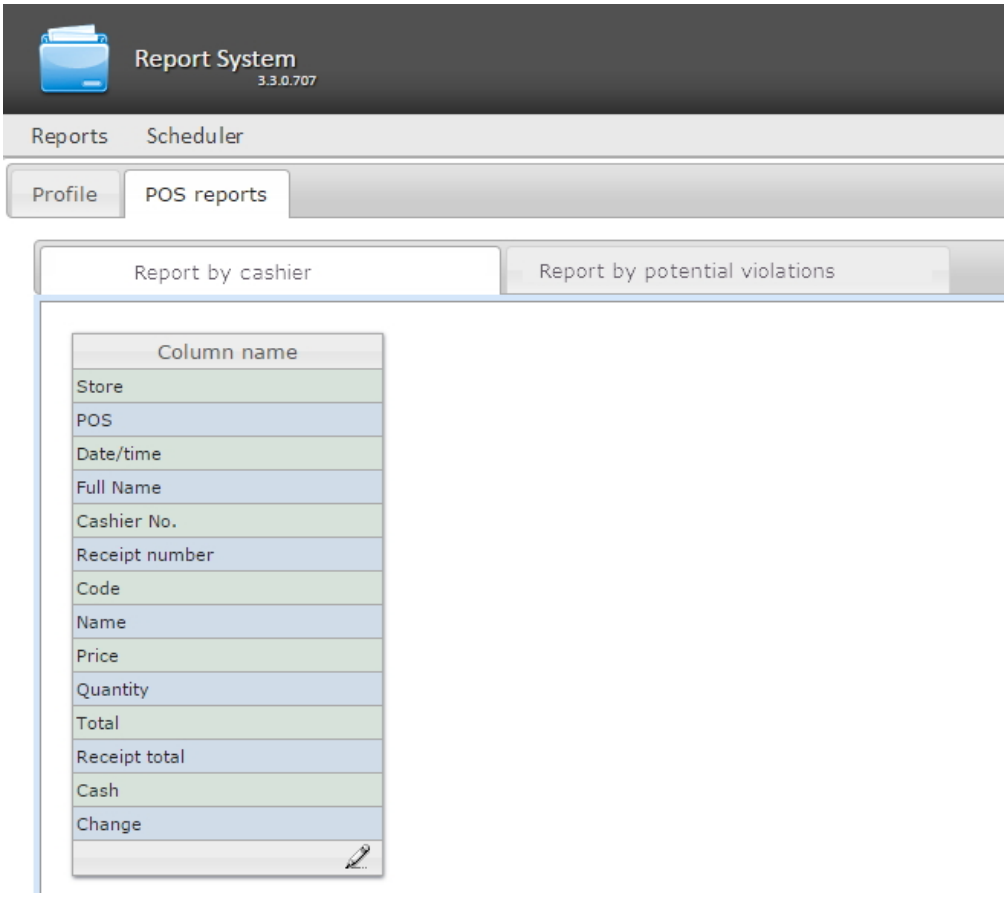
Note.

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

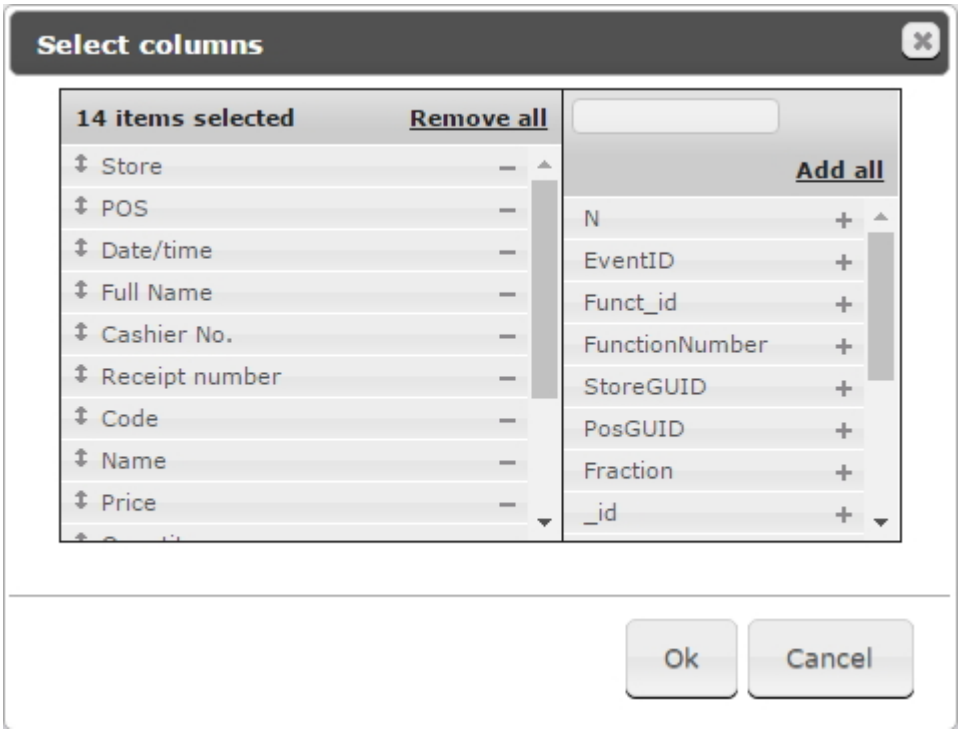
A unique interface of POS reports can be configured for every user.

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.

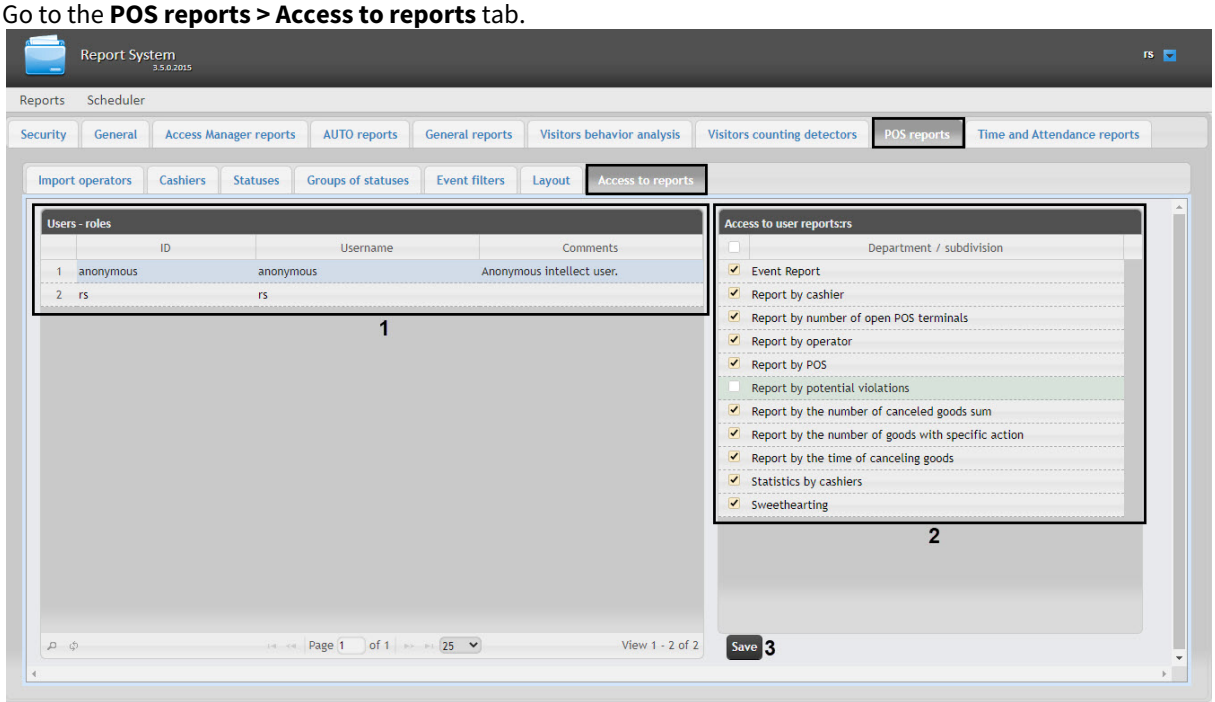


The list of columns can be edited in a similar way by clicking the **Edit columns** button right on the report page.

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.

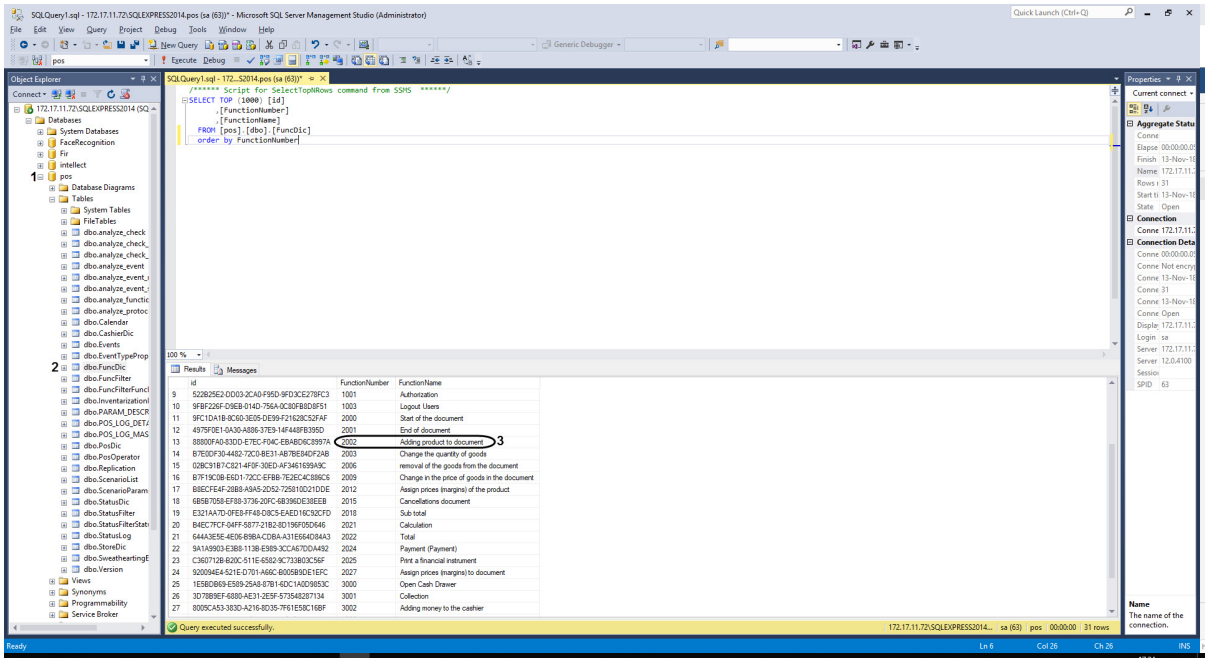
7.9.11 Setting up the Sweethearting report

Enabling the Sweethearting report

> **Attention!**
>
> The **Web.config** file configuration must be performed on the computer on which you will 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**).

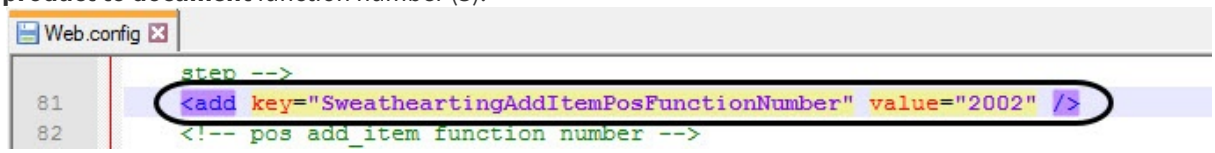


2. Open the **dbo.FuncDic** table (**2**).
3. Copy to the clipboard or memorize the **Adding product to document** function number (**3**).

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

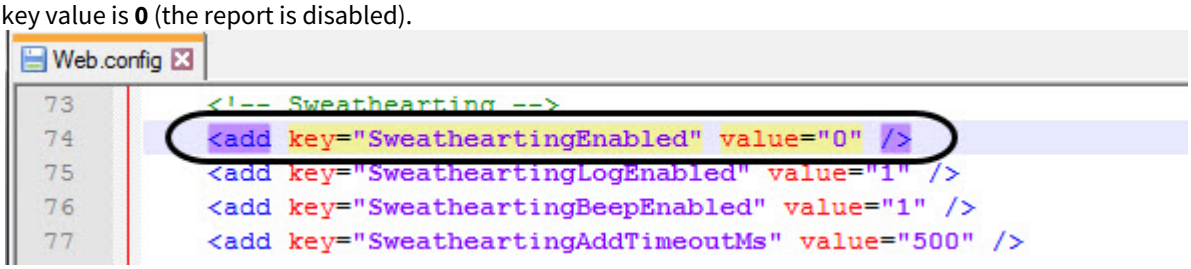
4. Go to the <*Intellect* installation directory>\Modules\Wt2.
5. Open the **Web.config** file for editing.

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.

> The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

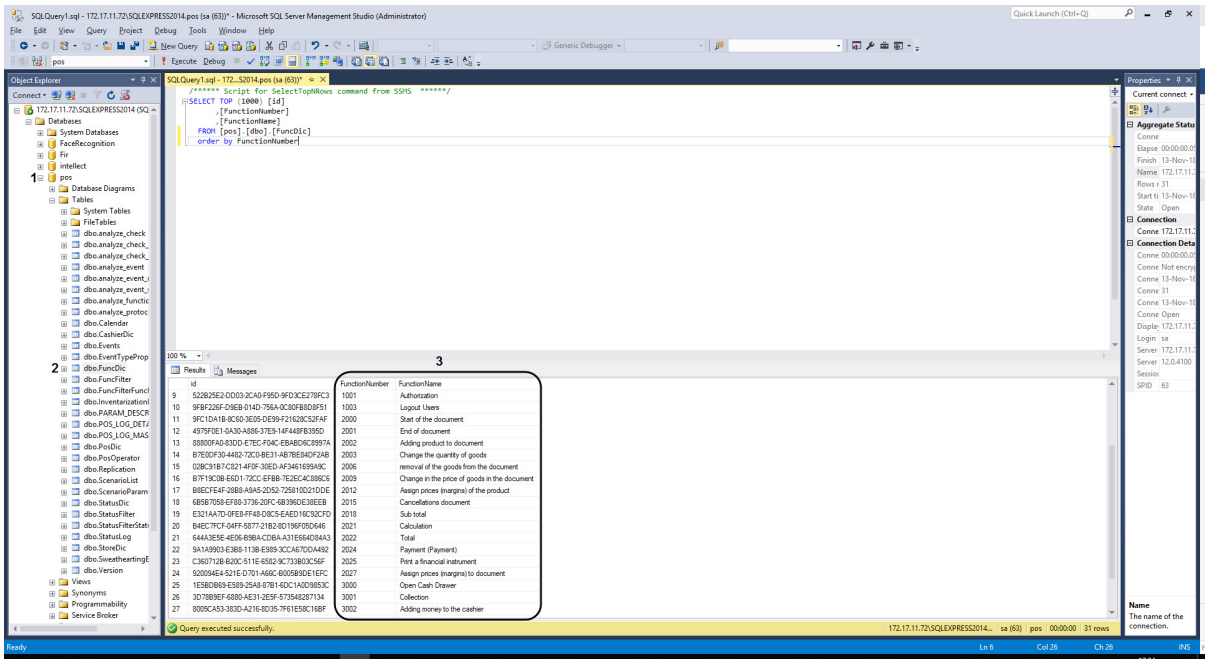
Filtering the sweethearting events

> **Attention!**
>
> The **Web.config** file configuration must be performed on the computer on which you will 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 occurred while the receipt was open.

To filter the sweethearting events, do the following:

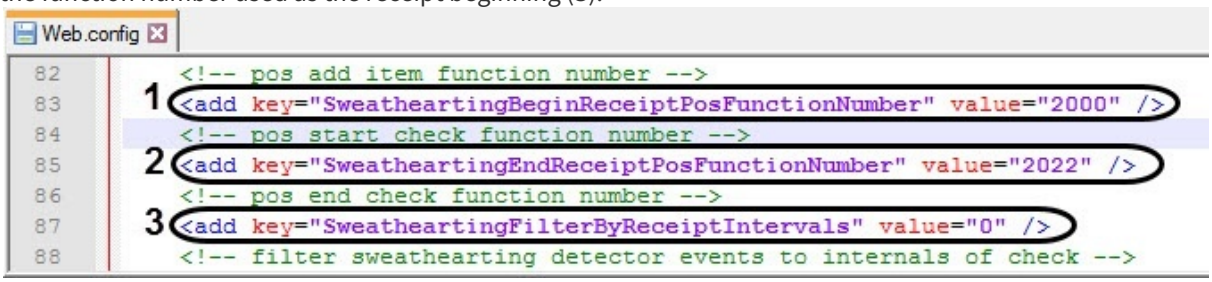
1. Open the **POS** database in the SQL Server Management Studio software (**1**).



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 occurred while the receipt was open will be displayed in the **Sweethearting** report. If the sweethearting event occurred 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.

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

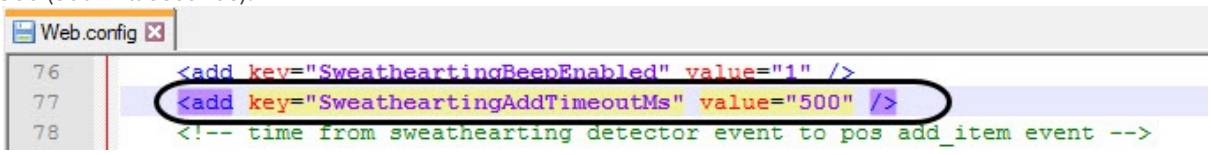
Setting the timeout for sweethearting event addition to report

Attention!

The **Web.config** file configuration must be performed on the computer on which you will work with the **Sweethearting** report.
After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

The **Sweethearting detection** module generates two events for each goods: the **alarmStartTime** and **alarmFinishTime** events. If the event of adding goods to the document is not in the time period between the alarm start and alarm finish events, the sweethearting event is generated that gets into the report. To increase the time period within which the event of adding goods should occur, change the value of the **SweatheartingAddTimeoutMs** key:

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.

Note

For example, if the time period between the **alarmStartTime** and **alarmFinishTime** events is 1000 milliseconds, and the **SweatheartingAddTimeoutMs** key is set to 500 milliseconds, then the sweethearting event will be generated if the event of adding goods to the document does not occur within 1500 milliseconds from the **alarmStartTime** event.

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

Disabling sound notification about new events in Sweethearting report

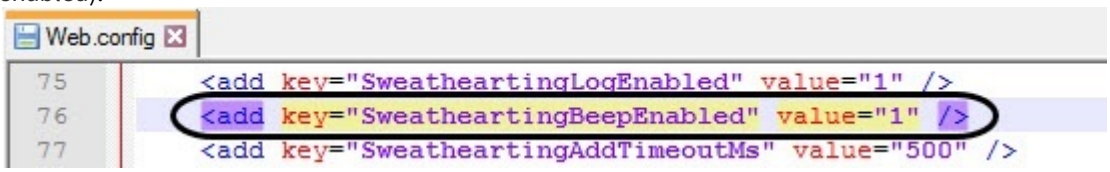
The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

Attention!

The **Web.config** file configuration must be performed on the computer on which you will 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.

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

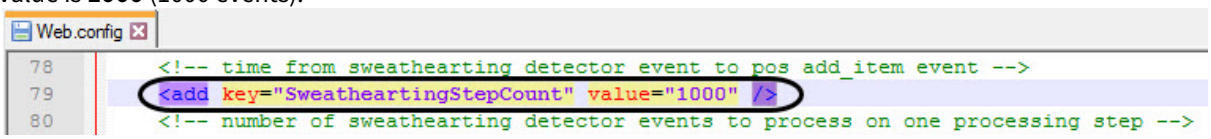
Configuring the events preloaded on the first Sweethearting report launch

Attention!

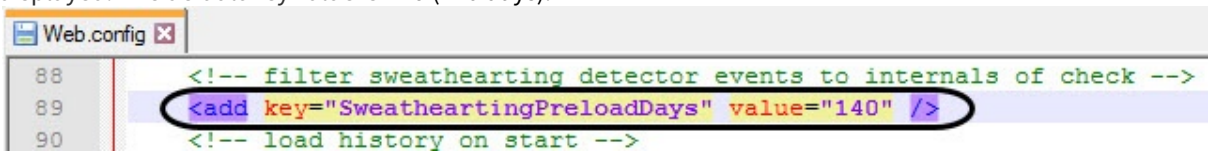
The **Web.config** file configuration must be performed on the computer on which you will work with the **Sweethearting** report.
After making any changes in the **Web.config** file, it is necessary to restart the **Cassini Service** utility.

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.

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

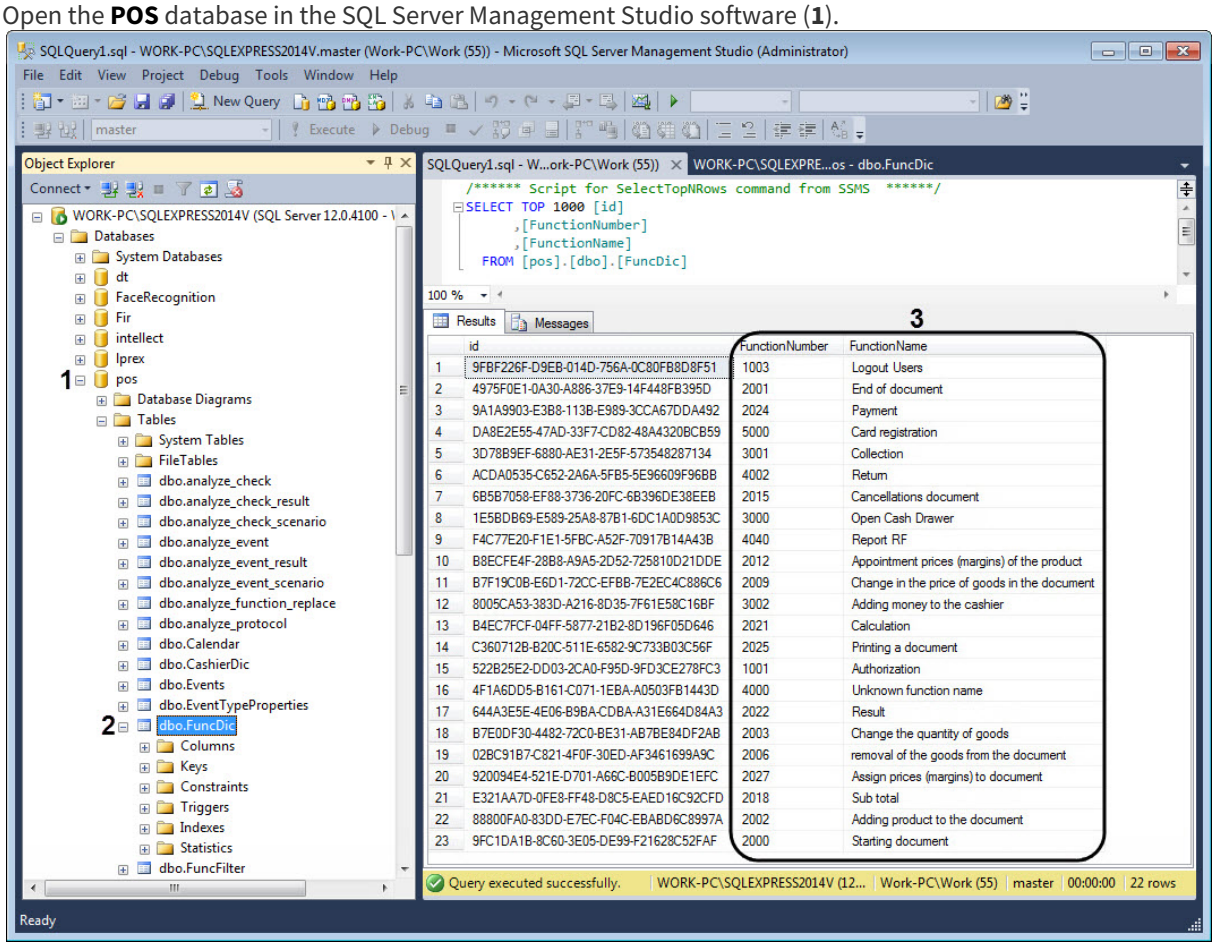
7.9.12 Setting up the Statistics by cashiers report

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.

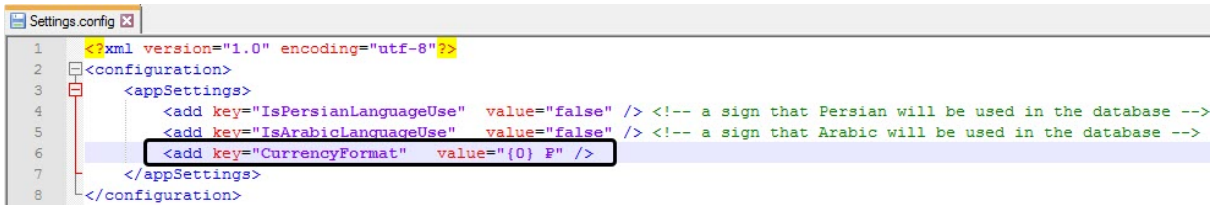
Setting up the **Statistics by cashiers** report is completed.

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 on which you will 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.

> The parameters of the **Settings.config** file are described on the page XML-file parameters reference guide.

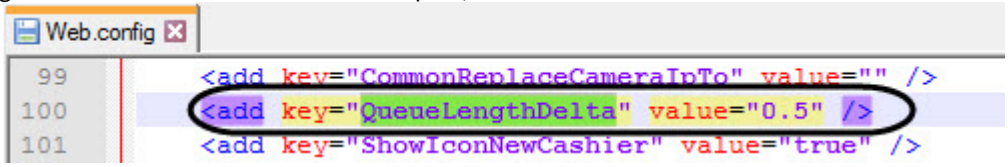
7.10 Setting up the reports by Queue Length detectors

7.10.1 Disabling the zero value filter

> **Attention!**
>
> The **Web.config** file configuration must be performed on the computer on which you will work with the Queue Length detectors reports.

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).



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

> The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

7.11 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.

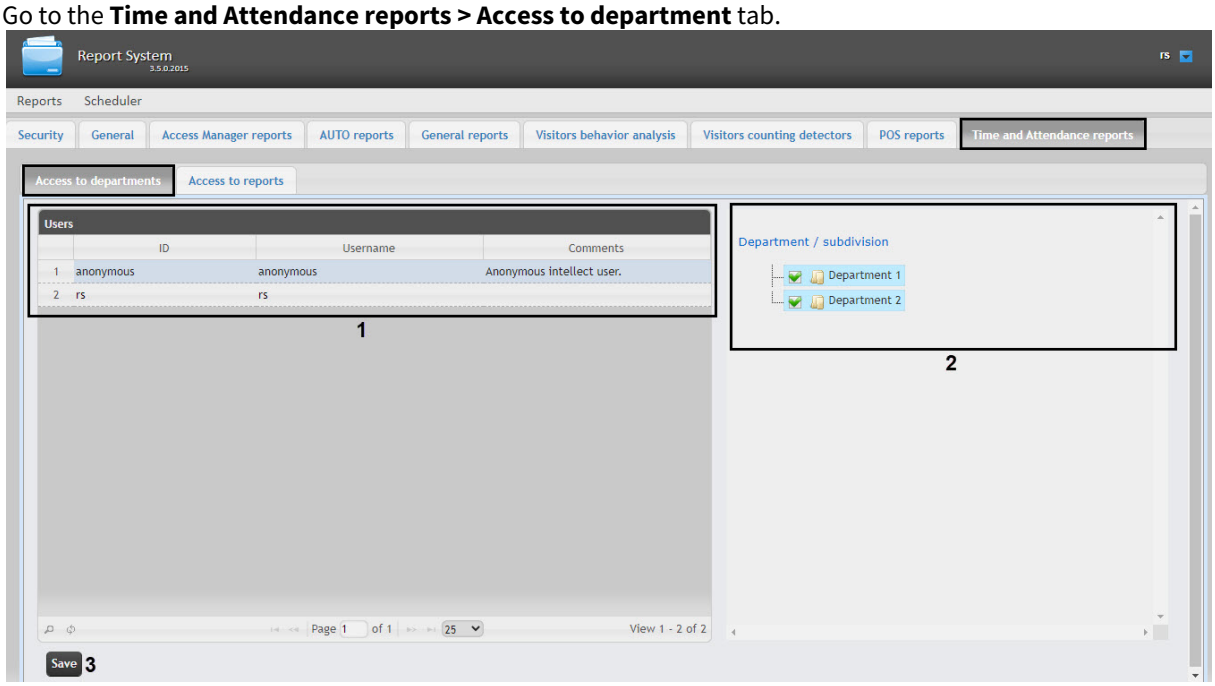
> **Note**
>
> In order to be able to work with Time and Attendance reports, the role with the right to perform the **Time and Attendance Module operator** operations should be created and assigned to users, as described in Set up the roles.

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

7.11.1 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**).

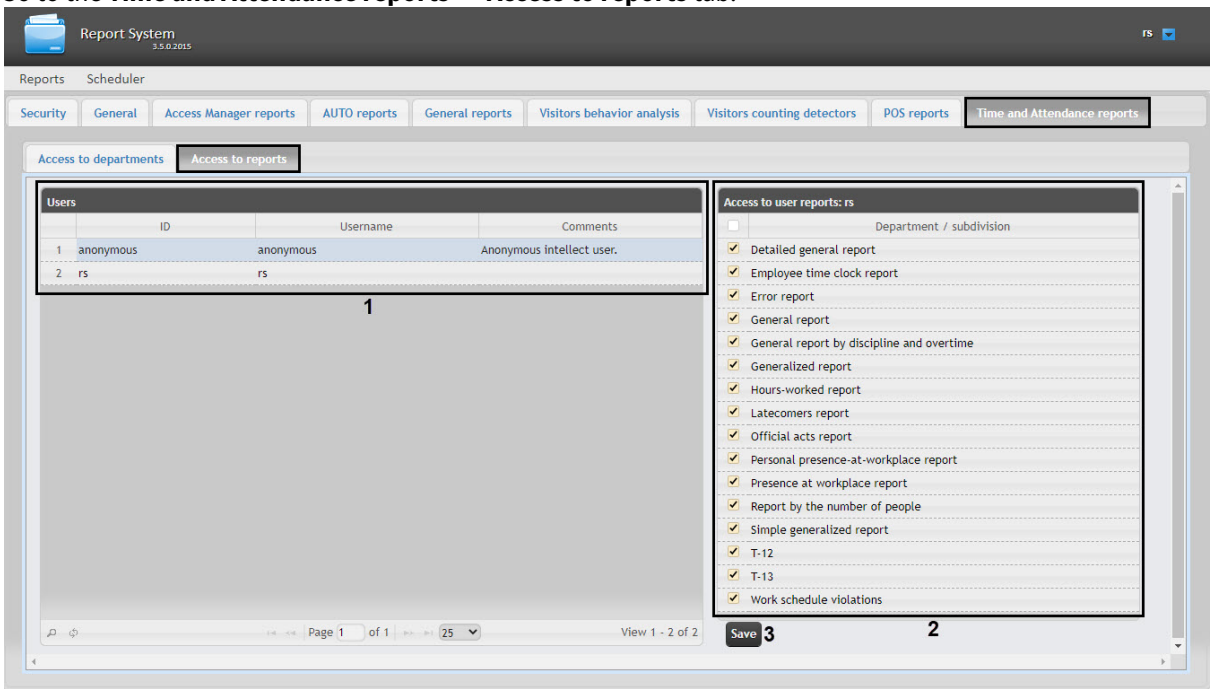
> **Note**
>
> The **rs** user has access to all departments by default, this can not be changed.

Configuring of user access to departments is completed.

7.11.2 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 whom the access is configured (**1**).

> **Note**
>
> The user should 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 the reports that you want the user to have access to.
5. Click the **Save** button (**3**).

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

Attention!

To save the users' access rights to *Time and Attendance* reports, you need to update the database using the updateDB.exe utility (see Database updating using the updateDB.exe utility).

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

On the page:

- Selecting a report format
- Adding the fields to the custom database template file

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.

Selecting a report format

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:

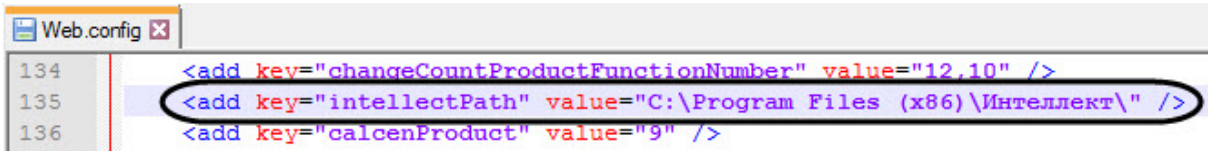
1. Go to the <*Intellect* installation directory>\Modules\Wt2.
2. Open the **Web.config** file for editing.
3. Add the following key to the **<appSettings>** key group:

```
<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.

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

Adding the fields to the custom database template file

For the **Presence at workplace report** correct 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 //Agreement #
specialty, CHAR, 255 //Speciality
```

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

   Attention!

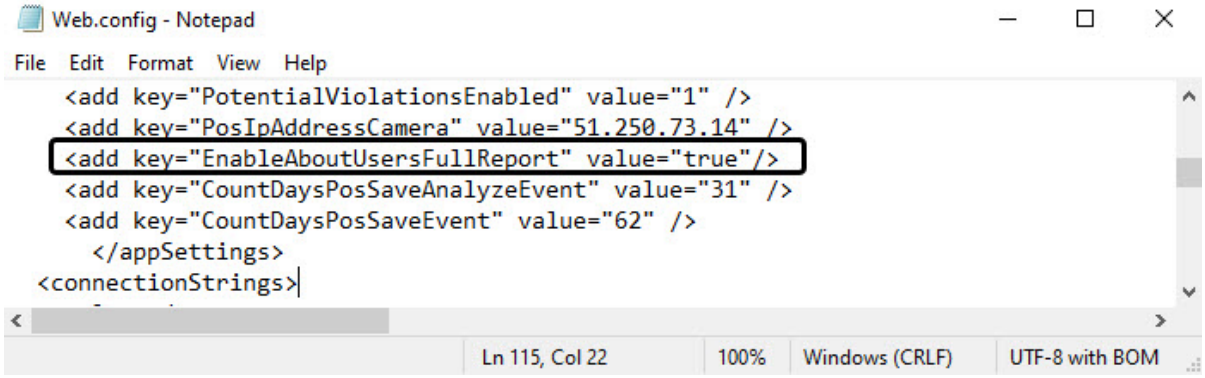
   After you save the dbi file, it is necessary to update the main database. To do this, use the idb.exe utility (see The ddi.exe utility for editing database templates and external settings files).

7.11.4 Enabling the Employee details (full report)

To enable the **Employee details (full report)**, do the following:

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

3. Set the value of the **EnableAboutUsersFullReport** key to **true**. The default value is **false**.



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

The parameters of the **Web.config** file are described in XML-file parameters reference guide.

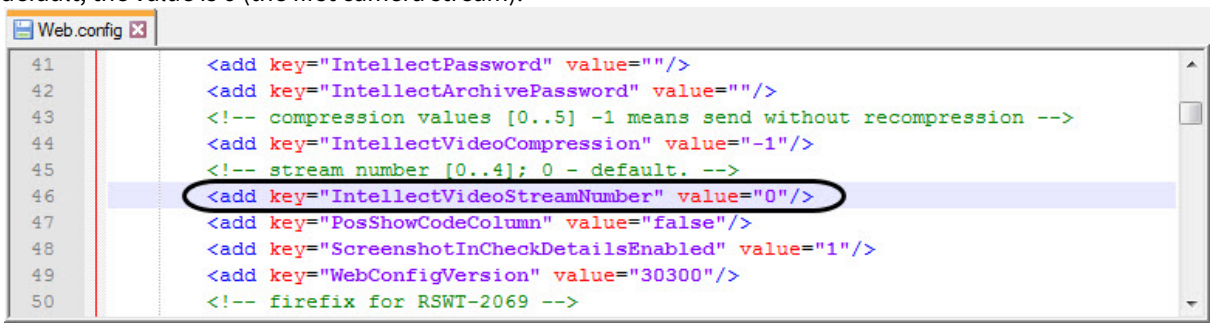
Note

The **Web.config** file configuration must be performed on the computer on which you plan to work with the **Employee details (full report)**.
After making any changes to the **Web.config** configuration file, you must restart the Cassini Service.

7.12 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).



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

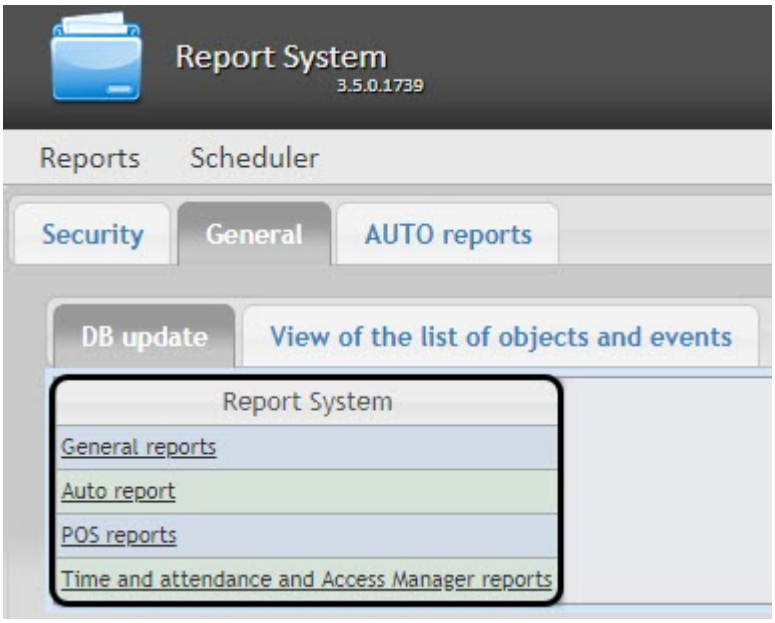
Attention!

This configuration must be performed on the computer on which you will work with the reports and on which the live video is available for viewing.

The parameters of the **Web.config** file are described on the page XML-file parameters reference guide.

7.13 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.

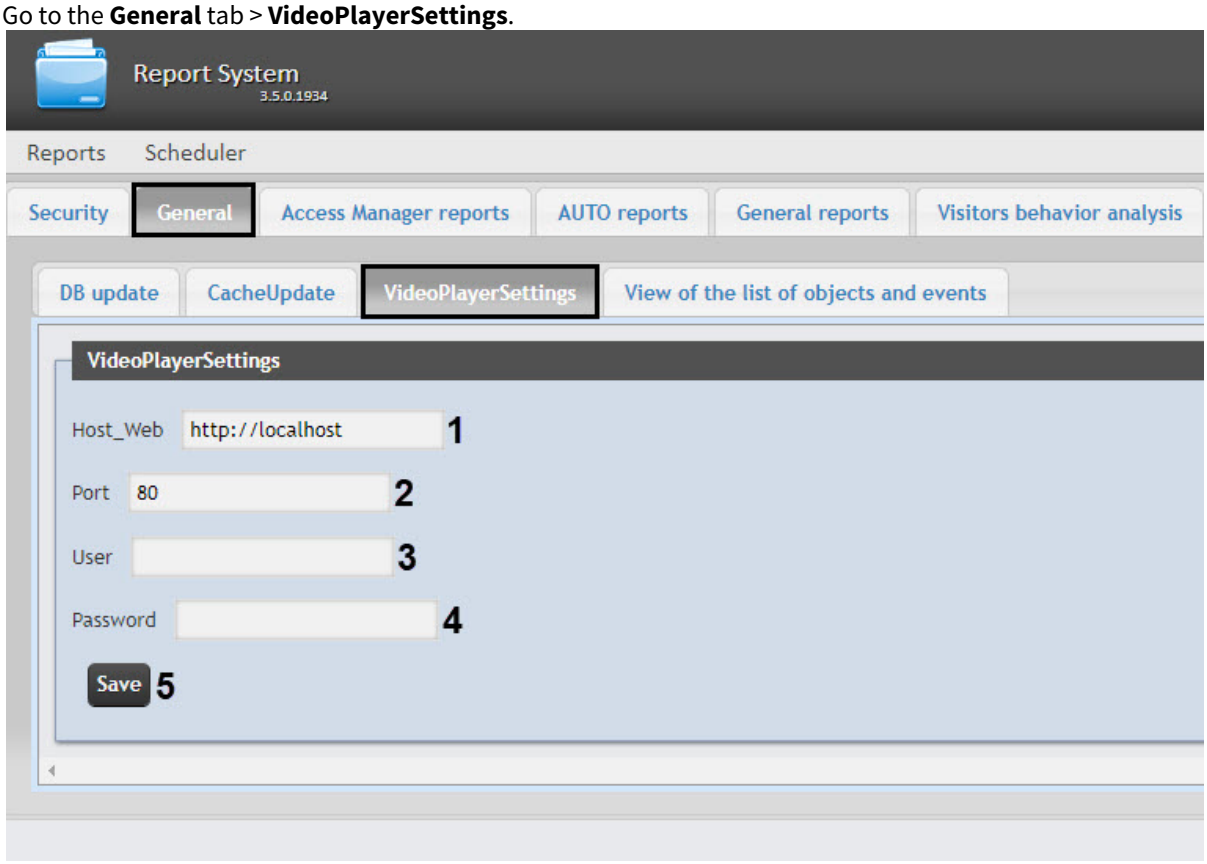
7.14 Video Player Settings

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 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 Access Manager reports

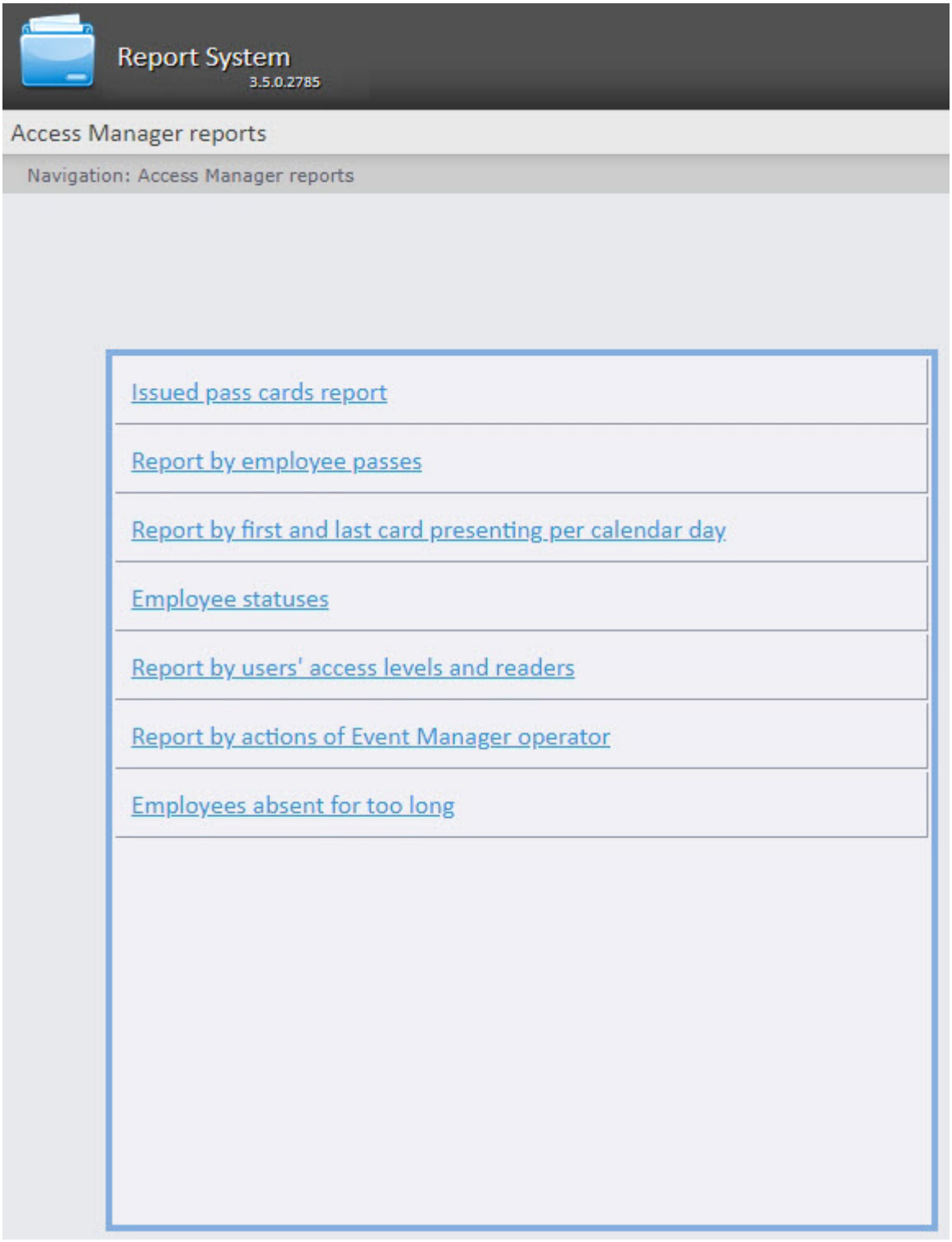
Working with the **Access Manager** reports consists of the following stages:

1. Selecting the report type.
2. Creating a report.

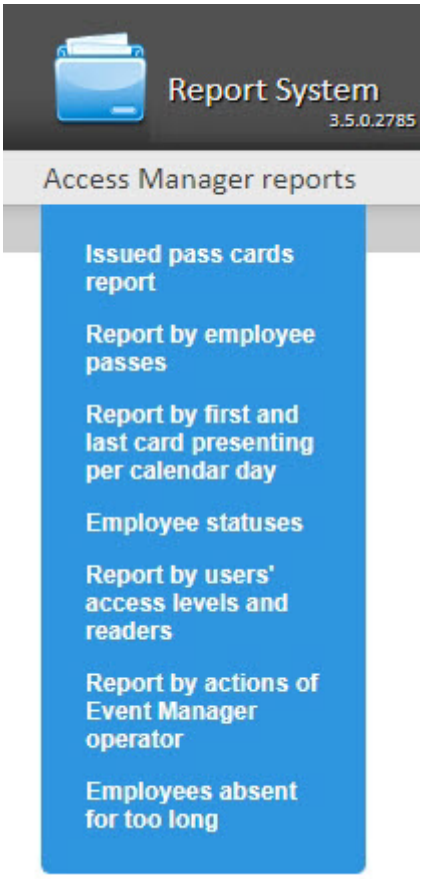
8.1.1 Selecting the type of Access Manager report

To select the type of the **Access Manager** report, click the **Access Manager reports** link in the *Intellect Web Report System* menu.

As a result, the list of available **Access Manager** reports will be 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 reports menu.



8.1.2 Creating the Access Manager report

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).

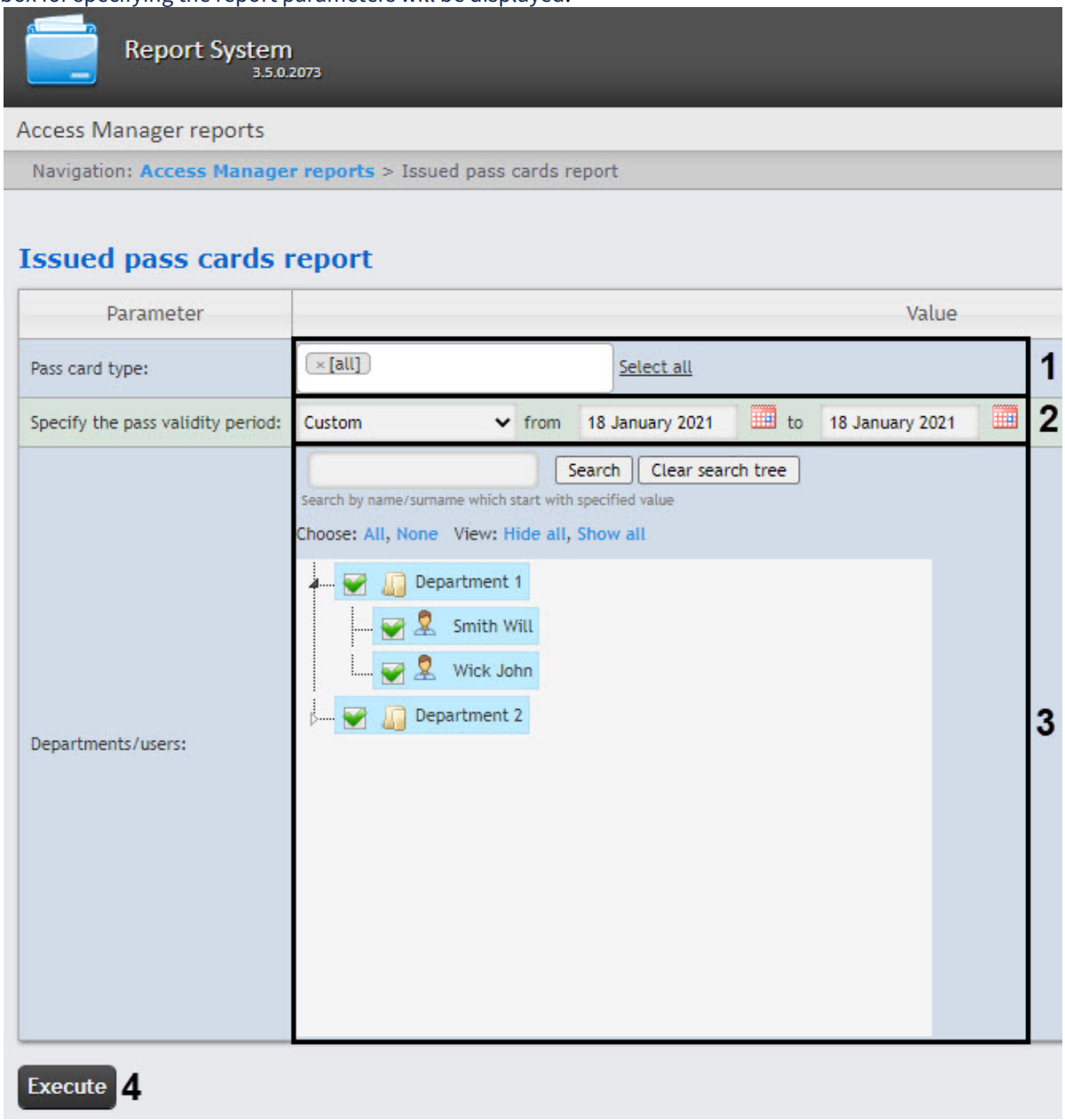
To zoom in/zoom out the report page, choose the required scale in the drop-down list (**3**).

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:

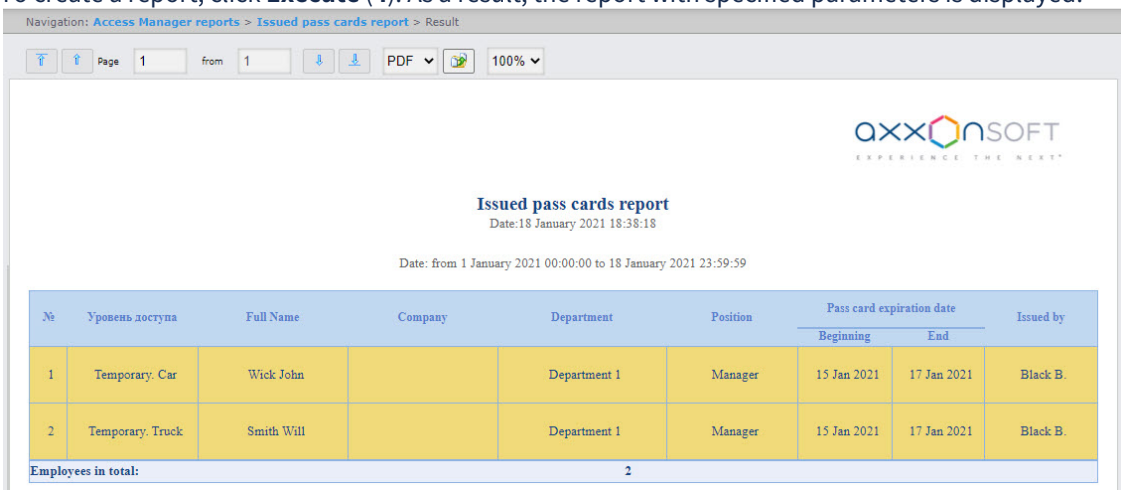
1. Select the **Issued pass cards report** (see Selecting the type of Access Manager report). As a result the dialog box for specifying the report parameters will be displayed.



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.



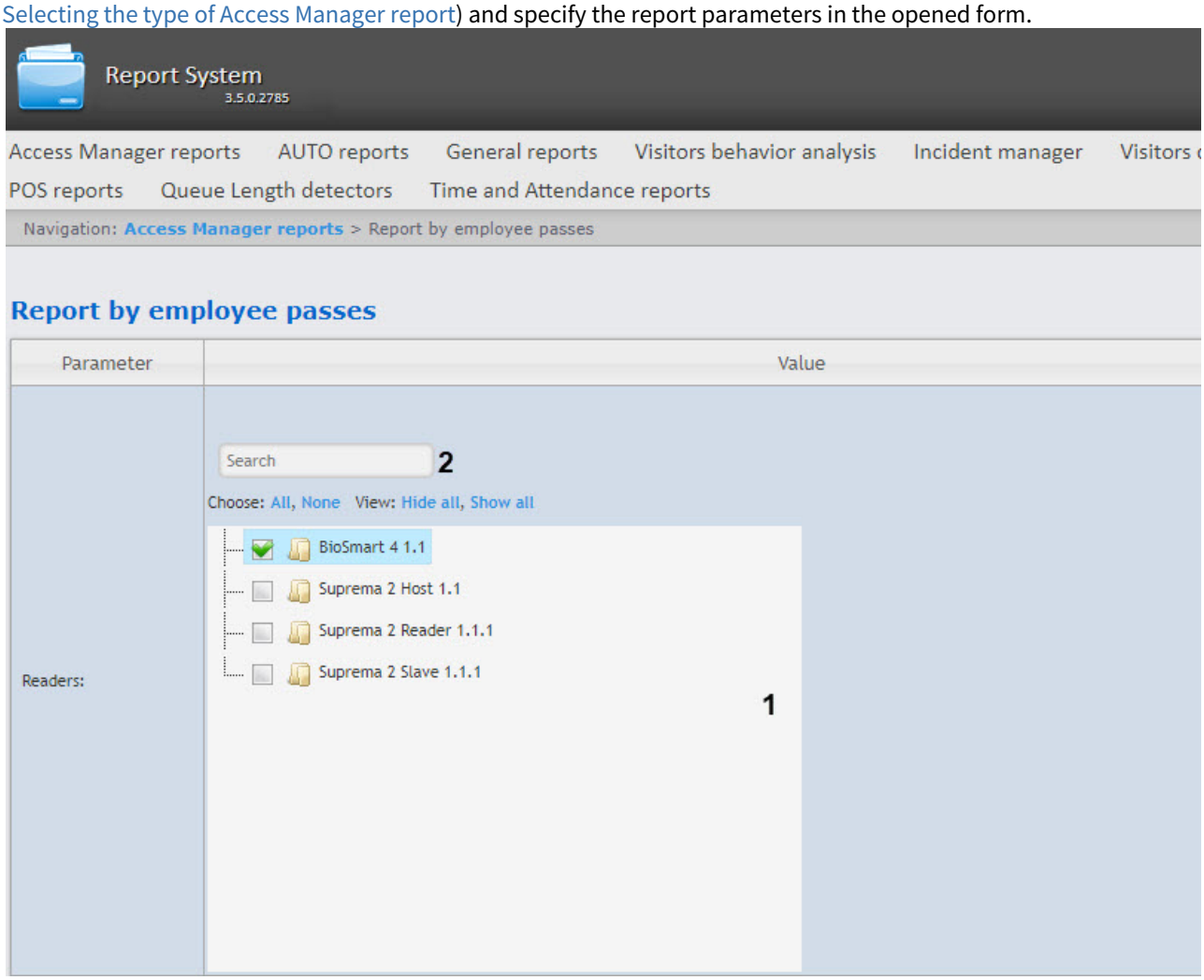
The report fields are described in the table.

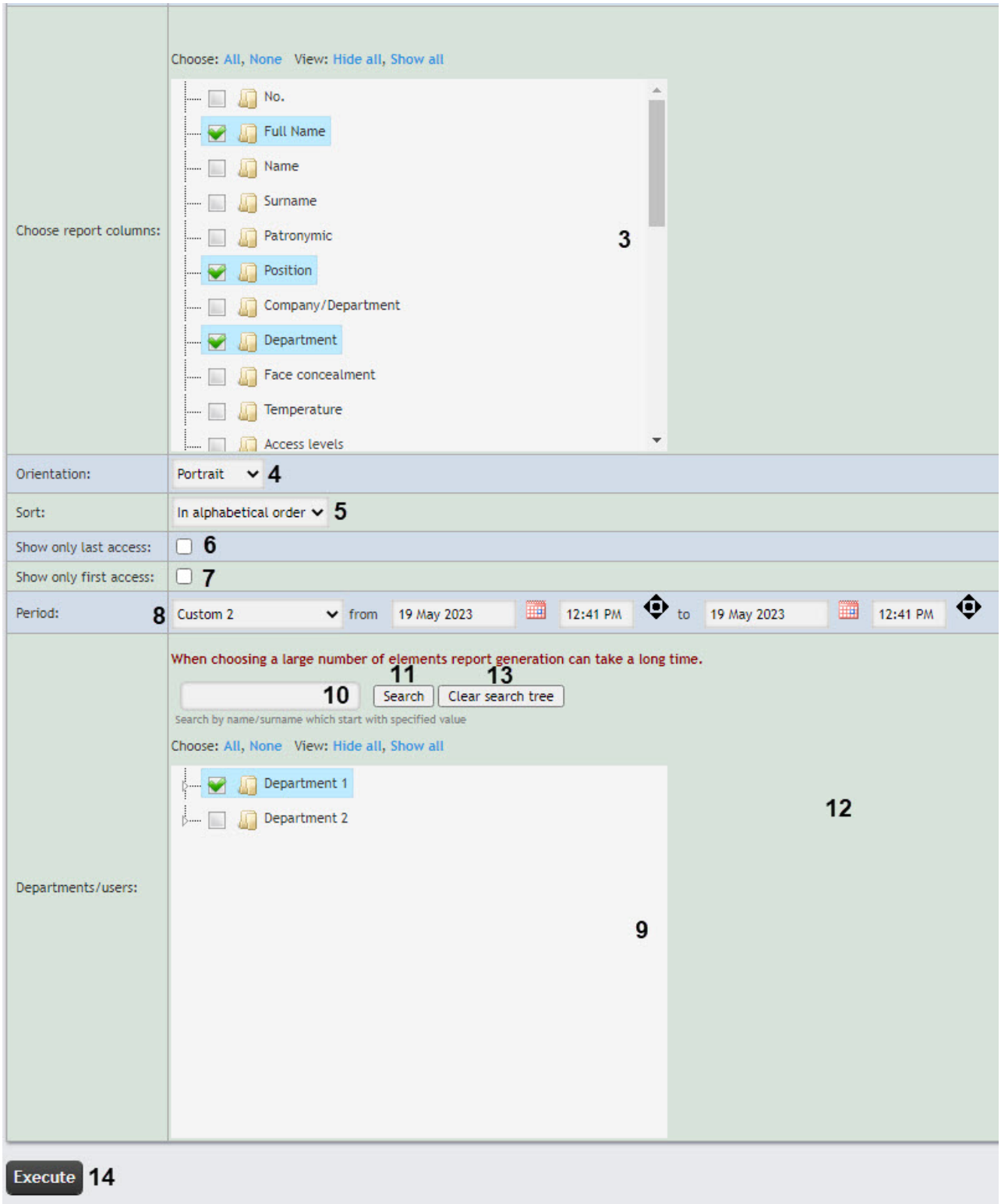
Field name	Description
Issued pass card type	Type of pass card
Date/Time of issue	Date and time of pass card issue
Period of validity (the number of days)	Pass card validity period
Issuing authority (individual)	Full name fo employee
Issuing authority (department)	Department to which the employee belongs
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	

Report by employee passes

The **Report by employee passes** displays all interactions between the selected employee and the selected readers. The report allows you to track the movement of the selected employee within a specified area.

To generate the report, select the **Report by employee passes** from the list of *Access Manager* reports (see Selecting the type of Access Manager report) and specify the report parameters in the opened form.





1. In the **Readers** area (**1**), set the checkboxes next to those access points, the information on which should be displayed in the report. Click **All** to select all found access points, click **None** to deselect. If the search field is blank, click **All** to select all possible access points. Click **Show all** to expand the access point structure, click **Hide all** to hide the structure.

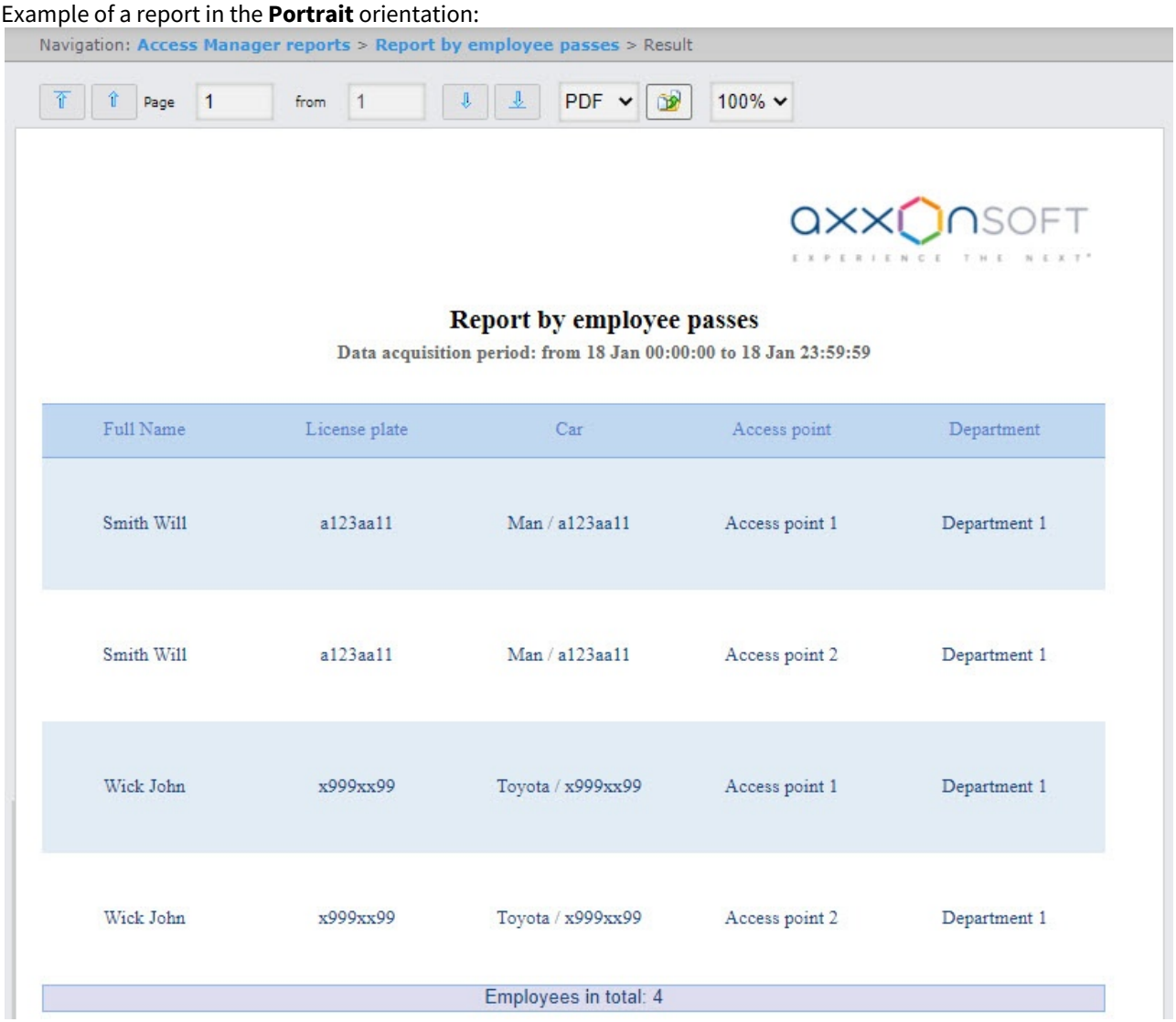
> **Attention!**
>
> This field displays only the access points which are added to any access level in the *Access Manager* module (see Creating access levels).
> For the **rs** user, it is enough to create an access level with all access points. For other users, it is necessary to assign access levels in the *Access Manager* module (see Assigning access levels to a user).

2. You can search for an access point using the search field. For this, in the search field (**2**), enter the name of the access point.
3. In the **Choose report columns** area (**3**), set the checkboxes next to those columns that should be displayed in the report. You can also change the order of the columns: left-click and hold the column name and drag it higher or lower relative to other columns. Click **All** to select all columns, click **None** to deselect. Click **Show all** to expand the columns structure, click **Hide all** to hide the structure.
4. From the **Orientation** drop-down list (**4**), select the report display orientation: **Portrait** (vertical) or **Landscape** (horizontal).

> **Attention!**
>
> - In the **Portrait** orientation, you can select up to 5 columns.
> - In the **Landscape** orientation, you can select up to 7 columns.

5. From the **Sort** drop-down list (**5**), select the sorting type: **In alphabetical order** or **By department**.
6. Set the **Show only last access** checkbox (**6**) to show only the last access of employees.
7. Set the **Show only first access** checkbox (**7**) to show only the first access of employees.
8. From the **Period** drop-down list (**8**) select the time period for which the report should be created. If the **Custom** or **Custom 2** time period is selected, enter the date of start and end periods for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the  button near the corresponding field to use the **Calendar** tool. For the **Custom 2** time period, it is also necessary to enter the time of start and end period using the  button.
9. In the **Departments/users** area (**9**), set the checkboxes next to those departments and employees, the information on which should be displayed in the report. Click **All** to select all found employees or departments. Click **None** to deselect. If the search field is blank, when clicking **All**, you will need to enter more than 4 characters. Click **Hide all** to hide the department structure. Click **Show all** to expand the department structure.
10. You can find an employee by their first name or surname using the search. For this, enter in the search field (**10**) at least 4 first characters of the employee's first name or surname and click the **Search** button (**11**). The department to which the found employee belongs will be displayed in the search tree in the area **12**. To clear the search field and the search tree, click the **Clear search tree** button (**13**).
11. To create a report, click the **Execute** button (**14**). As a result, the report with the specified parameters will be displayed.

Example of a report in the **Portrait** orientation:



All possible report fields are described in the table.

Field name	**Description**
No.	Line number
Full Name	Employee's full name
Name	Employee's first name
Surname	Employee's last name
Patronymic	Employee's patronymic
Position	Employee's position
Company/Department	Company/Department where employee works

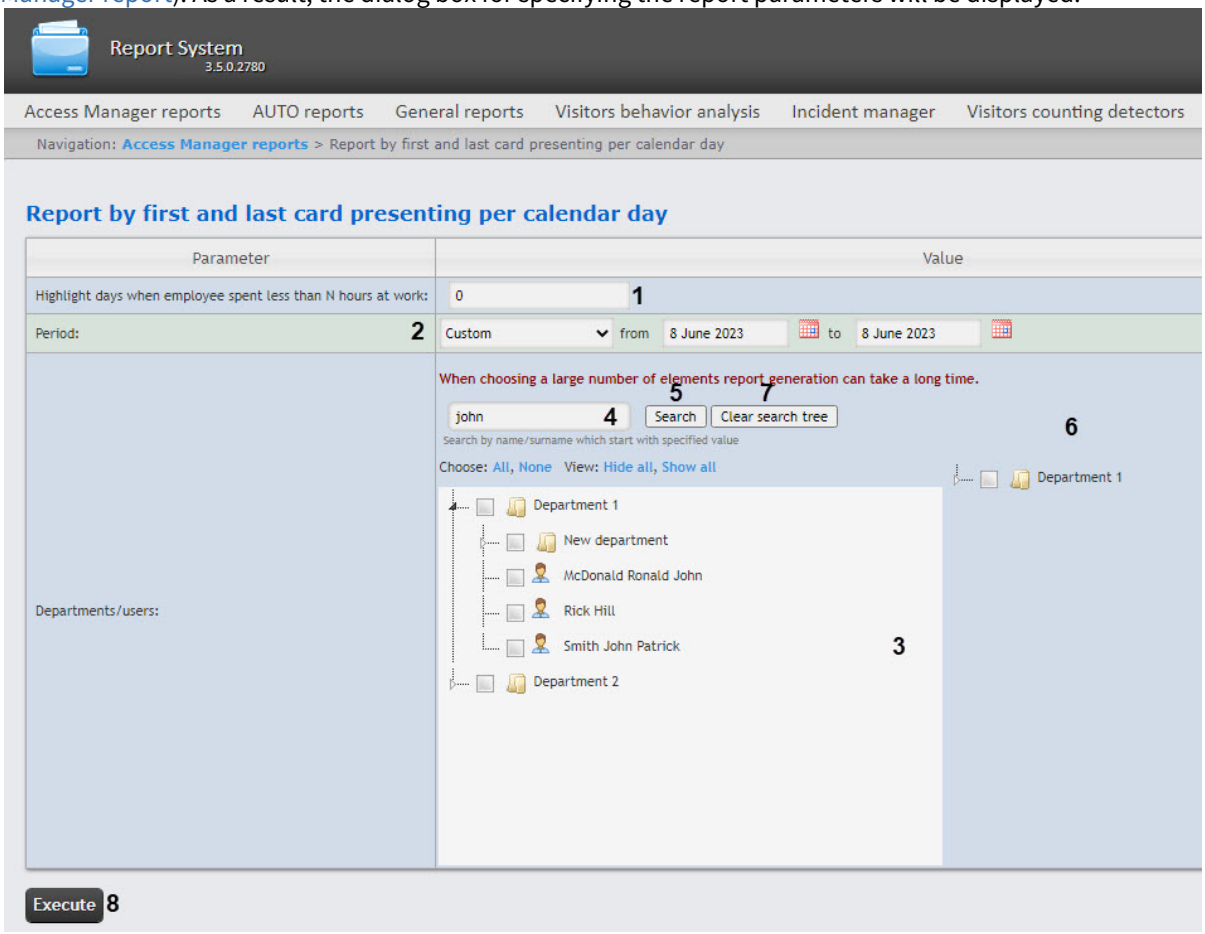
Field name	Description
Department	Department where employee works
Face concealment	Glasses, masks and other options of face concealment
Temperature	Face temperature in degrees Celsius from thermal camera or external system
Access levels	Employee access level
License plate	Employee's car license plate number
Car	Employee's car brand
Card number	Employee access card number
Card code	Employee access card code
Date of card issue	Date when the card was issued to the employee
Access point	Access point through which the employee passed
Date	Date of passage
Date and time	Date and time of passage
Time	Time of passage
Phone	Employee's phone number
Comment	Comment
Card start date	Employee's card start date
Card expiration date	Employee's card expiration date
Pin code	Employee's card PIN code
External ID	Employee's external ID
Personnel number	Employee's personnel number
Entry-Exit	Date and time of employee's entry and exit
The **Employees in total** line displays the number of captured employee faces, not the number of unique faces	

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 access point. Working schedules are ignored in the report, the data is displayed per calendar day. All access points are analyzed during the report generation.

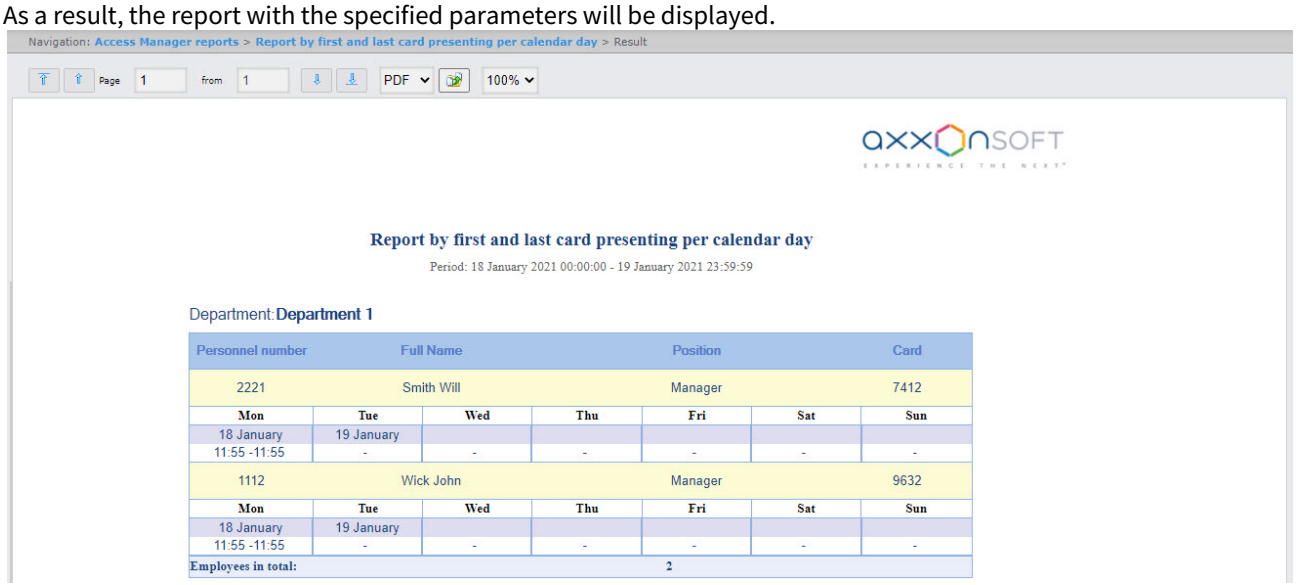
To create the **Report by first and last card presenting per calendar day**, do the following:

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. In the **Highlight days when employee spent less than N hours at work** field (**1**), enter the number of hours that employees must spend at work in a day. If employees spent less than the specified number of hours at work in a day, these days will be highlighted in orange.
3. From the **Period** drop-down list (**2**), select the time period for which the report should be created. If the **Custom** period is selected, enter the date of start and end periods for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
4. In the **Departments/users** field (**3**), set the checkboxes next to those departments and employees, the information on which should be displayed in the report.
5. You can also use the search by the name or surname of an employee. To do this, in the search line (**4**), enter at least the first 4 characters of the employee's name or surname and click the **Search** button (**5**). The search result will be displayed in the search tree in the area **6**. To clear the search line and the search tree, click the **Clear search tree** button (**7**).
6. Click the **Execute** button (**8**) to create the report.

As a result, the report with the specified parameters will be displayed.



The report fields are described in the table.

Field	Description
Personnel number	Personnel number of an employee
Full Name	Full name of an employee
Position	Position of an 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
The **Employees in total** line displays the number of employees included in this report	

Note

If the report was created automatically in Excel format (see Setting up Intellect Web Report System operation in the automatic mode), it will contain the information about the department to which the employee belongs.

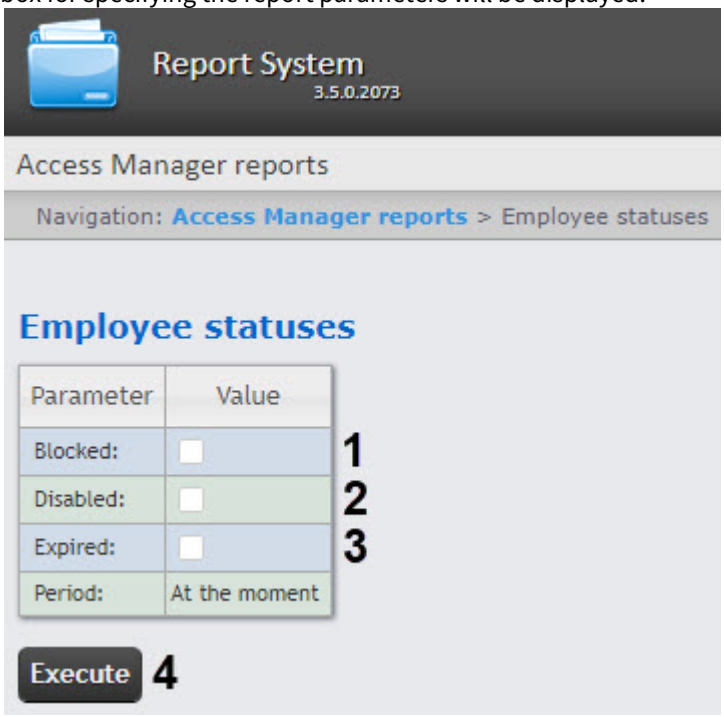
	1	2	3	4	5	6	7
1	**Report by first and last card presenting per calendar day**						
2	from 18 January 2021 to 18 January 2021						
3	**2221**	**Smith Will**	**Department 1**		**Manager**		**7412**
4	Mon	Tue	Wed	Thu	Fri	Sat	Sun
5	**18 January**	**19 January**					
6	11:55 - 11:55						
7	**1112**	**Wick John**			**Manager**		**9632**
8	Mon	Tue	Wed	Thu	Fri	Sat	Sun
9	**18 January**	**19 January**					
10	11:55 - 11:55						

Employee statuses report

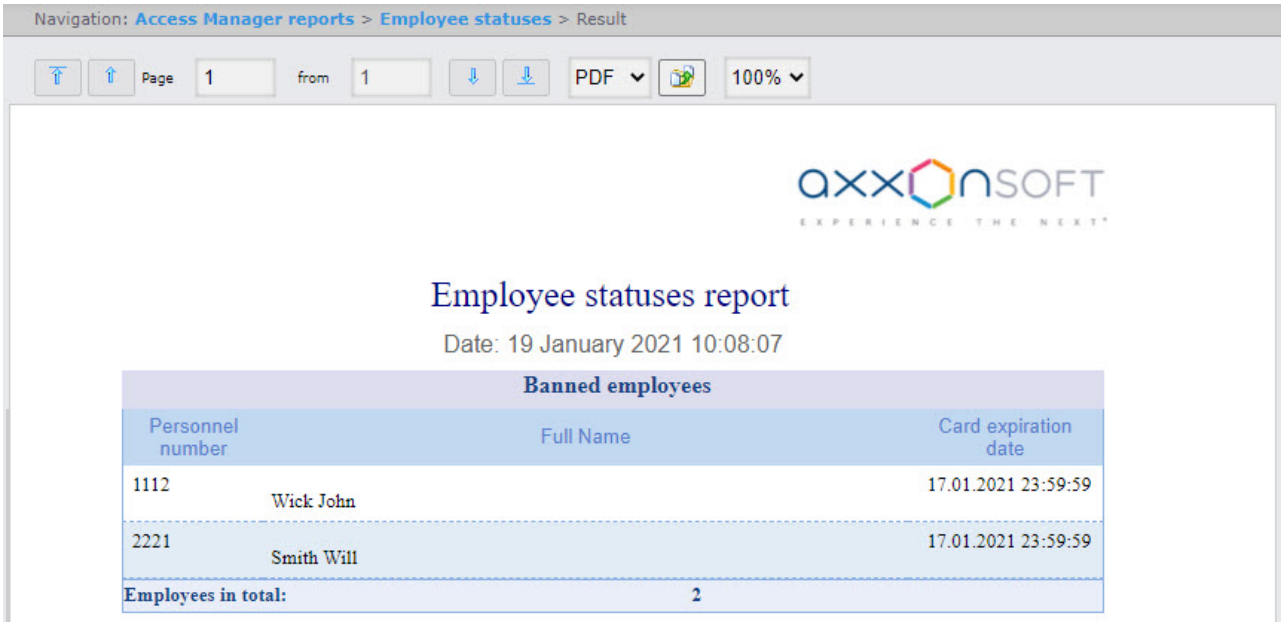
The **Employee statuses** report is a table which contains the information about the current status of employees' cards (expired, disabled, locked) and the dates of their expiration.

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.

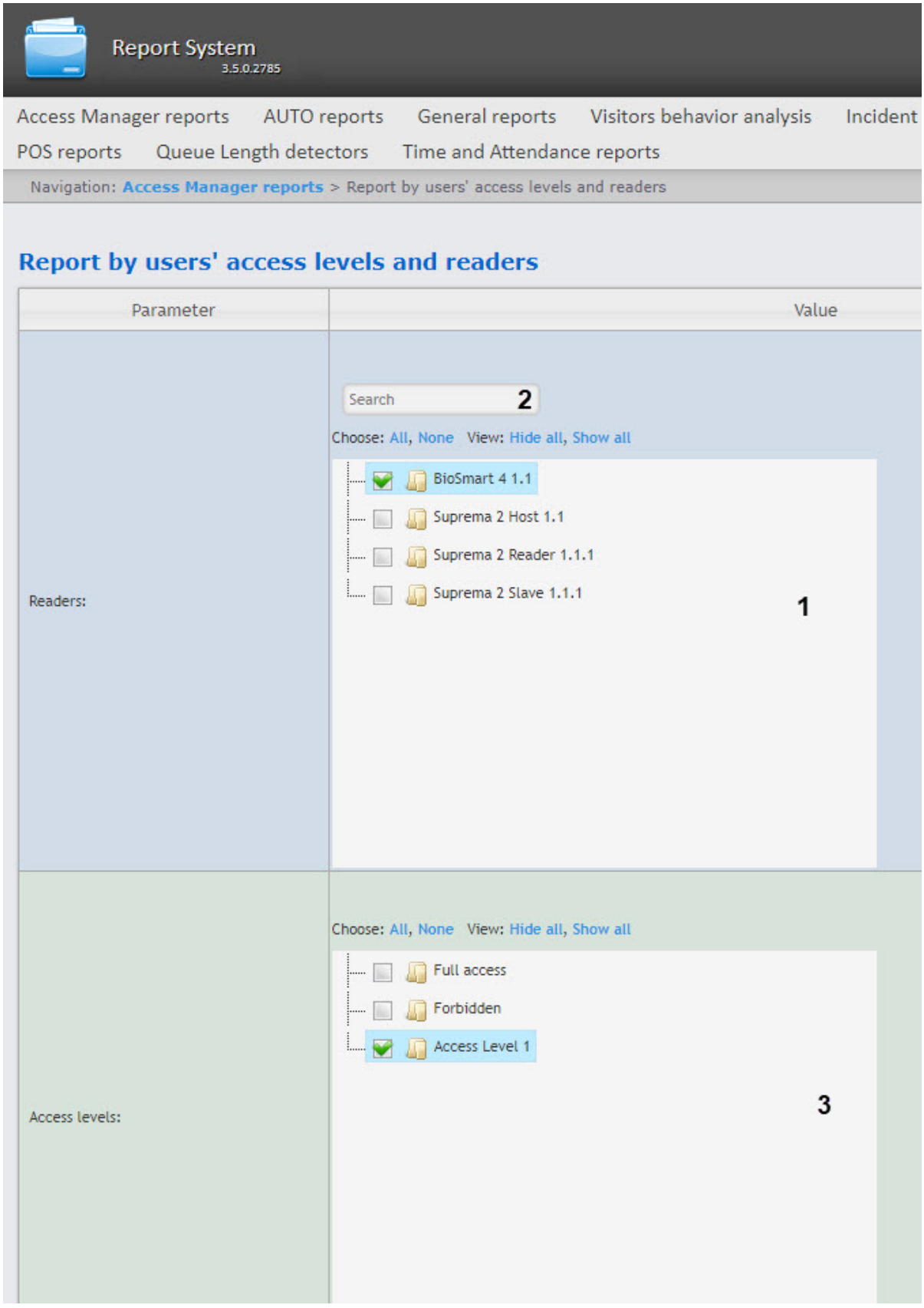
Field name	Description
Personnel number	Employee number in the *Access Manager* module
Full Name	Full name of the selected employee
Expire date of card	Expiration date of the employee card

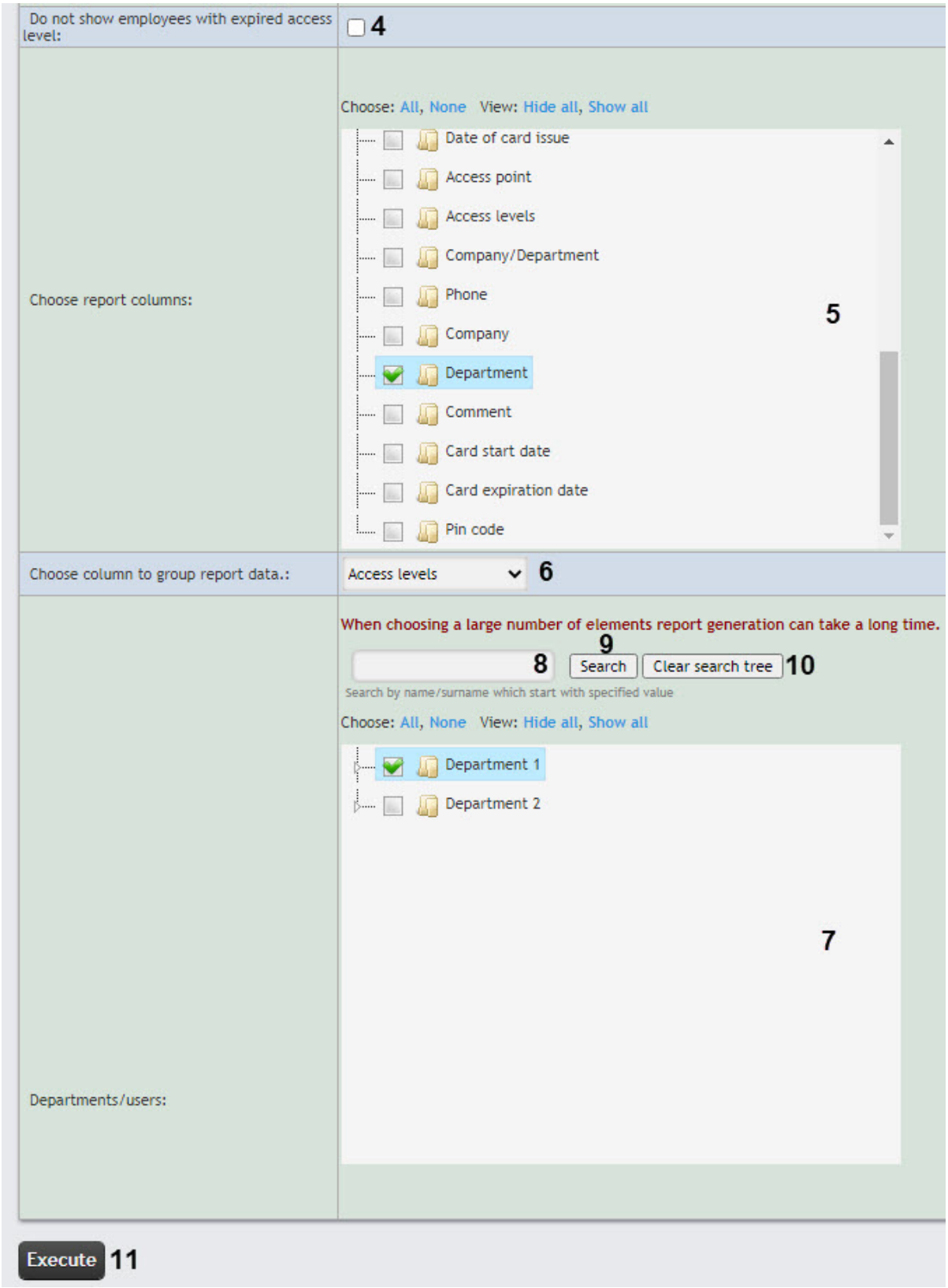
Report by users' access levels and readers

The **Report by users' access levels and readers** is a table that contains the information about users with the selected access levels or selected readers 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
3.5.0.2785
Access Manager reports
AUTO reports
General reports
Visitors behavior analysis
Incident
POS reports
Queue Length detectors
Time and Attendance reports
Navigation: Access Manager reports > Report by users' access levels and readers
Report by users' access levels and readers
Parameter
Value
Search
2
Choose: All, None View: Hide all, Show all
BioSmart 4 1.1
Suprema 2 Host 1.1
Suprema 2 Reader 1.1.1
Suprema 2 Slave 1.1.1
Readers:
1
Choose: All, None View: Hide all, Show all
Full access
Forbidden
Access Level 1
Access levels:
3



2. Set the report parameters in the following way:

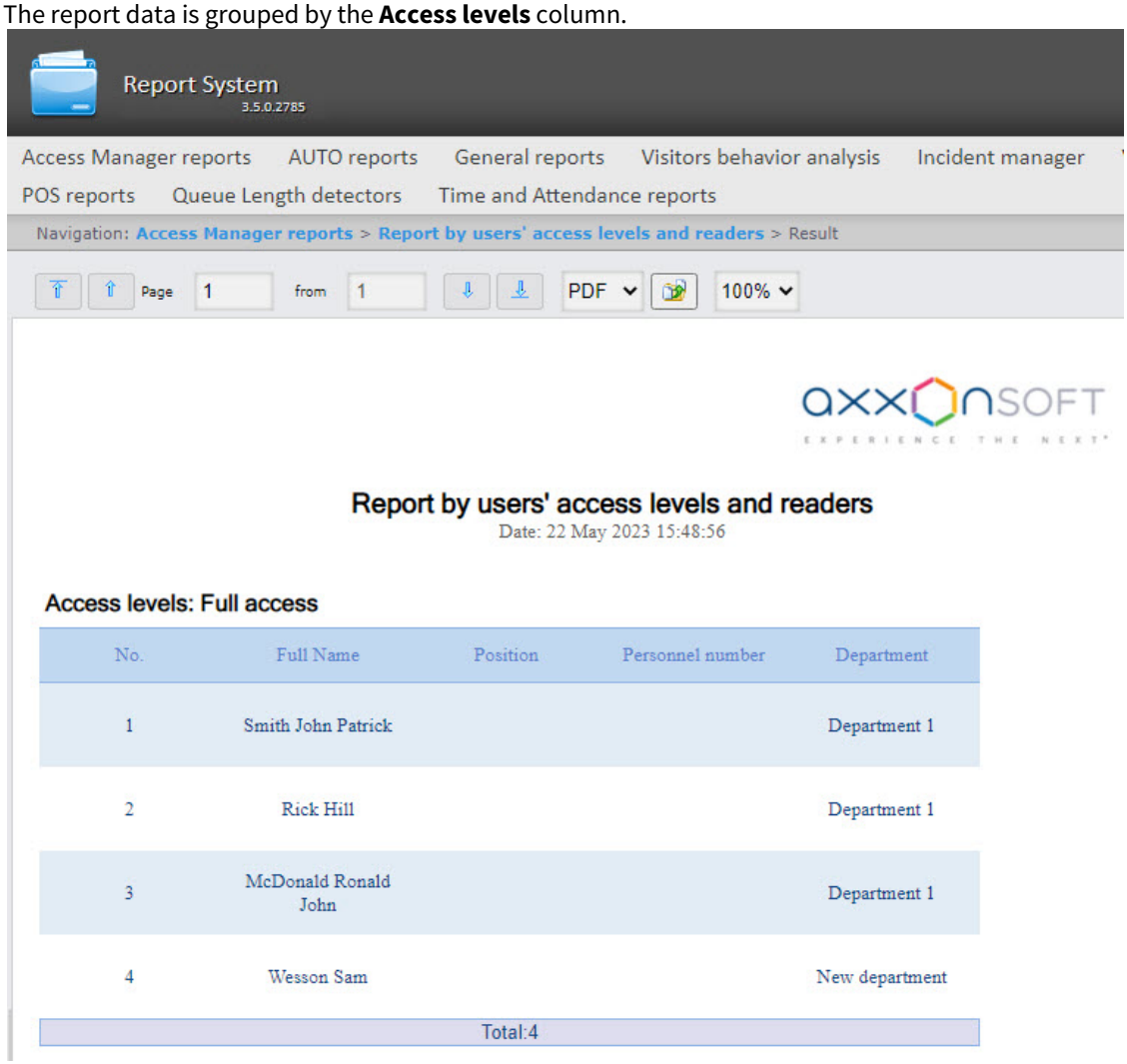
a. In the **Readers** field (**1**), set the checkboxes next to those readers the information on which should be displayed in the report.
b. To use the search when selecting the readers, in the search field (**2**), start entering the name of the reader. The search works from the first character. The results will be highlighted in a different color. Click **All** to select all found/available readers, click **None** to deselect. Click **Hide all** to hide the readers structure. Click **Show all** to expand the readers structure.
c. In the **Access levels** field (**3**), set the checkboxes next to those access levels the information on which should be displayed in the report. Click **All** to select all found/available access levels, click **None** to deselect. Click **Hide all** to hide the access levels structure. Click **Show all** to expand the access levels structure.
d. Set the **Do not show employees with expired access level** checkbox (**4**), so that employees with expired access level won't be displayed in the report.
e. In the **Choose report columns** field (**5**), set the checkboxes next to those columns that should be displayed in the report. You can also change the order of the columns: left-click and hold the column name and drag it higher or lower relative to other columns. Click **All** to select all found/available columns. Click **None** to deselect. Click **Hide all** to hide the columns structure. Click **Show all** to expand the columns structure.

> **Note**
>
> You can select up to 5 columns.

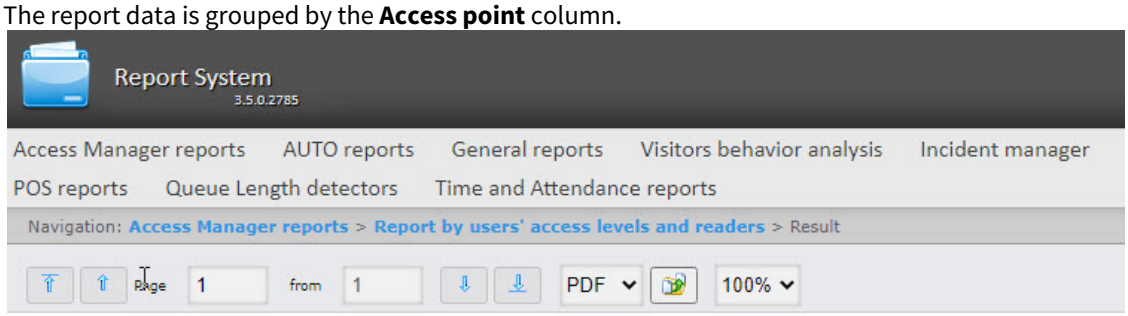
f. From the **Choose column to group report data** drop-down list (**6**), select the required column to group the report data: **Access levels**, **Access point**, **Department, Company/Department**.
g. In the **Department/users** field (**7**), set the checkboxes next to those departments or employees the information on which should be displayed in the report. Click **All** to select all found departments and employees, click **None** to deselect. Click **Show all** to expand the department structure, click **Hide all** to hide the structure.
h. You can find an employee by their first name or surname using the search. For this, enter in the search field (**8**) at least 4 first characters of the employee's first name or surname and click the **Search** button (**9**). The department to which the found employee belongs will be displayed in the search tree. To clear the search field and the search tree, click the **Clear search tree** button (**10**).

3. To create a report, click the **Execute** button (**11**).
4. As a result, the report with the specified parameters will be displayed.

a. The report data is grouped by the **Access levels** column.



b. The report data is grouped by the **Access point** column.



Report by users' access levels and readers

Date: 22 May 2023 16:02:22

Access point: Access point 2

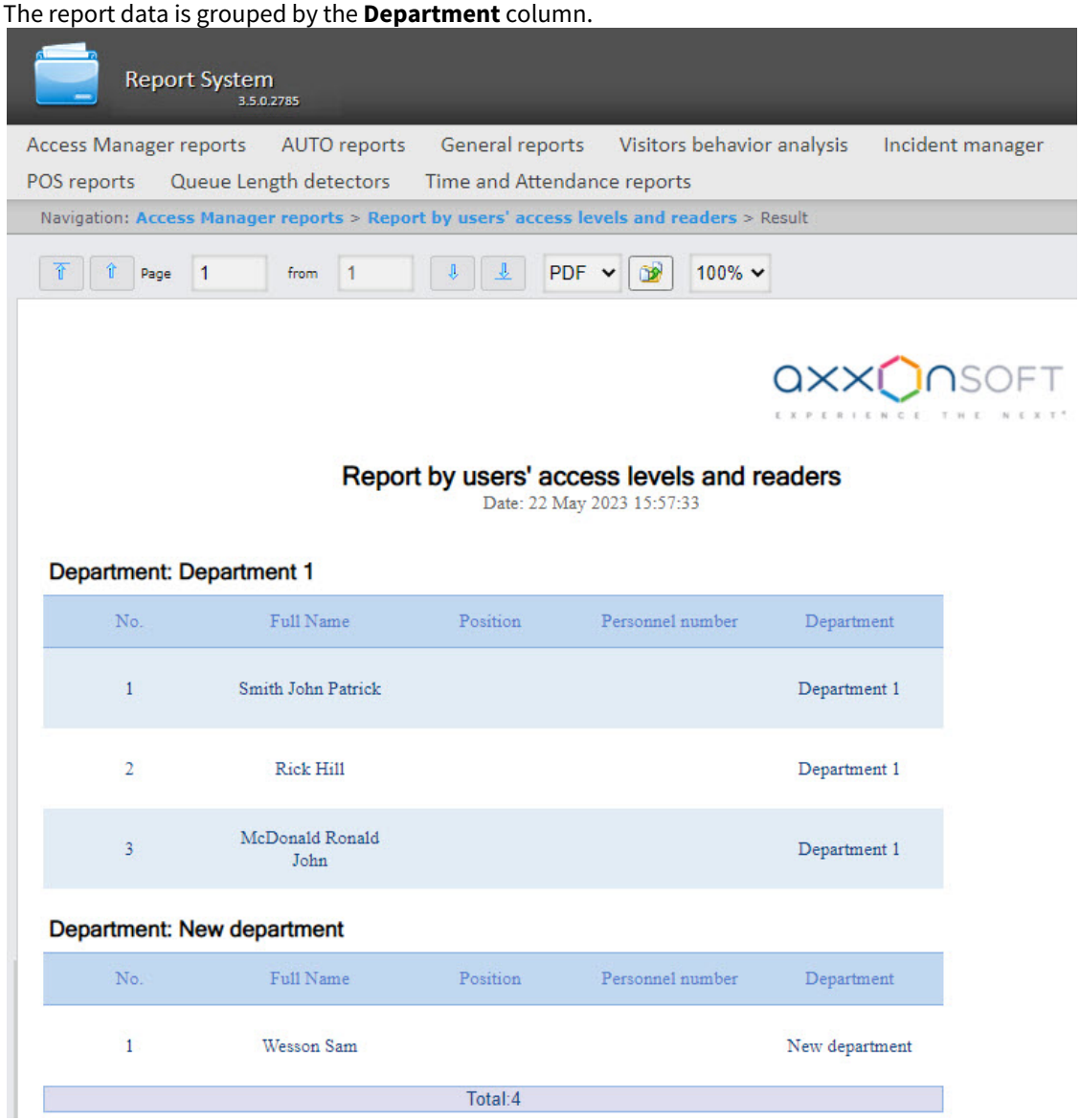
No.	Full Name	Position	Personnel number	Department
1	Smith John Patrick			Department 1
2	Rick Hill			Department 1
3	McDonald Ronald John			Department 1

Access point: Access point 1

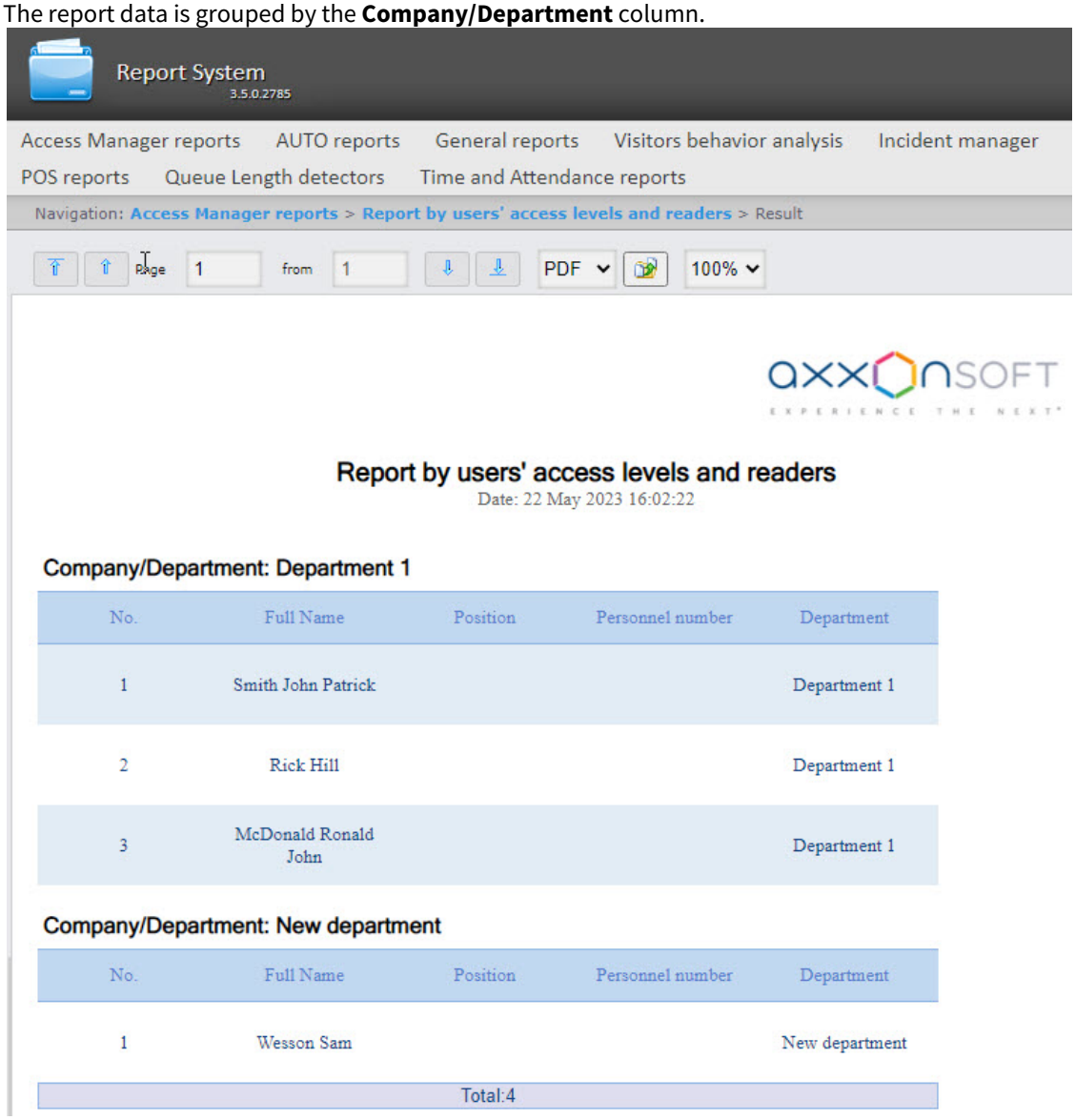
No.	Full Name	Position	Personnel number	Department
1	Wesson Sam			New department

Total:4

c. The report data is grouped by the **Department** column.



d. The report data is grouped by the **Company/Department** column.



All possible report fields are described in the table.

Field name	Description
No.	Line number
Full Name	Employee's full name
Name	Employee's first name
Surname	Employee's last name
Patronymic	Employee's patronymic

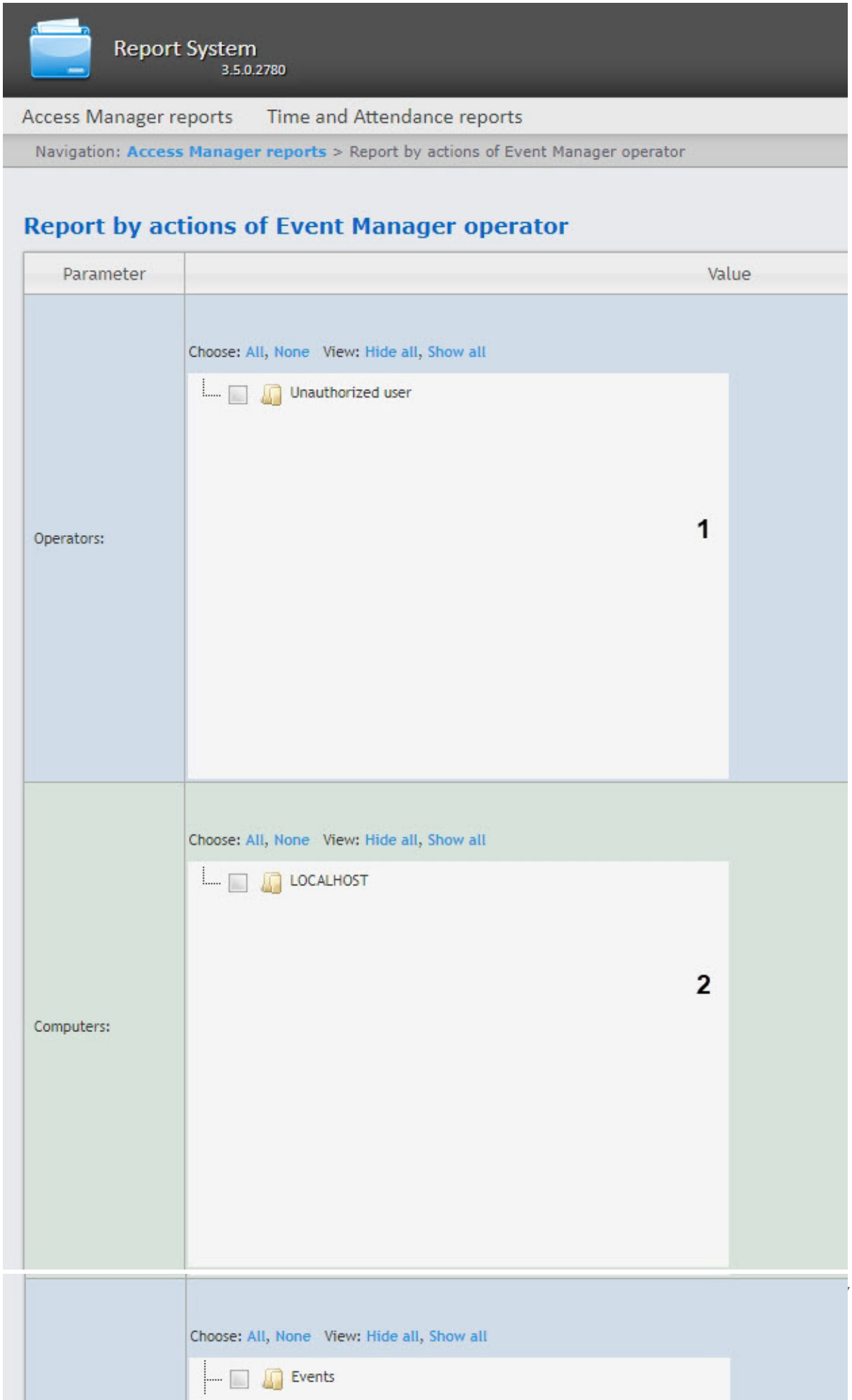
Field name	Description
Position	Employee's position
External ID	Employee's external ID
Personnel number	Employee's personnel number
License plate	Employee's car license plate number
Car	Employee's car brand
Card number	Employee access card number
Card code	Employee access card code
Date of card issue	Date when the card was issued to the employee
Access point	Access point through which the employee passed
Access levels	Employee access level
Company/Department	Company/Department where employee works
Phone	Employee's phone number
Company	Company where employee works
Comment	Comment
Card start date	Employee's card start date
Card expiration date	Employee's card expiration date
Pin code	Employee's card PIN code

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
3.5.0.2780
Access Manager reports
Time and Attendance 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

2. In the **Operators** field (**1**) set the checkboxes for the operators whose actions should be displayed in the report. Click **All** to select all operators. Click **None** to deselect. Click **Hide all** to hide the operators structure. Click **Show all** to expand the operators structure.
3. In the **Computers** field (**2**) set the checkboxes for the computers the information on which should be displayed in the report. Click **All** to select all computers. Click **None** to deselect. Click **Hide all** to hide the computersstructure. Click **Show all** to expand the computers structure.
4. 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. Click **All** to select all events and reactions. Click **None** to deselect. Click **Hide all** to hide the events and reactions structure. Click **Show all** to expand the events and reactions structure.
5. From the **Period** drop-down list (**4**) select the time period for which the report is to be created. If the **Custom** or **Custom 2** time period is selected, enter the date of start and end periods for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the  button near the corresponding field to use the **Calendar** tool. For the **Custom 2** time period, it is also necessary to enter the time of start and end period using the  button.
6. In the **Departments/users** field (**5**) set the checkboxes for the departments or employees the information on which should be displayed in the report.
7. You can find an employee by their first name or surname using the search. For this, enter in the search field (**6**) at least 4 first characters of the employee's first name or surname and click the **Search** button (**7**). The department to which the found employee belongs will be displayed in the search tree in the area **8**. To clear the search field and the search tree, click the **Clear search tree** button (**9**).
8. To create a report click **Execute** (**10**).

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

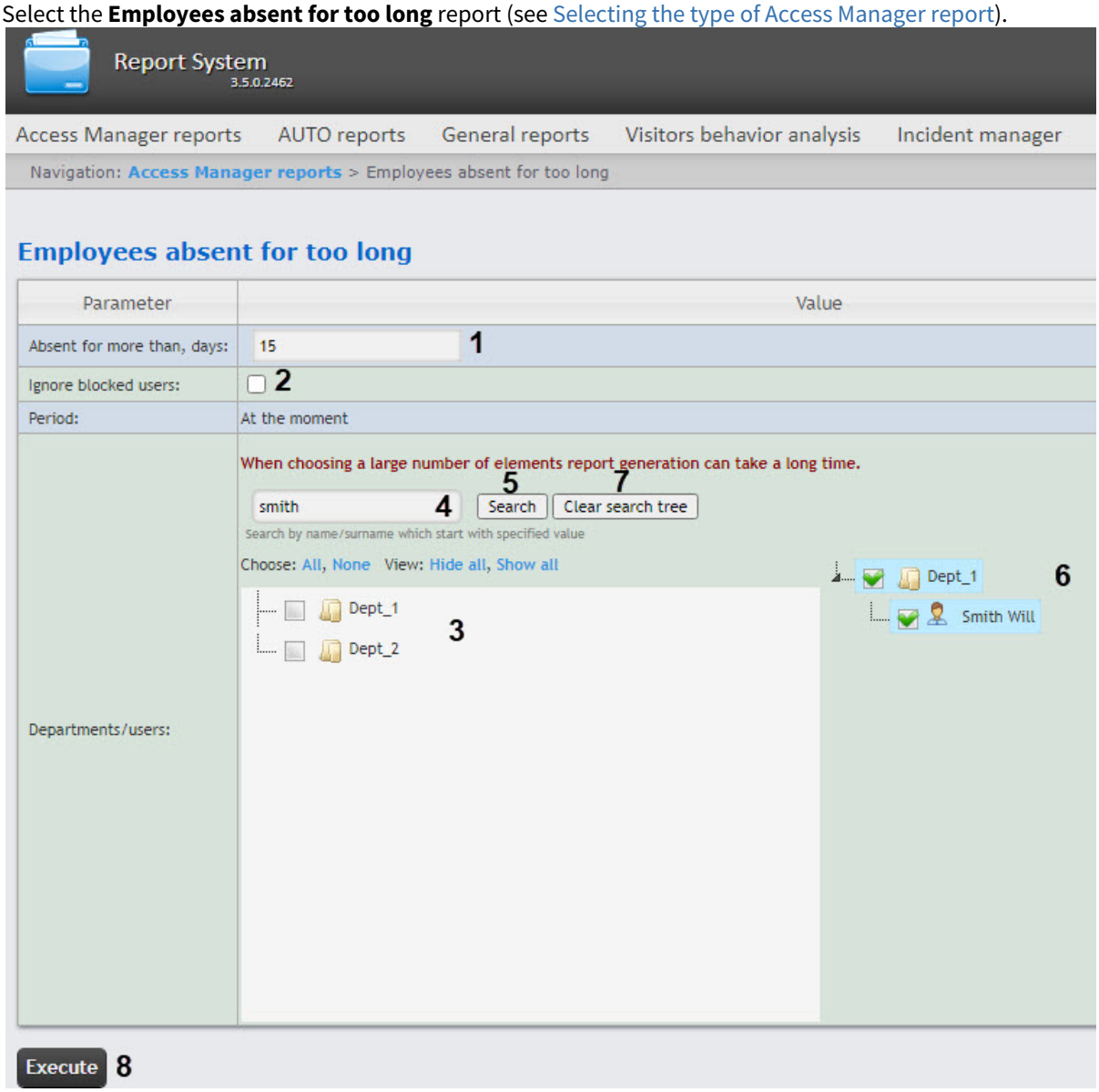
Field name	Description
Full Name	Full name of the requesting person
Department	Department of the requesting person
Card	Card number of the requesting person
Operator	Full name of the operator
Action	Operator reaction to a request
Workstation	The name of the computer on which the operator action was performed

Employees absent for too long report

The **Employees absent for too long** report is represented in the form of a table which contains the information about the last entries by the employees' cards that were not used for a long time. The cards that were not used for a long time are cards that were not used for entry for a specified number of days.

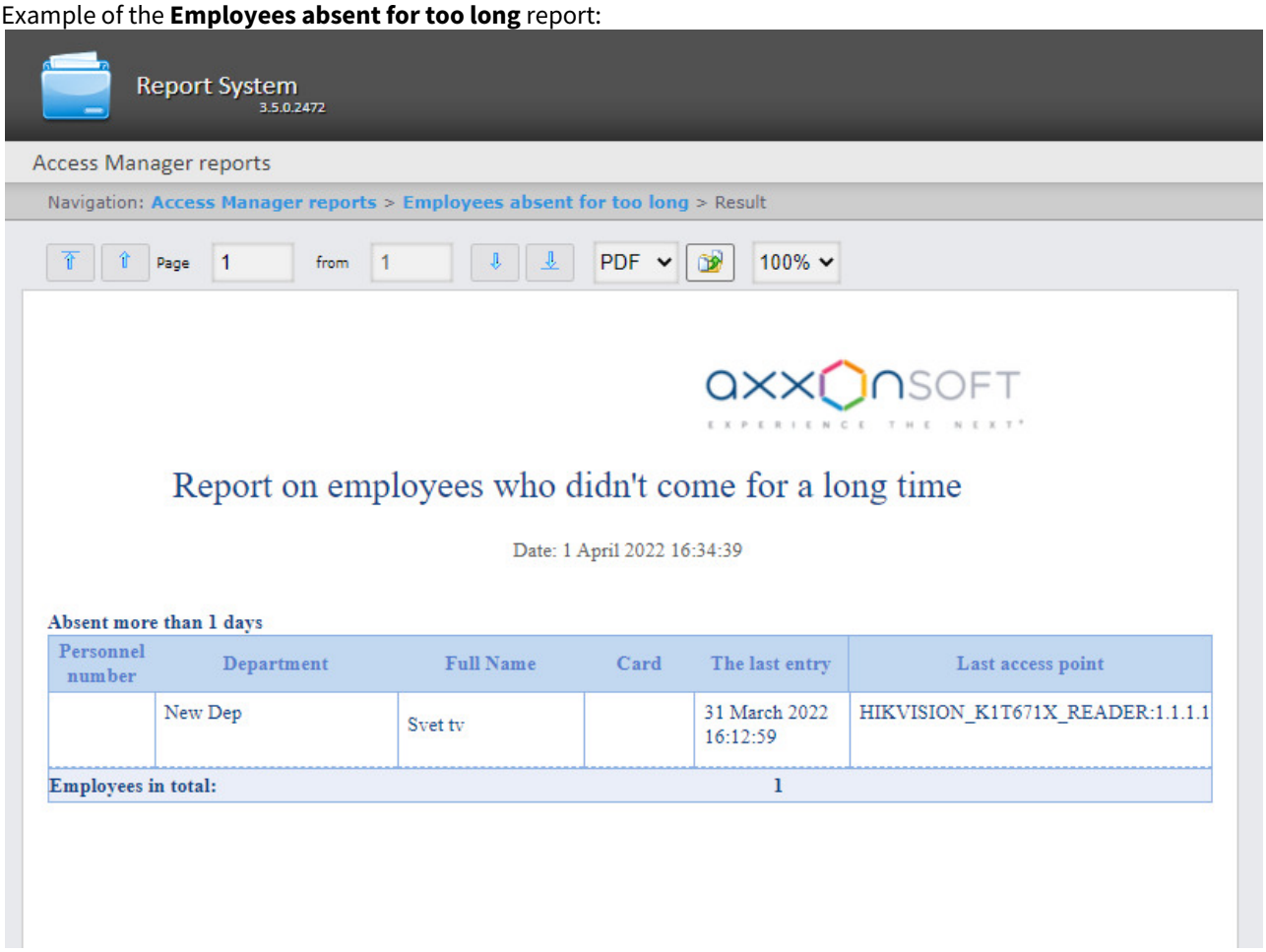
To generate the **Employees absent for too long** report, do the following:

1. Select the **Employees absent for too long** report (see Selecting the type of Access Manager report).



2. In the **Absent for more than, days** field (**1**), specify the required number of days.
3. If the user is blocked and should not be included into the report, set the **Ignore blocked users** checkbox (**2**).
4. In the **Departments/users** field (**3**), set the checkboxes next to those departments or employees the information on which should be displayed in the report. Click **All** to select all found departments and employees, click **None** to deselect. Click **Show all** to expand the department structure, click **Hide all** to hide the structure.
5. You can find an employee by their first name or surname using the search. For this, enter in the search field (**4**) at least 4 first characters of the employee's first name or surname and click the **Search** button (**5**). The department to which the found employee belongs will be displayed in the search tree in the area **6**. To clear the search field and the search tree, click the **Clear search tree** button (**7**).
6. Click the **Execute** button (**8**) to generate the report.

Example of the **Employees absent for too long** report:



The report fields are described in the table:

Field	Description
Personnel number	Employee's personnel number
Department	Employee's department
Full Name	Employee's full name
Card	Employee's card number
The last entry	Date of the employee's last entry through the access point
Last access point	Access point through which employee entered last using the card
The **Employees in total** line displays the number of employees included in the report	

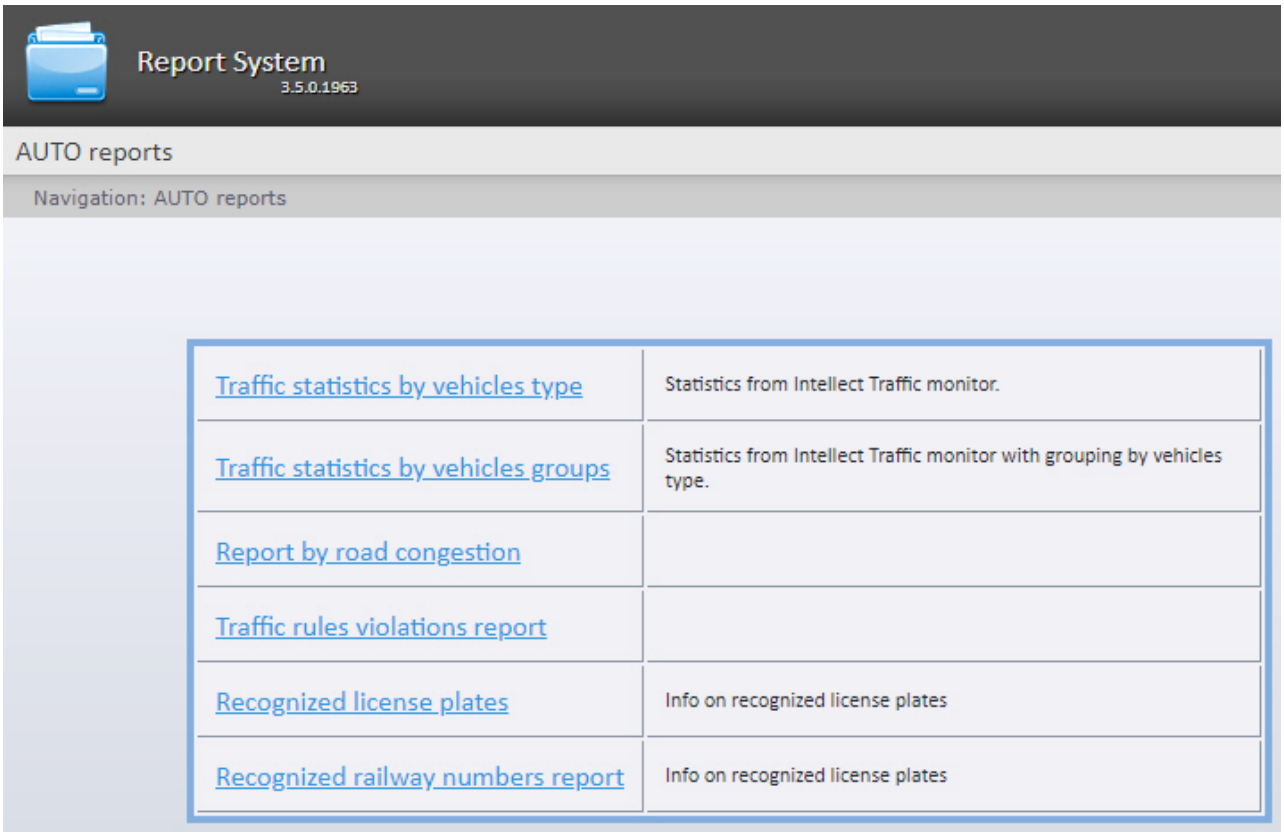
8.2 Working with AUTO reports

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.

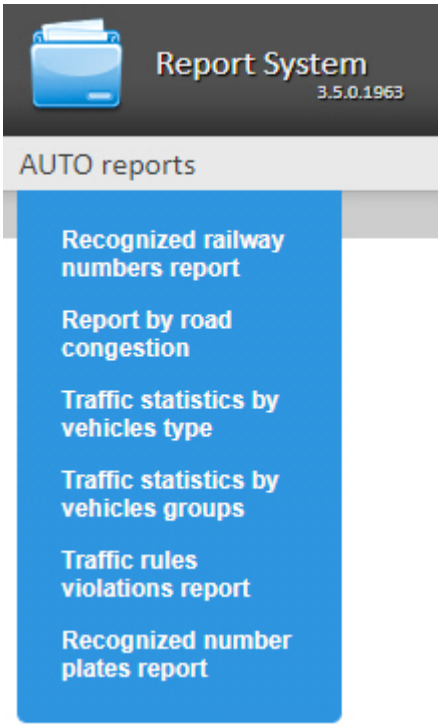
8.2.1 Selecting the type of Auto report

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.



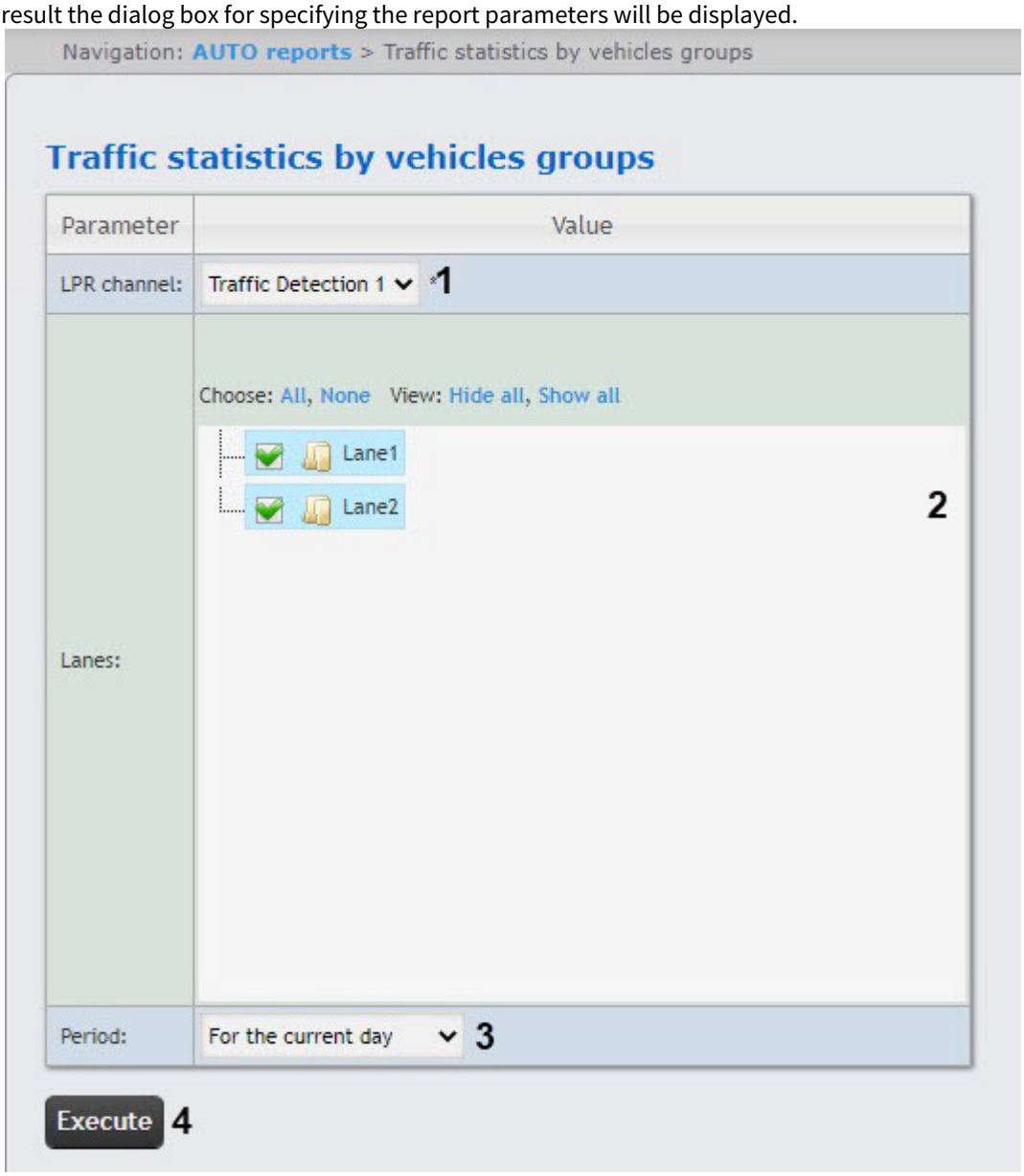
8.2.2 Traffic statistics by vehicles groups

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 Detection** 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:

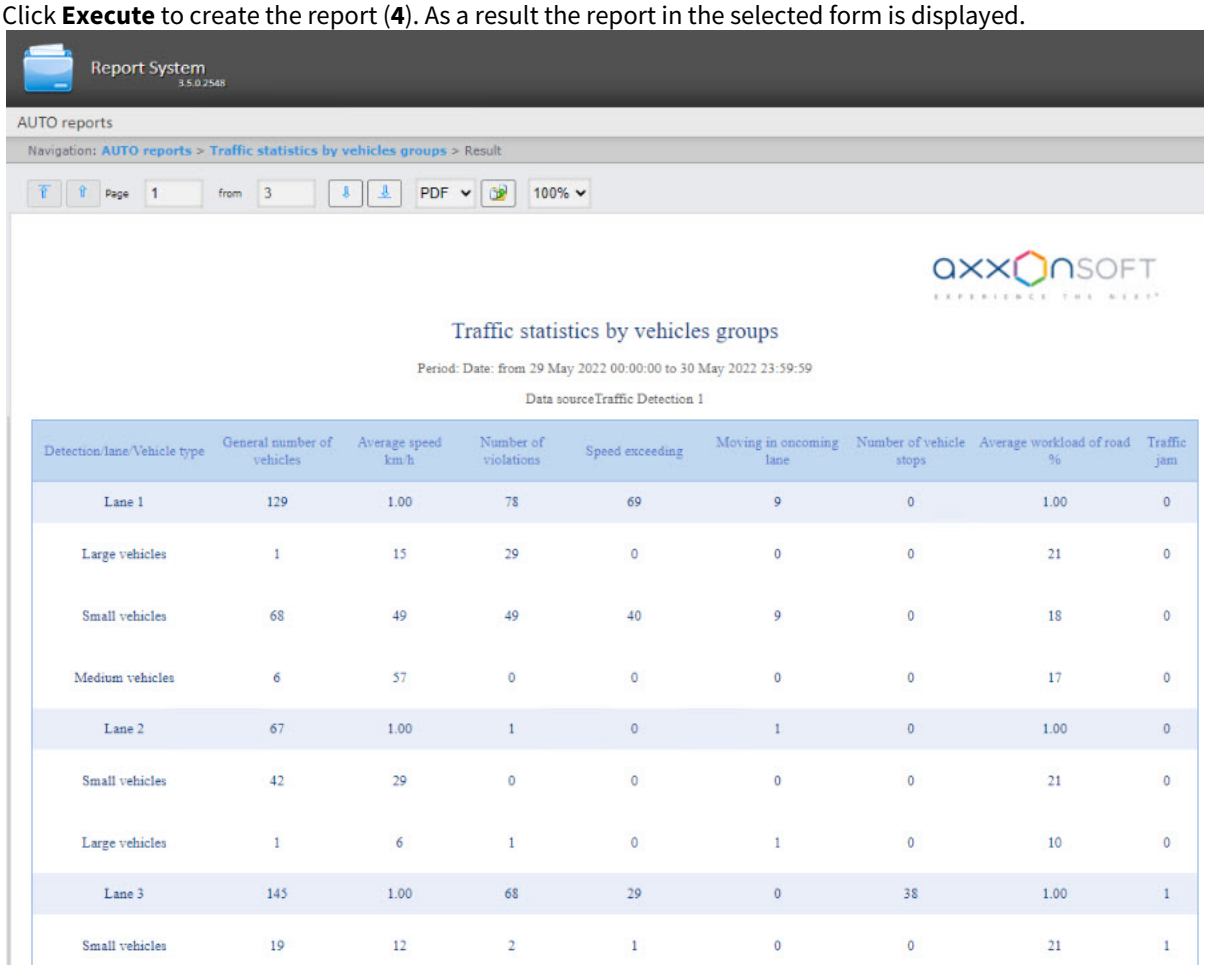
1. Select the **Traffic statistics by vehicles groups** report type (see Selecting the type of Auto report). As a result the dialog box for specifying the report parameters will be displayed.



2. From the **LPR channel** drop-down list (**1**), select the **Traffic Detection** 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 **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 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 violations	Speed exceeding	Moving in oncoming lane	Number of vehicle stops	Average workload of road %	Traffic jam
Lane 1	129	1.00	78	69	9	0	1.00	0
Large vehicles	1	15	29	0	0	0	21	0
Small vehicles	68	49	49	40	9	0	18	0
Medium vehicles	6	57	0	0	0	0	17	0
Lane 2	67	1.00	1	0	1	0	1.00	0
Small vehicles	42	29	0	0	0	0	21	0
Large vehicles	1	6	1	0	1	0	10	0
Lane 3	145	1.00	68	29	0	38	1.00	1
Small vehicles	19	12	2	1	0	0	21	1

This report contains the following information for each selected lane and vehicle group:

Column name	Description
Detection/ lane/Vehicle type	Vehicle detector/lane/type of the vehicle
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

Column name	Description
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.

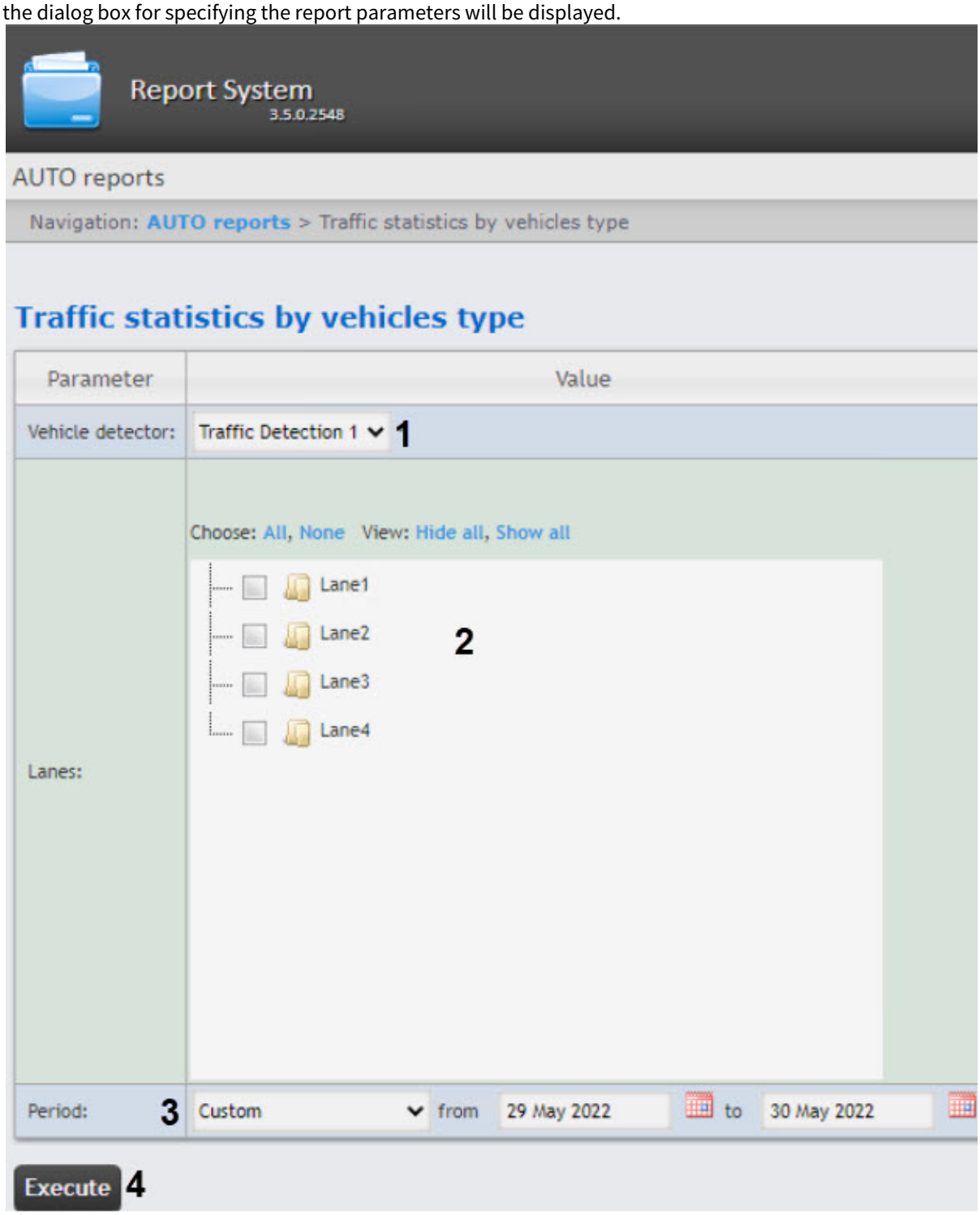
8.2.3 Traffic statistics by vehicles type

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 Detection** 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:

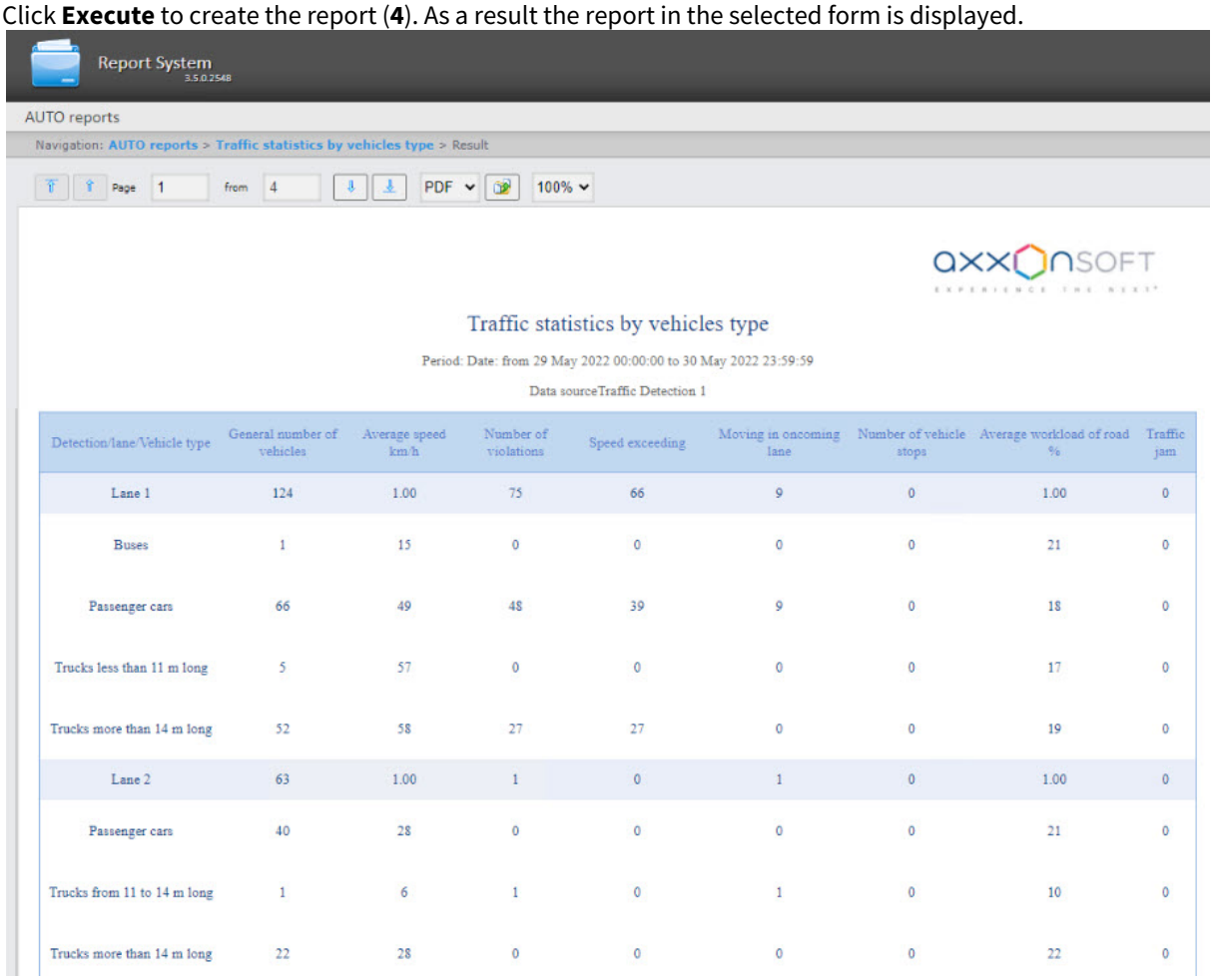
1. Select the **Traffic statistics by vehicles type** report type (see Selecting the type of Auto report). As a result the dialog box for specifying the report parameters will be displayed.



2. From the **Vehicle detector** drop-down list (**1**) select the **Traffic Detection** 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 **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 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 violations	Speed exceeding	Moving in oncoming lane	Number of vehicle stops	Average workload of road %	Traffic jam
Lane 1	124	1.00	75	66	9	0	1.00	0
Buses	1	15	0	0	0	0	21	0
Passenger cars	66	49	48	39	9	0	18	0
Trucks less than 11 m long	5	57	0	0	0	0	17	0
Trucks more than 14 m long	52	58	27	27	0	0	19	0
Lane 2	63	1.00	1	0	1	0	1.00	0
Passenger cars	40	28	0	0	0	0	21	0
Trucks from 11 to 14 m long	1	6	1	0	1	0	10	0
Trucks more than 14 m long	22	28	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

Column name	Description
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.

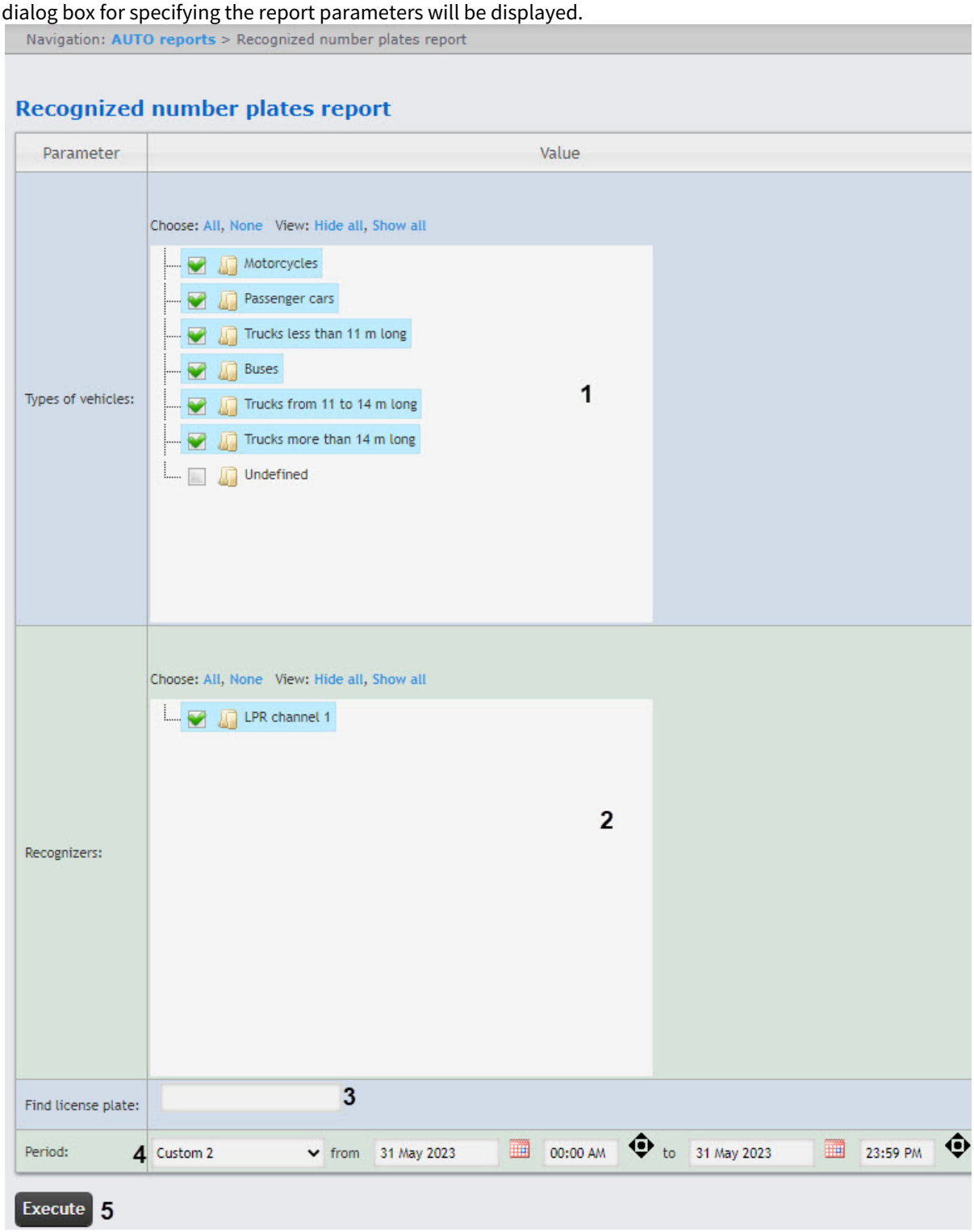
8.2.4 Recognized number plates report

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 **Types of vehicles** list (**1**), select the required vehicle types, the data for which should be included in the report.

b. In the **Recognizers** 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.

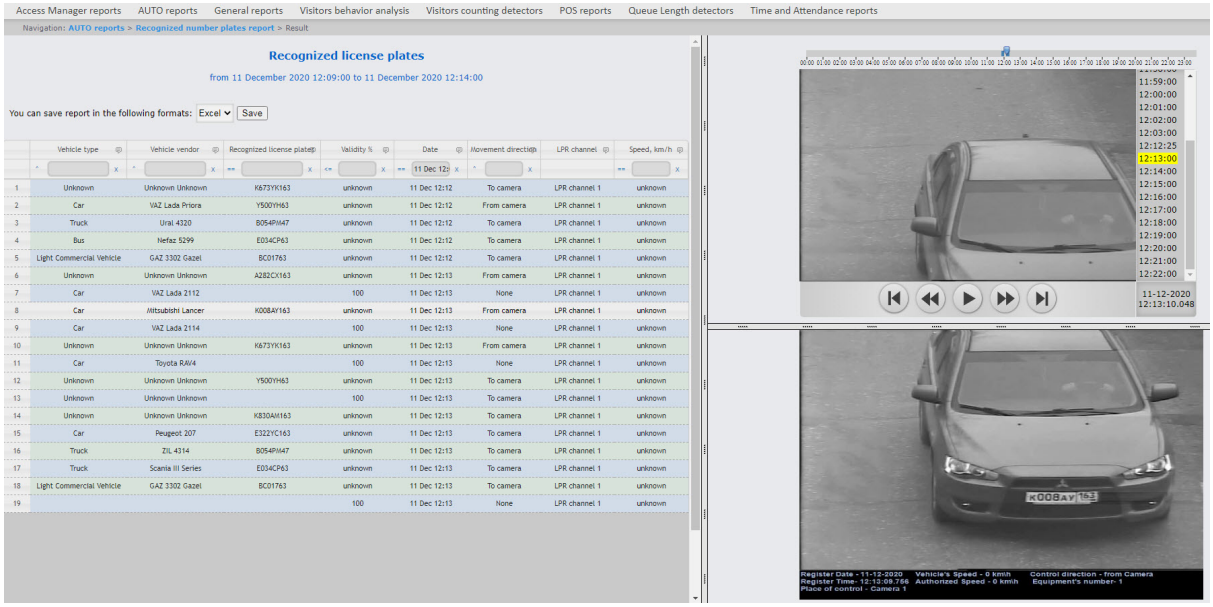
> **Note**
>
> If the **Custom** or **Custom 2** period is selected, enter the date of start and end periods for which the report is to be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool. Enter the start and end time of the **Custom 2** period using the button.

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.

8.2.5 Recognized railway numbers report

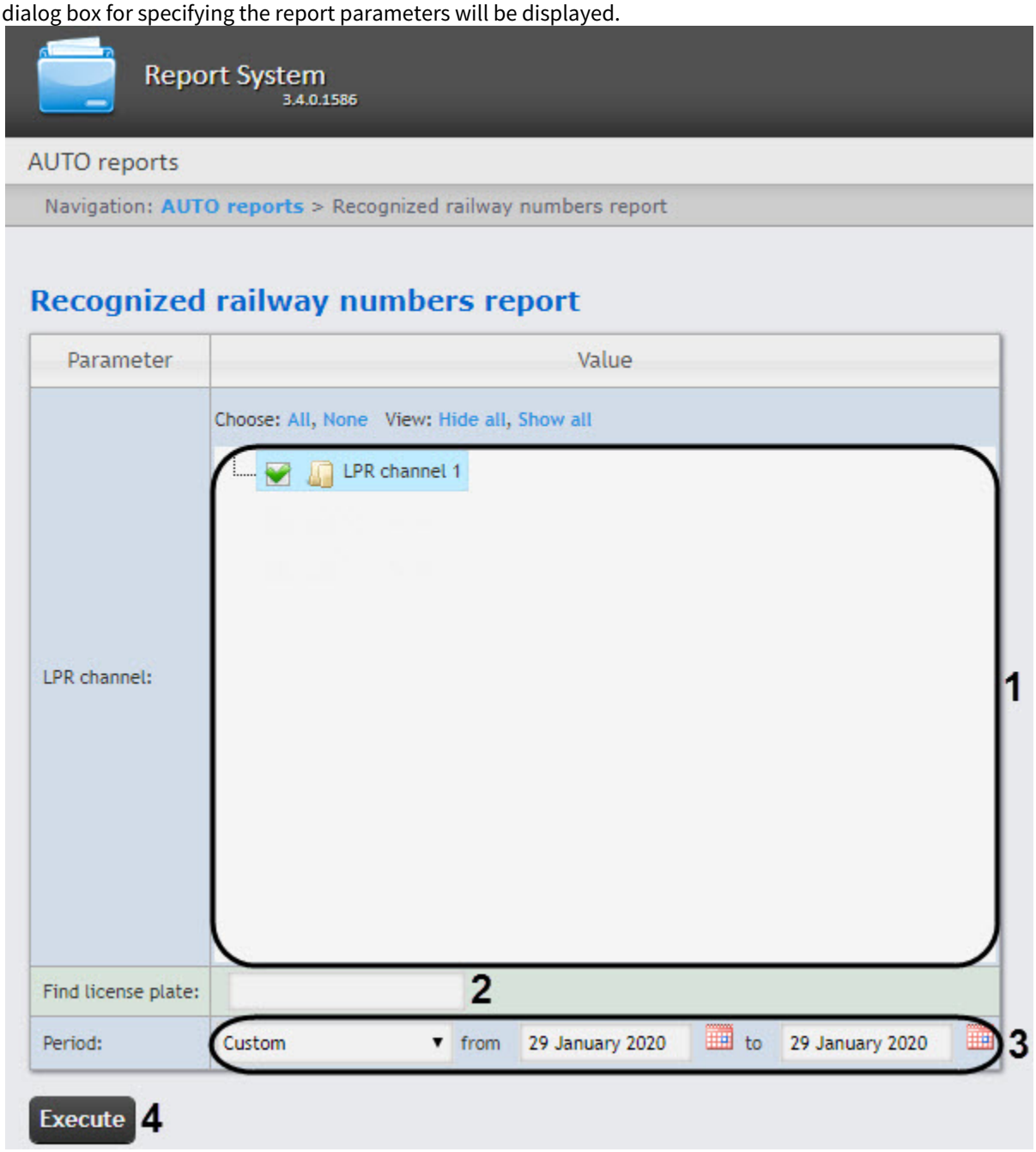
> **Note**
>
> To access the **Recognized railway numbers report**, it is necessary to activate it (see Configuring the Recognized railway numbers report).

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.

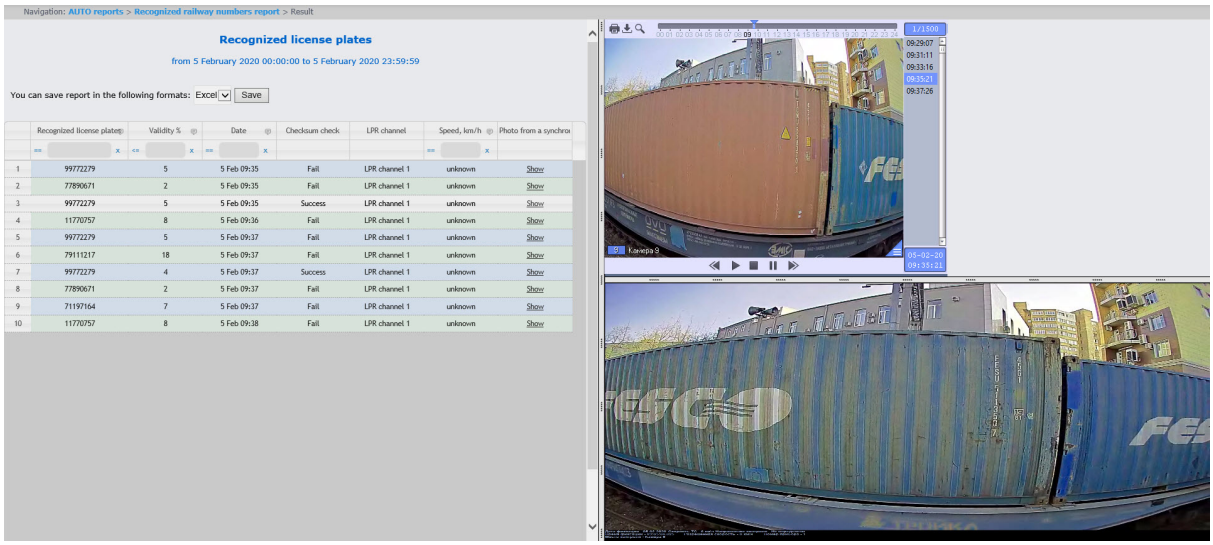
Attention!

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 Working with the generated Recognized number plates report and Recognized railway numbers report.



To save the report to a file, select the appropriate report format and click the **Save** button.

Attention!

This report cannot be generated automatically.

8.2.6 Report by road congestion

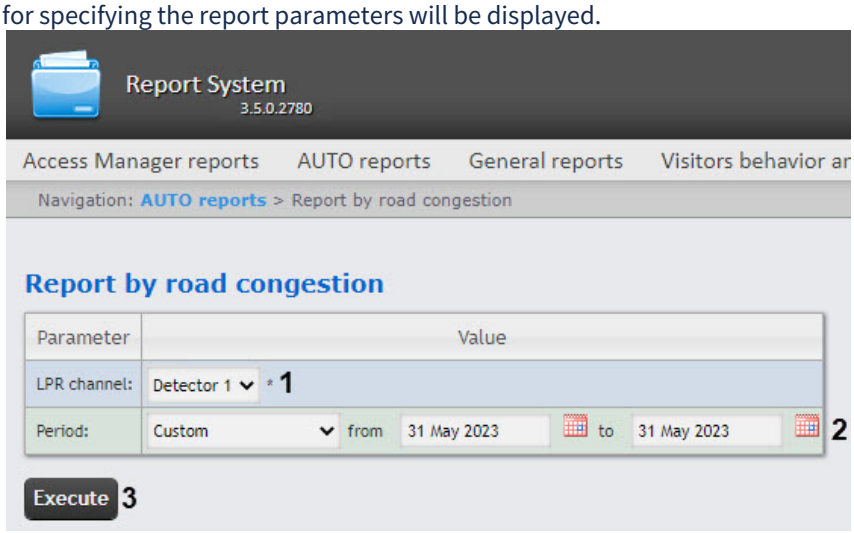
The **Report by road congestion** allows you to get statistical information about traffic congestion.

Note

The **Report by road congestion** is related to the *Intellivision vehicle detection* and *Vehicle Processor* modules (it is necessary to create and configure the corresponding objects in *Intellect*).

To get statistics on road congestion, do the following:

1. Select the **Report by road congestion** 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 **LPR channel** drop-down list (**1**), select the **Detector** object which data should be used to build the report.
3. From the **Period** drop-down list (**2**), 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.

4. Click **Execute** (**3**) to run the report. As a result the report in the selected form is displayed

The **Data source** table contains the following information:

Column name	Description
Types of vehicles	Name of vehicle types that correspond to the configured vehicle type classification on the settings panel of the **Vehicle Processor** object
General number of vehicles	The total number of recorded vehicles of all vehicle types, and separate number of recorded vehicles divided by each vehicle type
Average speed, km/h	The total average speed of the vehicle in km/h for all vehicle types, and separate average speed divided by each vehicle type
Traffic density, %	Traffic density in percent
Lane occupancy, %	Lane occupancy in percent

The **Average speed, km/h** graph displays the average speed for each type of vehicle.
The **Number of vehicles** graph displays the number of vehicles of each type.
This report can be saved to a file in the following formats:

- PDF;
- EXCEL;
- CSV.

8.2.7 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).

Filter and sort the license plate numbers

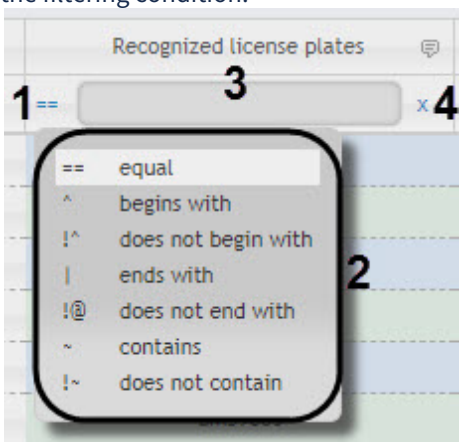
On this page:

- Filter the numbers
- Sort the numbers

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.



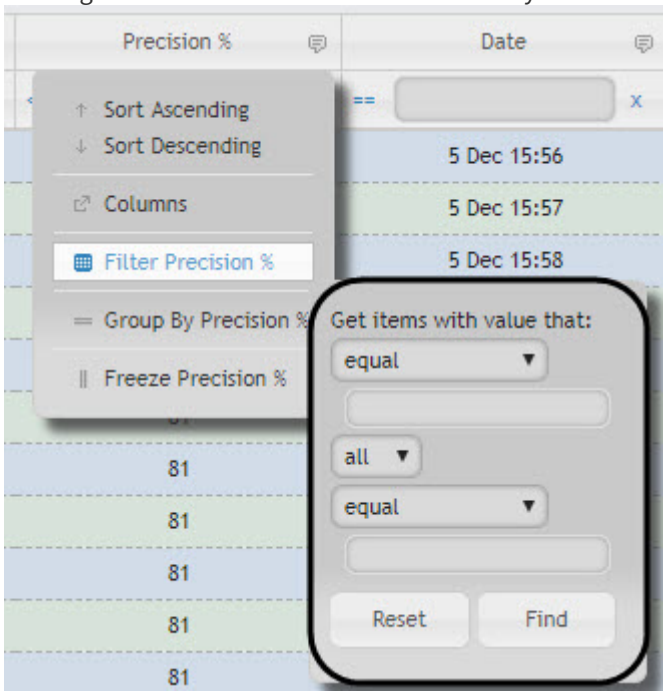
> **Note**
>
> - The list of filtering conditions (**2**) may differ depending on the selected column.

- 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**).

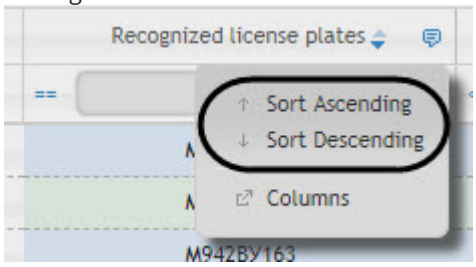
4. Filtering is also available in the submenu when you click the button next to the names of some columns.



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.



Customize, group, and freeze the columns

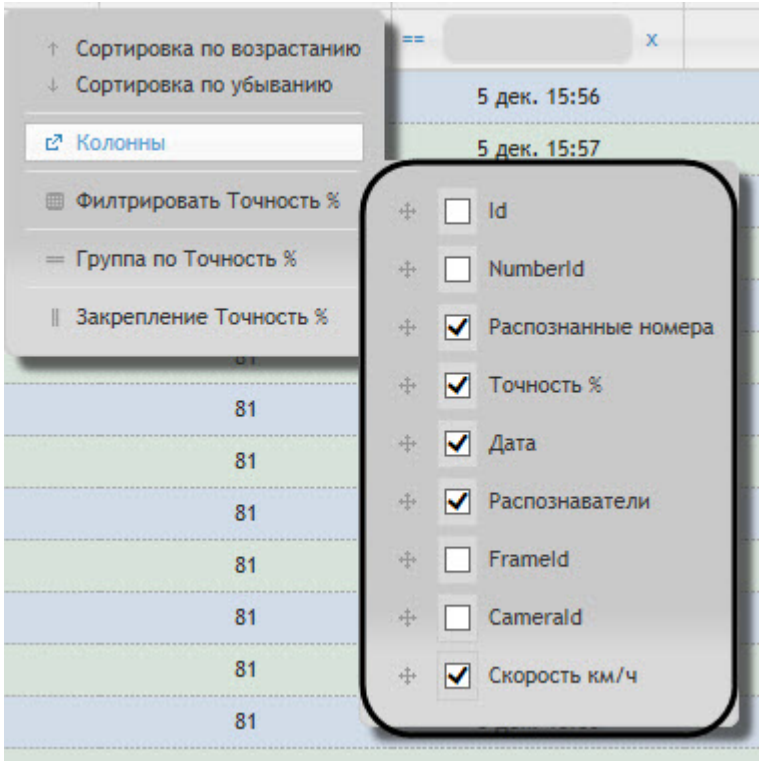
On this page:

- Customize the columns
- Group the columns
- Freeze the columns

Customize the columns

Customize the columns as follows:

1. Click the button next to the name of some columns.



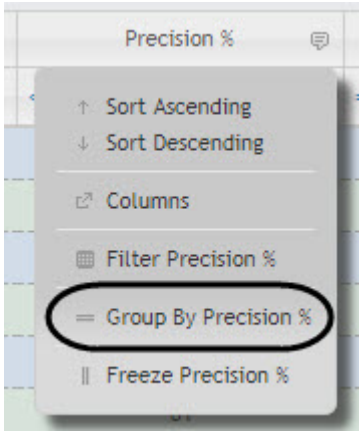
2. In the **Columns** submenu, select the necessary columns that will be displayed in the generated report.

> **Note**
>
> You can also set the order of the columns by moving the column names higher or lower in the list.

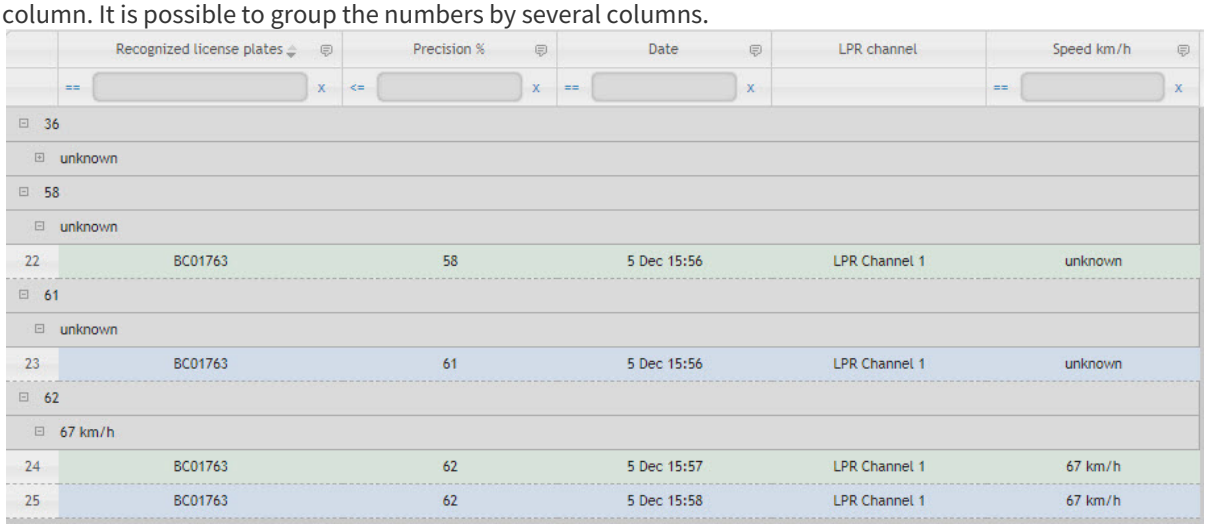
Group the columns

Group the columns as follows:

1. Click the button next to the name of some columns.

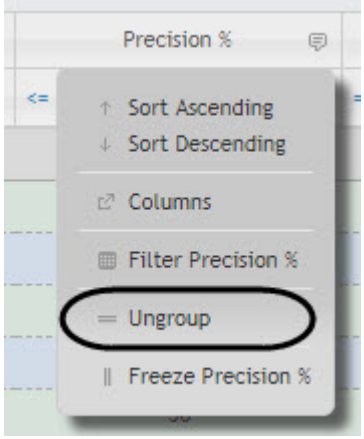


2. Select the **Group By "Column Name"** item. As a result, the numbers will be grouped by the specified column. It is possible to group the numbers by several columns.



	Recognized license plates	Precision %	Date	LPR channel	Speed km/h
	== x	<= x	== x		== x
36					
unknown					
58					
unknown					
22	BC01763	58	5 Dec 15:56	LPR Channel 1	unknown
61					
unknown					
23	BC01763	61	5 Dec 15:56	LPR Channel 1	unknown
62					
67 km/h					
24	BC01763	62	5 Dec 15:57	LPR Channel 1	67 km/h
25	BC01763	62	5 Dec 15:58	LPR Channel 1	67 km/h

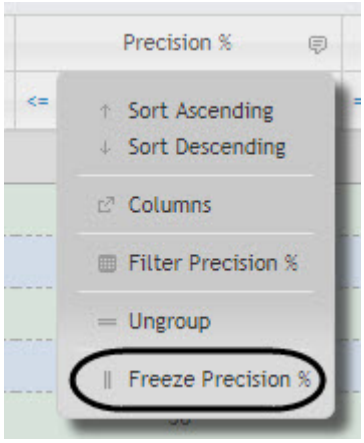
3. To ungroup a column, select **Ungroup**.



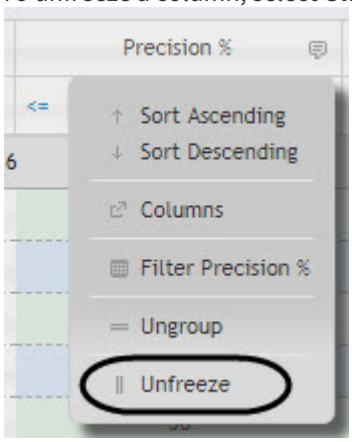
Freeze the columns

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**.



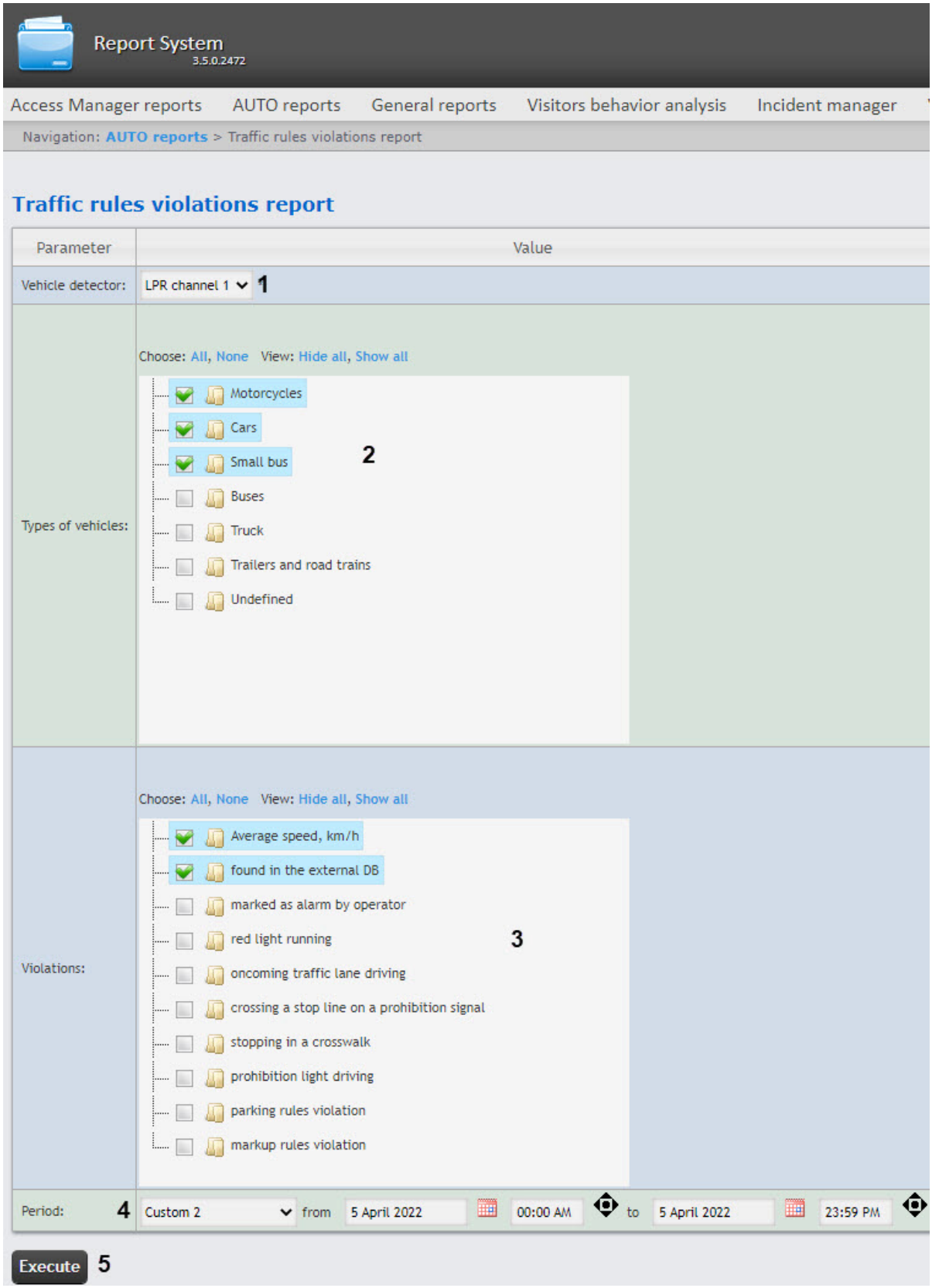
8.2.8 Traffic rules violations report

The **Traffic rules violations report** allows you to get the information about traffic violations for the selected period of time.

> **Note**
>
> The **Traffic rules violations report** is a part of the **LPR channel** module. That is why a corresponding object should be set up and configured in *Auto Intellect* (see Setting up the LPR channel).

In order to generate a traffic rules violations report, do the following:

1. Select the **Traffic rules violations report** (see Selecting the type of Auto report). A form for specifying the report parameters will open.


Report System
3.5.0.2472
Access Manager reports
AUTO reports
General reports
Visitors behavior analysis
Incident manager
Navigation: AUTO reports > Traffic rules violations report
Traffic rules violations report
Parameter
Value
Vehicle detector:
LPR channel 1
1
Choose: All, None View: Hide all, Show all
Types of vehicles:
Motorcycles
Cars
Small bus
2
Buses
Truck
Trailers and road trains
Undefined
Choose: All, None View: Hide all, Show all
Violations:
Average speed, km/h
found in the external DB
marked as alarm by operator
red light running
3
oncoming traffic lane driving
crossing a stop line on a prohibition signal
stopping in a crosswalk
prohibition light driving
parking rules violation
markup rules violation
Period:
4
Custom 2
from
5 April 2022
00:00 AM
to
5 April 2022
23:59 PM
Execute
5

2. From the **Vehicle detector** drop-down list (**1**), select the **LPR channel** by the data from which the report will be generated.
3. In the **Types of vehicles** list (**2**), set the checkboxes next to the types of vehicles required for the report. Click **All** to select all available types of vehicles. Click **None** to deselect. Click **Show all** to expand the types of vehicles structure. Click **Hide all** to hide the types of vehicles structure.
4. In the **Violations** list (**3**), set the checkboxes next to the violations required for the report. Click **All** to select all available violations. Click **None** to deselect. Click **Show all** to expand the violations structure. Click **Hide all** to hide the violations structure.
5. From the **Period** drop-down list (**4**), select the time interval for which the report should be generated. When selecting the **Custom 3** or **Custom 2** periods using the  tool, you should set the exact time (hours, minutes) at which the report should be generated. When selecting the **Custom 2** period, you should set not only the time, but the dates as well. Enter the date of start and end periods for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the  button near the corresponding field to use the **Calendar** tool.
6. Click the **Execute** button (**5**) to generate the report.

Example of a traffic rules violations report:



Traffic rules violations report

Period: Date: from 11 April 2022 00:00:00 to 11 April 2022 23:59:00

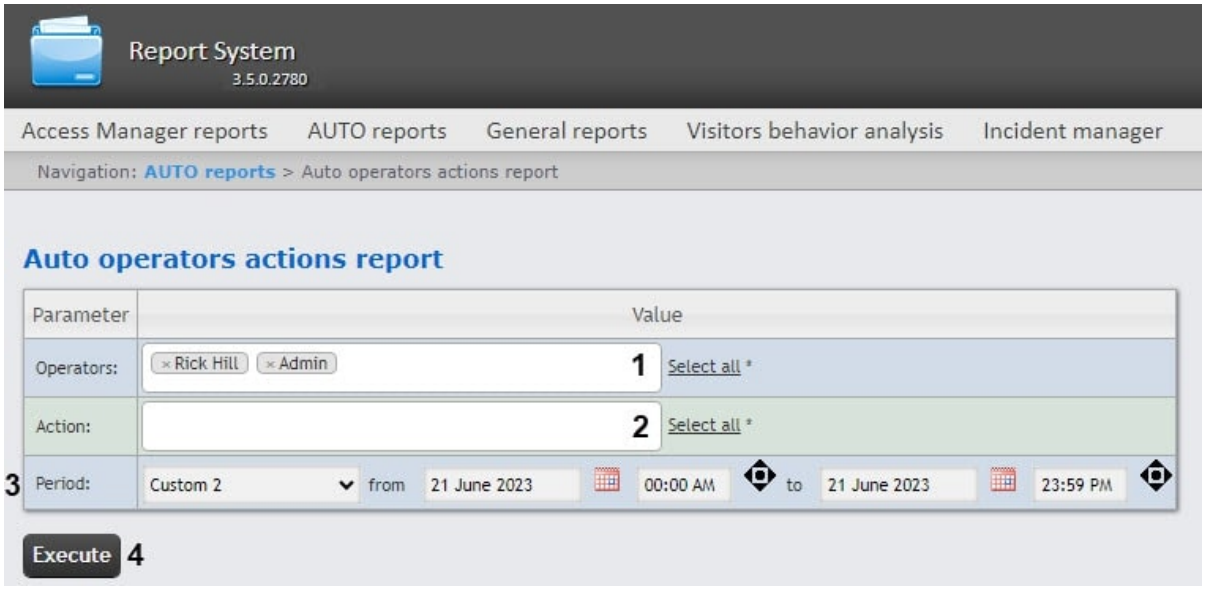
Violation	Recognized LP photo	View from camera	Map with violation place mark
Vehicle type: Vehicle vendor: not specified Violation: crossing a stop line on a prohibition signal		Camera 1 	

8.2.9 The Auto operators actions report

The **Auto operators actions report** allows you to get information about the actions of the selected operators for a certain time period.

To create the report, do the following:

1. Select the **Auto operators actions report** (see Selecting the type of Auto report). As a result, the dialog box for specifying the report parameters will be displayed.



2. In the **Operators** field (**1**), select the auto operators whose actions you want to include in the report by clicking the field. The list of all available operators will be displayed, you can select by clicking. You can also use the search. For this, start entering the name, surname or patronymic of an employee in field **1**. The search works from the first character. To select all available operators, click the **Select all** button to the right of field **1**.
3. In the **Action** field (**2**), select the actions of auto operators, the information about which you want to include in the report by clicking the field. The list of all available auto operator actions will be displayed, you can select by clicking. You can also use the search. For this, start entering the name of the action in field **2**. The search works from the first character. To select all available actions, click the **Select all** button to the right of field **2**.
4. From the **Period** drop-down list (**3**), select the time period for which the report should be created. If the **Custom** or **Custom 2** period is selected, enter the date of start and end periods for which the report should 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 should be created using the button.
5. Click the **Execute** button (**4**) to create the report.

As a result, an auto operators actions report in the form of a table will be displayed.

8.3 Working with General reports

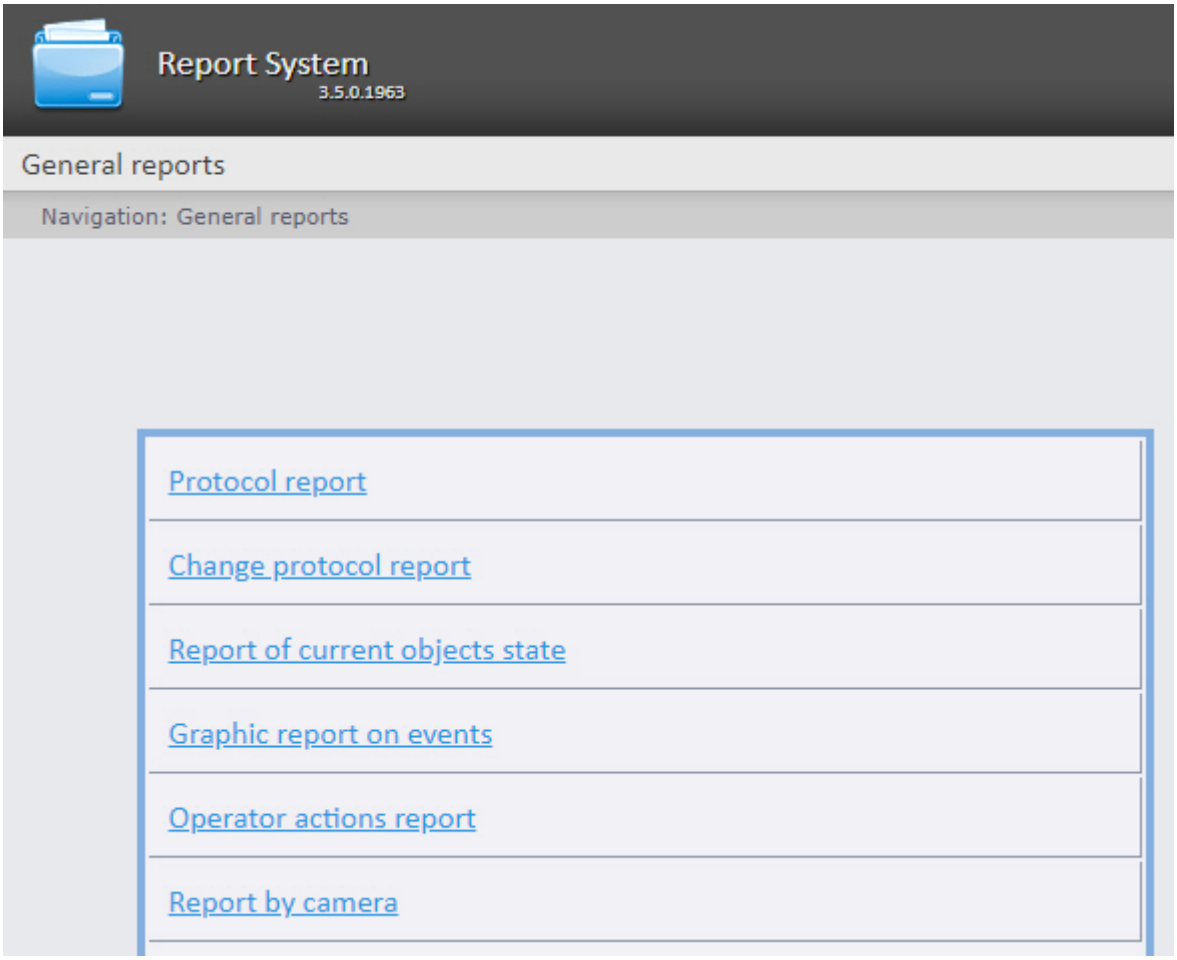
8.3.1 Selecting the type of general report

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 the 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 about the actions of the selected operators for a certain time period.
6. Report by camera. This report allows getting up-to-date information about all selected cameras.

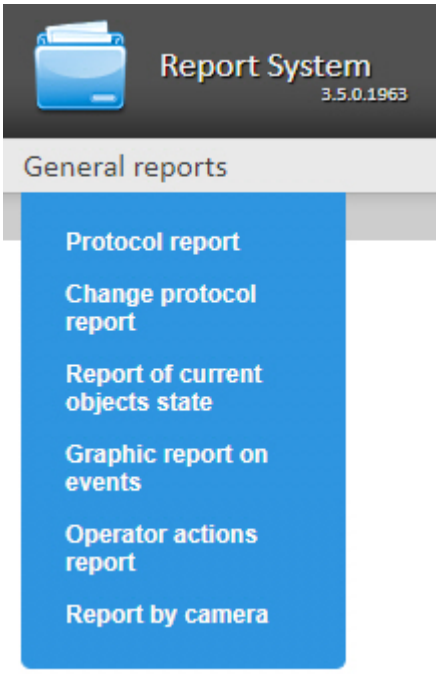
To select a type of general report, click the **General reports** link in the report menu of *Intellect Web Report System.*

As a result, the list of available general reports is displayed. For switching to the required report, click the corresponding link.



Note

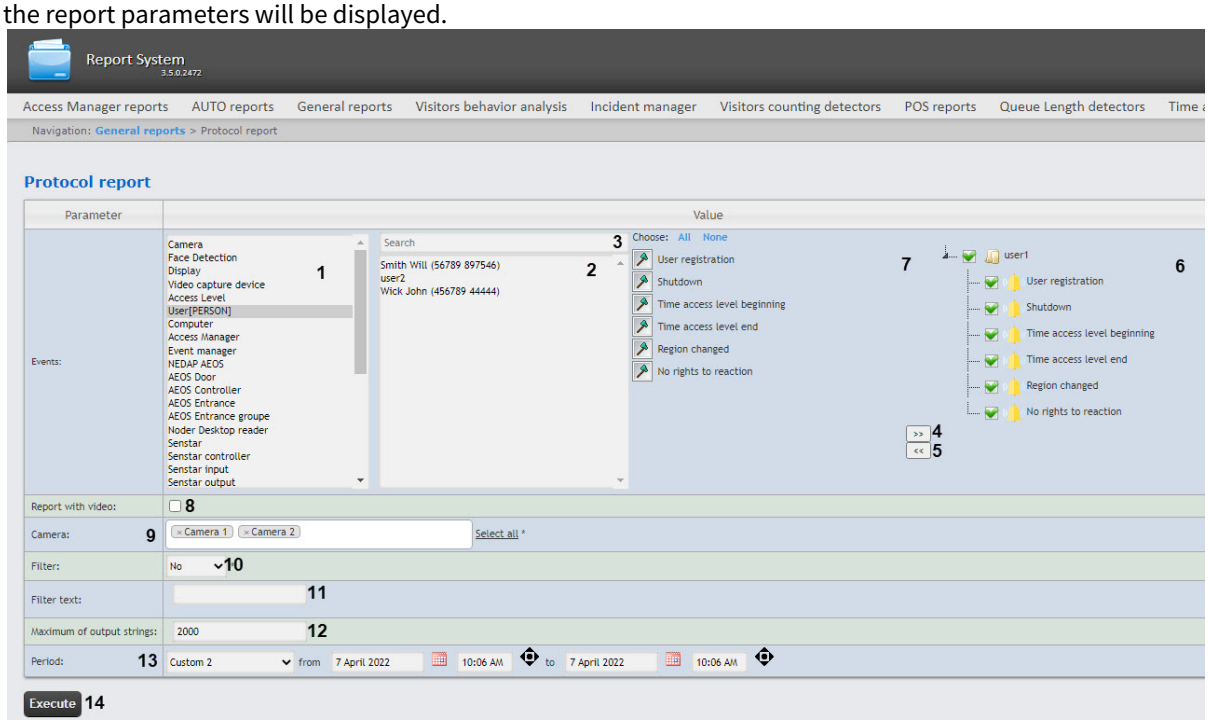
List of links to go to General reports is available when hovering over the **General reports** link in the reports menu.



8.3.2 Protocol report

In order to generate a protocol report, do the following:

1. Select the **Protocol report** type (see Selecting a type of general report). As a result, the form for specifying the report parameters will be displayed.



2. In the **Events** list, select the necessary object type (**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).

3. From the list of corresponding object types created in *Intellect* (**2**), select the objects for the report. The list of objects of each type is sorted by name. You can also use the **Search** field (**3**) to search for the object.
4. To select the required object, double-click it or click the >> button (**4**). Click the << button (**5**) to deselect. The objects selected for the report are displayed in the area **6**.
5. In the area **7**, the checkboxes are set next to the object events the information on which will be displayed in the report. By default, all events are selected. Clear the checkbox in order not to include the event in the report.
6. Set the **Report with video** checkbox (**8**) to create the report which will contain the video image from the camera.
7. From the **Camera** drop-down list (**9**), select the camera the video from which will be displayed in the report. You can also search for a camera by its name. To do this, start entering the name of the camera in the field. The search works starting from the first character.
8. From the **Filter** drop-down list (**10**), select the rule by which the data will be filtered when generating the report (**7**).
    a. **No**—the filter will not be applied.
    b. **Equal**—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 (**11**).
    c. **Contains**—the report will be generated only for those events where the **Information** column contains the filter value specified in the **Filter text** field (**11**).

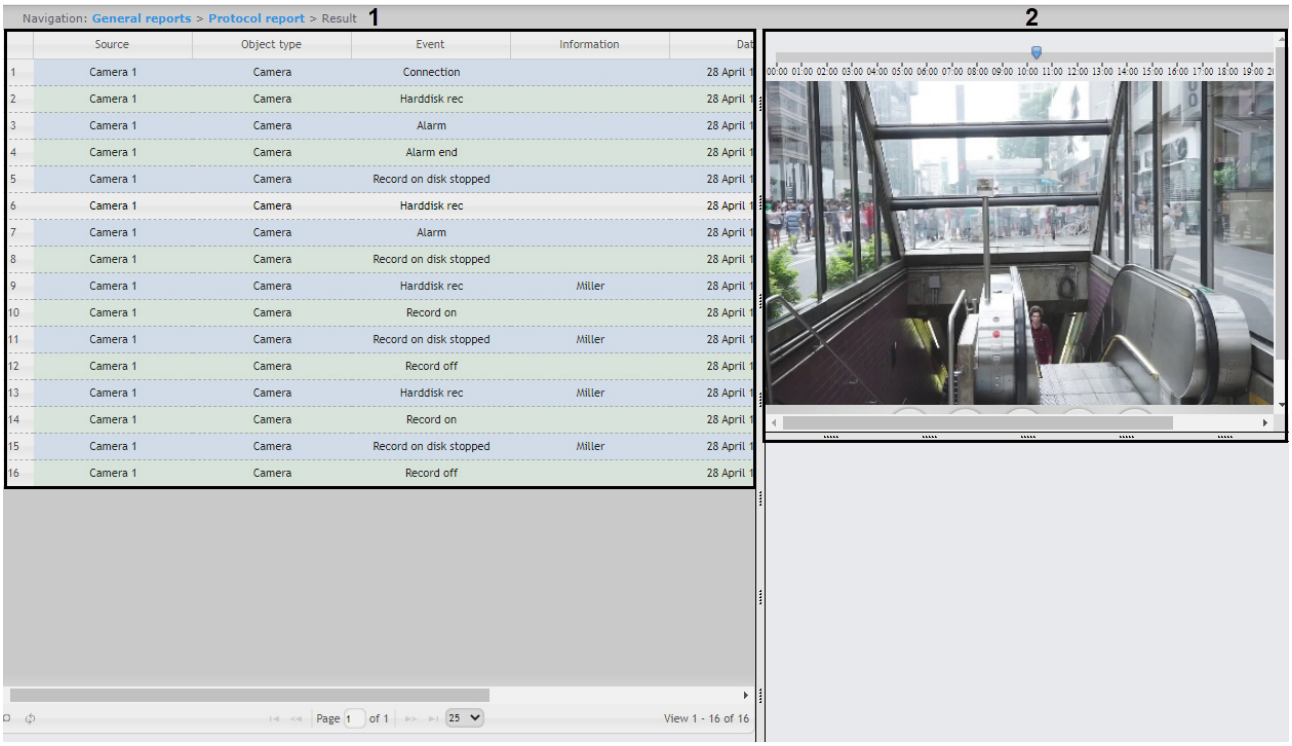
> **Note**
>
> The report is filtered only by the **Information** column (see the report fields description in the table below).

9. In the **Filter text** field (**11**), enter the value for the report filtering.
10. In the **Maximum of output strings** field (**12**), enter the maximum number of output strings in the protocol report.
11. From the **Period** drop-down list (**13**), select the time period for which the report should be created.

> **Note**
>
> - If the **Custom** period is selected, enter the date of start and end periods for which the report should 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 should be created using the button.

12. Click the **Execute** button (**14**) to generate the report.

Example of a protocol report:



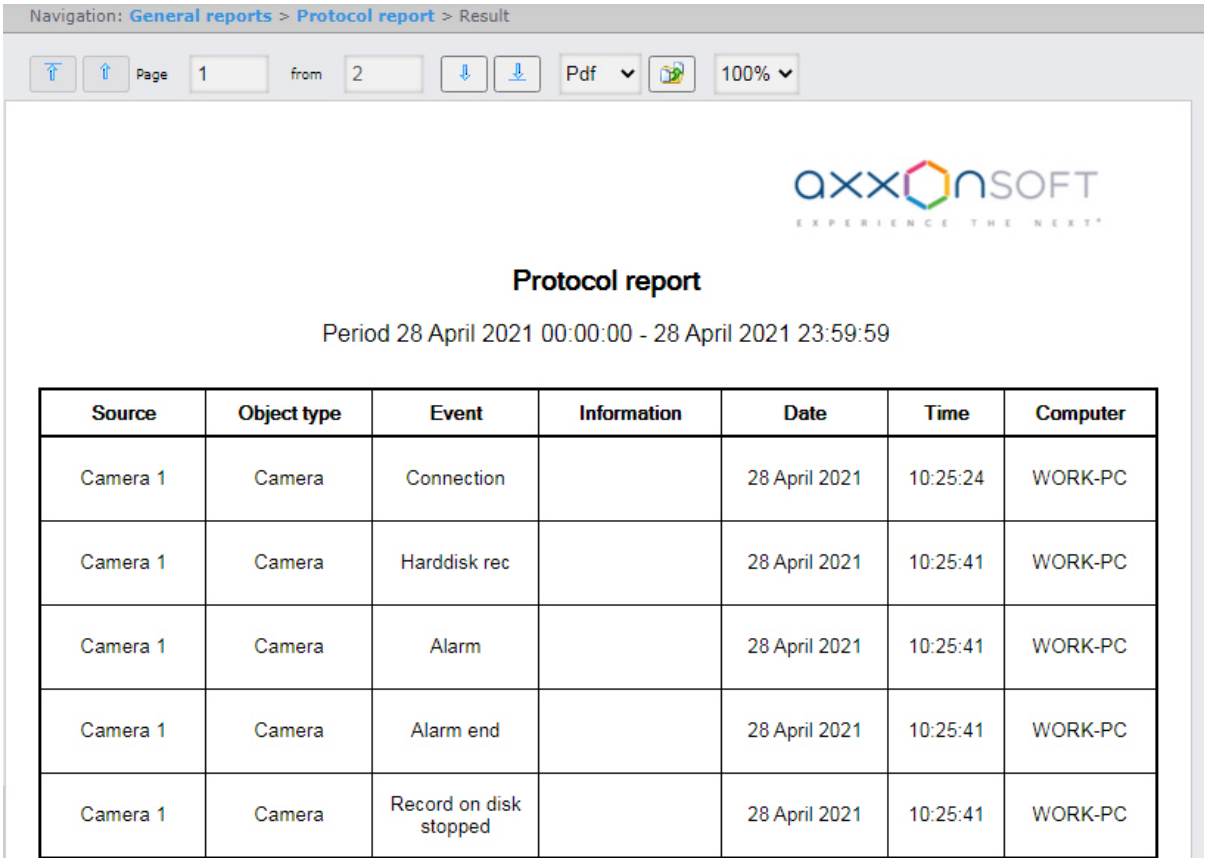
The form of the protocol report with video displaying feature consists of three parts. Part (**1**) is similar to the print form of the protocol report without video displaying feature. Part (**2**) displays the video from the selected camera. The video is displayed if there is the video archive for the specified period. Otherwise, the last frame from archive is displayed.

The images corresponding to the employee passes events will be displayed when using the FSA/ACS module. Specify the path to the folder with the images in the <add key="PathToPhotos" value ="" /> parameter in the web.config file to display the images. By default, the "/BMP/Person/" path is specified.

The names of the files with the images should correspond to the ID of the employees whose passes are displayed in the report.

Attention!

- It is impossible to print the form of the protocol report with video displaying feature. If you need to get the print form of the protocol report, create the report without video, i.e. the **Report with video** checkbox (**8**) should be clear.
- When creating an autogenerated protocol report, you should select the report without video displaying feature.



The description of the 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	Additional information about the event (if available), such as the name of the computer where the event occurred, the operator's comment, etc. *Note. The information in this column is received from the param0 column of the dbo.PROTOCOL table of the Intellect database*

Field name	Description
Date	Date of the event *Note. The information in this column is received from the date column of the dbo.PROTOCOL table of the Intellect database*
Time	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 occurred

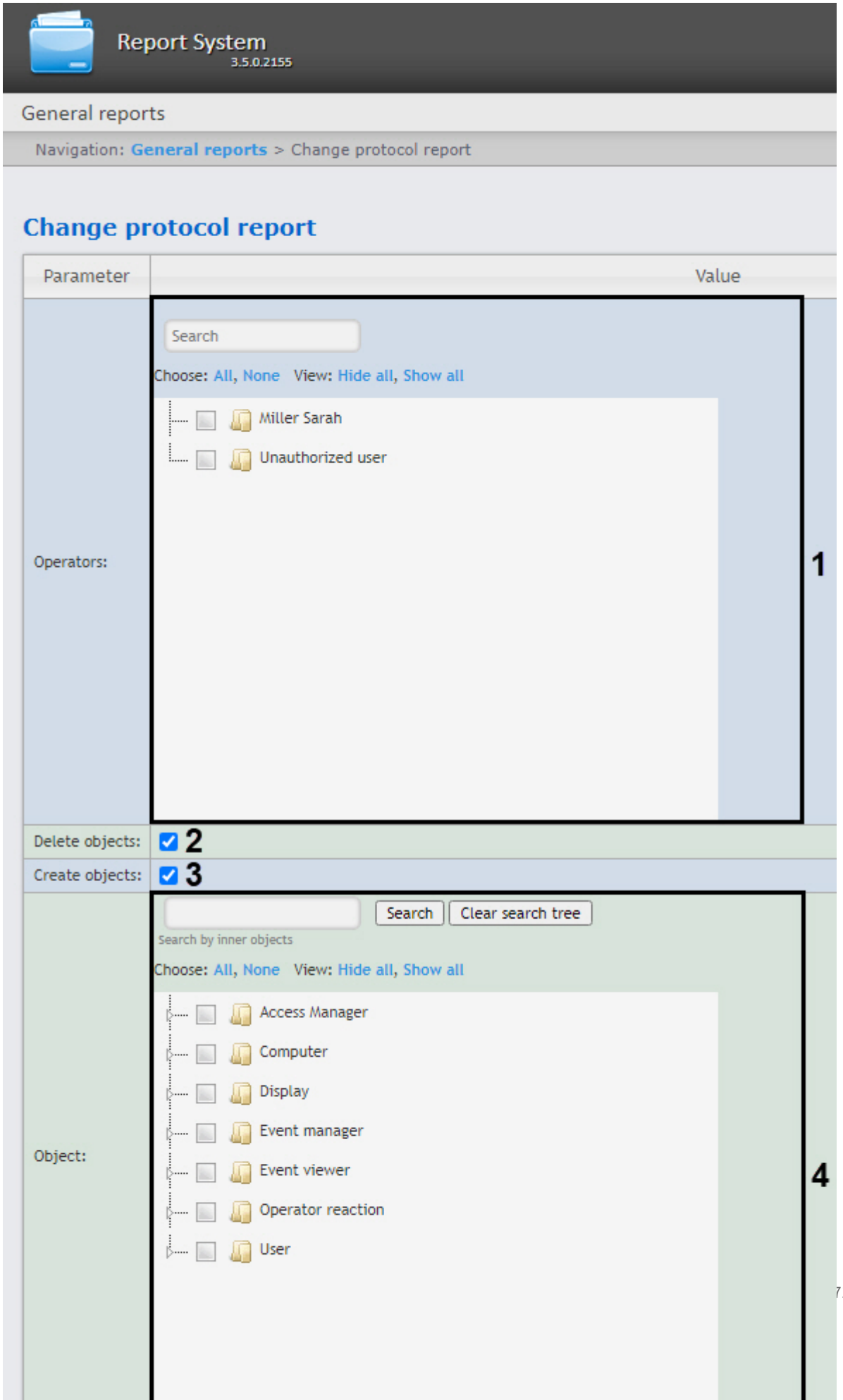
Note

- The operator's comment confirming the event in Event Manager module is specified in the **Information** field in square brackets (see Example of working with the Event manager module).
- For details about the dbo.PROTOCOL table, see Base Intellect database tables.

8.3.3 Change protocol report

In order to create a protocol report, do the following:

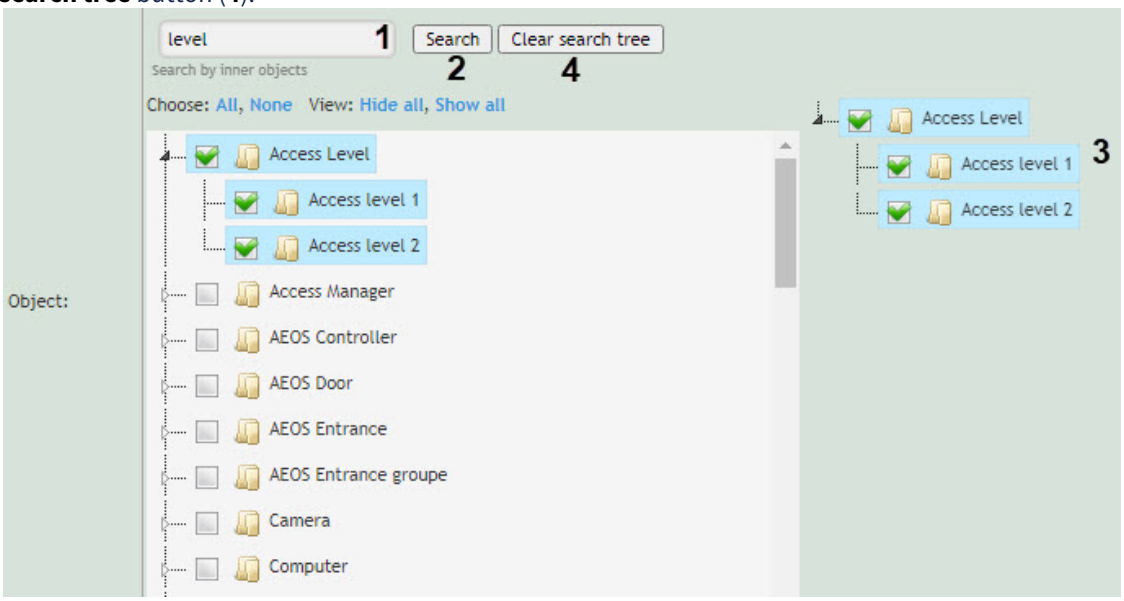
1. Select the **Change protocol report** type (see Selecting a type of general report section). As a result the dialog box for specifying the report parameters will be displayed.


Report System
3.5.0.2155
General reports
Navigation: General reports > Change protocol report
Change protocol report
Parameter
Value
Search
Choose: All, None View: Hide all, Show all
Miller Sarah
Unauthorized user
Operators:
1
Delete objects:
2
Create objects:
3
Search
Clear search tree
Search by inner objects
Choose: All, None View: Hide all, Show all
Access Manager
Computer
Display
Event manager
Event viewer
Operator reaction
User
Object:
4

2. Set the following report parameters:
   a. In the **Operators** field (**1**) set checkboxes in those users who have rights to change objects. You can also use the operator search.

> **Note**
>
> The **Unauthorized user** value means change of system by unauthorized user, deleted user and/or user with deleted rights.

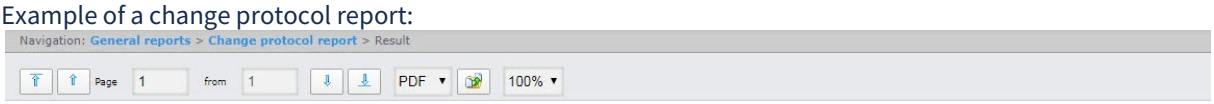
   b. To display deleted objects in the report, set the **Delete objects** checkbox (**2**).
   c. To display created objects in the report, set the **Create objects** checkbox (**3**).
   d. In the **Object** field (**4**), set the checkboxes next to the objects which changes should be displayed in the report. You can also use the search by objects. To do this, enter the name of the object (at least 4 characters) in the **Search by inner objects** field (**1**) and click the **Search** button (**2**). As a result, the found objects will be displayed in the additional object tree on the right (**3**). To cancel, click the **Clear search tree** button (**4**).



   e. From the **Period** drop-down list select the time period for which the report is to be created (**5**).

> **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. To create a report click **Execute** (**6**).
   Example of a change protocol report:



Change protocol report

Period 17 February 2020 00:00:00 - 17 February 2020 23:59:59

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

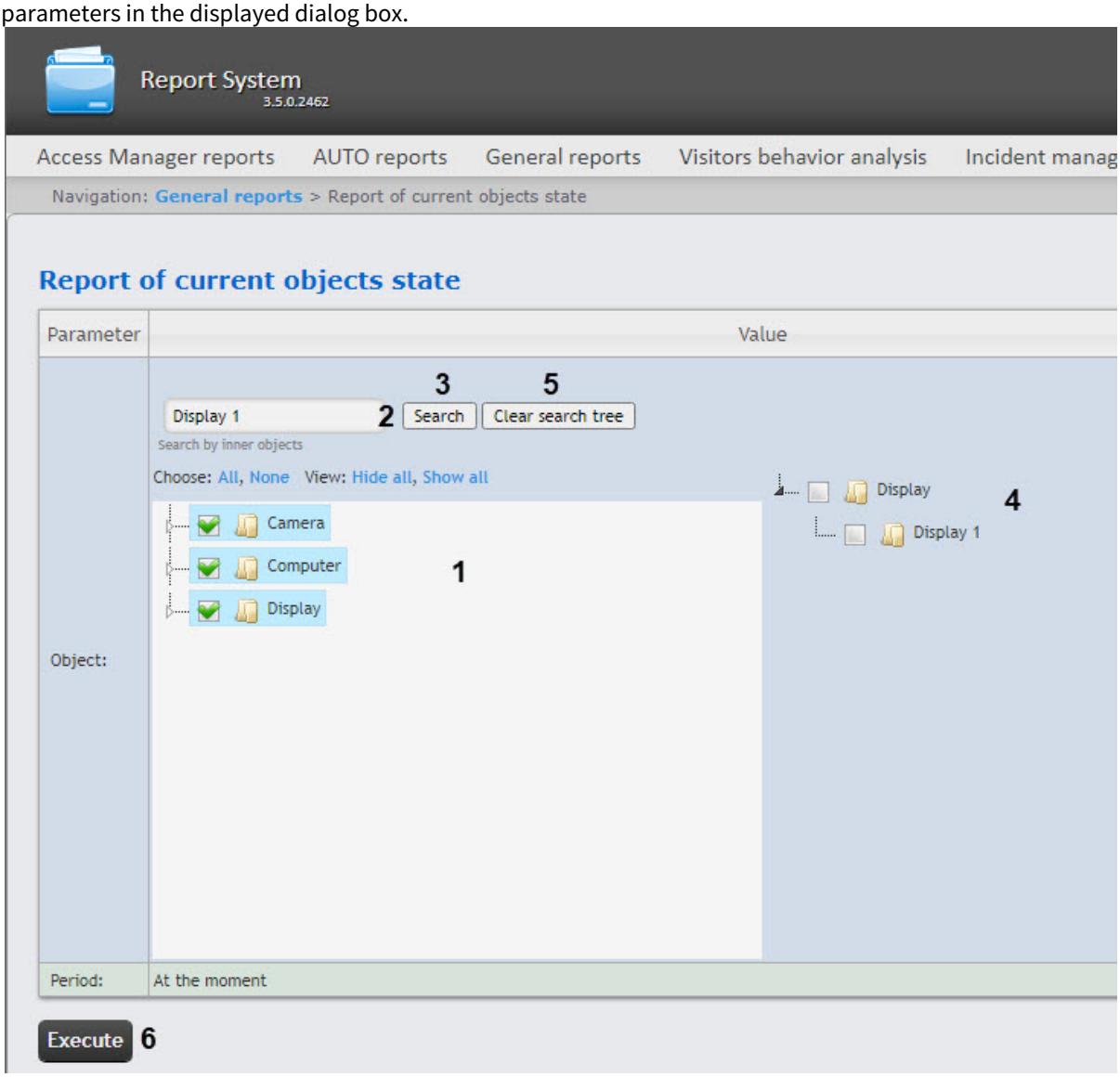
Note

- The ID of the object is indicated in square brackets in the end of the object name in the **Object name** field.
- The ID of the user is indicated in square brackets at the end of the user name in the **User** field.
- In the created report the objects are sorted by their ID and by the event date.

8.3.4 Report of current objects state

In order to generate the Report of current objects state, do the following:

1. Select the **Report of current objects state** (see Selecting a type of general report). Specify the report parameters in the displayed dialog box.



2. In the **Object** field (**1**), set checkboxes next to those objects which current state should be displayed in the report. Click **All** to select all objects from the list. Click **None** to deselect. Click **Show all** to expand the object structure. Click **Hide all** to hide the object structure.

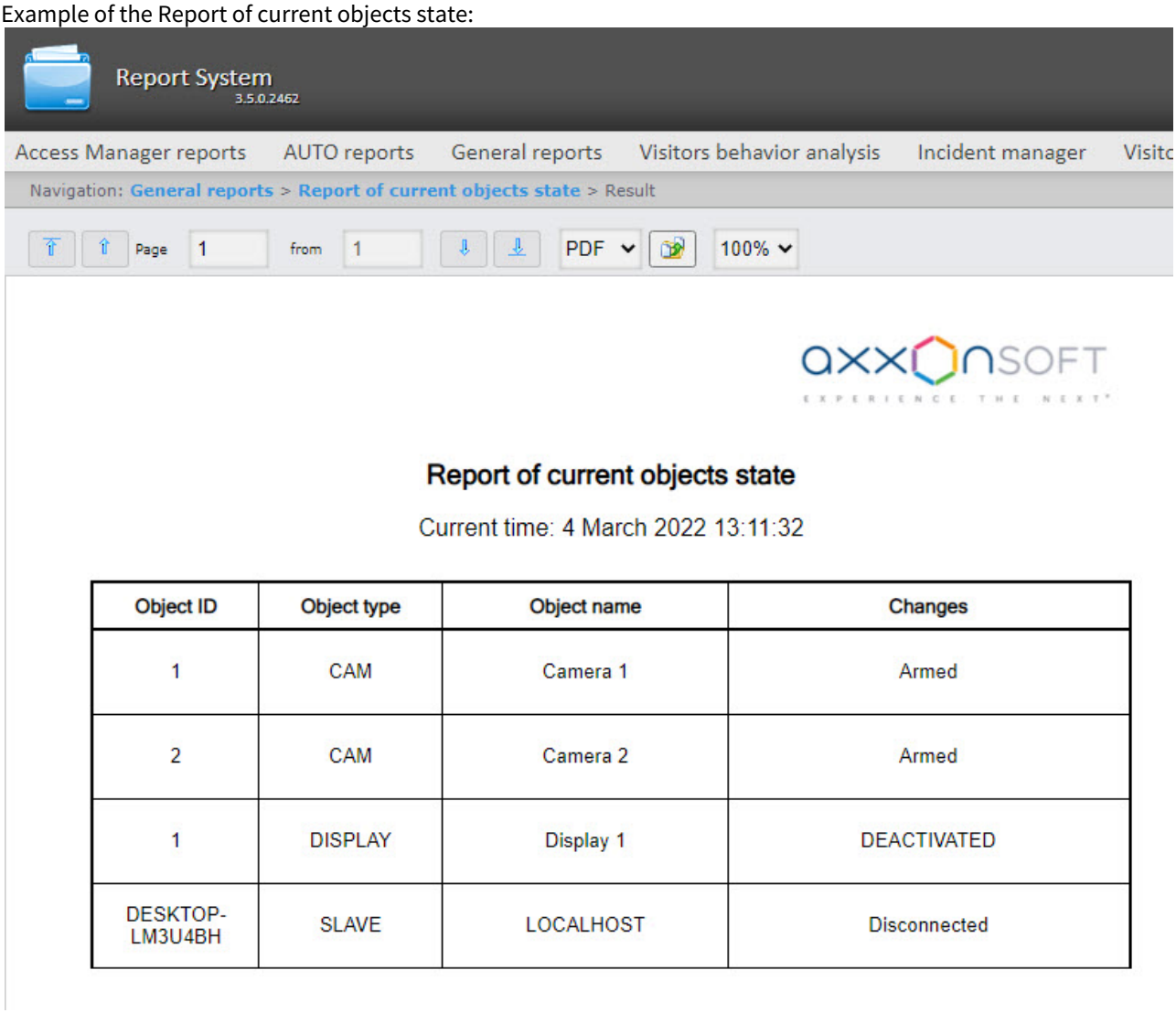
> **Note**
>
> The **Object** field displays only those objects which can be assigned a status displayed on the map.

3. To search for the inner object, enter its name (at least 4 characters) into the search field (**2**) and click the **Search** button (**3**). The found object will be displayed in the search tree (**4**).
4. Click the **Clear search tree** button (**5**) to remove the objects from the search tree.
5. Click the **Execute** button (**6**) to generate the report.

> **Note**

If the search tree is empty, the report is generated on the objects selected in the area **1**. Otherwise, the report is generated on the objects selected in the search tree.

Example of the Report of current objects state:



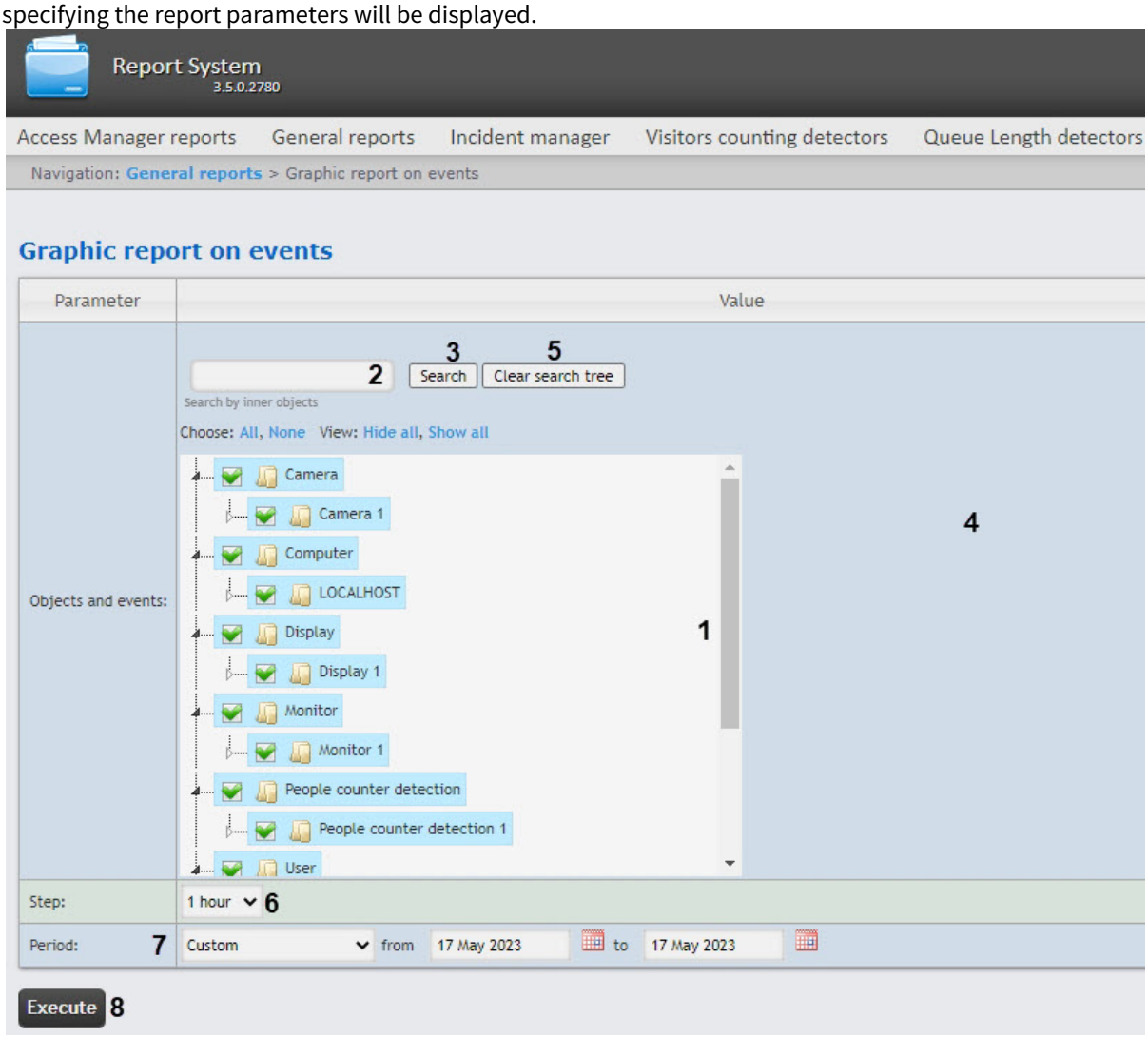
Object ID	Object type	Object name	Changes
1	CAM	Camera 1	Armed
2	CAM	Camera 2	Armed
1	DISPLAY	Display 1	DEACTIVATED
DESKTOP-LM3U4BH	SLAVE	LOCALHOST	Disconnected

Generation of the Report of current objects state is complete.

8.3.5 Graphic report on events

To create the **Graphic report on events**, do the following:

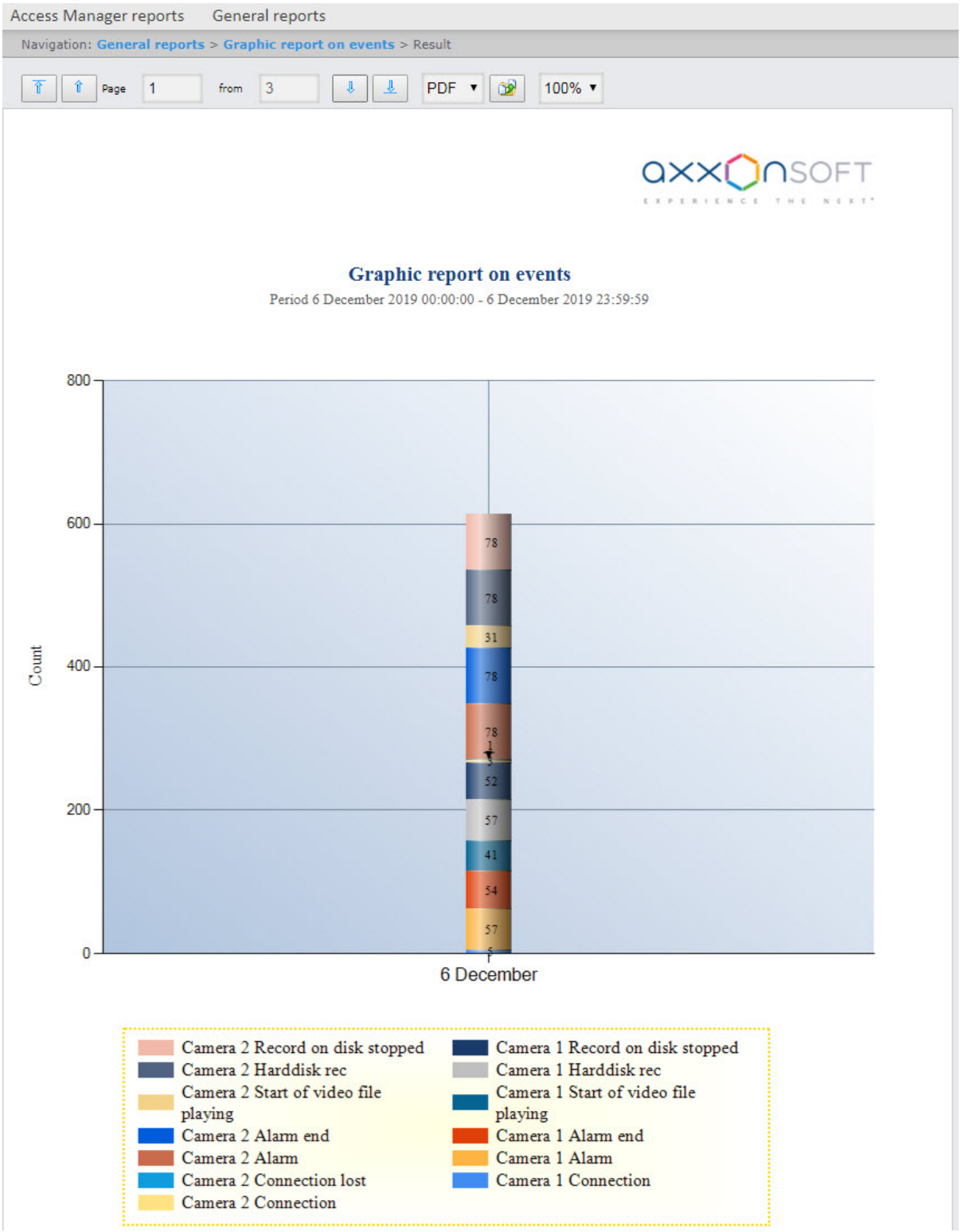
1. Select the **Graphic report on events** (see Selecting the type of general report). As a result the dialog box for specifying the report parameters will be displayed.



2. 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. Click **All** to select all objects from the list. Click **None** to deselect. Click **Show all** to expand the object structure. Click **Hide all** to hide the object structure.

> **Note**
>
> You can select any event by expanding the object type list.

3. To search for the inner object, enter its name (at least 4 characters) into the search field (**2**) and click the **Search** button (**3**). The found object will be displayed in the search tree (**4**).
4. Click the **Clear search tree** button (**5**) to remove the objects from the search tree.
5. From the **Step** drop-down list (**6**) 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**).
6. From the **Period** drop-down list (**7**) select the time period for which the report is to be created. 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.
7. To create a report click **Execute** (**8**). 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

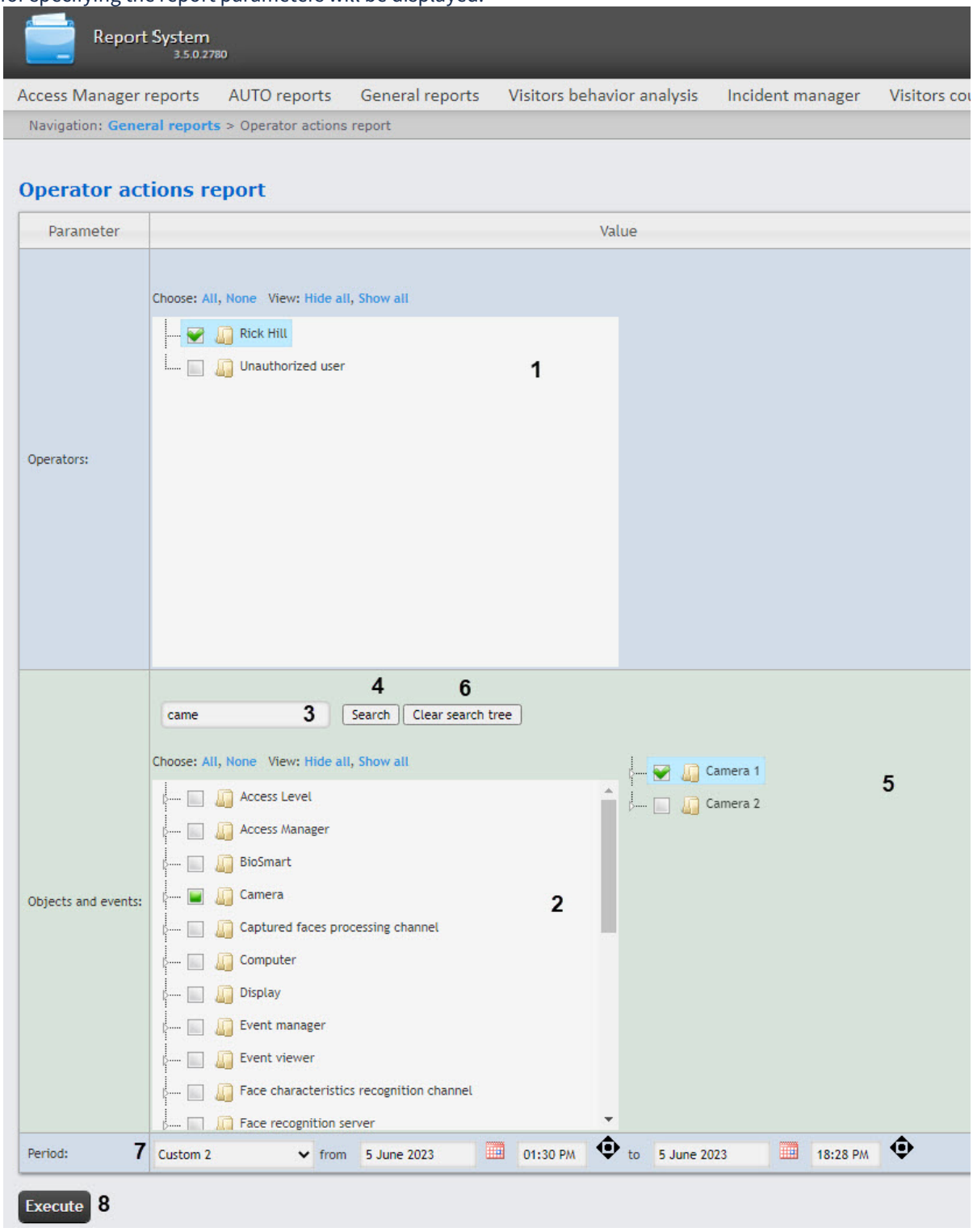
Date	Amount
6 December 2019 00:00:00	5

Event: Alarm

8.3.6 Operator actions report

To create an **Operator actions report**, do the following:

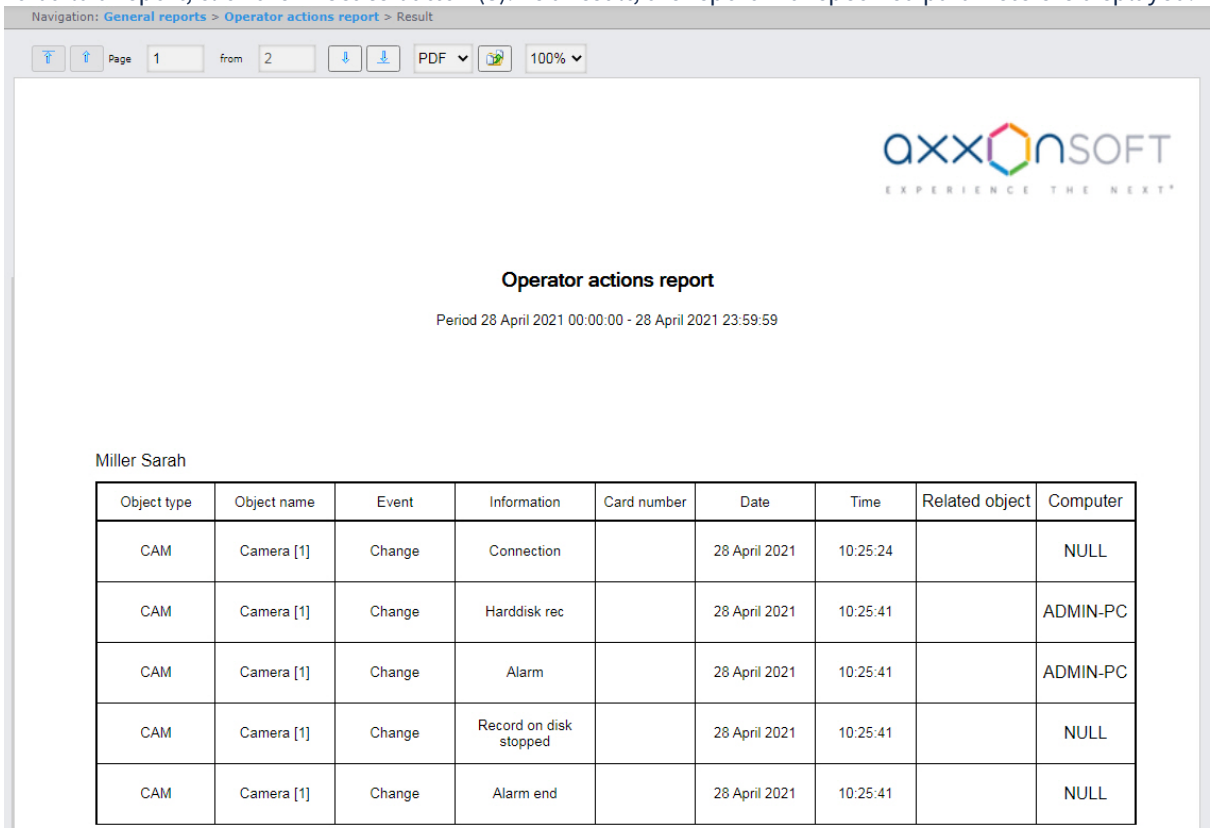
1. Select the **Operator actions report** type (see Selecting the type of general report). As a result the dialog box for specifying the report parameters will be displayed.



2. In the **Operators** field (**1**) select 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.
3. In the **Objects and events** field (**2**) select objects and their events for which the information should be displayed in the report. Click **All** to select all objects from the list. Click **None** to deselect. Click **Show all** to expand the object structure. Click **Hide all** to hide the object structure.
4. To search for the objects and events, enter its name into the search field (**3**) and click the **Search** button (**4**). The found object will be displayed in the search tree (**5**).
5. Click the **Clear search tree** button (**6**) to remove the objects from the search tree.
6. From the **Period** drop-down list (**7**) select the time period for which it is necessary to build a report.

> **Note**
>
> If the **Custom** or **Custom 2** 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. If the **Custom 2** period is selected, enter additionally the time of start and end periods for which the report should be created using the button.

7. To build a report, click the **Execute** button (**8**). As a result, the report with specified parameters is displayed.



Object type	Object name	Event	Information	Card number	Date	Time	Related object	Computer
CAM	Camera [1]	Change	Connection		28 April 2021	10:25:24		NULL
CAM	Camera [1]	Change	Harddisk rec		28 April 2021	10:25:41		ADMIN-PC
CAM	Camera [1]	Change	Alarm		28 April 2021	10:25:41		ADMIN-PC
CAM	Camera [1]	Change	Record on disk stopped		28 April 2021	10:25:41		NULL
CAM	Camera [1]	Change	Alarm end		28 April 2021	10:25:41		NULL

Report fields are described in the table.

Field	Description
Object type	Type of object in the system

Field	Description
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
Information	Event name
Card number	Operator Access Card Number
Date	Date and time of the event
Time	Time of the event
Related object	Object name with which the event is related
Computer	Computer name

Note

In the report, the objects are sorted by their identifier and by the event date.

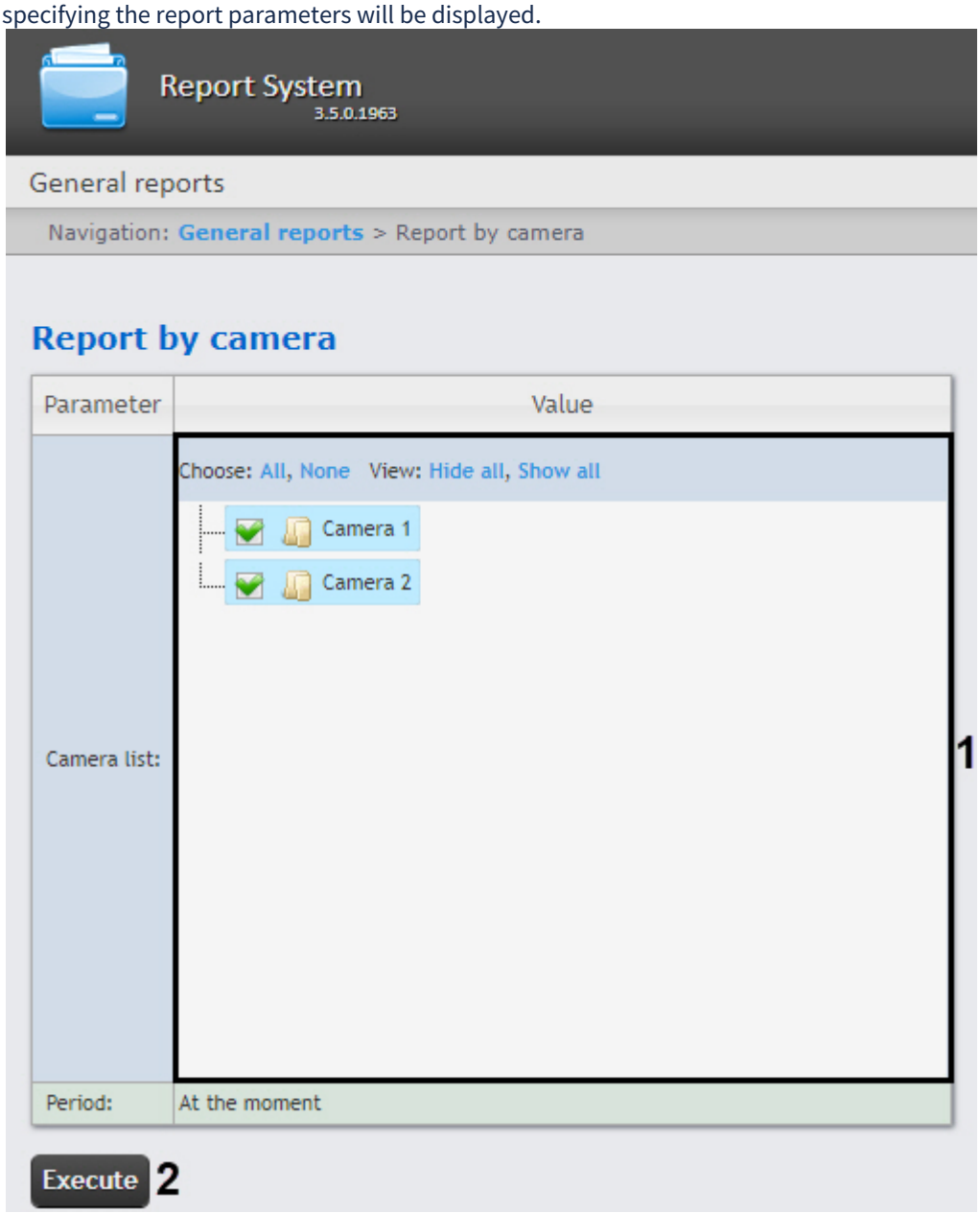
8.3.7 Report by camera

Attention!

To display frames from cameras in the generated report, it is necessary to configure the video player (see Video Player Settings).

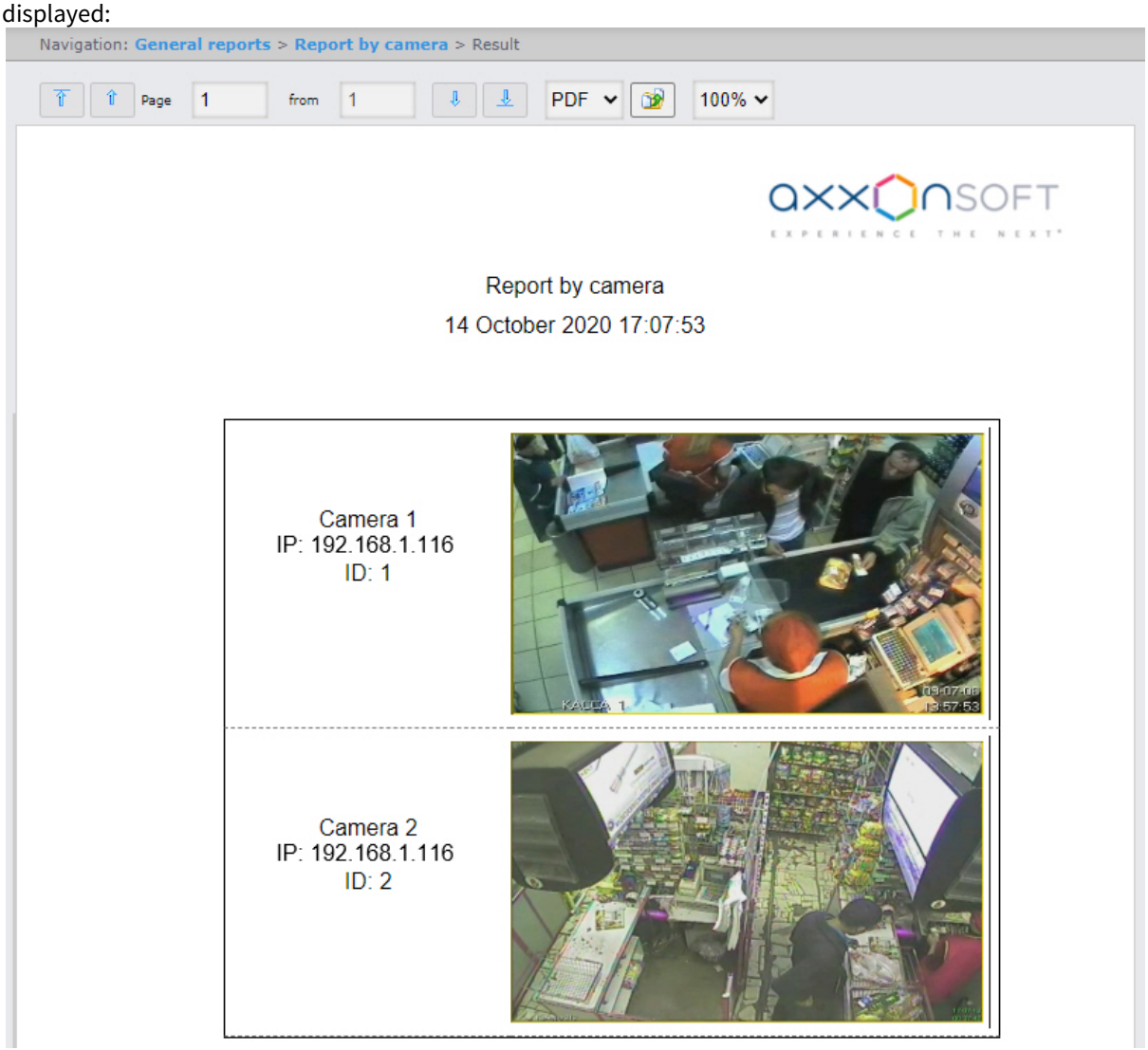
To create a **Report by camera**, do the following:

1. Select the **Report by camera** type (see Selecting the type of general report). As a result the dialog box for specifying the report parameters will be displayed.



2. In the **Camera list** list (**1**) set the checkboxes for those camera objects for which you want to build a report.

3. To build a report, click the **Execute** button (**2**). As a result, a report for the selected cameras will be displayed:



The report by camera contains the following information:

- Camera name in *Intellect;*
- Camera IP address;
- Camera ID;
- Frame from the camera at the time of the report generation. The frame is taken from the video stream, which is intended for recording the archive.

8.4 Working with Visitors behavior analysis reports

8.4.1 Selecting a type of Visitors behavior analysis reports

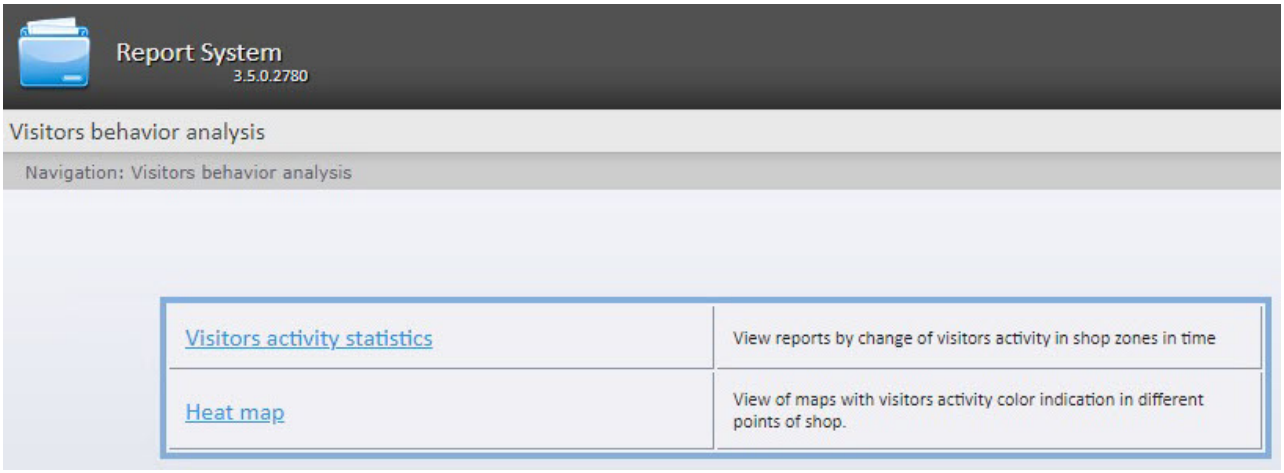
It is possible to create the following visitors behavior analysis reports:

1. Visitors activity statistics report is used to inspect the change of customer activity over time and quantitatively estimate activity in different zones of monitored area.

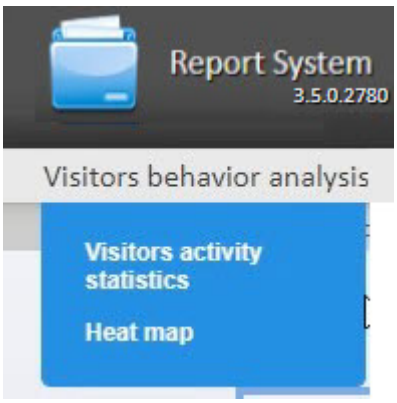
2. Heat map report decides the issue of quick and auality comparison of customer activity in different zones of monitored area.

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.



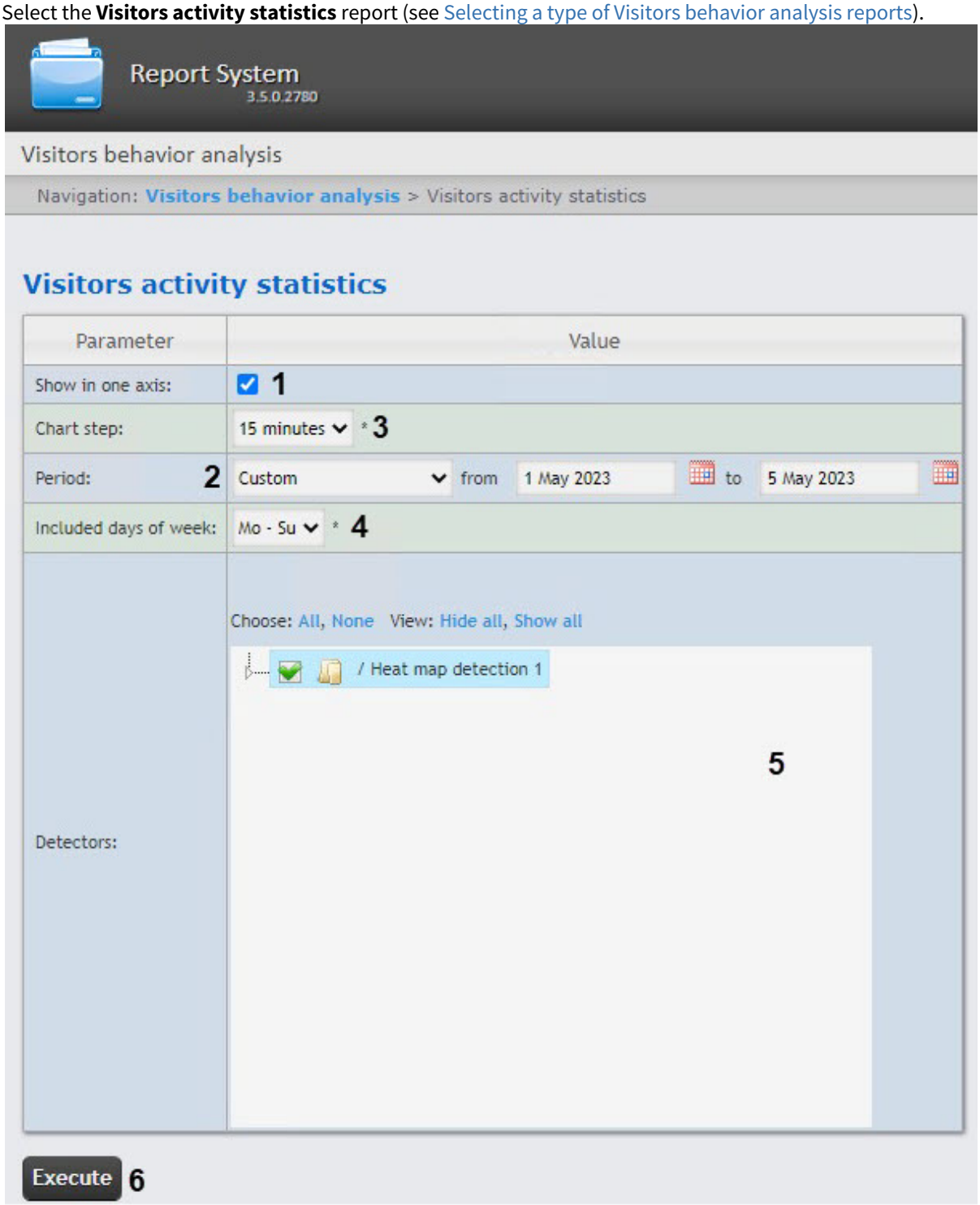
List of links for switching to visitors behavior analysis reports is available when hovering the **Visitors behavior analysis** link in the report menu.



8.4.2 Creating the Visitors activity statistics report

To generate the **Visitors activity statistics** report, do the following:

1. Select the **Visitors activity statistics** report (see Selecting a type of Visitors behavior analysis reports).



2. Set the **Show in one axis** checkbox to display data from different areas in one chart (**1**). By default, the checkbox is set.
3. From the **Period** drop-down list, select the time period for which the report should be created (**2**). For the **Custom 1** and **Custom 2** periods, enter the date of start and end periods for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field

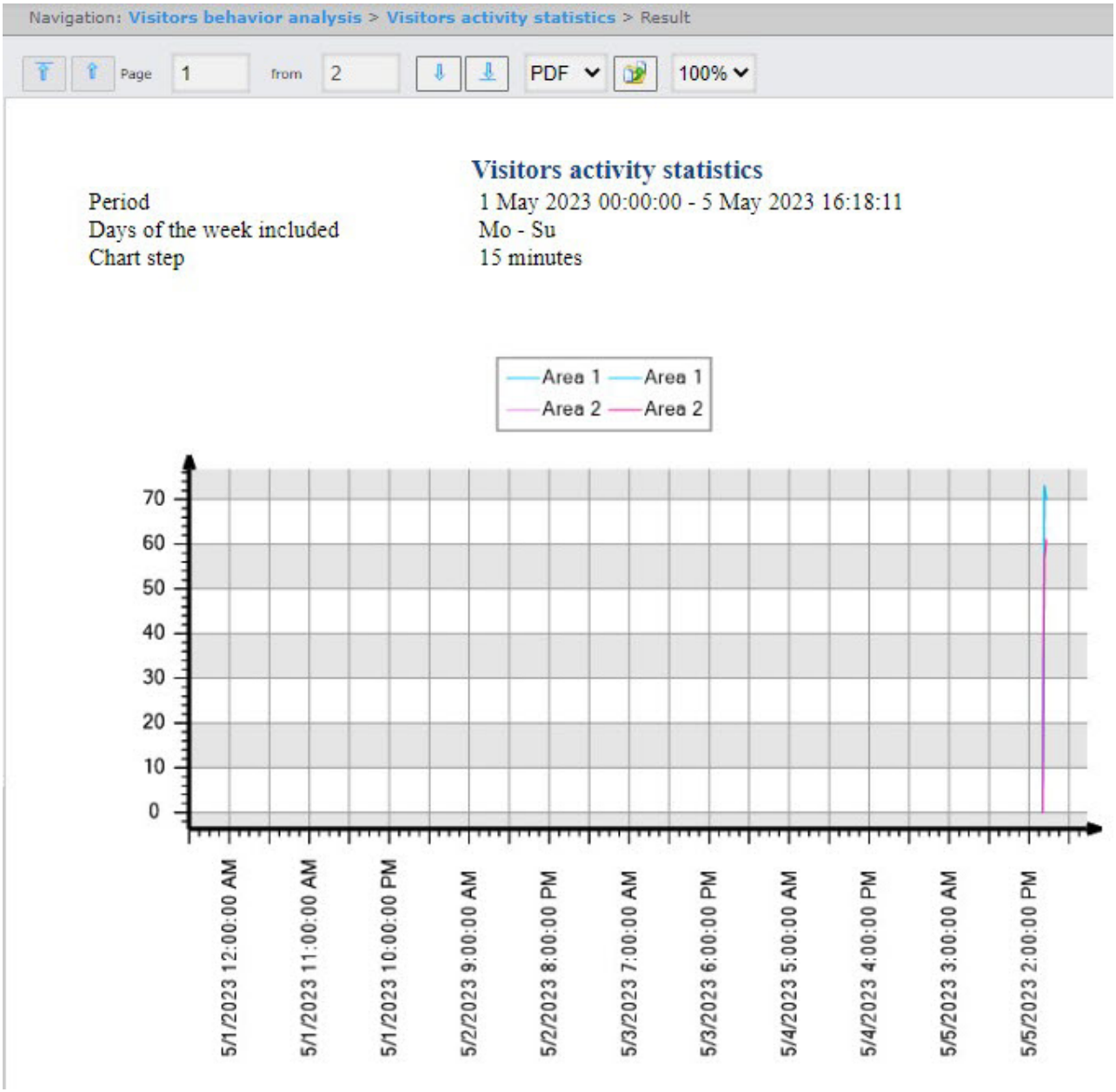
to use the **Calendar** tool. If the **Custom 2** period is selected, enter additionally the start and end time of the period for which the report should be created using the  button.

4. From the **Chart step** drop-down list, select the time interval in which data will be averaged (**3**). The list of available steps depends on the selected period (**2**).
5. From the **Included days of week** drop-down list, select the days when most customers work/ don't work to consider in statistics (**4**).

   > **Note.**
   >
   > If the data period and the specified included days of week don't overlap, an empty report will be created, and a message prompting to change the **Included days of week** parameter or specify another **Period**.

6. In the **Detectors** field, set the checkboxes next to the areas, the information on which should be displayed in the report (**5**). Click **All** to select all objects from the list. Click **None** to deselect. Click **Show all** to expand the object structure. Click **Hide all** to hide the object structure.
7. Click the **Execute** button (**6**) to generate the report.

Example of a **Visitors activity statistics** report.


Navigation: Visitors behavior analysis > Visitors activity statistics > Result
Page 1 from 2 PDF 100%
Visitors activity statistics
Period 1 May 2023 00:00:00 - 5 May 2023 16:18:11
Days of the week included Mo - Su
Chart step 15 minutes
Area 1 Area 1
Area 2 Area 2
70
60
50
40
30
20
10
0
5/1/2023 12:00:00 AM
5/1/2023 11:00:00 AM
5/1/2023 10:00:00 PM
5/2/2023 9:00:00 AM
5/2/2023 8:00:00 PM
5/3/2023 7:00:00 AM
5/3/2023 6:00:00 PM
5/4/2023 5:00:00 AM
5/4/2023 4:00:00 PM
5/5/2023 3:00:00 AM
5/5/2023 2:00:00 PM

Area and detector: : / Heat map detection 1

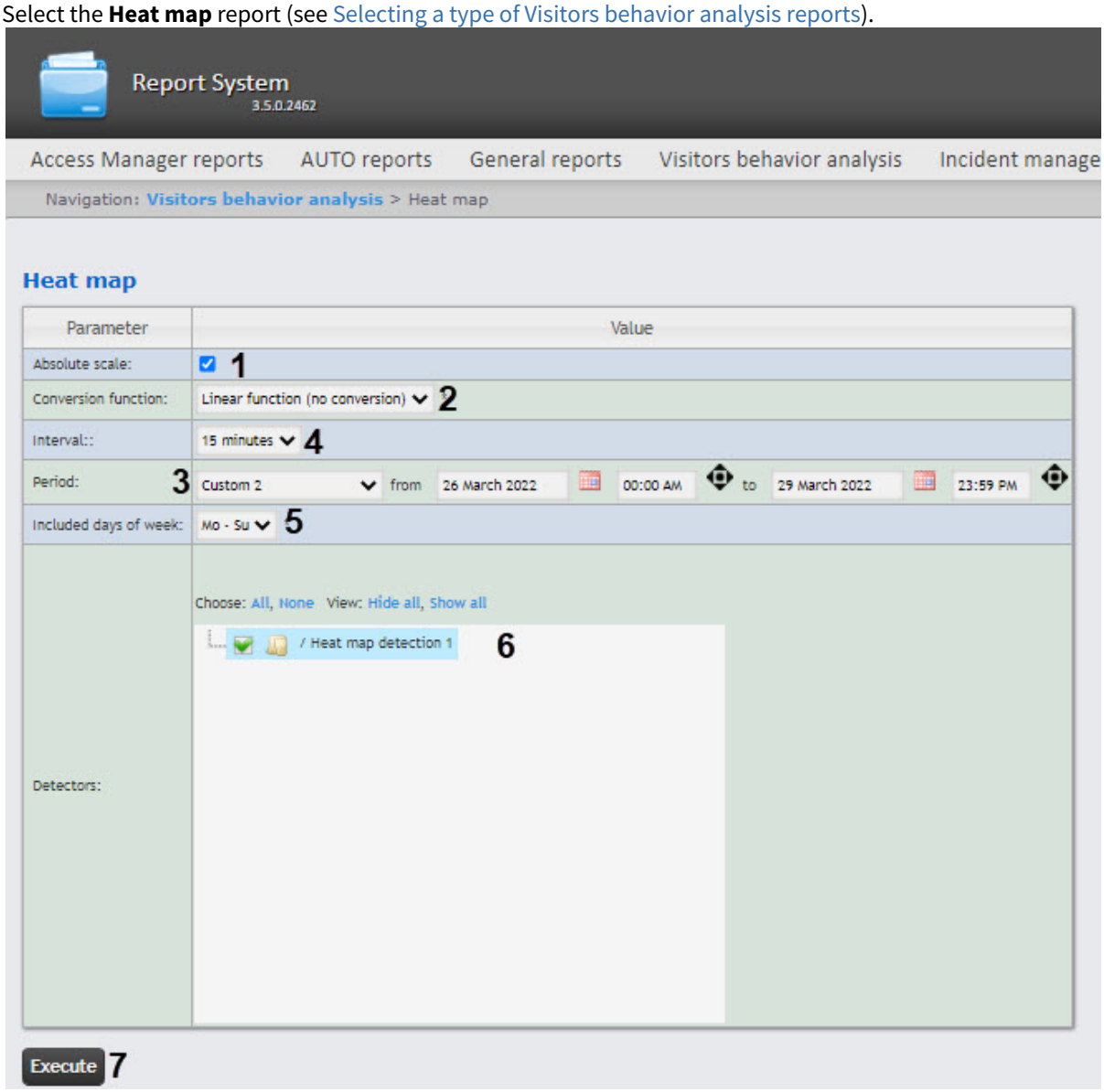
Detector	Receiving data period	Visitors
Average results for whole period		
Area 1	1 May 00:00 5 May 16:18	48%
Area 2	1 May 00:00 5 May 16:18	39%
Area 1	1 May 00:00 5 May 16:18	48%
Area 2	1 May 00:00 5 May 16:18	39%
Detailed statistics by points		
Area 1	5 May 16:15 5 May 16:29	70%
Area 1	5 May 16:00 5 May 16:14	73%
Area 1	5 May 15:45 5 May 15:59	0%

The report displays the average customer activity by areas for the whole period and the detailed statistics on customer activity for each time interval.

8.4.3 Creating a Heat map report

To generate the Heat map report, do the following:

1. Select the **Heat map** report (see Selecting a type of Visitors behavior analysis reports).



2. Set the **Absolute scale** checkbox, if it is required to dispaly initial data without any changes (**1**). By default, the checkbox isn't set.

> **Note**
>
> It is recommended to use this option 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 the area 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 (**2**). For example, if the customer activity fluctuates in a range from 0% to 20%, then when using the linear function of conversion, 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 colored red, and not blue. Find more information about the conversion functions at http://easings.net/en or https://wiki.multitheftauto.com/wiki/Easing.

3. From the **Conversion function** drop-down list, select the function of converting the initial data into relative units (**2**).

   > **Note**
   >
   > Different conversion functions are used to emphasize various aspects of customer activity statistics.

4. From the **Period** drop-down list, select the time period for which the report should be created (**3**). For the **Custom** and **Custom 2** periods, enter the date of start and end periods for which the report should 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 start and end time of the period for which the report should be created using the  button.
5. From the **Interval** drop-down list, select the time interval in which data will be summarized (**4**). The list of available intervals depends on the selected period (**3**).
6. From the **Included days of week** drop-down list, select the days when most customers work/ don't work to consider in statistics (**5**).

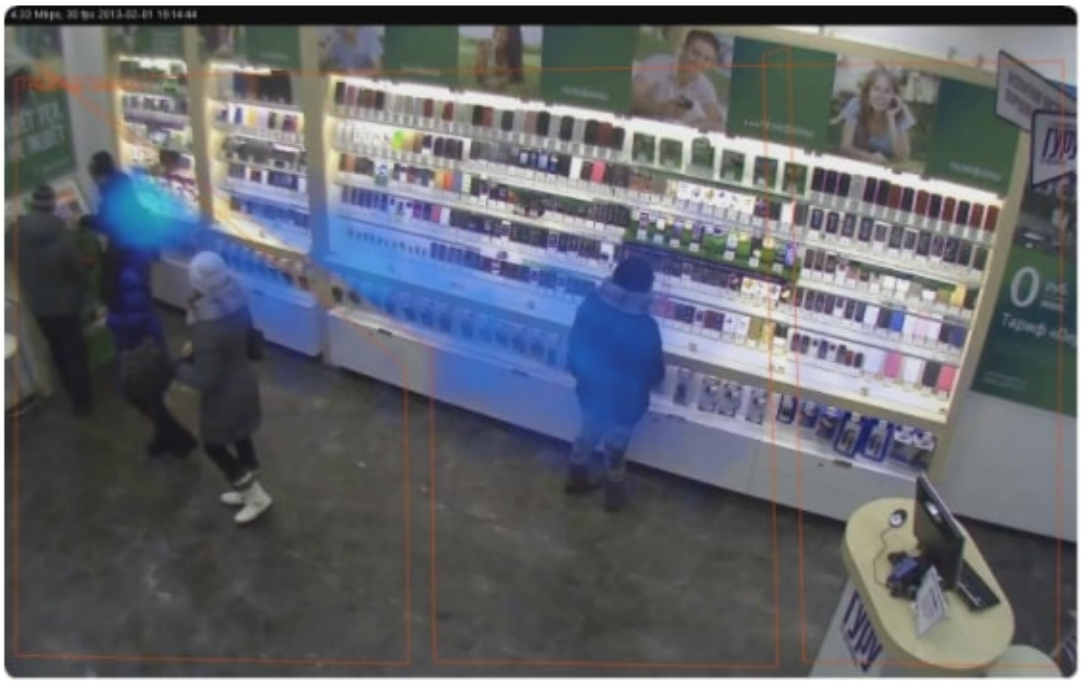
   > **Note**
   >
   > If the data period and the specified included days of week don't overlap, an empty report will be created, and a message prompting to change the **Included days of week** parameter or specify another **Period**.

7. In the **Detectors** field, set the checkboxes next to the detectors, the information on which should be displayed in the report (**5**).
8. Click the **Execute** button (**7**) to generate the report.

Example of a **Heat map** report.

Heat map

Period	29 March 2022 12:00:00 - 29 March 2022 18:00:00
Days of the week included	Mo - Su
Data source	/ Heat map detection 1



Customer activity statistics

0% 50% 100%

Customer activity in different parts of the observed area is highlighted in the corresponding color.

8.5 Working with the Incident manager reports

8.5.1 Selecting the type of the Incident manager reports

The Incident manager is used for:

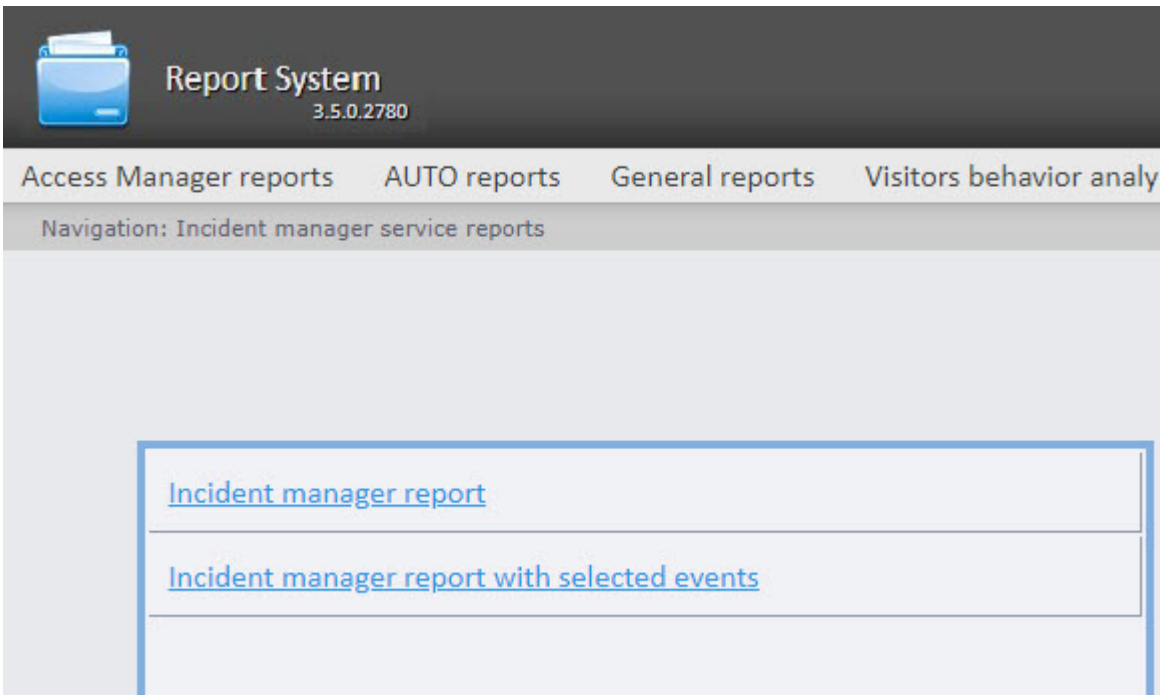
1. Processing of events according to a preconfigured script.
2. Automatic execution of macros that are started by some operator's actions.
3. Generating a report on the event and operator's actions.

You can create the following Incident manager reports:

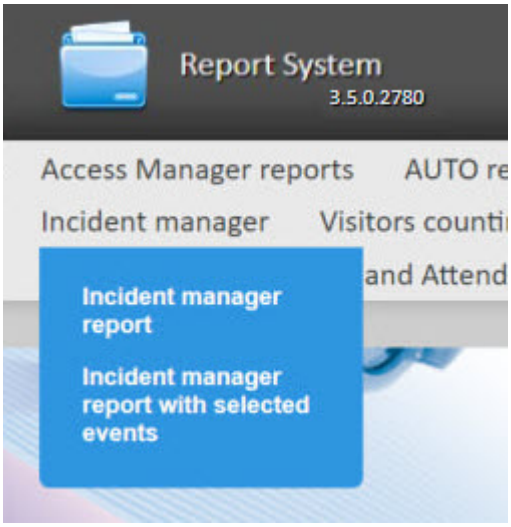
1. Incident manager report is created based on the operator's actions when processing all events.
2. Incident manager report with selected events is created based on the operator’s actions when processing the selected events.

To select the type of the **Incident manager** reports, click the **Incident manager** link in the reports menu of *Intellect Web Report System*.

As a result, the list of available **Incident manager** reports will be displayed. To select the required report, click the corresponding link.



The list of links to the **Incident manager** reports will also be available when you hover the cursor over the **Incident manager** link in the reports menu.

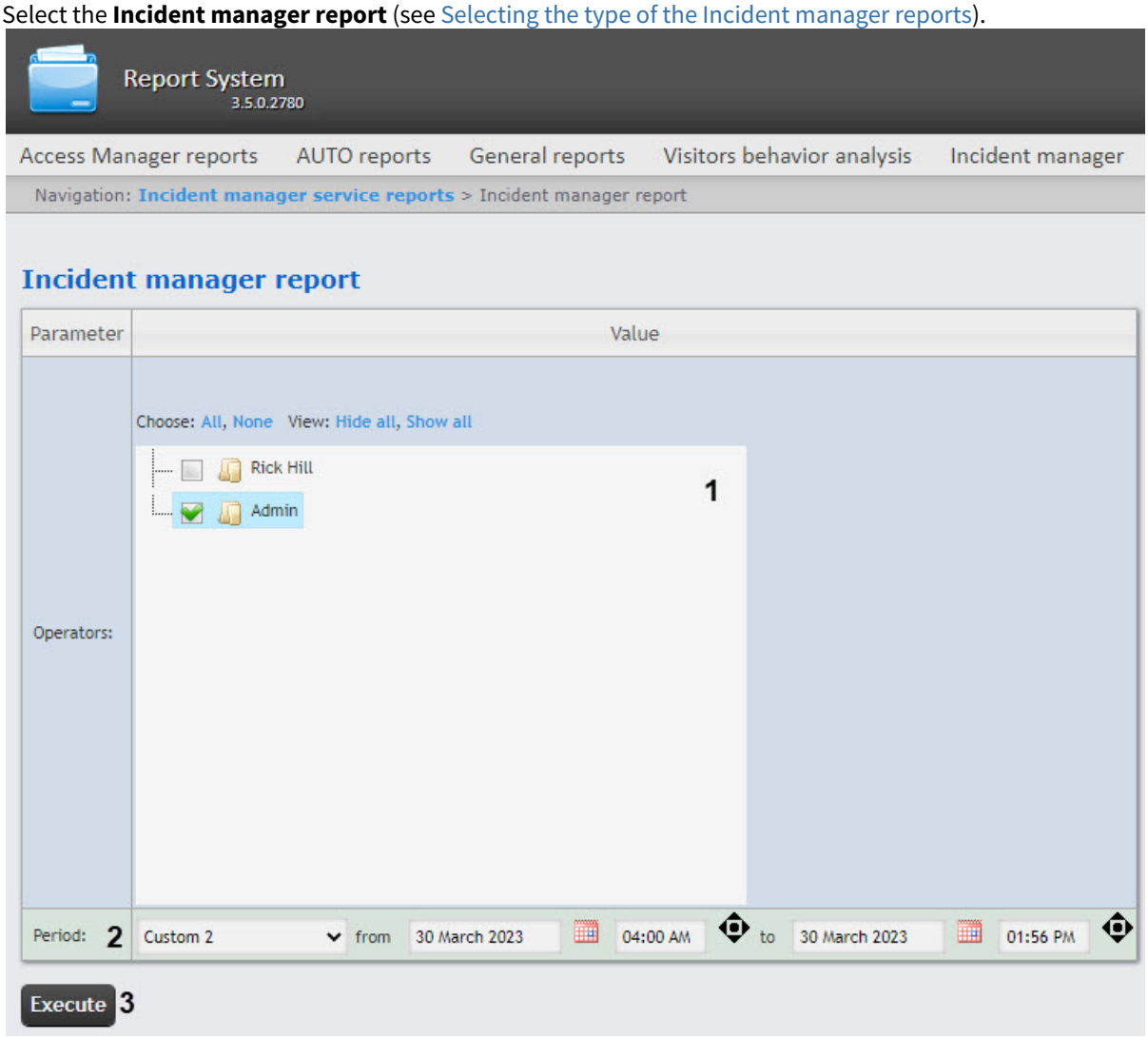


8.5.2 The Incident manager report

> **Attention!**
>
> To create the **Incident manager report**, you must first create and configure the **Incident manager** (see Configuring the Incident manager interface object), **Incident server** and **Incident handler** (see Configuring Incident server and Incident handler) objects in *Intellect.*

To create the Incident manager report, do the following:

1. Select the **Incident manager report** (see Selecting the type of the Incident manager reports).



2. In the **Operators** field (**1**), set the checkboxes next to those operators by whose actions you want to create the report. Click **All** to select all objects from the list, click **None** to deselect. Click **Show all** to expand the objects structure. Click **Hide all** to hide the objects structure.
3. From the **Period** drop-down list (**2**), select the time period for which the report should be created. If the **Custom** or **Custom 2** period is selected, enter the date of start and end periods for which the report should 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 should be created using the button.
4. Click the **Execute** button (**3**) to create the report.

Example of the Incident manager report:

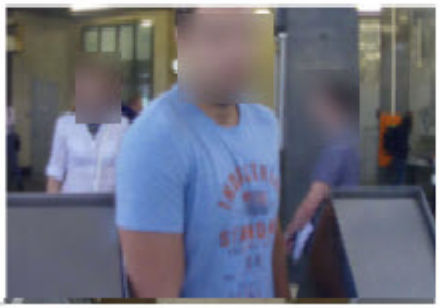
Incident manager report

Date: from 6 June 2023 00:00:00 to 6 June 2023 14:58:32

Event date and time	6 June 2023 14:56:47
Object ID and name and event	[3]Camera 3, Alarm
Server name	R-GIZATULLINA
Resolution	Processed

Operator ID and name	Server	Date and time	Message	Operator actions	Attachments
[1] sa sa sa	R-GIZATULLINA	6 June 2023 14:56:58		Images added : 1	Picture1
[1] sa sa sa	R-GIZATULLINA	6 June 2023 14:56:59	Image	Send	
[1] sa sa sa	R-GIZATULLINA	6 June 2023 14:57:01		123	
[1] sa sa sa	R-GIZATULLINA	6 June 2023 14:57:03		1;222;	
[1] sa sa sa	R-GIZATULLINA	6 June 2023 14:57:03		Send	

Picture1



Note

The Incident manager report has a **Resolution** field with the **Processed** or **Canceled** values. When you close an event without going through all steps, Resolution: Canceled is displayed. When you close an event with going through all steps, Resolution: Processed is displayed. If an event wasn't processed and wasn't

canceled (for example, *Intellect* restart), the **Resolution** field is blank. This information is contained in the resolution column of the dbo.PROTOCOL_INC_SERVER table. When resolution=1, an alarm was closed without processing.

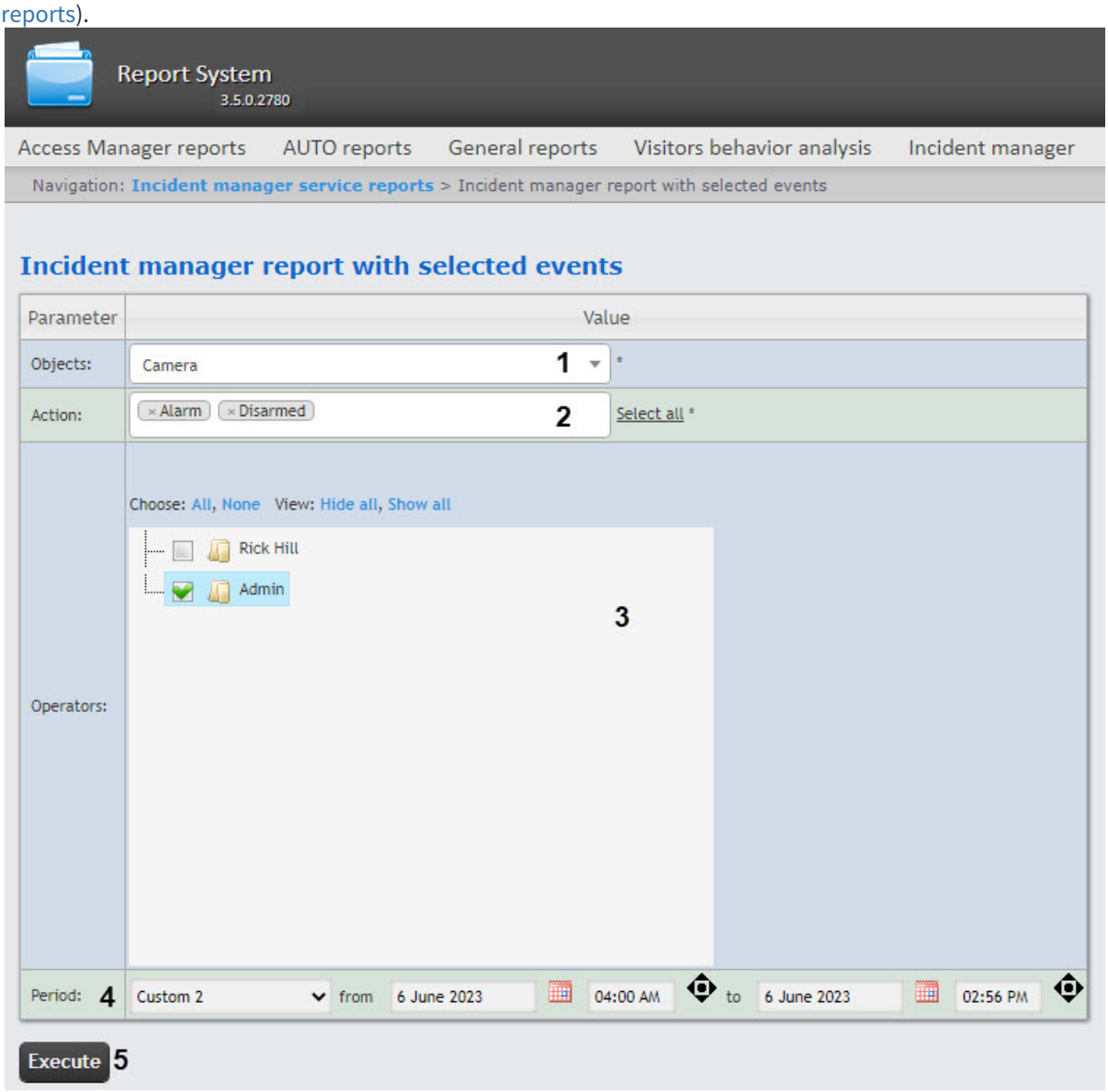
8.5.3 The Incident manager report with selected events

Attention!

To create the **Incident manager report with selected events**, you must first create and configure the **Incident manager** (see Configuring the Incident manager interface object), **Incident server** and **Incident handler** (see Configuring Incident server and Incident handler) objects in *Intellect.*

To create the Incident manager report with selected events, do the following:

1. Select the **Incident manager report with selected events** (see Selecting the type of the Incident manager reports).



2. In the **Objects** field (**1**), from the drop-down list, select the object, the actions with which you want to display in the report. You can also search for an object by name. For this, start entering the name of the object in the field **1**. The search works from the first character.

   > **Note**
   >
   > The **Objects** field displays only those objects that can be assigned a status displayed on the map.

3. In the **Action** field (**2**), from the drop-down list, select those actions with objects by which you want to create the report. You can also use the search by name. For this, start entering the name of the action in the field **2**. The search works from the first character. Click **Select all** to select all available actions with objects from the list. The contents of the list depends on the selected object in the field **1**.
4. In the **Operators** field (**3**), set the checkboxes next to those operators by whose actions you want to create the report. Click **All** to select all objects from the list, click **None** to deselect. Click **Show all** to expand the objects structure. Click **Hide all** to hide the objects structure.
5. From the **Period** drop-down list (**4**), select the time period for which the report should be created. If the **Custom** or **Custom 2** period is selected, enter the date of start and end periods for which the report should 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 should be created using the  button.
6. Click the **Execute** button (**5**) to create the report.

Example of the Incident manager report with selected events:

Incident manager report

Date: from 30 March 2023 00:00:00 to 30 March 2023 13:56:02

Camera 1: Connection 30 March 2023 13:55:26

Server: QA-T50
Resolution: Canceled

Camera 3: Connection 30 March 2023 13:55:25

Server: QA-T50
Resolution: Canceled

Camera 2: Connection 30 March 2023 13:55:25

Server: QA-T50
Resolution: Canceled

Camera 3: Record on disk stopped 30 March 2023 13:54:59

Server: QA-T50
Resolution: Canceled

Date and time	Operator ID	Operator	Server	Message	Operator actions
30 March 2023 13:55:41			QA-T50		

Camera 3: Record off 30 March 2023 13:54:59

Server: QA-T50
Resolution: Processed

Date and time	Operator ID	Operator	Server	Message	Operator actions
30 March 2023 13:55:38	Admin	Admin	QA-T50		kjhgjghkgfhjkgfhj
30 March 2023 13:55:38	Admin	Admin	QA-T50		Send

Note

The Incident manager report with selected events has a **Resolution** field with the **Processed** or **Canceled** values. When you close an event without going through all steps, Resolution: Canceled is displayed. When you close an event with going through all steps, Resolution: Processed is displayed. If an event wasn't processed and wasn't canceled (for example, *Intellect* restart), the **Resolution** field is blank. This information is contained in the resolution column of the dbo.PROTOCOL_INC_SERVER table. When resolution=1, an alarm was closed without processing.

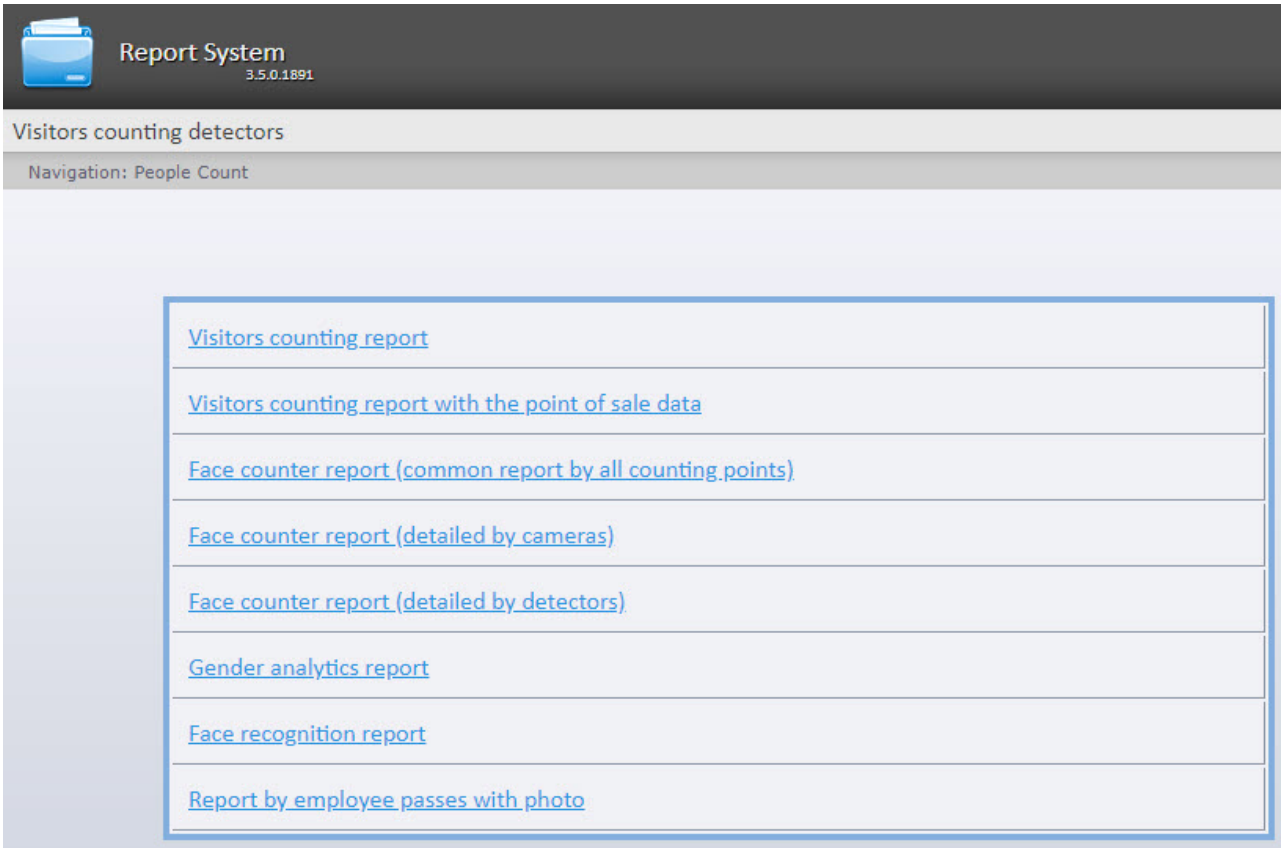
8.6 Working with reports by Visitors counting detectors

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.

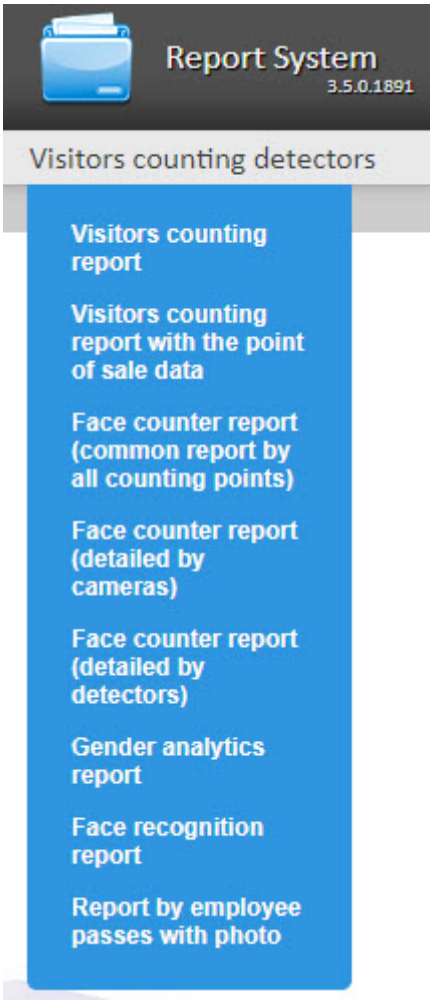
8.6.1 Selecting a type of reports by Visitors counting detectors

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.



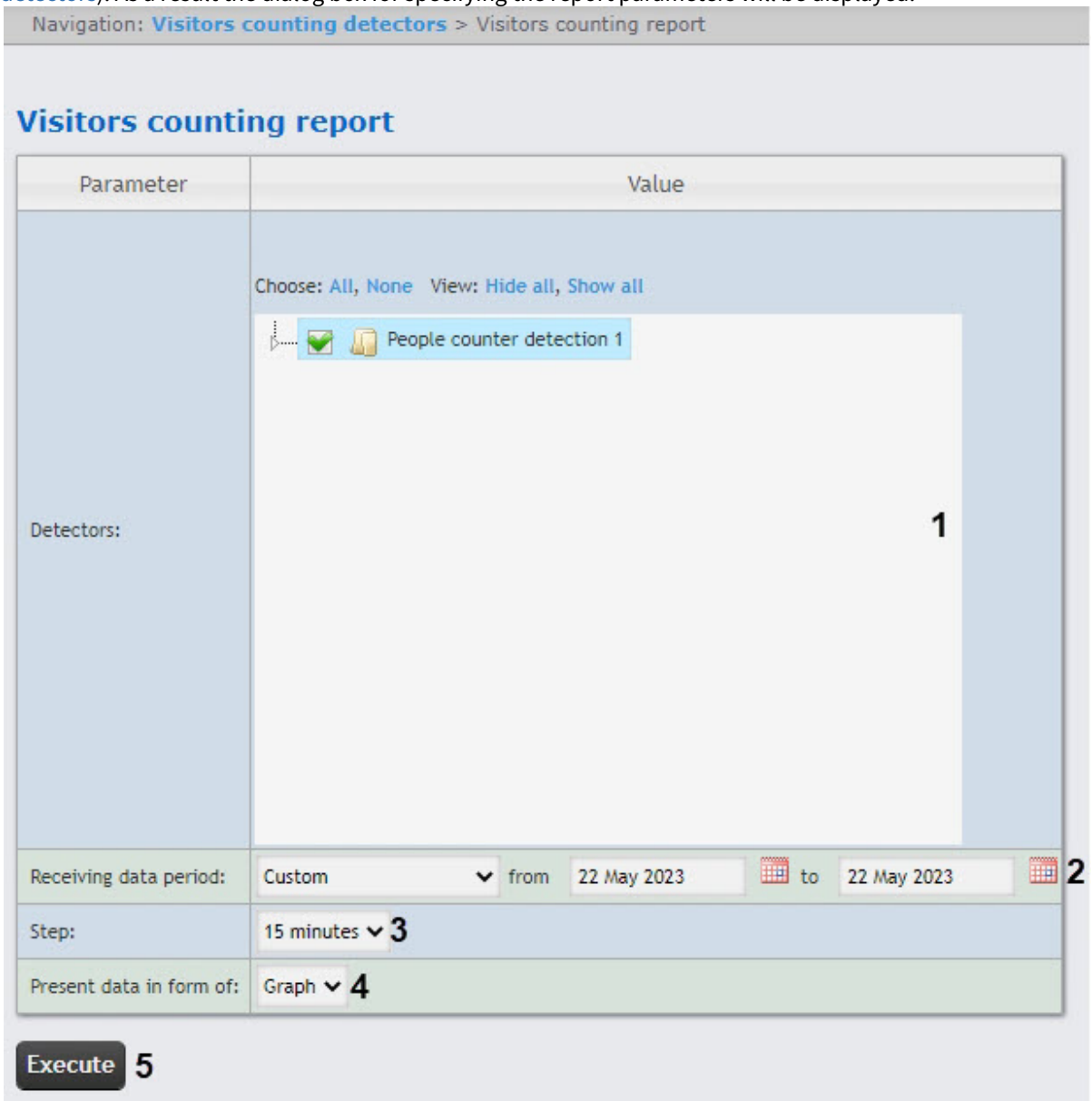
8.6.2 Creating a Visitors counting report

The **Visitors counting report** allows getting the data about the number of entering people. The data can be presented as a table or as a graph.

> **Note**
>
> The **Visitors counting report** is related to the **People counter detection** (it is necessary to create the corresponding object in the *Intellect* software).

o create a **Visitors counting report**, do the following:

1. Select the **Visitors counting report** 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.

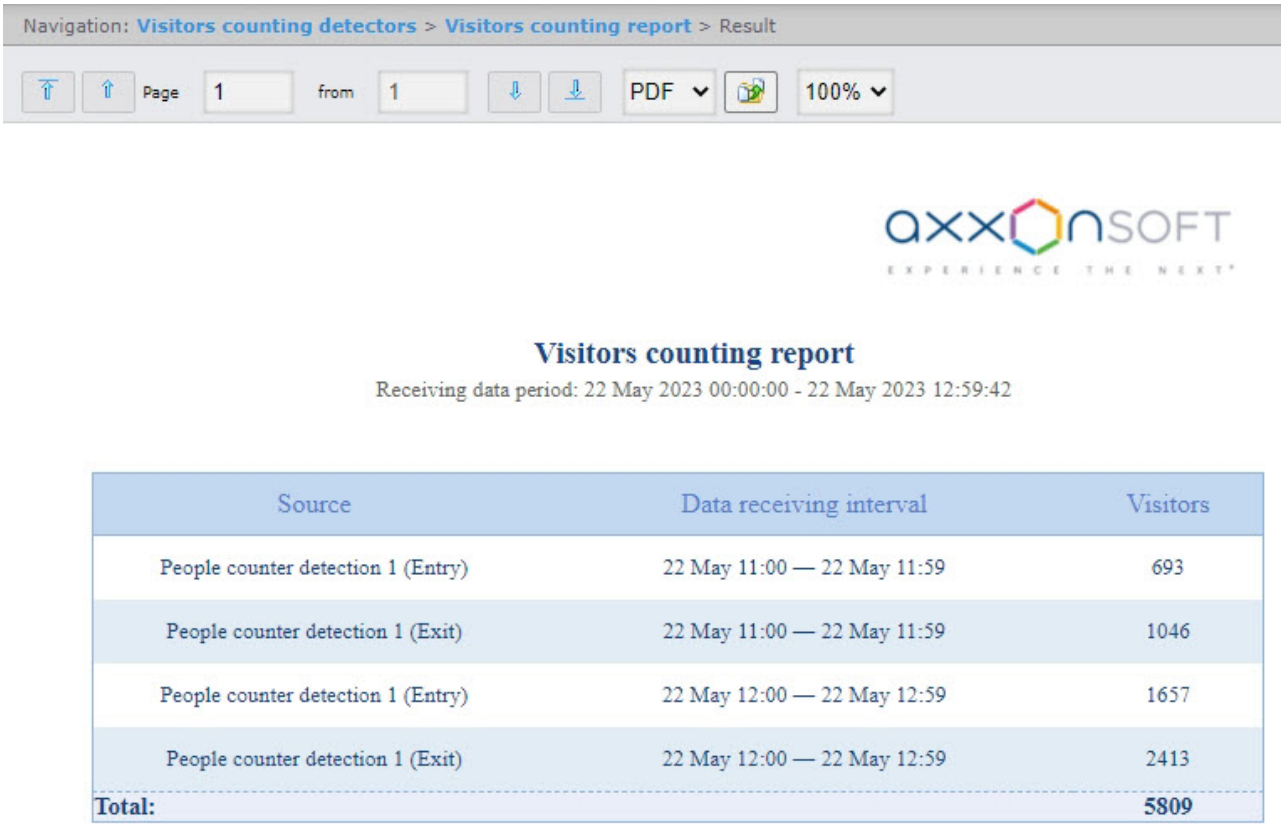


2. Set the report parameters in the following way:
   a. In the **Detectors** field (**1**) set the checkboxes for those **People counter detection** objects which data should be displayed in the report. You can also set the **Entry** and/or **Exit** checkboxes to build a report on the number of entered 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**). 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.
   c. From the **Step** drop-down list (**3**) 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).
   d. From the **Present data in form of** drop-down list (**4**), select the report format: **Table** or **Graph**.
3. To create a report click **Execute** (**5**).

As a result the report with specified parameters will be displayed.
The example of the report for the current day period as a graph:



The example of the report for the current day period as a table:



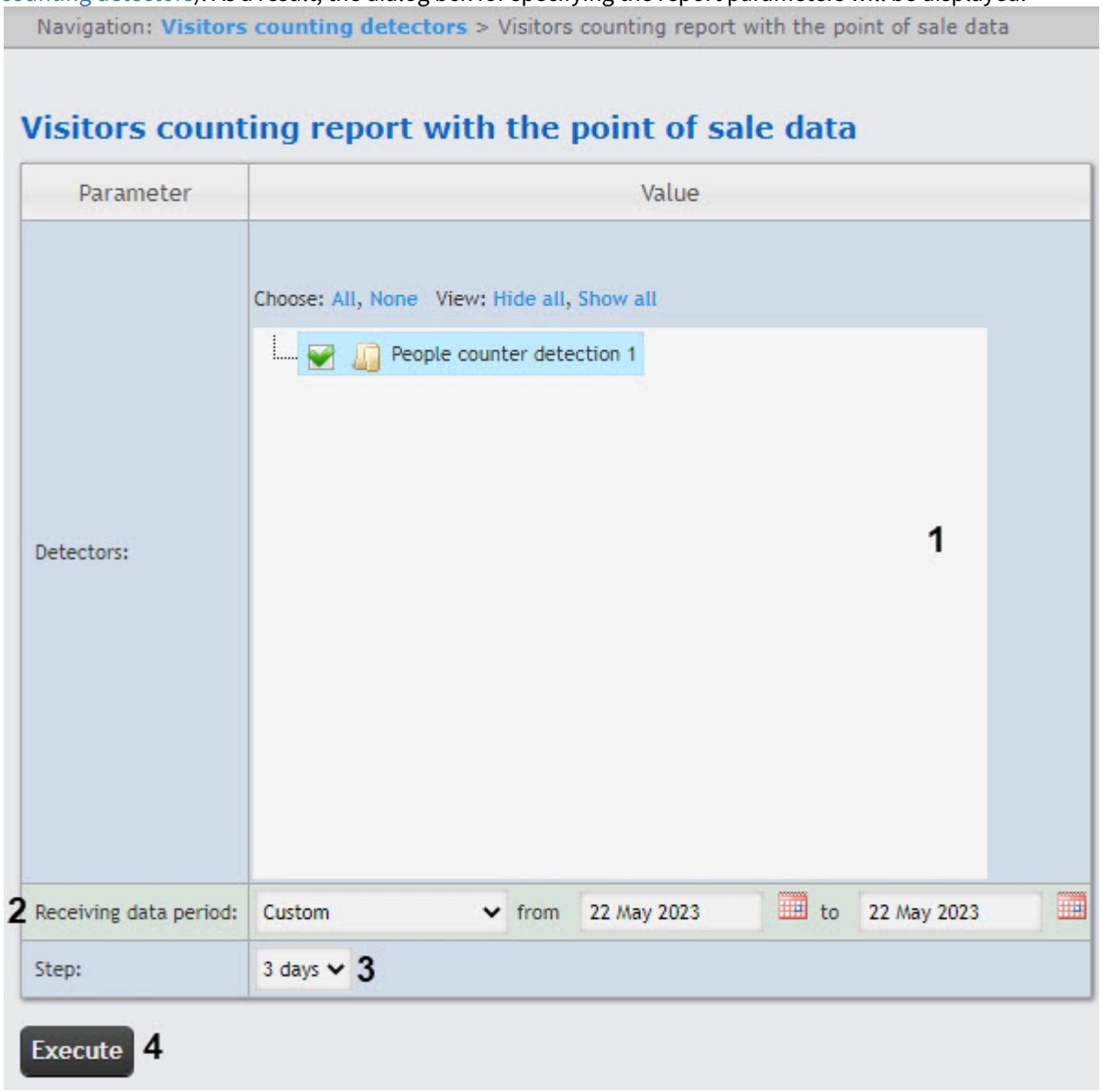
8.6.3 Creating Visitors counting report with the point of sale data

The **Visitors counting report with the point of sale data** allows you to get 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** belongs to the *People Counter detector* and *POS Intellect* (it is necessary to create the corresponding objects in *Intellect* and configure *POS Intellect* (for details, see Administrator's Guide)). The information about the profits brought by visitors is received from the database of the Server, which was specified during POS Intellect installation.

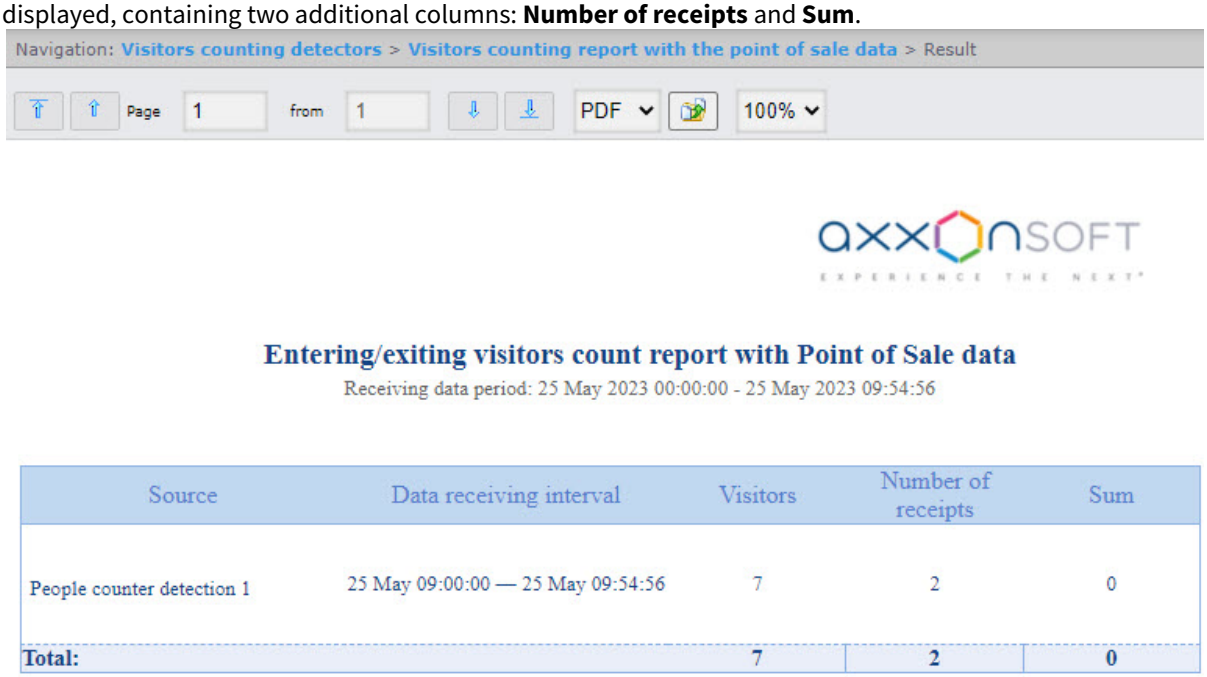
To create the **Visitors counting report with the point of sale data**, do the following:

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. In the **Detectors** field (**1**), set the checkboxes next to those **People counter detection** objects, the information on which should be displayed in the report.
3. From the **Receiving data period** drop-down list (**2**), select the time period for which the report should be created. If the **Custom** time period is selected, enter the date of start and end periods in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
4. From the **Step** drop-down list (**3**), select the time period during which the data received from people counter detection will be summarized. The value of this field depends on the selected receiving data period.
5. Click the **Execute** button (**4**).
   As a result, the **Visitors counting report with the point of sale data** with the specified parameters will be

displayed, containing two additional columns: **Number of receipts** and **Sum**.



8.6.4 Creating a Face counter report (common report by all counting points)

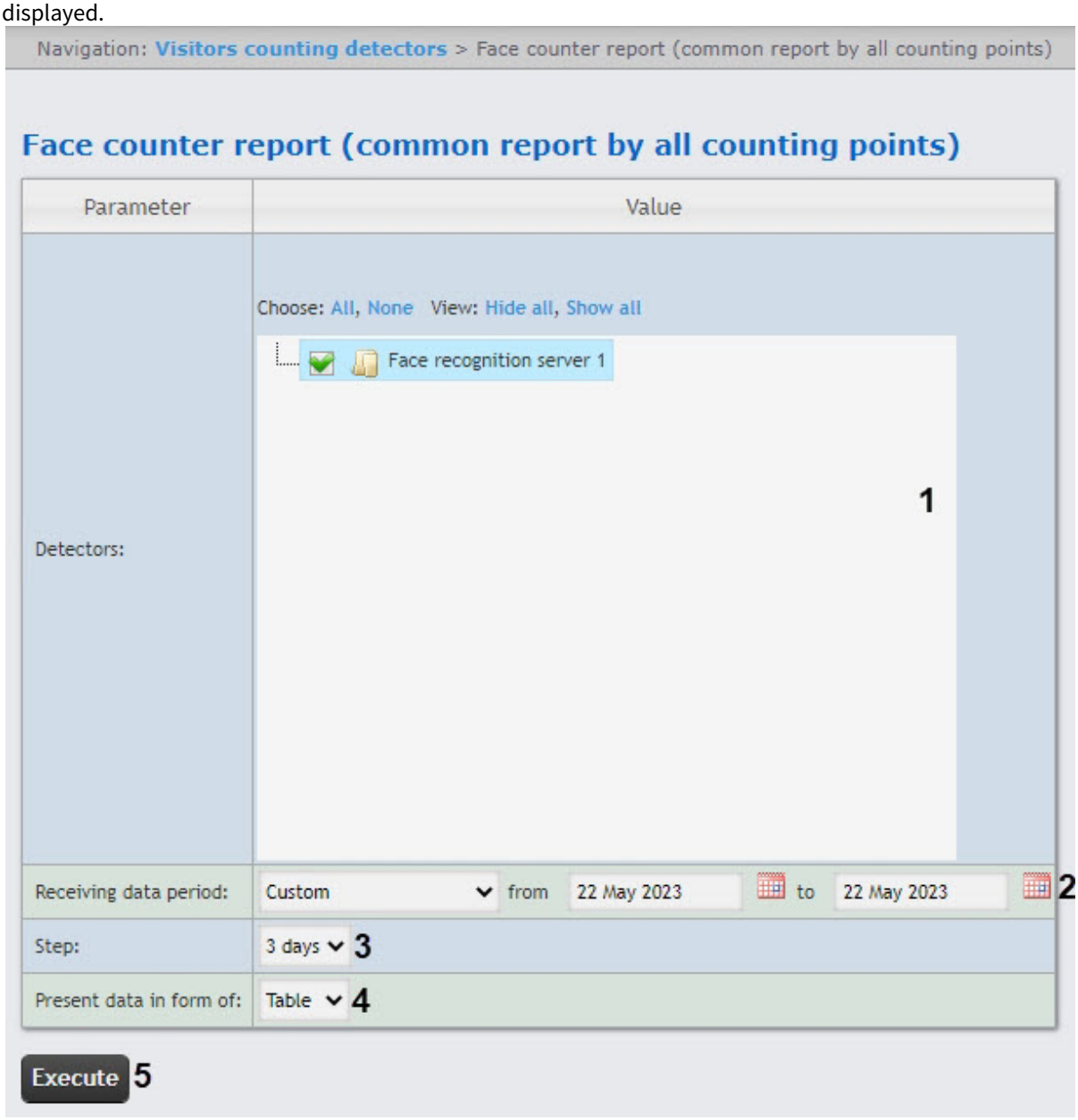
The **Face counter report (common report by all counting points)** allows getting data about the number of captured faces (people/persons) using the data from the face recognition servers. The data can be presented as a table and a graph.

> **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 *Intellect*).

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. From the **Receiving data period** drop-down list select the time period for which the report is to be created (**2**). 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.
   c. From the **Step** drop-down list (**3**) 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).
   d. From the **Present data in form of** drop-down list (**4**), select the report format: **Table** or **Graph**.
3. To create a report click **Execute** (**5**).

Example of a face counter report by all counting points as a table is given in the following figure.

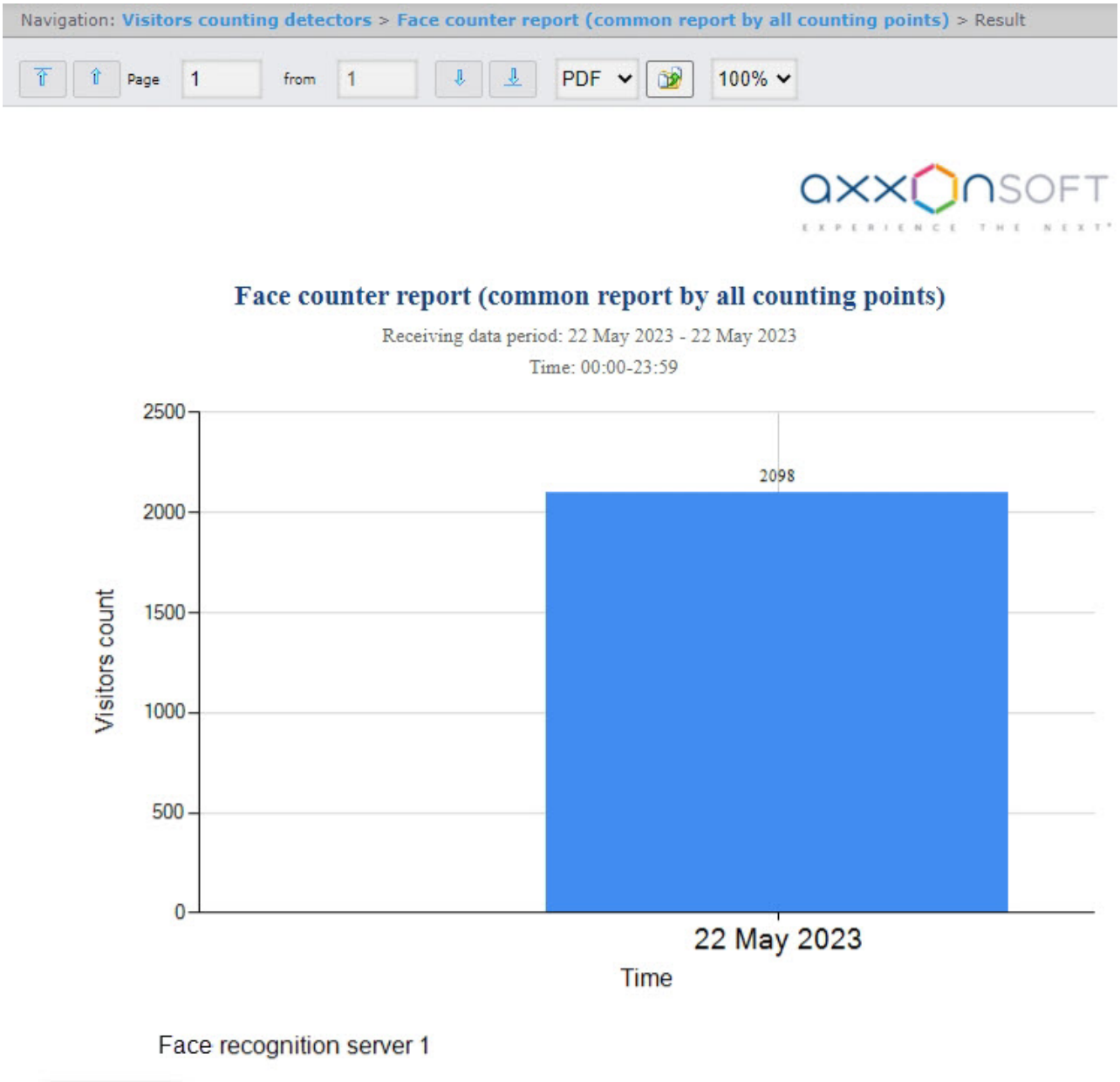
Face counter report (common report by all counting points)

Receiving data period: 17 May 2023 - 17 May 2023

Time: 00:00-23:59

Source	Data receiving interval	Visitors
Face recognition server 1	17 May 11:00 — 17 May 11:56	81
Total:		**81**

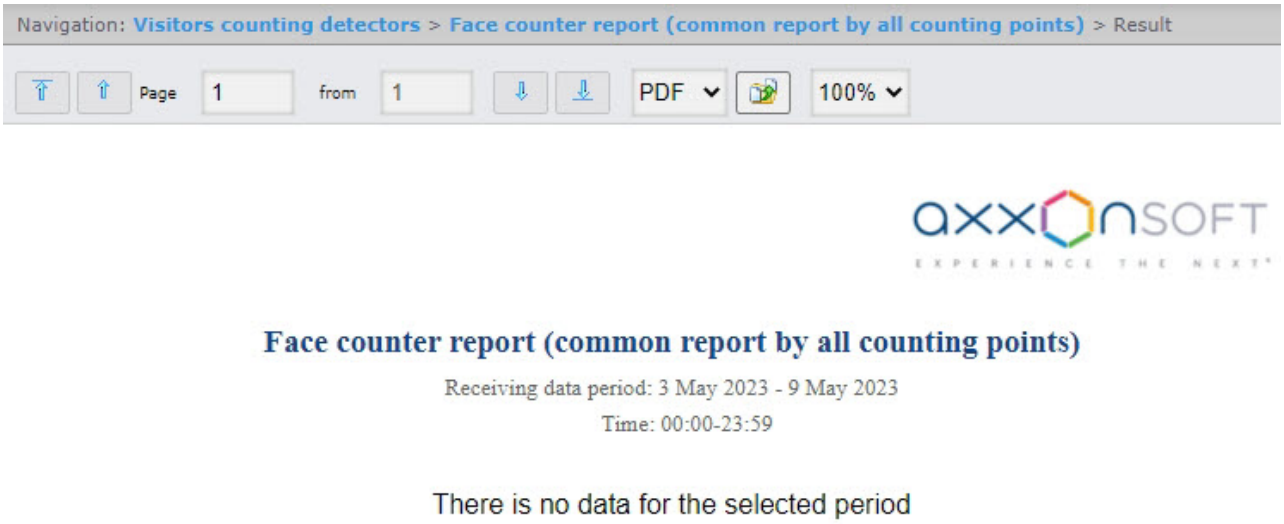
Example of a face counter report by all counting points as a graph is given in the following figure.



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.



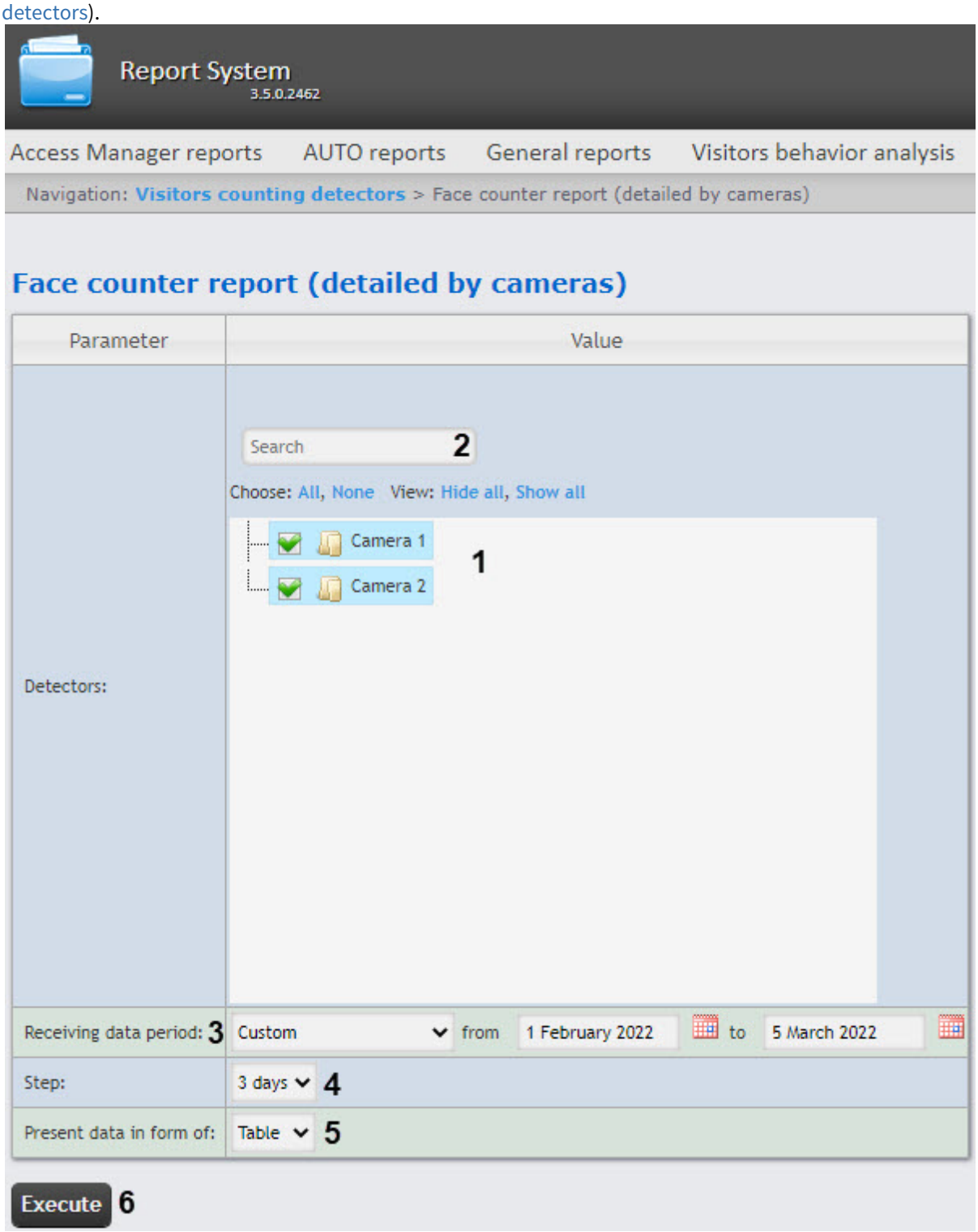
8.6.5 Creating a Face counter report (detailed by cameras)

The **Face counter report (detailed by cameras)** allows getting data on the number of the captured faces (people) using the data from the video cameras. The data can be presented as a table and as 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 *Intellect* (see Creating and configuring the Camera object).

To generate 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).

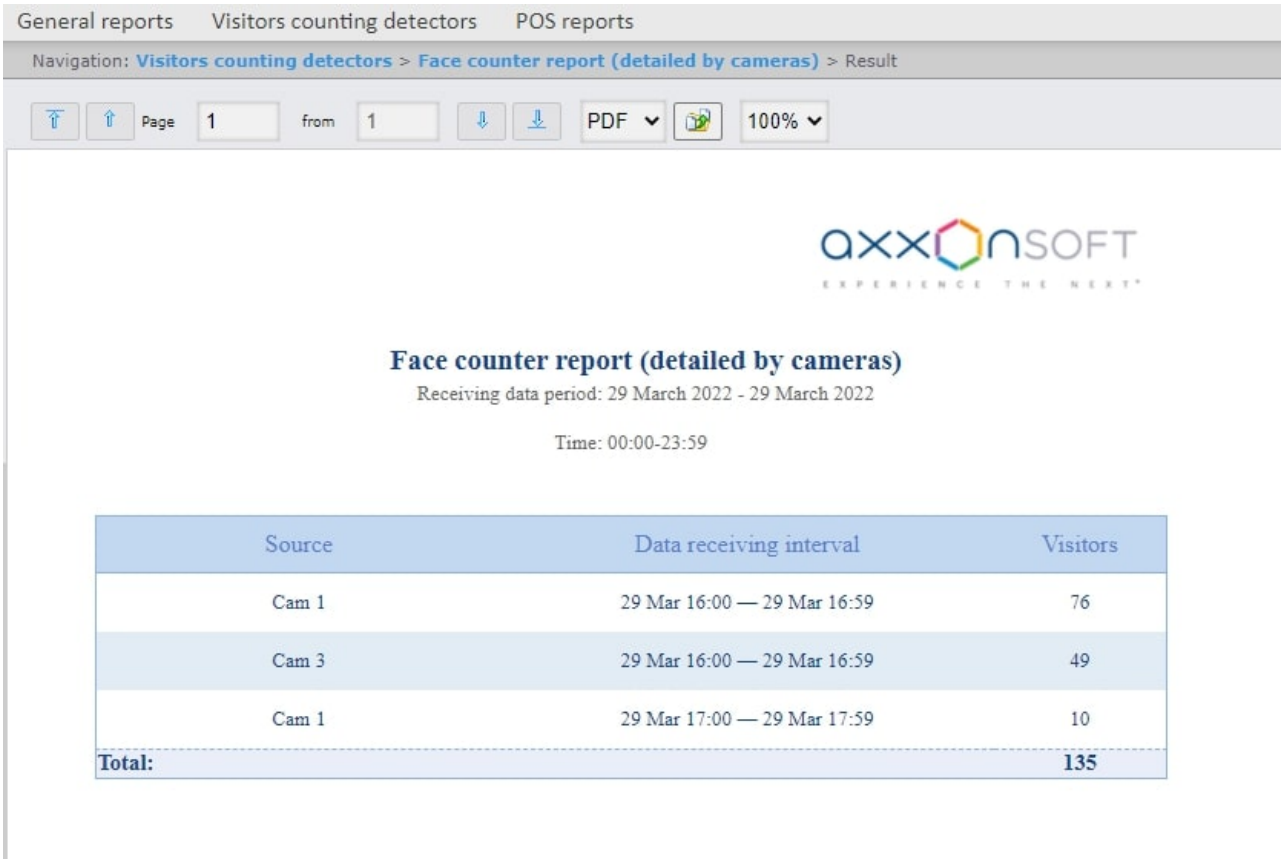


2. In the **Detectors** field, set checkboxes for those **Camera** objects, the information on which should be displayed in the report (**1**).
3. To use the search when selecting camera, in the search field (**2**) start entering the camera name. The search works starting from the first character. The results will be highlighted in a different color. Click **All** to select

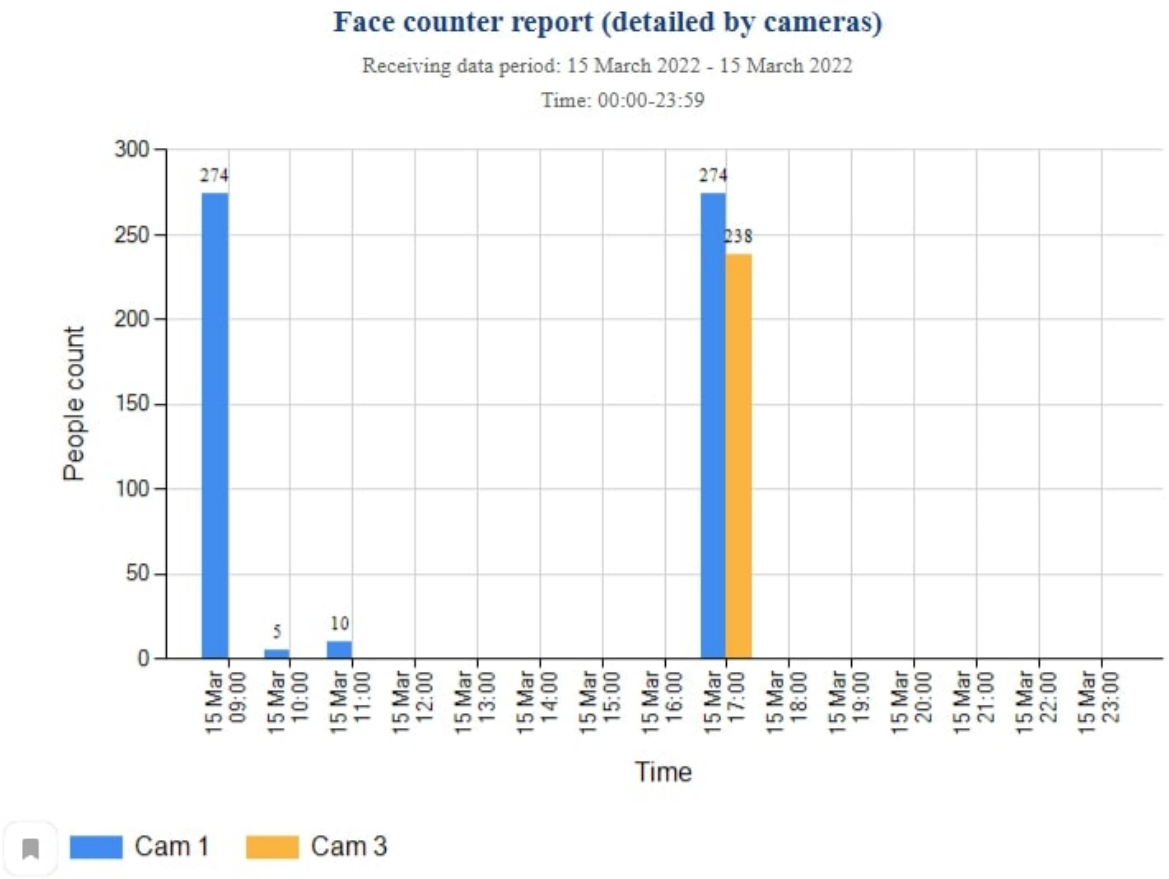
all found or available objects. Click **None** to deselect. Click **Show all** to expand the object structure. Click **Hide all** to hide the object structure.

4. From the **Receiving data period** drop-down list (**3**), select the time period for which the report should be created. If the **Custom** period is selected, enter the date of start and end periods for which the report should 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. From the **Step** drop-down list (**4**), select the time period, during which the data recieved from the face recognition server will be summarized. The list of the available intervals depends on the selected period (**3**).
6. From the **Present data in form of** drop-down list (**5**), select the form in which the data will be presented in the report: **Table** or **Graph**.
7. Click the **Execute** button (**6**) to generate the report.

Example of the **Face counter report (detailed by cameras)** in the form of a table:



Example of the **Face counter report (detailed by cameras)** in the form of a graph:



Note

People in the report refer to the number of the captured faces, not the number of the unique visitors.

8.6.6 Creating a Face counter report (detailed by detectors)

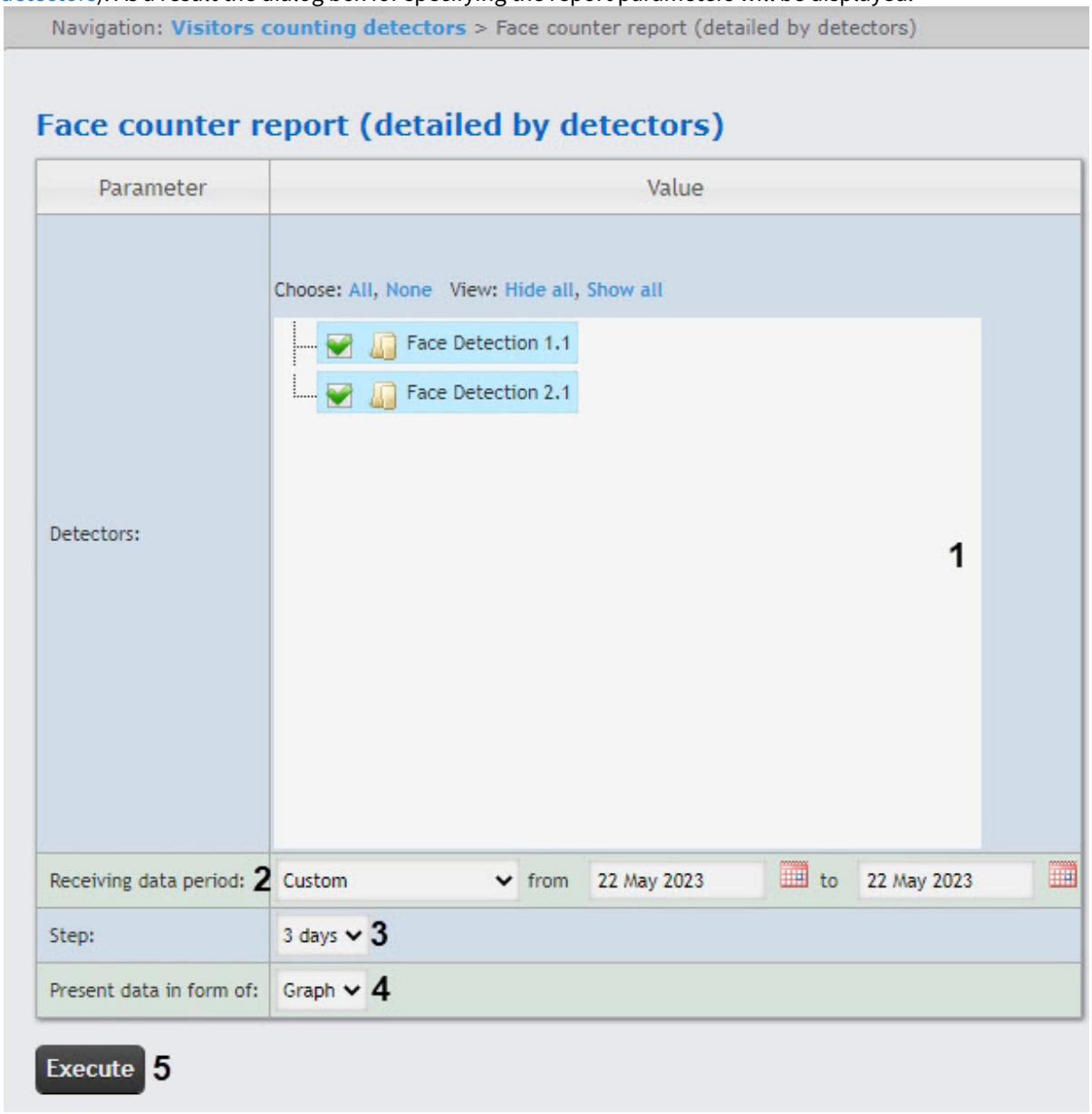
The **Face counter report (detailed by detectors)** allows getting the data about the number of captured faces (people/persons) using the data from the face detectors. The data can be presented only as a table.

Note

The **Face counter report (detailed by detectors)** is related to the **Face Detection** object (it is necessary to create the corresponding object in the *Intellect* software).

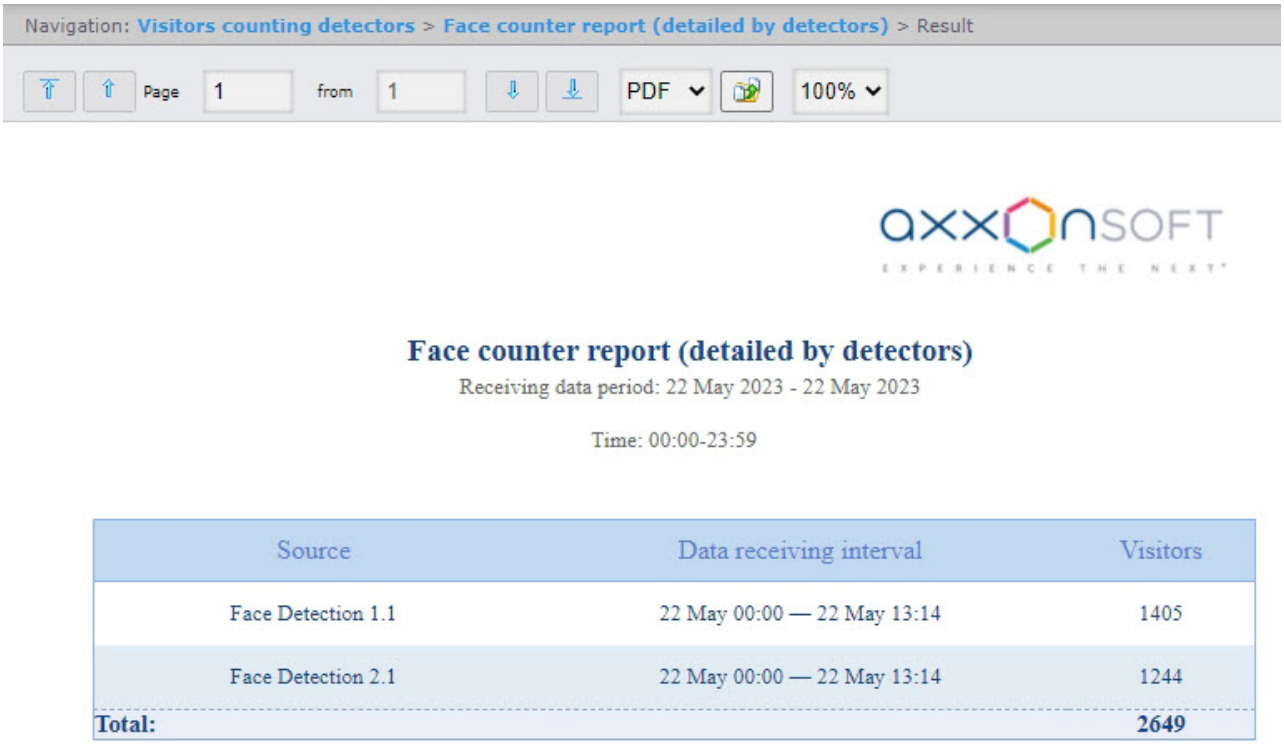
To create the **Face counter report (detailed by detectors)**, do the following:

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. In the **Detectors** field, set checkboxes for those **Face Detection** objects, the information on which should be displayed in the report (**1**).
3. From the **Receiving data period** drop-down list (**2**), select the time period for which the report should be created. If the **Custom** period is selected, enter the date of start and end periods for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
4. In the **Step** field (**3**), enter the time period, during which the data recieved from the face recognition server will be summarized. The list of the available intervals depends on the selected period (**2**).
5. In the **Present data in form of** field (**4**), select the form in which the data will be presented in the report: **Table** or **Graph**
6. To create a report click **Execute** (**5**).

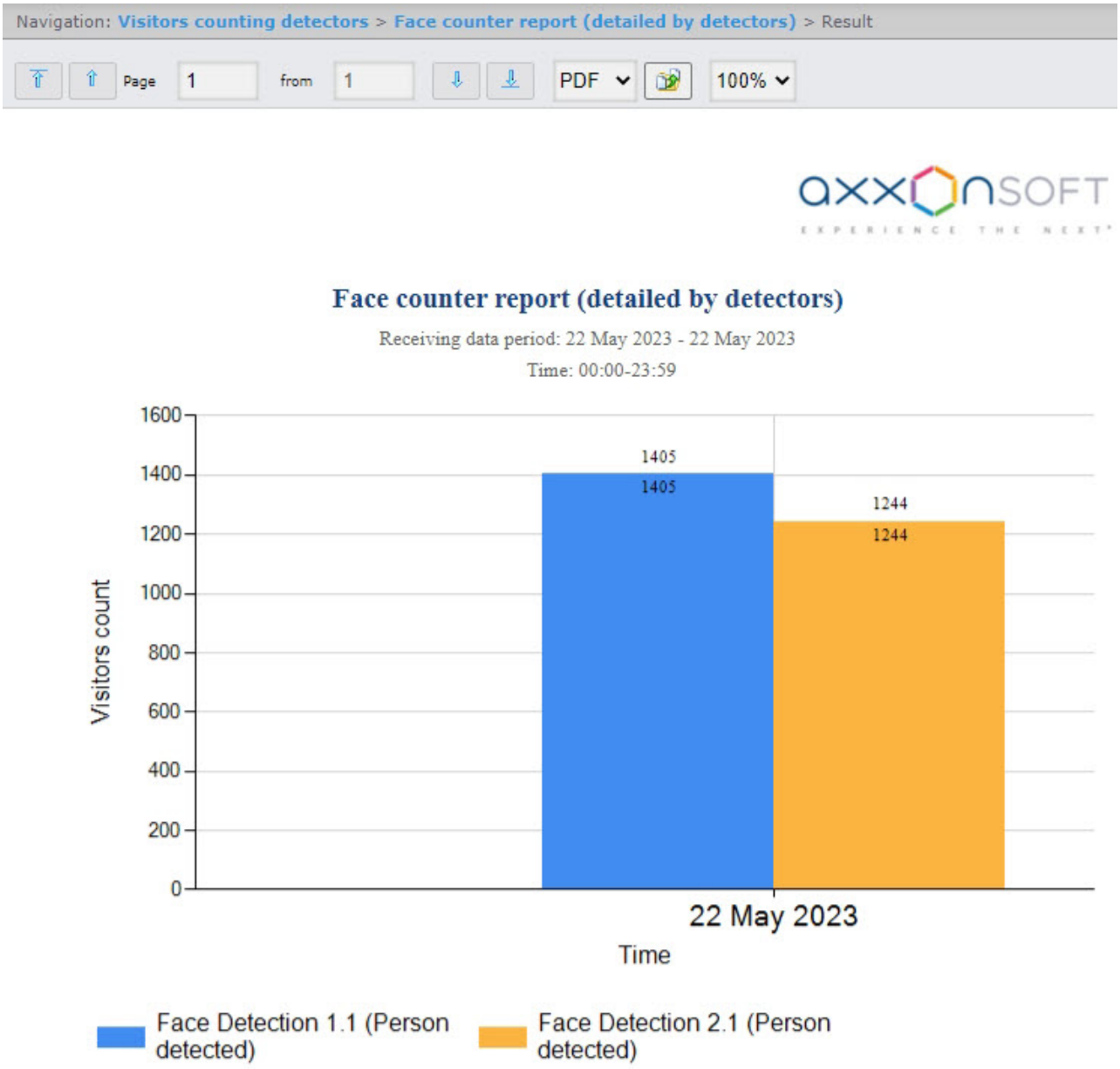
Example of the **Face counter report (detailed by detectors)** as a table is given in the following figure.



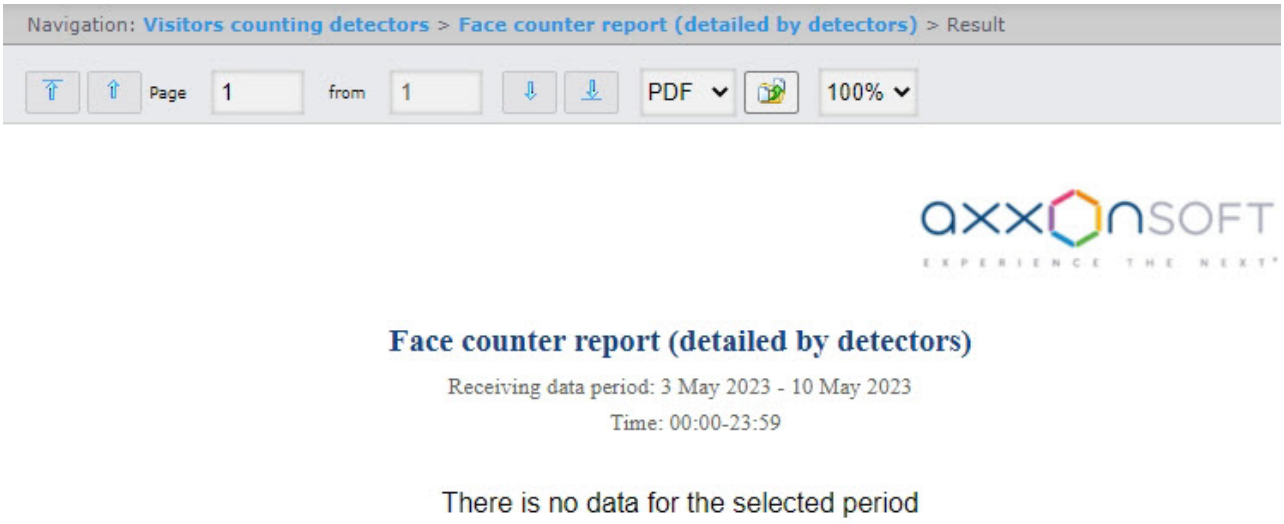
Note

The number of people (persons) in the report means the number of captured faces, not the number of unique visitors.

Example of the **Face counter report (detailed by detectors)** as a graph is given in the following figure.



If there is no data for specified time period, the report will be displayed as in the following figure.



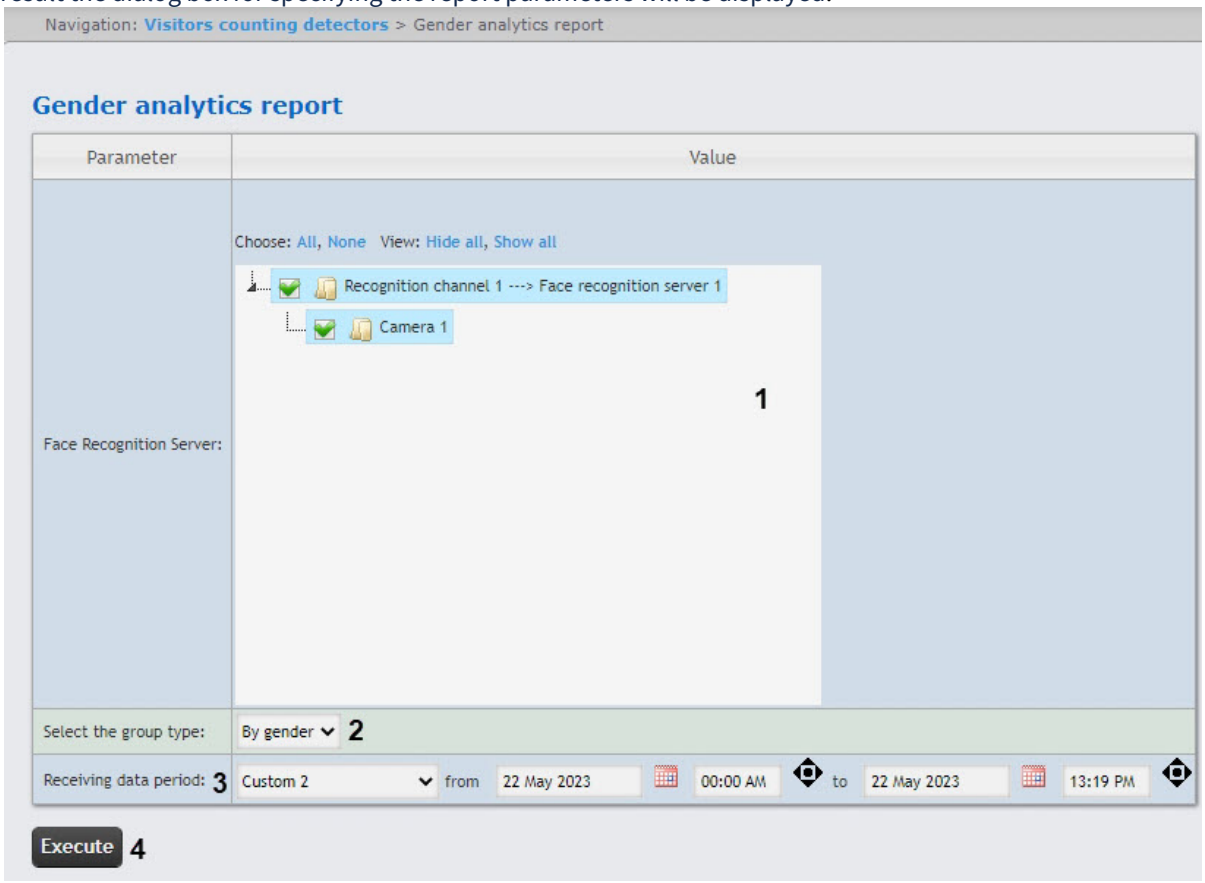
8.6.7 Gender analytics report

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 **Face recognition server** module (it is necessary to create and configure the corresponding object in *Face 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.



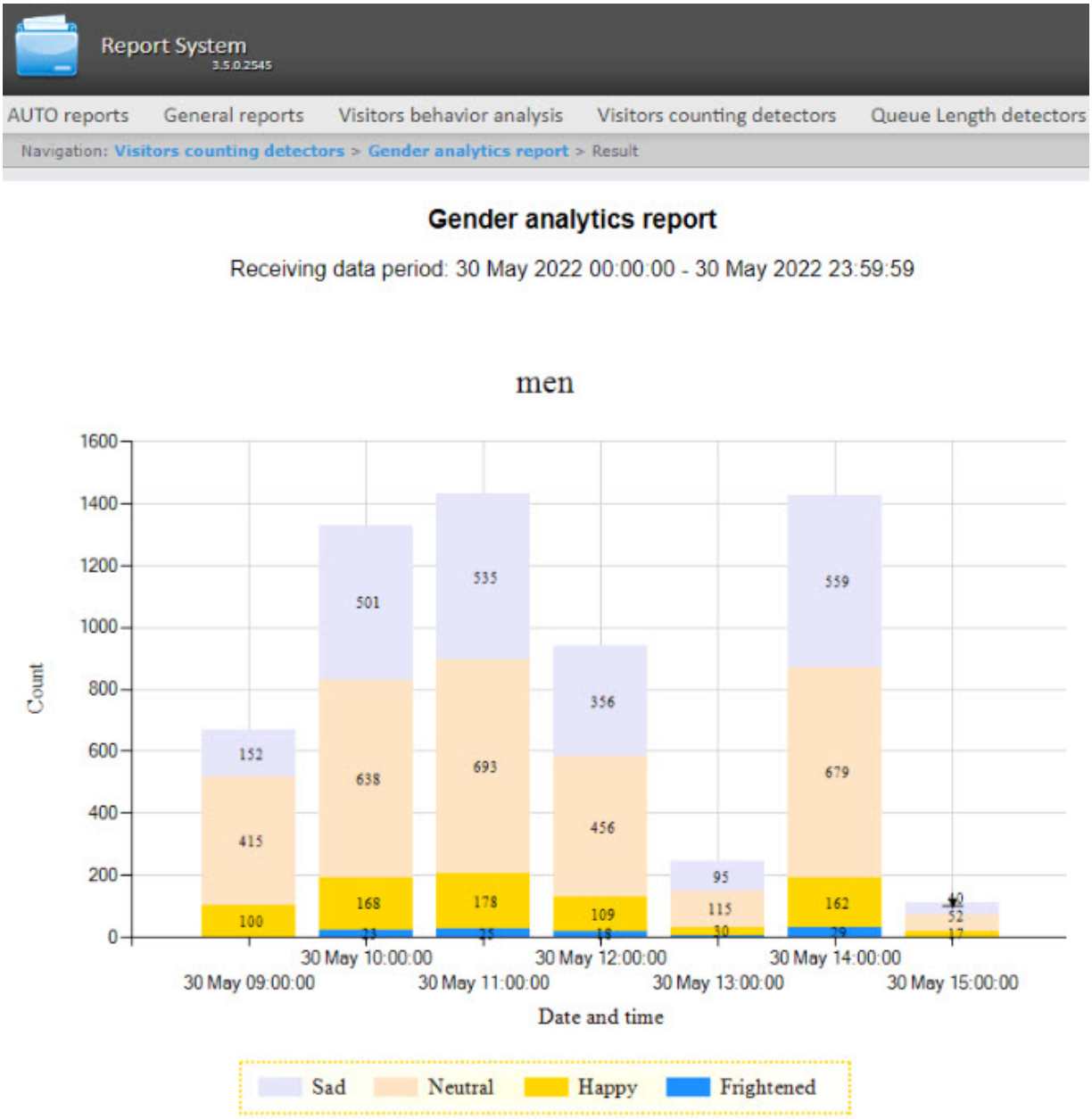
2. Set the report parameters in the following way:
   a. In the **Face Recognition Server** field (**1**), set the checkboxes for those **Face recognition server** and **Camera** objects, the information from which should be displayed in the report.
   b. From the **Select the group type** drop-down list (**2**), 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.

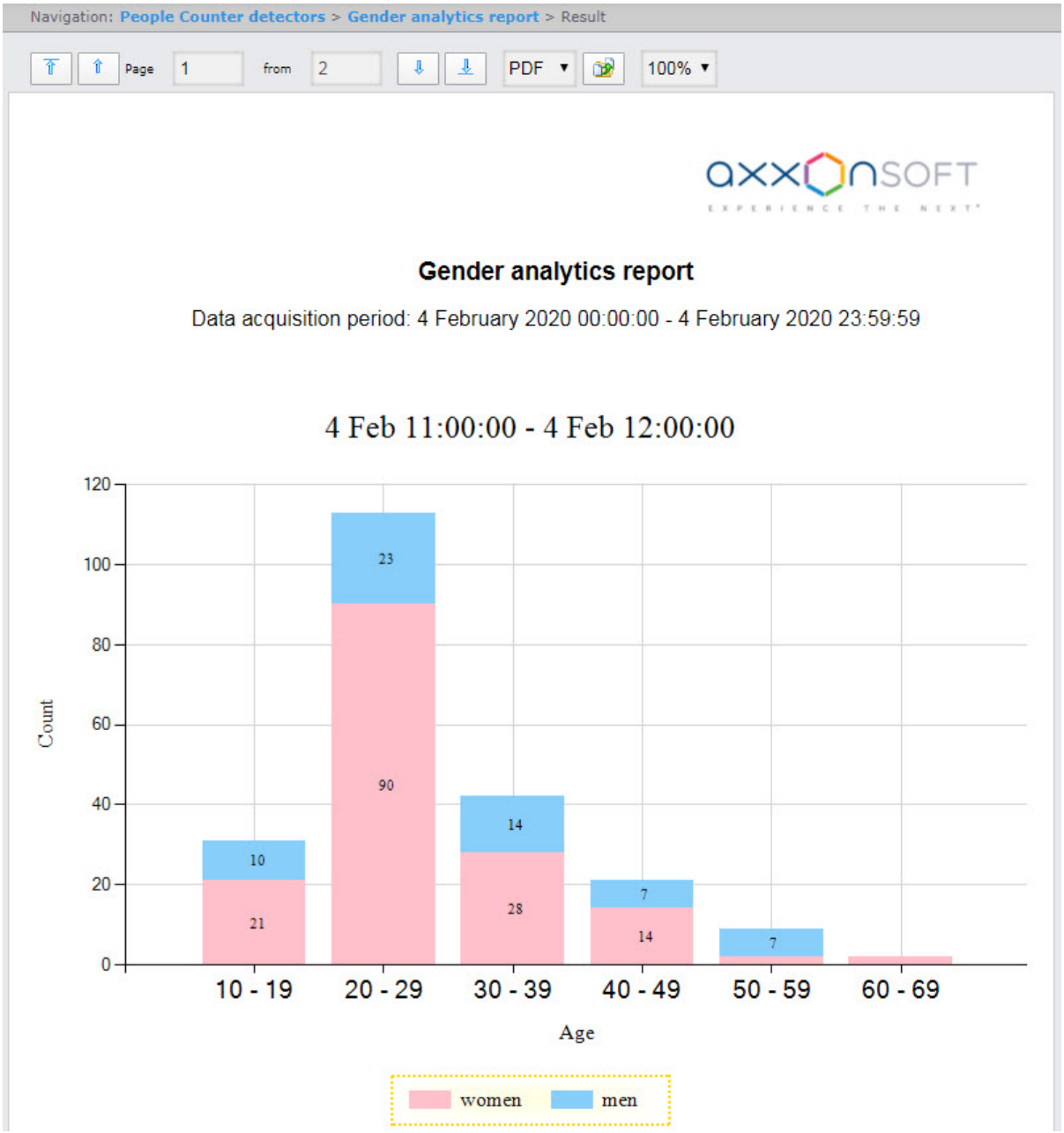
   c. From the **Period** drop-down list (**3**), select the time period for which you want to build a report.

> **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 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** (**4**). 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:

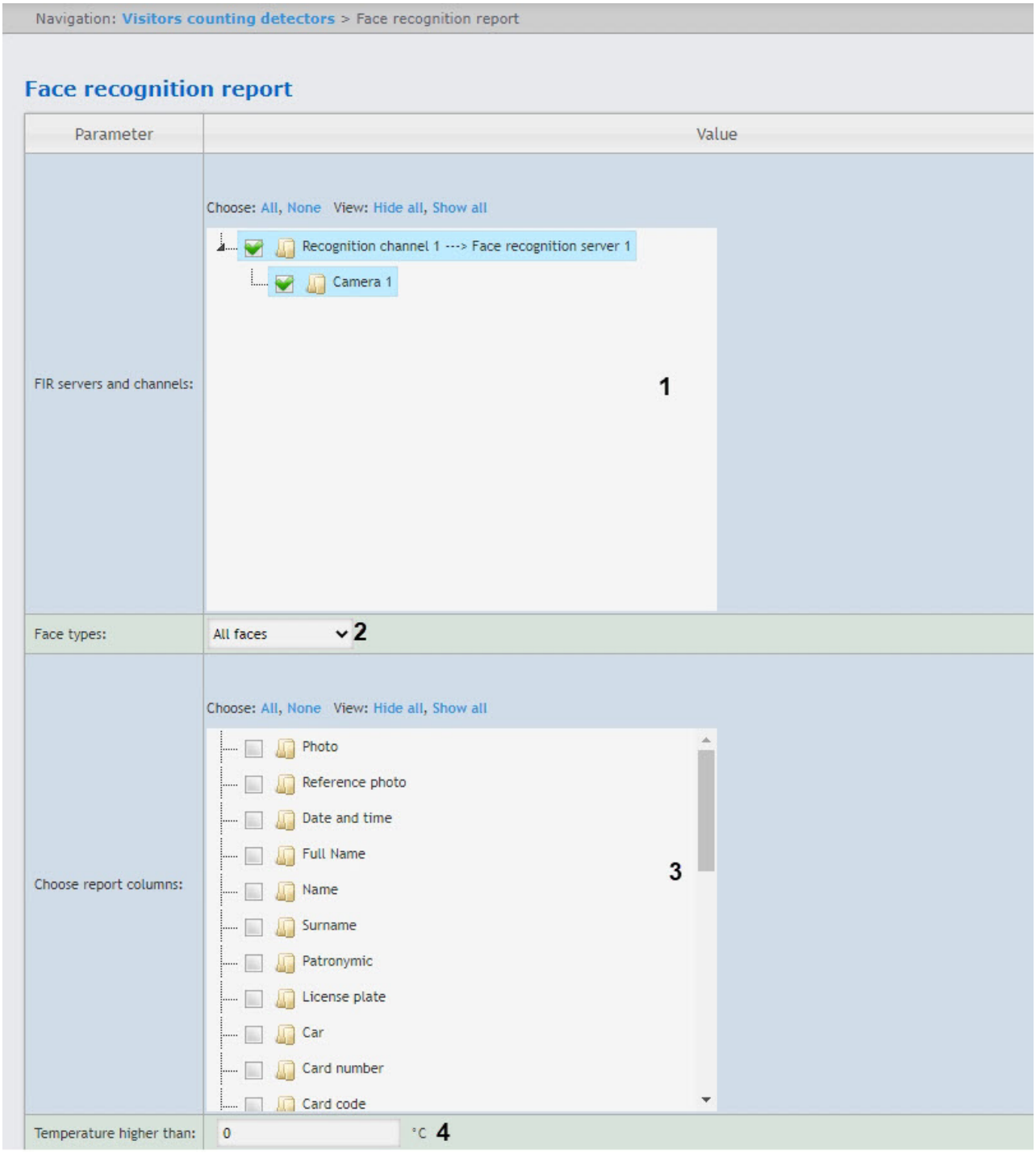


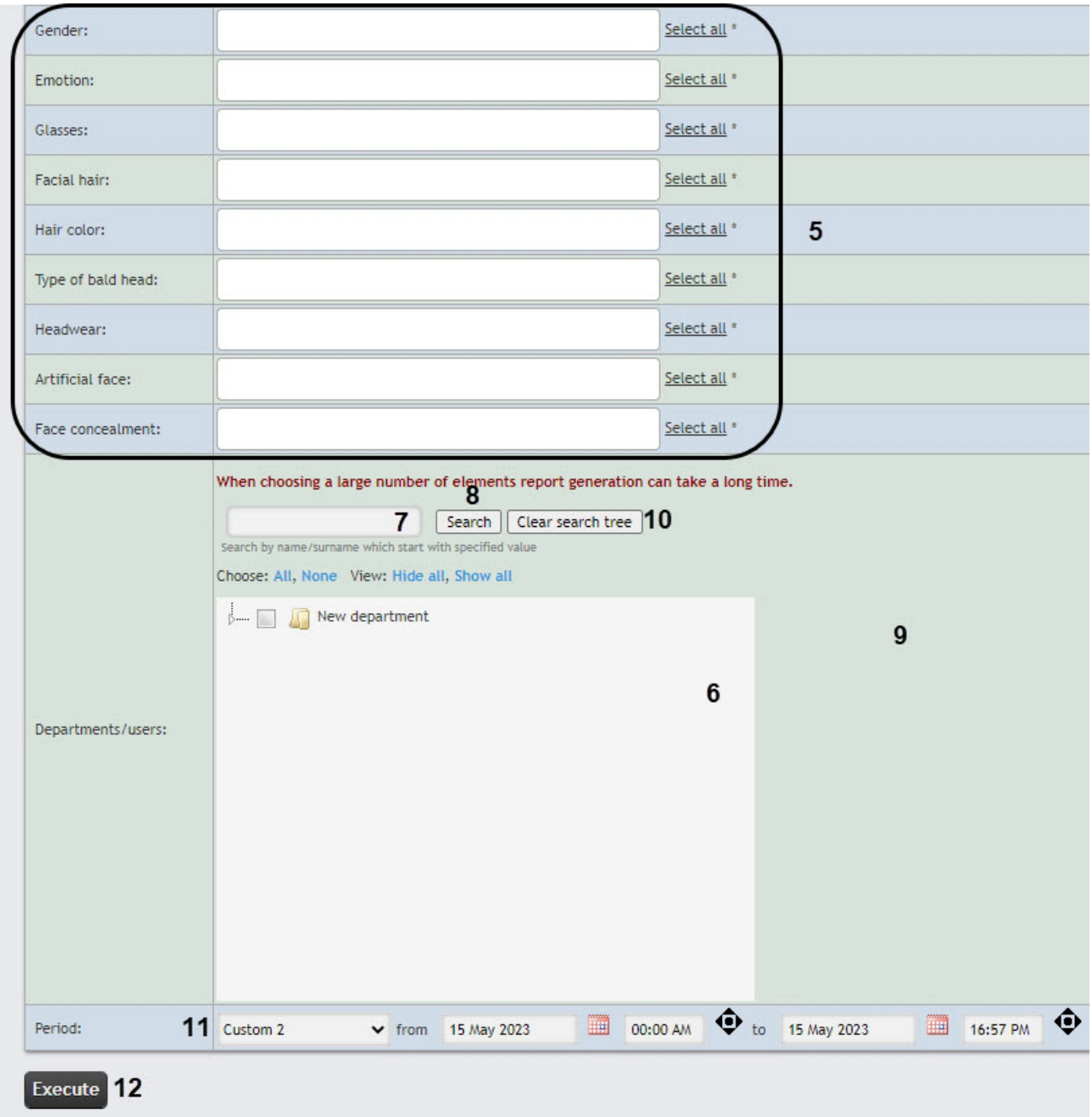
8.6.8 Face recognition report

The **Face recognition report** allows you to receive the data on recognized/unrecognized faces from *Face Intellect* for a certain period of time. The data are presented in the form of a table.

> **Note**
>
> The **Face recognition report** is a part of the **Face characteristics recognition channel** module and **Face Recognition Server**. It is necessary to create and configure the corresponding objects in *Face Intellect* (see Face Intellect configuration and setup procedure).

To generate the report, select the **Face recognition report** from the list of *Access Manager* reports (see Selecting a type of reports by Visitors counting detectors) and specify the report parameters in the opened form.





1. From the **FIR servers and channels** drop-down list (**1**), select the **Face Recognition Server** object, the information from which should be displayed in the report.
2. From the **Face types** drop-down list (**2**), select the face types the information on which should be displayed in the report:
    - **All faces**;
    - **Only unrecognized**;
    - **Only recognized**.
3. In the **Choose report columns** field (**3**), set the checkboxes 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. You can select up to 6 columns.
4. In the **Temperature higher than** field (**4**), set the value for filter of face temperature that should be displayed in the report.

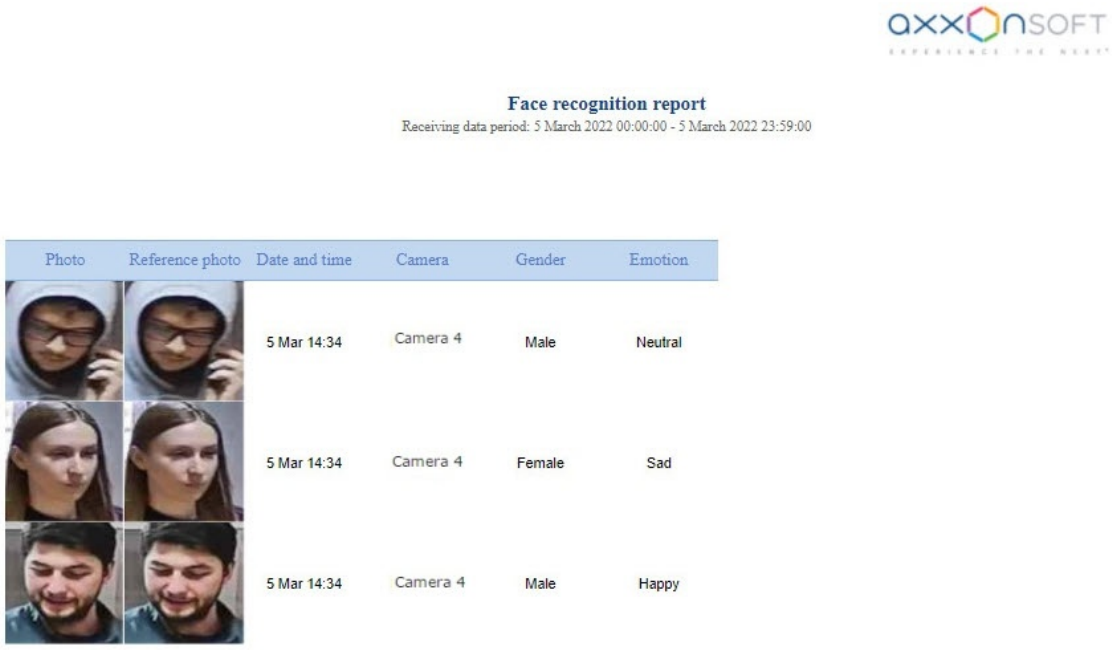
5. If necessary, in area (**5**), set a filter by face characteristics and temperature, selecting only those face characteristics that should be displayed in the report.
6. In the **Departments/users** field (**6**),set the checkboxes next to those departments or employees, the information on which should be displayed in the report. Click **All** to select all found departments and employees, click **None** to deselect. Click **Show all** to expand the department structure, click **Hide all** to hide the structure.
7. You can find an employee by their first name or surname using the search. For this, enter in the search field (**7**) at least 4 first characters of the employee's first name or surname and click the **Search** button (**8**). The department to which the found employee belongs will be displayed in the search tree in the area **9**. To clear the search field and the search tree, click the **Clear search tree** button (**10**). Selecting the department is not available when selecting **Only unrecognized** face type (see step 2).
8. In the **Period** fields (**11**) select the time period for which you want to generate the report.

   Note

   - If the **Custom 2** period is selected, enter the date of start and end periods for which the report should 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.

9. Click the **Execute** button (**12**). As a result, the report with the specified parameters is generated.

   Example of a face recognition report:



All possible fields of the report are described in the table.

Field name	Description
Photo	Photo from the camera

Field name	Description
Reference photo	Employee's photo from the *Face Intellect* database
Date and time	Employee's face recognition date and time
Full Name	Employee's full name
Name	Employee's first name
Surname	Employee's last name
Patronymic	Employee's patronymic
License plate	Employee's car license plate number
Car	Employee's car brand
Card number	Employee's access card number
Card code	Employee's access card code
Date of card issue	Employee's access card issue date
Access levels	Employee's access level
Phone	Employee's phone number
Company/Department	Company/Department where the employee works
Department	Department to which the employee belongs
Comment	Comment
Card expiration date	Employee's access card expiration date
Pin code	Employee's access card pin code
Temperature	Employee's face temperature in degrees Celsius
Gender	Employee's gender
Emotion	Employee's emotion
Glasses	Glasses on face
Facial hair	Facial hair
Hair color	Hair color

Field name	Description
Type of bald head	Type of bald head
Headwear	Headwear
Artificial face	Artificial face
Face concealment	Face concealment

The face recognition report is generated.

Note

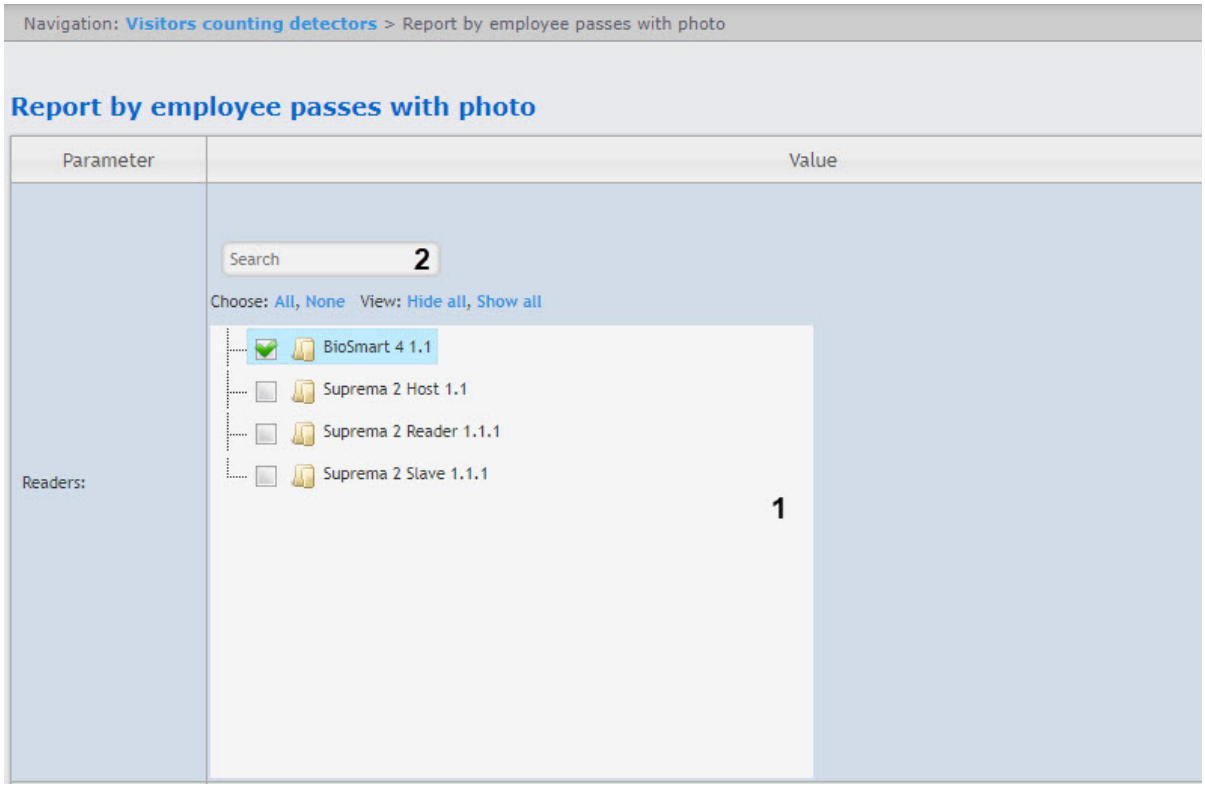
The maximum number of faces in the report is 1000. The data on other faces will not be displayed in the face recognition report.

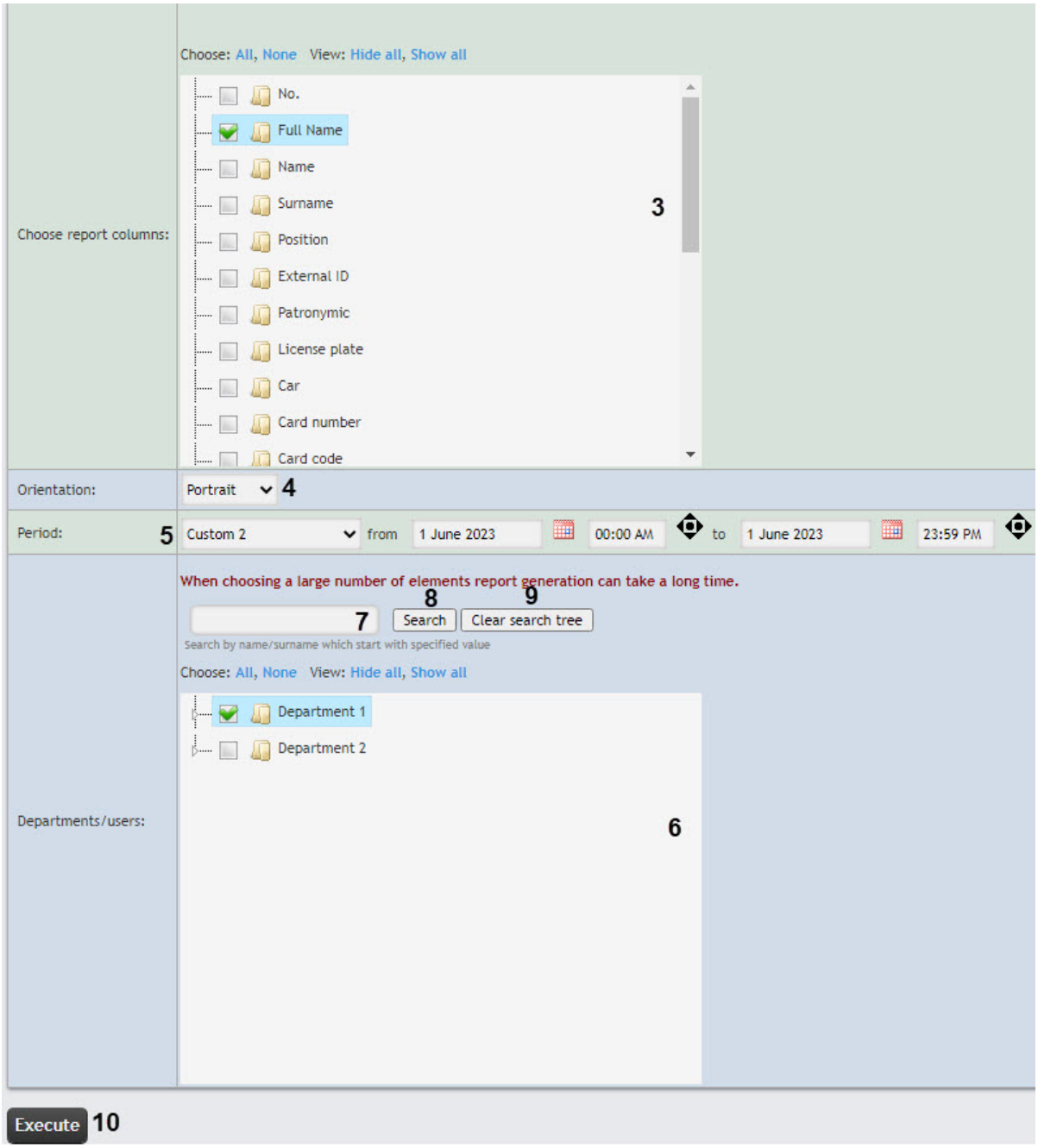
8.6.9 Report by employee passes with photo

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.


Navigation: Visitors counting detectors > Report by employee passes with photo
Report by employee passes with photo
Parameter
Value
Readers:
Search
2
Choose: All, None View: Hide all, Show all
BioSmart 4 1.1
Suprema 2 Host 1.1
Suprema 2 Reader 1.1.1
Suprema 2 Slave 1.1.1
1



2. 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).

3. To use the search when selecting readers, in the search field (**2**) start entering the reader name. The search works starting from the fourth character. The results will be highlighted in a different color. Click **All** to select all found or available objects. Click **None** to deselect. Click **Show all** to expand the object structure. Click **Hide all** to hide the object structure.

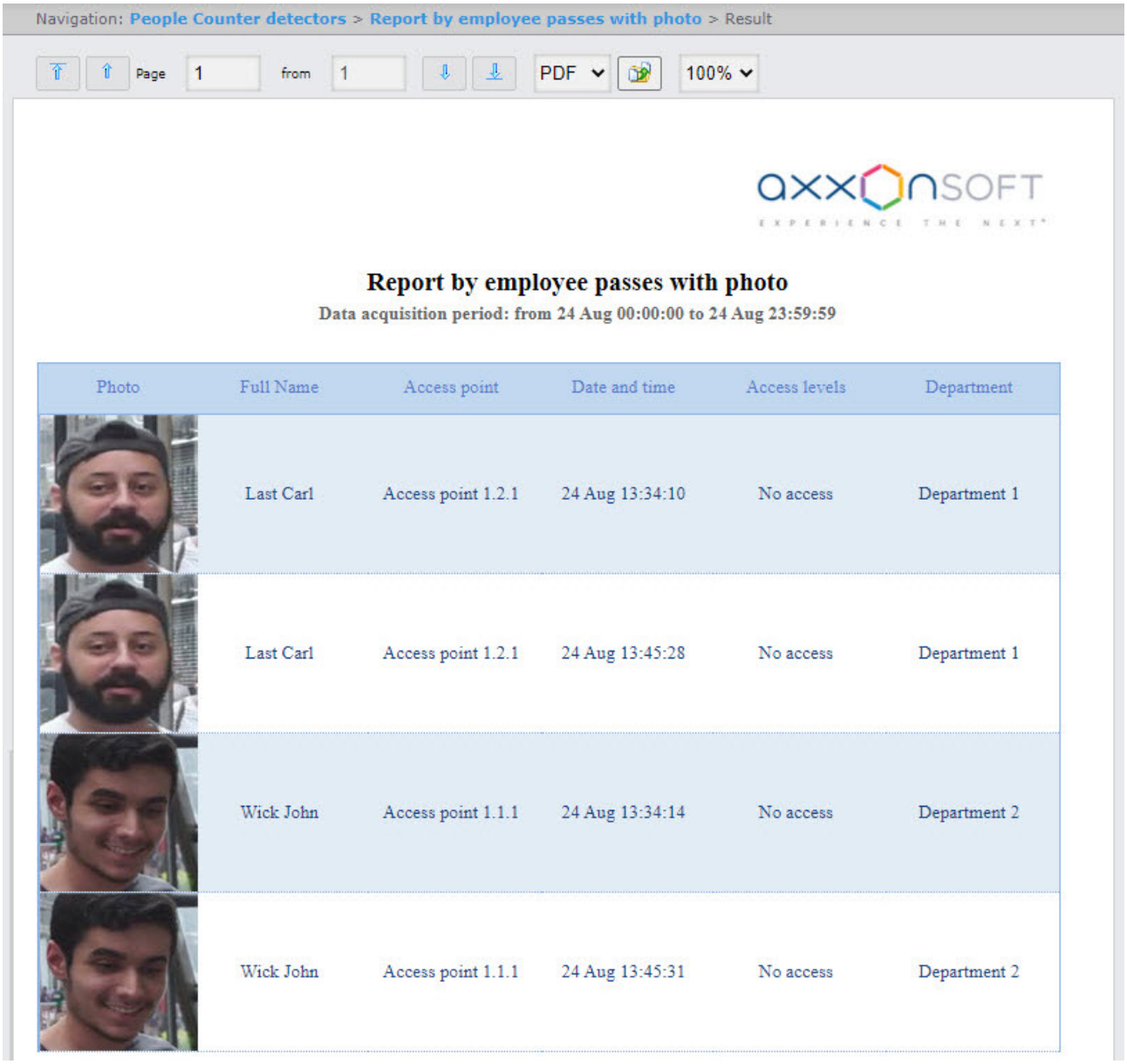
4. In the **Choose report columns** field (**3**), check the boxes next to the columns that should be displayed in the report. You can also change the order of the columns: to do this, use the left mouse button to move the column name up or down.
5. From the **Orientation** drop-down list (**4**) select 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.

6. 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.

7. In the **Departments/users** field (**6**), select the departments or users, information on which should be displayed in the report.
8. If necessary, you can search for a user by first/last name. To do this, enter the first/last name in the search field (**7**) and click the **Search** button (**8**). To clear the results, click the **Clear search tree** button (**9**). Click **All** to select all found or available objects. Click **None** to deselect. Click **Show all** to expand the object structure. Click **Hide all** to hide the object structure.
9. To create a report, click **Execute** (**10**). As a result, the report with specified parameters is displayed.



All possible fields of the report are described in the table.

Field name	Description
No.	Line number
Photo	Photo from the camera
Full Name	Employee's full name
Name	Employee's first name
Surname	Employee's last name

Field name	Description
Position	Employee's position
External ID	Employee's external identity number
Patronymic	Employee's patronymic name
License plate	Employee's car license plate number
Car	Employee's car brand
Card number	Employee's access card number
Card code	Employee's access card code
Date of card issue	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 levels
Phone	Employee's phone number
Company	The name of the parent department, if the employee's department is a subsidiary
Department	Department where employee works
Comment	Commentary
Card expiration date	Employee's access card expiration date
Pin code	Employee's access card pin code

8.7 Working with POS reports

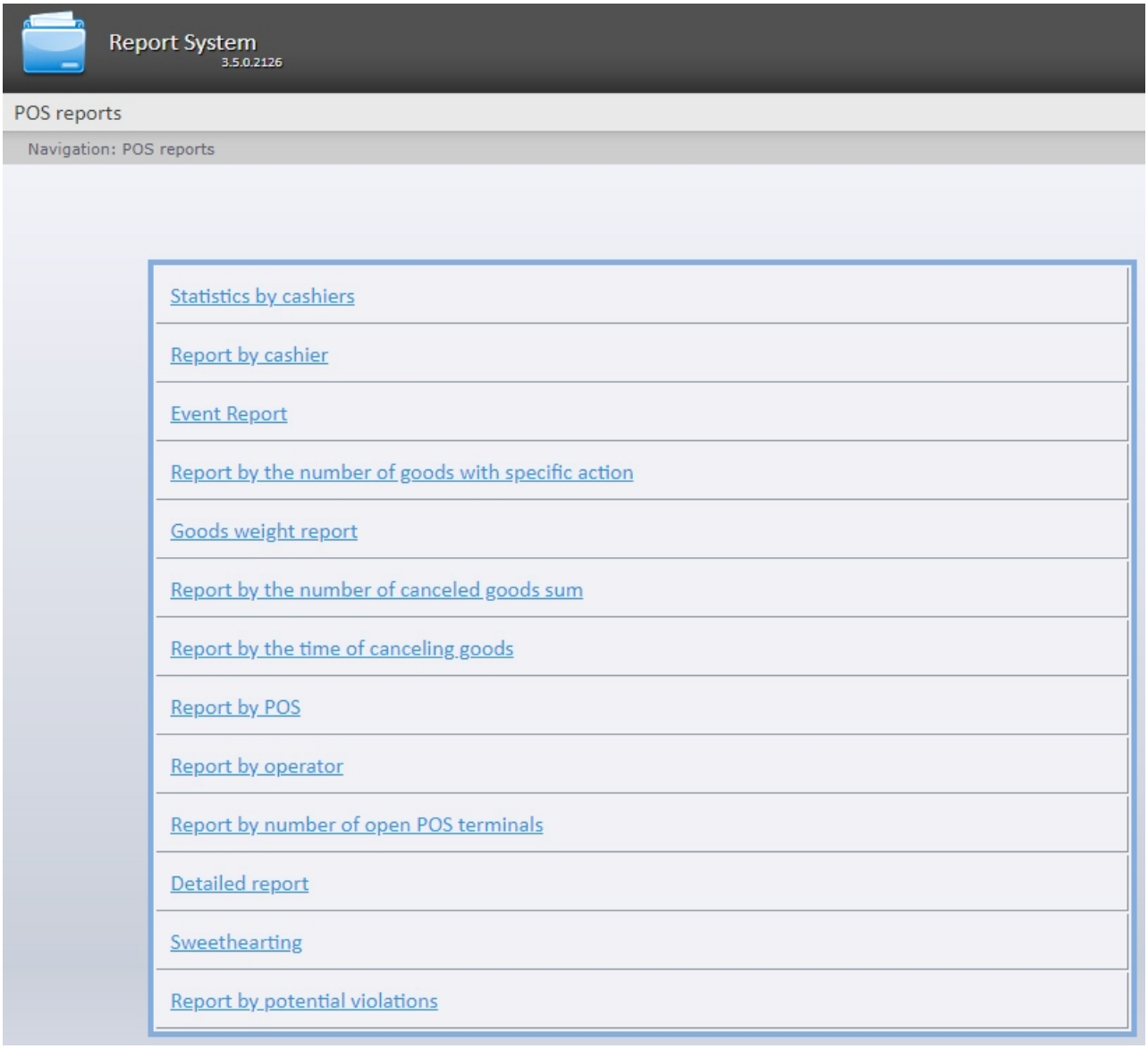
POS reports are created by the local database of *Intellect*, but it is also possible to use data from remote servers. Configuration of database replication is needed (see Configuring the POS Replicator system object).

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

8.7.1 General reports

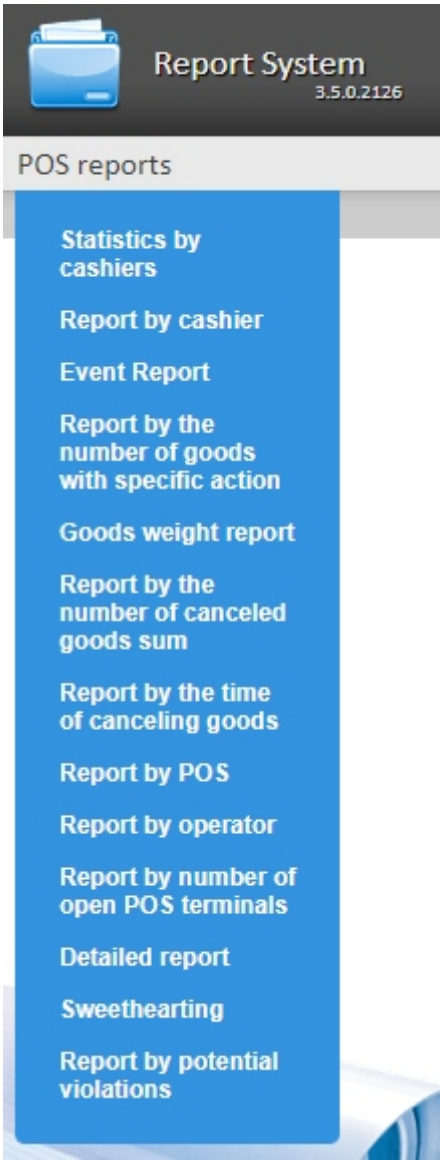
Selecting a type of general POS report

In order to select the type of the general POS report, click **POS reports** in the menu of *Intellect Web Report System.* As a result, the list of the available general POS reports will be displayed.



In order to select the required report, click the corresponding link.

> **Note**
>
> The list of the general POS reports links is also available when hovering over the **POS reports** link in the reports menu.

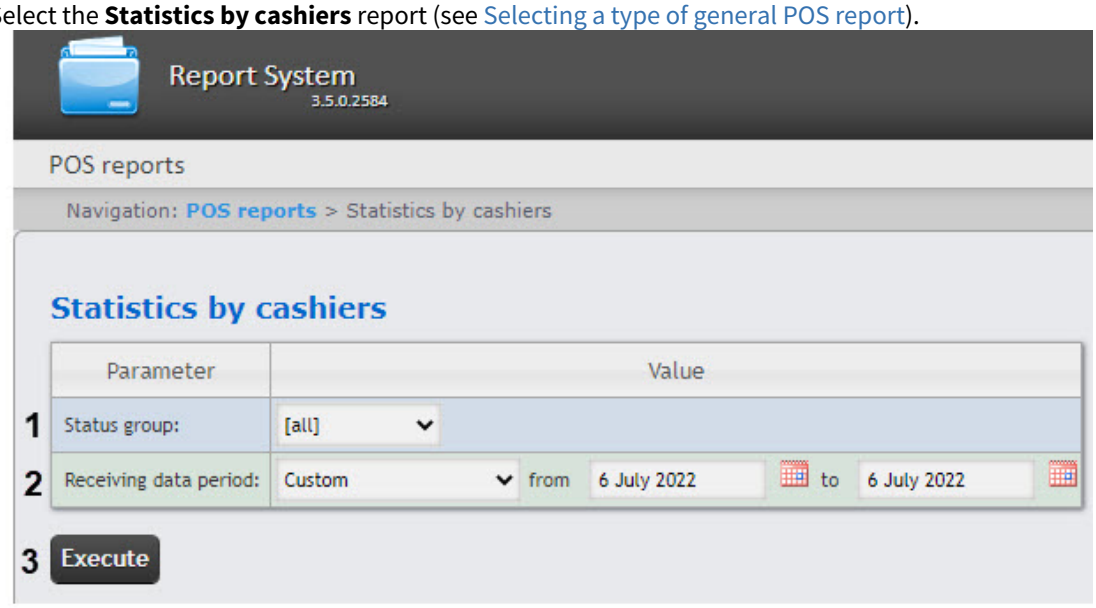


Statistics by cashiers

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

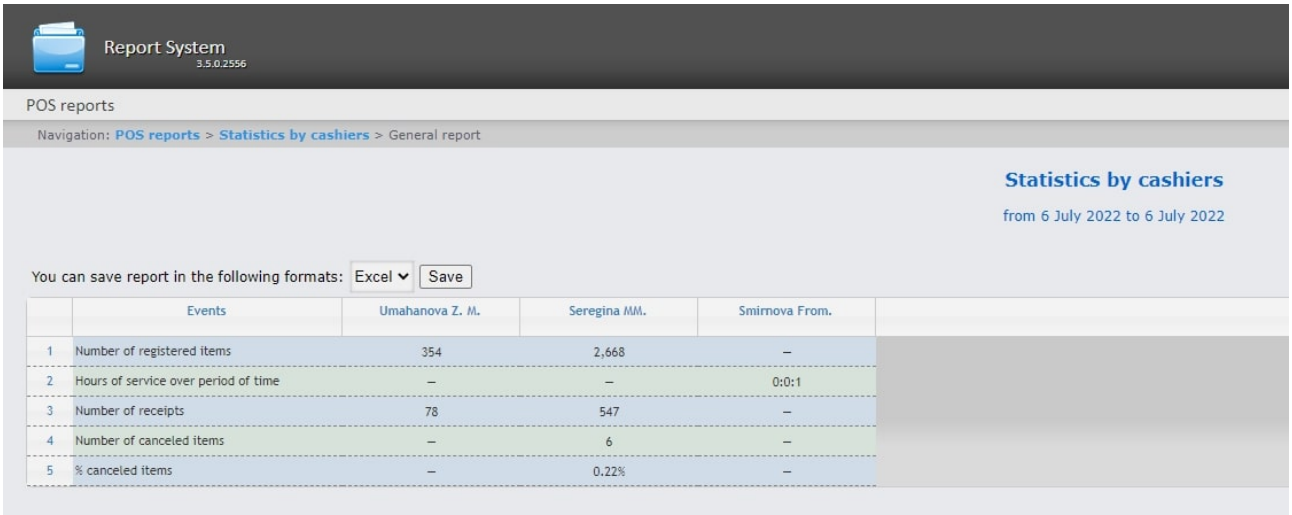
In order to generate the Statistics by cashiers report, do the following:

1. Select the **Statistics by cashiers** report (see Selecting a type of general POS report).



2. Specify the **Status group** of the events you want to display in the report (**1**). If **[all]** is selected, the report will include all events regardless of their statuses.
3. From the **Receiving data period** drop-down list, select the time period of the cashier data (**2**). If **Custom** period is selected, enter the date of start and end periods for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
4. Click **Execute** to run the report (**3**).

Example of a **Statistics by cashiers** report:



This is a summary table of events for all cashiers. In the cashier name column, the total number of events registered for this cashier will be indicated. To view a detailed report on the selected event for the cashier, click on the corresponding value in the table.

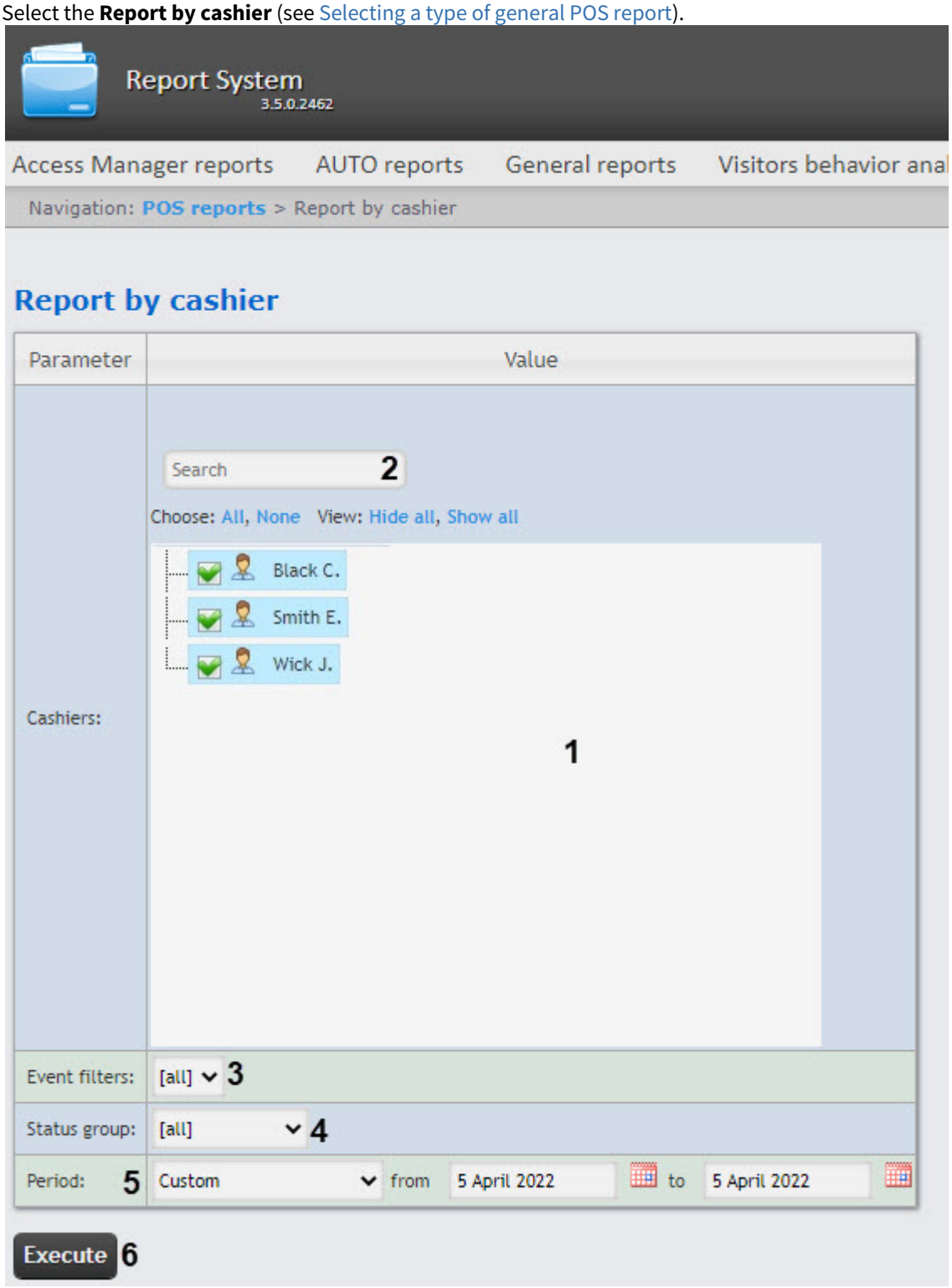
In order to save a **Statistics by cashiers** report in .xls format, click **Save**.

Report by cashier

> **Attention!**
>
> In order to generate the Report by cashier, the **POS-terminal** object should be set up and configured in *Intellect* (see The POS-terminal object setup).

In order to generate the Report by cashier, do the following:

1. Select the **Report by cashier** (see Selecting a type of general POS report).



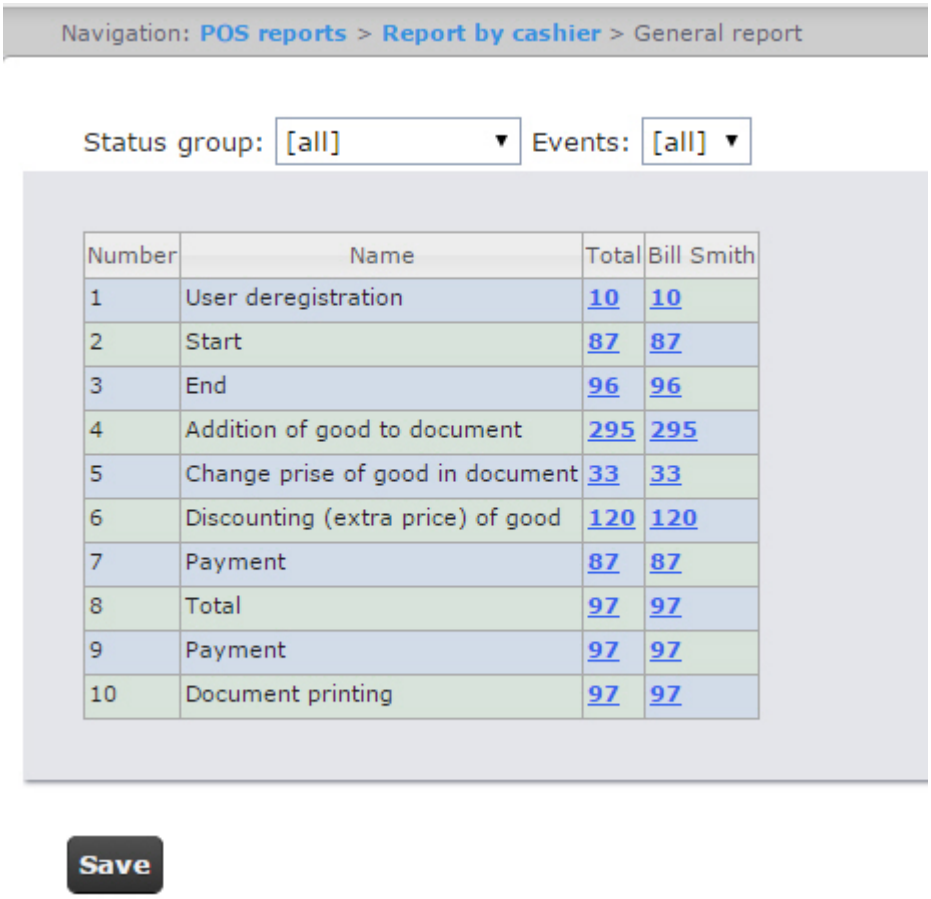
2. Select the cashiers by whom it is necessary to generate the report by setting the corresponding checkboxes in the **Cashiers** list (**1**).

Attention!

This field is mandatory: the report will not be generated if no value is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.

3. To use the search when selecting cashiers, in the search field (**2**) start entering the cashier's last name. The search works starting from the first character. The results will be highlighted in a different color. Click **All** to select all found/available cashiers. Click **None** to deselect. Click **Show all** to expand the cashiers structure. Click **Hide all** to hide the cashiers structure.
4. From the **Event filters** drop-down list (**3**), select an event filter that should be used to generate the report. If **All** is selected, then event filters are not considered and the report is created by all events.
5. From the **Status group** drop-down list (**4**), select the status group of those events that should be displayed in the report. If **All** is selected, the report will include all POS events regardless of their status.
6. From the **Period** drop-down list (**5**), select the time period for which the report should be created. If the **Custom** period is selected, enter the date of start and end periods for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
7. Click the **Execute** button (**6**).

Example of a Report by cashier:



In the **Total** column the total amount of events by their type is displayed. In the column with the cashier name the amount of events by their type registered for this cashier is displayed.

In order to save the summary Report by cashier in .xls format, click the **Save** button.

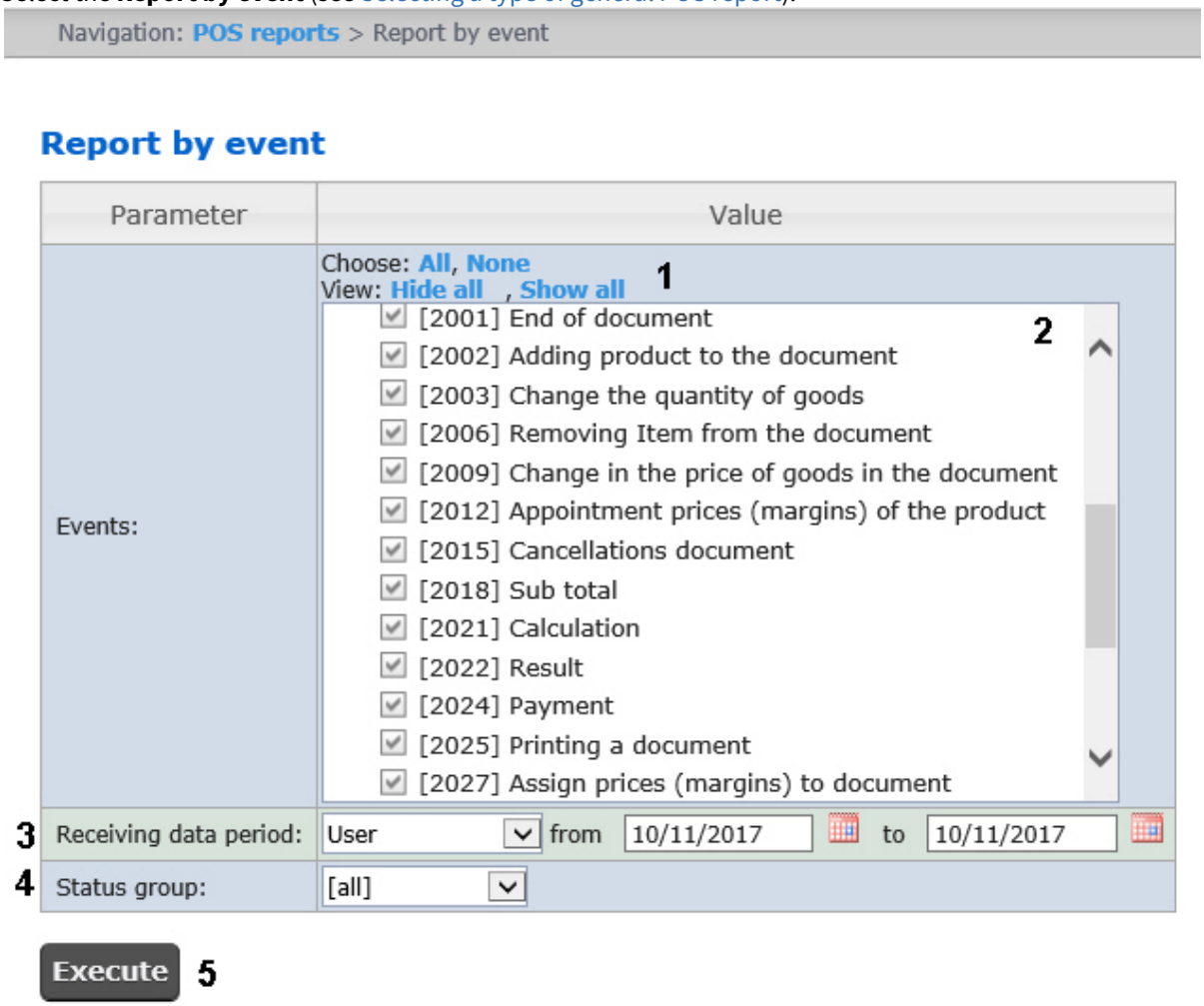
Report by event

> **Attention!**
>
> In order to generate the Report by event, the **POS-terminal** object should be set up and configured in *Intellect* (see The POS-terminal object setup).

The Report by event allows displaying the information on the selected events, including the shop and the POS terminal where they occurred, and what cashier performed the specified actions.

In order to display the Report by event, do the following:

1. Select the **Report by event** (see Selecting a type of general POS report).



2. Select the events that should be displayed in the report by setting the corresponding checkboxes in the list (**2**). Click **All** to set all checkboxes in the list. Click **None** to clear all checkboxes.

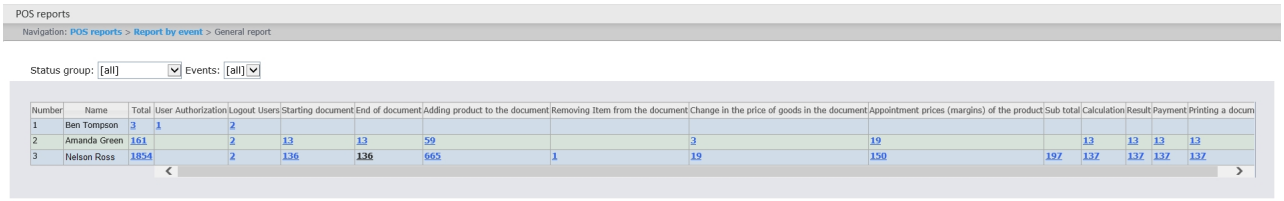
> **Attention!**
>
> This field is mandatory: the report will not be generated if no value is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.

3. Specify the period in the following way:

a. From the **Receiving data period** drop-down list (**3**) select the time period for which the report should be created.
b. If the **User** period is selected, enter the date of start and end periods for which the report should 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 should be created using the button.
If another period type is selected, specifying the date of start and end periods is not needed.

4. Specify the status group of those events that should be displayed in a report (**4**). If **All** is selected, then all POS events will be displayed in the report regardless of their status.
5. Click the **Execute** button (**5**).

As a result, a summary table of cashiers and events is displayed according to the specified parameters. A total of events for a cashier is displayed in the events type columns.



Number	Name	Total	User Authorization	Logout Users	Starting document	End of document	Adding product to the document	Removing Item from the document	Change in the price of goods in the document	Appointment prices (margins) of the product	Sub total	Calculation	Result	Payment	Printing a docum
1	Ben Tompson	3	1	2											
2	Amanda Green	161		2	13	13	59		3	19		13	13	13	13
3	Nelson Ross	1854		2	136	136	665	1	19	150	197	137	137	137	137

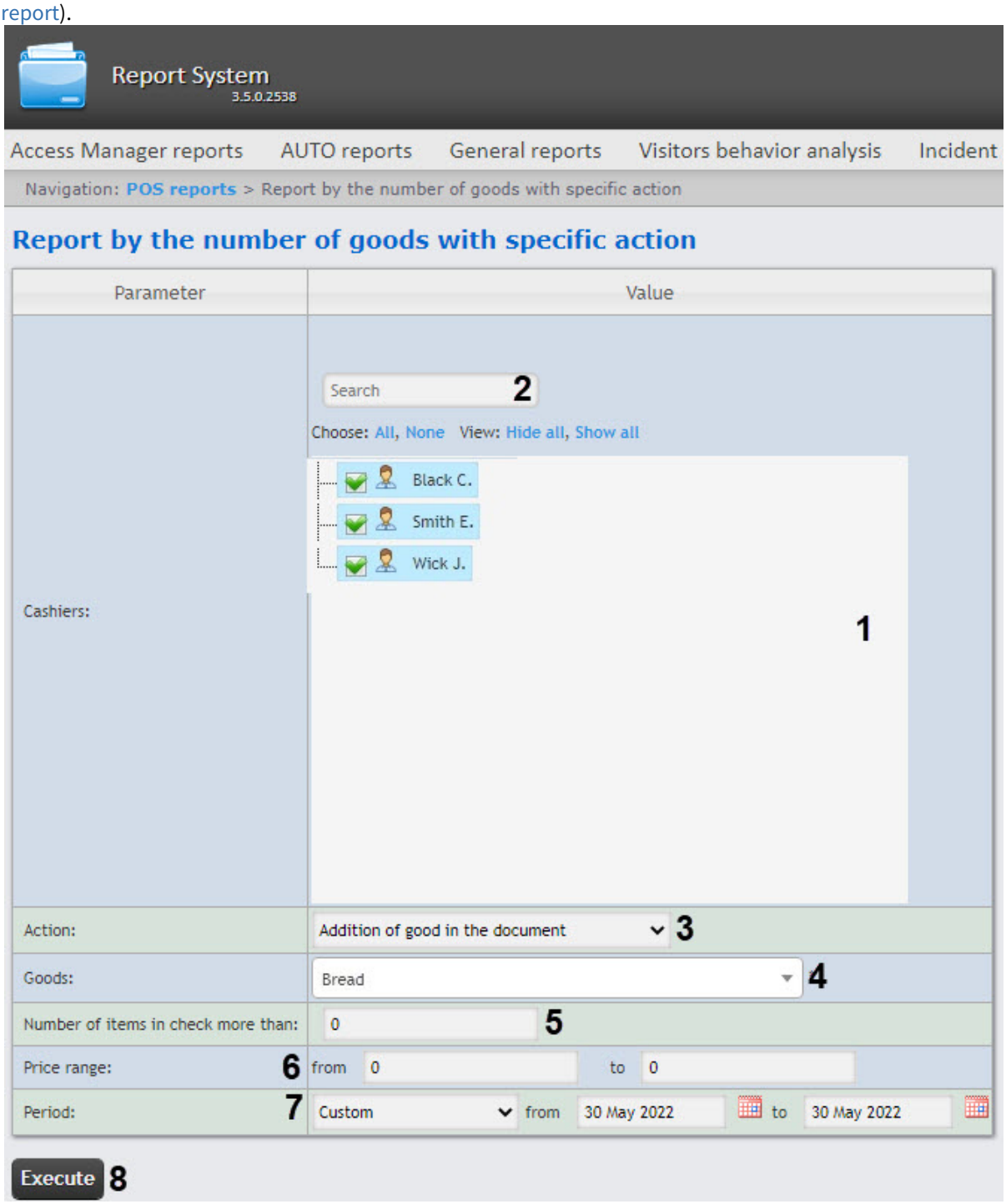
In order to save the summary Report by event in .xls format, click the **Save** button.

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 generate a report by the number of goods with specific action, do the following:

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



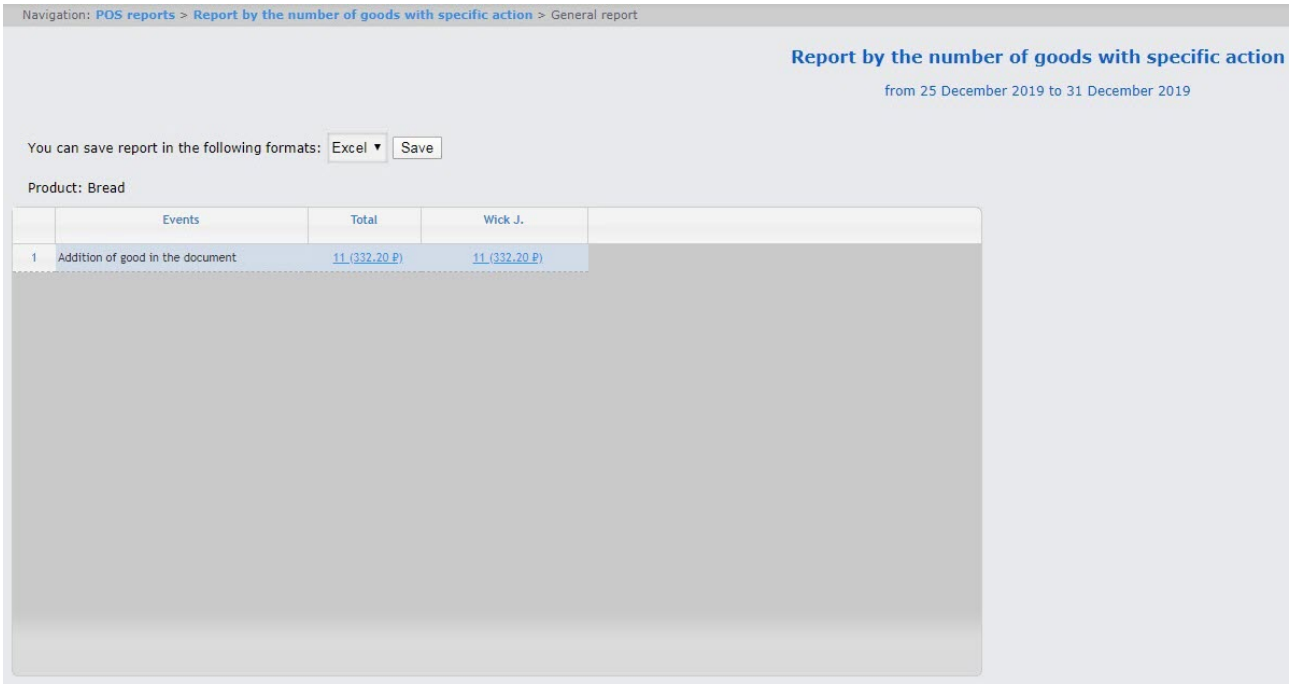
2. Select the cashiers by whom the report will be generated by setting the corresponding checkboxes in the **Cashiers** list (**1**).

> **Attention!**
>
> This field is mandatory: the report will not be generated if no value is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.

3. To use the search when selecting cashiers, in the search field (**2**) start entering the cashier's last name. The search works starting from the first character. The results will be highlighted in a different color. Click **All** to select all found/available cashiers. Click **None** to deselect. Click **Show all** to expand the cashiers structure. Click **Hide all** to hide the cashiers structure.
4. From the **Action** drop-down list (**3**), select the required cashier action.
5. In the **Goods** field (**4**), enter a substring of the goods name to search for the goods, the action on which should be displayed in the report. The substring should be at least 4 characters long.
6. In the **Number of items in check more than** field (**5**), enter the minimum number of this item in a check.
7. In the **Price range** field (**6**), enter the minimum and maximum price values for the item in the **from** and **to** fields.
8. From the **Period** drop-down list (**7**), select the time period for which the report should be created. 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.
9. Click the **Execute** button (**8**).

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

Example of a report by the number of goods with specific action:



This is a summary table of the selected action by the cashiers. The **Total** column displays the total price of the goods with the selected action for all cashiers. The column called by the cashier name displays the price of the goods with the selected action for this cashier.

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

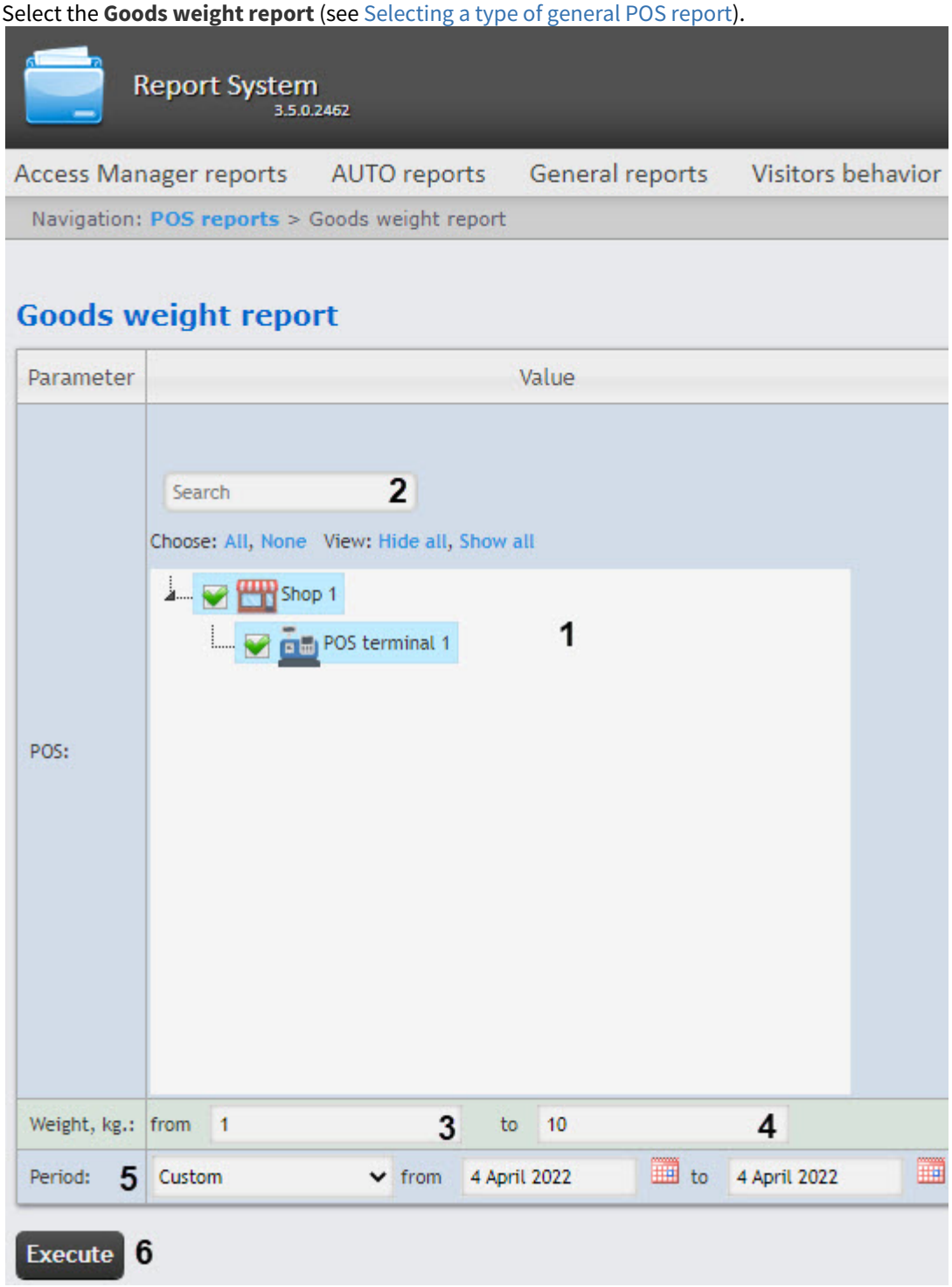
Goods weight report

Attention!

- In order to generate the Goods weight report, the **POS-terminal** object should be created and configured in *Intellect* (see The POS-terminal object setup).
- The Goods weight report is generated only when using SQL starting from the SQL2017 version. If an earlier version is installed, for example, SQL2014, the Goods weight report will not be generated.

In order to generate the Goods weight report, do the following:

1. Select the **Goods weight report** (see Selecting a type of general POS report).

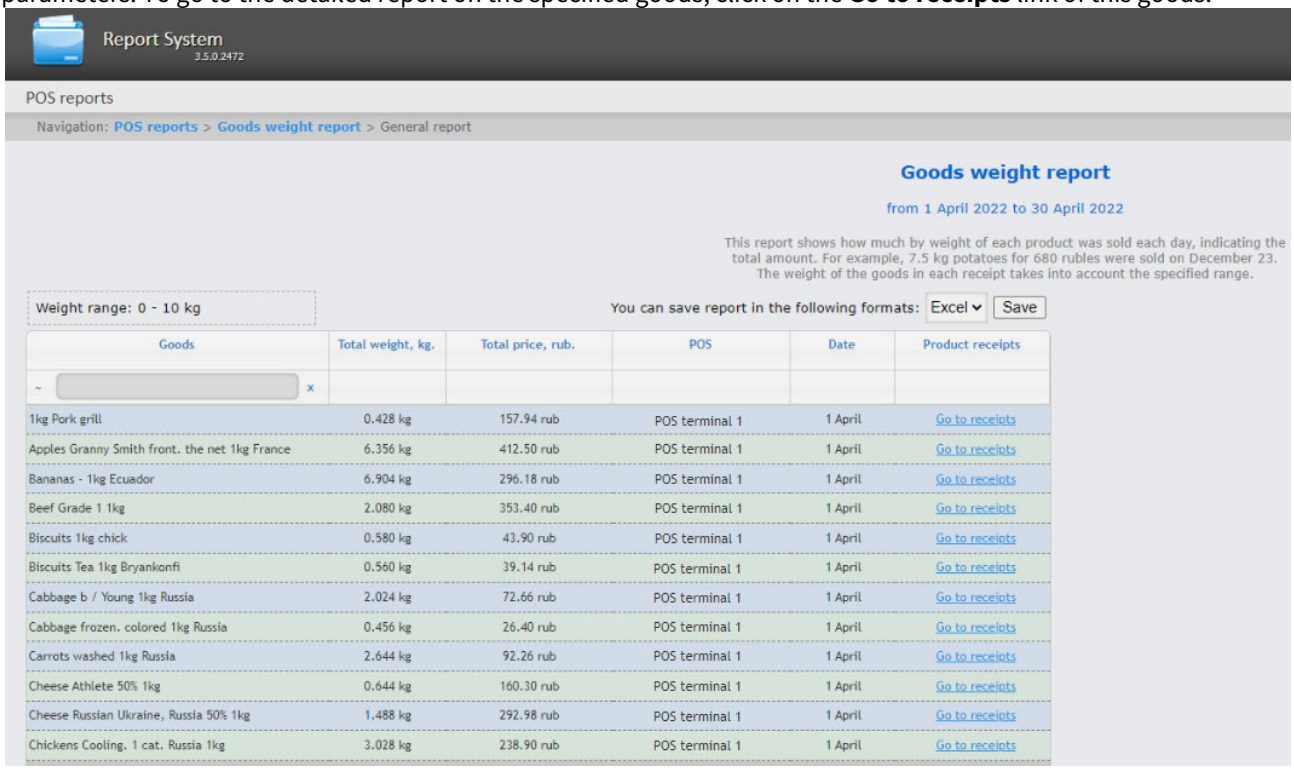


2. From the POS drop-down list (**1**), select the POS terminals for which the report will be generated.

> **Attention!**
>
> This field is mandatory: the report will not be generated if no value is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.

3. To use the search when selecting the POS terminals, in the search field (**2**) start entering the POS terminal name. The search works starting from the first character. The results will be highlighted in a different color. Click **All** to select all found/available POS terminals. Click **None** to deselect. Click **Show all** to expand the POS terminals structure. Click **Hide all** to hide the POS terminals structure.
4. In the **Weight, kg. from** (**3**) and **to** fields (**4**), enter the minimum and maximum weight of the goods in kilograms.
5. From the **Period** drop-down list (**5**) select the time period for which the report should be created. If the Custom period is selected, enter the date of start and end periods in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool.
6. Click the **Execute** button (**6**).

As a result, a summary table of the events by the goods weight will be displayed according to the specified parameters. To go to the detailed report on the specified goods, click on the **Go to receipts** link of this goods.



Goods	Total weight, kg.	Total price, rub.	POS	Date	Product receipts
1kg Pork grill	0.428 kg	157.94 rub	POS terminal 1	1 April	Go to receipts
Apples Granny Smith front. the net 1kg France	6.356 kg	412.50 rub	POS terminal 1	1 April	Go to receipts
Bananas - 1kg Ecuador	6.904 kg	296.18 rub	POS terminal 1	1 April	Go to receipts
Beef Grade 1 1kg	2.080 kg	353.40 rub	POS terminal 1	1 April	Go to receipts
Biscuits 1kg chick	0.580 kg	43.90 rub	POS terminal 1	1 April	Go to receipts
Biscuits Tea 1kg Bryankonfi	0.560 kg	39.14 rub	POS terminal 1	1 April	Go to receipts
Cabbage b / Young 1kg Russia	2.024 kg	72.66 rub	POS terminal 1	1 April	Go to receipts
Cabbage frozen. colored 1kg Russia	0.456 kg	26.40 rub	POS terminal 1	1 April	Go to receipts
Carrots washed 1kg Russia	2.644 kg	92.26 rub	POS terminal 1	1 April	Go to receipts
Cheese Athlete 50% 1kg	0.644 kg	160.30 rub	POS terminal 1	1 April	Go to receipts
Cheese Russian Ukraine, Russia 50% 1kg	1.488 kg	292.98 rub	POS terminal 1	1 April	Go to receipts
Chickens Cooling. 1 cat. Russia 1kg	3.028 kg	238.90 rub	POS terminal 1	1 April	Go to receipts

To save the Goods weight summary report in .xls format, click the **Save** button.

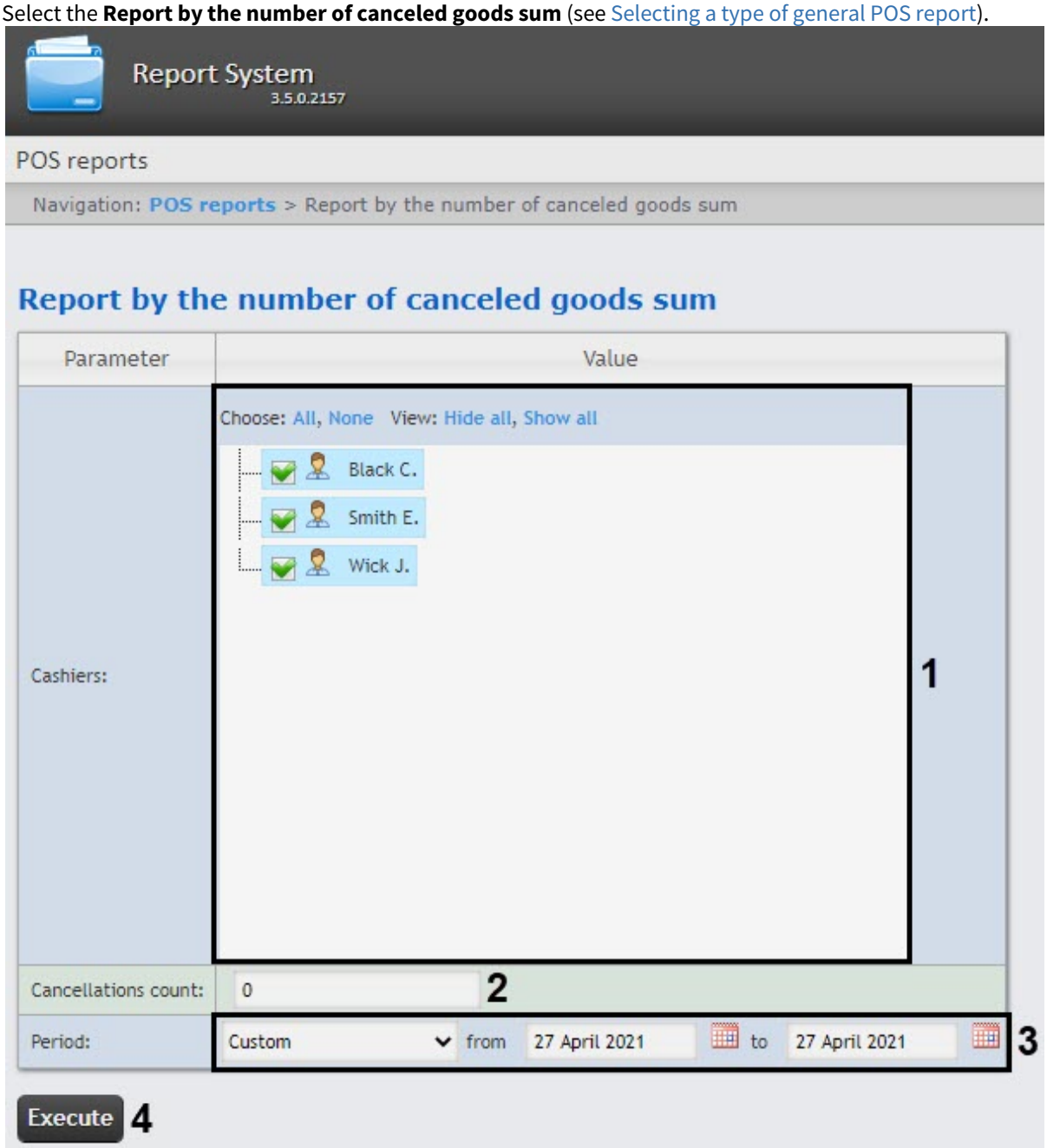
The Goods weight report generation is complete.

Report by the number of canceled goods sum

> **Attention!**
>
> In order to generate the Report by the number of canceled goods sum, the **POS-terminal** object should be created and configured in *Intellect* (see The POS-terminal object setup).

In order to generate the Report by the number of canceled goods sum, do the following:

1. Select the **Report by the number of canceled goods sum** (see Selecting a type of general POS report).



2. Select the cashiers for which the report should be displayed by setting the corresponding checkboxes in the list (**1**).

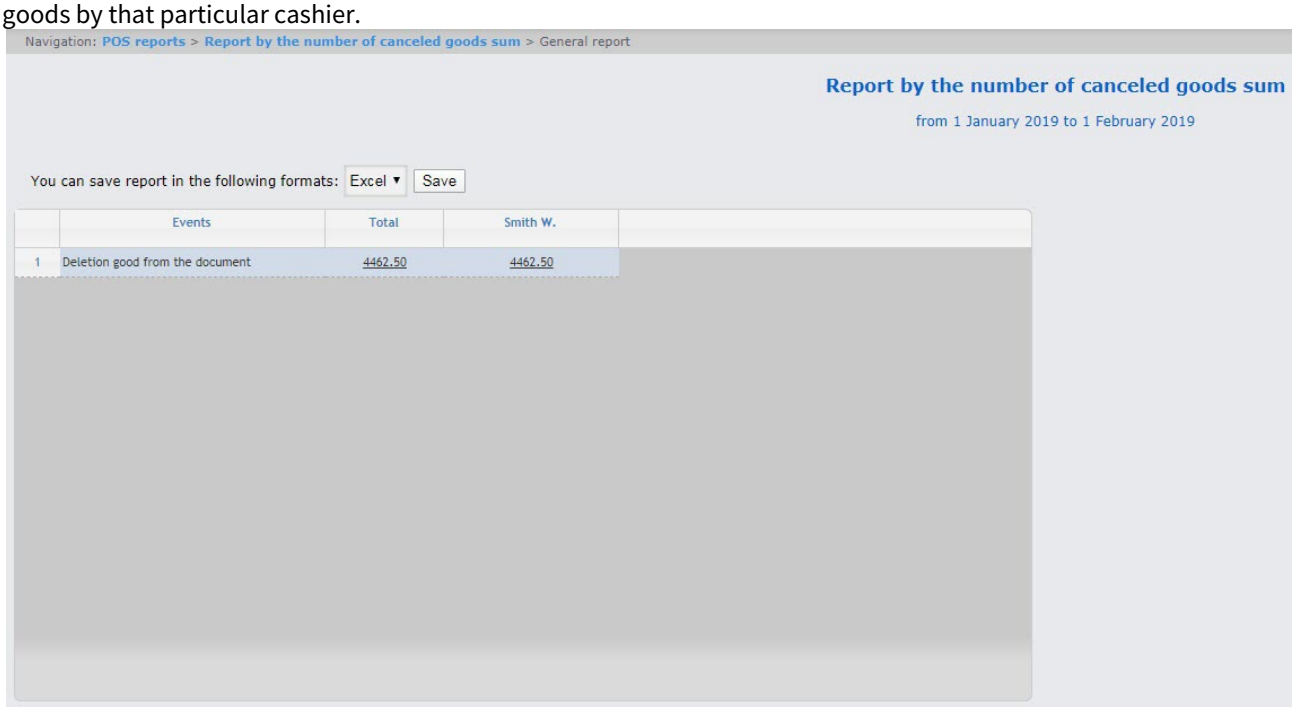
> **Attention!**
>
> This field is mandatory: the report will not be generated if no value is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.

3. In the **Cancellations count** field (**2**) specify the threshold value of the sum of the canceled goods number.
4. From the **Period** drop-down list (**3**) select the time period for which the report should be created.

> **Note**
>
> If the **Custom** period is selected, enter the date of start and end periods for which the report should 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. Click the **Execute** button (**4**).

As a result, a summary table will be displayed according to the specified parameters. The **Total** column displays the total sum of the canceled goods by all cashiers. The column with the cashier name displays the sum of the canceled goods by that particular cashier.



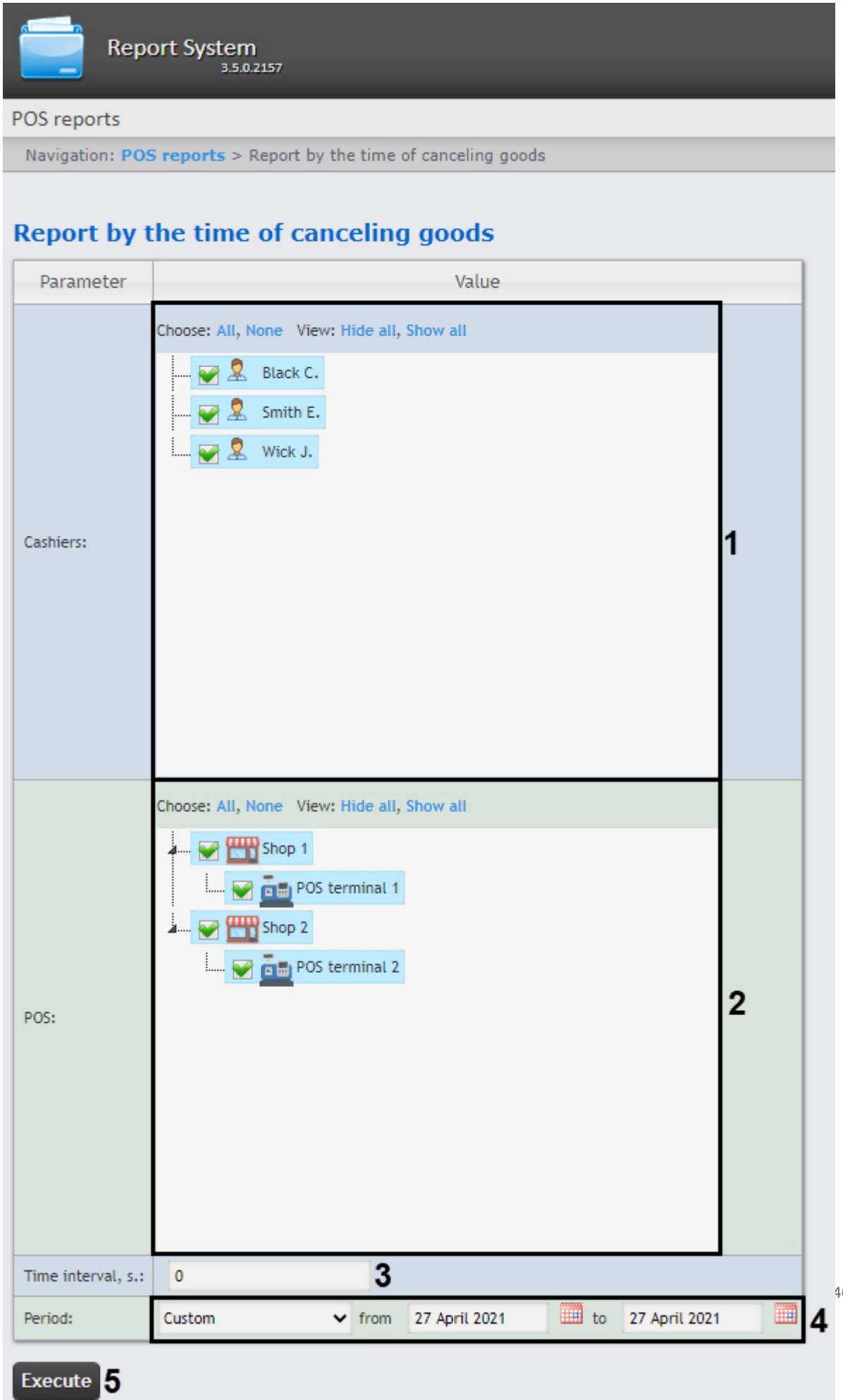
To save the summary report in .xls format, click the **Save** button.

Report by the time of canceling goods

> **Attention!**
>
> In order to generate the Report by the time of canceling goods, the **POS-terminal** object should be created and configured in *Intellect* (see The POS-terminal object setup).

In order to generate the Report by the time of canceling goods, do the following:

1. Select the **Report by the time of canceling goods** (see Selecting a type of general POS report).


Report System
3.5.0.2157
POS reports
Navigation: POS reports > Report by the time of canceling goods
Report by the time of canceling goods
Parameter
Value
Choose: All, None View: Hide all, Show all
Black C.
Smith E.
Wick J.
Cashiers:
1
Choose: All, None View: Hide all, Show all
Shop 1
POS terminal 1
Shop 2
POS terminal 2
POS:
2
Time interval, s.:
0
3
Period:
Custom
from
27 April 2021
to
27 April 2021
4
Execute
5

2. Select the cashiers for which the report should be displayed by setting the corresponding checkboxes in the list (**1**).
3. Select the POS terminals (cash desks) for which the report should be displayed by setting the corresponding checkboxes in the list (**2**).

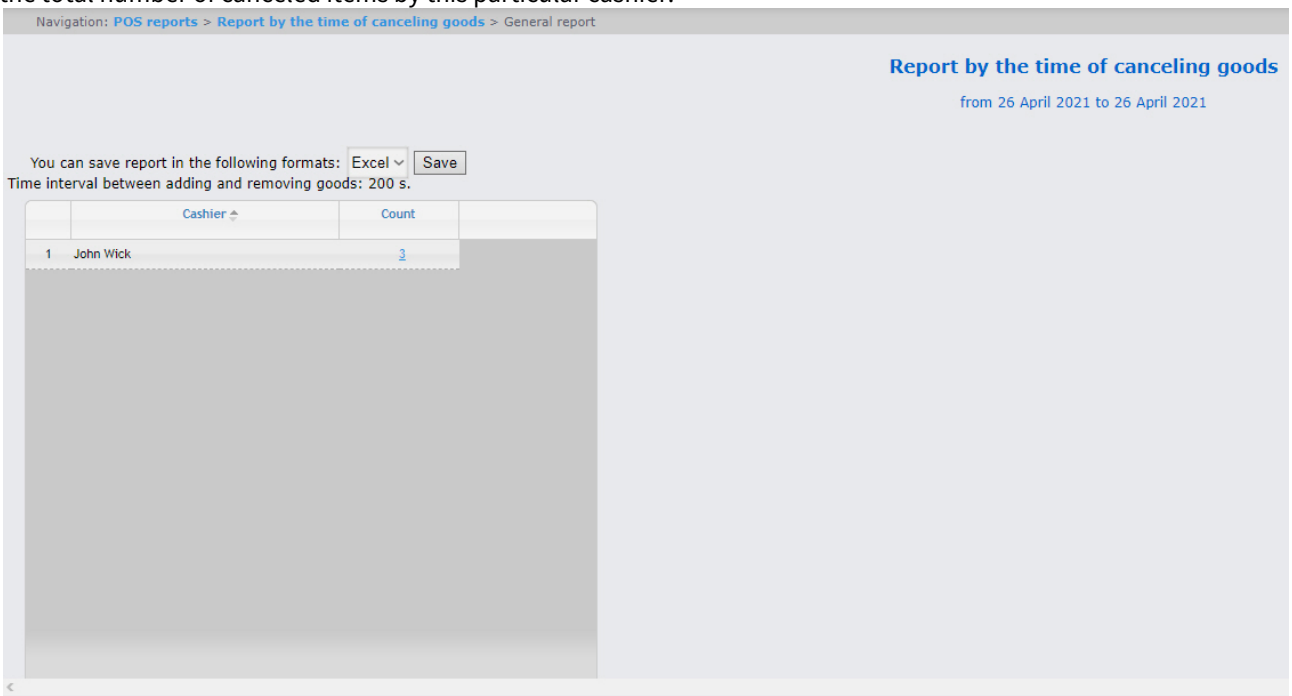
> **Attention!**
>
> The **Cashiers** and **POS** fields are mandatory: the report will not be generated if no value from these fields is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.

4. In the **Time interval, s.** field (**3**), specify the time interval in seconds between adding an item and canceling it. If an item was added and canceled during the specified interval, then such item will be included in the report.
5. From the **Period** drop-down list (**4**), select the time period for which the report should be created.

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

6. Click the **Execute** button (**5**).

As a result, a summary table will be displayed according to the specified parameters. The **Count** column displays the total number of canceled items by this particular cashier.



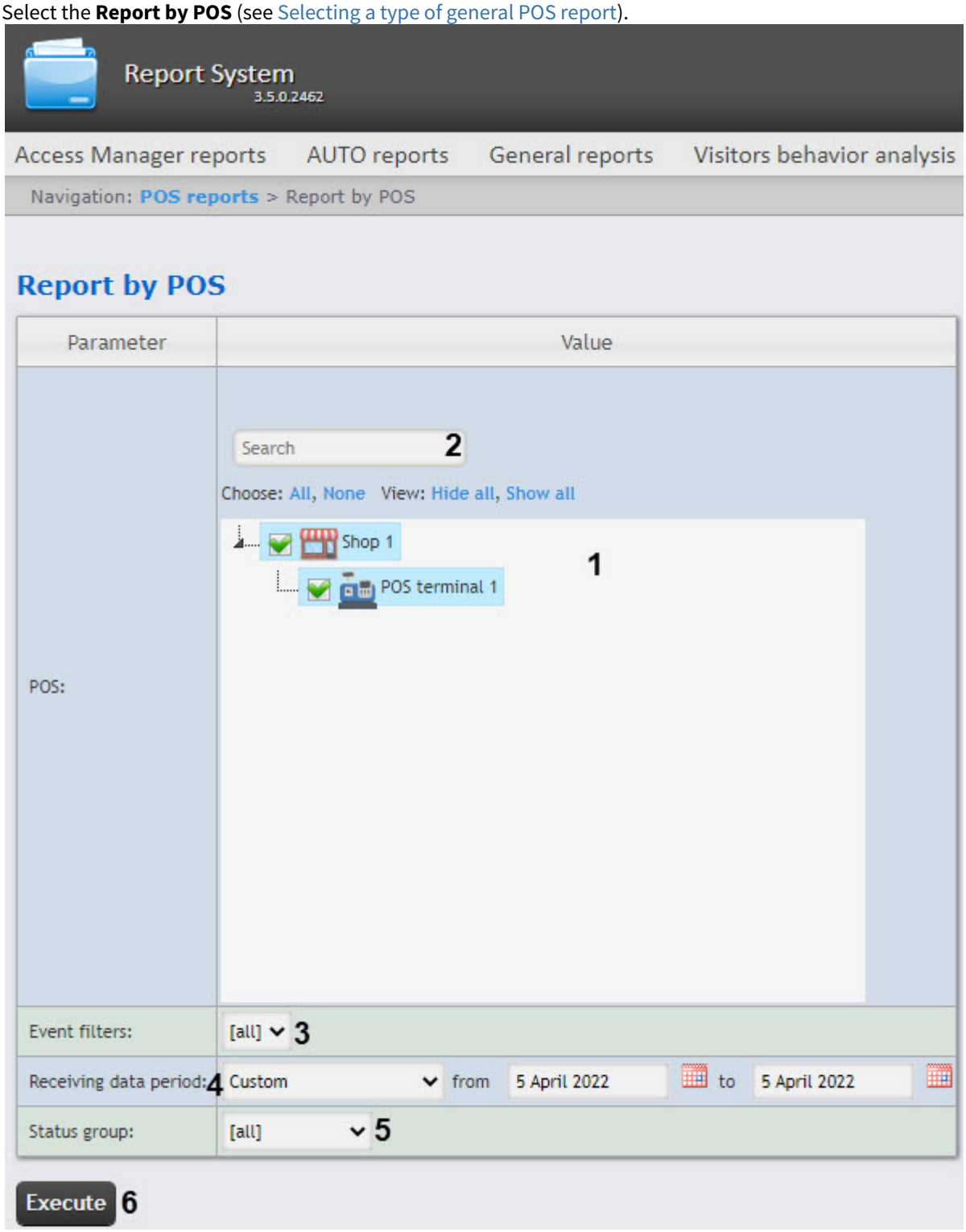
To save the report in .xls format, click the **Save** button.

Report by POS

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

In order to generate the Report by POS, do the following:

1. Select the **Report by POS** (see Selecting a type of general POS report).



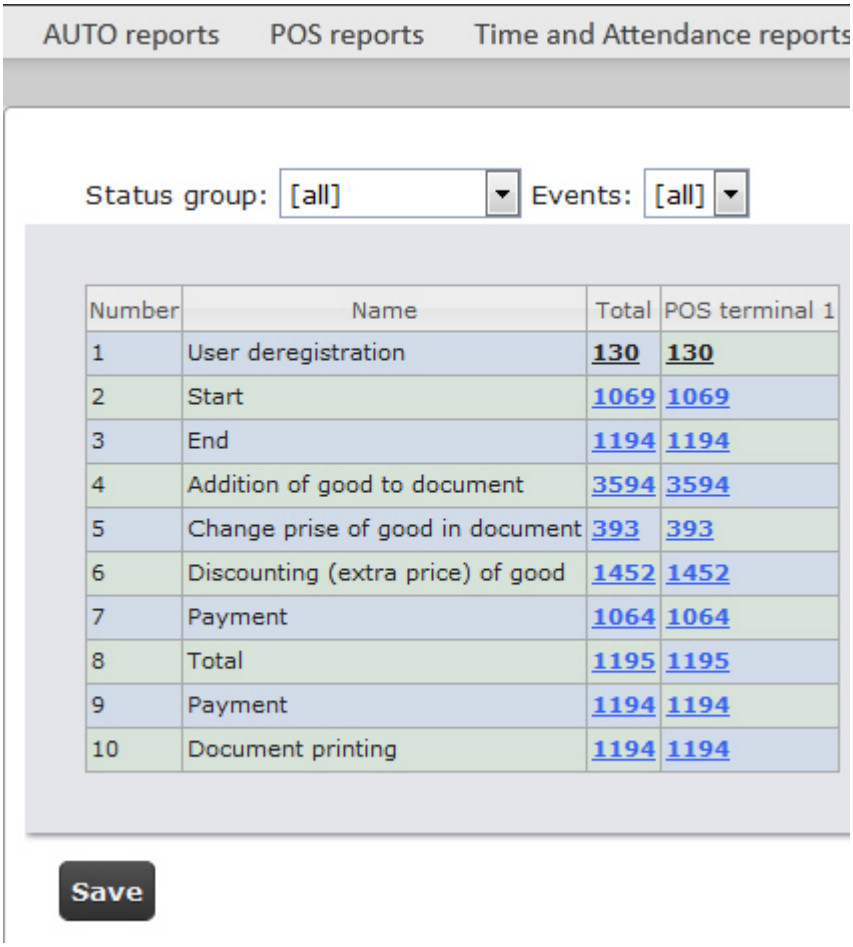
2. Select the POS terminals (cash desks) by which it is necessary to generate a report by setting the corresponding checkboxes in the **POS** list (**1**).

Attention!

- This field is mandatory: the report will not be generated if no value is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.
- The POS terminals that are not assigned to the shop, are not available in the list.

3. To use the search when selecting the POS terminals, in the search field (**2**) start entering the POS terminal name. The search works starting from the first character. The results will be highlighted in a different color. To select all POS terminals of a shop, set a checkbox next to this shop. Click **All** to select all found/available POS terminals. Click **None** to deselect. Click **Show all** to expand the POS terminals structure. Click **Hide all** to hide the POS terminals structure.
4. From the **Event filters** drop-down list (**3**), select an event filter that should be used to generate the report. If **All** is selected, then event filters are not considered and the report is created by all events.
5. From the **Receiving data period** drop-down list (**4**) select the time period for which the report is to be created. 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.
6. From the **Status group** drop-down list (**5**), select the status group of those events that should be displayed in the report. If **All** is selected, the report will include all events regardless of their status.
7. Click the **Execute** button (**6**).

Example of a Report by POS:



In the **Total** column the total amount of events by their type is displayed. In the column called by the POS terminal name the amount of events by their type registered for this POS terminal is displayed.

In order to save a summary Report by POS in .xls format, click the **Save** button.

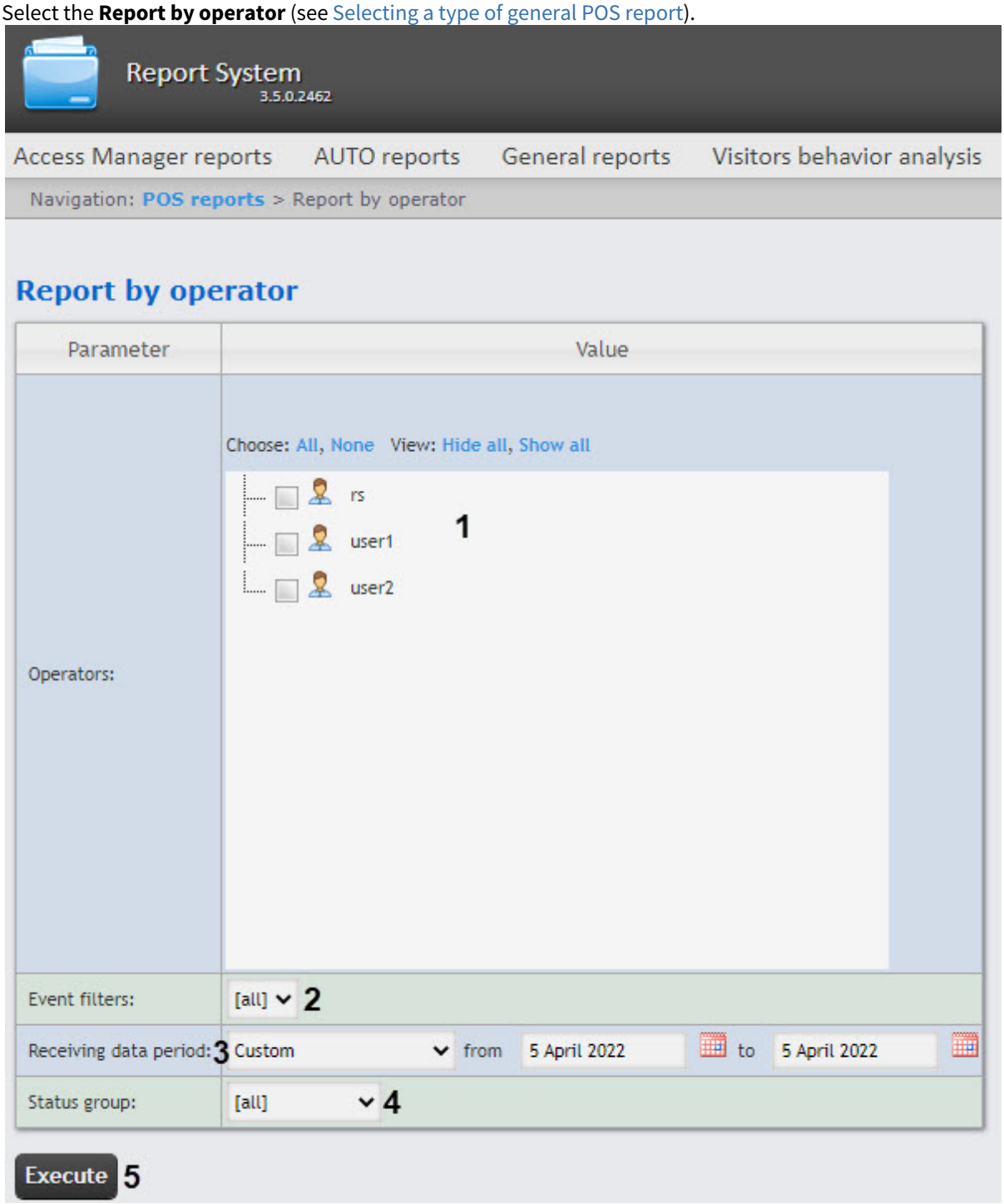
Report by operator

This report shows which operators assigned which statuses to the POS events. To generate a report by operator, do the following:

Attention!

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

1. Select the **Report by operator** (see Selecting a type of general POS report).

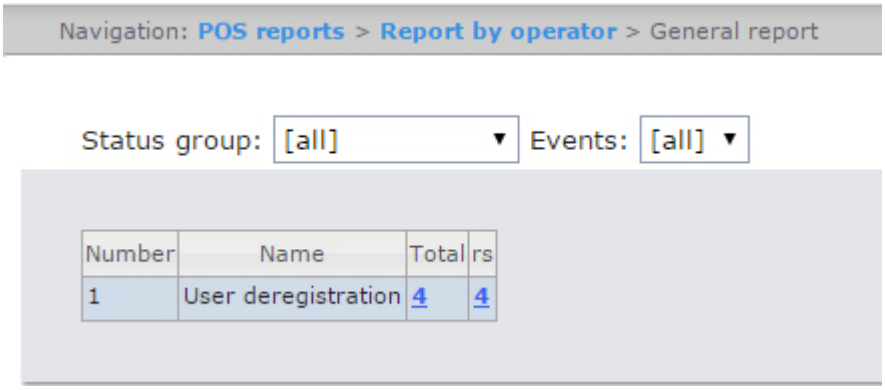


2. Select the POS operators by whom it is necessary to generate a report by setting the corresponding checkboxes in the **Operators** list (**1**). Click **All** to select all operators from the list. Click **None** to deselect. Click **Show all** to expand the operators structure. Click **Hide all** to hide the operators structure.
3. From the **Event filters** drop-down list (**2**), select an event filter that should be used to generate the report. If **All** is selected, then event filters are not considered and the report is created by all events.
4. From the **Receiving data period** drop-down list (**3**), select the time period for which the report should be created. If the **Custom** period is selected, enter the date of start and end periods for which the report should

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. From the **Status group** drop-down list (**4**), select the status group of those events that should be displayed in the report. If **All** is selected, the report will include all POS events regardless of their status.
6. Click the **Execute** button (**5**).

Example of a report by operator:



This is a summary table of events by the POS operators. The **Total** column displays the total number of events for each type of event. The column called by the POS operator name displays the number of events by their type processed by that operator (changed the status).

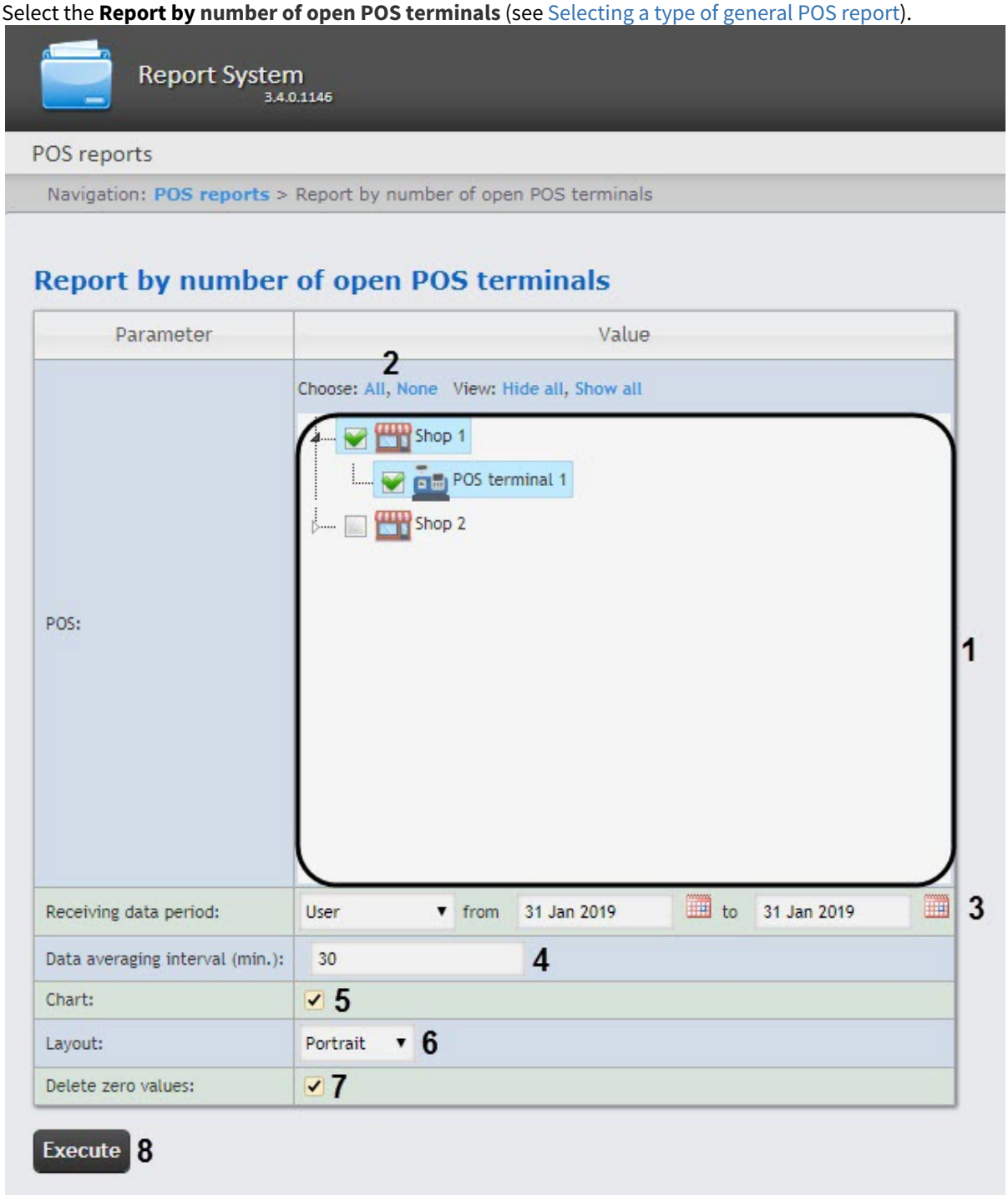
In order to save a summary report by operator in.xls format, click the **Save** button.

Report by number of open POS terminals

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

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

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

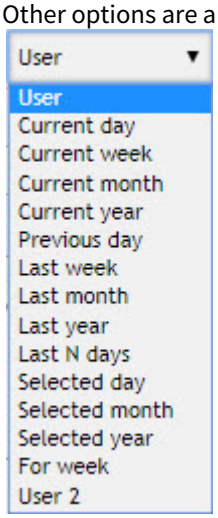


2. Select the POS terminals (cash desks) by which it is necessary to display a report by setting the corresponding checkboxes in the list (**1**). Click **All** to select all available checkboxes. Click **None** to deselect all checkboxes (**2**).

> **Attention!**

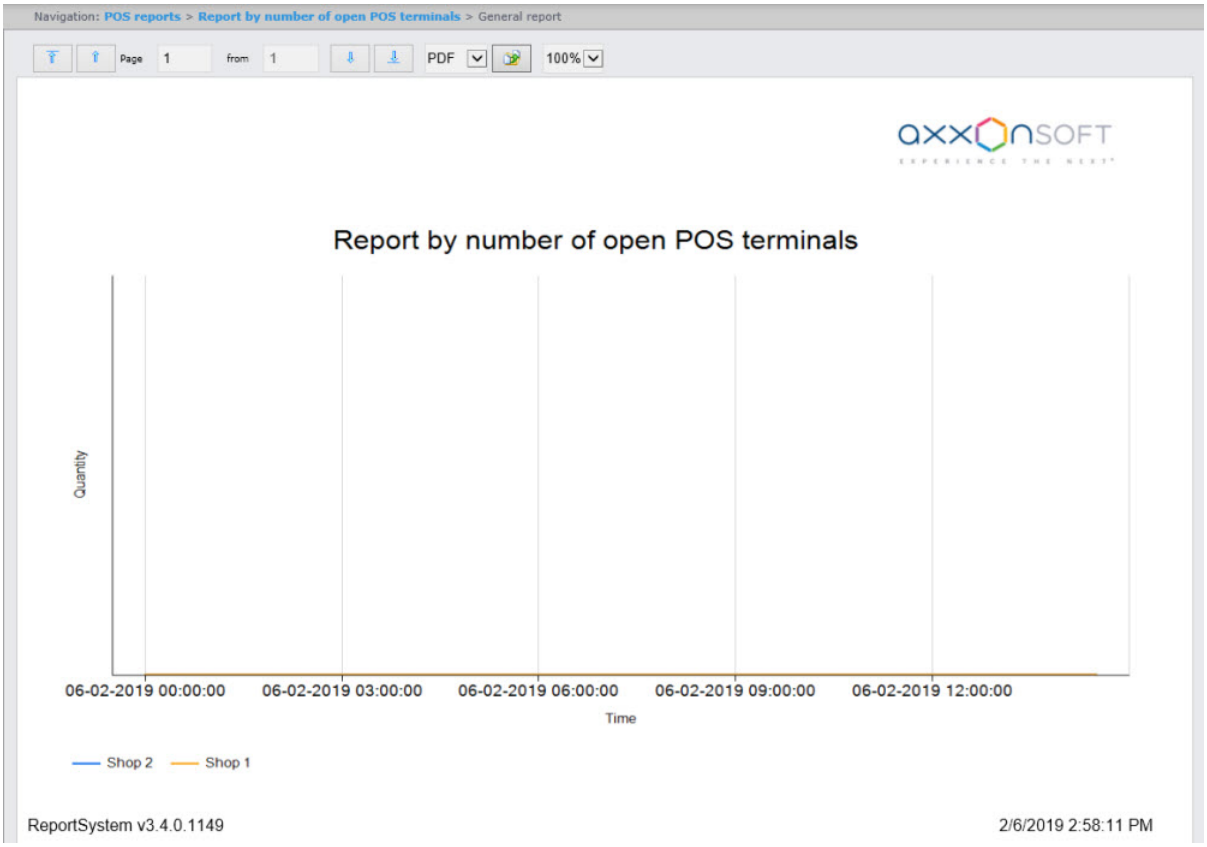
- This field is mandatory: the report will not be generated if no value is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.
- The POS terminals that are not assigned to the shop are not available in the list.

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 should be created (**3**).
   b. If the **User** period is selected, enter the date of start and end periods for which the report should 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 should 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 not to display the open POS terminals in the report if their number equals zero (**7**).
8. Click the **Execute** button 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 according to the specified parameters. If 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.



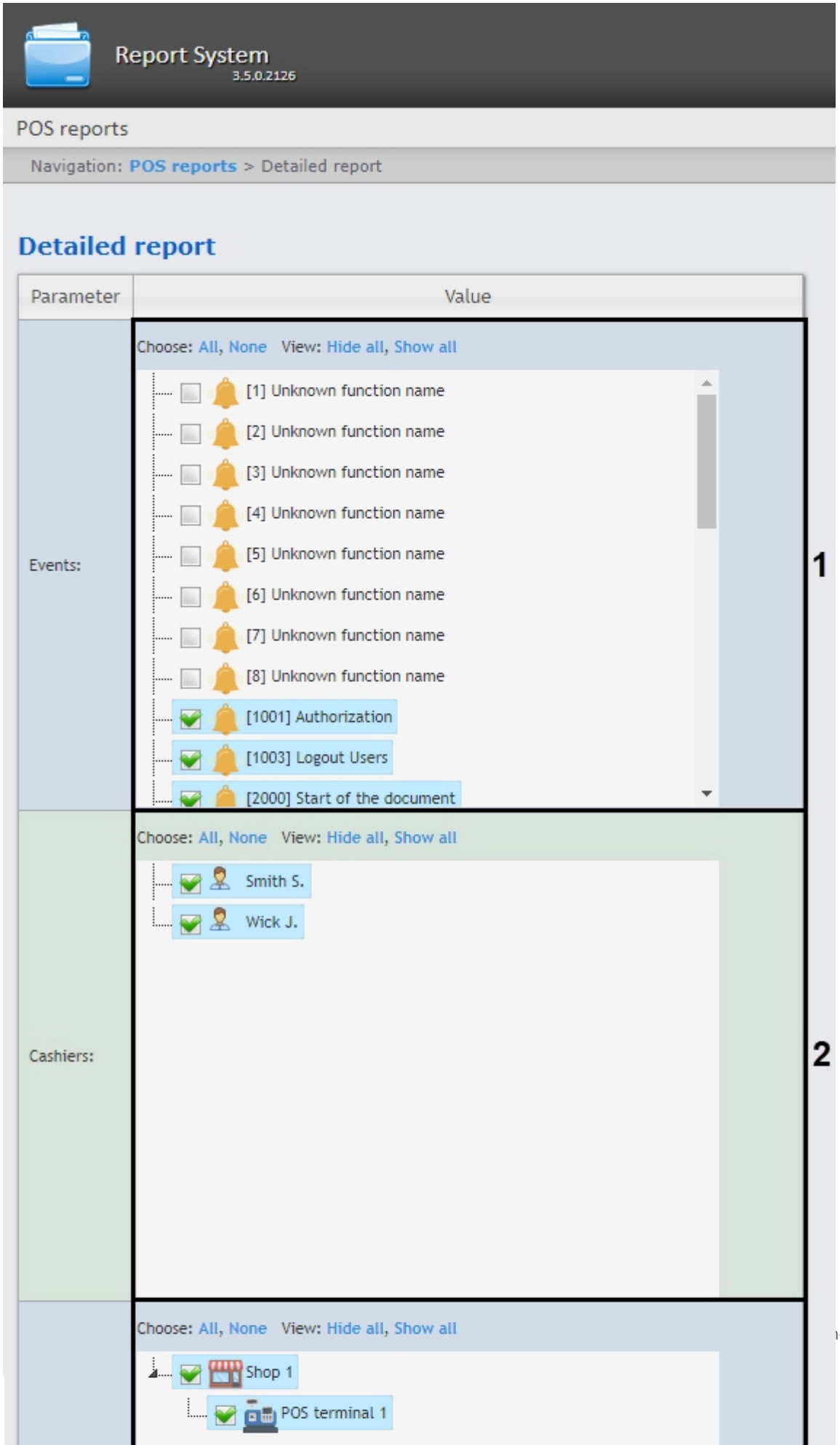
You can export the generated report (see Exporting of reports).

Detailed report

> **Attention!**
>
> In order to generate the Detailed report, the **POS-terminal** object should be created and configured in *Intellect* (see The POS-terminal object setup).

In order to display the Detailed report, do the following:

1. Select the **Detailed report** (see Selecting a type of general POS report).


Report System
3.5.0.2126
POS reports
Navigation: POS reports > Detailed report
Detailed report
Parameter
Value
Events:
Choose: All, None View: Hide all, Show all
[1] Unknown function name
[2] Unknown function name
[3] Unknown function name
[4] Unknown function name
[5] Unknown function name
[6] Unknown function name
[7] Unknown function name
[8] Unknown function name
[1001] Authorization
[1003] Logout Users
[2000] Start of the document
1
Cashiers:
Choose: All, None View: Hide all, Show all
Smith S.
Wick J.
2
Choose: All, None View: Hide all, Show all
Shop 1
POS terminal 1

2. Select the events that should be displayed in the report by setting the corresponding checkboxes in the list (**1**).
3. Select the cashiers by whom it is necessary to display the report by setting the corresponding checkboxes in the list (**2**).
4. Select the POS terminals (cash desks) that should be displayed in the report by setting the corresponding checkboxes in the list (**3**).

   > **Attention!**
   >
   > The **Events**, **Cashiers** and **POS** fields are mandatory: the report will not be generated if no value from these fields is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.

5. From the **Status group** drop-down list (**4**) select a status group (see Setting up the groups of statuses of POS events).
6. From the **Period** drop-down list (**5**) select the time period for which the report should be created.

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

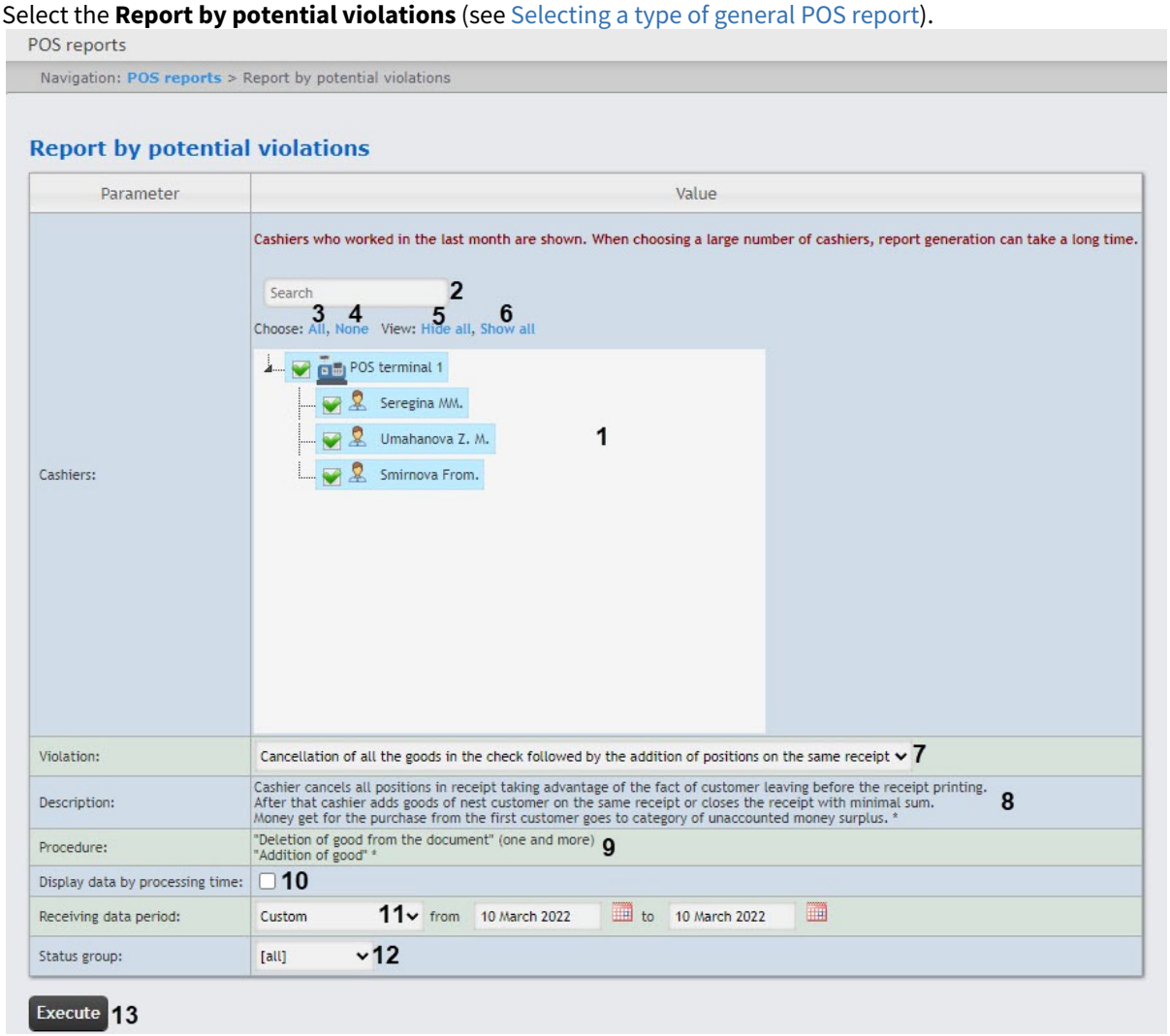
7. Click the **Execute** button (**6**). As a result of the operation, you will switch to the Detailed report (see Detailed reports).

Report by potential violations

> **Attention!**
>
> In order to generate the Report by potential violations, first it is necessary to create and configure the **POS-terminal** object in *Intellect* (see The POS-terminal object setup).

In order to generate a Report by potential violations, do the following:

1. Select the **Report by potential violations** (see Selecting a type of general POS report).



2. Select the cashiers by whom you want to display the report by setting the corresponding checkboxes in the list (**1**).

> **Attention!**
>
> This field is mandatory: the report will not be generated if no value is selected. If you try to generate a report, a warning message will alert you that you should select at least one value from the list.

3. Start entering the cashier's last name in the search field (**2**). Click **All** (**3**) to select all found cashiers. Click **None** (**4**) to deselect. If the search field is empty, click **All** to select all cashiers.
4. To hide the structure of cashiers, click **Hide all** (**5**). To expand the structure of cashiers, click **Show all** (**6**).
5. Select potential violations which should be displayed in the report (**7**). If **All** is selected, then all types of violations will be displayed in the 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 next 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 (when selling to accomplice).

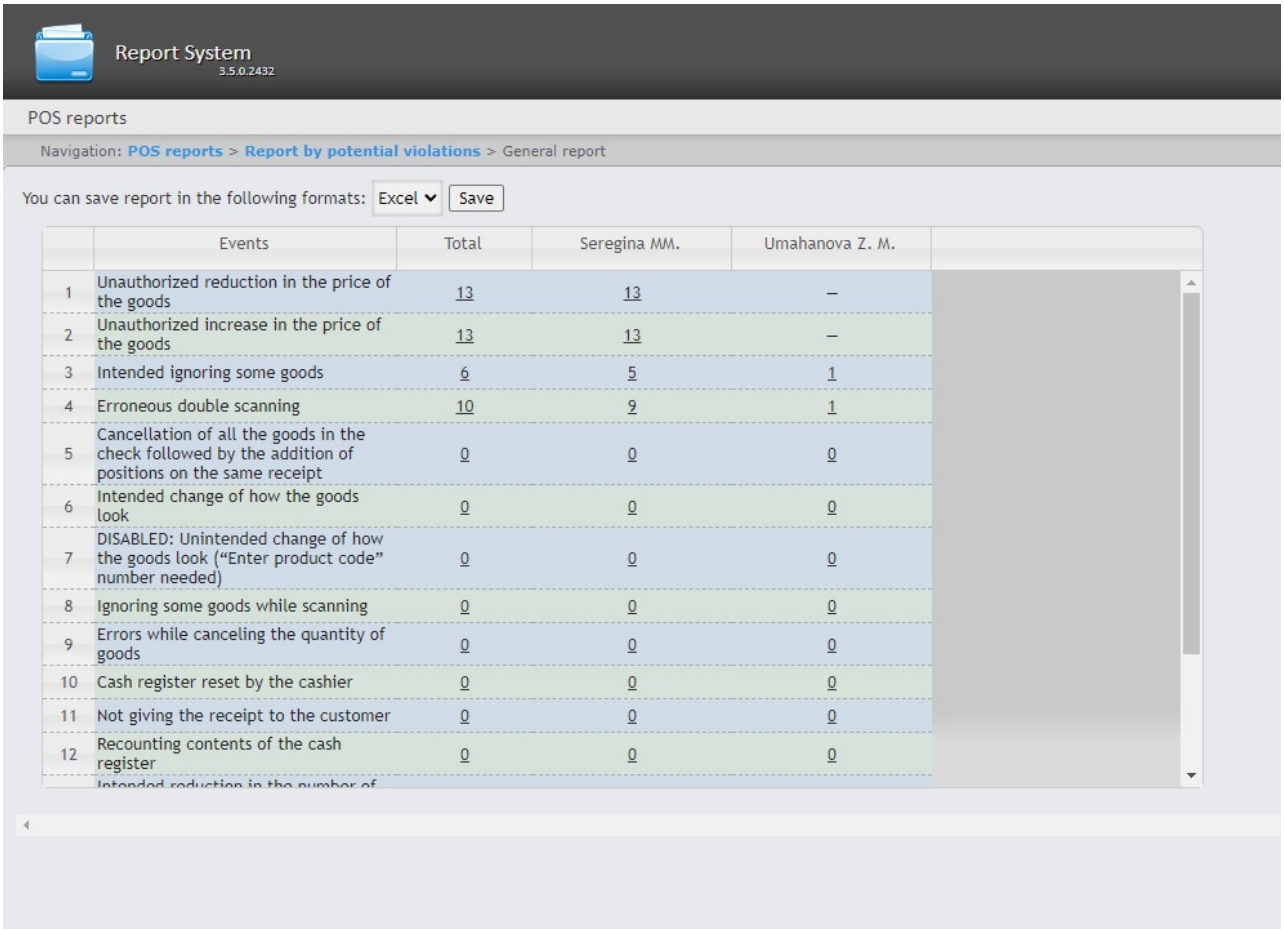
- **Unauthorized increase in the price of the goods** — cashier enters price manually to increase price of good. If customer left before receipt printing cashier returns correct price of good and receives unaccounted money surplus.
- **Intended ignoring some goods** — cashier includes only one good with 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 cashier 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** — 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. Doesn't print the receipt and takes the money surplus.

6. The **Description** field (**8**) has the description of the violation and is filled in automatically when the violation is selected.
7. The **Procedure** field (**9**) has the description of the procedure by which the violation is determined, and is filled in automatically when the violation is selected.
8. Set the **Display data by processing time** checkbox (**10**) to add the time spent by the operator when choosing the event status. This is the time between selecting the string in the detailed report and changing the event status of this string. If the checkbox is not set, the processing time will not be calculated and displayed in the report.
9. From the **Receiving data period** drop-down list (**11**), select the period of time for which the report should be created.

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

10. In the **Status group** field (**12**), specify the group of statuses of those potential violations that should be displayed in the report. If **All** is selected, then all violations will be displayed in the report regardless of their status.
11. Click the **Execute** button (**13**).

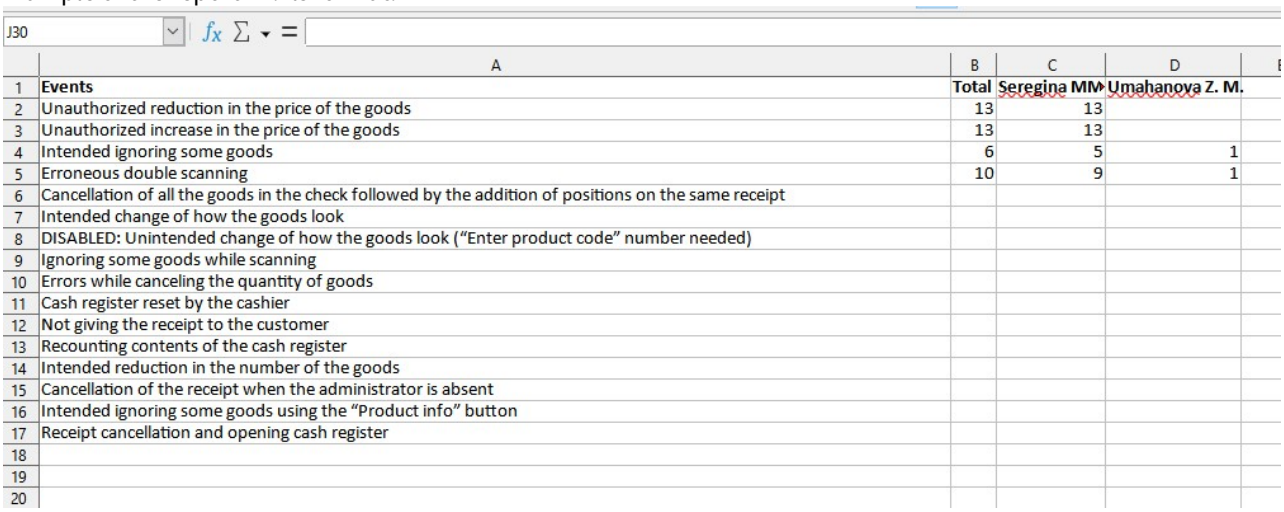
As a result a summary table of potential violations according to the specified parameters is displayed. In the **Total** column the total amount of potential violations by their type is displayed. In the cashier's name column the amount of potential violations registered for this cashier is displayed.



	Events	Total	Seregina MM.	Umahanova Z. M.
1	Unauthorized reduction in the price of the goods	13	13	–
2	Unauthorized increase in the price of the goods	13	13	–
3	Intended ignoring some goods	6	5	1
4	Erroneous double scanning	10	9	1
5	Cancellation of all the goods in the check followed by the addition of positions on the same receipt	0	0	0
6	Intended change of how the goods look	0	0	0
7	DISABLED: Unintended change of how the goods look (“Enter product code” number needed)	0	0	0
8	Ignoring some goods while scanning	0	0	0
9	Errors while canceling the quantity of goods	0	0	0
10	Cash register reset by the cashier	0	0	0
11	Not giving the receipt to the customer	0	0	0
12	Recounting contents of the cash register	0	0	0

In order to save the report in .xls format, click the **Save** button.

Example of the report in .xls format:



	A	B	C	D
1	**Events**	**Total**	**Seregina MM**	**Umahanova Z. M.**
2	Unauthorized reduction in the price of the goods	13	13	
3	Unauthorized increase in the price of the goods	13	13	
4	Intended ignoring some goods	6	5	1
5	Erroneous double scanning	10	9	1
6	Cancellation of all the goods in the check followed by the addition of positions on the same receipt			
7	Intended change of how the goods look			
8	DISABLED: Unintended change of how the goods look (“Enter product code” number needed)			
9	Ignoring some goods while scanning			
10	Errors while canceling the quantity of goods			
11	Cash register reset by the cashier			
12	Not giving the receipt to the customer			
13	Recounting contents of the cash register			
14	Intended reduction in the number of the goods			
15	Cancellation of the receipt when the administrator is absent			
16	Intended ignoring some goods using the “Product info” button			
17	Receipt cancellation and opening cash register			
18				
19				
20				

It is possible to enable cash desks analysis running in the background. To do this, in the C:\Program Files (x86)\Intellect\Modules\Wt2\web.config file, set the value of the **PotentialViolationsEnabled** key to **1**:

```
<add key="PotentialViolationsEnabled" value="1" />
```

Note

- By default, the cash desks analysis in the background is disabled and the value of the **PotentialViolationsEnabled** key is **0**.
- If there are many cash desks and their analysis is not completed before the end of the user session, then increase the value of **timeout** parameter in the C:\Program Files (x86)\Intellect\Modules\Wt2\web.config file. The value of the **timeout** parameter is set in seconds.

```
<authentication mode="Forms">
  <forms loginUrl="~/Account/LogOn" timeout="600" cookieless="UseCookies"></forms>
</authentication>
```

The Report by potential violations is generated.

8.7.2 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).

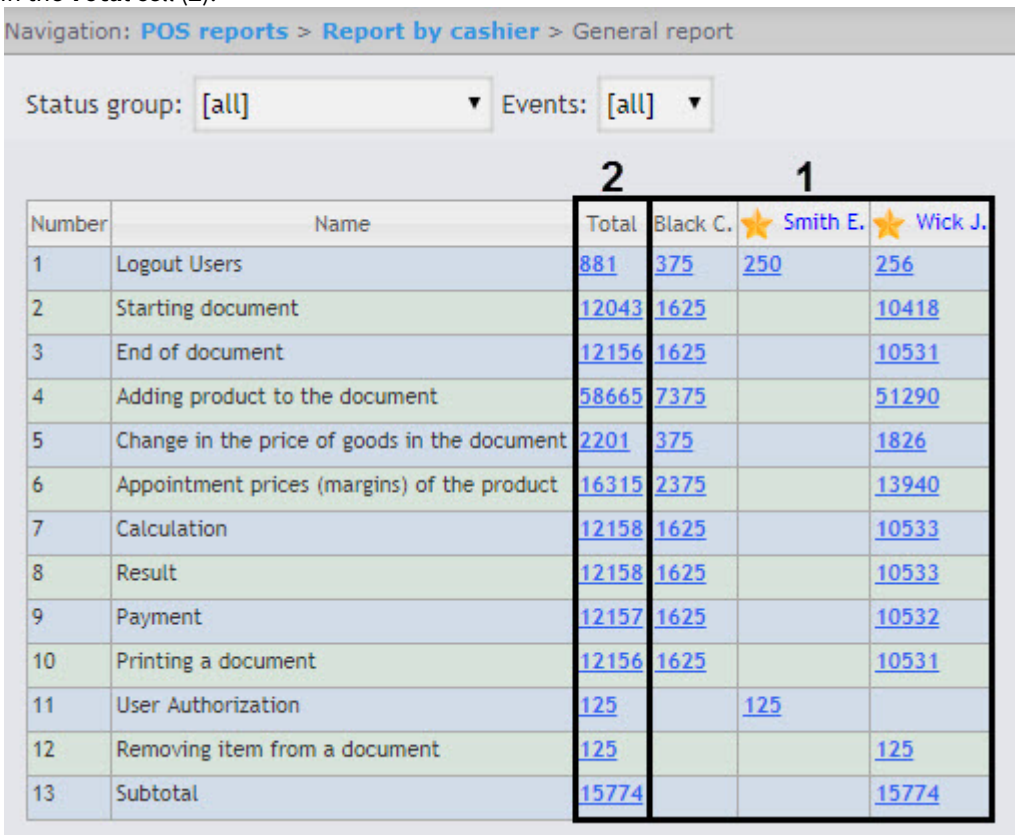
Detailed reports are created on the basis of corresponding general reports (e.g. a detailed report by cashier is created on the basis of a general report by cashier).

Viewing a detailed report

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

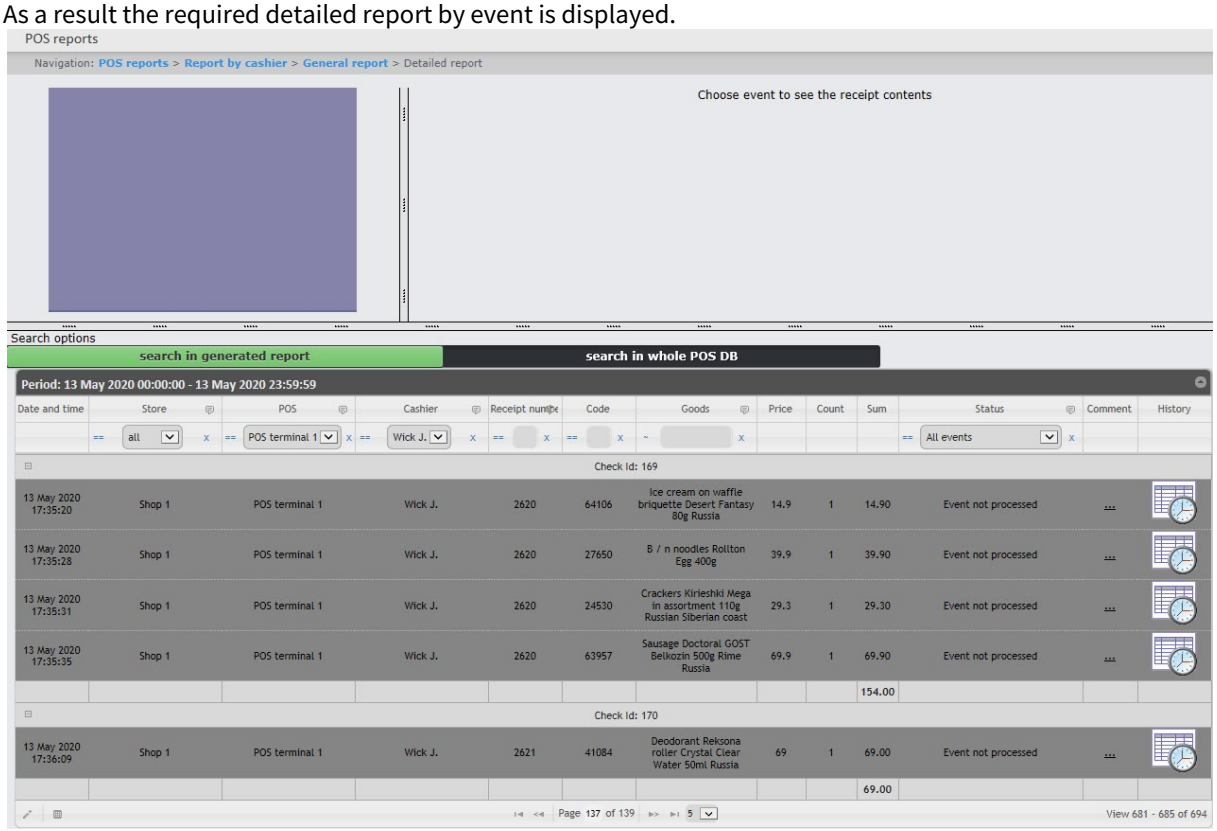
1. Generate a general report of the required type (see General reports).

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.

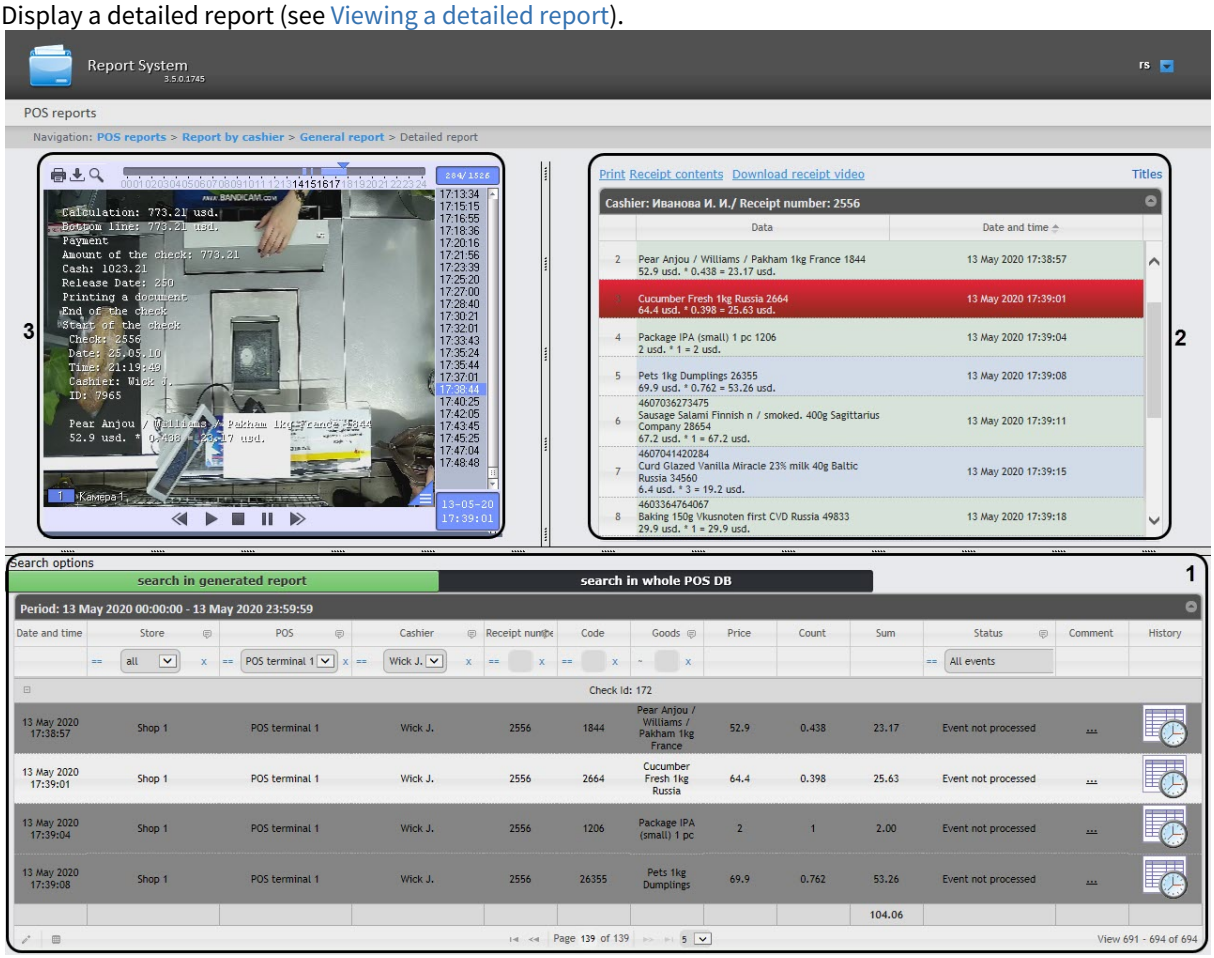


All detailed reports are identical in structure and represent the table. To configure the columns displayed in the table, see Select columns in detailed reports.

Viewing data from the POS terminal and the video of event

In order to view data from the POS terminal and video of the 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 Requirements for Intellect Web Report System implementation).

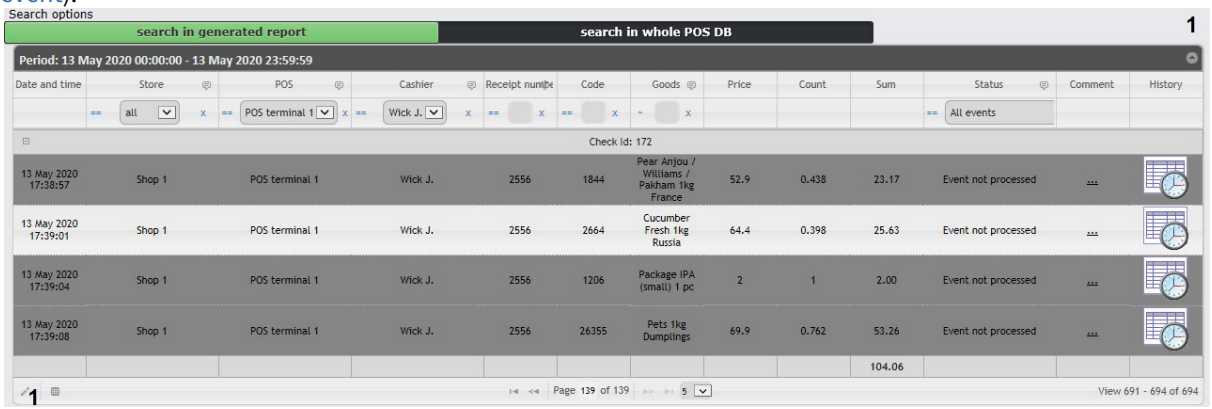
> **Note**
>
> The view of displayed data from the POS terminal and video events can be changed by selecting the needed layout (see Selecting layouts in POS reports).

Changing the event status and the comment

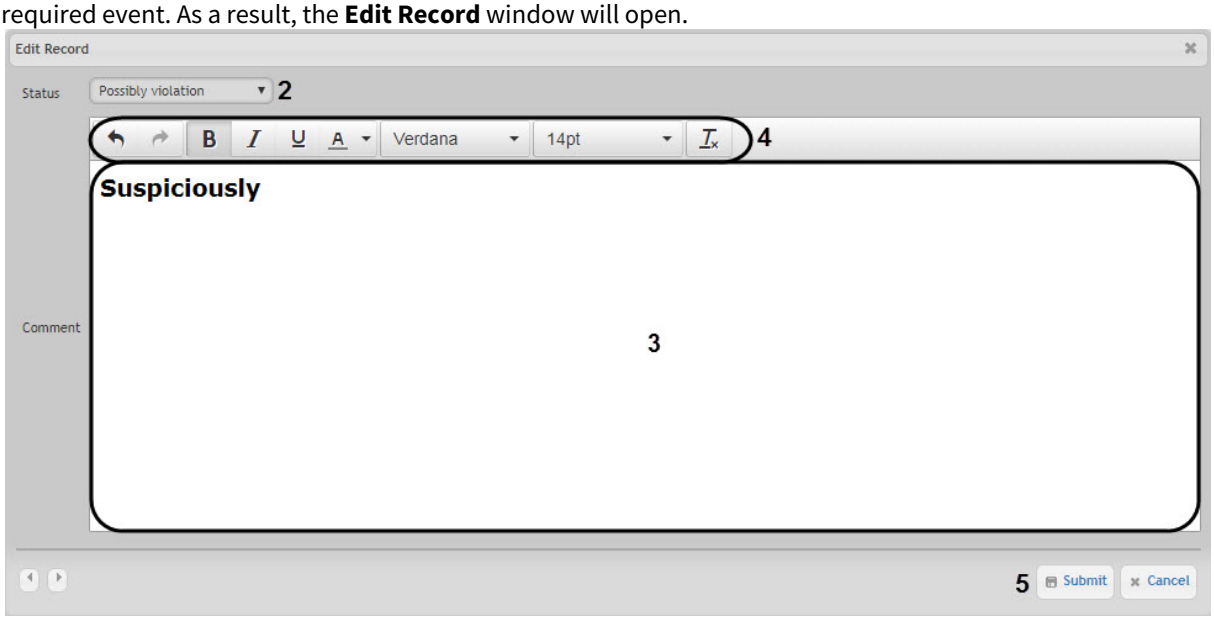
> **Attention!**
>
> For this operation the user should be added to the POS expert role.

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

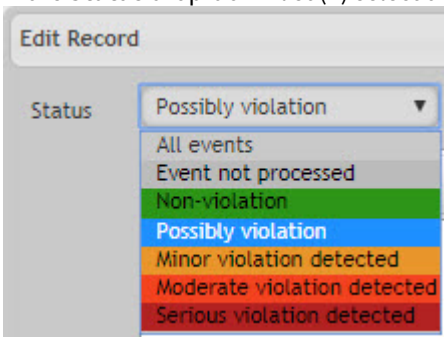
1. Select the required event in the detailed report (see Viewing data from the POS terminal and the video of event).



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.

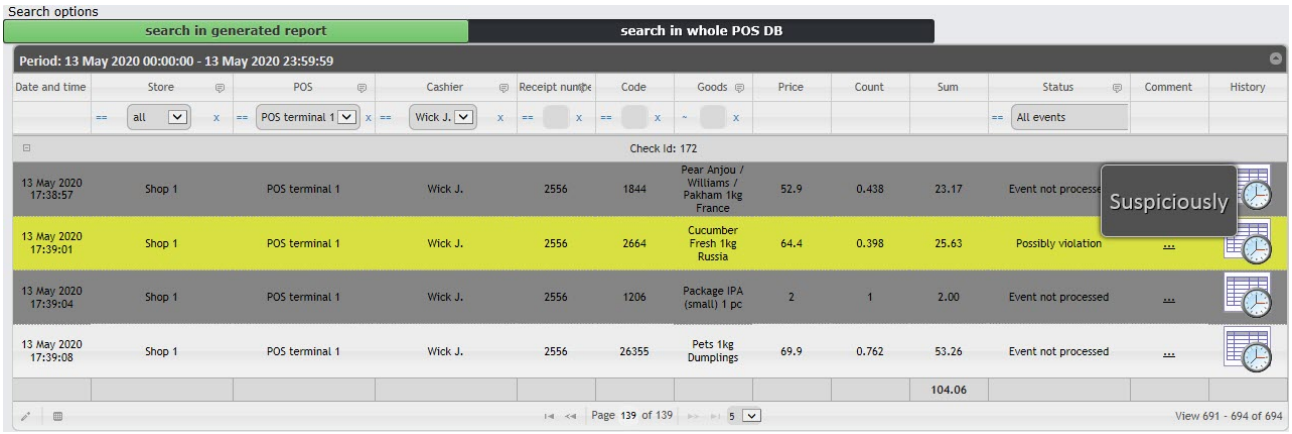


> **Note**
>
> The statuses in the list can be changed (see Setting up the statuses of POS events).

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.

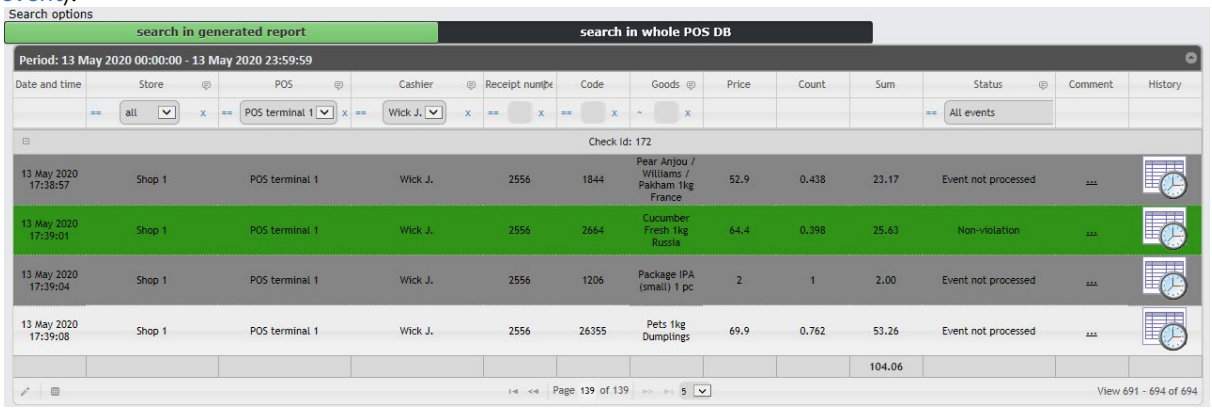
> **Note**
>
> To view a comment, click the ellipsis in the **Comment** column of the corresponding event. As a result, a pop-up window containing the comment text will appear.



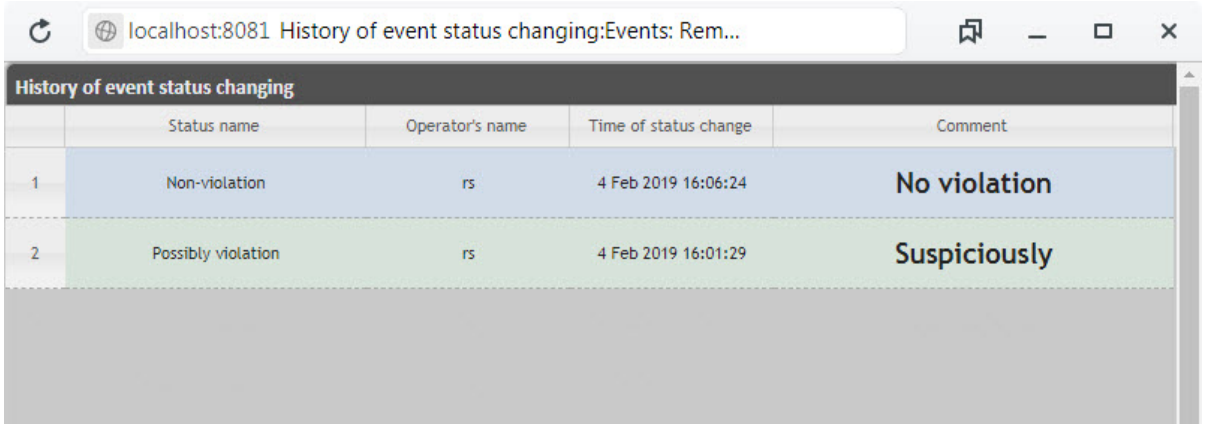
Viewing the history of event status or comment changing

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.

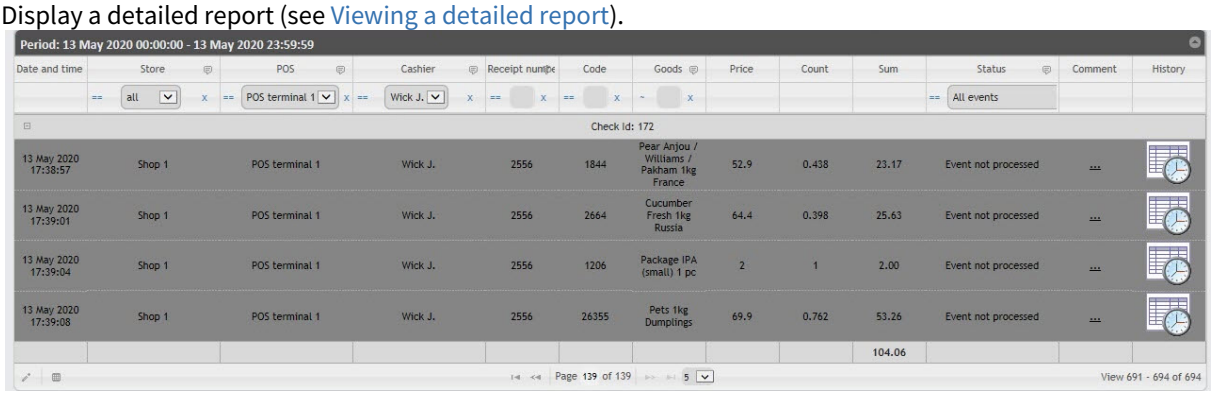


> **Note**
>
> If the event status or comment has not changed, then the **History of event status changing** page will be empty.

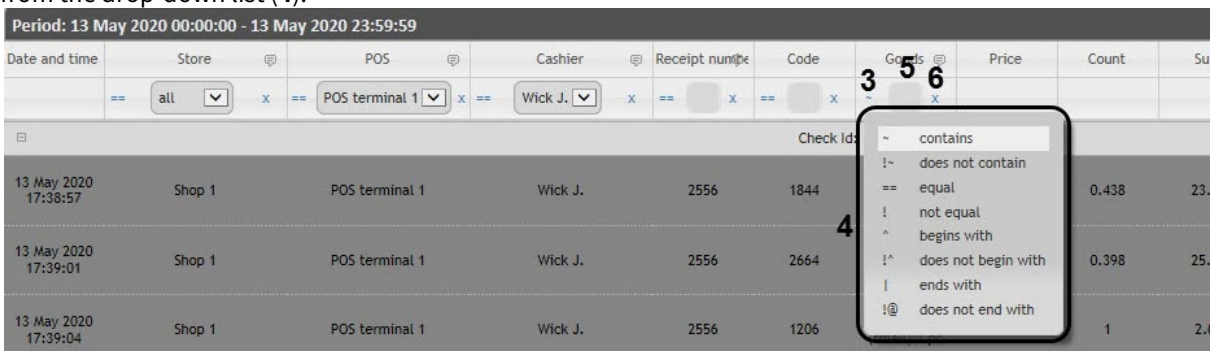
Filtering and sorting events in detailed reports

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

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



2. 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**).

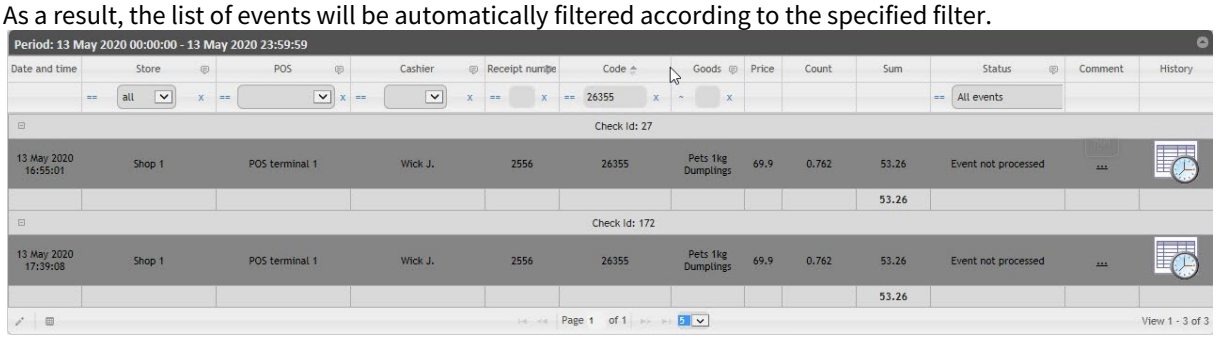


> **Note**
>
> - For some columns, the filtering is not available.
> - The list of filtering conditions (**4**) may differ depending on the selected column. For example, for the **Receipt number**, **Code**, and **Status**, columns only 2 conditions are available: **equal "=="** and **not equal "!"**.

3. 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).

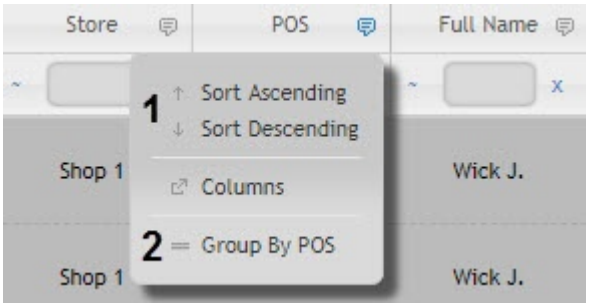
4. As a result, the list of events will be automatically filtered according to the specified filter.



5. To reset the filter, click the (**6**) button.
6. 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.

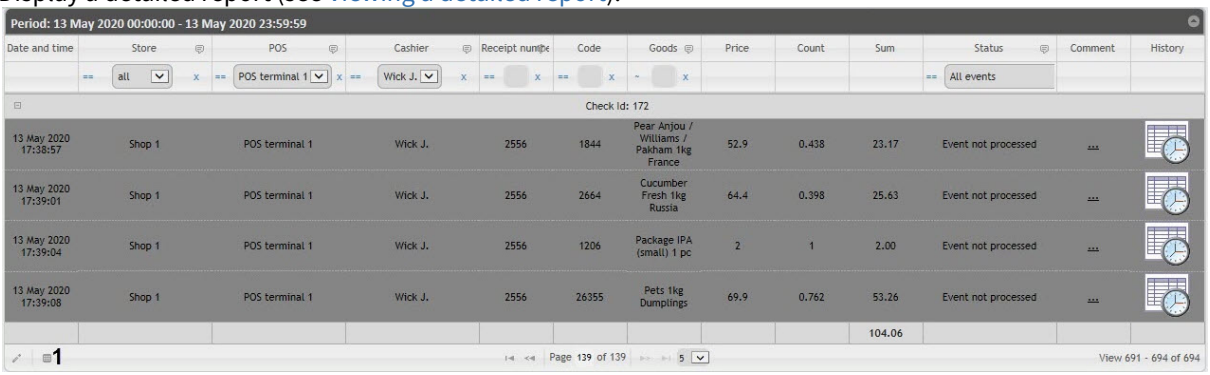


The filtering and sorting the events in the detailed reports is complete.

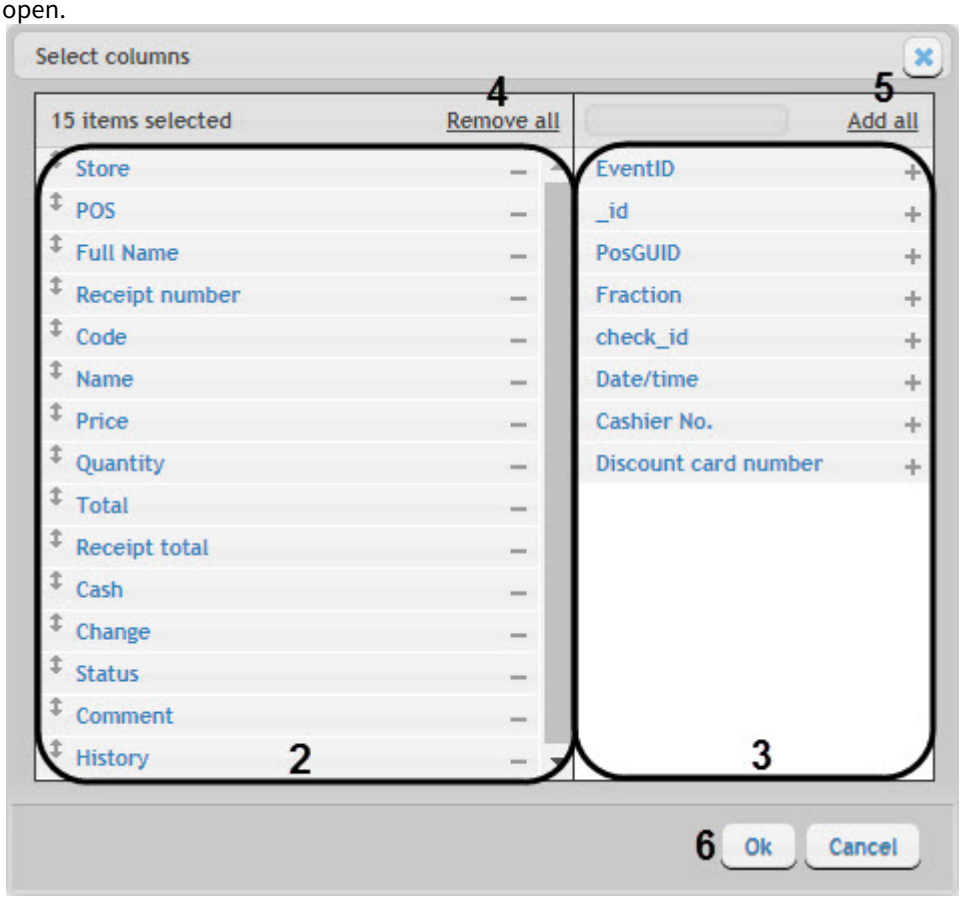
Select columns in detailed reports

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.



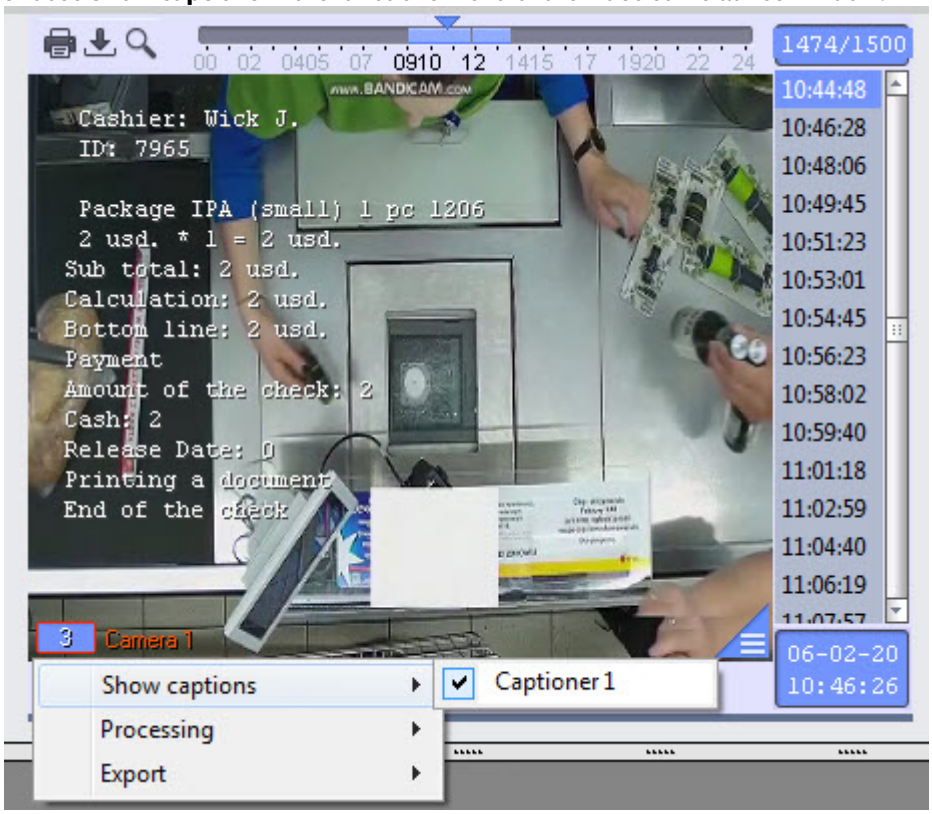
3. The active (displayed) columns are displayed in the (**2**) field.
   - To remove a column, click on the − icon next to the name of the corresponding column in the field (**2**).
   - To remove all columns, click **Remove all** (**4**).
   - To change the order of the columns, in the field (**2**) 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.

Disabling captions in the video surveying window

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

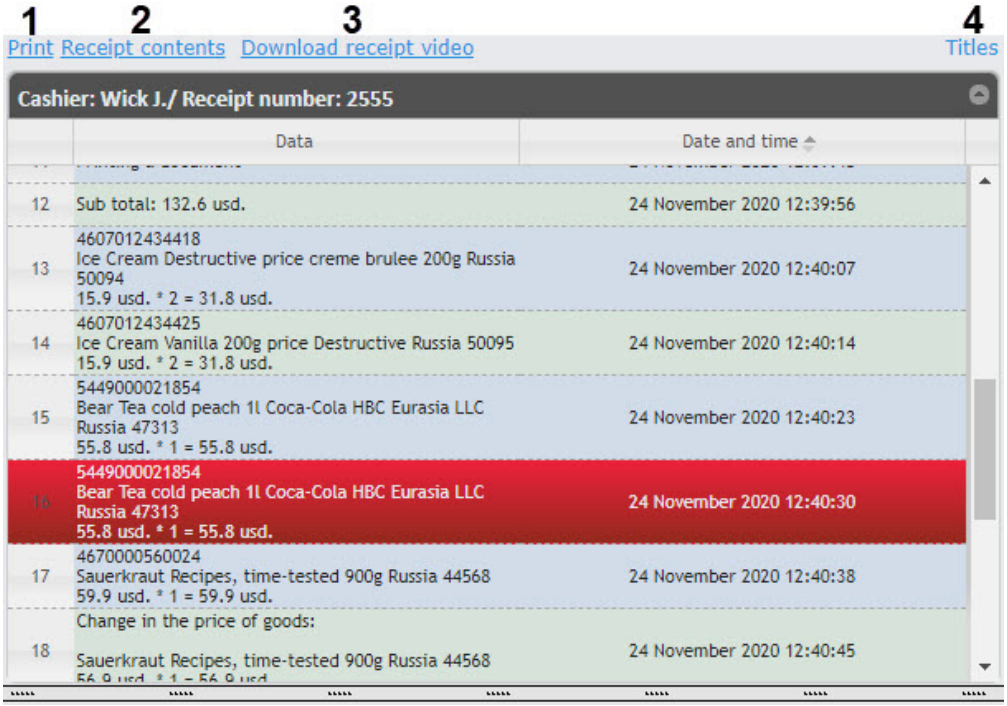
1. Choose **Show captions** in the functions menu of the video surveillance window.



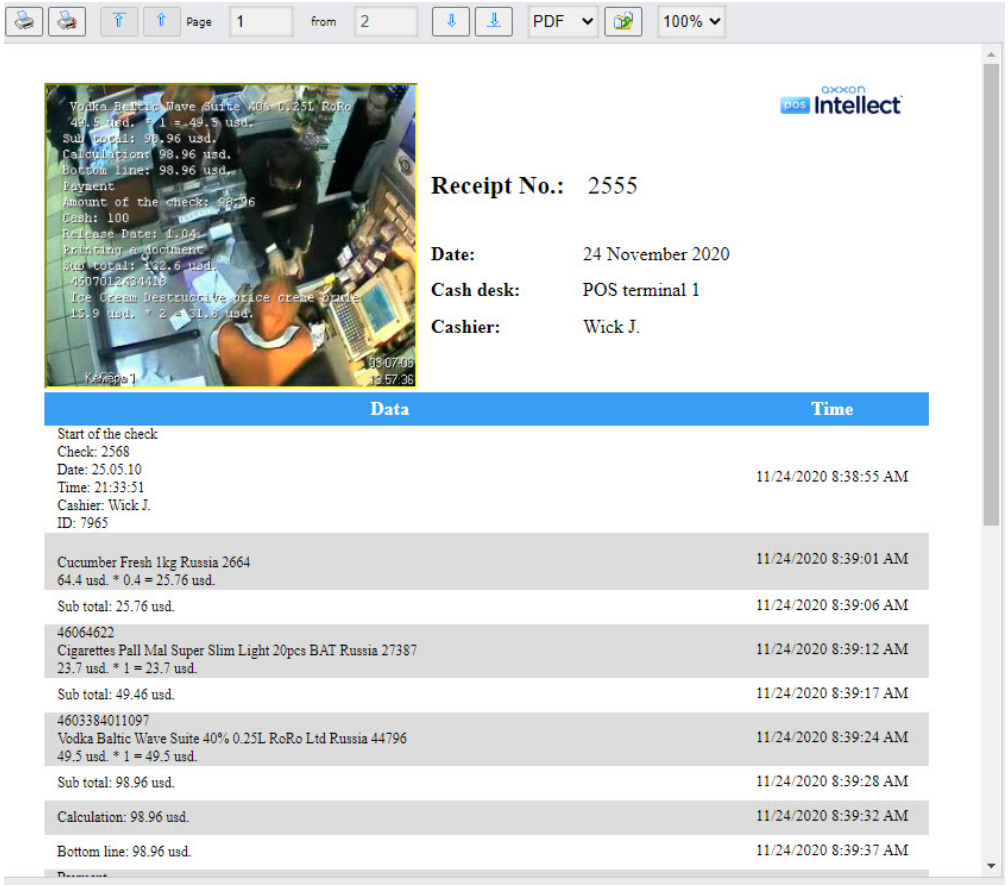
2. In the displayed list of available captioners select those from which captions are to be received.
3. To disable captions from some captioners left-click the line with the required captioner.

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.



Receipt No. 2555
Cash desk: POS terminal 1
Cashier: Wick J.

Goods	Amount (Items/Kg)	Price
Cucumber Fresh 1kg Russia	0.772	25.76
Cigarettes Pall Mal Super Slim Light 20pcs BAT Russia	1	23.7
Vodka Baltic Wave Suite 40% 0.25L RoRo Ltd Russia	1	49.5
Ice Cream Destructive price creme brulee 200g Russia	2	31.8
Ice Cream Vanilla 200g price Destructive Russia	2	31.8
Bear Tea cold peach 11 Coca-Cola HBC Eurasia LLC Russia	2	55.8
Sauerkraut Recipes, time-tested 900g Russia	1	59.9
Pork Leg n / a 1kg	0.634	98.21
Sour Merry Milkman 20% 400g WBD of Russia	1	36.8
Mayonnaise Makheev Prov.na egg yolk 840g sachet 40% of Russia	1	59.5
Package 100g Whiskas Tasty Eats Russia	2	13.8
green onion 100g FAS Russia	2	43.7

- **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.

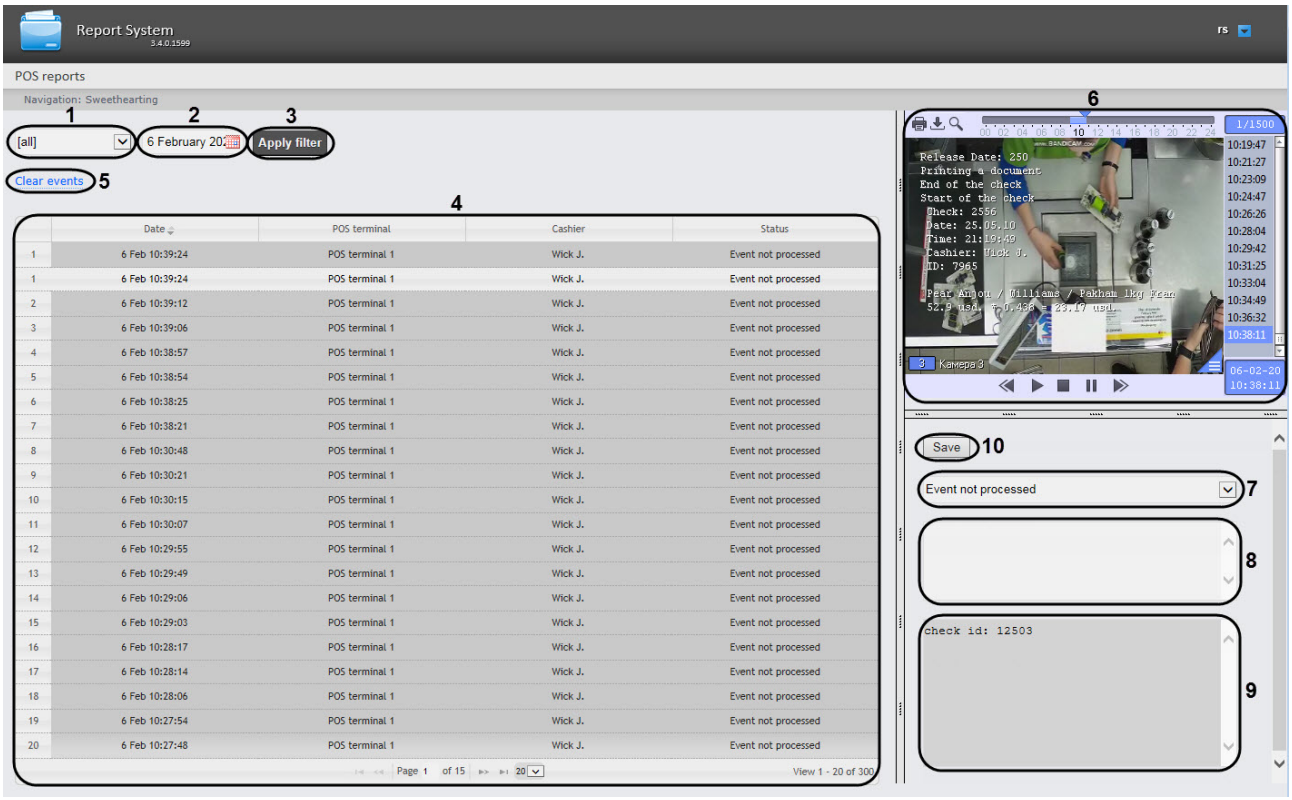
- **Titles** (**4**) - Enables or disables displaying captions on the video of the receipt when it is saved using the **Download receipt video** link.

8.7.3 Sweethearting monitor

> **Attention!**
>
> The **Sweethearting** report is generated automatically based on the data from the *Sweethearting at checkout detection* module, which is part of the *Intellect Detector Pack* (see Configuring the Sweethearting detection module).
> Also the **POS terminal** and the **Shop** objects should be set up and configured in *POS PSIM* (see The POS terminal object setup).

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.



Attention!

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 *Intellect Detector Pack* (see Setting the timeout for sweethearting event addition to report).

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 (**4**), 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 *Intellect Web Report System*, working with the **Sweethearting** monitor.

To display the events for a specific day, do the following:

1. From the drop-down list (**1**), select the POS terminals (cash registers) for which it is necessary to display thefts. If the **All** value is selected, the events from all POS terminals (cash registers) will be displayed.

2. Using the **Calendar** tool (**2**), set the day for which it is necessary to build the report. Click the  button near the corresponding field to use the **Calendar** tool.
3. Click the **Apply filter** button (**3**) to display the events for the specified day.

In order to clear the event table, click the **Clear events** link in the upper-left part of the table (**5**).

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 (**6**).

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

2. The drop-down list for selecting the status of the event (**7**). By default, all events have the **Event not processed (by default)** status. Having examined the video, the operator of *Intellect 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 (**8**). 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 (**9**).
5. The **Save** button to save the event changes (new status and comment).

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 Export and print out.

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

8.8 Working with reports by Queue Length detectors

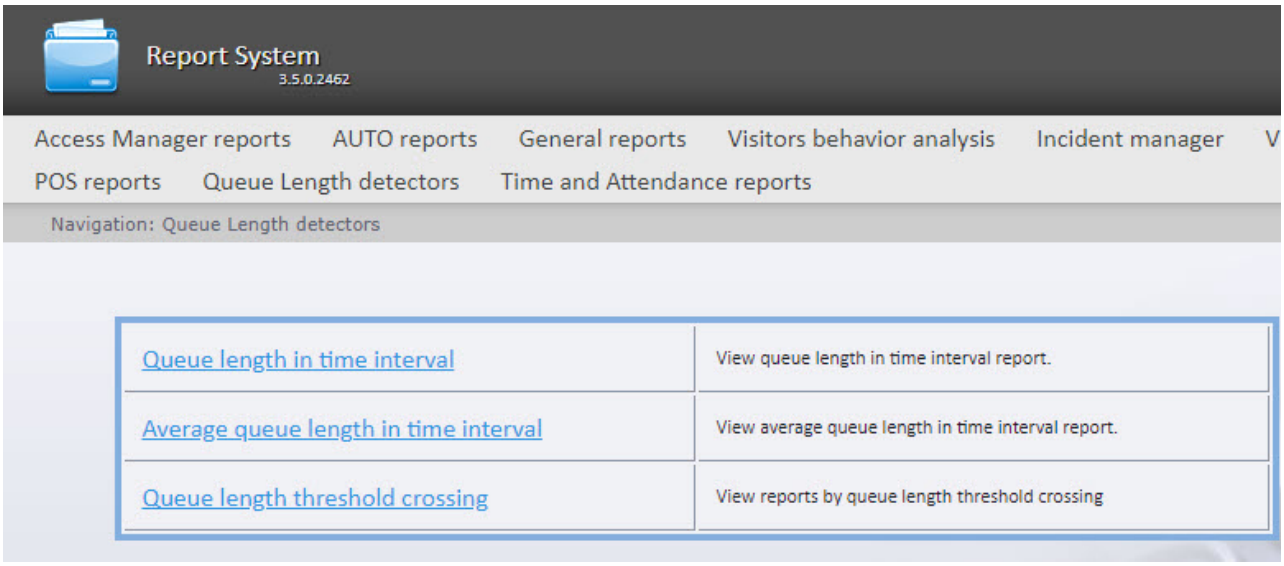
In order to be able to view and generate reports by Queue Length detectors, you should install *Detector Pack* subsystem and configure the Queue length detection as described in the Detector Pack user's manual.

> **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).

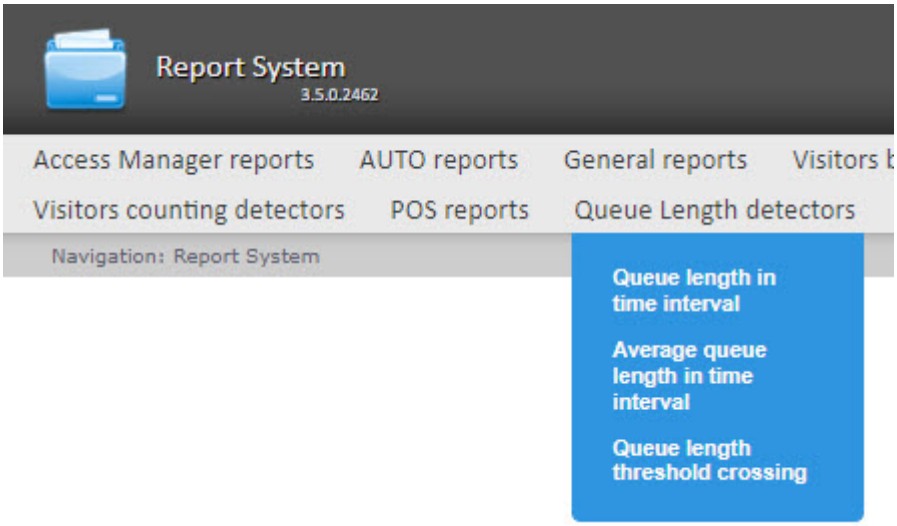
8.8.1 Selecting a type of reports by Queue Length detectors

To select a report by queue Length detectors, click the **Queue Length detectors** link in the report menu of *Intellect Web Report System*.

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



List of links for switching to reports by queue Length detectors is also available when hovering over the **Queue Length detectors** link in the report menu.



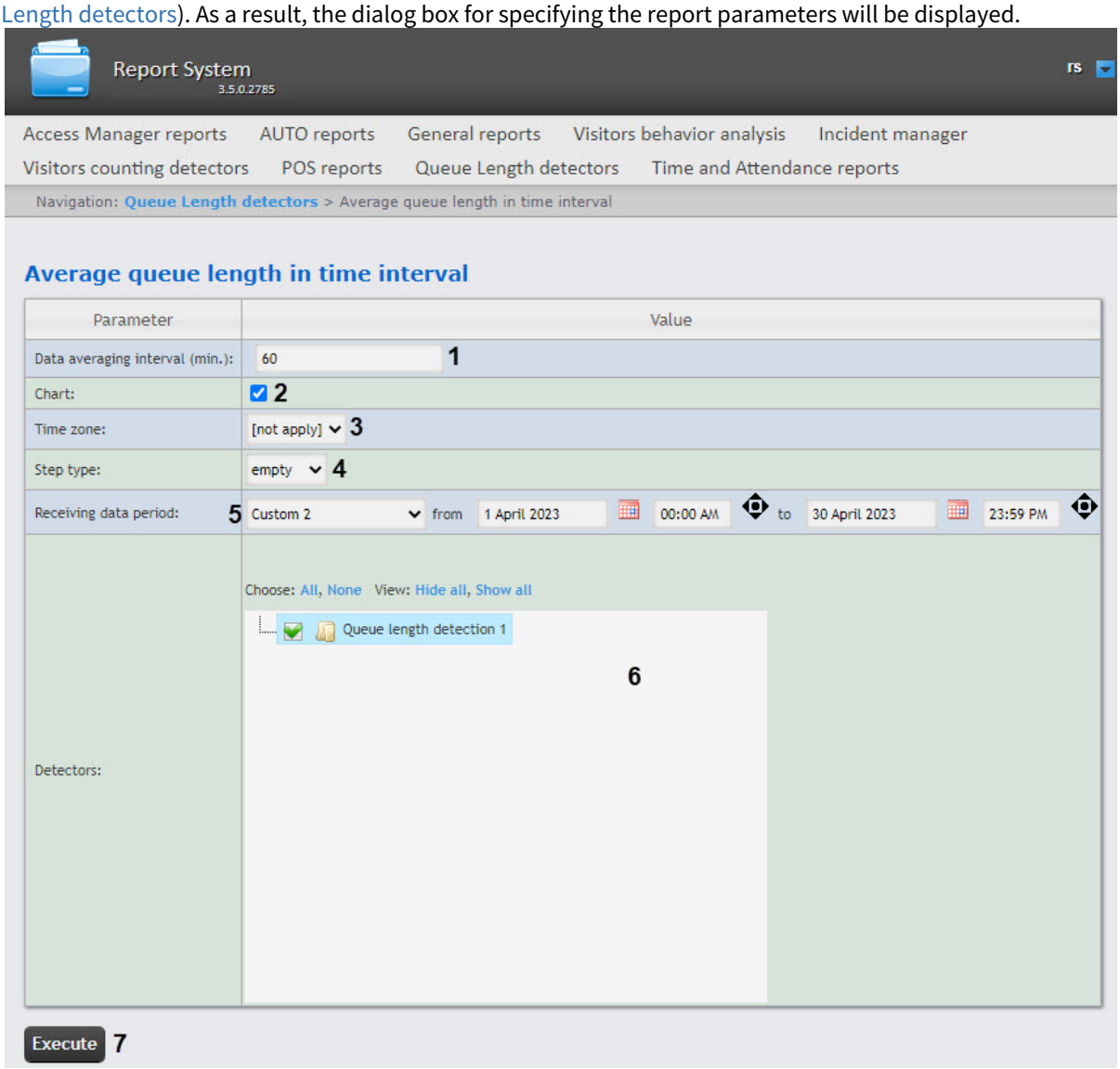
8.8.2 Average queue length in time interval

The **Average queue length in time interval** report provides the information on the average queue length. The data can be presented in the form of a chart or a table.

> **Note**
>
> The **Average queue length in time interval** report is a part of the **Queue Length Detector** module (it is necessary to create and configure the corresponding object in *Intellect*).

To create the **Average queue length in time interval** report, do the following:

1. Select the **Average queue length in time interval** report type (see Selecting a type of reports by Queue Length detectors). As a result, the dialog box for specifying the report parameters will be displayed.



2. In the **Data averaging interval (min.)** field (**1**), enter the calculation step of the queue length—the time interval between the congestion values of the monitored area. The report displays the average values of the queue length over a time equal to the calculation step. The maximum and minimum values of this field depend on the selected step type (**4**).

> **Note**
>
> If the average value is zero for all such intervals over a specified period, that period will not be displayed in the report. In this case, it is recommended to change the data averaging interval.

3. Set the **Chart** checkbox (**2**), if it is necessary to display the report in the form of a chart.
4. From the **Time zone** drop-down list (**3**), select the time zone for which report should be created.

> **Note.**

You can select time zones created in *Intellect* that have only one time period and don't have any nested time periods. You cannot select days of the week. For detailed information about creation and using time zones, see Creating and using time schedules.

5. From the **Step type** drop-down list (**4**), select the type of data averaging:
   a. **empty**—the data will be displayed as is, i.e., it won't be averaged. The **Data averaging interval (min.)** field (**1**) isn't taken into account;
   b. **seconds**—the data will be averaged by seconds with a step in the range 1-60 from the **Data averaging interval (min.)** field (**1**);
   c. **minutes**—the data will be averaged by minutes with a step in the range 1-60 from the **Data averaging interval (min.)** field (**1**);
   d. **hours**—the data will be averaged by hours with a step in the range 1-24 from the **Data averaging interval (min.)** field (**1**);
   e. **days**—the data will be averaged by days with a step in the range 1-31 from the **Data averaging interval (min.)** field (**1**).
6. From the **Receiving data period** drop-down list (**5**), select the time period for which the report should be created.

   Note

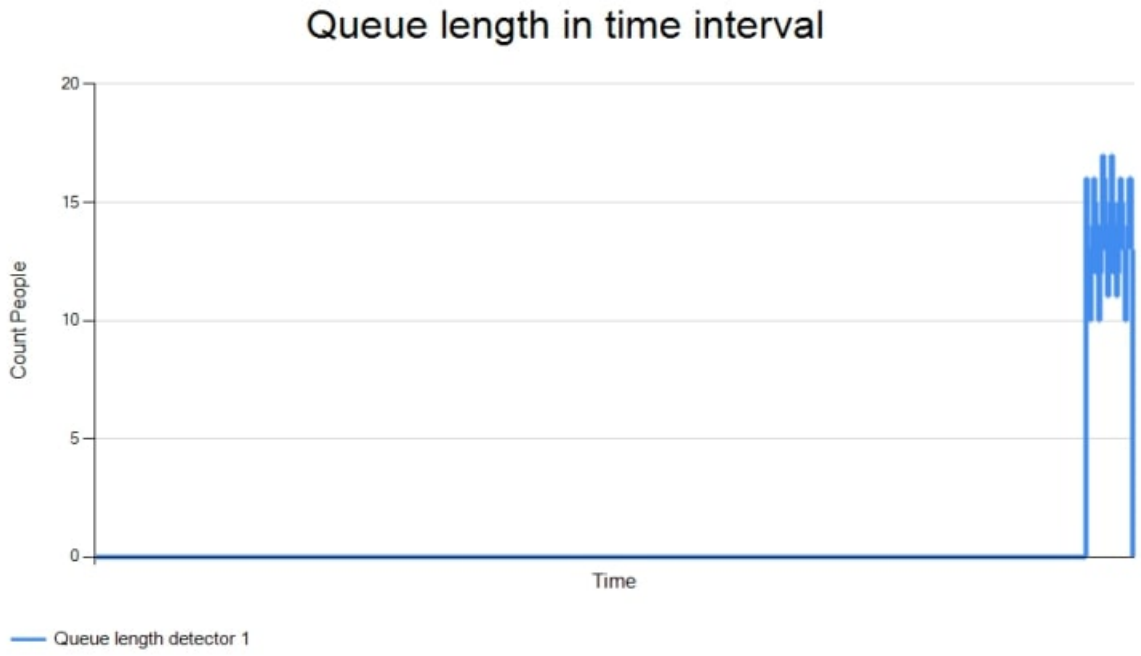
   If the **Custom** or **Custom 2** time period is selected, enter the start and end dates of the time period for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the  button near the corresponding field to use the **Calendar** tool. For the **Custom 2** time period, it is also necessary to enter the time of start and end period using the  button.
7. In the **Detectors** area (**6**), set the checkboxes next to those **Queue length detection** objects the information from which should be displayed in the report.
8. To create a report, click the **Execute** button (**7**). As a result, the report by the average queue length in time interval with the specified parameters will be displayed.

Example of the report in the form of a table:

Average queue length in time interval

Detector	Date	Data acquisition period	Threshold (people)
Queue length detector 1	5/16/2023	12:55 - 12:56	16
Queue length detector 1	5/16/2023	12:56 - 12:57	12
Queue length detector 1	5/16/2023	12:57 - 12:58	13
Queue length detector 1	5/16/2023	12:58 - 12:59	10
Queue length detector 1	5/16/2023	12:59 - 13:00	12
Queue length detector 1	5/16/2023	13:00 - 13:01	14
Queue length detector 1	5/16/2023	13:01 - 13:02	16
Queue length detector 1	5/16/2023	13:02 - 13:03	15
Queue length detector 1	5/16/2023	13:03 - 13:04	12
Queue length detector 1	5/16/2023	13:04 - 13:05	14
Queue length detector 1	5/16/2023	13:05 - 13:06	10
Queue length detector 1	5/16/2023	13:06 - 13:07	12
Queue length detector 1	5/16/2023	13:07 - 13:08	14
Queue length detector 1	5/16/2023	13:08 - 13:09	17
Queue length detector 1	5/16/2023	13:09 - 13:10	16
Queue length detector 1	5/16/2023	13:10 - 13:11	13
Queue length detector 1	5/16/2023	13:11 - 13:12	14
Queue length detector 1	5/16/2023	13:12 - 13:13	11
Queue length detector 1	5/16/2023	13:13 - 13:14	12

Example of the report in the form of a chart:



> **Note**
>
> If more than one detector is used, the data from each detector will be displayed in a different color.

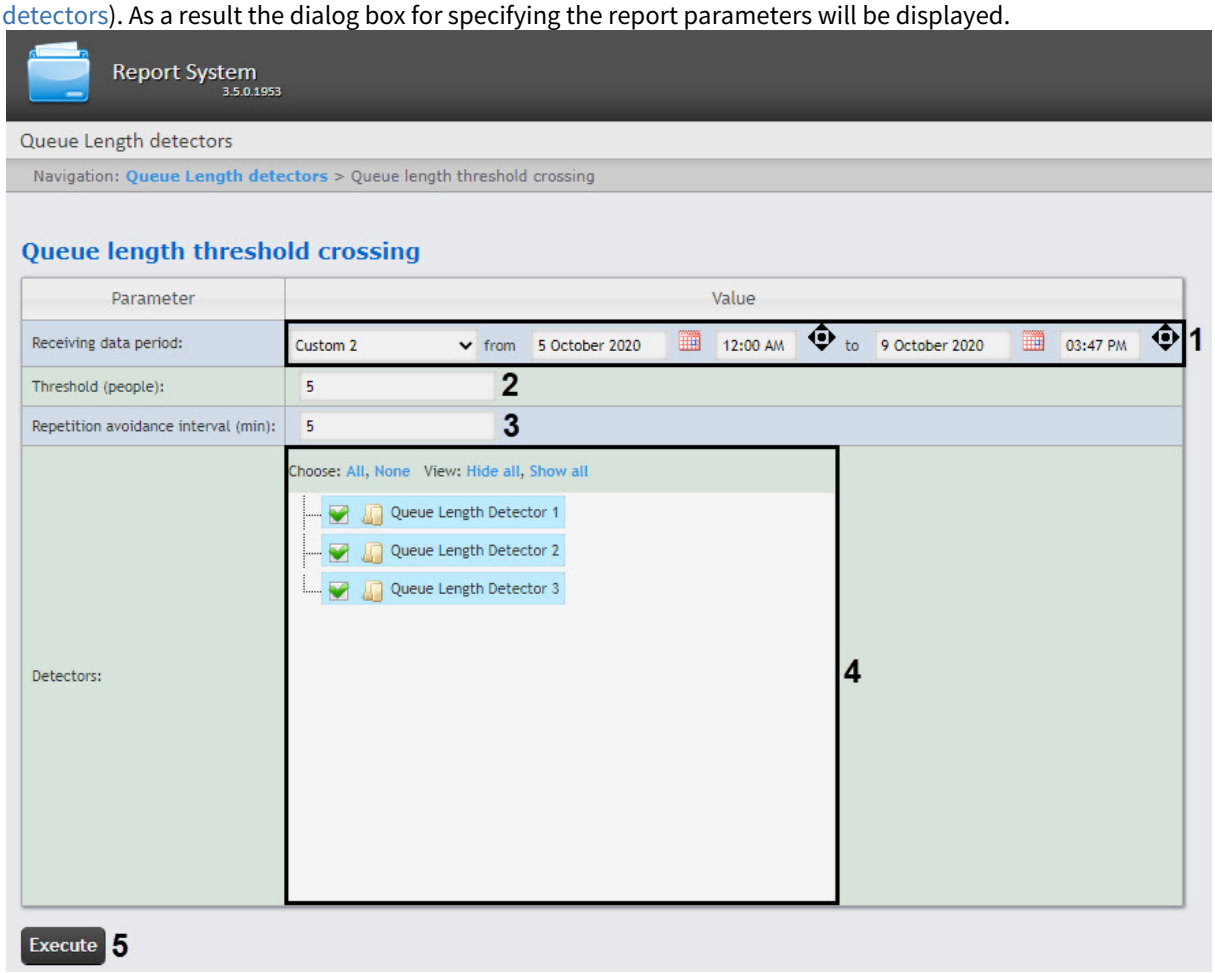
8.8.3 Queue length threshold crossing

The **Queue length threshold crossing** report allows you to get information about exceeding the maximum queue length.

> **Note**
>
> The **Queue length threshold crossing** report is related to the **Queue Length Detector** module (it is necessary to create the corresponding object in *Intellect*).

To create the **Queue length threshold crossing** report, do the following:

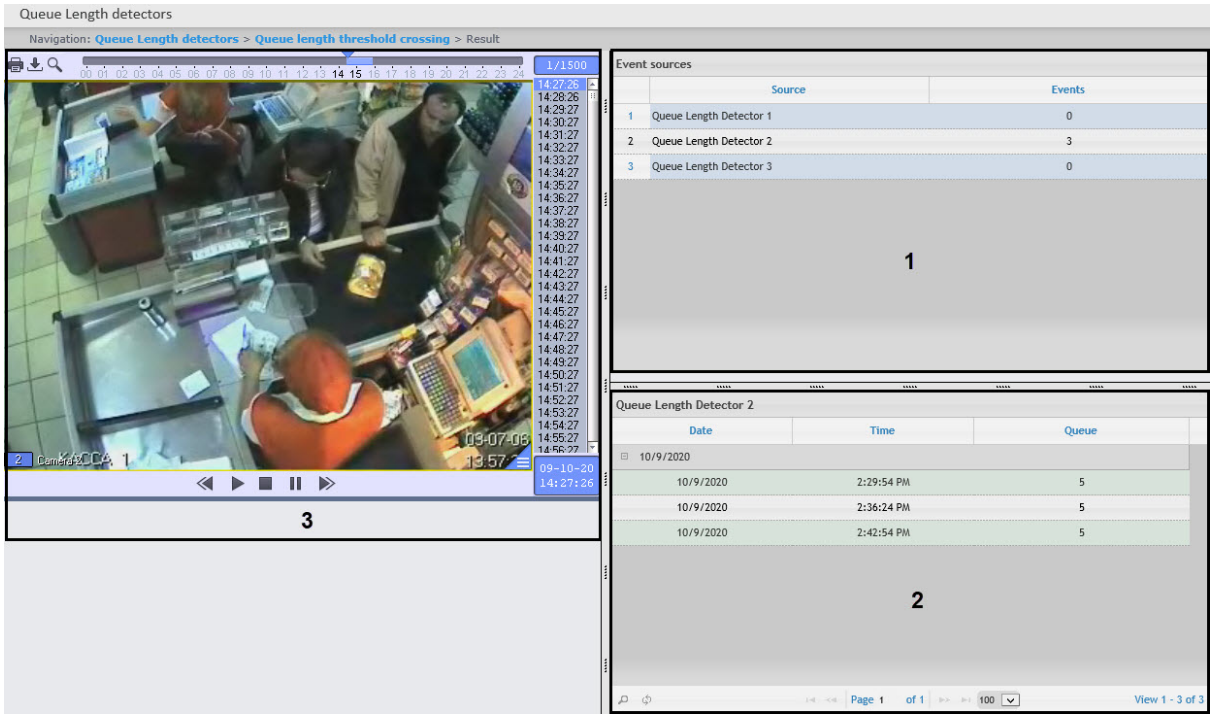
1. Select the **Queue length threshold crossing** report type (see Selecting a type of reports by Queue Length detectors). As a result the dialog box for specifying the report parameters will be displayed.



2. Set the following report parameters:
   a. From the **Receiving data period** drop-down list select the time period for which the report should be created (**1**).

   > **Note**
   >
   > If the **Custom 2** time period is selected, enter the start and end dates of the time period for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool. It is also necessary to enter the time of start and end periods using the button.

   b. In the **Threshold (people)** field (**2**), set the number of people in the queue, which is considered a threshold.
   c. In the **Repetition avoidance interval (min.)** field (**3**), enter the time in minutes during which the event of exceeding the threshold of the queue length will not be generated.
   d. In the **Detectors** field (**4**), set the checkboxes for those **Queue Length Detector** objects which information should be displayed in the report.
3. To create a report, click **Execute** (**5**). As a result, a report on all recorded facts of exceeding the queue length for the specified period will be displayed.



The report has a three-sectioned structure:

a. 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.
b. 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.
c. In section **3**, you can watch the video of the event selected in section **2**.

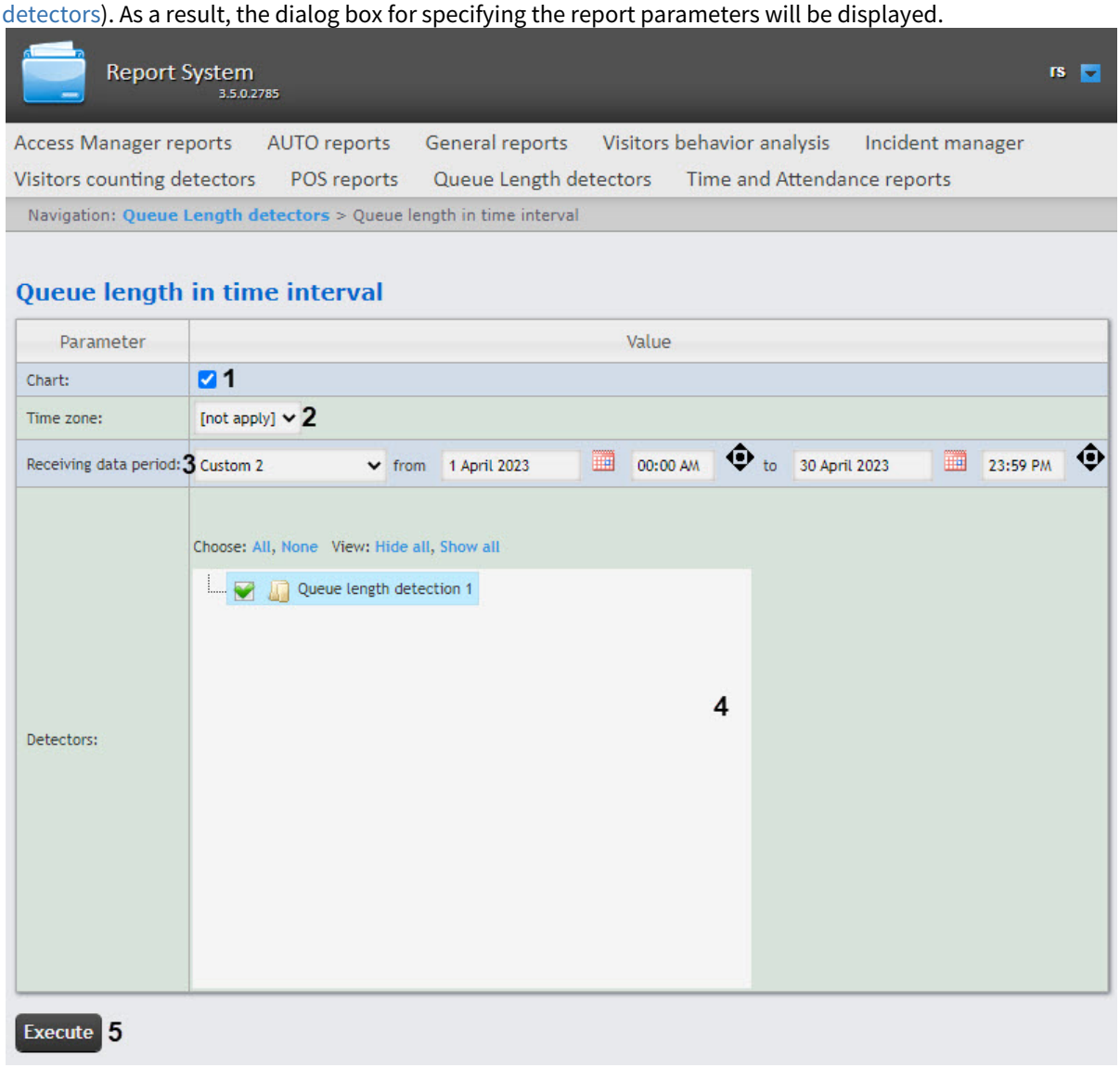
8.8.4 Queue length in time interval

The **Queue length in time interval** report provides the information on the queue length in time interval. The data can be presented in the form of a chart or a table.

> **Note**
>
> The **Queue length in time interval** report is a part of the *Queue length detection* module (it is necessary to create and configure the corresponding object in *Intellect Detector Pack* (see Configuring the Queue length detection module).

To create the **Queue length in time interval** report, do the following:

1. Select the **Queue length in time interval** report type (see Selecting a type of reports by Queue Length detectors). As a result, the dialog box for specifying the report parameters will be displayed.



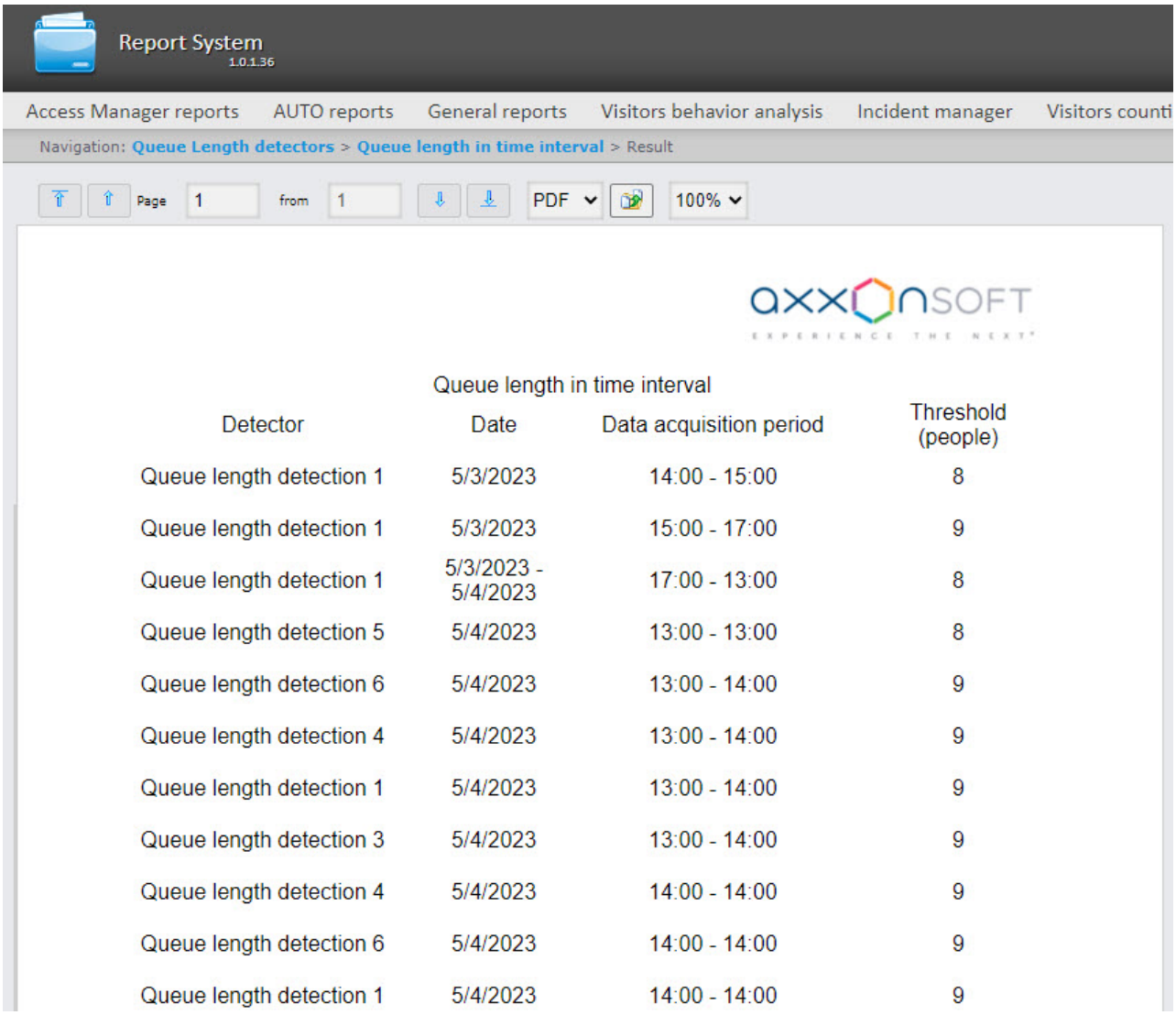
2. Set the **Chart** checkbox (**1**), if it is necessary to display the report in the form of a chart.
3. From the **Time zone** drop-down list (**2**), select the time zone for which the report should be created.

> **Note**
>
> You can select time zones created in *Axxon PSIM* that have only one time period and don't have any nested time periods. You cannot select days of the week. For detailed information about creation and using time zones, see Creating and using time schedules.

4. From the **Receiving data period** drop-down list (**3**), select the time period for which the report should be created. If the **Custom** or **Custom 2** time period is selected, enter the start and end dates of the time period for which the report should be created in the **from** and **to** fields using the **Calendar** tool. Click the button near the corresponding field to use the **Calendar** tool. It is also necessary to enter the time of start and end periods using the button.

5. In the **Detectors** field (**4**), set the checkboxes next to those **Queue length detection** objects which information should be displayed in the report. Click **All** to select all found/available detectors. Click **None** to deselect. Click **Show all** to expand the detectors structure. Click **Hide all** to hide the detectors structure.
6. To create a report, click the **Execute** button (**5**). As a result, the report by the queue length in time interval with the specified parameters will be displayed. The data is displayed with averaging depending on the selected time interval. If you select more than 14 days, the data averaging is one day. If you select from one day to 14 days, the data averaging is one hour. If you select less than one day, the data averaging is one minute.

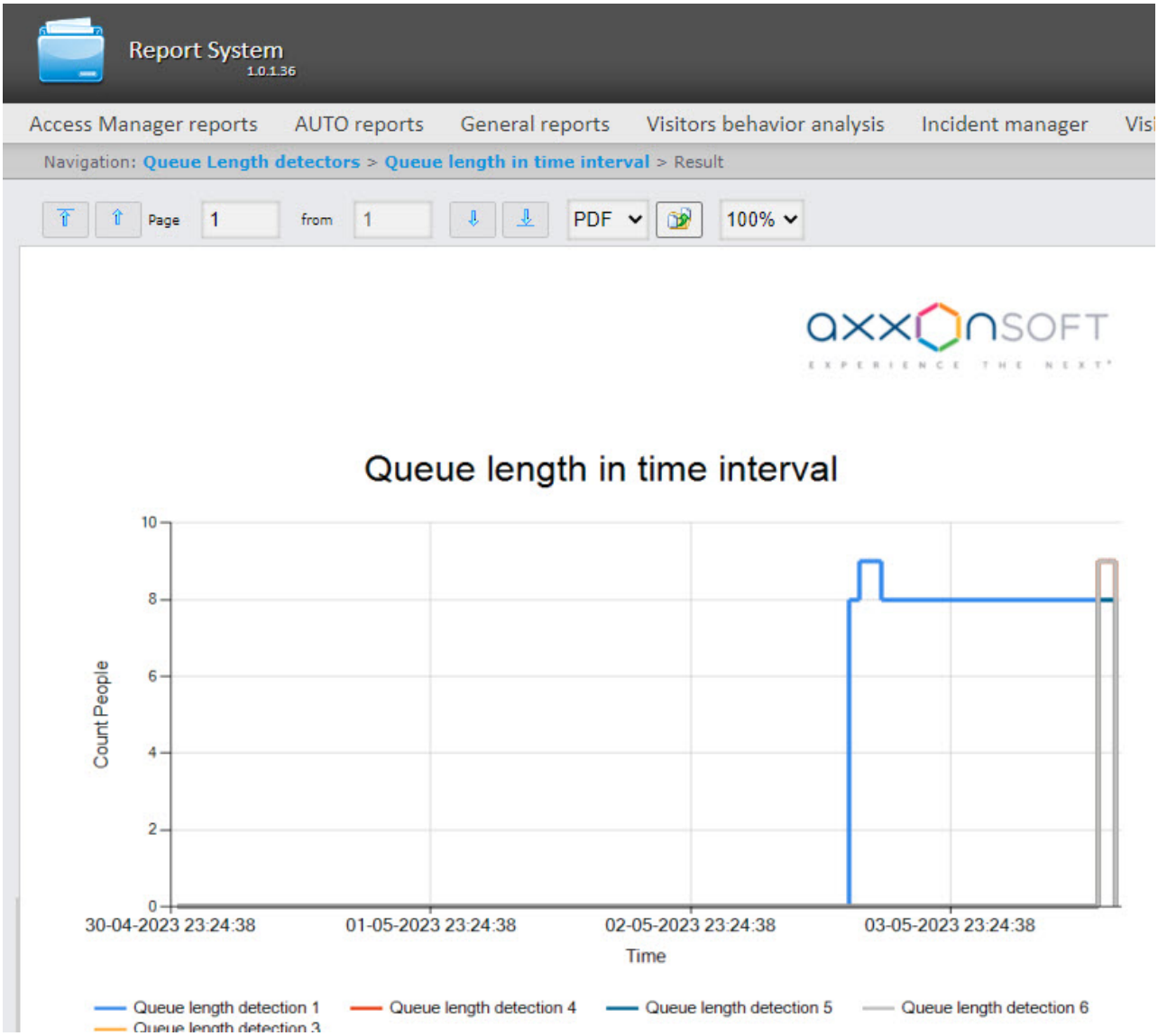
Example of the report in the form of a table:



Queue length in time interval

Detector	Date	Data acquisition period	Threshold (people)
Queue length detection 1	5/3/2023	14:00 - 15:00	8
Queue length detection 1	5/3/2023	15:00 - 17:00	9
Queue length detection 1	5/3/2023 - 5/4/2023	17:00 - 13:00	8
Queue length detection 5	5/4/2023	13:00 - 13:00	8
Queue length detection 6	5/4/2023	13:00 - 14:00	9
Queue length detection 4	5/4/2023	13:00 - 14:00	9
Queue length detection 1	5/4/2023	13:00 - 14:00	9
Queue length detection 3	5/4/2023	13:00 - 14:00	9
Queue length detection 4	5/4/2023	14:00 - 14:00	9
Queue length detection 6	5/4/2023	14:00 - 14:00	9
Queue length detection 1	5/4/2023	14:00 - 14:00	9

Example of the report in the form of a chart:



8.9 Working with Time and Attendance reports

Working with Time and Attendance reports consists of three stages:

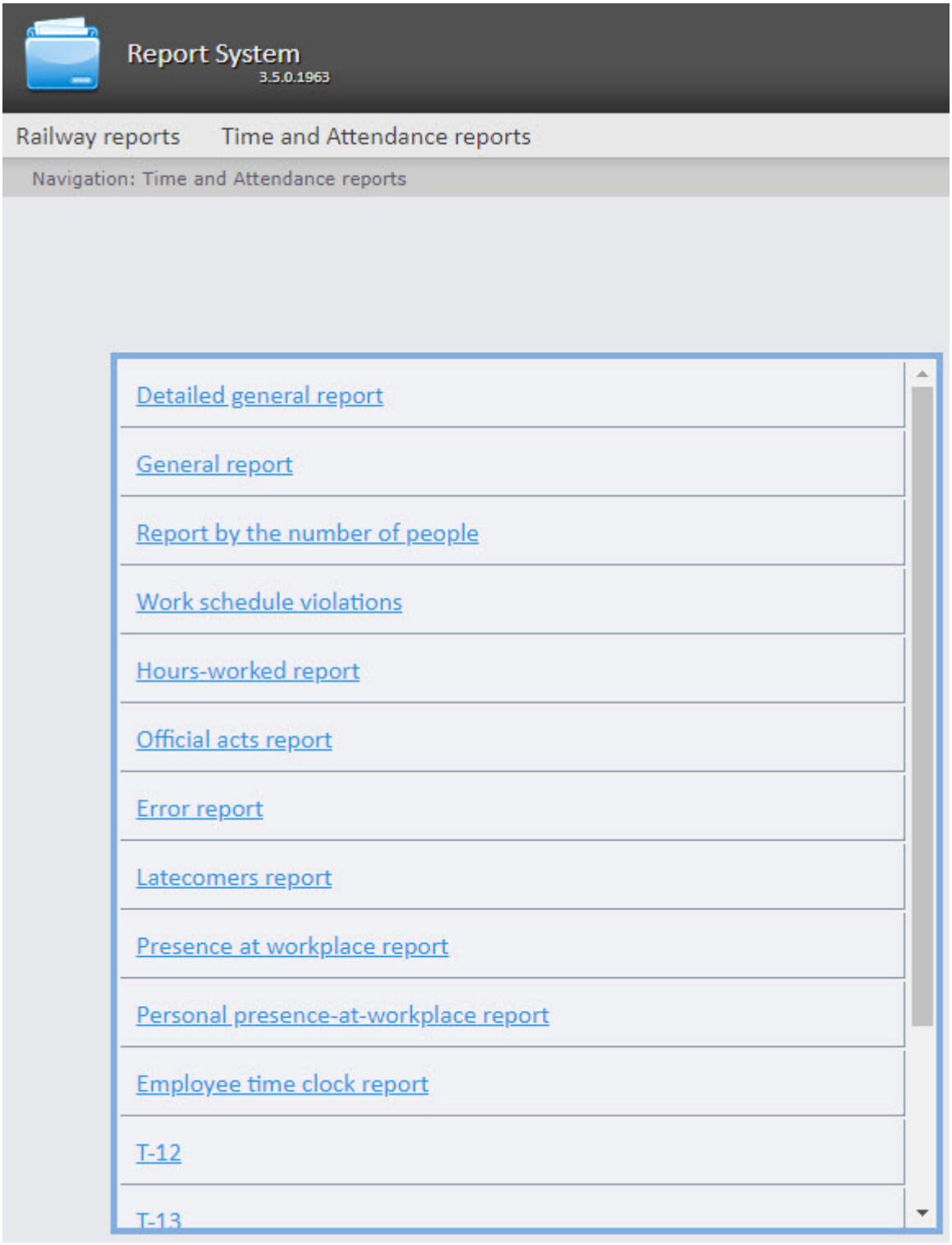
1. Selecting a type of report.
2. Creating a report.
3. Viewing a report.

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

8.9.1 Selecting a type of Time and Attendance report

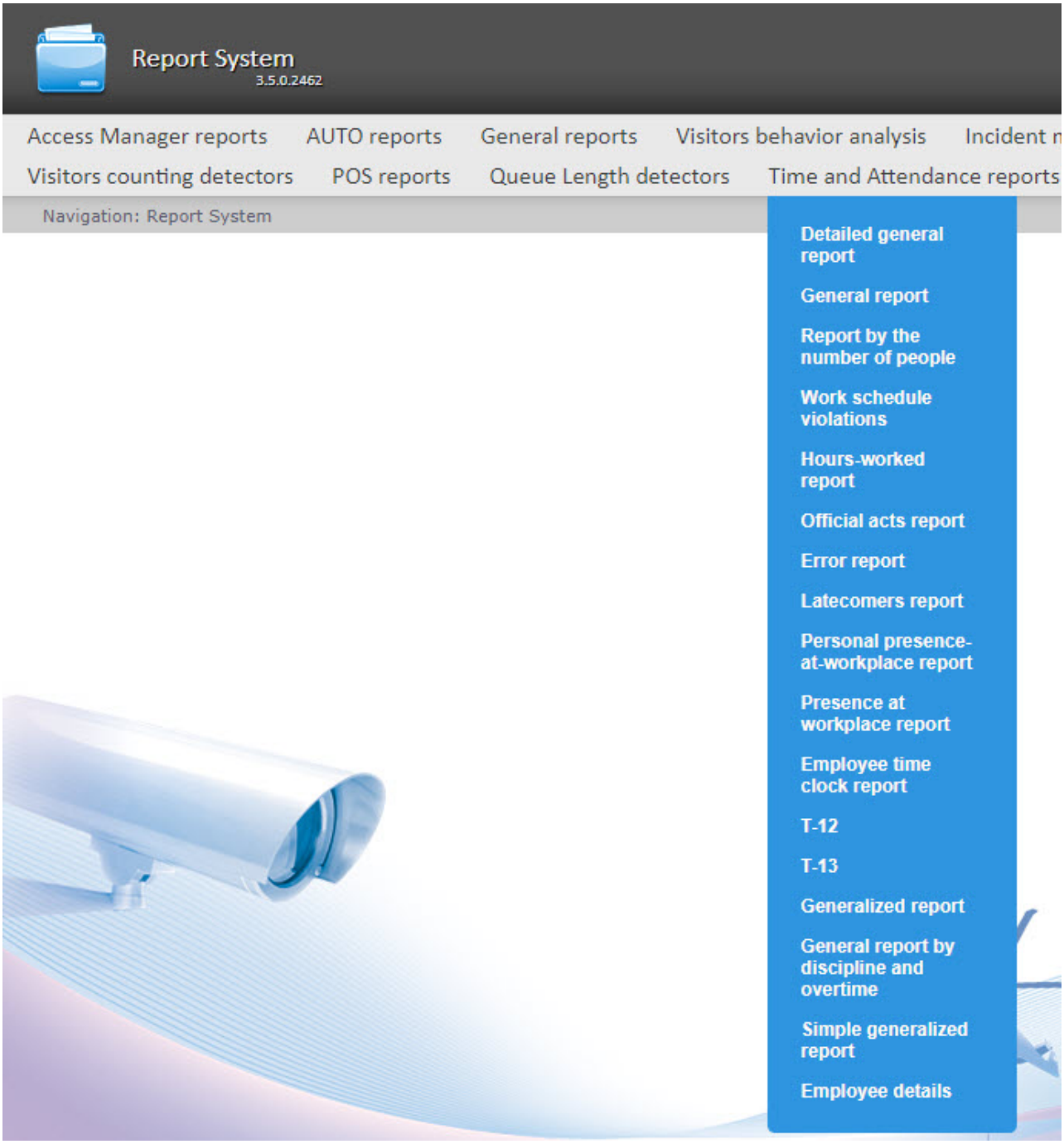
In order to select a type of Time and Attendance report click on **Time and Attendance reports** link in *Report System* menu.

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



Note

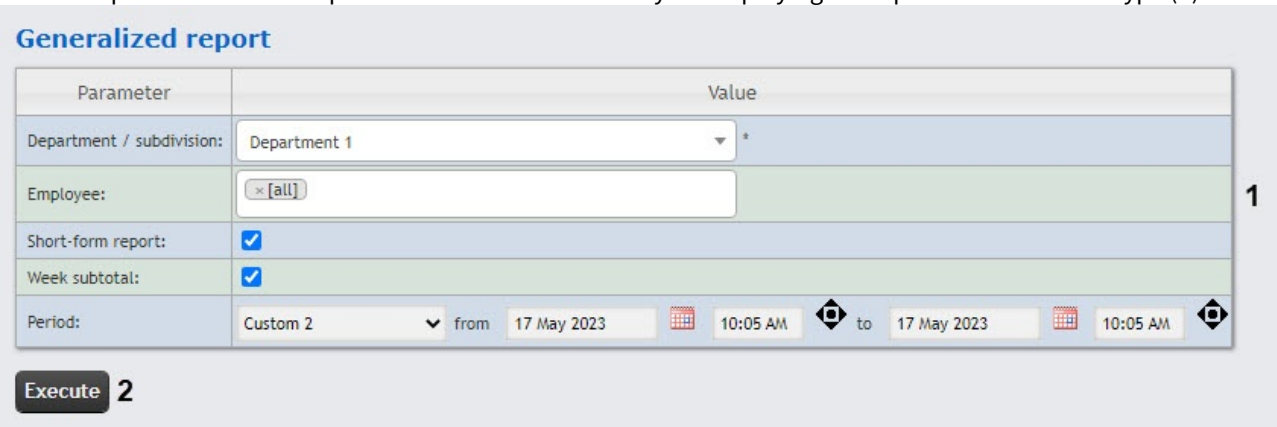
List of links for switching to Time and Attendance reports is available when hovering over the **Time and Attendance reports** link in the report menu.



8.9.2 Creating a Time and Attendance report

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

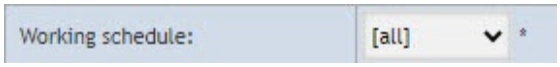
Select a Time and Attendance report in one way (see Selecting a type of Time and Attendance report).
Set the required values to the parameters that are necessary for displaying the report of the selected type (**1**).

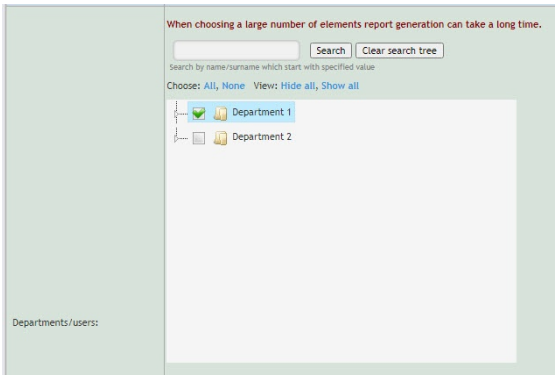


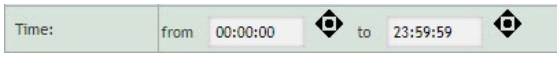
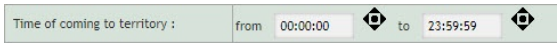
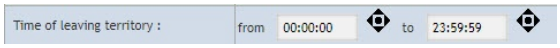
> **Note**
>
> The figure illustrates the parameters of a **Generalized report**.

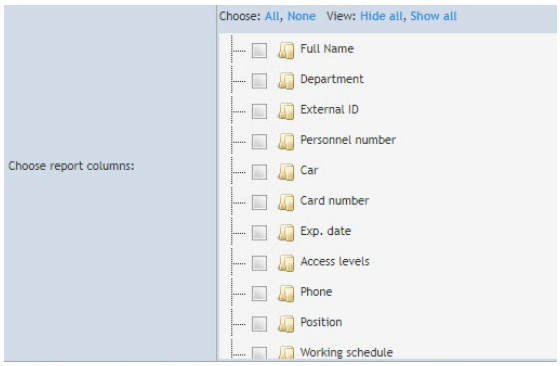
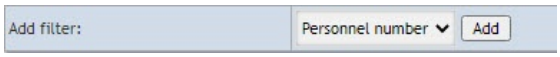
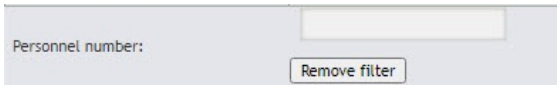
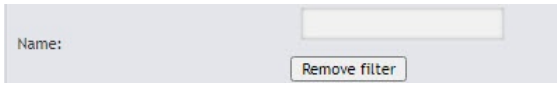
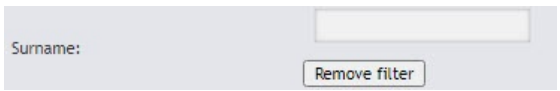
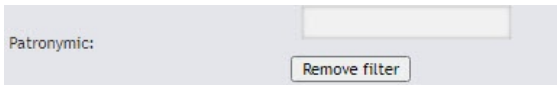
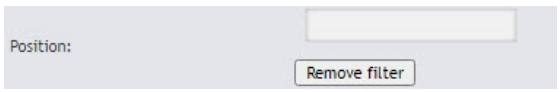
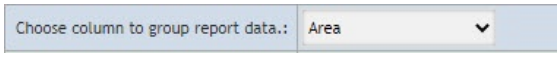
The set of parameters depends on the type of Time and Attendance report. Description of parameters used for creating reports is given in the table.

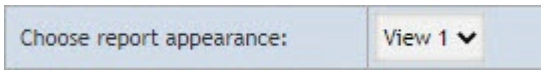
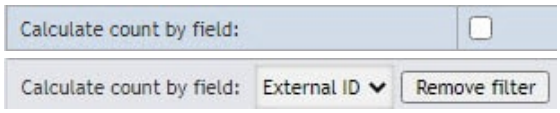
Parameter	Description	Used in reports
	Used to select the area the information on which you want to display in the report	• Detailed general report • General report • Presence at workplace report • Report by person quantity • Personal presence-at-workplace report
	Used to set the period for which you want to display the report	Used in all reports
	When the checkbox is set, some report fields are hidden	• General report • Detailed general report

Parameter	Description	Used in reports
	When the checkbox is set, 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
	When the checkbox is set, each department will be displayed on a separate sheet	• Detailed general report
	Used to select the working schedule of employees the information on which you want to display in the report. You can select one of the available schedules or all working schedules at once	• Detailed general report • General report

Parameter	Description	Used in reports
	Used to select a department or an employee the information on which you want to display 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 separately parent and child departments, as well as several employees of a department	• Work schedule violations • Hours-worked report • Official acts report • Error report • Latecomers report • Presence at workplace report • Employee time clock report • General report by discipline and overtime • Simple generalized report • General report • Report by person quantity • Employee details
	Used to select the department or subdivision the information on which you want to display in the report. You can select only a department/ subdivision. You can also use the search for the required department/ subdivision by substring	• General report • T-12 • T-13

Parameter	Description	Used in reports
	Used to select an employee the information on which you want to display in the report. If there are more than 100 employees, then the entire list is not displayed. To search for an employee, enter at least three first letters of their surname. As a result, employees with matching surnames will be displayed in the drop-down list	• General report • Personal presence-at-workplace report
	When the checkbox is set, only those employees who were not present at their workplace will be displayed in the report	• Hours-worked report
	Used to set the exact time (hours, minutes) at which you want to display the report	• Report by person quantity
	When the checkbox is set, the information on the working area only will be displayed in the report	• Presence at workplace report • Personal presence-at-workplace report
	Used to set the time period of employee coming to territory for which you want to display the report	• Presence at workplace report *Note. For the **Presence at workplace report** to work correctly, you need to configure it (see Setting up the Presence at workplace report and Personal presence-at-workplace report)*
	Used to set the time period of employee leaving territory for which you want to display the report	
	Used to set the time period of employee presence on territory for which you want to display the report	

Parameter	Description	Used in reports
	Used to select the columns of the report	
	Used to add a filter by which the employees will be filtered. Filter availability depends on whether the corresponding parameters are filled in for the employees in the *Access Manager* module	
	Used to filter the employees by their personnel number	
	Used to filter the employees by their name	
	Used to filter the employees by their surname	
	Used to filter the employees by their patronymic	
	Used to filter the employees by their position	
	Used to sort the data in the report	
	Used to group the data in the report	

Parameter	Description	Used in reports
	Used to select the appearance of the report: Standard or Compact for Presence at workplace report and View 1 or View 2 for Personal presence-at-workplace report	• Presence at workplace report • Personal presence-at-workplace report
	Used to include in the report the employees who arrived later than the start of the working day	• Employee time clock report
	If an employee 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
	Used to add an additional filter by the **External ID** field for counting the number of employees	• General report • Report by the number of people
	Used to select the the alternate view of the report appearance	• T-13 • Employee time clock report
	Used to add week subtotal to the report	• Generalized report

Click the **Execute** button (**2**).

As a result, a report will be created and displayed (see Viewing a Time and Attendance report).

8.9.3 Viewing a Time and Attendance report

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:

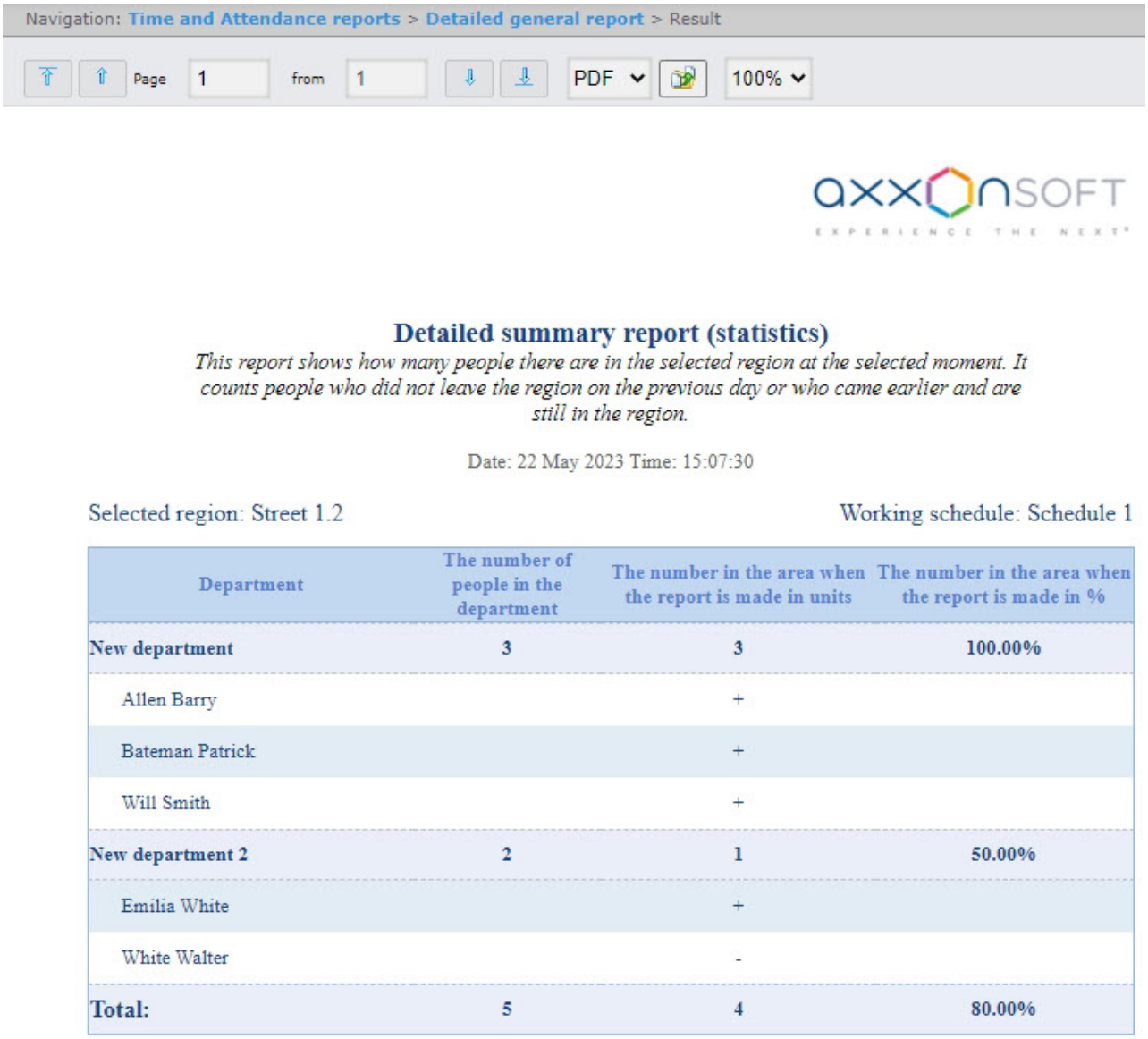
- PDF;
- RTF;
- HTML;
- Excel;
- CSV;
- Text.

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**).

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.

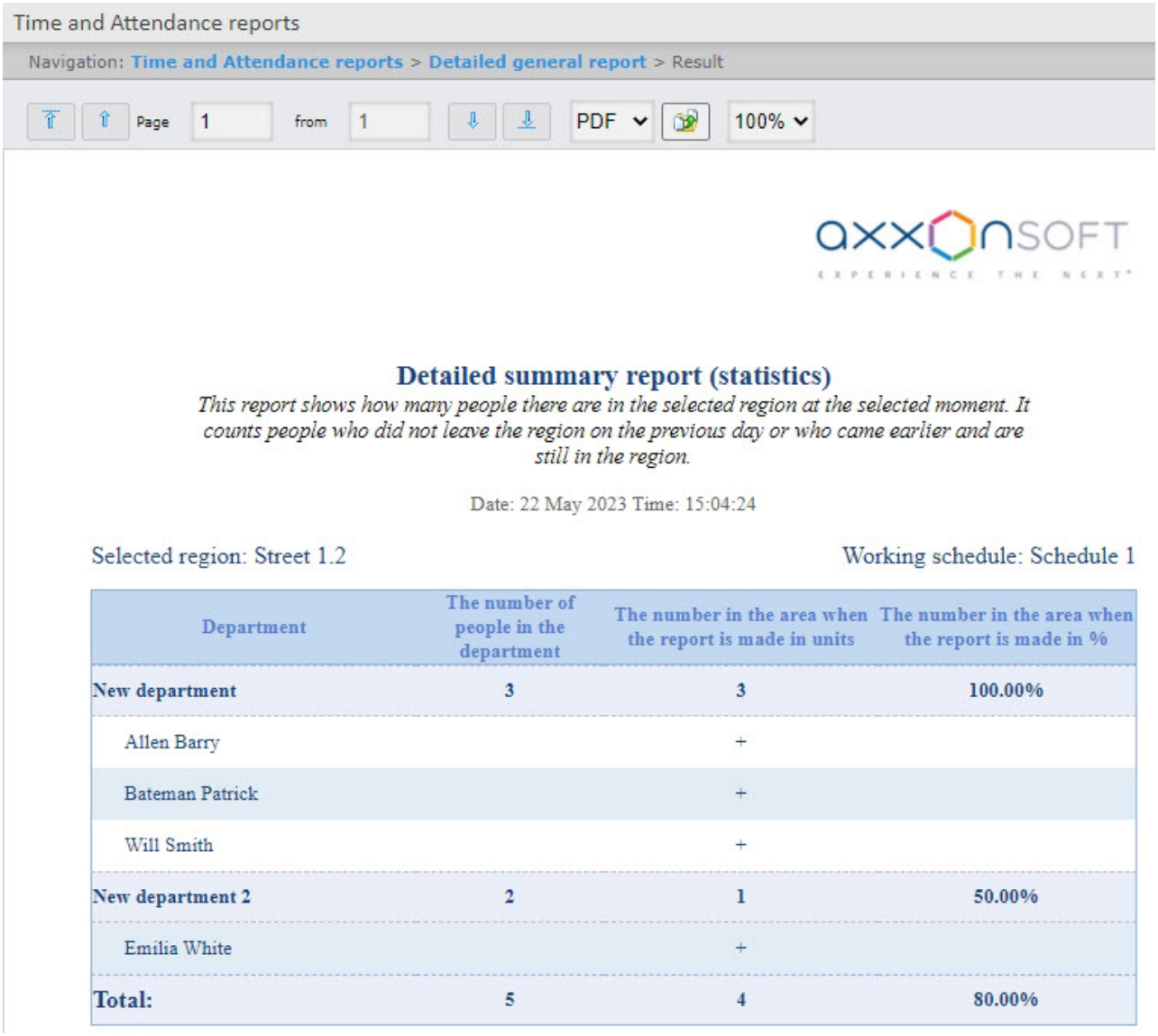
Field name	Description
Department	The name of the department and the full names of its employees
The number of people in the department	Total number of people in the department
The number in the area when the report is made in units	The number of people present in the selected region on the specified time period
The number in the area when the report is made in %	The number of people present in the selected region on the specified time period

Field name	Description
Total	Total number of people in all departments

Note

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

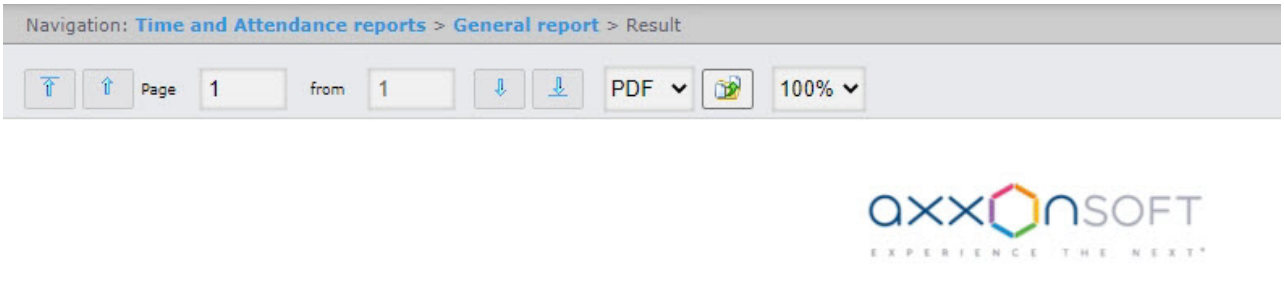
In the short report, the employees who are not present in the selected region are hidden:



Department	The number of people in the department	The number in the area when the report is made in units	The number in the area when the report is made in %
New department	**3**	**3**	**100.00%**
Allen Barry		+	
Bateman Patrick		+	
Will Smith		+	
New department 2	**2**	**1**	**50.00%**
Emilia White		+	
Total:	**5**	**4**	**80.00%**

General report

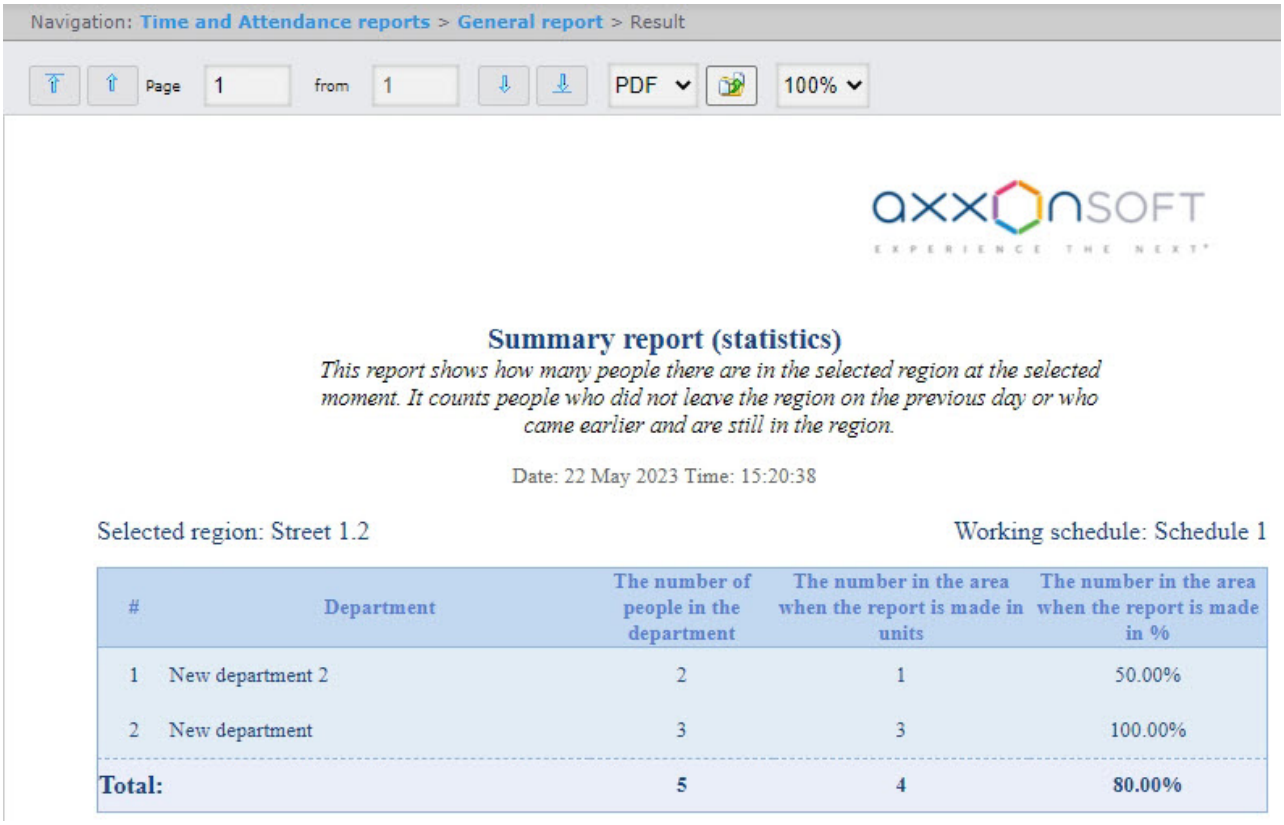
A **General report** contains the information about the total number of people in the departments, with the specified work schedule, the number of department's employees in the selected region, and the percentage of the employees present at the workplace at the time of the report creation or on the specified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



The report fields are described in the table.

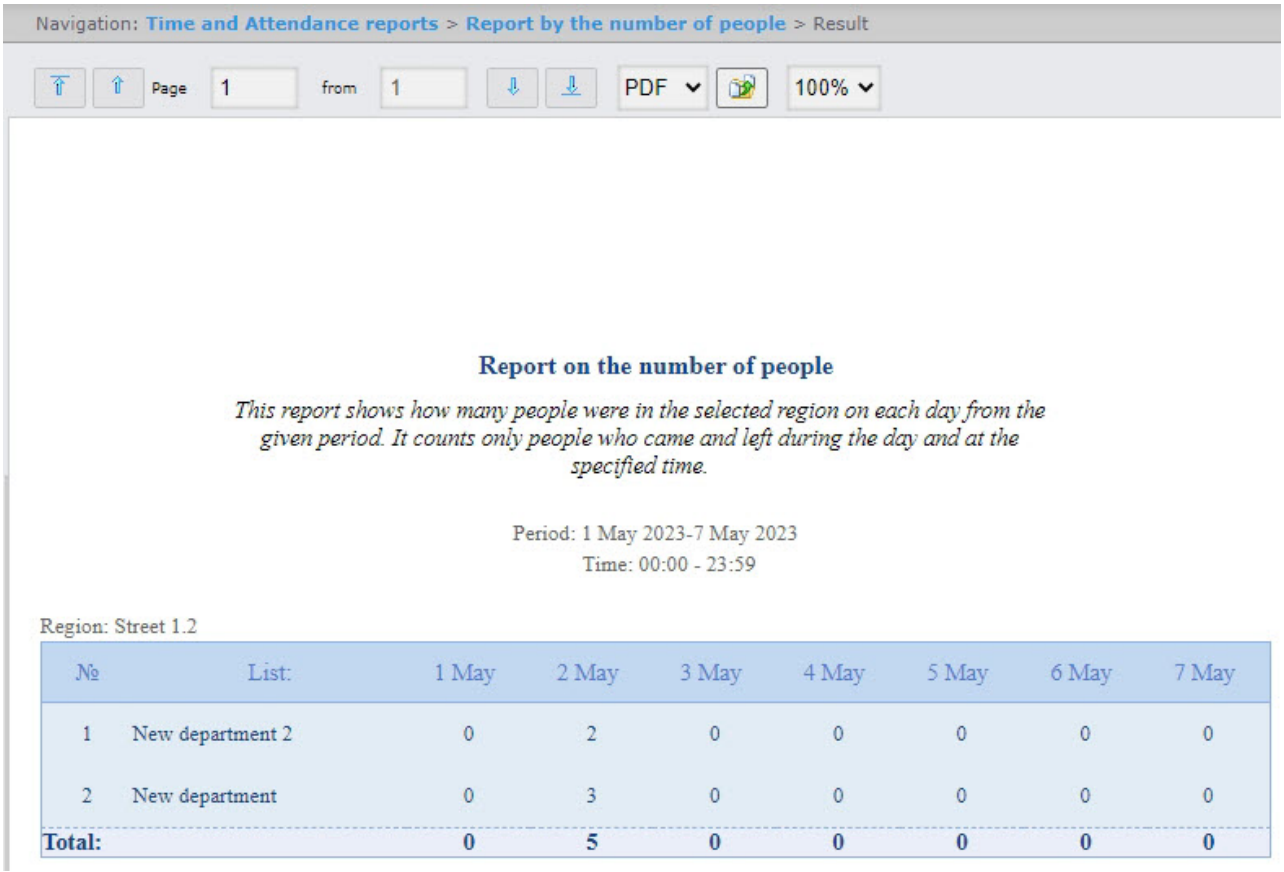
Field name	Description
Department	The name of the department
The number of people in the department	Total number of people in the department
The number in the area when the report is made in units	The number of people present in the selected region at the time of the report creation or on the specified day and time. If you added the **Calculate count by field** filter in the settings, the data in this field will be additionally filtered by the **External ID** field
The number in the area when the report is made in %	The number of people present in the selected region at the time of the report creation or on the specified day and time. If you added the **Calculate count by field** filter in the settings, the data in this field will be additionally filtered by the **External ID** field
The **Total** line displays 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:



Report by the number of people

The **Report by the number of people** 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.



The report fields are described in the table.

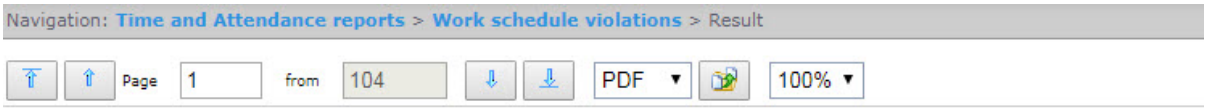
Field name	Description
List	Department name
Date and month	The number of people present in the selected region on the corresponding day. If you added the **Calculate count by field** filter in the settings, the data in this field will be additionally filtered by the **External ID** field
The **Total** line displays 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.

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

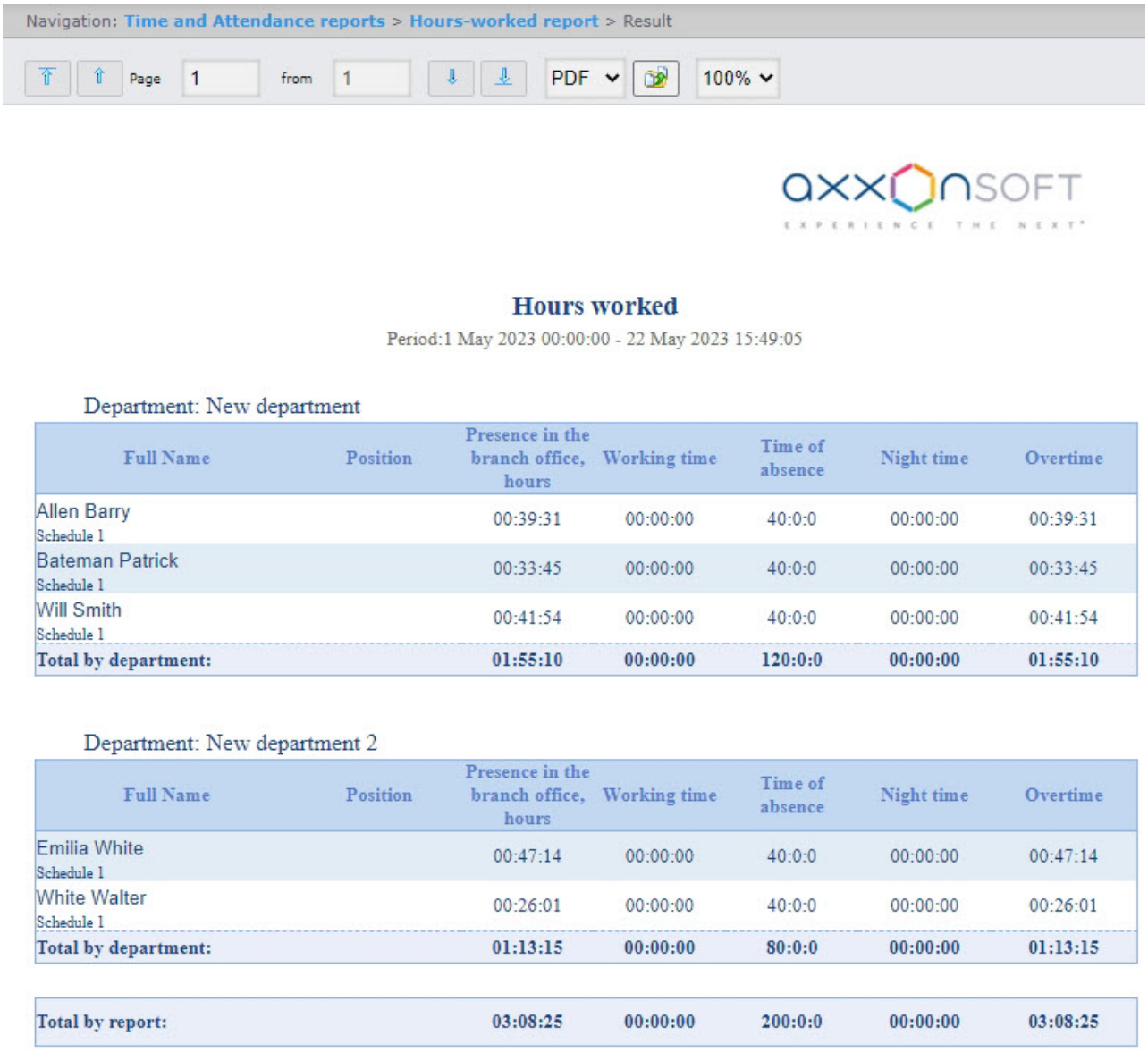
Report fields are described in the table.

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.

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.



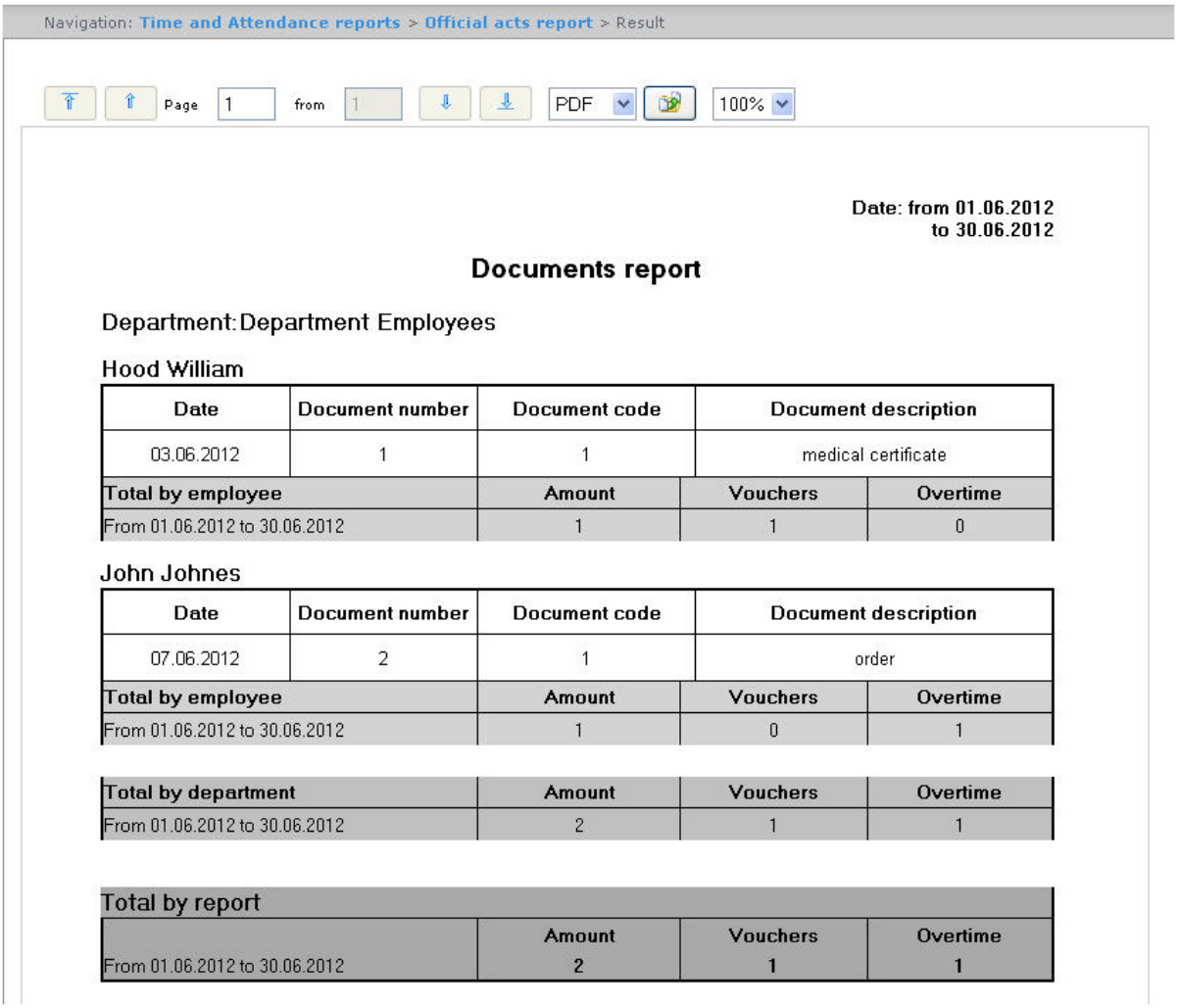
Report fields are described in the table.

Field name	Description
Full name	Employee full name
Position	Employee position
Presence in the branch office, hours	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

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

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.



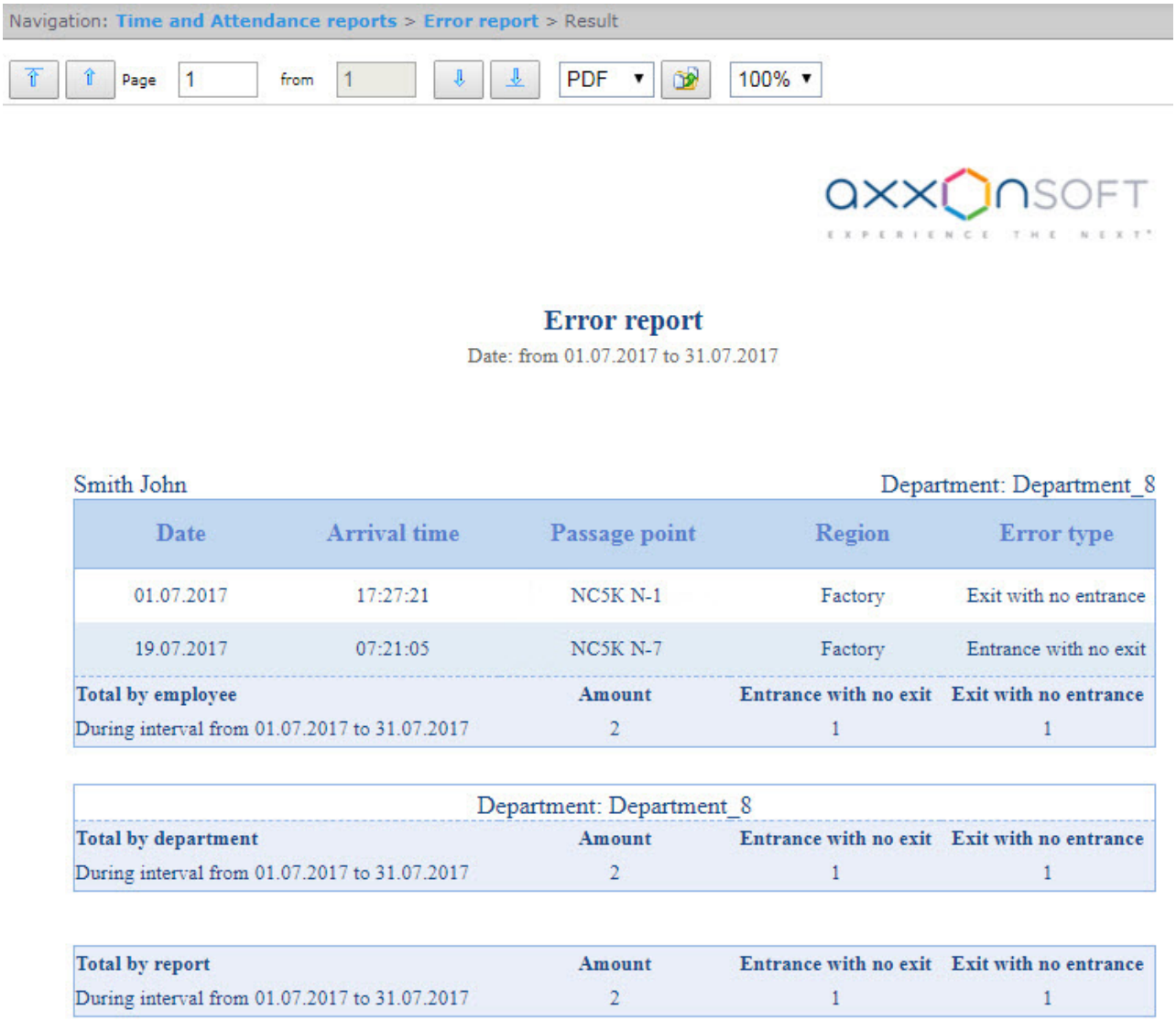
Report fields are described in the table.

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.

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.

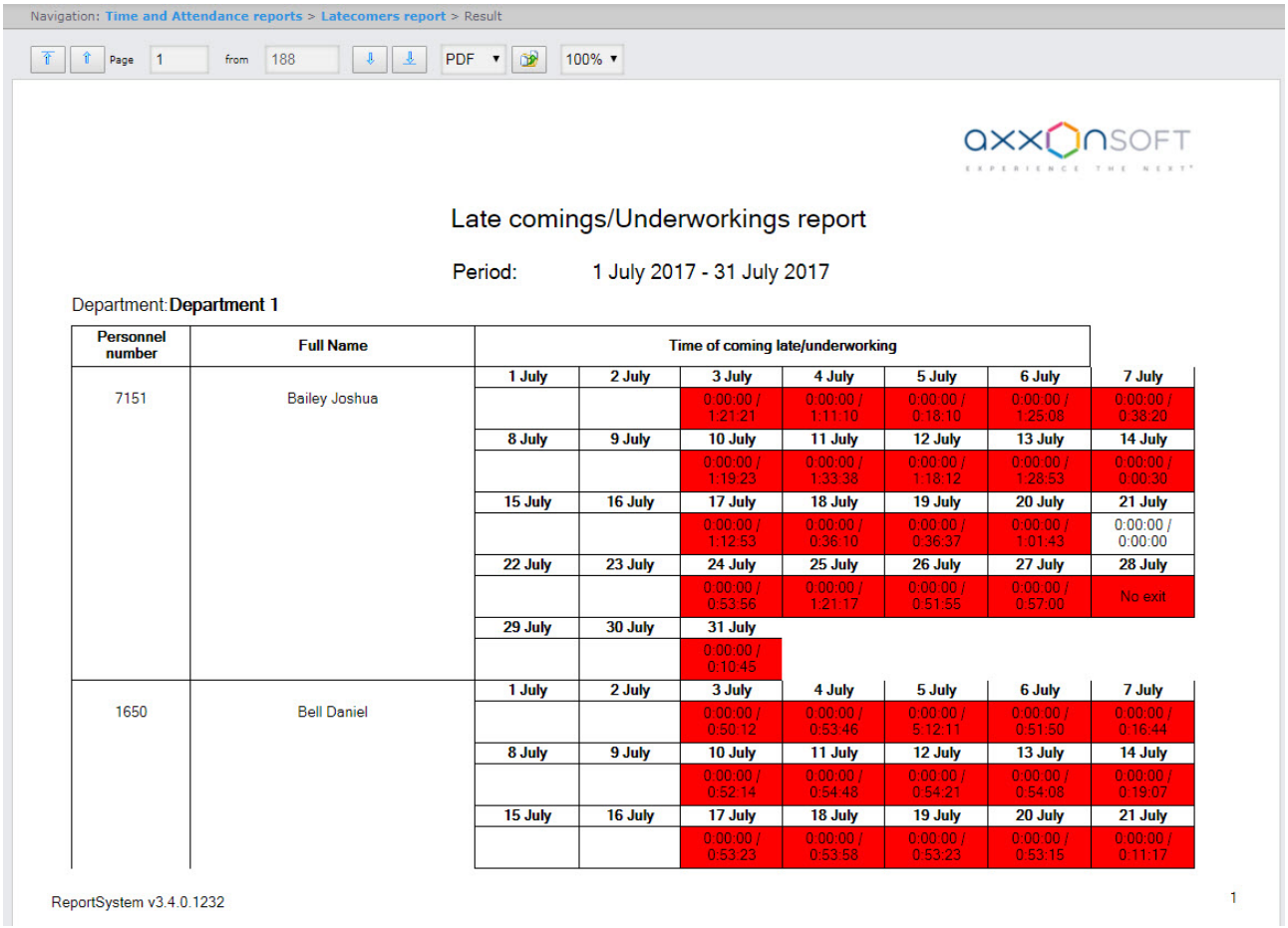
Field name	Description
Date	Date when an error was registered
Arrival time	Time when there was a passage to the region that caused an error
Passage point	Name of a passage point

Field name	Description
Region	Name of a region where an error was registered
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.

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.



Department: **Department 1**

Personnel number	Full Name	Time of coming late/underworking						
7151	Bailey Joshua	1 July	2 July	3 July	4 July	5 July	6 July	7 July
				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

Field name	Description
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.

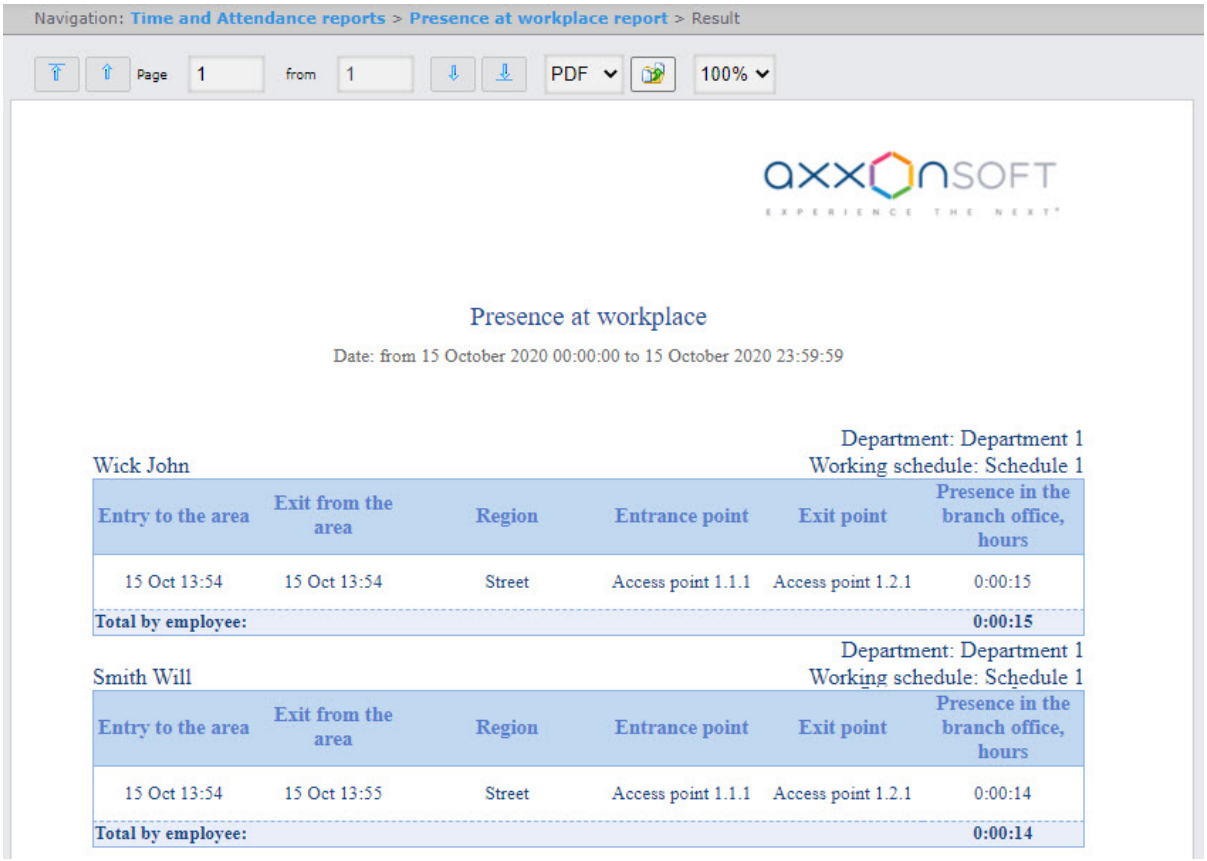
Personal presence-at-workplace report

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.

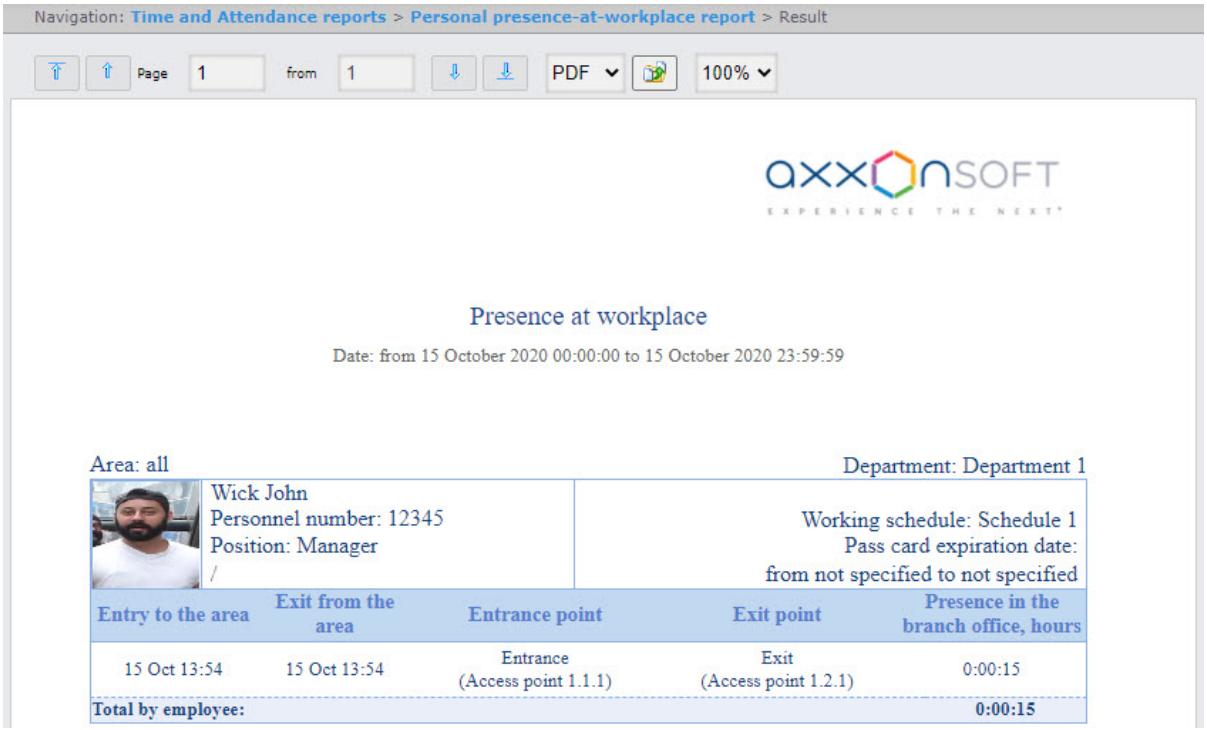
Note

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 **View 1** appearance.



Example of report with the **View 2** 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).

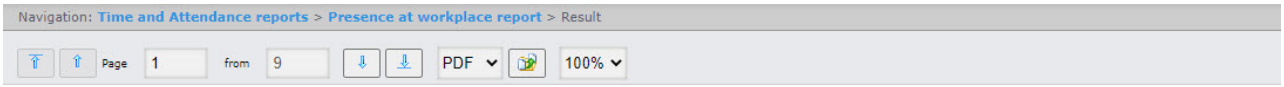
Report fields are described in the table.

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
Region	Region where employee is located after the pass
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.	

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.



Presence at workplace

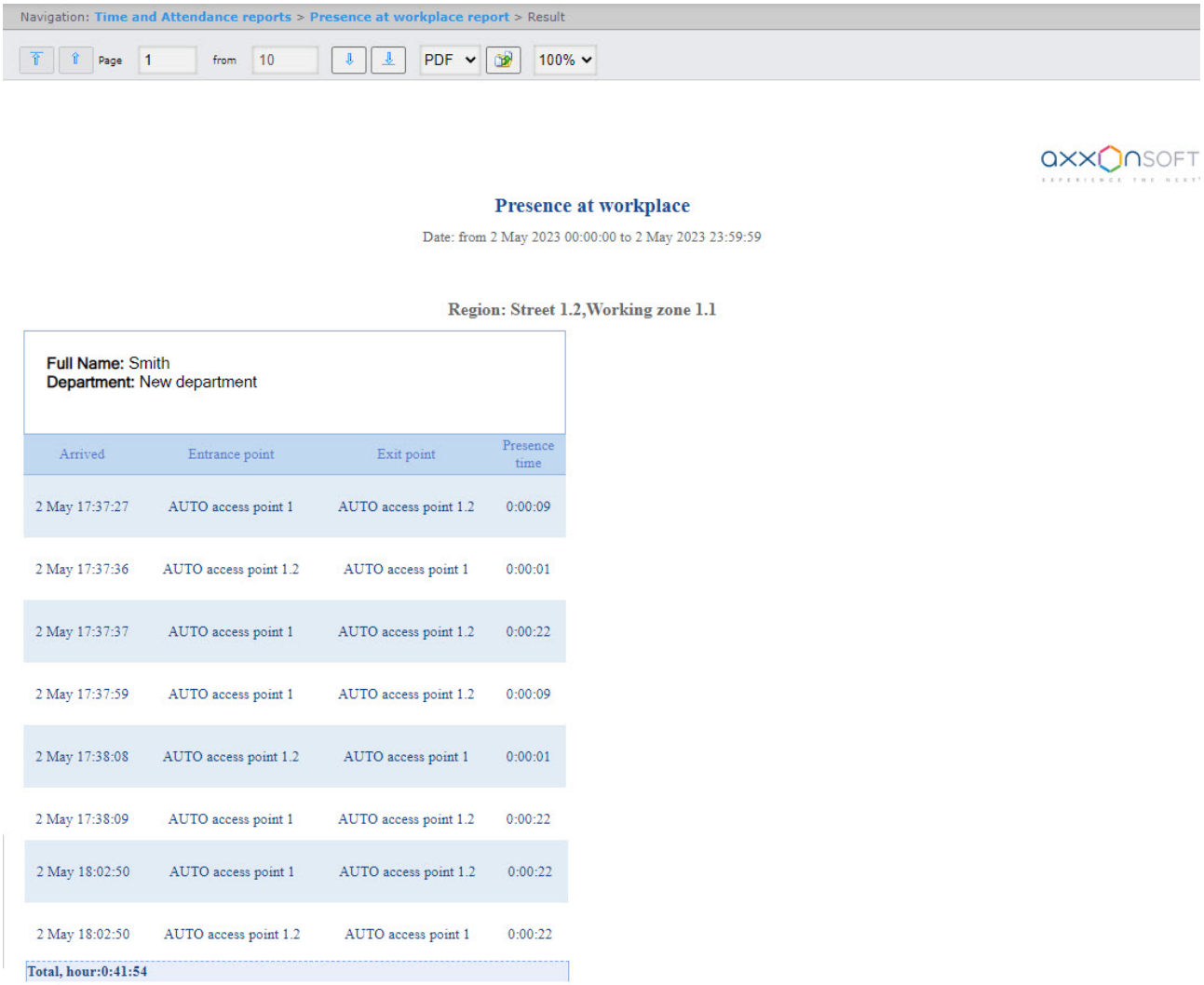
Date: from 2 May 2023 00:00:00 to 2 May 2023 23:59:59

Region: Street 1.2,Working zone 1.1

Full Name	Department	Area	Entrance point	Exit point	Presence time
Smith	New department	Working zone 1.1	AUTO access point 1	AUTO access point 1.2	0:00:09
Smith	New department	Street 1.2	AUTO access point 1.2	AUTO access point 1	0:00:01
Smith	New department	Working zone 1.1	AUTO access point 1	AUTO access point 1.2	0:00:22
Smith	New department	Working zone 1.1	AUTO access point 1	AUTO access point 1.2	0:00:09
Smith	New department	Street 1.2	AUTO access point 1.2	AUTO access point 1	0:00:01
Smith	New department	Working zone 1.1	AUTO access point 1	AUTO access point 1.2	0:00:22
Smith	New department	Working zone 1.1	AUTO access point 1	AUTO access point 1.2	0:00:09
Smith	New department	Street 1.2	AUTO access point 1.2	AUTO access point 1	0:00:22

Total, hour: 0:41:54

The report example with the **Compact** 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
Full Name	Employee's full name
Department	Department where employee works
External ID	Employee's external identity number
Personnel number	Employee's personnel number
Car	Employee's car brand

Field name	Description
Card number	Employee's access card number
Exp. date	Employee's card expiration date
Access levels	Employee's access levels
Phone	Employee's phone number
Position	Employee's position
Working schedule	Employee's working schedule
Photo	Employee's photo
Company	The name of the parent department, if the employee's department is a subsidiary
Company/Department	Company/Department where employee works
No.	Line number
Area	Area where employee is located after the pass
Arrived	Date and time of an employee's arrival to a region
Left	Date and time of an employee's leaving a region
Entrance point	Name of an entrance point to the region
Exit point	Name of an exit point from the region
Presence time	The time the employee spent in the selected region
The **Total, hour** line displays the total time spent by the employee in the region for the selected time period.	

You can select up to 17 columns.

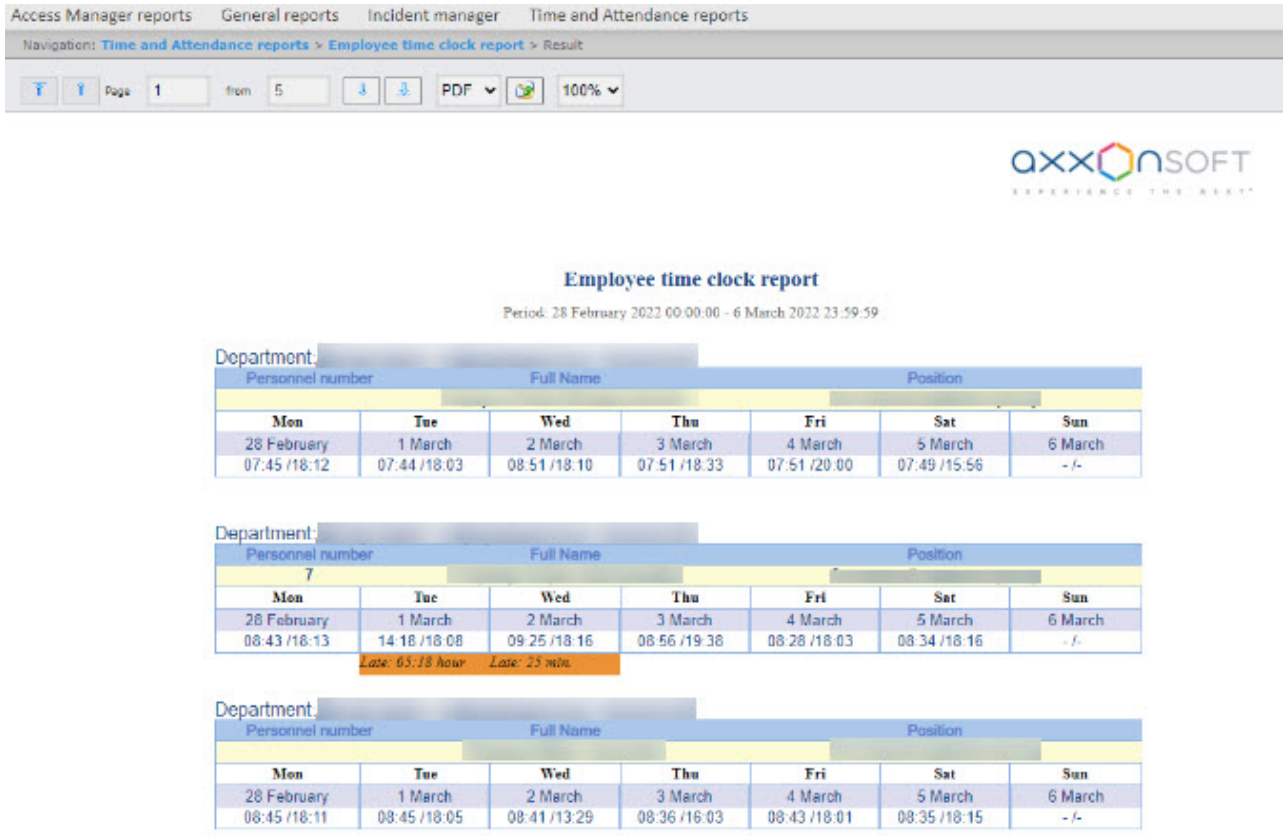
Employee time clock report

The **Employee time clock report** contains the information about an employee's arrival and leaving time every day of the specified time period.

This report is generated in two variants: regular view (default) and alternate view.

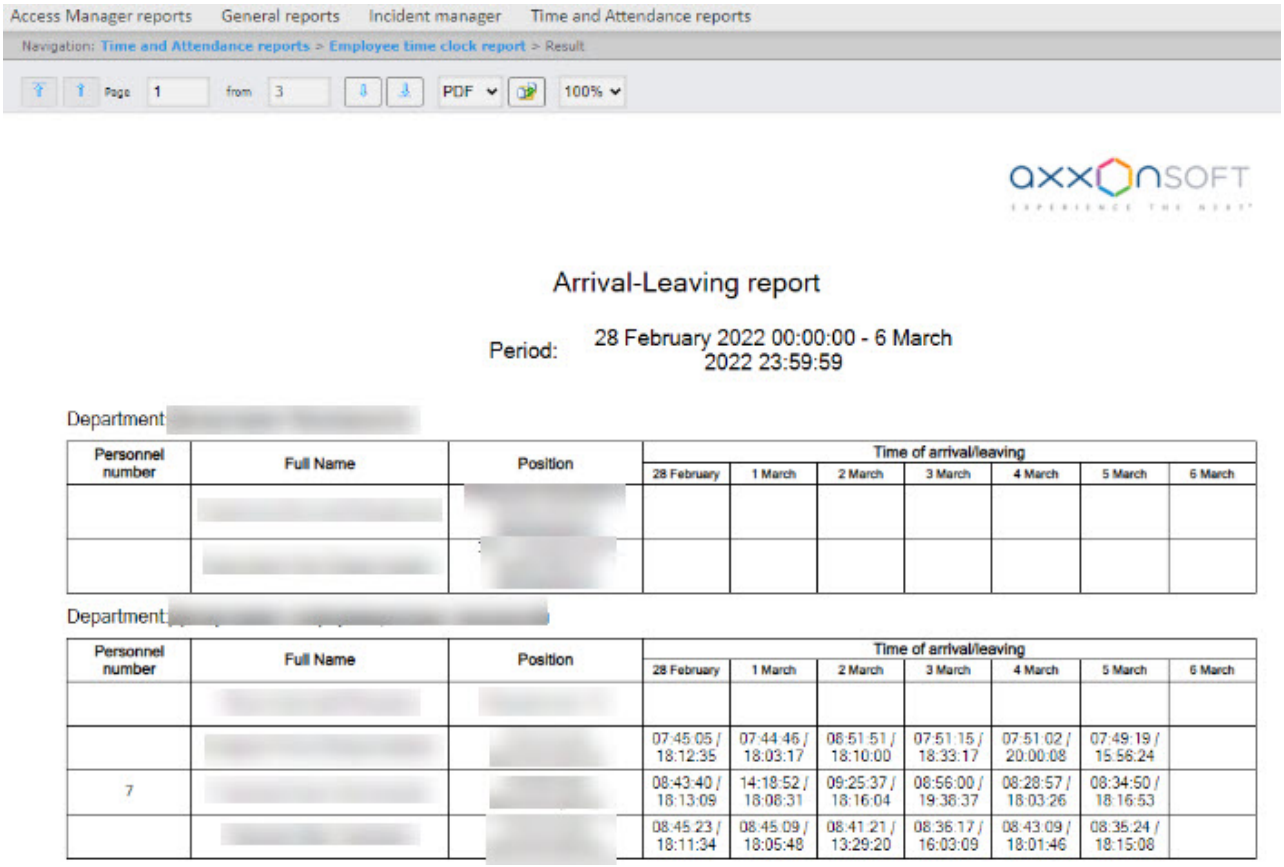
If the **Including latecomers** checkbox is set, the users' late arrivals will be marked, including the time by which they were late.

Example of the regular view of the **Employee time clock report**:



The regular view report is generated for the period selected by the user.

Example of the **Employee time clock report** when the **Alternate view** checkbox is set:



If the selected period is a week or less, the **Employee time clock report** in alternative view is generated for a week. If the selected period is more than a week, the report will be generated for a month.

The report fields are described in the table.

Field name	Description
Personnel number	Employee's personnel number
Full name	Employee's 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

T-12 and T-13 reports

Intellect Web Report System allows you to create the **T-12** and **T-13** reports that represent time and attendance reports.

The **T-12** and **T-13** reports display the information on the hours worked by an employee for each calendar day in the reporting month. Also, the **T-12** and **T-13** reports calculate the total hours (days) worked for the month and the number of absences for each employee of the department.

The top line of the columns 4 and 6 of the **T-12** report and the column 4 of the **T-13** report displays a letter code (note of attendances and non-attendances, etc.), and the bottom line displays the hours worked.

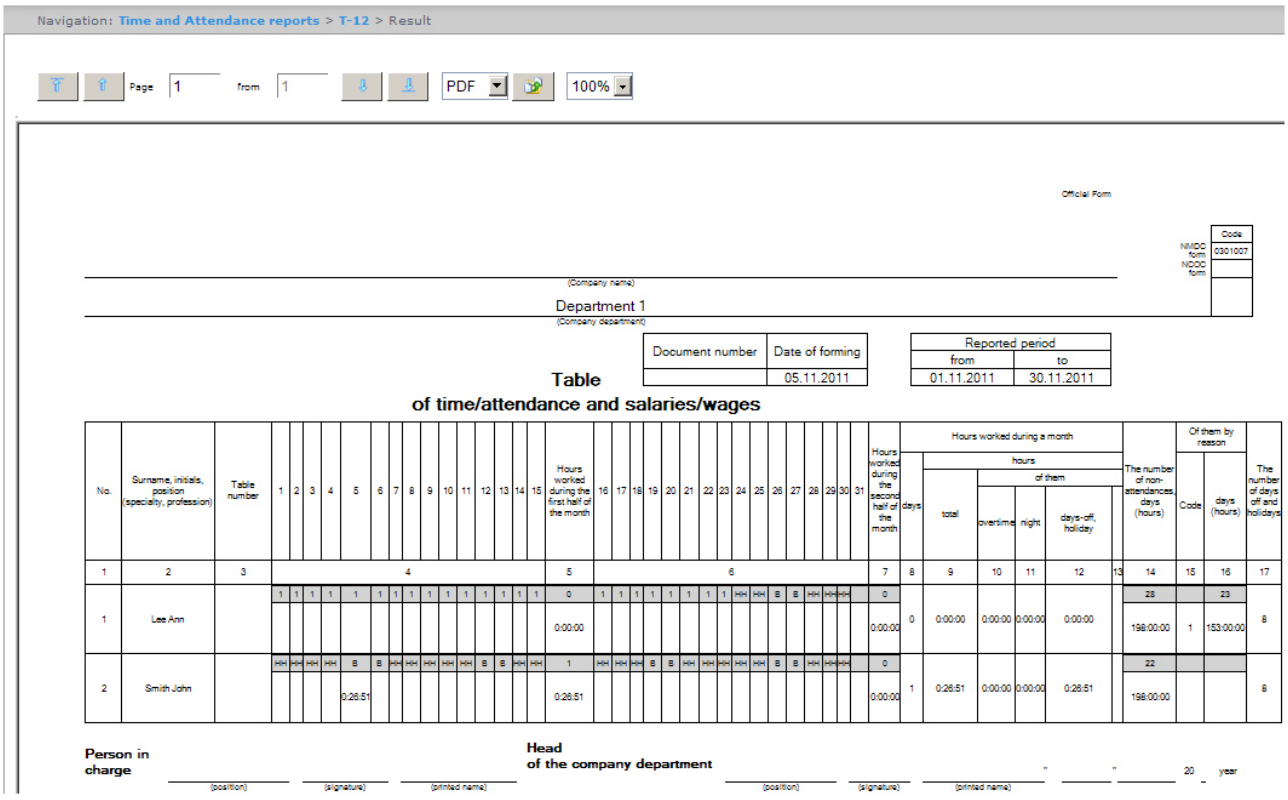
The top line of the columns 5 and 7 of the **T-12** report and the column 5 of the **T-13** report displays the number of days worked, and the bottom line displays the hours worked by each employee for half of the reporting month. The column 6 of the **T-13** report contains the number of days and the total hours worked by each employee in the reporting month.

The data to calculate salaries by types and priorities of expenses are displayed in the columns 7-9 of the **T-13** report.

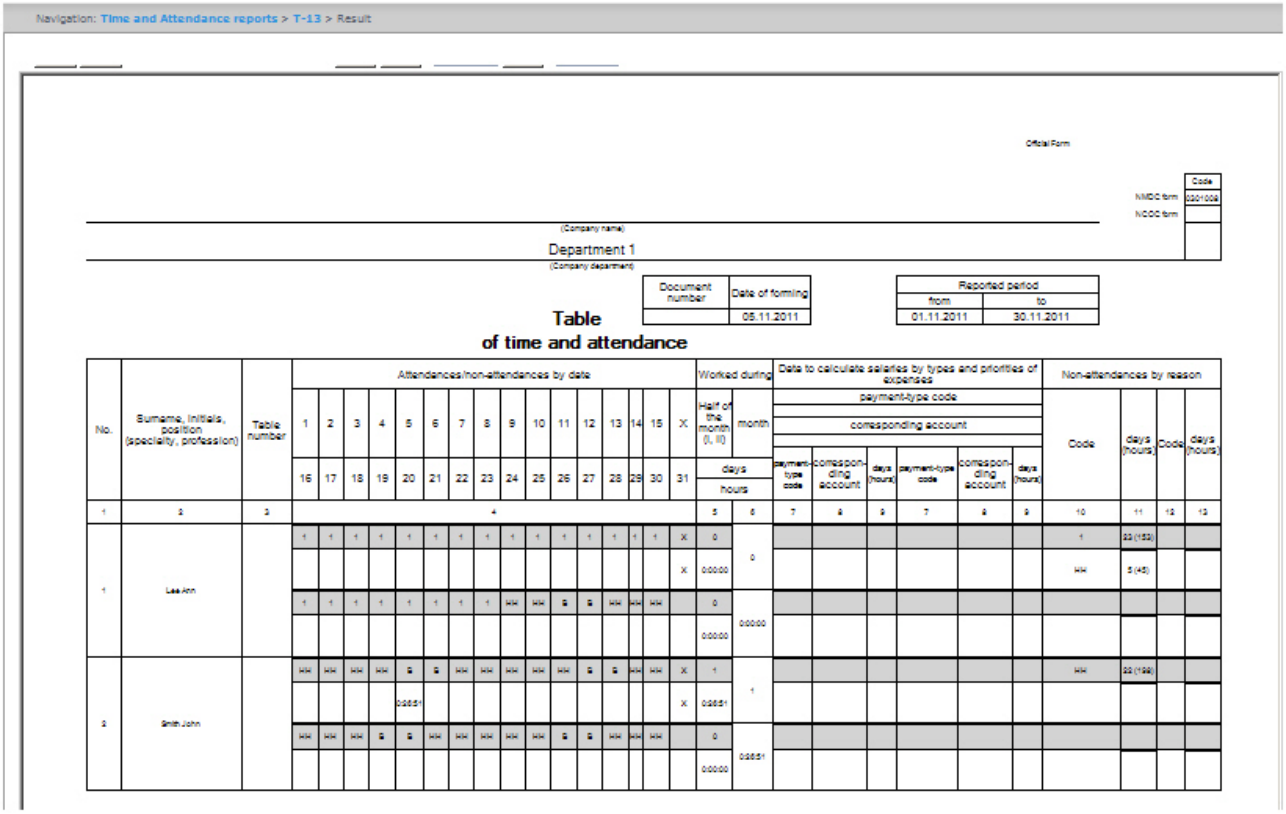
The total of the hours worked during a month by an employee is displayed in the columns 8-13 of the **T-12** report.

The total of an employee's non-attendances are displayed in the columns 14-16 of the **T-12** report and in the columns 10-13 of the **T-13** report.

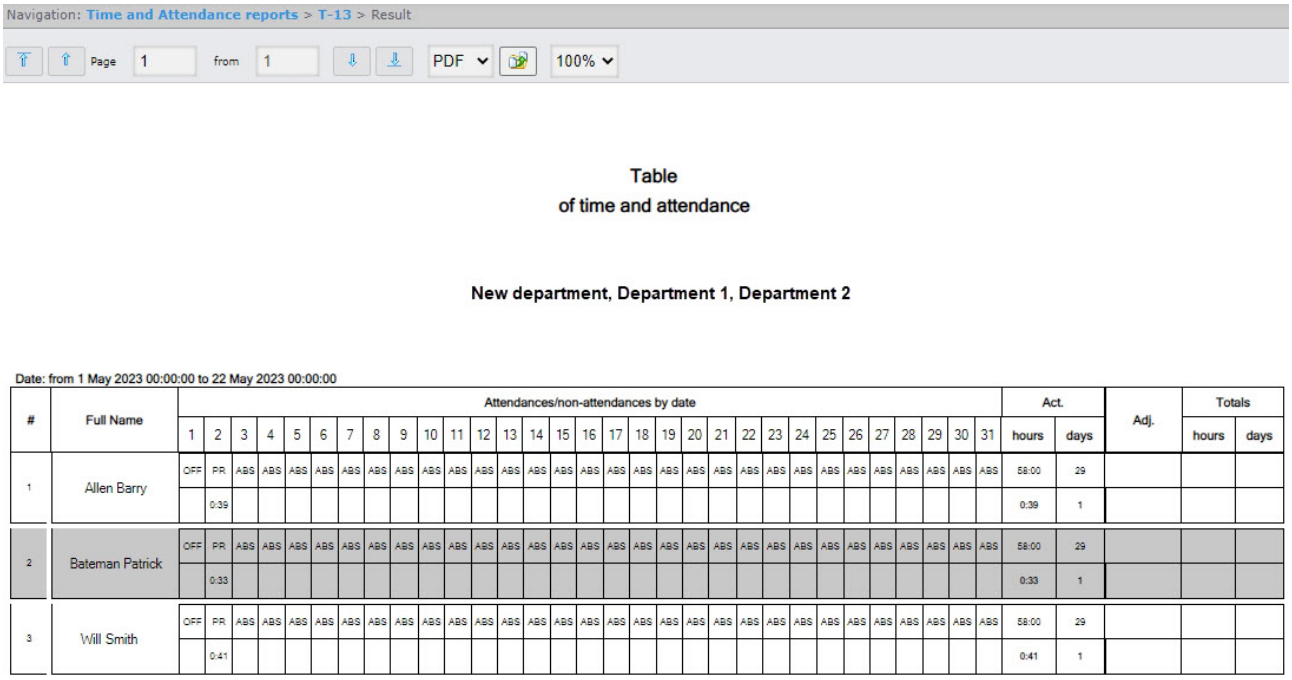
The **T-12** report is presented in the following figure.



The **T-13** report is generated in two variants: regular view (selected by default) and alternate view. In addition, you can select multiple departments. The following figure shows the regular view of this report.

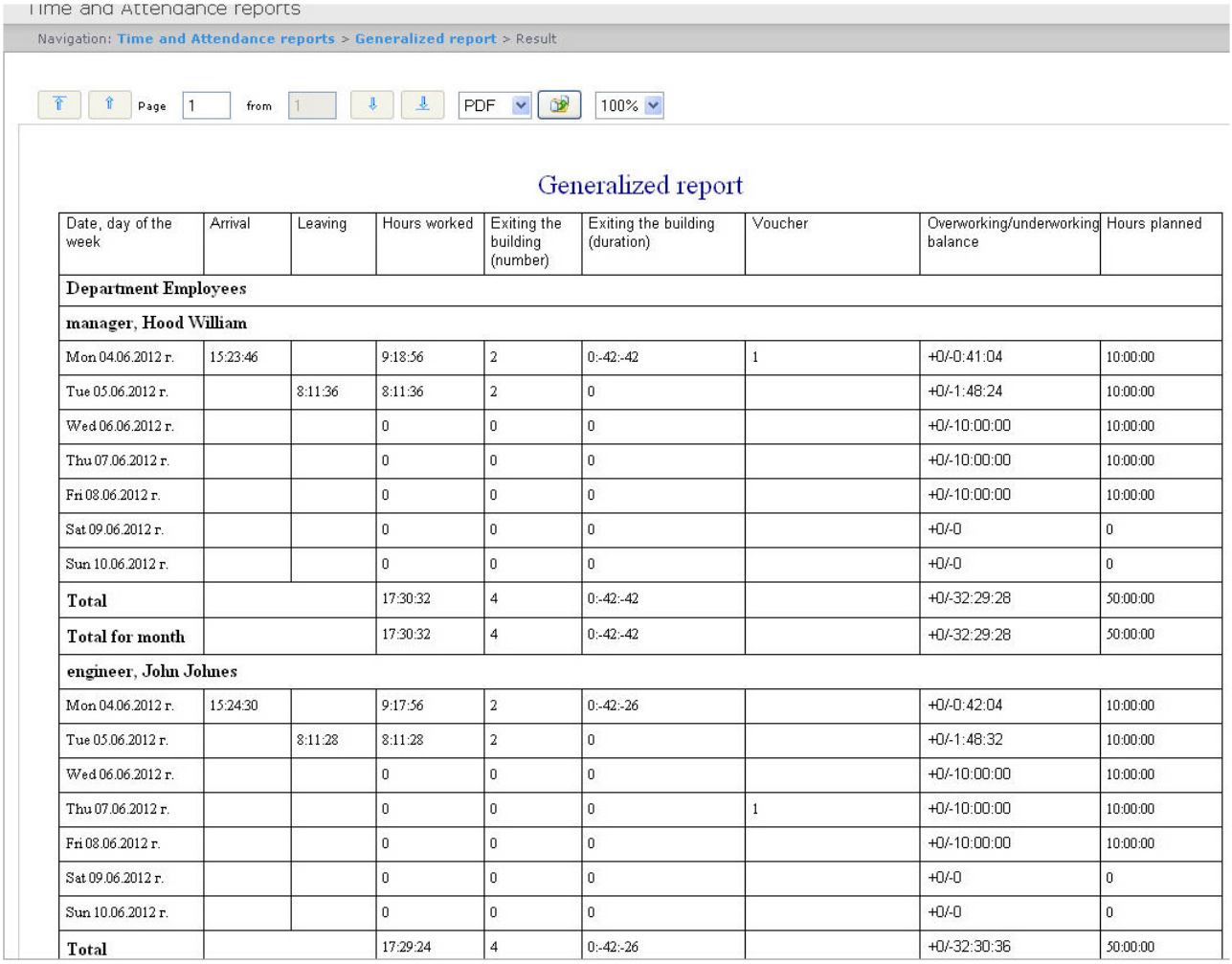


The following figure shows the alternative view of this report with several departments selected.



Generalized report

Generalized report is a table that contains information on carrying out the workday order by employees for every day of selected period.


Time and Attendance reports

Navigation: Time and Attendance reports > Generalized report > Result

Page 1 from 1 PDF 100%

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)

Field name	Description
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
Hours planned	Planned workday duration

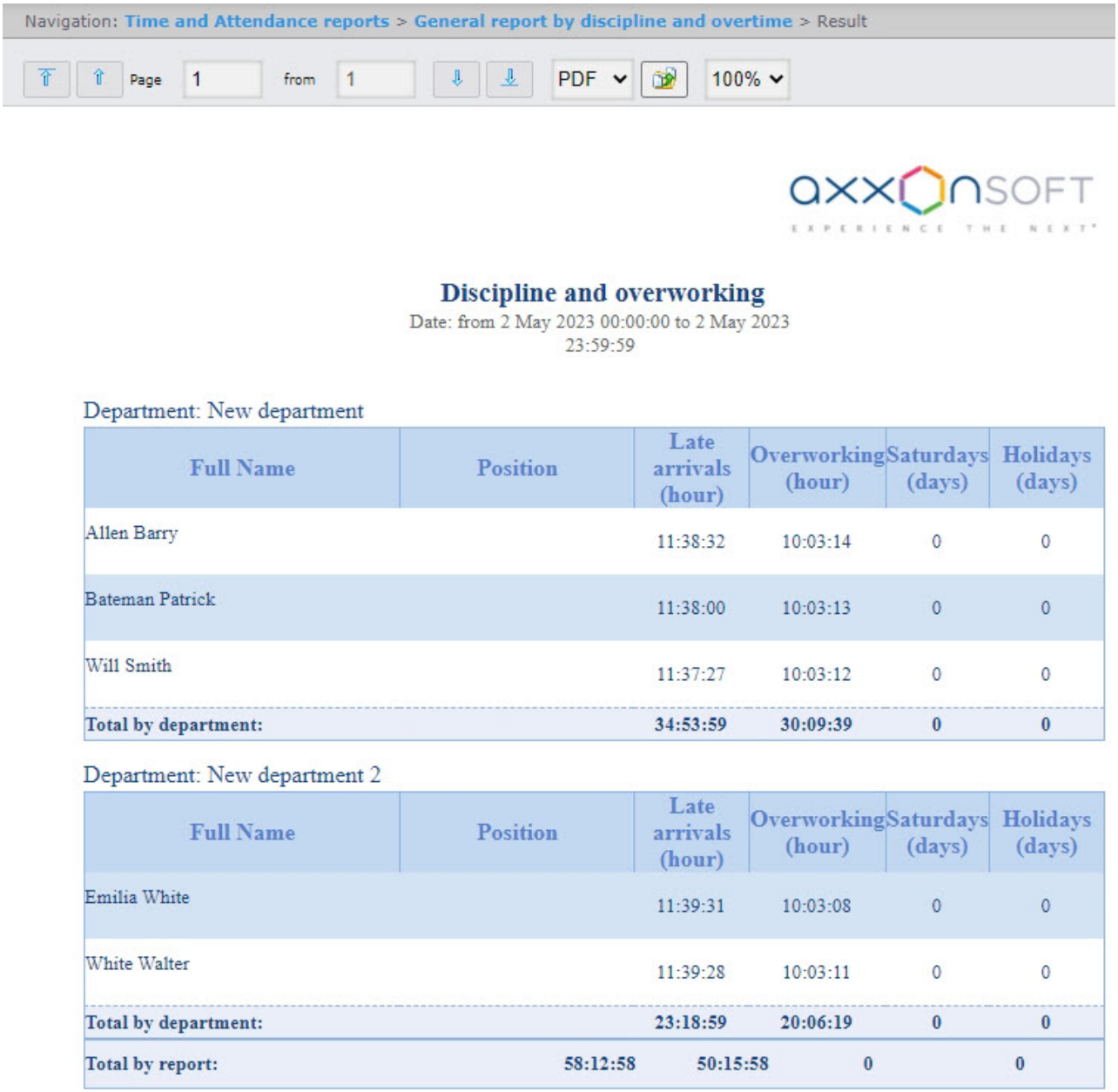
Note.

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.

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.



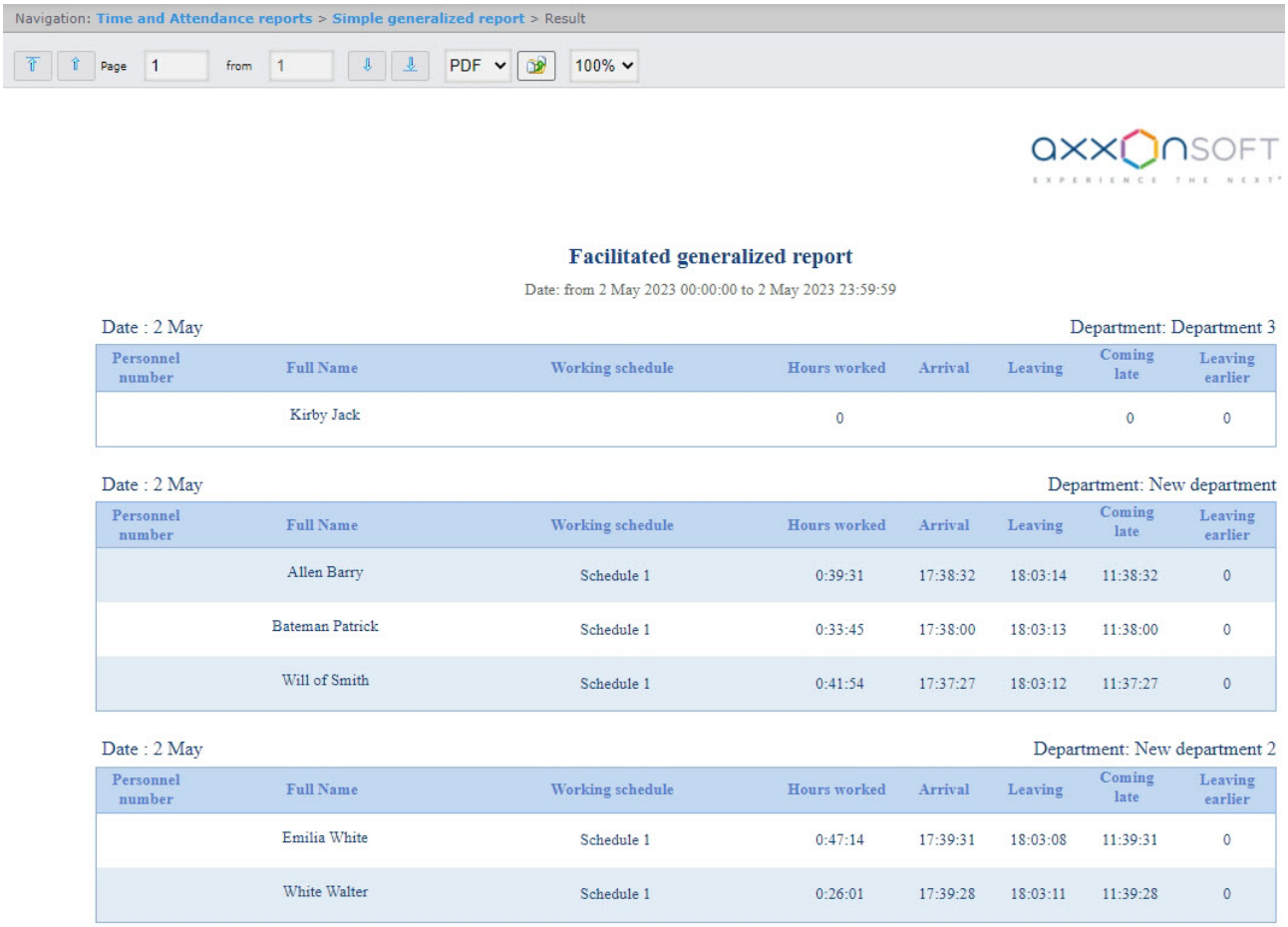
The report fields are described in the following table.

Field name	Description
Full Name	Employee full name
Position	Employee position
Late arrivals (hour)	General time if being late during the specified period (in hours)

Field name	Description
Overworking (hour)	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.	

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.



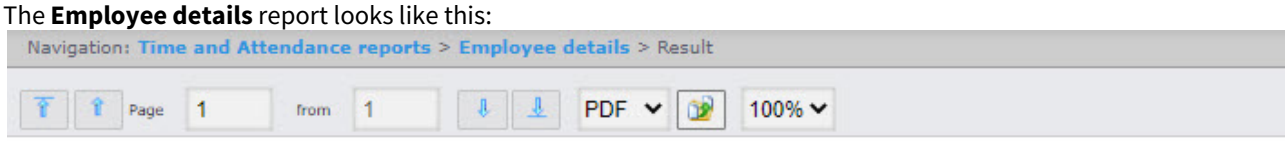
Report fields are described in the table.

Field name	Description
Personnel number	Employee personnel number
Full Name	Employee full name
Working schedule	Employee working schedule
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

Employee details

Employee details is a report in the form of a table that provides information about all passes of one or several employees, or all employees of the selected department for the specified period. You can configure the report so that only unique passes are taken into account.

The **Employee details** report looks like this:



Employee details

Date: from 2 May 2023 00:00:00 to 2 May 2023 23:59:59

Date: from 2 May 2023 00:00:00 to 2 May 2023 23:59:59

Bateman Patrick			Access level: Full access
Access time	**Access point**	**Direction**	**Area**
2 May 17:48	AUTO access point 1	enter	Working zone 1.1
2 May 17:58	AUTO access point 1.2	exit	Working zone 1.1
Diana Backwood			**Access level: Full access**
Access time	**Access point**	**Direction**	**Area**
2 May 17:48	AUTO access point 1	enter	Working zone 1.1
2 May 17:48	AUTO access point 1.2	enter	Street 1.2
2 May 17:58	AUTO access point 1	exit	Street 1.2
Hill Jonah			**Access level: Full access**
Access time	**Access point**	**Direction**	**Area**
2 May 17:48	AUTO access point 1	enter	Working zone 1.1
2 May 17:48	AUTO access point 1.2	enter	Street 1.2
2 May 17:58	AUTO access point 1	exit	Street 1.2
White Walter			**Access level: Full access**
Access time	**Access point**	**Direction**	**Area**
2 May 17:48	AUTO access point 1	enter	Working zone 1.1
2 May 17:58	AUTO access point 1.2	exit	Working zone 1.1
Employees in total:	4		

The report fields are described in the table.

Field name	Description
Access time	Date and time of employee pass
Access point	Access point through which employee passed
Direction	Direction of employee movement
Area	Area where employee is located after the pass
Employees in total line displays the employee's total number in the report	

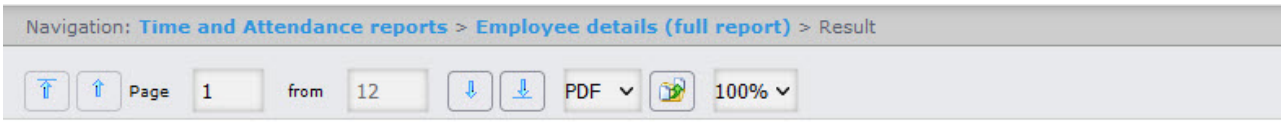
Employee details (full report)

Employee details (full report) is a report in the form of a table that provides information about entries and exits to different regions of one or several employees, or all employees of the selected department for a specified time period.

Employee details (full report) is a variant of **Employee details** report, and it is created using the same data.

> **Note**
>
> To enable the report, set the value of the **EnableAboutUsersFullReport** key to **true** (see Enabling the Employee details (full report)) and give the selected user the access rights to this report (see Setting up user access to Time and Attendance reports).

Employee details (full report) looks like this:



Employee details (full report)

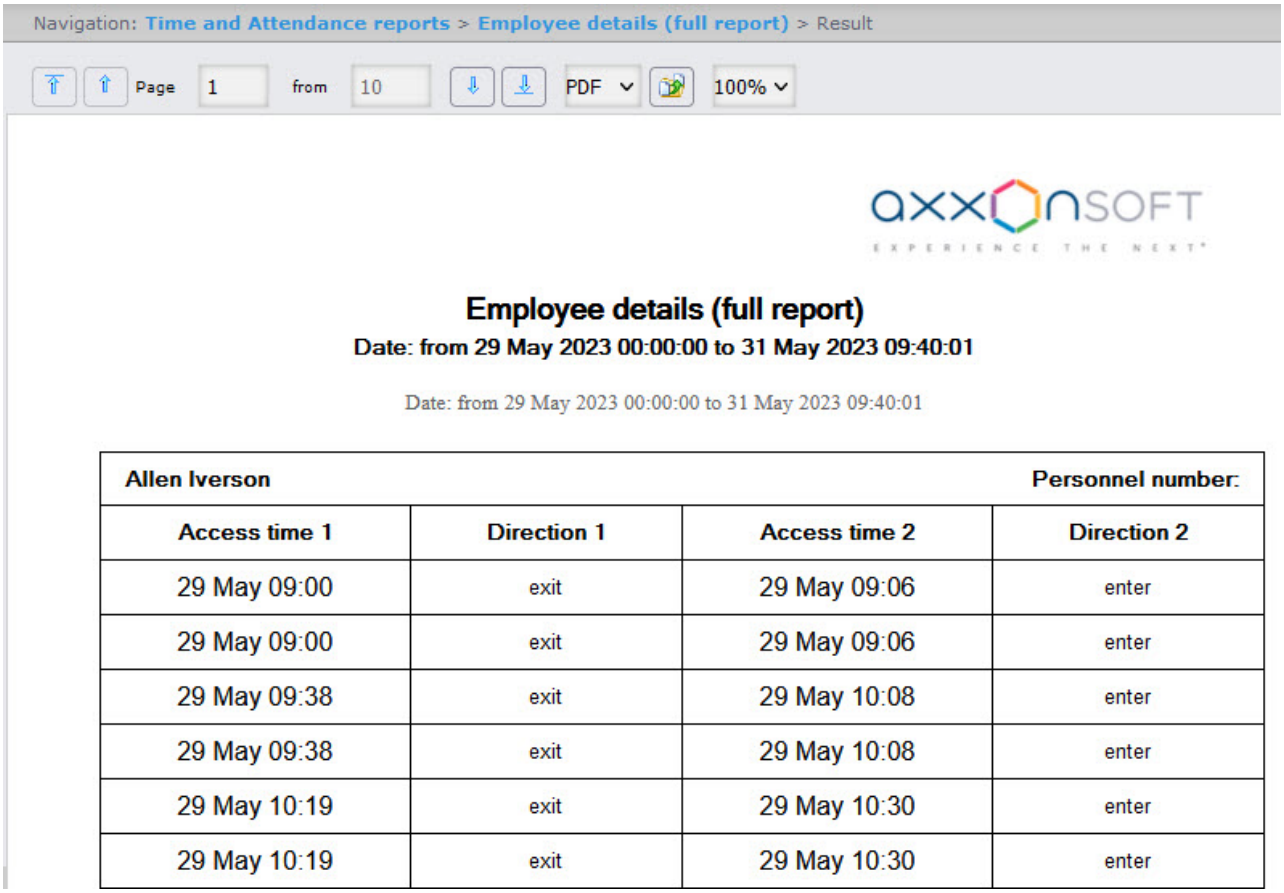
Date: from 1 May 2023 00:00:00 to 31 May 2023 09:29:40

Date: from 1 May 2023 00:00:00 to 31 May 2023 09:29:40

Allen Iverson			**Personnel number:**
Access time 1	**Direction 1**	**Access time 2**	**Direction 2**
28 May 15:26	enter	28 May 16:05	exit
28 May 15:26	enter	28 May 16:05	exit
28 May 16:06	enter	28 May 16:20	exit
28 May 16:06	enter	28 May 16:20	exit
28 May 16:26	enter	28 May 16:34	exit
28 May 16:26	enter	28 May 16:34	exit
28 May 16:49	enter	28 May 17:00	exit
28 May 23:59	enter	29 May 08:55	exit
29 May 09:00	enter	29 May 09:06	exit

If an employee entered the first region after the start date of the reporting period, the report will display the data in the order, as shown in the figure above: enter (the **Direction 1** column)—exit (the **Direction 2** column).

If an employee entered the first region before the start date of the reporting period, the report will display the data in the order, as shown in the figure below: exit (the **Direction 1** column)—enter (the **Direction 2** column).



The fields of the report are described in the table.

Field name	Description
Access time	Date and time of employee access
Direction	Direction of the employee movement
The **Employees in total** line displays the number of employees included in this report	

8.10 Exporting of reports

Intellect Web Report System allows exporting the reports to computer in the following formats:

- PDF;
- CSV;
- Excel.

The list of available formats may differ depending on the generated report type.

> **Note**
>
> Images are only supported in PDF format. If you export the report in a format other than PDF, only the text will be saved.

To export a report to a file, select an available format from the drop-down list (**1**) on the toolbar and click the button (**2**).



Note

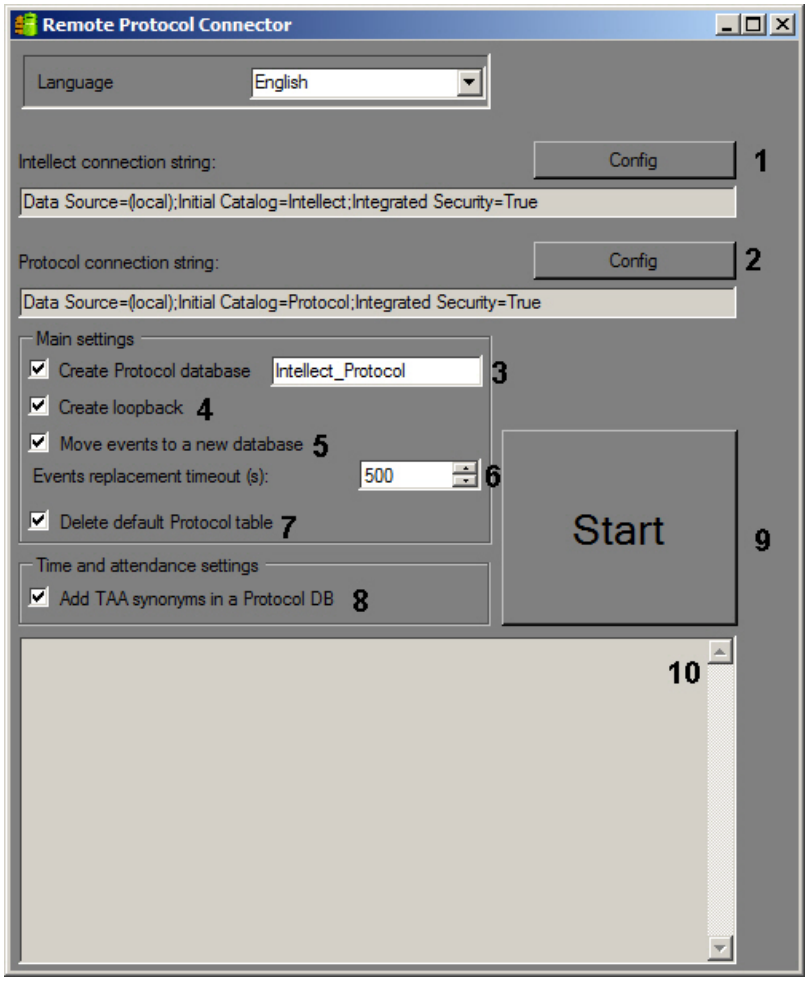
If a *"System.OutOfMemoryException"* message is displayed when you try to export the created **Report by users access levels** or **Report by users, access levels and readers** in PDF format, then it is necessary to reduce the exported data by splitting the report into several documents. For instance, create reports by less departments and then merge several PDF files in one file using the third-party software.

9 Appendix 1. The RemoteProtocolConnector utility for extracting event protocol to a separate database

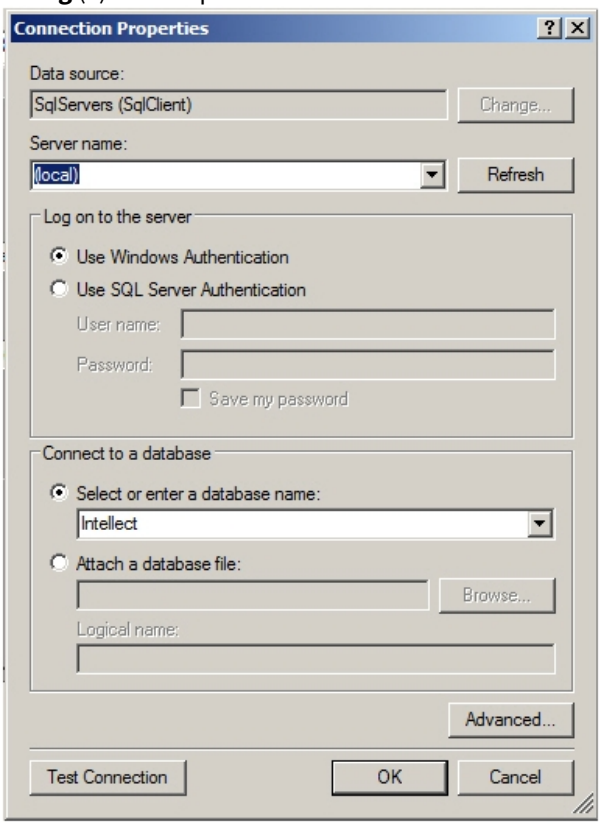
9.1 Extracting event protocol to a separate DB with RemoteProtocolConnector

Extracting event protocol to a separate DB with RemoteProtocolConnector is carried out as follows:

1. Run the the RemoteProtocolConnector.

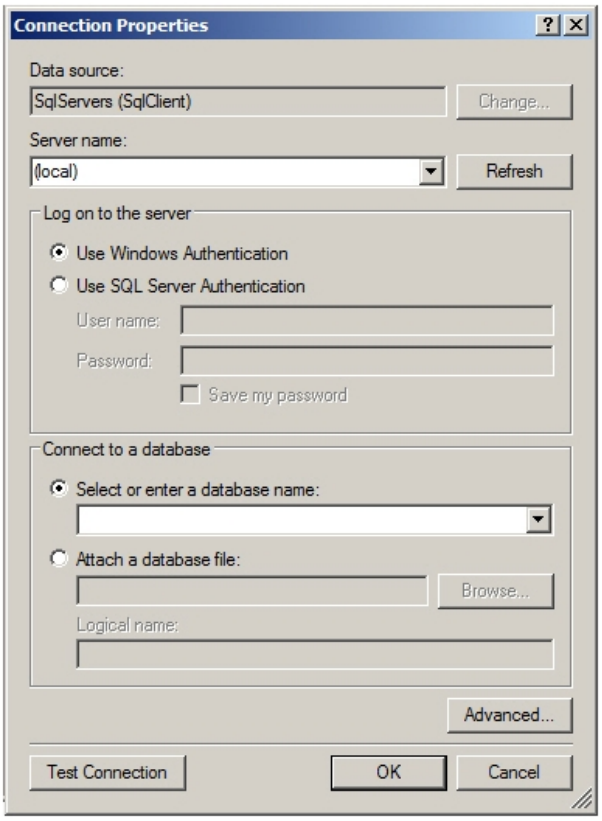


2. Check the connection string for *Intellect* software database. If the connection string is not correct, click **Config** (1) and set parameters of connection in the **Connection Properties** dialog box.



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).

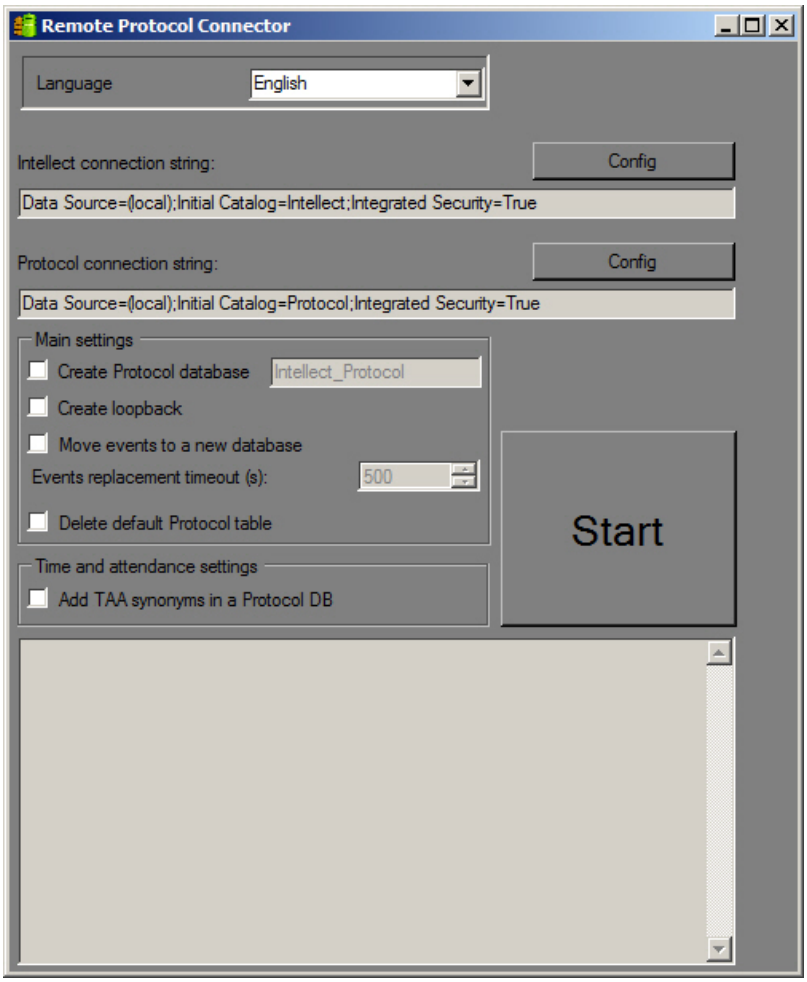
Extracting event protocol to a separate DB with RemoteProtocolConnector is completed.

9.2 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.