

# Animation export for L2000 Version 1.6.1 Help

*In general: use of the program is at your own risk. I cannot be held responsible for any damage, in any kind, resulting from using the software. When using the screen capture routine, you must check that the screen capture doesn't capture information you don't want to be captured. I cannot be held responsible when information is published on the internet or elsewhere which is confidential and/or was not intended to be processed by this program.*

*In short, I'm not responsible for anything resulting from using this software. Using this software is at your own risk, with no exceptions.*

## 1 Animation Export:

Animation Export is a program intended for publishing StormTracker data created by L2000 or Boltek StormTracker software on the internet. It converts a bitmap created by L2000, a screen capturing program, or by the screen capture function of Animation Export itself, to a GIF and/or animated GIF. It has an FTP routine for putting the files on an FTP server.

## 2 Screen capture routine:

Animation Export contains a screen capture routine. There are two possibilities:

- 1 - If you do not select the box "Activate window before capture", Animation Export makes a screen capture of the desktop (the screen as on the monitor), at specified intervals.
- 2 - If you do select the box "Activate window before capture", Animation Export will activate a window (bring it to the front), before capturing the screen. This makes it possible to do other tasks on the computer. When you start the export routine, you are asked to select the window to be captured. If you use this method of screen capture, you are advised not to do any user-actions at your computer (such as typing in text, starting programs, switching to programs) at the moment of the capture, because this may interfere with the activation of the window. If you check the box "Beep 3 seconds before capture", Animation Export beeps three seconds before the capture, so you can for that moment stop typing in text for instance.

**Important:** If you close the window you selected to be captured (by quitting the program), you will need to stop the export routine, start it and select a window again. This is because if a window is closed and opened again, it gets a different handle from Windows.

**Notes:**

- The window you selected to be captured will be minimized after capturing it.
- If the title of the window appears twice in the list, mostly you will have to select the first one. If you encounter problems, try selecting the second one. The windows are listed in order of appearance on the screen (the top-level window is listed higher than the others).
- If the program belonging to the window you selected, hangs, Animation Export will also hang.
- If an information tag is shown near your mouse cursor (such as information about the function of buttons) that information tag is also captured.

Tip: If you deselect "Always on top" in the "Taskbar & Start Menu" properties (Start -> Settings -> Taskbar & Start Menu), you won't see the taskbar in the screen captures.

Note: Animation Export can handle bitmaps up to 1024x1024 pixels. For publishing data on the internet, this is sufficient. But the screen capture files have the size of the screen. So it is necessary to set the display smaller than 1024x1024, for instance 1024x768 or 800x600 or 640x480.

## 3 Description of the main dialog:

### 3.1 Export Options

Screen capture file: Here you must specify the file where L2000, or the screen capture software you are using, saves the screen capture file. Animation export can only handle Windows Bitmap files (BMP) files. Don't forget to add ".BMP" to the filename.  
If you use the screen capture function of Animation Export, you must specify here a filename which can be used by Animation Export as a temporary file for the capture.

- Screen capture settings: To use the screen capture function of Animation Export, check the box: "Enable screen capture". Specify an interval. Animation Export will round up the intervals, for instance, if you specify 6 minutes, Animation Export will capture at :06, :12, :18 etc.  
If you want Animation Export to activate a window (for instance L2000 or Boltek StormTracker software), check the box: "Activate window before capture". If this box is checked and you start the export routine, you are asked to select the window to be captured. Animation Export will activate that window before doing the capture and then return to the window which was active before the switch.  
If you want Animation Export to beep three seconds before capture, check the box: "Beep 3 seconds before capture". In Windows 2000 and WindowsNT the internal speaker will beep, in other Windows versions, it plays the default sound event on computers with a sound card, and the standard system beep is sounded on computers without a sound card.
- Export name: Here you can specify the names of the export files. To have the computers recognizing the file as a GIF file, you must add ".GIF" to the file names (for instance: "c:\export.gif"). If you leave this field blank, the program will not create the GIF file to which the field (image/animation) belongs.
- Color depth: Here you can select the number of colors that will be used in the GIF images. GIF images may contain at most 256 colors. By selecting auto-detect, the program will determine how much colors are used in the screen capture file and which color depth is best suitable. If more than 256 colors are used, or you select fewer colors than the image contains, the program will use the colors most used in the image. All other colors will be replaced by one of these colors. To see how much colors are used in the screen capture file, look in the status bar, while a screen capture is processed. There the program will show how much colors are used in the file.
- Comment: Here you can specify comments that will be placed in the GIF file. These comments are not well supported. Most Internet browsers don't do anything with them. But I implemented this option, because I thought it is useful to have the possibility to add some information about your location, copyrights or something like that.  
Note that comment is only added to the animated GIF when the file is created. So to add comment to the animated GIF, the file must not exist.
- Rate: Here you can specify the rate of the animation in minutes per second. For instance, if you enter 60, the animation will display 60 minutes in one second. The program calculates automatically the necessary pause between the frames, based on the time the screen capture file was updated. So it doesn't matter if you alter the interval in L2000, while running Animation export.
- Span: Select here the span of the animation in minutes. For instance, if you enter 60, the animation file will only contain images not older than 60 minutes.
- Pause after: Select here the pause after showing the last frame before starting over the animation, in 1/100 second. For instance, if you enter 200, the animation will pause for 2 seconds, before starting over again.
- Skip frames: Here you can specify the minimum time (in minutes) between to frames in an animation. So if the time difference between two frames in the animation is less than the time specified here, the later of the two frames is deleted. With this option it is possible, for instance, to create an image each minute, but frames are added to the animation only each fifteen minutes. This makes it possible to have an animation of a long time period, without having enormous files. If you enter 0, all images are added to the animation.
- Note 1: Because the interval in which screen capture files are created by Lightning/2000 may vary slightly (for instance due to heavy lightning activity), Animation Export has a margin of 30 seconds. So if you have entered 5 minutes, the first images created after 4 minutes and 30 seconds after the previous image are added.
- Note 2: Animation Export isn't able to determine if the animation file has changed. So after each update of the screen capture file, it will perform a FTP upload, even if there are no frames added or deleted from the animation.

### 3.2 FTP Options

Using the following options, you can upload the GIF images created by the program and some additional files to a FTP server. The program uses a temporary file "aetemp.tmp" to upload the files, but it won't check if a file called "aetemp.tmp" is already at the server (but I think this is normally not the case).

Note: If you have specified a value for "Skip frames", please read note 2 of the information about "skip frames" (see above).

- Remote location: Here you can specify the location where the files should be uploaded to, including the server name and directories, for instance: "ftp.yourserver.com/yourdir/". Don't add "ftp://" to the name (as may be done in internet browsers). All files are placed in the same directory. If you don't want to upload the files created, leave this field blank.
- Login: Enter here the log in name, needed to access the FTP server.
- Password: Enter here your password, needed to access the FTP server. Something about security: the password is stored in the registry. This is done with some weak encryption. It is not possible to directly read the password from the registry, but with some advanced puzzling, it is possible to decrypt the password.
- Disconnect: If the box is checked, the program will disconnect from the Internet after uploading the files. The program will not check if the Internet connection is used by other programs. This option only makes sense if you dial-up with a modem.
- Upload files: Here you can specify other files to be uploaded together with the GIF files. Separate each file name with <Enter>, so place each file name on a different line.
- FTP Mode: Select here the mode for the FTP connection. You can choose between active and passive mode. Some FTP servers allow only passive or only active modes and in these cases you should consult your FTP server. Receiving error code 12003 is an indication that possibly the wrong mode is selected. Default is active mode.
- Upload using a temporary file If you select this option, all files are uploaded to the FTP server using a temporary file (named aetemp.tmp). After the transmission of the file to the server has finished, the file is renamed back to the original filename. Selecting this option prevents that during the upload of a file, the file can not be downloaded by visitors of your site.

### 3.3 Status

This field shows you the status of the export routine. If the program is busy with something, the status line will show a sentence describing the activity, followed by three dots ("..."). Messages from the FTP routine are preceded by: "FTPGATE:".

### 3.4 Buttons:

Click Start to start the export routine. After pressing Start, the program will wait for the next update of the screen capture file.

Click Stop to stop the export routine. After pressing Stop, the export routine will finish first its current export cycle before stopping.

Click Exit to leave the program. If you click Exit, the program is leaved immediately, without finishing its current export cycle. This can cause invalid GIF files and the possibility that the program cannot use the previous animation file anymore and that all frames are lost, so the animation file has to be created from the beginning again. It is recommended that you first click Stop, and waits till the export cycle is finished and than exit the program.

If you check the box "Automatically start export at startup" the export routine is started when Animation Export is started.

## 4 History

### *version 1.6.1 (2003-01-13):*

- More detailed error information is given when errors occur during the FTP upload.
- Bug fixed. In previous versions, when the program was sent for the second time to the system tray, it sometimes performed an illegal operation and crashed.
- Option added for a choice whether you want the upload of the files via a temporary file or not.
- Main dialog redesigned.

### *version 1.5.0 (2002-8-16):*

- Implementation of active and passive mode for FTP transfers.
- The program can now handle bitmaps up to 1024x1024 pixels instead of 1000x1000.
- An option for starting the export routine when the program is started, is added.

### *version 1.4.0 (2002-5-20):*

- Screen capture function added.

### *version 1.3.0 (2001-10-3):*

- Registry access under WindowsNT and Windows2000 fixed.
- When minimized, the window is hidden and an icon is placed into the system tray.
- An option is added for skipping frames out of an animation.
- The software now doesn't check continuously if the screen capture file is updated, but 10 times per second.
- The software now only starts exporting if the screen capture file isn't opened for writing by other threads and/or programs to prevent corrupted bitmap files.

### *version 1.2.0 (2001-7-7):*

- First attempt to fix problems with registry access under WindowsNT and Windows2000.
- If two identical frames are added to the animation, one is deleted (sometimes, the screen capture file is updated almost immediately after the first update. It seems to me that the cause of this is not in Animation Export, maybe it is caused by the operating system or L2000).
- Files are uploaded via the temporary file "aetemp.tmp".
- The program now uses less CPU while waiting for the next update.

### *version 1.1.0 (2001-6-24):*

- Support for 24-bit and 32-bit bitmaps added.
- An early roundup in the calculation of the pause between frames fixed.
- Some other minor issues fixed.

### *version 1.0.0 (2001-6-22):*

- First version of the program.