iOS Mobile Client. User Guide

Version 3.3.3

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General information about the iOS client app

The client app for mobile devices running iOS (version 8.0 and later) is available for free on the Apple App Store and works on the following devices:

- iPhone 5, iPhone 5C, iPhone 5S, iPhone 6, iPhone 6+, iPhone 6S, iPhone 6S+, iPhone 7, iPhone 8;
- iPod touch (fifth generation and later)
- iPad (all generations except the first one)

The client for iOS devices allows connecting to Axxon Next servers (version 3.0 and later) and Intellect servers (version 4.9.0 and later).

Client features are described in the table.

Client features	Working with Intellect servers	Working with Axxon Next servers
Live Video and Audio Monitoring	+	+*
Playback of recorded video and audio	+	+*
Playback of iOS sound on speakers	+	-
Getting titles in the live and archive modes	+**	-
Control of PTZ cameras (including activation of presets)	+	+
Zoom in (with digital zoom)	+	+
Managing cameras, relays and sensors	+	-
View maps	+	-
Working with geomaps	+	+
Run macros	+	+
View the list of events	+	+
Receiving push notifications about events in the system	+	+***

* Audio from Axxon Next Server is available in the rtsp over ffmpeg mode for cameras with h.264 stream only (see Configuring video in mobile Client iOS).

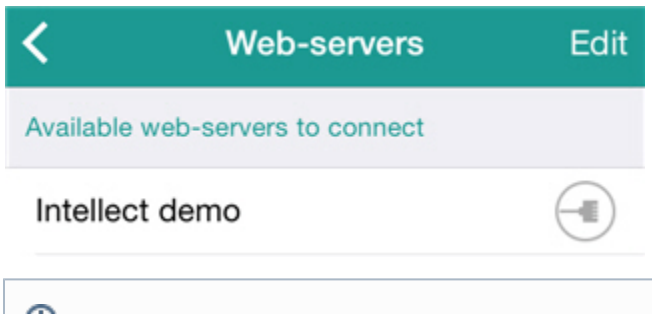
** Getting titles is available only for the mjpeg playback format.

*** Getting push notifications for the Axxon Next Server is available since version 4.1.0.5950.

Connecting to the server and working with servers

Configure the Web server in the appropriate software package before connecting to the Server (see Configuring the web server , Configuring the server for the clients connection via the Web-server 2.0 module).

When you start the software for the first time you can connect to the *Intellect* and *Axxon Next* demo servers to see your Client's capabilities.

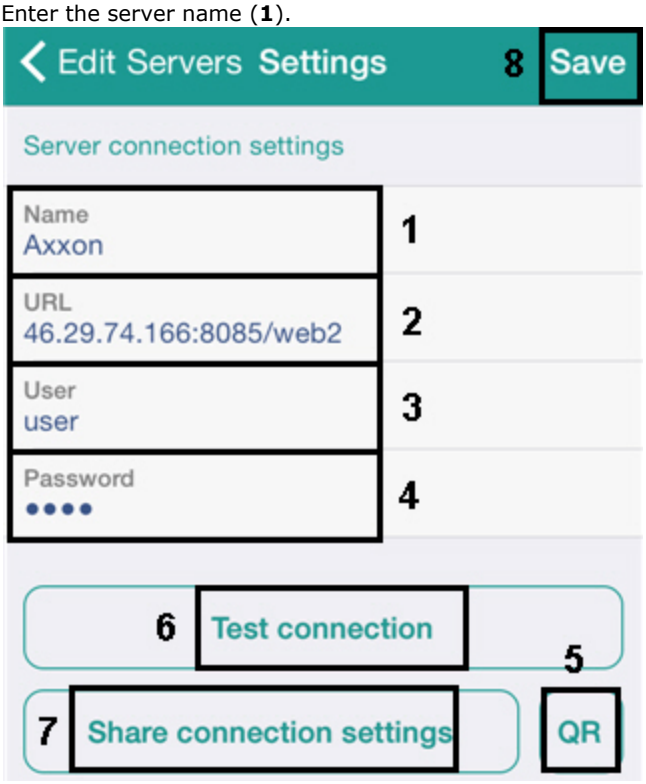


Note
If you create Servers and then upgrade the Client to version 3.0, no demo Servers are listed.

To display them, delete all the Servers in the list and restart the Client

Add a new server as follows:

1. Click the **Edit** button and then the button (**1**).
2. Read the QR code for the server settings by clicking the corresponding button (**5**) or add the settings manually:
   a. Enter the server name (**1**).



   b. Enter the URL server address in the format http://<IP address of Axxon Next server>:<Port>/<Prefix> (**2**).

> **Note**
> Example URLs with standard Server settings for Axxon Next and Intellect:
>
> ***Axxon Next (3.6 and earlier)***: 192.168.0.10:8000/asip-api
>
> ***Axxon Next 4***: 192.168.0.10:80
>
> ***Axxon Intellect***: 192.168.0.10:8085/web2

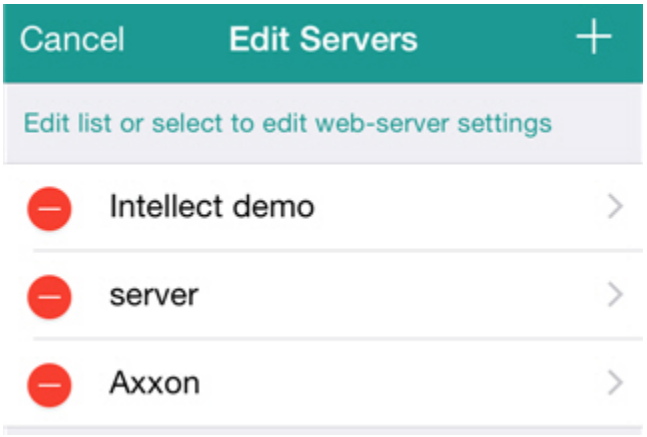
   c. Enter the user name and password for connecting (**3**-**4**).
3. To test the connection, tap the **Test connection** button (**5**). If the server is running, the connection settings are correct, and the device has a stable Internet connection, the message **Connection successful** appears. Otherwise, a message will remind you to verify these conditions.

> **Note**
> To perform a basic check of the web server connection and operability, in a browser on your mobile device, go to the Server's URL address (see paragraph 2)

> **Note**
> You can share the server settings by sending them in e-mal. For this click the **Share connection settings** but ton (**7**).
>
> In addition, you can create a QR code that contains Server settings. To do so, save the Server settings, return to them, and click the **QR** button (**5**).

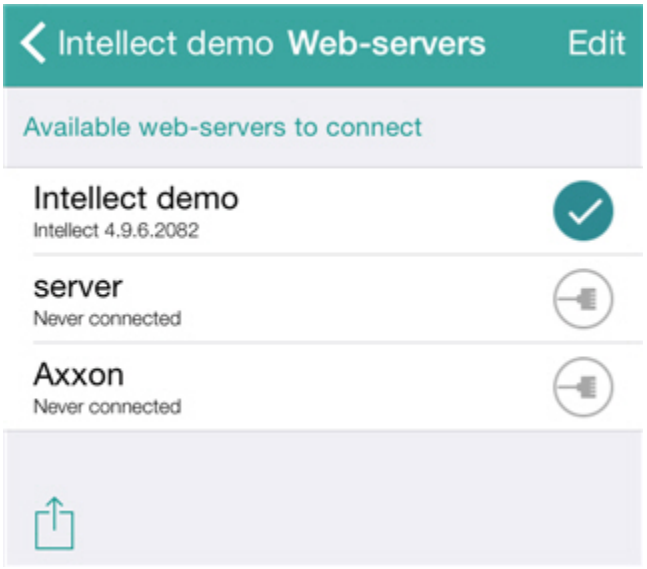
4. To save the server, tap the **Save** button (**6**).

The server is added to the list.



To remove the server, click the button , to restore to server settings, select it in the list.

To finish editing, click the **Cancel** button.

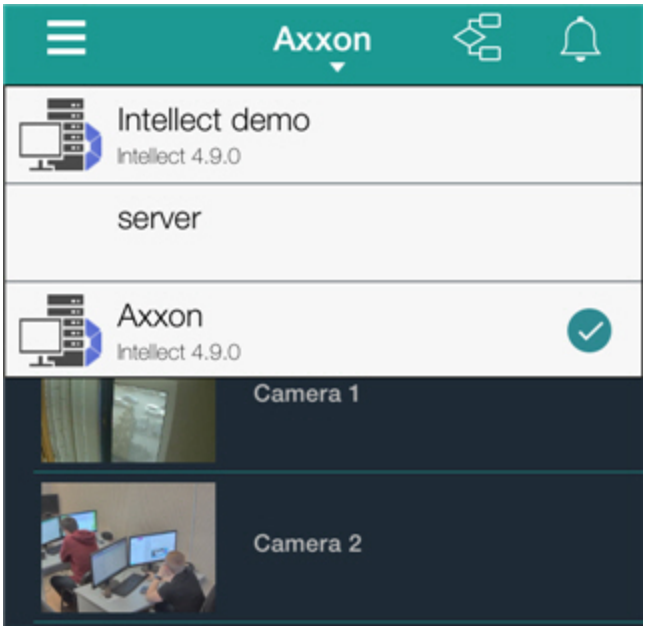


Note

To send the settings of all Servers by email, click the button.

To connect to the server select it in the list. The server that is now connected is marked .

To switch the servers, click the context menu by clicking the name of current server and select the required one.



Restore to the server settings as follows:

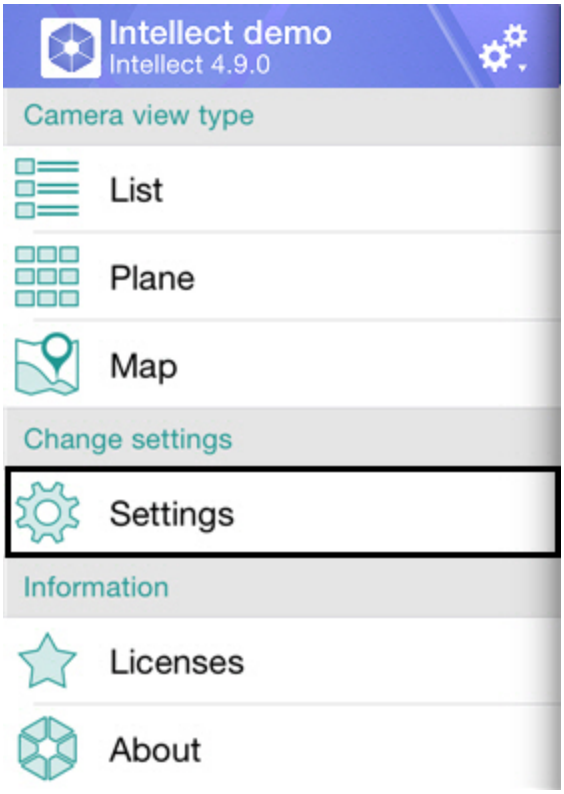
1. Call the main menu by clicking the button in the top left corner.
2. Click the server to which the connection is installed.

3. Click the **Edit** button and select the required server in the list.

Mobile iOS Client settings

To go to the setup menu:

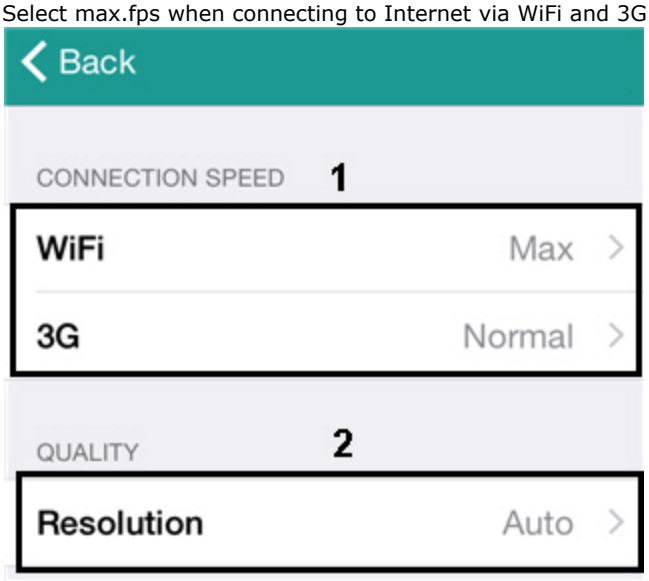
1. Call the main menu by clicking the button in the top left corner.
2. Select the **Settings** item.



Configuring video in mobile Client iOS

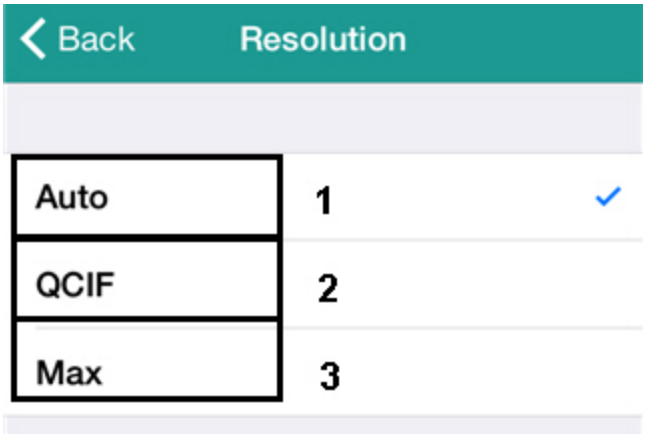
Configure video parameters as follows:

1. Select max.fps when connecting to Internet via WiFi and 3G: **Maximum**: 9 fps, **Medium**: 6 fps, **Slow**: 3 fps.



> **Note.**
> These settings are valid only when connection to the *Intellect* software package is established.

2. Select the video resolution (**2**):
   a. **Auto** - when your mobile device has a slow Internet connection, the degradation of image quality algorithm is applied for the image resolution (**1**).
   b. **QCIF** - display video with constant resolution (176 × 144) (**2**).
   c. **Max** - display video with original resolution (**3**).



Note.
These restrictions are recommended when your mobile device has a slow Internet connection.

3. Select playback format (**1**): mjpeg; mjpeg via ffmpeg (less resource-intensive than mjpeg); H.264 RTSP (ffmpeg) - video is displayed in the original format via RTSP protocol.

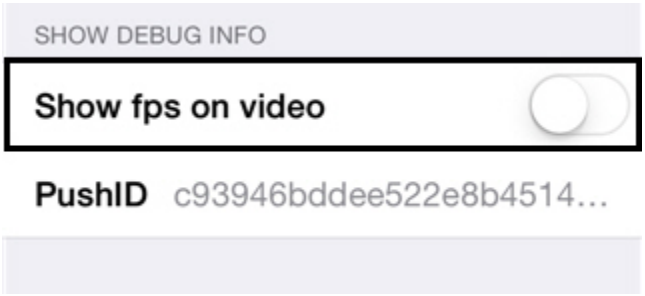
4. If RTSP is selected:
   a. Disable H.264 hardware decoding if necessary (**2**).
   b. Specify RTSP port set in *Intellect* settings (**3**, see Configuring rtsp Server module).

Display of video statistics

In the mobile iOS Client, you can view the following video statistics: frame number, fps, frame dimensions and size (KB), and delay from live video (in seconds).

Note.
This settings is valid only when connection to the *Intellect* software package is established.

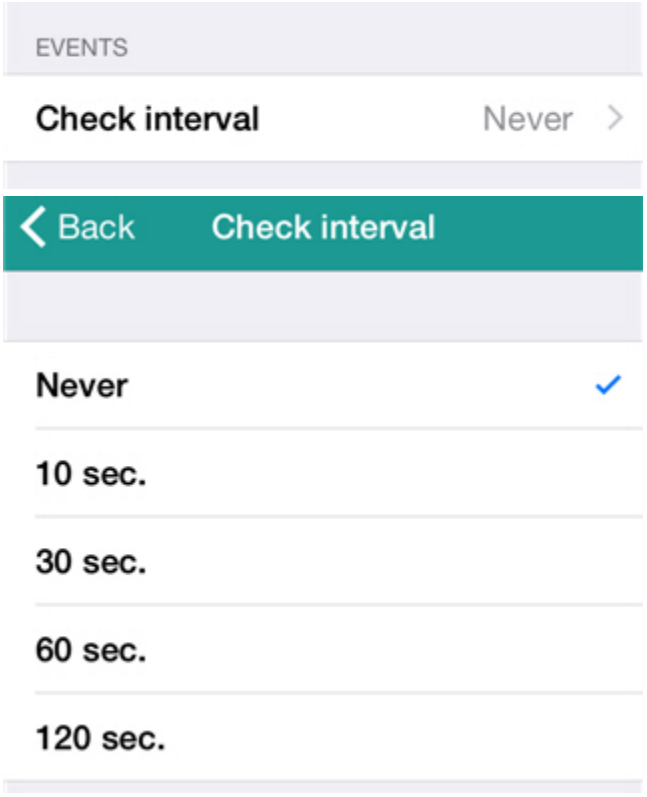
To do so, turn on the **Show fps on video** option.



As a result, video statistics are shown during playback: frame number, fps, frame dimensions and size (KB), and delay from live video (in seconds).

Configuring event receiving

To configure receipt of events, select the time interval at which to update events in the Client. You can also entirely disable receipt of events (by selecting **Never**).



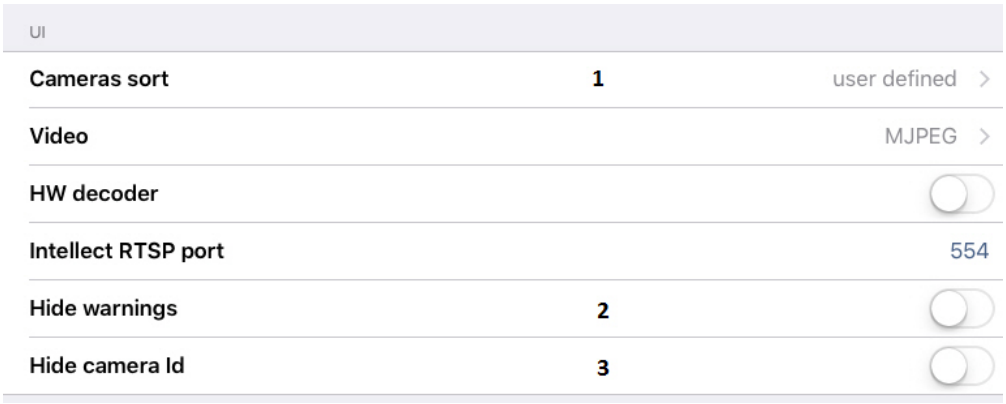
If events are not disabled, then the device receives push notifications (see Receiving push notifications) and the list of events is updated with specific period of time (see Viewing a list of system events).

Attention!
To get push notifications on the *Axxon Next* Server connection to AxxonCloud is to be performed (see AxxonCloud Setup and Operation).

Configuring the iOS mobile client interface

The iOS mobile client interface is configured by setting the following parameters:

1. Select the way of camera sorting in the mobile iOS Client (**1**).



Select the **User defined** way to sort cameras by name symbol-by-symbol. For example, 1, 10, 11, ... 2, 20, 21, 3, 4.

Cameras are sorting by number specified after text part in the name of camera while using the **By number in name** w ay. For example, Camera 1, Camera 2, etc.

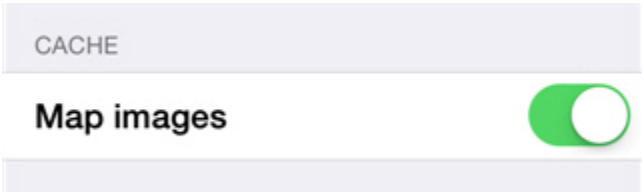
2. Enable the **Hide warnings** feature if notifications about connection to the outdated Server are to be disabled (**2**).
3. To hide the camera ID in the camera name enable the **Hide camera ID** parameter (**3**).

Accelerating map loading

You can accelerate map loading in the mobile iOS Client. This is performed via caching of the map image.

> **Note.**
> Thise settings is valid only when connection to the *Intellect* software package is established.

To enable caching of the map image, turn on the **Cache map image** option.

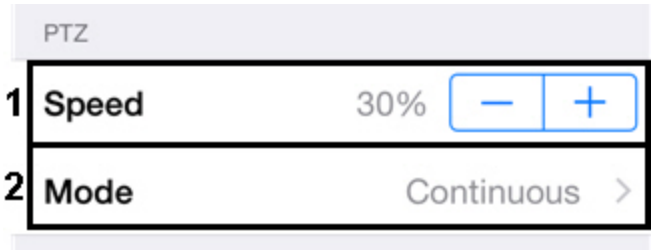


Configuring PTZ mode and speed

To configure PTZ mode and speed, do the following:

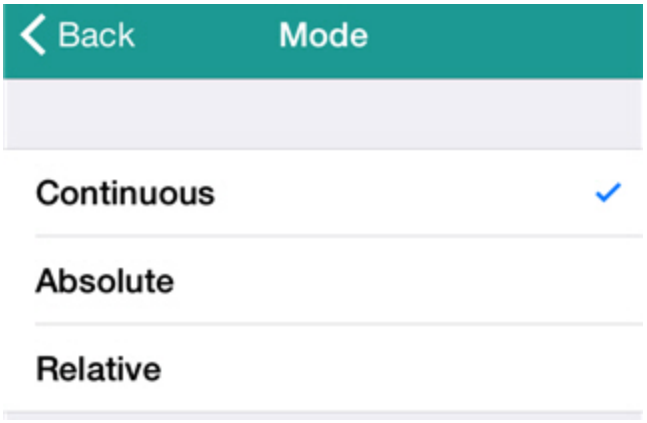
1. Set the speed of PTZ movement (**1**).

> **Note.**
> Possibility of control the PTZ movement is implemented only for working with cameras on the AxxonNext server.



2. Select the PTZ mode (**2**).

> **Note.**
> Possibility to select the PTZ mode is implemented only for working with cameras on the AxxonNext server.

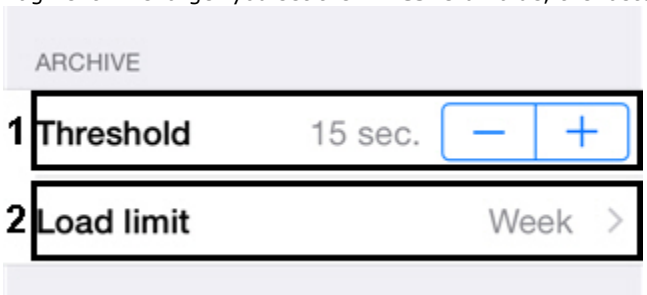


Note.
In case of the PTZ mode is selected improperly the mode which is specified first in the list of modes supported by device will be selected automatically (information is taken from the device driver).

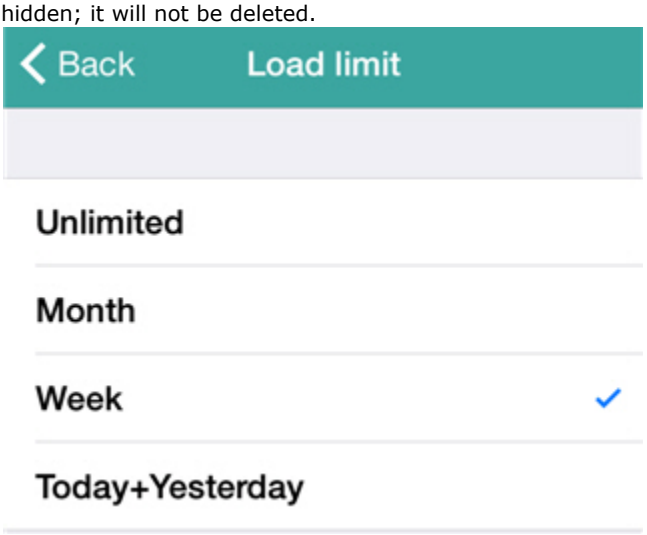
Setting up archives

To set up an archive in the mobile iOS client:

1. Set the detail level of the archive by tapping the **+/-** buttons (**1**). If the amount of time between two neighboring fragments is less than the amount of time that you specify here, the fragments will be displayed as a single larger fragment. The larger you set the **Threshold** value, the faster the archive will load.



2. If necessary, limit the archive depth shown on the timeline (**2**). If a limit is set, only video within the specified time frame will be available in the archive. Recorded video that is deeper (older) than the specified archive depth will only be hidden; it will not be deleted.

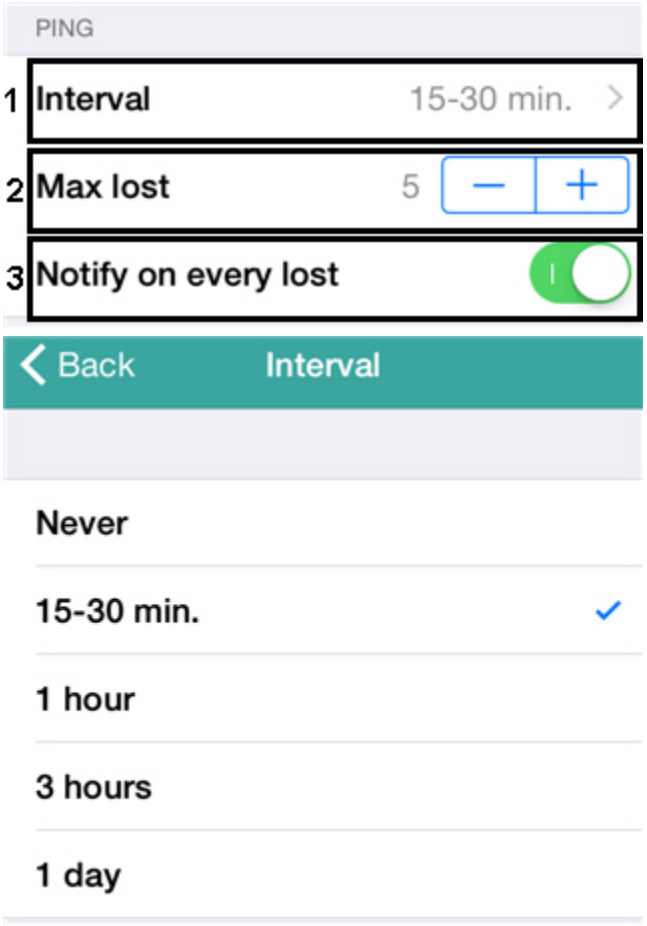


Configuring verification of Server connections

You can verify the connection between a mobile Client and a Server.

To configure verification of the connection:

1. Select the frequency at which the connection between the mobile Client and Server will be verified (**1**).



> **Note**
> The precise time in the **15-30 min.** range depends on how iOS allocates CPU time to the Client to perform tasks in the background.

> **Note**
> To not use verification, select **Never**.

2. Use the +/- buttons to set the number of failed verification attempts (no Server response) after which a "connection lost" message will be sent. This setting is relevant only if "Notify of drops" is not activated (see item 3).
3. Activate the **Notify on every lost** parameter if you require notification about each missed Server response.

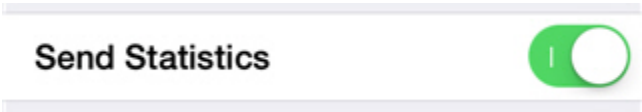
Notifications of connection drops are shown in the event panel. If the application is running in the background, a notification is sent.

> **Note**
> If the application is not running on the device, no notifications are sent

Disabling statistics collection

By default, statistics on use of Axxon Next are collected and sent to AxxonSoft.

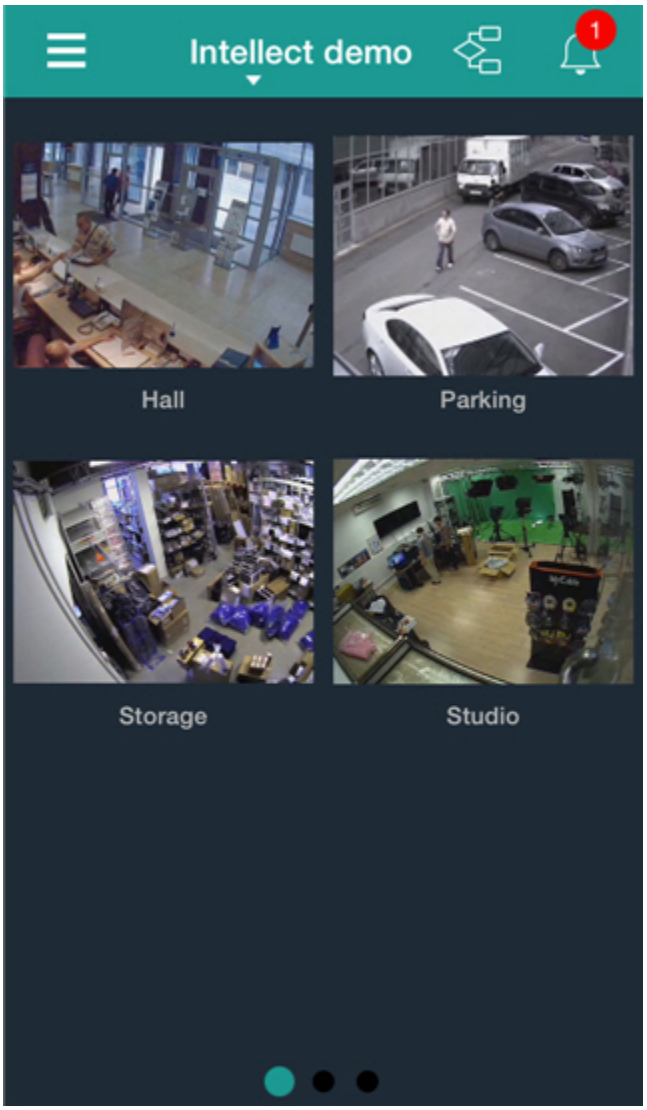
To disable sending of statistics, turn off the **Send statistics** option.



Using video cameras in iOS mobile client

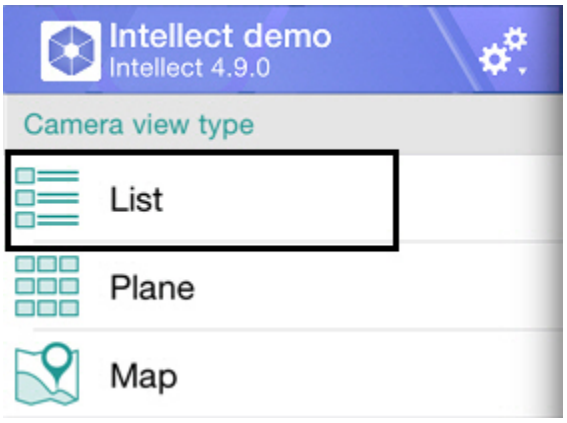
Displaying and finding video cameras in the iOS mobile client

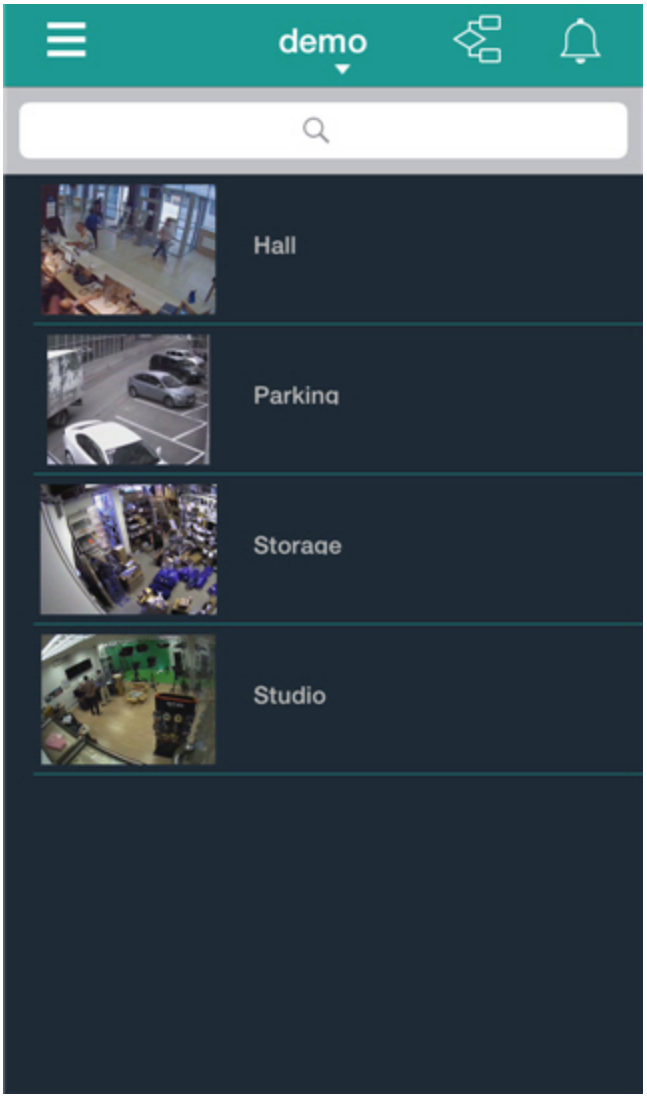
After you connect to a server, thumbnails of cameras are shown as tiles.



Video cameras can be listed on three pages: swipe left or right to go to another page.

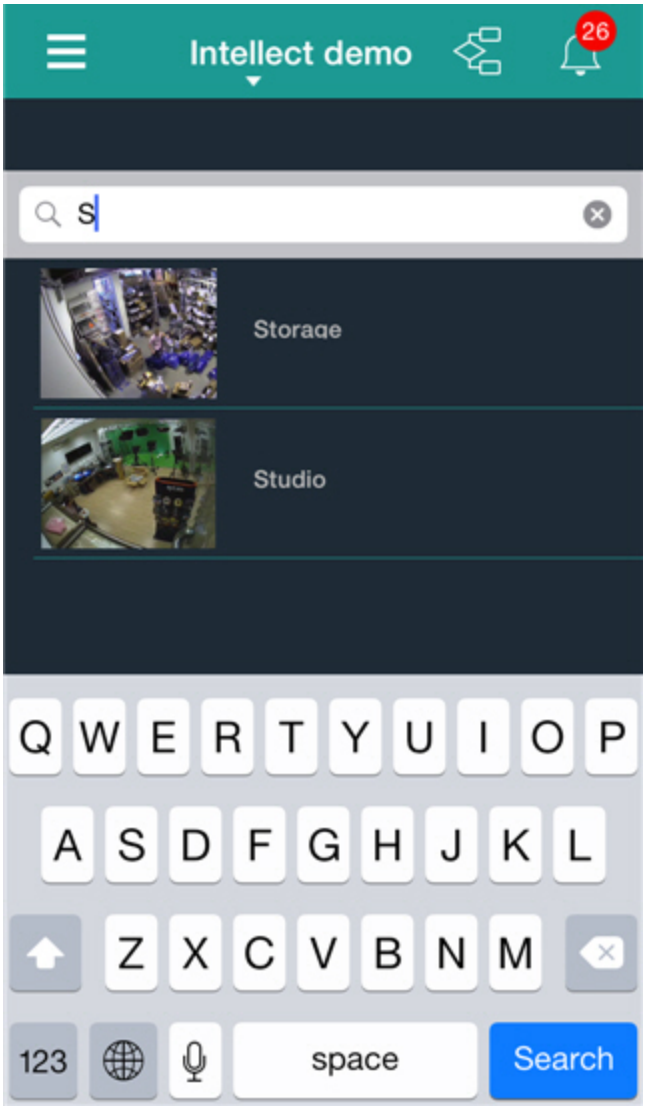
Cameras can also be shown as a scrolling list. Call the main menu by clicking the button and select the **List** item.





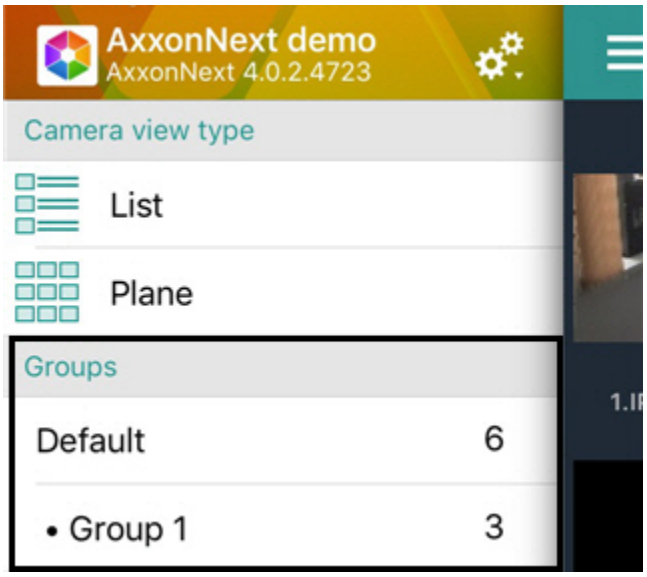
In this case, you can search for video cameras by scrolling up or down in the list or by searching by name.

Specify the full or a part of camera name in the search bar.

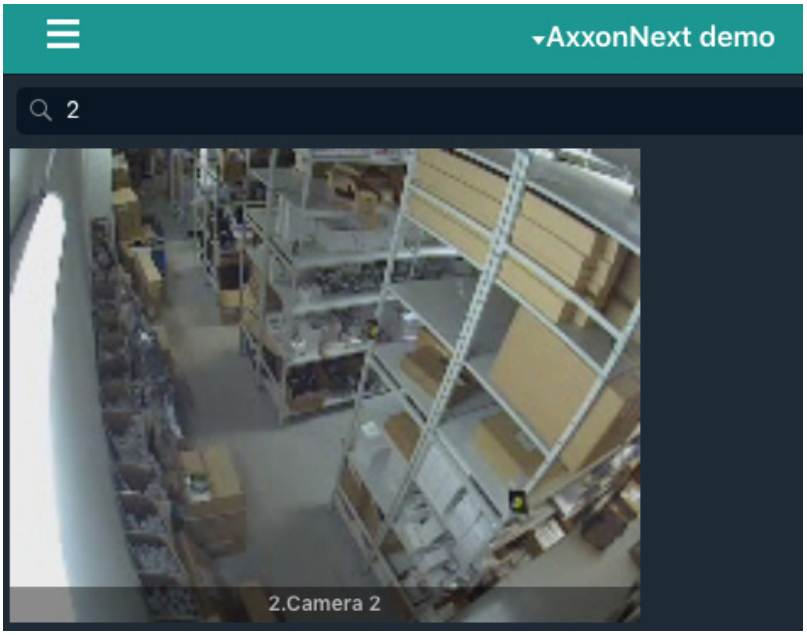


The list will show only cameras that meet the search criteria.

To display video cameras of the specified group (in the *Axxon Next* software, see the Configuring video camera groups section) or region (in the *Intellect* software, see the Examples of using areas and regions section) open the main menu and select the group.



When the group is displayed the search by the camera name is enabled.

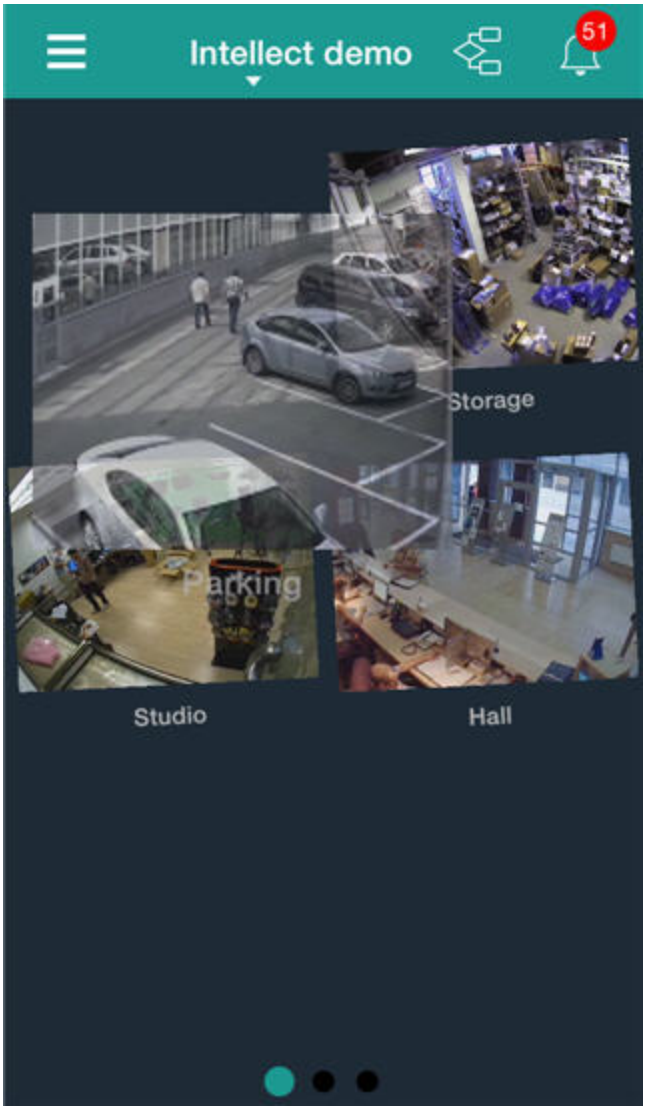


Rearranging camera icons

If camera icons are displayed on the tile (see Displaying and finding video cameras in the iOS mobile client), they can be rearranged on one screen or moved from one screen to another.

A camera icon is moved as follows:

1. Tap on an icon and hold your finger on it until the icons start shaking (in 1 second).



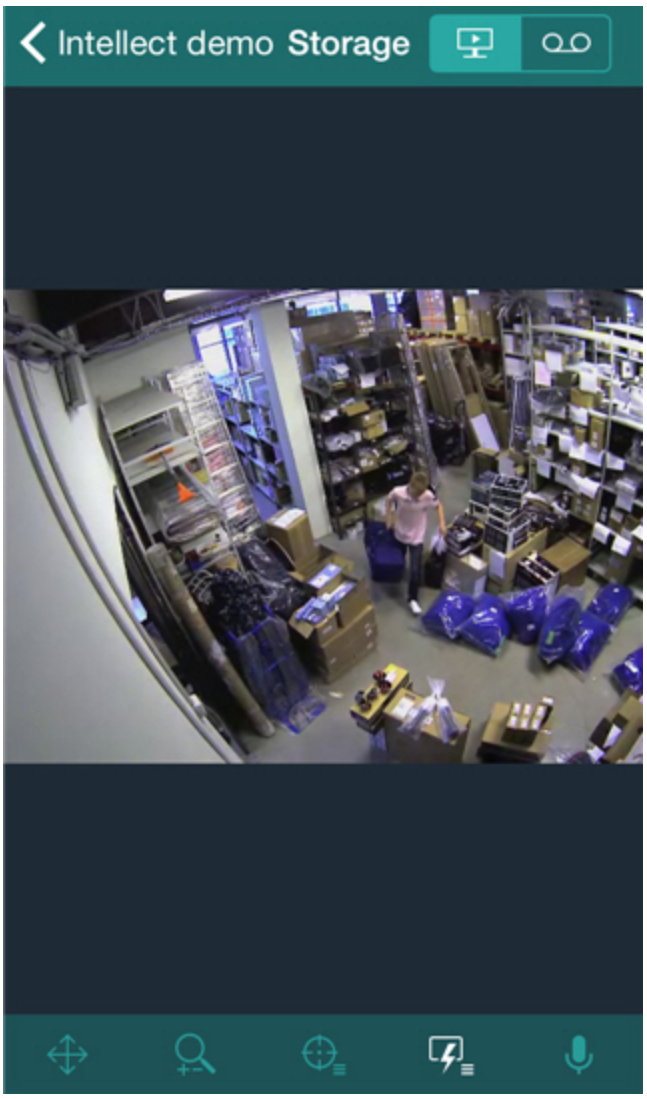
2. Drag the icon to a new location. To move the icon to another screen, drag the icon off the screen to the right or left and let it go when the new screen appears.
3. When the icon is in the place you want it, take your finger off the screen to drop the icon there.

Viewing live video in the iOS mobile client

To view live video, select the necessary camera.

> **Note**
> If you select a camera when a floating events board is displayed, instead of going to live video mode you will be taken to the video recorded from this camera when the event began (in other words, the beginning of the current alarm). Playback will be paused.

This opens a viewing tile for the camera.



Note
If the mjpeg playback format is selected (see Configuring video in mobile Client iOS) and the captioner is configured for a camera in Intellect (see The Captioner object setup), then captions are displayed on the video.

Scroll the screen down (to view video from the previous camera) or scroll it up (to view video from the next camera) for quick switch to viewing video from another camera.

To play live audio, in the web server settings, you must choose a microphone for the camera (see Selecting and configuring cameras for the Web-server module).

If a speaker has been selected for the camera in the web server settings (see Selecting and configuring cameras for the Web-server module), then the start/stop sound button is enabled on the bottom control panel in order to transmit sound from the iOS microphone on the selected *Intellect* speaker.

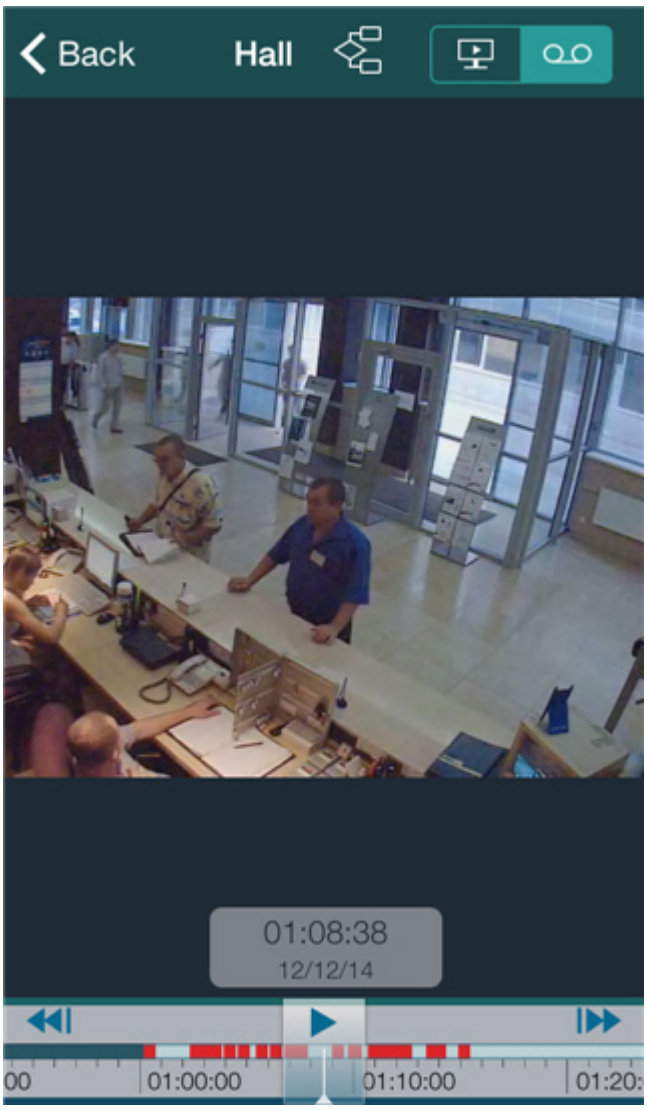
Note
Audio from Axxon Next Server is available in the rtsp over ffmpeg mode for cameras with h.264 stream only (see Conf iguring video in mobile Client iOS).

To return to the list of cameras, tap the **Back** button.

Viewing previously recorded video in the iOS mobile client

To view previously recorded video in the iOS mobile client, select the relevant video camera in the list and go to the tab

.



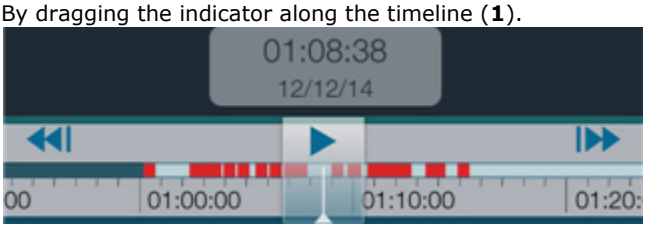
!

Playback is controlled by the and buttons.

> **Note**
> To listen to recorded sound from a camera, a corresponding microphone must be selected in the web server settings (see Selecting and configuring cameras for the Web-server module).

You can browse video footage as follows:

1. By dragging the indicator along the timeline (**1**).

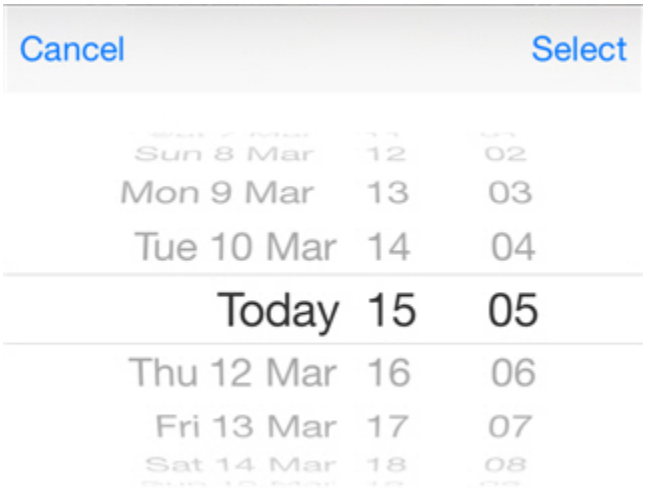


Light-green color on the timeline means that there is video footage, dark-green color means that there is no video footage and red color means that both video and an alarm are present.

Pinch to shrink or stretch the timeline.

2. Using the buttons to go to the previous/next recording: and . If there are alarms in the visible area of timeline, then there is switch to these alarm events. Otherwise there is switch to the previous/next recording.
3. By specifying a date and time.

   For this click the date and time on the timeline and select the specific moment.



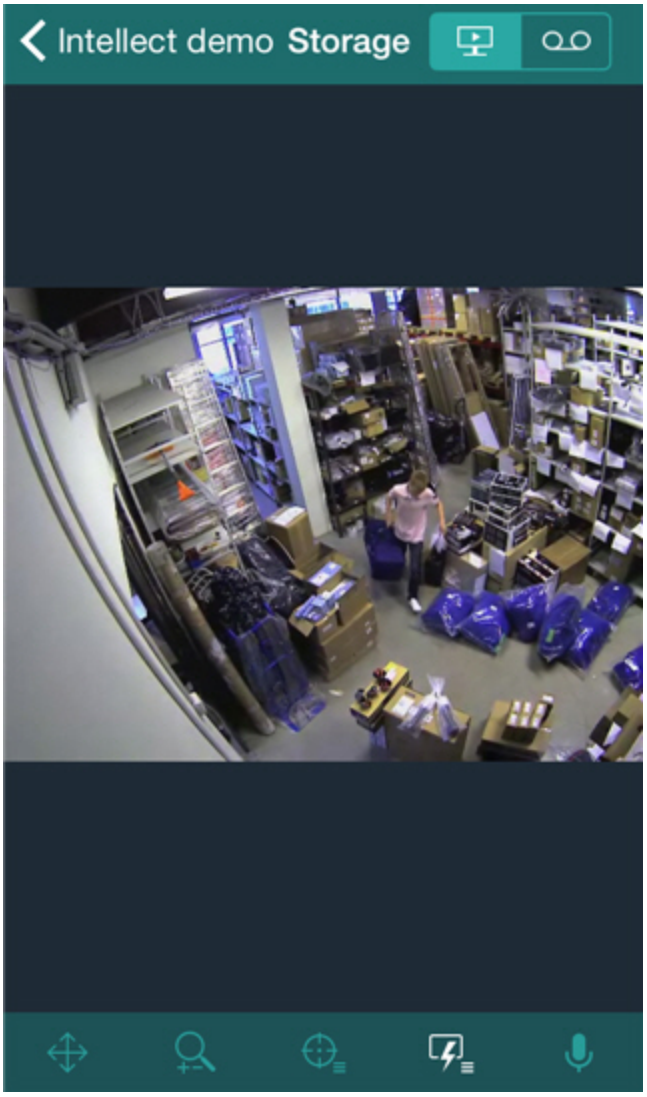
To jump to a certain moment, tap the **Select** button.

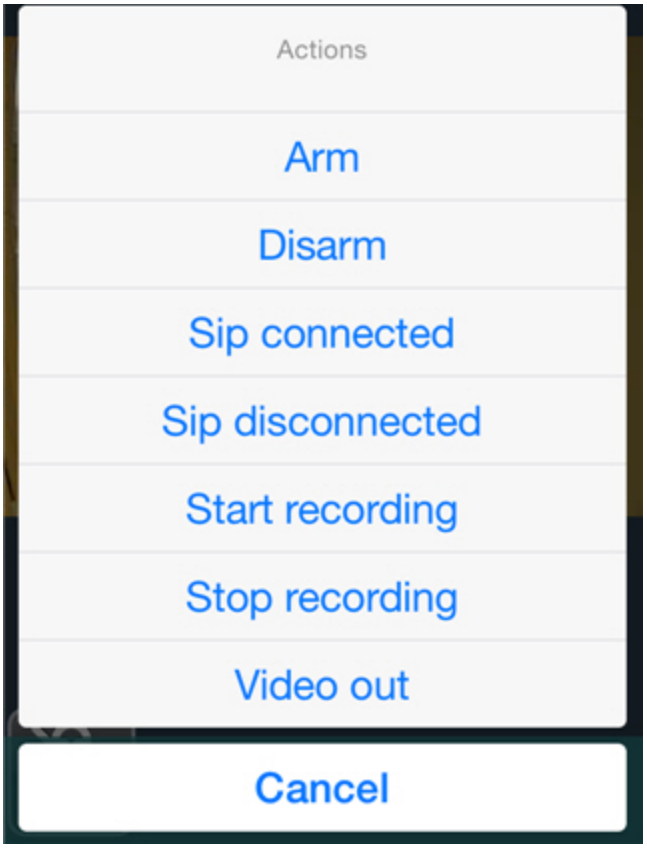
> **Note**
> If recording was not active at the selected point in time, playback will be performed of the closest point in time for which a recording is available (closest time to the right along the timeline).

Controlling cameras in the iOS mobile client

When connected to an Intellect server, the iOS client allows controlling video cameras: you can arm them, disarm them, and start or stop recording of video to the archives.

For this click the button on the bottom control panel and select the required action.


Intellect demo Storage



A description of commands is given in the Intellect Operator's Guide.

Digital zoom in the iOS mobile client

You can zoom in and out on both live and previously recorded video.

To zoom, pinch the video with two fingers.

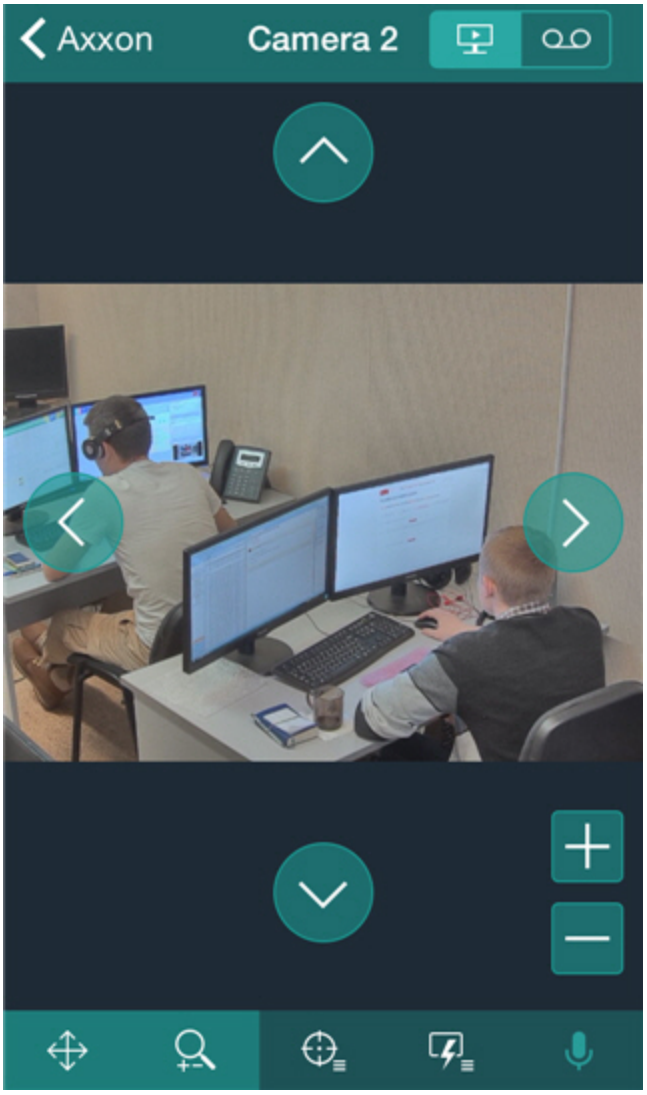
Video cannot be made smaller than its original size. 16x is the upper zoom limit.

To select the visible part of the frame when zoom is active, tap and drag the viewing tile.

Controlling PTZ cameras from the iOS mobile client

You can control PTZ cameras: to get started, open a viewing tile for a camera.

To display PTZ control elements, click the (angle change) and (optical zoom control) buttons on the bottom control panel.

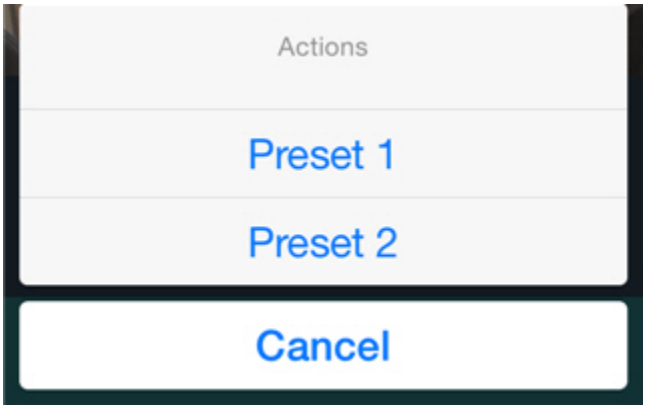


To change the camera angle of rotation, use the following arrow keys.

To change the angle at which a camera is panned/tilted, you can also tap any area of the video with your finger. The camera lens is automatically reoriented to the selected area (**Point&Click**).

To control optical zoom, use the **+/-** buttons.

To switch to the preset, click the button on the bottom control panel and select the required preset in the list.



Also it is possiible to focus some area of the video image frame.

To do this hold the finger on the interested area during 1 second and then move the finger to change the size of appeared blue

frame. After that the lens orintation will be changed in such way that selected area will display at full window (**Areazoom**).

The relationship between video cameras and sensors and relays

The relationship between video cameras and sensors and relays is relevant only when connected to an *Intellect* server.

If a camera is linked to sensors and relays, the following features become available in the iOS mobile client:

1. Jump to beginning of recorded alarm video when a sensor/relay event is tapped (see Jump from an event to live video, recorded video, or map).
2. Go to live video or recorded video when the icon of a sensor or relay is tapped on the map (see Using relays on the map , Using sensors on the map).

A camera is considered to be linked to a sensor or relay if they belong to the same region in Intellect (see Examples of using areas and regions).

Attention!
A sensor and relay can be linked only with a single camera. If a single region contains multiple cameras, sensors, and relays, they will be considered to be linked to the camera that has the lowest ID number (see The Settings panel of the Camera object).

Note that a single camera may be linked to many sensors and relays.

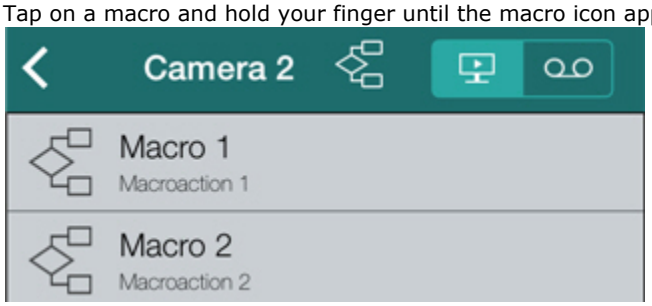
Using macros in the mobile iOS Client

Adding macros to video

You can add macro badges to video.

To do so:

1. Go to Live Video mode for the relevant camera (see Viewing live video in the iOS mobile client).
2. Call the macro menu by clicking the button.
3. Tap on a macro and hold your finger until the macro icon appears on the video.



Addition of the macro to the video is now complete.

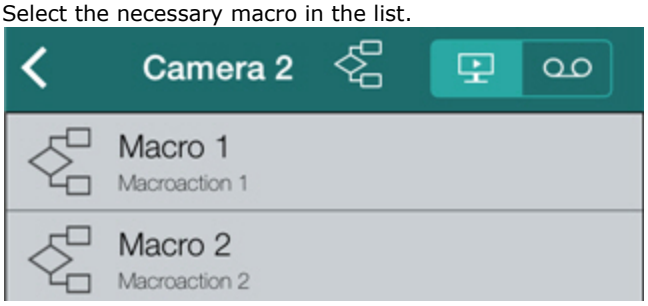
You can drag the macro badge around the screen. Tap the badge and drag it to the desired location.

To remove the macro icon, click the button when moving the icon.

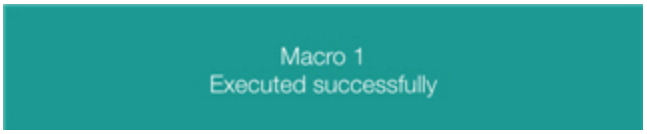
Running macros in the iOS mobile client

To run a macro:

1. Call the macro menu by clicking the button.
2. Select the necessary macro in the list.



The message about successful macro running is displayed on top.



In addition, if a macro has been added to a video, quickly tap the relevant icon to run it (see Adding macros to video).

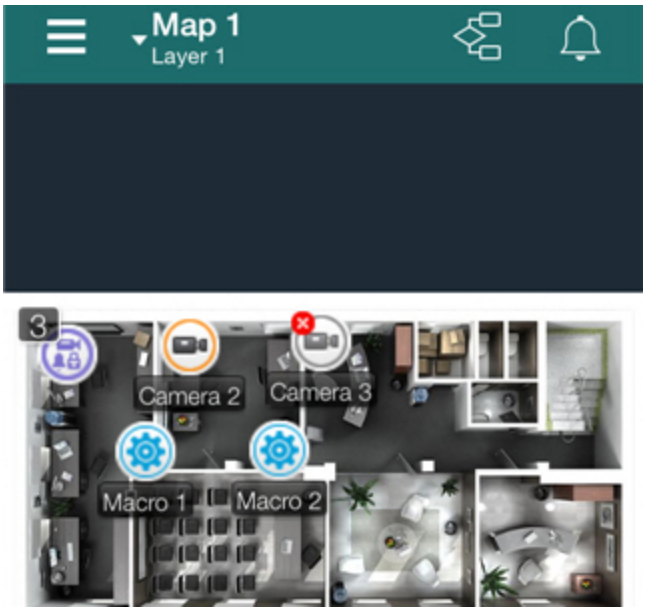
Using maps in the mobile iOS Client

The following maps are available in the Android Mobile Client:

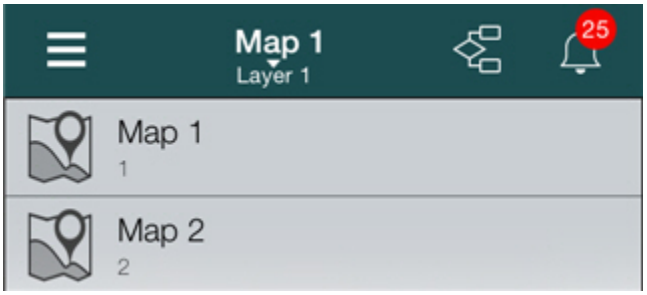
1. *Intellect* maps (see Setup procedure for the interactive map).
2. Google maps.

Working with Intellect maps in the mobile iOS Client

To view the map, call the main menu by clicking the button and select the **Plan** item.



To select the map, call the context menu by clicking the current map name and select the required map.



Note
The context menu is not active if one card is created in the system

If there are several layers on the map, then they are listed by right-left scrolling.

Icons for the following devices can be displayed on the map in the mobile Client: cameras, sensors, and relays. In addition, icons for macros can be displayed (see Map scale and object groups).

Icons indicate the current status of devices and allow controlling them.

Map scale and object groups

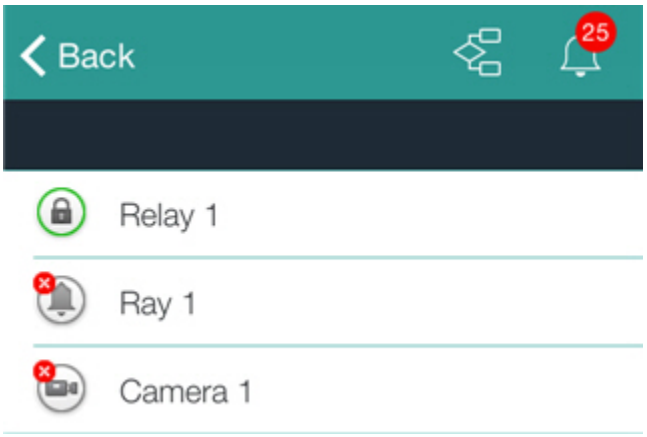
You can adjust the scale of the map in the iOS Client.

Simply pinch your fingers on the screen (to zoom out) or move them apart in a sweeping motion (to zoom in).

If some objects are too close to each other on the map and cannot be displayed at the current scale without overlapping, they are replaced by a group icon (an Object Group icon).

> **Note**
> The upper-left corner of the group indicates the number of objects in the group.

A list of objects in a group is displayed when you click the group icon.



After you select an object, a list of actions is presented.

Using cameras on the map

The icon of a camera on the map indicates the current status of the camera:

Icon	Status
	Camera alarm, recording is not active
	Camera alarm, recording is active
	Camera armed, recording is not active
	Camera armed, recording is active
	Camera disarmed, recording is not active

	Camera disarmed, recording is active
	Camera disabled in the System
	Camera connection lost

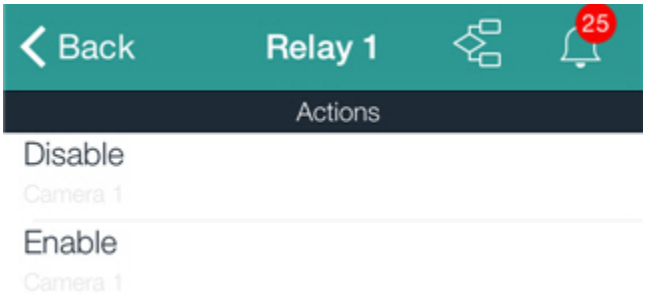
Live video is displayed when clicking the camera icon.

Using relays on the map

The icon of a relay on a map displays the current status of the relay.

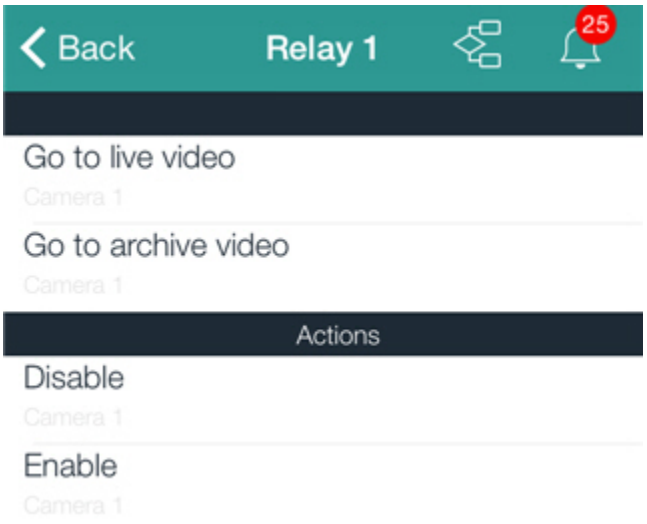
Icon	Status
	Relay disabled in the System
	Relay connection lost
	Relay off
	Relay on

To control a relay from the map, tap its icon to open its context menu:



To perform an action select a command. A description of commands is given in the Intellect Operator's Guide.

If a relay is linked to a camera (see The relationship between video cameras and sensors and relays), it is also possible to switch to live video mode or viewing of video recorded by the camera.

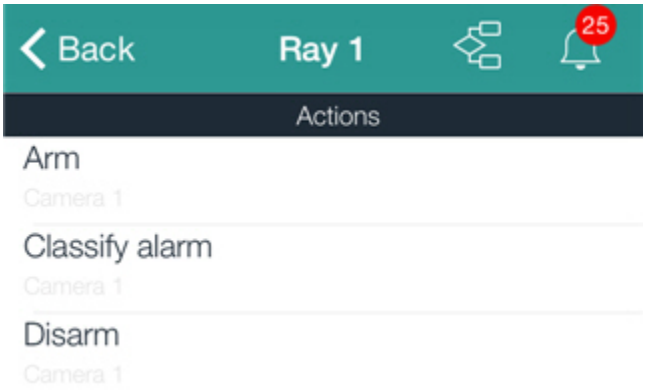


Using sensors on the map

The icon of a sensor on a map displays the current status of the sensor.

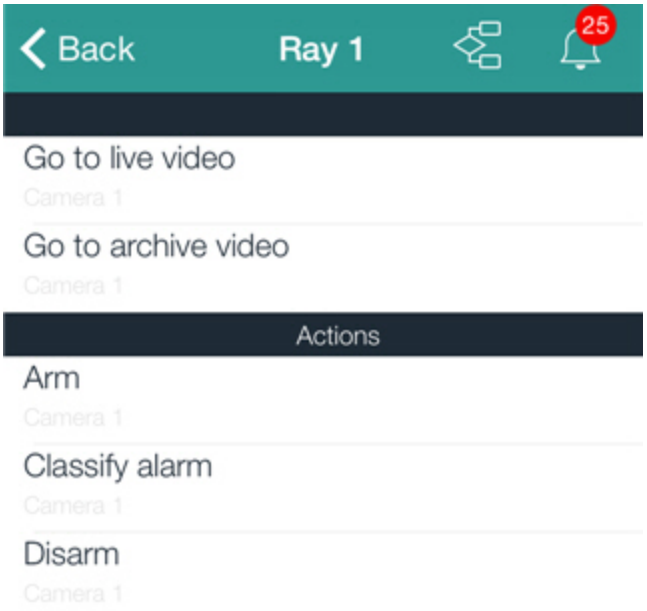
Icon	Status
	Sensor armed + alarm event accepted
	Sensor armed + alarm
	Sensor armed
	Sensor disarmed + alarm
	Sensor disarmed
	Sensor disabled in the System
	Sensor connection lost

To control a sensor from the map, tap its icon to open its context menu:



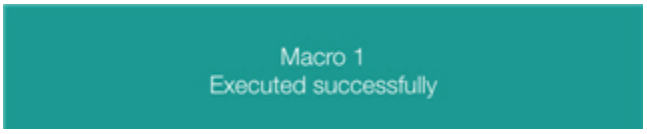
To perform an action select a command. A description of commands is given in the Intellect Operator's Guide.

If a sensor is linked to a camera (see The relationship between video cameras and sensors and relays), it is also possible to switch to live video mode or viewing of video recorded by the camera.



Using macros on the map

To run a macro on the map, click the macro icon. The message about successful macro running is displayed on top.



Working with Google maps in the mobile iOS Client

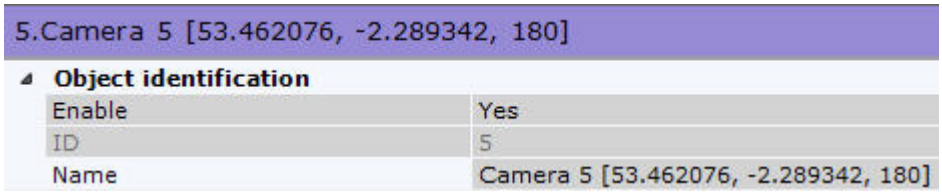
For the camera to be displayed on the geomap the camera name is to contain geographical coordinates in [X, Y, Z] format, where

X - latitude;

Y - longitude;

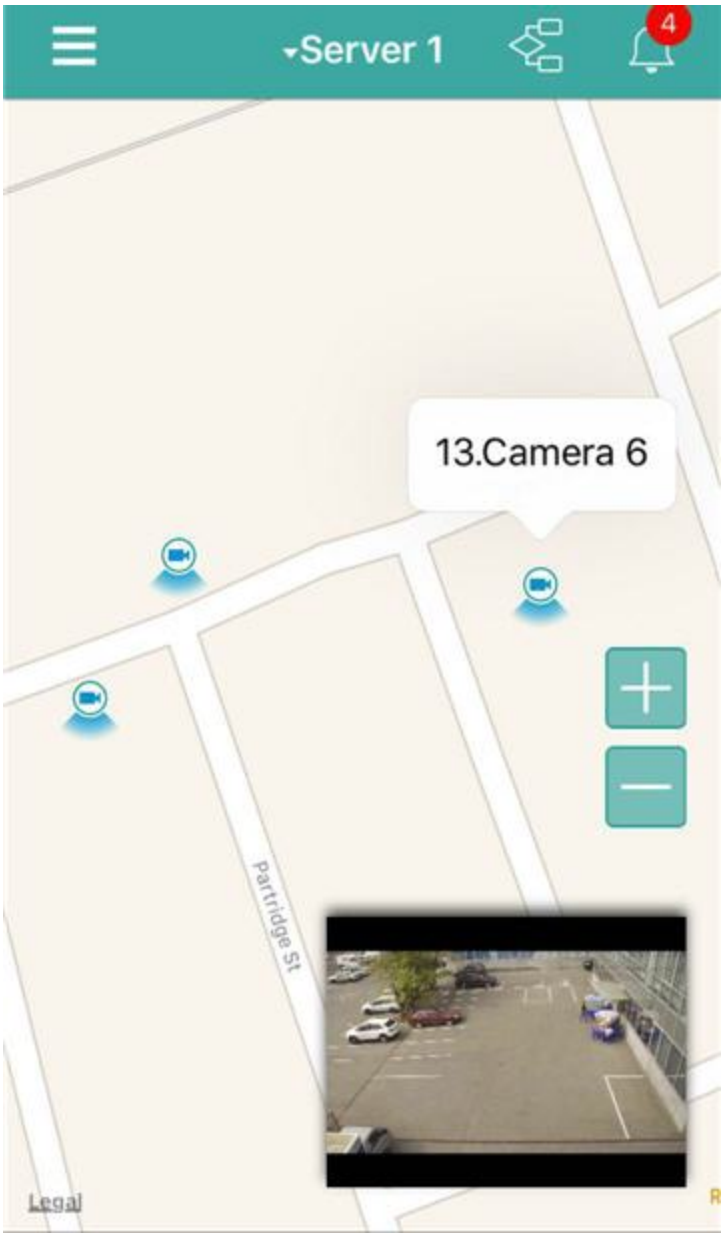
Z – camera rotation angle relative to the vertical axis, optional parameter.

For instance, this camera will be displayed on the map in the point with [53.462076, -2.289342] coordinates.



To view the geomap, call the main menu by clicking the button and select the **Map** item.

Intellect demo
Intellect 4.10.1.1645
Camera view type
List
Plane
Map
Plan


Server 1
4
13.Camera 6
Partridge St
Legal

Live video appear in the bottom right corner of the screen when clicking the camera icon on the map.

Video will be played back in a new window when clicking the video or camera name (see Viewing live video in the iOS mobile client).

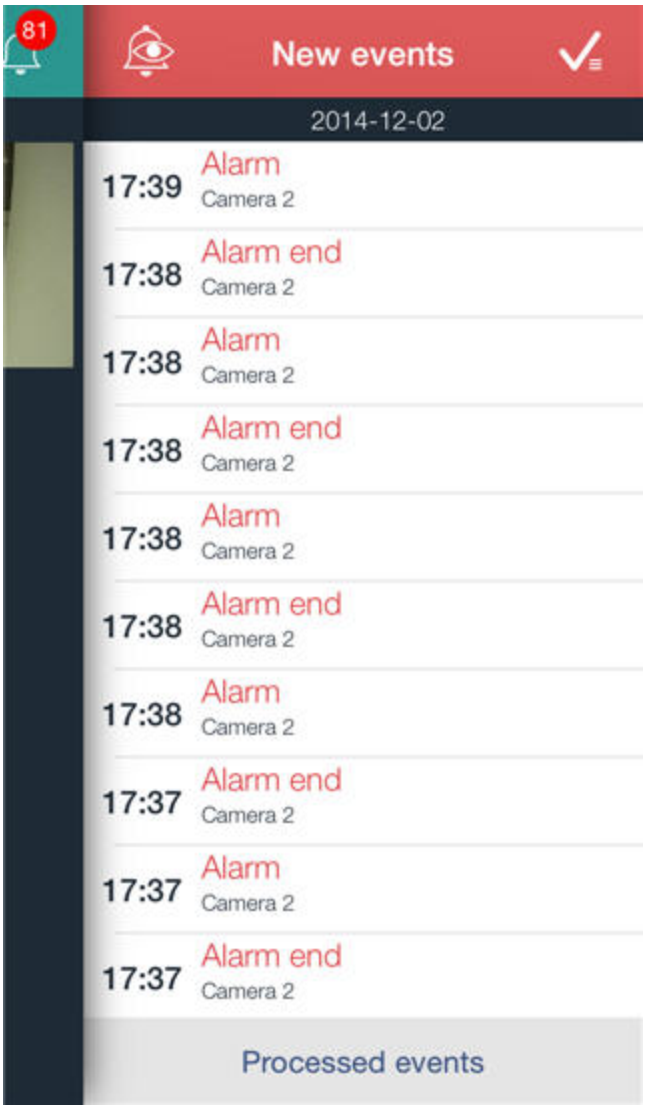
Handling events in the mobile iOS Client

Viewing a list of system events

To view the list of events, click the icon in the top right corner.

> **Note**
>
> The number of non-processed events (if any) is indicated on the icon .

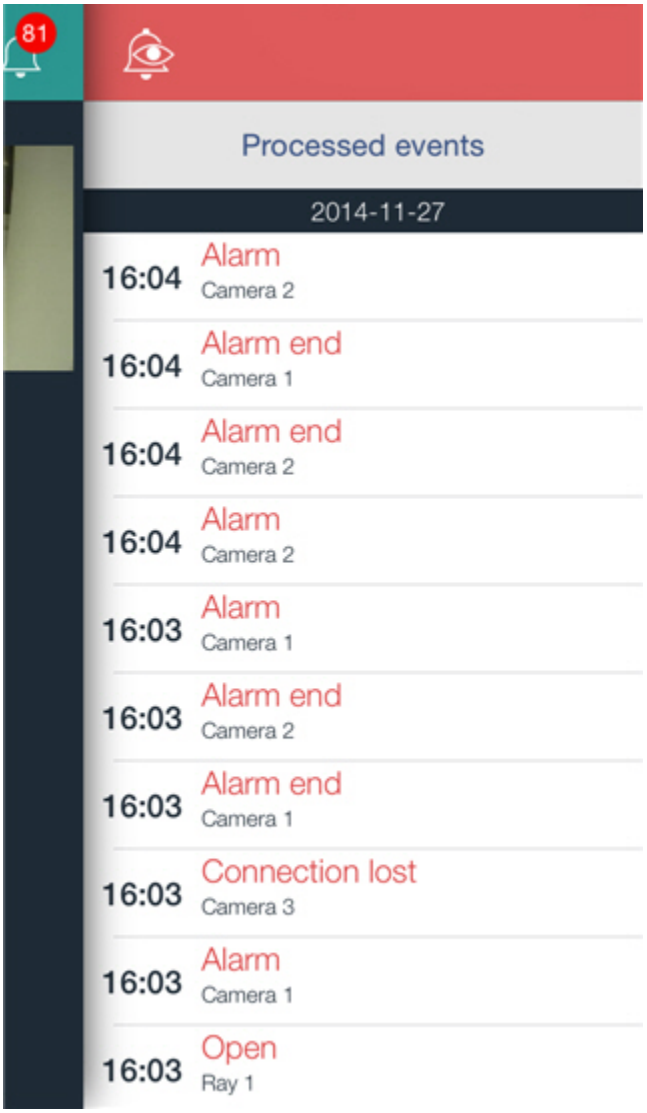
The list of events is shown. By default non-processed events are displayed on it.



> **Note.**
> The full name of person will be displayed in the event while face recognition on the Server of the *Intellect* software package, the recognized license plate – while license plate recognition.

Note
Set event filtering on the Server (see Configuring the Events filter for the Web-server 2.0 module).

To view processed events, click the corresponding button.



Note
To restore to non-processed events click the **Processed events** button once again.

To process all events, click the button. To process one or several events, select them by touching the screen and click the button.

To display the event board, select one or several events in the list of events and click the button (see Event board).

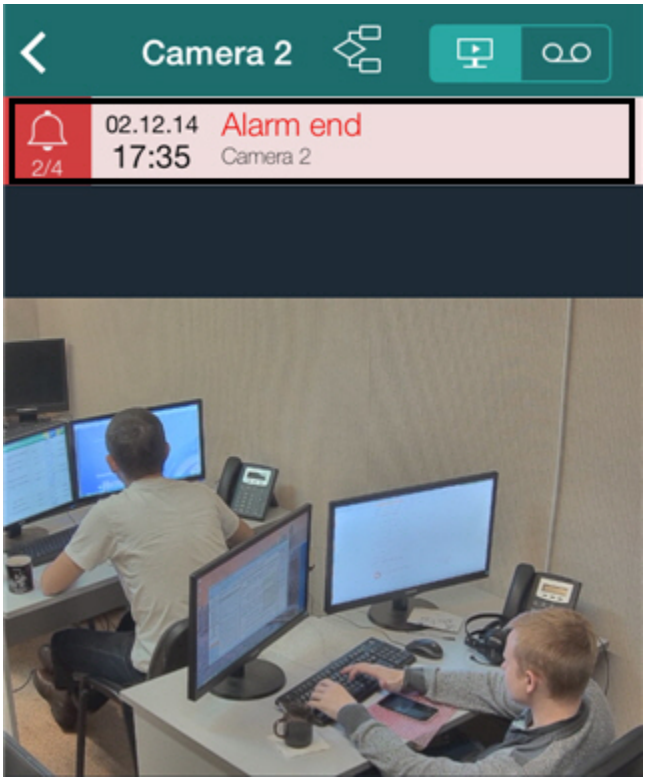
To hide the list of events, drag the left screen to the right or click the button.

Event board

Event board is designed to view and process selected events concurrently with viewing video or using the map.

To display the event board, select one or several events on the event screen and click the button (see Viewing a list of

system events).

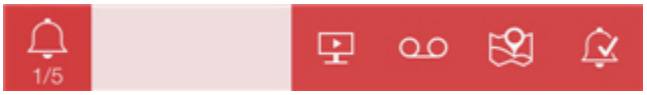


The event board is displayed only on the map and when you work with video.

Use the

button to switch between events. The ordinal number of current event as well as total events opened on the board are indicated on it.

An alarm can be processed on the board. You can switch to live video, archive or map. For this perform RTL event slide.



> **Note**
> Information on switches is given in the table of the Jump from an event to live video, recorded video, or map section.

To process the event, click the button.

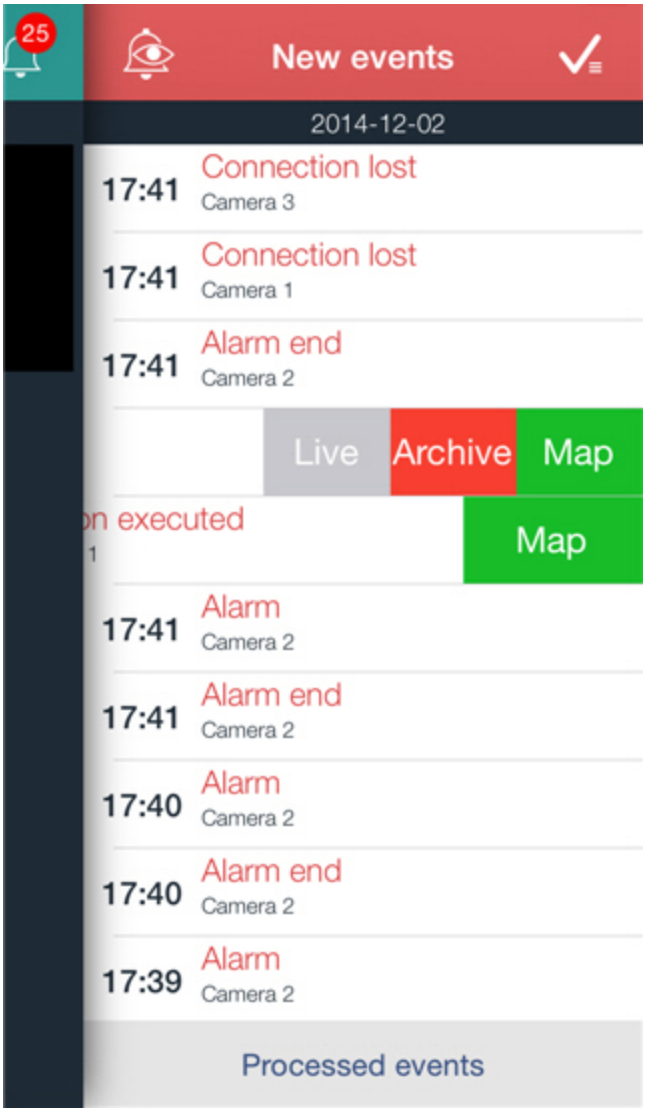
The event board is hidden when all events are processed on it.

Jump from an event to live video, recorded video, or map

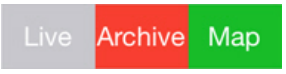
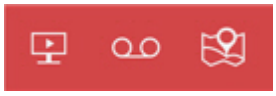
Ability to jump from a new event to live video, recorded video, or map.

> **Note**
> When you jump to a map, the map is recentered around the relevant event site

You can switch both from the list of events and event board. To open the jump menu, swipe your finger over an event from right to left.



A description of all jumps is given in the table.

Site event	Tap on event or push notification	Jump from menu
Video camera	Jump to recorded video from event start	Jump to live video, recorded video, or map  
Relay	Jump to map	Jump to map
Relay (attached to camera) see The relationship between video cameras and sensors and relays	Jump to archive of relevant video camera footage from the start of the event.	Jump to live video, recorded video, or map
Sensor	Jump to map	Jump to map
Sensor (attached to camera) see The relationship between video cameras and sensors and relays	Jump to archive of relevant video camera footage from the start of the event.	Jump to live video, recorded video, or map
Macro	Jump to map	Jump to map

Receiving push notifications

A mobile device can receive push notifications about system events from the Server.

> **Note**
> Activation and configuration of this function is performed in Intellect (see Configuring the Events filter for the Web-server 2.0 module).

Push notifications are sent to a device regardless of whether it is connected to the Server. Apple servers are responsible for delivering notifications.

> **Attention!**
> If several devices are connected to the Server under one login, then push notifications will be received by the latter connected device only.

> **Note**
> The device running the iOS Client must be connected to the Internet.

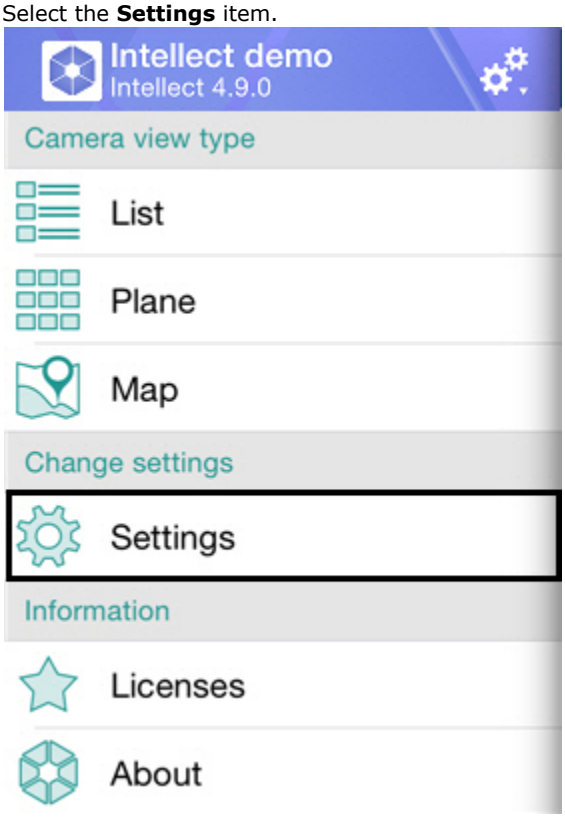
Push notification consists of: the name of server from which the event is received, the name of event source object, event name, date and time.

When clicking the push notification, there is the switch in the notification centre as described in the table of the Jump from an event to live video, recorded video, or map section. There is the switch if you slide the event from left to right on the locked screen.

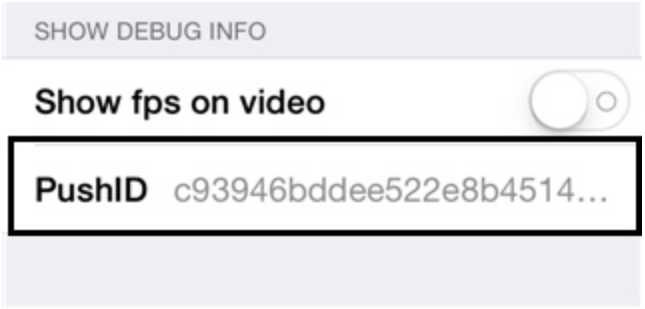
> **Note**
> When the device is locked, switches can be made from the notification centre only.

You may need the debugging information when addressing the technical support service about not receiving push notifications:

1. Call the main menu by clicking the button in the top left corner.
2. Select the **Settings** item.



3. Copy the debugging info by clicking the **PushID** line.



This information is to be sent to the technical support service.