

Lights, camera, action!

The fast processors, cheap memory and large hard drives in today's PCs make video editing simpler than ever before. Jason Whittaker takes a look at the cutting edge cutting room software you need to create your cinematic masterpiece

With processors topping the 2GHz mark, hard drives available at 100GB for the same price as a 100MB drive a decade ago and enough RAM in most contemporary machines to run a space station, it appears as though computer hardware will be able to handle pretty much anything on the software front for the next 10 years or so.

One area where all this computer power is welcome is in the field of video editing. Dedicated hardware to cut film and video, add special effects and put a little polish on to the silver screen has been available since the 80s, but until recently it has been beyond the price range of the average user. Today it is a very different story – even notebooks carry gigahertz processors and capacious hard drives and the typical new desktop machine is designed for far more than routine email and word processing.

Hardware isn't the only thing currently giving you the opportunity to shine as a movie director (and producer, actor and special effects department). Digital video cameras have become easier to use, due to advances such as FireWire, and video-editing applications have also improved.

In this article, we compare some of the programs available for video editing, dividing them into (semi-)professional applications and entry-level ones better suited to novices and those with less powerful PCs. The biggest distinction is in terms of price, but there is also a considerable difference in terms of the complexity of programs in each category.

All the programs reviewed here, except Pinnacle Express, are available in trial form on our cover disc this month.

Professional/semi-professional software

If you use video on a regular basis as part of your job, you should be prepared to pay for the sort of advanced program

that will be able to take on any task you might throw at it. Professional and semi-professional video editors do not hide their full capabilities from users, but rather demonstrate themselves capable of a multitude of tasks.

• **Ulead MediaStudio Pro 6.5** MediaStudio Pro is a complete suite aimed at fulfilling just about every video task the semi-professional editor could require. Central to this is the Video Editor, which offers an excellent timeline-based editor where multiple video and audio clips are arranged and cut together, complete with transitions and special effects. Its video capture tools are easier to use than Adobe Premiere's and are particularly helped by automatic tools for converting different files to a single codec (compressor/decompressor), so the quality of all your clips is roughly the same.

Video Paint lets you add video retouching effects, onion skinning and other animation styles. However, the paint tools included in the Video Painter are fairly rudimentary and the serious professional will be better served by Adobe Photoshop or Painter.



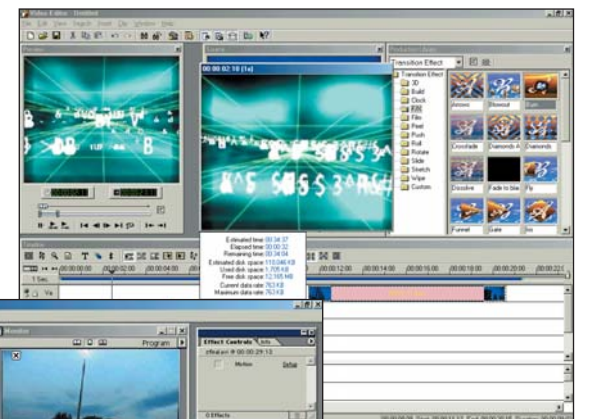
The Audio Editor is probably more useful. It's a good tool for editing sound, allowing you to extract it from the video file for finetuning, while, CG Infinity provides tools for adding titles to your videos and introducing other animation effects, including extremely complex paths.

MediaStudio suffers slightly in terms of its lack of integration and the fact that its interface appears cruder than Premiere's – indeed, Premiere is superior in terms of its timeline-editing capabilities. But if you are looking for a whole suite of applications (and a cheaper price tag), Ulead's package is probably a better choice.

• **Adobe Premiere 6.0** Premiere has long been considered the best video-editing program available for Mac or PC – and not without good reason. It may not always be the first choice for those who make a living out of professional editing, but of the packages reviewed here it is certainly the one most likely to be on their shopping list.

At the heart of Premiere is its excellent timeline. There are several different ways to view the clips in the timeline and, in addition to the Monitor introduced with version 5.0, you can arrange clips in a storyboard for rough cuts before the real work begins.

This latest version includes more tools for editing audio, not merely volume and channels but also bass, treble and chorus effects. The biggest change, and one



↑ MediaStudio is a complete suite of applications that offers good value for money

← Premiere is an excellent application that should satisfy any movie maker



← After Effects is more suited to post-production work, like animation, than editing video

After Effects is not a particularly simple tool to use – even less so than Premiere and MediaStudio. At first glance, its virtues are not apparent, as these programs offer a wide range of effects, transitions and compositing tools of their

own. For those involved in any form of professional work, however, After Effects provides extremely complex masking tools (for blocking out areas of the frame). For example, 127 different masks can be drawn and animated over every layer of a clip. It also boasts multiple titling and transition tools that go far beyond anything found in any other package.

The program comes in two formats, Standard, including core animation and compositing effects, and Production, adding extra tools for controlling just about every aspect of post-production. The price of After Effects, however, as well as the time it takes to master the many functions that it offers, means it is a program for professional video editors only.

Professional: post-production software

• **Adobe After Effects 5.0** After Effects is a slightly different package to the other professional applications here. Rather than a video-editing application, it is a compositing, animation and effects tool that is used for post-production work when a video has been captured and edited into its basic shape. Compositing is the process whereby footage is combined with other clips, images or titles to form a complete, finished product. This application has been designed for use in tandem with other Adobe editing programs such as Premiere or Photoshop.

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Beginner/entry-level software

The most basic video editor will enable you to create a passable montage of video clips and create a sort of narrative. However, even at the budget end of the market there are vast differences between each software package's capabilities and

special effects provision. One of the major distinctions between professional-level and entry-level video editors is that the latter tend to exclude complicated track-editing features. Others offer an alternative to timeline (usually based around a storyboard) that is simpler to get to grips with.

• **Pure Motion EditStudio 2.1.5** EditStudio is included in the entry-level section in this round-up, but this is due more to price than its capacities, some of which are exceptional in a video-editing program that costs less than £50. The interface of EditStudio is not as slick as many of the other competitors and, for that reason, you can expect to spend a little time working out all its capabilities. However, it comes a very close second to Pinnacle Studio 7.0 in terms of what it can do.

EditStudio includes tools for capturing and editing video footage. The former is not quite as simple as with VideoWave and Studio, but is still very good. The video editor includes potentially unlimited tracks for video and audio, all of which can simply be dragged and dropped on to the timeline. Effects and transitions are taken from the folder view in the bottom left of the screen.

The interface is slightly idiosyncratic at times, (for example, importing files is no easy business) and this program is not quite as customisable and flexible as Studio. Neither of these shortcomings is especially serious. but what you do lose at this price are the fancy effects. Despite this, for users seeking the closest thing to a semi-professional editing tool for an entry-level price, EditStudio is the best choice.

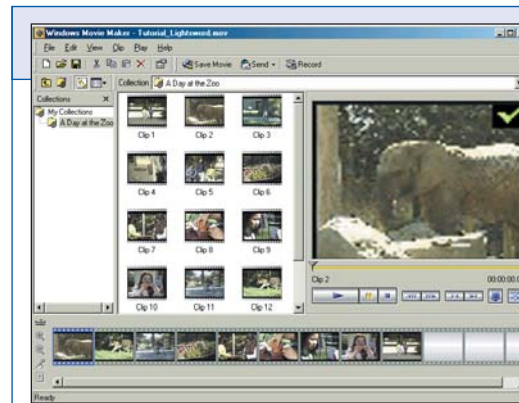
Web, tape and DVD

When creating your movies, in the vast majority of cases you will also need to consider how you can distribute them. As many computers come with internet connections and free web space, the internet can be a simple and relatively convenient way to distribute your files. The downside of this is that internet distribution is still very slow so don't expect to send large movies this way.

Videotape is still probably the cheapest way for others to see your work and certainly the most widely available. To copy files to tape, you will either need a video capture card that can output data to analogue tape, or a digital camcorder that can accept input from your PC. This latter method is probably the easiest

way to transfer files to videotape, as you can then connect a DV camera to a conventional VHS machine and record footage as you would from a television.

One way of distributing movies that is almost certain to gain ground in the future is DVD. At present, DVD recorders such as those from Panasonic and Pioneer cost between £300 and £600, but this is considerably less than a year ago and prices will soon fall further still. DVD media, however, remains fairly expensive (around £25 per disc). A way round this for short movies is to cut mini-DVDs (which typically hold 15 minutes of footage) with a cheaper CD writer. These can then be played back by anyone with a DVD player.



↑ Movie Maker is ideal for beginners who want to throw together a few short films, but its usefulness is limited

Moviemaking for free

If you have a copy of Windows Me or XP Home, a basic video-editing tool is included as part of the operating system. Windows MovieMaker is a simple tool for stringing together clips to create short movies for distribution on CD or across the web. It uses a storyboard rather than a timeline to organise footage and saves files in the Windows Media Video format. This offers reasonable quality and very small file sizes suitable for web distribution.

Although you can capture footage to your hard drive with a suitable DV (digital video) camera, you can use Movie Maker for very little else. It is not as advanced as Apple's similar entry-level tool, iMovie, and is surpassed by just about every other package on the market aside from Pinnacle Express. It is useful if you have video and absolutely no experience of editing, but you will quickly outgrow its capabilities.

• **Pinnacle Express** Pinnacle Systems has been making video capture systems for some time. Express is a standalone package that is intended to provide an easy way to capture video from a digital video camera and write your footage to video CD or DVD. But that's about all it does.

The program is simple to use, but this is largely due to the fact that you can use it for so little. Creating DVDs is probably just about simpler with this package than any other, but as there are no real tools for editing video there is no real way to improve or change your footage. For a little more you could purchase an excellent program from Pinnacle in the form of Studio 7.0; alternatively, if simple DVD

→ Studio 7.0 is a well designed package that offers an impressive array of features

creation is important to you go for VideoWave.

• **Pinnacle Studio 7.0** Studio 7.0 is a well-designed package that balances ease of use with flexibility, allowing more experienced users to change how they use the program as they become more confident.

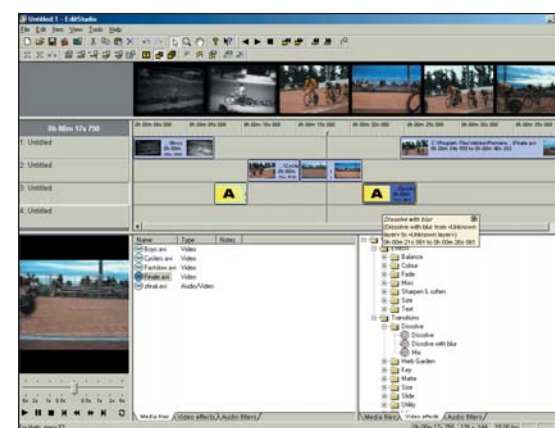
There is support for a storyboard, which makes entry-level video making as simple as possible, but click on a button in the Movie Window and you have a timeline for video, audio, transitions and music. The threefold nature of video production – capture, editing and making a movie – is represented by three buttons that show you as much (or as little) information as you need at any time.



The range of output formats is excellent, including DVD, RealPlayer and Windows Media Video. Though it is not as simple to create a DVD as with VideoWave, Studio 7.0 has equally impressive capture tools and additional audio software that makes it a recommended buy in this price range.

• **Ulead VideoStudio 5.0** VideoStudio is aimed at the entry-level and is very different from Ulead's other package – MediaStudio Pro. It shares some similarities with MGI VideoWave, but is perhaps more suitable for those without previous experience of video editing as it guides you through the process of creating a video from start to finish in its storyboard mode.

While absolute beginners may find this hand holding helpful, those with a little more experience will soon feel frustrated by the flexibility the program sacrifices for the sake of ease of use. There is a timeline mode, though, and the program includes a large number of effects, some of which are excellent, along with support for DVD formats.



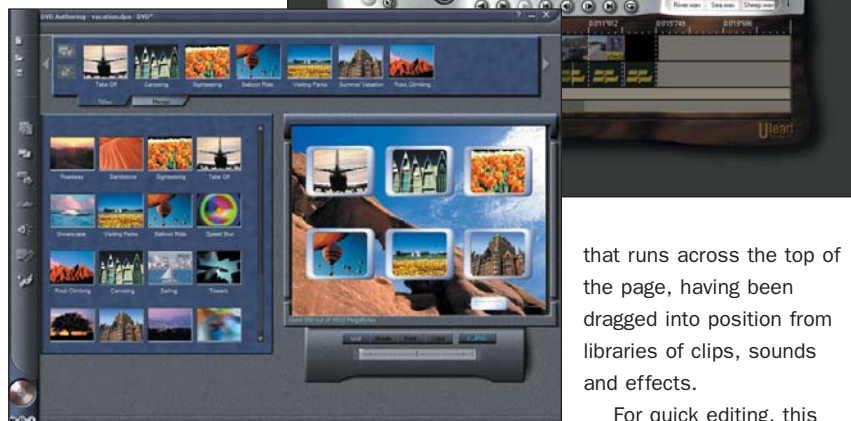
↑ EditStudio is not as user friendly as the other packages in its category, but the features are impressive for its price

→ Pinnacle Express is a limited package in that it allows you to create DVDs but not to edit the footage



→ Ulead VideoStudio is simple to use, but more experienced users will find its appeal limited

↓ MGI VideoWave's interface may be annoying for the experienced user, but the price is good



that runs across the top of the page, having been dragged into position from libraries of clips, sounds and effects.

For quick editing, this approach is very simple to

• **MGI VideoWave 5.0** VideoWave works by using the storyboard approach to editing movies. Rather than dragging clips to a timeline, they are arranged in a filmstrip

use and the VideoWave interface is very slick. At the same time, for anyone with a little experience, the fact that there is no timeline approach can become frustrating,

especially if you wish to trim or set in and out points for a clip. You can do this in VideoWave's Cutting Room, but with a minimal amount of knowhow a timeline is actually easier to use.

That said, there are some things to commend in this package. For example, if you are using footage from a digital video camera, every program reviewed here offers simple tools for capturing video, but VideoWave is one of the simplest to set up when it came to connecting an analogue capture card.

Its interface may frustrate experienced users, but the program comes at a fairly good price and is an obvious next step for someone who has exhausted the capabilities of Windows Movie Maker. The output options are superb, enabling you to make DVDs with version 5.0 as well as create videos for the web. ■



See the cover disc for our Pinnacle Studio 7.0 tutorial and trial versions of most of the programs here

Video editing at a glance

Product	Telephone	Website	Price (ex VAT)	Pros	Cons	Score
PROFESSIONAL						
Adobe After Effects 5.0	020 8606 4000	www.adobe.co.uk	£529	Wide range of post-production effects	Complex to use and expensive: professionals only	7/10
Ulead MediaStudio Pro 6.5	0031 030 659 4600	www.ulead.co.uk	£340	Large number of plug-in applications for video-editing tasks	Some applications (for example, capture and editing) better than others (such as video paint)	8/10
Adobe Premiere 6.0	020 8606 4000	www.adobe.co.uk	£459	Excellent interface, and now with support for streaming	Complex to use; expensive	9/10
ENTRY LEVEL						
Pure Motion EditStudio 2.1.5	07092 265 529	www.puremotion.co.uk	£42	Good timeline editor for an excellent price	Beginners may be slightly overawed	8/10
Pinnacle Express	01895 442 003	www.pinnacle-sys.de/uk/	£35	Cheap if you want to capture digital video	Very poor editing facilities	4/10
Pinnacle Studio 7.0	01895 442 003	www.pinnacle-sys.de/uk/	£64	Well thought-through interface; capable of complex tasks	Very little at this price	9/10
Ulead VideoStudio	0031 030 659 4600	www.ulead.co.uk	£59	Storyboard and timeline editing	Not as flexible as other packages in this price range	7/10
MGI VideoWave 5.0	0800 973 830	www.mgisoft.co.uk	£76	Simple to use and the best package in this range for producing DVDs	No timeline editing	8/10