

SLIInputLayer



Previewing and Capturing
Audio and Video Content
from MPEG-TS to Files

*Revision as of:
September 08, 2017*

Quick Start

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FCC ID:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Shielded cables and I/O cards must be used for this equipment to comply with the relevant FCC regulations. Changes or modifications not expressly approved in writing by SoftLab-NSK Co., Ltd. may void the user's authority to operate this equipment.

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Table of Contents

Introduction.....	4
Plugin Registration.....	5
Configuration.....	6
1. Preliminary Remarks.....	6
2. The FDConfig2 Program. Adding Virtual Input	7
The FDPreview Program. Previewing Streaming Audio and Video Data	10
The FDCapture Program. Capturing Stream Content to Files	11





Introduction

The SLIPInputLayer plugin is a program option additional to ForwardTN/TT/TA/TP/TS products designed by the SoftLab-NSK company.

The plugin is used to work with audio and video content received by server input in MPEG-TS stream, i.e. TV programs transmitted by the main broadcasting station via IP/ASI interface, video content from IP camera, etc.

The plugin allows:

- capturing audio and video content from input stream to files via the FDCapture program (capturing is executed only with data recompression);
- capturing audio and video content from input stream to PostPlay storages (via the PostPlayCapture program);
- previewing audio and video content from input stream in FDPreview program window (also in FDCapture, SLAdsRemover and other programs).

Note: For example, the SLIPInputLayer plugin is required to capture stream data to files in the following solutions:

- rebroadcast media data from MPEG-TS on a full screen – see the [«IPInput. Rebroadcasting Streaming Audio/Video Data on Full Screen»](#) user's guide. The function is available in the Forward TT/TA/TP/TS products;
- rebroadcast media data from MPEG-TS in a window over full-screen video background (PiP) – see the [«IPCamera. Rebroadcasting Streaming Audio/Video Data in the Form of Titles»](#) user's guide. The function is available if the Forward TT/TA/TP/TS product is used with the IPCamera plugin;
- rebroadcast media data from MPEG-TS with a time shift – see the [«IP2PostPlay. Recording Streaming Audio and Video Into Postplay Storages»](#) user's guide. The function is available if the Forward TA/TP/TS product is used with the IP2PostPlay plugin;
- rebroadcast media data from MPEG-TS with automatic removal of advertisement – the SLAdsRemover product.

Also there are variants of the SLIPInputLayer plugin for SD, HD, 4K resolutions and for various quantity of channels for simultaneous data capturing: 1, 4, 16.

The present guide describes order of the SLIPInputLayer plugin registration and its configuration.



Plugin Registration

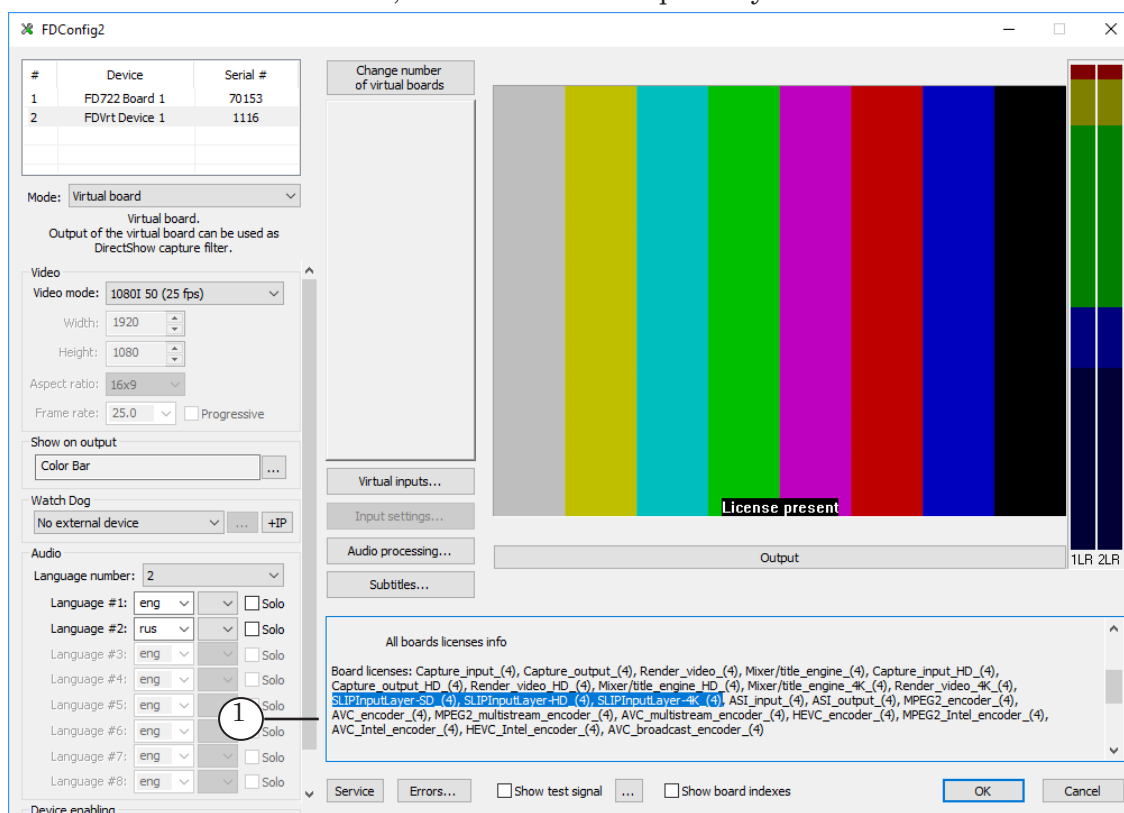
1. Work with the SLIPInputLayer plugin requires no additional installation of any other software components.
2. Be sure that software not earlier than 5.8.0 version for the main product and plugins is installed.

Note: Installers for current software versions and instructions on their installation you may find at the SoftLab-NSK company site in the [Download](#) section.

3. Activate registration of the SLIPInputLayer plugin by double-clicking name of registration file (*.reg). The file is received in set with plugin. Confirm adding information from the file to Windows registry.
Reboot the PC.

✓ **Important:** Registration of the plugin becomes active only after PC restart.

4. Open the FDConfig2 program via shortcut located on desktop. Be sure that in the All boards licenses info program section in the Board licenses list there is an item that corresponds to purchased product (1), i.e. SLIPInputLayer name, mark of cnahhels quantity and resolution.



Function of capturing to files and previewing of stream media data requires some additional configuration described below.



Configuration

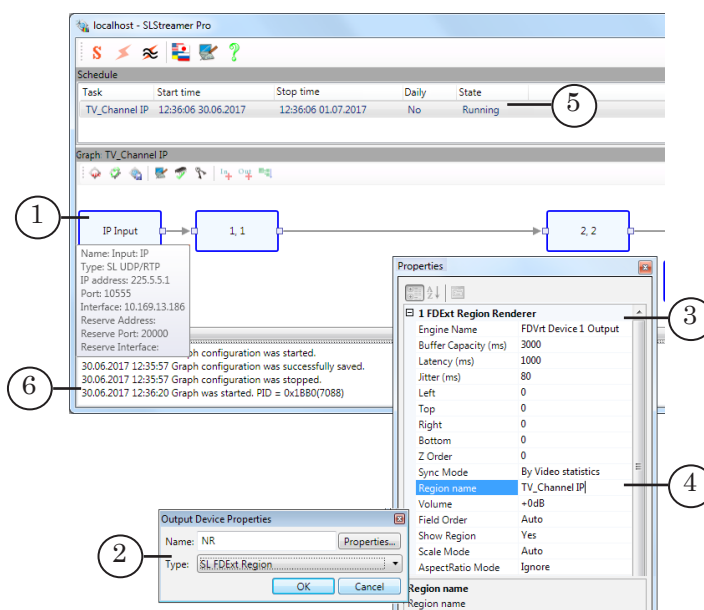
1. Preliminary Remarks

1. Broadcasting scheme must be set up first.

Note: For example, if it is necessary to broadcast video content from IP source on a full screen then follow the instructions given in the [«IPInput. Rebroadcasting Streaming Audio/Video Data on Full Screen»](#) user's guide.

Create graph (1) in the SLStreamer Pro program window. The graph is necessary to receive audio and video data from IP stream to named region of used board. The SL FDEExtRegion type (2) is selected for the Output device node. Necessary board (3) and region name (4) are also specified in node settings.

Note: More information on work with graphs is given in the [«SLStreamer Lite. SLStreamer Pro. Programs for Configuring, Monitoring & Managing Digital Broadcasting Schemes»](#) user's guide.

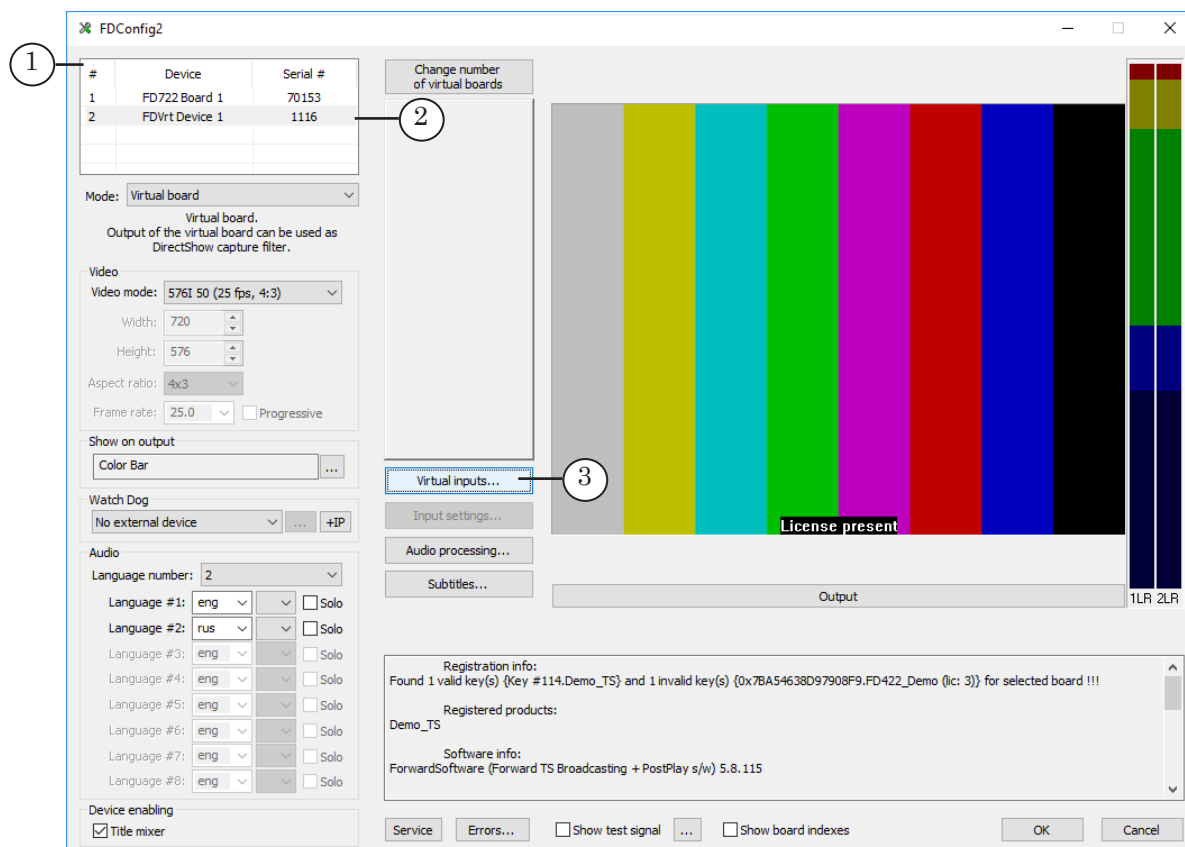


2. Be sure that state of task with the graph is Running (5), i.e. the graph is started (the Graph was started PID=... message appears (6)).



2. The FDConfig2 Program. Adding Virtual Input

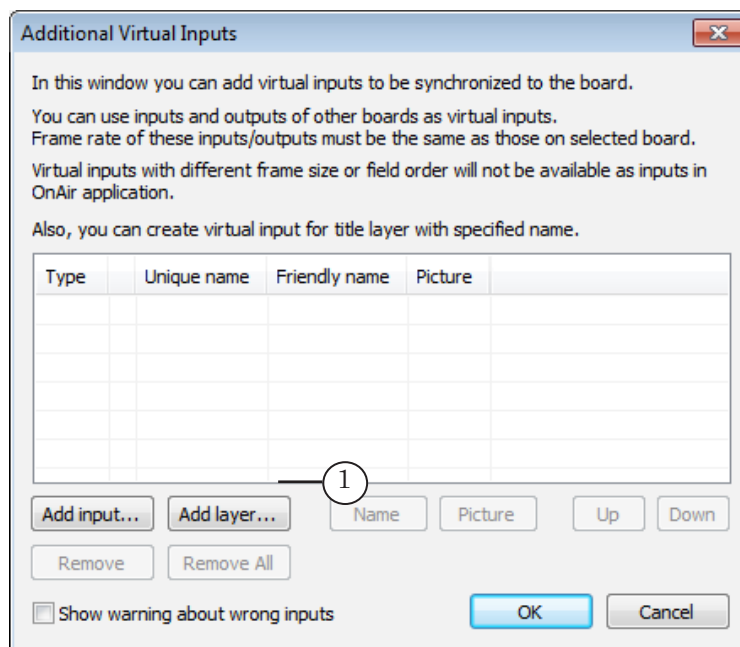
1. Configuring is executed when graph receives stream (see the section above).
2. Launch the FDConfig2 program.
3. Select board receiving the stream in the list (1).
FDVrt Device 1 (2) is in our example.



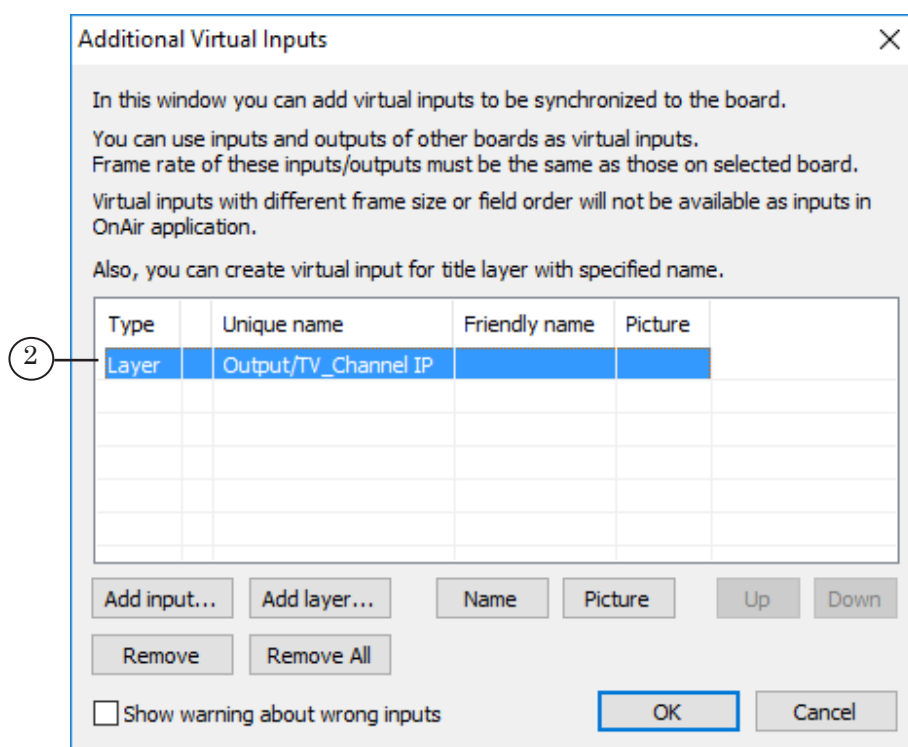
4. Click Virtual inputs... (3).



5. Click Add layer... (1) in appeared window. Select necessary item with specified named region name in the drop-down list.

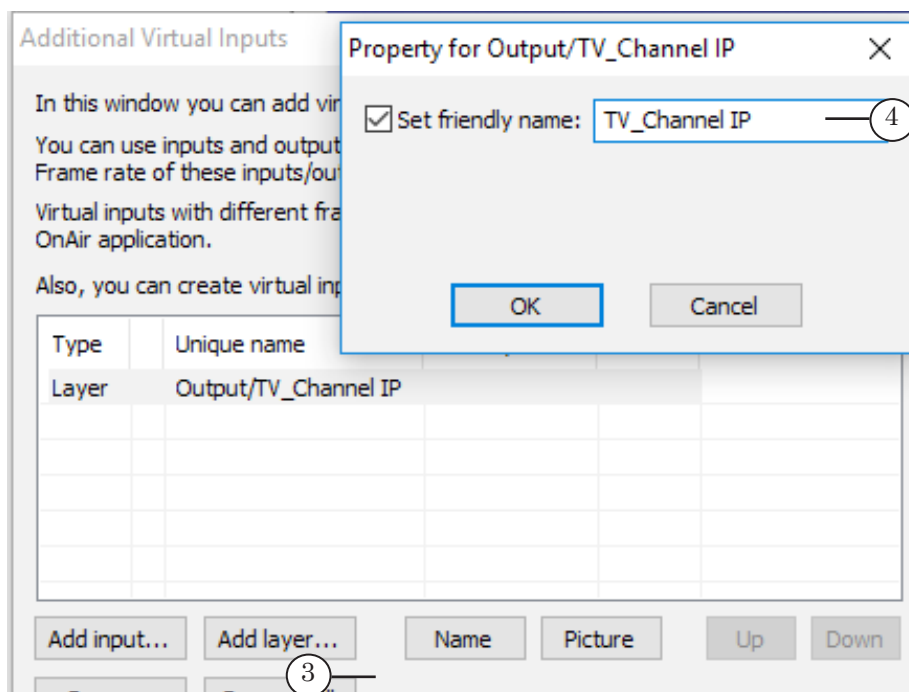


Selected layer is added to list of virtual board inputs (2).

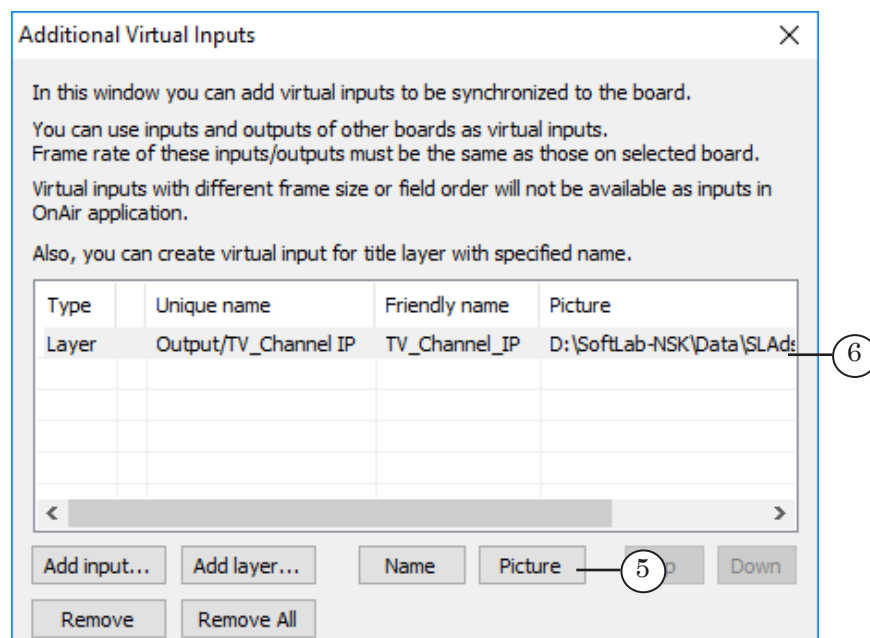




- Click Name (3). Specify name of added virtual input (4). This name is displayed in device lists in the FDConfig2, FDPReview, FDCapture and other programs at selection of capturing data source.



- Click Picture (5). Specify path to graphic file (6). Picture from this file will be used on input if some failure in receiving of stream from IP/ASI source occurs.



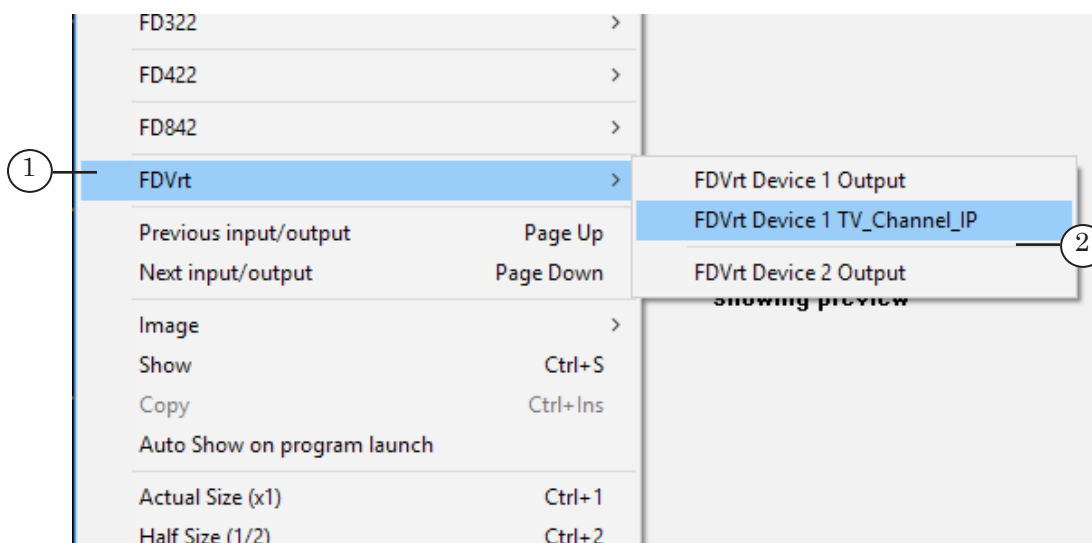
- Close the Additional Virtual Inputs window. Then close the FDConfig2 main program window by clicking OK.



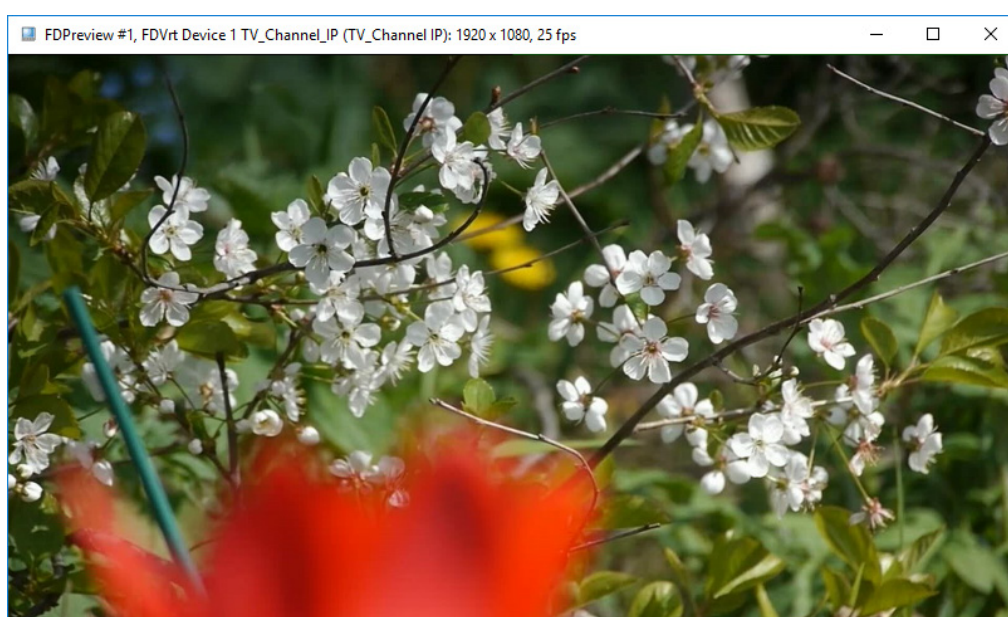
The FDPReview Program. Previewing Streaming Audio and Video Data

Launch the FDPReview program. More information on this program you may find in the [«FDPReview. Program for Previewing of Audio and Video on Boards Inputs/Outputs»](#) user's guide.

Open menu by clicking program title bar. Select item with board indication (FDVrt (1) is in our case). Select device in the appeared submenu. The device is a source of audio and video data for previewing. The FDVrt Device 1 TV_Channel_IP device (2) is in our example.



Double-click work area of the window to start audio and video data previewing.

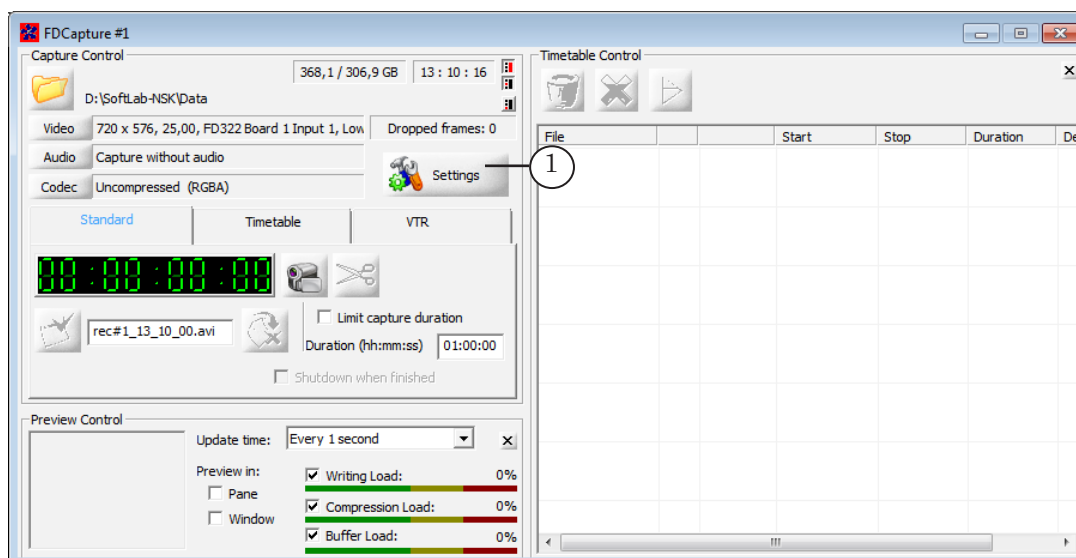




The FDCapture Program. Capturing Stream Content to Files

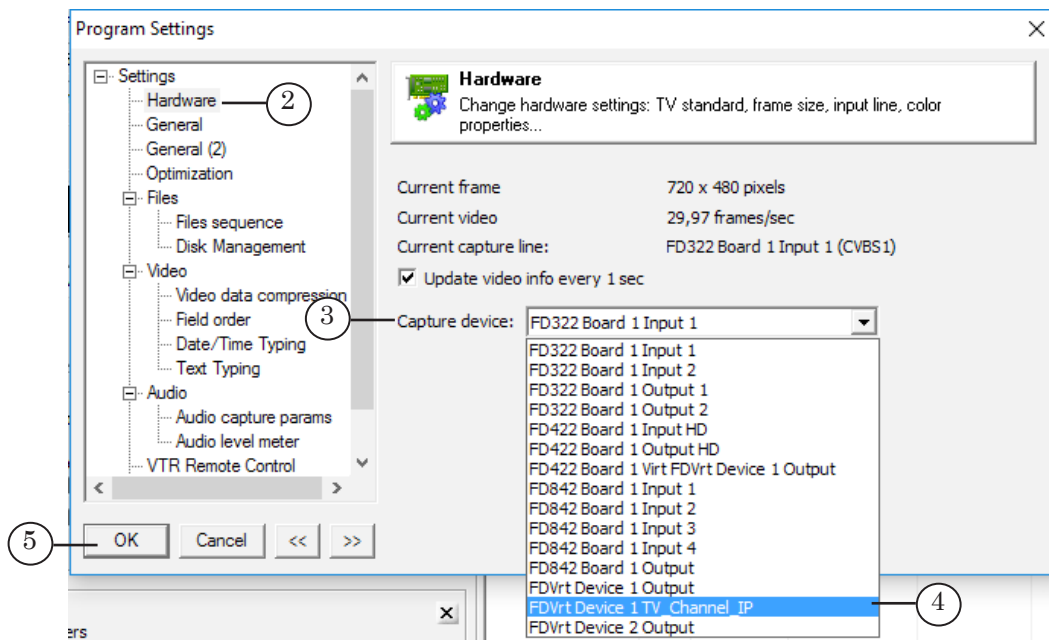
Configuration of audio and video data capturing to files and control over capturing are executed according to instructions given in the [«FDCapture. Program For Capturing Audio and Video Data to Files»](#) user's guide. If additional configuration is made (see the «Configuration» section above) then the FDCapture program has configured virtual input in the list of input devices.

1. Launch the FDCapture program. Click Settings (1) on the Capture Control pane.

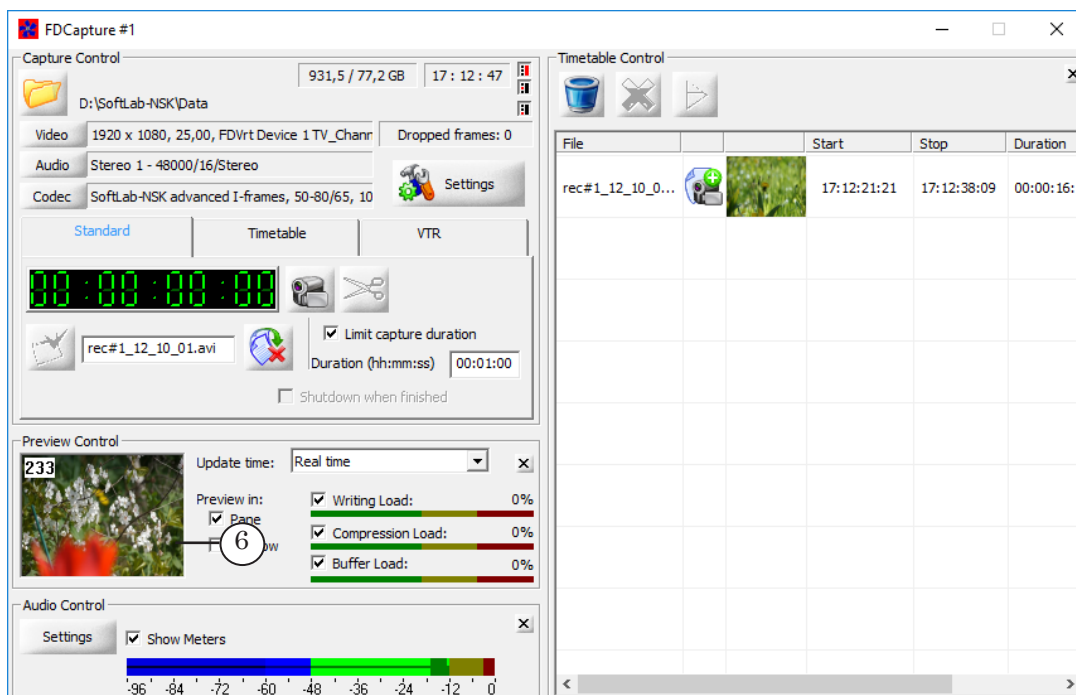




- Open Hardware section (2) by clicking its name in list. Select device in the Capture device list (3) which data must be captured to files, FDVrt Device 1 TV_Channel_IP (4) is in our case. Complete other configuration steps. Click OK (5) to return to the main program window.



- Video frames from input IP stream (6) are displayed in the preview windows.





4. Control over capturing of data from virtual input does not differ anyhow from control over other content and use of other audio and video data sources (for more information see the [«FDapture. Program For Capturing Audio and Video Data to Files»](#) user's guide).



Useful Links

ForwardT Software Set: description, download, documentation, solutions

<http://www.softlab-nsk.com/forward/index.html>

Support

e-mail: forward@sl.iae.nsk.su

forward@softlab-nsk.com

Forum

<http://www.softlab-nsk.com/forum>

Additional Documentation

- [1. «SLStreamer Lite, SLStreamer Pro. Programs for Configuring, Monitoring and Managing Digital Broadcasting Schemes» user's guide.](#)
- [2. «FDConfig2. Program for Control and Customizing of FDEExt Boards Work Parameters» user's guide.](#)
- [3. «IPInput. Rebroadcasting Streaming Audio/Video Data on Full Screen» user's guide.](#)
- [4. «IPCamera. Rebroadcasting Streaming Audio/Video Data in the Form of Titles» user's guide.](#)
- [5. «IP2PostPlay. Recording Streaming Audio and Video Into Postplay Storages» user's guide.](#)
- [6. «FDPreview. Program for Previewing of Audio and Video on Boards Inputs/Outputs» user's guide.](#)
- [7. «FDCapture. Program for Capturing Audio and Video Data to Files» user's guide.](#)

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