



Additional Utilities for the Intellect Software

1. Summary of the Intellect utilities	Перейти к концу метаданных	7
2. The utility for reading video capture card code and dongle		7
2.1 The purpose of the CodeReader.exe utility		7
2.2 Starting and shutting-down the utility		7
2.3 Using the CodeReader.exe utility		9
3. Converter.exe utility for converting video and audio archives		10
3.1 The purpose of the Converter.exe utility		10
3.2 Starting and shutting-down the Converter.exe utility		11
3.3 Converter.exe interface		14
3.3.1 The Archive's Converter dialog box		14
3.3.2 The Export Settings dialog box		17
3.3.3 A dialog box for choosing the video codec		22
3.3.4 A dialog box for choosing the audio format		23
3.4 Using the Converter.exe utility		24
3.4.1 General description of the Converter.exe utility		24
3.4.2 Selecting an archive to be played or converted		24
3.4.3 Searching for a video recording		27
3.4.3.1 Searching for a fragment in a recording		27
3.4.3.2 Searching for a frame in a recording		27
3.4.4 Recording playback		28
3.4.5 Converting video and audio archives to AVI files		28
3.4.6 Exporting recordings and frames		28
3.4.7 Using a command prompt to work with the Converter.exe utility		31
3.4.8 Printing a frame		33
3.4.9 Exporting video with titles		34
4. Tweaki.exe utility for advanced setup of the Intellect software system		36
4.1 The purpose of tweaki.exe utility		36
4.2 Starting and shutting-down the Tweaki.exe utility		37
4.3 Interface of the Tweaki.exe utility		38
4.3.1 The Settings panel of the Windows section		39
4.3.2 The Settings panel of the Intellect section		42
4.3.3 The Settings panel of the DNS section		45
4.3.4 The Settings panel of the Visitor management system section		47
4.3.5 The Settings panel of the Distributed configuration section		48
4.3.6 The Settings panel of the MSDE (MS SQL) configuration section		51
4.3.7 The Settings panel of the Video subsystem section		52

4.3.8 The Settings panel of the Testing video capture cards section	56
4.3.9 The Settings panel of the PTZ section	57
4.3.10 The Settings panel of the POS-Intellect section	59
4.3.11 The Settings panel of the Face-Intellect section	59
4.3.12 The Settings panel of the Version section	59
4.4 Typical tasks concerning system extended settings	60
4.4.1 Selecting and enabling the debug mode of Intellect software	60
4.4.2 Extended setup of the distributed architecture	63
4.4.3 Changing computer names and IP-addresses in the configuration database of the Intellect system	64
4.4.4 Limiting memory usage by an MS SQL server	66
4.4.5 Re-indexing the audio and video recordings archive	68
4.4.6 Enabling the Pure video/CUDA hardware acceleration	69
4.4.7 Testing video capture cards	72
5. The utility for collecting configuration data on servers and RWS for the Technical Support	74
5.1 The purpose of the Support.exe utility	74
5.2 Starting and shutting-down the Support.exe utility	74
5.3 The Support interface description	75
5.4 Collecting information about videosevers and remote workstations using the Support.exe utility	77
6. The Fps.exe utility for productivity estimation	78
6.1 The purpose of the Fps.exe utility	78
6.2 Starting and shutting-down the Fps.exe utility	79
6.3 Using the Fps.exe utility	79
7. The SignCheck.exe utility for checking the authenticity of exported frames and video recordings	82
7.1 Starting and shutting-down the SignCheck.exe utility	82
7.2 The purpose of the SignCheck.exe utility	84
7.3 Using the SignCheck.exe utility	84
8. The Convert.exe utility for correcting modification dates of video archives	84
8.1 The purpose of the Convert.exe utility	85
8.2 Starting and shutting-down the Convert.exe utility	85
8.3 Restoring changed creation dates using the Convert.exe utility	85
8.4 Working with the Convert.exe utility using the command prompt	86
9. The ddi.exe utility for editing database templates and external settings files	86
9.1 Editing intellect.dbi and intellect.ext.dbi database templates using the ddi.exe utility	87
9.2 Editing the external setting file (intellect.ddi) using the ddi.exe utility	89
9.2.1 General information on editing the external setting file	89
9.2.2 The Names tab	89

9.2.3 The Events tab	90
9.2.4 The Reactions tab	91
9.2.5 The Icons tab	92
9.2.6 The States tab	93
9.2.7 The Transition rules tab	94
10. The Arpedit.exe utility for creating user dialog windows	95
11. The idb.exe utility for converting databases, selecting database templates and making backup copies of databases	95
11.1 The purpose of the idb.exe utility	96
11.2 Running and shutting-down the utility	96
11.3 Interface elements of the idb.exe window	97
11.4 Using the idb.exe utility	100
11.5 Working with idb.exe utility with the use of keys	101
11.6 Extracting event protocol into an individual database	104
11.7 Creating the database backup copy	111
11.8 Restoring database from backup copy	114
12. The HubSearch.exe utility for searching IP-devices	115
12.1 The purpose of the HubSearch.exe utility	115
12.2 Starting and shutting-down the HubSearch.exe utility	115
12.3 Interface elements of HubSearch.exe utility window	117
12.4 Using the HubSearch utility	119
13. The MatrixCodeReader.exe utility	120
13.1 The purpose of MatrixReader.exe utility	120
13.2 Starting and shutting-down the MatrixCodeReader.exe utility	120
13.3 Interface elements of the MatrixCodeReader.exe	122
13.4 Using the MatrixCodeReader.exe	124
14. The Boards.exe utility	124
14.1 The purpose of the Boards.exe utility	124
14.2 Starting and shutting-down the Boards.exe utility	125
14.3 Interface elements of Boards.exe	126
14.4 Using the Boards.exe	127
15. Configuration check tool	128
15.1 Starting and shutting down the Configuration check tool	128
15.2 Configuration check tool interface description	132
15.3 Using the Configuration check tool	133
15.3.1 Creating a template	133
15.3.2 Downloading and editing the template	136

15.3.3 Verifying and correcting the configuration	136
16. Index.exe utility for reindexing archive files	138
16.1 The purpose of Index.exe utility	138
16.2 Starting and shutting down the utility	139
16.3 Using the Index.exe utility	139
17. The shedule.exe utility for creating a replication query file	141
17.1 The purpose of the shedule.exe utility	141
17.2 Starting and shutting-down the schedule.exe utility	141
17.3 Using the schedule.exe utility	143
17.3.1 Creating the query file for replication	143
17.3.2 Saving the query file	144
17.3.3 Opening the query file	146
18. The AxxonPlayer.exe utility for viewing and converting the video archive	147
18.1 Purpose of the AxxonPlayer.exe utility. Hardware requirements	147
18.2 Starting the AxxonPlayer.exe utility	148
18.3 Opening video files	148
18.3.1 Opening video files by specifying the path in the utility	149
18.3.2 Opening video files using the command prompt	153
18.4 Configuring the interface of the Axxon_Player.exe utility	154
18.5 Viewing video using the AxxonPlayer.exe utility	156
18.5.1 The Playback control panel	156
18.5.2 Archive navigation using the calendar	158
18.5.3 Archive navigation using the time scale	159
18.5.4 Scaling the video image	160
18.5.5 Saving the frame from the command prompt	161
18.5.6 Watermarks	162
18.6 Exporting the Intellect video archive using the AxxoPlayer.exe utility	163
18.6.1 Order of video archive export	163
18.6.2 Specifying the export folder	163
18.6.3 Going to the export panel	164
18.6.4 Creating the export task	164
18.6.5 Running the archive export	166
18.6.6 Setting the export parameters in the command prompt	167
19. The Cam_title_updater.exe utility to convert titles database	167
19.1 Purpose of the Cam_title_updater.exe utility	167
19.2 Starting and quitting the Cam_title_updater.exe utility	167

19.3 Updating titles database using the Cam_title_updater.exe utility	167
20. The SyncProtocol.exe utility to synchronize event log database	169
20.1 The purpose of the SyncProtocol.exe utility. Starting and shutting-down the utility	169
20.2 Synchronization of event log database using the SyncProtocol.exe utility	170

Summary of the Intellect utilities **Перейти к концу метаданных**

Additional *Intellect* software utilities are separate software applications intended to perform additional operations when setting up and working with *Intellect* software. This document describes the following utilities:

1. The utility for reading video capture card code and dongle
2. Converter.exe utility for converting video and audio archives
3. Tweaki.exe utility for advanced setup of the Intellect software system
4. The utility for collecting configuration data on servers and RWS for the Technical Support
5. The Fps.exe utility for productivity estimation
6. The SignCheck.exe utility for checking the authenticity of exported frames and video recordings
7. The Convert.exe utility for correcting modification dates of video archives
8. The ddi.exe utility for editing database templates and external settings files
9. The Arpedit.exe utility for creating user dialog windows
10. The idb.exe utility for converting databases, selecting database templates and making backup copies of databases
11. The HubSearch.exe utility for searching IP-devices
12. The MatrixCodeReader.exe utility
13. The Boards.exe utility
14. Configuration check tool
15. Index.exe utility for reindexing archive files
16. The shedule.exe utility for creating a replication query file
17. The AxxonPlayer.exe utility for viewing and converting the video archive
18. The Cam_title_updater.exe utility to convert titles database

The utility for reading video capture card code and dongle

The purpose of the CodeReader.exe utility

The CodeReader.exe utility is designed to read the dallas code of the cryptochip (chip) of the video capture card, which determines the card type, HID of computer and the number of the Guardant dongle.

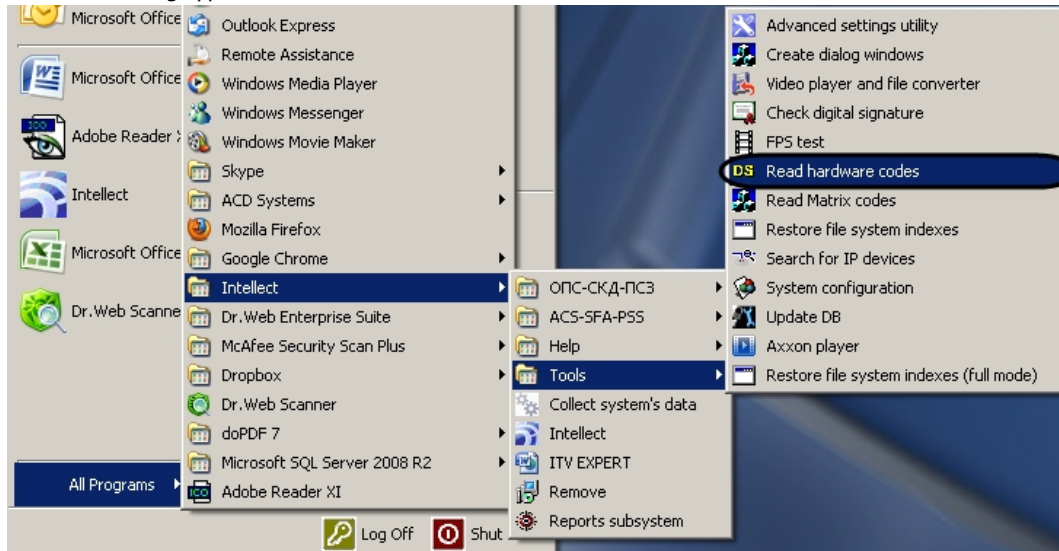
Note.

For proper operation of the utility INTELLECT™ is to be shut down.

Starting and shutting-down the utility

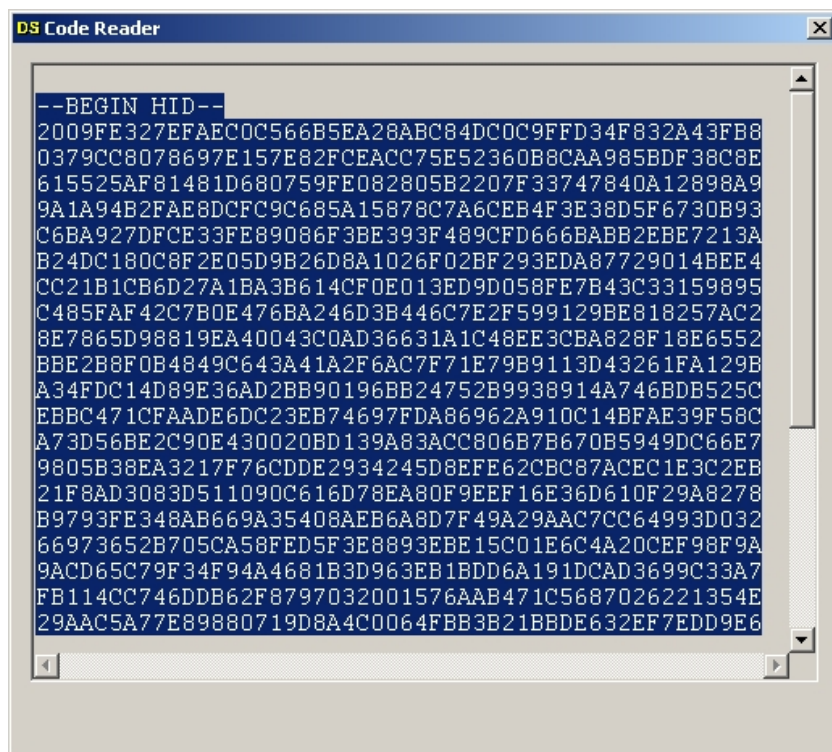
To start the CodeReader.exe utility, do one of the following:

1. Start the utility from the Windows taskbar. Click **Start**, then **All Programs**, then **Intellect**, then **Tools**, then **Read hardware codes**. The CodeReader.exe utility is available for the following types of INTELLECT™ installation: Server and Remote Admin Workstation.



2. Start the utility from the **Tools** folder of the *Intellect* folder. Example: C:\Program Files\Intellect\Tools\CodeReader.exe.

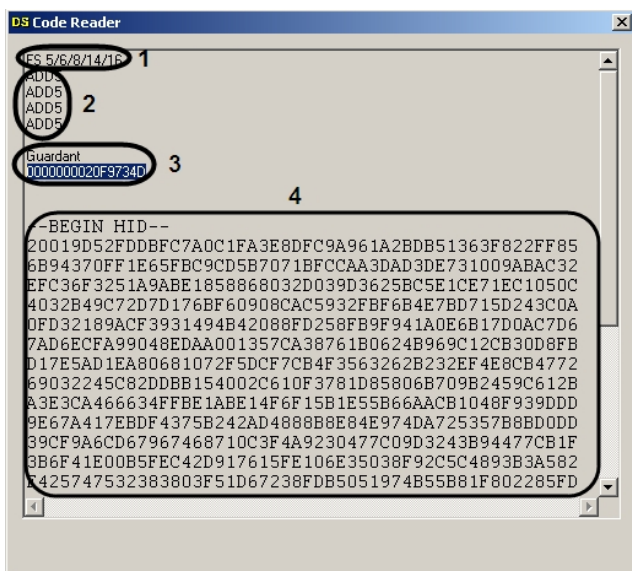
The Code Reader dialog box will open.



To shut down the CodeReader.exe utility, click the  button.

Using the CodeReader.exe utility

The CodeReader.exe utility allows determining the type of installed video capture card by its dallas code(s), HID of computer , as well as the number of the Guardant dongle. To read this information, start the utility (see the [Starting and shutting-down the utility](#) section). The type of video capture card, its dallas code(s) and the number of the Guardant dongle and HID will be displayed in the Code Reader dialog box .



The number of dallas codes depends on the number of chips on the video capture card. Figure shows that the FS6 card with 4 chips has been used.

Converter.exe utility for converting video and audio archives

The purpose of the Converter.exe utility

The Converter.exe utility is designed to play video and audio archives, and to convert them to standard formats: MPEG, DivX, etc.

Besides video and audio playback, Converter.exe utility is used for:

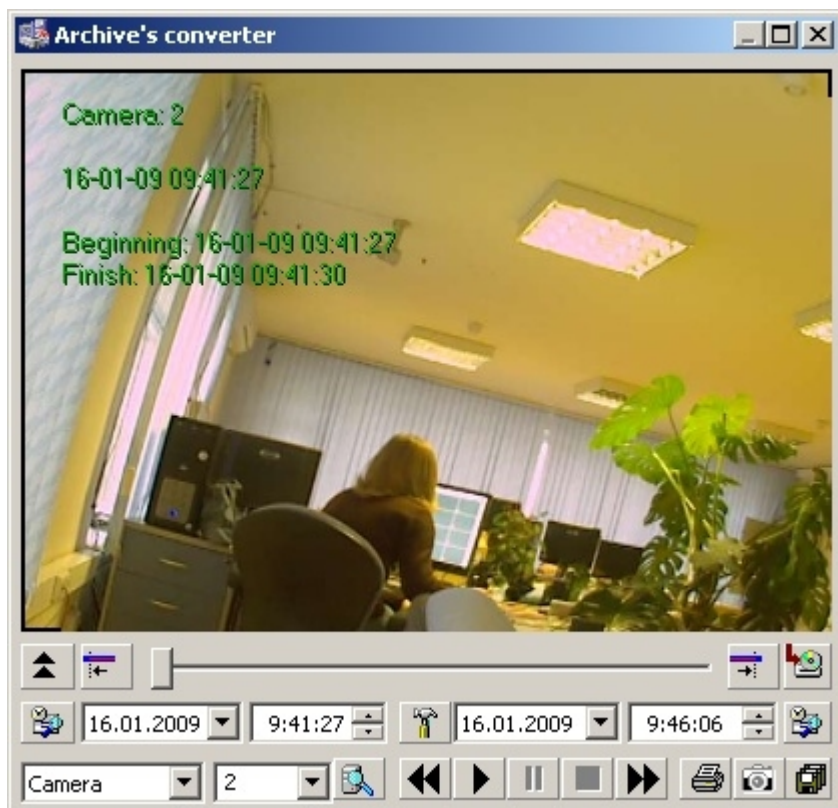
1. converting audio and video files;
2. copying the files from the archive to another folder with no data loss.

Note.

If video and audio were synchronized at the time of recording, the converted video file will contain sound track.

The utility can be started from the **Tools** folder of the Intellect program folder or from the **Start** menu: **Start -> Programs -> Intellect -> Utilities -> Playback and Conversion**.

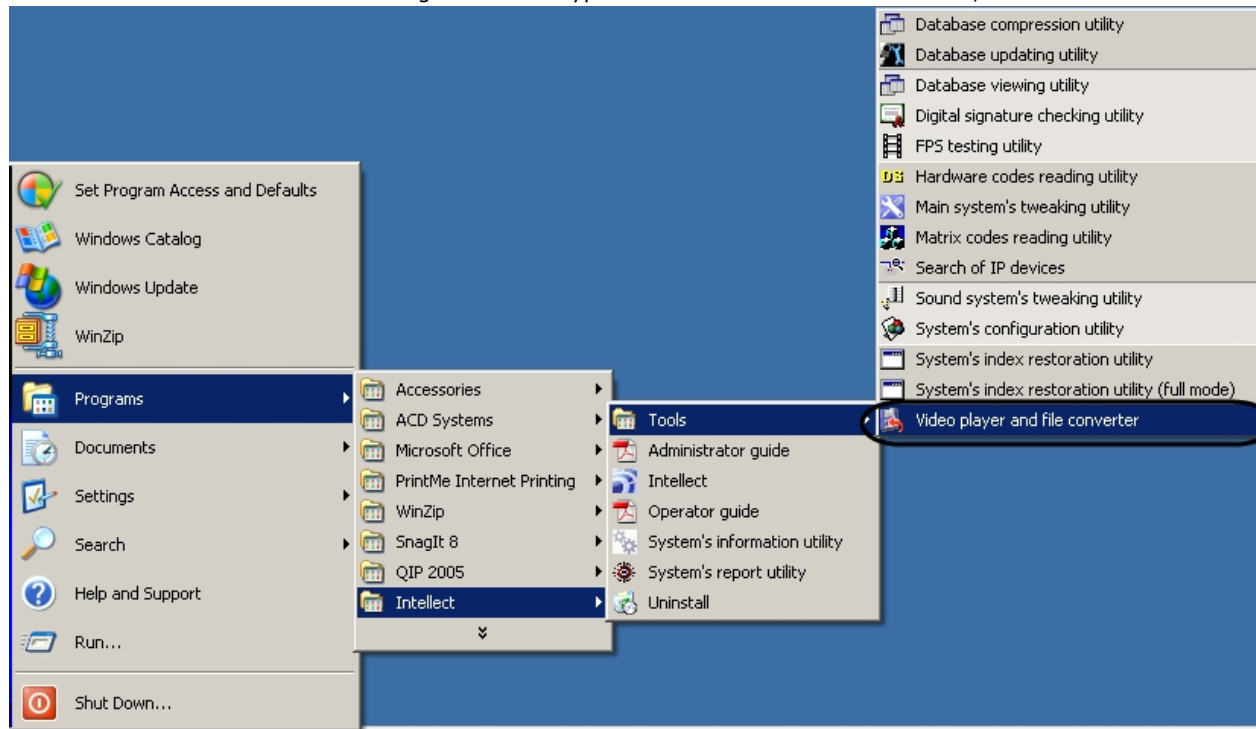
The utility dialog box is shown in the figure.



Starting and shutting-down the Converter.exe utility

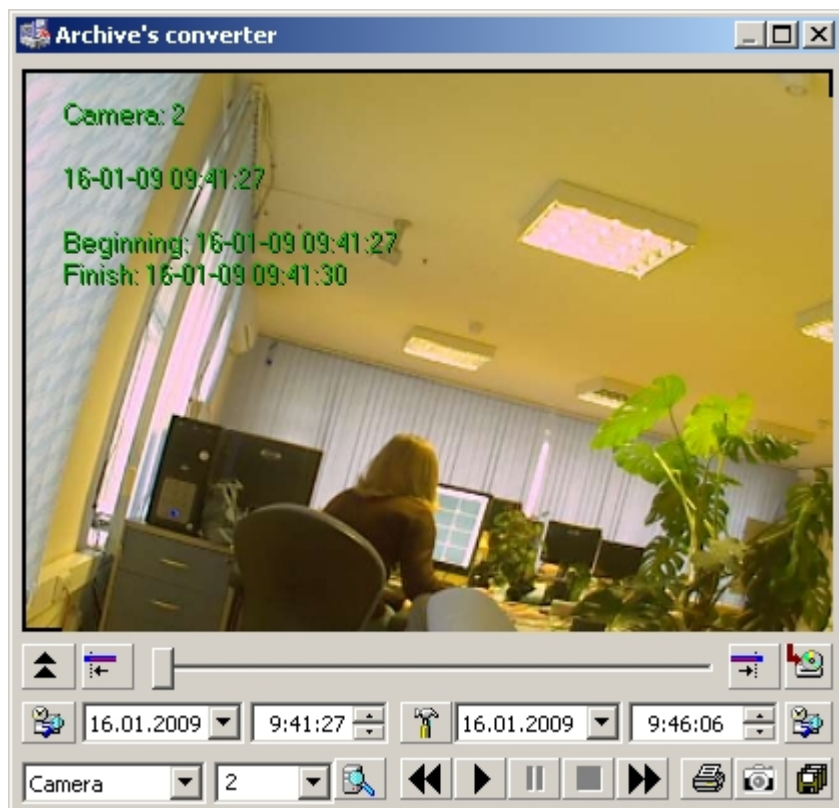
To start the Converter.exe utility, do one of the following:

1. Start the utility from the Windows taskbar. Click **Start**, then **Programs**, then **Intellect**, then **Utilities**, then **Playback and Conversion**. The Converter.exe utility is available from the **Start** menu with the following installation types of the Intellect software: Server, Remote administrator workstation, Remote client.

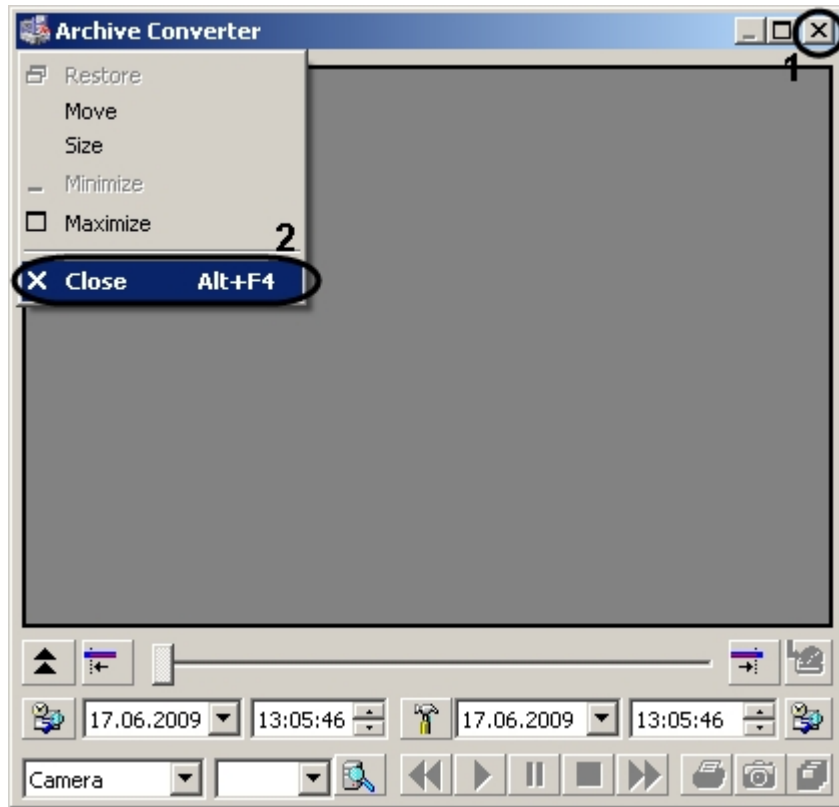


2. Start the utility from the Tools folder of the Intellect program folder. Example: C:\Intellect\Tools\converter.exe.

Archive Converter dialog box will open.



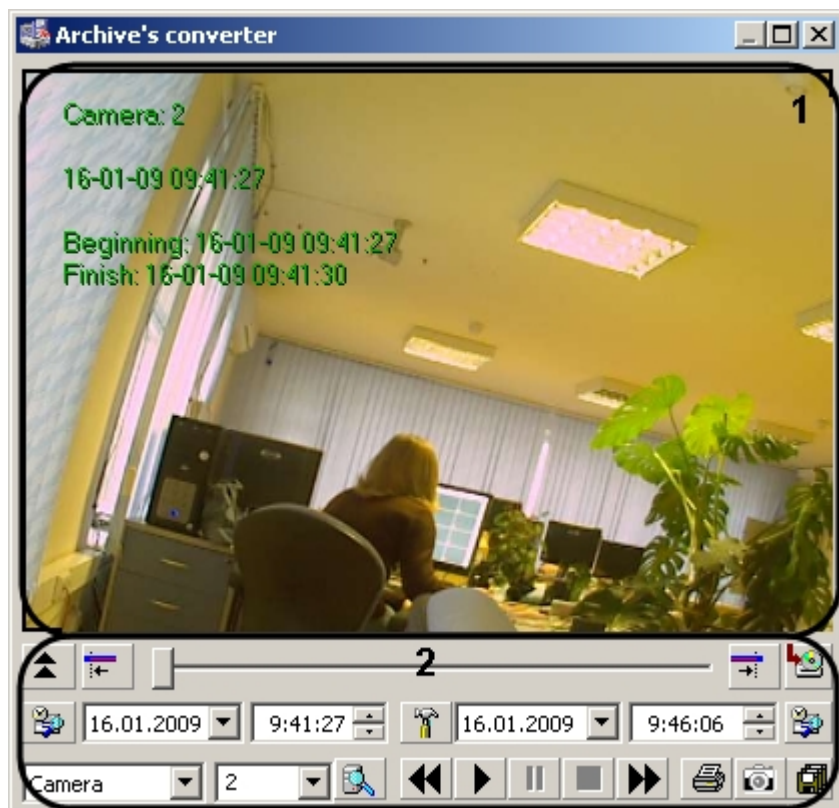
To close the Converter.exe utility, either click the cross button in the top right corner of the dialog box, or press Alt+F4 on the keyboard.



Converter.exe interface

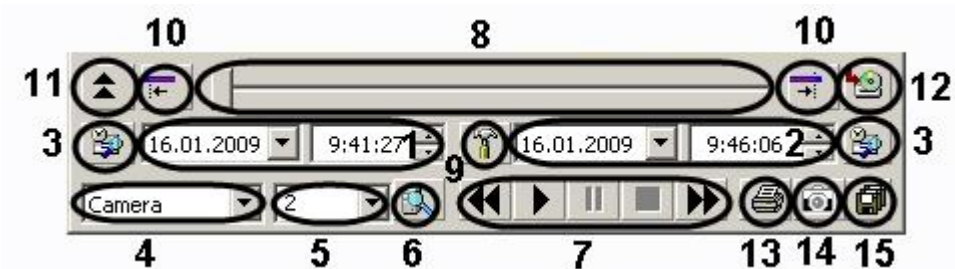
The Archive's Converter dialog box

The dialog box of the converter.exe utility is shown in the figure.



The Archive's Converter dialog box comprises of the following elements:

1. The screen to play back recordings (1);
2. The control panel for video and audio recordings playback (2).
The elements of the control panel are described in the table.



№	Element name	Description
1	Recording start date and time	Fields for entering the approximate start date and time of the video or audio recording
2	Recording end date and time	Fields for entering the approximate end date and time of the video or audio recording
3	Go to first / last frame	Buttons for quick moving of the slider to the beginning or the end of the recording
4	Device	Drop-down list field for selecting the device (camera, microphone), for which the recording should be found in the archive
5	Device number	Drop-down list field for selecting the number of the device, for which the recording should be found in the archive
6	Search	Button for starting the search of recordings in the archive of the chosen device. The recordings are searched in the entire archive of the device. After the search is completed it is possible to specify the approximate beginning and end date and time for required recording.
7	Playback panel	The panel consists of standard functions (left to right): fragment back, play, pause, stop, fragment forward.
8	Time scale	The scale allows monitoring the playback progress and moving between the frames. To move between the frames, drag the slider or use the playback panel buttons in a per frame playback mode.
9	Export setup	The button for opening the Export Setup dialog box
10	Exported recording limits	The buttons for setting up the first and the last frames of the recording fragment to be exported
11	Hide/show the list	The button for hiding and showing the list of selected recordings
12	Add to list	The button for placing the selected recording (recording fragment) on the list

13	Print frame	The button prints the current frame
14	Frame export	The button exports the current frame in a specified format. A dialog box opens for selecting the folder on the disk and entering the file name.
15	Export to AVI or archive	The button for starting the export of the recording (fragment) in the specified format. A dialog opens for selecting the device name, which made the recording. On export start, a folder is created for saving the exported recordings (by default, C:\Backup).

The Export Settings dialog box

To open the **Export Settings** dialog box, click the  button in the **Archive's Converter** window. The **Export Settings** dialog box will open, allowing to specify export parameters.

Export Settings

Choose folder

Destination: C:\Backup

Volume Size, MB: 650

Frames per second: RealTime

☐ Native Archive
 ☒ AVI File

☐ Native Format
 ☒ Break To Alarms

Frame Export

☐ Bitmap
 ☒ Jpeg

Quality: 80

Compression

☒ Video
 ☐ Full Frames (Uncor)
 ☐ Audio
 ☐ PCM, 8,000 kHz;

Titles

Point Of Sale: [] ☐ Name, Date Time

X: 5 Y: 5 W: 100 H: 100 Font

Screen

☒ Overlay
 ☒ Keep Aspect Ratio

☐ Always On Top
 ☒ Split AVI files

☐ Digital signature
 OK

No	Parameter name	Field type	Description	Format	Default value	Value range
The Choose folder group						
1	Destination	Type-in the value	Type-in the folder on the disk to store the exported files (by default the Backup folder is created on disk C:)	-	-	-
2	Volume Size, MB	Type-in the value	Type-in the maximum value of the volume (file) size containing one or more recordings.	MB	650	0 to 2000 MB

			If the size of recording for export exceeds the set one, then it will not be split. When the recording is added to the volume, the size of recording is expected to equal the mean value of sizes of all added recordings. A new recording is added to the volume if it does not exceed the volume size. A real size of recording can differ from the assumed one, therefore the volume size can exceed the assumed one. If the Break To Alarms checkbox is checked, each volume will contain one recording only. The field is disabled if the Native Archive parameter is activated.			
3	Frames per second	Select in a drop-down list	Type-in the amount of scaling of the video recording	fps	RealTime	0.5; 1; 3; 5; 15; 30; RealTime
4	Native Archive AVI File	Select a radio-button	If the Native Archive radio-button is selected, then archive fragments will be exported keeping the creation time, but with no AVI conversion. If the AVI File radio-button is selected, then the fragment is converted to the AVI format using the specified codec.	-	AVI File	1. Native Archive 2. AVI File
5	Break To Alarms	Checkbox	The checkbox is for selecting the way of storing the archive export fragments to volumes (files of specified size): the recordings for each alarm will be saved to separate volumes (files).	-	Unchecked	Unchecked – the file (volume) will contain a fragment of the size specified in the Volume Size, MB field. Checked – the volume will contain a fragment related to one alarm only.

6	Native Format	Checkbox	If the Native Format checkbox is checked, then video recordings are exported to AVI file without recompression, i.e. in the same format as in Intellect archive. To playback these AVI files on the computer without Intellect software package installed, install components from Intellect distributive beforehand: 1. \Redist\VC2005_Sp1\vcredist_x86.exe 2. \Redist\CamMonitor\CamMonitorInstaller.exe Note. To playback AVI files use Windows Media Player.	-	Unchecked	Unchecked – Intellect archive is exported to AVI file with recompression. Checked - Intellect archive is exported to AVI file without recompression.
The Frame Export group						
7	Bitmap Jpeg	Select a radio-button	If the Bitmap radio-button is selected, then the file is saved in Bitmap format. If the Jpeg radio-button is selected, then the file is saved in Jpeg format.			
8	Quality	Set the slider	The parameter specifies the quality level of the exported file. The value of 100% results in no quality loss.	%	80	0 to 100
The Compression group						
9	Video	Click the button	The button is for selecting and setting up the video codec used to compress video recordings. If the Native Archive radio-button is selected or the Native Format checkbox is checked, then this button is disabled.	-		-

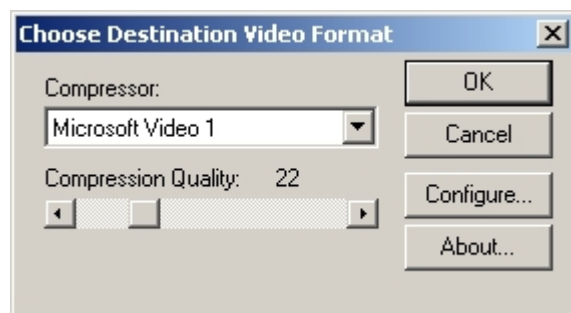
10	Field next to the Video button	Not to be edited	The field shows the info on selected video codec. If the Native Archive radio-button is selected, then this field is disabled.	-	Full Frame (Uncompressed), Quality: 0	The list of codecs found by the utility.
11	Audio	Click the button	The button is for selecting and setting up the quality of the exported audio. The Native Archive radio-button is selected, then this button is disabled.	-	-	-
12	Field next to the Audio button	Not to be edited	The field shows the selected audio format.	-	PCM, 8000 kHz; 16 bit; Mono	The list of quality levels detected.
The Screen group						
13	Overlay	Checkbox	If the Overlay checkbox is checked, there is Overlay II conversion	-	Checked	Checked – use Overlay II for conversion Unchecked – do not use Overlay II for conversion
14	Always On Top	Checkbox	If the Always On Top checkbox is checked, then Converter window is always over all other windows	-	Unchecked	Checked – the window is displayed on top. Unchecked – the window is not displayed on top.
15	Keep Aspect Ratio	Checkbox	If the Keep Aspect Ratio checkbox is checked, the aspect ratio of Converter window is fixed.	-	Unchecked	Checked – 3:2 ratio is kept when the size of the dialog box is changed. Unchecked – 3:2 ratio is not kept when the size of the dialog box is changed.
16	Split AVI files	Checkbox	Activates export of selected video recordings to the separate AVI files. Note. If the checkbox is not checked, video recordings from one camera are exported to one AVI file.	-	Checked	Checked - video recordings are exported to the separate AVI files. Unchecked - video recordings are exported to one AVI file.
17	Digital signature	Checkbox	Activates adding digital signature that is used for checking frame	-	Unchecked	Checked – digital signature is added.

		authenticity to exported frames. Note. Checking frame authenticity is performed using SignCheck.exe utility (see The SignCheck.exe utility for checking the authenticity of exported frames and video recordings section)		Unchecked - digital signature is not added.
--	--	--	--	--

If a microphone was selected as a device in the dialog box of Converter.exe utility, only the **Audio** button and the **Screen** group are enabled.

A dialog box for choosing the video codec

The Video button in the **Export Setup** dialog box opens a dialog box for choosing a video codec to be used for video compression.



No	Parameter name	Field type	Description	Format	Default value	Value range
1	Compression program	Select from drop-down list	The button allows selecting and setting up the video codec used to convert and compress the video image.	Codec name	Full frames (no compression)	All video codecs recognized by the operating system
2	Compression quality	Drag the slider	The slider allows setting the compression level. The zero position of the slider represents the highest compression and lowest quality. Changing this parameter is enabled if the codec is selected in the Compression Program field.	%	0	0 to 100
3	Setup ...	Click the button	The button opens the settings panel of the	-	-	-

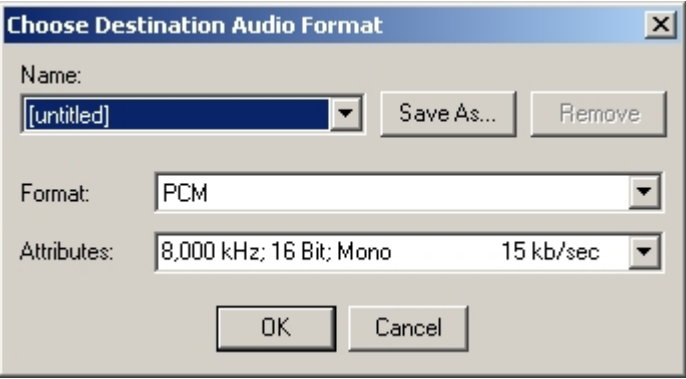
			video codec. See the codec manual for details.			
4	About	Click the button	The button opens an information box with codec details.	-	-	-

Note.

If AVI format is used, the resultant file size should not exceed 2 GB.

A dialog box for choosing the audio format

The **Sound** button in the **Export Setup** dialog box opens a dialog box for choosing an audio format.



No	Parameter name	Field type	Description	Format	Default value	Value range
1	Name	Select from drop-down list	The field allows choosing the name for the selected audio format.	Format name	Untitled	Untitled CD Quality Radio Quality Telephone Quality Compact disk
2	Format	Select from drop-down list	The field for selecting the format	Format name	PCM	The list of audio formats used by the utility.
3	Attributes	Select from drop-down list	The list of sound characteristics: playback	Parame-ter values	PCM, 8000 kHz, Mono	

			/recording frequency (8000 kHz), digitizing level (8, 16, etc bits), channel type (mono /stereo)			The list of characteristics, recognized by the operating system
4	Save as...	Click the button	The button allows creating a unique name for the selected format. To save a format under a unique name: 1. Select Untitled in the Name field. 2. Select the values in the Format and Attributes fields. 3. Click the Save As button 4. Enter a unique name in the Save This Format As field and click OK. The newly created name will appear in the Name drop-down list.	String	-	-

Using the Converter.exe utility

General description of the Converter.exe utility

The Converter.exe utility is designed to convert and play back audio and video recordings from the archive and save them to a specified folder.

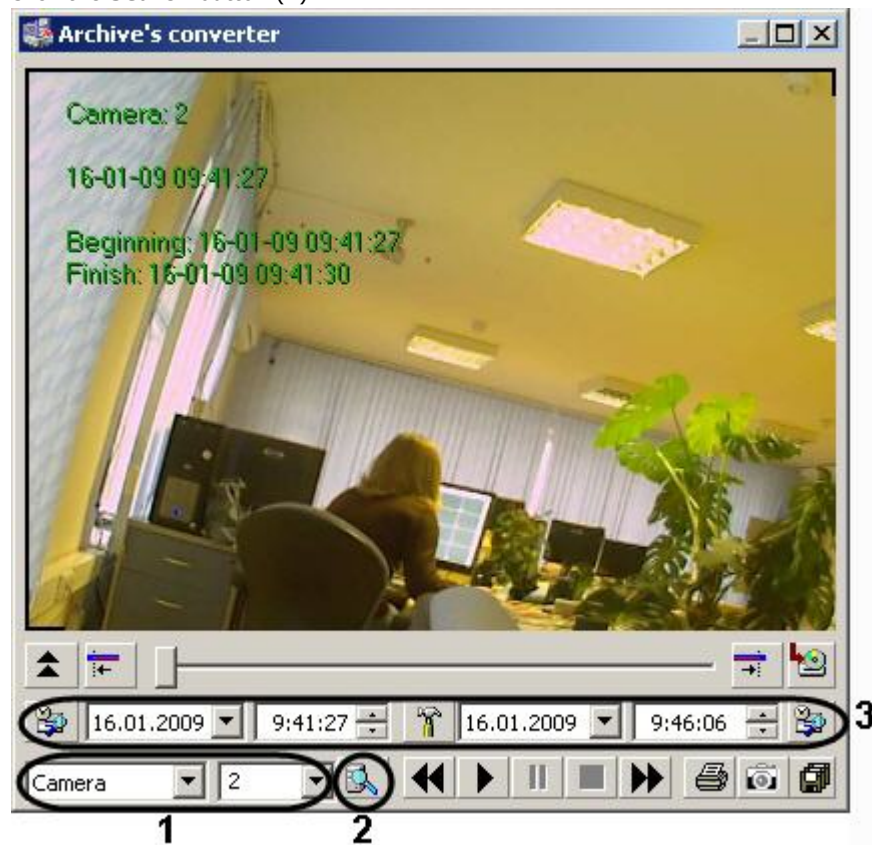
Using the Converter.exe utility includes:

1. Starting the utility (see [Starting and shutting-down the Converter.exe utility](#)).
2. Selecting an archive (see [Selecting an archive to be played or converted](#)).
3. Finding a recording in the selected archive (see [Selecting an archive to be played or converted](#)).
4. Playback of the recording (see [Recording playback](#)).
5. Finding the required recording fragment or frame (see [Searching for a video recording](#)).
6. Setting the export or conversion parameters (see [Converting video and audio archives to AVI files](#)).
7. Exporting the fragment or printing the frame (see [Exporting recordings and frames](#)).
8. Shutting-down the Converter.exe utility (see [Starting and shutting-down the Converter.exe utility](#)).

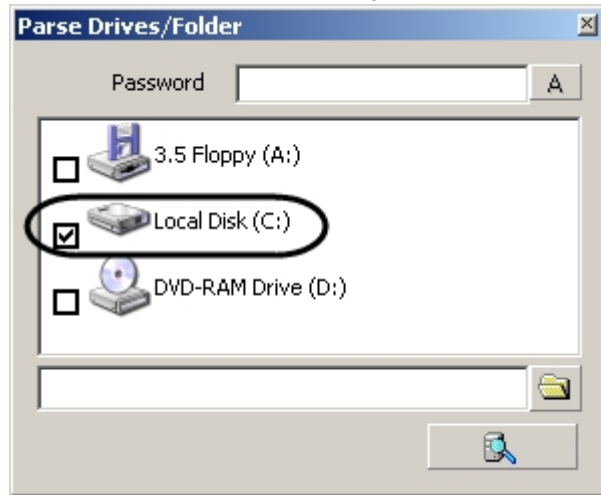
Selecting an archive to be played or converted

To search an archive for a recording, do the following:

1. Select the device the recording was made by, and its number (1).
2. Click the **Search** button (2).



3. Select the location of the archive (folder with archives for specific date and time) on an appropriate disk.



4. Click the  button.
5. Specify the time limits in the date/time fields (3).

The first frame of the required recording will be displayed in the video playback screen.

Note.

In case of searching for an audio recording, no visible signs of finding the recording will be shown. To check that a recording was found, play it.

Note.

Speed of records search directly depends on their number. The search process can take a lot of time if the archive depth is rather big and reading is performing from the network disk.

Note.

If video files that are to be opened were not recorded, but copied, then start the Convert.exe utility to open the archive (see [The Convert.exe utility for correcting modification dates of video archives](#) section):

- If the archive is created in the same time zone as it is viewed, then start the utility with the fullmode parameter:
convert.exe fullmode

- If the archive is created in different time zone than it is viewed, then move the archive to the current time zone by starting the utility with the following parameters in the command prompt:
convert.exe fullmode TZ +hh:mm
where +hh:mm is the time shift between the current time zone and the time zone of the archive.

Otherwise the folders with video files fail to open.

Searching for a video recording

After the approximate time interval is selected using the date/time fields, and the required archive is found, it may be necessary to find a particular fragment or frame to be played or exported.

Searching for a fragment in a recording

To find the required video fragment in the selected recording, do the following:

1. Click the **Play** () button in the playback control panel.
2. When the required fragment appears, click the **Pause** () button.
3. Click the **Fragment Start** () button to make the current frame the start of the fragment.
4. Click the **Play** () button in the playback control panel.
5. When the required fragment ends, click the **Fragment End** () button to make the current frame the end of the fragment. All subsequent frames will be omitted.

The resultant recording fragment will then be available for conversion or export, maintaining the format and the creation date.

Searching for a frame in a recording

To find a particular frame in the selected recording, do the following:

1. Click the **Play** () button in the playback control panel.
2. When the required frame appears, click the **Pause** () button to enter the per frame playback mode.

Note.

If the recording is to be played back in the per frame playback mode starting with the first frame, then click the **Pause** () button instead of the **Play** () button.

3. Keep clicking the **Fragment Forward** () and **Fragment Back** () buttons, to browse the frames until the required frame appears on the screen.

The resultant frame may be printed or used as a starting frame for a fragment (see [Searching for a fragment in a recording](#) section).

Note.

To quit the per frame playback mode, click the **Pause** () button once more.

Recording playback

The recording selected by date and time, can be played in Converter.exe player using the playback control panel.



The panel contains five control buttons (left to right on the figure): **Fragment Back, Play, Pause, Stop, Fragment Forward**, allowing to play, pause, stop and browse the fragments.

1. When the **Stop** button is down (clicked), clicking the **Fragment Forward** or **Fragment Back** buttons moves to the next or previous fragment.
2. Clicking the **Play** button plays the fragment from beginning to end. If the recording contains several fragments, the **Play** button should be clicked to play each of them.
3. To play the whole recording consisting of several fragments, in one go, click the **Play** button, then click it again and hold for 3 seconds. The button then changes its appearance from  to .
4. To play the recording in the per frame mode: a) click **Play**, b) click **Pause**, c) keep clicking **Fragment Forward** or **Fragment Back** to view frames one by one.
5. To view the fragment in accelerated mode click the **Play** button and then click the **Fragment forward** to accelerate twice relatively the previous speed. The current playback speed is displayed in titles above video image.
6. To view the record section in jog mode click the **Play** button and then click the **Fragment backward** to slow down twice relatively the previous speed. The current playback speed is displayed in titles above video image.

Converting video and audio archives to AVI files

Video and audio archives are converted into AVI format according to Converter.exe settings, using the **Export Setup** dialog box. The level of compression of the exported recording is determined by the following parameters:

1. **Frames Per Second** parameter – setting the value of scaling of the recording;
2. **Video** button – selection of the video codec, in case of video archive export;
3. **Sound** button – set the sound quality parameters (frequency, bitrate, etc), in case of audio archive export.

Note.

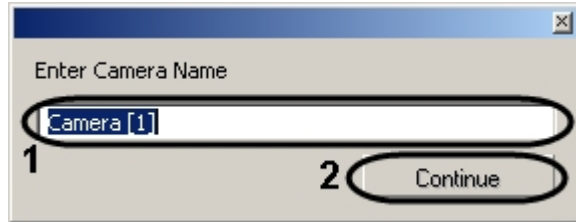
If AVI format is used, the resultant file size should not exceed 2 GB.

Exporting recordings and frames

Export of the recordings is one of the main functions of the Converter.exe utility. There are two ways of exporting records from an archive:

1. Export to AVI option converts (compresses) a recording and breaks it down into volumes (files of the size specified in the Export Setup dialog box). To export the recording as AVI, do the following:

1. Find the recording in an archive (see the [Selecting an archive to be played or converted](#) section).
2. In the **Export Setup** dialog box, select the **Export to AVI** radio-button.
3. Click the **Video** or **Sound** button to specify the conversion parameters. Click the **OK** button.
4. Click the **Export to AVI/Archive** button () to start exporting.
5. Enter the name of the device folder to save the recording to (1), then click **Continue** (2).



The export progress will be shown in the title bar of the Converter.exe window.



The title bar will read **Complete**, when exporting is completed. To verify the results, open the Backup folder and find the file named after the device from which archive the recording was exported.

2. The Export to Archive option allows copying the files from an archive to another location on the disk with no conversion, maintaining the recording creation date and an option for breaking it down into volumes.

To export a recording in the same format as it is stored in the archive, do the following:

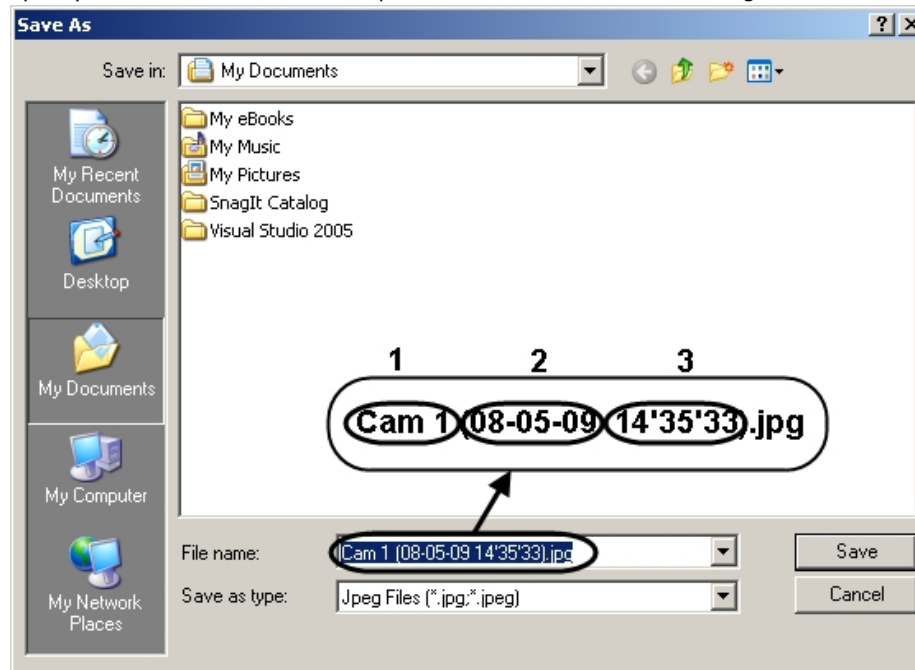
1. Find the recording in the archive (see the [Selecting an archive to be played or converted](#) section).
2. In the **Export Setup** dialog box, select the **Export to Archive** radio-button.
3. Specify volume size in the **Export Setup** dialog box. Click the **OK** button.
4. Click the **Export to AVI/Archive** button () to start exporting.

Note.

If AVI format is used, the resultant file size should not exceed 2 GB.

The Converter.exe utility allows exporting frames into bitmap and JPEG formats. Do the following:

1. Find the required frame (see the [Searching for a frame in a recording](#) section).
2. In the **Export Setup** dialog box, specify the parameter values in the **Frame Export** group. Click the **OK** button.
3. Click the **Export Frame** button ().
4. Specify the location to save the exported file to in the **Save As** dialog window.



The file name will be generated automatically in the following format: 1) name and number of the camera where the frame comes from; 2) creation date; 3) creation time. The file extension corresponds to the file format selected in the **Export Setup** dialog box.

5. Click the **Save** button.

Using a command prompt to work with the Converter.exe utility

Video and frames can be exported with the help of a command prompt using the following commands:

Converter.exe Disc:\File,Number_Cam,StartDate StartTime,StopDate StopTime,CameraName

Converter.exe Disc:\File,Number_Cam,StartDate StartTime,,CameraName

Note.

If **StopDate** and **StopTime** parameters are not specified, then ',' is to be specified instead.

The table describes the command parameters.

Parameter	Description
Disk	Disk for storing exported files
File	Name of a catalogue or file. Note 1. <i>If the catalogue or file specified in the command does not exist, it will be created automatically.</i> Note 2. <i>To export archive (video record in the original format) only catalogue name is to be specified.</i>
Number_Cam	Number of a camera which performs the recording
StartDate	Date of record start (dd-mm-yy)
StartTime	Time of record start (hh:mm:ss)
StopDate	Date of record end (dd-mm-yy). Note. <i>Parameter is not in use while exporting the separate frames</i>
StopTime	Time of record end (hh:mm:ss) Note. <i>Parameter is not in use while exporting the separate frames</i>
CameraName	Name of the camera that is to be displayed in the titles on the exported video, as well as the name of the folder created in the specified export folder used for storing exported files.

The example of using the command prompt to export files is shown in the figure.

```
Command Prompt
Microsoft Windows XP [Version 5.1.2600.1]
(C) Copyright 1985-2001 Microsoft Corp.

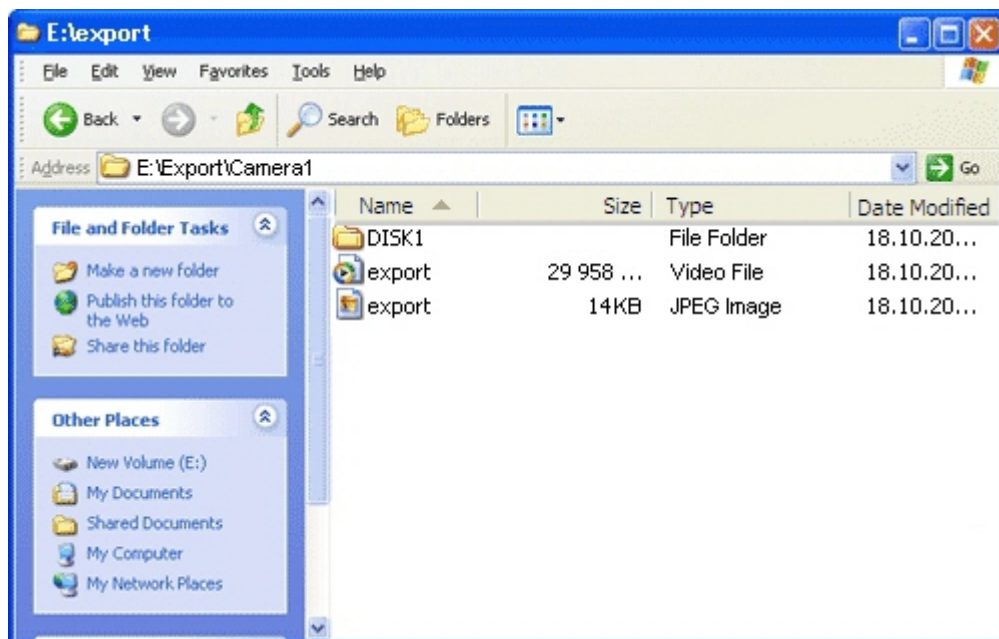
C:\Program Files\Интеллект\Tools>Converter.exe E:\Export,1,26-01-15 11:10:30,26
01-15 11:35:07,Camera 1

C:\Program Files\Интеллект\Tools>Converter.exe E:\Export\export.avi,1,26-01-15
1:10:30,26-01-15 11:35:07,Camera 1

C:\Program Files\Интеллект\Tools>Converter.exe E:\Export\export.jpg,1,26-01-15
1:10:30,26-01-15 11:35:07,Camera 1

C:\Program Files\Intellect\Tools>_
```

As a result the "export" folder containing the exported files is created on the local disk "E".



Printing a frame

To print a frame, do the following:

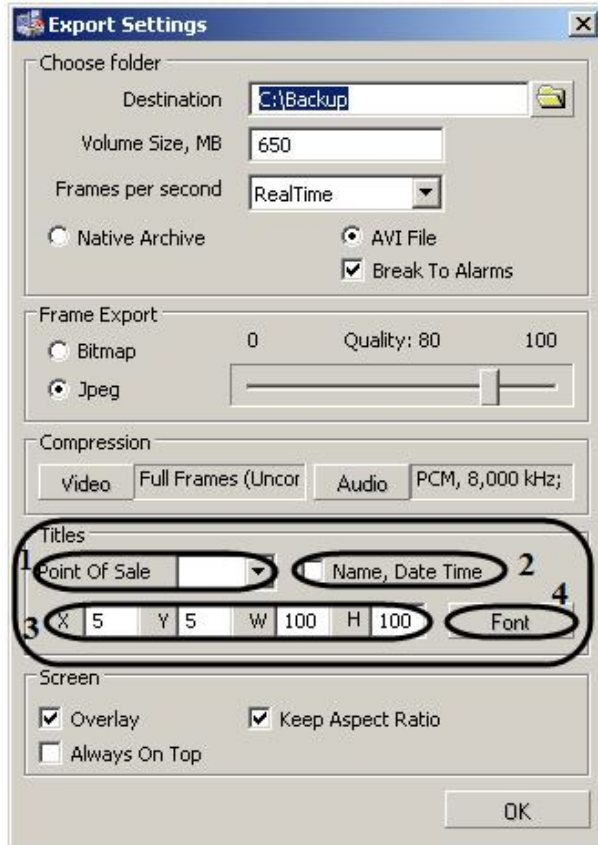
1. Find the required frame (see the [Searching for a frame in a recording](#) section).
2. Click the **Print Frame** button ().
3. A standard dialog box for printing and printer setup will be opened.

Exporting video with titles

Video with titles is exported as follows:

1. Run the Converter.exe utility(see [Starting and shutting-down the Converter.exe utility](#)).
2. Call for **Export Settings** dialog window in the opened window of Converter.exe utility and set its groups **Choose folder**, **Frame Export**, **Compression** and **Screen** (see. Interface description of [The Export Settings dialog box](#)).

3. Set the titles displaying in the **Titles group** in the dialog window **Export Settings**; table shows parameters description of the given.



Nº	Parameter name	Parameter description	Value range
1	Point of sale dropdown list	Name of cash terminal, titles from which should be laid over the video recording while viewing and exporting the frames and recordings with the help of Converter.exe utility.	Empty value– titles from all the titrates overlay function . no - overlay function is off. Number of cash terminal (from one and above) – function of displaying the titles concerning the given cash terminal.
2	Checkbox Name, Date, Time	When the given checkbox is activated , lines, containing name and number of a camera, date and time of creation of the given video frame , will be laid over the video recording.	Yes – lines, containing name and number of a camera, date and time of creation of the given video frame , will be laid over the video recording.

			No – lines, containing name and number of a camera, date and time of creation of the given video frame , will not be laid over the video recording.
3	Editing text fields X, Y, W, H	Coordinates and area size , taken by titles in the video recording. Is expressed in percentage relative to the screen size of video recording playback.	From 0 and above. Depends on the screen size of video recording playback.
4	Font button	Font selection of titles displaying.	-

Note.

If the cash terminal is selected, its value will not be saved with the repeated run of Converter.exe utility. On default displaying titles from all the titers is set.

4. To apply the settings it is necessary to click **OK** button. To cancel settings one should click the cross mark in the upper right corner of **Export Settings** dialog window.
5. Dialog window of Converter.exe utility for exporting the required file will open in result (see. [Exporting recordings and frames](#)).

Export of video recordings with titles is completed.

Tweaki.exe utility for advanced setup of the Intellect software system

The purpose of tweaki.exe utility

The tweaki.exe utility is designed for configuring the *Intellect* system by editing the sections of the Windows registry, where the setup parameters for the *Intellect* core and modules are stored:

- For 64-bit systems, the sections are HKLM\SOFTWARE\Wow6432Node\ITV and HKCU\SOFTWARE\Wow6432Node\ITV.
- For 32-bit systems, the sections are HKLM\SOFTWARE\ITV and HKCU\SOFTWARE\ITV.

Attention!

Specifying invalid values of the registry keys may lead to system failure.

The Tweaki.exe utility provides the following functionality:

1. Setup of Intellect system start-up (see [The Settings panel of the Windows section](#));
2. Enabling the debug mode (see [Selecting and enabling the debug mode of Intellect software](#));
3. Advanced setup of the video surveillance monitor (see [The Settings panel of the Video subsystem section](#));
4. Advanced setup of events logging (see [The Settings panel of the Intellect section](#));
5. Advanced setup of video signal processing by Server (see [The Settings panel of the Video subsystem section](#));
6. Advanced setup of distributed architecture (see [Extended setup of the distributed architecture](#));
7. Changing netnames and IP-addresses in the configuration database (see [Changing computer names and IP-addresses in the configuration database of the Intellect system](#));

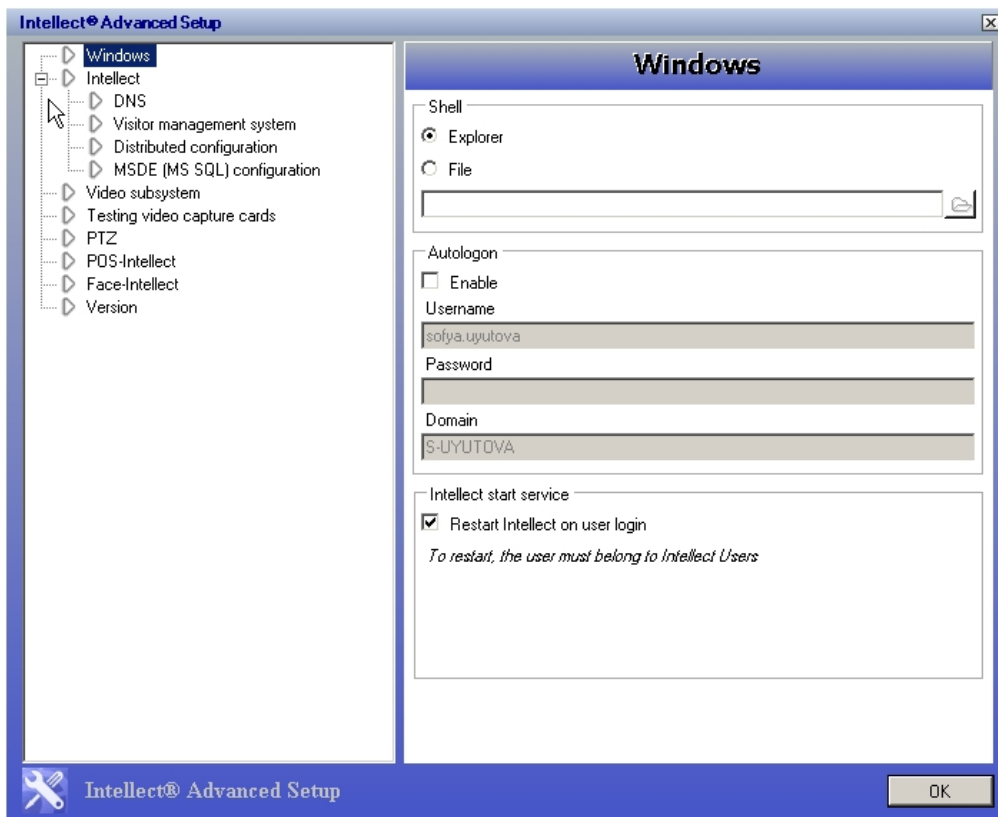
8. Limiting the RAM used by MS SQL server (see [Limiting memory usage by an MS SQL server](#));
9. Advanced setup of audio or video recording to an archive (see [The Settings panel of the Video subsystem section](#));
10. Re-indexing audio and video archives (see [Re-indexing the audio and video recordings archive](#));
11. Selecting the analog video out operation mode [The Settings panel of the Video subsystem section](#));
12. Testing the operability of video capture cards (see [Testing video capture cards](#));
13. Advanced setup of PTZ devices (see [The Settings panel of the PTZ section](#));
14. Displaying versions of Intellect modules (see [The Settings panel of the Version section](#));
15. Advanced setup of Face-Intellect (see [The Settings panel of the Face-Intellect section](#));
16. Advanced setup of POS-Intellect (see [The Settings panel of the POS-Intellect section](#)).

Starting and shutting-down the Tweaki.exe utility

To start the tweaki.exe utility, do one of the following:

1. Start the utility from the Windows taskbar. Click **Start ==> All Programs ==> Intellect ==> Tools ==> Advanced settings utility**. The tweaki.exe utility is available from the **S tart** menu with the following installation types of Intellect: Server, Remote administrator workstation, Remote client.
2. Start the utility from the **Tools** folder of the *Intellect* program folder: C:\Intellect\Tools\Tweaki.exe.

The **Intellect Advanced Setup** dialog box appears after running the tweaki.exe utility.

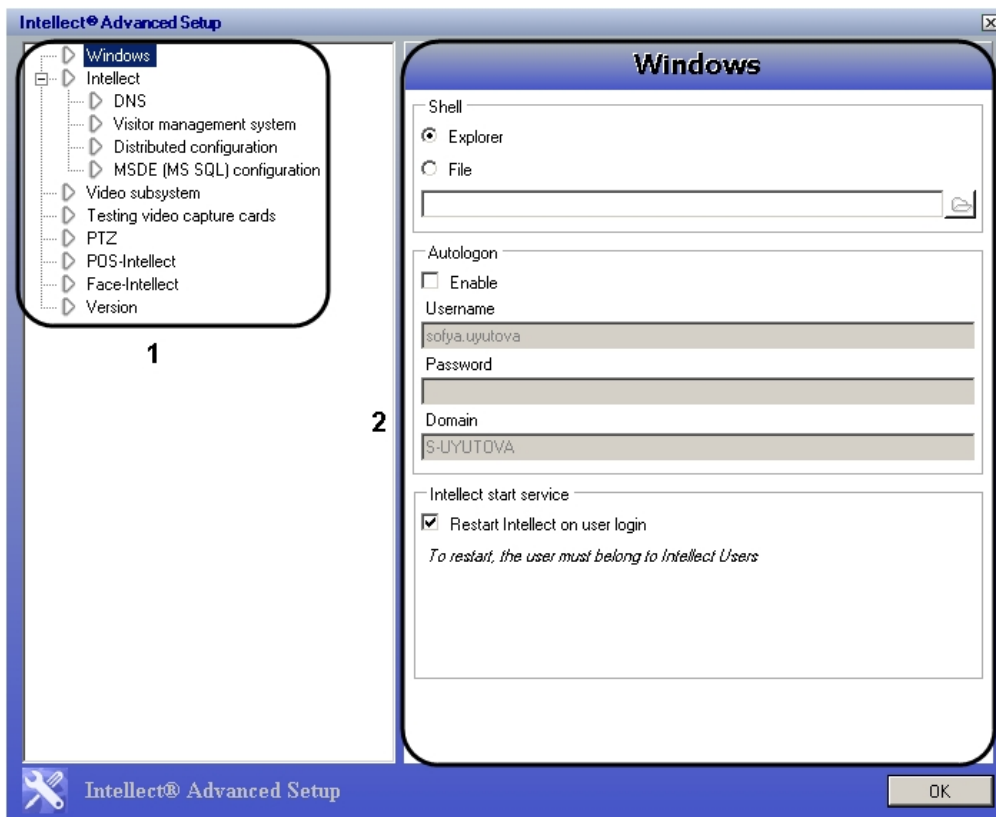


To shutdown the tweaki.exe utility and save the changes click **OK** . To shutdown the tweaki.exe utility without saving the changes, click .

Interface of the Tweaki.exe utility

The user interface of the tweaki.exe utility consists of two interrelated elements:

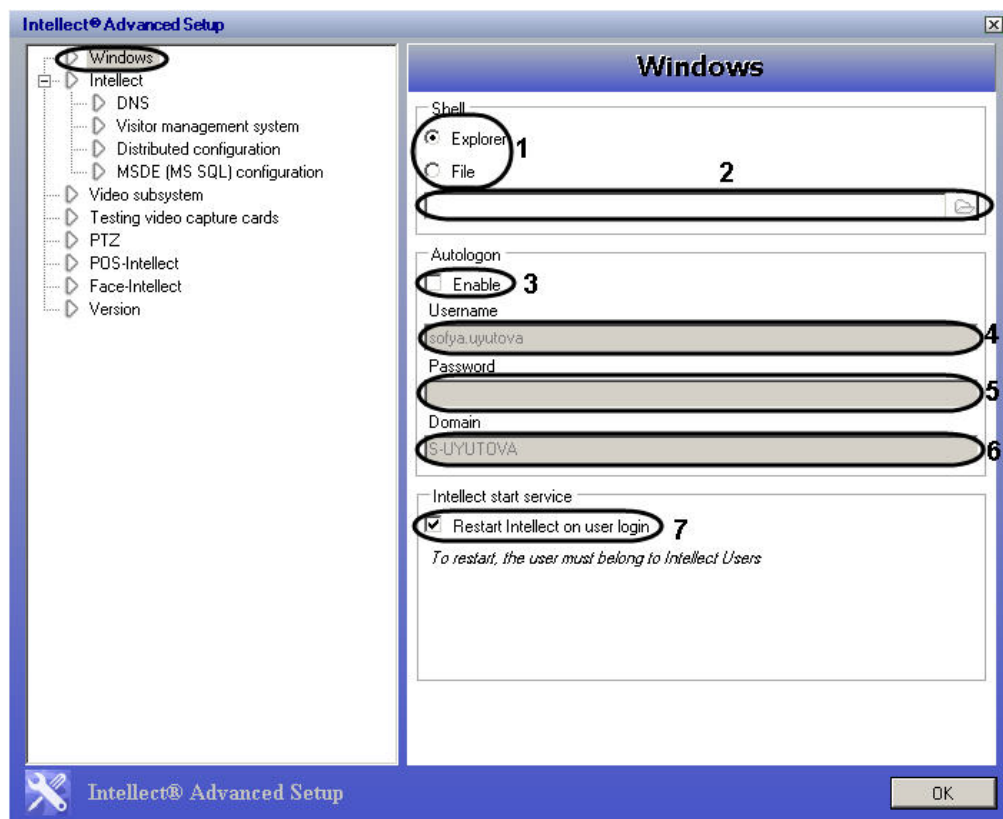
1. Tree of sections (1).
2. Settings panel for each section (2).



Sections tree of the tweak.exe dialog box has static structure and is used for navigation in the utility. To access the settings panel for the required section, left-click the corresponding tree tab.

The Settings panel of the Windows section

The **Windows** section is used to set Windows running Windows OS. The settings panel for the **Windows** section is shown in the figure.



The parameters of the **Windows** setting panel are described in the table.

No	Parameter name	Field type	Description	Representation	Default value	Value range
The Shell group						
1	The Explorer/ File switch	Set in the position	Selection of Windows working shell Attention! Disable UAC to run the Intellect software package as the shell. Configuration of the local security policy is required for full disabling of UAC in the Windows 8 and Windows 8.1 OS – see OS settings for correct operation of	-	Explorer	Explorer – Microsoft Explorer is loaded as working Windows OS shell (corresponds to standard Windows OS settings) File – Intellect starts as a working shell of Windows OS.

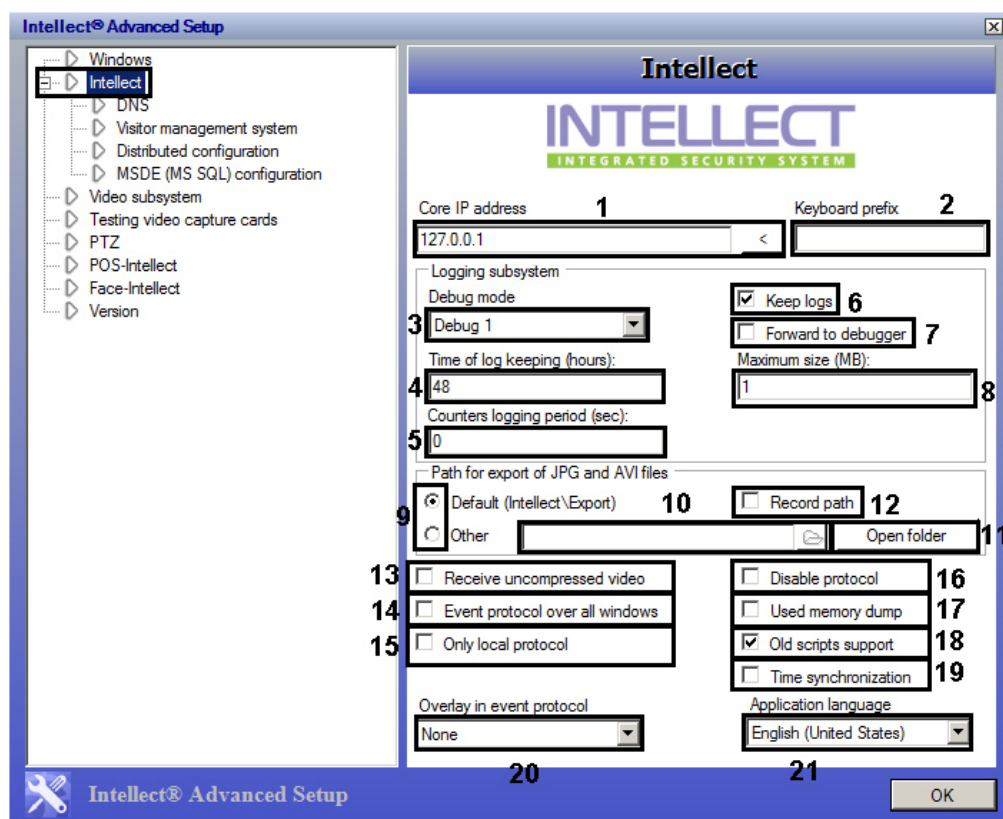
			<i>Remote Admin Workstation or Server</i> <i>To disable UAC and run the Intellect software as the shell, set to 0 the "Enable LUA" registry key in the HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Policies\System section.</i>			
2	The File field with  button. Active for the File switch position	Button is pressed	Opens standard Windows window «Open» to select shell file of OS Windows. Full path to the file is displayed in the field.	-	-	The intellect.exe or slave.exe executive file is selected as a shell
The Autologon group						
3	The Enable checkbox	Checkbox	Activates automatic log on of the user to OS Windows	Boolean type	No	Yes – automatic log on of the user is activated No– automatic log on of the user is not activated
4	The Username field	Type-in the value	Set the username for logging on the OS Windows	-	-	Up to 64 characters. Depends on the settings of Windows user account (stored locally or on domain server)
5	The Password field	Type-in the value	Set the password for logging on the OS Windows	-	-	8 to 14 characters Depends on the settings of Window's user account (stored locally or on domain server)
6	The Domain field	Automatically	Displays the name of domain server (if there is any), where data concerning user account is stored (user name and password)	-	-	Depends on domain net settings (net settings of OS Windows correspondingly)
7	Restart Intellect on user login checkbox	Setting checkbox	Specifies the way of restart the Intellect software installed as a service on user login	Boolean type	Yes	Yes - the <i>Intellect</i> software installed as a service restarts under the current user if it belongs

to the IntellectUsers group.

No - The *Intellect* software installed as a service doesn't restart under the current user even for users belonging to the IntellectUsers group.

The Settings panel of the Intellect section

The **Intellect** section is used for *Intellect* advanced setup. The settings panel for the **Intellect** section is shown in the figure.



The parameters of the Intellect settings panel are described in the table.

No	Parameter name	Field type	Description	Representation	Default value	Value range
1	The Core IP address field with  button. Is set on the Client	Type-in the value in the field /use the  button	Set the IP address of the Intellect server to which the slave.exe module is connected by default. In case of pressing  button, IP address of the local computer is set.	IP address	127.0.0.1	Depends on net settings of the Server. In case of connection failure dialog window requiring IP address is displayed
2	The Keyboard prefix field	Type-in the value in the field	Set the prefix for a special key-board. When a button is pressed on this key-board the Intellect detects when the button was pressed on this very key-board	Symbol	-	Usually, a tilde (~), code 126
The Logging subsystem group						
3	The Debug mode dropdown list	Drop-down list item	Set the mode of the <i>Intellect Debug window</i> displaying	List of available modes of Debug window displaying	None	Disabled – Debug window is not displayed. Debug 1 – Debug window is displayed and a log-file containing recordings about modules errors is created. Debug 2 – Debug window is displayed and a log-file containing recordings about modules errors and alerts is created. Debug 3 – Debug window is displayed and a log-file containing recordings about all the modules events is created. Debug 4 – Debug window is displayed and a log-file containing recordings about all the modules events, and also additional menu that is individual for each module (used by programmers) are created.
4	The Log-storing time (hours) field	Type-in the value in the field	Set the time of keeping log files	Sequence	48 hours	> 0
5	The Counters logging time (sec) field	Type-in the value in the field	Assigns the time interval in seconds for logging processor load, memory usage, and disk usage.	Sequence	0	Positive whole numbers and zero. If the value 0 is specified, sensor data is not included in the log file.
6	The Save logs checkbox	Checkbox	Enables logs saving	Boolean type	Yes	Yes – logs are saved. No – logs are not saved.

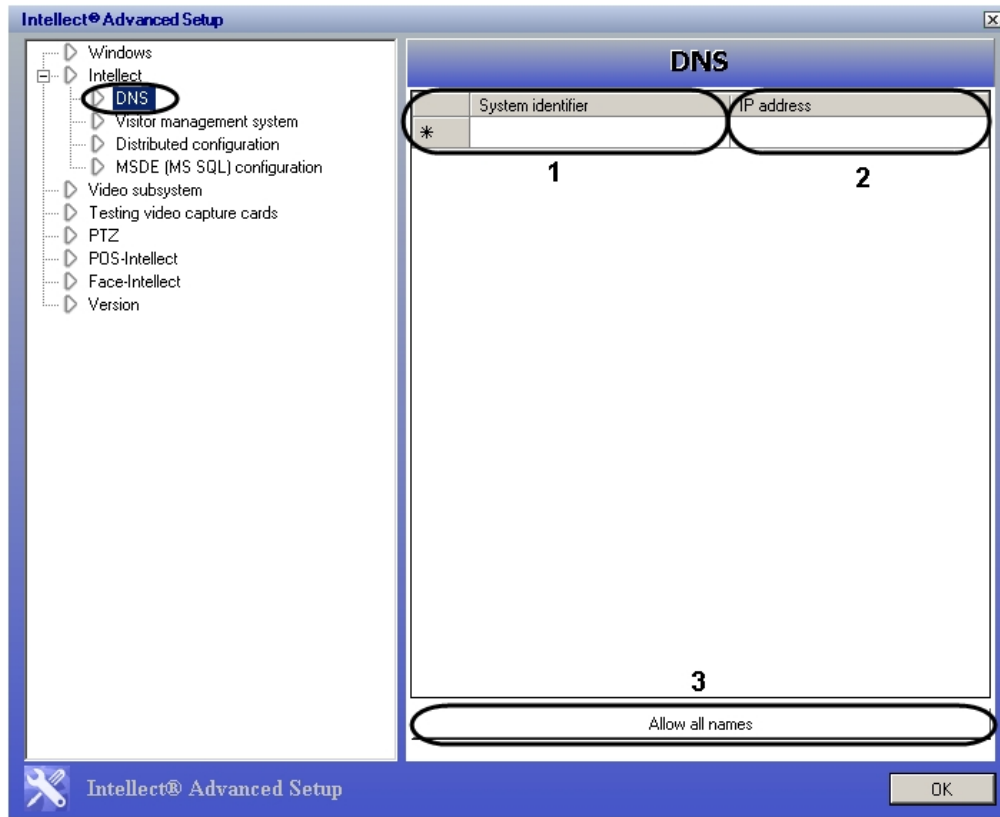
7	The Redirect to debugger checkbox	Checkbox	Enables the debugger	Boolean type	None	Yes –the debugger is in use. No – the debugger is not in use.
8	The Maximum size (MB) field	Type-in the value in the field	Defines the maximum size of RAM that log files can use. Log files are archived after that size is reached.	Sequence	100 MB	>= 100 Values less than 100 Mb are ignored.
The JPG and AVI files export path group						
9	The Default (Intellect\Export)/Other switch	Set in the position	Set the folder for exported files from <i>Intellect</i> video archive	-	Default (Intellect\Export)	Default (Intellect\Export) – exported to the C:\Users\%current user name%\Documents\Intellect\export\ folder Other – exported to the selected folder
10	The Other field with  the button	Click the button/type-in the value in the field	Set the pathname to the folder, where files from video archive are to be exported when the switch is set in the Other position	Pathname	-	-
11	The Open folder button	Click the button	Opens the current folder to export the files	-	-	-
12	The Record path checkbox	Checkbox	The checkbox forbids export catalogue change while exporting the archive period as well as exporting the archive from AviExport utility.	Boolean type	No	Yes – export catalogue change is forbidden. No – export catalogue change is allowed.
No group						
13	The Receive uncompressed video checkbox	Checkbox	Enables receiving uncompressed video from the Server. As a rule is set on the Client	Boolean type	No	Yes – Client receives uncompressed video from the Server No – Client receives compressed video from the Server
14	The Event viewer over all windows checkbox	Checkbox	Enable displaying the Event viewer window over all windows.	Boolean type	No	Yes – the Event viewer window is displayed over all windows. No – the Event viewer window is displayed if a corresponding screen is selected
15	The Only local protocol checkbox	Checkbox	Enables logging the events registered in the given computer to the Events protocol database.	Boolean type	No	Yes – events registered in the given computer are recorded to the Events protocol database

			<i>Note. This parameter can be set on the settings panel of the Computer object – see Configuring events logging section.</i>			No – all required events are recorded to the Events protocol database
16	The Disable protocol checkbox	Checkbox	Disables events logging to the Event viewer database on this computer. <i>Note. This parameter can be set on the settings panel of the Computer object – see Configuring events logging section.</i>	Boolean type	No	Yes – events are not logged to the Event viewer database No – events are logged to the Event viewer database
17	The Used memory dump checkbox	Checkbox	Enables logging .dmp file with a copy of main memory with incorrect shutting down at least one of the system modules to the Intellect root folder	Boolean type	No	Yes – memory dump is created No – memory dump is not created
18	The Support old scripts checkbox	Checkbox	Set the support of program tools in <i>Intellect</i>	Boolean type	No	Yes – both scripts and programs are supported No – only scripts are supported
19	The Time synchronization checkbox	Checkbox	Set time synchronization of all computers in the distributed system with system time of this computer. Time is automatically synchronized at midnight every 24 hours or when INTELLECT™ is started on the Server that is the source of time synchronization.	Boolean type	No	Yes – synchronization is enabled No – synchronization is disabled
20	The Overlay in Event viewer dropdown list	Drop-down list item	Set the overlay mode for processing the video signals that can be viewed with the help of the Event viewer object	Names of overlay modes	Overlay 2	None – video signals are not processed by video card Overlay 1 – video signals are processed as a single video stream Overlay 2 – video signals are processed independently from each other
21	The Application language dropdown list	Drop-down list item	Assigns the <i>Intellect</i> Software System's interface language	Names of installed languages	-	Depends on the set of installed languages. The process of installing languages is described in Intellect Software System's interface language .

The Settings panel of the DNS section

The **DNS** section is used for setting the automatic connection between the Client and reserve Servers in case of connection loss with the main Server. In the **DNS** section it is necessary to specify netnames and IP-addresses of reserve Servers as they are not listed in the Windows registry by default.

The settings panel for the **DNS** section is shown in the figure.



The parameters of the DNS settings panel are described in the table.

Nº	Parameter name	Field type	Description	Representation	Default value	Value range
1	The System identifier column	Type-in the value in the field	Set the netname of the reserve video Server if the connection with main Server is lost	-	-	Depends on net settings of reserve video server
2	The IP-address column	Type-in the value in the field.		IP-address	-	Depends on net settings of reserve video Server

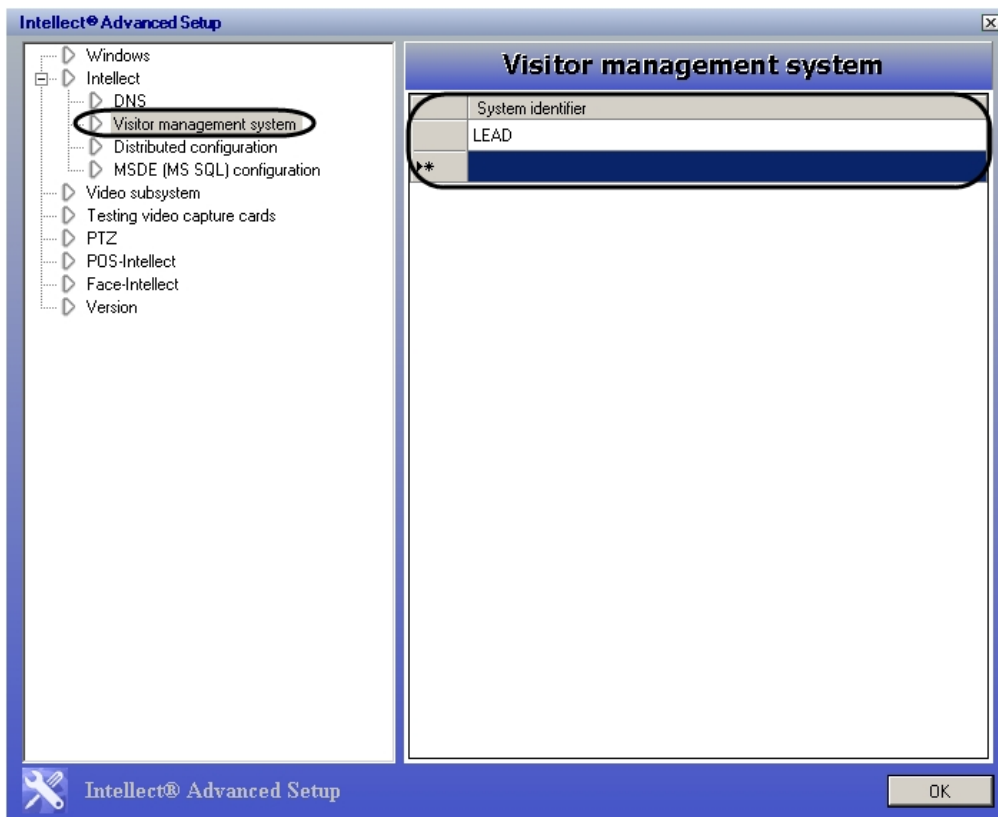
			Set the IP-address of the selected reserve video Server			
3	The Allow all names button	Click the button	Computer's IP-addresses, set in the System identifier column, are automatically added to the IP-address column, if these addresses are enabled and identified	-	-	-

The Settings panel of the Visitor management system section

The **Visitor management system** section is designed for creating common photo database of the *Visitor management system* module (is not included into *Intellect* base configuration). In this section it is necessary to specify netnames of computer where the photos are to be stored. Photos are to be stored in the **Person** folder (<Intellect >\Bmp\Person).

Note.

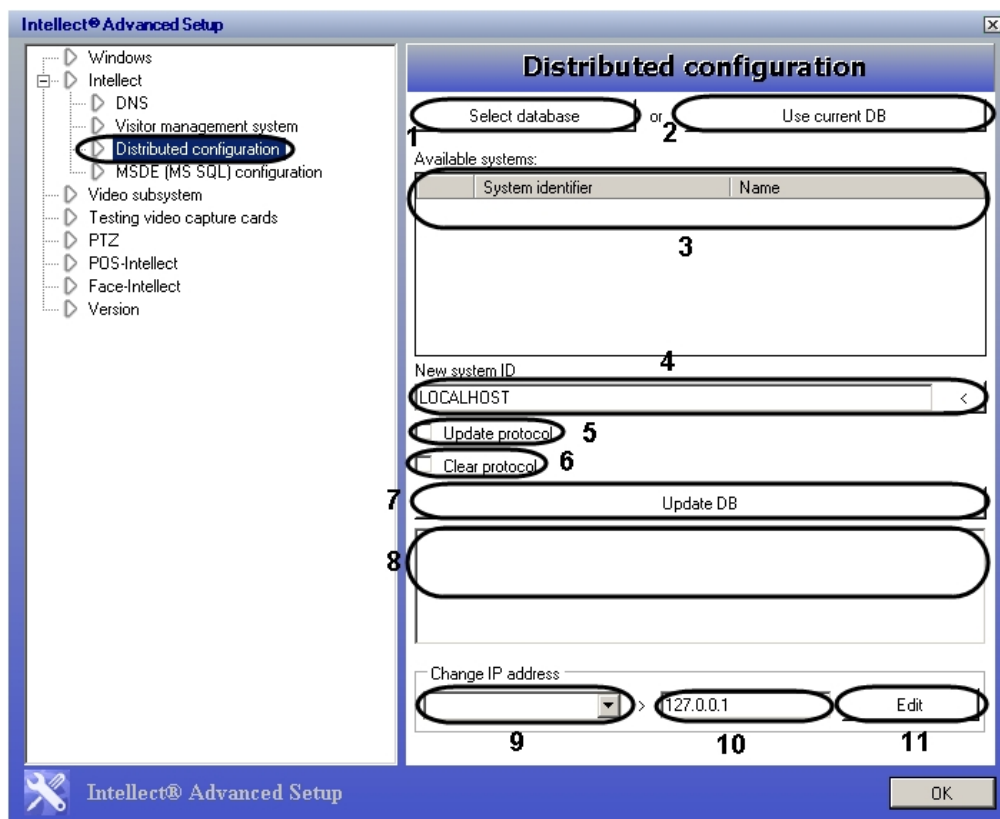
The **Person** folder is automatically created when the *Visitor management system* module is installed.



The Settings panel of the Distributed configuration section

The **Distributed configuration** section is for *Intellect* common database adjustment when real computer netnames do not coincide with the names in the database (for instance when the computer with the database is replaced). The section is also used for adjusting IP-address of selected computer in the database.

The settings panel for the **Distributed configuration** section is shown in the figure.



The parameters of the settings panel are described in the table.

Nº	Parameter name	Field type	Description	Representation	Default value	Value range
1	The Select database button	Click the button	Opens the standard Data Link Properties dialog box to choose the database, where netname and/or IP-address are to be changed.	-	-	-
2	The Use current DB button	Click the button	Selection of main <i>Intellect</i> database			
3	The Available systems table	Automatically		-	-	

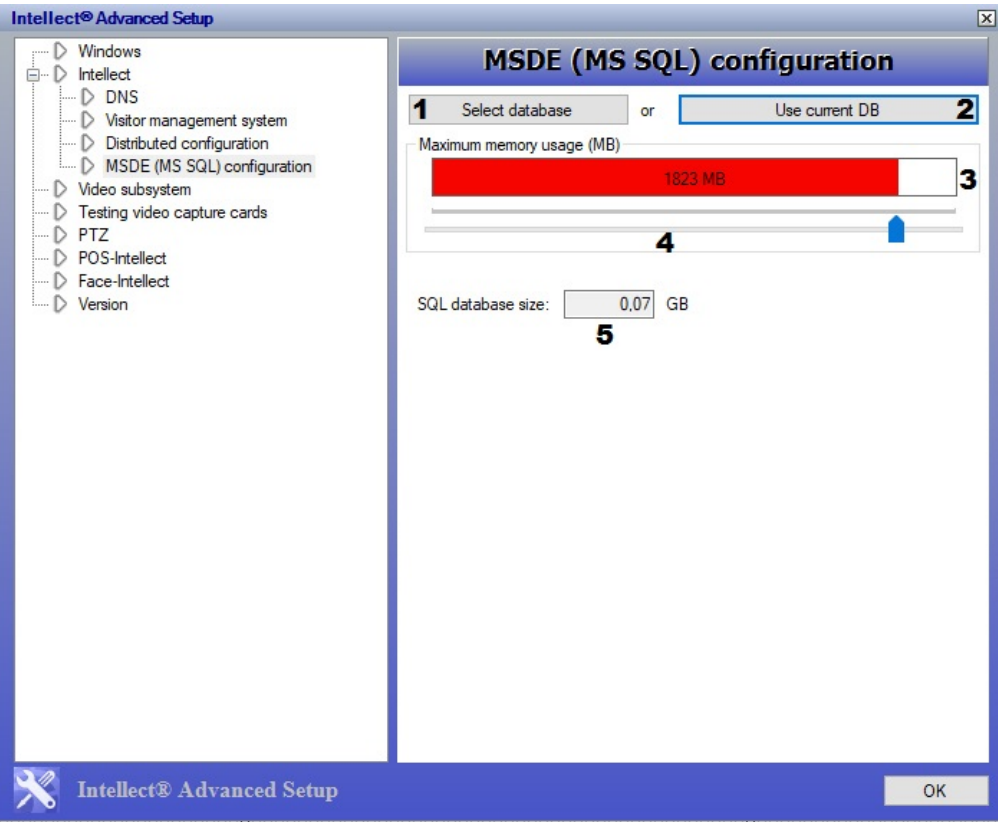
			Displays the list of netnames of computers that are in selected database			Netnames of computers connections between which are set on the Architecture tab
4	The New system ID field with  button	Button is clicked and value is selected from the list/ typed in the field.	Specifies a new netname of a computer selected in the Available systems table	-	-	Depends on the current net settings of the required computer. If the network name is longer than 15 characters, then first 15 characters are to be specified as the network name in this field.
5	The Update protocol checkbox	Checkbox	Replaces the computer's netname in the Events protocol table of the selected main Intellect database	Boolean type	None	Yes– computer's netname is replaced in the Events protocol table No – computer's netname is not replaced in the Events protocol table
6	The Clear protocol checkbox	Checkbox	Clears the event log from the Events protocol table of the selected main Intellect database	Boolean type	None	No – the list of registered events is not cleared. Checked – the list of registered events is cleared.
7	The Update DB button	Click the button	Runs the process of updating the selected database in accordance with given settings	-	-	-
8	The Update protocol field	Automatically	Displays updating process of the selected database	-	-	Depends on the structure of the selected database and the given settings
The Change IP address group						
9	The dropdown list with IP-addresses	Select from the list	Specifies IP-address that is to be changed in the selected database	IP-addresses of computers in the selected database	-	Depends on the number of computers connections between which are set on the Architecture tab
10	Field of setting IP-address	Type-in the value in the field	Specifies a new IP-address to be changed in the selected database	IP-address	127.0.0.1	Depends on the current net settings of the required computer
11	The Change button	Click the button		-	-	-

		Changes the IP-address of the required computer in the selected database		
--	--	--	--	--

The Settings panel of the MSDE (MS SQL) configuration section

The **MSDE (MS SQL) configuration** section is designed for setting the limits of RAM space for MS SQL Server operation with databases of SQL format. This limitation enhances the performance of the system.

The settings panel for the **MSDE (MS SQL) configuration** section is shown in the figure.



The parameters of the settings panel are described in the table.

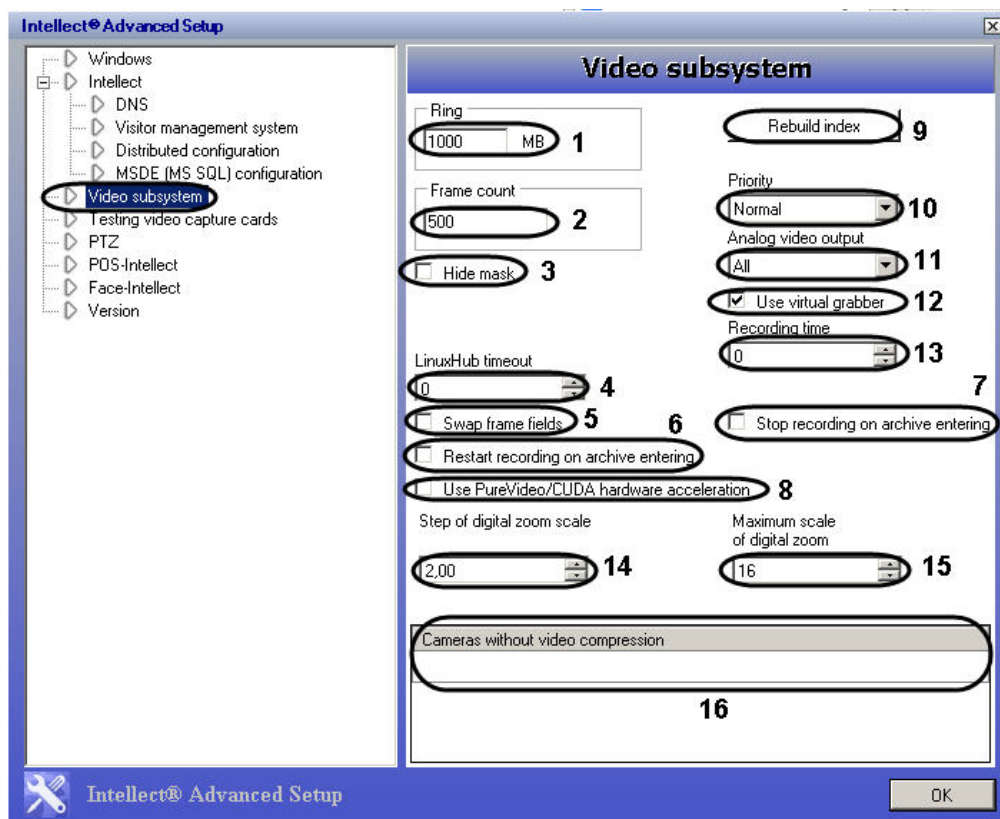
Nº	Parameter name	Field type	Description	Representation	Default value	Value range
1	The Select database button	Click the button	Opens the standard Data Link Properties dialog	-	-	-

			box for choosing the database of MS SQL format the RAM space for which is to be limited.			
2	The Use current DB button	Click the button	Selects the main Intellect database	-	-	-
3	The Maximum memory usage (MB) indicator	Automatically	Displays the relative (red strip) and absolute (in MB) space of RAM for SQL Server operation	%, MB	-	Depends on full space of RAM; not more than 2048.
4	The Maximum memory usage (MB) slider	Set in the position	Specifies the required space of RAM for SQL Server operation	-	Corresponds to the indicator's state.	Depends on full space of RAM; not more than 2048. If more memory is to be allocated to SQL server, then use <i>SQL Server Management Studio</i> – see Limiting memory usage by an MS SQL server .
5	The SQL database size field	Automatically	Displays the current size of the selected database	Positive real number with amount precision - two decimals	-	Depends on the capacity of storage where the database is.

The Settings panel of the Video subsystem section

The **Video subsystem** section is designed for advanced setup of the video subsystem in order to enhance the performance of the Intellect system.

The settings panel for the **Video subsystem** section is shown in the figure.



The parameters of the settings panel are described in the table.

No	Parameter name	Field type	Description	Representation	Default value	Value range
1	The Ring field	Type-in the value	Sets free disk space; when the limit is reached the earliest recordings will be deleted on loop (see General information on video archiving). If 2 or more disks are in use for video archiving, archiving on current disk is performed till there is FreeMbCritical of free disk space (1000 Mb by default, see the info on the key in Registry keys reference guide). Free space set by the Ring parameter is used for recording temporary files. This means	MB	1000	Depends on the disk space

			that when the limit set by the Ring parameter is reached, the maximum size of the temporary file is FreeMbCritical . Video can contain less frames than set by the Frame count parameter.			
2	The Frame count field	Type-in the value	Sets the maximum number of frames in one recording file.	frame	500	10 to 999. It is not recommended to change the default value.
3	The Hide mask checkbox	Checkbox	Prohibits displaying video hidden with the motion detector mask. Video area marked with motion detector mask will be grey-filled. This feature supports only uncompressed video from FS or FX video capture cards.	Boolean type	No	No — video hidden with the mask is displayed Yes – video hidden with the mask video is not displayed
4	The LinuxHub timeout list	Type-in the value/select from the list	Sets the maximum timeout for <i>Intellect</i> system to maintain the response of LinuxHub server	sec	30	0 to 400000
5	The Swap frame fields checkbox	Checkbox	Switches <i>Intellect</i> from basic to additional driver if there are video artifacts while using basic driver	Boolean type	None	No – Intellect operates with basic driver Yes – Intellect operates with additional driver
6	The Restart recording on archive entering checkbox	Checkbox	Enables restarting record on archive entering.	Boolean type	None	Yes – patch that has been recorded on archive entering is stopped and a new one starts. As a result the user who enters the archive sees a freeze frame corresponding to that on exiting. No – recording is not stopped on archive entering
7	The Stop recording on archive entering checkbox	Checkbox	The Pause button is pressed on archive entering	Boolean type	None	Yes – the Pause button is pressed on archive entering, archive navigation using arrow keys. No – the Pause button is not pressed on archive entering.
8	The Use PureVideo/CUDA hardware acceleration checkbox	Checkbox	Enables PureVideo/CUDA support on the Server while decompressing video from IP devices if PureVideo HD card of the 2 nd or 3 rd generation (Nvidia VP2 and VP3) is	Boolean type	Yes	No –PureVideo/CUDA is not in use Yes –PureVideo/CUDA is in use

			installed. Used to reduce Server load due to resources of graphics processor			
9	The Rebuild index button	Click the button	Deletes the database index file. After deleting the index, restart the Intellect system for a new index to be created.	-	-	-
10	The Priority dropdown list	Select the value from the list	Sets the priority of all <i>Intellect</i> video system processes	Names of priority processes	Below normal	Realtime, High, Above normal, Normal, Below normal, Low.
11	The Analog video output dropdown list	Select the value from the list	Selects analog output operation mode.	Names of available modes	All	All - video signals from all the analog outputs are displayed on one screen One - video signal from one analog output is displayed on one screen
12	The Use virtual grabber checkbox	Checkbox	Allows access to virtual Video Capture Devices settings (grabber) in <i>Intellect</i> <i>Note. Desktop Experience Feature is to be enabled when using a virtual video capture device on server OS and avi files.</i>	Boolean type	No	Yes - the Virtual value is available from the Type dropdown list on the settings panel of the Video Capture Device objects No - the Virtual value is not available for the Video Capture Device objects
13	The Recording time list	Type-in the value/select from the list	Sets the length of the file in seconds, restricting fragments size not by number of frames but by time of its recording.	Time in sec	0	Unlimited
14	The Step of digital zoom scale field	Setting the value in the field / select the value from the list	Specifies the fractional step of video image zooming	Real numbers with the fixed point	2,00	Maximum value depends on the maximum scale of digital zoom (see. №17). Minimum value is 1,00.
15	The Maximum scale of digital zoom field	Setting the value in the field / select the value from the list	Specifies the maximum value of digital zoom of video image	Numbers	16	1-16
16	The Camera without video compression table	Type-in the value in the field	Specifies the numbers of cameras connected to the video capture cards with compression. There is no compression for these cameras, i.e. the compressor settings in Intellect are ignored.	Camera's serial number	-	Depends on the number of cameras registered in the system

Note.

Setting the non-zero value to the **Recording time** parameter does not exclude the **Frame count** parameter. If the values for both parameters are set, then the file recording will be performed in accordance with the value which comes first. For instance, if the value of **Recording time** is equal to 10 seconds and **Frame count** is equal to 500 frames (by default) and in ten seconds the fragment consists of 80 frames, then 80-frame file is recorded.

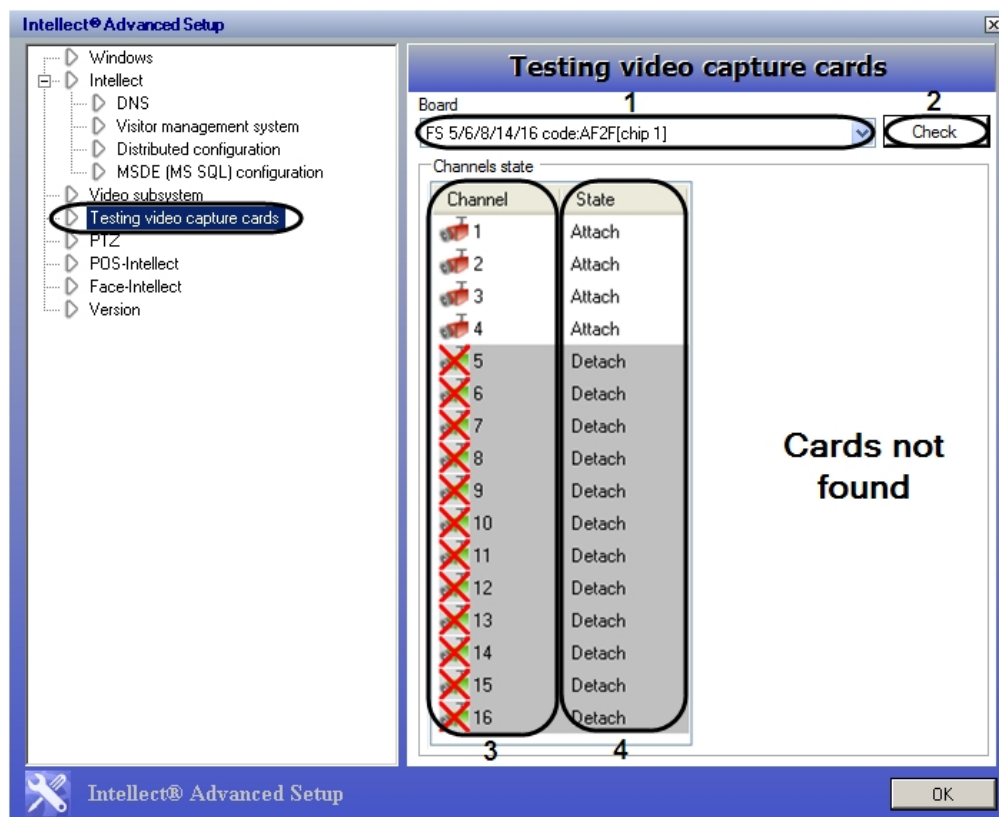
The Settings panel of the Testing video capture cards section

The **Testing video capture cards** section is designed to test the connection of the cameras to the video capture card.

Note.

To use this functionality *Intellect* is to be logged off. Otherwise there is "Cards not found" message.

The settings panel for the **Testing video capture cards** section is shown in the figure.



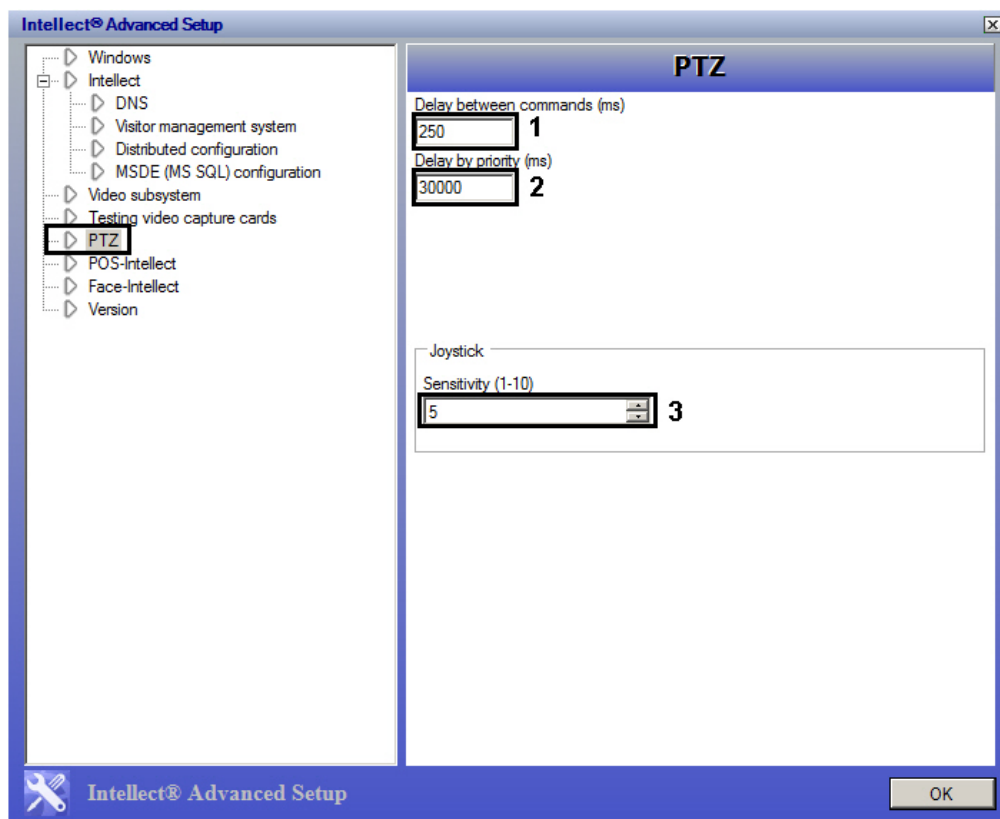
The parameters of the settings panel are described in the table.

No	Parameter name		Field type	Description	Representation	Default value	Value range
1	The Board dropdown list		Dropdown list	Specifies the video capture card which camera connections are to be checked	List of video capture cards	-	Depends on the number of installed video capture cards
2		The Check button	Click the button	Starts the testing process of the video capture card. The <i>Intel/ect</i> system is to be closed at the time of testing.	-	-	-
The Channels state table							
3	The Channel column		Automatically	Displays the channels numbers of the selected video capture card	-	-	From 1 to 16
4	The State column		Automatically	Displays the state of camera connections to the channels of the selected video capture cards			Attach – camera is attached Detach – camera is detached

The Settings panel of the PTZ section

The **PTZ** section is used for setting the telemetry control elements.

The settings panel for the **PTZ** section is shown in the figure.



The parameters of the **PTZ** settings panel are described in the table.

No	Parameter name	Field type	Description	Representation	Default value	Value range
1	The Delay between commands (ms) field	Type-in the value	Sets the delay time between executing the commands for PTZ devices This parameter is not supported by IP cameras.	ms	250	No limitations. It is not recommended to change the default value.
2	The Delay by priority (ms) field	Type-in the value	Sets the delay time before switch from the PTZ control to a user with lower or equal priority.	ms	30000	No limitations. It is not recommended to change the default value.
The Joystick group						
3	The Sensitivity (1-10) fi	Enter the value in the field	Sets sensitivity of the	Sensitivity in conditional	5	1-10

	eld	joystick: the less value the more sensitivity. If value of parameter is small then camera will react on even small deviations of the joystick. If value of parameter is great the camera will stay fixed until significant deviation of joystick	units		
--	-----	--	-------	--	--

The Settings panel of the POS-Intellect section

The POS-Intellect section is designed for setting the POS module for controlling cashier operations (is not included in INTELLECT™ basic version). Detailed information about POS-Intellect configuring using the tweak.exe utility is presented in [The settings panel for the POS sections using the tweak.exe utility](#) section in the POS-Intellect software package. Administrator's Guide documentation.

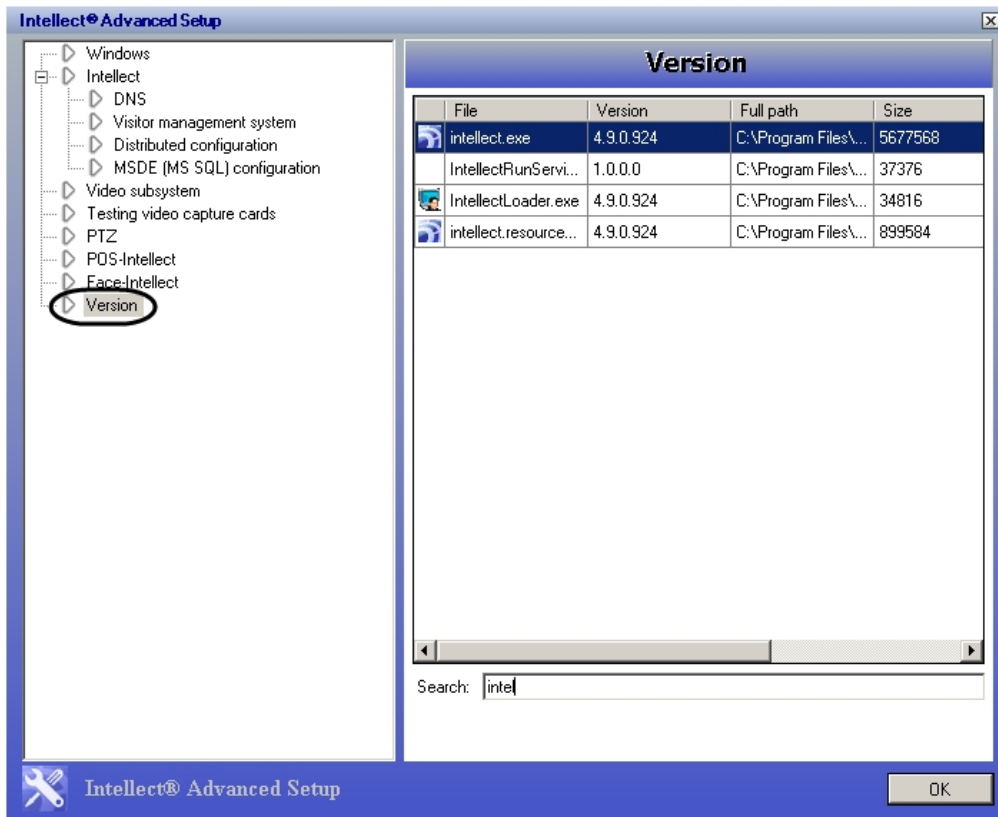
The Settings panel of the Face-Intellect section

The **Face-Intellect** section is designed for setting the FACE module for face recognition and search (is not included in INTELLECT™ basic version). Detailed information about Face-Intellect configuring using the tweak.exe utility is presented in [The settings panel for the Face-Intellect sections using the tweak.exe utility](#) section in the Face-Intellect software package. Administrator's Guide documentation.

The Settings panel of the Version section

The **Version** section provides information about INTELLECT™ software modules: versions, paths to executable files and .dll libraries, file sizes and dates of creation and modification.

The settings panel for the **Version** section is shown in the figure.



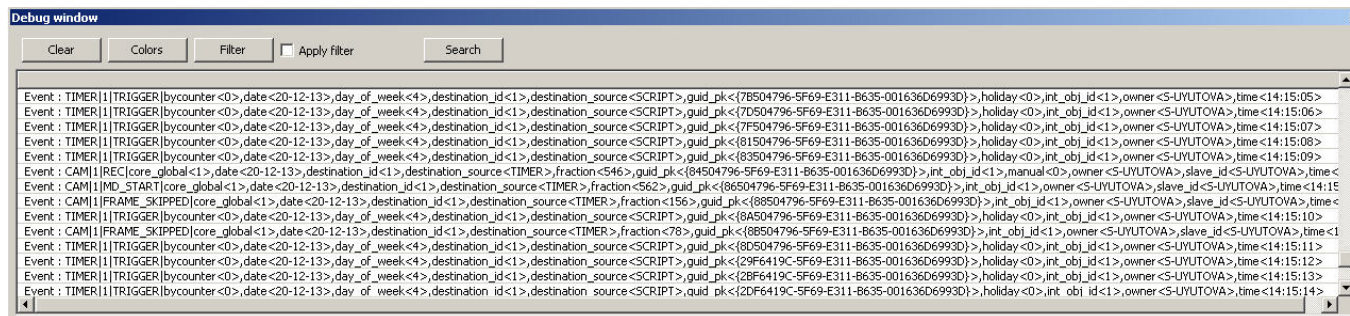
Typical tasks concerning system extended settings

Selecting and enabling the debug mode of Intellect software

On the page:

- Enabling debug mode
- Configuring log keeping

Debug mode is a special operation mode when the Debug Window is open, and is designed for analyzing the progress of Intellect software operation and for prompt debugging in case errors occur. Log files are created in this mode - they are stored on the disk for a specific time period.

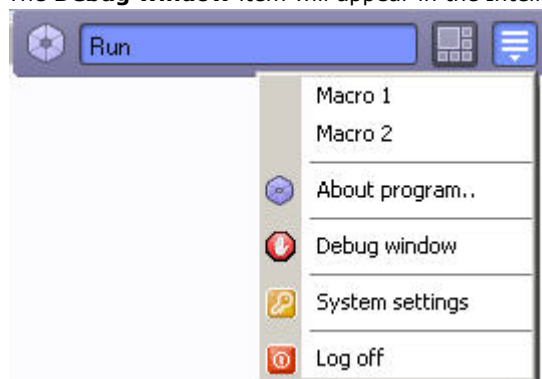


Enabling debug mode

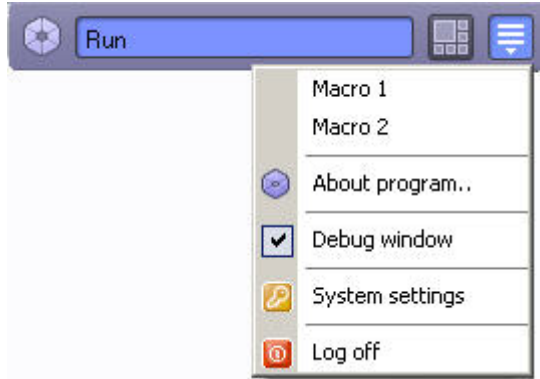
By default, debug mode is disabled. To enable debug mode, do the following:

1. Shut down *Intellect* software.
2. Start the Tweaki.exe utility (see the [Starting and shutting-down the Tweaki.exe utility](#))
3. Select the **Intellect** node in the tree on the left side of the utility dialog box.
4. Change the parameter **Debug Mode** from **None** to **Debug 1**, **Debug 2**, **Debug 3** or **Debug 4** (see [The Settings panel of the Windows section](#)).
5. Click the **OK** button.
6. Start *Intellect* system.

The **Debug window** item will appear in the *Intellect* main control menu.



7. Select **Debug window** in the main control menu to open the **Debug window**. The selected item will be marked with a tick.



To hide the **Debug window**, select the **Debug window** item in the menu once more.

Note

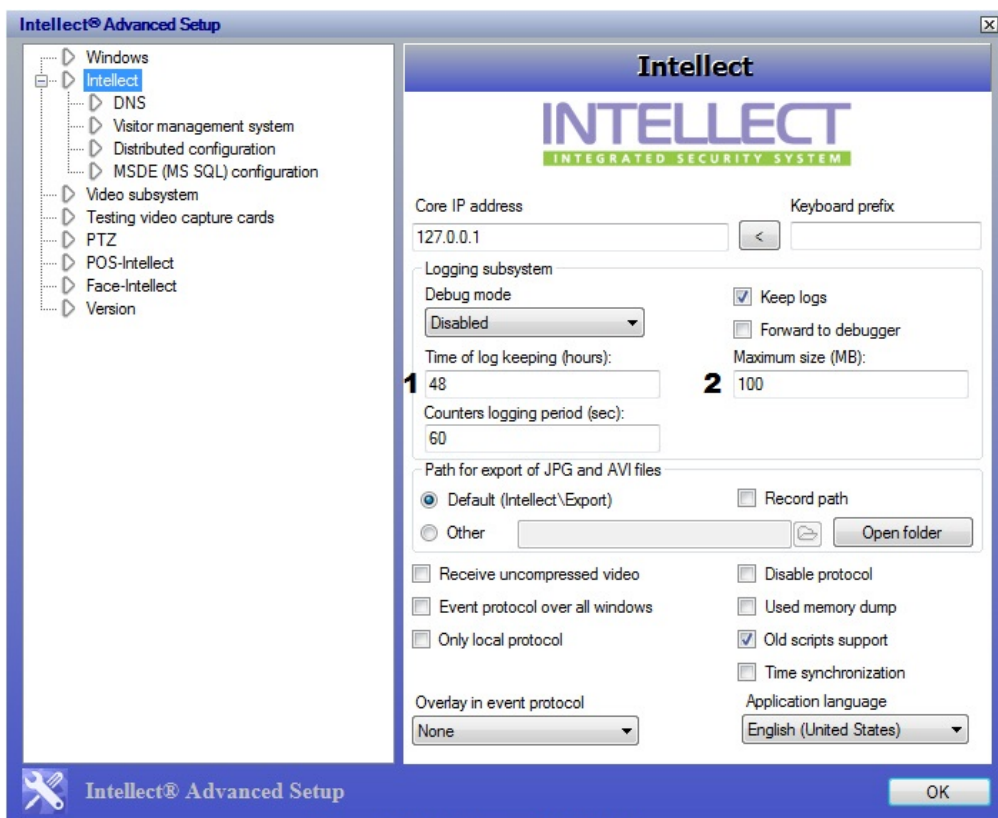
The debug mode slows the system down and uses a lot of system resources. We strongly recommend to enable debug mode for debugging purposes only and to disable it when all the settings are completed.

Note

Find details in the [The Debug window](#) section of [Programming Guide \(JScript\)](#).

Configuring log keeping

One can set log keeping parameters both on the Intellect setting panel in the Tweaki.exe utility and using some registry keys:



1. The **Time of log keeping (hours)** parameter means the same as DebugTime registry key. It specifies the number of hours for keeping log files. 48 hours by default.
2. The **Maximum size (MB)** parameter means the same as DebugSize registry key. It specifies the number of megabytes provided for log. 100 MB by default.
3. The DebugZipDays registry key enables the logs archiving in the .gz format and specifies the time period for their keeping. 2 days by default.

Log files are rewritten when one of these parameters is at its maximum.

Find more about registry keys in [Registry keys reference guide](#).

Example.

The **Time of log keeping (hours)** is 720 hours (1 month) and the **Maximum size (MB)** is 100 MB.

One week later the size of log file is 100 MB. It starts being rewritten though the log is kept less than it was specified.

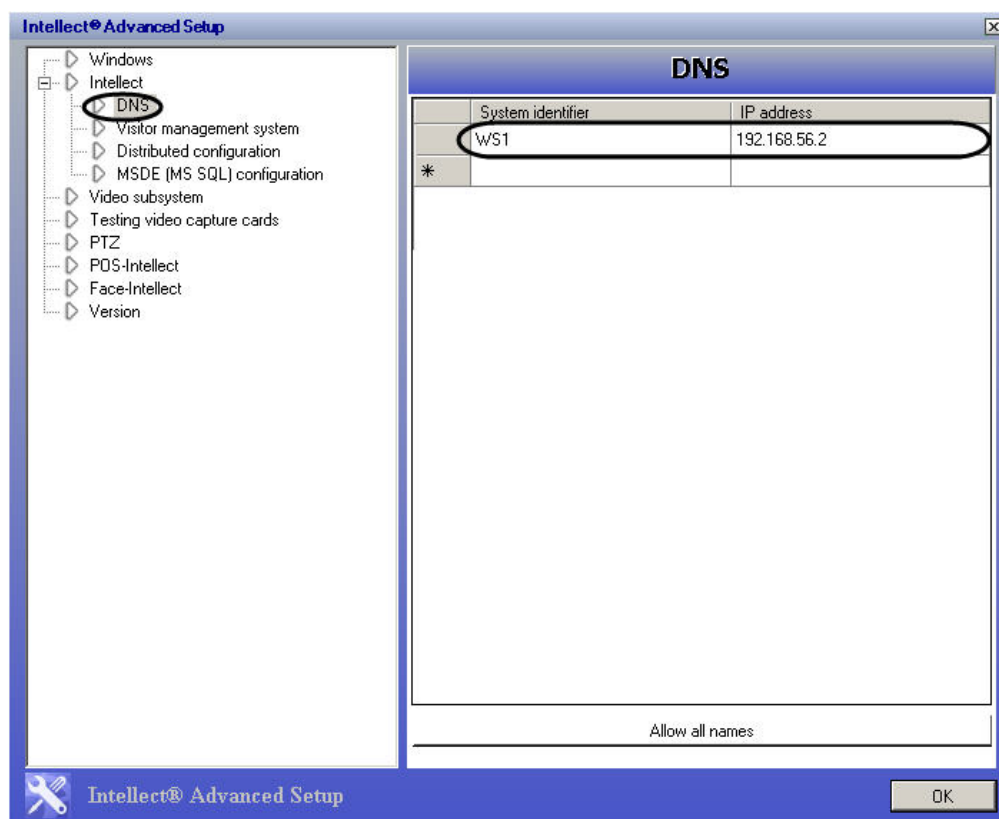
And if DebugZipDays has the value equal to the time period in days to keep logs, then logs are not rewritten - they are archived in the *.gz format and are kept for so long as it was specified in DebugZipDays parameter.

Extended setup of the distributed architecture

Extended setup of the distributed architecture is performed in the **DNS** section; it is intended to create reserve connections between the Client and other cores (Servers) in case of losing connection with the main core. Reserve connections are to be set up for each Client individually.

To create a reserve connection between the Client and a core, do the following:

1. Stop the *Intellect* software if it was running.
2. Start the Tweaki.exe utility (see the [Starting and shutting-down the Tweaki.exe utility](#)).
3. Select the **DNS** node in the tree on the left side of the utility dialog box.
4. Specify the core computer name and IP-address in the table.
5. Click **OK**.

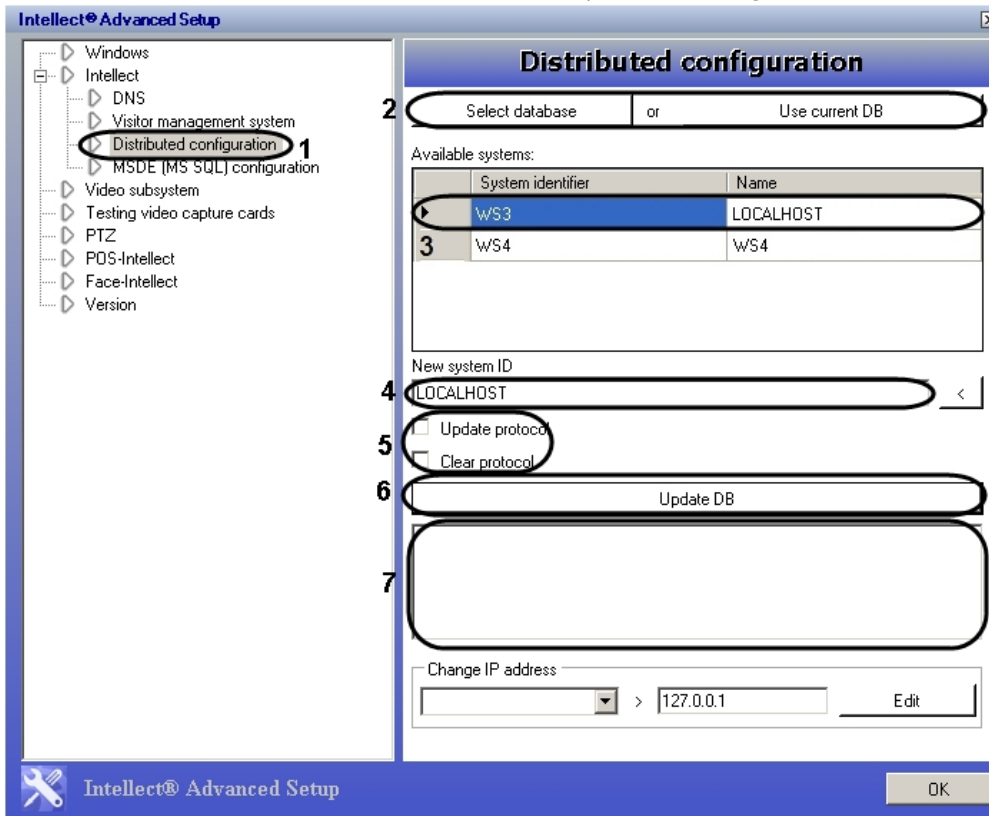


Changing computer names and IP-addresses in the configuration database of the Intellect system

The **Distributed configuration** node allows changing the computer name and/or IP-address in the *Intellect* database.

To change the computer name in the configuration database, do the following:

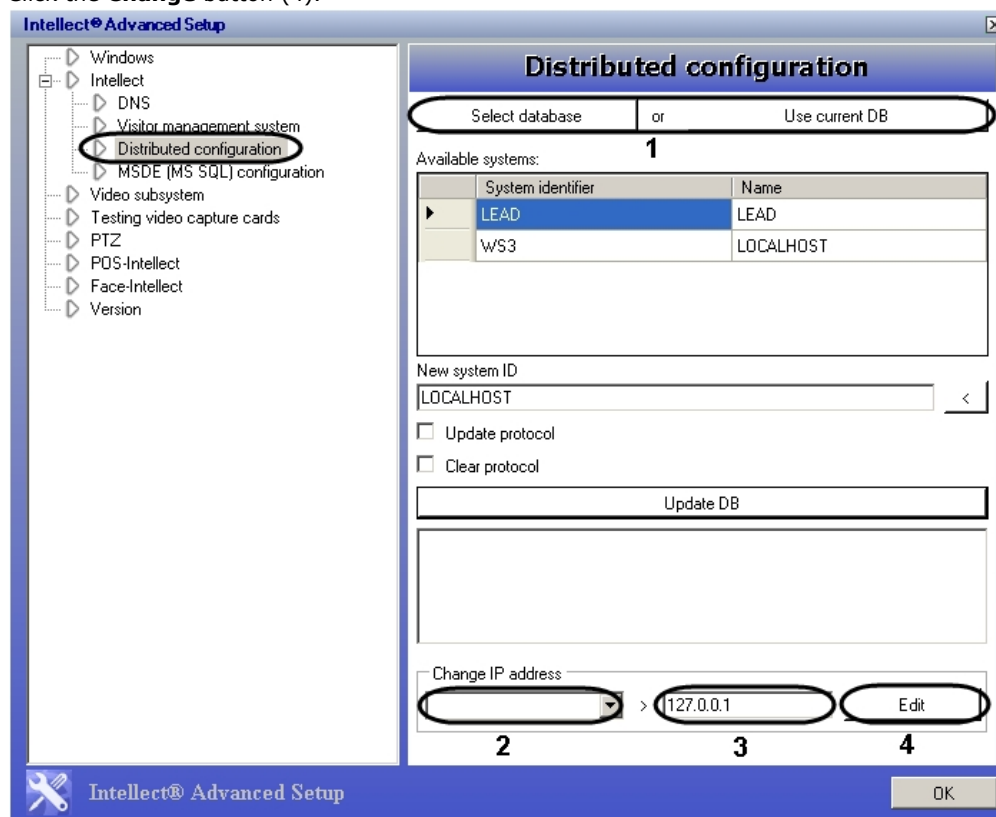
1. Close the *Intellect* software if it is open.
 2. Start the Tweaki.exe utility (see the [Starting and shutting-down the Tweaki.exe utility](#))
 3. Select the **Distributed configuraion** in the tree on the left side of the utility dialog box (1).
 4. Select the database containing the computer name to be changed (2) with **Select database** or **Use current DB** buttons.
- In result the **Available Slaves** table will show all computer names registered in the selected database (4).



5. To select the computer name to be changed in the **Available Slaves** table, right-click an appropriate row. The row will be highlighted.
6. Click the button next to the **New Slave ID** field to see the drop-down list of available computer names. Select the required computer name in the list. The selected name will appear in the **New Slave ID** field (4). Name can also be entered in the field manually.
7. Check one of the following checkboxes: **Check the Protocol** checkbox to replace the computer name in the events log, or the **Clear Protocol** checkbox to delete all records in the log. Only one of two checkboxes should be checked (5).
8. Click the **Update DB** button (6). The progress of replacing computer names for a new one will be displayed in the field below the **Update** button (7).

To change the IP-address in the configuration database, do the following:

1. Do steps 1-4 of the previous instructions (1).
2. Select the IP-address to be replaced from the **From** drop-down list (2).
3. Enter a new IP-address into the **To** field, or leave the default LOCALHOST value (3).
4. Click the **Change** button (4).



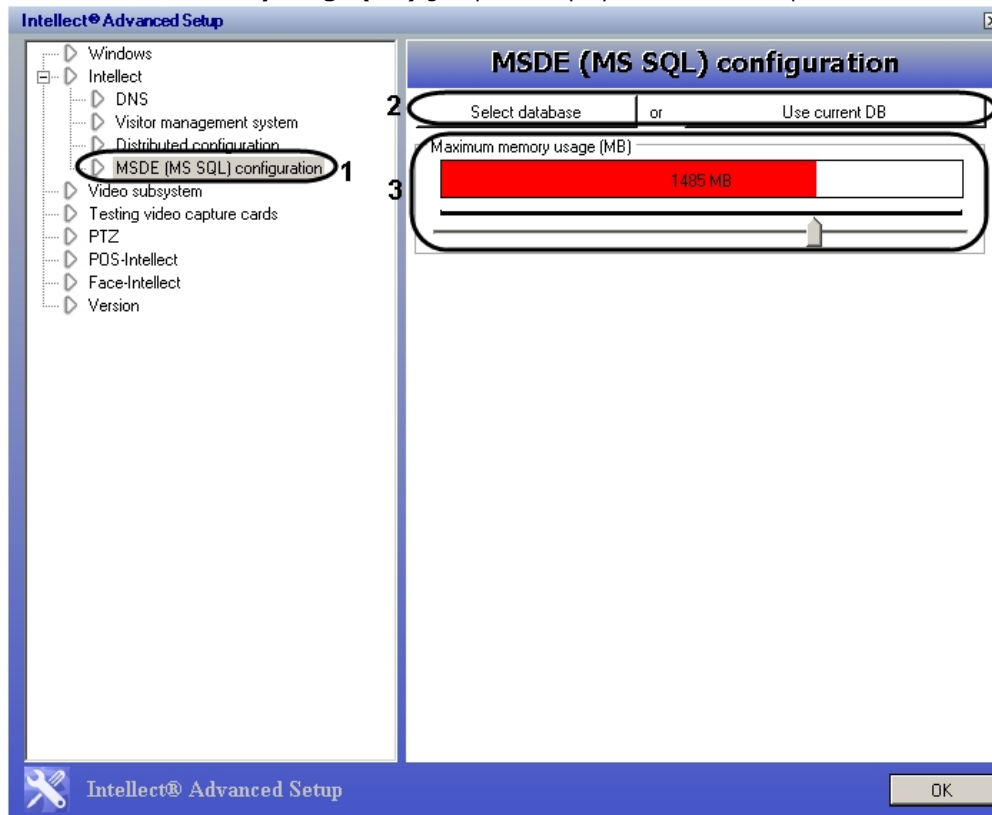
The IP-address in the **From** field and in the database will be changed.

Limiting memory usage by an MS SQL server

A certain amount of disk space is allocated for the SQL server for storing its data, functions and other internal structures. Allocated RAM is determined by default by the total RAM resources available for the SQL server in the system. The Tweaki.exe utility allows limiting the amount of RAM allocated for the SQL server. Do the following:

1. Close the *Intellect* software if it is open.
2. Start the Tweaki.exe utility (see [Starting and shutting-down the Tweaki.exe utility](#) section).
3. Select the **Configure MSDE (MS SQL)** node in the tree on the left side of the utility dialog box (1).

4. Select the MS SQL database to limit the allocated RAM by doing one of the following (2) using **Select database** or **Use current DB** buttons. The **Maximum memory usage (MB)** group will display the amount of space allocated for the selected database (3).

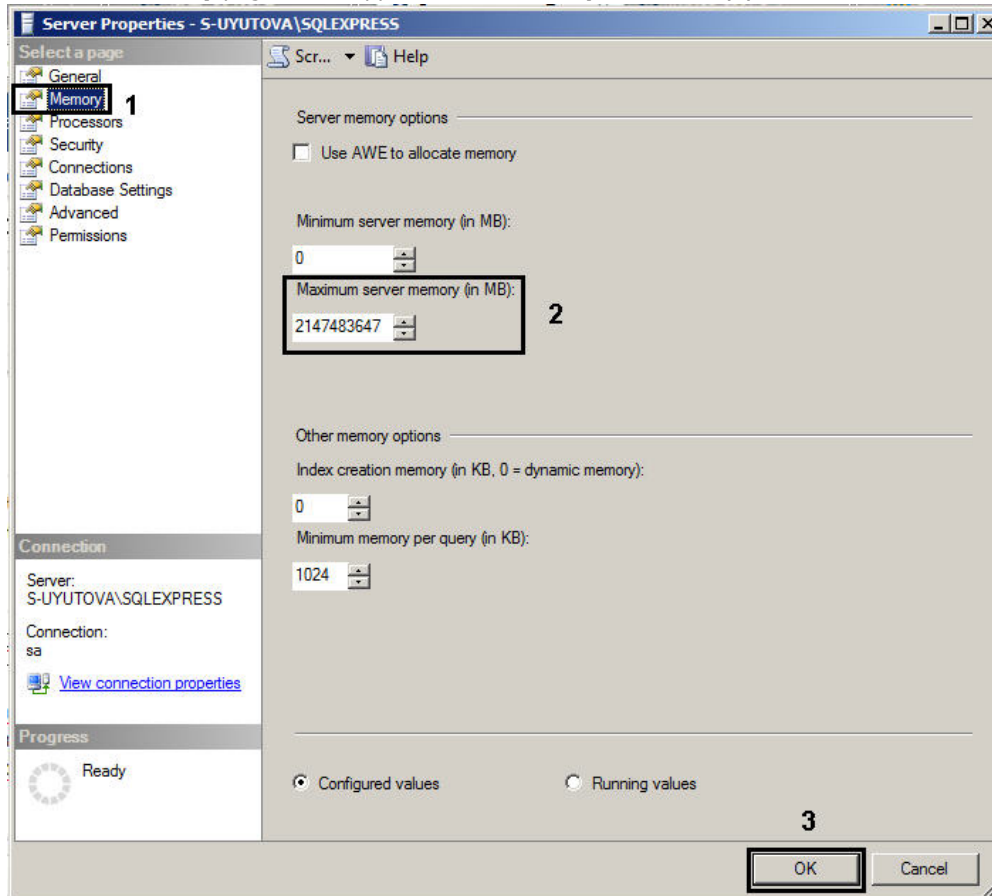


5. Drag the slider to a position representing the required amount of memory to be allocated for the SQL server (3).
6. Click the **OK** button.

In the advanced settings utility not more than 2048 MB can be allocated to SQL server. If more memory is to be allocated to SQL server, then use *SQL Server Management Studio*. For this do the following:

1. Run *SQL Server Management Studio* tool.
2. Right-click the Server DB.
3. Select the **Properties** item in the appeared menu.

4. Select the **Memory** page in the appeared **Server Properties** box (1).

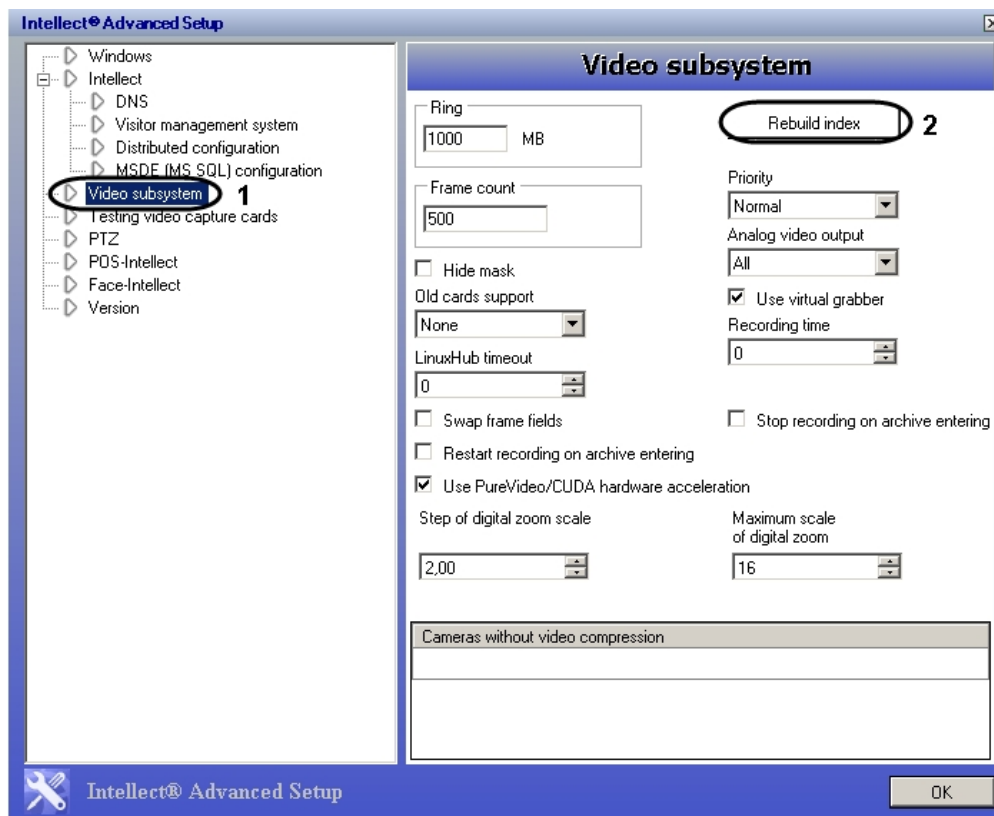


5. Specify the required server memory in MB in the **Maximum server memory (in MB)** field (2).
6. Click the **OK** button (3).

Re-indexing the audio and video recordings archive

To re-index the audio and video archives, do the following:

1. Close the Intellect software if it is open.
2. Start the Tweaki.exe utility (see the [Starting and shutting-down the Tweaki.exe utility](#)).
3. Select the **Video Subsystem** node in the tree on the left side of the utility dialog box (1).



4. Click the **Rebuild Index** button to delete the INDEX folder with .idx files containing the indexes to the video recording files in the archive (2).

Note.

Pressing the button **Rebuild index** sets the value of parameter IndexRebuilding=1 in the register's branch of OS Windows: HKLM\SOFTWARE\ITV\INTELLECT\VIDEO for 32-bit system (HKLM\SOFTWARE\Wow6432Node\ITV\INTELLECT\VIDEO for 64-bit). After archive reindexing the value of the parameter IndexRebuilding=0 is automatically set. When Intellect software is run together with IndexRebuilding=1 parameter, the archive is reindexed without any attempt to read it from *.idx files.

5. Click **OK**.
6. Start the *Intellect* system again. A new INDEX folder will be created in the video archive folder, containing new indexes.

This completes re-indexing of the database.

Enabling the Pure video/CUDA hardware acceleration

It is possible to enable the PureVideo/CUDA hardware acceleration when video signals are decompressed from IP devices. In this case decompression may be carried out by Server's graphics processor and this reduces the load on CPU.

Attention!

It is recommended to update the driver of the card that supports the PureVideo/CUDA hardware acceleration. Drivers are available for downloading at the official web page of Nvidia (www.nvidia.com).

Note.

Detailed information about the PureVideo/CUDA hardware acceleration is given in reference manual of Nvidia company.

The PureVideo/CUDA hardware acceleration functionality is implemented correctly when Server meets the following requirements of the software platform:

1. Is managed by OS Windows XP/Vista/7
2. The PureVideo HD video card of the second or third generation is installed (Nvidia VP2 and VP3)

Note.

Widespread models of video cards that support the PureVideo/CUDA:

- 1 Nvidia GeForce GTX 295;
- 2 Nvidia GeForce GTX 285;
- 3 Nvidia Quadro NVS 450;
- 4 Nvidia GeForce 9800 GT;
- 5 Nvidia Quadro NVS 420;
- 6 Nvidia Quadro NVS 295.

Note.

In the *Intellect* software package the PureVideo/CUDA hardware acceleration is applied only for video signals' decompression in H264 codec.

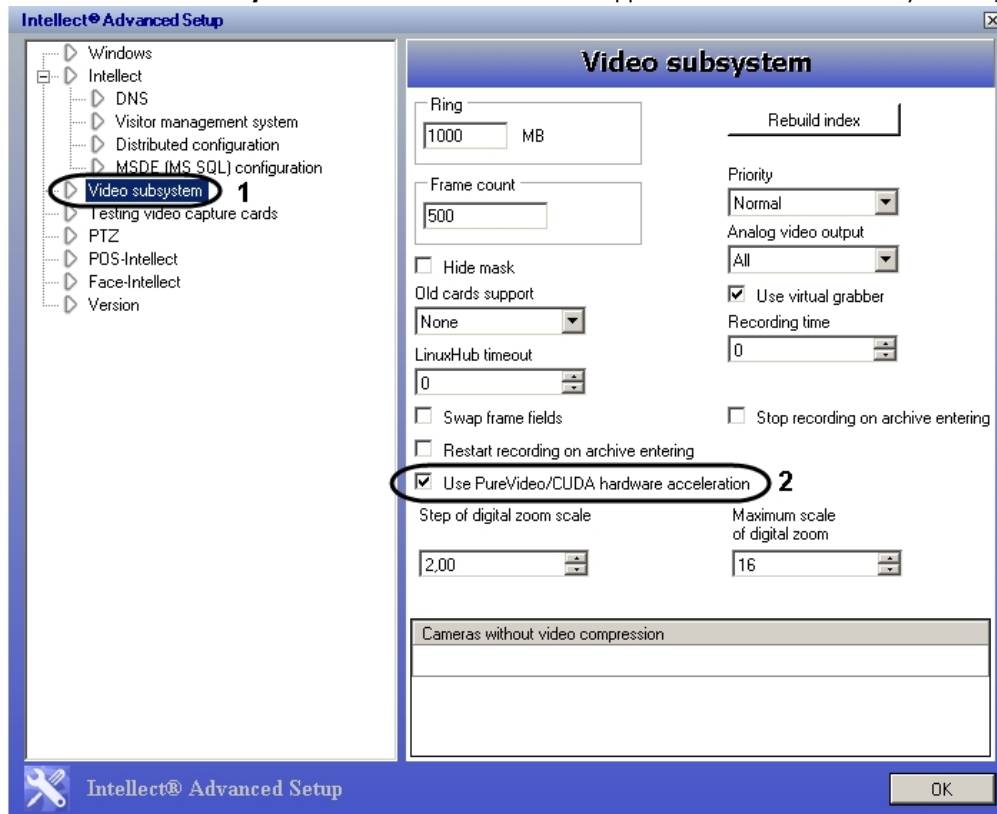
Note.

If the resolution more than 1920x1088 is set in the camera, then the PureVideo/CUDA hardware acceleration is not used for *video signals' decompression*.

To enable the PureVideo/CUDA hardware acceleration, do the following:

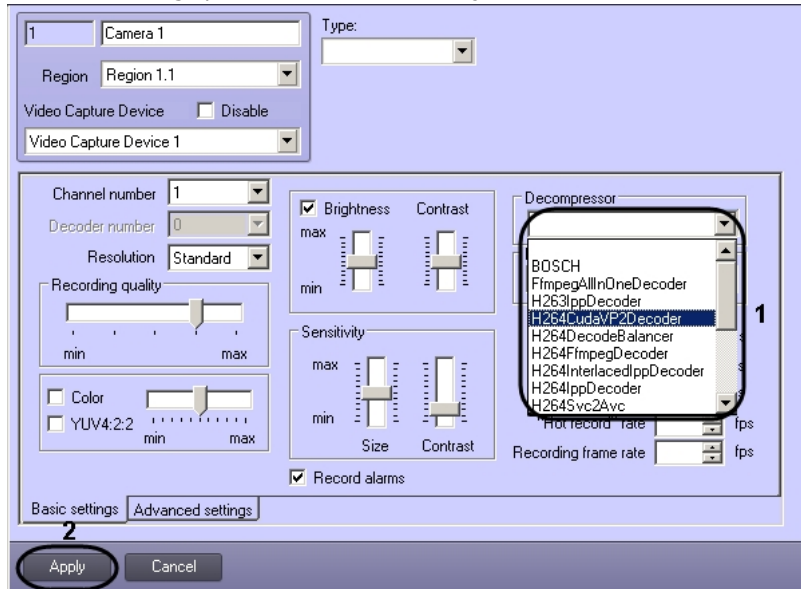
1. Shutdown the *Intellect* software package if it was run on the computer.

2. Run the Tweaki.exe utility (See the [Starting and shutting-down the Tweaki.exe utility](#) section).
3. Select the **Video subsystem** section in the tree in the upper left corner of the utility's dialog box (1).



4. Set the **Enable PureVideo/CUDA hardware acceleration** checkbox (2).
5. Click the **OK** button.

6. Go to the settings panel for the **Camera** object.



7. In the **Decompressor** drop-down list select the **H264CudaVP2Decoder** value (1).

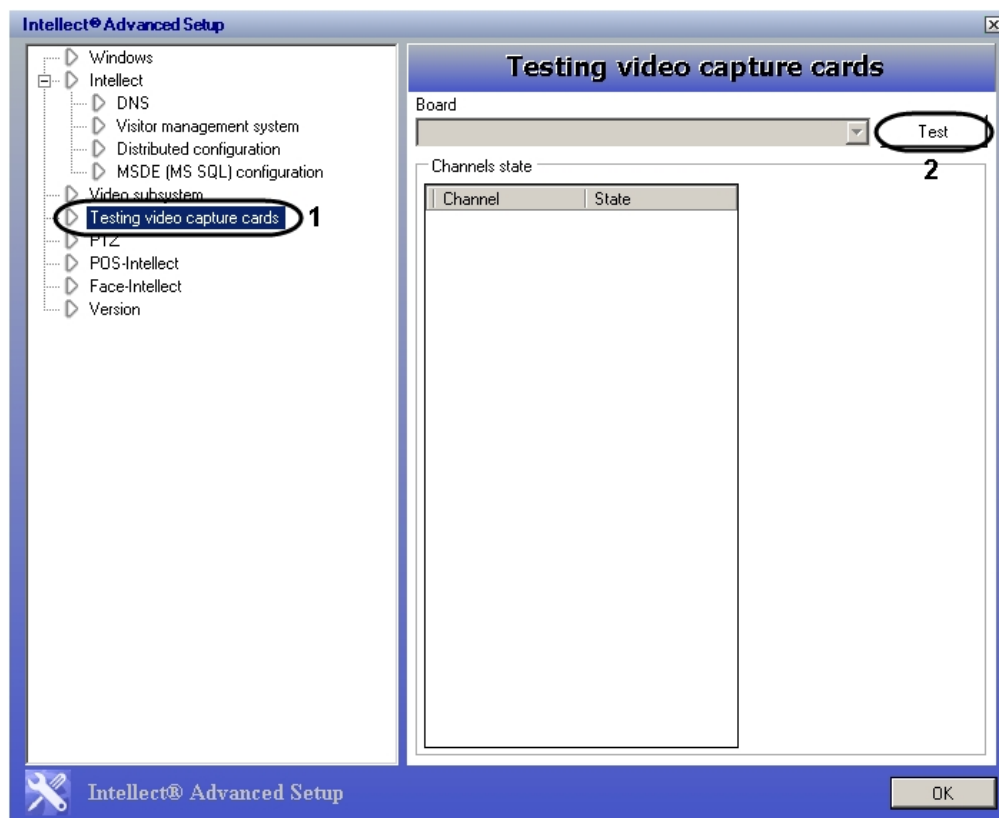
8. Click the **Apply** button (2).

The PureVideo/CUDA hardware acceleration is now enabled.

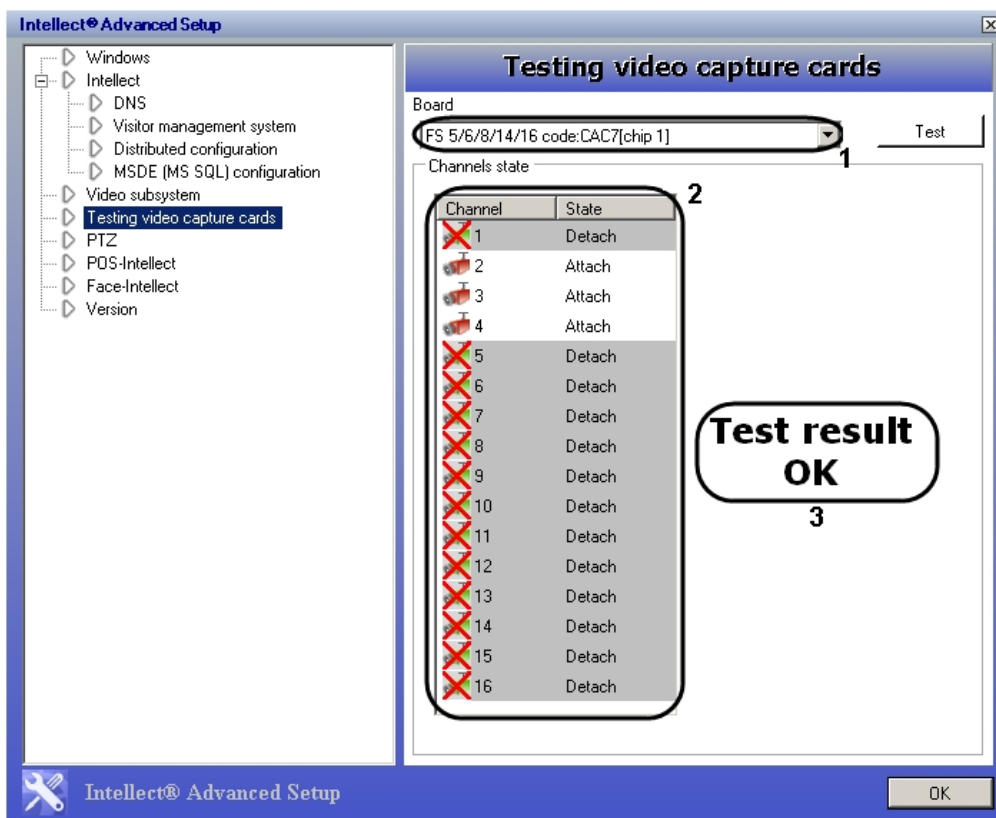
Testing video capture cards

To test a video capture card, test its channels using the **Testing video capture cards** module of the Tweaki.exe utility. Do the following:

1. Shut down the *Intellect* software if it is started.
2. Start the Tweaki.exe utility (see the [Starting and shutting-down the Tweaki.exe utility](#) section)
3. Select the **Testing video capture cards** node in the tree on the left side of the utility dialog box.



The **Board** field will display the name of the video capture card, and the **Channels state** table will show the information about each channel of the card (number and status). The confirmation of successful testing will be displayed to the right of the **Channels state** table.



The utility for collecting configuration data on servers and RWS for the Technical Support

The purpose of the Support.exe utility

The Support.exe utility is designed for collecting information about the configuration and operating status of the hardware, OS Windows and the INTELLECT™ system. The utility generates an archive that can be used by AxxonSoft Technical Support Service for troubleshooting purposes. In case of system malfunction or errors in the INTELLECT™ system, do the following:

1. Go to the AxxonSoft tech support server: <https://support.axxonsoft.com/>
2. Register a new account on the tech support server or log in the registered account.
3. Create an issue for tech support. Attach an archive generated by Support.exe utility.

Information on the issue progress will be sent to the email specified at registration.

Starting and shutting-down the Support.exe utility

To run Support.exe utility, use one of the following methods:

1. From the **Start** menu of OS Windows: **Start -> All programs -> Intellect -> System's information gathering utility**
2. From the **Tools** folder of the Intellect program folder: <Intellect>\Tools\Support.exe

After running the Support.exe , Support –system’s information gathering utility dialog box will be displayed on the screen.

[illegible]

To close the Support.exe utility, click the **Close** button ().

The Support interface description

Support.exe utility interface includes the following elements:

1. Short directions for using the Support.exe (1).
2. A group of settings for specifying data set collection time period and deleting dump and log-files after collecting the data set (2).
3. Process button to run the process of gathering information (3).
4. Filed of displaying the information (4).
5. Tale of displaying the process of gathering information, it includes two columns Step and Status. In the **Step** column there is displayed short characteristic of undergoing process while the information is being gathered. In the **Status** column there is displayed process-bar and time, spent on information gathering (5).

[illegible]

To close the Support.exe utility, click the **Close** button ()

Collecting information about videosevers and remote workstations using the Support.exe utility

To collect the information using the Support.exe utility, do the following:

1. Start the utility.
2. If necessary set the dump and log files collection parameters:
 1. In the **Collect dump files for ____ days** field specify the number of days for which dump files are to be included into the data set for technical support (1).
 2. In the **Collect log files for ____ days** field specify the number of days for which log files are to be collected into the data set for technical support (2).
 3. If old dump and log files are to be deleted after system data collection, set the **Delete old dump and log files after data set collection** checkbox checked (3).

3. Click the **Collect** button (4).

The data collection process will start. Upon completion, the "Completed!" message will be displayed in the **Step** column (5), while the information area will show the link to the newly generated file – support.7z.

This application can be used for collecting data about the system and about the installed AxxonSoft software. Click Collect to create support_[date]_[time].7z file. After that you can send it to AxxonSoft technical support group.

Collecting dump-files for the last days **1**

Collecting log-files for the last days **2**

☒ Remove old dump- and log-files after the info package is formed **3**

4 [Open folder with file support_19-02-2016_15-40-54.7z](#) **6**

Step	Status
Step 1 : Receiving info about installed software	OK (0 s)
Step 2 : Receiving info about the version of installed modules	OK (46 s)
Step 3 : Receiving info about the system	OK (256 s)
Step 4 : Receiving info about the DirectX subsystem	OK (20 s)
Step 5 : Receiving info about HDD	OK (530 s)
Step 6 : Receiving info about the key files	OK (0 s)
Step 7 : Receiving info about the registry settings (HKCU)	OK (0 s)
Step 8 : Receiving info about the registry settings (HKLM)	OK (0 s)
Step 9 : Receiving info about the registry settings (HKLM)	OK (0 s)
Step 10 : Copying configuration files	OK (0 s)
Step 11 : Copying files of scripts and dialogs	OK (0 s)
Step 12 : Copying log files	OK (15 s)
Step 13 : Receiving info about TCP/IP(UDP) ports in use	OK (3 s)
Step 14 : Receiving info about the types of installed CPU	OK (12 s)
Step 15 : Receiving info about the installed hardware	OK (4 s)
Step 16 : Receiving info about the installed Guardant dongles	OK (0 s)
Step 17 : Creating an archive copy of the MS SQL Server database	OK (23 s)
Step 18 : Compressing files	OK (4 s)
Step 19 : Removing old dump- and log-files	OK (0 s)
Step 20 : Removing temporary files	OK (0 s)
Completed!	

5

4. Follow the **Open Folder with Support.7z File** link to view the archive (6).
The archive is saved in C:\Users\%current user name%\Documents\Intellect\.

The Fps.exe utility for productivity estimation

The purpose of the Fps.exe utility

Productivity measurement fps.exe utility is used to estimate productivity of video processing.

Estimation is done in the following way:

1. Segmentation of the given video fragment for a set of frames in jpeg format.

Note.

If the video fragment is not set, the utility generates pattern set of frames. When necessary the utility may store the created set for frames to the selected directory.

2. Compression and/or decompression of the created frame set.
3. Calculation of productivity parameters- number of processed fps with defined resolution and colour.

Note.

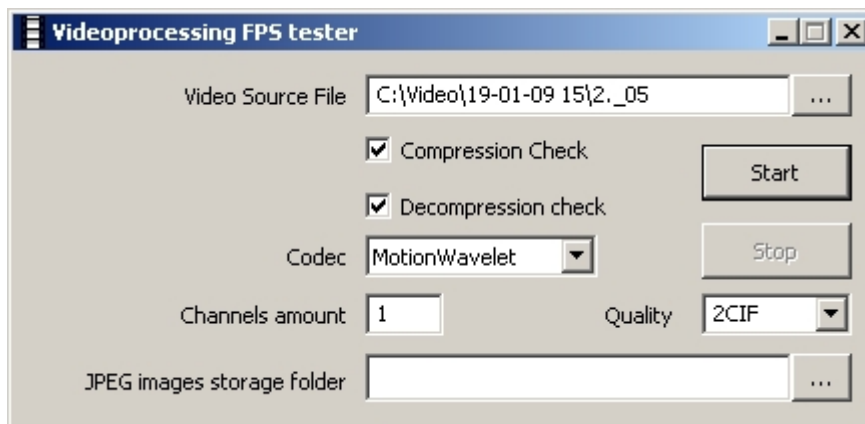
Compression is not available on the Cilent. Playback of a previously recorded video, or a video being received over the network in real time, is available.

Starting and shutting-down the Fps.exe utility

To start fps.exe, do one of the following procedures:

1. Start the utility from the Windows taskbar. Click **Start**, then **Programs**, then **Intellect**, then **Tools**, then **FPS testing utility**.
The fps.exe utility is available from the **Start** menu with the following installation types of the Intellect software: Server, Remote administrator workstation, Remote client.
2. Start the utility from the **Tools** folder of the Intellect program folder: <Intellect>\Tools\fps.exe .

After starting the fps.exe utility there will be a dialog window **Video processing FPS tester**.



To close fps.exe utility click  in the right upper corner of the utility's dialog window.

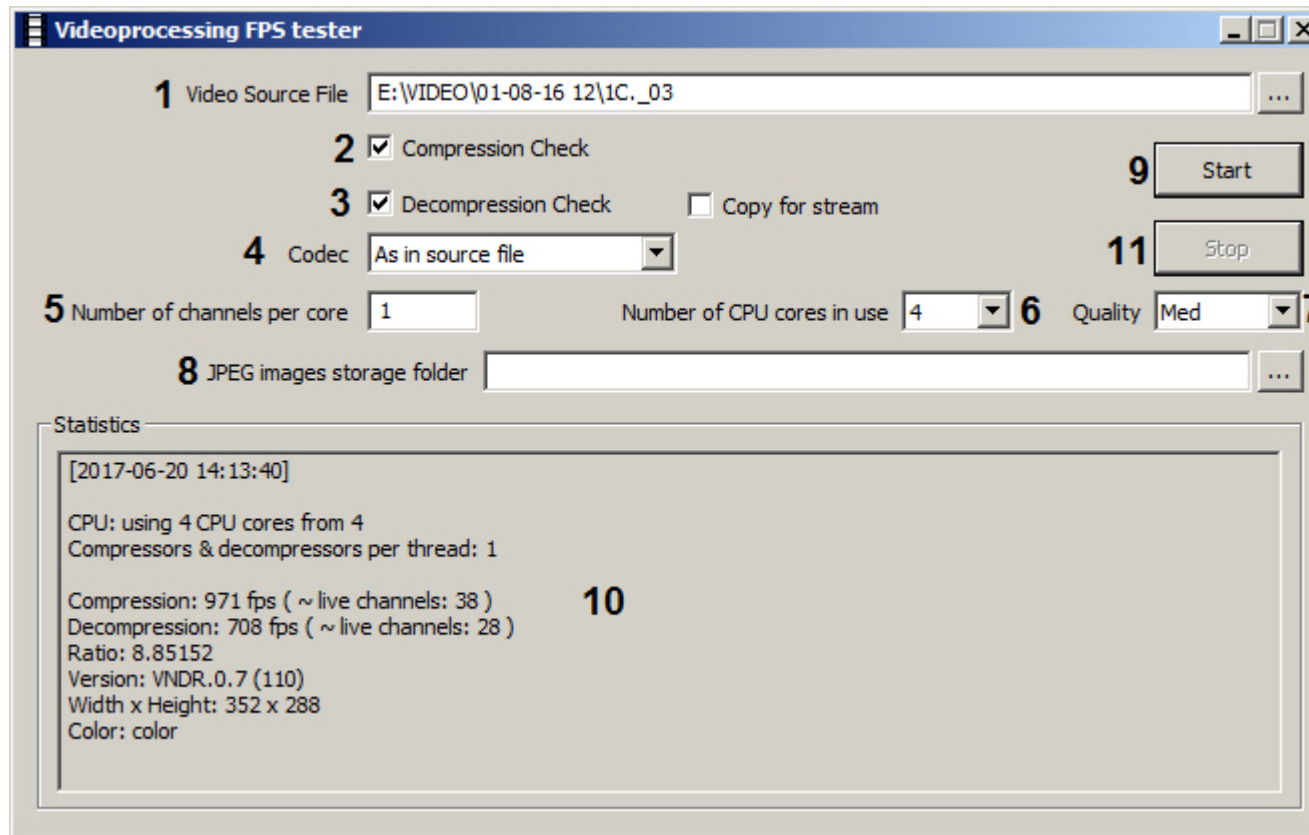
Using the Fps.exe utility

To check productivity of video processing, do the following:

1. Start the fps.exe utility (see [Starting and shutting-down the Fps.exe utility](#)).
2. To set the file of video fragment click  button in the field Images storage folder and in the **Open** standard Windows dialog window, that will open, select with a double mouse click the required file (1).

Note.

To emulation the pattern set of frames, the field **Video Source File** is not entered.



3. Activate **Compression check** checkbox to check how many fps the given computer can compress (2).
4. Activate **Decompression check** checkbox to check how many fps the given computer can decompress(3).
5. Select the required compressor version from the dropdown list **Codec** (4).
6. Enter the required number of emulated cameras in the field **Channels amount** (5).

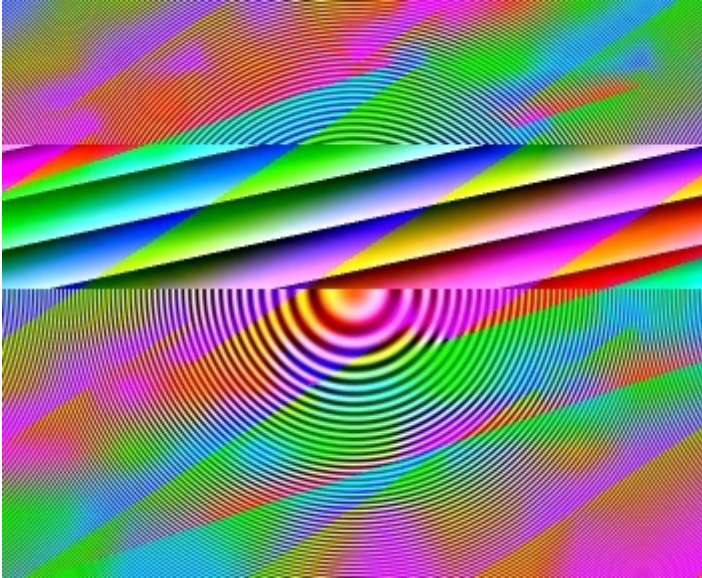
Note.

This setting is actual only with emulation of pattern set of channels.

7. In the **Number of CPU cores in use** field specify the number of CPU cores to be used for performance check (6).
8. Select the required value of frames compression from the dropdown list **Quality** (inversely to compression level) (7).
9. When necessary set the directory, where frames extracted from the video would be decompressed with the help of button  of the field **Jpeg images storage folder** (8).
10. To start video processing tester click **Start** button (9).
11. As the result parameters of video processing productivity will be displayed in the title bar of the utility window (10).

Productivity parameter	Description of parameter
Compression	total number of frames that can be compressed in one second
Decompression	total number of frames that can be decompressed in one second
Ratio	compression ratio
Version	selected version of the compressor
Width	frame width
Height	frame height
Color	if the frame is in color
CPU	number of CPU cores in use
Compressors \$ decompressors per thread	number of compressor instances per CPU

12. If step 8 is completed, the frames for testing video processing will be recorded to the files jpeg storage folder.



13. To stop the testing process, click the **Stop** button (11).

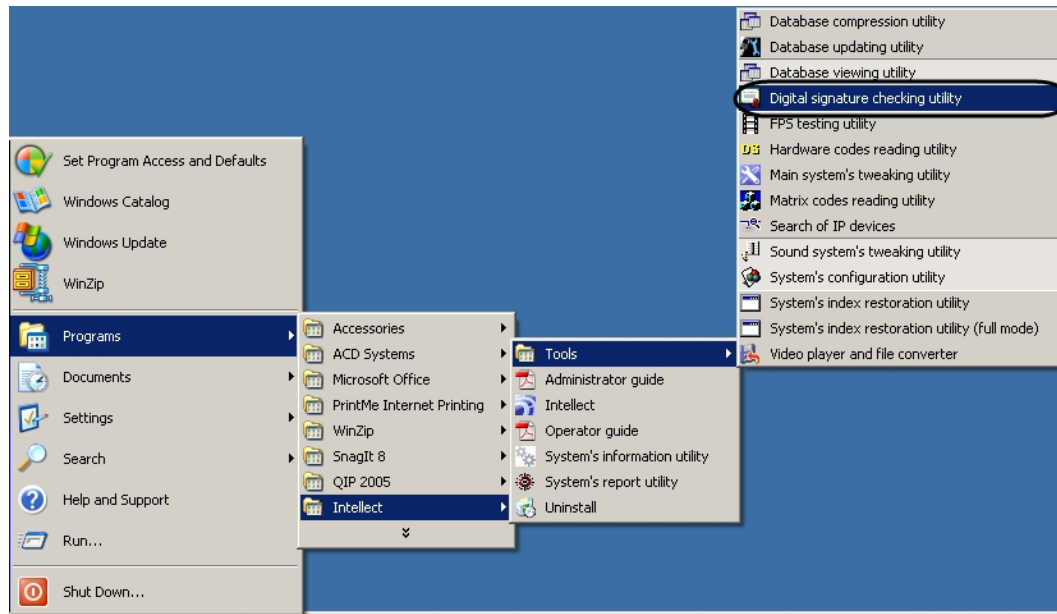
Testing productivity of video processing is completed.

The SignCheck.exe utility for checking the authenticity of exported frames and video recordings

Starting and shutting-down the SignCheck.exe utility

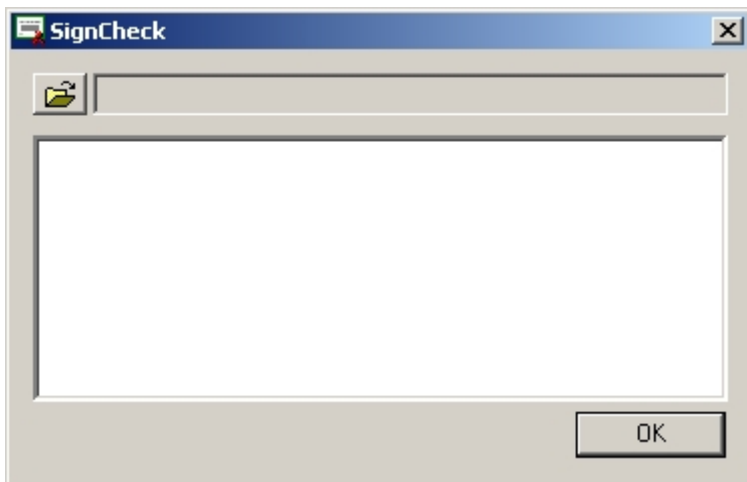
To start the SignCheck.exe utility, do one of the following:

1. Start the utility from the Windows taskbar. Click **Start**, then **Programs**, then **Intellect**, then **Tools**, then **Check of the Digital Signature**.
The SignCheck.exe utility is available from the **Start** menu with the following installation types of the Intellect software: Server, Remote administrator workstation, Remote client.



2. Start the utility from the **Tools** folder of the Intellect program folder. Example: C:\Intellect\Tools\SignCheck.exe.

The SignCheck dialog box will open.



To close the SignCheck.exe utility, click the **Close** button ().

The purpose of the SignCheck.exe utility

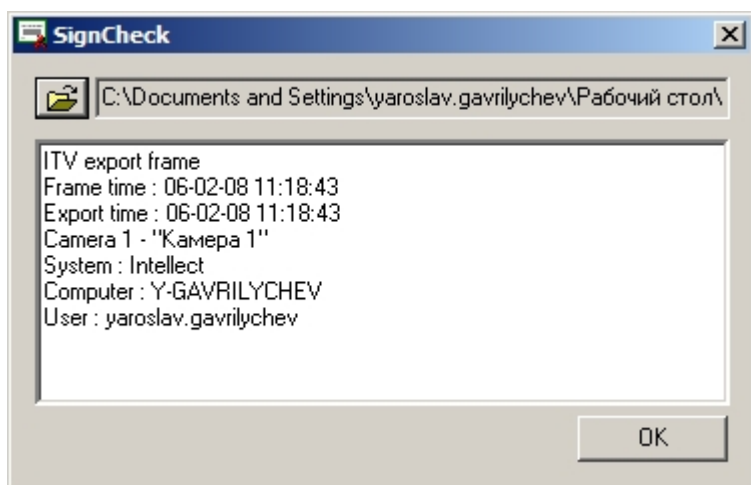
The SignCheck.exe utility is designed for checking the authenticity of a frame exported into BMP or JPEG format using the Converter.exe utility.

Using the SignCheck.exe utility

To verify the frame authenticity, do the following:

1. Start the utility (see [Starting and shutting-down the SignCheck.exe utility](#) section).
2. Select the file with exported frame to check, using the  button and a standard dialog box for opening files.

The SignCheck window will show the information about the selected frame.



The following information is displayed:

1. AxxonSoft export frame – digital signature title
2. Frame time – date and time stamp of this frame in the recording
3. Export time – date and time of exporting this frame to a file
4. Camera – ID of the camera from which the recording was made
5. System – the software that made the recording
6. Computer – name of the computer this software is installed on
7. User – user name of this computer.

If the frame cannot be authenticated, or the digital signature is missing, the "Verification failed" message will be displayed.

The Convert.exe utility for correcting modification dates of video archives

The purpose of the Convert.exe utility

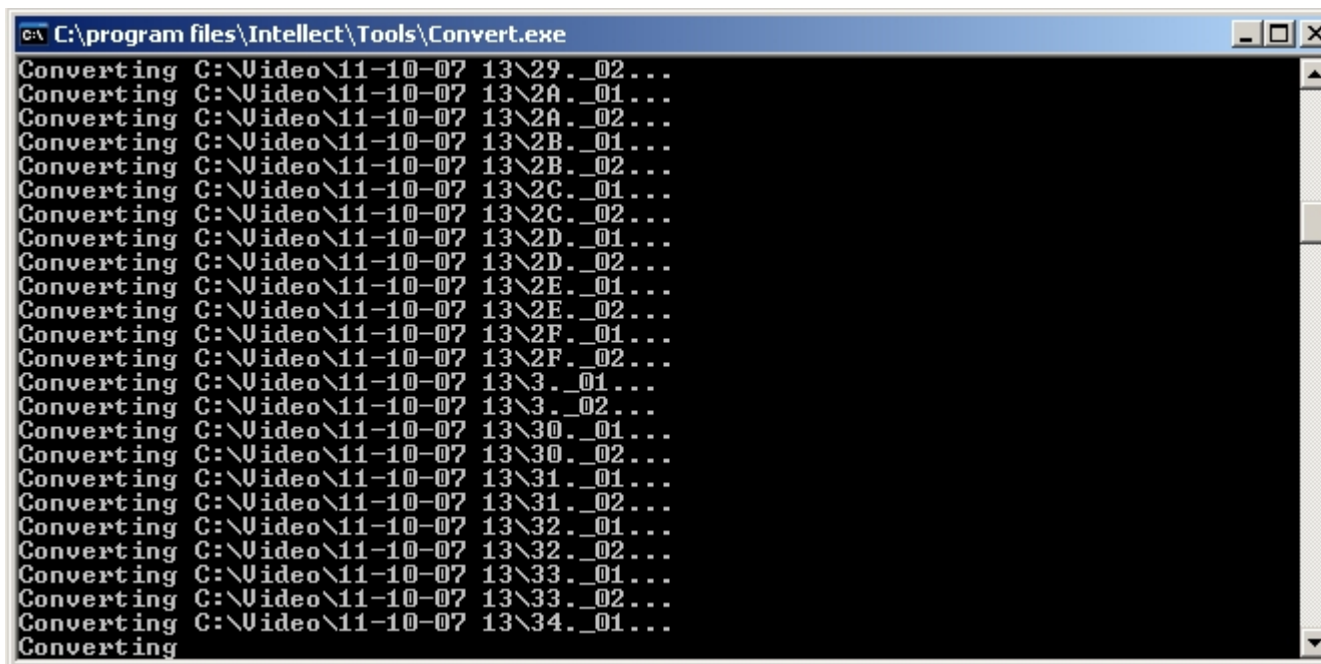
The Convert.exe utility is designed for restoring changed creation dates of video archive files. For example, file creation dates may be changed (corrupted) while transferring an archive from one computer to another. This may lead to incorrect playback of the archive.

Starting and shutting-down the Convert.exe utility

Start the utility from the Tools folder of the *Intellect* program folder. Example: C:\Intellect\Tools\Convert.exe.

The Convert.exe utility is available from the **Start** menu with the following installation types of the *Intellect* software: Server, Remote administrator workstation.

The Convert.exe utility dialog box will open.



To shutdown the Convert.exe utility, click the **Close** button ().

Restoring changed creation dates using the Convert.exe utility

The Convert.exe utility allows restoring the creation date of a video archive file. To make the restoration, start the utility (see the [Starting and shutting-down the Convert.exe utility](#) section). A console window will open starting the process of searching the Video folder on each of the available disks. Then, replacing of modification date for creation date will start automatically. This process will take some time depending on the archive size. For example, restoring dates in a 500 MB archive will take about 10 seconds. When all dates are replaced, the Convert.exe window will close by itself.

Working with the Convert.exe utility using the command prompt

One can work with the Convert.exe utility using Windows command prompt. The following startup parameters are in use:

1. TZ +hh:mm – changing date of file creation and modification for hh hours and mm minutes.
2. PATH – specifies the path to the archive folder with files date of creation (modification) of which is to be restored.
3. FULLMODE – running the utility in order to correct the date of creation and modification.
4. FORMAT is similar to FULLMODE. It also converts archive files to a format optimized for high-resolution archiving. The execution time of the FORMAT operation is comparable the the time required for a full conversion of the archive on the disk, because it requires reading every frame and creating a backup copy of the files while they are being converted. After the format of the archive or record has been updated, the execution time of subsequent conversions in FULLMODE will become the same as during an ordinary conversion.

Examples of commands for working with the Convert.exe utility using the command prompt:

1. Convert.exe PATH "H:\Video\03-09-12 15" FULLMODE
Running this command the Convert.exe utility will restore the date of file creation and modification in H:\Video\03-09-12 15 folder.
2. Convert.exe TZ +01:00
Running this command the time of file creation and modification will change for an hour. For instance, the "17-09-12 13" folder will be renamed as "17-09-12 14".

Note.

These examples assume using a command prompt in <Intellect>\ Tools folder.

The ddi.exe utility for editing database templates and external settings files

The ddi.exe utility is designed for editing external system settings files (*.ddi) and the templates of the main database (intellect.dbi and intellect.ext.dbi).

The ddi.exe utility is started from the **Start -> All Programs -> Intellect -> Tools -> System configuration** menu.

The ddi.exe utility is available from the **Start** menu with the following installation types of Intellect: Server, Remote administrator workstation, Remote client.

The utility can also be started from the **Tools** folder of the Intellect program folder.

After the changes are made to *.ddi and/or *.dbi files, update the main database. For this use the idb.exe utility (see [The idb.exe utility for converting databases, selecting database templates and making backup copies of databases](#) section).

Note.

If changes were made to .ddi or .dbi files using the ddi.exe utility and these files were installed along with Intellect, then these files will be deleted while deleting with configuration upload. .ddi and .dbi files added manually will be saved.

Editing intellect.dbi and intellect.ext.dbi database templates using the ddi.exe utility

To edit the template of the main database, open it using the **File -> Open** menu. The template files are stored in the root of the Intellect program folder.

Note.

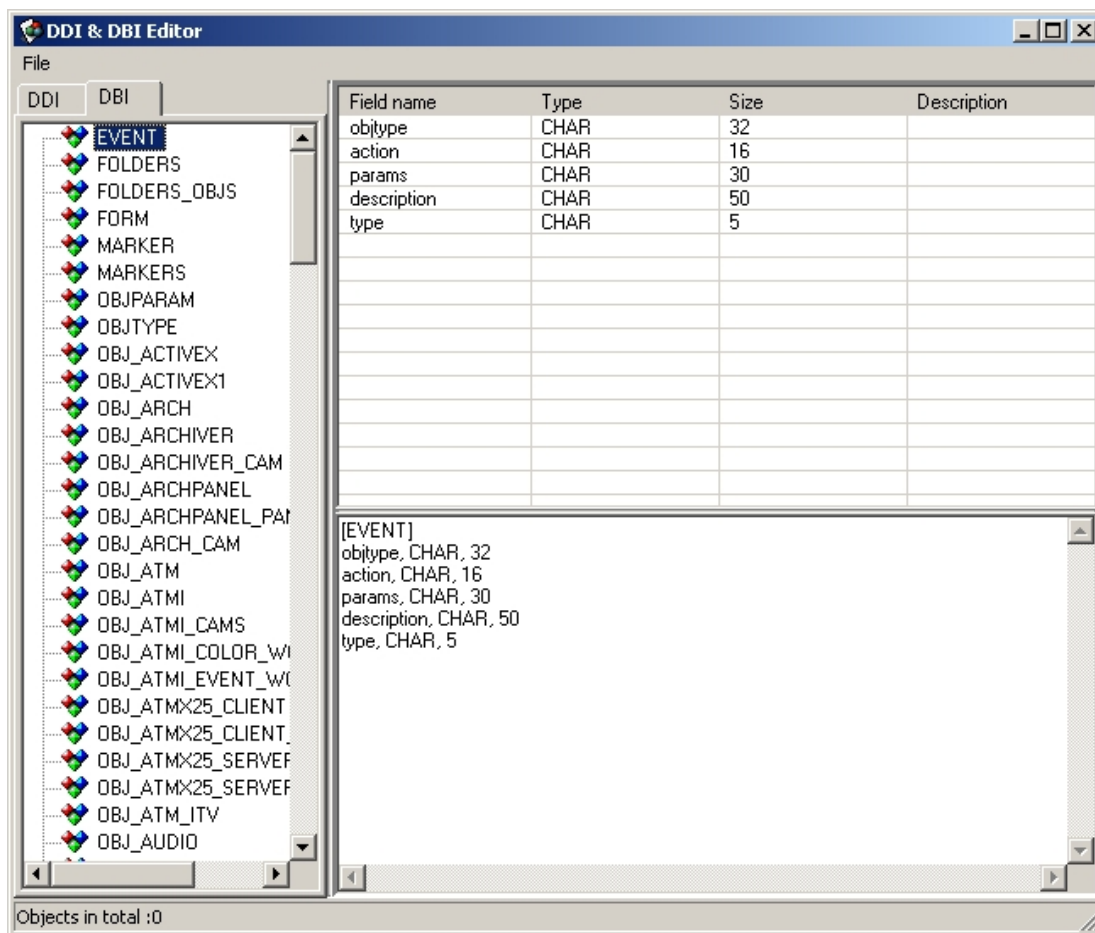
To open the recently used file, select the **Last files** item in the **File** menu or open the context menu in the **Names** tab.

Note.

The **Paste from file** item in the **File** menu allows opening several files by adding tables, described in other dbi files, to the open dbi file.

Intellect.dbi file contains the list of main tables and fields of the database. User-defined tables and fields are stored in a separate file – intellect.ext.dbi. This file is made separate from the main file, to eliminate the need to re-insert user-defined tables and fields into the main file, in case of Intellect system update. The contents of these files are merged upon Intellect start-up.

To view the database template, open the **DBI** tab in the top left corner of the window. The list of the tables of the main *Intellect* database will be displayed in the left panel. The right panel will show the list of fields of the selected database.



To delete, add, edit or copy object fields, use the table on the left of the utility box.

The following parameters of the table fields are displayed:

1. **Field name** – the name of the field in the database.
2. **Type** – data type of the field contents. Available types:
 1. BIT – checkboxes taking logical values Yes and No;
 2. CHAR – fields with a few symbols;
 3. DATETIME – date and time in the following format: date – dd-mm-yyyy, time – hh:mm:ss;
 4. DOUBLE, INTEGER, SMALLINT – numerical fields of corresponding types;
 5. TEXT – fields with the text.
3. **Size** – maximum number of units of the specified format in a field.
4. **Description** – field name shown in the interface.

The database is to be refreshed after the changes were made.

Editing the external setting file (intellect.ddi) using the ddi.exe utility

To edit the external settings file (intellect.ddi), open it using the **File -> Open** menu. This file is stored in the root of the *Intellect* program folder.

Note.

To open the recently used file, select the **Last files item** in the **File** menu or open the context menu in the **Names** tab.

Note.

The **Paste from file** item in the **File** menu allows opening several files by adding tables, described in other dbi files, to the open dbi file.

The external settings file contains the information about objects and events loaded into the system configuration, graphical symbols for various object states on the map, and the transition rules from one object state to another.

The purpose of editing can be software localization or expanding/limiting its functionality (for example, removing unused objects from the system).

Note.

Changing the external settings file may lead to system failure. Create a backup copy of the file before editing it.

The database is to be refreshed after the changes were made.

General information on editing the external setting file

To start using the utility, open the **DDI** tab in the top left corner of the utility dialog box.

The left side of the dialog box will display all system objects loaded into the configuration. The right side of the dialog box shows the properties panel for the selected object. This panel consists of several tabs: **Names**, **Events**, **Reactions**, **Icons**, **States**, and **Transition rules**.

To delete, add, edit or copy object properties, right-click a cell in the tab or the list of system objects to open the context menu.

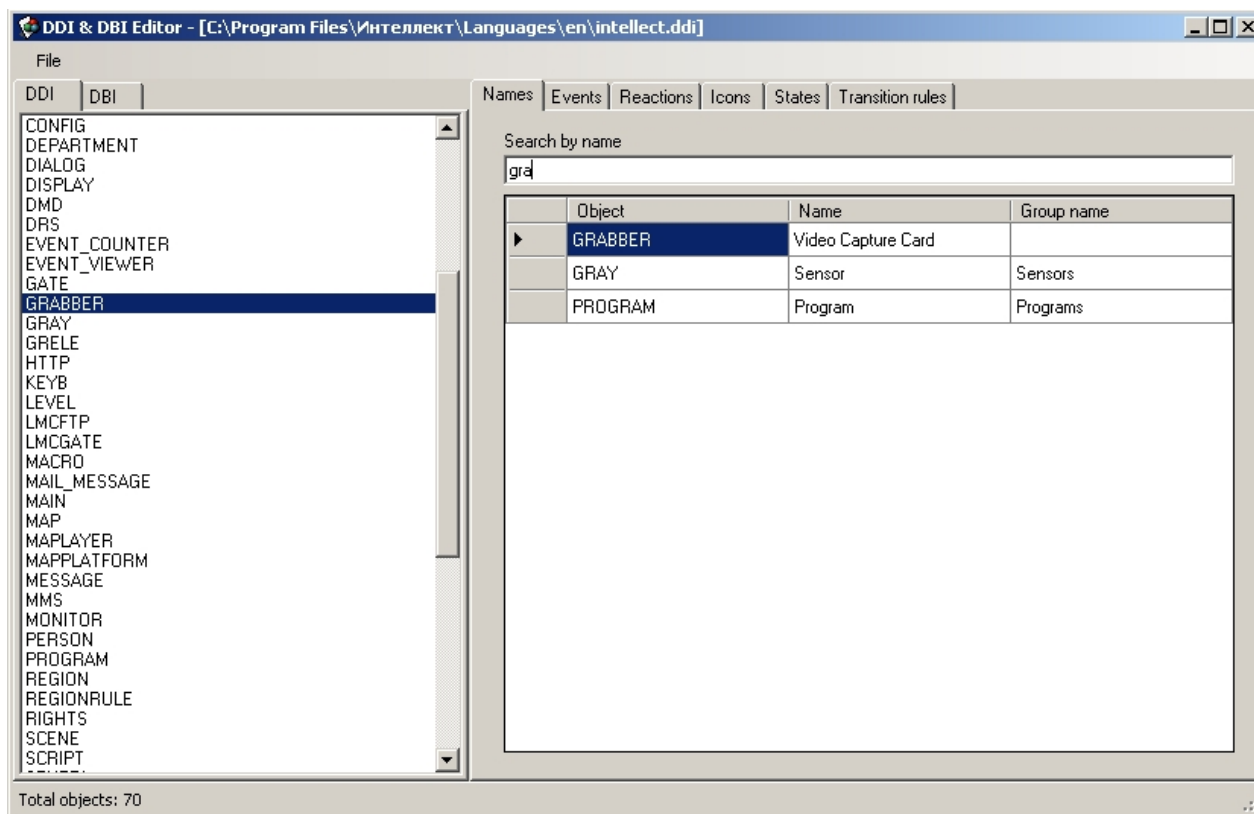
To edit the object properties, use the tables on the right of the ddi.exe utility box.

The Names tab

This tab contains the table with three fields:

1. **Object** – object ID in the system.
2. **Name** – the name of the object in the system.
3. **Group name** – the name of the group the object will be assigned to upon creation. If this field is left blank, no group will be created.

By default all objects, the description of which the ddi file contain, are displayed in the table. To find an object, type-in the object name or ID in the **Search by name** field. As a result the table will contain all object names in the system that exactly or partially match the word typed in this field.



This tab contains the table with three fields:

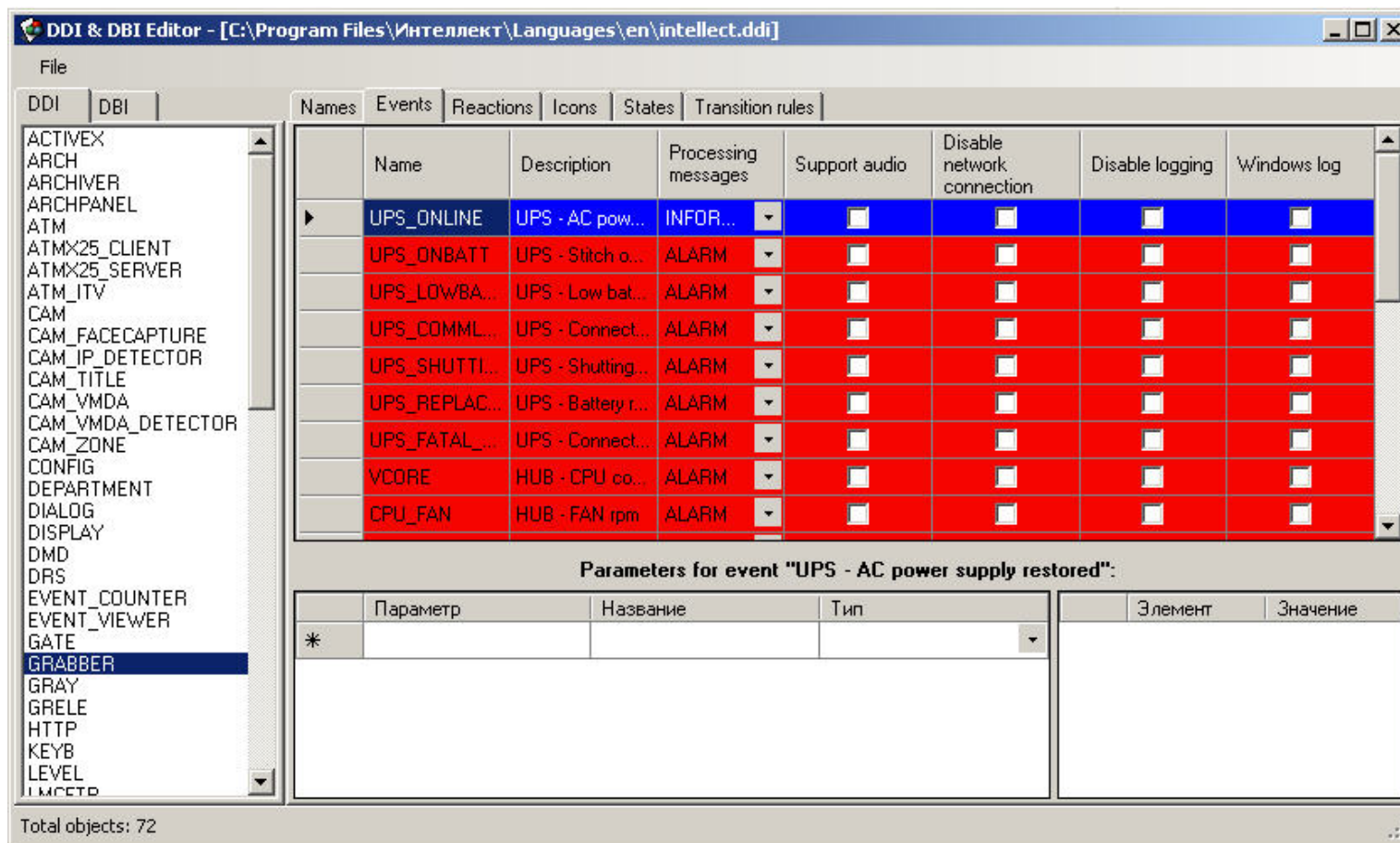
1. **Object** – object ID in the system.
2. **Name** – the name of the object in the system.
3. **Group name** – the name of the group the object will be assigned to upon creation. If this field is left blank, no group will be created.

By default all objects, the description of which the ddi file contain, are displayed in the table. To find an object, type-in the object name or ID in the **Search by name** field. As a result the table will contain all object names in the system that exactly or partially match the word typed in this field.

The Events tab

This tab contains the list of system events that the selected object can create. Each event has the following editable parameters:

1. **Name** – event identifier.
2. **Description** – short description of the event.
3. **Processing messages** – type of window to open on event occurrence: alarm window or information window.
4. **Support audio** – attached .wav files to be played when the event occurs.
5. **Disable network connection** – local event only. If this checkbox is set checked, other computers on the net will not be notified when the event occurs.
6. **Disable logging** –by default, all events are logged. Set the checkbox checked not to log the event.
7. **Windows log** – set the checkbox checked to log the event to Windows log. If the event is not logged, then it cannot be logged to Windows log.



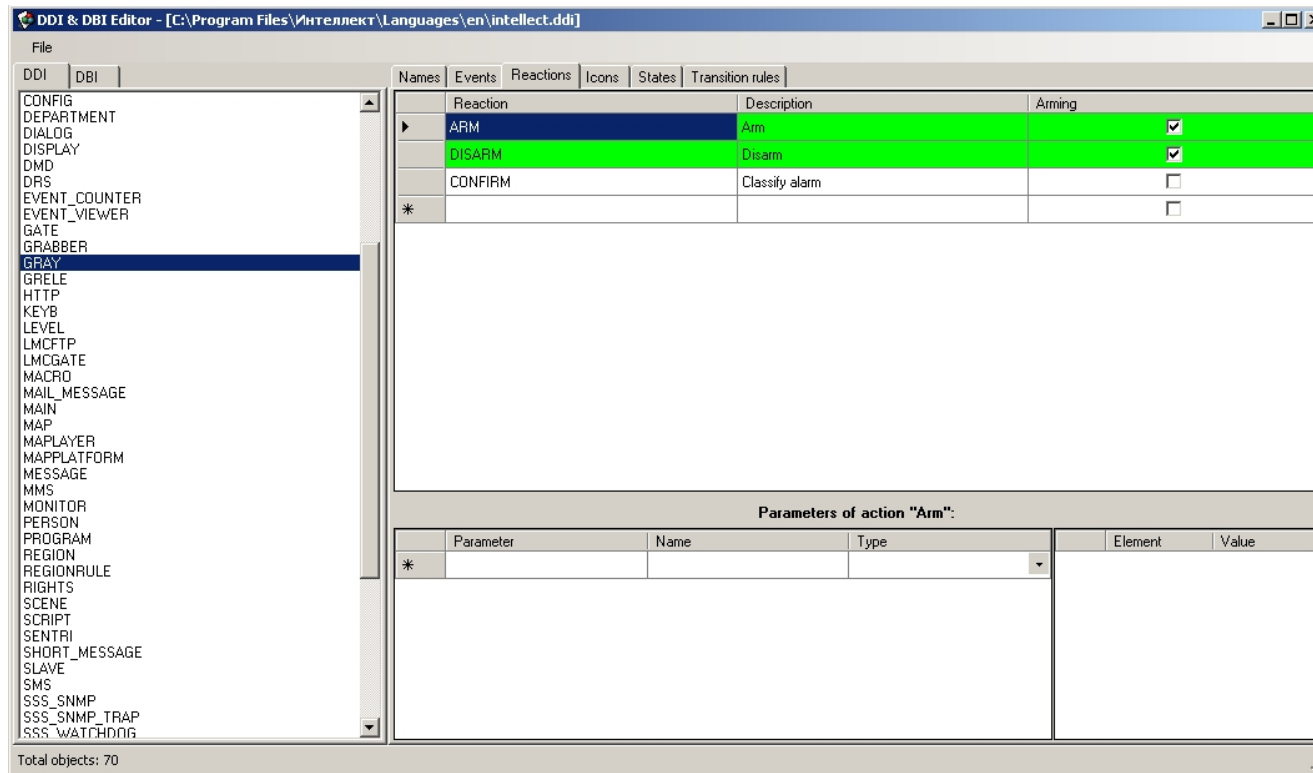
Note.

You can create only the events that are available for the selected object (created at the stage of system programming). Initially all of them are in the intellect.ddi file.

The Reactions tab

This tab lists all reactions that the object can make in response to events. Each reaction has the following properties:

1. **Reaction** – reaction ID.
2. **Description** – short description of the reaction.
3. **Arming** – additional property of the reaction, arming a region.

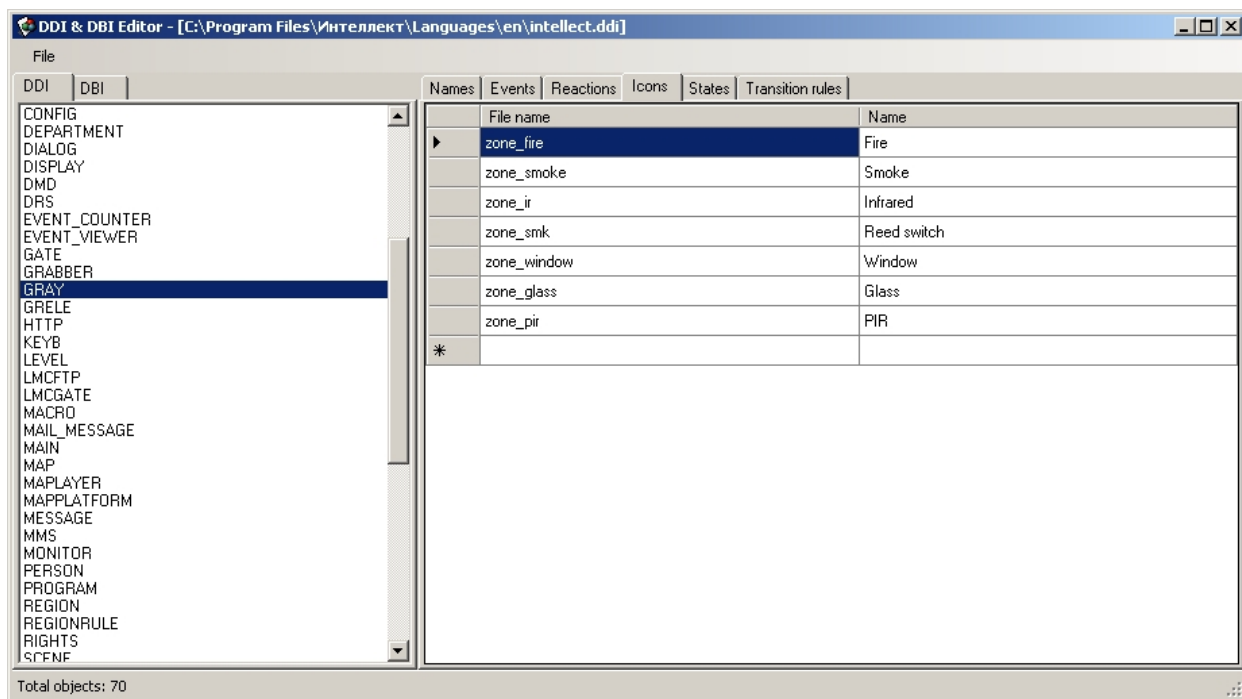


Note.

You can create only the reactions that are available for the selected object (created at the stage of system programming). Initially all of them are in the intellect.ddi file.

The Icons tab

This tab lists the graphical symbols (icons) that represent the selected object on the map. The part of the name used for identifying the file in the .bmp, .jpg or .png format is specified in the **File name** column. Image files are to be stored in the **Bmp** folder in the *Intellect* program folder (for example, C:\Program Files\Intellect\Bmp).



If default icons are to be in use for the same states of objects of the same type, the def icon should be specified on this tab (**By default**). See [The States tab](#) section for more information.

Names	Events	Reactions	Icons	States	Transfer rules
				File name	Name
				cam	Standard
				camptz	PTZ
				camfisheye	Fisheye
				def	By default
				*	

The States tab

This tab lists all states of the selected object. The states have the following properties:

1. **Name** – state ID.
2. **Image** – part of the name in the .bmp format that represent the object state on the map. For example, if the zone_fire file name was selected in the **Icons** tab, and the image of the selected ARMED state is arm, then the zone_fire_arm.bmp file will be in the **Bmp** folder.

The default icon for the states can be set. For this, set the def icon (**By default**) on the **Icons** tab. For example, if there is no zone_fire_arm.bmp icon for the ARMED state, then the def_arm.bmp icon will be searched. This avoids duplicating icons if one state for the different types of the object icon should be displayed identically.

Note.

If the file ID is not set in the **Icons** tab, then the file name will consist of the object ID and part of the file name specified in the Image column.

Note.

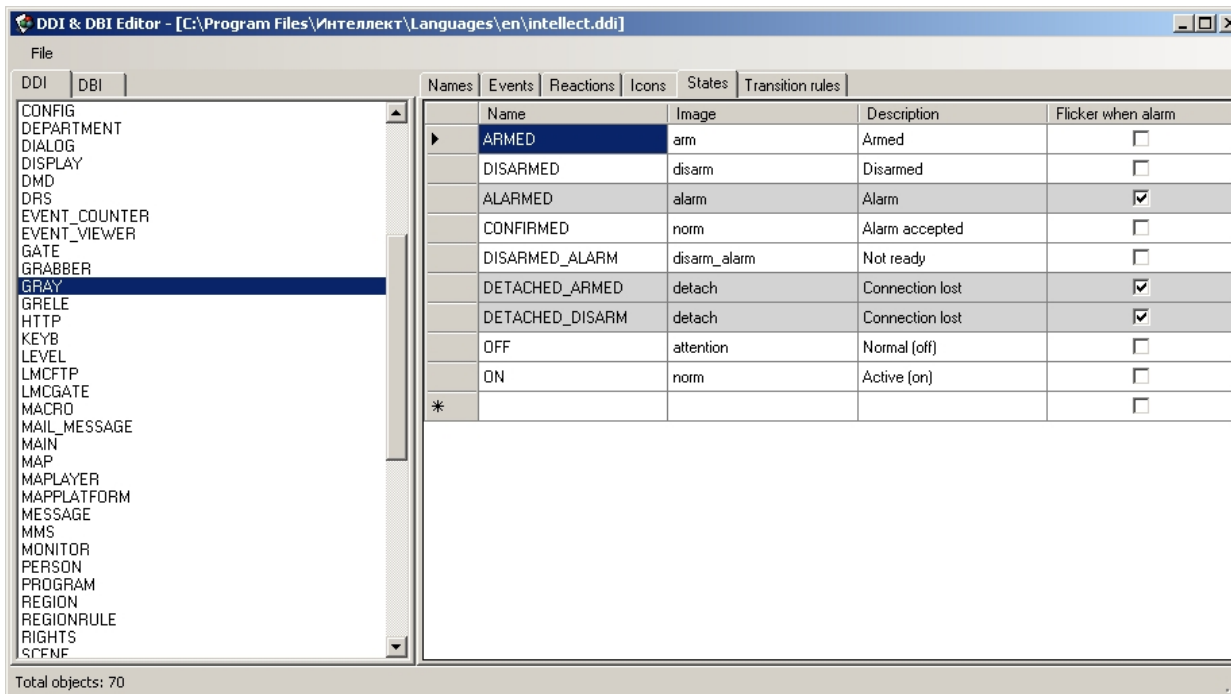
If the object is displayed on the map as a polygon, circle or line, then the color of these figures can be set for each state.

For this specify the color in the R:G:B:A format after the icon name (separated by **&**) in the **Image** column or specify the color only in this format instead of the icon name. Here are the examples of the **Image** column contents:

255:0:0 – red color is set for the state.

alarm&255:0:0 – icon and red color are set for the state.

1. **Description** – short description of the state.
2. **Flicker when alarm** – option of displaying object state - flickering.

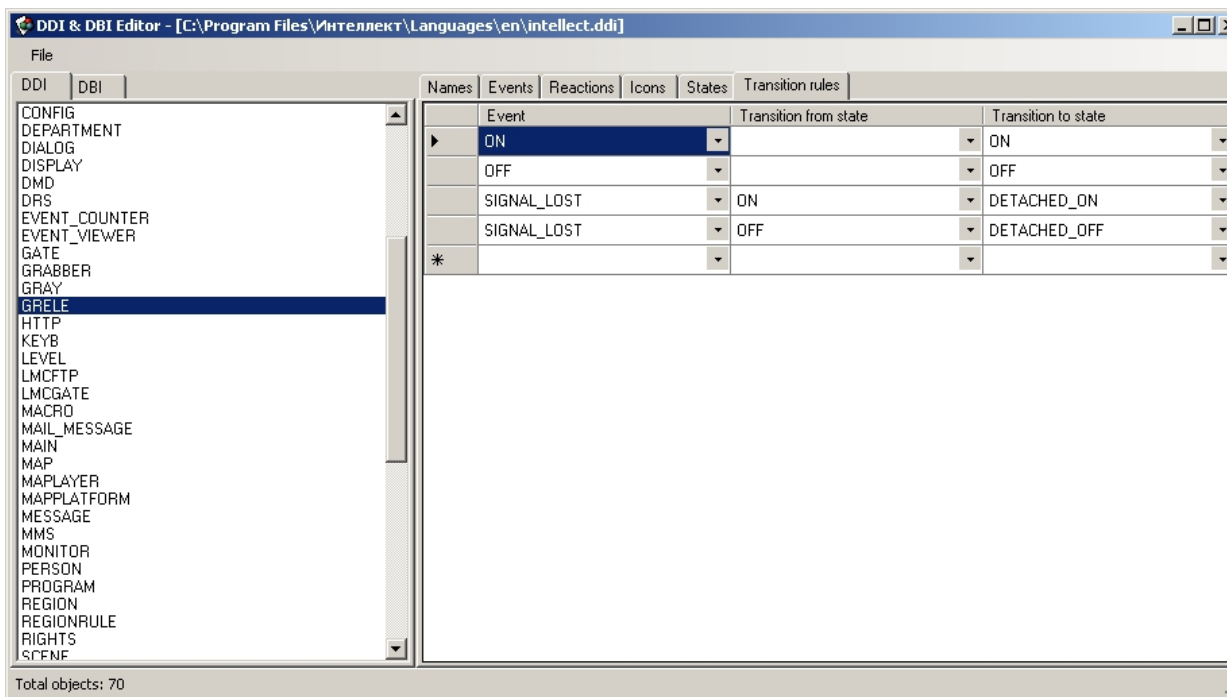


The Transition rules tab

Transition rules connect the events generated by objects, and the states of these objects. Each rule consists of the starting state of the object, an event, and an ending state that the object will take after the event.

The table lists the transition rules from one object state to another. Each rule has the following properties:

1. **Event** – identifier of the event triggering the transition.
2. **Transition from state** – identifier of the object state before the event took place. If this field is left blank, the rule will apply to all starting states.
3. **Transition to state** – identifier of the resultant state of the object.



The Arpedit.exe utility for creating user dialog windows

The Arpedit.exe utility is designed for creating dialog boxes. It allows tailoring Intellect™ system to particular monitoring and security tasks of the customer.

The Arpedit.exe utility is in the "Arpedit" folder (<Installation directory> \Intellect\Tools\ Arpedit). Detailed information on the utility is given in [User's Manual for ArpEdit](#) which is located in the same folder.

The idb.exe utility for converting databases, selecting database templates and making backup copies of databases

The purpose of the idb.exe utility

The idb.exe utility is designed for database administration in INTELLECT™ software. It provides the following functionality:

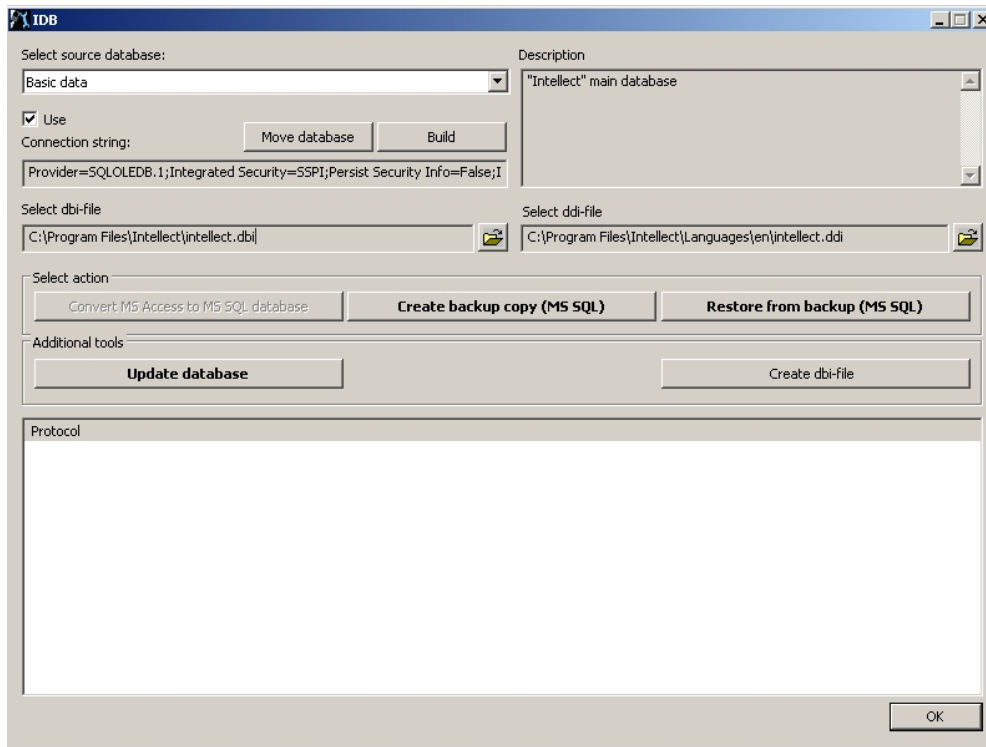
1. Converting MS Access databases to MS SQL format.
2. Connecting to the Intellect database.
3. Setting up the database synchronization.
4. Creating backup copies of a database.
5. Restoring a database from its backup copy.
6. Changing the database template (see Interface elements of the idb.exe window).
7. Separating the events log into an individual database.

Running and shutting-down the utility

Shut down the INTELLECT™ system before running the idb.exe utility.

The idb.exe utility is run from the Intellect installation directory. For example: «C:\ Program Files \Intellect\idb.exe».

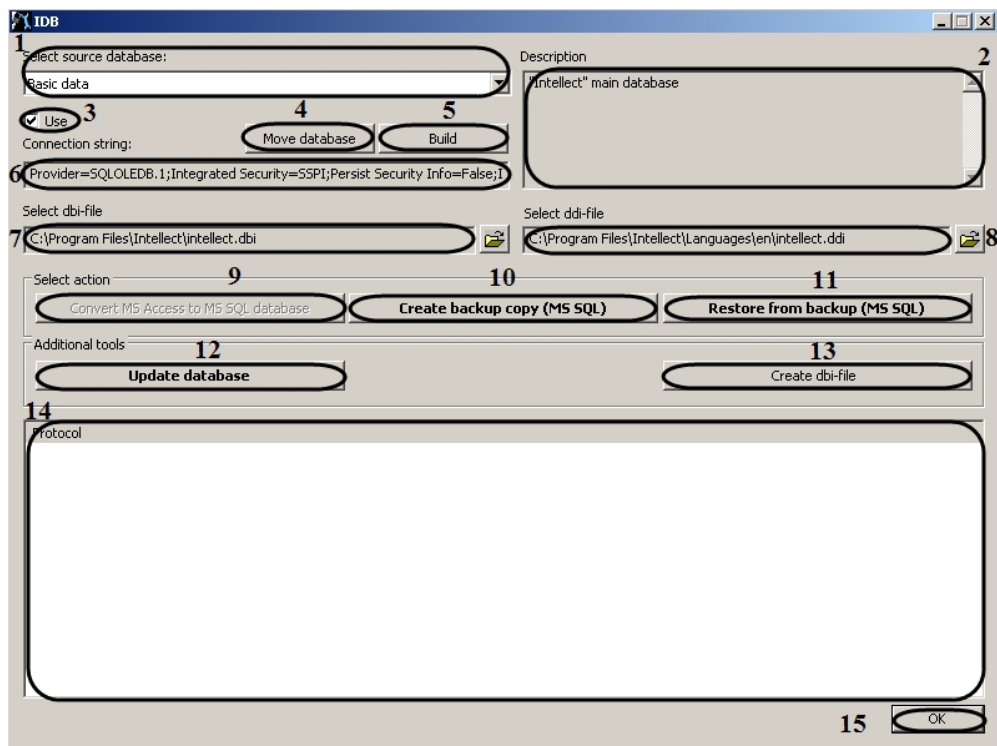
The idb.exe dialog box will open.



To confirm the changes and shut down the utility, click the **OK** button. To shut down the utility without saving the changes, click the **Close** button (✕).

Interface elements of the idb.exe window

The figure below shows the idb.exe dialog box.



The table describes the elements of the idb.exe utility.

Nº	Element name	Description	Default value	Allowed values
1	Select source database	A drop-down list for selecting the database: local, events log, or remote.	Basic data	Basic data – local configuration database Synchro source – remote database for synchronization Protocol – events log database Other values are used with vertical solutions.
2	Description	An information field showing the description of the selected source database.	Base for a configuration system Intellect	Base for a configuration system Intellect – Main configuration database of the Intellect system Remote database for synchronization Events log database Other values are not used.

3	Use	A checkbox for enabling/disabling database usage. When checked, the Build button becomes enabled which is used for setting up the connection to the database.	Checked	Checked – database connected Unchecked – database not connected
4	Move database	The button used to transfer MS SQL Server database files (.mdf and .ldf) to the specified folder. The user must have the rights to create files in this folder. When the files are moved, the database is automatically attached. <i>Note. It is possible to transfer only the local DB (Basic data data source). When using a remote DB (Synchro source data source), files can not be moved.</i>	Enabled	Enabled – idb.exe utility is connected to an MS SQL database Disabled – idb.exe utility is not connected to an MS SQL database
5	Build	A button for opening the Data Link Properties dialog box for database connection setup. This button is enabled if the Use checkbox is checked.	Enabled	Enabled – idb.exe utility is connected to the database Disabled – idb.exe utility is not connected to the database
6	Connection string	An information field showing the summary about the database connection	Depends on database connection parameters and server/workstation configuration	Shows the following parameters: Provider, Integrated Security, Persist Security Info, Data Source. The Provider parameter can take the following values: SQLLEDB.1 – MS SQL database Microsoft.Jet.OLEDB.4.0 – MS Access database; other values are not used. The Integrated Security parameter can take the following values: SSPI – authentication on MS SQL server using Windows account information; parameter not shown – authentication on MS SQL server using login/password, or MS Access database is used. The Persist Security Info parameter can take the following values: True – allow saving the password for automatic connection to the database; False – do not allow saving the password for automatic connection to the database; The Data Source parameter can take the following values: the name of an MS SQL server used for controlling the database;

				full pathname of the .mdb file of an MS Access database.
7	Select .dbi file	An information field and a button for selecting and displaying a database structure file (.dbi). The updated database will have the structure specified in this file.	C:\Program Files\Intellect\intellect.dbi	Full pathname of the .dbi file
8	Select .ddi file	An information field and a button for selecting and displaying the name of the . ddi file with system objects, events and actions.	C:\Program Files\Intellect\Languages\ru\intellect.ddi	Full pathname of the .ddi file
9	Convert MS Access to MS SQL database	A button for starting the conversion of an MS Access database to MS SQL format. This button is enabled if the utility is connected to an MS Access database.	Disabled	Enabled – idb.exe utility is connected to an MS SQL database Disabled – idb.exe utility is not connected to an MS Access database
10	Create backup copy (MS SQL)	A button for starting the process of creating a backup copy of the database. This button is enabled if the utility is connected to an MS SQL database.	Enabled	Enabled – idb.exe utility is connected to an MS SQL database Disabled – idb.exe utility is not connected to an MS SQL database
11	Restore from backup (MS SQL)	A button for restoring the database from a backup.	Enabled	Enabled – idb.exe utility is connected to an MS SQL database Disabled – idb.exe utility is not connected to an MS SQL database
12	Update database	A button for starting the process of updating the database structure. The structure is updated according to the .dbi file specified in the Select .dbi File field.	Enabled	Enabled – idb.exe utility is connected to the configuration database Disabled – idb.exe utility is not connected to the configuration database
13	Create dbi-file	A button for creating a database structure file (.dbi template).	Enabled	Enabled - .dbi file creation is allowed.
14	Protocol	An information area displaying the progress of database processing: converting, structure updating, creating backup copy, etc.	Empty	An information area displaying the progress of the database processing. A blue “i” marks the notifications about successful completion of each processing step. A red “!” marks the notifications about the errors in a processing step. A blue tick marks the completion of the processing.
15	OK	A button for saving the database connection parameters and shutting-down the idb.exe utility.	Enabled	Enabled – saving database connection parameters and shutting-down the utility is allowed. Disabled – the utility is still processing the database.

Using the idb.exe utility

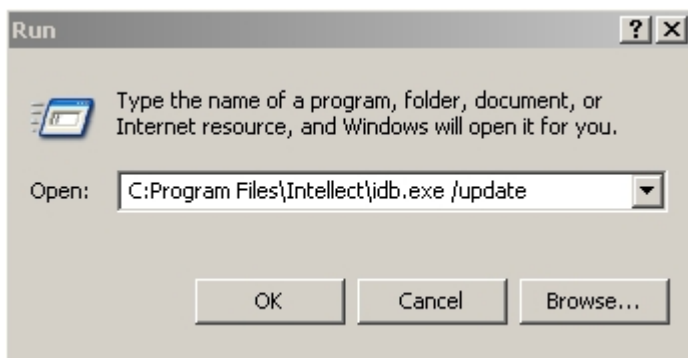
The idb.exe utility allows the administration of the databases of the Intellect system. Instructions on how to use the utility for administering databases are given in [INTELLECT™ software database management](#) section.

Note.

The Windows Firewall/ICS service is to be enabled to use the idb.exe utility.

Working with idb.exe utility with the use of keys

It is possible to run idb.exe utility with keys. For this click **Start -> Run**. Type the path to idb.exe utility and the required key after / in the appeared window.



To display keys, supported by the utility, use the command «idb.exe /?».



idb.exe utility supports the run with the following keys:

1. «/update» - the key of running the hidden updating of database (uses intellect.dbi file).
2. «/sync» - the key of database synchronization with the source of data.
3. «/backup» - the key of running the process of creation the backup copy of Intellect database. The backup copy is created to the address «C:\Documents and Settings\USER2\My documents\AxxonSoft\Intellect\Data\intellect.sql.bak». It is used when the idb.exe utility is connected to MS SQL database.
4. «/restore» - the key of running the database recover from the previously created backup copy. It is used when the idb.exe utility is connected to MS SQL database.
5. «/set_cs key=value» - the key of saving the connection string to the system registry (summary on parameters of connection to database).

6. «sql_convert:db_name mssql2000|mssql2005» - the key of running the database conversion process from MS Access to MS SQL format. It is used when the idb.exe utility is connected to MS Access database.

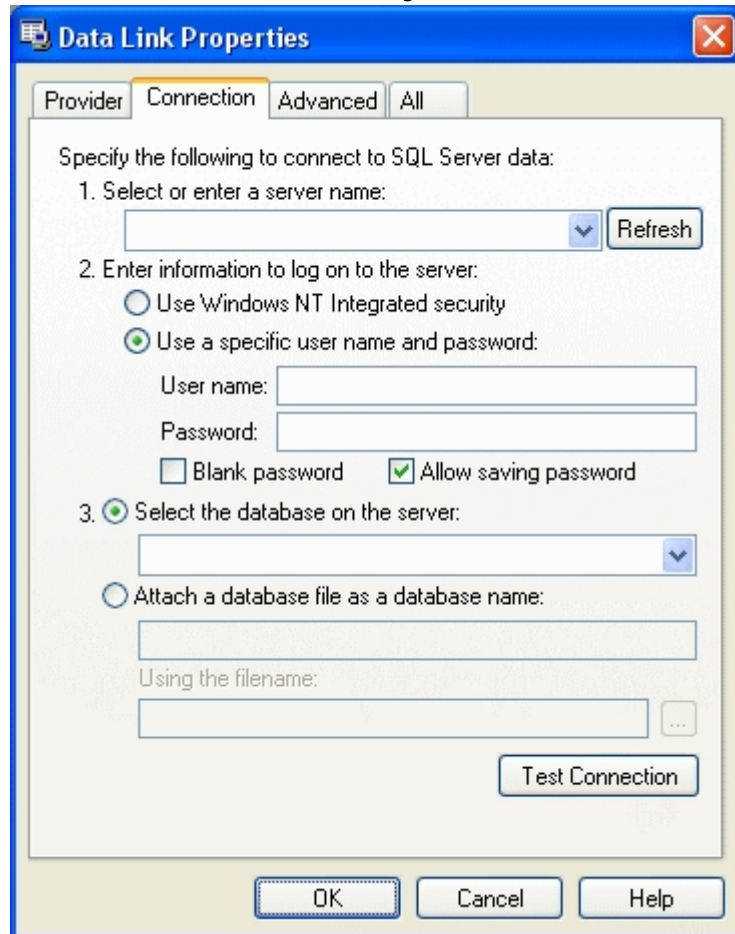
Example. To convert MS Access to MS SQL database using the key, do the following:

1. Use the **Run** command (Start -> Run), specify the key: C:\Program Files\Intellect\idb.exe /sql_convert.
2. Click the **OK** button. As a result the dialog box of the idb.exe utility is displayed.
3. Select MS Access database in the **Select data source** dropdown list
4. Click the **Convert MS Access to MS SQL** database button.
5. As a result the box suggesting to select MS SQL server is displayed. Click the **OK** button to continue.



6. As a result the **Data Link Properties** box is displayed. On this box you are to:
 1. select the **Server name** in the dropdown list;
 2. specify the user name and password to log in the Server;
 3. set the **Allow saving password** checkbox checked;
 4. click the **Test Connection** button;

5. click the **OK** button to save the changes.

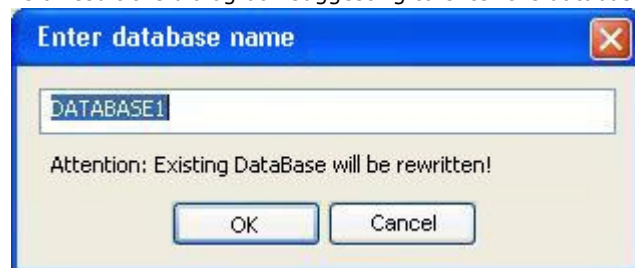


The 'Data Link Properties' dialog box is shown with the 'Connection' tab selected. It contains the following fields and options:

- Provider:** Tabbed interface with 'Provider', 'Connection' (selected), 'Advanced', and 'All' tabs.
- Specify the following to connect to SQL Server data:**
 - 1. Select or enter a server name:** A text box with a dropdown arrow and a 'Refresh' button.
 - 2. Enter information to log on to the server:**
 - ☐ Use Windows NT Integrated security
 - ☒ Use a specific user name and password:
 - User name:** Text box
 - Password:** Text box
 - ☐ Blank password ☒ Allow saving password
 - 3. ☒ Select the database on the server:** Text box with a dropdown arrow.
 - ☐ Attach a database file as a database name:
 - Text box
 - Using the filename: Text box with a browse button (...)
- Test Connection:** Button

At the bottom are 'OK', 'Cancel', and 'Help' buttons.

7. As a result the dialog box suggesting to enter the database name is displayed.



The 'Enter database name' dialog box is shown. It contains the following fields and options:

- Enter database name:** Title bar with a close button.
- DATABASE1:** Text box with the name 'DATABASE1' entered.
- Attention: Existing DataBase will be rewritten!** Message box.
- OK** and **Cancel** buttons.

8. Enter the database name or leave the name suggested by the system. Click the **OK** button.

9. As a result the process of converting **MS Access into MS SQL database** starts. The progress of the process is displayed in the **Protocol** table of the idb.exe utility.
10. When the database is converted, shut down the idb.exe utility (see [Running and shutting-down the utility](#) section).

MS Access database is now converted to the MS SQL format.

Extracting event protocol into an individual database

External event protocol is created with the help of the idb.exe utility.

Important!

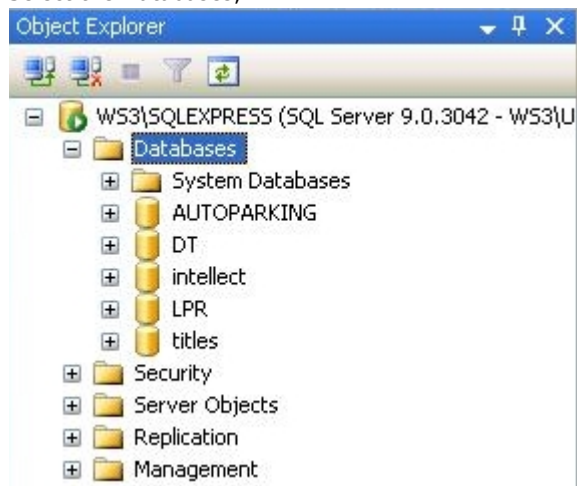
If *Time&Attendance* module is in use (the module is a part of *ACFA-Intellect* subsystem) use the RemoteProtocolConnector utility to extract event protocol into a separate database – see *Intellect Web Report System. User Guide* (the most relevant version of this document is available in [AxxonSoft documentation repository](#)).

Note.

The way of extracting event protocol into an individual database described in this section, i.e. with the idb.exe utility, is the way to be used for Report System being part of the base *Intellect* software. Additional configuration of the connection to such protocol DB is required in Report System being part of the base *Intellect* software (see [Connecting to the Events Log \(PROTOCOL table\)](#)).

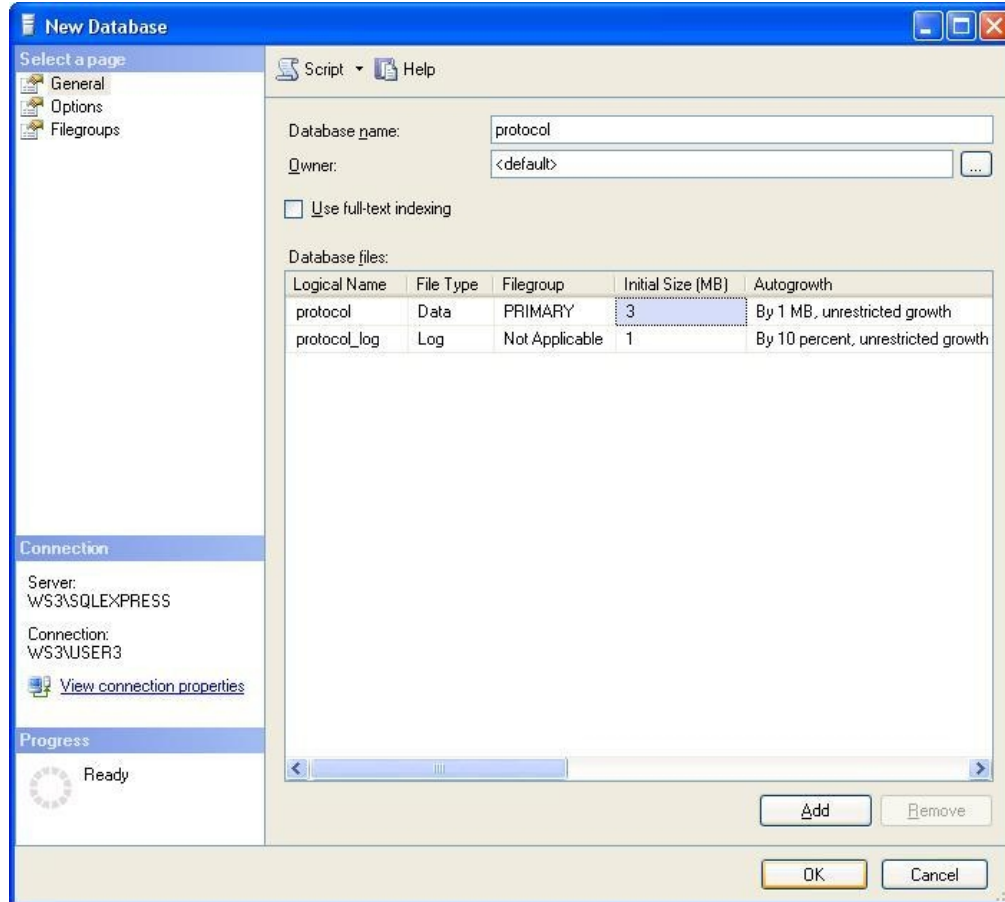
The protocol database is to be created beforehand with the help of MS SQL Server program. For this:

1. Open Microsoft SQL Server Management Studio Express;
2. Select the Databases;



3. Right-click and select the **New Database...**;

- Specify the protocol database name in the **Database name** line in the **New Database** box;



- To create a new protocol database, click **OK**;

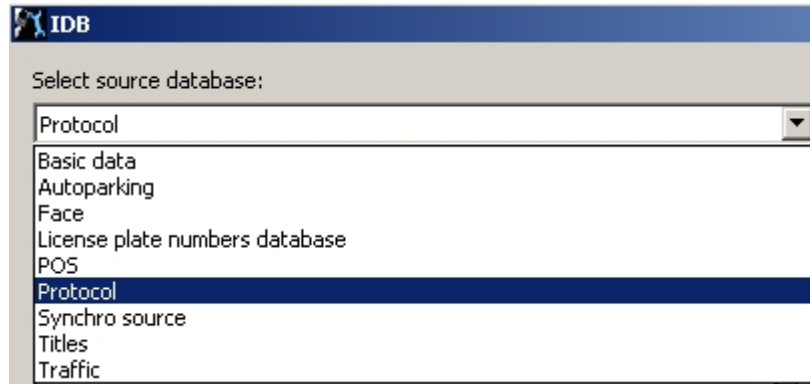
- Shut down Microsoft SQL Server Management Studio Express by clicking the  button in the upper right corner of the box.

As a result the protocol database is created.

To enable external event protocol, do the following:

- Run the idb.exe utility (see [Running and shutting-down the utility](#) section).

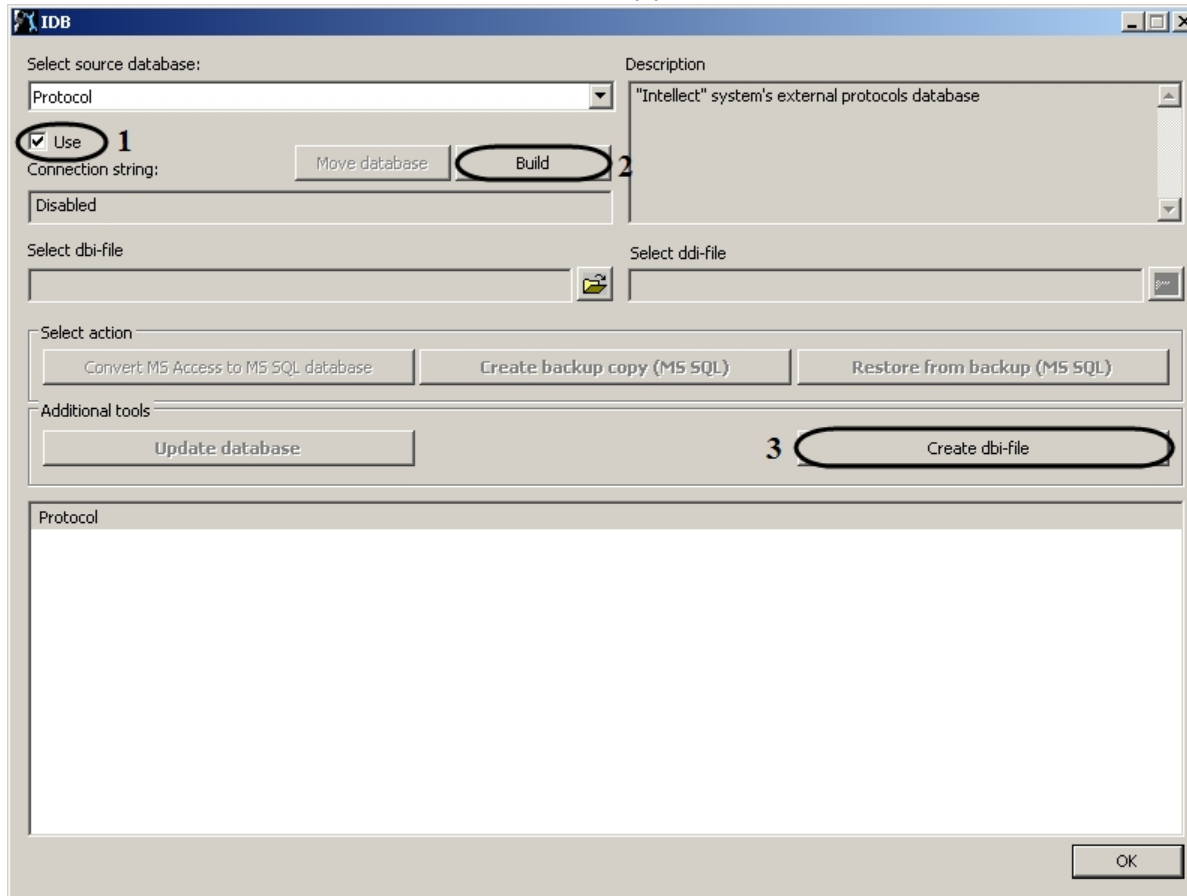
2. Select the **Protocol administration** database in the **Select source database:** dropdown list.



The screenshot shows a software window titled 'IDB' with a blue header bar. Below the header is a light gray bar containing the text 'Select source database:'. A dropdown menu is open, displaying a list of database options. The options are: 'Protocol' (highlighted in dark blue), 'Basic data', 'Autoparking', 'Face', 'License plate numbers database', 'POS', 'Synchro source', 'Titles', and 'Traffic'. The dropdown menu has a white background and a thin black border.

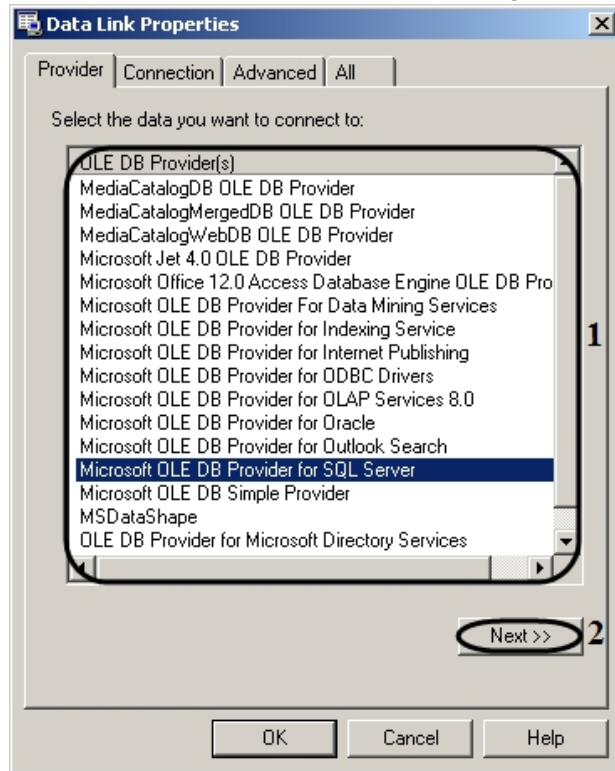
Select source database:
Protocol
Basic data
Autoparking
Face
License plate numbers database
POS
Protocol
Synchro source
Titles
Traffic

3. To enable the **Protocol database**, set the **Use** checkbox (1).



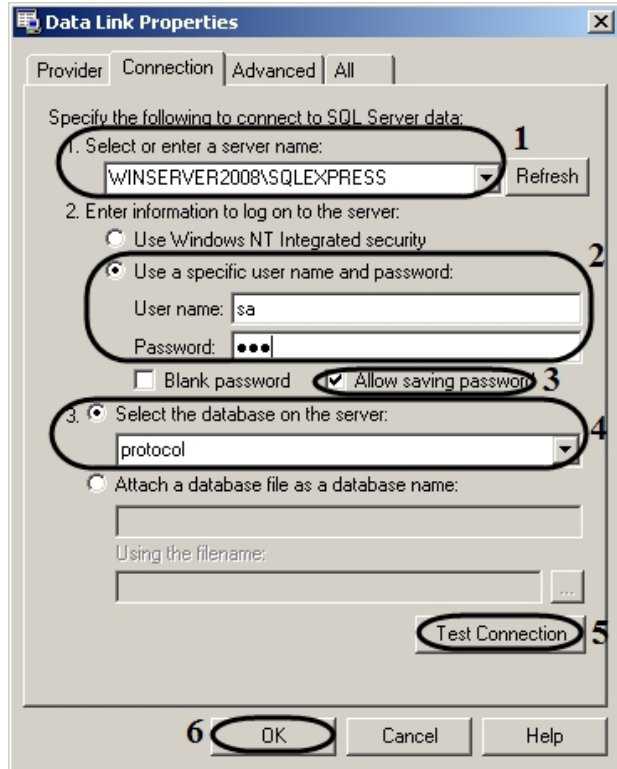
4. As a result the **Build** button becomes active (2). To connect to the **Protocol** database, click the **Build** button.
5. As a result the **Data link properties** dialog box appears. Go to the **Provider** tab.

6. Select the **Microsoft OLE DB Provider for SQL Server** item in the **OLE DB Provider(s)** list (1).

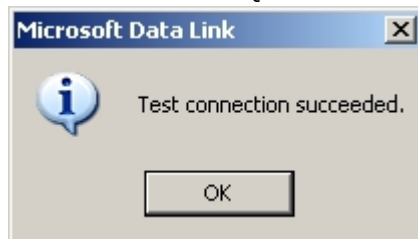


7. Click the **Next** button (2).
8. There is an auto switch to the **Connection** tab.
9. Do the following in the **Connection** tab:

1. Select a server name in the **Select or enter a server name** dropdown list (1).

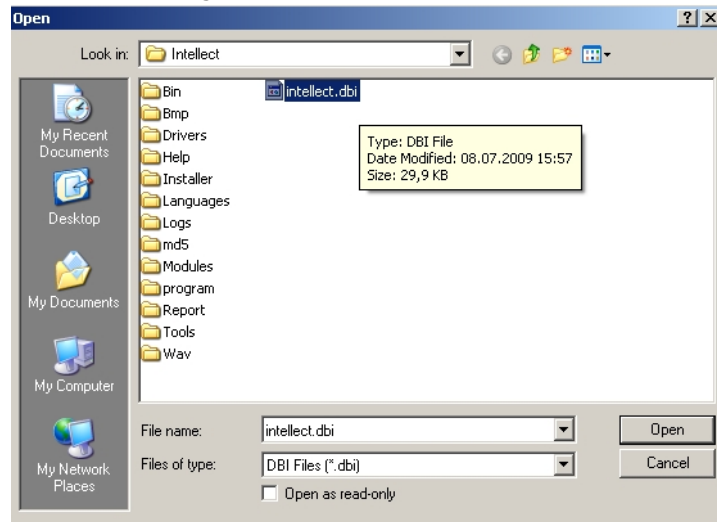


2. Specify the user name in the **User name** field and specify the password in the **Password** field (2).
3. Set the **Allow saving password** checkbox (3).
4. Select the protocol database in the **Select the database on the server** dropdown list (4).
5. Click the **Test connection** button (5)
6. If connection to MS SQL server succeeded, then the **Test connection succeeded** message appears.

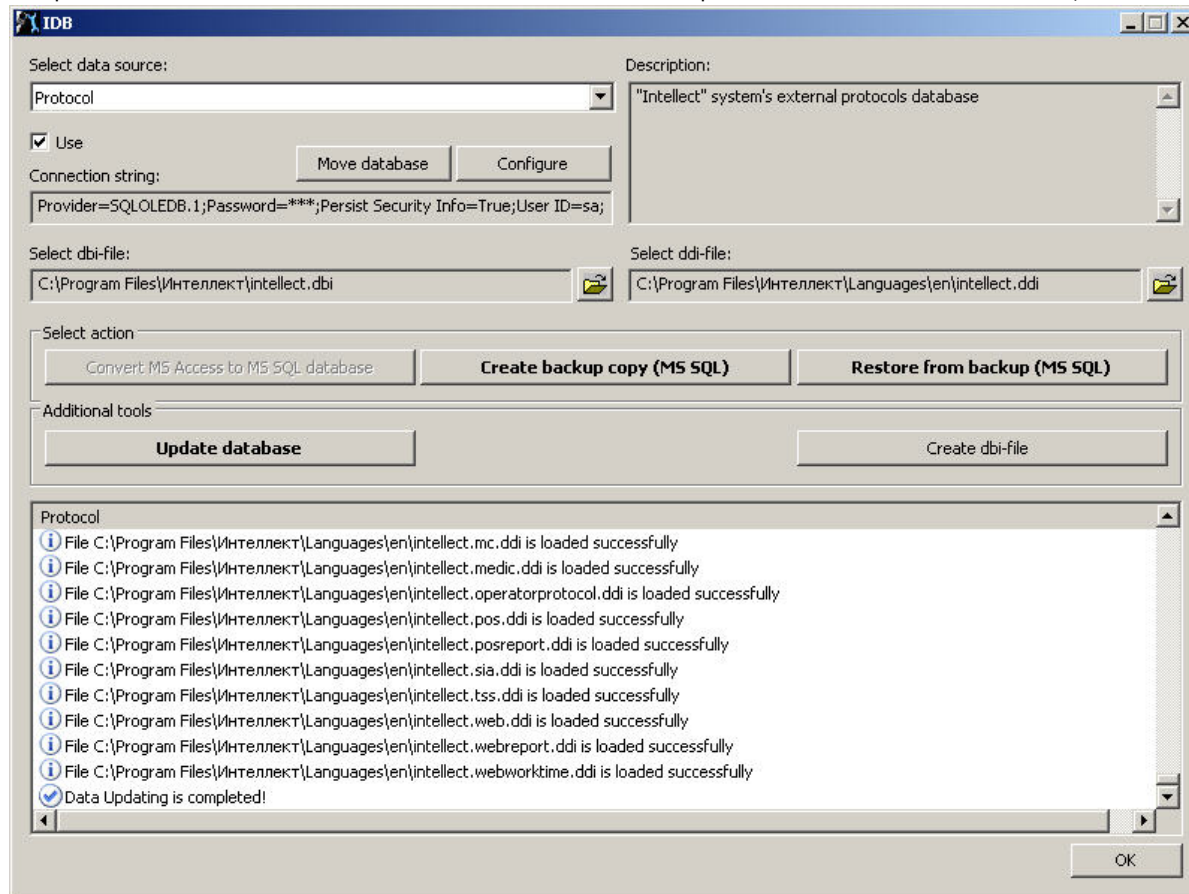


7. Click the **OK** button in the message box; the box closes automatically.
10. Select the dbi file. Click the button next to the **Select dbi file information** field.
11. As a result the **Open box** appears.

12. Select the C:\Program Files\Intellect\intellect.dbi file



13. To update the database in accordance with the intellect.dbi file specified in the **Select dbi file** field, click the **Update database** button.



14. As a result database updating will start. Information about this process is displayed in the **Protocol** table.
15. Database is updated, when there is the **Database updating is finished** message in the **Protocol** table.
16. To save INTELLECT™ connection parameters to the Protocol database, click the **OK** button. As a result the box closes automatically.

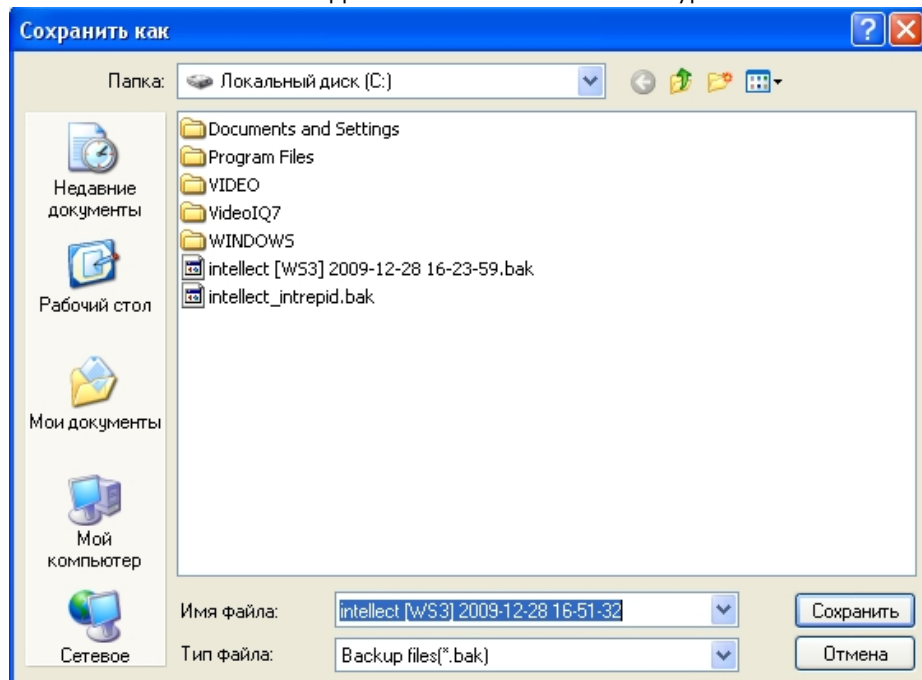
External event protocol is created and enabled.

Creating the database backup copy

To create the MSSQL database backup copy, use the idb.exe utility. To create the backup copy, do the following:

1. Run the idb.exe utility (see [Running and shutting-down the utility](#) section).
2. Select the **Basic data** MSSQL database in the **Select data source:** dropdown list.
3. Click the **Create backup copy (MS SQL)** button.

4. As a result the **Save as** box appears. Select the address and type-in the name of saving backup copy.

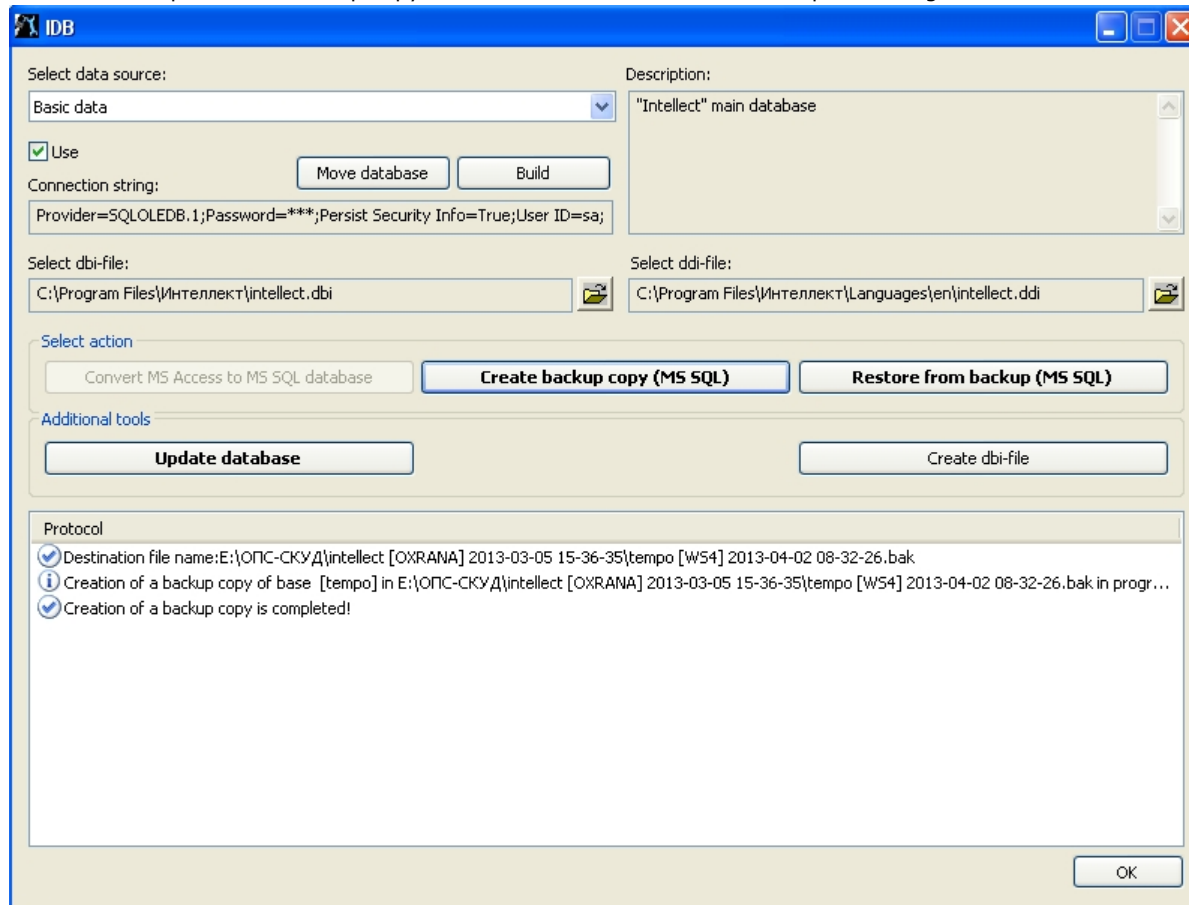


Note.

While creating the MS SQL database backup copy, the created backup copy will be saved on the computer where the database server is installed, in case of *Intellect* software and database server are located on different computers connected through the networks. To save created backup copy on the computer where the *Intellect* software is installed, do the following:

1. Create the folder available through the networks on the computer where the *Intellect* software is installed. Provide access to the created folder from the computer where the database server is installed.
2. Specify the path to the created folder in the **Save as** window.

5. As a result the process of backup copy creation starts. Information on this process is given in the **Protocol information** table.



6. The backup copy is created when the **Creation of a backup copy** is completed! message appears in the **Protocol** table.

Note.

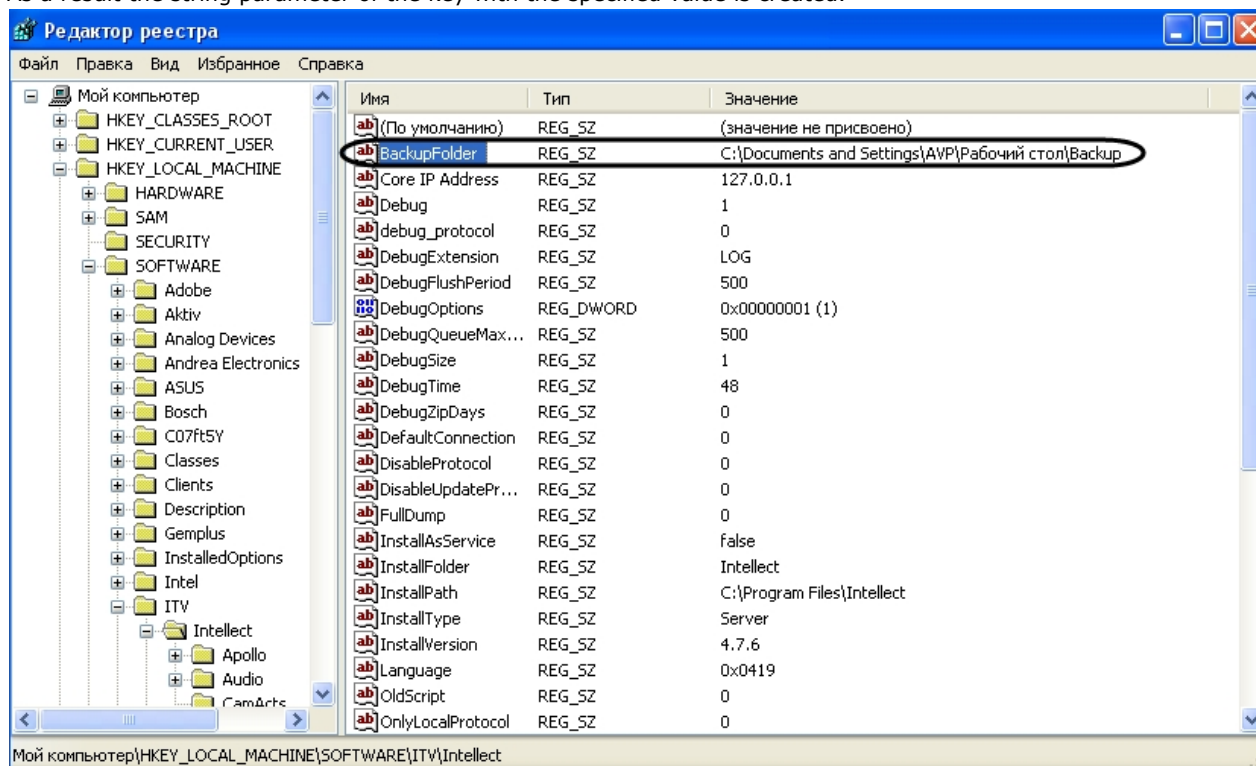
The backup copy (MS SQL) can be created using the macro.

7. Click the **OK** button. The box closes automatically.

The MSSQL database backup copy is created.

By default the database backup copy is created at: C:\Documents and Settings\<user name>\My documents\ITV\Intellect\Data\intellect.sql.bak. If one cannot change the folder for storing the database backup copy while the backup copy creation, do the following:

1. Call the **Run** function (**Start - > Run**). Type-in the regedit in the opened box.
2. Click the **OK** button. As a result the **Registry editor** box opens.
3. Create the string parameter with the BackupFolder name in the «HKLM\SOFTWARE\ITV\INTELLECT» registry thread (see [Adding string parameters to the registry](#) section).
4. Set the value of the BackupFolder parameter – type-in the address of the folder for storing the database backup copy(e.g. C:\ Documents and Settings\AVP\Desktop\Backup). If the database copy is to be stored on the network disk, then the UNC path to the network folder (with the recording access) is to be specified on the disk in the **\\ServerName\ShareName** format. Take into account the fact that all network resources that require additional authentication are to be enabled using the same username as for running the SQL Server service. To find out and/or change the user that runs the SQL Server service, do one of the following:
 1. Using the SQL Server Configuration Manager utility.
 2. Run **Start – Control panel – Administrative tools – Services**, right-click the **SQL Server** service and select the **Properties** item in the feature menu. Go to the **Log On** tab.
5. As a result the string parameter of the key with the specified value is created.



6. Call the **Run** function (**Start - > Run**). Type-in the «C:\Program Files\Intellect\idb.exe /backup» key in the opened box.
7. Click the **OK** button.

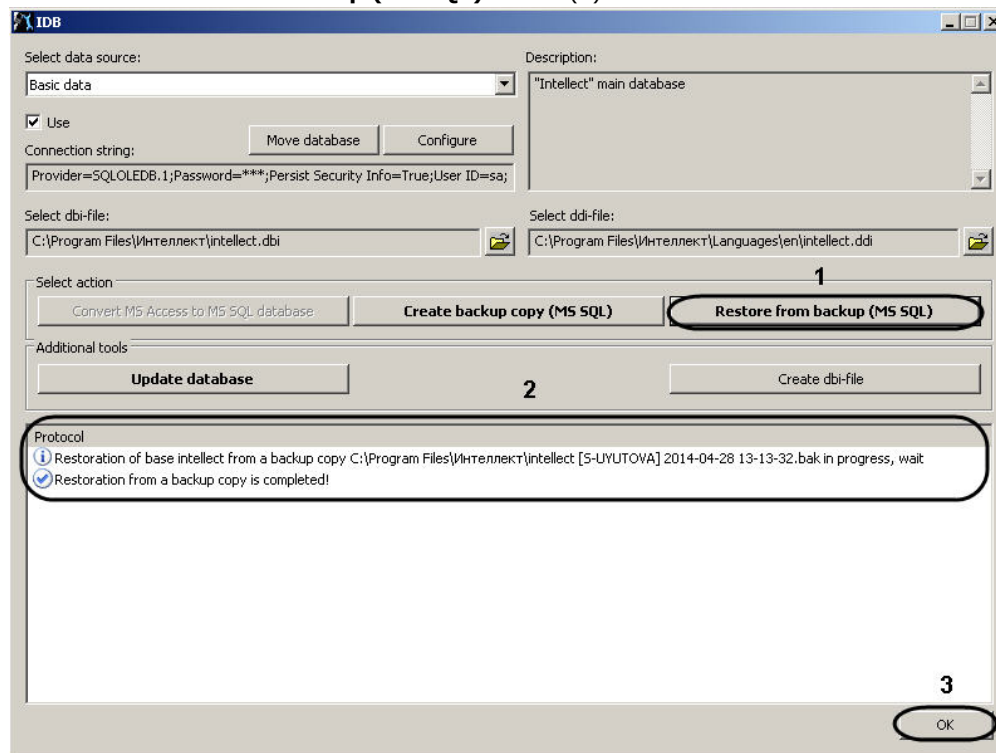
As a result the intellect.sql.bak database backup copy is created in the folder specified as the value of the BackupFolder parameter («C:\ Documents and Settings\AVP\Desktop\Backup»).

Restoring database from backup copy

The database backup copy is created using the idb.exe utility (see the [Creating the database backup copy](#) section).

Database restoring from backup copy is also performed using the idb.exe utility the following way:

1. Open the idb.exe utility (see the [Running and shutting-down the utility](#) section).
2. From the **Select data source:** drop-down list select MS SQL-Basic data database.
3. Click the **Restore from backup (MS SQL)** button (1).



4. Using the standard dialog of files opening select the created earlier file with database backup copy.
5. As a result the process of database restoring from backup copy will start. Information about process is displayed in the **Protocol** informational table (2).
6. Restoring is completed when the **Restoration from a backup copy is completed!** message will be displayed in the Protocol table.
7. To complete working click the **OK** button. As a result the window will be automatically closed (3).

Database restoring from backup copy is completed.

The HubSearch.exe utility for searching IP-devices

The purpose of the HubSearch.exe utility

The HubSearch.exe utility is designed for searching IP-devices, such as Wave Hub, Matrix LH and Matrix LS and also for changing net settings(for example changing the IP address, address mask etc.) of a found device.

Starting and shutting-down the HubSearch.exe utility

To start the HubSearch.exe use one of the following ways:

1. Run the utility from Windows start menu. For this click **Start -> Programs -> Intellect -> Tools -> Search of IP devices**.
The HubSearch.exe utility is available from the **Start** menu with the following installation types of the Intellect software: Server, Remote administrator workstation, Remote client.
2. Run the utility from Tools folder of Intellect installation catalogue. For example: C:\Program Files\Intellect\Tools\ Hub\HubSearch.exe.

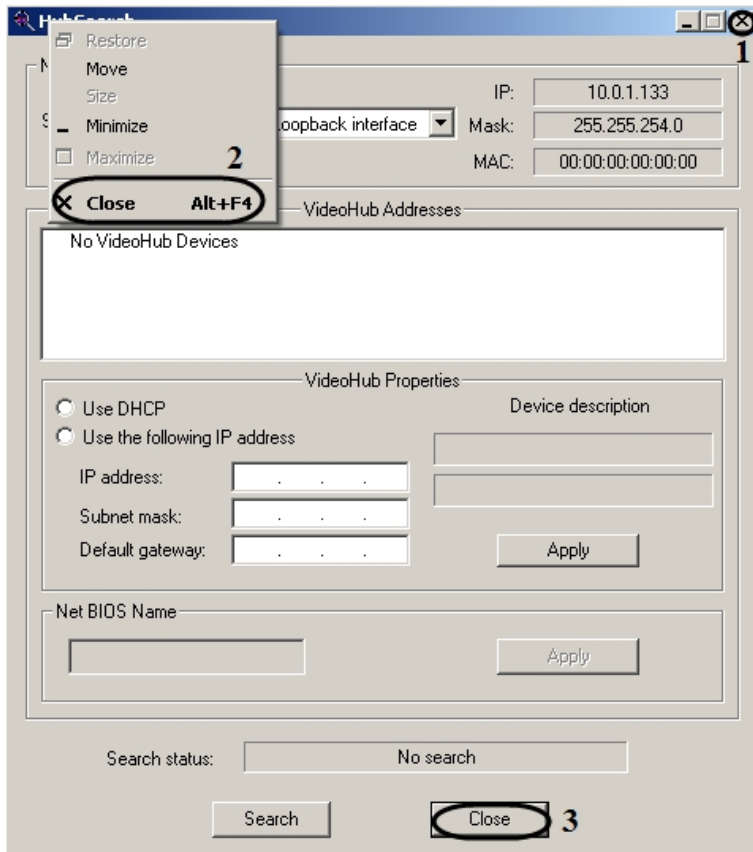
In result dialog window of the HubSearch.exe utility will open.

The screenshot shows the HubSearch utility window. It has a title bar with the text 'HubSearch'. The window is divided into several sections: 'NetAdapter Info' at the top, 'VideoHub Addresses' in the middle, 'VideoHub Properties' below that, and 'Net BIOS Name' at the bottom. The 'NetAdapter Info' section contains a dropdown menu for 'Select NetAdapter' set to 'MS TCP Loopback interface', and three text boxes for 'IP' (10.0.1.133), 'Mask' (255.255.254.0), and 'MAC' (00:00:00:00:00:00). The 'VideoHub Addresses' section is a large empty box with the text 'No VideoHub Devices'. The 'VideoHub Properties' section has two radio buttons: 'Use DHCP' (selected) and 'Use the following IP address'. To the right of these is a 'Device description' label and two empty text boxes. Below the radio buttons are three text boxes for 'IP address', 'Subnet mask', and 'Default gateway', each with a dotted pattern. An 'Apply' button is to the right of these. The 'Net BIOS Name' section has a single text box and an 'Apply' button. At the bottom, there is a 'Search status' label with a text box containing 'No search', and two buttons: 'Search' and 'Close'.

To close the HubSearch.exe utility use one of the following ways:

1. Click the button in left upper corner of Close dialog window (1);
2. Press a combination of keys Alt+F4 (2);

3. Click the **Close** button at the bottom of dialog window (3).



Interface elements of HubSearch.exe utility window

User interface (dialog window) of HubSearch.exe utility is shown in the figure.

The table shows the content of HubSearch.exe utility user interface.

Group №	group	Element's name	description
1	NetAdapter Info	Dropdown list Select NetAdapter	Selection of net adapter
		Display-only field IP	Displays IP-address of computer's netcard
		Display-only field Mask	Displays mask of computer's netcard
		Display-only field MAC	Displays MAC-address of computer's netcard
2	VideoHub Addresses	Field VideoHub Addresses	Displays found devices
3	VideoHub Properties	Switch Use DHCP	Enables protocol of dynamic site configuration
		Switch Use the following IP address	Enables net settings

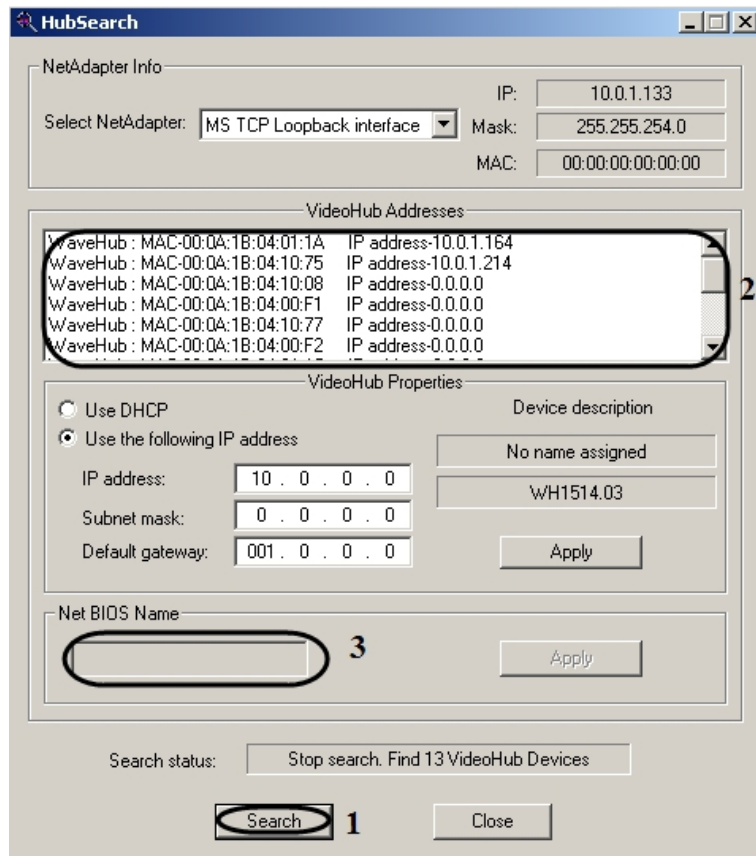
		Field IP address	Set IP address of the device
		Field Subnet mask	Set address mask of the device
		Field Default gateway	Set the gate
		2 Display-only fields Device Description	Displays parameters of the device
		Button Apply	Is used for applying the new settings
4	Net BIOS Name	Field Net BIOS Name	Set the netname of the device
		Button Apply	Is used for applying the new settings
5	Search status	Display-only field Search status	Displays status of device search
		Button Search	Serves to start the search
		Button Close	Closes dialog window

Using the HubSearch utility

Using the HubSearch.exe utility is done in the following way:

1. Run the HubSearch.exe utility.

2. To search for device click **Search**.



3. From the list **VideoHub Addresses** select the requires net device (2)
4. When protocol of site dynamic configuration is used, set the switch to the position **Use DHCP**. To change net settings set the switch to the position **Use the following IP address**
5. Click **Apply** button of **VideoHub Properties** group to save the changes.
6. If necessary change the net name of the device in the field **Net BIOS Name** (3).
7. Click **Apply** button of **Net BIOS Name** group to save the changes(1).
8. Close the HubSearch.exe utility(see. section [Starting and shutting-down the HubSearch.exe utility](#)).

Work with HubSearch.exe utility is completed.

The MatrixCodeReader.exe utility

The purpose of MatrixReader.exe utility

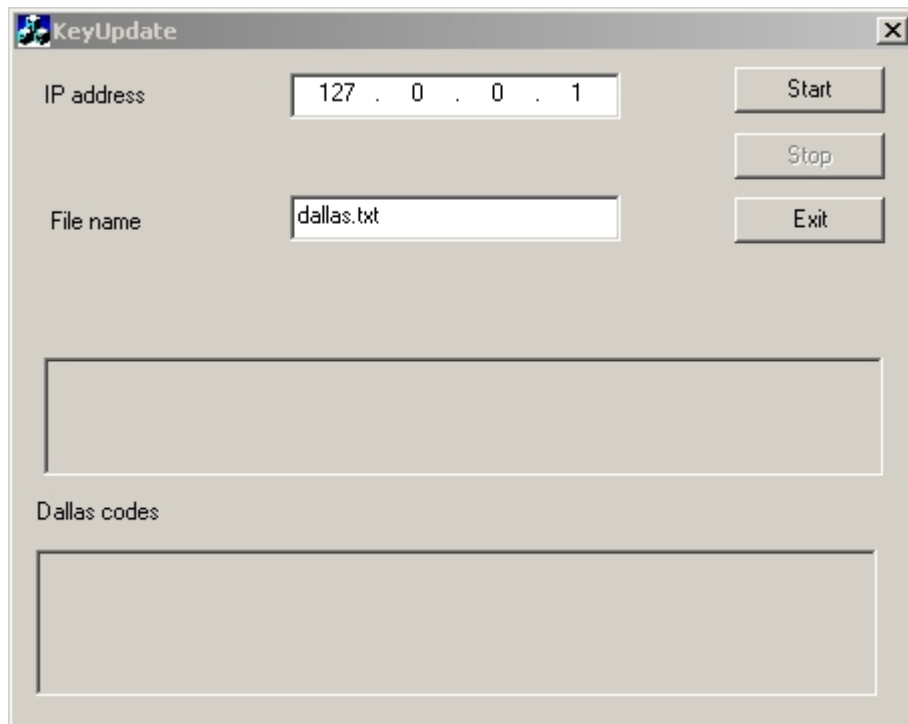
The MatrixCodeReader.exe utility is designed for getting dallas-codes of video capture cards' cryptochips on Matrix devices.

Starting and shutting-down the MatrixCodeReader.exe utility

To start the, MatrixCodeReader.exe do one of the following:

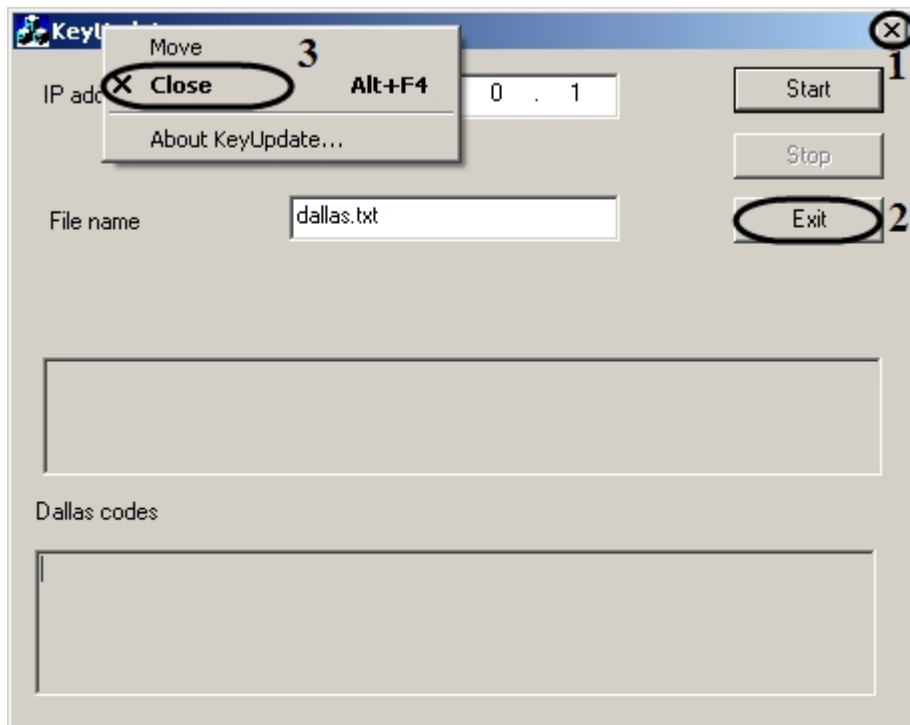
1. Start the utility from the Windows taskbar. Click **Start**, then **Programs**, then **Intellect**, then **Tools**, then MatrixCodeReader.exe.
The MatrixCodeReader.exe utility is available from the Start menu with the following installation types of the Intellect software: Server, Remote administrator workstation, Remote client.
2. Run the utility from the folder «Tools\Hub» of Intellect installation directory catalogue. For example: «C:\Program Files\Intellect\Tools\ Hub\ MatrixCodeReader.exe».

MatrixCodeReader.exe dialog window will be displayed in result.



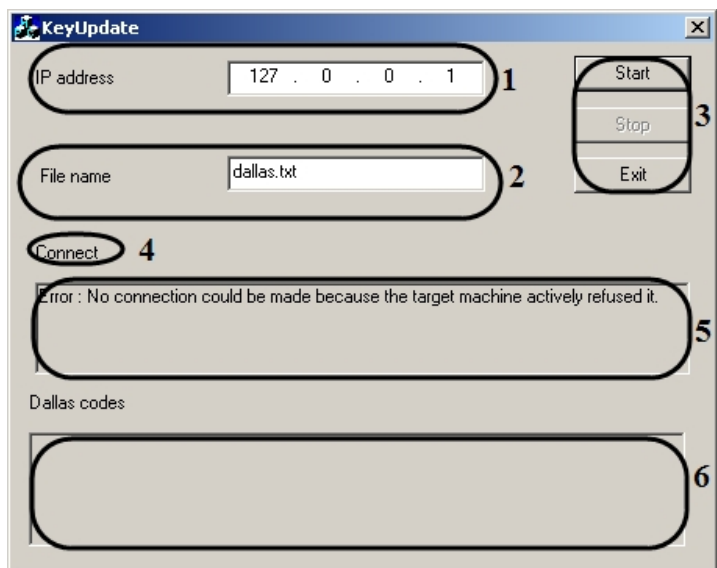
To close MatrixCodeReader.exe do one of the following:

1. Click the button in right upper corner of Close dialog window (1);
2. Press a combination of keys «Alt»+«F4» (2);
3. Click **Exit** button in the dialog window (3).



Interface elements of the MatrixCodeReader.exe

The user interface of MatrixCodeReader.exe is shown in the figure.

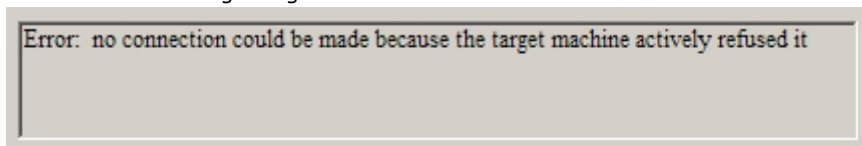


MatrixCodeReader.exe user interface has the following elements:

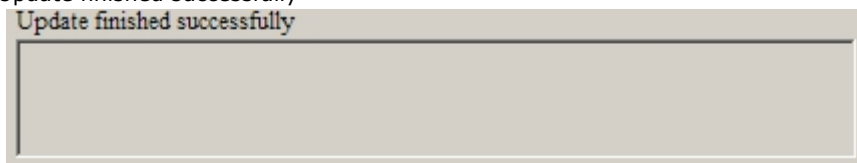
1. Entry field **IP address** of device's IP address (1).
2. Entry field **File name** of file's name, containing dallas-code of video capture card's cryptochip. Is set by default(2).
3. Start button of running and receiving the dallas-code, Stop button and Exit button to quit the utility (3).
4. State line (4). May contain the following information.
 1. Empty line, when the utility is run



2. Connection at the beginning or when an error has occurred



3. Update finished successfully

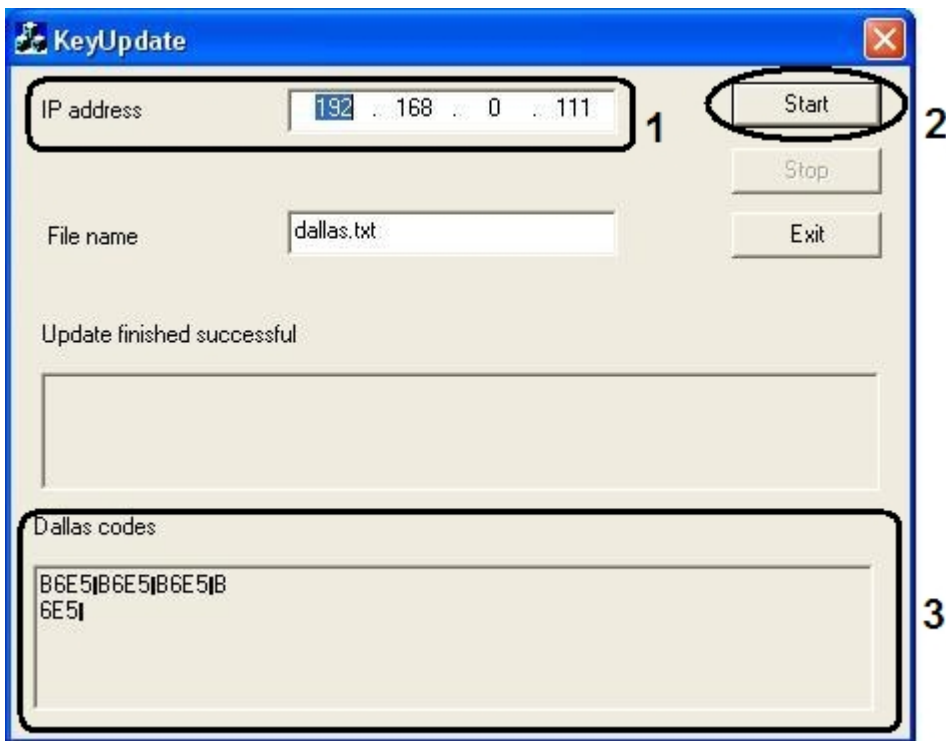


5. Area of error's displaying (5).
6. Area of displaying the dallas-code (6).

Using the MatrixCodeReader.exe

Use the MatrixCodeReader.exe as follows:

1. Run MatrixCodeReader.exe (see [Starting and shutting-down the MatrixCodeReader.exe utility](#))
2. Enter IP of the device in the field IP-address (1)
3. Click **Start** (2)
4. Dallas codes of the boards will appear in the area Dallas codes in result (3)
5. Finish work with MatrixCodeReader.exe (see [Starting and shutting-down the MatrixCodeReader.exe utility](#)).



Work with MatrixCodeReader.exe is over.

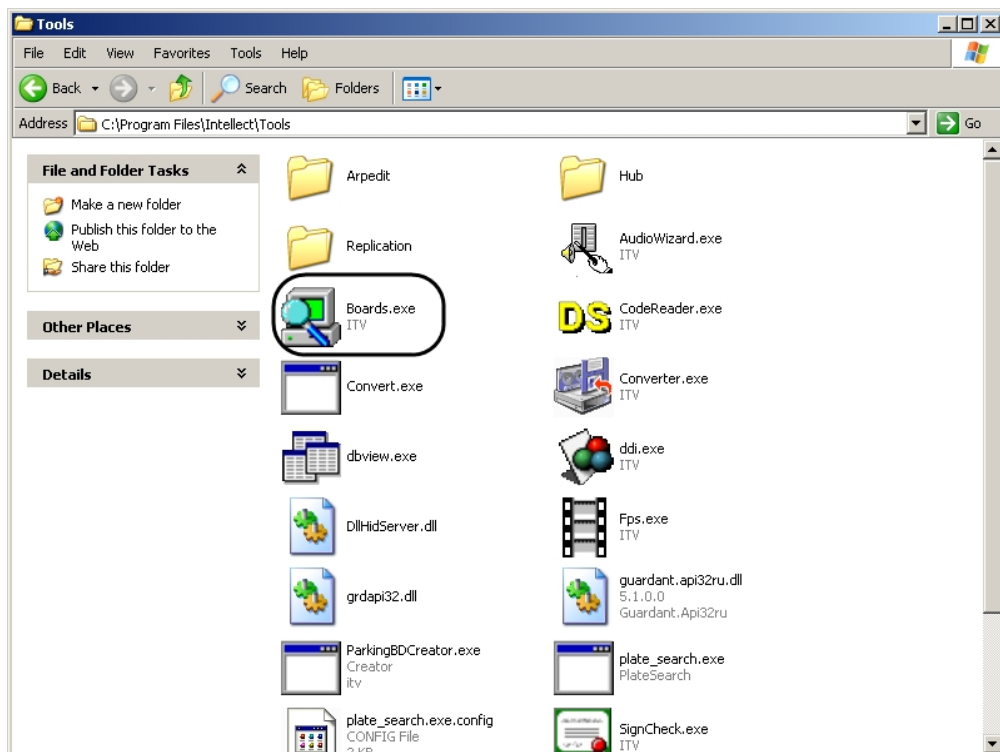
The Boards.exe utility

The purpose of the Boards.exe utility

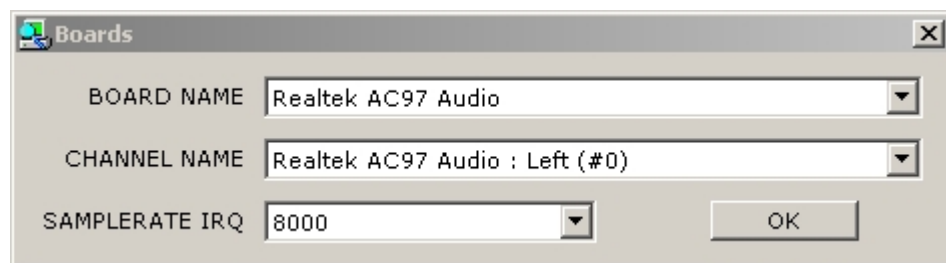
Boards.exe utility is designed for viewing the list of all devices of audio digitization and audio input channels available on a Server and the list of available sample rates.

Starting and shutting-down the Boards.exe utility

Boards.exe is run from Tools folder of Intellect program installation directory. For example: C:\Program Files\Intellect\Tools\ Boards.exe.

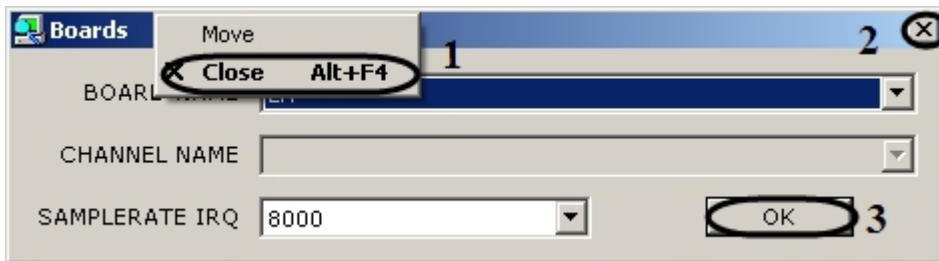


Boards.exe dialog window will be displayed in result.



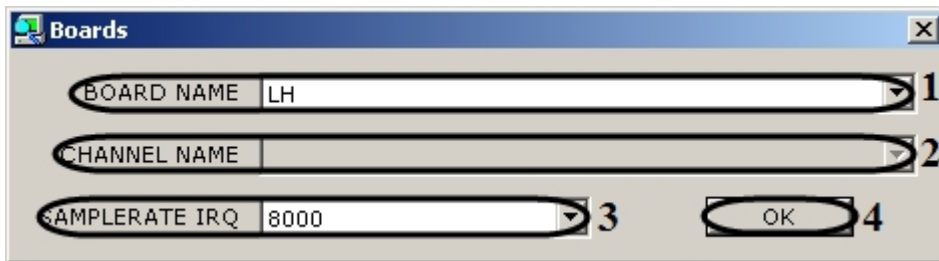
One can quit Boards.exe using one of the following ways:

1. Press a combination of keys Alt+F4(1).
2. Click the button in right upper corner of Close dialog window (2);
3. Click **OK** after changes (3).



Interface elements of Boards.exe

User interface (dialog window) of Boards.exe is shown in the figure.



Boards.exe user interface has the following elements that are shown in the table.

Element №	Element of user interface	Description
1	Dropdown list «Board Name»	Set the type of sound digitization device. Depends on type and number of devices of audio signal digitization installed on the Server.
2	Dropdown list «Channel Name»	Set the number of audio input channel in accordance with RCA-F pin number, to which microphone is connected. Depends on board type of audio signal digitization.
3	Dropdown list «Samplerate IRQ»	Set the sample rate by the device.

		Influences on quality of played back and recorded audio signal and size of audio recording. For video capture cards' ADC – 8000, 16000, 32000.
4	Button «OK»	Is used for shutting-down the Boards.exe.

Note.

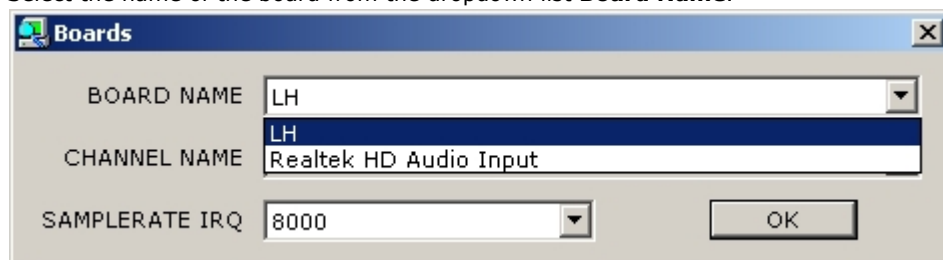
For video capture cards' ADC of AxxonSoft company: 0 – Left channel; 1 – Right channel.

The more the level of digitization, the better the quality of audio signal and consequently the more efficiency of audio control.

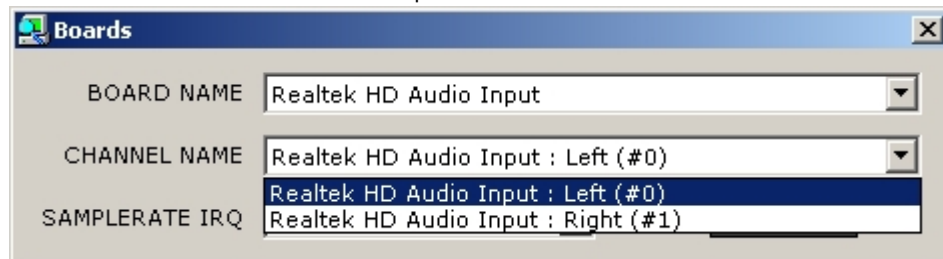
Using the Boards.exe

Using the Boards.exe utility is done in the following way:

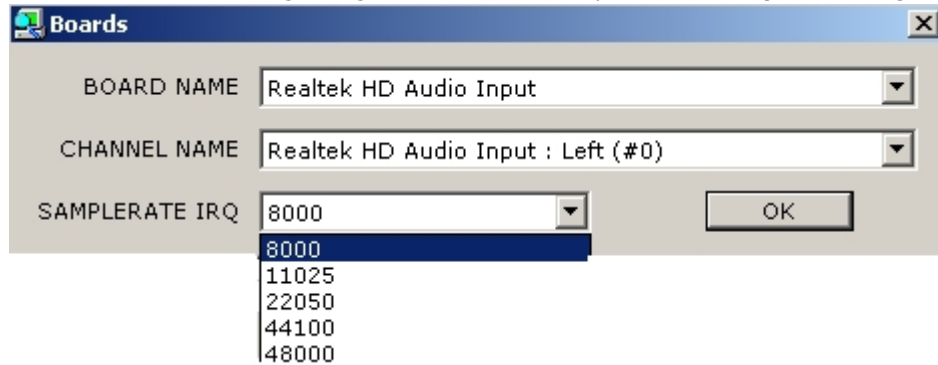
1. Run Boards.exe (see section [Starting and shutting-down the Boards.exe utility](#)).
2. Select the name of the board from the dropdown list **Board Name**.



3. Select the channel name from the dropdown list **Channel Name**.



4. Select the rate of audio signal digitization from the dropdown list **SamplerAte IRQ**.



5. Click **OK**. The utility window will automatically close.

Work with Boards.exe is completed.

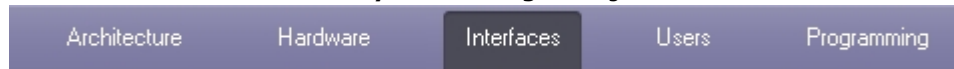
Configuration check tool

The Configuration check tool is designed for checking the settings of all created objects in the INTELLECT™ software and restoring the correct configuration if any changes occurred. Restoring is performed from the configuration template which can be created at any moment in accordance with current settings.

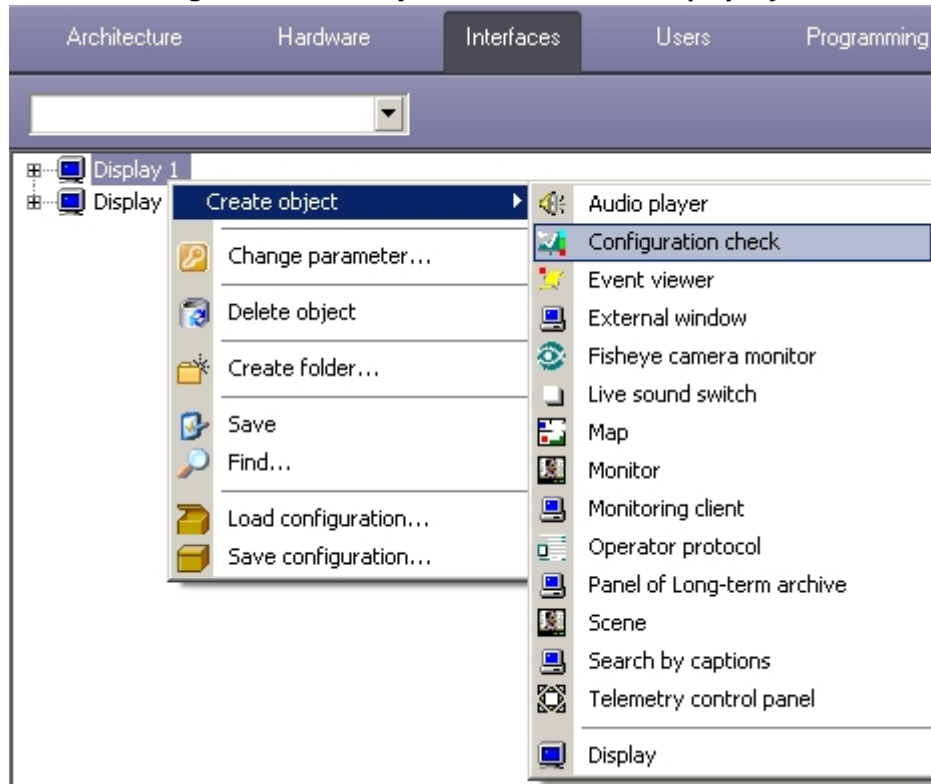
Starting and shutting down the Configuration check tool

To start the Configuration check tool, do the following:

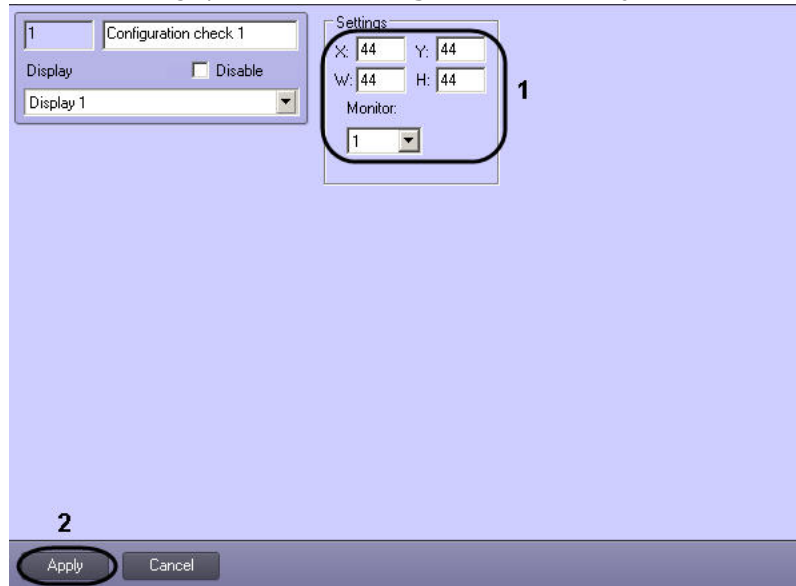
1. Go to the **Interfaces** tab of the **System settings** dialog box.



2. Create the **Configuration check** object on the base of the **Display** object.

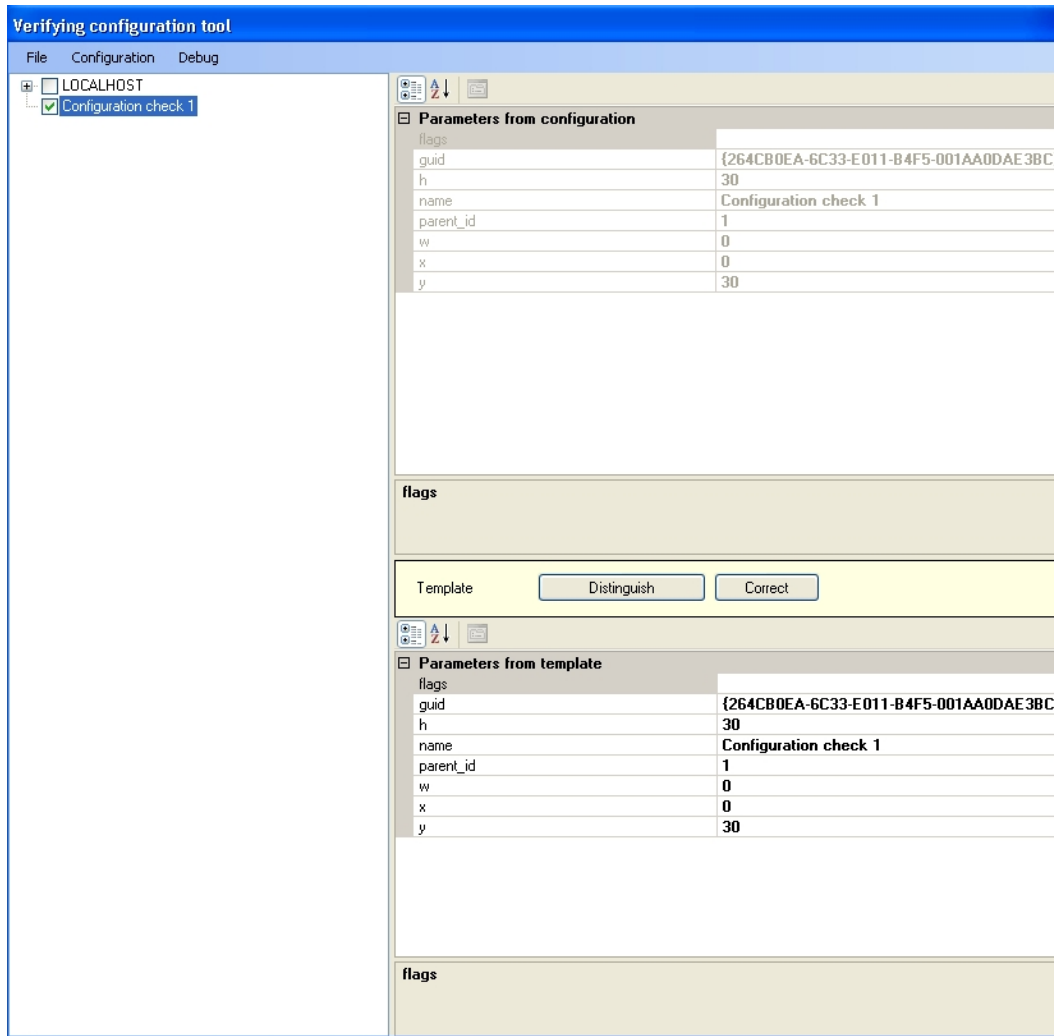


3. Go to the settings panel for the **Configuration check** object.



4. To configure the position of the **Configuration check** object, set the coordinates of upper left corner in **X:**, **Y:** fields and values of window's width and height in **W:**, **H:** fields, and select the computer monitor for which the coordinates are set (1).
5. To save the changes, click the **Apply** button (2).

As a result the **Verifying configuration** tool dialog box is displayed.



To shut down the tool, click the button on the main control panel of INTELLECT™ software and select the **Close all** menu item;



Configuration check tool interface description

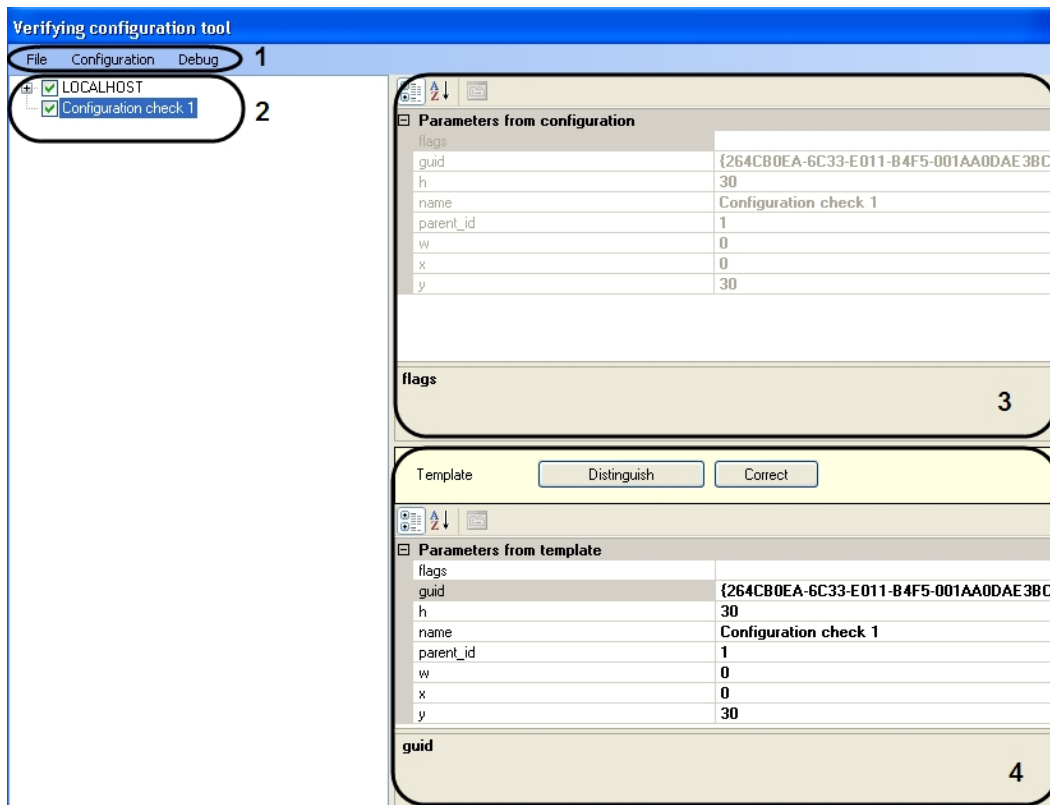
The dialog box of the Configuration check tool has four main interface elements:

1. The toolbar (1).
The tool's control menu is located here.
2. The objects tree of INTELLECT™ software (2).
The objects tree of INTELLECT™ software is displayed here. Clicking the left mouse button on any object in the objects tree, the configuration of its parameters is displayed in parameters field (points 3-4).
3. The field of object parameters from INTELLECT™ configuration (3).
The current configuration is displayed in this field. These parameters are not available for editing.
4. The field of object parameters from a template (4).

Parameters of the selected object from the configuration template field are displayed here. These parameters are available for editing.

Note.

At the first start of the Configuration check tool, the current configuration of selected object is displayed in this field.



Using the Configuration check tool

To start the operation, start the Configuration check tool (see the [Starting and shutting down the Configuration check tool](#) section).

Creating a template

To create a template in the Configuration check tool, do the following:

1. In the objects tree, set the checkboxes next to those objects which parameters configuration will be included in a template.



2. Click the left mouse button upon the object which parameters configuration is to be edited.

Note.

The set checkbox next to the required object is an obligatory term in order to edit the parameters.

As a result there is a list of object parameters with values, available for editing in the parameters from template field.

Note.

In the parameters from INTELLECT configuration field there is a list of object parameters with values set in INTELLECT software. They can not be edited.

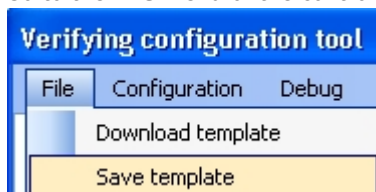
Parameters from configuration	
auth	
brand	
chan	0
codec	
flags	
format	PAL
guid	{CD5DCD06-BE2E-E011-B4F3-001AA0DAE3}
ip	
ip_port	80
mode	1
model	

Note.

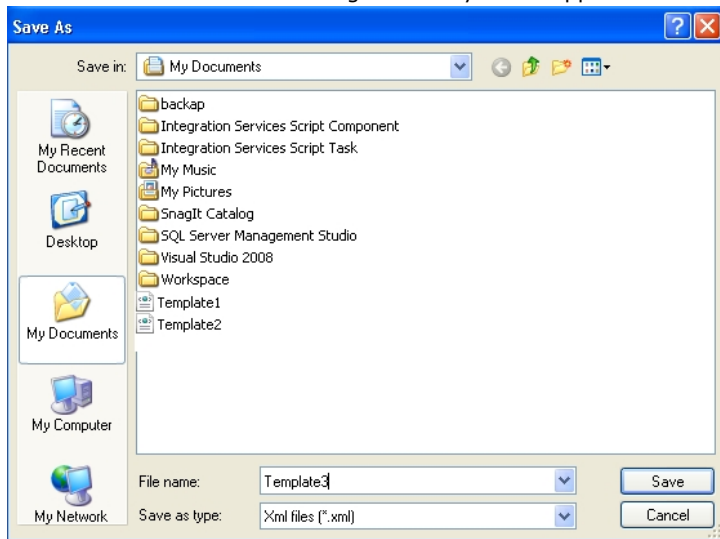
At the first start of the Configuration check tool, the current configuration of selected object is displayed in this field.

flags	
format	PAL
guid	{CD5DCD06-BE2E-E011-B4F3-001AA0DAE3}
ip	
ip_port	80
mode	1
model	
name	Video Capture Card 1
parent_id	T-MAKAROVA

3. Edit the object parameters. To edit the selected parameter, click the left mouse button upon the corresponding line with its value and edit it.
4. Repeat steps 3-4 for all objects, which parameters configurations are to be edited.
5. Go to the **File** menu of the control panel and select the Save template item.



6. Name a file and select the storage directory in the appeared window.



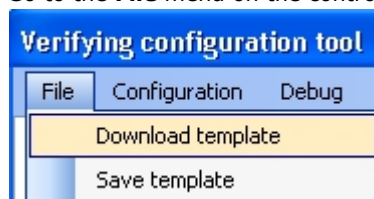
7. Click the **Save** button.

The template is now created.

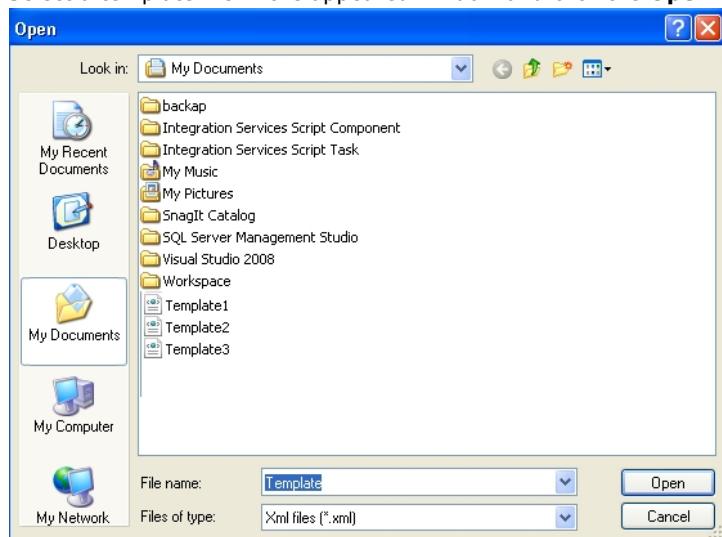
Downloading and editing the template

To download and edit the template, do the following:

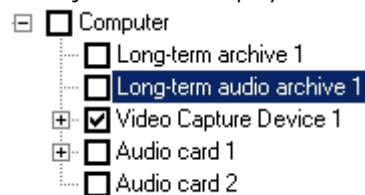
1. Go to the **File** menu on the control panel and select the **Download template** item.



2. Select a template file in the appeared window and click the **Open** button.



The objects tree is displayed as a result. The active checkbox is next to the objects which configuration has been saved in the template.



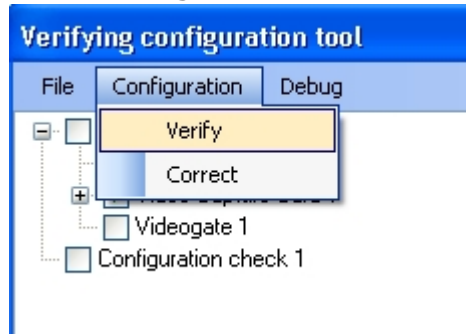
3. To edit the template, repeat steps 1-7 of the **Creating a template** section.

The template is now downloaded and edited.

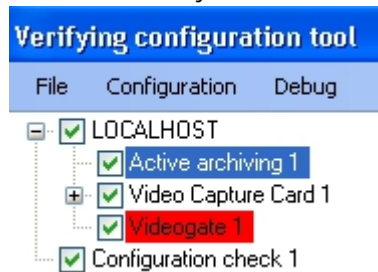
Verifying and correcting the configuration

To verify the current configuration of objects in INTELLECT software and restore it from the template, do the following:

1. Download the template for which the object configuration is to be verified in INTELLECT software (see the [Downloading and editing the template](#) section).
2. Go to the **Configuration** menu on the control panel and click the **Verify** button.

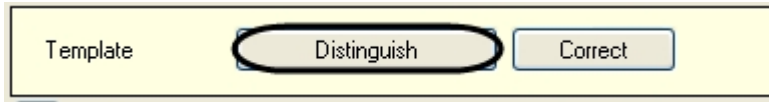


As a result the objects which current configuration in INTELLECT software differs from that one in the template will be marked red in the objects tree.

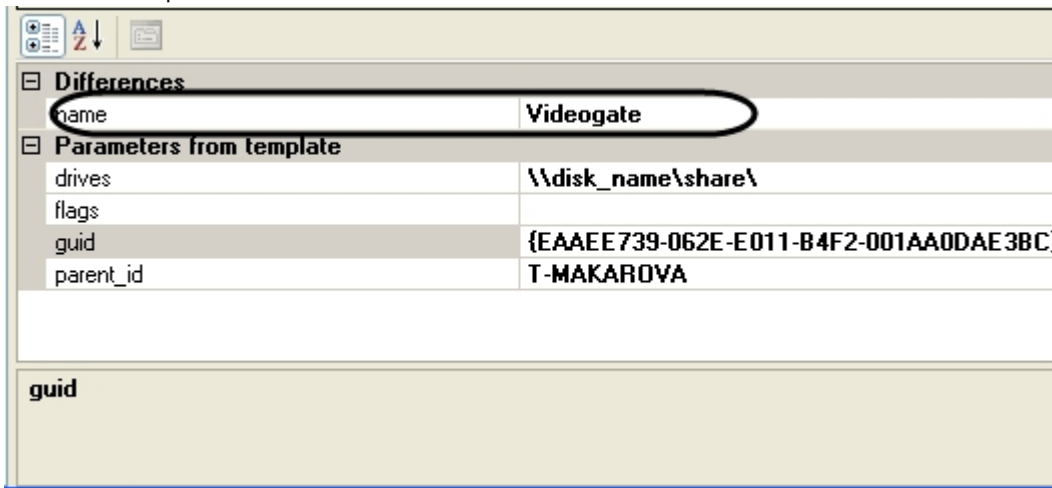


3. To view object parameters in the template which values are different from those ones in the INTELLECT software, click the left mouse button upon the object marked red in the objects tree and go to the parameters from the template field.

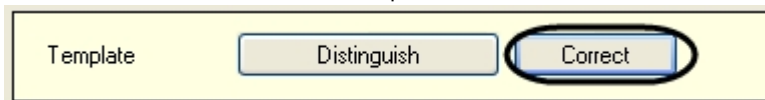
4. Click the **Distinguish** button in the **Template** field.



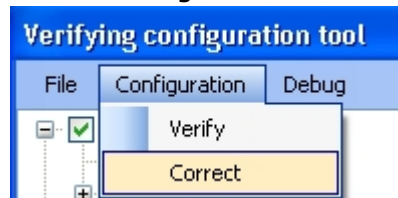
As a result the parameters which values are different from those ones in INTELLECT software are moved to the **Differences** list.



5. Correction (if necessary) of these parameter in INTELLECT software for those ones from the template may be performed in two ways:
1. Click the **Correct** button in the Template field.



2. Go to the **Configuration** menu on the control panel and select the **Correct** item.



The parameter configuration from INTELLECT templates is now verified and corrected.

Index.exe utility for reindexing archive files

The purpose of Index.exe utility

Index.exe utility reindexes archive files with big data array without restarting the INTELLECT™ software.

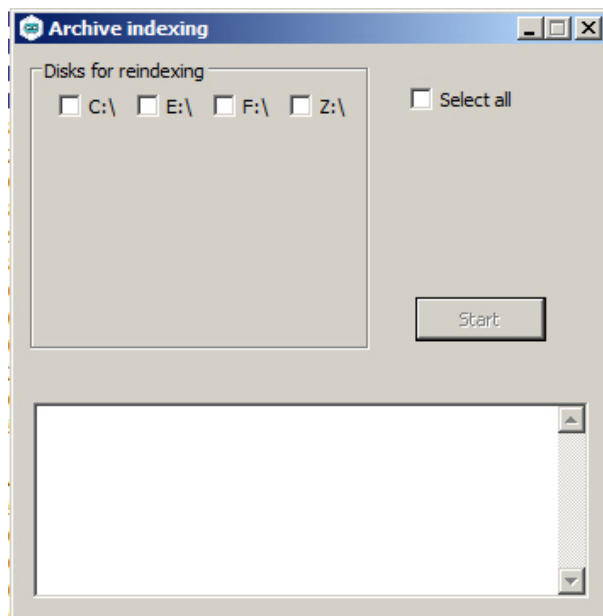
Note.

Another way to perform reindexing of archive files is to shut down the *Intellect* software and delete the INDEX folder in the VIDEO folder on the disk with archive. Indexes will be rebuild automatically after the *Intellect* startup. This method is equal to using of the *index.exe* utility.

Starting and shutting down the utility

To start reindexing utility run *index.exe* executive file in the **Modules64** folder that is in the catalogue of the INTELLECT™ software installation, for example, «C: \Program Files\Intellect \Modules64».

As a result the window of *index.exe* utility is displayed



To stop working with *index.exe* utility click «Close» - .

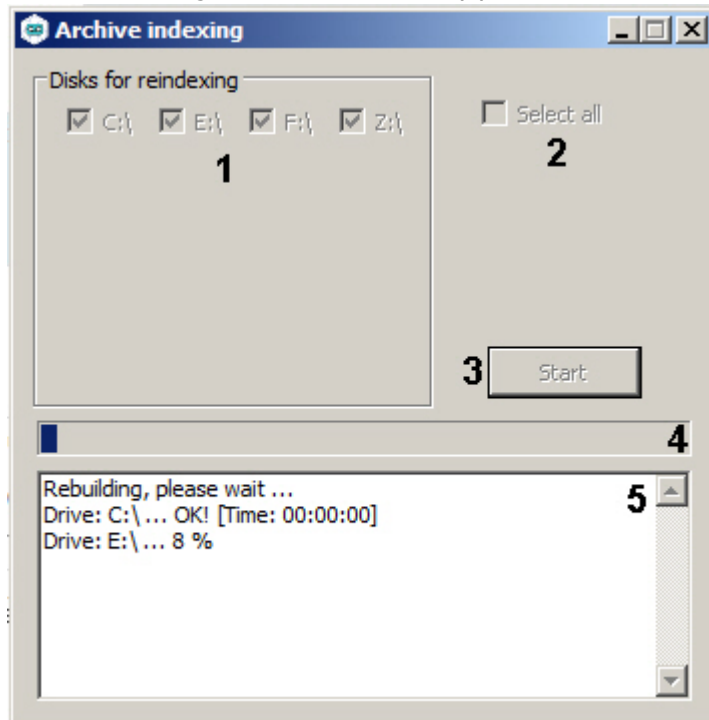
Using the Index.exe utility

Attention!

Before you start working with the utility check the value of IndexRebuilding parameter in HKLM/SOFTWARE/ITV/INTELLECT/Video for 32-bit systems (HKLM/SOFTWARE/Wow6432Node/ITV/INTELLECT/Video for 64-bit) section of OS Windows registry: by default it should be 0. If the parameter value differs from the value by default, you should change it to 0, otherwise the utility will not index the archive.

To reindex archive files after its changing (for example, after copying new video recordings to one or several archive disks), do the following:

1. Start *index.exe* utility (see [Starting and shutting down the utility](#) section).
2. In appeared window select archive disks for reindexing by setting checkbox next to required disks (1). Check **Select All** to set all checkboxes (2).
3. To start reindexing click the **Start** button (3).



Note.

At the time of reindexing all the elements of utility window are not active.

4. Rebuilding process is displayed by progress bar (4) and in the text field (5).
5. When you finish reindexing, shut the window of utility.

Reindexing of archive files is completed.

To reindex archive files without using the dialog box, in the command line start *index.exe* utility with parameters, for instance, *index.exe C, D* command will reindex archive files on disks C and D. To reindex archive files on all disks, use the all parameter.

The shedule.exe utility for creating a replication query file

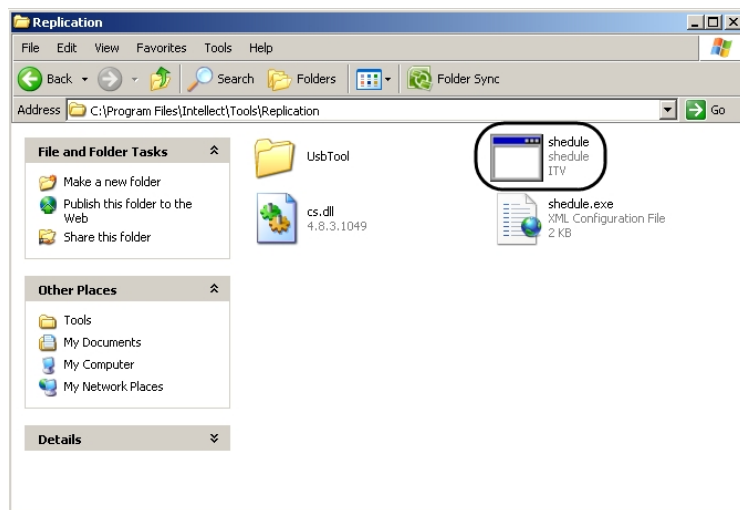
The purpose of the shedule.exe utility

The shedule.exe utility is designed for creating a query file on the Server-Receiver while replicating the archive on unconnected Servers (see [Replicating archive from unconnected servers using the removable storage](#) section).

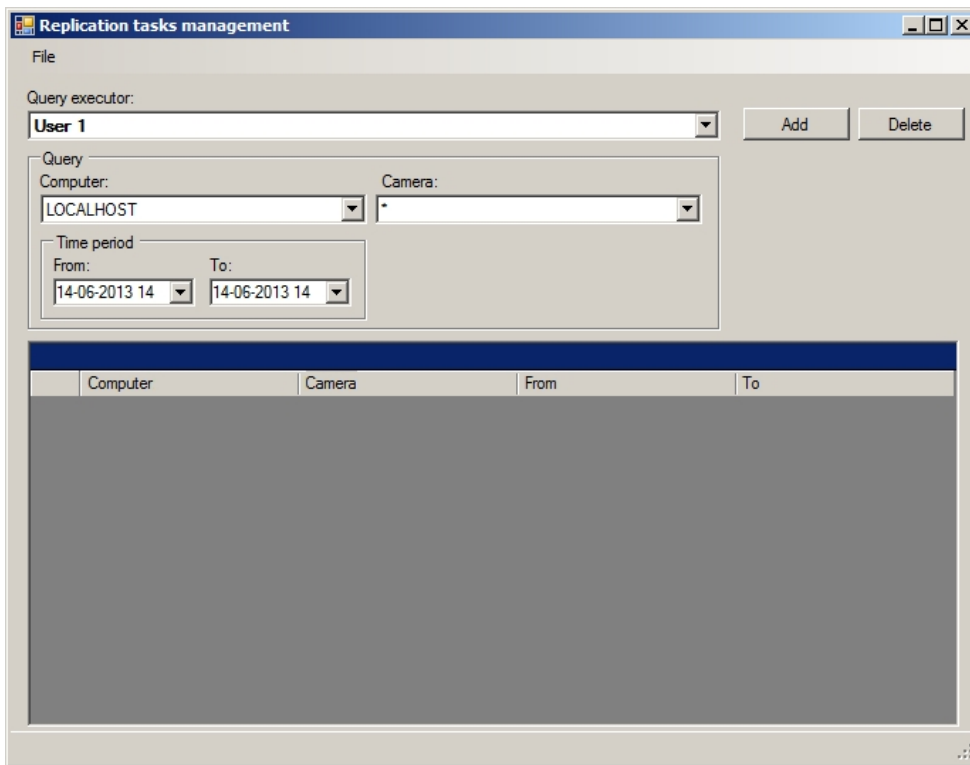
Starting and shutting-down the shedule.exe utility

To start the utility start the shedule.exe file in the Tools\Replication folder of the INTELLECT™ installation directory. For example:

C:\Program Files\Intellect\Tools\Replication\shedule.exe .



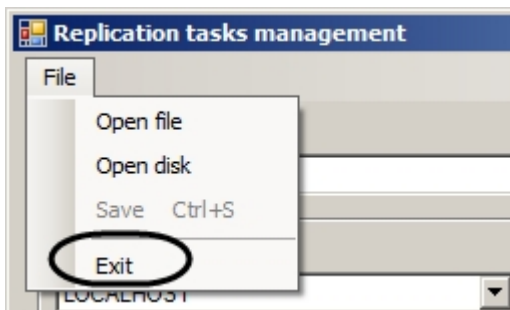
As the result the dialog window of the shedule.exe utility is opened.



Note.

The error message is displayed at opening the *schedule.exe* utility when users or the **Camera** objects are not created in the INTELLECT™ software under the **Computer /LOCALHOST** object corresponding to the Receiver. It is needed to create required objects and restart the system.

To close the *schedule.exe* utility, click the  button or select **Exit** in the **File** menu.



Using the schedule.exe utility

Creating the query file for replication

To create the query file do the following:

1. Connect the removable storage to the Receiver.

2. Select the user registered the INTELLECT™ software in the **Query executor** drop-down list (1).

Replication tasks management

File

Query executor: 1

5 Add 7 Delete

Query

Computer: 2 Camera: 3

Time period

From: To:

14-06-2013 14 14-06-2013 14 4

Computer	Camera	From	To
LOCALHOST	Camera 1	2013-06-14T14:00:00.00000	2013-06-14T14:00:00.00000

6

3. Select the **Computer** object corresponding to the Data source in the **Computer** drop-down list (2).
4. In the corresponding drop-down list select the **Camera** object the archive of which is to be copied (3).
5. Specify the time period for which the archive from selected camera is to be copied in the **From:** and **To:** fields using the mask or calendar that is displayed by clicking the  button (4).
6. Click the **Add** button (5).
The task is added to the list (6).

Note.

Select the task and click the **Delete** button to delete it from the list (7).

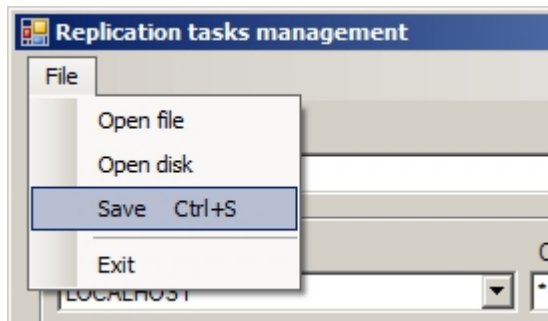
7. Repeat steps 2-6 for all required Sources.
8. Save the query file.

The query file is now created.

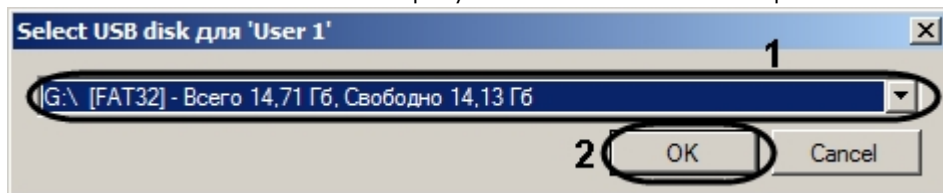
Saving the query file

To save the query file do the following:

1. Select **Save** in the **File** menu.



2. Select the removable disk where the query file is to be saved in the drop-down list of the opened dialog box (1).

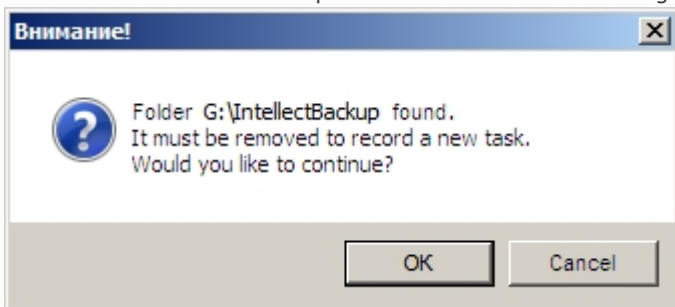


Note.

The Removable disks are not found message will be displayed if the removable storage is not found while saving the query file.

Note.

If there is the IntellectBackup folder on the removable storage, then the dialog box asking to delete this folder is displayed. Click the **OK** button .



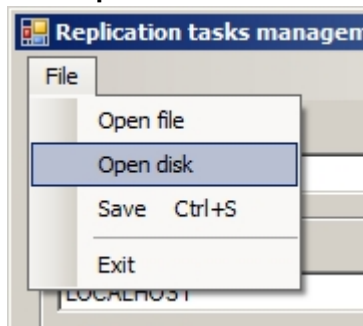
3. Click the **OK** button (2). The query file is saved on the selected disk.

The query file is now saved.

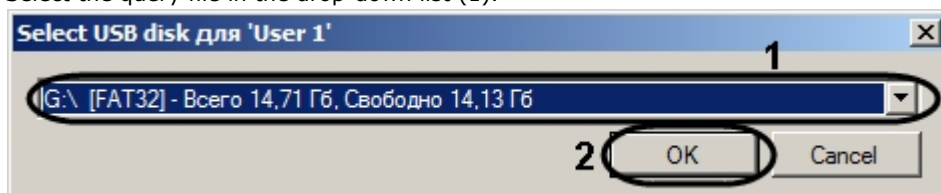
Opening the query file

To open the query file do one of the following:

1. Specify the disk where the query file is. For this:
2. Select **Open disk** in the **File** menu.



3. Select the query file in the drop-down list (1).

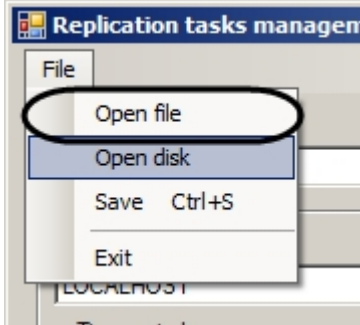


Note.

The Removable disks are not found message will be displayed if the removable storage is not found while opening the query file.

4. Click the **OK** button (2).
- The utility detects and opens the query file which is in the root of selected disk.
5. Select the query file manually. For this:

6. Select **Open file** in the **File** menu.



7. Select the *itv_task.xml* file containing the query parameters using the standard opening dialog.

The query file is now opened.

The AxxonPlayer.exe utility for viewing and converting the video archive

Purpose of the AxxonPlayer.exe utility. Hardware requirements

On the page:

- [Purpose of the AxxonPlayer.exe utility](#)
- [Hardware requirements for the AxxonPlayer.exe utility](#)

Purpose of the AxxonPlayer.exe utility

The AxxonPlayer.exe utility is designed for viewing and converting the video archive recorded with the INTELLECT™ software package. The utility also allows viewing files in .mkv and .avi formats with or without audio.

Important!

Export is not supported for .avi and .mkv files.

Note.

There is a specific menu item used to open files in .avi and .mkv formats located in the folder – **Folder with video files** (see [Opening video files by specifying the path in the utility](#) section). The **File** menu item is used to open a separate archive file or a file in .avi or .mkv format.

Hardware requirements for the AxxonPlayer.exe utility

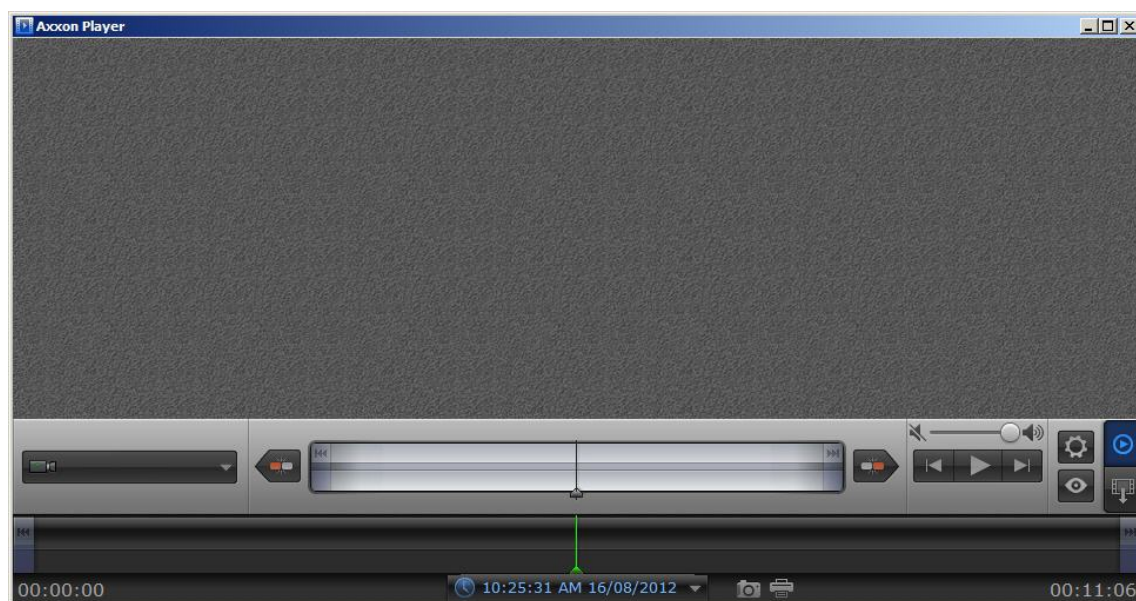
For proper operation of the AxxonPlayer.exe utility the graphics card installed on the computer is to support Direct3D or OpenGL 1.2 functionality.

Starting the AxxonPlayer.exe utility

To start the AxxonPlayer.exe utility, do one of the following:

1. Run the AxxonPlayer.exe executable file in the **Tools** (for 32-bit version) or **Tools64** (for 64-bit version) folder from the INTELLECT™ software installation directory.
2. Select in the menu **Start -> All Programs -> Intellect -> Tools > AxxonPlayer** or **AxxonPlayer (x64)** (for 32-bit or 64-bit version correspondingly).

The Axxon Player window opens after starting the AxxonPlayer.exe utility.



The AxxonPlayer.exe utility is now started.

Opening video files

There are three ways to open video files with the AxxonPlayer.exe utility:

1. Double left-click on the archive file (file of *.* type) in the VIDEO folder.

Note

To open files by double clicking they should be associated with the "ITV player" utility. To perform it, run the AxxonPlayer from the admin login at least once.

2. Specifying the path using which the access to archive files is to be performed in the utility.
3. Using the command prompt.

Note.

If video files that are to be opened were not recorded, but copied, then start the Convert.exe utility to open the archive (see [The Convert.exe utility for correcting modification dates of video archives](#) section):

- If the archive is created in the same time zone as it is viewed, then start the utility with the fullmode parameter:
`convert.exe fullmode`
- If the archive is created in different time zone than it is viewed, then move the archive to the current time zone by starting the utility with the following parameters in the command prompt:
`convert.exe fullmode TZ +hh:mm`
where +hh:mm is the time shift between the current time zone and the time zone of the archive.

Otherwise the folders with video files fail to open.

Note.

Select the folder that is the source for files to be played back in the .mkv and .avi formats.

Opening video files by specifying the path in the utility

The following ways are to be used to specify the path to archive files:

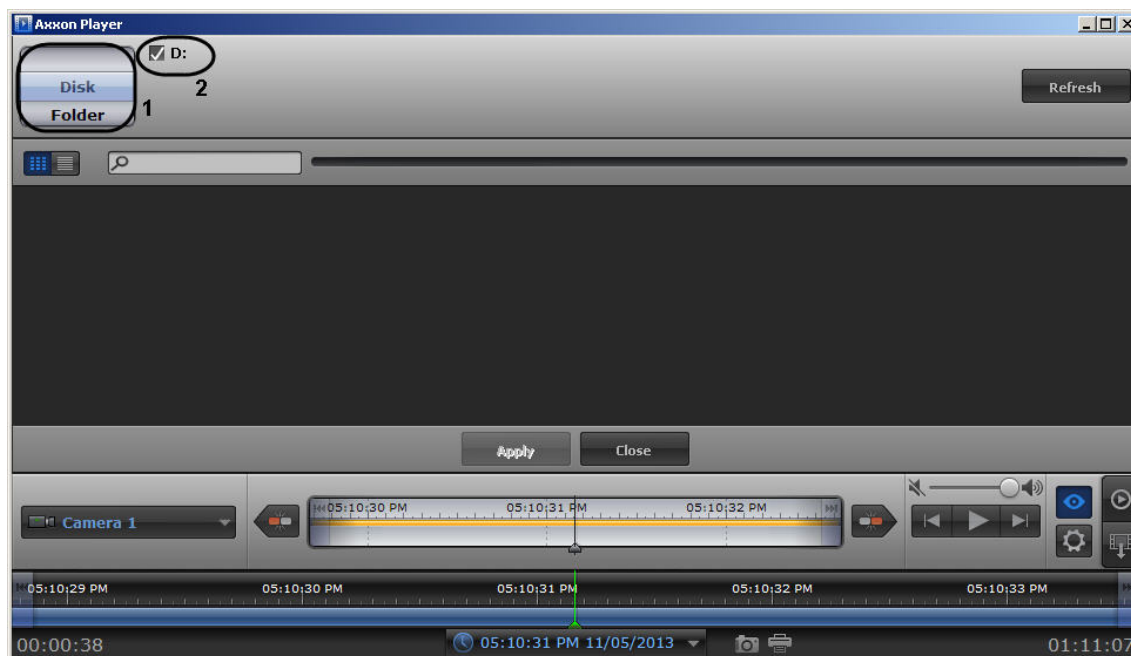
1. **Disk** – access is performed to all files stored on the specified disk;
2. **Folder** – access is performed to all files stored in the specified folder;
3. **File** – a separate archive file or a file in .avi or .mkv format will be played back.
4. **Folder with video files** – files in .avi or .mkv format stored in the specified folder will be played back.

To open archive files which are to be viewed with the AxxonPlayer.exe utility, do the following:

1. Click the  button in the Axxon Player window.



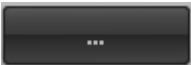
The playback settings panel is opened.



2. Select the way of opening the file: **Disk**, **Folder** or **File** (1).

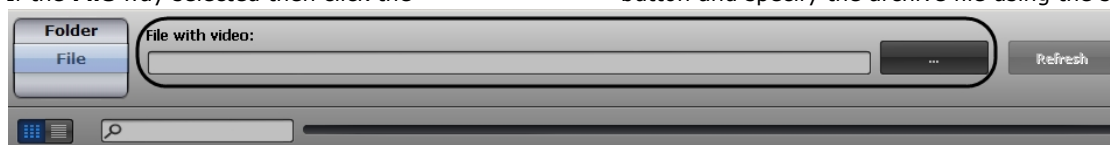
3. Specify the path to video files:

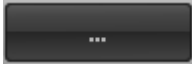
1. If the **Disk** way is selected then set checkboxes next to those disks on which the INTELLECT™ software archive is stored (2).

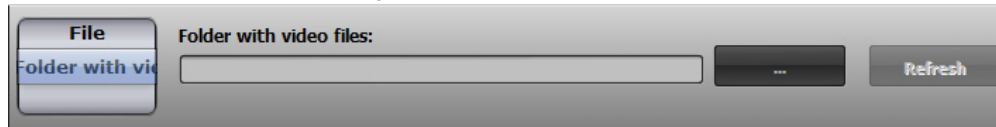
2. If the **Folder** way is selected then click the  button and specify the folder from which the archive is to be viewed using the standard Windows dialog.



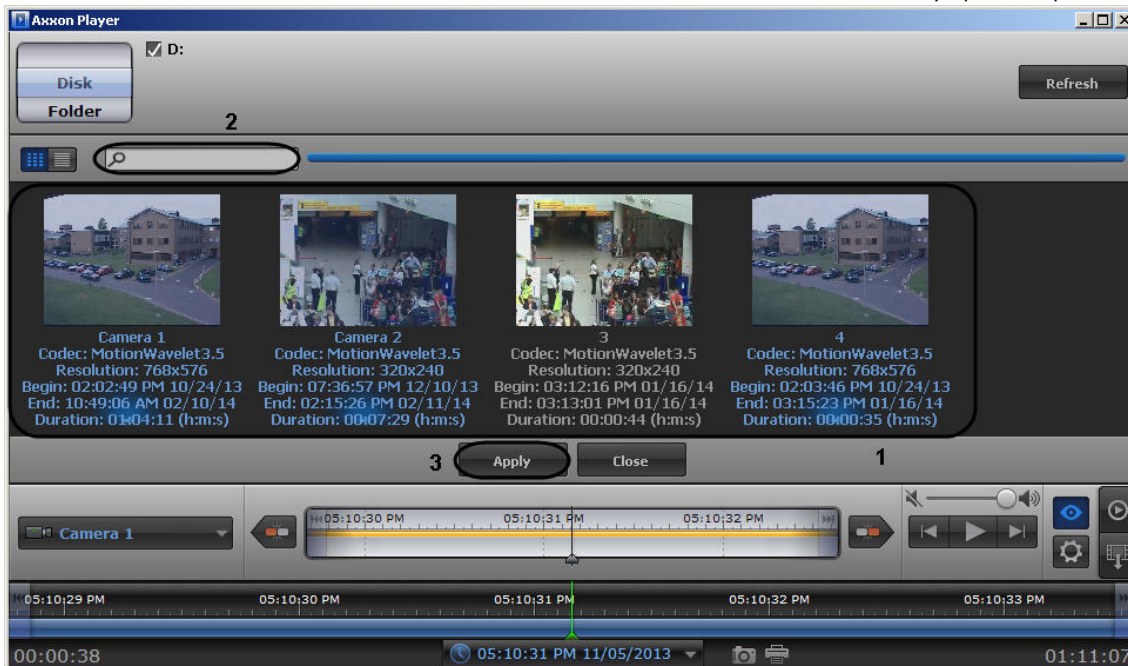
3. If the **File** way selected then click the  button and specify the archive file using the standard dialog of file opening



4. If the **Folder with video files** way is selected then click the  button and specify file in .avi and .mkv format using the standard Windows dialog.



4. Click the **Refresh** button. The of list video cameras on which the archive is available by specified path is displayed in the playback window (1)



5. Select video cameras the archive from which is to be viewed (1). To select more than one camera at a time left-click them holding the Ctrl button pressed.

Note.

Names of the selected video cameras are highlighted with blue. All found cameras are selected on default.

Note.

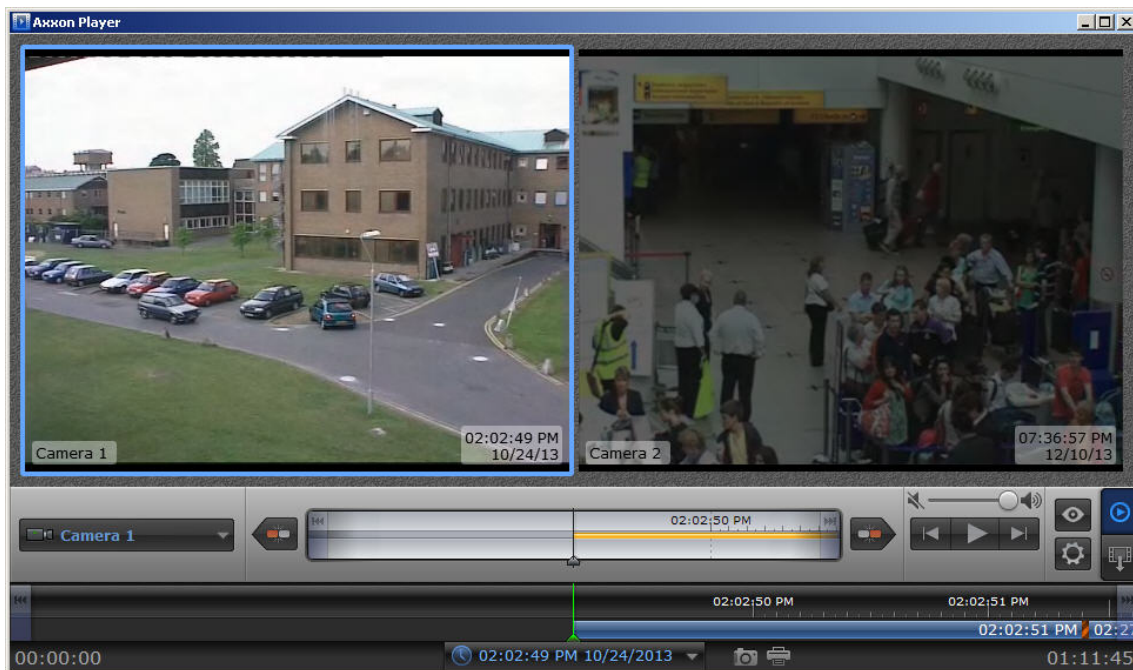
Click the  button to switch over the mode of list viewing by rows (one camera in a row).

Note.

Enter the part of camera name in the **Search** field to search required camera (2).

6. Click the **Apply** button (3).

Playback setting panel is closed. Video images from selected cameras stored in the archive on specified path are displayed in the utility window.



If several cameras are selected for archive playback, it is possible to make the image from one camera full-sized in the utility window. Double click the video image to switch over the full-screen mode. Double click the video image again to return the mosaic mode.

Opening the archive files specifying the path is completed.

Opening video files using the command prompt

It is possible to open video files using the "AxxonPlayer.exe" utility from the command prompt.

To open video files input the following in the command prompt:

Axxon_player.exe --source "File/Folder path". For example, Axxon_player.exe --source "H:\VIDEO\05-05-12 18\15._01".

To select all available disks with the archive use the "all" value of the "source" parameter: Axxon_player.exe --source "all".

To display the window of the Axxon_Player.exe utility over other windows use the "topmost" parameter with "1" value when opening video files using the command prompt. For opening in a normal mode use "0" value of this parameter. For instance, the Axxon_player.exe --source "H:\VIDEO\05-05-12 18\15._01" --topmost "1" command starts the utility in the displaying over other windows mode. By default the "topmost" parameter has "0" value.

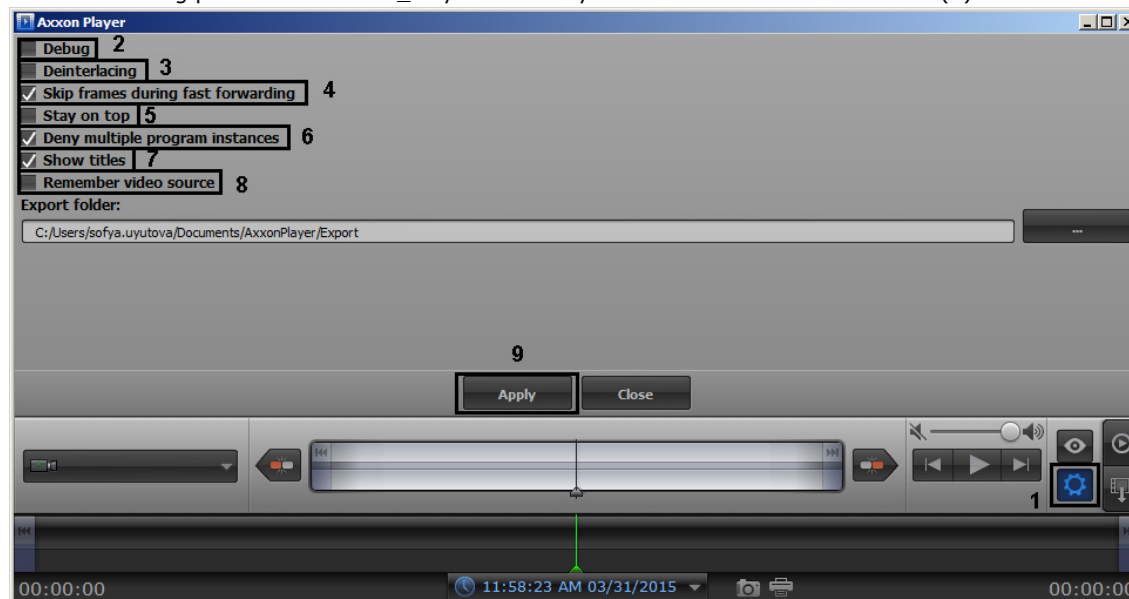
To start the Axxon_Player.exe utility in a single mode prohibiting simultaneous opening several windows of the utility, use the "single" parameter of the command prompt with "1" value. To start using several windows of the utility use 0 value of this parameter. For instance, using the Axxon_player.exe --source "H:\VIDEO\05-05-12 18\15._01" --single "1" command the Axxon_Player.exe utility starts with prohibition of simultaneous opening of several utility windows. By default the "single" parameter has "1" value.

To enable the option of titles displaying above video image while playing use the "titles" parameter of the command prompt with value 1. To disable titles displaying while playing the video image use value 0 for this parameter. On default the titles parameter is 1.

Configuring the interface of the Axxon_Player.exe utility

To configure the interface of the Axxon_Player.exe utility do the following:

1. Go to the setting panel of the Axxon_Player.exe utility. For this click the  button (1).



2. To display a semi-transparent debug window over each image set the **Debug** checkbox (2).
3. To enable deinterlacing set the **Deinterlacing** checkbox (3). To disable deinterlacing remove this checkbox. Deinterlacing allows avoiding artifacts in the video image.

Image with artifacts:

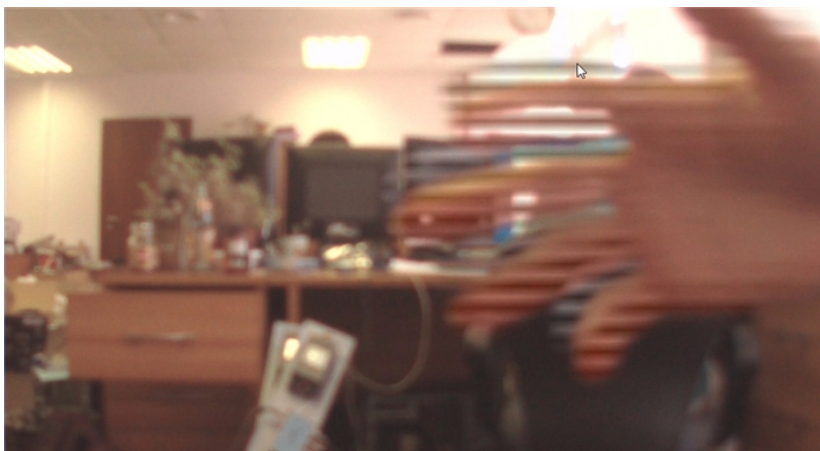


Image with no artifacts:



4. To enable the option of frames skipping when there is fast playback set the **Skip frames during fast forwarding** checkbox (4). This functionality is used to reduce the Server load.
5. To display the utility window over other windows set the **Stay on top** checkbox (5).
6. To disable the simultaneous opening of several utility windows set the **Deny multiple program instances** checkbox (6).
7. Set the **Show titles** checkbox to display titles above video image while playing the video record (7). Options of titles displaying such as font, color and place are specified by Settings.xml file which is located in the folder with video archive (in the VIDEO folder). This file is formed by the **Captioner** object (see the [Configuring captions display on a video image](#) section).

Attention!

To use the Settings.xml file the search of archive files is to be performed by disk or by folder where the Settings.xml file is located (see the [Opening video files by specifying the path in the utility](#) section).

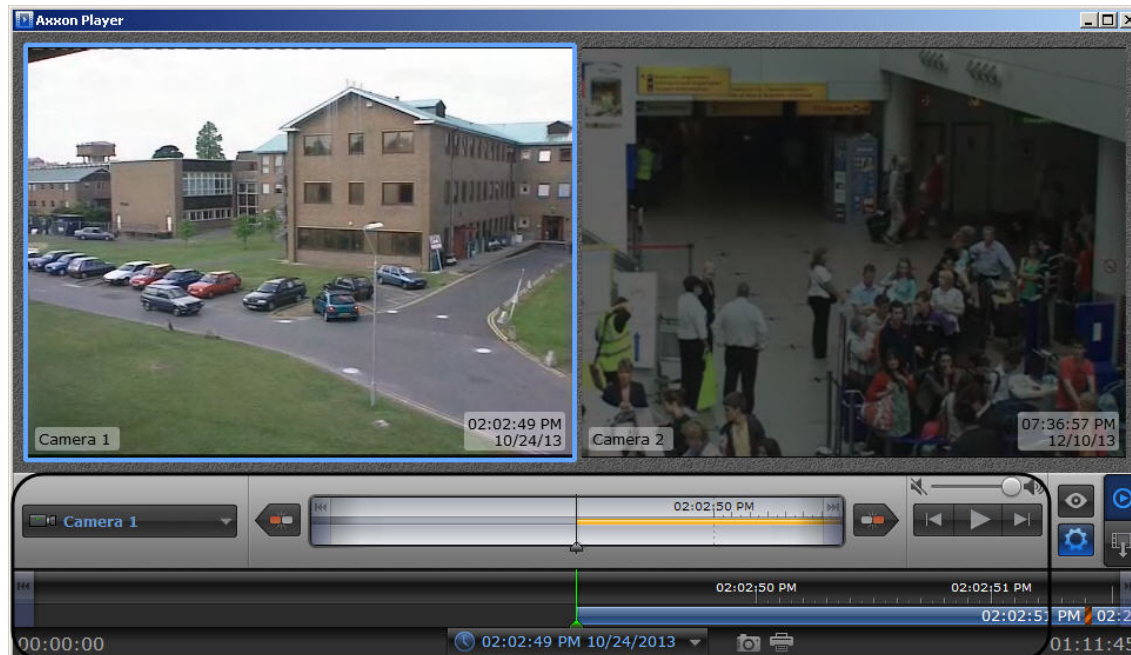
8. If resources of video (disks, folders, files) are to be remembered and selected when the utility is run, then set the **Remember video source** checkbox checked (8). If the checkbox is set unchecked, then video is not shown when the utility is run, but when the path to the folder or file with video is selected, the previously specified path is shown. If the checkbox is set checked, then when the utility is run video is shown starting from the frame at which the viewing was previously stopped.
9. Click the **Apply** button (9).

Deinterlacing configuration is now completed.

Viewing video using the AxxonPlayer.exe utility

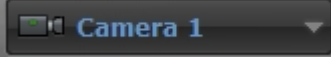
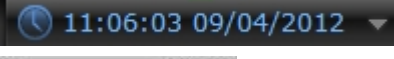
The Playback control panel

Archive playback control using the AxxonPlayer.exe utility is performed in the utility window on the playback control panel.



Click the button to go to the playback control panel.

Elements description of the playback control panel is given below:

1.  Start the archive playback on cameras on which there are records on specified date. Synchronic archive playback is available.
2.  Playback stop.
3.  Playback speed up in two times relatively the current speed if the playback launched (maximum ×16 speed up is available).
Go to the next frame if the playback stopped.
4.  Playback speed down in two times relatively the current speed if the playback launched (maximum ×16 speed down is available).
Go to the previous frame if the playback stopped.
5.  Go to the current record beginning.
6.  Go to the current record ending.
7.  Go to the archive ending in the main time scale. Go to the archive ending of selected camera on additional time scale.
8.  Go to the archive beginning in the main time scale. Go to the archive beginning of selected camera on additional time scale.
9.  Select active camera for archive playback in full-screen mode if several cameras selected for archive playback.
10.  Saving the screenshot of the utility area displaying camera boxes. Screenshot is saved in C:\Users\%current user%\Documents\AxonPlayer\Screenshots directory.
11.  Printing the screenshot of the utility area displaying camera boxes.
12.  Specifying time and date for archive record to be played.
13.  Volume adjustment

Time and archive marks in the both scales are to be taken into consideration while controlling playback. Their description is given in the table below.

Mark	Description
Time mark for archive absence (5)	This mark means that there is no compressed archive. The more interval without archive, the thicker the mark is.
Time mark 1 (1)	Time period from archive begin to the current moment.
Time mark 2 (2)	Time period from the current period to archive ending.
Time mark 3 (3)	Time of recording start.

Time mark 4 (4)

Time of recording finish.



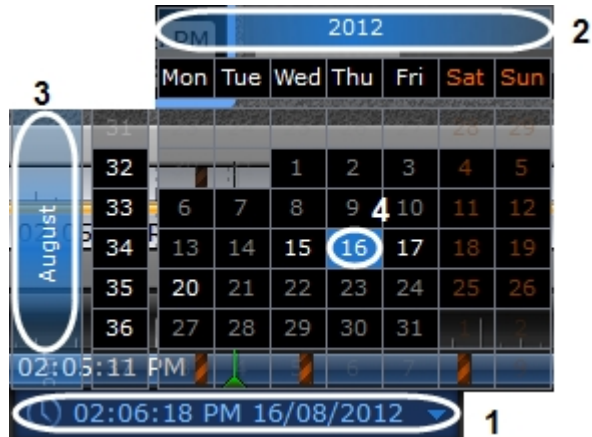
Archive navigation using the calendar

Archive navigation can be performed using the Calendar tool. This tool is designed to specify the date the archive on which is to be played back.



To specify date of archive viewing do the following:

1. Click the  or  button to access the Calendar tool (1).



2. Specify the year by dragging the calendar field left or right (2).
3. Specify the month by dragging the calendar field up or down (3).
4. Select the needed day by left-clicking the mouse (4). Days for which records are stored in archive are highlighted with white.

Going to the first archive record at the specified date is performed when the required date is selected in the calendar.

Date specifying for archive viewing is completed.

Archive navigation using the time scale

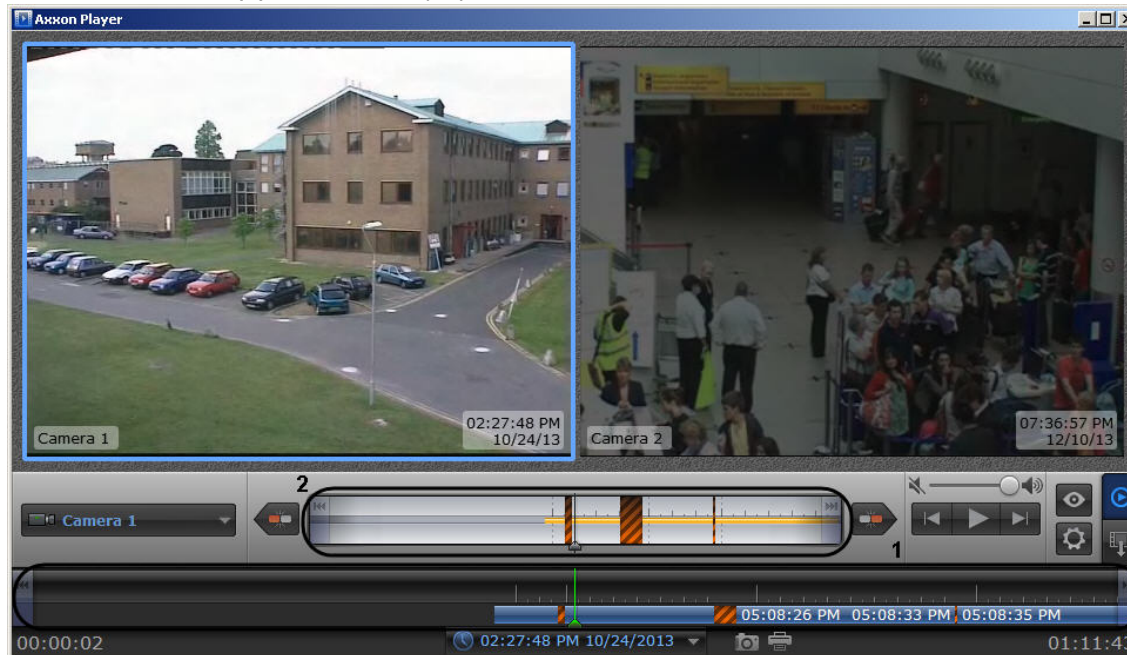
Archive navigation can be performed using the time scales.

Time scales contain color indicators of records presence per period – tracks.

There are following time scale types in the AxxonPlater.exe utility:

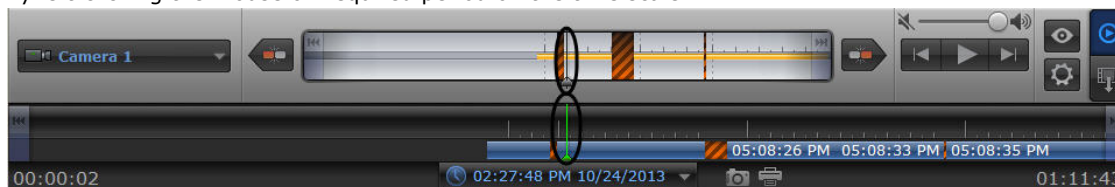
1. Main time scale (1). This scale displays tracks from all cameras selected to view.

2. Additional time scale (2). This scale displays tracks from the active camera.



Archive navigation is performed in two ways:

1. By dragging the scale relatively the indicator. When the indicator is matched to the point on the time scale then there is going to the moment on the record corresponding to this point.
2. By left-clicking the mouse on required period on the time scale.



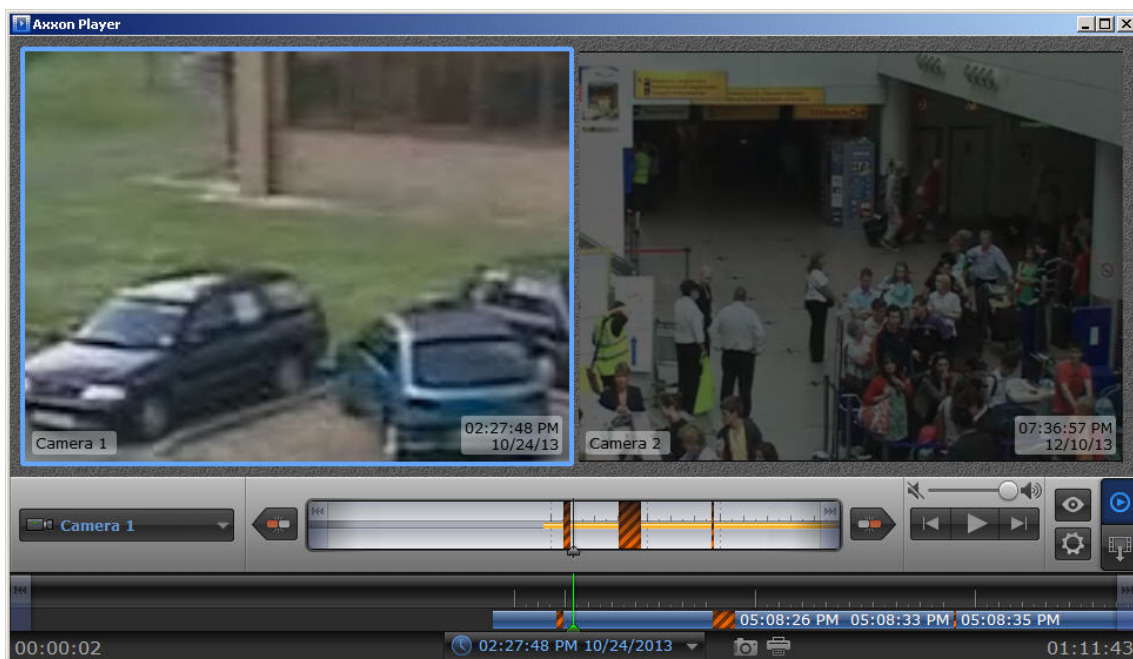
Going in the main and additional scale is synchronized.

It is possible to size time scales. Zoom in and zoom out of time scales are performed using the scroll wheel in required area of the time scale.

Scaling the video image

It is possible to scale viewing video images in the "AxxonPlayer.exe" utility.

Zoom in and zoom out of video image size are performed using the scroll wheel in the camera area.



Navigation over the blowup video is performed using the mouse cursor moving with holding the middle mouse button (wheel) pressed.

Saving the frame from the command prompt

It is possible to export frame from archive using the command prompt. The following parameters of axon_player.exe executive file are used:

- help – reference on parameters of executive file;
- source arg – specifying the video file/catalogue;
- channels arg – specifying the video camera id for frame export;
- destination arg – specifying the catalogue for frame export;
- time – specifying the time of export frame in YYYY-MM-DD HH:MM:SS.ZZZ format.

Example.

```
« --source "D:\VIDEO" --destination "D:\CmdExportFolder" --channels "1 3 5" --time "2011-11-02 15:40:11.123"»
```

or

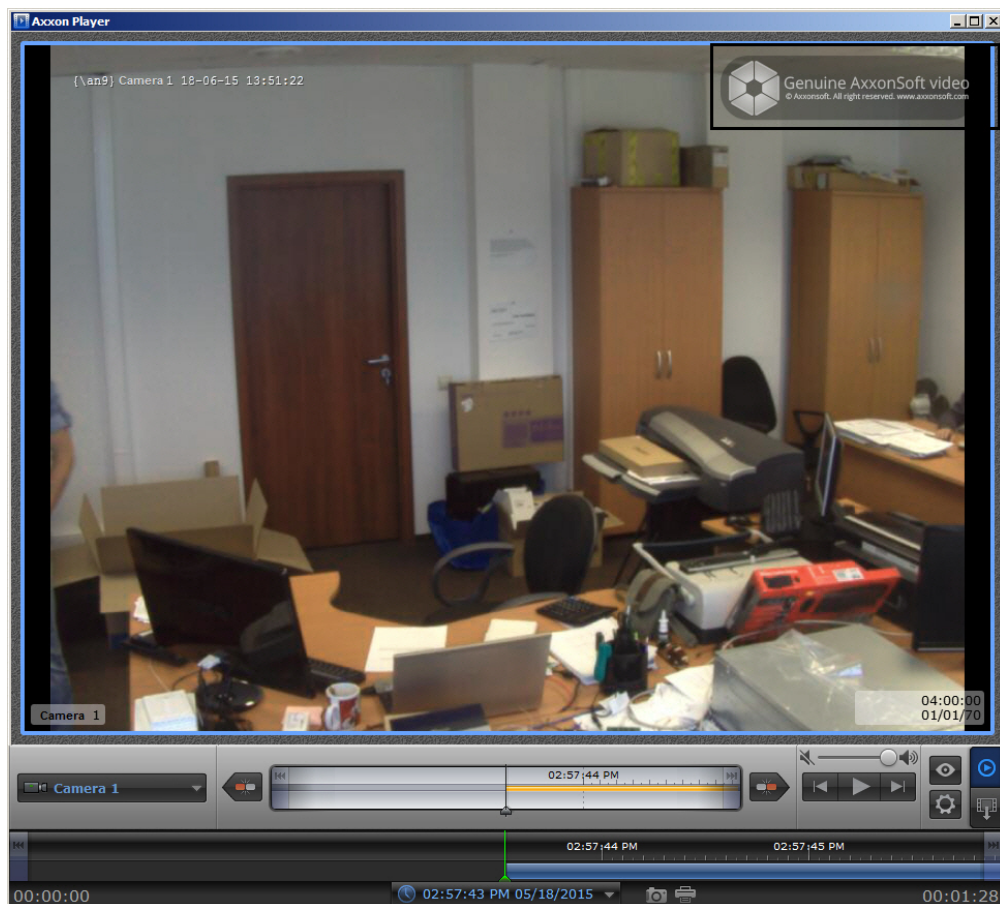
```
«--source "D:\VIDEO" --destination "D:\CmdExportFolder\UserFrame.jpg" --channels "1" --time "2011-11-02 15:40:11.123"»
```

File names like "dd-MM-yyyy hh-mm-ss-zzz channelID.jpg" are assigned automatically in the first case. In the second case file names are specified by the user and it is possible to save the frame in jpg, bmp or png formats.

If the **channels** parameter is not specified, then all existing channels are to be saved both for the video and images.

Watermarks

If a video file was exported using AviExport utility (see [The AviExport utility](#) section in Operator's Guide), a watermark will be displayed on the video while viewing it using the AxxonPlayer utility:



Note.

A watermark is not added to the video if video was exported in the original format and codec was not changed.

Exporting the Intellect video archive using the AxxoPlayer.exe utility

Order of video archive export

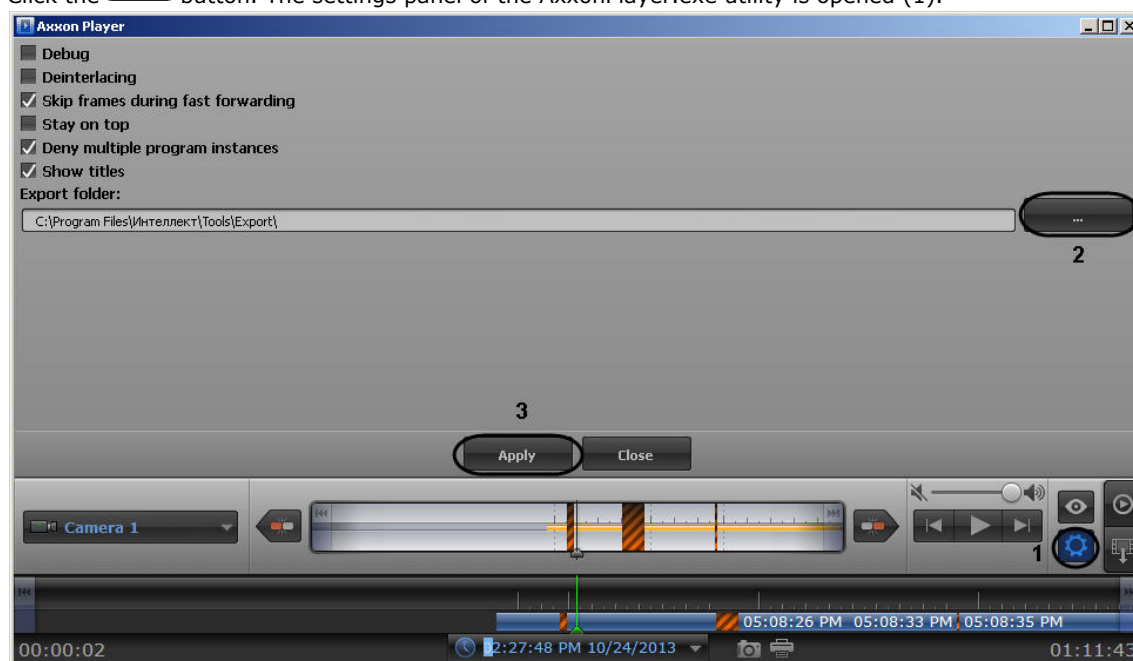
Exporting the INTELLECT™ software archive using the AxxonPlayer.exe is performed in the following order:

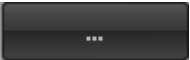
1. Specify the path to the folder to which archive files are to be exported (see [Specifying the export folder](#)).
2. Go to the export panel (see [Going to the export panel](#)).
3. Create the export task (see [Creating the export task](#)).
4. Start the archive export (see [Running the archive export](#)).

Specifying the export folder

To specify the export folder do the following:

1. Click the  button. The settings panel of the AxxonPlayer.exe utility is opened (1).



2. Click the  button and select the export folder using the standard dialog of path selection to the Windows OS folder (2).
3. Click the **Apply** button (3).

Specifying the export folder is completed.

Going to the export panel



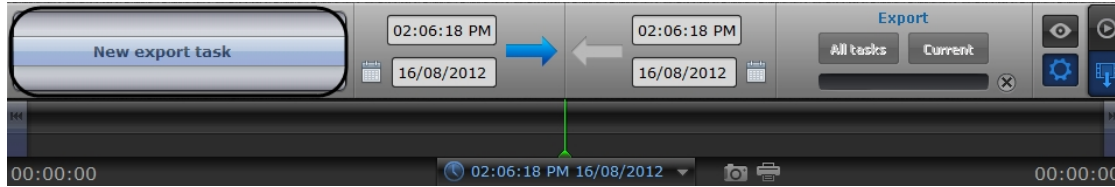
To go to the export panel click the button. If .avi or .mkv file is opened in the utility, this button is disabled and looks like



Creating the export task

To create the export task do the following:

1. Select the **New export task** value in the list. The value selection is performed by dragging the list items up or down until the aligning with the list center.



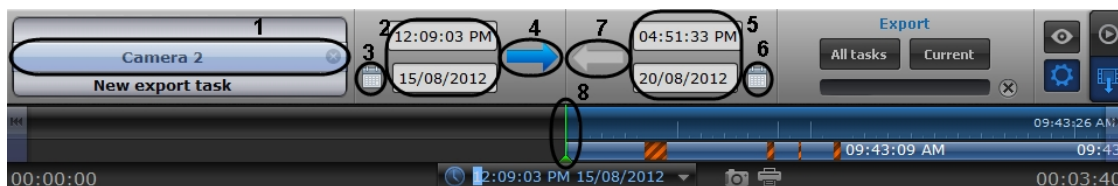
2. Select the image from the required camera and drag it to the list using the left mouse button.



Cameras are to be added to the export list (1).

Note.

To remove the cameras from the list click the  button.



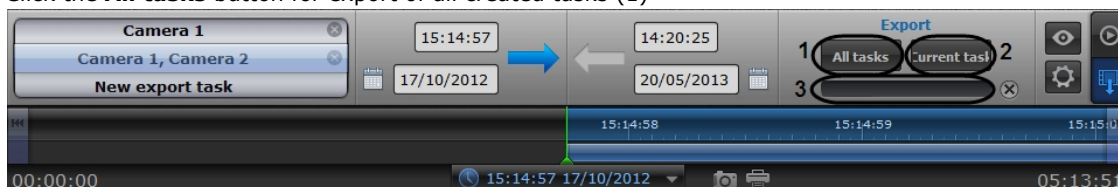
3. Specify the start export date by one of the following ways:
 1. Enter the required value in the field manually (2).
 2. Click the  button and use the Calendar tool (3). Calendar operation procedure is equal to the archive navigation procedure (see [Archive navigation using the calendar](#) chapter).
 3. Click the  button (4) and specify the start value of export by dragging the time scale relatively the indicator (8).
4. Specify the end export date by one of the following ways:
 1. Enter the required value in the field manually (5).
 2. Click the  button and use the Calendar tool (6). Calendar operation procedure is equal to the archive navigation procedure (see [Archive navigation using the calendar](#) chapter).
 3. Click the  button (7) and specify the end value of export by dragging the time scale relatively the indicator (8).

Export task creation is completed.

Running the archive export

To run the export do the following:

1. Click the **All tasks** button for export of all created tasks (1)



2. Click the **Current** button to run the export of task selected in the task list (2).

The export state is displayed by the indicator of process display (3). Archive files will be copied to the export catalogue in the «drive_<Disk letter with the «Intellect» software archive>» after the export completion, e.g. «drive_D».

Note.

Click the  button to stop the export. None of files will be exported.

Export of video archive is completed.

Setting the export parameters in the command prompt

It is possible to set the export parameters from the Windows command prompt. The following parameters of the axon_player.exe executive file are used:

- help – reference output by parameters of executive file;
- source arg – specify the video file/catalogue;
- channels arg – specify the video camera id for export through the space button ;
- destination arg – specify the export catalogue;
- from arg – specify the start export time in YYYY-MM-DD HH:MM:SS.ZZZ format;
- to arg – specify the end export time in YYYY-MM-DD HH:MM:SS.ZZZ format.

Example of line for export: «--source "D:\VIDEO" --channels "1 3 5" --destination "D:\CmdExportFolder" --from "2011-11-02 15:40:05.123" --to "2011-11-02 15:40:17.123"»

The Cam_title_updater.exe utility to convert titles database

Purpose of the Cam_title_updater.exe utility

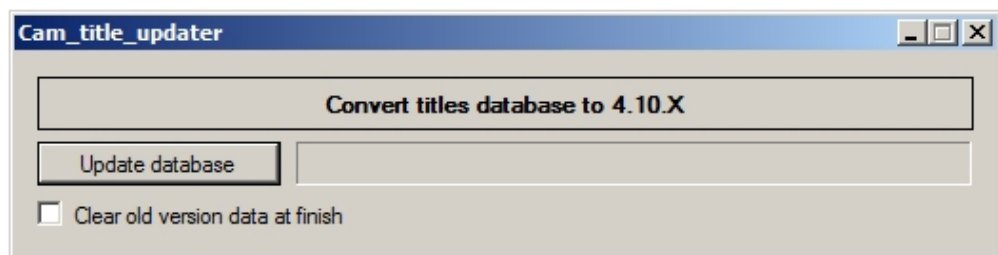
The Cam_title_updater.exe utility is used to convert titles database to a new format when updating to Intellect 4.10.x from older versions.

Starting and quitting the Cam_title_updater.exe utility

Start the Cam_title_updater.exe utility as follows:

1. Start -> All Programs -> Intellect -> Tools -> Update titles DB.
OR
2. <Intellect installation folder>\Modules using Cam_title_updater.exe file.

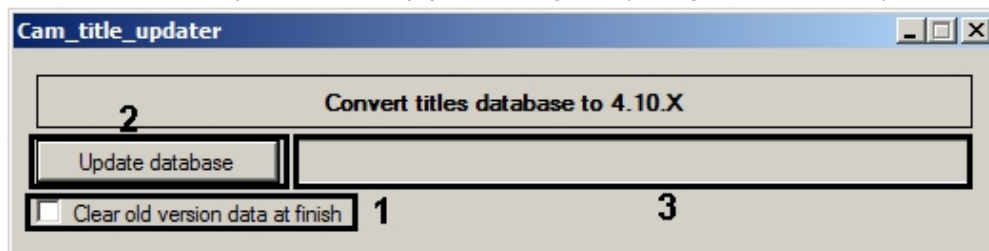
The Cam_title_updater.exe overview is shown below.



Updating titles database using the Cam_title_updater.exe utility

Start titles database update as follows:

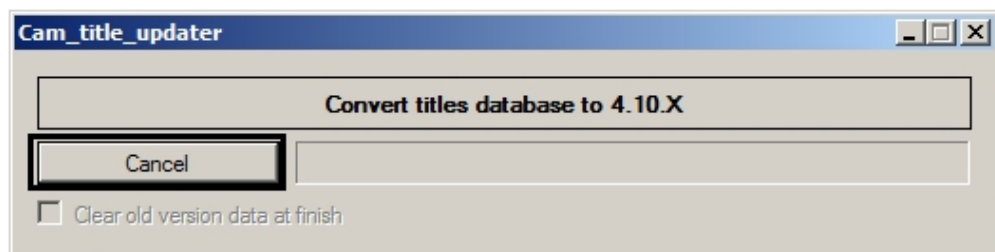
1. Start the Cam_title_updater.exe utility (see [Starting and quitting the Cam_title_updater.exe utility](#)).



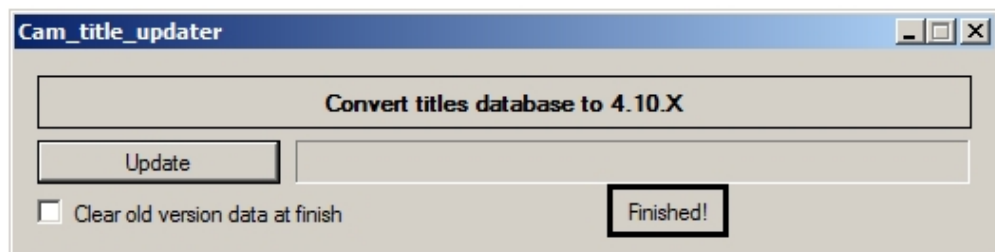
2. If it is required to delete titles in the old format when conversion to a new format is finished, set the Clear old version data at finish checkbox checked (1).
3. Click the **Update database** button (2).
4. The conversion process will be shown by means of process display (3).

Note.

To stop converting click the **Cancel** button. The data that has already been converted when clicking the button will be available.



When the titles database is updated there will be the **Finished!** message.



Note.

Every time the **Update** button is clicked the process of updating titles database is started.

The titles database is now updated.

The SyncProtocol.exe utility to synchronize event log database

The purpose of the SyncProtocol.exe utility. Starting and shutting-down the utility

Purpose

The SyncProtocol.exe utility is designed to synchronize Server/Client Event log database with databases of other Servers/Clients by command if the auto synchronization is disabled.

The auto synchronization is disabled on the **Computer** settings panel using the **Only local protocols** checkbox. If this checkbox is set checked, then the auto synchronization is not performed - see [Configuring events logging](#).

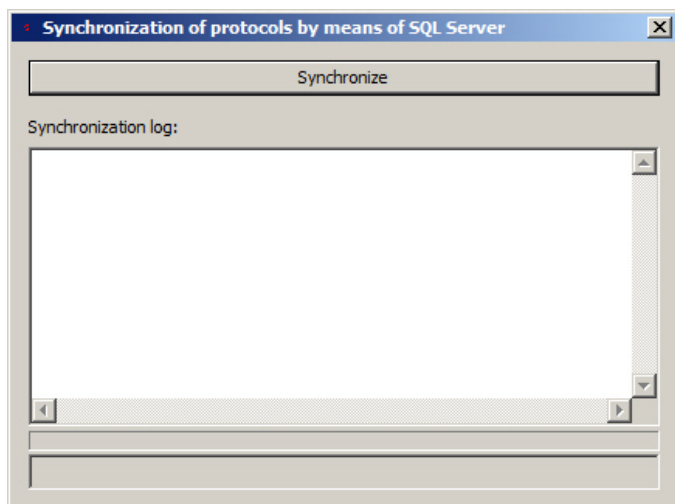
Before starting synchronization using the SyncProtocol.exe utility it is required to configure synchronization on the **Computer** settings panel by specifying the computers for synchronization and the Event Viewer database connection string – see [Configuring the Event Viewer databases synchronization](#).

There is no synchronization with computers for which sending events is disabled in the **Architecture** tab (see [Configuring the interaction of distributed system components](#)). If the **Send events** checkbox is set checked, but checkboxes for all the events are set unchecked, then the events that cannot be disabled will be synchronized (for instance, SLAVE and macro events).

Starting and shutting-down the utility

Start the SyncProtocol.exe utility from the **Tools** folder in the *Intellect* installation folder (by default, C:\Program Files (x86)\Intellect\Tools\).

The utility dialog box is shown in the figure.

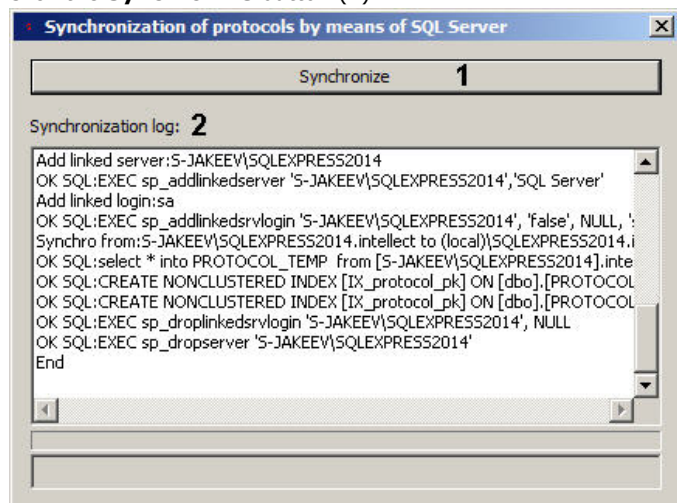


To shut down the SyncProtocol.exe utility click the  button in the upper-right corner of the window.

Synchronization of event log database using the SyncProtocol.exe utility

Synchronize the event log database using the SyncProtocol.exe utility as follows:

1. Preconfigure the system and start the SyncProtocol.exe utility (see [The purpose of the SyncProtocol.exe utility. Starting and shutting-down the utility](#)).
2. Click the **Synchronize** button (1).



3. The information on the synchronization process is displayed in the **Synchronization log** field (2).

4. When the process is completed shutdown the utility by clicking the  button.

The event log database is now synchronized using the SyncProtocol.exe utility.