USER

CALAMUS

The Independent Magazine for Calamus DTP Users.

ISSUE 3.

LET'S TALK

A few words from the boss (who also happens to be the secretary, tea boy, mail boy, dishwasher and general dog's body).

Welcome to issue three, several of our critics said we would never get this far, well we have proved them wrong.

Anyway here we are again, bringing you another journal full of interesting bits and pieces relating to Calamus.

Nothing much has changed since the last issue. We have however made appearances at all the Atari Shows which have taken place around the country with some success I would like to thank every one who came to see us, I hope we were of some help.

As some of you may know my main interest at the moment is trying to get Calamus Vector files to work on other platforms and vice-versa. Todate I have managed to export plenty of vector files out as EPS (Encapsulated Postscript) from Calamus (via the Bridge module) and Line ART 3, and then imported them into both Adobe Illustrator and Corel Draw 4.0 on the PC with no problems.

A friend of mine has a access to a MAC, gave me several different types of EPS clip art files from Adobe Illustrator which I managed to convert to Colour and B/W CVG's using the DMC EPS converter, again without any problem. My main difficulty at the moment is finding someone to test the PostScript and DXF (AutoCad) options which are available from within the Bridge Module, so if there is anyone out there who wishes to receive a test PostScript or DXF file, then drop us a line with a disk enclosed.

As I have mentioned in previous issues, we are planning to start a series of articles on the subject of S & SL Modules which are currently available, well we intend to start with the Bridge module, followed by the Line ART Module, so watch out for this in future issues.

A little mention about Printer drivers, or rather the lack of them, this is the single biggest problem which we have to deal with. Unfortunately it is impossible to resolve this type of problem without having the printer at hand. Any way that's enough gossiping for now and I hope you enjoy this issue and don't forget if you have any problems or can contribute to the content, please drop us a line or even better send it on disk.

Regards

Steve Llewellyn, Editor.

Adding to the Content.

Hopefully, in the future all articles in this magazine will be written by you, the users.

Anyone reading this magazine can make a contribution to it; no matter how small it may be.

If you do wish to make a contribution to the content of this magazine (News Items, Q & A, Hints & Tips Reviews, Articles as long as they are Calamus related), can you please send it to us on a 720k disk in either ASCII or CDK format (with screen shots if poss). It will make our job so much easier.

Repaired Fonts.

We previously mentioned that some Calamus fonts have been badly constructed (mainly PD) and therefore may cause problems when used with Calamus 1.09/1.09n/S/SL and Line ART 1 or 3.

Since then, we have received many letters asking which fonts are damaged and how they can be repaired. With this in mind, we have decided to offer a service whereby you the user can send us your damaged font and in return, we will repair and return them within 28 days(free of charge).

We will only repair a damaged font which is public domain and does not appear on our list of repaired fonts, and has not already been repaired.

This list can be obtained from us by send us 2 x 1st class stamps. In addition there are a number of disks which contain previously repaired fonts. These can be purchased from Calamus User for the princely sum of £5.00 for each disk (inc P&P).

So, if you have any damaged fonts that you need repairing, please do not hesitate to send them to us with a 1st class stamp (for each disk) and will try our best to repair them.

By offering this service we hope to eradicate most of the damaged Calamus fonts from the public domain arena.

Information & Disclaimer.

NEWS DESK SPECIAL.

New Mods on the Block.

About three months ago I heard a rumour that a new company had been formed in Germany to develop third party modules for Calamus S/SL and the newly developed NT versions. After contacting several of my sources around the world, it was finally confirmed that the rumour was indeed true and after some more checking I managed to obtain their phone number, at which point I contacted them.

Going under the name of Adequate Systems, a merry band of ex DMC programmers (which includes Klaus Garm, who I spoke to on the phone) had set up business in the small German town of Damshtad, with the main goal of using there previously acquired knowledge and programming skills to develop more modules for use with that superior DTP program that we know and love.

I first asked Klaus which modules were they currently working on? "At first, we are focusing our attention on the image processing side, as this is where Calamus is presently lacking. There will be three modules in this suite, the first being 'MERGE', followed by 'FILTER' and finally 'PAINT' ".

He then elaborated on the functions of each module.

MERGE.

The Merge module as it's name implies, allows via a process of soft masking the merging of two bitmap frames together to produce semi-transparent overlays.

FILTER.

This module will allow filters to be loaded and used to modify whole frame contents. It will work on any frame type for example, if you wanted to use the Sharpen filter on a text frame, the Filter would process the frame contents and then produce a Bitmap frame containing the resulting filtered image. Naturally the filters will work on an ordinary bitmap image in the same way.

The Filter module will come will a number of filters including: Smooth, Sharpen, Dither and a Programmable filter which will offer the user the opportunity of defining their own via a programmable filter matrix.

PAINT.

The Paint module will be capable of retouching images from within Calamus S/SL/NT, and will offer a large array of tools including definable Pencil, Pen, Airbrush, Smearing, Water, Cut and Paste, plus much more.

This has been designed to replace the Brush module (which DMC includes with SL at present) and will offer considerably more powerful tools than are currently available from external packages.

Klaus told me that for a long time they had wanted to produce this module (even when they were at DMC) but they thought that it would be to complex to implement. After leaving DMC and Given the time they soon found out to there own surprise that it was not as difficult to produce as they first thought and they where soon rewarded with a retouching module which works much faster than most external programs.

Kauls finished by saying that these three modules really belong together and will offer for the first time, the possibility of producing very complex processes all from within Calamus. Then used a example to elaborate on the effects which could be achieved. Say you wish to paste an image of one persons head onto an image of another person body, this could easily be performed using these three modules.

First you would import two image into there own frame, one being a head and other being the body. Next you could use the Filter module to smooth the edges, then by using the Merge module, the two images could then be merged together and finally you could use the Paint module to touch-up the edges and remove any remaining joins.

The cost and availability of these modules(the first being the most painful part) are as follows:

Merge: 400DM (inc Tax) Available Now.
Filter: 300DM (inc Tax) Available End of June/Mid July.
Paint: 600DM (inc Tax) Available End of July/Mid August.

Unfortunately, at present all these modules are only available in German and there is at present no official distribution channel for the UK/USA as yet, but as discussions are under way between Adequate Systems and other English speaking companies, they may appear in an English form in the not to distant future. Any way as usually we will keep you informed of any further developments as we hope to obtain review copies for a future article.

Just on a footnote, Klaus mentioned that after these three modules are completed, they have plans for many more modules including a Table module which could be rather useful.

Rumour Control calling.

It has been recently rumoured throughout the Atari community that DMC Germany would no longer be supporting the Atari version of Calamus SL and that future development of SL would be taken over by the Newly formed Company Adequate Systems (see News Desk Special) and there by releasing DMC to concentrate on the development of the NT and future Chicago versions.

After some checking, I received confirmation that these rumours were un-true and that DMC had no such plans in-fact they have at present two In-house teams of programmers developing Calamus, one concentrating on producing a new up-grade version of Calamus SL (details will be announced when the up-grade is near to release, so don't contact JCA or DMC just yet) and the second working on the NT and Chicago version.

Further more, during my interview with Klaus Garm of Adequate System, he took the opportunity to put the record straight and confirm that the rumours were totally unfounded, in-fact they have never been approached by DMC on this subject. He also backed up the comments about the DMC programmers currently working on up-grading Calamus SL.

More News on Calamus PC.

In the last issue we told you about the forthcoming release of the Windows NT version of Calamus. Well to update you on this topic, we can inform you that it is now available in the UK.

This makes Calamus the first DTP package to be available on the NT operating system and like most PC heavy weights, will come on a CD Rom, with a price tag to match, which set to be around the £ 1000 mark.

While on the subject on Calamus on the PC. We have recently learnt that other versions of Calamus will become available with the arrival of more NT based operating systems. This includes the PowerPC (including Apple's PowerPC) which will join the Intel Pentium, Mips and Dec Alpha by having there own version of Calamus NT.

Now we have saved the best for last. It's has just be announcement by Microsoft that the first stable (questionable) version of Chicago the Windows 3 replacement, is due to hit the streets as we speak. With this in mind we can confirm that DMC will be producing a version of Calamus to run on the Normal PC platform with the new Chicago operating system.

As usual we will keep you informed in future issues as more information becomes available.

Calamus Magic.

Yet another Multitasking operating system becomes available for the Atari ST/STe/TT machines. MAGIC has been developed by the people behind NVDI and offers a lot more features than most of it's previous competitors. So we managed to get our hands on a copy before it's release and put it to the test with Calamus compatibility in mind.

The first problem that we came across was that Calamus does not like working with Multitasking systems - the keyboard becomes in-accessible.

This is not confined to only MAGIC, both MultiTos and Geneva caused similar problem with Calamus. Fortunately we managed to get hold of a new Patch from Germany called CALAPAT.TOS which solves this problem. this is now available on both our Calamus PD Collection disks (see the 'Public Eye' article for more details).

Once we had fixed Calamus with the patch and changed the memory setting inside the System module, we where ready to start testing Magic with Calamus.

First we tested SL with all the programs that we use on a daily bases, including 1st Word Plus, Type Art, Studio Photo, SuperBase Pro, Gemview, Convecter (plus many more), which all worked without any problems.

It was only when we got to testing Line ART3 and DA Vektor with SL, that we came across problems. Both programs still worked OK, but Line ART decided that it would dominate the display and would not allow any other application (including SL) to be displayed and there was a clash between SL's palette and DA Vektors own. Apart from that everything else worked very well and did not cause too many conflicts. But one thing I must point out is that the problems relating to Calamus working with other programs are down to conflicts between the programs, not MAGIC.

The nice thing about MAGIC is that it boast more features than many other Multitasking operating systems, these include: being less memory hungry, Magic only uses about 500K, a Multitasking manager which allows the user to escape from crashes, it's own desktop (although I am using Gemini II a Shareware replacement desktop at the moment), a tidy up feature which will redraw the screen display, better control over most external ports and an overall increase in system speed.

Systems Solution are handling Magic and can be contact on 081-6933-355.

Q AND A

Oblique or Italic?
From Mr. Holden, Stockport.

Q I have a recently discovered within my growing collection of Calamus fonts, a number of Oblique and Italic versions. As they all seem to be slanted fonts, is there a difference between Oblique and Italic fonts ?

A There is a difference between these two styles let me explain:
Oblique (or Suedo Italic) fonts are actually just slanted (usually by between 11% and 14%) versions of their normal variant and are usually confined to San Serif style Fonts (see Fig I) such as Helvetica, Swiss, Univers, Rockwell etc.
A true Italic font is in itself an individual font and is as different from it's

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ABCDEFGHIJK abcdefghijk
ABCDEFGHIJK abcdefghijk

Fig I

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normal variant as say Times is to Baskerville. Apart from the slanting (usually by the same degree as Oblique's), A true Italic font also contains several different design features such as *Tails* and in most cases there is an absence of some *Serifs* (see fig II below). These differences are usually confined to just the lower case characters set and are a designed feature.
Whilst Oblique fonts are confined to the San Serif's, Italic fonts are

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Serif — n   n — Different Loop
         No Serif   — Tail

Fig II Normal Times and Italic Times, note the difference.

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confined to Serif style fonts such as Baskerville, Bodini, Garamond, Souvnier, Times, etc...

Be warned, you may find that in some cases that slanted fonts which have been entitled Italic are infact Oblique fonts. This is usually caused by the person who has originally designed or converted the font having a poor knowledgable of this craft.
Any way, I hope this makes it much clearer.

DMC fixes.
Joe Connor, CIX.

Q I have just found DMXFIX.PRG and FALCON8.PRG in the Calamus S Auto folder and I cannot find any documentation for them anywhere. Does anyone know what they are supposed to Fix?

A *Reply from Nathan Potechin, DMC Publishing, Canada.*
DMCFIX was written to correct a limitation in TOS that didn't allow 16 meg or larger files to be imported. This didn't used to be an issue. Then along comes Calamus SL and 300 dpi or greater colour scanned images and all of a sudden, 20 meg TIFFs weren' t so extraordinary! The FALCON8.PRG was written to allow Calamus SL to display in 256 colours while in 256 colour mode on the Falcon. Without it, Calamus SL will dither down to 16 colours in 256 colour mode on the Falcon.

Calamus User.
We have tested out the FALCON8.PRG and have found that this fix is not apparent until you try importing a 256 colour (or more) image without the fix.

1.09n on the Falcon.
From Mr A. Todd, Birmingham.

Q I use Calamus 1.09n on my Atari STE, but I am planning to upgrade my system to include a Falcon. My question is, will Calamus 1.09n work on the Falcon ?

A The answer is simply yes. We have been using 1.09/n extensively on our Falcon and have not yet discovered any problems with it.
Naturally, Calamus 1.09n was only designed to works in mono hires so you have to set the video setting to 2 colours in hires. One thing we have found will not work on the Falcon is OutLine ART 1, which just corrupts the screen display when a CVG file is imported.
We have now just purchased Screenblaster for our Falcon and can now run Calamus 1.09n in higher screen resolutions right up to 1024 x 804, but we have found that 840 x 640 is more readable and redraws faster.
I understand that Blow-up will give you similar resolutions but like Screenblaster you need the right type of monitor. However you would be better off with Calamus SL. It has a lot more features than 1.09n and works in colour.
For more information contact System Solutions 081-693-3355 (Blow Up) or Compo 0487-3582 (Screenblaster).

Protext and RTF import drivers.
Mr. Paul Sutherland, CIX.

Q Is anyone producing third-party external modules for Calamus SL? In particular, the present choice for text import seems very limited. There should be RTF at least! And the ASCII option is less helpful than with Calamus 0.9 for Protext users because it strips out all the genuine end-of-paragraph returns.

A *Reply from Nathan Potechin, DMC Publishing , Canada.*
Neither Protext nor RTF (PC) are available as import drivers for Calamus SL at this time. I am expecting that RTF will arrive in the near future. I doubt we'll see a Protext driver. Sorry.

Loading GEM images files into 1.09.
Mr R. Stewart, Dundee.

Q I have recently purchased some vectored clipart in GEM format which I was hoping to use within Calamus 1.09n. But every time I try to import any of it in, Calamus reports a LOADING ERROR which is followed by that most common message FATAL INTERNAL ERROR. I have no problem loading them into other programs, so I no that they work.
Is there any way of importing these files into Calamus without incurring the wrath of the Fatal Error message? Please find enclosed a copy of one the disks for you to try yourself.

A Thank you for sending the disk and I will return it to you with your copy of this Magazine.
The problem with these GEM files is that they are in GEM3 format which Calamus 1.09/n does not support.
The difference between ordinary GEM and GEM 3 is that the ordinary GEM format only includes straight lines, where GEM3 includes both straight lines and Bezier Curves (curved lines), but was unfortunately not supported when 1.09/ or 1.09n was developed, hence the use of the CVG format (which does includes both straight and curved lines).
The only course of action in this case is for you to convert them into CVG format should you wish to use them within 1.09/n or alternatively, you could always up-grade to Calamus SL (which does support GEM3) if it is that important for you to use GEM3 format.

CTD and CVD, What do they do?
MR F. Allens, Warickshire.

Q Whilst using Calamus SL, I have found two sets of import and export drivers (CTD & CVD) which are not documented in the manual. Can you tell me what they do?

A *CTD (Calamus Text Document) format*: With Calamus 1.09/n, the CTX format would be used to retain the Layout and Style information. But with the development of Calamus SL, lots more features were added including the addition of colour. So the CTD format was designed to store all this information instead of upgrading the old 1.09/n CTX format, which would have caused problems with compatiablity.
CVD (calamus Vector Document) format. When Calamus SL was originally released, the package did not come with a CVG export driver (for some unknown reason) so the CVD format was included instead to allow constructed vectors to be saved.

PUBLIC EYE

The second part of the series that looks at Calamus related public domain and shareware programs.

As a friend of mine once said "you can never have too many fonts", which is fine if you have a complete printed list of them at your finger tips or you can remember what they all look like. But if you are like me, you can never find the time and it gets worse as your font library grows. One of these two font listing programs could well be the answer.

CFN Lister 1.0.

First on the Test bench is a simple little German program called CFN Lister (version 1) which I found only works in Hires mono mode.

Once the program has started, you are presented with a large GEM Dialogue box which includes a number of GEM buttons simple entitled (see fig I).

The first step, is to load in the fonts you wish to appear on the final print out. This is easily accomplished by selecting one of five font slots and then using the usual GEM files selector to guide the program to the location of a specific font. In—addition to the LOAD (fonts) buttons, are an equal number of UNLOAD buttons, which do as the say.
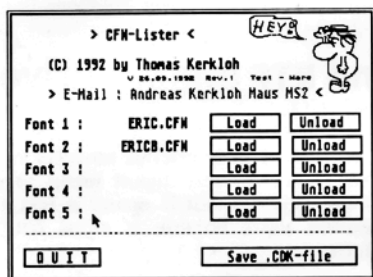

Fig I

Once the fonts have been Loaded, you are now ready to save the CDK document to disk, this default's to the 1.09 version of the document format.

After the document is saved, you can either choose a new selection of fonts for a new document or you can exit and fire up Calamus to print out the previously produced document. Once you have loaded the document into Calamus, you will see that each font has been layed out inside a box with the name of the font at the top left hand corner. The full character set of the font is layed out with the lower—case appearing on the top line, followed by the upper—case, then the numeric's, and finally the Symbols ($ £ & ? etc). On the last line is that immortal sentance "The lazy brown dog…".

After some testing the only problems that I have encountered when using CFNLister 1: are Firstly, the program has a problem trying to locate it's own RSC file when both files are placed inside a folder. Secondly, the document created by CFN Lister contains some uneven spacing between each character.

Apart from these minor problems, CFN Lister works very well and makes light of a complex task.

CFN Show.

CFN Show is another useful program by the same author and like CFN Lister, only works in Hires Mono res. But unlike CFN Lister, CFN Show is one of those programs which can be selected to operate as either a PRG or ACC application. Once started CFN Show offers you the option to either SHOW or LIST the fonts from a selected path/folder.

If SHOW is selected, the normal GEM file selector is displayed and then a path can be selected. From this path a list (see fig II) containing the File Name, Font Title, Font Serial number and the selected path will be displayed on the screen from every font within the chosen path.
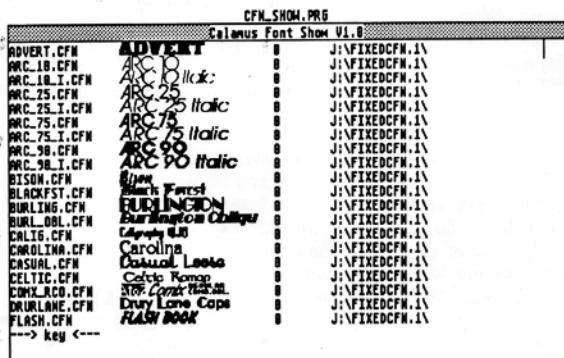

Fig II.

A simple tip for use with this option is to install either a Screengrab or Screenprint program to preserve each listed page.

If the LIST option is chosen, the same sequence of events can be taken as with the SHOW option with the exception that the LIST option will construct an ASCII file containing the file Name and File Path of each font from within the selected path and save it to disk.

CFN Lister 2.

Whilst recently searching the ATARI.ST/2Listings conference on CIX (this is where all up—loaded programs can be found) I came across the latest version of the aforementioned CFN Lister program.

So I downloaded this little gem and tried it out with astonishing results. This updated version of CFN Lister has been completely re—vamped and looks totally different from the original version.

Once the program has been started, you are immediately presented with a large dialogue box with plenty of buttons and three windows to play with (see fig III below).
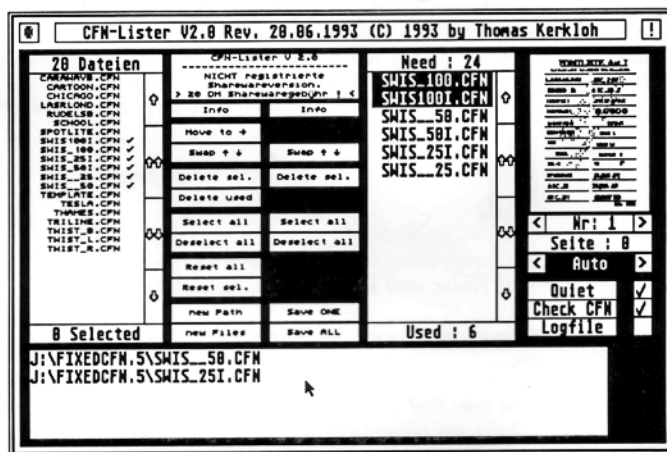

Fig III

First off, you must load in some fonts. This can be performed by either loading in a single font or a complete folder or drive (if your not organized) full of fonts. Actually the program doesn't really load the fonts in. What happens is that the font information is loaded and a list of the loaded fonts appears on the left hand side of the dialogue box.

Once this information has been loaded into the program, you can then select which fonts are to appear in the document and in which order. You can then chose from one of two pre—designed layouts(by the author), followed by the number of pages the document will contain. The first layout offers the option to display 24 fonts on every page with each File name displayed using it's own font style. The second has been designed for use with complete families of fonts with 14 full character sets being displayed on each page.

Finally of course comes the out—putting of the documents, this is handled by saving the complete document using the original 1.09 format which means total compatibility with every version to date.

Once the document has been saved, you are then free to carry on constructing another document full of fonts, or exit to start up Calamus to print the document.

This useful gem is a shareware program and there are more features un—vailed when you pay a registration fee of 20DM to the author,(which I am planning on doing), so I will keep you informed about further features when I find out about them.

LINE ART REVIEW

In the first of a two part Review on the two main Vector Art packages. We will take a look at DMC's latest version of Out Line Art 3 and see what new features it has to offer.

When the original version of Line Art (1.0) was first released it was looked upon at the time as an impressive piece of software, which could only be equalled by it's very expensive rival on the MAC, Adobe Illustrator 88.

When SL arrived on the scene (the all singing, all dancing colour replacement to the good old 1.09), a major up-grade was due for this powerful tool. Version 2 came and went, and never saw the light of day. Then more than a year after SL's release along came Line Art version 3.

Whats new?

The first major addition to this re-vamped package is it's ability to handle 24 bit (16 Million) colour vectors. This is even possible on mono systems.

This has been achieved by using new programming techniques which were refined whilst developing SL. Resolution Rasterization as it is called, allowing the program to conduct all the 24 bit colour work within memory and only when the calculations have been completed will it then be rastered to the current resolution display. In other words a 2 colour system (ST HiRes) will display the 16 million colours as rastered levels of grey, whilst a 16 colour system (TT Medium Res) will raster them as levels of 16 colours and so on through 256 (8bit) and 32,000 (16bit) colour modes. It is only when you use Line Art 3 with a 24bit colour (via a Matrix or Cyrel colour Card) or true colour system, that you will notice the difference in it's display and see your designs in their true glory. Naturally, when your hard work is saved, the 24bit colour information is saved with it.

With the introduction of Colour, DMC have added the option to use a pre-defined colour list (see fig I) to choose the required colour. This again is another feature brought over from SL and OLA even uses the same list as it's DTP brother.
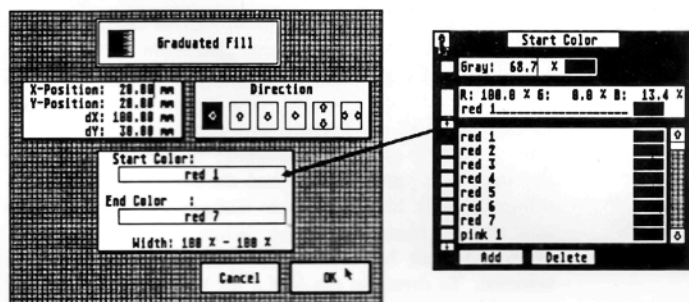

Fig I The dialogue box on the right is used to set the colours and colour lists from Calamus S / SL can be imported into LA3.

The next major addition to OLA3, which I found very useful is the on-line help. Most graphic packages today include this function, but DMC have introduced it in a strange manner by including two versions of the program on the master disk. The first runs in less than 4mb of memory and excludes the on-line help, whilst the second requires at least 4mb and includes the help files. This on-line help is activated by positioning the mouse pointer over the icon and pressing the HELP key which present the user with a dialogue box containing the specific information. Since OLA 3 does not come with it's own manual (I was supplied with an OLA 1 manual and a sheet explaining the new features), you will have to rely on this, that's if your system has enough memory. An interesting addition that DMC have included which merits a mention is a clever UNDO function that allows OLA3 to step back any number of times to undo any mistake or action. This function is only restricted by the size of the pre-set memory buffer.

EPS and Postscript export.

The final major addition (and I have saved the best till last) is the option to export any vector image as either a PS (postscript) or EPS (Encapsulated Postscript) file (see fig II below).

Fig II From within Line ARt 3 is the option to export vector images as EPS or Postscript files, the choice is yours.

The thinking behind this is to allow OLA3 work to be transported to other platforms where it can either be printed out direct from a Postscript device or for importing into a compatible Art and DTP packages. With this in mind DMC have spent a lot of time and effort to develop the routines which produce these files. It is still questionable whether the Postscript option works as well as it should as I haven't been able to test it yet, the main problem seems to be that there is postscript and there is postscript. But I do know that EPS does work, as I have had no problems importing LA3 EPS files into both Adobe Illustrator 5.0 and Corel Draw 4.0. This is probably due to the fact that DMC have stuck closely to the Adobe's EPS 3.0 format.

The main problem with Line Art 1 was the restriction on the number of paths and points you could generate. A good example of this was when I first used Didot Line Art to Design a logo and then decided to retouch it using OLA1. Once I had imported it into the package I was presented with only half of this complex vector image. This has now been fixed inside LA3.

Other new additions include the new layout of the icons which has been designed to be similar to Calamus S/SL's module set up and a new option to display vector images in draft mode which will speed up screen redraws.

Conclusion.

At the end of the day the only things new about this program are the features which I have already mentioned. Nothing else has changed and LA3 is still as difficult to use as it's predecessor, but if you really like OLA1 and find it hard to change then contact JCA and they will up-grade your old version for the hot and dandy new one, at some nominal charge.

With DMC releasing the S/SL module version of LA3 with lots more features this is probably the best way to go if you really need LA3 and use S or SL. Other wise I would take a look at some of the other packages currently available and which offer a lot more features for your money.

LINE ART AUTONOMY

This is the second part of the two part series from Canadian George Bradford on the finer points of getting the most out of OutLine ART 1. In the next issue George will be starting a new series called Calamus Corner.

Want a perfect greyscale fountain off your 300dpi laser printer? Outline Art through Calamus is the answer.
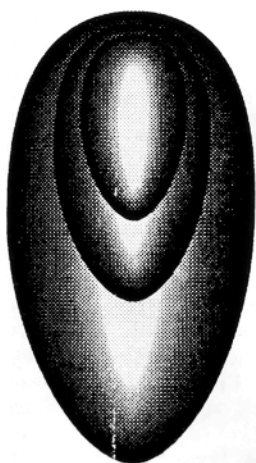
After working with a Macintosh Quadra 900 at my place of employment during the week, I have always found it a joy to come home to my Atari Mega ST4 at night. Even though the expensive and sophisticated Mac programs like Illustrator and Freehand can build superbly subtle blends on the screen, they print out as ugly banded interpretations on our 300dpi Apple Laserwriter II NT. Everyone takes this for granted and when I tell them that Outline Art through Calamus gives me almost perfect blends, and greyscale fountains on my Atari SLM804 laser, they simply shrug and give me that look of disbelief. Obviously the PostScript language built into most commercial equipment these days is no match for the dedicated language used to support Calamus when it comes to speed and matching the screen representation.

With your Calamus print screen set at Raster X1 you can achieve extremely high quality greyscale fountain blend reproduction, with no sign of banding. The illustrations in this article are reproduced from 300dpi output to demonstrate this point. Greyscale fountain fills, blends, and graduations all fall into the category of a smooth transition of dots blending from black to white, or any greyscale range. These delicate fills allow you to create infinite 3-dimensional type shapes, which are outside the limits of the convenient dynamic greyscale frames supported in Outline Art 1.0.

In actuality they are numerous screens stacked on top of each other to produce the soft rounded effects shown here. Given a command of 50 steps, Outline Art simply produces 50 different layers, each of a slightly different percentage screen fill. Unfortunately fountain fill objects cannot easily be moved about on the screen simply because all these layers are independent, and there is no grouping command in Outline Art as yet. However, if you are working with Calamus SL, its Vector Module should be able to group them for you.

At this time I will do my best to explain the many steps involved in creating the Apple Orchard logo shown here, but be prepared for little things I may have forgotten to mention. As you work, continually save your file, so that when you find you don't have what you expected, then you can always reload your last save and try again. Especially with these fountain fill blends it is far easier to reload than to try and delete them all one by one.

STEP 1: Draw the basic apple shape about 8 squares high on the 10mm grid, and give it a 100% black fill. The leaf and stem portions come later, so don't bother with them at this time. Bring up the Calculator screen and click on ENLARGE %, then enter Width % = 95, Height % = 95, and click on Center Object in the Position Buttons box. Finally click on CANCEL at the bottom right, not Calculate. If you choose Calculate the computer goes into action immediately, and we still have to set up the Clipboard Extra Functions menu.

STEP 2: Activate "Clipboard Extra Functions" and leave the top part alone. Beside the camera icon; click ON Transform before copy; click OFF Move To, but change DX and DY: to 0.00 mm; click ON Multiple Copy; click ON Greyscale variation, and set at -3% (backspace until minus sign will function); click ON Copy to foreground; click OFF Copy to background; click ON Prompt # of copies; click OFF Number of copies, but set to 50; click ON Extra Functions active.

STEP 3: Now close these menus and be sure to "select" your black apple shape so that it is active. At this point you will put all this into play by clicking on the camera icon in the Object Menu, which you normally use to copy frames. A prompt with Number of Copies set at 50 should appear, click OK and sit back and wait. For those of you who have Codeheads' WARP 9 screen refresh accelerator installed, things will move along fairly quickly. The rest of you will have to wait a while longer for the final results.

By now you have "something" on the screen, and it would be a good time to click on the ABOUT OUTLINE ART menu, top left. This will show you how much memory you have used, and should show 51 objects now in play, including your black apple shape. Your eventual .OL file will shrink considerably when converted to a .CVG, so don't panic about the 16K it registers from your first few steps here. Your totally finished .CVG file will likely read out at about 15.5K with all the other parts included.

What you should have on your screen by now is an apple body that looks similar to mine. The hi-lite on the apple is a bit large and glaring, and this could be softened by changing the number of copy steps to 60 or 70 if you want to experiment. The refresh time and the size of the file will both be affected, but this is your choice. If you now turn off "Fill Areas" under the "Extra" heading, and magnify your work, you will see the multitude of blend steps that have been created, as fine lines stepped one inside the other.

STEP 4: Creating the apple stem. I purposely kept it simple, with an outline and 82% fill, then a 50% adjusted clone without a outline supered on top for a slight hi-lite effect. These should be sent to background to lap behind the apple.

STEP 5: The leaf was a little more demanding, and I found this to be a real toughy. I drew the leaf with bezier curves, gave it a 50% fill, and an outline later, when the blending was all done. Set the Calculator to Width 90, Height 85, Center Object. Set "Extra Functions" as Greyscale Variation 3% (not -3% here), and the Number of Copy steps at 8. This will give some shape to the leaf, but I ended up physically dragging in several of the leaf tips that were protruding beyond the main leaf just to tidy things up a bit. Select the main leaf and give it an outline, now that the blending is done. When it reads 50% in the Modify Object box you know you have the right one selected. To dress up the leaf a bit I have added a single curved line down the center, but feel free to add radiating veins to it also.
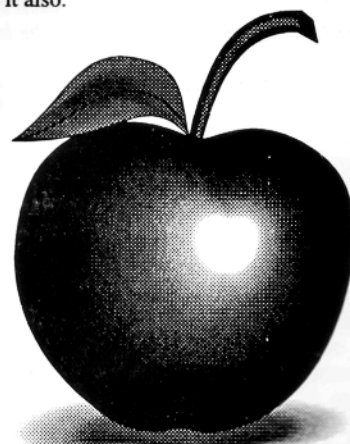
The apple was built with 50 copies of a simple black apple shape, each step reducing 97% of the previous, and the tone changing gradually by a 3% value.

The type was built separately in two parts and given a Line and White Fill command. The decorative diamond shapes were added last, with outline and 50% fill.

The finished Apple Orchard logo weighing in at 15.5K and almost good enough to eat. Much could be done to improve on it, but I leave that to you.

This would also be a good time to go back to the calculator and click on NULL so that it doesn't screw you up later on with old commands.

STEP 6: The shadow at the base of the apple. To my mind this is the simplest, yet most impressive part of the illustration. Draw yourself a small irregular shape below the apple, to act as the innermost part of the soft shadow effect. We are now going to copy to background this time, with the steps getting larger and lighter as they stack behind each other outwardly, eventually blending off to nothing. Give your small shadow shape a 60% fill, and no outline of course. Now slide it in behind the bottom of the apple, using your Alternate Key to hi-light all points, and then dragging it. Now we will blend from dark to a light feathered edge.

STEP 7: Set the Greyscale Variation to -3% again, so it will get lighter as it grows outward. Set the Number of Copies to 20. Click ON Copy to Background so that each step will generate BEHIND the apple, and not in front. Set the Calculator to Enlarge 103% for each step, and click on the Center Object button in the Position Buttons box. Click on the (Copy Objects) camera icon again and the end result should be a dandy soft base shadow.

STEP 8: The type was set using the Circular Text command, given an outline and 00 white fill. Two decorative diamonds were then added and given a 50% fill and outline. Because the apple occupied so much of the screen I decided to build this type as a separate file and then merge the two later. Since my apple had been drawn a bit to large I decided to do a Select All Points, and set the calculator to Enlarge (reduce) 90% to reduce it a bit. This calculation took the Mega ST4 about 30 seconds to do, and as you can see it handled the calculations perfectly.

When saving to .CVG format I entered a line weight of .50mm. The finished APPLE ORCHARD logo, with the type merged into it resulted in a .CVG file of only 15.5K. This type of simple fountain fill can be used for a number of functional purposes if you think things through first. The oval shapes shown at the beginning of this article was created in much the same way as the apple in this tutorial, and has a gem-like quality. In actuality I started it from a black base also, but it produced too harsh an edge, so I turned off Fill Areas, magnified the top half and went in and deleted the bottom 4 layers, so it now starts at 88%. The final result is merely 3 copies of the finished .CVG piled on top of each other after being reduced to fit.

The somewhat rectangular (GB) blend shown here is created in a similar manner, but has much sharper shoulders because of its inherent shape. Some of the settings were: 10 steps, -3%, W 97%, H 97%, Center Object, and change upper layer to 12% when done. The possibilities are endless, but you must be careful not to overdo it either. Try to keep your components as simple and functional as possible, or the whole thing starts to look like a batch of experiments with no true design purpose. Finally, the "GB" was added on top and given the outline command from the Style Menu.

The picture frame effect was created with settings at: 82% base (outer shape), 16 copies, -4%, W 98.9, H 98.8, Center Object for outer frame portion. Your upper layer will read about 24% in the Modify Object box, and for the downward curve of the frame you change the -4% to 4%, 16 copies to 10 copies, and leave the rest as it was. Now change the final layer to 15% for the soft background within the frame. Finally an .IMG file of the lady was imported and a 2pt. white border from your standard Calamus 1.09N frames was added for trim.

Picture frame effect from fountains around edge, with white 2 point rule added for effect.

One point that I have overlooked is the naming of your many .OL files during these steps. You would be wise to name them very clearly, or write down on paper exactly what each file contains. Otherwise you will find yourself guessing when it comes time to merge or revise files. The Calculator, combined with the Extra Functions has limitless uses, and the more you probe the more you will find yourself relying on them.

In the second part of this Vector Art Package review we take a look at the new kid on the block. Is DA's Vektor just another flash in the pan or will stand out from the competition.

This review deals mainly with what DA Vektor can offer the average Calamus user. We have purposely left out some features, which while being very useful for other applications, have nothing to do with Calamus DTP.

I remember very well the occasion when I visited one of the international computers shows and Ray Cross of CGS was demonstrating a new piece of software from Germany called DA Vektor. Talk about love at first sight (and I don't mean with Ray) I watched in amazement for about 20 minutes whilst Ray guided me around this latest release. Since DA Vektor owes a lot of it's appearance to Didot line art and it's bigger brother Didot Professional I was already familiar with the interface and some of it's features, so all I needed to learn was the new additions. And it is these new additions that make DA Vektor such a useful and invaluable package for any DTP user

Core Functions.

DA Vektor consists of five core functions (Vectoriser, Vector Path, Vector Graphic, Graphic Chart and finally, Animation) which all share and interact within a common work area. In turn, each function has it's own Toolbox which contains icons dedicated to that specific function, with the exception of some icons which are common throughout all five toolbox.

The first core function is the Vectoriser which like most features within DA Vektor owes much of it's development to Didot where these routines made their first appearance. To Vectorise an image inside DA Vektor is quite an easy and painless process once the image has been imported into the work area. All you have to do is set the vectoriser to use lines or Beizer curves and then clicking on the ' Start Trace' icon and the program does the rest (see fig I). Once the process is complete you will be left with quite an accurate vectorised copy (that's if you use Beizer curve) of your original line art image, which can then be exported to other packages.
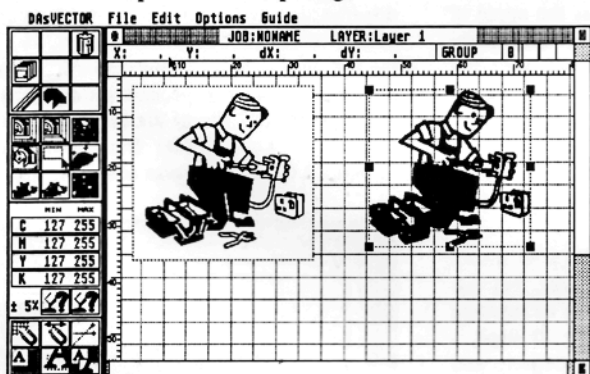
Fig I Vectorising, is as simple as wiring a plug.

If you have a flair for drawing vectors by freehand then the next core function is for you. The Vector Path function is where any freehand or retouching of vector images can be performed and as you would expect there are numerous tools within the tool box to achieve this. In addition, there are a number of new features which really make DA Vector. These include a freehand drawing options (Polylines or Beizer curves) which works very well with the 'Displays Image' (in the background) option, allowing manual tracing to be performed. Also new to DA Vektor are two very useful features: the 'Convert line to Beizer curve' does just what it says and I have found this to be very useful and the 'Eliminate Intersections' which basically removes cross paths at an amazing speed.

Fig II Manipulating Vectors into any shape.

The next core function, Vector Graphic, is probably the most powerful of all five. It is here that previously designed vectors shapes can be manipulated to produce some stunting effects. So let's take a closer look at some of these functions which can produce these stunting effects. First on the tour is a feature which has be ported over from Didot Professional, the Beizer Grid Transformer (see fig II). This allows a square grid resembling a piece of paper to be sculpted into any shape and then stored for future use. Once the grid has been shaped, a vector image can then be placed upon it and distorted. This very same feature is available from within DMC's Line Art but unfortunately is much more complex to use.
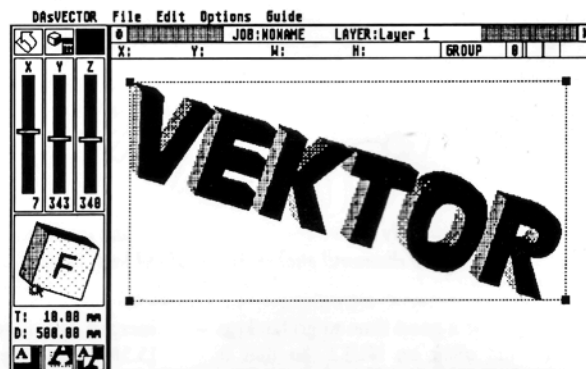
Fig III 3D Extrude is probabley the most impressive function to be found within DA Vektor.

Next is probably the most impressive feature of the whole package, 3D Extrude function, which will produce a three dimensional version of the selected vector shape. Three sliders are used to control the way the vector image appear (see fig III). In addition, the light source can be controlled giving an extra element of realism. To complement this suite of functions there is a copy and a calculator function which no self respecting vector package would be with out.

In addition to these vector shapes, the Vector Graphic function can also produce vector text, but unlike DMC's Line ART, the text features within DA Vektor are much more flexible and powerful without being too daunting to the user. Vector Text is handled via one icon, which in turn accesses several functions which can manipulate the Text in a number of ways with some interesting results. This vector text is first produced by using either a Calamus or Didot font, which is used to place the text on to the screen in different manners including along a straight path, in a circular path or along a vector path (see fig IV).
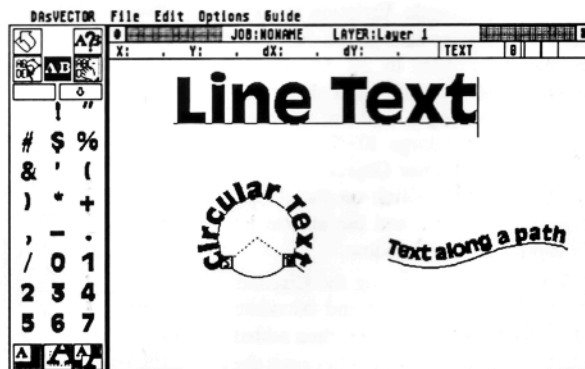

Fig IV By using the Vector Text feature, the possiblities are endless.

Next on the agenda is the fourth of the Core functions, Vector Chart, which I must admit I havn't had much opportunity to use. Basically it allows you to produce 2D or 3D Bar and Pie Charts, naturally all in a Vector form, which can then be exported in several formats including Calamus CVG.

The final Core function is the Animation, which you would think wouldn't really have much to do with Calamus. Well that's were you are wrong. If you wished to produce the same effects that are illustrated in this issue, Line ART Autonomy (see fig V) using DA Vektor instead (in-fact we will be including some DA Vector Hints in the next issue), then it is within the Animation function that they would be produced. Within this useful function, are a number of duplicated functions which have previously appeared within the Vector Graphic function, including the morphing effect 'Beizer Grid

Transformer'. The problem is that this feature cannot morph between two vector images with a different number of points, in other words they both require the same number of points and can only handle beizer curves so even a box shape would have to use curves (with the tangents set to level) instead of lines. In addition, there are a number of features for changing the colours, proportional sizes and rotation, all of which can contribute to the morping process. A feature within the Vector Graphic function allows all the frames created within the Animation to be placed on to the working area all at once, which can then be grouped and exported as a CVG file.
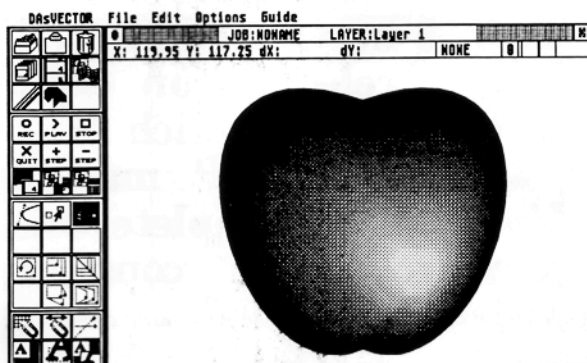
Fig V By using the Animation Function, a graduated grey scale apple (as discribed this issues Line ART Autonomy) can be easily produced, more so than usding other packages.

Common Core features.

As previously mention there are five core functions which make up DA Vektor and within these functions are a number of features which are common to each core function. Most of these features will be familiar to any one who have used Didot before, but let's take a brief look at each of them for those of you who are not .

Lets start with the *library function* (see fig VI). This useful feature can be found within four of the core functions (excluding the Vectorsier) and offers the option to store different elements depending on the core function. For example, a library of pre-defined basic shapes could be stored for use within the Vector Path or more complex images may be found within the Vector Graphic's own Library. In addition, there is a common clipboard which allows elements and images to be stored and accessed, again the contents relates to the specific function. Like most features within DA Vektor, both the Library and Clipboard features work on a drag and place system, which has only recently found it's way on to the PC and the MAC.
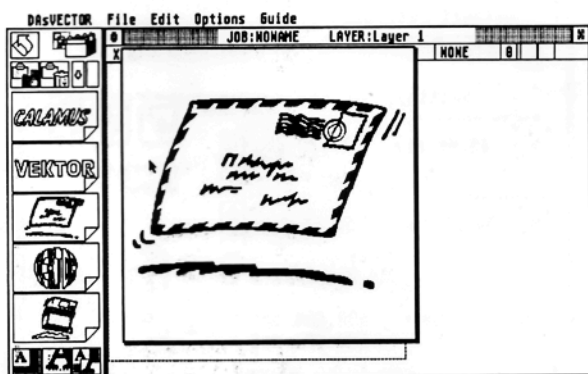
Fig VI The Clipboard can store any number of vector images or shapes, with a thumbnail display of each image.

Working in colour or not.

Like so many programs that have emerged over the last year or two, DA Vektor uses resolution rendering (see the Line ART Review) to place it's display onto the screen. But with the addition of just using 24bit (RGB) like most programs, DA Vektor stands out from the rest by also offering the use of 32bit (CYMK) colour setting.

Any colour setting can be finely adjusted at any time by simply moving the three slider (or four with 32bit) within the Set colour dialogue box. Alternatively, pre-defined colour setting can be selected from a colour chart which can be amended or added to at any time. Again, compared to DMC's Line Art (excluding the module version)this feature is much easier to use.

Services.

In addition to the core functions, there is a feature to run special external programs called services (which are included with DA Vector). These include Image Converter, Colour Run, Postscript Font to DFN font converter.

Something I forgot to mention when describing the vectoriser is that you can not just import any type of image into DA Vektor, the program will only except TIH (TIFF Halftones) or TIF (TIFF true colour) files. But this is easily resolved by using one of the external services. The Image Converter will take any TIF or IMG image and convert it to A TIH, TIC (which is used for fill patterns) or TIF format.

The Colour Run (see fig VII) service offers the option to create fine, medium or course, Graduate colour or Halftone images which can then be saved in the normal TIFF format. This can take a lot of space on your hard disk, depending on the size and the leave of coarse-ness. The font converter takes either a single or a folder full of postscript type 1 fonts and produces DFN (DA Vector own format) equivalent. Another service program which is not included with DA Vektor is a special version of the GT Look 2 Epson scanner software which allows scanning from within DA Vektor,which is handy for scanner owners who do not use a multitasking system.
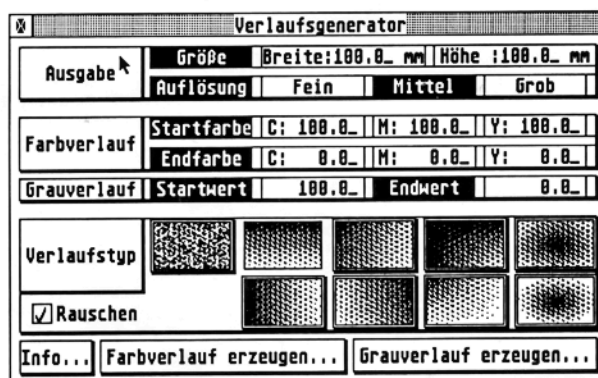
Fig VII From the 'Services' menu option. Converters and Scanner software can be utilised, including the generation of either Graduated Colour or Halftone Tints.

Importing and Exporting.

Unlike the image formats, Vectors images are better catered for via a number of import and export drives including HTV (DA Vektor Native format) which also save vectors with image fill patterns, DIG (Didot or DA Layout format), CVG (Calamus 1.0 B/W or 1.1 colour format), GEM (Metafile 3 format), ADF (Acorn Archimedes vector format) and RVP (DA Repro vector foramt).

The export side is equally supported with all the above formats with the addition of the EPS (Encapsulated PostScript) format which I have found to be very reliable when tested on other packages and platforms.

Conclusion.

Down side.
The main down side of this program is the fact that sometimes for unknown reasons DA Vektor will hang up for no apparent reason. I have been assures by Ray that these problems have been resolved in the latest version.

Another fault which I find very annoying is the fact that DA Vector will only import TIH/TIF formats of images. Other packages on the Atari and other platforms allow offer formats to be loaded, so why not DA Vektor?.
The up side.
The nice thing about DA Vektor is that it makes manipulating Vectors and Text much easier than other packages. When you think of all the features that it offers and then look at the price tag, it is definitly value for money at around the £ 150.00 mark.

Once the Atari software proves that it is much more reasonably priced than anything similar on the PC or MAC.

If you are interested in purchasing DA Vektor then give Ray or Alison Cross a ring at CGS Computerbild on 081-679-7307.

Wish list.

There are a number of features I would like to see added, these include a import driver for Corel Draw CDR vector images and the same for importing EPS images. Plus a feature which I have seen within a MAC programcalled Smart ART which takes the text and shapes it in to a pre-defined shape, for example an eye or fish shape. The introduction of these features would make DA Vector even better. DA Programmers take note.

An Issue of Calamus User would not be complete without it's most popular section.
This addition of Hints and Tips includes some real gems, which we hope will be of some use to you all.

Flowing Text around Irregular Shapes. (1.09/1.09n)

As we have previously shown in the past, it is possible from within S/SL to flow text around a irregular bitmap image. We have now found a way of creating the same effect from within Calamus 1.09/1.09n. So just follow these simple steps:

Step 1.
First, import some text into a text frame, then import a bitmap image in to a bitmap frame.

Step 2.
Next, create a number of Bitmap frames around the image, making sure that they follow the contour of the image (see fig I).
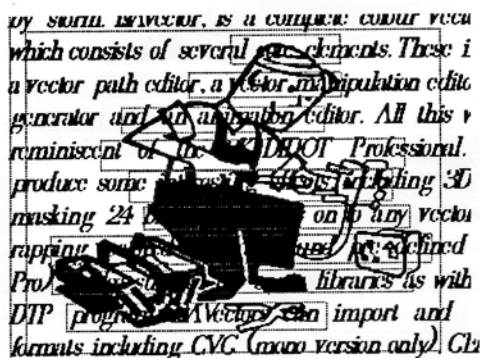
Fig I the bitmap frames should follow the contour of the image.

Step 3.
Then, place the text frame over the collection of bitmap frames and click on the text frame, making it active.

Step 4.
Now, click on the 'Special Text Frame Function' and click on the 'Place Text Around Frame' icon.

Step 5.
Next, click on one of the bitmap frames and then click on the 'Select All' option within the 'Extras' Menu.

All the bitmap frames should now be active.

Step 6.
Now, click on the bitmap frame (which contains the image) whilst holding down the left shift key.

This should de-activate that bitmap frame.

Step 7.
Next, click on the 'Place Text Around Frame'.

This should now force the document to redraw the text around the image (see fig II).
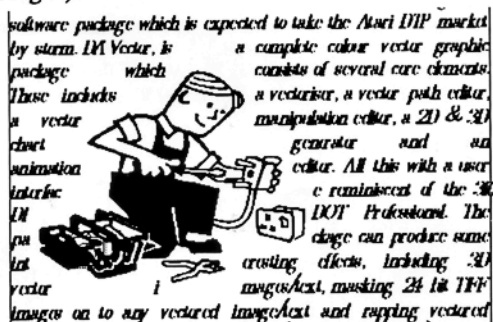
Fig II The Text should now flow around the bitmap image.

This hint can also be used within SL to flow text around a drop character (see fig III), just substitute the bitmap image/frame with a text frame containing the required character.
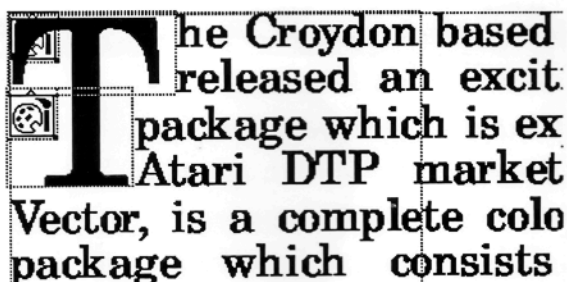
Fig III This hint can also help when using drop characters.

Improving Rasters printing at 600dpi (SL only).

Here is a tip for those of you trying to get the best from a 600dpi laser printer.
When you are setting up the Raster Generator just before printing, set the Raster Width to read 54 lpcm, this should in turn reset the pixel Size (below the Raster Width) to 16 x 16 pixels.
Once you have done this, you should then click on Done button and complete the usual sequence to return you the main display.
This should now result in a finer dot pattern when out-putting to a 600dpi print which is what you would expect from higher resolution device. Now for a word of warning, this tip will only work with single rasters, for example a box with a 50% fill pattern or a piece of text set to 25%.(see fig IV)
This tip does not work well with Raster Images or Graduated levels of grey as it will produce sharp bands between the different levels.
Mark Skillin, Kent.
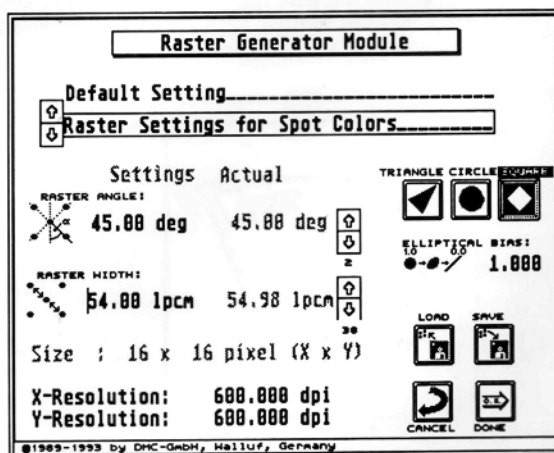
Fig IV By using these setting within the Raster Generator module, you should get some smooth halftone tints when printed at 600 dpi.

Printing to Disk (1.09/1.09n/S/SL).

Whilst at the Birmingham Atari show, I was asked by two gentlemen if there was a way of printing a CDK document to disk.
Well, I have found that this can be achieved by using the GEMIMG.CDT (S/SL) driver which prints a bitmap image of the document (at any resolution up to 600 dpi) to disk.
This bitmap image file can then be loaded into any program which accepts this popular bitmap format and then printed out to the attached printer.
I have tried this not only with SL but also 1.09n (which seems to use most of the SL drivers without any problem) and then loaded the

resulting IMG file into several programs (including PageStream, Didot Pro, Arabesque Pro, Atari Works) for printing out to my HP Laserjet 4L at 300 dpi.

I was very much surprised to see the quality was extremely good and I could not see any difference between the IMG prints and those generated from the original CDK's.

The main problem that you may incurred by using this method. Is, making sure that the imported images are sized (within the desired application) to the correct ratios to avoid moiré patterns and hence, poor quality printout's.

Extruded 3D Text.(S/SL)

This hint will produce the illusion of 3D from within Calamus S/SL.

Step 1.
First create a Text frame and enter a piece of text into it.

Step 2.
Next insure that the 'Select Copy Type' is set to 'Prompt When Copy'.

Step 3.
Now activate the text frame and select the 'Copy Frame' (Camera icon) and enter the following parameters, then click on 'OK':
Virtual Copies Only = Selected Prompt When Copying =
Selected Number of Copies = 20
Horz Spacing = 0.01000 Cm
Vert Spacing = 0.01000 Cm

The original text frame will now be copied 20 times and this should give the illusion of being Extruded 3D.

Step 4.
Finally, to complete this effect, select the top frame and select the Text Style module and change the style to outline. Now because each frame in the group is a virtual copy of the original frame, when the settings in that frame are changed, the contents in all the other frames will change too.

The text should now look as if it is 3D (see fig V). Now try and change the style setting and experiment with different styles, you will be amazed with the effects you can produce.

3D Extruded

Fig V 3D Extruded Text, it's as easy as that.

3D Extruded

3D Extruded

3D Extruded

Some more examples of the effects you can create from this simple S/SL hint.

Casting a Shadow. (S2/SL)

With this hint you will be able to produce the illusion that the text headline is casting a shadow.

Step 1.
First create a text frame and enter some text, making sure that the point size is set to about 72pt.

Step 2.
Next click on the 'Copy Frame' icon, then set the 'Number of copies' to equal 1, Horz Spacing equal 0, Vert Spacing equal 0 and click on OK.

Step 3.
Now click on the 'Text Style' module and set the 'Text Attribute' to 50% or 25% grey. Next set the 'Text Effect' to Skewed and the skewed setting to 45 degrees, followed by the clicking on the 'Change Text Style' icon.

You should now see that the grey text has been skewed and appears over the top of the normal black text.

Step 4.
Next click on the 'Place Frame in Background' icon which should place the shadow behind the main black text.

If you wish to have the shadow cast in front of the main text, click on the 'Mirror Frame Vertically' icon from within the 'Frame Miscellaneous Functions' and move the frame until it matches correctly with the main text frame (See fig VI).

Shadows

Fig VI From two frames and a bit playing around you end up with the illusion of a forward casting shadow.

X and Y Co–ordinates Display. (1.09/1.09n/S/SL)

This is not so much as a hint but more of a reminder of a useful option. When I first started producing this magazine, I found that the easiest way to position a frame correctly and accurately was by using the co-ordinates option at the top of right hand corner of the screen. This option controls the X and Y, and also the DX (Width) and DY (Depth) settings of any type of frame including grouped frames (see fig VII below).

For more information on this useful option, I suggest you look up Co-ordinate Display in your manual (page 65 for 1.09/n and chapter 5.1.1.8 for S/SL)

| | X: | 10.65334 | dX: | 9.24431 |
| | Y: | 15.08580 | dY: | 9.83441 |
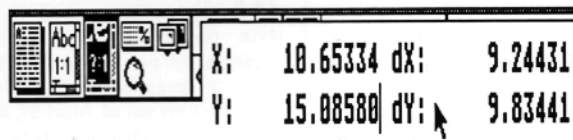
Fig VII This useful feature make setting the precise frame co-ordinates, very easy.