

Quick on the draw

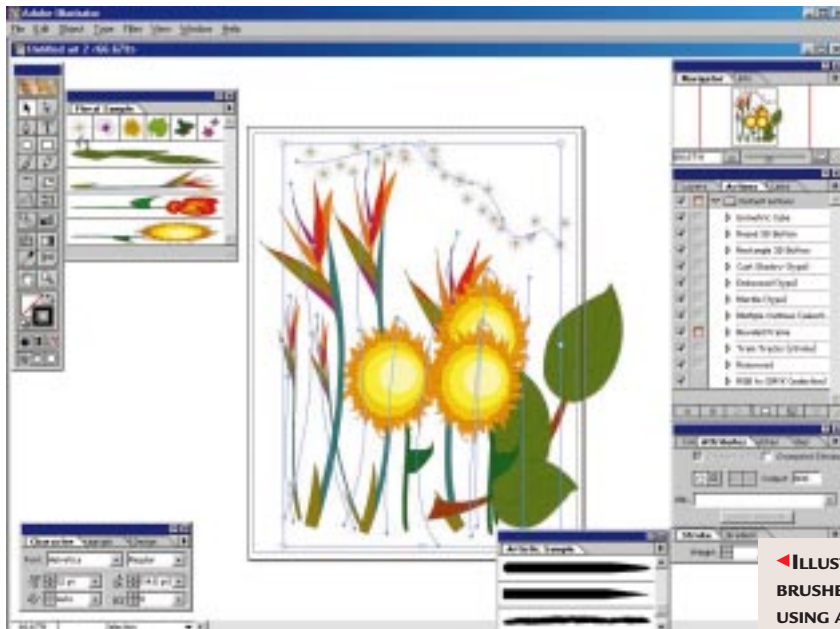
Whether you're a pro or a part-timer, let this month's software group test be your guide to the very best in **drawing packages.**

In this group test we take a close look at no less than 14 drawing applications. This number reflects the diversity of uses to which such software is applied, from commercial design through to technical illustration.

Not so long ago, 'art' software was defined according to the way it worked.

Vector-based software uses algorithms to produce lines, shapes and colours, and bitmap packages 'paint' with pixels. Vector packages are good for emulating pen and pencil drawing with flat colour, and offer the precision necessary for technical illustrations. Bitmap packages are good at producing natural paint

Professional packages



ILLUSTRATOR 8'S ART BRUSHES DRAW PATHS USING A SINGLE OBJECT, OR SCATTER AN OBJECT RANDOMLY ALONG A PATH

Adobe Illustrator 8

Adobe Illustrator is enjoying renewed success in the professional graphics market, all as a result of the launch of Illustrator 8 late last year. There could hardly be a greater contrast between the slow, lumpish, crash-prone Illustrator 7 and its version 8 replacement.

Adobe achieved this success largely by listening to users and giving them what they asked for. Powerful and imaginative features such as the new art, scatter and pattern brushes, gradient mesh tool and live blends sit alongside ease-of-use enhancements such as the new pencil tool, free transform tool and smart guides.

Interface enhancements mean Illustrator looks and works more like Photoshop, and even includes Photoshop's Actions and Navigator palettes. Many small but important menu and dialogue-box details have been attended to, further improving productivity.

Metacreation's Expression [page 170] was the first to introduce vector tools that produce naturalistic paint-style effects, and now Illustrator has followed suit. Any object can be defined as an art brush, and the brush can then be applied to any stroke. Supplied brush libraries include flowers, arrows, patterned borders, and natural-looking watercolour, ink and charcoal brushes.

Art brushes can be used in a variety of ways. You can use the natural media

brushes to create ink, watercolour or charcoal effects. Using object-based brushes you can quickly build up complex scenes comprised of similar but subtly varied elements — a forest of trees, or a bouquet of flowers, each stem curving in a different direction, and each bloom a different colour. Using border brushes you can easily create miles of train track, fencing, rope or ornate edging in any width or colour you like, following any curve.

Scatter brushes are another innovation from pixel editors. Here, the object repeats at random along the path. Brush options allow you to specify size, spacing, rotation and the degree of randomness, among other things — a sort of digital object spraygun. Unlike their pixel equivalents, however, these paths remain editable, and 'expanding' the stroke turns it into a normal editable object.

Another powerful feature that provides pixel-style effects is the gradient mesh tool, which creates patches of smoothly blended colour in an airbrush style. A mesh is created by clicking to define points on an object — each point adds a blob of colour. You can add or take away points from the mesh, change colours and even drag points, or the paths joining

them, to rearrange the colour mesh.

The pencil tool has been improved beyond recognition; instead of a scribbled line with hundreds of anchor points, the Freehand drawing implement now produces smoothly curved paths with the minimum number of points necessary. If you go wrong, you just restart your path from the point where it went astray and Illustrator not only appends the new section but deletes the old, erroneous one.

Numerous small tweaks include putting the Pathfinder operations in their own graphical palette, new and more consistent keyboard shortcuts, an improved eyedropper that samples font and stroke styles, AutoCad file import, a links palette and compressed layer

lists, to name but a few. The degree and extent of these additions and enhancements make this release of Illustrator the best yet, by a wide margin.

CorelDraw 9

Version 9 is the 10th anniversary edition of Draw, a package which started life as a clip-art collection with a handy graphics utility attached and went on to become one of the top three professional illustration packages around.

Draw's standing in the design industry, third to Illustrator and Freehand, is the result of history. It is really only since the first Mac version was released two years ago that Draw has been taken seriously by design professionals. The Mac version of Draw 9 lagged two months behind the PC product, which was launched in May this year.

With this version Corel has pulled out all the stops in an attempt to woo designers away from the competition, with a raft of features and productivity

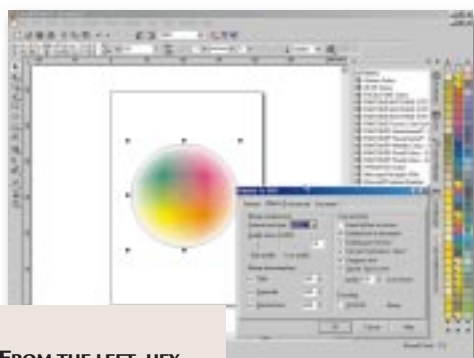


DRAW 9'S LENS EFFECTS CLOCKWISE FROM TOP: INVERT, MAGNIFY, LIGHTEN, TRANSPARENCY

enhancements. In part, it is a feature-matching exercise, introducing new tools like mesh fill, natural media brushes and the interactive fill tool.

If Corel's intention was to duplicate Illustrator's new gradient mesh tool, it couldn't have done a better job — the two are virtually indistinguishable. Draw's natural media brushes are more flexible than Illustrator's — you can, for example, draw Spirograph-style symmetrical patterns about an axis.

Corel has gone a long way towards addressing one of the most vocal criticisms, namely that the Draw interface is cluttered and complicated. Dockers,



▲ **FROM THE LEFT, HEY, IT'S THAT GRADIENT MESH AGAIN, PDF OPTIONS, COLOUR PALETTE BROWSER, COLLAPSED DOCKERS AND MULTIPLE COLOUR PALETTES**

modeless palettes that can be 'docked' in a container, replace the few remaining roll-ups. It is now possible to display all of the seven new

Pantone colour palettes at once, each one expanding individually as you need it.

Corel has finally abandoned Envoy, the electronic portable document format it acquired with WordPerfect, in favour of Adobe Acrobat. You can create a pdf directly from Draw 9 without having to first save a PostScript file then distil it. Draw's pdf export provides all of the functionality available in Acrobat Distiller 4, including compression controls, font embedding and pdf-style presets optimised for print, web and document distribution.

File compatibility has been extended, most significantly with the ability to import and export both Illustrator and Photoshop files with layers intact. With an additional 70 import and 40 export filters, most file formats are covered.

Further encouragement to the professionals is provided in the form of 'pre-flight' checking for pre-press problems such as missing fonts, trapping issues and wrongly specified colours, embedded ICC colour profiles,

imposition layout and a prepare-for-service-bureau wizard.

Corel being Corel, you get shedloads of clip-art and images, as well as numerous other packages including PhotoPaint 9, Canto Cumulus Desktop, and Corel Texture, Trace and Capture.

Macromedia Freehand 8

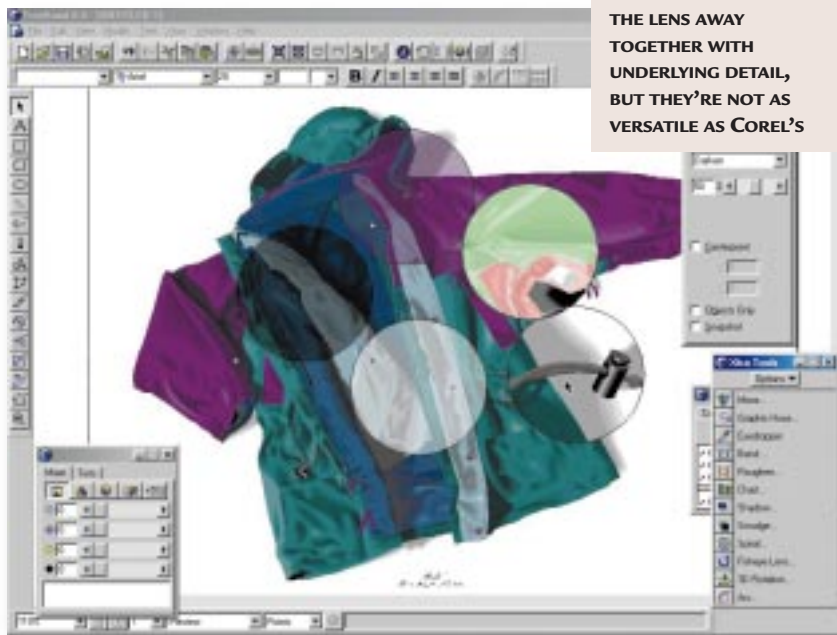
Freehand 8 was launched in April 1998, which makes it more than 18 months old. In the world of graphics software, that's getting long in the tooth, and by any measure an upgrade is now due.

When version 8 was released, the overall improvement in speed and ease of use, coupled with groundbreaking new features like a lens tool with transparency effect, freeform distort, graphics hose and

Freehand 8 boasts a multi-function transform tool which allows you to move, scale and rotate by dragging an object's or group's perimeter handles, and modifier keys allow you to flip and copy the selection. The freeform distort tool is a more flexible and intuitive alternative to node editing, allowing you to grab, reshape and smear path sections.

Complex vector images, particularly blends, can slow down screen redraw considerably, and Freehand provides two view options for increased performance: Fast Preview and Fast Keyline speed up artwork views by greening text and reducing

▼ **IT'S THOSE LENSES AGAIN. CLOCKWISE FROM TOP: TRANSPARENCY, INVERT, MAGNIFY, LIGHTEN AND DARKEN. YOU CAN TAKE A SNAPSHOT AND MOVE THE LENS AWAY TOGETHER WITH UNDERLYING DETAIL, BUT THEY'RE NOT AS VERSATILE AS COREL'S**



transform tool, made it the undisputed king of the vector graphics castle. Now that mantle has been stolen back by the leaps made by Illustrator 8, it can only be a short while before Macromedia attempts to regain the throne.

Most of Freehand's new features come courtesy of the lens tool which provides transparency, invert, lighten, darken and magnify functions. The magnify lens allows you to take a snapshot of the magnified portion and move it away.

Prior to version 8, Freehand handled transparency by creating a new-filled object to overlay the existing selection and create a transparent effect. The lens provides transparency on-the-fly — objects behave transparently wherever you move them. Like Illustrator 8,

the number of displayed blend steps, a simple but helpful innovation.

One bonus for cross-platform users is that Freehand 8 is supplied with both PC and Mac versions in the box. The Design In Motion Suite also includes the InstaHTML export application and Macromedia's web vector animation package, Flash. Additionally there is a 10,000 piece clip-art library and 500 fonts.

PCW DETAILS

★★★★★

Adobe Illustrator 8

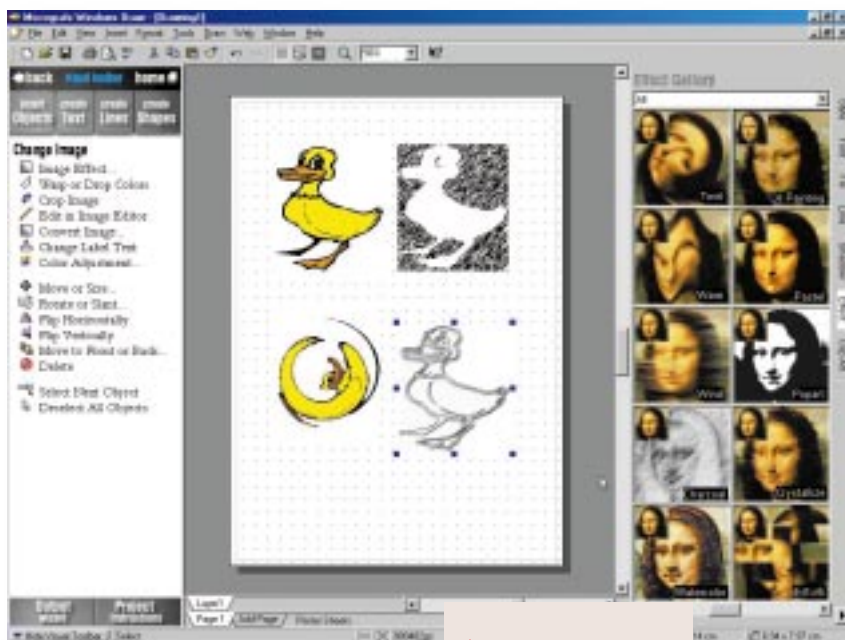
★★★★★

CorelDraw 9

★★★★

Freehand 8

Budget packages



Sierra Windows Draw 7

Formerly known as Micrografx Windows Draw 6 Premier Edition Print Studio, new owner Sierra has adopted the less verbose 'Publisher' moniker for this budget suite. In addition to Draw, you get the Photomagic image editor, an excellent 3D-effects application, 48 fonts, 32,000 clip-art images and a media manager to keep track of them.

One of the attractions of this package for those with older machines is that it will run on a 486 with 16Mb RAM; if you custom-install the Draw component only, you can get away with around 35Mb of hard-disk space.

One thing Windows Draw has is an abundance of guidance — you're never at a loss to know what to do next. This is mainly due to the excellent Visual Toolbar, a kind of hybrid toolbar/help window. Having chosen one of the (fairly poor) selection of templates, the visual toolbar prompts you to get editing by selecting either some text or one of the graphics on the page. Depending on your next move, it then provides a further menu of options. If you select text, for example, the change text object toolbar offers change font, colour and format, and edit, distort and check spelling, among other things.

On the opposite side of the editing

▲ **WINDOWS DRAW 7 HAS A WIDE RANGE OF EFFECTS FILTERS THAT CAN BE APPLIED TO JUST ABOUT ANYTHING — BUT DON'T EXPECT IT TO REMAIN EDITABLE**

window, the gallery provides a fast track to a multitude of special text and graphics effects. Tabbed panels in combination with a pull-down menu offer many preset effects, although the combinations are a little odd. For example, the style gallery has four categories of text effects (simple text, cool text, dark backgrounds and sports themes) with two libraries of star-shaped objects tagged on the end.

By far the most impressive is the effects gallery, which includes an expansive range of image-editing style filters. Here you'll find everything from colour correction and posterisation

► **SERIF DRAWPLUS 4 HAS RATHER GOOD TRANSPARENCY EFFECTS. HERE, A LINEAR BLEND IS APPLIED TO FADE THE STAR TOWARDS THE BOTTOM LEFT**

filters to distortion, photographic, texture and warp filters. Surprisingly, you can get many of the filters to work on clip-art images and even text. It also places pixel images, although objects are not subsequently editable.

If you don't want your hand held, you can dispose with the visual toolbar and galleries and go it alone from the menus, which provide a good range of object drawing and editing tools. There's web support with an HTML export option, and facilities for creating GIF and AVI animations. Help with printing is in the form of an output wizard.

Serif DrawPlus 4

The 'Plus' can only refer to the massive array of clip-art and photo images. The 100,000 Deluxe Graphics Pack, which ships with DrawPlus, comprises nine CDs, five of which contain clip-art and the remaining four photographs. You also get a design CD full of templates and additional fonts, which you have to install in order to use the DrawPlus wizards, and 3Dplus, a 3D text effects application.

Wizards have become the almost universal means of producing basic templates for those short on design experience and time, and DrawPlus is no exception. The wizard process consists of making a few basic choices for document type, text fields, colours and so on before producing the template. The options on offer are firmly home and leisure-based with an abundance of certificates, badges, greetings cards and car-boot sale posters, so if you're looking for



something to produce business stationery, DrawPlus isn't it.

Like Sierra Windows Draw, DrawPlus uses a gallery, here called the Studio, for easy access to most of the content as well as text and object formatting and effects. The studio also has a tabbed panel providing access to wizards. These are somewhat rudimentary. Banner wizards, for example, ask you to import some text and select a colour, then incorporate your choices into one of a limited selection of fairly cheesy banner templates.

All the wizards follow this three-step-process template modification, and the results are often less than impressive.

The good news is that once you get past the wizards, things get decidedly better. DrawPlus has a selection of powerful tools and features, mostly new to version 4. Alongside the wizards in the studio panel are tabs for text formatting, line, fill and transparency styles.

The fill panel holds a wide range of solid and graduated (linear, radial, elliptical and conical) as well as bitmap and 'plasma' fills. The latter, based on tiled fractal patterns, sound a lot more exciting than they look, though.

You can now add transparency to objects, revealing detail underneath; effectively, this is the same as reducing the object's opacity. The transparency panel provides a range of presets. At its simplest, transparency can be applied evenly across the entire object, but you can also apply transparency through a mask. Things get really exciting when you use the bitmap and plasma fills as a transparency mask, allowing you to produce interesting textured semi-transparent effects.

Other new features include improved editable blends, a new join objects command, linked colour styles and a wider selection of quickshapes. Web authors are well provided for, with a GIF animation wizard and support for GIF and PNG file formats. Finally, there's a rather good tour that will familiarise you with the package's options and improvements.

► **DESIGNWORKS 3.5'S** INTERFACE IS WELL ORGANISED WITH TOOL FLYOUTS, DOCKABLE FLOATING PALETTES AND POP-UP PALETTES FOR FILL AND LINE STYLES



GSP Designworks 3.5

Designworks is the drawing application in GSP's Power Publisher suite [see page 255 for a chance to win a copy], which also includes the Pressworks DTP package, a photo editor, 3D powerText, an HTML export application called Web Printpower, and an address book. There's a library of 10,000 clip-art images and 10,000 photos which can be viewed and accessed using Designwork's simple but effective image browser.

As with Serif DrawPlus 4, you need to look past the mediocre selection of

Pagepilot wizards and templates to discover the treasure that lies beyond. Although a budget package,

Designworks has many of the features and interface properties that you would expect to see in the pro packages, such as multiple layers, Pantone spot-colour support, and colour separations.

The draw window is surrounded by toolbars, but because of the way they're organised, this is anything but intimidating. General and object tools sit along the top, drawing tools to the left, with align and transform tools on the right. Each of the toolbars can be expanded, and flyouts appear where there are tool variants. Alternatively, you can display the bar with 20 buttons depicting each tool and all of its variants. Double-clicking any of the toolbars causes it to undock and float.

Instead of the thousands of effects that litter other budget packages, Designworks just has straightforward tools that enable you to get on with the job. The drawing tools let you create paths with a multifunction bezier tool, by adding individual corner, curve and connector points, or using a freeform pencil. You can switch between tools at any time and continue drawing from the last anchor point.

Using the align toolbox you can line up objects along any edge or centrally, as well as aligning them to the page edges; there is no distribute command, though. Colours are displayed in a palette along the bottom of the screen and you can define your own using CMYK, RGB, HLS models or the Pantone colour library.

You're not completely on your own — cue cards provide concise guidance on how to carry out basic editing and there's a reasonable help file, but Designworks would definitely benefit from some kind of context-sensitive help along the lines of Windows Draw's visual toolbar.

If you're looking for quick results but are low on ideas, Designworks probably isn't for you. But if you know what you want, it provides all the tools you'll need to produce your own original artwork.

PCW DETAILS

★★★★★

Sierra Windows Draw 7

★★★★

Serif DrawPlus 4

★★★★

GSP Designworks 3.5

Miscellaneous drawing tools



◀ **IT'S ALL DONE WITH VECTORS IN EXPRESSION — THE WATERCOLOUR SEA, (SELECTED), SAND, FISH (REPEATING STROKE) AND TREASURE (PATTERN FILL)**

can paint with fish, flowers, or any of your creations. You can repeat elements along strokes to create, say, a shoal of fish, and multi-view strokes allow you to include randomly

All of the packages in this section are unusual. They are all Metacreations products, and interestingly, with one exception, were acquired when the company bought Fractal Design.

Expression

Expression's unique feature is that it's a vector draw application that creates paint-like results. The big problem with paint programs is that, like the real thing, once the paint goes on the page, it's there to stay and there's not much you can do.

Expression's Warehouse Palette of natural media strokes are editable vector paths, so you have all the control and flexibility of Bezier curves with the natural look of painted strokes — variable width, soft edges, varying colour. The warehouse palette is sectioned into folders including watercolour, textured, multi-bristled and airbrush strokes.

Objects can also be defined as strokes, so you

edited variations. You can also create animations from elements of multi-view strokes. Other applications have now incorporated this feature, but it still provides a superbly flexible environment.

Painter 5.5 Web

Painter is a pixel paint application that concentrates on providing tools that closely emulate traditional artists' media and is famously packaged in a paint tin.

Painter is more about creating than editing, so you won't find the variety of tools and filters that photo-editing packages bristle with. You can, however, import photos into a background layer and trace over them with effects brushes.

Painter 4 introduced the image hose, which paints with pictures and has since been imitated by almost everyone. A less copied feature is the superb mosaic tool, which produces excellent results.

Version 5.5 Web edition introduced web authoring tools including the image slicer. This innovation simplifies the task of producing visually rich web pages by chopping them up into sections and reassembling the bits in an HTML table. You can then save the bits in the most optimal format, depending on the content.

Art Dabbler 2.0

Dabbler is the software equivalent of a flip-book animation. As a pixel-based paint package, it's fairly unremarkable. A well-organised drawer-based interface

accommodates a range of natural media tools like inkpens, chalks and oil brushes.

But Dabbler comes into its own when used to create cartoon animations, by closely following the traditional method. It makes use of a semi-transparent top drawing through which you can later view the preceding frame to build up animations frame by frame.

You can playback and edit using a viewer applet with cassette-style buttons, and export completed animations as QuickTime or AVI files. To get you started there are two guides to cartoon drawing and animation, both in flipbook format.

Poser 3

Another product with a difference, Poser was originally designed as a tool for artists, a software version of the wooden poseable doll, or life model. Version 3 features fully poseable hands and facial expressions, a walk designer which creates realistic walking movements, animal figures, and fully animated lighting and camera changes.

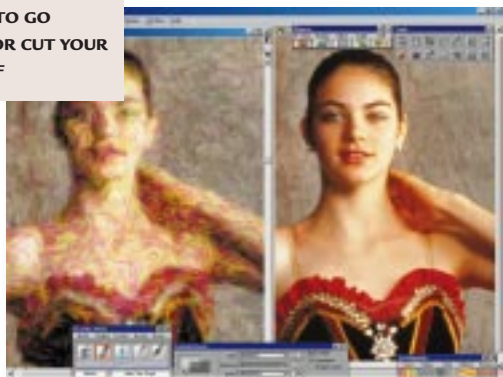
As well as a library of hand presets, you can use a thumbwheel to extend and contract the fingers and thumb and rotate the wrist. Faces can likewise be manipulated — lips opened and closed, and even reproducing the correct mouth formations for saying certain letters.

Eyebrows are controllable to a degree that would worry Roger Moore, and the bald heads and bad wigs of earlier Poser versions have been replaced by a more realistic hairstyle library.

Poser 4, which is due out as we go to press, promises radical new features including enhanced animation, a full wardrobe of textured 3D clothing from formal dress to beachware, and transparent effects. The interface also gets a revamp with greater ease of use.

Painter 3D will be bundled with the new version, which is expected to sell for the same price as version 3.

▼ **PAINTER LETS YOU ACHIEVE EFFECTS LIKE THIS WITHOUT HAVING TO GO INSANE OR CUT YOUR EARS OFF**



PCW DETAILS

★★★★

Expression / £151.58 (£129 ex VAT)

★★★★★

Painter 5.5 Web / £351.33 (£299 ex VAT)

★★★★

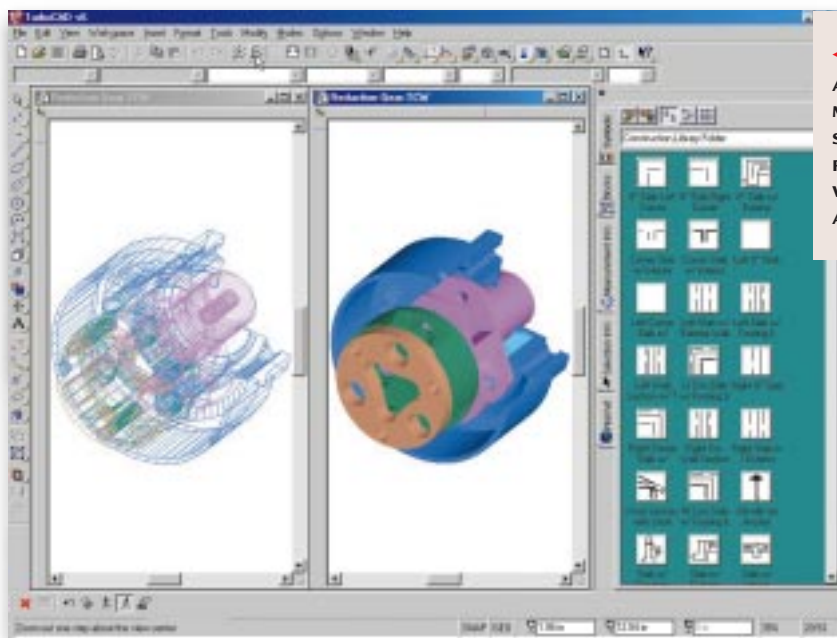
Art Dabbler 2.0 / £46.94 (£39.95 ex VAT)

★★★★

Poser 3 / Poser 4 £234.99 (£199.99 ex VAT)

Contact Computers Unlimited
0181 358 5857

Technical packages



◀ **TURBOCAD GIVES YOU A LOT FOR YOUR MONEY, INCLUDING SEVERAL 3D RENDERING OPTIONS WITH REAL-TIME MOVE AND ROTATION**

edit window and docking tabbed palettes to the right.

From here you can access symbol libraries, blocks, selection and measurement

information, and further resources from the web. The CD contains more than 1000 house plans and 12,000 industry-specific symbols, and TurboCad will trace scanned images to provide your own templates.

Version 6 features many new and improved tools and productivity enhancements. Dynamic walls are a big timesaver, allowing you to drag and drop windows and doors and accommodating them perfectly without the need to adjust their position or redraw the wall. Any draw package will let you toggle individual layers on and off; TurboCad allows you to create layer sets — groups of layers that can be activated together.

All the CAD drawing aids you'd expect to find are there, including a full set of dimensioning tools, snaps including vertex, midpoint, grid and tangent, multiline tools including polylines, polygons, parallel and perpendicular, and Bezier, spline and sketch-curve tools. TurboCad's in-depth approach is amply demonstrated by its arc tools, which offer 12 alternative ways to produce a bit of a circle.

In addition to integrated 3D extrusion, lighting and rendering functions, you get a concise, well written manual and multimedia tutorial.

iGrafx Designer

Micrografx has given its Graphics Suite a facelift, with the product repositioned and relaunched as the iGrafx range. iGrafx Designer comprises an upgrade to Micrografx Designer and also includes iGrafx image, formerly Picture Publisher, iGrafx Business, a chart and flow-diagram package, and iGrafx Share and Deploy networking utilities.

Designer is more a professional drawing application with CAD aspects than a fully fledged CAD application, and as such is well suited to producing quality finished visual graphics with a high technical content, such as cutaway illustrations of engine components.

New features include Sticky lines, which permanently connect objects even during editing, simplifying the creation of schematic

diagrams. Boolean operators allow you to join, fragment, slice and contour objects, and CAD-like drawing tools let you perform operations like trim, extend and chamfer. There's a good range of annotation and callout tools which provide for quick labelling of an object's dimensions, angles, perimeter area or volume.

IMSI TurboCad 6

TurboCad strikes a nice balance between ease of use and power features. The desktop is well organised, with standard and drawing toolbars top and left of the



Autodesk Actrix and Visio 5 Professional

The production of flowcharts, schematics and diagrams has its own particular requirements, and applications have appeared to meet

◀ **IGRAF X DESIGNER'S OBJECT MANAGER KEEPS TRACK OF THINGS IN A COLLAPSIBLE HIERARCHY. SELECTING TOOLS FROM THE PALETTE ON THE LEFT PRODUCES A CONTEXT-SENSITIVE VARIANTS BAR AT THE TOP, HERE SHOWING THE COMPOUND LINE VARIANTS**

them. These packages are aimed at everyone from personnel managers to network administrators, electrical engineers and plumbers.

Essentially, these packages speed up diagram design by providing a grid, a symbol library, and drawing aids like connecting lines that remain connected even when you rearrange the objects.

Actrix Active Shapes behave in an intelligent way, rotating and snapping into position automatically. Autodesk's Plugs and Sockets technology means objects know what they can and can't connect with, so ducting sections, for example, will only connect with other

appropriate shapes. As you'd expect, it also has better precision drawing tools than either Visio or iGrafx Professional.

Actrix Visio 5 is interoperable with AutoCad and you can save in DWG and DWF formats, as well as HTML. Automation of repetitive tasks and additions are made possible using Visual Basic for Applications (VBA).

Visio Professional is aimed at designers of network diagrams, website diagrams, database documentation and business process management. A technical version is available for heating, ventilation and air conditioning, electrical and engineering drawings.

The package has a good range of wizards to get you quickly through the initial stages of diagram design. You can modify a shape's characteristics with properties, and attach data fields to objects in order — for example, to track costs.

Visio's Smartshapes know when to hide or reveal parts of shapes depending on neighbouring connections, and SmartConnectors re-route to take account of newly positioned shapes.

A database wizard links shapes and drawings to records in an ODBC-compliant database. Like Actrix, Visio can be developed using Microsoft VBA.



	ILLUSTRATOR 8	FREEHAND 8
CONTACT	ADOBE	MACROMEDIA
Tel	0181 606 4001	01344 458600
URL	www.adobe.com	www.macromedia.com
Price (ex VAT)	£257.32 (£219)	£327.82 (£279)
Cross platform	✓	yes (both supplied)
layers	✓	✓
transparency	✗	✓
CMYK output	✓	✓
Art brushes	✓	✓
HTML output	✓	✓ (with InstaHTML)
Press sens tablet supp	✓	✓
Scripting	✓	Applescript only
blends/editable	✓/✓	✓/✓
gradient mesh	✓	✗
Editable global colours	✓	✓
fonts	70	500
clipart/photos	725	10,000



	CORELDraw 9	WINDOWS DRAW 7	DRAW PLUS 4	DESIGNWORKS 3.5
CONTACT	CORELDraw 9	SIERRA	SERIF	GSP
Tel	0800 581028	0118 920 9100	0800 376 7070	01480 496575
URL	www.corel.com	www.sierrahome.com	www.serif.com	www.gspltd.co.uk
Price (ex VAT)	£327.82 (£279)	£39.95 (£34)	£69.95 (£59.30)	£39.95 (£34)
Cross platform	✓	✗	✗	✗
layers	✓	✓	✓	✓
transparency	✓	✗	✓	✗
CMYK output	✓	✗	✗	✓
Art brushes	✓	✗	✗	✗
HTML output	✓	✓	✗	✗
Press sens tablet supp	✓	✗	✗	✗
Scripting	✓	✗	✗	✗
blends/editable	✓/✓	✓/✗	✓/✗	✓/✗
gradient mesh	✓	✗	✗	✗
Editable global colours	✓	✗	✓	✓
fonts	1,000	300	400	
clipart/photos	26,000	32,000	100,000	20,000

Table of features

PCW DETAILS

★★★

iGrafx Designer

Price £327.83 (£279 ex VAT)

Contact Micrographx
01483 747526

www.micrographx.com

★★★★★

IMSI TurboCad 6

Price £117.49 (£99.99 ex VAT)

Contact IMSI 0181 581 2000
www.imsiuk.co.uk

★★★

Autodesk Actrix

Price £292.58 (£249 ex VAT)

Contact Autodesk 01483 462600
www.autodesk.co.uk

★★★

Visio 5 Professional

Price £292.58 (£249 ex VAT)

Contact Visio 01372 847800
www.visio.com

Editor's Choice

The notable thing about most of the drawing software reviewed here is that since last year, most developers have released upgrades with major new features and improved interfaces. The featured programs interact to a greater degree, both with each other, with third-party add-ons, with Windows, and with outside sources such as the internet and databases.

Software developers have also looked to other areas for ideas, in particular pixel-based image editing software. Both Illustrator 8 and CorelDraw 9 boast the ability to import and export files from each other and Adobe Photoshop with layers intact, both offer a gradient mesh tool that produces airbrush effects, previously only possible in pixels, and both offer a form of 'artistic brush' that draws using entire objects and produces a more natural-looking, less clean-edged look.

Budget packages too have been quick to incorporate emerging features like transparency, editable colour styles, object joining functions, editable blends and HTML export. One criticism that can be levelled at all the budget packages, though, is the generally poor standard of templates and wizards. This is something that developers could improve greatly in future versions, and would be of far greater benefit to users than yet more clip-art.

➤ **Illustrator 8 takes the Editor's Choice**, having once again leapfrogged its main competitor, Macromedia Freehand. We felt Illustrator deserved the award on two counts, for

its introduction of bold new creative tools like the new Pencil Tool, Art Brushes and the Gradient Mesh Tool, and for the myriad other productivity-boosting interface improvements.

Among the features that will make life easier, the Free Transform Tool, Live Blends, Actions Palette, Links Palette, and Smart Guides are only the top of a very long, useful list.

If Adobe's new page layout application, InDesign, takes off, the productivity gains from interoperability between InDesign, Photoshop and Illustrator — all available on the Mac as well as on Windows — will be hard to resist.

▲ **ADOBE'S ILLUSTRATOR 8 HAS LEAPFROGGED FREEHAND, ITS MAIN COMPETITOR**

so hard on emulating Illustrator, rather than Freehand, tells you a great deal about this three-horse

race. The extension of dockers, the layer manager's layer-only view mode and extension of drag-and-drop go some way towards cleaning up what was for many a complicated workspace.

In some respects, for example, imposition layout and preparing for bureau output, Adobe could take some tips from Corel.

➤ **In the budget section Sierra Windows Draw 7** snaps up our second **Highly Commended** award. Ease of use, a wide range of effects, good web publishing and animation features all combine to give it the edge on the competition. The Visual toolbar provides exactly the kind of help beginners need to achieve results quickly. Now all it needs is some decent templates.

Finally, among the also-rans, two packages merit a mention. They are: **Metacreations' Poser** and **IMSI TurboCad 6**. Poser, because for creating realistic 3D human and animal figures there's simply nothing to touch it. If Poser 4 delivers all of the promised new features, it will be an astonishing piece of software. IMSI TurboCad is worthy since it combines powerful CAD features with ease of use, at an affordable price.

▼ **CORELDRAW 9 MUST NOW BE CONSIDERED THE OFFICIAL RIVAL TO ILLUSTRATOR**

➤ **Our first Highly Commended award** goes to another professional package, **Corel Draw 9**, which, also through the introduction of new creative tools and interface enhancements, must now be considered the official rival to Illustrator. The fact that Corel has concentrated

