ScenalyzerLive 4.0

User Manual



User manual for ScenalyzerLive Version 4.0

Legal Notice

Publication date 28.12.2005 17:37 Copyright (C) 2005 Andreas Winter

No part of the manual may be duplicated or reproduced in any way without the express permission of Andreas Winter. *ScenalyzerLive* users may print and save the user manual for personal use only.

Scenalyzer is a registered trademark of Andreas Winter Scenalyzer.com Ungargasse 71 A-1030 Wien Austria

info@scenalyzer.com

Other trademarks referred to in this document are the sole property of their respective owners.

Although great care has been taken to try to ensure the accuracy of the information in this manual, the author assumes no responsibility for errors and/or technical changes.

Table of contents

Legal Notice	2
Table of contents	3
Terms in this Manual	4
Introduction	5
A practical example	6
System requirements	13
Download and installation	14
Buying ScenalyzerLive	15
Ouick guide	16
ScenalyzerLive Main Window	17
A short test to get started	20
Real-time video transfer from camera to hard disk with or without scene detection	
(without tape index creation)	20
Creating a tape index	21
Batch capturing – loading a tape index and selecting scenes for batch capturing	22
Importing a ScLive 2.x tape index	23
Importing a batch list as text file	23
Exporting clips	
Tape errors and dropped frames.	24
File list in the main window.	
Tape index lists	27
Clip lists	27
Toolbar in list views	28
Clip selection	28
Selecting the entire clip	28
Selecting portions of a clip.	. 28
Selecting portions of a enprime	28
Selecting a row of contiguous clips	29
Selecting clips that belong together	29
Selecting all clins	29
Moving the start or end of a clip selection	29
Simple editing	29
Snlitting clins	29
Ioining clips	29
Deleting clips	30
Displaying clips from other directories in the file list	30
Removing clips from the file list	30
Renaming clips	30
Commenting clips	30
Working with the film strin view	30
Adapting the clip view	
List view ontions	52
Column headers	52
Clin attributes	 22
Scene detection methods	
Timer controlled capture	
miler controlleu capture	

Still picture export	36
Creating animated movies in ScLive – stop-motion recording	37
Live camera capture	38
Time lapse shots	38
Searching the tape end:	39
Hard disk speed test	39
Working with Menu Trees	40
Changing the tape index directory	41
Automatic changes	41
FAQ: Frequently asked questions	42
Program options overview	43

Terms in this Manual

Capturing refers to the process of transferring video from a camera or a VCR to an avi file on a hard drive.

Batch capturing refers to the process of transferring video automatically from selected tape positions to an avi file on a hard drive.

ScLive not only works with scenes on tape (tape index scenes) but also with scenes that were already transferred to a hard disk (avi files). The term **clip** is used to refer to tape index scenes and avi files in the context of properties and functions.

Key refers to keys on the keyboard, **button** refers to buttons in on-screen dialog boxes.

Introduction

Thank you for your interest in ScenalyzerLive!

Modern video editing programs generally offer excellent functions for video postproduction. However, the selection and transfer of video from tape to hard drive, the first and most important steps in digital video editing, unfortunately are often time-consuming and inefficient processes in modern video editing programs.

For these tasks ScenalyzerLive (ScLive) offers:

- **Capturing with real-time scene detection:** the video is quickly and automatically prepared in handy chunks, ready to be used in your editing program (page 2)
- **Tape index creation:** a complete and concise directory of your videotapes with video and audio of all scenes is created directly on your hard drive (page 21).
- **Tape index sheet printing**: you get meaningful and clearly laid out printouts showing all scenes of each tape.
- **Quick tape indexing**: you can completely index a 60-minutes tape in fast-forward mode in just 5 minutes
- Enhanced browsing capability: compose your film by browsing through all scenes of all your tapes directly on your hard disk, with video and audio.
- ScLive offers **intelligent batch capturing** (page 22): it finds the correct locations even if a tape has interrupted time codes. Also your **camera is treated carefully** because excessive winding is prevented.
- In analog video, ScLive **recognizes scenes by their picture content** and can segment them in real-time into individual files. To use the batch capture function with older Hi8 or VHS videos, we recommend transferring analog videotapes to DV tapes first.
- **Simple-editing functions** (page 29): let you cut, trim, join and split video files on the hard disk quickly, frame-exact and without quality loss.
- ScLive offers additional valuable professional features:
 - ✓ **Time lapse capturing** from tape or from a camera (page 38)
 - ✓ Capturing from a live camera (page 38)
 - ✓ **Timer controlled capturing** (page 35)
 - ✓ **Stop motion capturing** for creating animations (page 37)
 - ✓ Support for 4-channel audio
 - ✓ A comfortable still-frame-export (page 36)

A practical example

This manual is chock full of facts So, to help you get started, I'll show you how to use the program by way of an example.

For starters, I drove my car around my hometown, Vienna, filming away, choosing various settings. For this example, I'll select some interesting scenes from that tape and make a short film: *Viennese Impressions*.

You'll see that ScenalyzerLive lets me select the scenes and then does the capturing automatically. ScLive prepares the selected scenes for editing on hard disk in avi format. The final editing of the video (adding cross-fades, video effects, and background music) is then done with a video editing application.

Getting back to the example and back at my computer, I have to make a decision: Do I create a tape index or just capture the whole tape? I decide to create a tape index so I can have an overview of my tapes handy on my hard drive. A tape index with video and sound in preview quality using 1x speed uses only 500 MB space for a 60 minutes tape. In addition, I can view the tapes video at any time directly on the computer in preview quality with picture and sound without having first to look for the tape, put it in the VCR, and find the clips.

If you have already tried a batch capture function with other programs, you may be skeptical of using another one since they hardly ever work. Well just keep on reading for a pleasant surprise!

To create the index, I start ScLive, insert the tape into the camera, and select **Tape** > **create Index**.



The index creation window opens up:

📴 create a tape index	×
name	value
Tape Index Settings	
-tape name	Vienna
• scene detection mode	Datestamp
min.time between 2 scenes	Oh 00m 01s
start a new file if audio parameters or 16:9 flag changes	YES
tape-speed	▼1x (normal playback)
rewind tape before indexing	VES .
rewind tape after indexing	VES VES
capture low-res video file	VES
capture and index at the same time	NO -
	⊥
Ok	Cancel

I enter the name of the tape: Vienna.

I accept the default for all other options. Here's a brief explanation of what these options do and why I'm choosing them.

For **scene detection mode**, I accept **date stamp**, because the tape was recorded by a DV camera; therefore, each frame contains a date stamp. Tapes created from an analog source would require **optical scene detection** (for information on scene detection, see page 35).

I accept 1x for **tape speed**. The index creation will then take as long as the video on the tape does, but the end product is a tape index with perfect preview frames. Higher speeds such as 2x and 12x are handy if I need to quickly find a specific scene on a not-yet-indexed tape.

I use the **capture low-res video file** option to get a tape index that contains scene information including 5 preview frames as well as the whole video in reduced quality. Later I can review the video from the hard drive with the pictures and sound. At that time, I can also select frame-exact capture positions for batch capturing.

Next I click **Ok** to start the index creation. ScLive rewinds the tape and starts to play it. The index window opens and is populated with the detected scenes.



The index window: Each row contains a detected scene with 5 thumbnails of preview frames.

After the index is completed, I use the scroll bar on the right-hand side, or the mouse scroll-wheel, to review a complete list of tape scenes. If I want to view the video on a certain position, I use the left mouse button to click into the corresponding thumbnail. If I want to play a scene, I click that scene and press the spacebar. I can also play the video from a particular position by clicking the respective position with the middle mouse button (or the mouse wheel).

By the way, this tape was recorded at 4 different locations: a scene in a garden, later some scenes at Schönbrunn castle in Vienna, after that some scenes in the Viennese Prater, and last of all, some scenes on the Danube Island ("Donauinsel"). You are not required to rename scenes, but to get a better overview, I decide to name the scene in the garden **garden**, the scenes at Schönbrunn, **schönbrunn**, and so on.

To change the name, I click the name field for the garden scene, type **garden** and press **ENTER**. When this scene is later captured via batch-capturing, the video is saved in a file named **garden.avi**.



This tape contains 36 scenes recorded at Schönbrunn, and I would like to name all of them **schönbrunn**. To enter the new name only once, I use the group-selection function to select all the associated scenes. I double-click one of the Schönbrunn scenes, and ScLive automatically marks all 36 scenes.



By the way, ScLive detects all associated scenes by checking their recording date. The rule for that is simple but effective: All scenes with less than 30 minutes between timestamps are treated as a group – surprisingly, the results match realistic conditions very closely.

I have now selected all Schönbrunn scenes using the group-selection function. I click the name of one of the selected scenes again and enter **Schoenbrunn** and press **ENTER**. That renames all selected scenes **Schoenbrunn**.

All clip functions in ScLive are always related to all selected clips. Therefore, you can rename, delete, mark for batch capturing, or join-together all selected clips at once.

Next I rename the scenes that were recorded at the other locations in the same way.

Now we have a tape index that provides a good overview of all scenes on the *Vienna* tape, and we have given useful names to the scenes. Next, I'll save the index to hard disk.

I select **File > Save** in the **tape index** window:



The whole idea behind a tape index file is to have an exact replica of the video tape archived on hard disk. So, it is not a good idea to delete scenes from a tape index. In this example, I renamed scenes, but I did not delete or trim scenes. If an archived tape index is about to be overwritten, ScLive displays a warning:

sclive	×
⚠	Do you really want to overwrite the tape-index with the changes you just made? If you added or deleted scenes from this indexfile, it is better to use "save-as" and save it as a new cliplist.
	<u>Yes</u> <u>N</u> o

I click **Yes** so that the tape index and the changes are saved.

Next, I want to select some interesting scenes and have them batch captured to the hard drive.

First, I click a scene to select it (yellow highlighting appears). Then I press the **Ins** key to mark the selected scene for batch capturing. Marked batch capture scenes are shown with a checkmark displayed on the right-hand side of the thumbnail row:



After I have marked all desired scenes for batch capturing, I need to choose a location to write the avi files to. To do that, I go to ScLives main window (!) and select **Capture > Change Capture Folder**.



The following dialog appears:

Select folder	for .avi file:	s or enter	the nam	eofan	iew I	folde	r		? ×
Look in: 🔂	videos			•	¢	£	d i.		
create folder:	Vienna					_		OK	
	,							Canc	el I
							_		

In the dialog, I browse to the folder **c:\videos**. I want to capture the files in a new subdirectory (**c:\videos\Vienna**), so I type the name of the subdirectory (**Vienna**) into the **create folder** field and click **OK**.

ScLive asks if the subdirectory Vienna should be created:



I click **Yes** and the subdirectory is created. This subdirectory is now used as the current capture folder.

Back in the tape index window, I start the batch capture of the marked scenes via the menu item **Start Batch**:

ive St	cenal	yzerLi	ve - ta	peindex [C:	\tape-indic
Eile	Edit	Cļips	⊻iew	Start Batch	
thu	Imbna	ils			
nai	me			ti	mecode-in

ScLive opens the Batch Capture window, and from here on, everything is done automatically. ScLive checks whether the correct tape is inserted, plays back to the beginning of the first scene, and transfers all selected scenes to disk.

ScenalyzerLiv	ve - Smart Batcl	hcapturing							×
frames left to	capture:0:00:27:14	of 0:00:29:1	3, jobs left:7 of 7						
capturing									
Jobs:									
beg.tc	todo	tape	file	p	beg.date	end.tc	dur.cap	dur.est	
0:00:10:0)9 capturing	Vienna	.\garden.avi		2005-06-01 15:30:34	0:00:15:19	0:00:01:24	0:00:05:11	
0:00:54:0)1 capture	Vienna	.\Schoenbrunn.avi		2005-06-01 17:56:58	0:00:59:14	0:00:00:00	0:00:05:14	
0:01:37:1	1 capture	Vienna	.\Schoenbrunn.avi		2005-06-01 17:59:36	0:01:41:05	0:00:00:00	0:00:03:20	
0:02:51:0)2 capture	Vienna	.\Schoenbrunn.avi		2005-06-01 18:19:17	0:02:53:22	0:00:00:00	0:00:02:21	
filename and	path for these batc	hjobs:							
Folder:	[sclive will use	e the capture	folder + the relative path of ea	ch clip]					
🔲 filename:	[sclive will use	e the filename	s specified in each clip]						_
using index "	/ienna'', interrupte	d timecodes:1	, length of index:0:08:52:03						
Stop!	Hic	le)							

Note: The "Vienna" tape has a time code interruption (see info on the bottom of the batch capture window). That means, there is a short, empty space between two scenes on the tape. The subsequent scenes were again provided by the camera with a time code starting at zero. But this is no problem for ScLive. ScLive still winds to the correct positions when batch capturing.

In order to go easy on the camera, ScLive rewinds the tape only once if possible. ScLive goes to the beginning of the first selected scene, captures it, and then fastforwards to any additional selected scenes. Consecutive scenes are captured end-toend without further positioning or breaks and are still distributed to the desired files.

The marked scenes are transferred from the camera into individual avi files on the hard drive via batch capturing. That means, for each earmarked scene in the tape index a full- quality avi file is created on the hard drive. These files are stored in the capture folder defined earlier (c:\videos\Vienna):

Address 🗀 C:\videos\Vienna	
Name 🔺	Size
Donauinsel'20050602 17.52.41.avi	17.656 KB
🔺 garden'20050601 15.30.34.avi	19.992 KB
A Prater'20050602 15.59.35.avi	12.754 KB
Prater'20050602 16.22.51.avi	14.091 KB
🖞 Schoenbrunn'20050601 17.56.58.avi	20.431 KB
🖞 Schoenbrunn'20050601 17.59.36.avi	14.004 KB
🔺 Schoenbrunn'20050601 18.19.17.avi	10.498 KB

This completes the example. Now I can import the folder into the editing software and compose a film from the avi files.

System requirements

Please note: Depending on the hardware and drivers you use, your Windows system or a listed video-editing card might NOT work with ScLive. This is why we advise:

<u>Please test the trial version of ScenalyzerLive to make sure it works well on your</u> system before you purchase the software!

Computer:

Intel or AMD processor with 800 MHz or higher (1.5 GHz or higher recommended) Microsoft Windows 98 SE, ME; Windows 2000 or XP recommended

Please use Windows-Update/Microsoft Update to keep your Windows system up to date.

Supported video capture cards:

- Standard 1394/Firewire interface (e.g., Pyro, Exsys, No-name cards, Firewire interfaces on the motherboard etc.)
- Canopus DV-Storm series (including analog inputs)
- Canopus EZ-DV or Raptor RT
- Pinnacle DV500, Pro-One, AV/DV or Studio DV Deluxe PCI cards (including analog inputs)
- Analog DV converter at the Firewire interface, e.g., Canopus ADVC series
- Matrox RT/RTX cards (1394/Firewire inputs only)

Not supported: TV tuner cards, USB boxes or MJPG/MPEG cards.

ScLive works only with DV compressed video – that is, video recorded by a DV or Digital8 video camera or analog video which is captured via one of the supported DVcapture cards. Analog video can also be captured with an analog-DV converter like the Canopus ADVC-series or others.

If your DV/D8 camera has analog inputs and is connected to the PC via Firewire, it can be used with ScLive as an Analog-to-DV converter for capturing analog video. To do this, it may be necessary to activate the **A/V->DV Out** option in the camera menu.

If you use an Analog-to-DV converter or if a connected camera is used as an Analog-to-DV converter, please deactivate device control in ScLive by setting the option **Misc. Options > Use device control** to **No**.

Download and installation

You will find the most current version of ScenalyzerLive on the Scenalyzer website: www.scenalyzer.com

Open the website and click on the **Download** link.

You will receive ScenalyzerLive in a compressed file named "ScLive.zip". Simply click on the download link to download the zip-file. When the content of the file is displayed you can double-click the ScLive.exe-file in the zip-archive to install or try out the program.

You will be asked whether you want to install ScenalyzerLive or whether the program should be started immediately without installation.

If you already have an older version of ScLive installed on your system that you want to keep, and additionally install the new version, enter a new installation path when prompted during the installation.

If a registered version of ScenalyzerLive is already installed on your system, you do not need to enter the registration key again after updating to a newer version.

Buying ScenalyzerLive

We would like to thank your for your interest in ScenalyzerLive and your decision to purchase the application.

ScenalyzerLive is distributed as Shareware over the Internet. This means, you can first try out the application on your own PC and should you decide it is useful, you can purchase (register) the application for a registration fee. For details please see our website

www.scenalyzer.com

Open the website and click the link **Buy Online**.

Payment options include secure online ordering with credit card and bank transfer.

This software is not distributed by mail. Immediately upon payment you will receive your personal registration key by e-mail. After you unlock the trial version it runs as a full version.

As a registered user you can later download the most current trial versions from the website and use them as full versions – this way you will always receive free updates.

Restrictions of the unregistered trial version:

Video material, which is captured with the trial version, contains logos and must be captured again with the registered version in order to make the logos disappear. Also, the number of printed or exported scenes is limited.

One ScenalyzerLive license is valid for:

- One person on more than one PC
- or
- Several persons on one PC.

Please be fair and do not share your ScenalyzerLive registration key – please recommend ScenalyzerLive to your friends and other interested people who might want to test and purchase this program! We thank you in advance for your recommendations!

Quick guide

- To capture video click the **Capture** button in the ScLive main window or select **Capture > Start capturing** in the menu bar.
- To index a tape select **Tape > Create index** in the menu bar.
- To open a tape index select **File > Open tape-index** in the menu bar.
- Batch capture: Open a tape index. Click on a desired scene and press the INS key on the keyboard to mark the scene for batch capturing. Repeat this step for all desired scenes. When you are done, select Start batch capturing in the menu bar of the tape index window to begin the batch capturing of all marked scenes.
- Scene detection in existing files: To display the file to be split in the file list of the main window select Clips > Add avi-file to list. Then, click on the file and select Clips > Detect scenes in selected clips. Finally, click OK > Commit changes on the toolbar.
- To play back files to tape: Select the desired clips in the main window and select **Playback > Play selected clips to camera>VCR**.
- To change the order of the clips: There are triangular drag zones on the left and right bottom of the thumbnails of each clip. Click the drag-zone to move the clip to the desired position in the list. Clips can also be sorted using the column headers.
- Simple-editing: Modify the clips in the file list of the main window with toolbar commands, e.g. Split at cursor, Join selected scenes, Delete selection and others. Then, click OK > Commit changes in the toolbar and ScLive will modify the files on the hard disk according to the modifications made to the clips.

Note: A detailed practical example can be found on page 6 of this manual

ScenalyzerLive Main Window



- A: The *monitor window* shows the *current video picture*.
- **B**: The *audio peak meter* shows the current audio level within a range of -30 to 0 db. Click on the audio peak meter to toggle it on or off.
- **C:** Use the *source selection buttons* to select whether the monitor window shows a video from the camera (*Input*), or from the hard disk (*Disk* and *Output*). If the source selection button displays *Output*, the monitor window shows video from the hard disk and sends it to the camera at the same time.
- **D:** The **Mute** checkbox turns off the sound. However, this option only mutes the preview sound, the files are always saved with sound. If you right-click the **Mute** checkbox ScLive opens the Windows volume controls.
- **E:** Click this button to open the monitor window in an undocked, freely moveable window. The size of this monitor window is user definable.
- **F:** The first box shows information about the current video standard and audio parameters, the second box displays *time code*, *recording date* and *recording time* of the current video image.
- **G:** The **driver selection** combo box displays a list of all cameras and video inputs available on this PC. Select the device ScLive should use for capturing. The list might also contain inputs or capture cards, which do not support the DV standard and cannot be used with ScLive.
- **H:** This information box displays the current tape position and the current playback mode of the camera (e.g., *PLAY* or *REW*).
- I: The functions of the **device control buttons** correspond to the common playback buttons of cameras and VCRs. Device control buttons with blue symbols are used

for tape transport and playback with picture; buttons with black symbols are used for tape transport without picture. If the **Enable recording** checkbox is checked, the tape control buttons for recording and record-pause become available.

- J: The Info box displays information about the current program status. The user will receive messages about possible functions or problems, e.g., "Error: no video driver" or "What can you do Capture video". Text in this list can be double-clicked in order to execute the respective functions.
- K: This button displays the current capture folder. ScLive captures all avi files into the current capture folder. To change the current capture folder, click this button.
- L: The Explorer button opens the Windows Explorer in the current capture folder.
- M: This area shows the file list in the main window. Each avi file in the current capture folder is shown as a clip (N).
- **N:** Each **clip** represents a file or a scene. It consists of 5 thumbnails (the first picture of the clip, 3 pictures from the middle of the clip and the last picture of the clip) and text fields displaying clip attributes like the name, time code and the recording date.
- **O:** The **multi-line column headers** can be used to sort clips and to show or hide clip attributes. Right-click the desired location in the column header to modify the attributes displayed for each clip.
- **P:** This info box displays the number and the length of all clips, the selected clips and the number of clips with errors or missing frames (see also "Tape errors and dropped frames" on page 24
- **Q:** The **Toolbar** offers functionalities for simple-editing. Hold the mouse-cursor over one of the icons and a small tool tip window will explain the icon function. (see page 27)
- **R:** The **Playback controls** (buttons and sliding regulator) are used for playing back video from the hard disk.
- **S:** The **file-name** and **tape-name** fields specify the filename and the tape-name to be used when capturing. The tape name is stored as an attribute in the avi-file and can be used by editing software like Premiere and Vegas to assign the file to a certain tape. The tape-name entry field, however, is not used when ScLive is batch capturing it then automatically writes the tape name of the tape index file into the recorded avi file.
- **T:** The **Capture** button puts the camera into playback mode and starts the video capture. During the capturing three buttons appear: the **Stop** button for ending and the **Pause** button for interrupting the process, and the **Split** button for starting a new scene.
- **U:** This **Status** box shows the currently ongoing process ("capturing"), the total number of dropped frames during capturing, the current capture- or playback file and its length/position, the free space on the hard disk and the buffer utilization status.
- V: Press the Index search button to find the tape index for the current monitor picture and open it or copy the tape name from the tape index into the tape name field S. For example, put a tape into the camera, play it for a few seconds, and press the index search button. ScLive will suggest opening the associated tape index.
- *Info:* If the camera or the capture card play the sound simultaneously with ScLive during capture or playback, you will hear an echo because the sound is played

twice with a small delay. In this case simply turn off the preview-sound in ScLive by clicking the **Mute** box **D**.

- *Info:* If your camera uses the *Microsoft DV-Camera and VCR* driver, you can assign a meaningful name to each camera by pushing the **Settings** button **G**. The name will then be displayed in the dropdown list, e.g., "Sony PC 120". This is especially useful if more than one camera is connected to the PC.
- *Info:* If you use an analog capture card supported by ScLive please set the correct parameters for this card by using the Settings button **G**, e.g., the video input you use (S-Video or Composite) and the video standard (PAL, NTSC or SECAM). If you changed the video-standard please restart ScLive afterwards. The video standard settings only affect the video card driver, ScLive itself does not need video standard settings because it automatically switches to the video standard that is currently used.

A short test to get started

Start ScLive, connect your camera/VCR to the PC and select the capture-device in the driver selection combobox. Insert a tape and start the playback. If everything is set up correctly, you should now see a video picture in ScLive monitor window.

Real-time video transfer from camera to hard disk with or without scene detection (without tape index creation)

A tape index has several advantages. It offers a space saving overview with video and audio and provides simple access to all scenes on the tape. But if you just want to capture video from a tape and do not need a tape overview later, you can capture directly without creating a tape index first.

ScLive can transfer a video tape (or parts of it) to the hard disk with automatic scene detection. ScLive detects the scenes in real-time during capturing and writes individual avi files for each scene into the current capture folder on the hard disk.

Scene detection can also be turned off with the option **File > Options > Capture > Scene detection**. Without scene-detection, ScLive captures the whole tape in one or more large files.

You can also define a file size limit with the option **File > Options > Capture > max. file size**. ScLive splits the captured video into multiple files of the specified size. This is especially useful if the maximum file size is limited by the file system, e.g. FAT and FAT32 allows only files up to 4 GB while NTFS is unlimited.

The file list in the main window shows the list of already captured scenes (avi files). You can view, delete, rename, split and trim individual scenes or move them to other folders in this list. You can do all this while ScLive is capturing video, too.

Rewind the tape to the start. Click **CAPTURE** in the ScLive main window or select **Capture > Start capturing**. ScLive puts the camera into play mode and starts to capture the video to the hard disk.

The resulting files are individual avi files that can be easily imported by your editing software.

For capturing, ScLive uses the options set via *File > Options > Capture*, including scene detection mode (page 35) or time-lapse (page 43).

ScLive can also automatically start or end the capturing at a preset time (page35).

For an optimal overview, it is recommended to capture the avi files of each project in a separate folder, for example, "c:\Video\holiday2005". To set the capture folders in ScLive select **Capture > Change capture folder** or click the button above the scene list that displays the current capture folder.

You can also enter the name of a new, not yet existing folder in the folder dialog and ScLive will create the folder.

To assign a file name (e.g. "Departure") before capturing, enter the name in the field **Name** at the bottom of the main window. ScLive adds the recording date to name the capture files accordingly, for example "Departure'20040907 17.38.28.avi". ScLive use the date-format YYYYMMDD HH.MM.SS because this date-format is sortable.

Creating a tape index

A tape index is an index of your DV tape, similar to a photo index in film processing. The tape index stores an overview of all scenes on tape. Later you can simply compile indexed scenes for an editing project and transfer the scenes automatically to the PC. You can also use a tape index to select significant scenes on the tape and print index pictures.

To create a tape index, select **Tape > Create a tape index**. A dialog opens. Enter a name for the tape in the **tape name** field.

tive create a tape index	×
name	value
-Tape Index Settings	
— tape name	Summer 2005
 scene detection mode min.time between 2 scenes start a new file if audio parameters or 16:9 flag changes 	■ Datestamp Oh 00m 01s YES
-itape-speed	▼1× (normal playback)
rewind tape before indexing rewind tape after indexing	I♥ YES I♥ YES
— capture low-res video file	YES
Capture and index at the same time	
Ok Car	ncel

If the **capture low-res video file** checkbox is checked, you can play back the tape index video directly on the PC with video and audio.

Each tape index is stored under the tape name in the folder c:\tape-indices. The tape index directory can be changed (see "

Changing the tape index directory" on page 41). It is recommended to save all tape indices in the same directory because ScLive will search for them in this directory.

Tape index files with low resolution video are stored as special avi files with embedded scene and clip information. These tape index .avi files can also be opened and viewed as regular video files by other applications than ScLive. Tape index files without embedded video are stored as .scl files in the c:\tape-indices directory.

Click **Ok** in the **Create tape index** dialog and ScLive starts to create the index. A new window opens and shows the tape index list that is being created. The list can be edited during and after the creation of the tape index. Individual scenes can be joined, split, renamed or commented (see page 25). This is useful if the optical detection of ScLive did not detect scenes correctly. Because the index should provide a true representation of the tape, scenes in the tape index should not be deleted. For archiving the tape index can also be printed or exported like other ScLive clip lists (via the index window menu items **File > Print** or **Clips > Export list**).

Batch capturing – loading a tape index and selecting scenes for batch capturing

If you already created a tape index, open the index by selecting **File > Open tape index** in the main window menu.

Then you need to select scenes (or parts of scenes) to transfer them automatically by "batch capturing" from the tape to the PC. There are two ways to select scenes for batchcapturing:

- Like in ScLive 2.x you can select an entire scene in ScLive 4.0 by clicking on it and pressing the **Insert** key on the keyboard. This marks the scenes for batch capturing. After you have marked all desired scenes of a tape you start the batch capturing by selecting **Start Batch** in the **tape index** window.
- If you want to select *scenes from more than one tape* for your current video project or want to *batch capture parts of scenes* use the compilation method:

In the **tape index** window click on the scene you want to use, or select only a part of a scene and press the **D** key.

ScLive opens a new clip list (the compilation clip list) and copies the selected scene or partial scene to this new clip list.

Repeat this process for all desired scenes. The compilation clip list will expand each time a clip is added by pressing the D-key until all scenes of interest for your current project are listed.

Finally you start batch capturing, and ScLive processes all scenes in the compilation clip list. If the scenes are from different tapes, ScLive will ask you to insert the tapes as needed.

The compilation clip list can also be saved or printed so you can easily repeat the batch capture later or get a hard copy overview.

Tip: You are looking for a certain tape position, and just want to playback/view this position? Open the tape index, click on the desired scene and select **File > Play from Tape**. ScLive winds the tape in the camera to the position and starts the playback.

Tip: You are viewing video on tape or a ScLive file and want to open the tape index of the original recording tape? Click the **Tape:** button in bottom right corner of the main window and select **Open index**.

Importing a ScLive 2.x tape index

To work with a tape index that was created with an older 2.x version of ScLive, the old index must be imported. Select **Tape > Import an old index**. Enter the filename of the old avi index file in the displayed menu tree.

📴 import an old tape index		×
name	value	
Convert Index Settings		
old-index-file to import	! ? c:\index\oldindex.avi	
tape name	[same as index-file-name]	
create low-res video file	VES VES	•
	Ok Cancel	

Tip: If you click the row **old index file to import** in the menu tree a small **?** appears in the same row. Click the **?** to search for the filename of the old index using a Windows file dialog.

Next, select whether to store low-res-video along with the imported tape index and start the import with **OK**. ScLive will create a new tape index file for the import under "c:\tape indices". After the import, you may delete the old index file, because ScLive 4.x will no longer need it.

Importing a batch list as text file

Select **File > Import batch list** to import batch lists from other video editing programs into a new clip list in ScLive. The batch list file must be a text file with columns separated by commas or tabs. For example, Premiere Pro can create such files with the command **Project > Export batch list**.

Row layout:

Tape name,01:02:03:04,06:07:08:09,file name

For this example, 01:02:03:04 is the time code of the in-point, and 06:07:08:09 is the time code of the out-point.

Exporting clips

In ScLive you can use the menu command **Clips > Export list** to export clip information, files or scenes to a HTML file, an EDL file, a text file or a batch list. When exporting to HTML or text, thumbnails of the scenes can be exported in separate JPG files.

Tape errors and dropped frames



Figure: a clip with two defective positions (highlighted in green)

Generally, video on DV tapes is error-free. However, sometimes tape defects can be caused by a dirty video head or if the tape was subjected to unfavorable conditions. Defects can show up as pixelated video. It can be annoying if such defects show up in a finished project. To avoid this, ScLive displays a red dot or a red strip at tape positions with visible or invisible defects.

The information bar under the clip list shows the number of tape errors (errr:0) and the number of dropped frames (dropped:0) for all clips. Press the **N** key on the keyboard to step through the individual error frames. Sclive will then show the potentially defective video frame in the preview monitor. Depending on the type of defect, you can decide whether to use or not to use this position in your film.

With some cameras, overdriven sound may also incorrectly be marked as a tape error, even though video and audio are not really defective. In such a case it is recommended to turn off the tape error view by setting the option **View > List settings > Show error line in clips** to **No**. By the way, defective frames are marked with red or yellow stripes only in the ScLive strip view. Video frames in the avi file are not marked and can be used in the final film.

However, if individual frames were dropped during capturing ScLive will display a yellow strip at that position. Dropped frames are commonly caused by problems in the transmission between camera and PC, by driver problems or by a hard disk being slow over a longer period of time (see also "

Hard disk speed test" on page 39)

Working with clips in the file list, in tape index lists, and clip lists

There are three types of list views for scenes or avi files in ScLive::tape index list view, file list view and clip list view. These views in ScLive are largely similar. The tools and functions for scenes or avi files are very similar as well. Therefore, ScLive uses the term "clip" for both tape index scenes and avi files in the context of their attributes and functions.

In the lists each clip is displayed in an individual row:



Fig: Clip with 5 thumbnails

The thumbnails show the time line of the video from left (first video thumbnail) to right (last video thumbnail).

The clip in this figure consists of 38 individual frames. For illustration purposes the thumbnail pictures were replaced by the corresponding frame numbers (1 to 38).

Below the clip, the name of the clip, the tape position, the length, the recording date and the tape name are displayed.

The clip in this figure is completely selected (indicated by yellow stripes along the top and bottom of the whole clip and on the left and right ends of the selection). The last picture that was played back is called the "current cursor position". In this figure it is in the center of the clip – indicated by the red line.

The time code of the current cursor position is displayed at the current cursor position: T 0:05:52:15 (**T** refers to tape). If there is no tape position information available in the avi file, the position within the file is displayed: F 0:00:01:12 (**F** refers to file).

The current cursor position is the position before which ScLive separates a clip using the **Split** function. For example, if you want to divide clip A into two clips A and B, set the current cursor position on the first picture of the future clip B and apply the **Split** function. Please note, that the current cursor position by itself is not a selection. If you want to delete an individual frame from a clip you need to mark an area that starts before the frame and ends behind it.

Scrubbing in the clips: Click on a position in the clip and ScLive shows you the corresponding picture in the preview monitor. If you move the mouse, the preview monitor follows the current position and you will be shown the video at this position.

To select only part of a clip, click the beginning of the part with the left mouse button and move the mouse to the end.



Fig: A portion of the clip is selected.

You can also move the beginning and end of the selection by dragging the beginningline or the end-line of the selection with the mouse.

Once a part of a clip has been selected, various functions can be executed, e.g., the selected part can be deleted with the **Del** key or the **D** key can be used to copy the part to a newly created clip list

Each clip provides space for "film transport strips" on the left and right margins. The right film transport strip can be double-clicked to combine the clip with the following clip. The left film transport strip can be double-clicked to connect the clip with the previous clip. No film transport strips are displayed between combined clips.

ScenalyzerLive uses three types of lists to display clips:

- The file list in the main window
- Tape index lists
- Clip lists

File list in the main window

This list shows the contents of the current capture folder. Each avi file in the capture folder is displayed as a clip in a single row with 5 thumbnails.

Changes to the file list in the main window are used for simple-editing of the files. When you select and execute **OK / Commit changes** all changes are applied directly to the corresponding files on the hard disk.

There is only one file list in ScLive. It is displayed on the right-hand side of the main window.

Tape index lists

Tape index lists represent the contents of a tape and contain tape scenes in form of clips. Tape index lists are changed, when the user combines scenes, splits erroneously detected scenes, or when the user names and comments scenes. ScLive creates a separate tape index list for each indexed tape. Tape index lists are displayed in separate windows. Tape index lists are stored as special avi files (index with picture and sound in preview quality) or as scl file (index without picture and sound) in the directory c:\tape-indices.

Clip lists

Clip lists contain scenes from tape index lists and/or references to DV video files. Clip lists are mostly used as batch lists or play lists. They contain compilations of clips. For example, if you want to use scenes from different tape indices in one project, collect the desired scenes in a clip list. Then let ScLive batch capture all clips in the clip list. Save the clip list so you can capture the same clips again in the future. You can also insert avi files in a clip list. This stores information from the avi file, like the original tape position and thumbnails, in the clip list. Even if this avi file is no longer on your hard disk anymore, ScLive can batch capture these same positions again using the clip list.

You can also insert avi files into a clip list to create a custom playback list. You can use as many clip lists in ScLive as you want. Clip lists are stored as scl files in the directory/folder of your choice.

Toolbar in list views

Editing of clips or scenes is possible in all list views. The necessary functions are in the **Edit** menu and in the **Clip** menu, or you can right-click a clip, use a keyboard command or click an icon on the toolbar under the list:



Info: The **OK** button for applying changes is only active in the file list of the main window.

Clip selection

When you edit a clip in a list view you must first select the whole clip or a portion of it.

ScLive displays the selected positions in yellow highlighting. You have the option of selecting one or more entire clips or portions of a single clip. You can split a clip at the current cursor position.

Selecting the entire clip

Click the thumbnails of a clip to select the entire clip.

Selecting portions of a clip

Click on the thumbnails of the clip. Keep the mouse button pressed and move the cursor to the end of the area to be selected. Later you can also move the yellow start and end lines of the selected area with the mouse.

Selecting more than one clip

Hold the Ctrl- key while you click on the thumbnails of different clips. The mouse click toggles the selection of the respective clips.

Selecting a row of contiguous clips

Click on the thumbnails of the first clip, use the scroll bar or mouse wheel to scroll to the last clip and press the Shift key while you click on the last clip. All clips from the first to the last one are selected.

Selecting clips that belong together

If a clip is double-clicked, a group selection is performed. ScLive then selects all clips around the clicked clip which were originally filmed within less than e.g., 30 minutes time interval. This way, scenes in context can quickly be selected at once and can be titled with a common name or marked for batch capturing.

Selecting all clips

Quickly click on a clip three times to select all clips of the list. Alternatively, you can also use the key combination Ctrl+A.

Moving the start or end of a clip selection

If only one clip or part of a clip is marked, you can move the start or the end of the selection by clicking and dragging with the mouse. To change the current cursor position you use the left and right arrow keys or the playback controls in the main window (page 17) or the film strip view (page 30). Then press the I key to set the start of the marked area and press the **O** key to set the end of the marked area.

Simple editing

ScLive offers several quick and easy editing functions for video clips. You can delete parts of clips or entire clips, you can combine and copy clips, or split them into automatically detected scenes. The edit functions are available in all list views, but each list offers different editing methods:

- The file list in the main window is used to change existing avi files. For example, you can shorten avi files, combine them or move them. These changes are done without loss of quality. First change the clips in the file list as needed, then click **OK / Commit changes**. ScLive changes the actual avi files to reflect the changes of the file list on the hard disk.
- Edits in the clip list and in the tape index are used to change the selections for batch capturing. Only the information about the clips in these lists is changed, the actual avi files on the hard disk remain unchanged.

Splitting clips

To split a clip in ScLive click on a position in the clip and press the S key or use the **Split** button in the toolbar below the list.

Joining clips

You can combine clips in the file list, for example, to create one avi file out of several joined avi files. You can also join scenes from index lists to undo scene splits. To do this, select two or more clips and select **Join** (or press the + key). You can tell that clips are joined when there is no film transport strip.

Choose **OK** / **Commit changes** in the file list and joined scenes will be saved on the hard disk as a single continuous file.

Note: If two tape-index scenes are joined but not positioned next to each other on the tape, batch capturing will still create two individual files.

Deleting clips

Mark the clip or part of the clip you want to delete, and press the **DEL** key. ScLive displays a red strike-through mark across the clips. If you select **OK / Commit changes** in the file list, the deleted parts are physically deleted from the hard disk. However, if clips are deleted in the clip list or tape index views, the clips are immediately removed from the list, but the avi files on the hard disk are not deleted or modified.

Displaying clips from other directories in the file list

Use the menu command **Clips** > **Add avi files to list** to add files from other directories to the list.

Removing clips from the file list

Pressing the **R** key to remove selected clips from the current clip list. This has the opposite effect of the **Clips** > **Add avi files to list** option. When a clip is removed from the file list, the clip is no longer displayed in the file list anymore but its file is not deleted from the hard disk and not marked for deletion.

Renaming clips

Simply click on the scene name and type in a new name. You can also select a clip, press F2 and enter a new name. If more than one clip is selected, and one clip is renamed, all selected clips receive the new name with a sequential number.

Commenting clips

If the comment line is not already displayed in every clip of the clip list, right-click on the desired position in the list column header (detailed instructions on page 33). A pop-up menu will appear. Select **Comment** and ScLive will display the comment line in each clip.

Click in the desired comment line of the clip and enter your text. Press **ENTER** or press the down arrow key to move on to the next clip.

Working with the film strip view

ScLive offers an effective way to edit and cut clips or files with *frame accuracy*. This is helpful when *clips have to be split at exact positions*. The film strip can be shown below each list. It is used for frame-exact positioning of the cursor. Use **View > Show film strip** to display the single line or double line film strip view. Alternatively the film strip view can also be activated or hidden with the *Magnifying glass icon in the toolbar*.

1	10 19 28 3	38
1		38
		38
- The second second		
en		
	0:05:51:21 0:00:01:13 2004-09-12 19:08:56 solive	

This figure shows a video clip (frames 1 to 38). In the lower part of the figure, you see two rows film strip view. The filmstrip view always shows the picture on the current cursor position in the middle (frame 23) as well as the pictures before and after. A vertical red line before the middle picture indicates the current capture position. If the clip is split by using the split-command, ScLive will cut at exactly this position.

The film strip view consists of one or two individual rows.

The second film strip row shows the same position of the same clip in a different time resolution. In the lower part of the film strip view, the resolution is 1 picture. The individual pictures are positioned around the cursor position (frames 19 to 27 of the example).

In the upper part of the film strip view the cursor is also positioned in the center, the time resolution however, is 8 pictures (frames 7, 15, 23, and 31 of the example). The upper row of the filmstrip is used to quickly find the desired position in a courser time resolution. Afterwards you can fine tune the positioning in the row below. If the single row filmstrip view is selected, only the lower row, which has a frame-by-frame resolution, is displayed.

If you wanted to split the clip after frame 25, simply click between frames 25 and 26 to move the current cursor position behind frame 25. Frame 26 is now in the center and the filmstrip view shows the frames surrounding frame 26. Next select **Edit** > **Split** (or press the **Split** button in the toolbar), to split the scene exactly at the cursor position – after frame 25. Now we have a clip with the frames 1 to 25 and a second clip with the frames 26 to 38:

thumbnails				
name	timecode-in	duration	rec.date	tape
		1	Constant of the local division of	
	671	12	10	SE
		J		LD /
0				
iumbers	0:05:51:21	0:00:01:00	2004-09-12 19:08:56	sclive
T 0:05:52:21		and and and		
00	00	20	SE	00
	12/4	51	1.55	1.5X
lumbers	0:05:52:21	0:00:00:13	2004-09-12 19:08:57	sclive
clips:2 (0:00:01:13	3); selected:1 (0:00:00:13); delet	ed:0 (0:00:00:00), batch:1	0 (0:00:00:00), errs:0, drop	ped:0
			S 2 Q ok	
1000		16		
	2 10 2	5 26	34	
123				
T:0:0	05:51:22 T:0:05:52:05 T:0:05:	52:20 T:0:05:52:21 T:	0:05:53:04	
22 2	2 21 2	5 26	77 70	20 20
han han ha	3 24 2	J 20 1	61 60	
the second s	and the second and the second	and the second second	and the second s	and the second second

Tip: You can use the mouse wheel to scroll in the filmstrip view. If the mouse is positioned on the top row, the scrolling speed is fast. If the mouse is positioned on the bottom row, the scrolling speed is slow.

The bottom filmstrip view also shows the sound as a waveform. This is helpful when the cuts are determined by sound cues, e.g. in interviews.

Adapting the clip view

List view options

Select **View > List options** in the menu bar, to define the number of columns in list views, the font sizes in lists, the number of thumbnails per clip etc.

ame	value	
List-Settings		
-Font Size	- + 14	
— Columns	1	
- show scale in clips	YES	
- show error-line in clips	YES	
hide deleted clips	NO	
number of thumbnails per clip	5 Thumbnails	
free space under clips	0	
	~	

Example: 9 thumbnails per clip:



Example: 3 thumbnails per clip, 2 columns (2 clips per row):



Column headers



Fig: Column header above a clip

Use the column headers at the top of each list to determine which attributes of each clip to display (e.g. **thumbnails**, **name**, **time code start**, etc.) and to change the order of the columns. For example, if you want to display the aspect ratio information between **Recording date** and **Tape**, right-click in the column header between **Recording date** and **Tape**. A pop-up menu appears and displays all attributes of the clip. Already displayed attributes have a checkmark in the menu. In the menu, click on **Aspect ratio** and ScLive will show the column **Aspect-ratio** between the columns **Recording date** and **Tape**. To hide the **Aspect ratio** column again, right-click in the header.

Right-click into the column headers and select **Auto arrange columns** to automatically adapt the column width.

The column header can also be used to sort all clips in the list. Simply click on the headings of the desired column and ScLive will sort the column by this attribute. To prevent unintentional sorting, ScLive only sorts when the user clicks on the heading but ScLive does not sort automatically when the list has changed. *Expert tip for sorting by several criteria:* For example, if you want to have your clips sorted by tape name and then by time code, sort by time code first and then sort by tape name. ScLive remembers the last sort order and uses it as lower priority sort order when sorting by another attribute.

Clip attributes

Attributes	Description	
Thumbnails	Up to 9 thumbnails of the current scene (first frame, some frames in between, last frame)	
Name	The filename of this scene	
Path	The path of this scene.	
timecode-in	The time code of the first frame of this scene	
timecode-out	The time code of the last frame of this scene	
file-in	The position of this clip in the file	
Duration	The length of this scene	
rec.date	The date stamp of the first frame of this scene	
rec.date-end	The date stamp of the last frame of this scene	

ScLive recognizes the following attributes for each clip:

Delete	Indicates if this scene should be deleted	
Batch	Indicates if this scene should be batch-captured	
Comment	Your comments for this scene	
cap.date	The date when this scene was captured by $ScLive$ - this is not the datestamp (date-beg)!	
Tape	The name of the tape where this scene was captured from	
Standard	the video standard of this scene (NTSC or PAL)	
Aspect	The aspect ratio of the scene (16:9 or 4:3)	
Interlaced	Indicates if the video is interlaced or progressive-scan (=movie-mode)	
dropped#	The number of dropped frames in this scene	
Audio	The audio-mode of this scene	
Errors	The number of frames that have audible or inaudible errors in the audio-data - this can be an indication for tape-problems	
Sourcefile	The name of the source file of this scene	
mod.info	Information about the modifications	

- By default, ScLive displays only a small selection of the above attributes in each clip list. You can however use the column header to adapt the list views (see "*Column header*" on page 33).
- The fields **Thumbnails** and **Comment** are always displayed in a complete, separate row.
- The fields **Delete** and **Batch** are displayed as checkbox options. Just put checkmarks in the checkboxes to delete or batch capture clips. Alternatively you can use the **DEL** key for deletion and the **INS** key for marking the clips for batch capturing. In clip lists deleted clips are immediately removed, in file lists they are marked with a strike-through indicator. Clips marked for batch capturing are displayed with a check mark on the thumbnails.
- The **Batch** attribute cannot be used in the file list in the main window.
- For clip lists and batch lists the Path attribute indicates the sub directory where the files are to be stored in batch capturing. The Path attribute can also be used in the file list in the main window to move files to other directories (also to other hard disks). Simply click on the Path column of the clip (if it is visible) and enter the desired new path. Alternatively you can choose Edit > Change path or use the P key to change the path of the selected clips. ScLive will move the files to the indicated directory after you click OK / Commit changes.

Scene detection methods

ScLive provides two different types of scene detection.

When filming to DV tape, the camera invisibly embeds the current time and date information in each video frame. Each video frame is "date stamped". ScLive shows the date stamp of the current frame below its monitor window. If you use *date stamp scene detection*, ScLive recognizes a change of scenes when the difference of the recording time of two subsequent frames is more than one second. Scene detection by date stamps is generally highly exact.

However, if the video was not recorded with a DV/D8 camera but comes from an analog source, the pictures will not contain a date stamp. In this case please use *optical scene detection*. This scene detection method analyzes the contents of each picture to recognize the individual scenes. If used with properly filmed video, ScLive recognizes nearly all scenes correctly. However, if a video contains excessive pans or cross fades, optical scene detection might not detect scenes correctly. In this case, you can use the simple-edit functions to easily correct wrongly recognized scenes.

Note: If a DV tape does not contain a date stamp, the camera clock was probably not set before recording. For tapes without date stamps, use *optical scene detection*.

Timer controlled capture

ScenalyzerLive can use a VCR-like timer function to start capture automatically at a certain time and for a preset duration. Choose **Capture > Add start and stop timer** to open the following dialog:

ScenalyzerL	ive - Timer	×	
Start and S	top Timer	•	
Day:	Freitag , <mark>114</mark> . Oktober 2005	•	
Start: 14:	:00:00 🐥 End: 15:00:00 🐥 Duration: 1:00:00	•	
Repeat:	no repetition		
Name:	Name: new timer		
shut down the computer after the last timer has finished			
current time: Friday, October 14, 2005 13:07:44 starting in: 52 mins; 16 secs stopping in: 1 hour; 52 mins; 16 secs			
Note: Sclive must be running and the computer must not enter hibernation or standby mode. Also check for enough free diskspace!			
	OK CANCEL Delete Timer		

ScLive offers an unlimited number of timers. Type and time of the timer are set in the timer dialog. ScLive will start to the capture at the set time and will end it after the

entered period or at the set time for ending capturing. The displayed timer name (**New timer**) will be used as the file name for capturing.

You will find a list of active timers in the guide window (on the left bottom side of the main window) as well as under the menu command **Capture** in the main window. ScLive has two types of timers:

- A **Start and stop timer** triggers ScLive's capturing at the set time and stops it after a set time periode.
- A **Stop timer** does not have a start time, only a stop time. It makes ScLive stop capturing at the indicated time. E.g., if you just want to capture the first 30 minutes of a tape, start capturing and activate the stop timer during capturing via **Capture > Set stop timer** and set a duration of 30 minutes. ScLive will then stop capturing automatically after 30 minutes.

Tip: You could use the timer function to start capturing a time lapse recording automatically at sunrise.

Still picture export

ScLive can export the current picture in the preview monitor at any time as a still picture in BMP or JPG file format. Press **CTRL+E** or use **Capture > Export current picture**. ScLive uses the settings defined under **File > Options > Stills export** (for an overview of the options see page 43).

Creating animated movies in ScLive – stop-motion recording

You can use ScLive to produce creative animated movies with stop-motion recording. In stop-motion recording, you record single pictures of static objects (e.g. clay objects or action figures) and move the objects slightly after each picture. The objects seem to "come to life" in the movie, and your creativity is only limited by the time you can spend creating the movie.

Connect your camera to the PC, set the camera to **camera mode** and take the tape out of the camera so that it won't switch to standby mode after a few minutes. Select **Capture > Stop motion capture** to open the **Stop motion capture** dialog.



In this dialog you see a list of the individual frames of the movie on the right-hand side. On the left-hand side you see the last captured frame.

If the **Overlay monitor** checkbox is activated, you can use the slider-control to display the current camera picture and the last captured frame in overlay format (in the figure above an overlay of pictures 3 and 4 is shown, picture 3 is the frame captured last, and 4 is the current camera frame). This "onion skin" function assists you when you slightly change the objects in front of your camera, because you can easily reference the changes to the last captured frame.

Now, set up your scenery in front of the camera and press **F11** (**Capture**). ScLive will add the current camera picture to the movie. Then slightly change the objects to "tell the story" and press **F11** again, and so on.

After some time you will have developed an animated film. You can save it with the file commands in the **Stop motion capture** dialog. ScLive stores the animated film in a DV avi file on the hard disk.

Playback: For example, select the last 5 frames from the frame list by holding CTRL and clicking on them. Then click **Play** and ScLive will playback the selected frames, followed by the current camera picture. This helps to estimate the movement in the frames and to arrange the scenery for the following frame accordingly.

Tip: Use the **Repeat**-checkbox to playback the frames in an endless-loop. *Tip:* Use the button **Delete last** to delete the last captured frame. The individual frames on the list can be deleted or moved with the commands in the **Edit** menu.

Live camera capture

If the option **File > Options > Capture > Auto capture from live camera** is set to **YES** and a camera is connected to ScLive via Firewire, ScLive will automatically start capturing once the camera goes into record mode and it will end capturing automatically when the camera recording is paused. This way, the video is not only recorded on tape but ready saved to your hard disk for editing, after the recording is done.

Time lapse shots

Use ScLive to create impressive time lapse shots. These shots display an event that happens slowly, like a sunrise or moving clouds, in highly accelerated form. If the time-lapse option is turned on. For example, you could choose to record not every single frame in ScLive but every sixtieth frame. That makes the video run 60 times faster than real-time – a 60-minute event will last only 1 minute in the file. Therefore, set the options under **File > Options > Capture Time lapse capturing** to **YES** and enter the desired acceleration factor as **Time lapse factor**. When you are done, press the capture button in the main window to capture as usual.

Calculation of the time-lapse factor

The factor indicates, how much faster than the filmed original event the film file is going to play in the captured file. For example, if you want 24 hours (24 times 60 minutes times 60 seconds) play in 30 seconds, use this factor: $24 \times 60 \times 60 / 30 = 2880$

Time-lapse factor of a live event:

If an event takes longer than your camera can continuously record (e.g., longer than 60 minutes), link the camera to a PC or a notebook for filming and let ScLive directly capture the event without actually taping it.

Remove the tape from the camera so the camera does not switch to standby mode after a few minutes. Set the camera to camera mode, connect the camera to the PC and start the capture in ScLive with the respective time-lapse factor.

Tips for the camera and time lapse capturing:

A tripod or another way to secure the camera position is essential. Please turn off some of the automatic functions on your camera: deactivate the anti shake function, use fixed white balance (e.g., "outdoor") and use manual focusing. Protect your camera from environmental influences like rain etc. Also be careful to

not point the lens directly at the sun at noon to avoid burning the CCD-sensor.

Searching the tape end:

Let's assume you have a partially recorded tape and would like to record something new after the end of the recorded video on the tape. In this case let ScLive quickly search for the end of the recorded video on the inserted tape by selecting **Tape** > **Search tape end**. ScLive will wind the tape frame-exactly to the last recorded frame. The end-search functions on most cameras do not find the tape end once the tape has been removed, but ScLive finds the end-position even if the tape was removed from the camera.

Hard disk speed test

Informations about hard disk speed and buffer size:

DV capturing writes data with a speed between 3.5 and 4 megabyte per second to the hard disk, which is unproblematic for modern hard disks.

However, if the hard disk is busy during capturing for several seconds with other functions and cannot store the video stream, ScLive stores the data in a RAM buffer and writes it to the hard disk later. ScLive dynamically uses a maximum of 50% of the main RAM as buffer. In the bottom status bar of the main window, you find a bar displaying how much of the buffer is currently used.

In the rare case that the error message "Sorry, your hard drive was not able to write fast enough" is displayed during capturing, please use the function **File** > **Tools** > **hard disk speed test** to check the speed of the partition or disk where the capture folder is currently located. With this function, ScLive writes a video file on the hard disk and shows you the relation between writing speed and real-time. If the result is e.g., "ScLive wrote [...] 5.6 times real-time", it means, that the hard disk is 5.6 times faster than the required minimum speed for DV capturing.

If however the hard disk is rather slow (e.g., 1.5 times realtime-speed or slower) the most common cause is that the DMA or UDMA mode for this hard disk or this IDE channel is not activated in the Windows Device Manager.

Working with Menu Trees



ScLive offers a large number of options that are displayed as highly organized overviews in menu trees (e.g., **File > Options**). These options customize the program for diverse needs. But not to worry – you do not have to know all these options or set them yourself. But at times, you might find a special function that is useful for your project.

To reset a setting or a branch of the tree structure to the default value, click on the option in the menu tree and choose **Reset item to default**.

Practically all options in the menu tree have Tooltips that explain their specific functionality. To view a Tooltip just hold the mouse pointer over an option and a small yellow information field appears.

•Ja	estamp
min time between 2 scenes 0h 00	n 01s
This defines which kind of scene-detection ScenalyzerLive should use.	
Datestamp-Scene-Detection compares the recording-time and date embedded in the	
dv-Stream and detects a new scene if the time between two frames changed more	
than a given amount of seconds. If the video comes from an analog source, only	
optical' scene recognition can be used. Optical recognition is less precise	
than datestamp recognition.	

Depending on the setting, sub-options can be visible or hidden. For example, the option **tape speed** (**1x**, **2x**, **12x**) in the tape index creation menu tree is visible only if the scene detection option **date stamp** is also selected. (*This is because an optical tape index only provides exact results if 1x speed is used*).

Tip: If you enter a file or folder name in an option, a button with a ? appears next to the entry field. Click this button to browse for the filename in a Windows file dialog. A button displaying a ! opens the respective file or opens the Explorer in the respective folder.

Tip: To display only changed settings (that is, settings with values other than the default value) right-click on the menu tree and choose **Show only non-default items**

from the context menu. To display all options again, use the command **Show all items**.

Tip: Right-click on a menu tree option and choose **Copy** from the context menu to copy the text of the selected settings branch to the Windows Clipboard. Then, for example, you can insert the text into a word processing application to document the current status of the settings.

Tip: For example, to enter **5 minutes** in an option that requires time entries [e.g., **max. file length (duration)**], enter **5m**.

Changing the tape index directory

By default ScenalyzerLive uses the directory **c:\tape indices** to store all tape indices. To change the default tape index directory, go to **File > Options> Folder Settings > Tape-index-folder**. Enter a different directory and close ScLive. Then, copy all files from the old tape index directory to the new tape index directory. When you are finished, restart ScLive.

Automatic changes

Select **clips > Modify** to use several automatic splitting and joining functions:

- Split long clips clips are split at a maximum length
- Join short clips short clips are joined with their preceding clips.
- Remove start/end frames a number of frames at the beginning and at the end of all clips are removed.

All three functions can be accessed in the same menu, however, only the function you selected via the top menu row **What do you want to do?** is executed:

រែក Modify Clips	د	×
_name	value	4
-What do you want to do?	select what to do	
Clips to use	✓ select what to do	
include deleted clips	split long clips	
	join short clips	4
	Cancer remove start/end frames	

Finally, select **Ok** to execute the selected functions on the clips.

FAQ: Frequently asked questions

"Can I capture my tape without scene detection? I would like to end up with only one file or a few files."

Go to **File > Options > Capture Settings > Scene detection mode** and select **no scene detection**.

"Without scene detection, ScLive created some 2 GB files – how can I capture one tape into one large file?"

Go to **File > Options > Capture Settings > max. file size** and select **unlimited**. Please note, that the hard disk must be NTFS partitioned, to enable the creation and storage capacity for files larger than 4GB.

"My camera has 4–channel sound– how can I capture the sound of channels 3 and 4?"

Set File > Options > Capture Settings > audio capture settings > write other audio-channel to separate wav file to YES. For each captured avi file, ScLive creates a wav file with the sound for channels 3 and 4 under the same name. If the tape does not have 4-channel sound for a particular scene, ScLive does not create a wav file for this scene. Please note that only recordings in 32 kHz/ 12 Bit mode are capable of 4-channel audio channels.

"I don't have Internet access on the PC where I cut the video – how can I register ScLive on this PC?"

Copy the registration key from the email you received to a text file, save it as ***.txt**, and transfer it over a network connection, CD, floppy disk, a USB stick or by other means to the computer where you will do the video editing. It is recommended that ScLive already be installed and tested on this computer before you register it. Then open the ***.txt** file and follow the instructions in the key information:

1. Select the key and select **Edit** > **Copy** in this program to copy the text to the clipboard.

2. In ScenalyzerLive, select **Help** > **Insert registration key** to apply the key. ScenalyzerLive will restart and run as a registered version. If a newer version of the program is installed later, it is not necessary to enter the key again. You will, however, need the key in case you reinstall your Windows operating system.

Program options overview

In **File > Options** you set the programs options. You can customize the program in various ways to fit your needs or you can activate additional functions.

Capture Settings		
file-type	Type2 DV-avi (default; for Premiere; Vegas etc.)	
	Defines the kind of files created by ScLive. If you are	
	unsure, try Type2 files and Type1 files.	
Matrox: write separate audio file	YES	
StudioDV: multiple scenes in one	YES	
file	If enabled. ScLive will write multiple scenes into one avi file	
	for studio-dv	
max. file size	2 GB (default)	
	Defines the maximum size of the resulting avi file:	
	640 MB and 700 MB - for CD-backup	
	1 GB - for very old applications	
	2 GB - for compatible Type 2 files	
	4 GB - for Windows95/98	
	unlimited: for NTFS partitions (Windows XP and 2000)	
	ScenalyzerLive will try to divide the files neatly at a scene	
	break 30 seconds before the maximum size is reached.	
user-defined max. avi file size (MB)	2048	
max. file length	0h 00m 00s	
	Defines the maximum duration of a file. To disable this	
	funktion set it to zero.	
timelapse-capturing	NO	
	Use this to capture a 1 hour long sunset in a 1-minute file	
	(factor=60), for example	
timelapse-factor	60 Defines hew meny frames Celine should alve when	
	Defines now many frames ScLive should skip when	
	capturing. For example, a factor of 60 means that ScLive	
	Reeps one of 60 frames. The resulting avi video file will play	
auto conturo from livo comoro		
auto-capture nom ive-camera	In an able of Sal in a will automatically start conturing when a	
	in enabled, Schlive will automatically start capturing when a	
file recence		
nie-names	name datestamp.ext	
ant 40:0 flog when conturing		
set 16:9 hag when capturing	NU If this and a lange that the California will track all some time doubted	
	If this option is activated, SCLIVE will treat all captured video	
scene detection mode	Datestamp	
	beines which kind of scene-detection ScenaryzerLive	
	recording time and date embedded in the dy Stream and	
	detects a new scene if the time change between two frames	
	is higher than a set amount of seconds. If the video comes	
	from an analog source, only 'optical' scene recognition can	
	be used. Optical recognition is less precise than datestamp	
	recognition.	
min.time between 2 scenes	0h 00m 01s	
	If the recording date between two scenes differs by this	
	amount of time, a new file is started. Set this to 1 second to	

	put exactly one scene into each file. Set this to e.g. 15	
	minutes, and all scenes that have been recorded with a	
	pause of less then 15 minutes between each other will be	
	put into the same avi file.	
optical sensitivity	low sensitivity (filtered)	
start a new file if audio parameters	YES	
or 16:9 flag changes		
Audio Capture Settings		
capture audio	YES	
	if this is set to NO, ScLive will mute the audio when	
	capturing	
keep DV-Audio in-sync	YES	
	Some video sources have audio and video which run out of	
	sync over longer periods.	
	This option enables Sclive's Audio-Sync-Module that keeps	
	DV-audio perfectly synchronized.	
audio-mode for all .avi files written	Automatic (same as on tape)	
audio-channel to capture	"first channel"	
write other audio-channel to	NO	
separate wav file	This option is only effective for video that has 2 pairs of	
	stereo channels. If this option is checked, ScLive will write	
	the other audio channel to a separate wav-file.	
	Folder Settings	
alternate capture-folders (when		
main-disk is full)		
alternate capture-disk-1	Here you specify alternate capture disks for ScLive that can	
	be used when the current disk is full. For example enter	
	d:\video and e:\video	
space to leave free on each disk	32	
(MBytes)	ScLive will leave this amount of megabytes free on the	
	capture disks	
tape-index-folder	C:\tape-indices	
	This is the folder where ScLive saves tape indexes or looks	
	for tape indexes	
	Stop Capturing	
no-more video timeout	0h 00m 30s	
	After the last video has been received ScL ive will wait until	
	until this amount of time has lansed before it stops the	
	camera///CR	
when dropped-frames occur	NO	
when dropped hames beed	ScI ive will stop the capture if a dropped frame occurs	
when the bookup act is finished		
when the backup-set is iinished	INU	
	ii you re-capture video with Schive-backup-into, Schive can	
when the detectors changes more		
than	Un our ous	
	when the datestamp changed more than 12 hours	
	Basically. Scl ive will capture a day's worth of video and	
	then stop	
Mise Ontions		
use device control	YES	
	Set this option to NO if you are capturing from an analog DV	
	converter or if you are using a DV camera to convert from	
	VHS to DV and do not want the camera to start plaving	
	when you push CAPTURE.	
relative size of frames in filmstrip-	20	

view	
sound when scrubbing	YES Uncheck this option if you do not want to hear the sound on your camera/VCR when scrubbing over files
group-select time-frame	0h 30m 00s Doubleclicking a scene selects all scenes that have been recorded with pauses of less than this amount of time between them
preview while capturing/playback	YES Disable this option if there are problems with the speed of capture or playback.
hi-res preview	YES High resolution preview can require a lot of CPU time on slower systems. Disable this option if there are problems with the speed of capture or playback.
play preview audio	YES Some older audio drivers crash the computer when ScLive uses them for audio preview. Restart ScLive to apply changes to this option.
max. Clips per List	5000 If you have an extremly large number of clips in a folder, ScLive will only display the first n clips
Still Frame Export Settings	These are the settings for ScLive's Still-Frame-Export.
write-folder	This indicates is the folder where $ScLive$ saves the pictures. Leave blank to use the default write folder
file-names	name'datestamp.ext Defines the name format for ScLive's files
type	compressed JPEG (*.jpg) The file type of saved images
Compression Quality	70 Indicates the compression quality (between 1 and 100). 1 is the lowest image quality and produces small file sizes, 100 is the highest image quality with the largest file sizes, the default is 70
crop image	YES Defines how many pixels of the DV picture should be removed on the borders of the picture.
Crop Pixels Left/Right/Top/Bottom	8 This defines how many pixels of the DV picture should be removed around the borders of the picture.
Deinterlace Image	YES If this is checked, the even lines of the picture will be replaced with the interpolated odd lines. If you see stripes in every second line of the exported pictures, you should check this. If your camera used a 'progressive mode' you should not check this.
Correct Aspect Ratio (square pixels)	YES Corrects the aspect ratio of the pictures for square pixel devices like PCs and printers. Select this option if you will view the exported pictures on a PC or in print. Leave the option unchecked if you will use the pictures in a DV-movie.'
Image Size	Full width (720 pixels) This is the horizontal resolution of the exported pictures.
Resize Methode	resample (better quality and slower)
play 'Click' sound	YES

open exported picture in associated	3 NO
editor	
	Playback Settings
duration of black video to record before the video (seconds)	1.5 ScLive will send black video-frames for this amount of seconds to your camera/VCR before sending the actual video from the avi files.
duration of black video to record after the video (seconds)	1.5 After the video from the avi files has been sent to the camera/VCR, ScLive will send black video-frames for this amount of seconds to your camera/VCR before stopping the device.
set 16:9 flag on playback	NO If this is checked, ScLive will set the 16:9 flags for video sent to the camera/VCR. Use this option when your editing-app incorrectly outputs 16:9 video in 4:3.
endless loop playback	NO
playback with fake datestamps	for files without datestamps when recording clips without datestamps, they can not later be datestamp-detected on the tape. This function assigns fake datestamps to such clips. 'for files without datestamps': files without datestamps are recorded with fake datestamps and can later be datestamp- detected on the tape as individual scenes 'for each file': same as above plus files with multiple clips are later datestamp-detected on the tape as only one scene Backup-Info Settings
playback: add backup-info	
	If enabled, ScLive will add the original filename information to video played to the camera/VCR. This information is stored on the tape and can later be used to capture the same files to the same locations (see option 'use ScLive backup-info' on the capture-tab). This is a non-standard extension of the DV format and might not be available with all devices.
capture: use backup-info	ignore info ScLive can add the original filename information to video played to the camera/VCR (enable the option 'add backup- info' on the playback-tab). This option defines how this information is used when ScLive re-captures this video from the tape. This is a non-standard extension of the DV format and might not be available with all devices.