



Leonardo da Vinci



## Leonardo V3 *V3 Solution User Guide*

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### **Abstract:**

*V3 Solution* combines *CamStudio+*, a software enabling to record the screen activity of a computer and to merge it with the voice of the presenter, *V3 Capture*, an add-in for Microsoft PowerPoint which collects information for indexing purposes, and the XviD video codec.

This manual provides methodological and technical information for enabling a fruitful usage of *V3 Solution* when recording a training activity. It first describes favourable conditions for recordings. The way to use *CamStudio+* and *V3 Capture* is then illustrated with many screenshots. Tips for using the tool in the classroom are also given. The document concludes with a troubleshooting section, and some known issues.

**Keyword list:** CamStudio+, V3 Capture, recording process

## 0 EXECUTIVE SUMMARY

From our experience, providing recording of training activities to members of the audience who have not been able to attend is very beneficial for them. This document hence describes how to use *V3 Solution*. *V3 Solution* combines *CamStudio+*, a software enabling to record the screen activity of a computer and to merge it with the voice of the presenter, *V3 Capture*, an add-in for Microsoft PowerPoint which collects information for indexing purposes, and the XviD video codec. It first lists a few conditions under which performing the recording is meaningful from a pedagogical point of view. Then the use of *CamStudio+* combined with *V3 Capture* add-in and the use of *CamStudio+* as a standalone software are both described in details. Those descriptions are followed by some tips inspired from our experiments. They enable the beginning user to avoid common pitfalls. Finally, troubleshooting information is provided, along with the description of some known issues.

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## 1 INTRODUCTION

From our experience, meeting the following conditions should be an incentive to record your training activities with *V3 Solution*:

- Most of your training time is dedicated to lectures
- Your lecture material is digital, e.g. PowerPoint slideshow, Adobe PDF file, web browsing, etc.
- Part of the audience is likely not to be able to attend, e.g. evening classes, distance learning, students enrolled in another training program.

In such conditions, *V3 Solution* provides you with an easy method to initiate the recordings of your presentation. It allows you to record the screen activity and your voice. The result is an AVI video file. There are two ways for recording your lectures :

- *Production of indexed recordings of Microsoft PowerPoint slideshows*  
If you use Microsoft PowerPoint to do your presentation and if you want to index the contents of your recording, use *V3 Capture* add-in for Microsoft PowerPoint. The AVI file produced by *CamStudio+* will be complemented with indexing information collected in a LOG file. Please refer to section 2.1 from this manual for information on how to use the add-in.
- *Standalone use*  
*CamStudio+* allows you to record all your no-Microsoft PowerPoint presentations (OpenOffice, Adobe Acrobat, Lotus Notes, ...) thanks to the fact that *CamStudio+* records all the activity from your computer screen and your voice to make a AVI video file. Please refer to section 2.2 from this manual for information on how to use *CamStudio+*.

To get easily started with *V3 Solution* this guide provides hereafter a step-by-step description of both usages, namely the production of indexed recordings of Microsoft PowerPoint slideshows and the standalone use. Each step is illustrated with a screenshot with a yellow arrow indicating where you should click.

## 2 STEP-BY-STEP INSTRUCTIONS

### 2.1 Production of indexed recordings of Microsoft PowerPoint slideshows

#### 2.1.1 Step 1

First of all if you have not already installed *CamStudio+* software and *V3 Capture* add-in for Microsoft PowerPoint on the computer from which you will be presenting please do so. If you have already installed it please jump to Step 2.

*CamStudio+* and *V3 Capture* add-in are provided with *XviD video codec* in the *V3 installation package*. You can download a copy of the latter from the following URL : <http://www.leonardo-v3.eu>. For more information on how to install it please refer to *V3 solution installation and configuration manual*.

#### 2.1.2 Step 2

*CamStudio+* records your voice. Please make sure that you have your audio device (microphone, Bluetooth headset, ...) connected to your computer and functional so that your voice will be recorded. For more information on how to connect your audio device (microphone, Bluetooth headset, ...) to your computer please refer to its companion manual. A good way to check the sound under Microsoft Windows XP is to launch *Windows sound recorder* (Start menu -> Programs -> Accessories -> Entertainment -> Sound Recorder). Check if the selected device is the one you want to use for recording. Record your voice then play it back. If you hear your voice, it means that it is working.

#### 2.1.3 Step 3

Open the PowerPoint slideshow you will be presenting like you might normally do by click on the file in the directory. PowerPoint will start and if the *V3 Capture* add-in is installed it will automatically load it.

When the PowerPoint file has loaded click on the tab “Add-Ins” if you use Microsoft Office 2007 as shown in [Illustration 1](#). For Microsoft Office XP, a button called *V3 Capture* has been added to your toolbar.

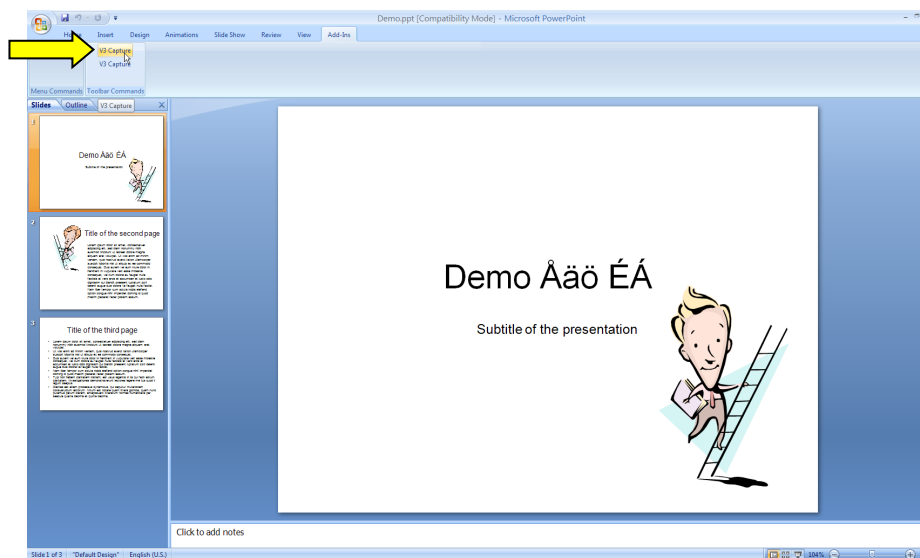


Illustration 1: V3 Capture button

#### 2.1.4 Step 4

When you have clicked the *V3 Capture* button a new window will appear on top of your PowerPoint window. This is the *CamStudio+* window. To start recording your presentation click on the record button which is a red round circle as shown in [Illustration 2](#).

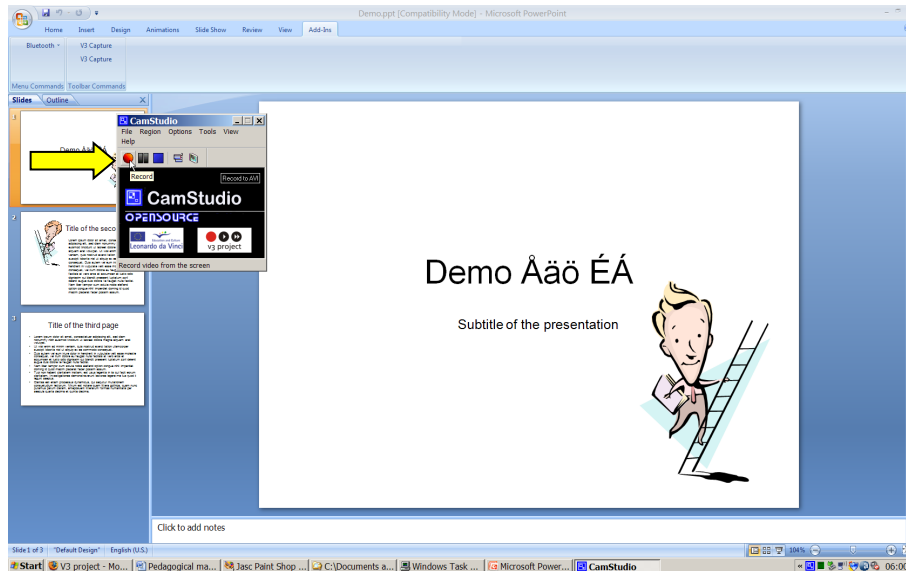


Illustration 2: V3 Capture add-in : CamStudio+ window

#### 2.1.5 Step 5

When you click on the record button your presentation will launch into full screen slideshow mode and the recording of your presentation including everything that happens on the screen of your computer as well as your voice will be recorded. *CamStudio+* window automatically minimizes itself in the Microsoft Windows task bar.

#### 2.1.6 Step 6

Now you simply continue with your presentation and you are free to move backwards and forwards in your presentation as well as open your browser or any other software. *V3 Capture* will record everything that happens on your screen. In order to switch to your browser or other software please use the “ALT+TAB” keys combination. Do not use the “ESC” key to leave the presentation because it will end the recording and create the AVI video file.

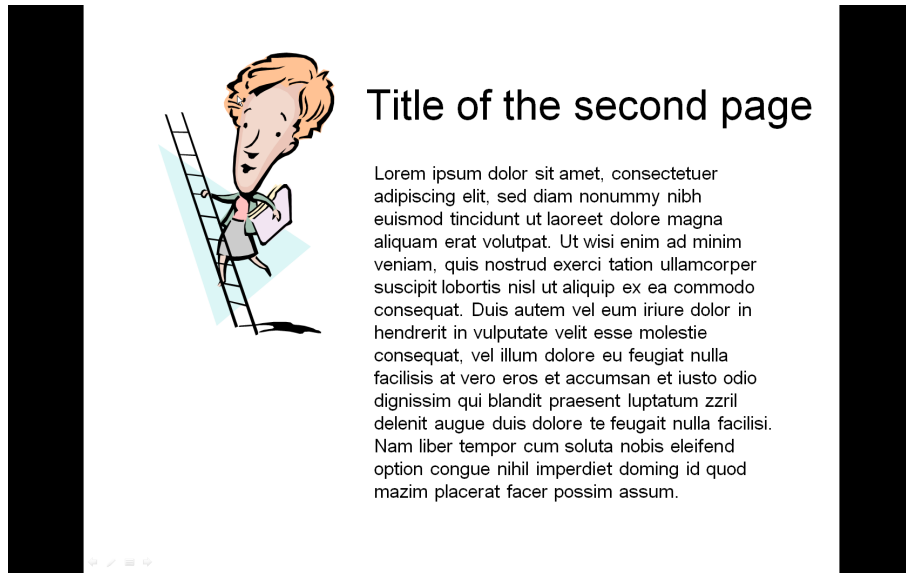


Illustration 3: Continue with your presentation

### 2.1.7 Step 7

When you have ended your presentation and come to the end of the PowerPoint presentation click on the black screen indicating that your presentation has come the last slide (see [Illustration 4](#)). If you want to stop the recording before the end of your presentation just press the “ESC” key. By doing so you will also automatically stop full screen slideshow mode as well as stop the recording. *CamStudio+* will now compile the screen and voice recording. It is not possible to close the software during this process (see [Illustration 5](#)).

Note : it is not possible to use the stop keyboard shortcut from *CamStudio+* when using *V3 Capture* add-in.

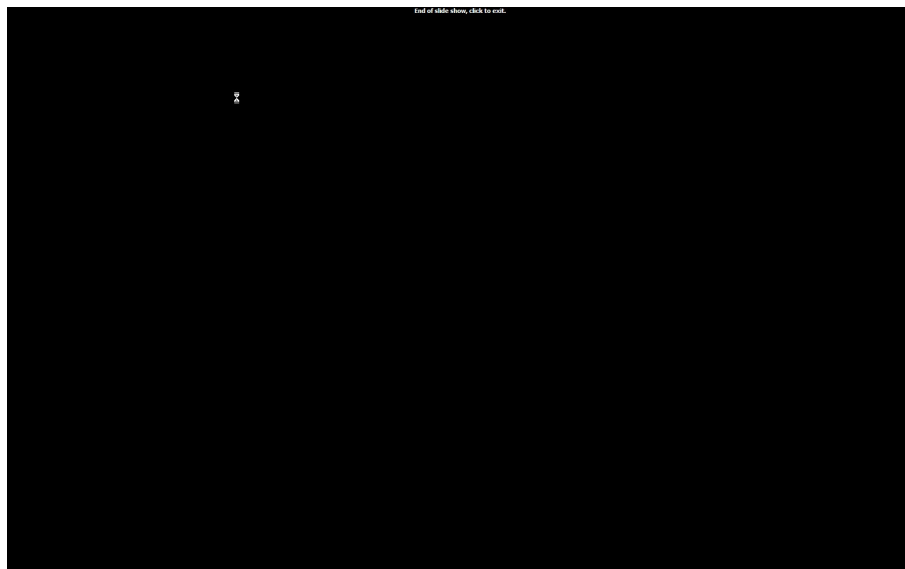


Illustration 4: End of presentation - Black Screen

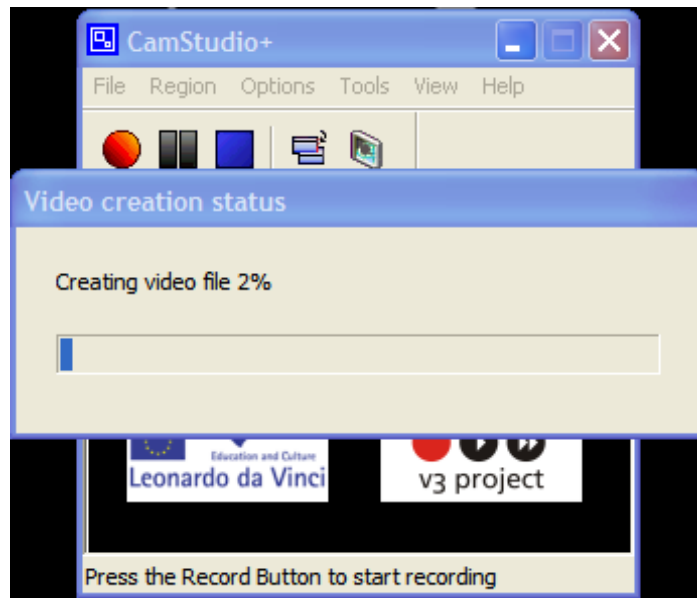


Illustration 5: CamStudio+ Progress Window

### 2.1.8 Step 8

When the compilation process is finished it has saved the media file (AVI) of your presentation on your computer. The directory containing the media file will automatically open if the option “Open video directory after compression” from *CamStudio+* menu is selected. If not open manually the directory with the AVI file. Then double click the file to view it if you want to double-check the success of the recording.

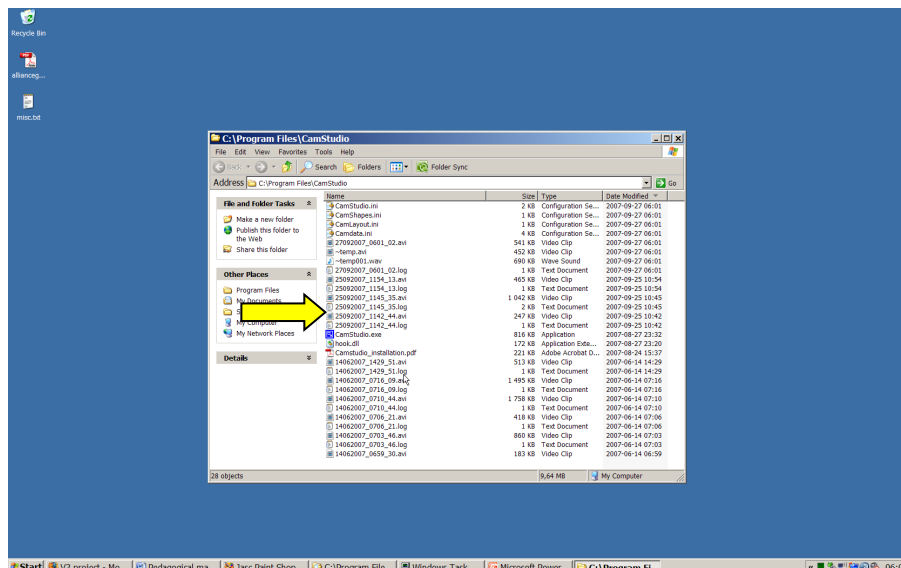


Illustration 6: Checking the media file



## 2.2 Standalone use

### 2.2.1 Step 1

First of all if you have not already installed *CamStudio+* software on the computer from which you will be presenting please do so. If you have already installed it please jump to Step 2.

*CamStudio+* is provided with *XviD video codec* and *V3 Capture* add-in for Microsoft PowerPoint in the *V3 installation package*. You can download a copy of the latter from the following URL : <http://www.leonardo-v3.eu>. For more information on how to install it please refer to *V3 solution installation and configuration manual*.

### 2.2.2 Step 2

*CamStudio+* records your voice. Please make sure that you have your audio device (microphone, Bluetooth headset, ...) connected to your computer and functional so that your voice will be recorded. For more information on how to connect your audio device (microphone, Bluetooth headset, ...) to your computer please refer to its companion manual. A good way to check the sound under Microsoft Windows XP is to launch *Windows sound recorder* (Start menu -> Programs -> Accessories -> Entertainment -> Sound Recorder). Check if the selected device is the one you want to use for recording. Record your voice then play it back. If you hear your voice, it means that it is working.

### 2.2.3 Step 3

Click on *CamStudio+* executable file (*CamStudio+.exe*) or click on the *CamStudio+* shortcut if you created one after the installation. The main window appears and is shown in [Illustration 7](#).



Illustration 7: *CamStudio+* main window

#### 2.2.4 Step 4

If it is the first time you launch *CamStudio+* or if you want to check the configuration please refer to *V3 solution installation and configuration manual*. In general the settings are not modified so you can skip this step and go to Step 5.

#### 2.2.5 Step 5

Once the configuration step is finished you can start recording your presentation. Click on the record button which is the red round circle (see arrow for reference). It is also possible to start recording by using the keyboard shortcuts as shown in [Illustration 9](#). The default start shortcut is F8.

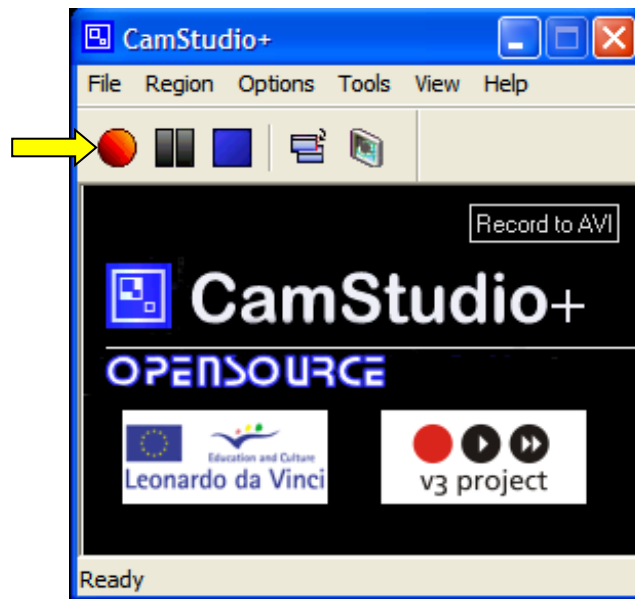


Illustration 8: CamStudio+ Record Button

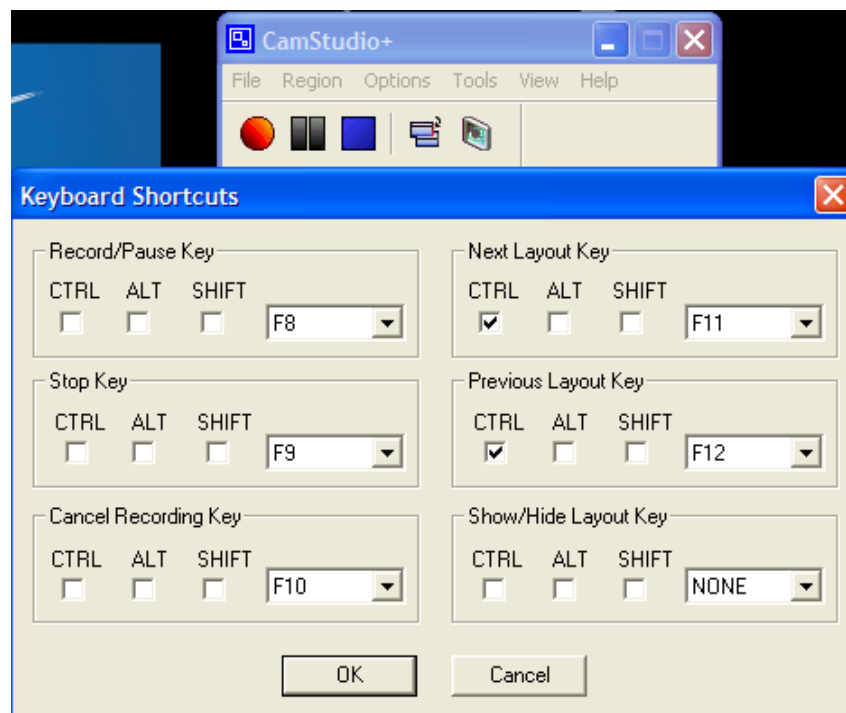
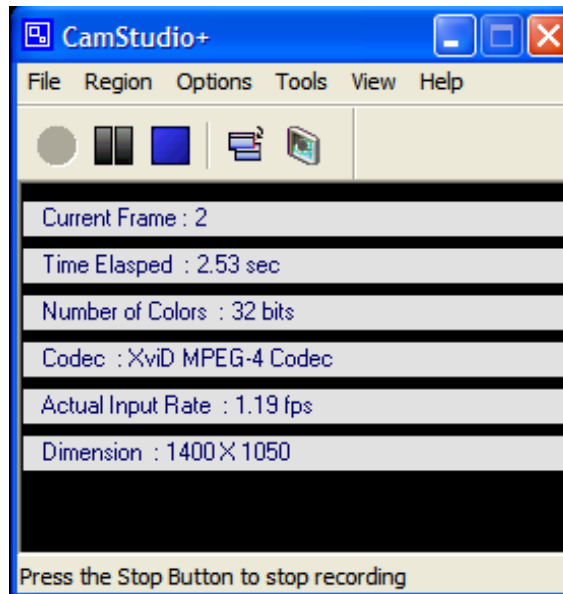


Illustration 9: CamStudio+ Keyboard Shortcuts Window

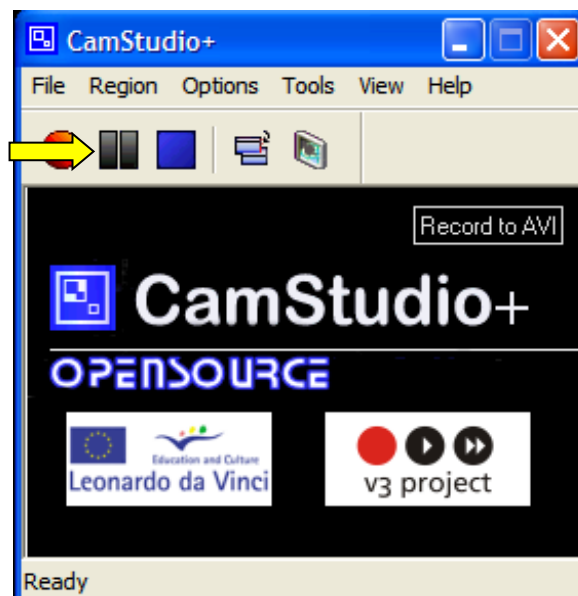
When you click the red button, the recording starts and the main window shows the recording information as shown in [Illustration 10](#).



*Illustration 10: CamStudio+ Recording Information*

#### 2.2.6 Step 6

It is possible to pause the recording if you do not want to record confidential information or if you want to make a break during the lecture for instance. To do so click on the pause button (double vertical bars in [Illustration 11](#)). If you are using *V3 Capture* add-in, use ALT+TAB key to switch between the different opened windows. Go to *CamStudio+* window, then press the pause button.



*Illustration 11: CamStudio+ Pause Button*

### 2.2.7 Step 7

When you have finished your presentation switch to *CamStudio+* window and click on the stop button which is the blue square (see arrow for reference).

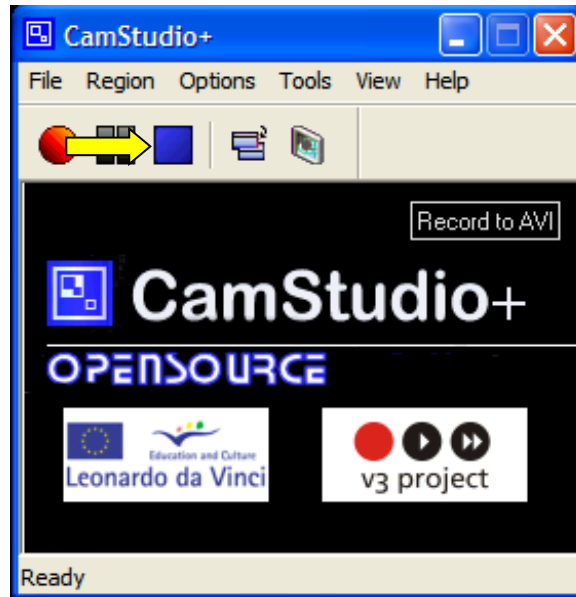


Illustration 12: CamStudio+ Stop Button

When you have clicked on the stop button a new window will appear in front of *CamStudio+* main window showing the AVI video file creation status as shown in [Illustration 13](#).

Note : it is not possible to close *CamStudio+* during the video creation process.

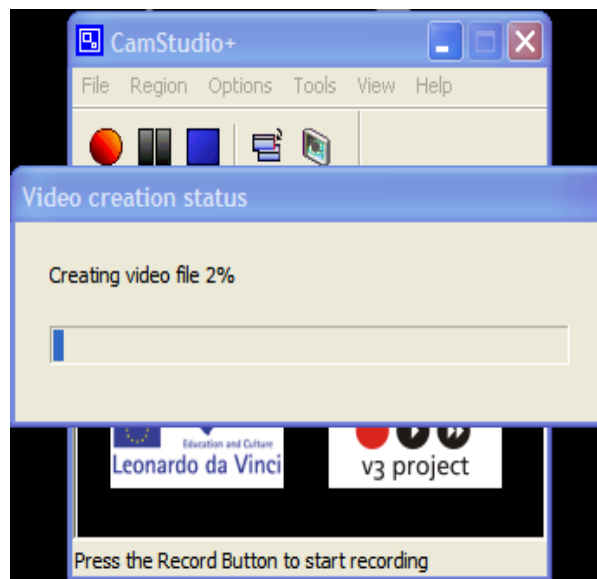


Illustration 13: Video Creation Status Window

When the video file is created the window will disappear. If you have chosen to open video files directory at the end of the recording in order to check your recording a window will appear. The name of your recording depends on the option you have chosen. If you have chosen “automatic file naming” the video format name is like DDMMYYYY\_hhmm\_ss.avi (i.e. : 23102007\_1452\_36.avi). If you have chosen the other option “ask for file name” then your file has the name you have given at the end of recording (i.e. : Marketing\_Lecture1.avi). Open it with your favorite media player and watch the video.

### 3 SOME ADVICES

#### 3.1 How to make a good recording

##### 3.1.1 Slide title

The indexation process of *V3 Capture* is based on the “title” section in your slide template. Therefore it is important to use a Microsoft PowerPoint template which includes a “title” section for each of your presentation. The titles have to be explicit and shall not contain special character like arrows.

##### 3.1.2 Questions from the audience

When you record a lecture your audio device (microphone, Bluetooth headset, ...) captures your voice. It means that if someone in the audience asks you a question his/her voice will not be recorded. A good way to proceed is to repeat the question and then answer it. It has to be done if it is planned that the audience can ask questions at the end of a lecture. If you do not want to record the questions at the end of a lecture stop the recording after your presentation. It avoids to have a long useless, partly silent period at the end of a recording.

#### 3.2 Usability

##### 3.2.1 Problems happen

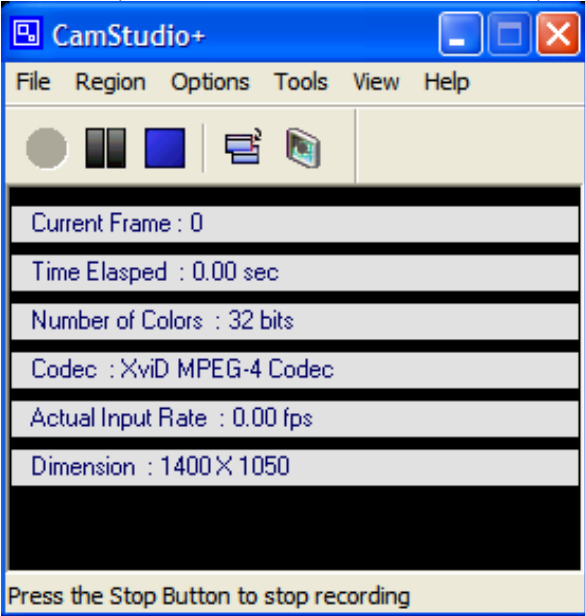
You have to be aware when using *V3 Capture* and/or *CamStudio+* that the recording does not always succeed. The reasons can be various and there are not always solutions. When a problem happens consult the troubleshooting section to see if a solution for your problem exists. For instance : if the creation of the video file at the end of the recording fails it is sometimes possible to restore a recording by merging audio and video temporary files created by *CamStudio+*. The table below shows you the cases in which problems were encountered. It shows you the cases in which everything should be OK as well.

	Office XP	Office 2007
Single Core PC	OK	OK
Win Xp		
Vista		
	Vista can check the security of <i>V3 Capture</i>	Vista can check the security of <i>V3 Capture</i>
Dual core PC	Desynchronization	Desynchronization
Win Xp		
Vista		
	Vista can check the security of <i>V3 Capture</i>	Vista can check the security of <i>V3 Capture</i>
	Desynchronization	Desynchronization



### **3.2.2 Rights on your recordings**

Regarding your rights on your recordings it depends on the law which is applicable in your country. In general your recordings are protected by the Intellectual Property regulations.

## 4 TROUBLESHOOTING

Problem	Solution
<p><i>More than one instance of CamStudio+ is running</i></p> <p>If you have launched <i>CamStudio+</i> then you launch Microsoft PowerPoint and click on <i>V3 Capture</i> button it tries to launch a new instance of <i>CamStudio+</i>.</p>	<p><i>Stop the instances not tied to Microsoft PowerPoint</i></p> <p>Just click on the “OK” button for each windows which appears. When <i>CamStudio+</i> is launched close the first <i>CamStudio+</i> instance (the one where the “Enable presentation indexing” is deactivated).</p>
<p><i>Indexing option activated in CamStudio+ and not using V3 Capture</i></p> <p>If you have activated “Enable presentation indexing” without using <i>V3 Capture</i> add-in and have already started the recording <i>CamStudio+</i> waits endlessly for information from the add-in. The information window shown in the illustration below remains inactive (i.e. : Current Frame remains at 0).</p> 	<p><i>Kill CamStudio+</i></p> <p>Go to the Windows task manager (CTRL +ALT+DEL) select <i>CamStudio+</i>. Then click on “End Task” button. Once it is closed launch <i>CamStudio+</i> again and be sure that “Enable presentation indexing” option is deactivated before starting to record.</p>
<p><i>Blocking window at the end of the recording</i></p> <p>If you have stopped the recording and the video creation status window still shows “Preparing compression and merging” after 5 minutes (see the illustration on the next page).</p>	<p><i>Kill CamStudio+ and merge temporary files</i></p> <p>Go to the Windows task manager (CTRL +ALT+DEL) select <i>CamStudio+</i>. Then click on “End Task” button. Once it is closed go to the temporary video directory and check the files called “~temp001.wav” (contains sound) and ~temp.avi (contains video). If there are no problems use a software to merge both files (i.e. : <a href="#">VirtualDub</a>).</p>



Problem	Solution
	
<p><i>CamStudio+ error messages during the recording or at the end of it</i></p> <p>If you have stopped the recording or you are recording and <i>CamStudio+</i> shows a message telling it was not able to create the video file. For instance : “Unable to create AVI”, “Unable to merge audio and video streams”.</p> 	<p><i>Kill CamStudio+ if needed, merge audio and video files and check the disk capacity</i></p> <p>If you need to kill <i>CamStudio+</i> go to the Windows task manager (CTRL+ALT+DEL) select <i>CamStudio+</i>. Then click on “End Task” button. Once it is closed check if there is enough space left on the disk you use for storing the files. If there is not enough space left please free space. Then go to the temporary video directory and check the files called “~temp001.wav” (contains sound) and ~temp.avi (contains video). If there are no problems use a software to merge both files (i.e. : <a href="#">VirtualDub</a>).</p>
<p><i>Headset battery is exhausted</i></p> <p>If you use a Bluetooth headset and you hear regular beeps from it meaning that the battery is exhausted.</p>	<p><i>Stop the recording and swap the battery</i></p> <p>Stop the recording. Then swap the battery with a fully loaded one or switch to another Bluetooth headset or switch to a wired/wireless microphone. Connect it to your computer and start again the recording. Notice : It is better to stop the recording than using the pause feature because it is not sure that Microsoft Windows will correctly switch to another audio device. This can result in a</p>

Problem	Solution
	video file with no sound from the time the battery was exhausted.
<i>Not possible to connect the Bluetooth headset to the computer</i> If your Bluetooth headset is not detected by your computer check if the pairing stack is not full. For instance : it is possible to connect up to 8 different devices (computers, mobile phones, ...) with the Nokia HDW-3.	<i>Reset the pairing stack</i> Reset the pairing stack. It means that all the devices in the stack will be erased. You will have to restore the pairing between your headset and your other devices. Refer to your headset manual to know how to proceed.
<i>Microsoft PowerPoint asks a question and then crashes</i> When using <i>V3 Capture</i> add-in it happens Microsoft PowerPoint asks for something (i.e. : it asks if you want to install a grammar package because it is not installed) and it crashes because <i>V3 Capture</i> can not launch the slideshow.	<i>Restart Microsoft PowerPoint and answer "no" to its question</i> Accept to restart Microsoft PowerPoint. When it is restarted it asks you the same question. If it asks you for installing packages click on "no". Then go to the Windows task manager (CTRL+ALT+DEL) select <i>CamStudio+</i> . Then click on "End Task" button. Once it is closed click on <i>V3 Capture</i> button to start a new recording.
<i>Microsoft PowerPoint not usable during a long time under Microsoft Vista</i> When you launch Microsoft PowerPoint under Microsoft Vista the latter checks if all macros and add-ins of which <i>V3 Capture</i> . This operation can take a lot of time.	<i>Wait until the end of the security checks</i> Wait until the end of the operation or deactivate the security check for <i>V3 Capture</i> .

## 5 KNOWN ISSUES

Problem	Solution
<i>VideoLanClient can not play my recordings</i> When you watch your recording with VLC (VideoLanClient) it remains on the first frame of the video.	<i>Use another video player</i> Play your recording with another video player (Microsoft Windows Media Player, Real Player, MPlayer, ...).
<i>The slideshow stops before the last slide of my presentation</i> If you change the slide numbering of your Microsoft PowerPoint file and you use the <i>V3 Capture</i> add-in it happens that the slideshow stops before your last slide (i.e. : your slide numbering starts at 30 and goes to 90. The slideshow starts at slide 30 and stops at slide 60).	<i>Change your numbering</i> Change your numbering and set it to default numbering.
<i>Special characters in my slide titles</i> If you use special characters (arrows, ...) in your slide titles it is possible that <i>V3 Capture</i> stops to index your presentation.	<i>Edit your slide titles</i> Edit each slide title where special characters are present and remove them from the title.
<i>Desynchronization</i> If you use a computer with a dual core or a multicore processor there is a loss of lipsync. The video is not synchronized with the audio.	<i>There are no solutions</i> Audio and video threads are handled by separate cores without synchronization between them.

## 6 DOCUMENT HISTORY

Date	Revision	Author(s)	Comment
23 X 2006	0.1	Geoffrey Miche	Initial version
26 X 2007	0.8	Geoffrey Miche	Edited version following the comments from Laurent Schumacher
21 XI 2007	0.9	Geoffrey Miche	Edited version following the comments from Laurent Schumacher
26 XI 2007	1.0	Geoffrey Miche	Edition of WP2 user guide made by Petrus Linqvist following comments from Geoffrey Miche Integration of WP2 edited version to <i>CamStudio+</i> user guide
27 XI 2007	1.1	Laurent Schumacher	Minor changes for the sake of consistency