



TABLE OF CONTENTS

<i>Welcome!</i>	3
<i>Support and registration</i>	4
<i>Installation</i>	5
New customer	5
Existing customer	5
<i>Key new features in version 1.5</i>	6
Error handling - “where am I?”	6
Report mode	6
Viewing an EPS file	6
Custom page sizes	7
Level 2 PostScript	7
<i>Other new features and changes in version 1.5</i>	8
Stricter mode	8
Page counting	8
EPS export improvements	9
1. Bounding Box	9
2. Colour separations	9
Warning messages	10
Better handling of large multi-page files	10
Miscellaneous changes	11
A note on arithmetic accuracy	11
<i>Additional documentation</i>	12
Imaging Setup	12
Custom size option	12
Use bounding box for EPS option	13
Emulation Setup	14
Language Version	14
Stricter Checking	15

TABLE OF CONTENTS

Where Am I?	15
Where - text information	17
Where - path information	18
Where - bounding box	20
Where - document structure	21
Where - recent comments	22
<i>General Installation notes.....</i>	24
What is updated?	24
3D Dialogs	24
Uninstallation	24
Installing icons for workbench,	
view or translate mode	25
<i>Known Problems and Restrictions.....</i>	26
Image Viewers	26
File viewers/editors	26
PostScript Painting	26
Fonts	26
Long file names	27

Welcome!

Welcome! This booklet contains the *Release Notes* for version 1.5 of the PSAlter program.

If you have just purchased PSAlter, *thank you*. You should find these release notes together with the 170 page *PSAlter User Manual*, and the installation disks for PSAlter. Please take a moment to read the license agreement, which you will usually find on the envelope containing the PSAlter disks, and keep the envelope for your reference. Whatever you do, don't lose the User Manual, since it contains your personal serial number for PSAlter, and you will need the serial number to install or re-install PSAlter, or to obtain technical support.

These notes don't replace the manual, but it is worth taking a look at the section *Additional Documentation* in this booklet, starting on page 12. This covers the very few areas where the manual is now out of date.

Don't forget to register your copy of PSAlter! This version was supplied as a free update to everyone who remembered to register version 1.0.

If you were previously a PSAlter customer, you should have received this booklet with a new set of disks. Make sure you have the serial number. You *will* need it to install this new version. If you can't find the number, run your existing copy of PSAlter and use **Help | About**. The serial number will be shown on screen. This update is covered by the same license agreement as your original purchase. In particular, the original disks must be destroyed or kept; you cannot sell them or give them away unless you are giving away all rights to use PSAlter.

You may wish to review most of the contents of this booklet, but especially *Key New Features* on page 6. The section *Other New Changes* on page 8 will interest customers who are more familiar with the details of PSAlter.

Support and registration

At Quite Software, we are proud of the quality of our products and want to help you get the best out of them. We do everything we can to make sure that they will work ‘out of the box’ and that you won’t have to waste any time contacting us for assistance. But things do go wrong, so there are a number of options for getting help.

- On the internet, check our web site for the latest support information. Your problem may already be described on:

<http://www.quite.com/psalter/support.htm>

If a browser such as Netscape or Internet Explorer is installed on your system, you should be able to use **Help | PSAlter home page** to reach our pages.

- Send us e-mail to **help@quite.com**. From Compuserve, send e-mail to **INTERNET:help@quite.com**
- You can fax us on **+44 181 522 1726** (in the UK: **0181 522 1726**).
- Phone us on **+44 181 257 1044** (in the UK: **0181 257 1044**). We can’t guarantee instant technical support over the phone, and we recommend you use one of the above methods if you can.
- Write to us at **Support, Quite Software, 105 Ridley Road, Forest Gate, London, E7 0LX, England.**

Try to include relevant details of your problem don’t assume that we will have seen it before. Do check the manual, and the release notes. But also, please don’t e-mail large supporting files except on request. Please include your PSAlter serial number with fax or e-mail.

We regret that we can’t offer a training service for people learning PostScript. There are a number of excellent ‘teach yourself’ PostScript books available. On the internet, you may find the **comp.lang.postscript** usenet group a valuable resource; also visit our web site at **<http://www.quite.com/ps/>** for hints, tips, and pointers to other useful sites.

Installation

New customer

If you are a new customer of PSAlter, you will have a complete copy of PSAlter 1.5 on two floppy disks. To install it follow these instructions. If you have any trouble with these instructions, they are given in much more detail in the *PSAlter User Manual*, which should accompany these Release Notes.

1. Check that you have your PSAlter serial number. This can usually be found inside the front cover of the *PSAlter User Manual*.
2. Insert the first disk
3. In Windows 95 or NT 4.0, use Run from the Start button; or in Windows 3.1 or NT 3.51, use Run from the File menu in Program Manager.
4. Type a:setup (where a is the letter for your floppy disk drive).
5. Follow the instructions on screen. You will need your serial number, which can be found inside the front cover of the User Manual.

Existing customer

If you are an existing customer you will also be sent a complete copy of PSAlter. This will update your existing installation, and you will need your serial number. Follow the instructions above. If you don't have your serial number run **Help | About** in PSAlter before you start, and write down the code you will see there.

Note that the **PSAlter 1.0** program group will be removed, and a new **Quite Software** program group will be created for PSAlter 1.5.

Key new features in version 1.5

The main new features in this release are improved error handling, an overhaul of EPS processing, a new report mode, and full level 2.

Error handling - “where am I?”

The most common question asked once PSAlter has given a detailed explanation of an error is “where am I?”. In a complex document containing many graphics, it may be a struggle to identify the original document or file causing the error. Often, this identification is the most important factor. Once identified, that part of the job can be redone, solving or circumventing the problem.

When PSAlter displays a PostScript error, it now gives a new button **Where?** This button opens the first of a series of screens designed to help you identify the source of the error. This is described in detail in the on-line help, and in the *Where Am I* section starting on “Where Am I?” on page 15

Report mode

A useful report is produced when you run PSAlter in Report mode, starting with a new button when PSAlter starts. This includes details such as page counts, error reports, and a list of fonts required for the job.

The report is intended to be largely self-explanatory and can be saved or printed. You can also view the report with View | Report in the Workbench or View mode.

Viewing an EPS file

When you open an EPS file, you now have the choice of automatically adjusting the page size to exactly hold the EPS image. This is especially useful if you view EPS images larger than a regular page. This is selected using the **Use Bounding Box for EPS** option in Imaging Setup.

Key new features in version 1.5

This option is described in detail in the Additional Documentation section on page 13.

Custom page sizes

PSAlter now allows you to define up to four custom page sizes on the Imaging Setup screen. The four sizes you select are remembered. To change a custom size, click on the **Custom Size** button. This is described in detail in the Additional Documentation section on page 12.

Level 2 PostScript

Previous versions of PSAlter implemented about half of level 2. This was chosen to reflect the half that was in most common use, but some people still wanted the reassurance of having a full level 2 implementation. PSAlter now has full level 2.

This supersedes the discussion in *Level 1 and Level 2 PostScript* starting on page 19 of the *PSAlter User Manual*.

This is covered in great detail in the on-line help, which has details of all level 2 (and level 1) operators, but is not likely to be of interest unless you want to program in PostScript.

You may notice that the choice in the emulation setup screen has been slightly redesigned to give a clear choice between **Level 1**, **Level 1 + Colour**, and **Level 2**. The **Advertise Level 2** option has been abolished as it is no longer appropriate.

See *Emulation Setup* on page 14 for more details and a discussion of how the Emulation Setup screen has changed.

Other new features and changes in version 1.5

Stricter mode

There are a few errors which are made in PostScript files and fonts so often that PSAlter is best to ignore them. But this does not benefit programmers trying to produce the most accurate code. In the past this conflict has lead to compromises being made.

Stricter mode allows you to choose whether you want PostScript to be strictly checked for errors, or whether you are just interested in the results. See *Emulation Setup* on page 14 for a more details.

Page counting

PSAlter has always considered the number of pages in a document to be the number of separate images you can view on screen. This is usually correct, but there are cases where a file, if sent to a printer, would produce a different number of *physical* pages. Where the physical page count differs from the number of pages PSAlter will show you - the *logical* page count, PSAlter will report both.

The following will cause a difference between page counts:

- (a) If multiple copies are requested of pages, then the physical count will be higher. In workbench mode, image viewer windows show the number of copies.
- (b) Some programs ask for zero copies! PSAlter counts this correctly.
- (c) In some cases PSAlter believes there is an extra page after a job, which would not print. A few applications 'run on' and make extra marks which are never seen because they are not followed by a 'showpage' instruction.
- (d) EPS files do not require a showpage instruction, so if they are printed they may not produce any output. PSAlter recognises this as 0 physical pages. This does not mean the EPS file is wrong - it is probably still suitable for use as a graphic image.

The physical page count is shown in the status line after a program finishes, but only if it is different from the logical page count.

In addition, the following produce warning messages (which can be switched off):

- (a) The last page did not include a showpage so would not print.
- (b) The last page requested zero copies so would not print.

EPS export improvements

1. Bounding Box

The bounding box calculated by PSAlter may now be slightly larger and produce slightly different results when an EPS file is placed. It is a design limitation of EPS that the bounding box is only accurate to 1/72 inch. PSAlter rounded the actual bounding box, but this could result in the edges of a EPS file being 'shaved' when it was placed. This was most noticeable with text in serif fonts, where the serifs may be short or missing. PSAlter now rounds the bounding box so it is never smaller than the actual size. This will stop the shaving effect but may mean that some EPS files are up to 1/72 inch larger on one or more sides, leading to white space appearing unexpectedly.

2. Colour separations

It is now more likely that an exported EPS file will be correctly colour separated for typesetting by PageMaker or QuarkXPress. Note that these programs cannot reliably separate every EPS file, especially those containing level 2 features such as JPEG compression or device-independent colour.

In detail, a **%%DocumentProcessColors** line is added to the EPS file that is written. If the page sets only shades of grey, or does line art or text with colours in the CMYK model, then the correct combination of process colours (but always including black) will be added to this line e.g. **%%DocumentProcessColors: Cyan Black**. If any colours are specified as RGB colours, or any colour image is used, then **%%DocumentProcessColors: Cyan Magenta Yellow Black** will be added.

Warning messages

A number of users have reported that some of PSAlter's warning messages and confirmations are an irritation once the user is familiar with PSAlter. For the most common of these messages, there is now an option 'Don't show this warning again.' To get back all of the warnings use Option Reset (or hit the **Reset** button in Setup) and select **Warnings**.

The warnings are currently:

1. If you use the **Stop** button you cannot continue.
2. If you close this program window the images will be thrown away.
3. This PostScript file contains forbidden operators and will probably make a bad EPS.
4. This PostScript file contains dangerous operators and might make a bad EPS.
5. Confirm you want to delete all breakpoints.
6. Confirm you want to delete all watches.
7. The last page of this document won't print because the program has no **showpage** (new warning).
8. The last page of this document won't print because the program requested zero copies (new warning).
9. The EPS file has a bad **%%BoundingBox** line (new warning).

Better handling of large multi-page files

If you have a document with many pages, PSAlter compresses the pages you are not looking at and writes them to disk. In the previous version, PSAlter may still have run out of memory or system resources after several hundred pages. The memory handling has been revised so that PSAlter should be able to handle files up to several thousand pages, depending on the amount of memory available. Windows NT behaves differently from Windows 3.1 and was even more likely to run out of memory. PSAlter now works differently when run in Windows NT.

Miscellaneous changes

The new menu item **Help | PSAlter Home Page** is available. This opens your web browser on a special page about PSAlter. All of the links on this page lead to the internet, and require you to be connected. This works only if you have internet access and a browser installed. The browser must be set up to be run automatically for .htm files. If this does not work automatically, but you have internet access, you can still visit our home page **<http://www.quite.com>**.

Ctrl+S is a shortcut for **File | Save Program** in the workbench.

There is a new option in the Workbench, **Window | Auto Arrange Icons**. This is a switch which is on by default. If it is on, Arrange Icons is performed each time the workbench area changes, including on entry to and exit from executive mode. This is especially important in Windows 95 and NT 4.0, where the icons are now bars which can disappear behind the status line.

A note on arithmetic accuracy

PSAlter 1.5 and above may give different results from earlier versions for work that includes complex arithmetic calculations. If you are performing calculation in PostScript you should be aware that the accuracy in most implementations is very limited, and rounding errors can quickly accumulate. It is best to avoid complex calculations in PostScript.

PSAlter uses a slightly more accurate maths library than most PostScript implementations. This means, of course, that it can give different results.

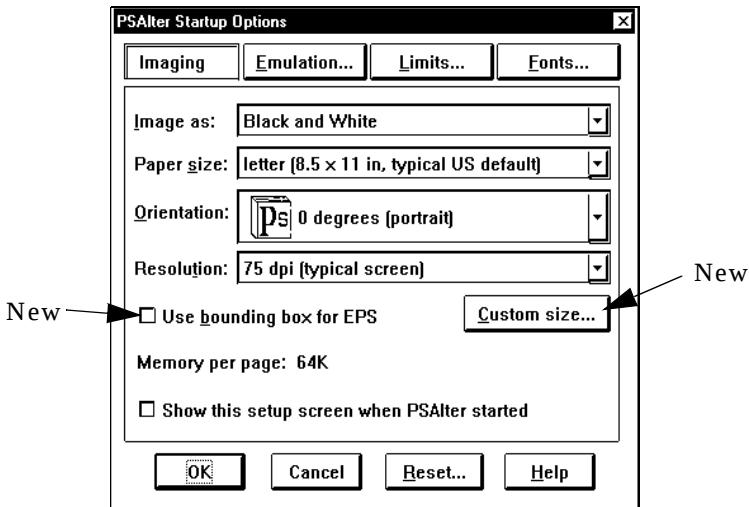
PSAlter 1.5 was compiled with a different maths library from earlier versions. This gives equally valid, but again possibly different results.

The main culprit when PostScript programs are giving radically different answers to calculations is the apparently innocent **cvi** operator, which always truncates towards zero rather than rounding, as many people expect.

Additional documentation

Imaging Setup

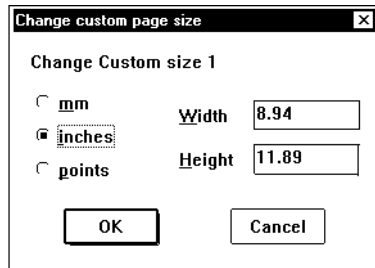
Imaging Setup is described in the section starting on page 55 of the *PSAlter User Manual*. No options have been removed or changed, but two new options have been added, and they are described here.



Custom size option

The new **Custom size** option allows you to select a page size other than one of those listed. When you click **Custom size**, a screen similar to the one on the right appears.

This allows you to select any size up to PSAlter's maximum of 100 inches (2540mm), subject to available memory.



Tip: each time you select a unit (mm, inches or points), the value in width and height is converted. Make sure to choose the correct units before you type the size.

PSAlter supports up to four different custom sizes to match the sizes you use most often. Normally, when you click **Custom Size**, you are changing **Custom Size 1**. To change or select other sizes, choose them from the **Paper Size** list first.

Note that most PostScript files include page size requests, and PSAlter will always honour these requests. Custom page sizes only affect files with no page size request included, which includes all EPS files. However, custom sizes have no effect if the file is an EPS file and **Use Bounding Box for EPS** (see below) has been selected.

Use bounding box for EPS option

If you select the new **Use bounding box for EPS** option, special processing is performed for each EPS file that you use with PSAlter. All EPS files contain a 'bounding box', which gives its size if used as a graphic. When the option is on, the page size is automatically adjusted to contain the bounding box stated in the file.

If you work much with EPS files it is convenient to switch this on. An important disadvantage, however, is that if you intended to print the file directly by sending it to a printer, you will not necessarily see problems that may occur, such as if the image is off the visible page.

Note that PSAlter does not use the file name to decide if a file is EPS. Instead, it looks at the first line, which must contain

```
%!PS-Adobe-x.x EPSF-x.x
```

where *x.x* is the version number of the file format. If creating PostScript files yourself, make sure to only use this form on files intended for use as EPS graphics.

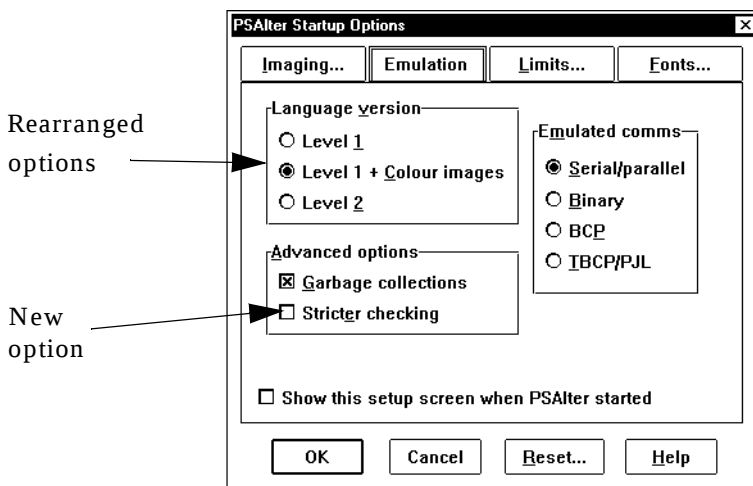
A small margin is added around the stated size of the EPS file to allow for any overrun. This may result in an unexpected white 'frame' around a picture.

Note: Even if this option is off, PSAlter will notice if you are trying to

view an EPS file that is too large for the current page size, and give you a chance to increase the size for the current file.

Emulation Setup

Emulation Setup is described in the section starting on page 63 of the *PSAlter User Manual*. The screen has been rearranged, because PSAlter now supports full PostScript level 2, and has one additional option (Stricter Checking).



Other options have not changed.

Language Version

PSAlter supports three variants of the PostScript language, which correspond to commonly available printers.

- **Level 1** is the original PostScript printer. A large number of black and white laser printers, including all those made before 1990, and many made since, are level 1. These printers accept requests for coloured text and drawings, but not coloured bitmaps (e.g. photographs). Choose this option if you want to ensure the file works on the widest possible range of printers.

- **Level 1 + Colour images** corresponds to the older colour printers, including all those produced before 1990. When this option is selected, PSAlter will accept coloured bitmaps. However, this option does not force PSAlter to display in colour; this is controlled by the Imaging Setup.

PostScript programmers may wish to note that this option allows PSAlter to use the CMYK extension operators, including the **color-image** operator.

- **Level 2** was an enhancement to PostScript which Adobe first published in 1990. It includes all of level 1. Recent PostScript printers are level 2, though some manufacturers who do not use Adobe interpreters continue to supply level 1 printers. With this option selected, PSAlter will handle the widest range of PostScript files.

Note: In 1997, Adobe announced PostScript 3, which can be thought of as level 3. At the time of writing, they have not published the specification, and no PostScript 3 printers are yet on the market. PSAlter does not support PostScript 3. Just as PostScript level 1 printers are still supported by almost all applications, it will be a long, long time before level 2 is obsolete.

Stricter Checking

There are a few errors which are made in PostScript files and fonts so often that PSAlter is best to ignore them. One example is fonts which are more than 2000 units wide (the widths of two 'M' characters). Such fonts are wrong by the definition of PostScript but they are not uncommon. Earlier releases gave **invalidfont** errors for this case.

If this option is set, PSAlter does extra checking, and is recommended for PostScript developers. Anyone just interested in results should leave Stricter Checking switched off. Full details are contained in the on-line help.

Where Am I?

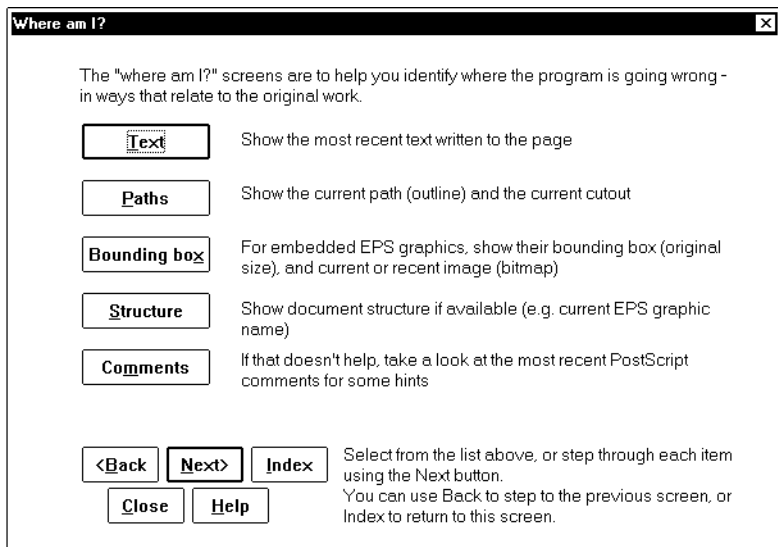
This section is a supplement to the information in the *PSAlter User Manual* in the section *PostScript Errors*, starting on page 24.

Additional documentation

One of the most common problems which affects users of PostScript is PostScript errors. The most common question asked once PSAlter has given a detailed explanation of an error is “where am I?”. In a complex document containing many graphics, it may be a struggle to identify the original document or file causing the error. Often, this identification is the most important factor. Once identified, that part of the job can be redone, solving or circumventing the problem.

When PSAlter displays a PostScript error, it now gives a new button **Where?**

This button opens the first of a series of screens designed to help you identify the source of the error. You can also use **View | Where am I?** in the Workbench or View mode even if there is no error.



Information on subsequent screens includes:

1. Current font.
2. Recent text written, and the location on screen.
3. Current path and cutout.

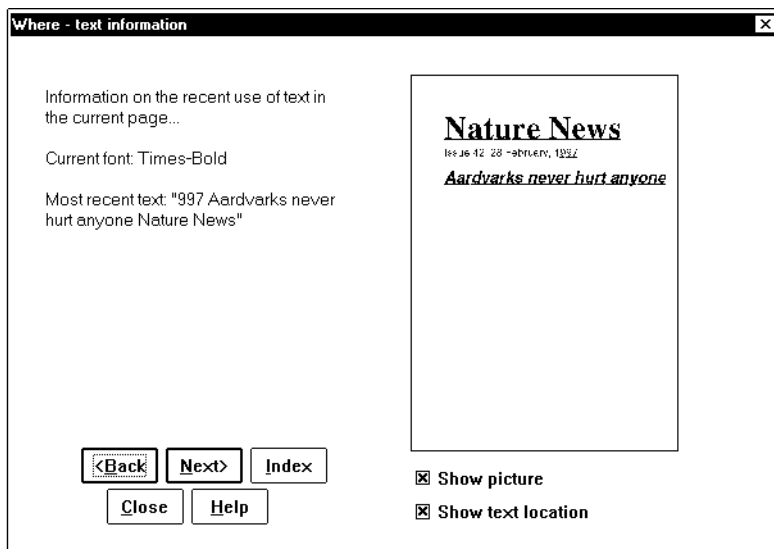
Additional documentation

4. If in a nested EPS graphic, its location on screen.
5. The location on screen of the current or most recent bitmap
6. Document structure information - e.g. name of current nested EPS file.
7. If none of this helps, recent PostScript comments.

Remember that the full power of the workbench remains available.

Where - text information

The 'Where - text information' screen contains information on text. This gives the name of the current font, and shows the text most recently added to the current page.



The recent text is shown in two ways. On the left the text is shown in quotes, while on the right the text is shown in its position on the page. The recent text will be underlined, normally in red.

If it is difficult to locate the text, click the **Show picture** option off. This will remove the picture, leaving only the underlining. Make sure the

Show text location option is on.

You can zoom in on the picture by simply clicking the mouse. This zooms in on the area of the page you click, so that area is shown at 100% magnification (the amount of detail shown depends on the resolution). Click again to zoom out.

Notes

1. If there is no text on the current page, this screen will not show anything useful, except possibly the current font.
2. Some programs identify their fonts with unhelpful names like F12.
3. The information shown on the left will only be accurate if the font follows a standard ordering. Some fonts might, for instance, have the letter 'a' in the slot we'd expect to find 'z'. This may include TrueType fonts printed in Windows 95. In these cases, looking at the page should help.
4. As this example illustrates, text is not necessarily written from top to bottom, or even from left to right. In most cases the order makes sense, though.
5. The text shown on the left of the screen does not show any line breaks. Text which is very loosely placed may appear to have spaces in it.
6. The red underlines may appear above rather than below the text, because some applications place their text this way (with the 'base line' above).
7. For this (and similar) screens the colours shown can be affected by changing the settings in the **Options | Colours** menu in the workbench.

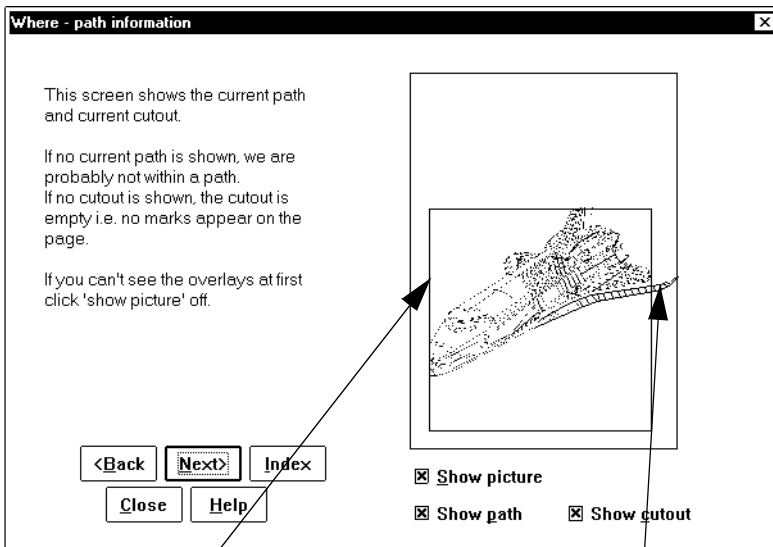
Where - path information

The 'Where - path information' screen contains information on paths. As a PostScript file runs it constructs invisible *paths* which will then be filled in or outlined to make them visible. Paths can also be turned into *cutouts*, which are like a window on the page: until the cutout is changed marks cannot be made outside the cutout.

Additional documentation

The current path and cutout path are overlaid on a miniature version of the current page. The current path, if any, will usually be shown in red. The cutout path will usually be shown in blue. As with the text information screen, you can clear the **Show Picture** option to show only the paths. You can also click the mouse to zoom in.

The current path information is most useful in cases where you are getting a **limitcheck** error, which often means a path is too complicated. It is usually easy to work out which graphic is involved.



This is the cutout

This portion is the current path and can extend outside cutout

The cutout information is more often useful than you might think. Many applications set a cutout to the size of the current graphic before starting it, so this is a valuable way to find out which graphic is in use.

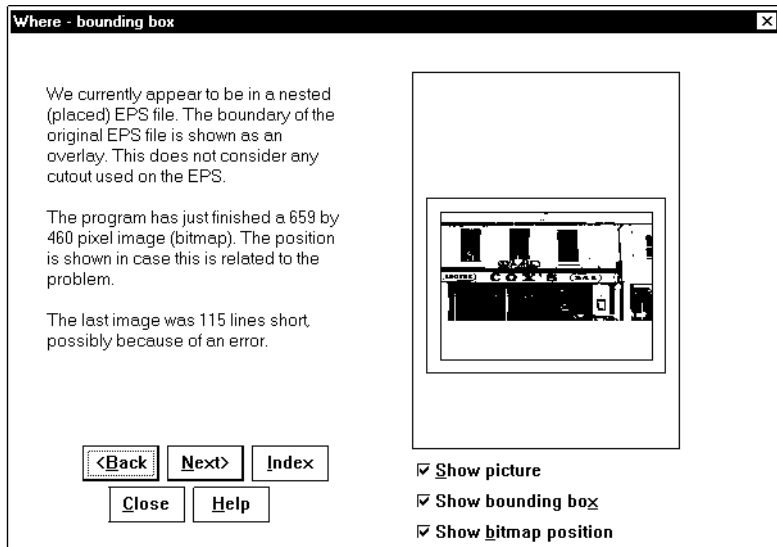
Notes

1. If you can't see the current path (red), this is normal. Many activities, such as drawing text, do not require a path.

2. If you can't see the cutout path even with the picture off, first look for it around the border of the page. If it is there then no special cutout has been set - each page starts out with a cutout the size of the page.
3. If you still can't see the cutout path, switch off the **Show path** option. The path is sometimes directly on top of the cutout, and may obscure it.
4. If you *still* can't see the cutout path there probably isn't one! That is, no marks can currently be made on the page. This is unusual, but won't cause an error in itself.

Where - bounding box

The 'Where - bounding box' screen shows the position of two kinds of bounding box, both of which can convey useful information. They are shown overlaying the page, and as with similar screens you can switch off the **Show Picture** option to make the overlays clearer, or click the mouse to zoom in.



The bounding box of an EPS graphic is the smallest rectangle which completely encloses it. When an error occurs within an EPS graphic, PSAlter can often show its position, typically as a blue box.

Look at the caption to the left of the picture if no blue box is shown, as this will tell you whether or not EPS information is available. Not all applications include EPS graphics with the extra comments PSAlter uses to find out their bounding box. However, QuarkXPress and Adobe PageMaker do so.

PSAlter can also show the bounding box of the most recent bitmap. The notes to the left of the picture indicate the size of the bitmap and whether the bitmap was finished, or if it was still being painted. The **ioerror** error can occur during a corrupt picture. The **undefined**, **stackoverflow** and **typecheck** errors can occur shortly after a corrupt picture.

Notes

1. Some applications use bitmaps for non-obvious purposes like gradients or text, so look closely at the area if it does not obviously seem to be a bitmap.
2. If an EPS contains a bitmap only, you will usually only be able to see one of the bounding boxes at a time as they are often the same.

Where - document structure

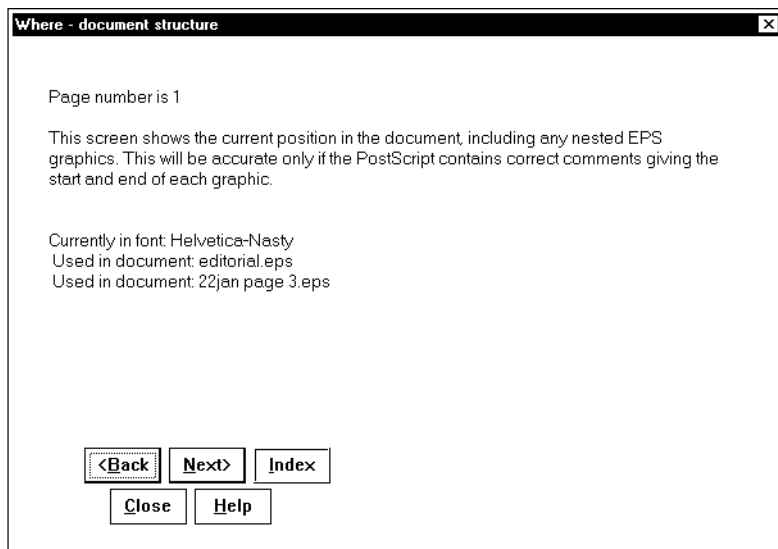
Document structure is one of the simplest and most powerful tools for locating which graphic causes a problem. Well written applications include special comments in a PostScript file such as

```
%%BeginDocument: name
```

when the EPS file *name* is started. PSAlter keeps track of these and will report the information on the 'Where - document structure' screen.

PSAlter shows only the currently active graphics - that is, you will not see more than one EPS name unless one EPS is placed within another. It will show other types of object such as fonts, if you are within them.

The document structure screen also shows the current page number, and if the page is part of a separated job, its plate colour.

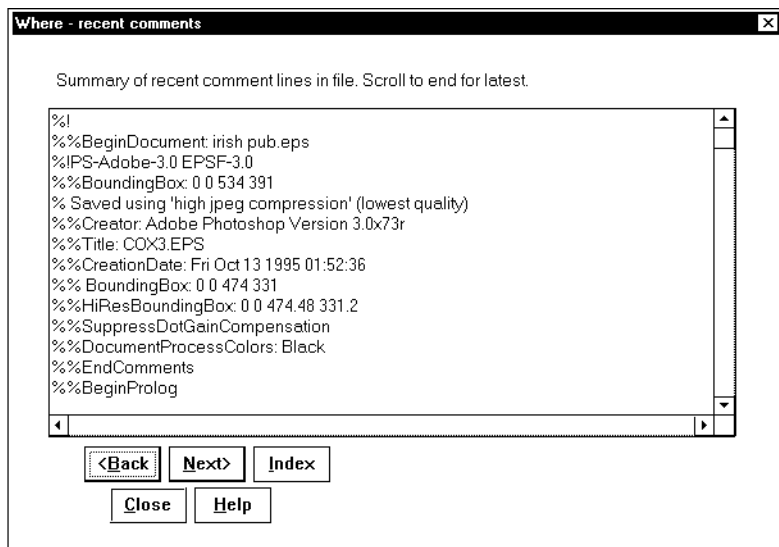


Where - recent comments

This is getting on for the last resort. If none of the other screens have helped, the 'Where - Recent comments' screen shows the most recent comments found in the PostScript program. Comments serve no function in most printers, but reading them can give you valuable clues as to what was going on. Remember to scroll to the bottom of the list to

Additional documentation

see the most recent comments.



If this is still no use, it may be necessary to use the Workbench to try and isolate the problem, or revert to the traditional approach of changing parts of the job to see when the problems disappear.

General Installation notes

What is updated?

PSAlter is almost entirely self contained in its own directory. The exceptions to this are as follows:

1. A short [PSAlter] section is added to win.ini. This can be removed if either TWAIN is not used, or if PSAlter is installed in the default location.
2. The TWAIN directory in C:\WINDOWS (or the actual Windows installation directory) is created if it does not exist.
3. TWAIN\PSALTER is created and files installed in it.
4. TWAIN.DLL is updated to version 1.5 in the C:\WINDOWS directory. If an earlier version was found, it will be renamed to TWAIN.BAK.

3D Dialogs

If you do not want the 3D-look dialogs, you can add the line '3D=0' in the [PSAlter] section of WIN.INI. The 3D-look is standard in Windows 95.

Uninstallation

You can uninstall PSAlter using the **Uninstall** option in setup.exe on the installation disk. You can also use the 'Uninstall PSAlter' icon, which will just run setup.exe after prompting for the disk.

Uninstallation will also remove the PSAlter 1.0 program manager group, but if you have moved PSAlter's icons to another group, you will have to delete them manually.

TWAIN.DLL is not removed, since it could be used by other programs. The C:\WINDOWS\TWAIN directory is removed if it is now empty.

If uninstallation fails to remove all the files it should, try restarting

Windows first. If PSAlter crashed or was stopped with Ctrl+Alt+Del, it may have left files in use, preventing it from being deleted.

Installing icons for workbench, view or translate mode

The information in this section may be useful but is subject to change in future releases.

If you want to install icons which go directly to specific modes in PSAlter this can be done quite easily. First duplicate the original PSAlter icon.

In Windows 3.1 and Windows NT 3.51, this is most easily done in Program Manager by selecting the icon and using **F8** or **File | Copy**. Then use **File | Properties** and edit the **command line** field, adding extra options at the end (following a space).

In Windows 95 and NT 4.0, right click on a blank space on the task bar, and select **Properties**. Then click **Start Menu Programs** and **Advanced**. You can now navigate the shortcuts which make up the Start menu. Single click on the PSAlter icon and use Ctrl+C to copy, then Ctrl+V to paste a second PSAlter icon. Now right click on the copy and select **Properties**. Click **Shortcut** and change the command line shown for **Target**.

For workbench mode, use **-mw**. For view mode use **-mv**. For translate mode use **-mt**. You will probably also want to change the description.

Other command line options you may find useful are as follows. Separate multiple options with spaces. Do not use spaces within options.

Image mode: **-im** for black and white; **-ig** for greyscale; **-ic** for 256 colours; **-it** for true colour (24-bit). Resolution (equal in X and Y): **-rnnn** where *nnn* is the resolution in dpi. Run setup dialogs on entry (overrides settings on the dialog): **-sy** to run dialogs, **-sn** to suppress them.

This information can also be used in Windows 95 and NT 4.0 to define associations with file types and specific actions..

Known Problems and Restrictions

The entries in here are mostly long-term minor problems which we know about but which are not likely to be fixed in the immediate future.

Image Viewers

PSAlter will often, unnecessarily, paint part of an image just after starting.

If part of the viewer has to be painted, PSAlter may pick up the current picture for just that part, leaving a mismatch. Should probably not bother to repaint an image which is incomplete and not being monitored.

When the background image is displayed in workbench mode, other windows or icons may disappear temporarily. Click on the image to bring them back.

File viewers/editors

In ASCII (as opposed to binary) mode PSAlter should detect Ctrl+D characters in the middle of images, and fault them. Currently they are ok, which means it will image some files that cannot print.

PostScript Painting

The largest coordinates that can be handled are in the range -32767 to +32767 pixels. Usually an error is reported, or it is rounded down (depending on Limits setup) for larger figures but occasionally (especially with Windows fonts) this is not detected and figures wrap around with unpleasant consequences.

Fonts

Where a Windows font is used, the **Metrics**, **Metrics2**, **CDevProc** and **WMode** entries cannot be used to change character spacing.

Characters from Windows fonts are not 'normalized', with exterior

paths anticlockwise, when the charpath operator is used. This can produce unexpected results if character outlines are combined with other shapes.

Long file names

Windows 95 and Windows NT allow long file names to be used, as well as spaces in file names. PSAlter does not support this. However, it is still possible to read files with long names. In every case, a file with a long name also has a short name visible to PSAlter. For instance the file **Testing PostScript.ps** might be visible as **testin~1.ps**. If you have trouble identifying the file, alternative methods, like drag and drop from the Windows desktop or explorer, may be preferable. Drag and drop automatically converts long names.

The desktop itself can usually be accessed as a directory, typically
C:\WINDOWS\DESKTOP or
C:\WINDOWS\PROFILES*username*\DESKTOP.