



Tech Support Documents

Topic: Troubleshooting PostScript Errors

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Troubleshooting PostScript Errors

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You may receive a PostScript error when sending a file to a PostScript interpreter (e.g., printer, Acrobat Distiller). A PostScript error occurs when the PostScript interpreter can't read the file's PostScript code, or the file's PostScript code exceeds one or more of the limits built into the PostScript page description language. If your PostScript interpreter appears to process data but then stops, a PostScript error may have occurred.

A PostScript error message includes a PostScript error type, defining what sort of error it is, and an offending command, which usually indicates the specific part of the PostScript code that the interpreter couldn't read. The offending command usually indicates the command that caused the problem. Some PostScript errors will point you right to the cause of the problem, and some will get you looking in the right direction.

PostScript errors usually look like this:

```
%%[Error: <type>; OffendingCommand: <offending command> ]%%
```

For example, the PostScript error `%%[Error: dictfull; OffendingCommand: def]%%` contains the PostScript error type "dictfull" and the offending command "def." The error type indicates that the dictionary contains the maximum number of entries; the offending command is the last command the PostScript interpreter tried to process, "def," which defines a new word in the dictionary.

Viewing or Printing a PostScript Error Message

If you think a PostScript error has occurred, but it doesn't appear on-screen or in your printout, you may be able to view or print the error message by doing one or more of the following:

- In Windows or on the Macintosh, use an error handler utility. For example, Adobe PageMaker has the Include PostScript Error Handler option in the Print Options dialog box.

- In Windows, set up the printer to print the error message:

In Windows 95:

1. Choose Start > Settings > Printers.
2. Right-click your target printer, then select Properties from the pop-up menu.
3. In your printer's Properties dialog box, click the PostScript tab.
4. Select the Print PostScript Error Information option, then click OK.

In Windows 3.1x:

1. In Program Manager, open the Control Panel in the Main group.
2. Double-click the Printers icon.
3. Select your target printer from the list of installed printers.
4. Click Setup, then click Options, then click Advanced.
5. Select the Print PostScript Error Information option.
6. Click OK to close the remaining dialog boxes.

- On the Macintosh, set up the Apple LaserWriter 8.x or Adobe PSpriinter 8.x printer driver to display or print the error message:

In the Print dialog box, click Options, select either the Summarize on Screen or the Print Detailed Report option, then click Print.

OR: Disable print spoolers, including Background Printing. To disable Background Printing, select your printer driver in the Chooser and then select Off for the Background Printing option.

Using the PostScript Error Message to Start Troubleshooting

Once you have a specific PostScript error message, you can begin troubleshooting the cause. To begin troubleshooting a PostScript error, locate the error type and offending command in the "PostScript Error Types" and the "PostScript Offending Command" sections. You can then try to repair the problem.

For example, you may receive the PostScript error "%%[Error: limitcheck; OffendingCommand: image]%%". Your first step is to locate "limitcheck" in the "PostScript Error Types" section. The "PostScript Error Types" section lists "limitcheck" under the heading "Exceeds printer's memory or PostScript language limit." The "PostScript Offending Command" lists "image" under the heading that indicates a problem with bitmap data. So you have bitmap data that exceeds the printer's memory or PostScript language limit. The likeliest source of bitmap data is a graphic in your file. You can then check graphics in your file to see if one or more is causing the problem. If you find a likely culprit, you can delete the graphic, reimport it in case it's damaged, or simplify it (e.g., reduce its dpi). You can also try printing the file to a printer with more memory, which may be able to print the problem graphic.

Some PostScript errors won't help you determine a likely cause. For example, you may receive the PostScript error "%%[Error: undefined; OffendingCommand: <random characters>]%%". The "PostScript Error Types" section lists "undefined" under the "Errors that indicate unintelligible PostScript code" heading. The "PostScript Offending Command" section lists "<random characters>" under the heading that indicates a problem with any element or file. In this case, your file contains PostScript code the PostScript interpreter can't recognize. See the

"Troubleshooting Possible Causes for the PostScript Error" section to continue troubleshooting the problem.

PostScript Error Types

This section lists common error types, grouped under headings that indicate a general cause.

The following error types indicate that something exceeds the PostScript interpreter's memory or a PostScript language limit:

- dictfull
- fatal system error at [various]
- limitcheck
- VMerror

The following error types indicate communication problems:

- interrupt
- ioerror (may also be caused by a disk problem on the printer's hard disk, such as a bad sector)
- timeout

The following error types indicate the file contains unintelligible PostScript code:

- dictstackoverflow
- dictstackunderflow
- execstackoverflow
- handleerror
- invalidaccess
- invalidexit
- invalidfileaccess
- invalidfont
- invalidrestore
- nocurrentpoint
- rangecheck
- stackoverflow
- stackunderflow
- syntaxerror
- typecheck
- undefined
- undefinedfilename
- undefinedresult
- unmatchedmark
- unregistered

PostScript Offending Commands

This section lists common offending commands, grouped under headings that indicate a general cause.

The following offending commands indicate a problem with specific text or a font element:

- ashow
- awidthshow
- charpath
- definefont

- findfont
- imagemask
- kshow
- makefont
- selectfont
- show
- stringwidth
- widthshow

The following offending commands indicate a problem with specific masks (e.g., clipping paths):

- clip
- eoclip

The following offending commands indicate a problem with fills and lines, often in imported object-oriented, or vector, graphics (e.g., EPS, PICT):

- arc
- arcto
- currentpoint
- curveto
- eofill
- fill
- lineto
- moveto
- rcurveto
- rlineto
- setdash
- setlinecap
- setlinejoin
- stroke

The following offending commands indicate a problem with bitmap data:

- colorimage
- image
- imagemask (Associated with 1-bit image bitmap graphics and bitmap fonts.)

The following offending commands indicate a problem with any element or graphic:

- array
- def
- dict
- exch
- get
- index
- itransform
- nostringval
- packedarray
- put
- restore
- save

- setgray
- setpageparams
- setscreen
- [random characters]

Troubleshooting Possible Causes for a PostScript Error

While many PostScript error messages quickly indicate the source of a problem, you'll need to troubleshoot your problem further if you receive a non-specific PostScript error message, or if you think you're getting a PostScript error but you haven't received an error message. To troubleshoot a PostScript error, isolate when the problem occurs to determine if it is a system-level, application-specific, file-specific, or element-specific problem. After you narrow down when the problem occurs, you can eliminate likely causes until you solve the problem.

- Isolating System-Level Printing Problems

Do you receive the error from more than one application? If the same problem occurs from more than one application, the cause is most likely a problem at the system level. System-level problems are commonly caused by damaged fonts, damaged system files, damaged printer drivers, insufficient hard disk space, network problems, or hardware problems. If the problem only occurs from one application, see the "Isolating Application-Specific Problems" section.

Make sure you're using an up-to-date PostScript device driver (e.g., printer driver), or use the version of the driver required by your application. You also need plenty of free hard disk space when sending a file to a PostScript interpreter, especially when you print a large file. Make sure your free hard disk space is not fragmented.

If you're printing to an external PostScript device, secure loose connectors (e.g., cables, switch boxes) by unplugging and replugging them. You can easily tell if a connection to an external device is severed altogether: the device won't receive any data, so nothing happens. But if a connection is loose, the symptoms of your problem may be unclear: the device might receive small jobs only, or its driver may appear only intermittently in a Macintosh's Chooser.

If you're printing to an older PostScript printer or one that uses a PostScript emulator (e.g., Pacific Page cartridge, Phoenix PostScript Interpreter), it may not recognize newer PostScript code. Try printing the file to a containing a more current version of Adobe-licensed PostScript.

- Isolating Application-Specific Problems

Do you receive the error only from a single application, and in every file from that application? To determine if the error is being caused by the application or by a specific file, create a new file containing only a simple element, such as a rectangle or line. If this test file does not cause the error, the application itself is not causing the error, so you can move to the "Isolating File-Specific Problems" section. If this test file does cause the error, the application software may be damaged. Delete the application's preferences file, then reinstall the application from the original installation disks.

- Isolating File-Specific Problems

Do you receive the error only with a specific file or files? If the error occurs only with a specific file, the file may have the wrong print settings selected for your PostScript interpreter, it may be damaged, or it may contain a problem element (e.g., damaged graphic). You can begin troubleshooting the file by using the same print settings as those of a file that does not cause an error.

To determine if the file itself is damaged, copy the file's contents into a new file, save the new file using the Save As command, then see if the error occurs with the new file. If the error doesn't occur, the original file was damaged. If the error does occur, run any built-in diagnostic routines your application offers. In PageMaker, for instance, you can repair some file problems by using its Diagnostic Recompose feature: deselect all elements in the file, then choose Type > Hyphenation while you hold down the Ctrl and Shift keys (Windows) or the Option and Shift keys (Macintosh). If the error still occurs, the file likely contains one or more damaged elements. Move to the "Isolating Element-Specific Problems" section.

- Isolating Element-Specific Problems

Do you receive the error only with a specific page or elements on a page? After you've ruled out a damaged file as the cause, the error is likely being caused by a damaged or incorrectly written element or font. It may also be caused by an element or combination of elements that requires more memory than is available. If the error occurs with a range of pages, look for common elements on those pages. If you can print all elements individually or in small groups, but not all at the same time, the combination of elements you are printing requires more memory than is available.

To isolate the element or elements causing your problem, make a copy of the file. Then send groups of pages to the PostScript interpreter. If a group causes an error, print one page at a time from that group. Continue sending pages until you've narrowed down the problem page. You can then isolate the elements causing the problem by removing elements from each page. If you remove a page and the page then doesn't cause the error, the elements you just removed were causing the problem. Some applications, such as PageMaker, offer the option to include some elements, but not others, when sending your file to a PostScript interpreter. For example, when you select the Proof Print option in PageMaker's Print dialog box, PageMaker prints the text but not the graphics. Using this option, you can quickly determine if your problem is caused by an imported graphic or another element besides text in a PageMaker publication.

If an element causing the problem is text or an element you've created in the application, recreate the element. For text elements, you can also try using a different font (e.g., reformat the text using a different kind of font). If the file doesn't cause the error when you use a different font, reinstall the original font in case its files are damaged.

If the element causing the problem is an imported graphic, first try reimporting the graphic. If the error still occurs, open the graphic in the application in which it was created, resave it, make sure it prints from that application, then reimport the graphic. If the imported graphic still causes the error, try resaving it in a different format, exporting it from a different application, or simplifying it so that it requires less memory. An imported graphic can cause a PostScript error if it contains damaged or incorrectly written information, or if it too complex for your PostScript interpreter (i.e., it requires more memory than is available).

If the file causes a PostScript error because it is too complex, simplify it and see if it will print. To begin simplifying a complex file, reduce the number of imported graphics, reduce the number of fonts that must be downloaded, reduce the number of text effects (e.g., skewing, rotation), delete elements you don't need, create paths using fewer points, or reimport bitmap images that have been resampled at a lower resolution. Graphic formats such as EPS are updated periodically, so older applications may use an older graphic standard that newer PostScript interpreters may not understand.

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