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I'm not robot


reCAPTCHA

Next

Convert text to pdf windows command line

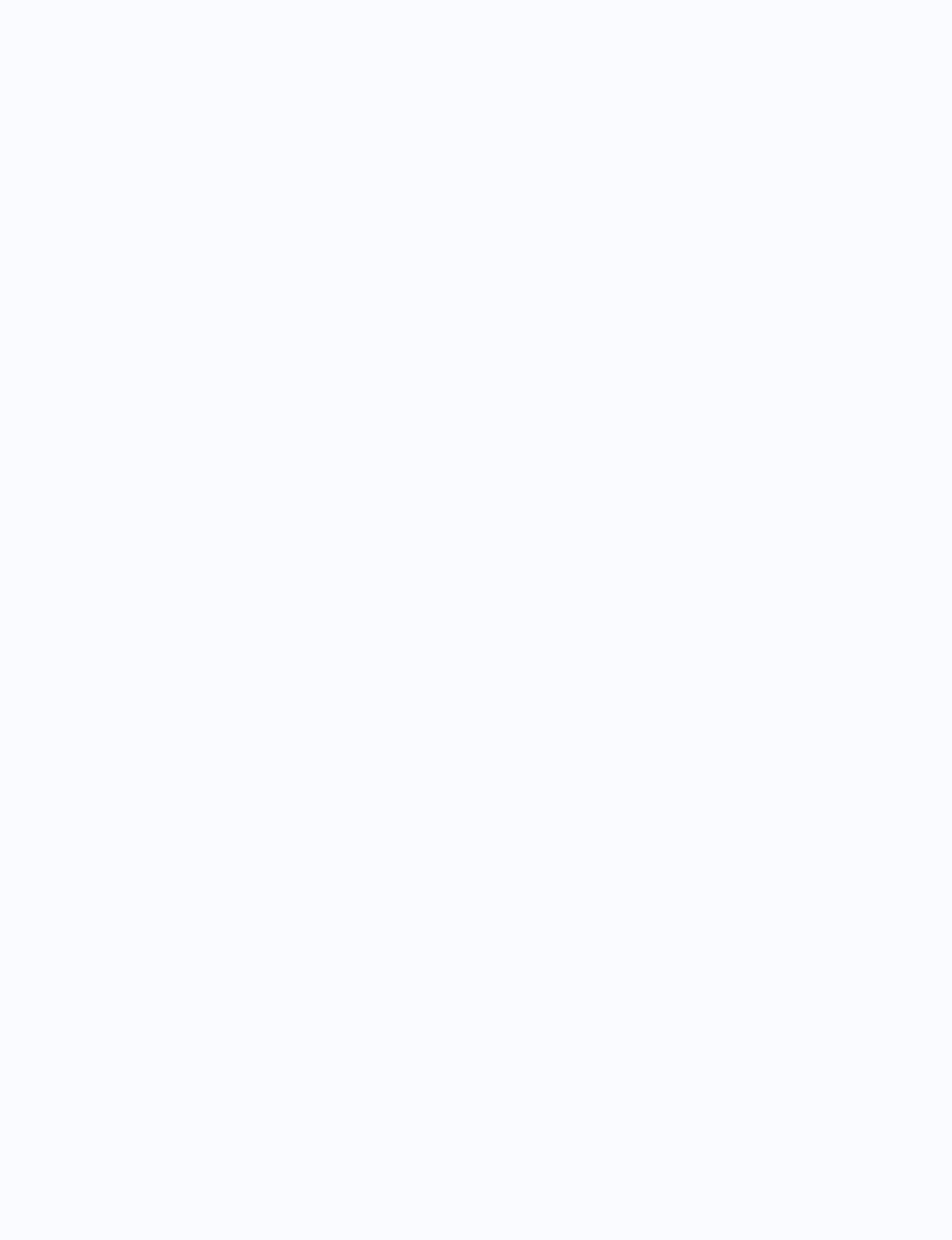
For other information, see the Ghostscript overview and, if necessary, how to install Ghostscript. Invoking Ghostscript. This document describes how to use the command line Ghostscript client. Ghostscript is also used as a general engine into other applications (for viewing files for example). Please refer to the documentation for those applications.

Using Ghostscript in other contexts. The command line to invoke Ghostscript is essentially the same on all systems, although the name of the executable program itself may differ among systems. The following are some basic examples. The details of how these work are described below. To view a file, gs -dSAFER -dBATCh document.pdf.You'll be prompted to press return to open the file. To convert a figure to an image file, gs -dSAFER -dBATCh -dNOPAUSE -dDEVICE=png16m -dGraphicsAlphaBits=4 -sOutputFile=tiger.png tiger.eps To render the same image at 300 dpi, gs -dSAFER -dBATCh -dNOPAUSE -dDEVICE=png16m -r300 -sOutputFile=tiger_300.png tiger.eps To render a figure in grayscale: gs -dSAFER -dBATCh -dNOPAUSE -dDEVICE=pnggray -sOutputFile=figure.png figure.pdf To rasterize a whole document, gs -dSAFER -dBATCh -dNOPAUSE -dDEVICE=pgmraw -r150 -dTextAlphaBits=4 -sOutputFile=paper-0004.pgm paper.ps There are also a number of utility scripts for common to convert a PostScript document to PDF: ps2pdf file.ps The output is saved as file.pdf. There are other utility scripts besides ps2pdf, including pd2ps, ps2eps, pd2dsc, ps2asci, ps2ps and ps2ps2. These just call Ghostscript with the appropriate (if complicated) set of options.

You can use the 'ps2' set with eps files. Ghostscript is capable of interpreting PostScript, encapsulated PostScript (EPS), DOS EPS (EPSF), and Adobe Portable Document Format (PDF). The interpreter reads and executes the files in sequence, using the method described under "File searching" to find them. The interpreter runs in interactive mode by default. After processing the files given on the command line (if any) it reads further lines of PostScript language commands from the primary input stream, normally the keyboard, interpreting each line separately. To quit the interpreter, type "quit". The -dBATCh -dNOPAUSE options in the examples above disable the interactive prompting. The interpreter also quits gracefully if you type ^C at the file or command line. The interpreter recognizes many options. An option may appear anywhere in the command line and applies to all files named after it on the line. Many options include a followed by a parameter. The most important are described in detail here. Please see the reference sections on options and devices for a more complete listing. Help at the command line. gs -h You can get a brief help message by invoking Ghostscript with the -h or -? switch, like this: gs -h -? The message shows that version of the Ghostscript executable, the version and release information, the general format of the command line, a few of the most useful options the formats it can interpret, the available output devices, the search path and the bug report address. On systems the executable may have a different name: System Invocation Name Unix xs VMS xs MS Windows 95 and later gswin32.exe gswin32c.exe gswin64.exe OS/2 gso52 On Windows, the two digit number indicates the word length of the system for which the binary was built (so gswin32c is for x86 Windows systems, whilst gswin64.exe is for x86_64 Windows systems). And the "-c" suffix indicates a Windows console based binary (note that the "display device" window will still appear). Selecting an output device Ghostscript has a notion of 'output devices' which handle saving or displaying the results in a particular format. Ghostscript comes with a diverse variety of given devices supporting vector and raster file output, printing, driving various printers and communicating with other applications. The command line option "-dDEVICE=device" selects which output device Ghostscript should use. If this option isn't given the default device (usually a display device) is used. Ghostscript's built-in help message (gs -h) lists the available output devices. For complete description of the devices distributed with Ghostscript and their options, please see the devices section of the documentation. Note that this switch must precede the name of the first input file, and only its first use has any effect. For example, for printer output in a configuration that includes an Epson printer driver, instead of just 'gs myfile.ps' you might use gs -dDEVICE=epson myfile.ps The output device can also be set through the GS_DEVICE environment variable. Once you invoke Ghostscript you can also find out what devices are available by typing 'devices' at the file or command line. The printer device may be used to print the interactive prompt as well. (epson) device (my printer) Run all output devices. The display unit you do something. Modify the device. No change devices. You can switch devices at any time by using the selectdevice procedure, for instance like one of these: (x) alpha device (eps) selectdevice Output resolution. Some printers can print at several different resolutions, letting you balance resolution against printing speed. To select the resolution on such a printer, the -o switch: -dDEVICE=printer -dXRES=XRES where XRES and YRES are the requested number of dots (or pixels) per inch. Where the two resolutions are same, as is the common case, you can simply use -rres. The -r option is also useful for controlling the density of pixels when rasterizing to an image file. It is used this way in the examples at the beginning of this document. Output to files Ghostscript also allows you to control where it sends its output. With a display device this isn't necessary as the device handles presenting the output on screen internally. Some specialized printer drivers operate this way as well, but most devices are general and need to be directed to a particular file or printer. To send the output to a file, use the -sOutputFile= switch or the -o switch (below). For instance, to direct all output into the file ABC.xyz, use gs -sOutputFile=ABC.xyz When printing on MS Windows systems, output normally goes directly to the printer. PRN. On Unix and VMS systems it normally goes to a temporary file which is sent to the printer in a separate step. When using Ghostscript as a file rasterizer (converting PostScript or PDF to a raster image format) you will of course want to specify an appropriately named file for the output. Ghostscript also accepts the special filename '-' which indicates the output should be written to standard output (the command shell). Be aware that filenames beginning with the character '%' have a special meaning in PostScript. If you need to specify a file name that actually begins with %, you must prepend the %os% fledgevice explicitly. For example to output to a file named %abc, you need specify gs -sOutputFile=%os%abc Please see Ghostscript and the PostScript Language and the PostScript Language Reference Manual for more details on % and file naming. For the same reason, the % character also has a special meaning for the command processor (shell) on some operating systems. Note, some devices, e.g. pdwrite, ps2write, ... only file the output file in the command shell, changing the OutputFile device path will cause these devices to emit the pages received up to that point and then they need a new file name. OutputFile. For example, in order to create two PDF files from a single invocation of ghostscript the following can be used: gs -dDEVICE=pdfwrite -dPage=1 -sOutputFile=examples/color1.ps -sPageDevice=examples/color1.ps -sOutputFile=out.%pdj -dBATCh -dNOPAUSE somefile.ps Choosing paper size Ghostscript is distributed configured to use U.S. letter paper as its default paper size. There are two ways to select other paper sizes from the command line. If the desired paper size is listed in the section on paper sizes known to Ghostscript below, you can select it by the default paper size for a single invocation of Ghostscript by using the -sPAPERSIZE= switch, for instance: -sPAPERSIZE=a4 -sPAPERSIZE=legal Otherwise you can set the paper size using the pair of switches: -dDEVICEWIDTHPOINTS=w -dDEVICEHEIGHTPOINTS=h Where w is the desired paper width and h is the desired paper height in points (units of 1/72 of an inch). Individual documents can (and often do) specify a paper size, which takes precedence over the default size. To force a specific paper size and ignore the paper size specified in the document, select a paper size as just described, and also include the -dFIXEDMEDIA switch on the command line. The default set of paper sizes will be included in the currentpagevice in the InputAttributes dictionary with each paper size as one of the entries. The last entry in the dictionary (which has numeric keys) is a non-standard (Ghostscript extension) type of PageSize where the array has four elements rather than the standard two elements. This four element array represents a page size range where the first two elements are the lower bound of the range and the second two are the upper bound. By default these are [0, 0] for the lower bound and [164160, 164160] for the upper bound. The range type of PageSize is intended to allow flexible page size specification for non-printer file formats such as JPEG, PNG, TIFF, EPS, ... For actual printers, either the entire InputAttributes dictionary should be replaced or the range type entry should not be included. To simplify using the default paper sizes in the InputAttributes dictionary, the command line option -dNORANGEPAGESIZE can be used. Using this option will result in automatic rotation of the document page if the requested paper size is not supported by the printer. The command line option -dPAPERWIDTH=width and -dPAPERHEIGHT=height can be used to specify the paper size in points. Changing the installed default paper size You can change the installed default paper size on an installed version of Ghostscript, by editing the initialization file gs_init.ps. This file is usually in the Resource/Init directory somewhere in the search path. See the section on finding files for details. Find the line %DEFAULTPAPERSIZE(a4) def Then to make A4 the default paper size, uncomment the line to change this to /DEFAULTPAPERSIZE (a4) def For A4 you can substitute any paper size Ghostscript knows. This supersedes the previous method of uncommenting the line % (a4) Sometimes the initialization files are compiled into Ghostscript and cannot be changed. On Windows and some Linux builds, the default paper size will be selected to be a4 or lpr depending on the locale. Interacting with pipes As noted above, input files are normally specified on the command line. However, one can also "pipe" input into Ghostscript from another program by using the special file name '-' which is interpreted as standard input. Examples: (some program producing ps) | gs [options] - zcat paper.ps gz | gs - When Ghostscript finishes reading from the pipe, it quits rather than going into interactive mode. Because of this, options and files after the '-' in the command line will be ignored. On Unix and MS Windows systems you can send output to a pipe in the same way. For example, to pipe the output to lpr, use the command gs -q -sOutputFile=- | lpr In this case you must also use the -q switch to prevent Ghostscript from writing messages to standard output which become mixed with the intended output stream. Also, using the -sStdout=-sStderr option is
useful, particularly with input from PostScript files that may print to stdout. Similar results can be obtained with the %stdout and %pipe% fledgevies. The example above would become gs -sOutputFile=%stdout -q | lpr or gs -sOutputFile=%pipe%lpr (again, doubling the % character on MS Windows systems.) In the last case, -q isn't necessary since Ghostscript handles the pipe itself and messages sent to stdout will be printed as usual. Using Ghostscript with PDF files Ghostscript is normally built to interpret both PostScript and PDF files, examining each file to determine automatically whether it is PostScript or PDF. PostScript files are interpreted and processed as such. However, the PostScript switch will also apply to PDF files, with the exception that, in addition, the pdf2ps utility uses Ghostscript to convert PDF to (Level 2) PostScript. Switches for PDF files Here are some command line options specific to PDF -dNEWPDF From release 9.5.0 Ghostscript incorporates two complete PDF interpreters; the original long-standing interpreter is written in PostScript but there is now a new interpreter written in C. At present the old PostScript-based interpreter remains the default, in future releases the new C-based interpreter will become the default, though we would encourage people to experiment with the new interpreter and send us feedback. While there are two interpreters the command-line switch NEWPDF will allow selection of the existing interpreter when false and the new interpreter when true. -dPDFFitPage Rather than selecting a PageSize given by the PDF MediaBox, BleedBox (see -dUseBleedBox), TrimBox (see -dUseTrimBox), ArtBox (see -dUseArtBox), or CropBox (see -dUseCropBox), the PDF file will be scaled to fit the current device page size (usually the default page size). This is useful for creating fixed sized images of PDF files that may have a variety of page sizes, for example thumbnail images. This option is also set by the -dFITPage option. -dPrinted=dPrinte=false Determines whether the file should be displayed or printed using the "screen" or "printer" options for annotations and images. With -dPrinted, the output will use the file's "print" options; with -dPrinted=false, the output will use the file's "screen" options. If neither of these is specified, the output will use the screen options for any output device that doesn't have an OutputFile parameter, and the printer options for devices that do have this parameter. -dUseBleedBox Sets the page size to the BleedBox rather than the MediaBox. Defines the range of the contents of the page should be clipped when output in a production environment. This may include any extra bleed area needed to accommodate the physical limitations of cutting, folding, and trimming equipment. The actual printed page may include printing marks that fall outside the bleed box. -dUseTrimBox Sets the page size to the TrimBox rather than the MediaBox. The trim box defines the intended dimensions of the finished page after trimming. Some pages have a TrimBox that is smaller than the MediaBox and may include white space, registration or coloring marks outside the CropBox. Using this option simulates appearance of the finished printed page. -dUseArtBox Sets the page size to the ArtBox rather than the MediaBox. The art box defines the extent of the page's meaningful content (including potential white space) as intended by the page's creator. The art box is likely to be the smallest box. It can be useful when one wants to crop the page as much as possible without losing the content. -dUseCropBox Sets the page size to the CropBox rather than the MediaBox. Unlike the other "page boundary" boxes, CropBox does not have a defined meaning, it simply provides a rectangle to which the page contents will be clipped (cropped). By convention, it is often, but not exclusively, used to aid the positioning of content on the (usually larger, in these cases) media. -sPDFPassword=password Sets the user or owner password to be used in decoding encrypted PDF files. For files created with encryption method 4 or earlier, the password is an arbitrary string of bytes; with encryption method 5 or later, it should be text in either UTF-8 or your locale's character set (Ghostscript tries both). -dShowAnnotations=false Don't enumerate annotations associated with the page Annots key. Annotations are shown by default. In addition, finer control is available by defining an array /ShowAnnotTypes. Annotation types listed in this array will be drawn, whilst those not listed will not be drawn. To use this feature: -c /ShowAnnotTypes [1,] def -f Where the array can contain one or more of the following names: /Stamp, /Squiggly, /Underline, /Link, /Text, /Highlight, /Ink, /FreeText, /StrikeOut and /stamp dict. For example, adding the follow to the command line: -c /ShowAnnotTypes [/Text /Underline] def -f would draw only annotations with the subtypes "Text" and "Underline". -dShowAcroForm=false Don't show annotations from the Interactive Form Dictionary (AcroForm dictionary). By default, AcroForm processing is now enabled because Adobe Acrobat does this. The option is provided to restore the previous behavior which corresponded to older Acrobat. -dNoUserInterp Ignore the userInterp parameter. This option is useful for backward compatibility with old versions of Ghostscript and Adobe Acrobat, but for processing files with large values of UserInterp that otherwise exceed the implementation limit, -dRENDERITNOTDEF is preferred. If a glyph is not present in the font the normal behaviour is to use a /notdef glyph instead. On TrueType fonts, this is often a hollow square. Under some conditions Acrobat does not do this, instead leaving a gap equivalent to the width of the missing glyph, or the width of the /notdef glyph if no /Widths array is present. Ghostscript now attempts to mimic this undocumented feature using a user parameter RenderITNotDef. The PDF interpreter sets this user parameter to the value of RENDERITNOTDEF in systemdict, when rendering PDF files. To restore rendering of /notdef glyphs from TrueType fonts in PDF files, set this parameter to true. These command line options are no longer specific to PDF, but have some specific differences with PDF files -dFirstPage=pagenumber Begin on the designated page of the document. Pages of all documents in PDF collections are numbered sequentially. -dLastPage=pagenumber Stop after the designated page of the document. Pages of all documents in PDF collections are numbered sequentially. -sPageList=pagenumber There are three possible values for this; even, odd or a list of pages to be processed. A list can include single pages or ranges of pages. Ranges of pages use the minus sign '-'. Individual pages and ranges of pages are separated by commas ','. A trailing minus '-' means process all remaining pages. For example: -sPageList=1,3,5 indicates that pages 1, 3 and 5 should be processed. -sPageList=5-10 indicates that pages 5, 6, 7, 8, 9 and 10 should be processed. -sPageList=1,5-10,12 indicates that pages 1, 5, 6, 7, 8, 9, 10 and 12 onwards should be processed. Note: Use of PageList overrides FirstPage and/or LastPage. If you use these as well as PageList they will be ignored. The list of pages included in increasing order, you cannot process pages out of order and inserting higher numbered pages before lower numbered pages in the list will generate an error. PDF interpreter always handles the list of pages in the document the PDF interpreter only handles the list of pages in the document the PDF interpreter only handles the list of pages in the document the PDF interpreter only handles the list of pages in the document. PG and PS scripts cannot be handled in this way, and the list of pages is not supported. However, the requested pages which still lead to saving time. Be aware that using the -sPageList option will not reset the page list of the original document. For example to print even pages by page size, use -sPageList=even. For example to print odd pages by page size, use -sPageList=odd. -sOutputFile=out.%pdj -dBATCh -dNOPAUSE somefile.ps Choosing paper size Ghostscript is distributed configured to use U.S. letter paper as its default paper size. There are two ways to select other paper sizes from the command line. If the desired paper size is listed in the section on paper sizes known to Ghostscript below, you can select it by the default paper size for a single invocation of Ghostscript by using the -sPAPERSIZE= switch, for instance: -sPAPERSIZE=a4 -sPAPERSIZE=legal Otherwise you can set the paper size using the pair of switches: -dDEVICEWIDTHPOINTS=w -dDEVICEHEIGHTPOINTS=h Where w is the desired paper width and h is the desired paper height in points (units of 1/72 of an inch). Individual documents can (and often do) specify a paper size, which takes precedence over the default size. To force a specific paper size and ignore the paper size specified in the document, select a paper size as just described, and also include the -dFIXEDMEDIA switch on the command line. The default set of paper sizes will be included in the currentpagevice in the InputAttributes dictionary with each paper size as one of the entries. 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To use this feature: -c /ShowAnnotTypes [1,] def -f Where the array can contain one or more of the following names: /Stamp, /Squiggly, /Underline, /Link, /Text, /Highlight, /Ink, /FreeText, /StrikeOut and /stamp dict. For example, adding the follow to the command line: -c /ShowAnnotTypes [/Text /Underline] def -f would draw only annotations with the subtypes "Text" and "Underline". -dShowAcroForm=false Don't show annotations from the Interactive Form Dictionary (AcroForm dictionary). By default, AcroForm processing is now enabled because Adobe Acrobat does this. The option is provided to restore the previous behavior which corresponded to older Acrobat. -dNoUserInterp Ignore the userInterp parameter. This option is useful for backward compatibility with old versions of Ghostscript and Adobe Acrobat, but for processing files with large values of UserInterp that otherwise exceed the implementation limit, -dRENDERITNOTDEF is preferred. 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Pages of all documents in PDF collections are numbered sequentially. -sPageList=pagenumber There are three possible values for this; even, odd or a list of pages to be processed. A list can include single pages or ranges of pages. Ranges of pages use the minus sign '-'. Individual pages and ranges of pages are separated by commas ','. A trailing minus '-' means process all remaining pages. For example: -sPageList=1,3,5 indicates that pages 1, 3 and 5 should be processed. -sPageList=5-10 indicates that pages 5, 6, 7, 8, 9 and 10 should be processed. -sPageList=1,5-10,12 indicates that pages 1, 5, 6, 7, 8, 9, 10 and 12 onwards should be processed. Note: Use of PageList overrides FirstPage and/or LastPage. If you use these as well as PageList they will be ignored. The list of pages included in increasing order, you cannot process pages out of order and inserting higher numbered pages before lower numbered pages in the list will generate an error. PDF interpreter always handles the list of pages in the document the PDF interpreter only handles the list of pages in the document the PDF interpreter only handles the list of pages in the document the PDF interpreter only handles the list of pages in the document. PG and PS scripts cannot be handled in this way, and the list of pages is not supported. However, the requested pages which still lead to saving time. Be aware that using the -sPageList option will not reset the page list of the original document. For example to print even pages by page size, use
-sPageList=even. For example to print odd pages by page size, use -sPageList=odd. -sOutputFile=out.%pdj -dBATCh -dNOPAUSE somefile.ps Choosing paper size Ghostscript is distributed configured to use U.S. letter paper as its default paper size. There are two ways to select other paper sizes from the command line. If the desired paper size is listed in the section on paper sizes known to Ghostscript below, you can select it by the default paper size for a single invocation of Ghostscript by using the -sPAPERSIZE= switch, for instance: -sPAPERSIZE=a4 -sPAPERSIZE=legal Otherwise you can set the paper size using the pair of switches: -dDEVICEWIDTHPOINTS=w -dDEVICEHEIGHTPOINTS=h Where w is the desired paper width and h is the desired paper height in points (units of 1/72 of an inch). Individual documents can (and often do) specify a paper size, which takes precedence over the default size. 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For actual printers, either the entire InputAttributes dictionary should be replaced or the range type entry should not be included. To simplify using the default paper sizes in the InputAttributes dictionary, the command line option -dNORANGEPAGESIZE can be used. Using this option will result in automatic rotation of the document page if the requested paper size is not supported by the printer. The command line option -dPAPERWIDTH=width and -dPAPERHEIGHT=height can be used to specify the paper size in points. Changing the installed default paper size You can change the installed default paper size on an installed version of Ghostscript, by editing the initialization file gs_init.ps. This file is usually in the Resource/Init directory somewhere in the search path. See the section on finding files for details. Find the line %DEFAULTPAPERSIZE(a4) def Then to make A4 the default paper size, uncomment the line to change this to /DEFAULTPAPERSIZE (a4) def For A4 you can substitute any paper size Ghostscript knows. This supersedes the previous method of uncommenting the line % (a4) Sometimes the initialization files are compiled into Ghostscript and cannot be changed. On Windows and some Linux builds, the default paper size will be selected to be a4 or lpr depending on the locale. Interacting with pipes As noted above, input files are normally specified on the command line. However, one can also "pipe" input into Ghostscript from another program by using the special file name '-' which is interpreted as standard input. Examples: (some program producing ps) | gs [options] - zcat paper.ps gz | gs - When Ghostscript finishes reading from the pipe, it quits rather than going into interactive mode. Because of this, options and files after the '-' in the command line will be ignored. On Unix and MS Windows systems you can send output to a pipe in the same way. For example, to pipe the output to lpr, use the command gs -q -sOutputFile=- | lpr In this case you must also use the -q switch to prevent Ghostscript from writing messages to standard output which become mixed with the intended output stream. Also, using the -sStdout=-sStderr option is useful, particularly with input from PostScript files that may print to stdout. Similar results can be obtained with the %stdout and %pipe% fledgevies. The example above would become gs -sOutputFile=%stdout -q | lpr or gs -sOutputFile=%pipe%lpr (again, doubling the % character on MS Windows systems.) In the last case, -q isn't necessary since Ghostscript handles the pipe itself and messages sent to stdout will be printed as usual. Using Ghostscript with PDF files Ghostscript is normally built to interpret both PostScript and PDF files, examining each file to determine automatically whether it is PostScript or PDF. PostScript files are interpreted and processed as such. However, the PostScript switch will also apply to PDF files, with the exception that, in addition, the pdf2ps utility uses Ghostscript to convert PDF to (Level 2) PostScript. Switches for PDF files Here are some command line options specific to PDF -dNEWPDF From release 9.5.0 Ghostscript incorporates two complete PDF interpreters; the original long-standing interpreter is written in PostScript but there is now a new interpreter written in C. At present the old PostScript-based interpreter remains the default, in future releases the new C-based interpreter will become the default, though we would encourage people to experiment with the new interpreter and send us feedback. While there are two interpreters the command-line switch NEWPDF will allow selection of the existing interpreter when false and the new interpreter when true. -dPDFFitPage Rather than selecting a PageSize given by the PDF MediaBox, BleedBox (see -dUseBleedBox), TrimBox (see -dUseTrimBox), ArtBox (see -dUseArtBox), or CropBox (see -dUseCropBox), the PDF file will be scaled to fit the current device page size (usually the default page size). This is useful for creating fixed sized images of PDF files that may have a variety of page sizes, for example thumbnail images. This option is also set by the -dFITPage option. -dPrinted=dPrinte=false Determines whether the file should be displayed or printed using the "screen" or "printer" options for annotations and images. With -dPrinted, the output will use the file's "print" options; with -dPrinted=false, the output will use the file's "screen" options. If neither of these is specified, the output will use the screen options for any output device that doesn't have an OutputFile parameter, and the printer options for devices that do have this parameter. -dUseBleedBox Sets the page size to the BleedBox rather than the MediaBox. Defines the range of the contents of the page should be clipped when output in a production environment. This may include any extra bleed area needed to accommodate the physical limitations of cutting, folding, and trimming equipment. The actual printed page may include printing marks that fall outside the bleed box. -dUseTrimBox Sets the page size to the TrimBox rather than the MediaBox. The trim box defines the intended dimensions of the finished page after trimming. Some pages have a TrimBox that is smaller than the MediaBox and may include white space, registration or coloring marks outside the CropBox. Using this option simulates appearance of the finished printed page. -dUseArtBox Sets the page size to the ArtBox rather than the MediaBox. The art box defines the extent of the page's meaningful content (including potential white space) as intended by the page's creator. The art box is likely to be the smallest box. It can be useful when one wants to crop the page as much as possible without losing the content. -dUseCropBox Sets the page size to the CropBox rather than the MediaBox. Unlike the other "page boundary" boxes, CropBox does not have a defined meaning, it simply provides a rectangle to which the page contents will be clipped (cropped). By convention, it is often, but not exclusively, used to aid the positioning of content on the (usually larger, in these cases) media. -sPDFPassword=password Sets the user or owner password to be used in decoding encrypted PDF files. For files created with encryption method 4 or earlier, the password is an arbitrary string of bytes; with encryption method 5 or later, it should be text in either UTF-8 or your locale's character set (Ghostscript tries both). -dShowAnnotations=false Don't enumerate annotations associated with the page Annots key. Annotations are shown by default. In addition, finer control is available by defining an array /ShowAnnotTypes. Annotation types listed in this array will be drawn, whilst those not listed will not be drawn. To use this feature: -c /ShowAnnotTypes [1,] def -f Where the array can contain one or more of the following names: /Stamp, /Squiggly, /Underline, /Link, /Text, /Highlight, /Ink, /FreeText, /StrikeOut and /stamp dict. For example, adding the follow to the command line: -c /ShowAnnotTypes [/Text /Underline] def -f would draw only annotations with the subtypes "Text" and "Underline". -dShowAcroForm=false Don't show annotations from the Interactive Form Dictionary (AcroForm dictionary). By default, AcroForm processing is now enabled because Adobe Acrobat does this. The option is provided to restore the previous behavior which corresponded to older Acrobat. -dNoUserInterp Ignore the userInterp parameter. This option is useful for backward compatibility with old versions of Ghostscript and Adobe Acrobat, but for processing files with large values of UserInterp that otherwise exceed the implementation limit, -dRENDERITNOTDEF is preferred. If a glyph is not present in the font the normal behaviour is to use a /notdef glyph instead. On TrueType fonts, this is often a hollow square. Under some conditions Acrobat does not do this, instead leaving a gap equivalent to the width of the missing glyph, or the width of the /notdef glyph if no /Widths array is present. Ghostscript now attempts to mimic this undocumented feature using a user parameter RenderITNotDef. The PDF interpreter sets this user parameter to the value of
RENDERITNOTDEF in systemdict, when rendering PDF files. To restore rendering of /notdef glyphs from TrueType fonts in PDF files, set this parameter to true. These command line options are no longer specific to PDF, but have some specific differences with PDF files -dFirstPage=pagenumber Begin on the designated page of the document. Pages of all documents in PDF collections are numbered sequentially. -dLastPage=pagenumber Stop after the designated page of the document. Pages of all documents in PDF collections are numbered sequentially. -sPageList=pagenumber There are three possible values for this; even, odd or a list of pages to be processed. A list can include single pages or ranges of pages. Ranges of pages use the minus sign '-'. Individual pages and ranges of pages are separated by commas ','. A trailing minus '-' means process all remaining pages. For example: -sPageList=1,3,5 indicates that pages 1, 3 and 5 should be processed. -sPageList=5-10 indicates that pages 5, 6, 7, 8, 9 and 10 should be processed. -sPageList=1,5-10,12 indicates that pages 1, 5, 6, 7, 8, 9, 10 and 12 onwards should be processed. Note: Use of PageList overrides FirstPage and/or LastPage. If you use these as well as PageList they will be ignored. The list of pages included in increasing order, you cannot process pages out of order and inserting higher numbered pages before lower numbered pages in the list will generate an error. PDF interpreter always handles the list of pages in the document the PDF interpreter only handles the list of pages in the document the PDF interpreter only handles the list of pages in the document the PDF interpreter only handles the list of pages in the document. PG and PS scripts cannot be handled in this way, and the list of pages is not supported. However, the requested pages which still lead to saving time. Be aware that using the -sPageList option will not reset the page list of the original document. For example to print even pages by page size, use -sPageList=even. For example to print odd pages by page size, use -sPageList=odd. -sOutputFile=out.%pdj -dBATCh -dNOPAUSE somefile.ps Choosing paper size Ghostscript is distributed configured to use U.S. letter paper as its default paper size. There are two ways to select other paper sizes from the command line. If the desired paper size is listed in the section on paper sizes known to Ghostscript below, you can select it by the default paper size for a single invocation of Ghostscript by using the -sPAPERSIZE= switch, for instance: -sPAPERSIZE=a4 -sPAPERSIZE=legal Otherwise you can set the paper size using the pair of switches: -dDEVICEWIDTHPOINTS=w -dDEVICEHEIGHTPOINTS=h Where w is the desired paper width and h is the desired paper height in points (units of 1/72 of an inch). Individual documents can (and often do) specify a paper size, which takes precedence over the default size. To force a specific paper size and ignore the paper size specified in the document, select a paper size as just described, and also include the -dFIXEDMEDIA switch on the command line. The default set of paper sizes will be included in the currentpagevice in the InputAttributes dictionary with each paper size as one of the entries. The last entry in the dictionary (which has numeric keys) is a non-standard (Ghostscript extension) type of PageSize where the array has four elements rather than the standard two elements. This four element array represents a page size range where the first two elements are the lower bound of the range and the second two are the upper bound. By default these are [0, 0] for the lower bound and [164160, 164160] for the upper bound. The range type of PageSize is intended to allow flexible page size specification for non-printer file formats such as JPEG, PNG, TIFF, EPS, ... For actual printers, either the entire InputAttributes dictionary should be replaced or the range type entry should not be included. To simplify using the default paper sizes in the InputAttributes dictionary, the command line option -dNORANGEPAGESIZE can be used. Using this option will result in automatic rotation of the document page if the requested paper size is not supported by the printer. The command line option -dPAPERWIDTH=width and -dPAPERHEIGHT=height can be used to specify the paper size in points. Changing the installed default paper size You can change the installed default paper size on an installed version of Ghostscript, by editing the initialization file gs_init.ps. This file is usually in the Resource/Init directory somewhere in the search path. See the section on finding files for details. Find the line %DEFAULTPAPERSIZE(a4) def Then to make A4 the default paper size, uncomment the line to change this to /DEFAULTPAPERSIZE (a4) def For A4 you can substitute any paper size Ghostscript knows. This supersedes the previous method of uncommenting the line % (a4) Sometimes the initialization files are compiled into Ghostscript and cannot be changed. On Windows and some Linux builds, the default paper size will be selected to be a4 or lpr depending on the locale. Interacting with pipes As noted above, input files are normally specified on the command line. However, one can also "pipe" input into Ghostscript from another program by using the special file name '-' which is interpreted as standard input. Examples: (some program producing ps) | gs [options] - zcat paper.ps gz | gs - When Ghostscript finishes reading from the pipe, it quits rather than going into interactive mode. Because of this, options and files after the '-' in the command line will be ignored. 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decoding encrypted PDF files. For files created with encryption method 4 or earlier, the password is an arbitrary string of bytes; with encryption method 5 or later, it should be text in either UTF-8 or your locale's character set (Ghostscript tries both). -dShowAnnotations=false Don't enumerate annotations associated with the page Annots key. Annotations are shown by default. In addition, finer control is available by defining an array /ShowAnnotTypes. Annotation types listed in this array will be drawn, whilst those not listed will not be drawn. To use this feature: -c /ShowAnnotTypes [1,] def -f Where the array can contain one or more of the following names: /Stamp, /Squiggly, /Underline, /Link, /Text, /Highlight, /Ink, /FreeText, /StrikeOut and /stamp dict. For example, adding the follow to the command line: -c /ShowAnnotTypes [/Text /Underline] def -f would draw only annotations with the subtypes "Text" and "Underline". -dShowAcroForm=false Don't show annotations from the Interactive Form Dictionary (AcroForm dictionary). By default, AcroForm processing is now enabled because Adobe Acrobat does this. The option is provided to restore the previous behavior which corresponded to older Acrobat. -dNoUserInterp Ignore the userInterp parameter. This option is useful for backward compatibility with old versions of Ghostscript and Adobe Acrobat, but for processing files with large values of UserInterp that otherwise exceed the implementation limit, -dRENDERITNOTDEF is preferred. If a glyph is not present in the font the normal behaviour is to use a /notdef glyph instead. On TrueType fonts, this is often a hollow square. Under some conditions Acrobat does not do this, instead leaving a gap equivalent to the width of the missing glyph, or the width of the /notdef glyph if no /Widths array is present. Ghostscript now attempts to mimic this undocumented feature using a user parameter RenderITNotDef. The PDF interpreter sets this user parameter to the value of RENDERITNOTDEF in systemdict, when rendering PDF files. To restore rendering of /notdef glyphs from TrueType fonts in PDF files, set this parameter to true. These command line options are no longer specific to PDF, but have some specific differences with PDF files -dFirstPage=pagenumber Begin on the designated page of the document. Pages of all documents in PDF collections are numbered sequentially. -dLastPage=pagenumber Stop after the designated page of the document. Pages of all documents in PDF collections are numbered sequentially. -sPageList=pagenumber There are three possible values for this; even, odd or a list of pages to be processed. A list can include single pages or ranges of pages. Ranges of pages use the minus sign '-'. Individual pages and ranges of pages are separated by commas ','. A trailing minus '-' means process all remaining pages. For example: -sPageList=1,3,5 indicates that pages 1, 3 and 5 should be processed. -sPageList=5-10 indicates that pages 5, 6, 7, 8, 9 and 10 should be processed. -sPageList=1,5-10,12 indicates that pages 1, 5, 6, 7, 8, 9, 10 and 12 onwards should be processed. Note: Use of PageList overrides FirstPage and/or LastPage. If you use these as well as PageList they will be ignored. The list of pages included in increasing order, you cannot process pages out of order and inserting higher numbered pages before lower numbered pages in the list will generate an error. PDF interpreter always handles the list of pages in the document the PDF interpreter only handles the list of pages in the document the PDF interpreter only handles the list of pages in the document the PDF interpreter only handles the list of pages in the document. PG and PS scripts cannot be handled in this way, and the list of pages is not supported. However, the requested pages which still lead to saving time. Be aware that using the -sPageList option will not reset the page list of the original document. For example to print even pages by page size, use -sPageList=

by the normal definition during the interpreter initialization. -Name-string=string Define a name in systemd with a given string as value. This is different from -n. For example, -dXXZ=35 on the command line is equivalent to the program fragment `!XXZ=35` is equivalent to `!XXZ={35} def -pname=string Define a name in the command line. -w=string Set the working directory for this document. For example, -w /usr/bin will set the working directory to /usr/bin. This means that the path to the file to be processed is relative to this directory. -DownScaleFactor=1 can be equivalently performed by -pDownScaleFactor=3 and -pAPERSIZE=letter can be equivalently performed by -pAPERSIZE=letter. Note, that there are some 'special' values that should be used, such as DEVICE and DefaultGrayProfile. Basically, only use -p if you cannot set what you want using -s or -d. Also, internally, after setting an parameter with -p we perform an intrinsics operation. This is required to allow changes in parameters such as HWResolution to take effect. This means that attempting to use -p other than at the start of a page is liable to give unexpected results. Brnly, Un-defn a name, cancelling -d or -s. Note that the initialization file gs init.ps makes systemd read-only, so the values of parameters with -D, -d, -S, and -s cannot be changed - although, of course, they can be superseded by definitions in userdict or other dictionaries. However, device parameters set this way (PageSize, Margins, etc.) are not read-only, and can be changed by code in PostScript files. -number1number2 Equivalent to -dDEVICEWIDTH=number1 and -dDEVICEHEIGHT=number2, specifying the device width and height in pixels for the benefit of devices such as X11 windows and VESA displays that require (or allow) you to specify width and height. Note that this causes documents of other sizes to be clipped, not scaled: see -dFIXEDMEDIA below. -number (same as -numbernumber) -number1number2 Equivalent to -dDEVICECRESOLUTION=number1 and -dDEVICEVRESOLUTION=number2, specifying the device horizontal and vertical resolution in pixels per inch for the benefit of devices such as printers that support multiple X and Y resolutions. Suppress messages -q Quiet startup: suppress normal start-up messages, and also do the equivalent of -dQUIET. Parameter switches (-d and -s) As noted above, -d and -s define initial values for PostScript names. Some of these names are parameters that control the interpreter or the graphics engine. You can also use -d or -s to define a value for any device parameter. This is useful, for example, to set the device resolution. For example, -dResolution=300 will set the resolution to 300 dots per inch. -dColorScreen=0 -dColorScreen=1 -dColorScreen=2 -dColorScreen=3 -dColorScreen=4 -dColorScreen=5 -dColorScreen=6 -dColorScreen=7 -dColorScreen=8 -dColorScreen=9 -dColorScreen=10 -dColorScreen=11 -dColorScreen=12 -dColorScreen=13 -dColorScreen=14 -dColorScreen=15 -dColorScreen=16 -dColorScreen=17 -dColorScreen=18 -dColorScreen=19 -dColorScreen=20 -dColorScreen=21 -dColorScreen=22 -dColorScreen=23 -dColorScreen=24 -dColorScreen=25 -dColorScreen=26 -dColorScreen=27 -dColorScreen=28 -dColorScreen=29 -dColorScreen=30 -dColorScreen=31 -dColorScreen=32 -dColorScreen=33 -dColorScreen=34 -dColorScreen=35 -dColorScreen=36 -dColorScreen=37 -dColorScreen=38 -dColorScreen=39 -dColorScreen=40 -dColorScreen=41 -dColorScreen=42 -dColorScreen=43 -dColorScreen=44 -dColorScreen=45 -dColorScreen=46 -dColorScreen=47 -dColorScreen=48 -dColorScreen=49 -dColorScreen=50 -dColorScreen=51 -dColorScreen=52 -dColorScreen=53 -dColorScreen=54 -dColorScreen=55 -dColorScreen=56 -dColorScreen=57 -dColorScreen=58 -dColorScreen=59 -dColorScreen=60 -dColorScreen=61 -dColorScreen=62 -dColorScreen=63 -dColorScreen=64 -dColorScreen=65 -dColorScreen=66 -dColorScreen=67 -dColorScreen=68 -dColorScreen=69 -dColorScreen=70 -dColorScreen=71 -dColorScreen=72 -dColorScreen=73 -dColorScreen=74 -dColorScreen=75 -dColorScreen=76 -dColorScreen=77 -dColorScreen=78 -dColorScreen=79 -dColorScreen=80 -dColorScreen=81 -dColorScreen=82 -dColorScreen=83 -dColorScreen=84 -dColorScreen=85 -dColorScreen=86 -dColorScreen=87 -dColorScreen=88 -dColorScreen=89 -dColorScreen=90 -dColorScreen=91 -dColorScreen=92 -dColorScreen=93 -dColorScreen=94 -dColorScreen=95 -dColorScreen=96 -dColorScreen=97 -dColorScreen=98 -dColorScreen=99 -dColorScreen=100 -dColorScreen=101 -dColorScreen=102 -dColorScreen=103 -dColorScreen=104 -dColorScreen=105 -dColorScreen=106 -dColorScreen=107 -dColorScreen=108 -dColorScreen=109 -dColorScreen=110 -dColorScreen=111 -dColorScreen=112 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-dColorScreen=168 -dColorScreen=169 -dColorScreen=170 -dColorScreen=171 -dColorScreen=172 -dColorScreen=173 -dColorScreen=174 -dColorScreen=175 -dColorScreen=176 -dColorScreen=177 -dColorScreen=178 -dColorScreen=179 -dColorScreen=180 -dColorScreen=181 -dColorScreen=182 -dColorScreen=183 -dColorScreen=184 -dColorScreen=185 -dColorScreen=186 -dColorScreen=187 -dColorScreen=188 -dColorScreen=189 -dColorScreen=190 -dColorScreen=191 -dColorScreen=192 -dColorScreen=193 -dColorScreen=194 -dColorScreen=195 -dColorScreen=196 -dColorScreen=197 -dColorScreen=198 -dColorScreen=199 -dColorScreen=200 -dColorScreen=201 -dColorScreen=202 -dColorScreen=203 -dColorScreen=204 -dColorScreen=205 -dColorScreen=206 -dColorScreen=207 -dColorScreen=208 -dColorScreen=209 -dColorScreen=210 -dColorScreen=211 -dColorScreen=212 -dColorScreen=213 -dColorScreen=214 -dColorScreen=215 -dColorScreen=216 -dColorScreen=217 -dColorScreen=218 -dColorScreen=219 -dColorScreen=220 -dColorScreen=221 -dColorScreen=222 -dColorScreen=223 -dColorScreen=224 -dColorScreen=225 -dColorScreen=226 -dColorScreen=227 -dColorScreen=228 -dColorScreen=229 -dColorScreen=230 -dColorScreen=231 -dColorScreen=232 -dColorScreen=233 -dColorScreen=234 -dColorScreen=235 -dColorScreen=236 -dColorScreen=237 -dColorScreen=238 -dColorScreen=239 -dColorScreen=240 -dColorScreen=241 -dColorScreen=242 -dColorScreen=243 -dColorScreen=244 -dColorScreen=245 -dColorScreen=246 -dColorScreen=247 -dColorScreen=248 -dColorScreen=249 -dColorScreen=250 -dColorScreen=251 -dColorScreen=252 -dColorScreen=253 -dColorScreen=254 -dColorScreen=255 -dColorScreen=256 -dColorScreen=257 -dColorScreen=258 -dColorScreen=259 -dColorScreen=260 -dColorScreen=261 -dColorScreen=262 -dColorScreen=263 -dColorScreen=264 -dColorScreen=265 -dColorScreen=266 -dColorScreen=267 -dColorScreen=268 -dColorScreen=269 -dColorScreen=270 -dColorScreen=271 -dColorScreen=272 -dColorScreen=273 -dColorScreen=274 -dColorScreen=275 -dColorScreen=276 -dColorScreen=277 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Relative ones are being resolved from the path, which is specified in FAPIconfig file. The file FAPIfontmap is actually special PostScript code. It may include records of 2 types : general records and FCO records (see below). A general record describes a font, which is being rendered with FAPI. They must end with semicolon. Each general record is a pair. The first element of the pair is the font name (the name that PostScript documents use to access the font, which may differ from real name of the font which the font file defines). The second element is a dictionary with entries : Key Type Description Path string Absolute path to font file, or relative path to font file from the FontPath value, being specified in FAPIconfig, FontType integer PostScript type for this font. Only 1 and 42 are currently allowed. Note that this is unrelated to the real type of the font file - the bridge will perform a format conversion. FAPI name Name of the renderer to be used with the font. Only /UFST and /FreeType are now allowed. SubfontId integer (optional) Index of the font in font collection, such as FCO or TTC. It is being ignored if Path doesn't specify a collection. Note that Free Type can't handle FCO. Default value is 0. Decoding name (optional) The name of a Decoding resource to be used with the font. If specified, lib/xlatmap (see below) doesn't work for this font. Example of a general FAPI font map record : /FCO1 > ; FCO records work for UFST only. A group of FCO records start with a line name ReadFCOfontmap:, where name is a name of a command line argument, which specify a path to an FCO file. The group of FCO records must end with the line EndFCOfontmap. Each record of a group occupy a single line, and contains a number and 1, 2 or 3 names. The number is the font index in the FCO file, the first name is the Postscript font name, the second is an Encoding resource name, and the third is a decoding resource name. Note that FAPIfontmap specifies only instances of Font category. CID fonts to be listed in another map file. Ghostscript distribution includes sample map files gs/lib/FAPIfontmap, gs/lib/FCOfontmap-PCLPS2, gs/lib/FCOfontmap-PCLPS3, gs/lib/FCOfontmap-PS3, which may be customized by the user. The last 3 ones include an information about UFST FCO files. The file FAPIcidfmap defines a mapping table for CIDFont resources. It contains records for each CID font being rendered with FAPI. The format is similar to FAPIfontmap, but dictionaries must contain few different entries : Key Type Description Path string Absolute path to font file, or relative path to font file from the CIDFontPath value, being specified in FAPIconfig. CIDFontType integer PostScript type for this CID font. Only 0, 1 and 2 are currently allowed. Note that this is unrelated to the real type of the font file - the bridge will perform format conversion. FAPI name Name of the renderer to be used with the font. Only /UFST and /FreeType are now allowed. SubfontId integer (optional) Index of the font in font collection, such as FCO or TTC. It is being ignored if Path doesn't specify a collection. Default value is 0. CSI array of 2 elements (required) Information for building CIDSystemInfo. The first element is a string, which specifies Ordering. The second element is a number, which specifies Supplement. Example of FAPI CID font map record : /HeiseiKakuGo-W5 > ; The control file FAPIconfig defines 4 entries : Key Type Description FontPath string Absolute path to a directory, which contains fonts. Used to resolve relative paths in FAPIfontmap. CIDFontPath string Absolute path to a directory, which contains fonts to substitute to CID fonts. Used to resolve relative paths in FAPIcidfmap. It may be same or different than FontPath. HookDiskFonts array of integers. List of PS font types to be handled with FAPI. This controls other fonts that ones listed in FAPIfontmap and FAPIcidfmap - such ones are PS fonts installed to Ghostscript with lib/fontmap or with GS FONTPATH, or regular CID font resources. Unlisted font types will be rendered with the native Ghostscript font renderer. Only allowed values now are 1,9,11,42. Note that 9 and 11 correspond to CIDFontType 0 and 2. HookEmbeddedFonts array of integers. List of PS font types to be handled with FAPI. This controls fonts being embedded into a document - either fonts or CID font resources. Unlisted font types will be rendered with the native Ghostscript font renderer. Only allowed values now are 1,9,11,42. Note that 9 and 11 correspond to CIDFontType 0 and 2. Ghostscript distribution includes sample config files gs/lib/FAPIconfig, gs/lib/FAPIconfig-FCO. which may be customized by the user. The last ones defines the configuration for handling resident UFST fonts only. In special cases you may need to customize the file lib/xlatmap. Follow instructions in it. Some UFST font collections need a path for finding an UFST plugin. If you run UFST with such font collection, you should run Ghostscript with a special command line argument -sUFST_Plugin=path, where path specifies a disk path to the UFST plugin file, which Monotype Imaging distributes in ufst/fontdata/MTFONTS/PCL45/MT3/plug_xi.fco. If UFST needs it and the command line argument is not specified, Ghostscript prints a warning and searches plugin file in the current directory. If you want to run UFST with resident UFST fonts only (and allow Ghostscript font renderer to handle fons, which may be downloaded or embedded into documents), you should run Ghostscript with these command line arguments : -sFCOfontfile=path1 -sFCOfontfile2=path2 -sUFST_Plugin=path3 -sFAPIfontmap=map-name -sFAPIconfig=FAPIconfig-FCO where path1 specifies a disk path to the main FCO file, path2 specifies a disk path to the Wingdings FCO file, path3 a disk path the FCO plugin file, path1 is either gs/lib/FCOfontmap-PCLPS2, gs/lib/FCOfontmap-PCLPS3, or gs/lib/FCOfontmap-PS3. FAPIcidfmap works as usual, but probably you want to leave it empty because FCO doesn't emulate CID fonts. Some configurations of UFST need a path for finding symbol set files. If you compiled UFST with such configuration, you should run Ghostscript with a special command line argument -sUFST_SSDir=path, where path specifies a disk path to the UFST support directory, which Monotype Imagong distributes in ufst/fontdata/SUPPORT. If UFST needs it and the command line argument is not specified, Ghostscript prints a warning and searches symbol set files in the current directory. Note that UFST and Free Type cannot handle some Ghostscript fonts because they do not include a PostScript interpreter and therefore have stronger restrictions on font formats than Ghostscript itself does - in particular, Type 3 fonts. If their font types are listed in HookDiskFonts or in HookEmbeddedFonts, Ghostscript interprets them as PS files, then serializes font data into a RAM buffer and passes it to FAPI as PCLEOs. (see the FAPI-related source code for details). Copyright © 2000-2021 Artifex Software, Inc. All rights reserved. This software is provided AS-IS with no warranty, either express or implied. This software is distributed under license and may not be copied, modified or distributed except as expressly authorized under the terms of that license. Refer to licensing information at or contact Artifex Software, Inc., 1305 Grant Avenue - Suite 200, Novato, CA 94945, U.S.A., +1(415)492-9861, for further information. Ghostscript version 9.55.0, 27 September 2021



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