Quick Start Guide

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1 Quick Start Guide. Introduction

1.1 Document purpose

This document, titled Quick Start Guide(see page 3), is intended to be used as a concise guide for installing and starting the *Axxon Next* software package as well as for configuring and using its main functions (video surveillance, audio surveillance, pan/tilt/zoom devices management).

More detailed information on the *Axxon Next* software package is presented in the document titled User Guide[1].

1.2 Purpose of the Axxon Next software package

Meet Axxon Next, a next-generation open-platform video management software (VMS). Thanks to exciting innovations from AxxonSoft, the Axxon Next platform has reached a whole new level of performance, reliability, efficiency, functionality and accessibility.

Video surveillance systems based on Axxon Next can scale infinitely: there are no restrictions on the number of video servers, workstations or video cameras. Axxon Next also plays well with other devices and systems.

Support for over 6000 models of IP devices including more than 1500 models of IP cameras integrated using proprietary protocol and 4500 ONVIF compliant devices is included, as well as remote access from mobile devices and a web interface.

Security needs of all sizes - from those of large-scale distributed facilities to the smallest sites - can be efficiently met with Axxon Next video management software. Every license includes full, unrestricted VMS functionality, even on systems of just one camera. Users on tight budgets will appreciate the free version of the program, which supports up to 4 camera channels.

1 https://docs.axxonsoft.com/confluence/display/next45en/User+Guide

2 Installing the Software Package

To install the *Axxon Next* VMS, run the Setup.exe executable file from the distribution package as Windows OS administrator.

The following three types of installation are available:

1. **Client** – installs only the Client that allows the user to connect to any Server and perform administration/management/monitoring of the guarded object based on the permissions granted by the administrator.
2. **Server and Client** – installs the Client and the Server services.
   The *Axxon Next* Server:
   a. Interacts with the devices (video cameras, microphones, sensors, relays, etc.) that constitute the security system.
   b. Stores the archive data on its own storage space and interacts with the archives on NAS.
   c. Stores the events and object tracks databases.
   d. Analyzes the incoming video image using the detection tools.
   e. Stores the configurations of the security system, user settings, layouts created in the system, macros, etc.
3. **Failover Server and Client** – installs the Client and the Server services with the FailOver technology. In emergency situations (Server power outage, network connection loss), the configuration of the Server with the FailOver technology will be restored on another Server of the system.

When installing the Server, the following software is installed among the prerequisites:

1. PostgreSQL database Server. A new log database is automatically created with the name – ngp, the username – ngp, and the password – ngp.
2. *.NET Framework 2.0*, *.NET Framework 3.5 SP1* and *.NET Framework 4.0*.
3. Acrobat Reader, which is necessary for exporting in PDF format and printing freeze frames (see Frame export[2]).
4. VLC Media Player. The VideoLan folder in the *Axxon Next* installation directory will contain the VLC.exe file, which is a version of the VLC Media Player that can be run from any disk/carrier without installation. This file can be used to playback the exported archive video.

> **Attention!**
>
> Starting from *Axxon Next* 4.5.10, VLC Media Player is excluded from the software package.

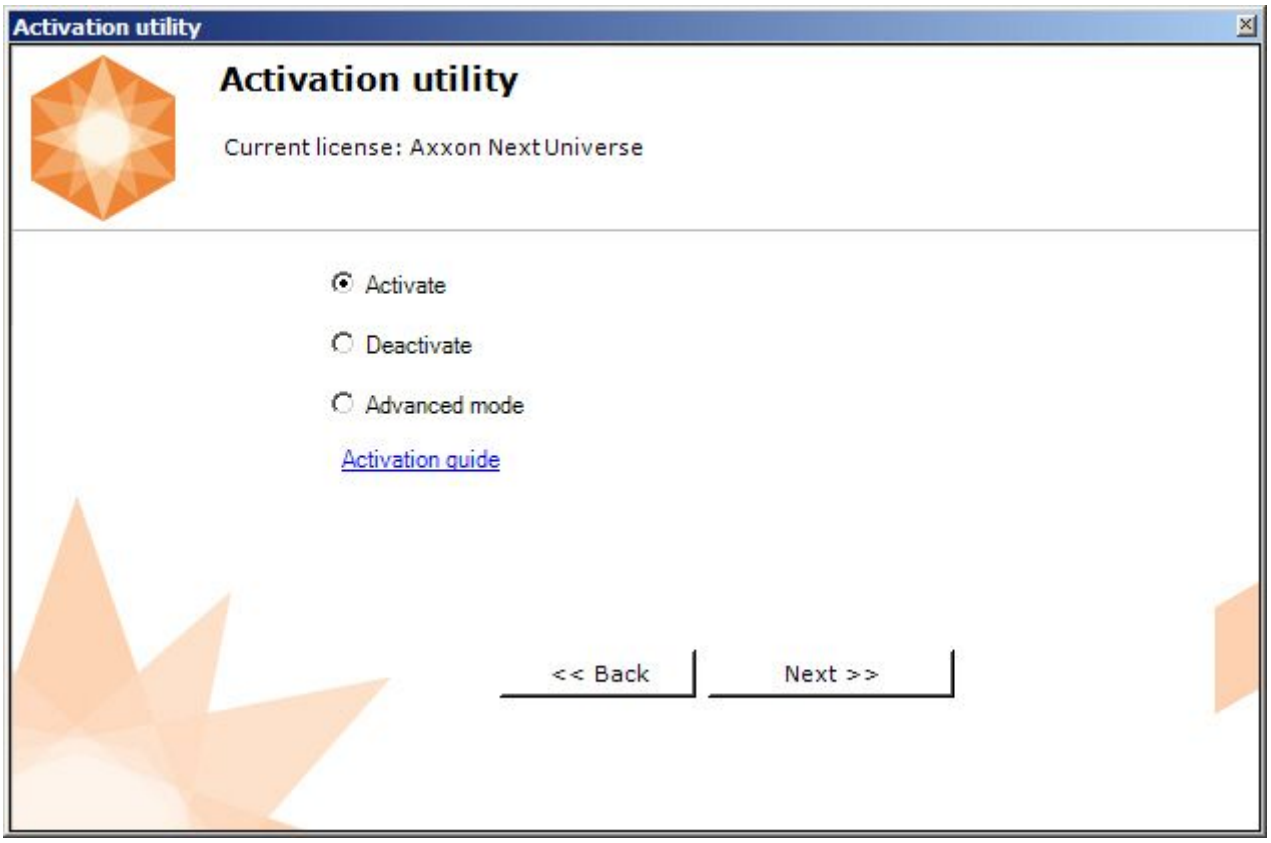
2 https://docs.axxonsoft.com/confluence/display/next45en/Frame+export

3 Licensing the Software package

There are 5 types of *Axxon Next* license: **Demo**, **Free**, **Start**, **Professional**, and **Universe**. Upon installation, the software will be launched in demo mode. Worktime period is from 8 am to 6 pm.

You should activate Axxon Next VMS to utilize the full feature set of the security software package. You can activate the software by distributing an activation key on the system.

License activation for the *Axxon Next* software package is carried out through the corresponding utility. Launch the product activation utility using **Start** menu: **Start** → **All programs** → **Axxon Next** → **Utilities** → **Product activation**.



It is recommended that you read Activation guide[3] providing step by step activation instructions.

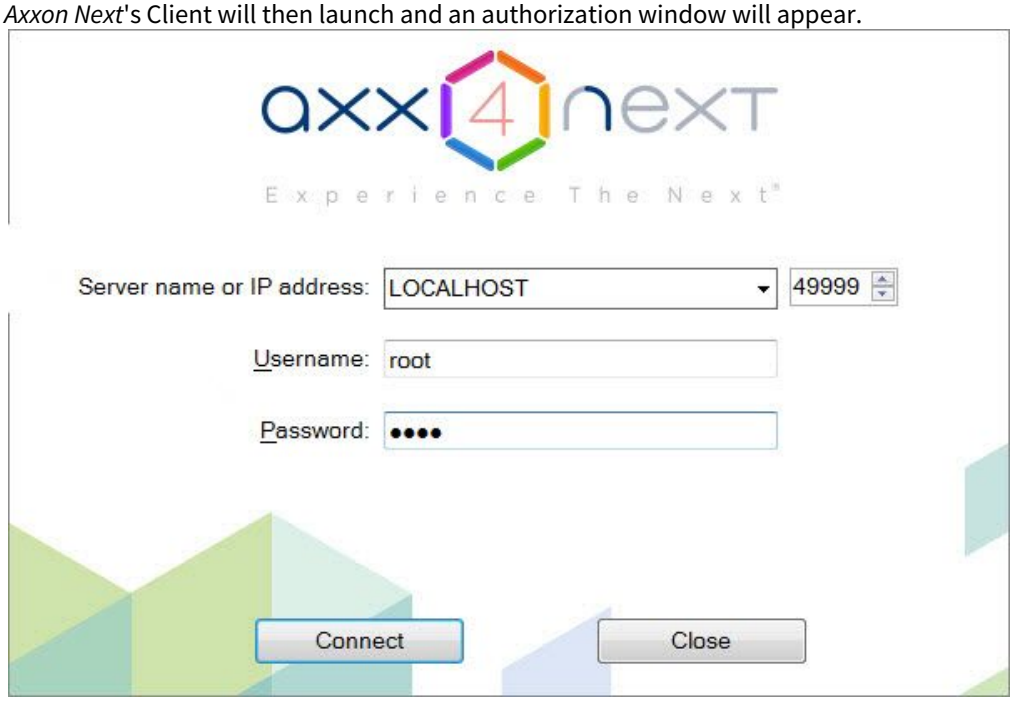
3 https://docs.axxonsoft.com/confluence/display/next45en/Activation+Guide

4 Starting and closing the Axxon Next software

Check readiness for operation of the entire communication environment, cameras, microphones and other system components before starting the system.

To start working with the software, you must perform the following steps:

1. Go to **Start** → **All Programs** → **Axxon Next** → **Axxon Next**.
   Axxon Next's Client will then launch and an authorization window will appear.



2. Enter your user name and password and click **Connect**.

> **Note**
>
> When logging into the system for the first time, use the user name **root**, which has administrator permissions. Enter "root" into the **User name** and **Password** fields. The administrator then needs to configure the system for multi-user access.

If authorization is successful, a video surveillance monitor will be displayed on the screen.

Before closing *Axxon Next*, you need to exit the user interfaces. To do this, you need to do one of the following:

1. Click the

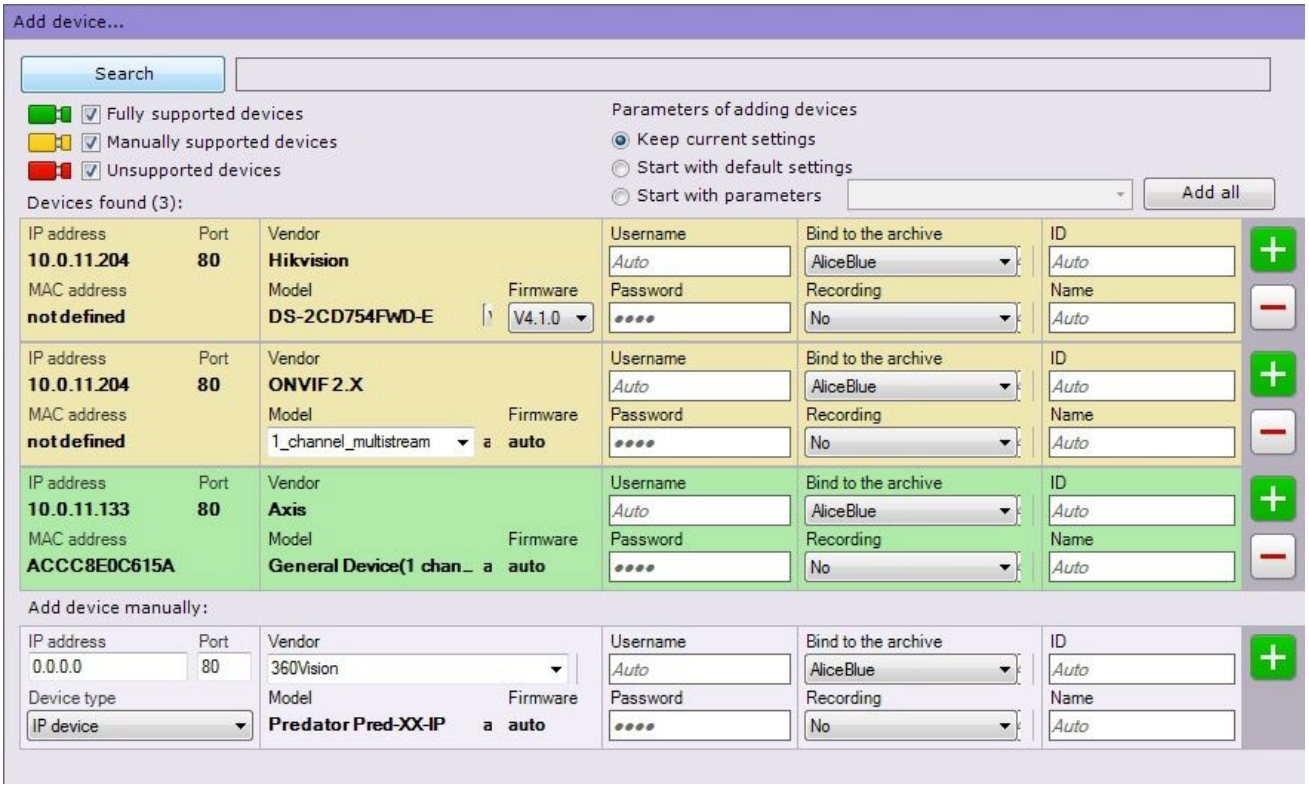
button located under **Settings**.
2. In the Windows taskbar notification area, in the context menu of the Axxon Next icon, select **Close window**.

When you perform one of these actions, the authorization window will appear. To close *Axxon Next* (completely exit the client), click **Close**.

5 Configuring the Axxon Next software package

5.1 Create Cameras

You can add video cameras and IP servers to the system by using the IP Device Discovery Wizard.



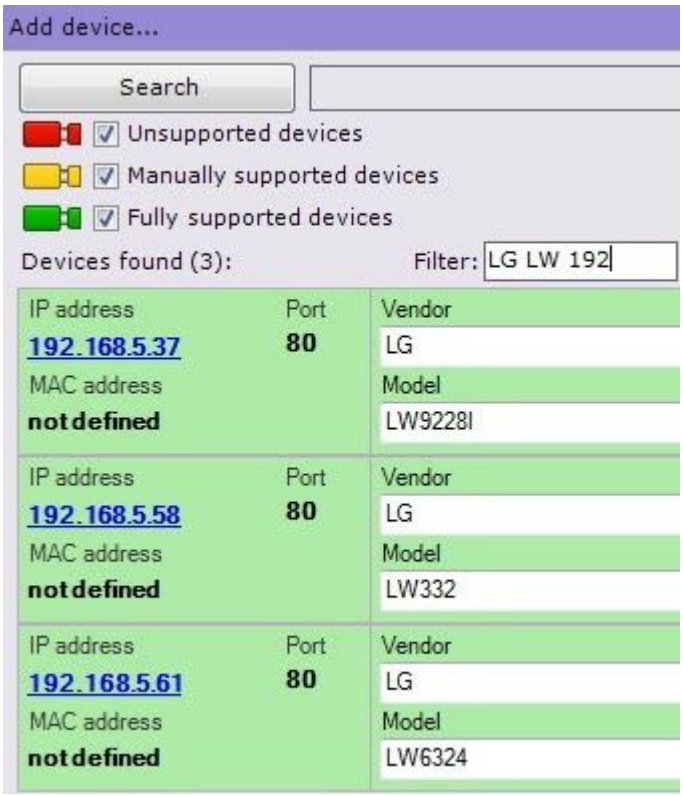
The IP devices are color-coded based on the status of the device.

Color of video camera icon	Description
	Fully supported device
	Manual configuration required
	Axxon Next compatibility not guaranteed

When adding a device, you can immediately set several configuration options, such as:

- firmware version,
- username and password,
- object ID and name,
- archive and recording (non-stop or based on a time schedule).

In addition, three modes are available for adding a device to a configuration: with the default settings, with the current settings or custom settings.



To add one device, click the button. To add all devices, click the **Add all** button.

If an IP device is not shown in the search results (beacuse it is located on another subnet or contact has been temporarily lost), you can add it manually. To do so, in the neutral-colored area above the search results, select the type of IP device that you are adding (with or without edge storage), specify an IP address and port, and select the manufacturer and model.

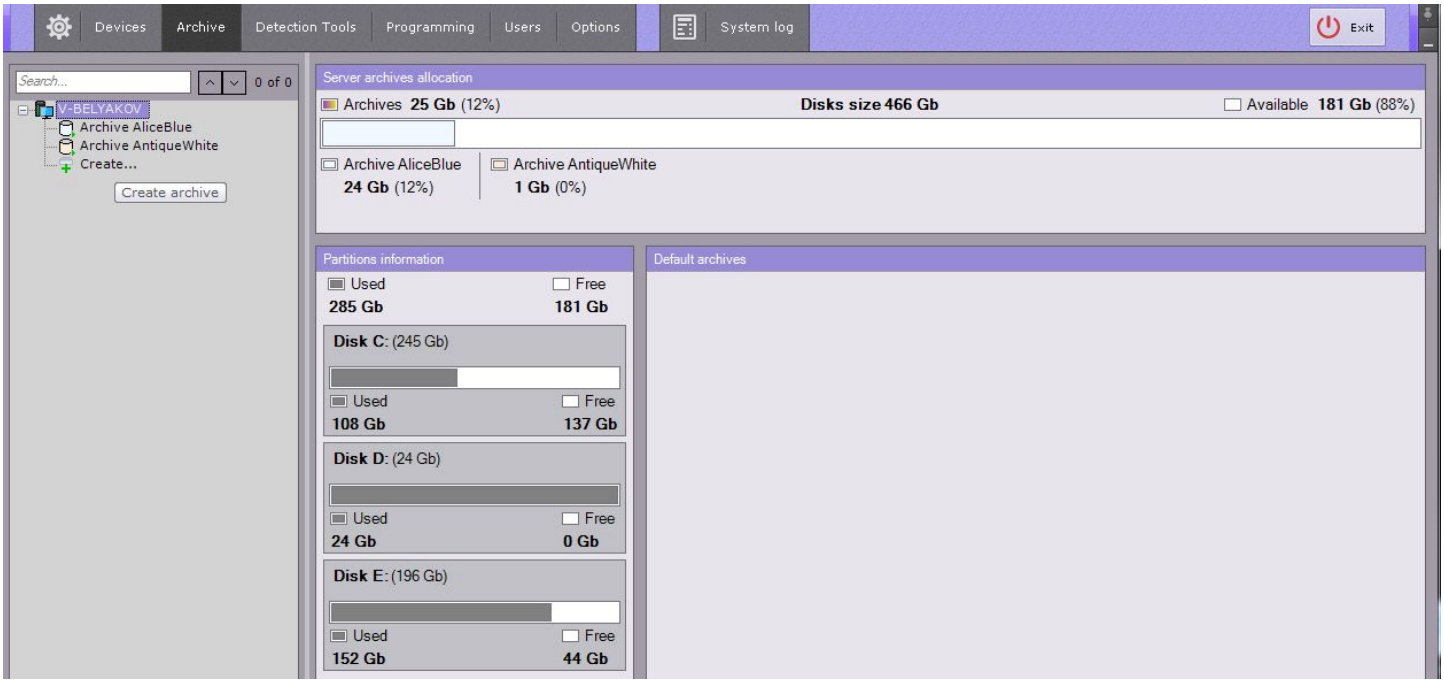
5.2 Creating Archive

On the base of one server you can create an unlimited number of archives. An archive can be placed on local disks or on network disks.

You can save a single archive volume of recorded video on each local drive. An archive volume is a file or an entire logical drive (with the proprietary SolidStore file system).

On network drives, you can save an archive volume only in the form of a file.

To create an archive, go to the **Archive** tab and click the **Create** link.



Configure the archive as follows: select the archive type, configure archive volumes, click the **Apply** button.

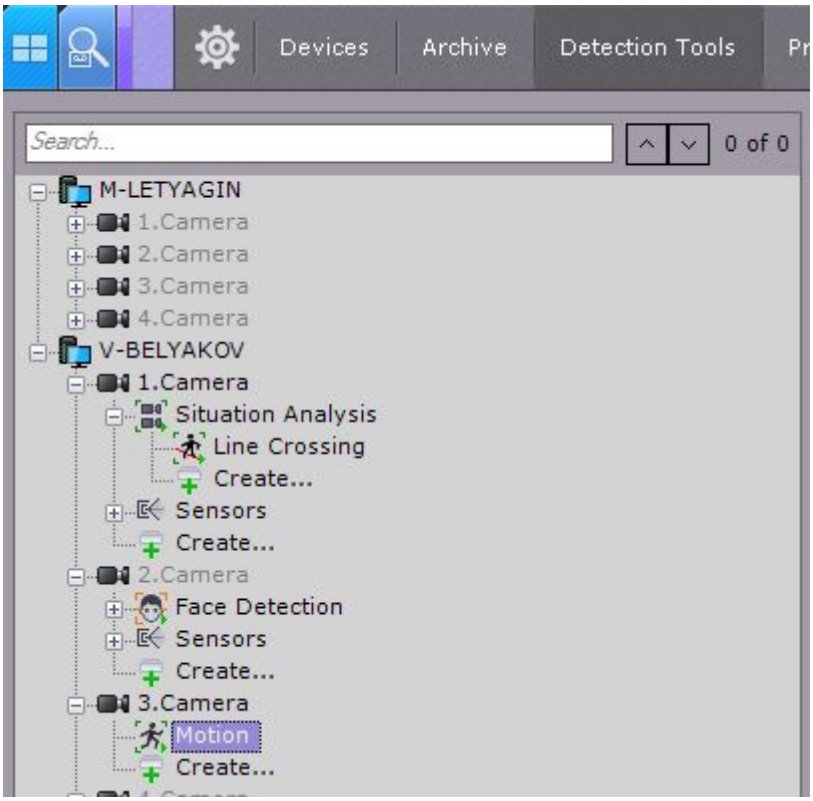
Configure the recording as follows: select the cameras, Configure recording settings

5.3 Create and Configure Detection Tools

In the Axxon Next software package, several types of detection tools process incoming data:

1. Scene Analytics detection tools;
2. facial recognition tools;
3. automatic number plate recognition tool;
4. basic detection tools:
    a. Video analytics;
    b. Audio analytics;
5. Detection tools embedded in a video camera.

You can configure detection in the **Detection Tools** tab.



To create a detection tool, click **Create** in the camera's object tree and choose a required tool.

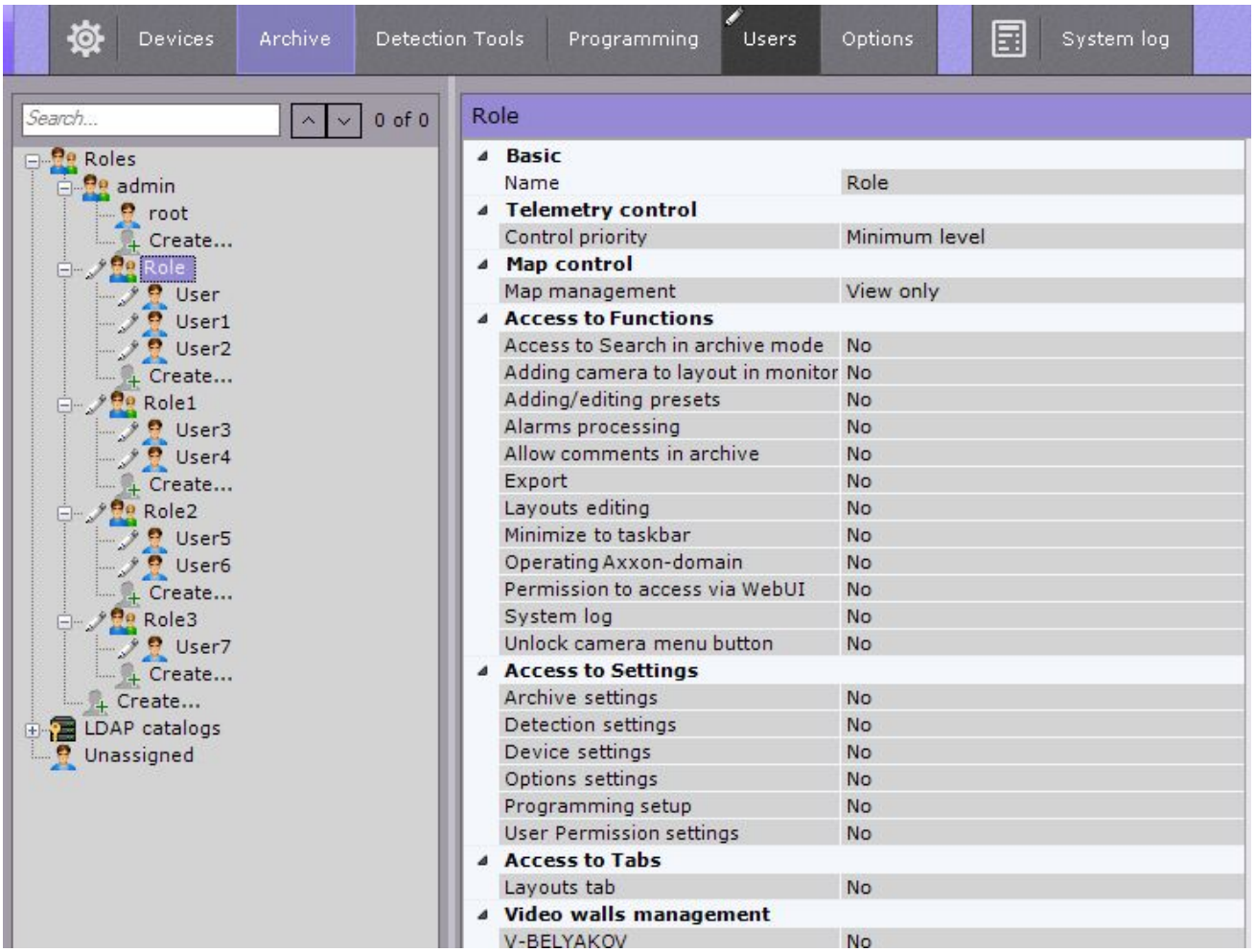
To create **Scene Analytics** and the **Facial Recognition** detection tools, you need to create a respective object first. You create detection tools on the basis of these objects.

5.4 Configuring Users and Roles

In Axxon Next, every user has permissions based on their role.

By default, there is one role (**admin**) and one user (**root**). The **root** user belongs to the **admin** role and has rights to configure all components of the video surveillance system. To add a user with individual permissions, create a new role with the necessary permissions and then create a new user account.

Roles and users can be added and configured in **Settings**, on the **Users** tab.



There are two types of users: local (stored in the Server database) and LDAP[4].

Roles configuration involves setting group and individual permissions for users' access to various system settings, features and hardware.

You can assign a role to a user and set permissions for the role.

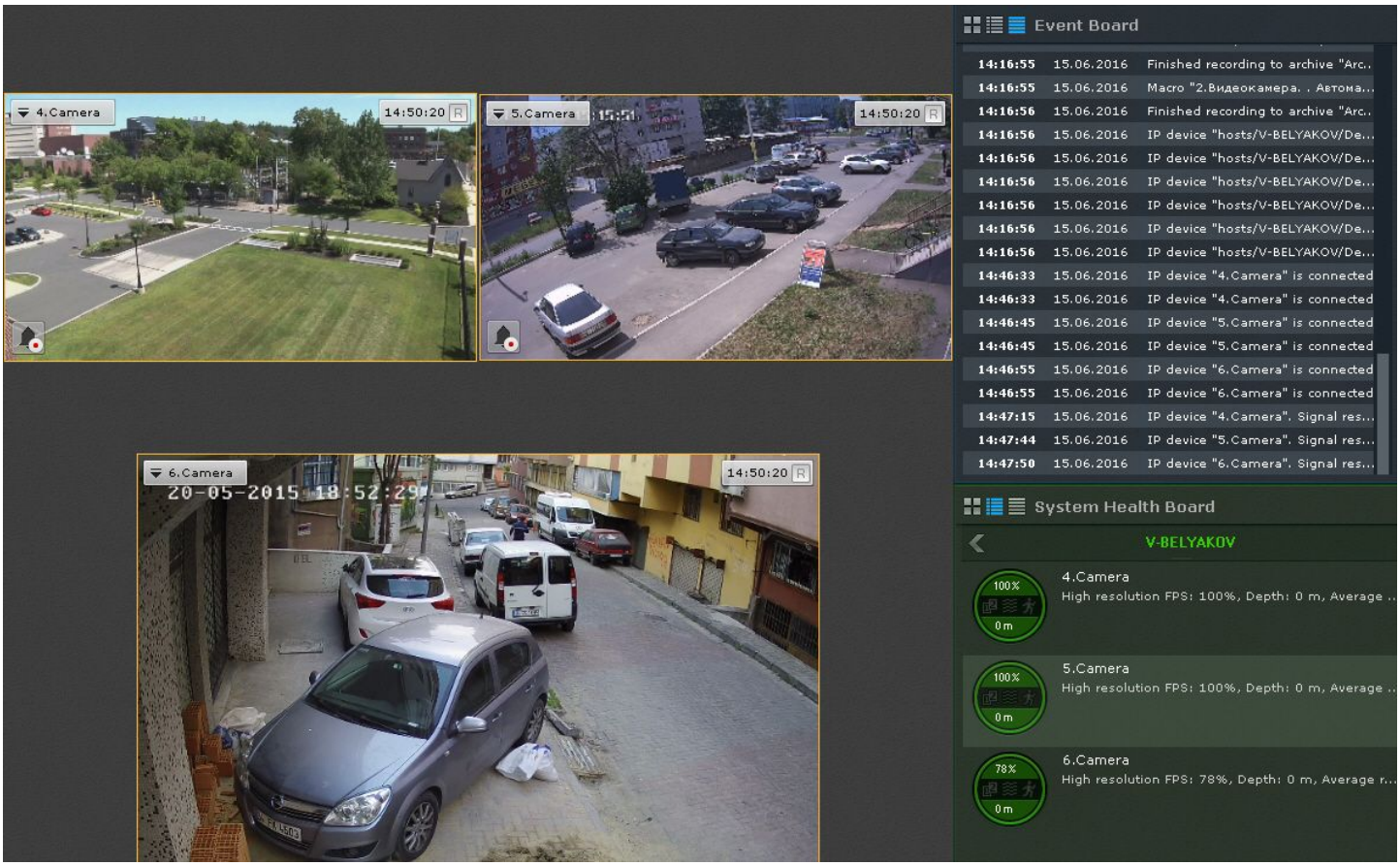
4 https://en.wikipedia.org/wiki/Lightweight_Directory_Access_Protocol

5.5 Create and Configure Layouts

You can create and configure custom layouts for any user. Log into the Server under the appropriate user name and configure the layouts for that user.

New layouts are created based on standard layout types.

You can add video camera tiles and information boards (dashboards) to a layout. You can also attach a map, that will be automatically displayed when you switch to this layout.



6 Operating the Axxon Next software package

6.1 Alarms Management

All alert/alarm events are displayed on the **Alarms** panel.

The **Alarms** panel is at the top of the screen and you can see it only if there are active alarms. To open Alarms Panel, click the

button.

When you classify an alarm (critical, non-critical, false, or missed), a flag is added to the alarm recoding on the timeline. A flag is added to the point on the timeline when the alarm began.

6.2 Search Video Footage

You can search recorded video in two modes: the Archive mode and the Archive Search mode.

In the Archive mode (the **Playback** tab in the viewing tile), you can search video episodes using one of the two timelines.

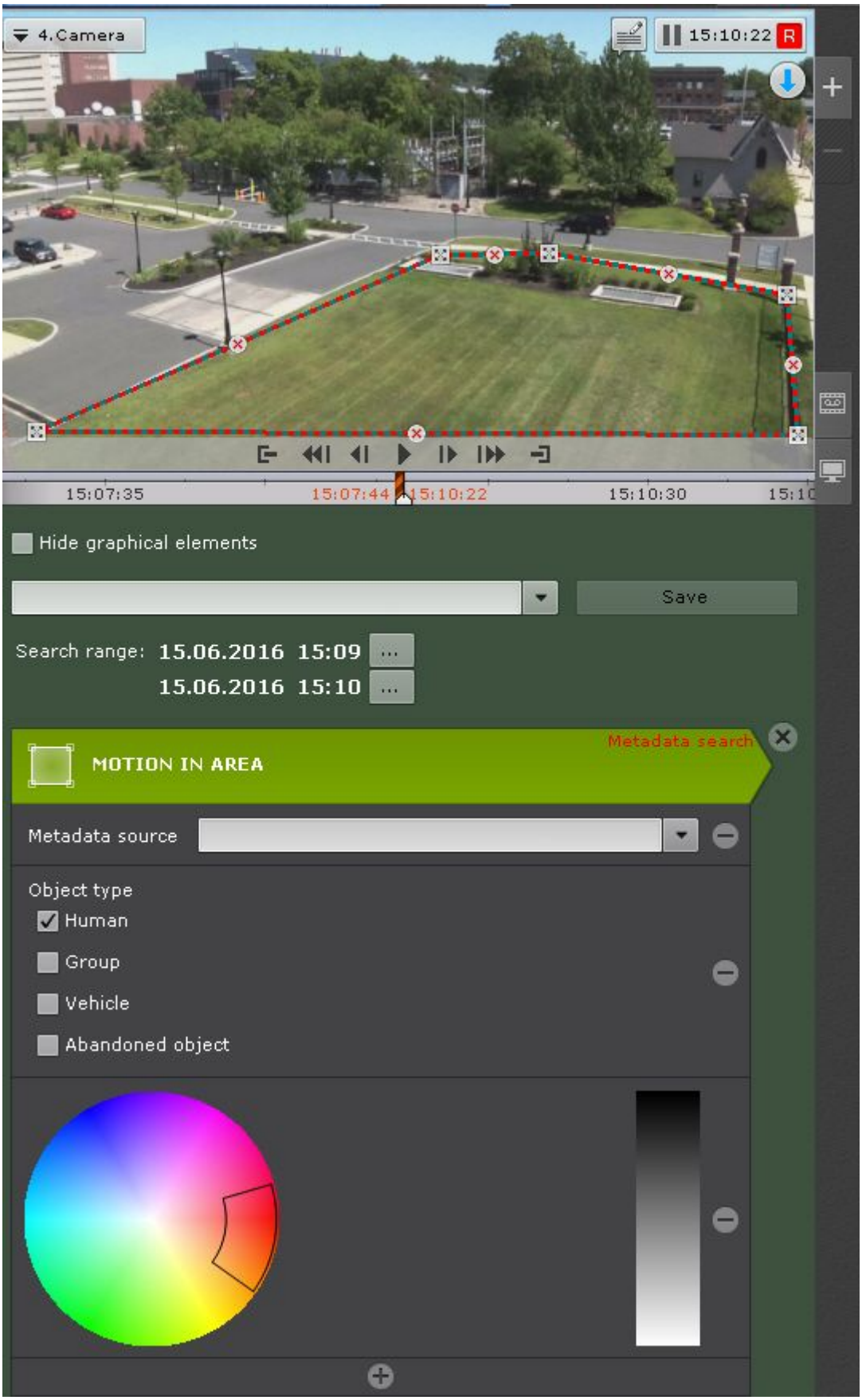
To navigate in the archive, left-click and drag the pointer to the point of interest.

In the Archive Search mode (the tab **Search**), you can set criteria (filters) to search video footage. You can choose from the following search filters:

1. Events search.
2. Time search.
3. Titles search.
4. Face search.
5. ANPR search
6. Forensic search.
7. Searching comments.

Forensic Search MomentQuest lets you search for video episodes using the following criteria:

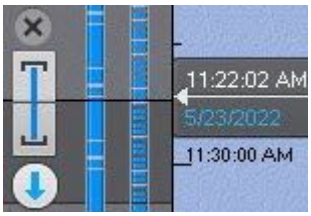
1. Motion in Area.
2. Loitering of an object in a specific area.
3. Simultaneous presence of a large number of objects in a specific area.
4. Crossing of a virtual line by an object's trajectory.
5. Motion from one area to another.


4.Camera
15:10:22
R
15:07:35
15:07:44
15:10:22
15:10:30
Hide graphical elements
Save
Search range: 15.06.2016 15:09
15.06.2016 15:10
Metadata search
MOTION IN AREA
Metadata source
Object type
Human
Group
Vehicle
Abandoned object

6.3 Export Snapshots and Video Recordings

You can export in one of the following two ways: set the export range in the archive or click in the viewing tile.

You can select the export range on the timeline with the right-click or set it using the buttons .



Snapshots can be exported to JPG and PDF, video can be exported to AVI, MKV and EXE formats.

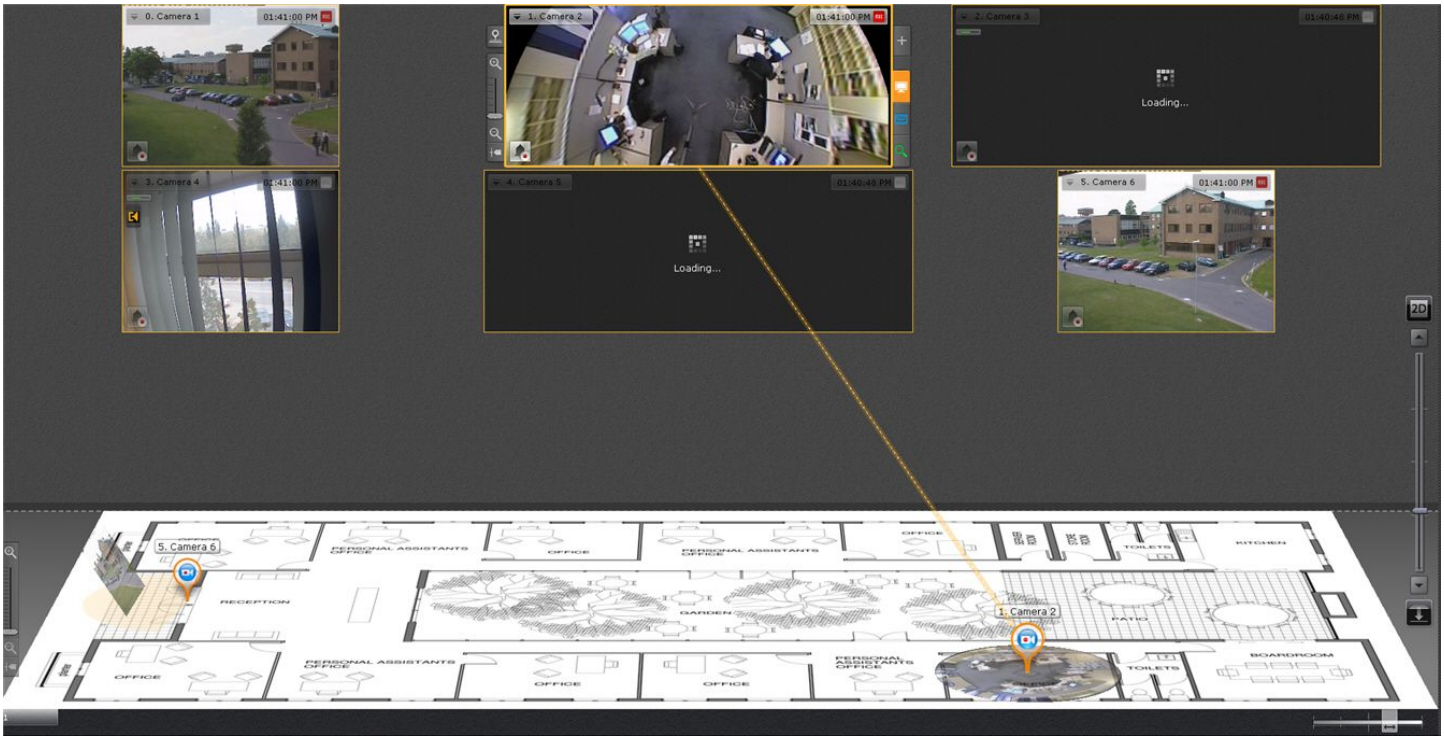
Exported video footage is digitally watermarked to prove the genuineness of the video recording.

6.4 Working with Map

The 3D interactive map is used to visualize the secured facility, control cameras and identify cameras' location.

Interactive maps in Axxon Next can obtain image data from graphics of the site or geospatial data from OpenStreetMap.

> **Note**
>
> To work with OpenStreetMap maps in *Axxon Next*, you need to purchase an OpenStreetMap[5] license.



The map can contain icons for cameras, relays, and sensors. The area in which live video is displayed and field of view are indicated for each camera.

The interactive map allows controlling the objects from the context menus of the graphical symbols on the map showing the states of the corresponding objects.

You can use the interactive map in three modes;

1. 3D mode, in which both the map and layout are available
2. 2D mode, in which only the map is available
3. immersion mode, in which video is overlaid on the map

5 http://www.openstreetmap.org/copyright

6.5 ANPR and Search in Video Footage

Automatic number plate / license plate recognition is performed by a special detection tool. ANPR / LPR event is a recognized number plate written to a database.

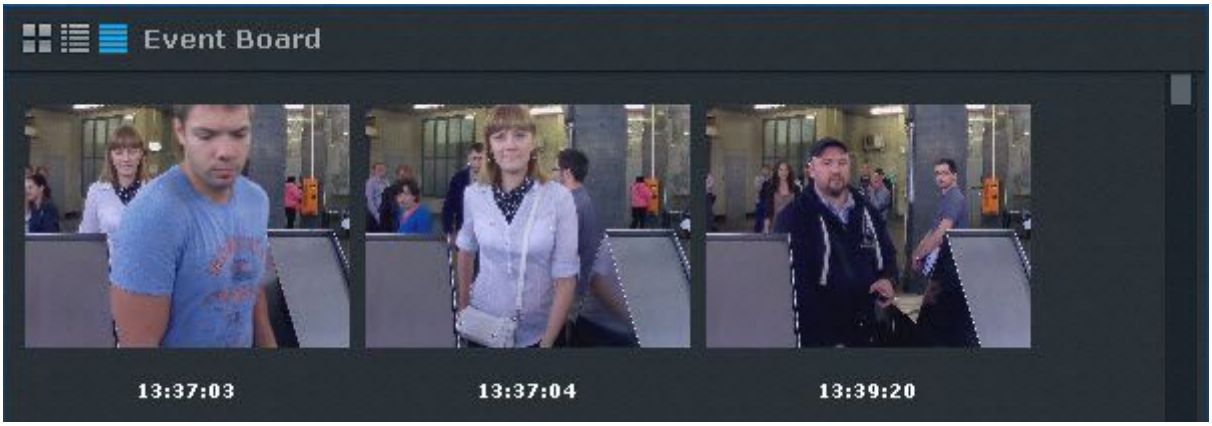
These events can be displayed in a layout on the Events Board or Message Board.

You can search ANPR events in recorded video from one or several cameras.

6.6 Facial Recognition and Search in Video Footage

Face recognition is performed by a special detection tool. A facial recognition (FR) event is a set of digitized face features written to a database.

These events can be displayed in a layout on the Events Board or Message Board.

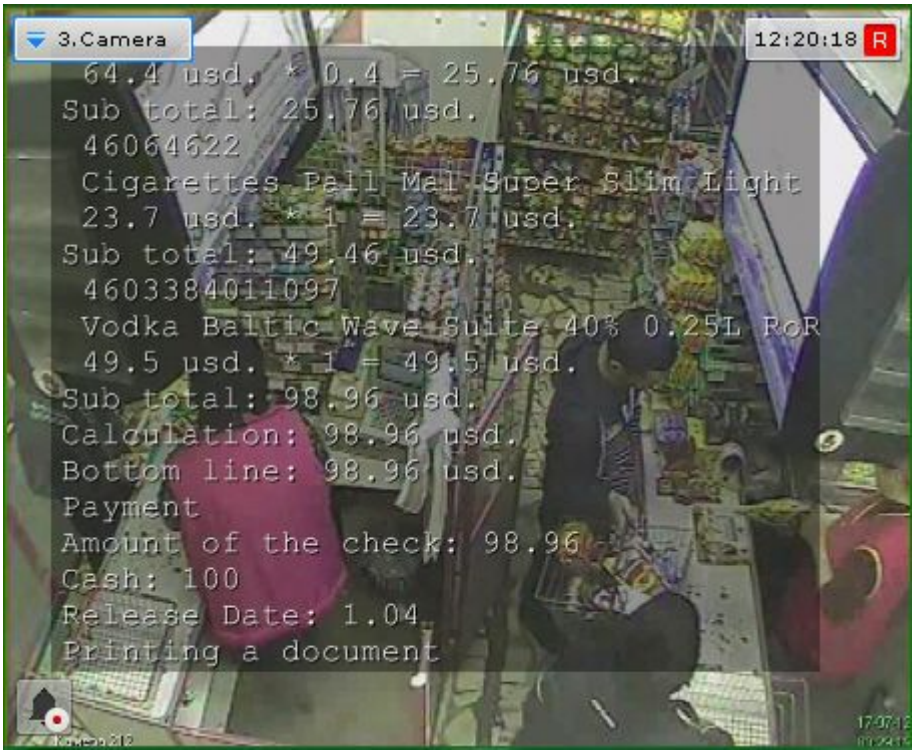


You can search FR events for similarity with an uploaded picture in recorded video from one or several cameras.

6.7 Receive Metadata from POS devices

You can configure *Axxon Next* to obtain data from POS devices.

If you have configured the titles overlay, the video tiles show titles superimposed on video. You can have titles from several POS terminals in the same camera window.



In the Archive Search mode, you can enter the keywords for titles and find relevant video recordings.