

Gerald's Column

by Gerald Fitton

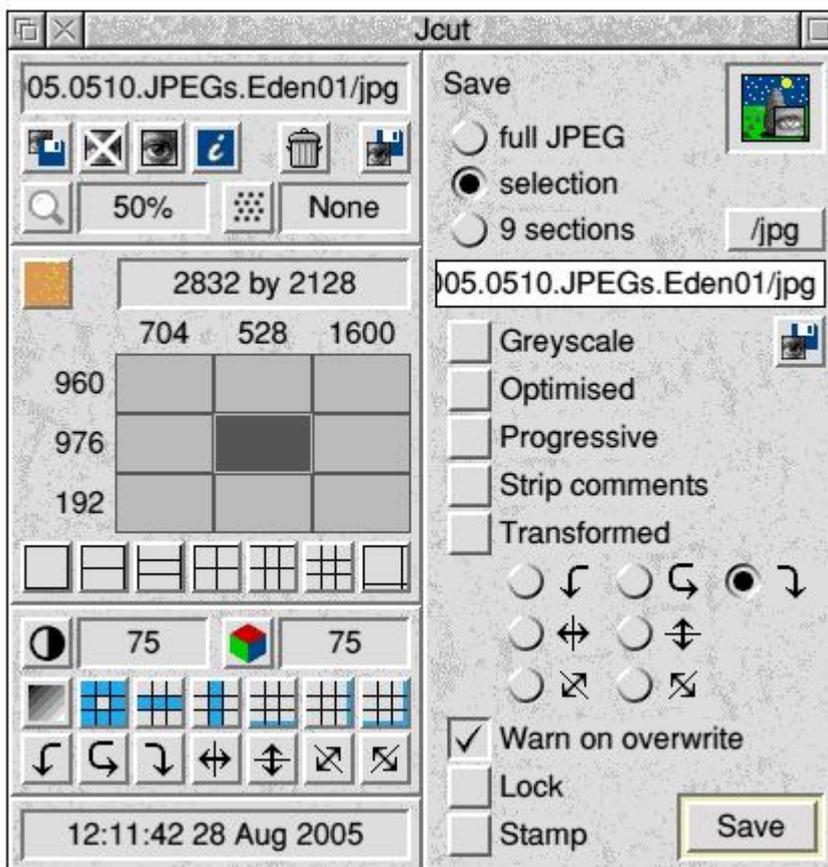
At <http://archive.abacusline.co.uk> you will find my experimental website for Archive readers. You will need to enter the username "archive" and the password "amusement" (in lower case and without the inverted commas) in order to gain access to this site. Thanks for all the feedback which you have sent me about the contents.

!Jcut

In last month's article I recommended shooting pictures without much consideration for the composition and then using a computer to crop the picture. As a result I received about a dozen emails asking me how to do this on the RISC OS platform. About half of these correspondents had suitable Windows software which they used, but nothing for RISC OS.

So I asked on Archive-on-Line what people used on their RISC OS machines. Although there are many programs which do this I shall describe just one, !Jcut, leaving the remainder to be reported in the Archive-on-Line Off Line column.

I downloaded !Jcut in the form of a zip archive from a website recommended to me by Philip Draper; it contains many other interesting RISC OS utilities. The website is at <http://www.dacha.freeuk.com>.



After unzipping the archive I ran !Jcut and the program icon appears on the icon bar. A JPEG file can be loaded to !Jcut by dragging the JPEG to the icon on the icon bar.

The Eden Project

The Eden Project is located near St Austell in Cornwall. It is a most interesting tourist attraction. As part of my grandfather duties I was commissioned to pick up my grandson from a short holiday with old friends in Cornwall and I took the opportunity to make a second visit to this site. It has been developed further since I last saw it in May 2005. One of the two main domes is very hot and tropical so I gave that dome a miss this time. I took the picture shown below in the more temperate zone dome.



Selections

If you look at the !Jcut screenshot you will see that the size of the original picture in pixels is 2832 x 2128 and that, using a <select drag release> (as you might use in !Draw) I have divided this picture into nine "selections". The centre selection is 528 x 976 pixels. I chose to Save a "selection" (meaning the highlighted selection', in my case the middle one of nine), changed the file name and clicked on the Save button (bottom right).

Actually, I did this several times with slightly different selections and the picture I have sent to Paul for publication (shown below) is 480 x 944 pixels. I was able to get rid of some of the rubbish surrounding the interesting statue (or is a sculpture?) from the selection of 528 x 976 shown in the original !Jcut screenshot.



One of the reasons why I was able to have several chained attempts at the selection, cropping a bit more off each time, is because the selection is not degraded by reprocessing the whole of the JPEG file each time a little more is trimmed off the picture.

It is a valid criticism of some popular Windows software that the information is recompressed (as a JPEG format file) every time the file is Saved and then Reloaded. You don't get this problem with !Jcut.

Exif

My best guess at this acronym is "Exchangeable Image File". The important thing to me (and to you) is not so much the words the acronym stands for but what it is and does.

My camera stores information in Exif format about the snaps taken with it as part of a JPEG file. This may have the wrong form of words because it may be that Exif is a form of (a sub-category of) JPEG file! Anyway, have a look at the screenshot below.



This screenshot shows the Exif data for the original (before cropping) Eden picture.

You will see that I took this 6MP picture with a FUJIFILM FinePix F700 at F 5.7 with a shutter speed of 1/300 second. I took the picture at 15:50:15 on 22/08/2005. This accords with my memory of the event.

I copied the pictures from my camera to my computer and then looked at the properties of the JPEG file using an Exif reader. Let me emphasise that all this Exif data is contained within the camera (and computer) JPEG file.

Exif in TIFF files

!Jcut preserves the Exif data (does !Jclean delete it?) in the selection. The Exif data from the statue' is shown in the screenshot below. This feature of !Jcut can be very useful.



I have made a couple of slight modifications to this statue file.

I have added some copyright data ("Gerald" and "Abacus Training") and saved what was a !Jcut selection as a (high quality) TIFF image. It is my hope that the TIFF image will help Paul to print a good reproduction of this detail taken from the 6MP original camera shot.

You can see from this screenshot that TIFF files as well as JPEG files can contain Exif data. TIFF files have the disadvantage of being larger than JPEG files (for photographs). They have the advantage that they do not lose information when they are reloaded and resaved. TIFF is generally a better format than JPEG if you need to keep loading and saving slightly different variations of the picture as you work on it.

Picture CDs

This is a subject I shall leave until another day. However, at this point it is relevant to say that as far as I know DVD players which play CDs containing photos require the JPEG format and don't work with TIFF format files. The relevance of this is that however you process your sprites or TIFF files you will need to save as JPEG in order to display them on your TV set from a photo CD.

In summary

!Jcut is a RISC OS utility which can be used to crop pictures whilst preserving all the Exif data. TIFF files can also contain Exif data. Generally, using the TIFF format until you have finished editing is good but !Jcut as a means of cropping a file to size is also good because it preserves as much of the original JPEG coding as possible.

Another day

The BBC have announced that they are upgrading their Interactive Media Player to something they are calling MyBBCPlayer. The intention is to make many of their TV programs available on the Internet for a limited time after its original screening. The software called MyBBCPlayer will be used for streaming these programmes.

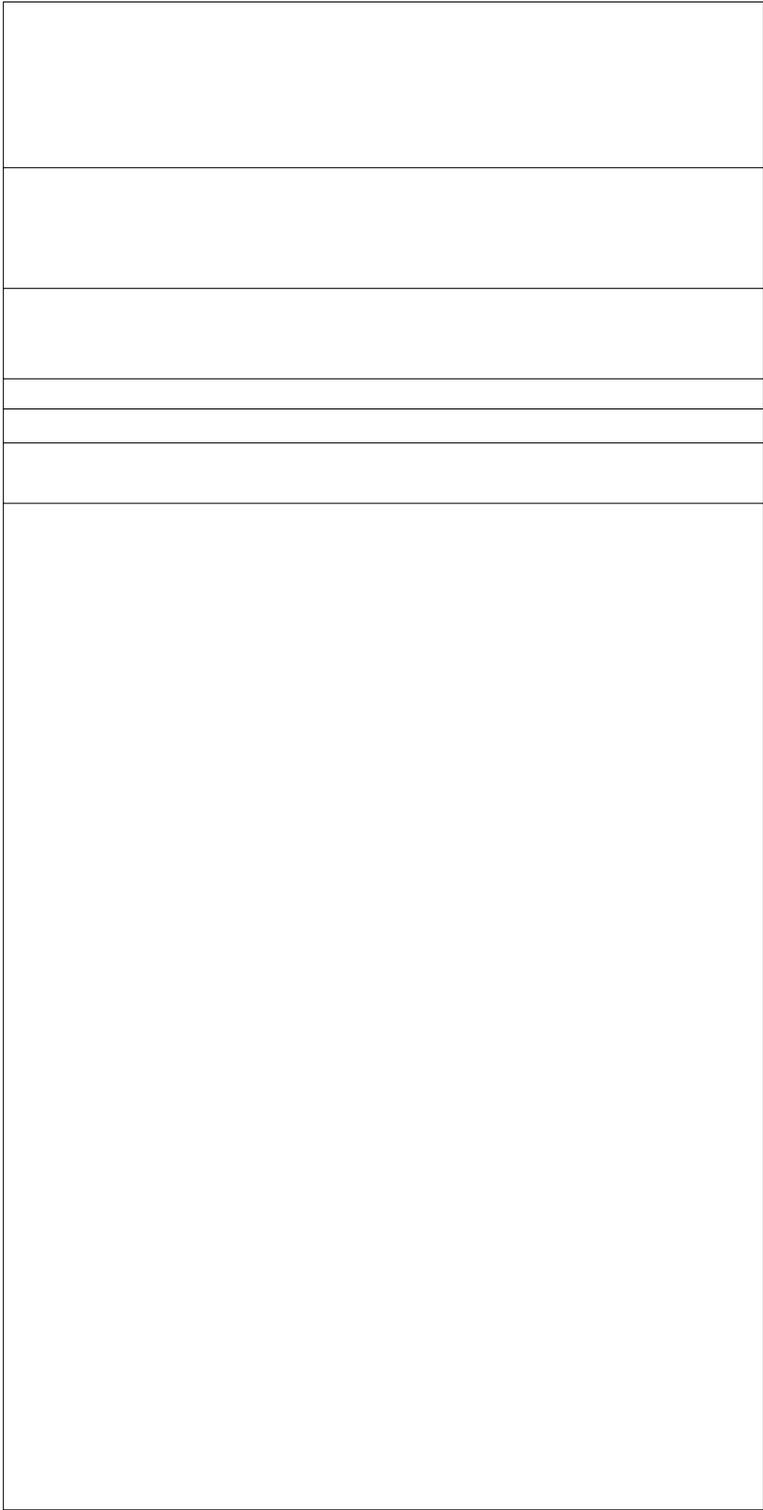
Communication

Emails addressed to me at 'abacusline.demon.co.uk' will not be delivered to me any more. The site at <http://www.abacusline.demon.co.uk> will soon be closed forever.

My website for Archive readers is at the subdomain <http://archive.abacusline.co.uk/> It is a protected subdomain. The username is "archive" and the password "amusement". You will find many examples supporting my Gerald's Column articles on that site.

This month you will find the original eden00/jpg file, the TIFF file of the statue and many more. They are wrapped in a zip archive. Click on the link to download this zip archive.

For Archive correspondence please write to me at <archive@abacusline.co.uk>.



2.000

1.778 Wide Screen

1.618 Golden Section

1.500 Photo Paper

1.458 35mm Film

1.414 'A' Series Paper

1.333 Digital Camera