CamStudio Quick Start

CamStudio Recorder allows you to capture cursor movements, menu selections, pop-up windows, layered windows, typing, sounds and everything else you see on your screen.

Important Note: With CamStudio, once you record your presentation / window you will not be able to edit any settings or any part of it**. It is advisable to define all the settings PRIOR to recording**. The steps to set the settings are found in section 2.

Section 1

Opening CamStudio Recorder

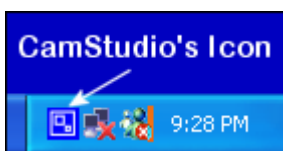- Go to Start > All Programs > CamStudio > CamStudio

  To start recording, click the red button. A rectangle will appear for you to select the area you want to record.

- When you want to stop recording, click the blue stop button. A dialog will appear for you to name and save the file.

- To pause a recording to adjust your screen, click the pause button. You can resume recording by clicking on the record button again.

Minimizing CamStudio
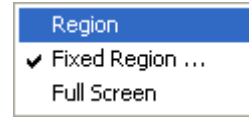
CamStudio is minimized to the system tray instead of the taskbar. To restore CamStudio, double click its icon in the system tray.

<u>Section 2</u>

➢ **Setting Regions**

From the main menu, choose **Regions** >**Region** or **Fixed Region** or **Full Screen**

1) Region
Before recording starts, you can define an arbitrary rectangular region with the mouse. When you press on the **record button**, the cursor turns into a pen on cross-hairs, which you use to define a rectangular region on your screen by click-dragging the left mouse

button.

2) Fixed Region…

You can capture a fixed-size rectangular region. A dialog allows you to define the size of the region in pixels.
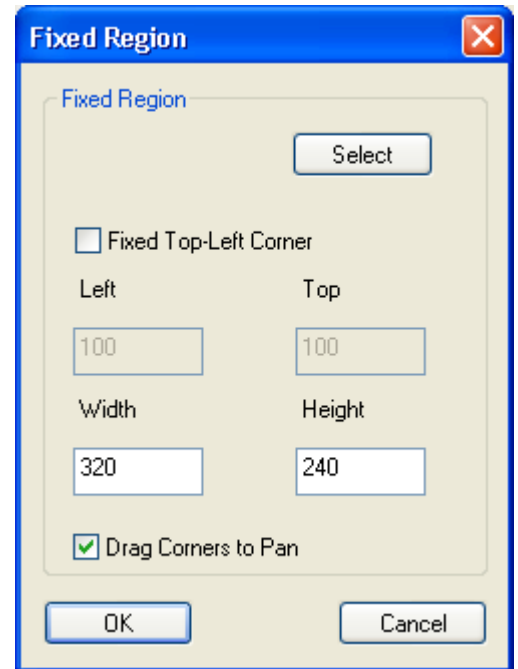
If the <u>Fixed Top-Left Corner</u> checkbox is not selected.

Before the recording starts, you can move the fixed-size region around the screen to determine where you want the input area to be.

If the <u>Fixed Top-Left Corner</u> checkbox is selected.

Recording will start immediately when the **Record Button** is clicked. The region of capture is specified by the Left, Top, Width and Height values of the dialog above.

If the **Drag Corners to Pan** checkbox is selected, you can drag either one of the four corners of the recording region (indicated by the flashing rectangle) with your mouse during recording. The mouse cursor will change to a four-pointed arrow when it is over one of the corners. When this happens, click and drag the region to the new location.

3) Screen

The entire computer screen is captured.

➢ Setting Video Options

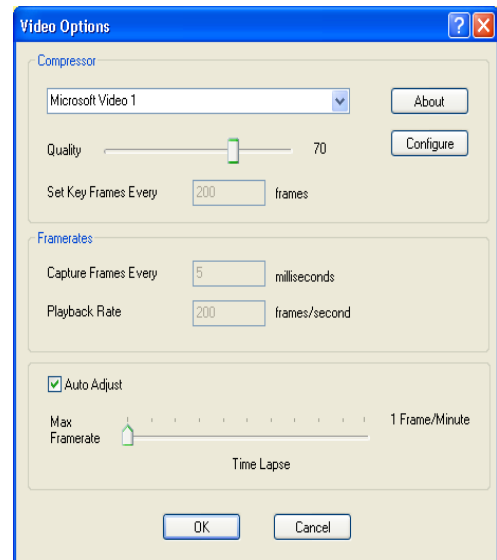From the main menu, choose **Options** >**Video Options**

Setting the video options allows you to optimize your video recordings by choosing between the file size, quality and frame rates of your video files.

The quality setting determines how nicely your picture is saved. A lower value means a lower picture quality but also a smaller file size. Only some compressors use this value.

Auto Adjust

Use the Auto Adjust settings to set the Key Frame Rate, Capture Rate and Playback Rate automatically through the slider.
Shift the slider to the left to increase the frame rate and to the right to reduce file size. It is better to have it located in the middle.

➢ Setting Cursor Options

From the main menu, choose **Options** > **Cursor options**

Setting cursor options can help illustrate the action you are recording by drawing attention to the area where the action happens. The following cursor effects can be selected:
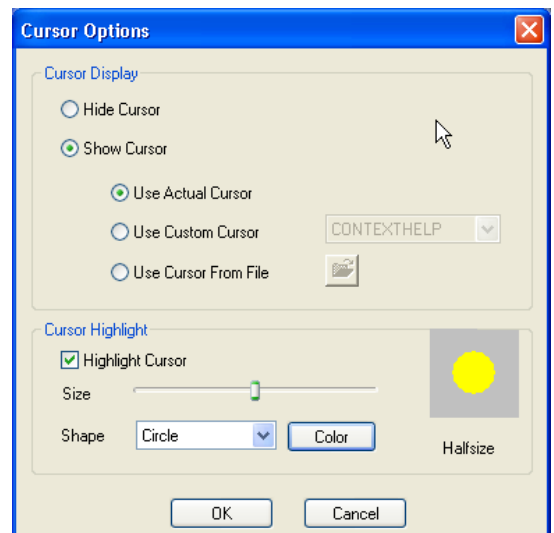
Hide Cursor

The cursor will be hidden during screen capture

Show Cursor

Use Actual Cursor – The actual shape and position of the cursor will be recorded during screen capture.

Use Custom Cursor – Replace the recorded cursor with a customized one.

Use Cursor From File - Replace the recorded cursor with a cursor that is loaded from file.

Highlight Cursor

When this option is selected, the recorded cursor will have a highlight area around it. This helps in calling attention to the movements of the cursor. You can set the shape, size and color of the highlight area.
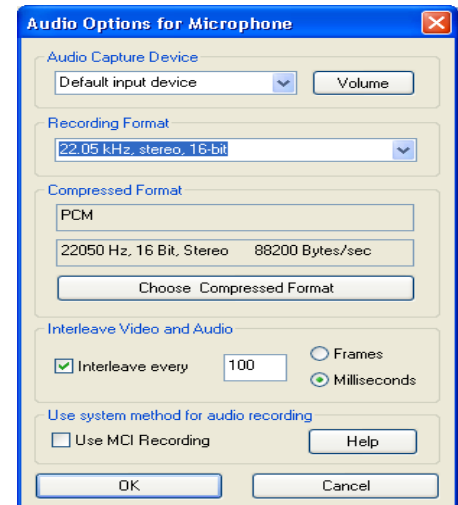
➢ **Recording Audio from Microphone**

From the main menu, choose **Options**->**Record audio** from microphone

When enabled, CamStudio will record your voice input from the microphone while it is capturing video. You need a sound card with an attached microphone to use this option.

Setting Audio Options for Microphone

From the main menu, choose **Options**->**Audio Options**->**Audio Options for Microphone**
Use this dialog box to set the **recording format and compressed format** of your audio.

Volume - Use this to adjust the input volume of your microphone if your recorded audio is barely audible. If CamStudio is unable to locate your volume control, you will need to adjust the volume manually through Start : Programs : Accessories: Entertainment : Volume Control.

Recording Format -- The recording format is the format your soundcard use to record your voice from the microphone. Its main attributes are *samples per second* (measured in kHz), *mono/stereo* input, and *bits per sample* (usually 8 or 16 bit). **Larger values for *samples per second* and *bits per sample* will result in better recording quality, but at the expense of the movie file size.**

Compressed Format -- This is the format that will be saved with your movie file. You can click on the "Choose Compressed Format" button to select another compressed format. After recording your movie, CamStudio will attempt to convert your audio from the recording format to the compressed one.

Your choices for the compressed format are determined by the recording format. If you change your recording format, the compressed format will also change automatically.

Interleave Video and Audio – Interleave your audio and video for smoother playback on a slow device such as CD-ROM. This will also allow better synchronization of your video and sound content. A value of 1 frame/milliseconds will mean full interleave. Larger values will mean less interleaving.
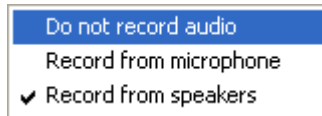
Use system method for audio recording

If you set this checkbox, CamStudio will use certain system commands (MCI commands) to perform the recording of audio from your microphone. This method is more stable and may give better sound quality in some systems. If you experience low audio quality when recording from CamStudio, but managed to

obtain high quality recordings from your system's Sound Recorder, you may want to consider setting this option.
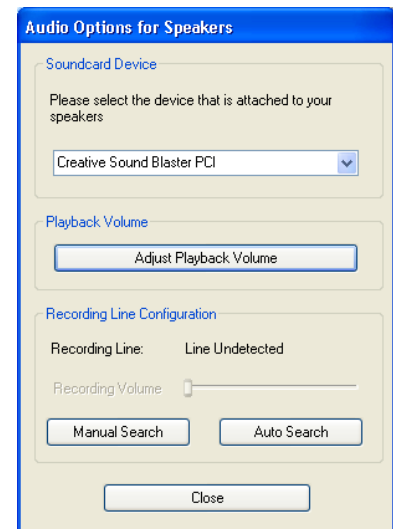
➢ Recording Audio from Speakers

From the main menu, choose **Options**->**Record audio from speakers**

By selecting this option, CamStudio will record the output from your speakers while it is capturing video. This is ideal for recording a gaming session or a movie stream. You will need a sound card with speakers attached to use this option.

Please note that not all soundcards support this function. (Most modern and branded soundcards usually allows you to record from your speakers)

Setting Audio Options for Speakers

From the main menu, choose **Options** >**Audio Options** >**Audio Options for Speakers**

Most of the time, you only need to adjust the Playback Volume and Recording Volume.

Playback Volume
The Playback Volume controls the volume of your speakers. The sound signals going to your speakers and can originate from a variety of sources. Examples include sound from CD, Microphone, MIDI playback and Wave playback.

Recording Volume
The Recording Volume controls the volume of the recording line.

Important: For a good quality recording, it is important that both the Playback Volume and Recording Volume are not set too high.

Recording Line Configuration
By clicking the **Automatic Search** button, CamStudio will play a few tones and attempt to automatically detect the line. It is advisable that you use the **Manual Search.**

If you select the **Manual Search** button, CamStudio will ask you a few questions on whether you have heard a tone when a particular line is used. You will need to turn on your speakers and listen carefully.

Note:

- *Normally, you do not need to perform a search at all because CamStudio will automatically do that for you when you choose the Record Audio from Speakers option*
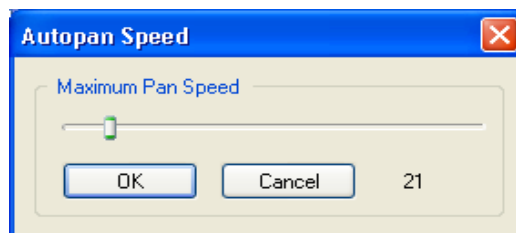- *If the recording is set incorrectly, you will not get any audio from your speakers.*

➢ Enable Autopan

From the main menu, choose **Options**->**Enable Autopan**

If this option is selected, the capture area will follow the cursor to wherever it goes during recording. This has the effect of making the screen capture to occur at the region with the most action.

Autopan Speed

From the main menu, choose **Options**->**Autopan Speed**

Use this to control the maximum speed at which the capture area follows the mouse. The value is measured in screen pixels.

➢ Program Options

From the main menu, choose **Options** >**Program Options**

Use the program options to customize the way the program behaves when it starts/stops recording. A tick beside the menu items indicates that option is enabled.

- ✓ Minimize program on start recording
- ✓ Hide flashing rectangle during recording
- ✓ Save Settings on Exit
- ✓ Capture translucent/layered windows
- ✓ Play AVI file when recording stops >>
- ✓ Temporary directory for recording   >>
- ✓ Recording Thread Priority >>
- ✓ Name of AVI >>
- ✓ Troubleshoot …

Save Settings on Exit

The *Save Settings on Exit* option allows you to save the program settings when you exit. These settings will be loaded the next time you launch CamStudio.

Play AVI file when recording stops

In here, you can choose to

- Do nothing when the recording stops.
- Use CamStudio Player.
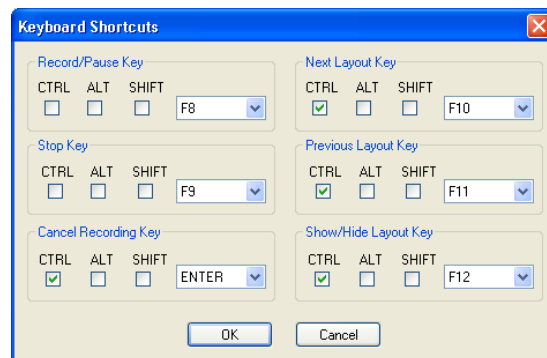- Use your system's default player.

Name of AVI

With auto-naming, you can now avoid giving a name to every AVI you record. The name of the file will have the following format **1422003_1520_26.avi** and is saved in CamStudio's installed directory.

The name is formed using the system's date and time of the recording.

➢ Keyboard Shortcuts

From the main menu, choose **Options**->**Keyboard Shortcuts**

Use the above dialog box to customize your shortcut keys for starting, stopping or canceling your recording operation.

➢ Screen Annotations

From the main menu, choose **Tools**->**Screen Annotations**

The Screen Annotations feature allows you to add captions to your screen during recording. An example of a screen annotation is shown below:

Screen annotations consist of two main components: *Shapes* and *Layouts*.

Shapes

A shape is just a floating window that will appear on top of all other windows on your desktop. An example is shown below.

Instantiating a shape

To create the shape above, simply **double click** on the item **Orange Gradient** or **drag it out** of the Screen Annotations dialog box.

Editing the shape

To edit the shape, **right-click** on it to display a context menu

- The **Clone** command allows you to create a copy of the shape.

- The **Resize** command lets you change the width and height of your window.

- The **Anti-Alias** command lets you adjust the rendering quality of the shape. A higher quality shape will take more time to draw.

- When you have finished editing the shape, you can save it with the Save command.

- The Close command will close / hide the shape on your desktop.

- The Close All command will close all shapes on your desktop.

- The Refresh command will redraw the shape.

- The Save Layout command will save all the shapes and their arrangement on your desktop into a layout. Please refer to the Layout section below for more information.
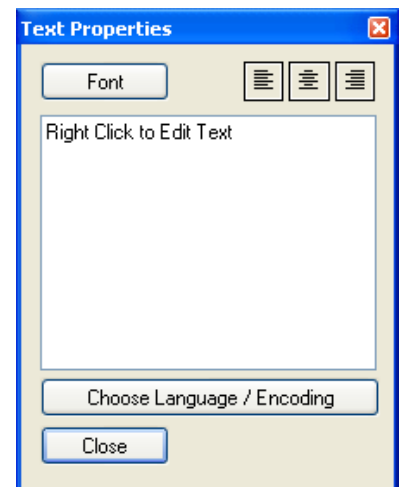
Editing Text

Select **Edit Text** from the context menu to change the text of the shape. Clicking on the **Font Button** allows you to choose the Font Name, Font Style (Bold, Italic, Underline) and Font Color of the shape's text. The three buttons
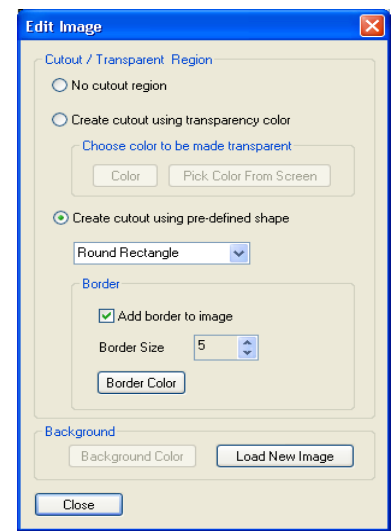
are used for setting the alignment of text. The **Choose Language / Encoding** button allows you to choose an appropriate font for your language if it is non-Western (English, French, German etc). This feature is available only on Win 2000 / XP. To change to Arabic, click on the **Choose Language / Encoding,** select **Arabic.** Also note that you need to have Arabic enabled on your computer and you need change the language from English to Arabic on your computer. To do so, go to your taskbar, next to the computer clock and select Arabic.

Editing Image

Select **Edit Image** from the context menu to change the image of the shape.

The **cutout / transparent region** allow you to create non-rectangular windows. It refers to the region that allows the background to show through. There are two methods to create a cutout region.

1) By Transparency Color
All areas of the image with the specified transparency color will be made transparent.
For example, if the transparency color is <u>Black</u>, the image

        will be transformed into

2) By using a predefined shape.
Currently, the predefined shapes are round-rectangle, ellipse and rectangle.
For example, a round-rectangle cutout region for the image
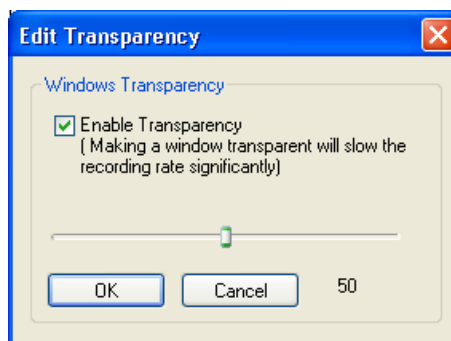
        will be something like

For a predefined cutout region, you can add a border, and set the color and size of the border.
You can set the **Background color** for a shape if the shape does not have an image.
Otherwise, you can click the **Load New Image** button to change the background image to a new file. The file formats that are accepted are bmp, gif and jpeg.

Editing Transparency

Select **Edit Transparency** from the context menu to change the shape's transparency. This feature is available only in Win 2000 / XP. The lower the number the more transparent your shape is. However if you set transparency to 6 or lower, your shape will be too transparent that it will be invisible.
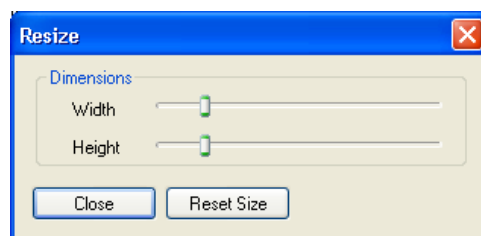

Note that recording a transparent window will cause the frame rate to drop significantly. You will also have to enable the Program Options ::Capture Translucent / Layered Window setting for the shape to be properly captured into the AVI movie.

Resizing Shapes

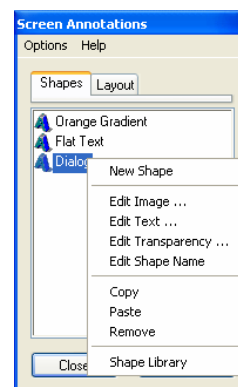Select **Resize** from the context menu to resize the shape.

 Note that a shape with a large size will be drawn and displayed very slowly.

➢ **Managing and creating shapes**

Screen Annotations

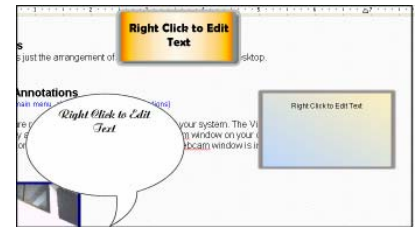From the main menu, choose **Tools** >**Screen Annotations**

In the **Screen Annotations** dialog box, **right click** on an item to display a context menu for managing and creating shapes.

- You can also rename a shape by choosing the **Edit Shape Name** command or selecting a shape and **press F2**.
- You can **rearrange the order** of the shapes in the list by dragging a shape onto another. For example, to switch the order of the "Flat Text" and "Dialog", simply drag "Dialog" onto the "Flat Text" item.
- The **Shape Library** command lets you
  1) Save all your existing shapes into a file
  2) Load a shape library file into the Screen Annotations dialog box and
  3) Create a new (empty) shape library

- The **New Shape** command will launch a dialog box where you can specify the:
  1) Name of the new shape
  2) Image of the new shape
  3) Size of the new shape
  4) Initial text

Layouts

A layout is just the arrangement of one or more shapes on your desktop.
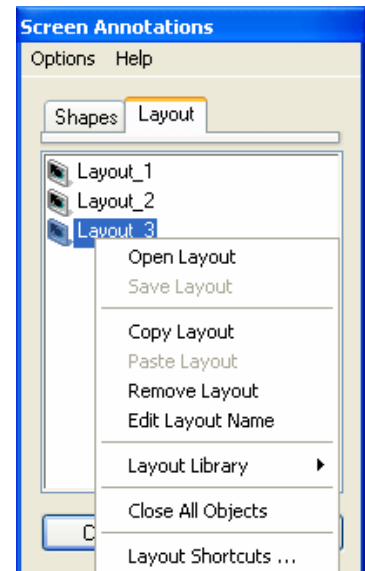An example is shown below

You usually prepare all your layouts before recording starts. When you start recording, you will click a hotkey / shortcut key to cycle through the layouts to display the appropriate captions at the proper time.
You can mange your layout by clicking on the **layout tab** of the Screen Annotations dialog.

- Select a layout and **right-click** on it to display a context menu for managing the layouts.
- You can rename a layout by choosing the **Edit Layout Name** command or selecting a layout and **press F2**.
- You can **rearrange the order** of the layouts in the list by dragging a layout onto another. For example, to switch the order of the "Layout 1" and "Layout 2", simply drag "Layout 1" onto the "Layout 2" item.

Instantiating a layout

You instantiate a layout by simply **double click** on the layout item or **drag it out** of the Screen Annotations dialog box. By doing so, all the shapes that are saved into the layout will be displayed on the desktop in their correct order and position.

Saving a layout
To save a layout, first, arrange your shapes in their correct position and order. **Right click** on any of the shapes to bring up a context menu, and select the **Save Layout** command.

Cycling through layouts
You can cycle through the layouts by clicking the **Next Layout** key in the Screen Annotations dialog box. Every click will close all existing shapes on the desktop and instantiate a new layout. Alternatively, you can use a hotkey / keyboard shortcuts to perform the cycling. To customize the keys for navigating the layouts, you can choose Options->Keyboard Shortcuts from the main menu or Objects->Layout Shortcuts from the Screen Annotations menu.

Layout shortcuts
The keys for cycling through the layouts are
<u>Next Layout Key</u> – key for displaying the next layout
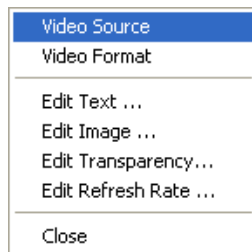<u>Previous Layout Key</u> - key for displaying the previous layout
<u>Show / Hide Layout Key</u> - key for showing / hiding the current layout

➢ Video Annotations

From the main menu, choose **Tools**->**Video Annotations**
This feature requires a webcam to be installed on your system. The Video Annotations window is essentially a webcam window. By placing a webcam window on your desktop, you can record its content along with other screen content when the webcam window is inside your recording region.

The Video Annotation window does not only stream video content to your desktop. You can also add a text caption, make a cutout region, or set transparency values (Win 2000 / XP only) to the video annotation just like you did for screen annotations. To do so, **right-click** on the webcam window to display a menu like this

The **Edit Text**, **Edit Image** and **Edit Transparency** commands have already been covered in the section on Screen Annotations and will not be explained here.

Refresh Rate

The refresh rate indicates the number of times (frames) CamStudio will attempt to capture an image from your webcam and display it on your screen. The actual rate will usually be much lesser, especially for large sized images.

Video Source

You can use the video source dialog to select your webcam or video source for the video annotation. You can also set the brightness, contrast, gain, exposure and other settings related to your webcam video.

Video Format

The video format dialog is used for selecting the **dimensions** of your webcam or video source image. You can also set the pixel depth and compression (e.g RGB24, RGB32) of your video.
Note: You are advised to choose a small dimension (e.g 160 x 120) for the video format, as a large sized format will slow down your system significantly.

➢ Audio and Video Synchronization

From the main menu, choose **Options** >**Audio Options** >**Audio and Video Synchronization**

If the video and audio track of your recording is not in phase during playback, you can try to shift a stream slightly to make them back in sync. This may happen if you are recording the output of a webcam. *Note : The dialog above only handles the case when the audio streams appear to go before the video.*

➢ File Size

An AVI file usually has a very large file size, especially for those lengthy and detailed videos. This is due to the fact that a video file has to pack hundreds and thousands of images into a single file. It is thus very common to have size exceeding one megabyte.
To reduce the size of the AVI file, you can do the following:
- *Limit the area of the region being captured.*
- *Limit the (input) rate of which video frames are captured. This can be set in the <u>Capture Frames Every</u> field of <u>Video Options</u>*
- *Change the compressor and compression quality. By changing the compression quality, you are essentially making a tradeoff between picture quality and the file size.*
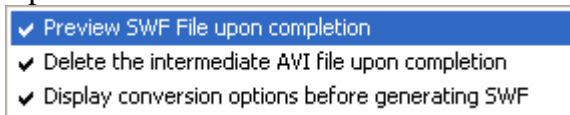
➢ Producing Flash (SWF) Files:

CamStudio allows you to produce Flash files in two ways

1) Record directly to Flash

To record directly to Flash, simply click the 🅢🅦🅕 button to toggle the recording mode to Record to SWF. After that you may proceed in the same way as you record an AVI file.
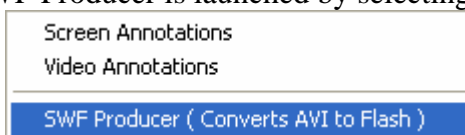There are a few options that you can adjust prior to recording to Flash. These are accessed with the Options :: Record to Flash commands in the menu.

✔ Preview SWF File upon completion
✔ Delete the intermediate AVI file upon completion
✔ Display conversion options before generating SWF

2) Convert an existing AVI file to Flash with the SWF Producer

The CamStudio distribution package includes a module known as the SWF Producer that is able to convert an AVI file to SWF. This is actually a separate program that can function independently of the CamStudio Screen Recorder.

The SWF Producer is launched by selecting Tools :: SWF Producer from the menu.

Screen Annotations
Video Annotations

SWF Producer (Converts AVI to Flash)

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