Ghostly image

Ken McMahon discovers a no-cost way of PostScript printing.

Given the choice between a PostScript and a non-PostScript printer, which would you choose?... OK, everyone who chose the latter see me later. PostScript has many advantages over Windows printers which print a bitmap image, making use of the same Windows GDI that produces the image you see on-screen.

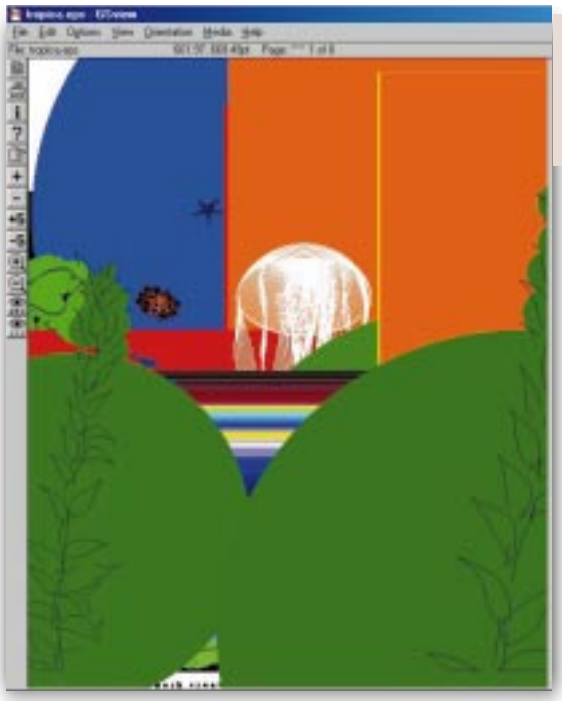
PostScript describes images as mathematical vectors and fills which are not rasterised (converted to dots) until you print them. They are therefore resolution independent — you get the best quality image your printer is capable of delivering.

To print PostScript files you need a PostScript interpreter, often called a raster image processor (rip). Ripping is processor-intensive work and so rips have tended to reside in expensive hardware, either in mono and colour laser printers or as part of a standalone print server in output bureaux. This and the additional cost of licencing PostScript from Adobe has put PostScript printing beyond the reach of many — until now, that is.

The increased power of desktop systems now makes it possible to implement PostScript rips in software and these are available for PCs and Macs. Combine a software PostScript rip with an inexpensive colour inkjet printer and you have a colour proofing system that is a match for professional systems at a fraction of the cost.

If you want a no-cost introduction to PostScript printing via a software rip a good place to start is www.cs.wise.edu/~ghost/aladdin/get550.htm where you will find Aladdin GhostScript 5.5. The developers point out that GhostScript is not shareware but you can download it and use it on a personal licence at no cost. You'll need to download two zip files: GhostScript itself and a previewer called GS view which also acts as an installer. I installed the product without problems. It took around 10Mb of disk space and ran first time without a hitch.

GhostScript differs from most software rips in that it has been developed independently of Adobe, which invented and developed PostScript into its present-day industry standard format. Consequently GhostScript suffers from the kind of occasional glitches you'd expect from a non-standard implementation.



◀FIG 1 GHOSTSCRIPT EXPERIENCES PROBLEMS WITH COMPLICATED POSTSCRIPT

I tried it out by choosing a selection of Illustrator files and printing them via GhostScript as well as in the usual fashion, from Illustrator 8 using the Epson driver. To view and print the files in GSview it's first necessary to save them in eps format although GSView will open and display PostScript files which have been printed to disk, as well as pdf files. For the most part the Illustrator eps files opened and previewed perfectly and for freeware using a non-Adobe interpreter I reckoned this was good progress. Having selected print from the file menu you need to select a GhostScript printer driver (a couple of Epson versions were provided) and then direct the output to the relevant printer queue.

A few seconds later and you can imagine my delight when line after line of textual garbage spewed forth from the Stylus Photo 700 [Fig 1]. Revisiting the print dialogue and swapping to the mswinpr2 driver, as suggested in the help file, did the trick [Fig 2].

I printed a number of Illustrator files and GhostScript handled nearly all of them without complaint. However, I had hoped to see evidence of superior output, particularly with complicated blends,

▶FIG 2 HOW THE PICTURE SHOULD LOOK, BUT PRINTING IT IS ANOTHER ISSUE

Questions & answers

Q Windows 98 is meant to have colour management built in but the pre-built profiles do not match my system (Gateway G6-450 with an Epson Stylus 600 and Plustek scanner). The only profiles appear to be for my printer using specific paper types. There are profiles for some monitors but not the Gateway. Is there a way to create new profiles or modify the existing ones? And what's the best place for profiles on the web?

KISH WOOLMORE

***A** One of the biggest problems with colour management is finding profiles for output devices. You can create your own using Agfa's Colortune software. You'll find details at www.agfahome.com. Colortune creates a profile of your scanner by comparing a scan you make of the supplied IT8 colour target with a reference file. In a way this is better than using a profile supplied by the manufacturer which, while it gives a close approximation of the characteristics of your scanner model, won't account for any of it's individual idiosyncrasies. In the absence of a profile for the monitor try Windows 98's sRGB colourspace profile. If this doesn't give good results there are other generic monitor profiles you could try. My version of Windows 98 includes profiles for a number of Epson printers including the Stylus Photo 700, but not the Stylus Color 600. You can find this and profiles for other printers at www.corel.com/support/ftpsite/pub/coreldraw/colorprofiles/. For more colour profiles go to www.pantone.com/support/printerlist.asp. It's important you choose the correct profile for the printer/paper combination you are using. A profile for plain paper will not do the job if you are using photo-quality inkjet paper.*

graduated fills and text. But aside from more saturated — not necessarily more accurate — colours, much better quality photographic images and a rather annoying tendency to resize the image to fill the page, there was little to choose between the two methods.

GhostScript managed to open Illustrator 8 files with some wickedly complicated gradient mesh blends but was seriously disorientated by one image which contained a number of quite complicated blends and graduated fills, though to be fair this file also gave my HP Laserjet 5000 PostScript mono laser rather bad indigestion.

I refuse to give up at this early stage as the prospect of cheap PostScript proofing is just too irresistible. I'm saving GhostScript as an emergency backup for those problem files where, for no apparent reason, pieces of text just disappear and the contents of clipping paths spill outside their boundaries.

For those who are short on utilities for handling PostScript files, GsView has a lot to offer. If you've ever been given an eps without a preview, all you get to look at when you place it is a grey bounding box and of course you won't be able to print it. Gsview provides an instant solution with its 'Add eps' preview command. You can convert single page PostScript files to eps, and even create pdfs from a PostScript file and vice versa [Fig 3].

◀FIG 3 PLENTY OF OPTIONS INCLUDING MULTIPAGE POSTSCRIPT AND ACROBAT PDF DOCUMENTS

The lack of colour management makes GhostScript a non-starter for serious colour proofing work so if that's your aim I'm afraid your going to have to spend some money. There are a couple of options here: Epson's StylusRIP 3.2 is an obvious choice for anyone who already owns an Epson inkjet, and the Birmy PowerRIP 5.1 is configured for Epson and Canon inkjets and has the advantage of support for PostScript Level 3 features.

PowerRIP provides custom colour calibration controls including a number of presets for Epson paper types. StylusRIP relies on you having already calibrated your system using ICC colour profiles, so you'd need to find profiles for your printer/paper.

My initial foray into low-cost PostScript colour printing has not been the success I had hoped for. Lack of colour calibration together with the uninspiring quality of output places GhostScript out of the picture, though if you're short on applications and utilities for handling PostScript and pdf files it's worth having around. My next step will be to check out Epson's StylusRIP 3.2. At £129, if it can better GhostScript it will be worth the money. Watch this space.

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