

# SLScreenCapture

Broadcasting Screen Content  
In Form of Titles



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User's Guide

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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 Ltd. may void the user's authority to operate this equipment.

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This warranty is in lieu of any other warranty expressed or implied. In no event shall we be held liable for incidental or consequential damages, such as lost revenue or lost business opportunities arising from the purchase of this product.



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## Introduction

The SLScreenCapture plugin is used in solutions based on SoftLab-NSK company products.

The SLScreenCapture plugin is used to organize broadcasting of image from PC screen (with corresponding sound if necessary) in the form of title overlayings. User specifies area of capture on the screen. Screen content is transmitted on air in real time and output in window of specified size over the main video material.

The plugin may be used for displaying any screen content in the form of titles: video from the Internet, Skype chats, ICQ, etc.

The plugin includes:

- the SLScreenCapture program used to customize and control capturing of data and corresponding audio material from PC audio device. You may launch several program instances at the same time;
- the ScreenCapture title element used to customize and control displaying audio and video data on air captured by the SLScreenCapture program. You may use several element instances at the same time.

One pair (one program instance and one title element) ensures broadcasting of data from one source (from one area). Work with several pairs (several program instances and several title elements correspondingly) if necessary to display data from different screen areas.

**Note:** Several title elements may be created for one program instance. All of them broadcast audio and video material of one the same captured zone.

Instructions on installation and configuration of the plugin are described in the present document.

The SLScreenCapture plugin is an additional option to the following products:

- from Forward Tx products line: Forward TT, Forward TA, Forward TP;
- from Forward TS products line: products used for insertion of advertisement and titles overlaying.



# Installation and Registration of Plugin

## 1. Software Set Requirements

Implement the following to work with the plugin:

1. Install the main product (Forward TT/Forward TA/Forward TP/Forward TS). Activate registration of the product.
2. Install software for SLScreenCapture plugin. Activate registration of the plugin.
3. Indices of versions of the main product and plugin must be the same. We recommend working with the last current version of software.

## 2. Features of Plugin Installation

The SLScreenCapture plugin is installed as optional one to the based software. Plugin is installed via specific plugins installer – the following file:

ForwardTxPlugins\_Setup\_X\_X\_X.exe, where X\_X\_X is index of software version (5\_7\_0, for example).

Follow this order at installation:

Note: All required components of software and additional instructions for installation you can find at the [Download](#) page.

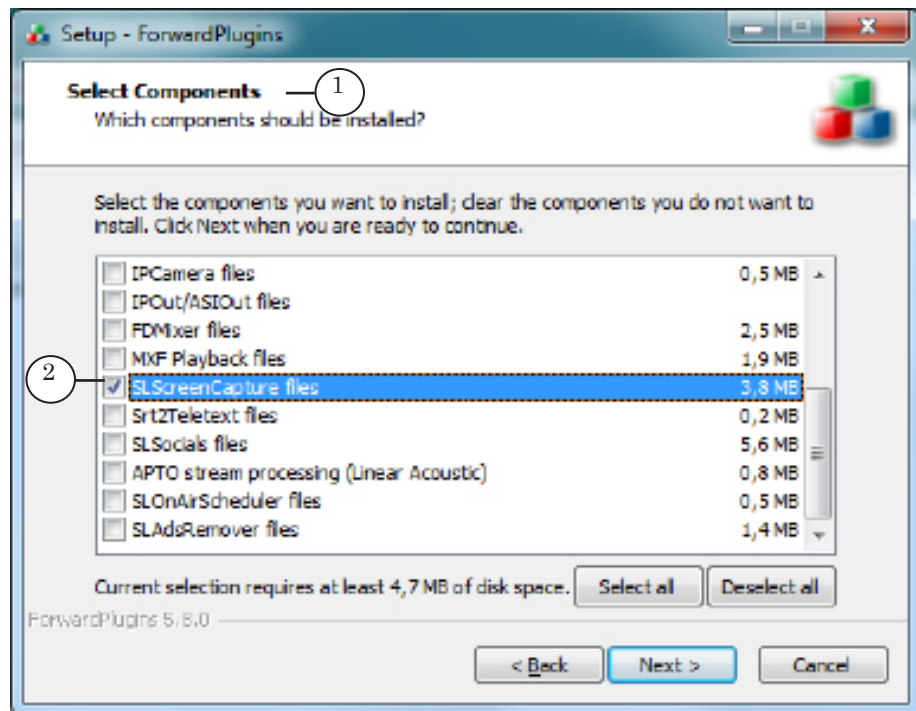
1. Be sure that software of the main product is installed and its registration is activated. If the software is absent install it and activate the registration (see more information in the [«ForwardT Software Setup»](#) guide or [«ForwardTS Software Setup»](#) depending on the basic product).
2. Activate registration of the SLScreenCapture plugin. Double-click name of registration file received with plugin. Required information is added to Windows registry. Reboot PC then.

✓ **Important:** Reboot PC to apply registration.

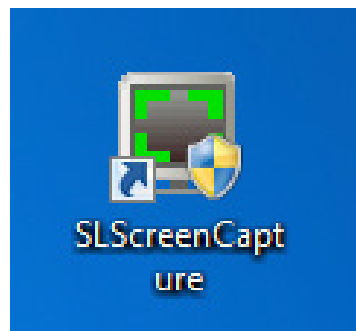
3. Install software for the SLScreenCapture plugin:
  1. Launch plugins installer and follow the steps (for more information see the [«ForwardT Plugins Setup»](#) guide).



2. Put the SLScreenCapture files mark (2) on the Select Components page (1).

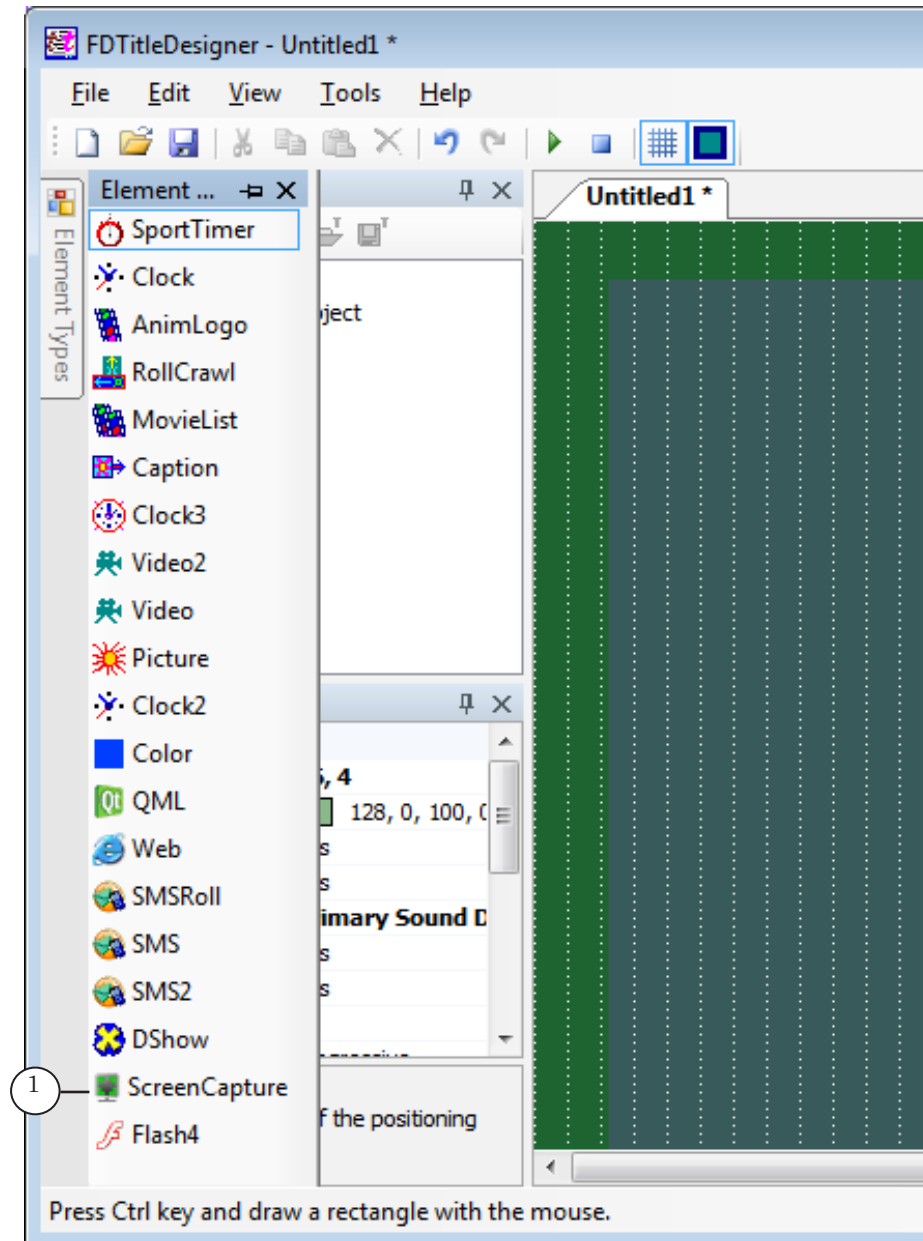


4. After installation and registration of the SLScreenCapture plugin functional set of the main product is extended:
  1. The SLScreenCapture program is added to the main software set. Its shortcut is added to the desktop.





2. The ScreenCapture title element (1) is added to the basic set of title elements in the FDTTitle Designer program.





## Work Order

The present section describes steps for preparation and control over broadcasting of screen content and sound from audio device via the ScreenCapture plugin:

1. Open program window with audio and video data that must be output on air.
2. In the SLScreenCapture program:
  1. Specify capture area on the PC monitor.
  2. Specify frame rate that will be used for capturing video.
  3. Specify device (source of sound) if necessary to broadcast audio data.
  4. Start capturing content.
3. In the FDTitle Designer program:
  1. Create title project by adding the ScreenCapture title element.
  2. Customize properties of the ScreenCapture title element including index of SLScreenCapture program instance.
  3. Save the project.

Note: Title project may include several ScreenCapture title elements created for broadcasting data from different sources related (according to program instance index) to different SLScreenCapture program instances. Insert the elements into different title objects to control elements independently. More information you may find in the [«FDTitleDesigner. Title Object Editor»](#) guide.

4. Load project with ScreenCapture title elements in the FDO nAir program.

You may control broadcasting of background video and titles automatically or interactively via the FDO nAir program.

✓ **Important:** The SLScreenCapture program must work in capture mode in order to broadcast screen content on air.

Note: For more information see the [«FDO nAir. Broadcast Automation»](#); [«FDO nAir. Commands list. Broadcast Automation»](#) guides.



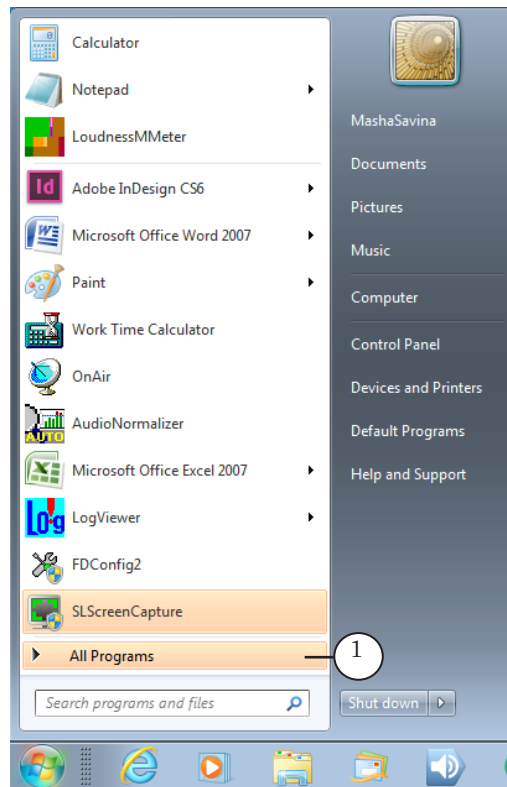


## Work With SLScreenCapture Program

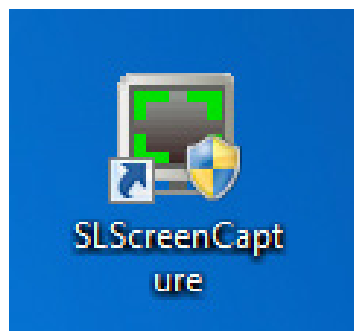
### 1. Program Launch

Use the Start menu to launch the program:

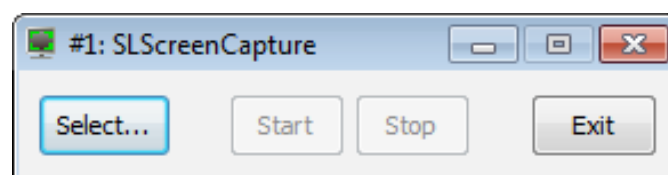
All Programs > ForwardT Software > Plugins > SLScreenCapture (1).



You may also launch the program via program shortcut located on the desktop.



The main program window appears.

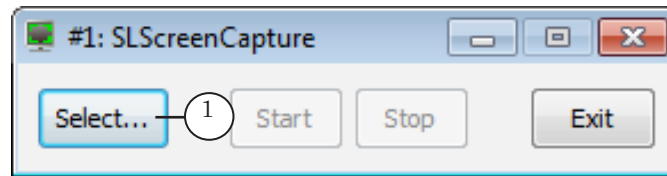




## 2. Selecting Capture Area

Complete the following to select area for capturing:

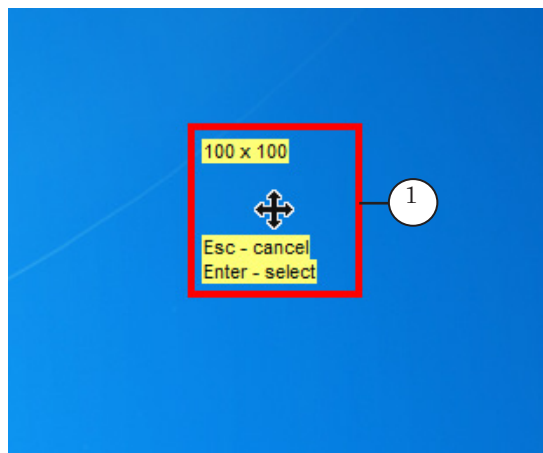
1. Click Select (1).



2. The main program window disappears. Outline of capture area (1) on monitor in arbitrary place appears. Current size of capture area in the left upper corner of specified rectangle is displayed: N x M, where N is a width (in pixels), M is a height (in pixels).

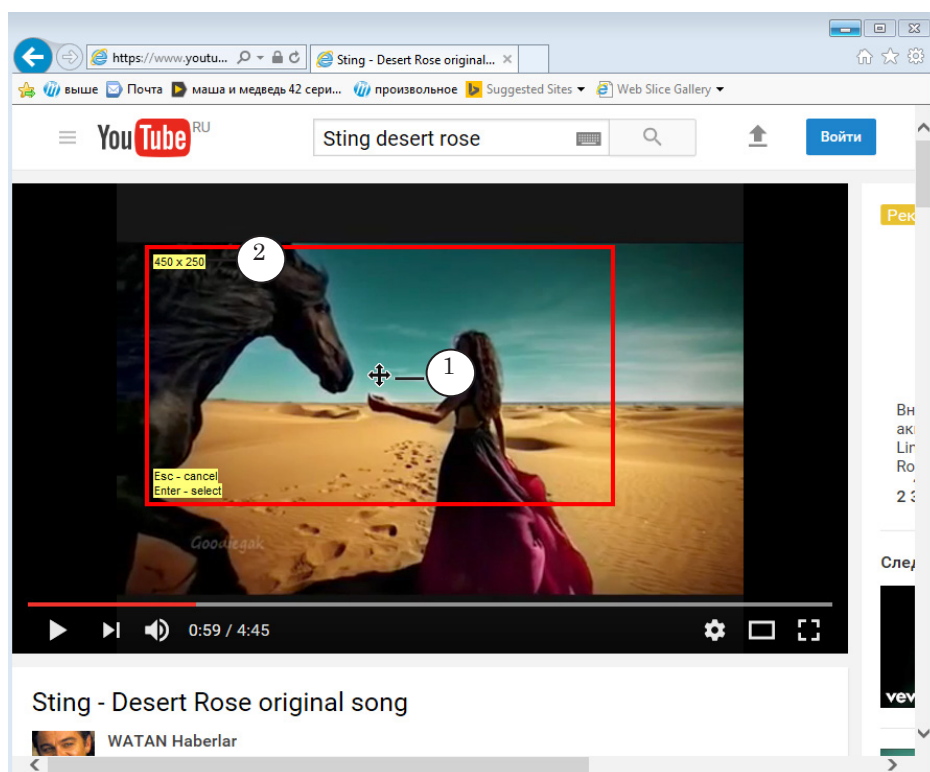
Service information on possible operations in the low right corner is displayed:

- press Esc to cancel selecting capture area and return to the main program window;
- press Enter to confirm current choice of area and return to the main program window.





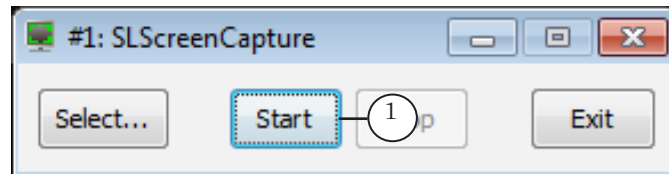
3. Grab by left-clicking and holding mouse button mark in centre of area (1). Drag it to desired place.



4. Click and hold left mouse button over rectangle outline, move border of rectangle to define screen capture area.
5. Double click the (2) field if necessary to specify size of outline with a pixel accuracy. Type desired values and press Enter. Outline applies desired size.
6. Press Enter to finish selection of capture area.



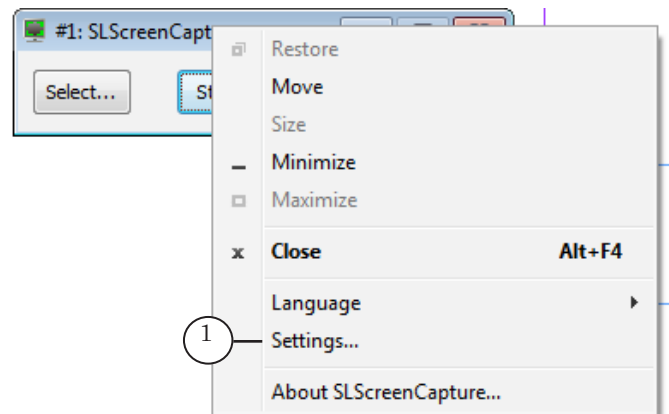
7. The main program window with active Start button (1) appears.



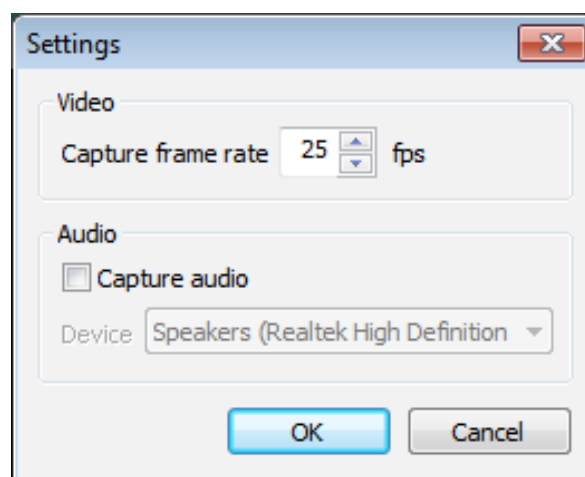
### 3. Settings Window

Capture parameters are configured when data capturing is stopped. To customize data capturing execute the following:

1. Right-click area with title in program window.
2. Select Settings (1).

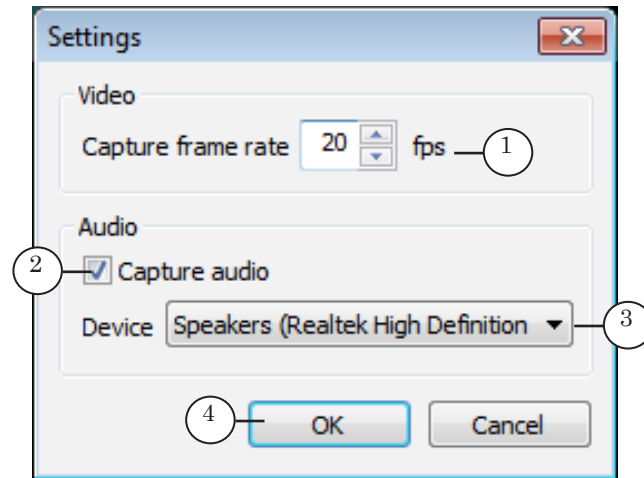


3. The Settings window is opened.





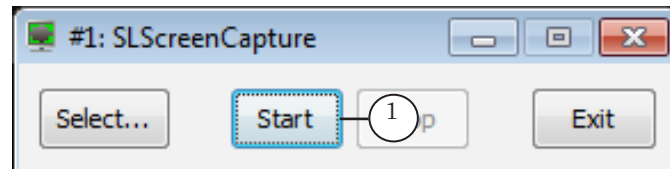
- Specify frame rate at content capturing: from 1 up to 20 frames per a second (1).



- If necessary to capture audio data:
  - Put the (2) mark.
  - Select device (source of sound) in the Device drop-down list (3).
- Click OK (4) to apply settings and close the window.

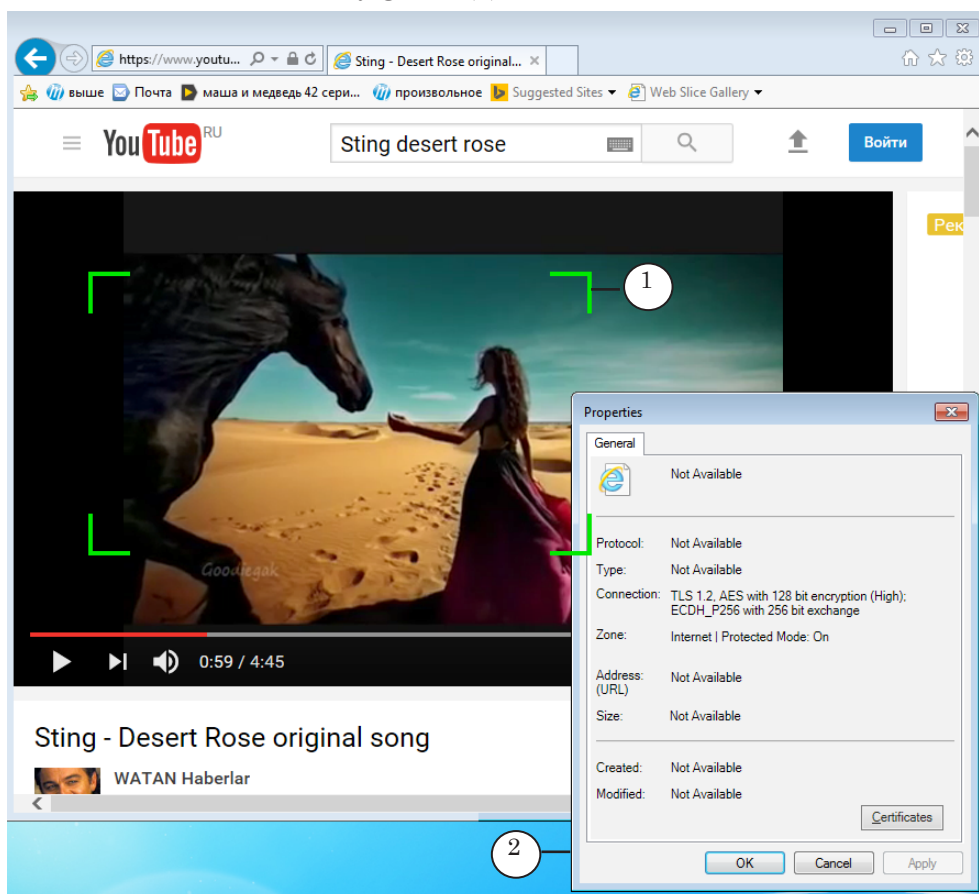
#### 4. Control Over Capture

- Click Start (1) to start data capturing and converting it into titles.

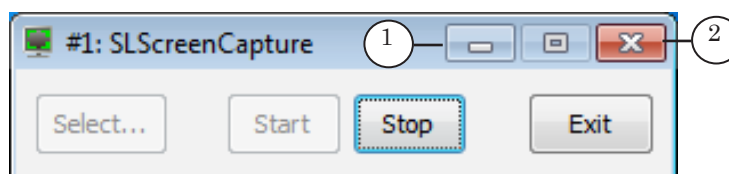




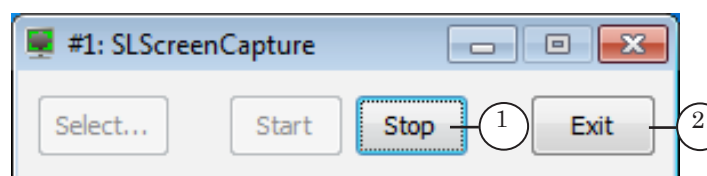
2. When data is captured line borders of captured area are marked by green (1).



3. Be sure that no other windows in specified area are opened (for example, windows of other programs do not cover the image) (2).
4. The Minimize (1) and Close buttons (2) are used to minimize program window into icon on taskbar.



5. Click Stop (1) to stop capturing audio and video data.



6. Click Exit (2) to exit program window. If the button is clicked during data capturing request on finish capturing appears.

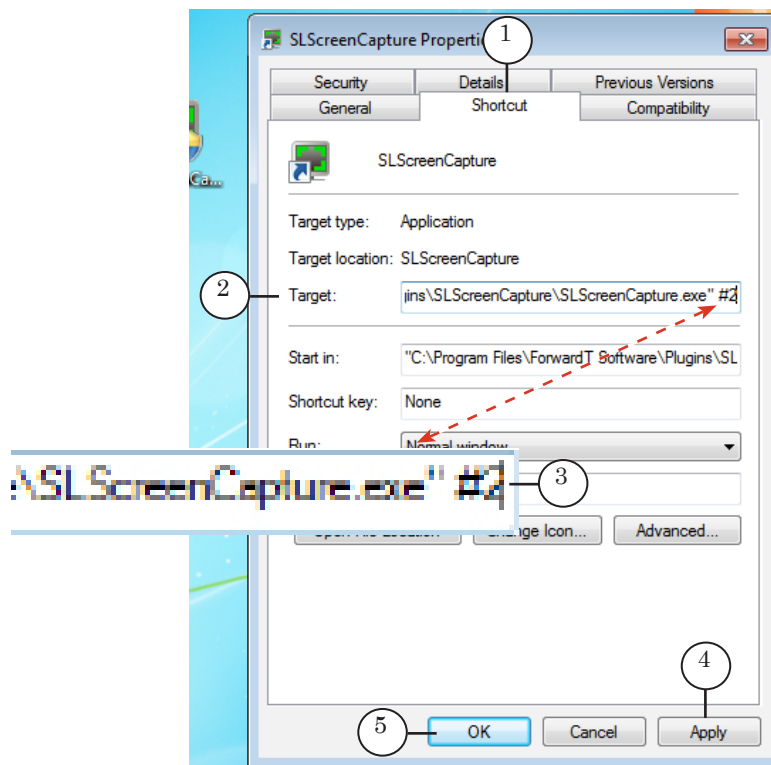


## 5. Several Program Instances

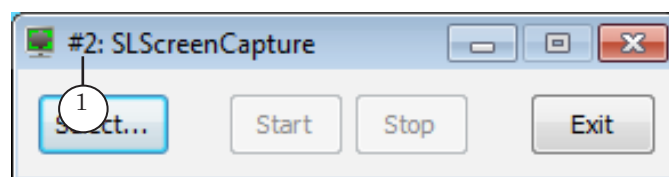
There is a possibility to work with several program instances simultaneously or at different time. It may be needed if necessary to display several screen areas, for example.

Complete the following steps to launch the second program instance:

1. Create another program shortcut for the second SLScreenCapture program instance. Rename it as SLScreenCapture\_2, for example.
2. Right-click program shortcut. Select Properties in context menu. Then pass to the Shortcut tab (1).



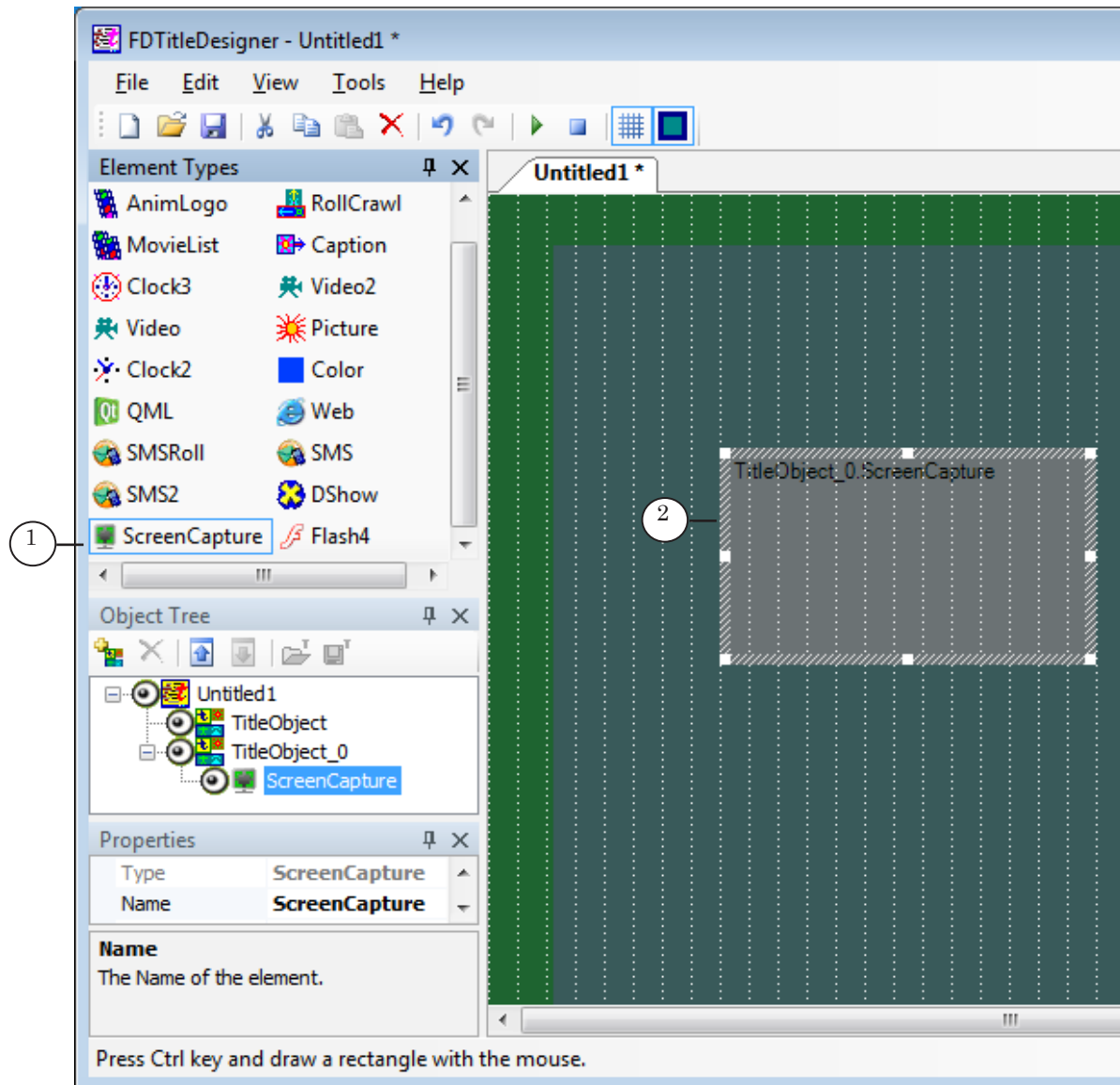
3. Add a space and #N symbols (where N is index of program instance, #2 is in our case (3)) to existing text in the Target field (2).
4. Click Apply (4). Then click OK (5) to close the window.
5. Launch the second program instance (1) by double-clicking created shortcut. Customize it.





## Creation of Title Project

1. Use Start menu to launch the FDTTitle Designer program:  
All Programs > ForwardT Software > Titles > Title Designer or  
program shortcut located on the desktop.
2. Empty title project appears at first program launch  
automatically.
2. Open the Element types pane. Click ScreenCapture (1).

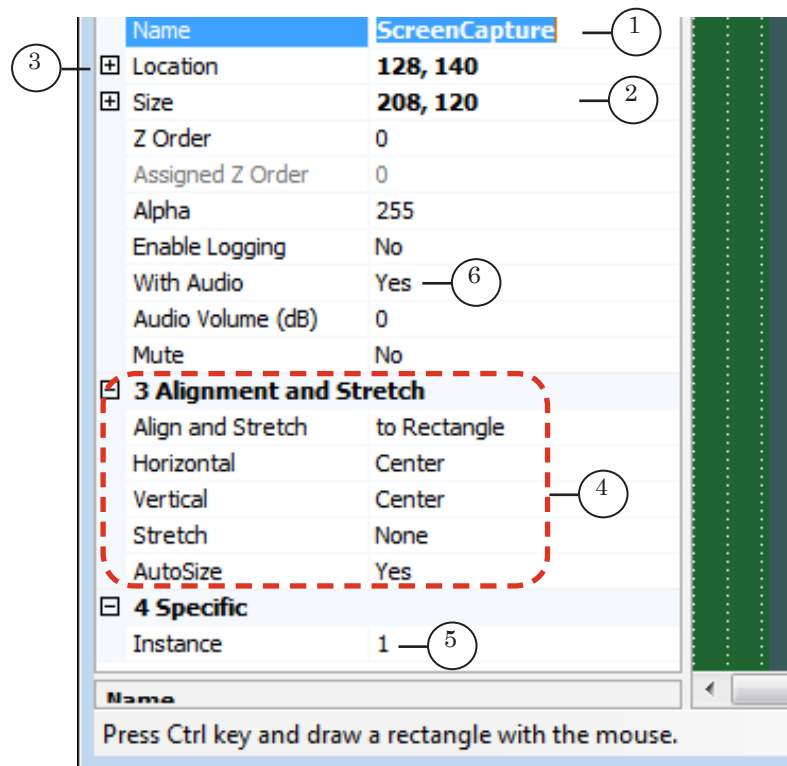


3. Put mouse pointer at work area. Press and hold left mouse  
button and drag the pointer to the right to mark the element  
outline (2).





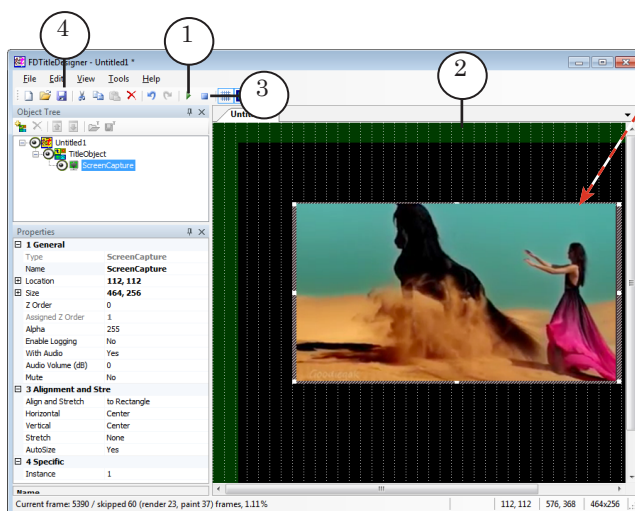
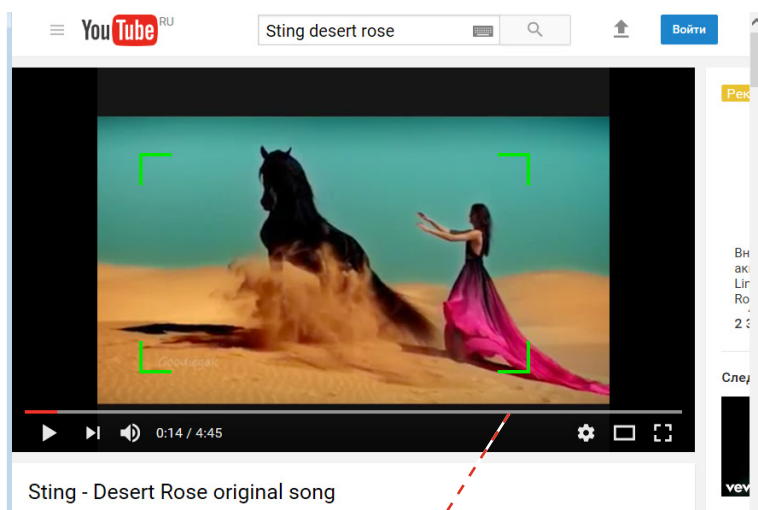
4. Specify name of title element (1). Give elements different names if there are several elements in the project.



5. Select necessary size (2) and location of element (3) (i.e. windows where data from captured areas is displayed) on the screen.
6. Specify way of displaying captured zone in element window in the 3 Alignment and Stretch section (4).
6. Click the Instance line (5) and specify index of SLScreenCapture program instance that is used to capture necessary audio and video data.
7. Select Yes (6) in the With Audio line if necessary to allow displaying data in audio titles captured via specified SLScreenCapture program instance.



8. Be sure that data from specified screen area in title element is displayed. Click Start Preview (1) to check it.



9. If settings are specified correctly then data is captured in the SLScreenCapture program. In this case corresponding image in region is displayed (2).
10. Click Stop Preview (3) to stop content previewing.
11. Add other title elements if necessary.
12. Save title project (4) and close the FDTitle Designer program.

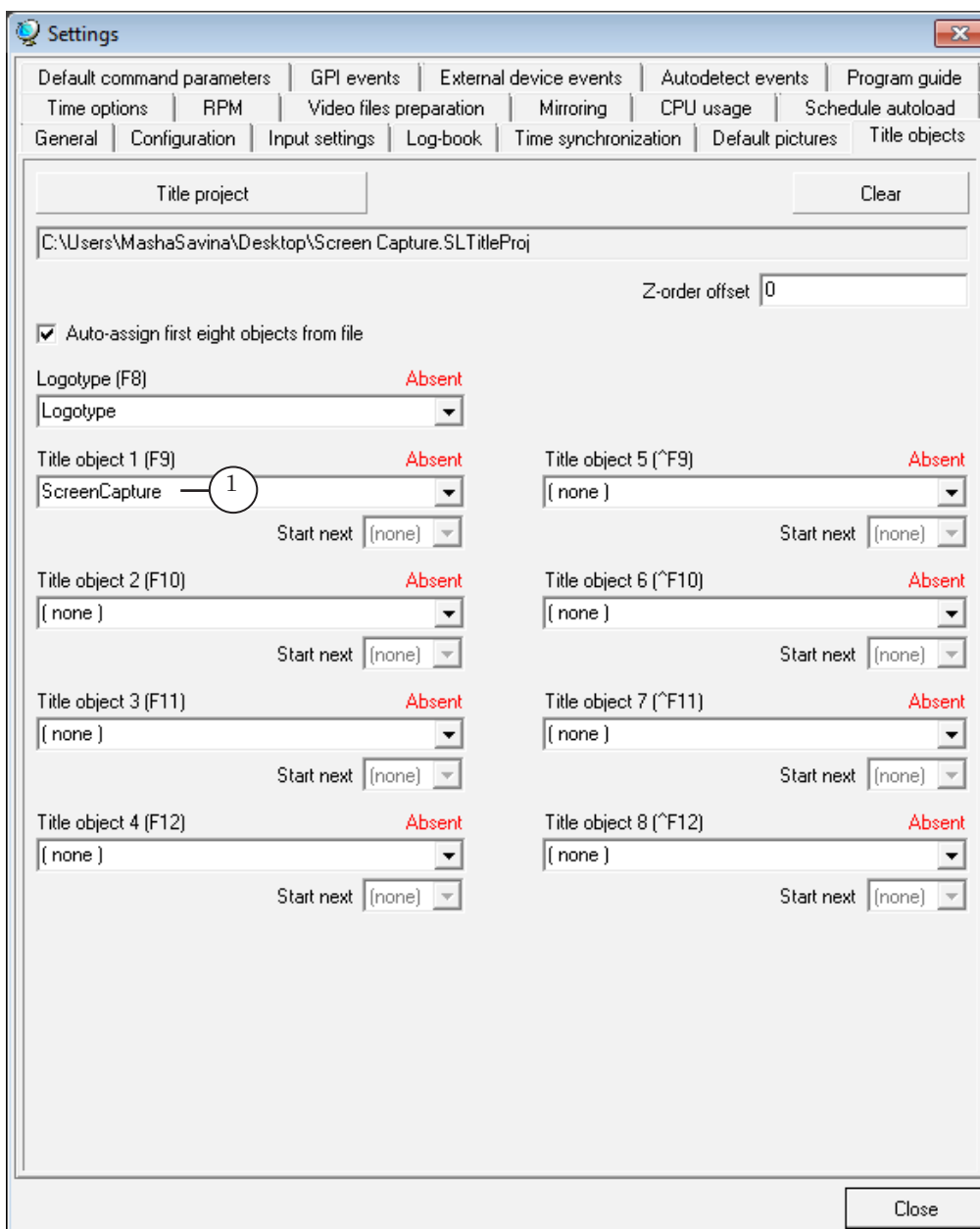
Note: More information on creation and work with title projects see the [«FDTitle Designer. Title Project Editor»](#) guide.



## Work With FDO nAir Program

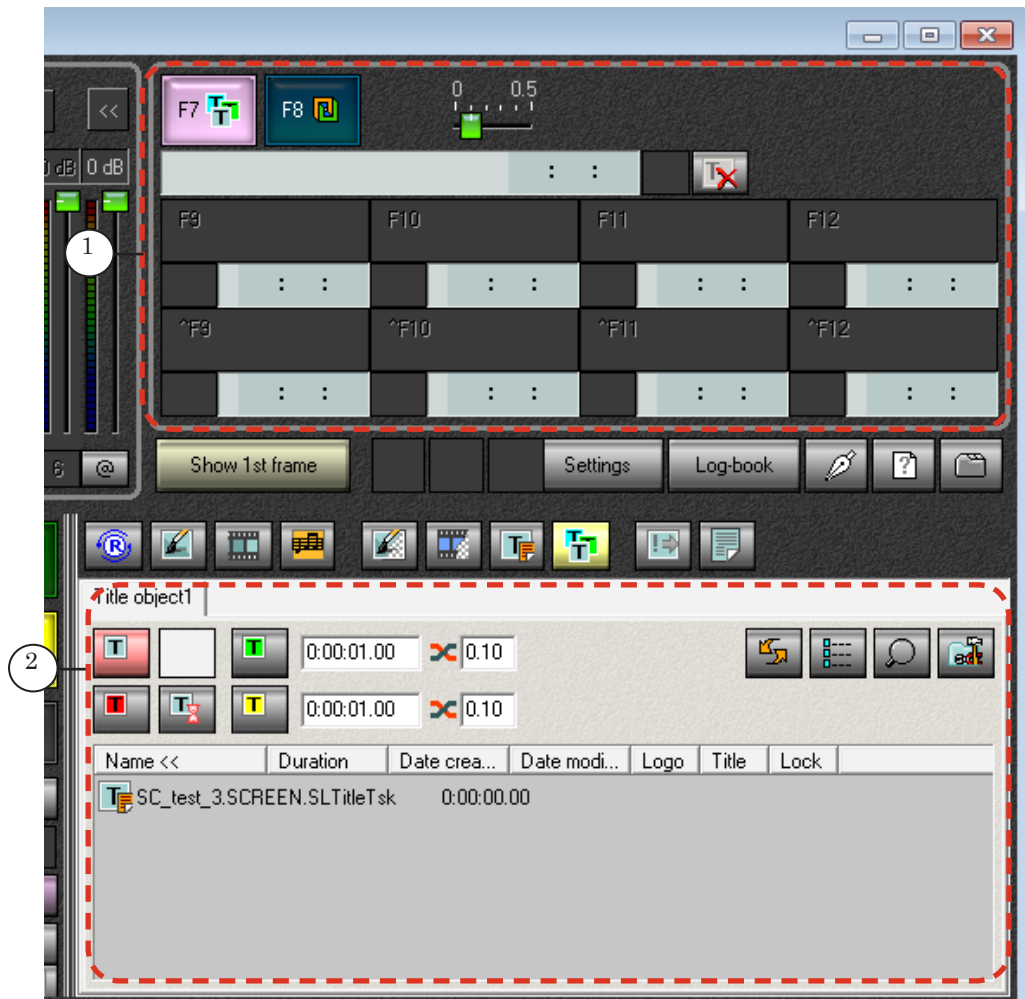
Note: More information on the FDO nAir program see in the [«FDO nAir. Broadcast Automation»](#) user's guide.

1. Launch the FDO nAir program via shortcut on the desktop or Start menu: All Programs > ForwardT Software > OnAir.
2. Browse created title project with ScreenCapture title element (1).





3. You may control titles displaying in 2 ways:
- via buttons of interactive control (1);



- according to schedule via commands of control over title objects automatically:
  - Load object task immediately;
  - Title Object Off;
  - Title object On;
  - Abort object task.

Note: Buttons for adding commands to schedule are located on file pages of control over title objects (2).

For more information on commands of control over titles see the [«FDO nAir. Commands. Broadcast Automation»](#) user's guide.



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## 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](mailto:forward@sl.iae.nsk.su)

[forward@softlab-nsk.com](mailto:forward@softlab-nsk.com)

[forward@softlab.tv](mailto:forward@softlab.tv)

### **Forum**

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

### **Additional Documentation**

1. [FDO nAir. Broadcast Automation. User's Guide.](#)
2. [FDO nAir. Commands List. Broadcast Automation. User's Guide.](#)
3. [FDTile Designer. Ttile Project Editor. User's Guide.](#)
4. [ForwardT. Software Setup. User's Guide.](#)
5. [ForwardTS Product Line. General Information. User's Guide.](#)
6. [Plugins Setup. User's Guide.](#)

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