

## BB FlashBack White Paper

1<sup>st</sup> Edition – BB FlashBack 1.4.1 – February 2005

### Overview

BB FlashBack is a leading screen recording program for Windows, published by Blueberry Software. When the record function is activated, screen activity is stored in a real time video file. This recording can then be replayed, edited and enhanced with graphics, text or sound effects for export to a wide range of formats.



Although this product is primarily designed for those creating movies for tutorial, training and demonstration purposes, BB Flashback has been applied with success to a wide range of other fields including showing work to clients, converting PowerPoint presentations for the Web and archiving lessons or conferences.



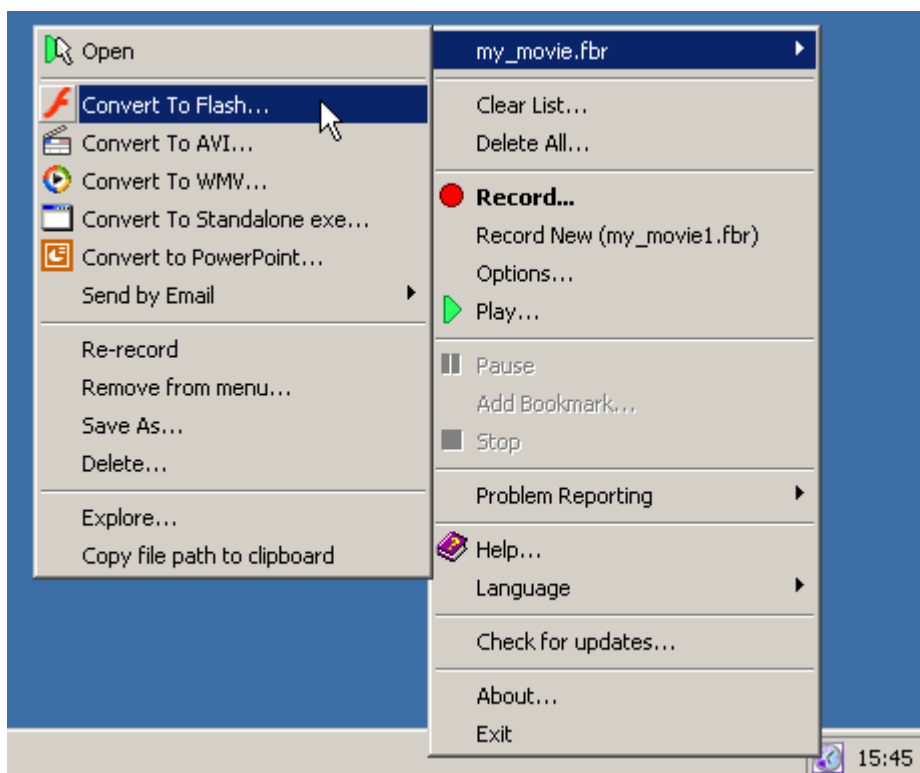
A separate screen recording product, BB TestAssistant, is available for software developers and testers who wish to use Blueberry's screen recording technology for capturing and reporting software problems.

### Competitive advantages

BB FlashBack has many advantages over other apparently similar software products. A number of these are detailed below:

#### User interface

Throughout the development of BB FlashBack "ease of use" has been a prime focus. Consequently, BB FlashBack's graphical interface is easier to learn and use than other competing applications. See "program modules" for more information.



The BB FlashBack recorder.

## Recording methodology

Whereas other screen recorders are limited to a single capture technique, BB FlashBack offers a choice of three different recording methods. This includes the Blueberry capture driver, signed by Microsoft for Windows 2000 and XP systems, representing the most advanced and high performance recording available to date. The choice of recording methodologies means that, unlike our competitors, BB FlashBack can give you the best recording whatever your material, computer and operating system. See “methods of recording” for more information.

## Movie output

Many screen recording programs offer a limited range of output. However BB FlashBack can export movies to 5 different formats ensuring the optimal professional result every time. Compression methods developed for the FlashBack program mean that file size, particularly in FBR, EXE and Flash formats, often outperform other applications. See “publishing formats” for more information.



Export movies to a wide range of formats.

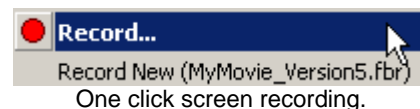
## Program modules and their functionality

BB FlashBack is divided into two modules - the recorder and the player. Both are installed by FlashBack’s installation program. The recorder runs in the Windows system tray and allows the user to record the screen according to the selected options and settings. This module also records user speech or computer sounds if this has been enabled in the options.

The player allows the user to replay movies and to perform all editing, production and format conversion functions. Both programs contain numerous menu links to each other to allow quick and easy switching between the modules.

## Methods of recording

BB FlashBack has a range of three different technologies to record screen activity. A short diagnostic test is included which, when run, gives you guidance on which recording method will best suit your current hardware and software setup.



### Capture driver recording mode

BB FlashBack includes a special capture driver which is probably the most sophisticated screen recording technology currently available. Rather than taking a rapid succession of screenshots, or even analysing the screen for changes, the capture driver integrates with Windows and is informed by the operating system every time anything has changed on screen. This means extremely fast recording, totally smooth playback and a smaller file size.

The capture driver is signed by Microsoft for use on Windows XP and 2000 operating systems. This driver is not supported on Windows 98, Me and NT platforms - but users of these operating systems will instead have a choice of the two alternative technologies below.

### **DirectX recording mode**

DirectX recording is an innovative recording technique that monitors different sections of the screen for changes. When a change in the screen is found, only the required section of the screen is analysed and stored to disk – meaning faster recording for the user without quality loss. This recording method is preferable when recording on a when capturing special content such as Flash, extremely graphical material, or when using a lower specification computer.

### **GDI recording mode**

In GDI mode the whole screen is captured in a series of frames then compared for differences. Changes are stored to disk and compressed in a movie file. GDI recording is preferable on higher specification machines with older operating systems, and offers reliable and quality recording.

#### ***Frame rate***

When either DirectX or GDI mode is selected, the user may choose the frame rate used during screen capture to get the required balance between movie smoothness and recording speed. A higher frame rate means a smoother quality replay. A lower frame rate means faster recording. Note that the quality of the screen image is consistently high, it is only the smoothness of changes (such as mouse and window movements) which are affected by frame rate.

## **Standard movie creation cycle**

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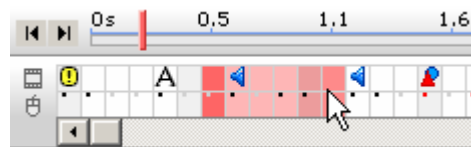
The typical user might go through the following process to create a movie.

### **1) Recording**

The user loads BB FlashBack Recorder, selects the appropriate recording settings – including options to select whether sound should be captured, before pressing the record button to start recording. When recording is complete, the footage is stored in an FBR format file.

### **2) Editing**

After recording, the FBR file is loaded into the BB FlashBack player where it can be stored, edited and replayed. Footage can also be removed, inserted or shifted to another location. The movie can be slowed down or speeded up – either entirely or in part - and the mouse cursor edited. Changing the viewable movie area (“clipping”) is also possible.

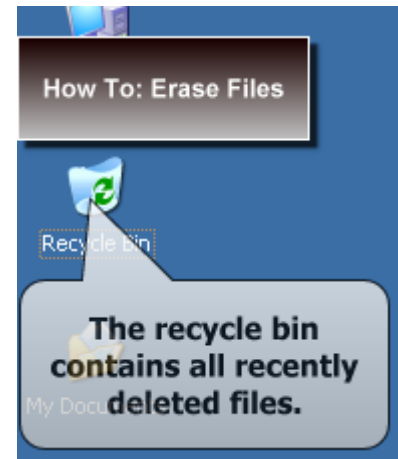


The FlashBack player's framebar.

NB: All movies loaded into the player are displayed frame by frame, even if they were recorded with the capture driver which does not use a frame by frame technique. This gives the user maximum editing control.

### 3) Production

BB FlashBack can insert text, sound and graphics. Text is usually displayed inside a graphical textbox, or callout, and sounds can be imported from MP3/WAV files or through the PC microphone to add to those initially recorded if sound recording was enabled. Graphics may be imported from any standard image format file. All these effects can be positioned onto selected frames so that the user can control precisely when they appear in the movie.



BB FlashBack text callouts.

### 4) Publishing

For final distribution the movie is usually converted into another industry standard format such as Flash, AVI, WMA or EXE. Note that movies cannot be edited by the FlashBack Player in these formats, so the FBR file should be kept in case future changes are required. The supported export formats are detailed below.

### Publishing formats

BB FlashBack movies can be distributed in any one of five formats: FBR, Flash, EXE, AVI and WMV. FlashBack also contains an additional option to export to PPT (PowerPoint) files. In this case the movie is first exported to Flash and then embedded inside a PPT file. All formats support sound.

#### **FBR (FlashBack format)**

FBR format is BB FlashBack's native file format. It is both high quality and highly compressed to give a low file size. FBR movies are only viewable in FlashBack Player. In addition to the standard player included in the full FlashBack package, a freeware FBR player with no editing or publishing features is also available which users can distribute as they wish.

#### **AVI and WMV Formats**

AVI and WMV files are encoded with a particular codec. Codecs are third party pieces of software, separate from the BB FlashBack program. When exporting to either of these formats, the application will prompt the user to select from a list of codecs installed on the operating computer. The codec used to encode the movie is required to be present in order to view the footage.

#### **Flash Format**

Flash is perhaps the most widely used movie format - Macromedia Flash being a leading standard for computer displayed animation. The free Flash plug-in required to view Flash files is present on the vast majority of modern computers. Upon exporting to Flash format BB FlashBack will create two files: a HTML and a SWF. The SWF file is the actual movie footage while the HTML is a web page that shows the SWF at the correct size and quality.

#### **Executable Format**

EXE movies require no playing software in order to be viewed - they are in fact FBR files wrapped with a special mini-player inside the executable file.

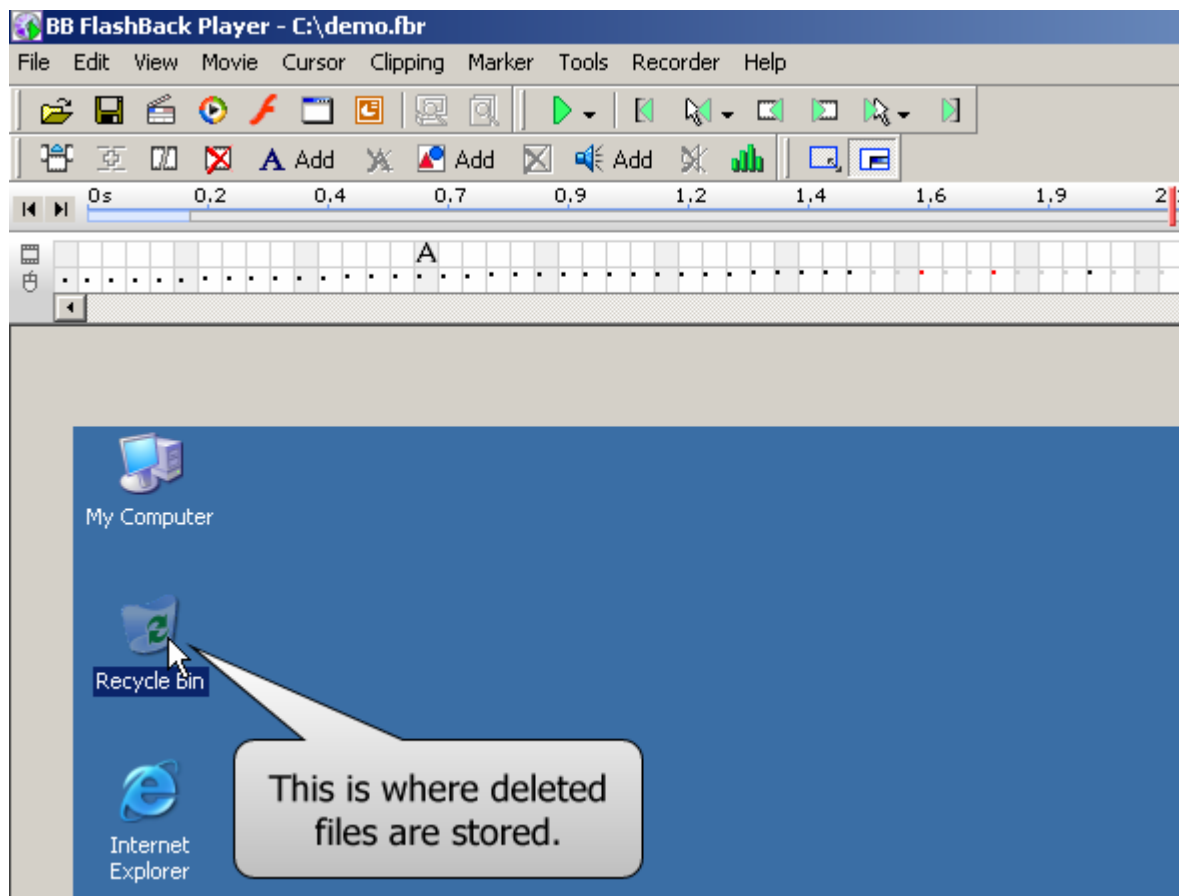
## System requirements

BB FlashBack has the following minimum system requirements:

- 300 MHz or higher CPU clock speed required; 600 MHz or higher recommended
- 128 MB of RAM or higher
- 20 MB of available hard disk space for application files
- Graphics card with 4 MB or video memory required; 8 MB recommended
- Super VGA (800x600 or higher resolution) video adapter and monitor
- Windows 98 or higher
- DirectX 7.0 or higher
- Windows installer engine 1.1
- Keyboard and Microsoft mouse or compatible pointing device

## Summary

A great deal of design, development and innovation has gone into the creation of BB FlashBack. The software provides slick recording technology and powerful editing features in an easy to use interface. Whatever is required - quick recordings or professional high end presentations - BB FlashBack empowers the user to create with ease a multimedia movie to impress the audience.



Review, edit and produce your movies with ease in the FlashBack player.

**For further information**

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BB FlashBack is published by Blueberry Software and sold through Component Source. For further information about the product or for ordering information, visit us online at [www.componentsource.com](http://www.componentsource.com), or email us at [sales@componentsource.com](mailto:sales@componentsource.com).