Axxonsoft Platform Calculator

User Guide

Introduction

On the page:

Purpose of the document

This document is useful for sales managers as well as for CCTV engineers designing Axxon Next- and Axxon Intellect-based security systems. The document contains the information about:

1. The purpose of Axxonsoft Platform Calculator.
2. How to work with Axxonsoft Platform Calculator.

General information

Axxonsoft Platform Calculator can be found at https://sale.axxonsoft.com/calc/calculator.jsf

The platform calculator allows determining information by the input data (the number of cameras, area of application, archive requirements, detection tools, etc.):

1. Available platforms, the number of servers and average load. The platform means the processor model or IPDROM solutions (IPDROM solution cannot be calculated in English version of the Platform calculator).

   Attention!

   The results of hardware platform calculation can change – hardware configuration can both increase and decrease depending on the camera model, camera settings and exposure of the image. Extra objects can increase the hardware configuration.

2. Archive size.

   Attention!

   Disk space data is for information only. The Vendor's calculator is used for more accurate calculation, see Archive parameters.

3. Summary stream from IP devices, output and record streams.

Disk space and server load data are for information and planning purposes only.

The platform calculator allows calculating parameters both for systems where IP devices are in use and for systems where analog cameras are in use as well as for hybrid systems.

Platforms calculator also allows you to calculate a platform for CARMEN LP recognition engine. The following parameters are calculated based on the input data (location and number of cameras, type of recognition engine, country issued the license plates):

1. Available platforms.
2. Number of Servers.
3. Available resolutions of the part of the frame used for recognition.
4. Number of recognition channels required to be purchased.

General information about how to choose platform for Axxon Next and Intellect

Here is the procedure of choosing the platform:

1. Set the purpose of the stream (displaying, recording and archive).

2. Calculate the number of Servers taking into account the limitations imposed by detection tools.
3. Calculate the total load for each type of the stream.
4. Calculate the number of Servers taking into account the calculated total load and set maximum CPU load.
5. Total Servers in the system is calculated as maximum of Servers with limitations by detection tools and Servers with total load.

Disclaimer

On the page:

Important note

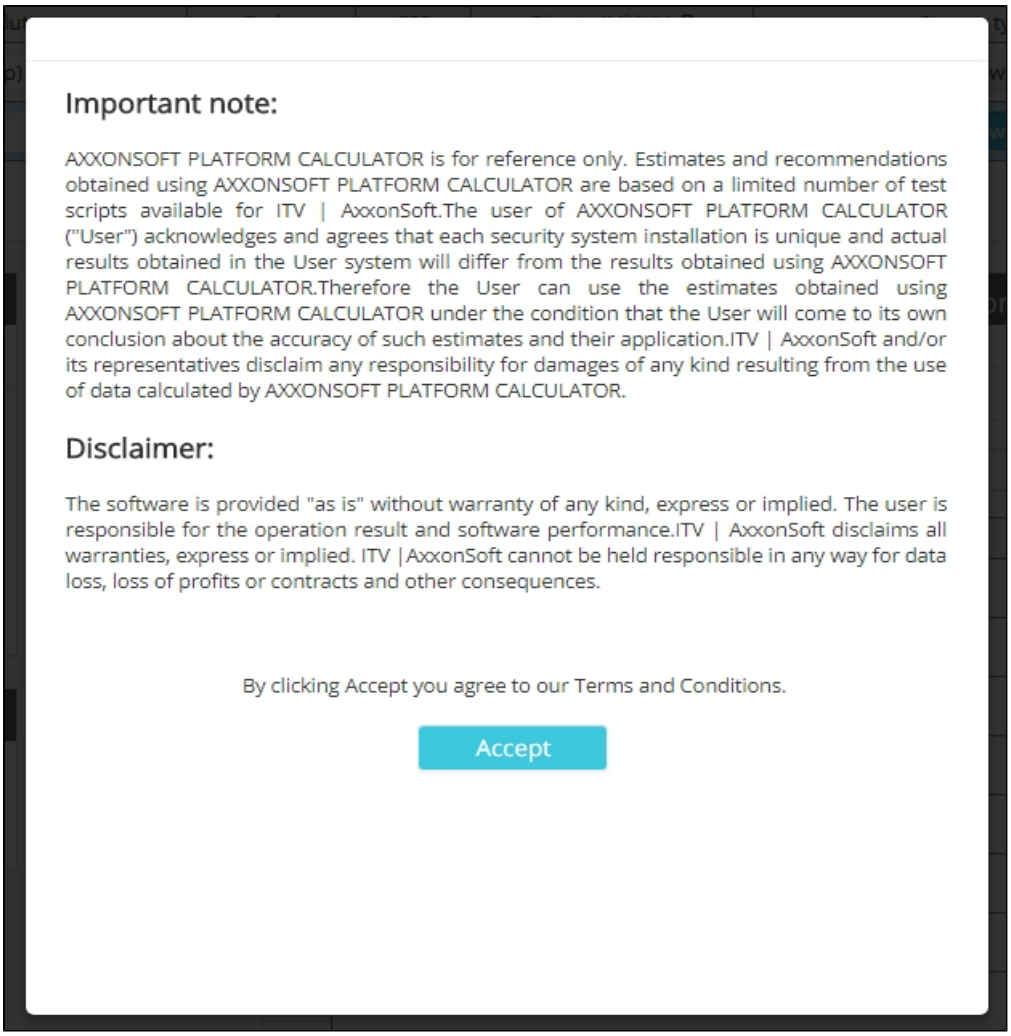
AxxonSoft Platform's Calculator (AXXONSOFT PLATFORMS CALCULATOR) is for reference only. Estimates and recommendations obtained using AXXONSOFT PLATFORMS CALCULATOR are based on a limited number of test scripts available for ITV | AxxonSoft.The user of AXXONSOFT PLATFORMS CALCULATOR ("User") acknowledges and agrees that each security system installation is unique and actual results obtained in the User system will differ from the results obtained using AXXONSOFT PLATFORMS CALCULATOR.Therefore the User can use the estimates obtained using AXXONSOFT PLATFORMS CALCULATOR under the condition that the User will come to its own conclusion about the accuracy of such estimates and their application. ITV | AxxonSoft and/or its representatives disclaim any responsibility for damages of any kind resulting from the use of data calculated by AXXONSOFT PLATFORMS CALCULATOR.

Disclaimer

The software is provided "as is" without warranty of any kind, express or implied. The user is responsible for the operation result and software performance.ITV | AxxonSoft disclaims all warranties, express or implied. ITV |AxxonSoft cannot be held responsible in any way for data loss, loss of profits or contracts and other consequences.

Confirmation of terms acceptance

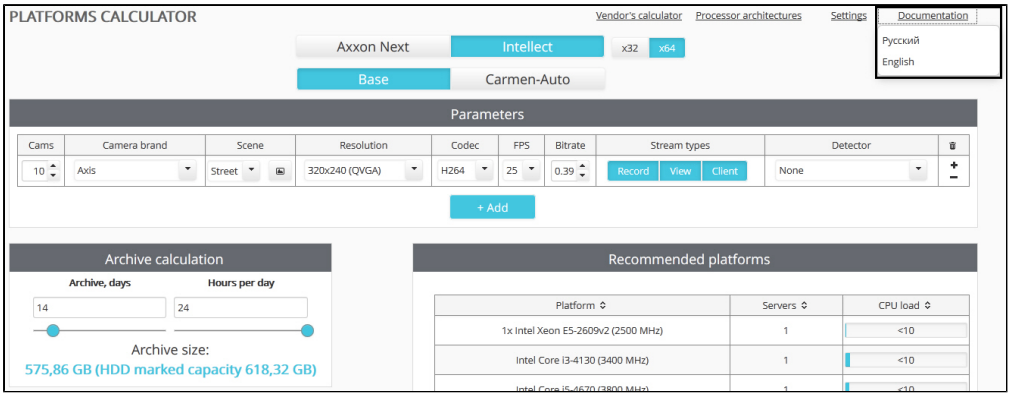
At the first launch of the Platform calculator the window containing the information given above will be displayed. to continue working with the calculator click the **Accept** button.



Otherwise close the tab with opened platform calculator in the browser.

Access to documentation

To go to online documentation on Axxonsoft platform calculator, select the required language in the **Documentation** menu. Russian and English documentation is available so far.



How to choose the best platform

Here is the procedure of choosing the appropriate platform:

1. Identify and specify maximum CPU load on computers in the video surveillance and audio control system.
2. Identify and specify allowable CPU architectures to use on the platform of the video surveillance and audio control system.
3. Set input parameters to choose the platform: select the software platform, models of cameras, video codecs, etc.

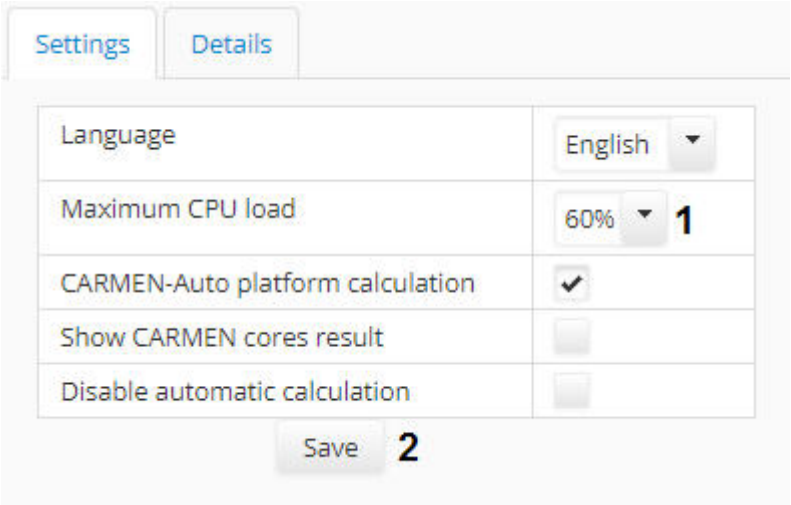
Setting maximum CPU load

The platform calculator allows setting maximum CPU load. On the basis of this parameter the number of Servers is calculated.

To set maximum CPU load, do the following:

1. Click the **Settings** button on the **Platform Calculator** page.

2. The box for setting calculator parameters is displayed.

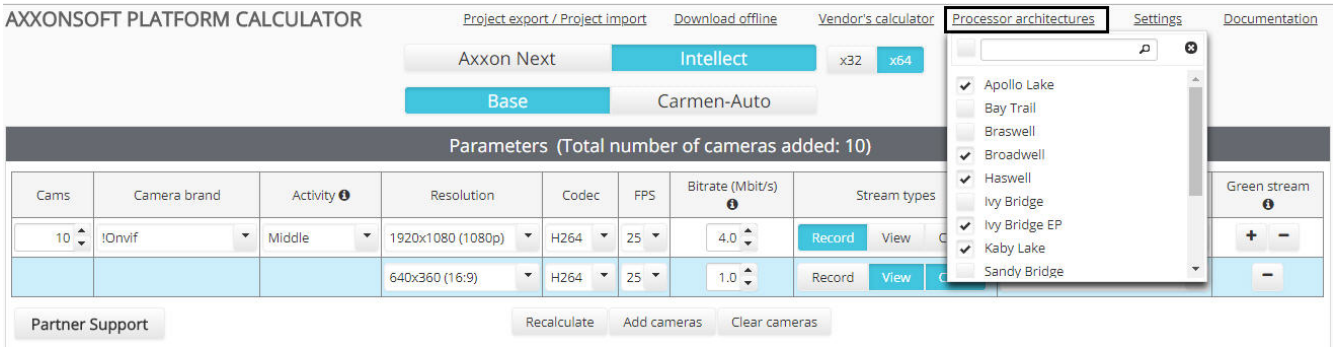


3. Select the required value of maximum CPU load in the **Maximum CPU load** (**1**) dropdown list.
4. Click the **Save** (**2**) button. The changes will be saved and the box will be closed.

The maximum CPU load is now configured.

Selecting CPU architecture

The platform calculator allows taking into account the CPU architecture when choosing the platform and excluding CPUs with improper architecture from the search results. To select the architecture, use the **CPU architecture** list on the **Platfo rm calculator** page. Set the checkboxes checked next to those architectures that are to be in the search results.

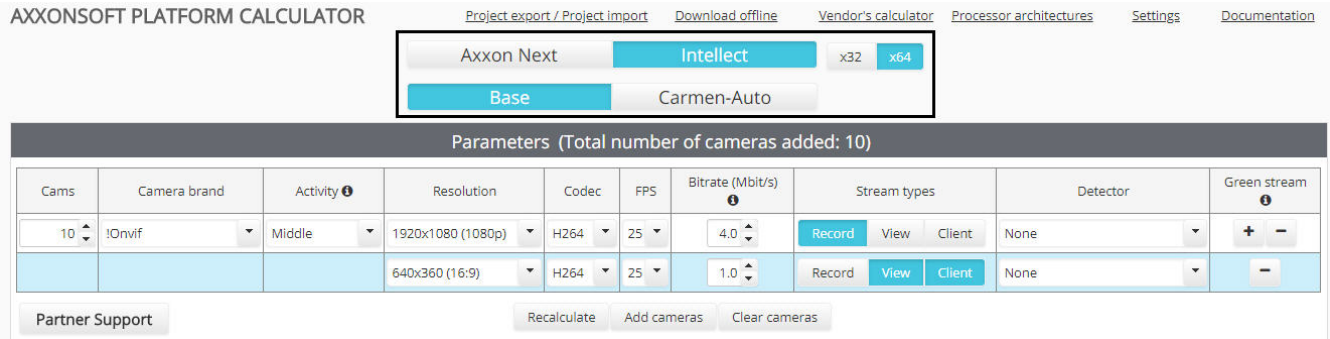


To search the architecture in the list, use the search box on the top of the dropdown list.

Selecting software platform

Hardware platform selection depends on which software platform proposed to be used: *Axxon Next* , base *Intellect* or *Intellect* with *CARMEN* license plate recognition engine.

> **Note.**
>
> Possibility to select the CARMEN license plate recognition engine to calculate platforms is disabled on default if the preferred browser language is Russian. How to enable this possibility see in the Setting parameters for CARMEN platform section.
>
> If the preferred browser language is English, then this possibility is enabled on default.



By default, the platform is calculated for a 64-bit system and 64-bit modules. When using cameras that do not support the x64 mode (outdated camera models, the full list is available in Documentation Drivers Pack) or when installing the software on a 32-bit operating system, select x32 mode.

Important!

It is recommended to use x64 mode, since the following restrictions are imposed in x32 mode:

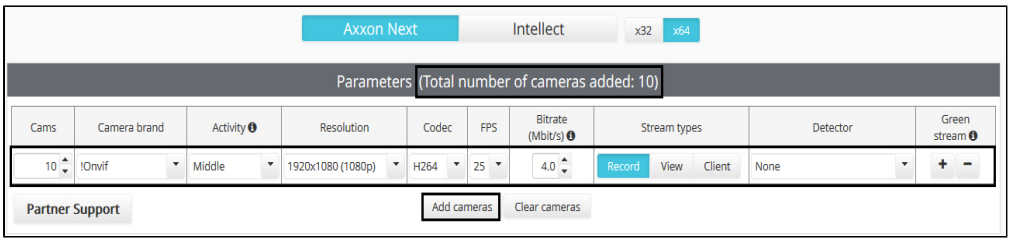
1. In x32 mode, the amount of RAM is limited to 3GB
2. Some detectors do not support x32 operation. The list of such detectors is given in the documentation of the corresponding product or vertical solution.

Parameters that are to be set in order to calculate platforms for *CARMEN* license plate recognition engine differ from those that are to be set when using *Intellect* and *Axxon Next* platforms. In the first case parameters settings are described in the Setting parameters for CARMEN platform section, in the second case – in the Setting parameters of video surveillance system section.

Setting parameters of video surveillance system

Selecting cameras

Cameras used in the video surveillance system are selected in the **Parameters** group of the **Platform calculator** page. To add cameras to the list click the **Add** button.

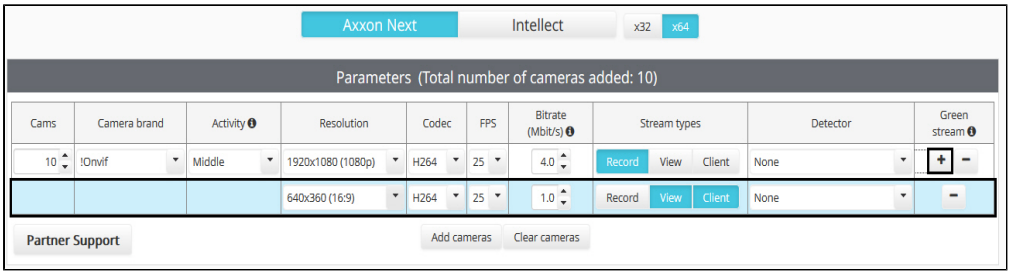


Total number of cameras added is displayed in the head of the **Parameters** table.

Note.

To remove configuration click the **-** button in **Green stream** column. To remove all configurations click the **Clear cameras** button.

The Platform calculator allows using of different streams to display video, send it to remote clients and record to archive. On default one stream is set for these purposes while adding cameras. To add additional streams click the **+** button in **Gre en stream** column. Additional stream is highlighted in blue in the table.



Note.

To remove stream click the **-** button in **Green stream** column.

The parameters are described in the table.

Parameter	Info
Cams	The number of cameras that is to be used in the video surveillance system.
Camera brand	The list of vendors of IP cameras and video capture cards integrated with *Axxon Next* and *Axxon Intellect Enterprise* . In addition to brand names there are the following items in the list: **!Onvif**. Select it if you plan to use a camera that operates via the OnVif protocol. **!RTSP**. Select it if you plan to use a camera that transfers video via RTSP protocol. **!Undecided**. Select it if you are not sure what camera model will be in use.
Activity	Approximate estimation of activity in the field of view of a camera: low, middle or high. Available values: **Extremely low, Low, Middle, High.** *Note 1. If the camera is installed so that an average of 3 objects is present simultaneously in the frame, select **High** . If there are 2 objects in the frame at the same time, select **Middle**. If only 1 object is present in the frame, select **Low**. **Extremely low** activity corresponds to the objects occasionally appearing in the frame.* *Note 2. The average (middle) activity means a scene with 30% changes in the frame and an average number of small moving details. The high activity corresponds to a scene with more than 70% of changes in the frame and a large number of small moving details.*
Resolution	Video resolution. The list of available resolutions depends on the selected vendor or the model of video capture card.
Codec	Compressor used by camera or video capture card for compressing video stream. The availability of compressors in the list depends on the selected vendor or the model of video capture card.
FPS	Frame rate of the stream. The range of values depends on the selected vendor or the model of video capture card.
Bitrate	The stream from one specified camera in Mbit/s. By default, the stream calculation is based on the constant bitrate (CBR) recommended for specified resolution (for h264 codec). For other codecs, the default stream is calculated based on the average data obtained from testing the cameras by the ITV | AxxonSoft quality control department. If the calculated flow is not correct, it is possible to specify the stream from one camera manually. The Vendor's calculator is used for more accurate calculation. The list of known calculators can be found in the **Vendor's calculator** dropdown list.
Stream types	Selection type of stream.

Detector	See Selecting types of detection tools.

Note.

If several streams are added for cameras then the **Codec**, **Resolution**, **FPS** and **Bitrate** parameters are specified for each stream separately.

Archive parameters

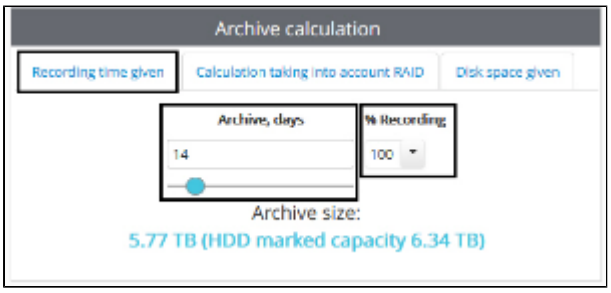
On the page:

Archive is calculated in one of two ways:

1. **By time.** Time period for which the video archive is stored is set and the calculation result is the disk space used for storing the archive.
2. **By size.** Disk space is set and the calculation result is the time period for which the video archive is stored.

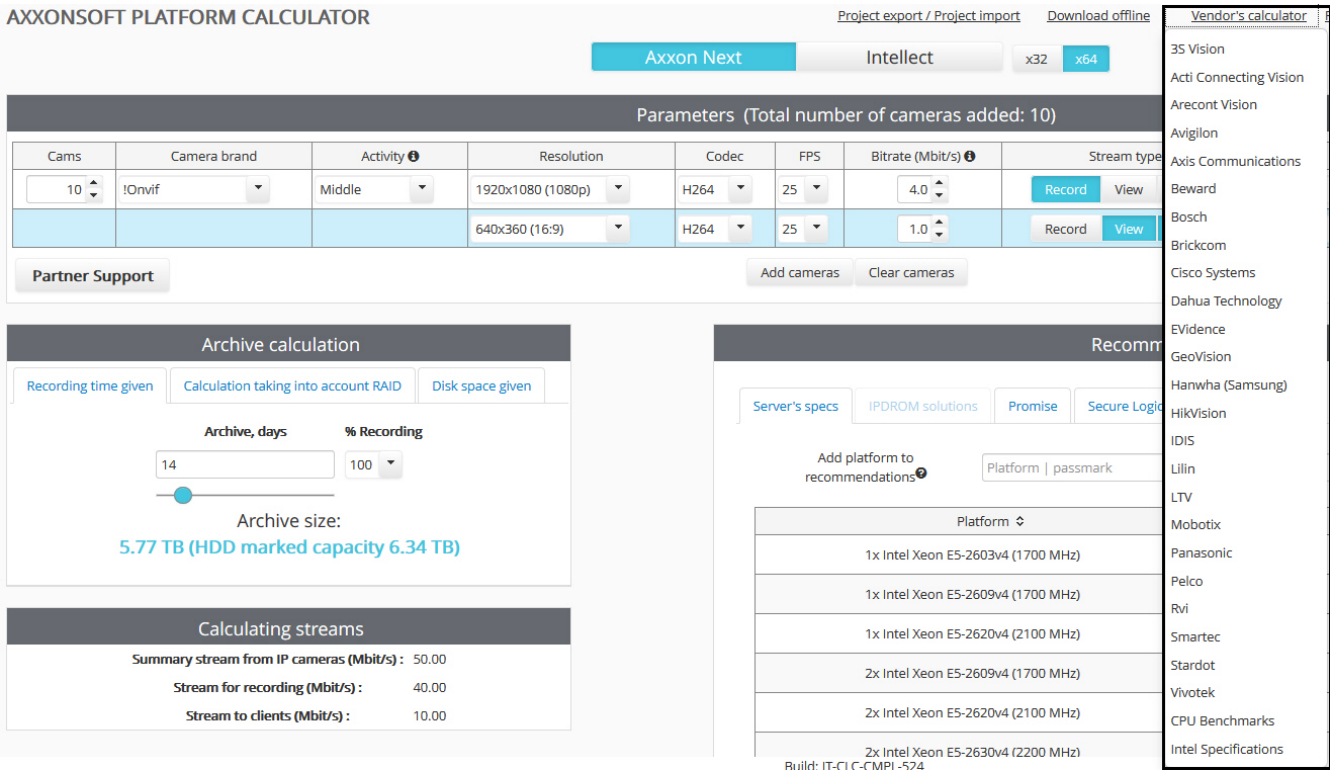
Calculation by time

To calculate the disk space needed for storing the archive, set the following parameters on the **Recording time given** tab in the **Archive calculation** group:



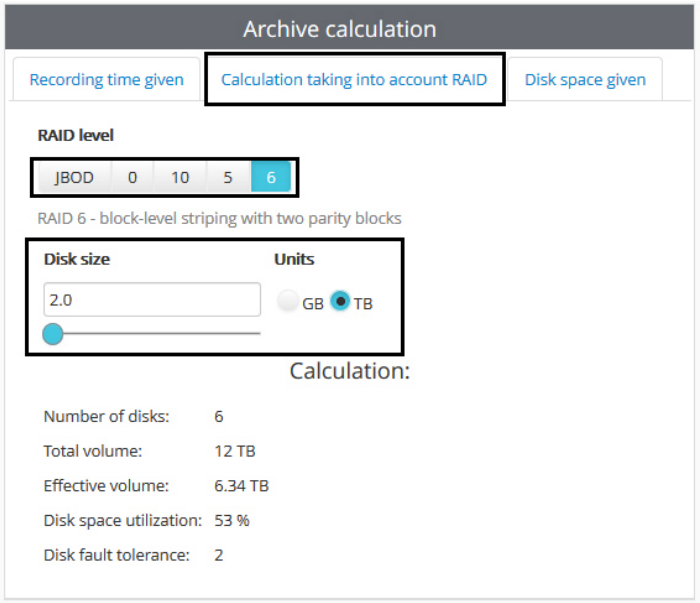
1. **Archive, days** – the required archive depth (in days).
2. **% Recording** – the average percentage of hours a day during which there will be recording to the archive. 100% mean continuous recording.

Disk space data is for information only. The Vendor's calculator is used for more accurate calculation. The list of known calculators can be found in the **Vendor's calculator** dropdown list.



RAID calculation

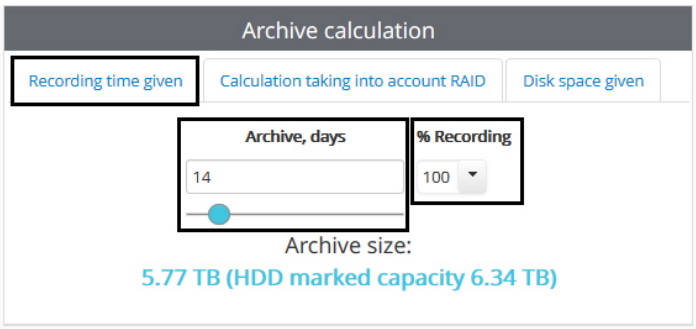
The calculation of RAID parameters for storing video archive is performed by the following parameters on the **Calculation taking into account RAID** in the **Archive calculation** group:



1. **RAID level**, one of the following:
    1. **JBOD** – simple consolidation of disks, which is not a RAID level.
    2. **0** – RAID 0, an array of disks with data striping.
    3. **10** – RAID 10, an array of disks with mirroring and striping.
    4. **5** – RAID 5, an array of disks with block-level striping and one checksum.
    5. **6** – RAID 6, an array of disks with block-level striping and two checksums.
2. **Disk size** in **GB** or **TB**. RAID is supposed to be built on the disks of given size. The calculation results indicate the required number of disks and other RAID parameters (see Calculation results for Axxon Next and Intellect). Calculat ion of the archive depth with the selected disk size is performed on the **Disk space given** tab.

Calculation by size

To calculate time period for which the video archive is stored, set the following parameters in the **Disk space given** of the **Archive calculation** group:



1. **Archive size** – disk space used for storing the archive.
2. **Units** – units that measure the archive size.

Information on the archive storage period is reference only.

Selecting types of detection tools

Here is the list of detection tools:

Name	Calculation on GPU	Product	Description	Features
Video Content Analytic (VCA)	-	Axxon Next, Intellect	Object trajectories detection tool.	-
Face detection (Cognitec)	-	Intellect	*Face-Intellect* face detection tool based on the Cognitec engine.	When calculating a platform using this detection tool, only resources for faces detec ting and vectorization are taken into account. The load from comparing faces with a reference database is not taken into account, because usually a separate server is provided to perform this function.
Main motion detection	-	Intellect	Basic motion detection tool in *Intellect* (a detection that is turned on when camera is armed)	-
Motion Detection	-	Axxon Next	NOT a smart video detection tool in Axxon Next (Motion detection).	-
Motion Detection (decode key frames)	-	Axxon Next	NOT a smart video detection tool in Axxon Next (Motion detection) with key frames decoding enabled.	-
License Plate Recognition	-	Axxon Next	License plate recognition detection tool in Axxon Next version 4.0 and newer.	-
Face Search	-	Axxon Next	Face search detection tool in Axxon Next version 4.0 and newer.	-
LPR VIT	-	Intellect	*Auto-Intellect*, VIT license plate recognition module.	-

People Counter	-	Intellect	People counter detection tool that is a part of *Intellect Detector Pack*.	Optimal parameters for t his detection tool are res olution of 800x600 / 640x360 / 640x480 / 320x240 and FPS of 24 to 30. If specified parameters of the video stream do not meet these conditions, then when you select this det ection tool the resolution is set to 320x240 and FPS to 24.
Virtual Loop	-	Intellect	Auto-Intellect, **Vehicle detector** module and **V ehicle processor** module that are the part of the information-gathering subsystem.	-
Glow detection	-	Intellect	Detection of light sources status on the video that is a part of *In tellect Detector Pack*.	-
Face detection (Tevian)	-	Intellect	*Face-Intellect* face detection tool based on the Tevian engine.	When calculating a platform using this detec tion tool, only resources for faces detecting and vectorization are taken into account. The load from comparing faces with a reference database is not taken into account, because us ually a separate server is provided to perform this function.
Heat Map Detection	-	Intellect	Heat map detection tool that is a part of *Intellect Detector Pack*.	-
Fire Detection (CPU)	-	Axxon Next, Intellect	Fire detection based on neural network in *Axxon Next* version 4.1 and newer.	In order to enhance quality of operation and reduce CPU usage, it is recommended to use the detection tool with calculation on GPU.
Fire Detection (GPU)	Yes	Axxon Next, Intellect		Video card requirements: • minimum 2 GB of memory; • support for CUDA 5.0 or later. For 1 detection tool channel, 500 MB of video memory shall be used. Example: for 4 channels of fire detection tool, a video card with no less than 2 GB of memory is required. Several video cards can be in use in one system.
Smoke Detection (CPU)	-	Axxon Next, Intellect	Smoke detection based on neural network in *Ax xon Next* version 4.1 and newer.	In order to enhance quality of operation and reduce CPU usage, it is recommended to use the detection tool with calculation on GPU.

Smoke Detection (GPU)	Yes	Axxon Next, Intellect		Video card requirements: • minimum 2 GB of memory; • support for CUDA 5.0 or later. For 1 detection tool channel, 500 MB of video memory shall be used. Example: for 4 channels of smoke detection tool, a video card with no less than 2 GB of memory is required. Several video cards can be in use in one system.
VCA with neural networks (GPU)	Yes	Axxon Next, Intellect	Object trajectories detection tool (VMDA) based on neural network in *Axxon Next* and *Intellect*.	Video card requirements: • minimum 2 GB of memory; • support for CUDA 5.0 or later. For each track, one image per second is sent to neural network for classification. The NVIDIA GeForce GT 730 video card is capable of processing about 70* classifications** per second, and the NVIDIA GeForce GTX 1070 video card is capable of processing about 220*** classifications per second. Several video cards can be in use in one system. For example, if you need to track 9 persons per second on 10 cameras, GeForce 1070 or similar video card is suitable.
Sweethearting detection	Yes	Intellect	Sweethearting detection in *POS-Intellect* software	Video card requirements: • minimum 2 GB of memory; • support for CUDA 5.0 or later.

IntLab-Carriages (passenger)	-	Intellect	Recognizer of railway passenger carriage numbers	1. Optimal resolution of 704*288 OR 640*360 and fps = 25. At a higher resolution the module will not be able to process all frames reducing quality of operation. 2. Main channel has the same resources consumption as subordinate channel.
IntLab-Carriages (freight)	-	Intellect	Recognizer of railway freight carriage numbers	1. Optimal resolution of 704*288 OR 640*360 and fps = 25. At a higher resolution the module will not be able to process all frames reducing quality of operation. 2. Main channel has the same resources consumption as subordinate channel.
LPR INTELLIVISION	-	Intellect	*Auto-Intellect*, IntelliVision license plate recognition module.	-
IntelliVision VCA	-	Axxon Next	A smart video detection tool in Axxon Next	-
Face Detection (Huawei)	-	Intellect	*Face-Intellect* face detection tool based on the Huawei engine.	-

Note.

* - The results are given for Core i5-3570 (3400 MHz) CPU and may vary depending on the CPU installed. For example, the Xeon Gold 6140 (2300 MHz) CPU allows 95 classifications** per second.

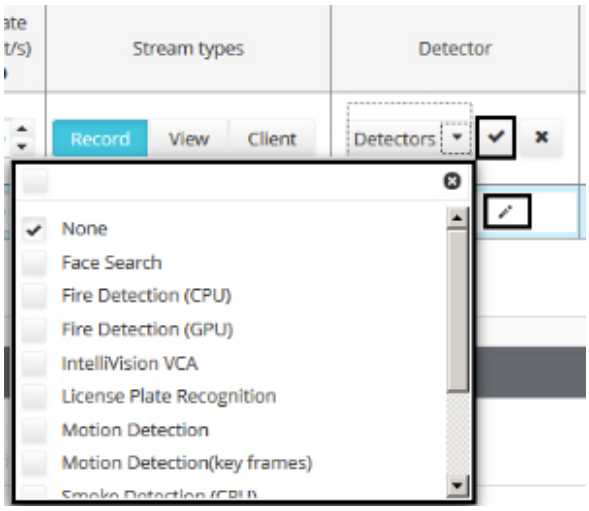
* -1 classification per second is 1 object detected on video. For example, if average of 9 moving objects are simultaneously present on video from one camera, and there are 5 cameras in the system, use video card allowing 45 classifications per second.

* - The results are given for the Core i7-8700 (3200 MHz) CPU and may vary depending on the CPU installed.

After adding cameras to the list (see Selecting cameras), the types of detection tools can be specified too. You can select zero to all detection tool types for each stream. The list of available detection tools depends on the selected software platform (see Selecting software platform).

Add detection tools as follows:

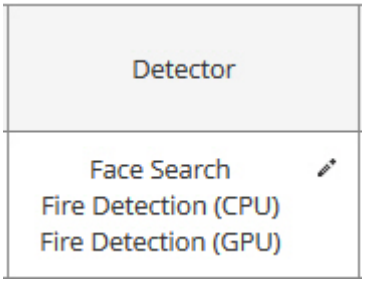
1. Click  in the **Detector** column. The detection tool selection form is shown.



2. Click the **Detectors** list.
3. Uncheck the **None** box.
4. Check the boxes next to detection tools to add.

> **Note.**
>
> If **None** checkbox is set together with any other checkbox(es), the calculation is not performed since the **None** checkbox is incompatible with any detection tools.

5. Click  . The selected detection tools are shown in the list in the **Detector** column.



> **Note.**
>
> Follow same steps 1-4 to change the list of detection tools.
>
> Uncheck all boxes using the checkbox in top left corner of the form to delete all detection tools from the list. The **None** checkbox is automatically set when saving the form with no checkboxes set.

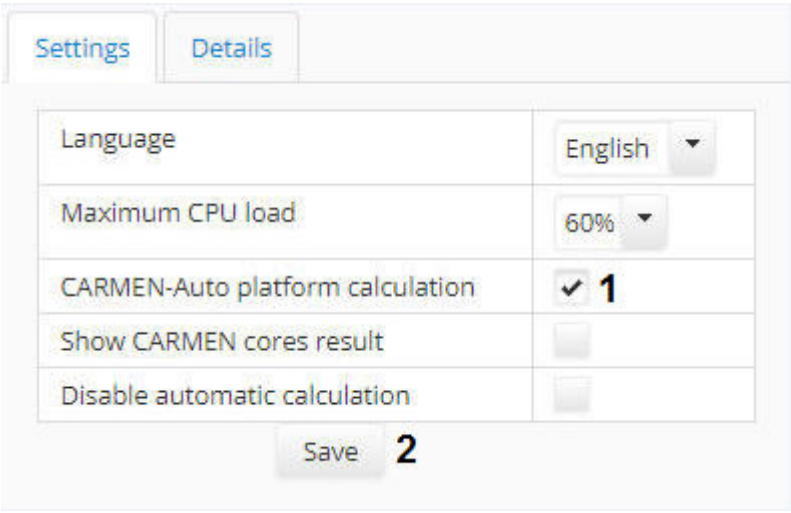
> **Important!**
>
> Platforms calculator does not check if specified parameters match detection tools requirements for cameras. For instance, if specified fps is lower than that required for detection tool to operate, then platforms will be calculated but the calculated platform won't suit the detection tool requirements.
>
> The requirements of detection tool for cameras are specified in the documentation – see AxxonSoft documentation repository.

Setting parameters for CARMEN platform

Possibility to select the CARMEN license plate recognition engine is disabled on default. To enable it, do the following:

1. Click the **Settings** button on the **Platforms calculator** page.

2. In the opened window set the **CARMEN-Auto platform calculation** checkbox.

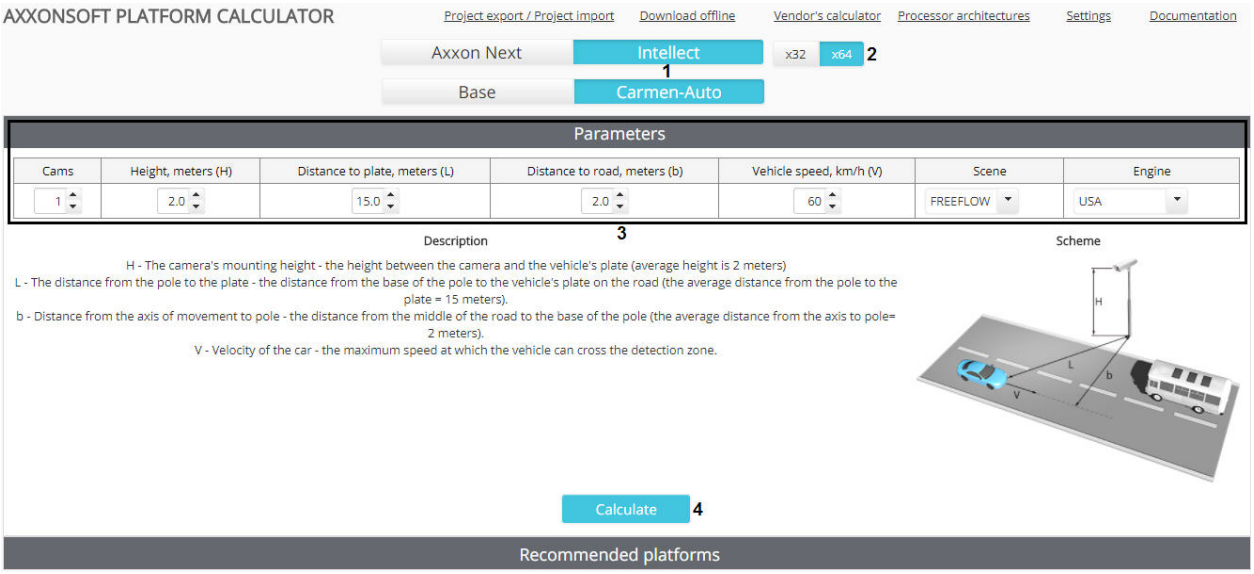


3. Click the **Save** button.

As a result the possibility to select platform calculation for the CARMEN-Auto will be available (see also the Selecting software platform section).

Calculate a recommended platform for *CARMEN* license plate recognition engine as follows:

1. Select the **Intellect** platform and the **Carmen-Auto** type (**1**).



2. If 64-bit CARMEN modules are to be in use, then set the **x64** switch checked (**2**).
3. Set parameters of the recognition engine in use (**3**). On the **PLATFORMS CALCULATOR** page one can find a figure with main parameters and their description.

Parameter	**Description**
Cams	The number of cameras used for license plate recognition.
Height, meters (H)	The camera's mounting height – the height between the camera and the vehicle's plate (average height is 2 meters).
Distance to plate, meters (L)	The distance from the pole to the plate – the distance from the base of the pole to the vehicle's plate on the road (the average distance from the pole to the plate is 15 meters).
Distance to road, meters (b)	The distance from the axis of movement to pole – the distance from the middle of the road to the base of the pole (the average distance from the axis to pole is 2 meters).
Vehicle speed, km/h (V)	

	Velocity of the car – the maximum speed at which the vehicle can cross the detection zone.
Scene	The type of the CARMEN recognition engine. The FREEFLOW scene is to be selected when CARMEN-Auto recognition engine is in use, the PARKING scene is to be selected for CARMEN-Parking recognition engine. TheTRIGGERED scene is to be selected for FREEFLOW with enabled ParkingMode; to enable this mode use in Auto Intellect use ParkingMode registry key (see Registry keys reference guide)
Engine	The country that has issued the license plate to be recognized.

4. Click the **Calculate** button to calculate recommended platforms (**4**).

As a result recommended platforms are calculated.

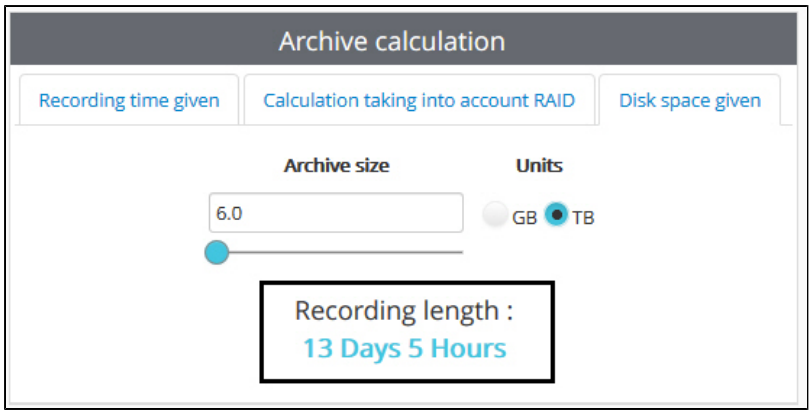
Calculation results

Calculation results for Axxon Next and Intellect

After adding a stream to the list (see Selecting cameras), the following parameters are recalculated:

> **Note.**
>
> Automatic recalculation can be disabled – see Disabling automatic calculation.

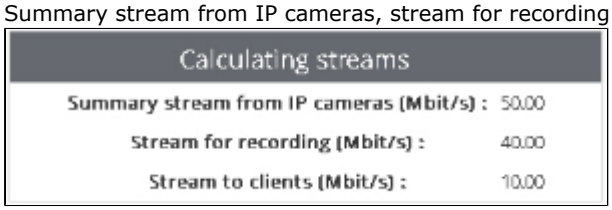
1. Archive size: disk space or time period.



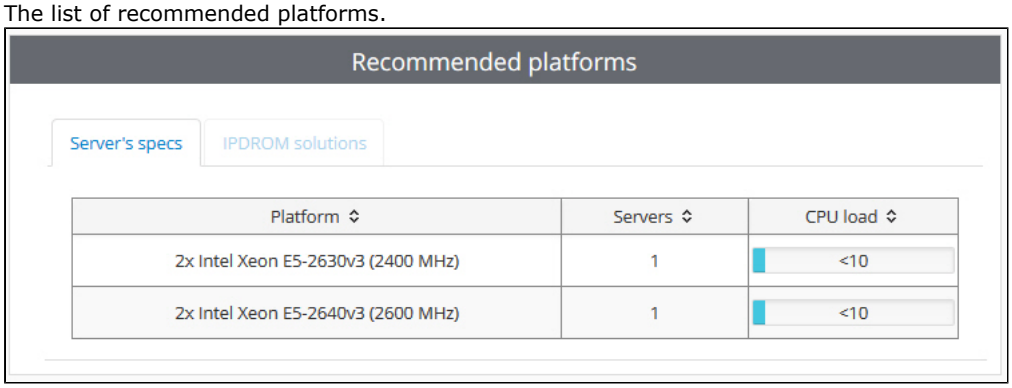
RAID parameters are:

1. **Number of disks** required to build the needed RAID level with the given disk size.
2. **Total volume** = **Number of disks** * one **Disk size**
3. **Effective volume** is a disk space required for storage of the archive with the depth set on the **Recording time given** tab.
4. **Disk space utilization** = **Effective volume** / **Total volume** (percentage)
5. **Disk fault tolerance** is a number of disks that can fail without archive loss.

2. Summary stream from IP cameras, stream for recording and stream to clients.

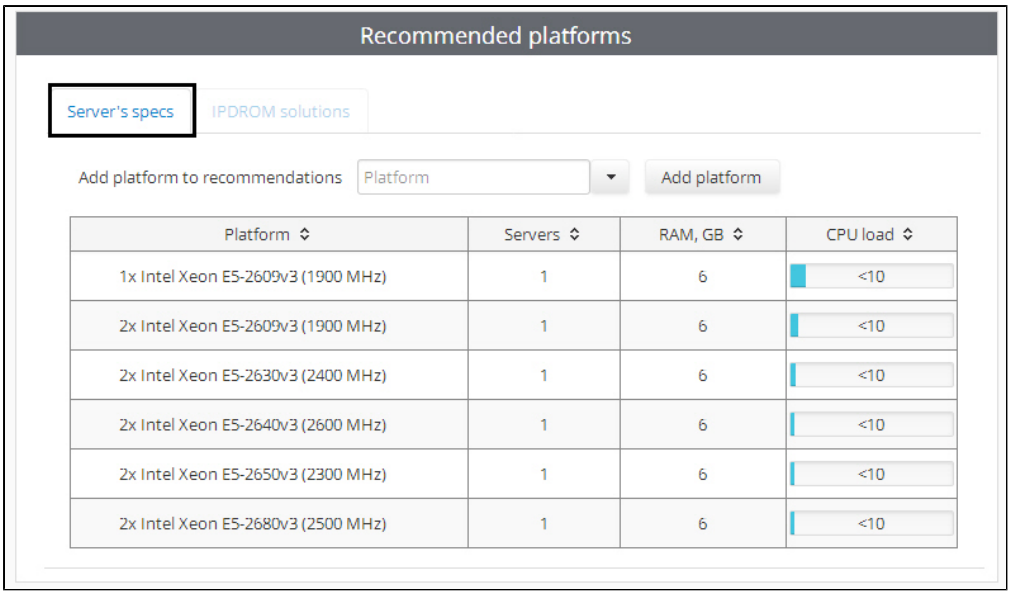


3. The list of recommended platforms.



> **Note.**
>
> Results of platforms calculation in the **Recommended platforms** table can be sorted by column using the ⇕ button in the title of corresponding column.

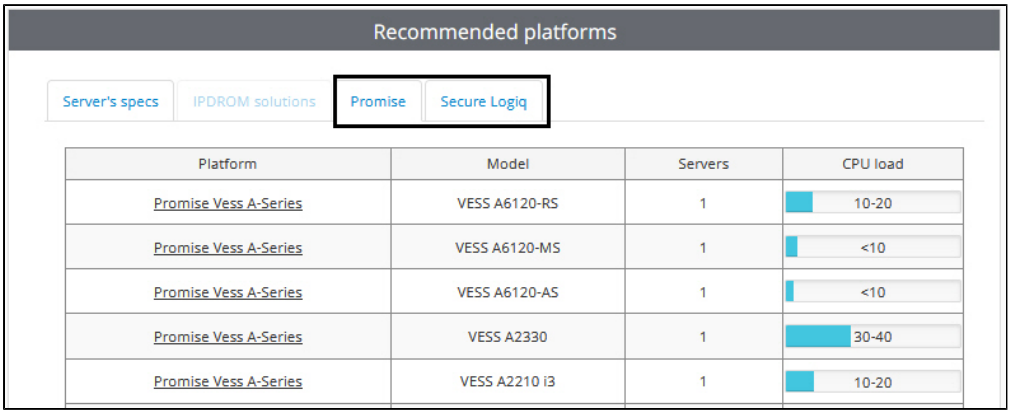
In the **Server's specs** tab one can find the platform calculation results for processors with selected architecture (see Selecting CPU architecture).



The **IPDROM solutions** tab is not available in English version of the Platform calculator.

The number of servers which is required to use for specified number of video cameras is shown in the **Servers** column. Recommended RAM volume is given in the **RAM, GB** column.

To add a platform to the calculation results, type the platform name or part of it in the **Add platform to recommendations** field or select the platform name in the list. A platform rating at the http://www.cpubenchmark.net/cpu_list.php web-site can be used for search instead of platform name. In this case platforms with names including the entered number will be first in the search results list, and then the platforms with similar rating are displayed.



After the platform is selected, click **Add platform**. The platform will be added to the calculation results. To delete an added platform, click  .

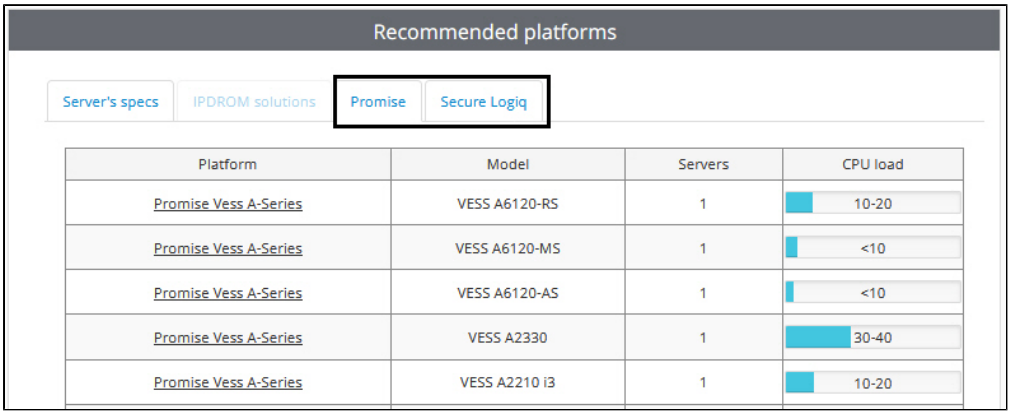
Note.

Processors added this way are populated from the http://www.cpubenchmark.net/cpu_list.php web-site data, so the result of platform selection is approximate.

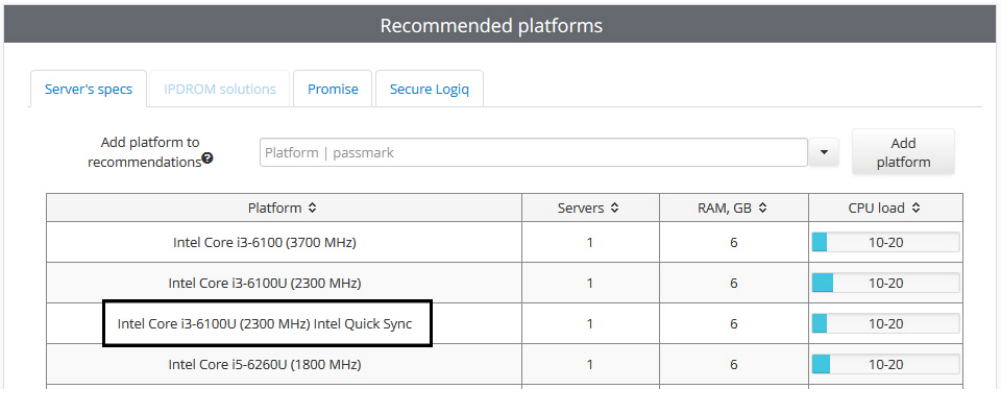
Example.

If 100 cameras are added and as a result of the best platform calculation it is recommended to use 5 servers with 50-60% server load then it is required to use 5 servers and install 100 / 5 = 20 cameras on each server. In this case CPU of each server won't be more than 50-60%.

In other tabs in the **Recommended platforms** group (**Promise**, **Secure Logiq**), the recommended platforms by AxxonSoft partners are shown. To view a platform description on partner's web site, click corresponding link in the **Platform** column.



If platforms are calculated for *Axxon Next*, then calculation results both with and without the Intel Quick Sync Video technology usage are presented at the **Server's specs** tab. The use of this technology provides reducing of CPU load. If this technology is taken into account when calculating results, **Intel Quick Sync** is specified next to platform name.



Note.

Configuration procedure for using the Intel Quick Sync Video technology in the Axxon Next software is described in the *Axxon Next User Guide*. Please find the most recent version of this document in AxxonSoft documentation repository.

To save the calculation results in the excel file, click the **Export configuration to XLS** button. If the **Server's Specs** tab is opened when export starts, the export file includes the list of recommended processors. If **Promise** or **Secure Logiq** tab is opened at the moment, both the list of recommended processors and the list of recommended Promise or Secure Logiq solutions are included in this file.

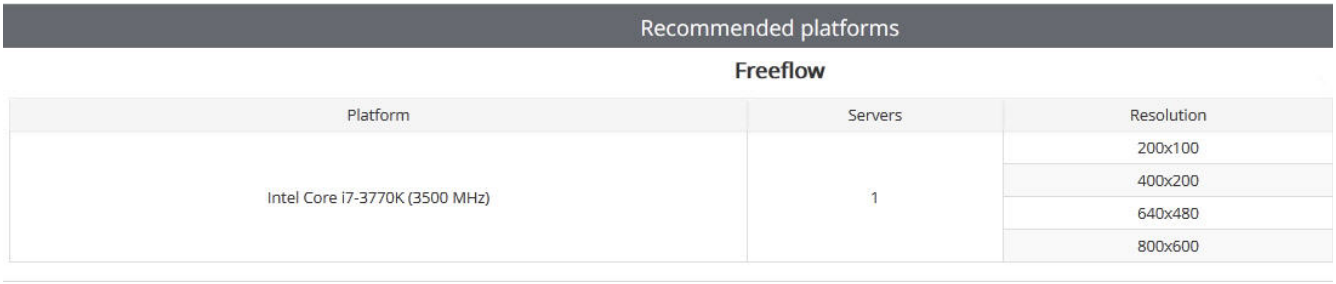
The results of hardware platform calculation can change – hardware configuration can both increase and decrease depending on the camera model, camera settings and exposure of the image. Extra objects can increase the hardware configuration.

There are no graphics card requirements for Servers without displaying. NVIDIA GeForce GT520 graphics card or more efficient is sufficient for Servers with displaying/RMW.

CPU load when using RMW is the same as one for Server with displaying.

Calculation results for CARMEN

Information on recommended platform, number of Servers, available resolutions of the part of the frame used for recognition as well as number of recognition channels required to be purchased will be shown when calculating CARMEN platform.



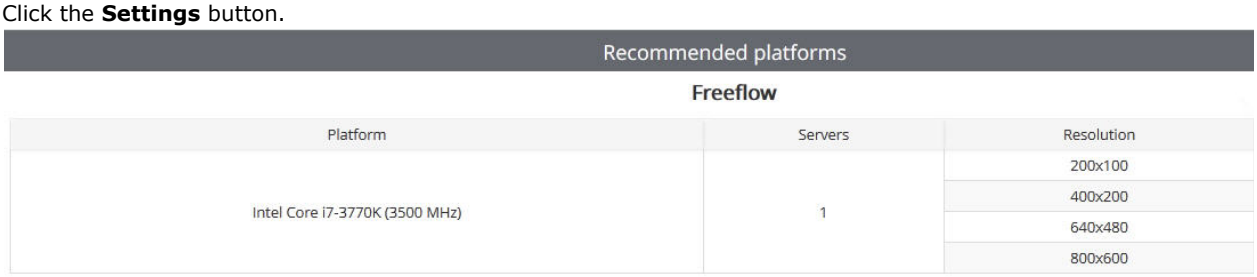
Note.

In the **Resolution** column not the resolution of the incoming video signal is specified but the resolution of the part of the frame that is set as **Search area** when configuring the **LPR channel** object.

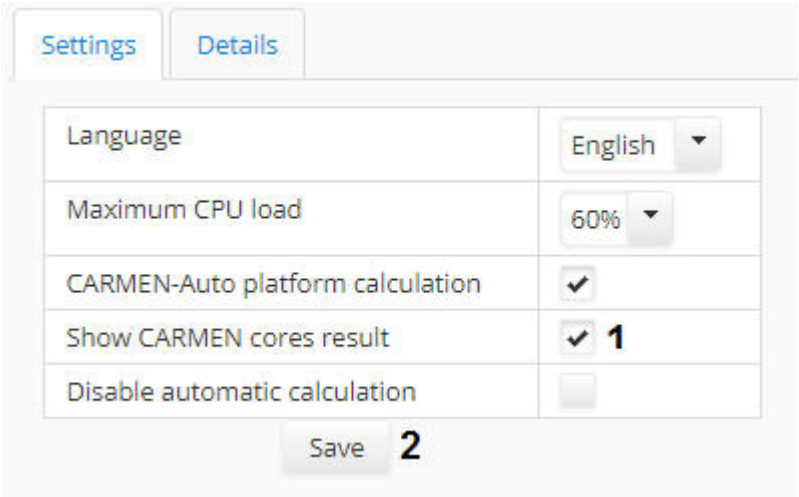
Example: a camera with 800x600 resolution is used for recognition when 400x200 search area is set. In this case look for 400x200 line in the table – not 800x600.

By default the information on the number of recognition channels required to be purchased (i.e. the number of system cores) is not displayed in the calculation results for CARMEN. To display this information, do the following:

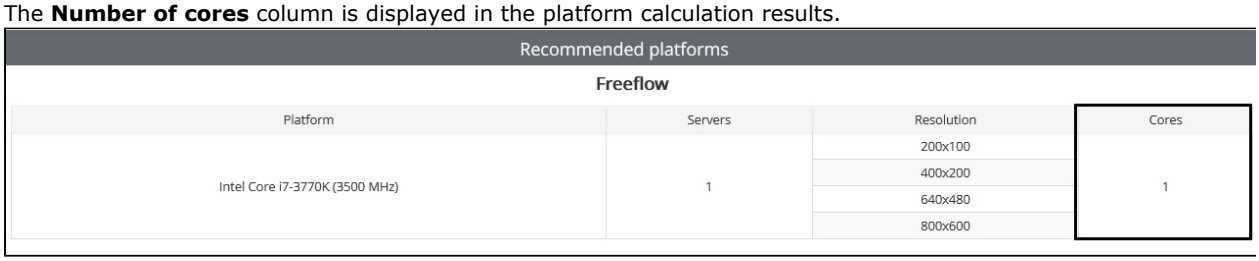
1. Click the **Settings** button.



2. In the appeared box set the **Show CARMEN cores result** (**1**) checkbox checked and click **Save** (**2**).



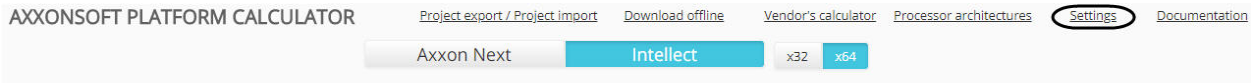
3. The **Number of cores** column is displayed in the platform calculation results.



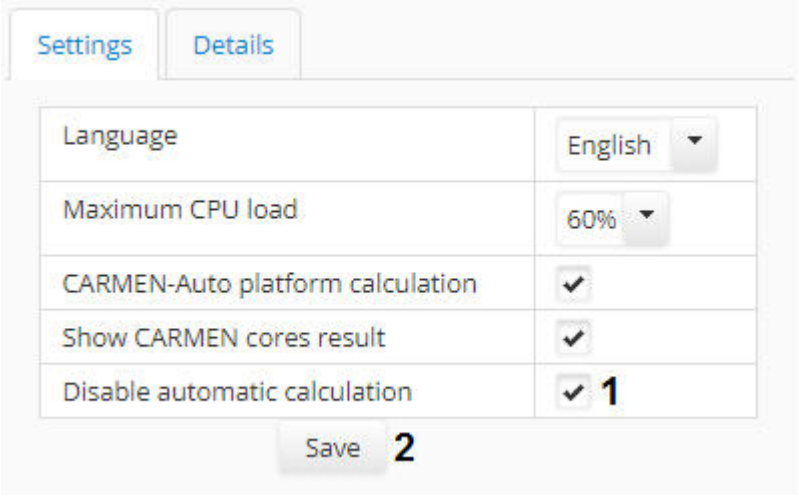
Disabling automatic calculation

By default, each time configuration is changed, recommended platforms are automatically recalculated. To disable automatic recalculation of the results and only perform calculation by user's command, do the following:

1. Click **Settings**.

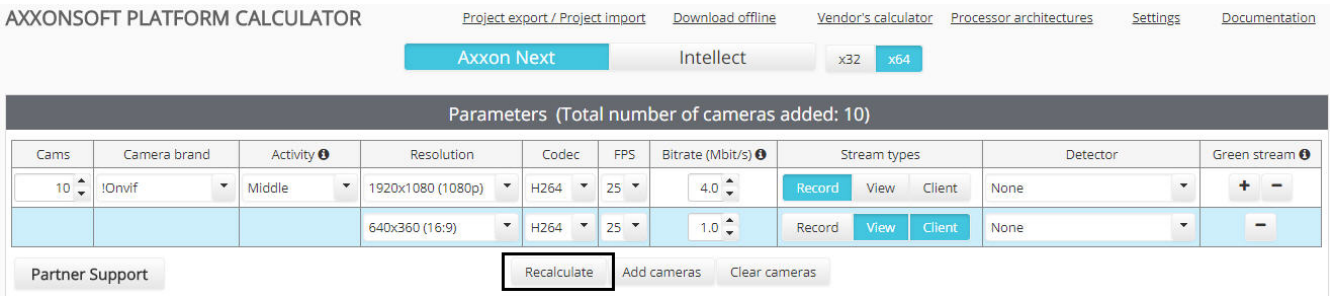


2. Calculator settings are displayed.



3. Set the **Disable automatic calculation** checkbox (**1**).
4. Click **Save** (**2**).

The **Recalculate** button appears under the **Parameters** table. Click this button to calculate recommended platforms after setting all required parameters (see Setting parameters of video surveillance system).



Import and export of configuration

Axxonsoft platform calculator allows saving video subsystem configuration to a file after being set up while calculating platform. The saved files can be opened in the platform calculator any time to proceed with calculations.

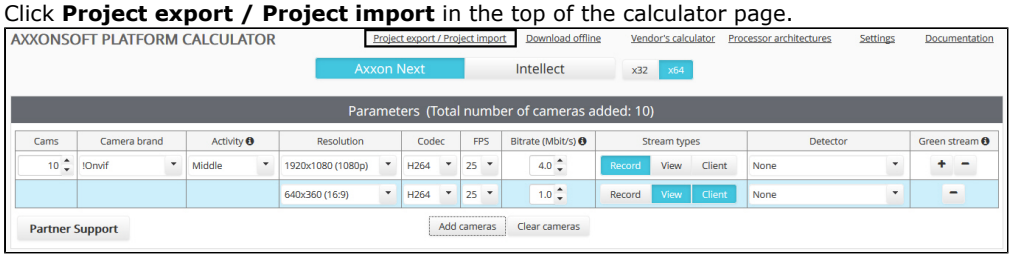
Streams and their parameters, the number of days to keep archive for, as well as the number of hours a day to record video are saved to the file. Parameters for calculation by disk space given, *Promise* or *Secure Logiq* solution filters, processor architectures and settings are **not** saved. Carmen platform calculation parameters are **not** saved either.

> **Important!**
>
> Import and export of configuration are not supported in the offline version of the Axxonsoft platform calculator – see also Offline version of the platform calculator.

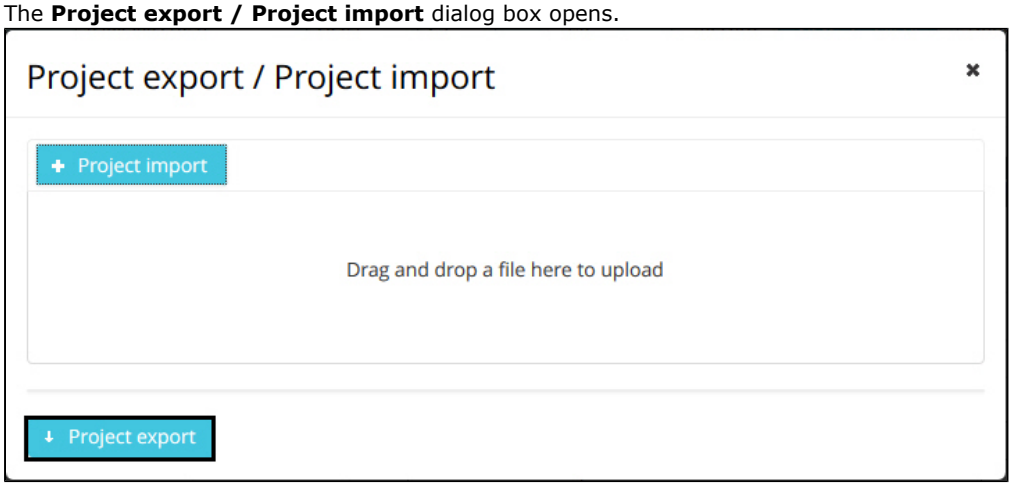
Export configuration to file

To export selected configuration in the platform calculator, do the following:

1. Set the video surveillance system parameters (see Setting parameters of video surveillance system).
2. Click **Project export / Project import** in the top of the calculator page.



3. The **Project export / Project import** dialog box opens.



4. Click **Project export**.
5. Select a location to save the file in the standard Windows dialog box.
   The file is saved in a special .pcalc format. The file name consists of the name of the AxxonSoft software product, brand of the first camera in the list, and the date and time the file was created, for example:

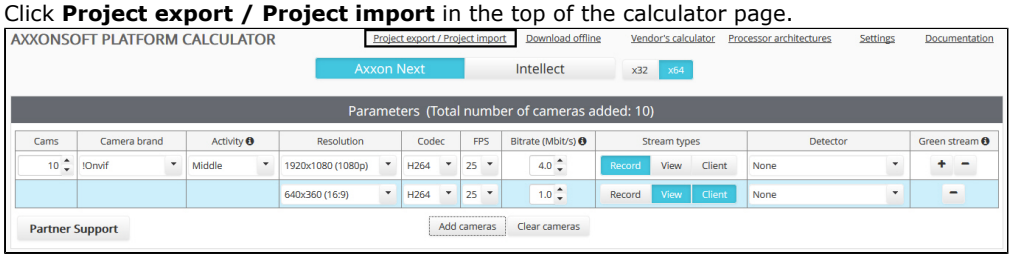
   `axxon_next_RTSP_2018_01_31_11_08.pcalc`

Configuration export is now completed.

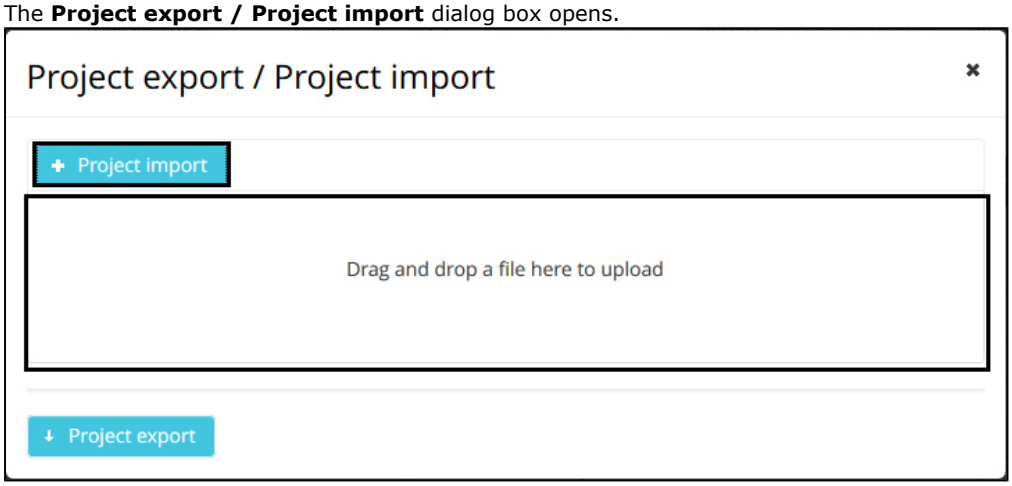
Import configuration from file

To import configuration configuration from a file, do the following:

1. Click **Project export / Project import** in the top of the calculator page.



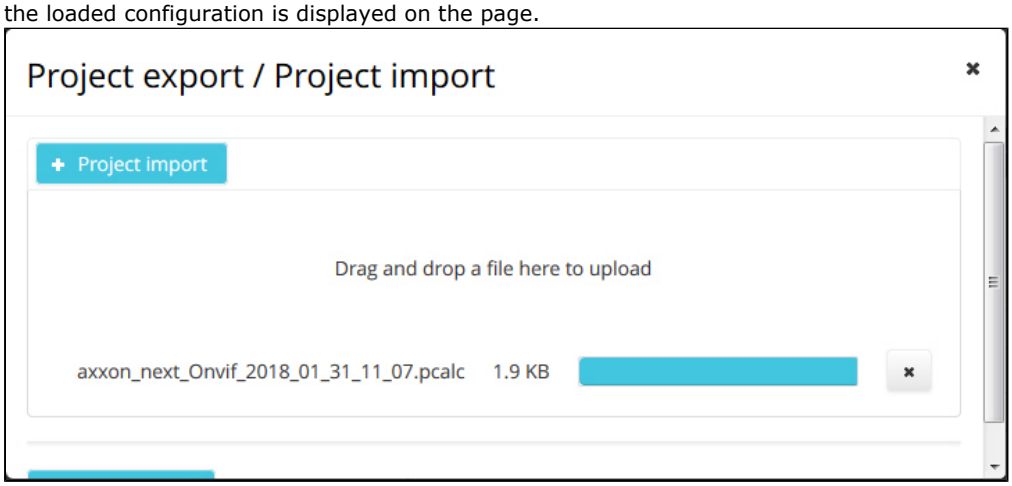
2. The **Project export / Project import** dialog box opens.



3. Drag and drop the file to the area shown or click **Project import** and select file with configuration in a standard Windows dialog box.

> **Note.**
>
> The files in the corresponding are created while exporting configuration – see Export configuration to file.

4. After the file is selected, it is automatically applied, the **Project export / Project import** dialog box closes, and the loaded configuration is displayed on the page.

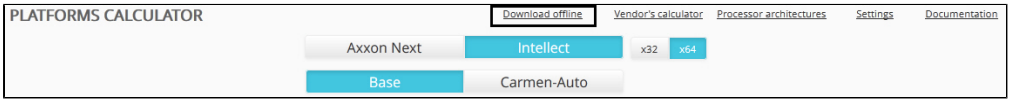


Configuration import is now completed.

Offline version of the platform calculator

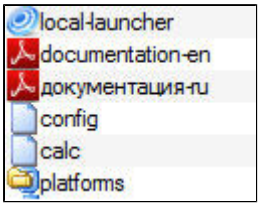
Downloading and starting offline version

The offline version of the platform calculator can be downloaded to perform calculations when there is no Internet connection. Select the **Download offline** item.



The offline version represents the zip file. To use the offline version of the platform calculator, unzip and save the file in any folder.

The archive contents are shown in the figure.



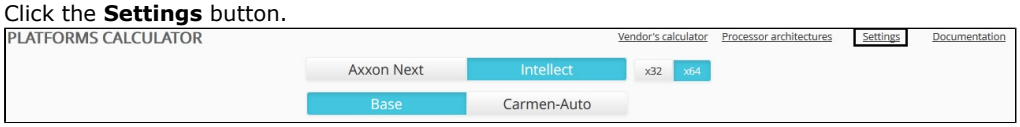
To start the platform calculator, the local-launcher.exe file is to be run. The **Axxonsoft Platform Calculator** page is opened in the browser used by default. The interface of the offline version is the same as one of the online version.

Updating offline version

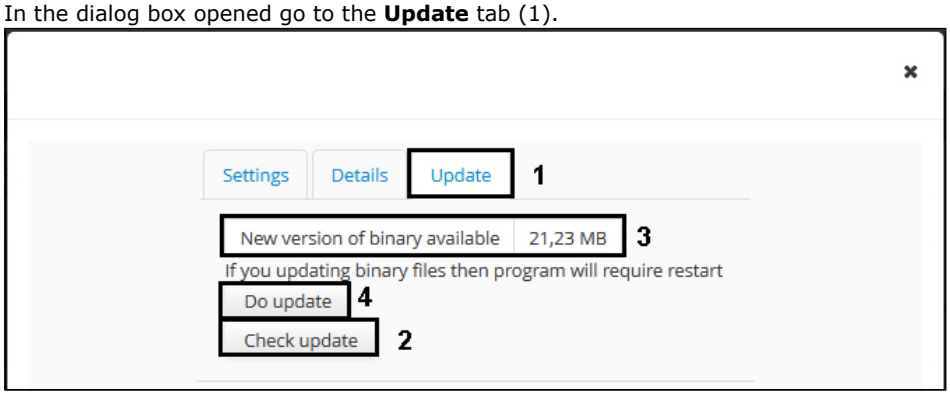
The offline version of the platform calculator can be updated if necessary. Both calculation data and executive part are updated.

Updating is performed as follows:

1. Click the **Settings** button.



2. In the dialog box opened go to the **Update** tab (1).



3. Click the **Check update** button (2).
4. If running offline version of the calculator is outdated, information about available updates and their size will be displayed (3).
5. Click the **Do update** button (4). After downloading and applying the available updates, a new tab with an updated version of the platform calculator will open in the browser.

Updating the offline version of the platform calculator is completed.

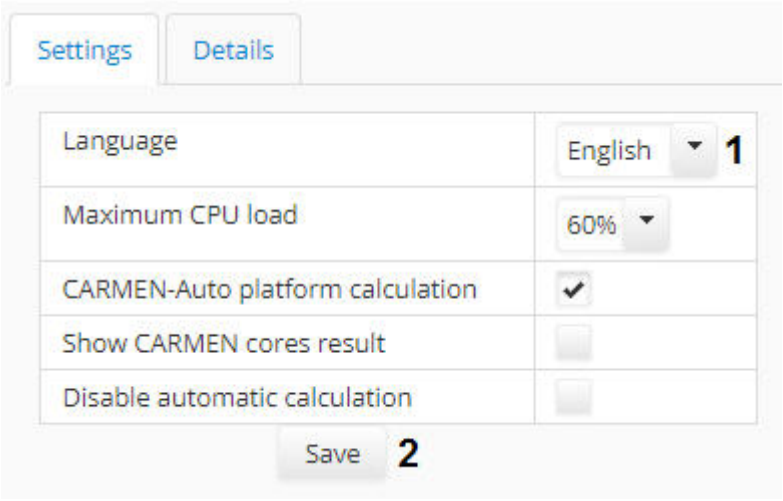
Interface language

One can change the interface language on the Platform Calculator page. The English and Russian languages are available.

To change the interface language, do the following:

1. Click the **Settings** button on the **Platform Calculator** page.

2. The **Settings** box is opened.



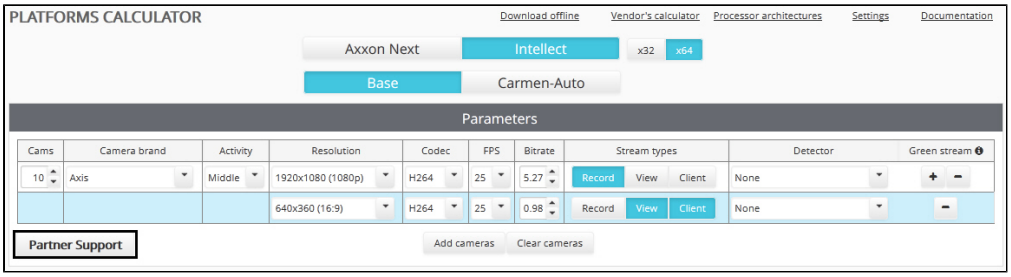
3. Select the required interface language in the **Language** (**1**) dropdown list.
4. Click the **Save** (**2**) button.

The calculator interface language is now changed.

Partner Support

If you have any questions about Platforms Calculator, feel free to contact AxxonSoft support.

For this click the **Partner Support** button.



AxxonSoft contact form appears in a new tab: http://www.axxonsoft.com/contacts.php

Fill out the contact form and send it. AxxonSoft specialist will contact you and answer your questions.