

PDF plug-in roundup

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THE EXTENSIBILITY OF ADOBE'S ACROBAT IS LIMITED ONLY BY ITS PLUG-INS

Adobe Systems Inc.'s (San Jose, CA) PDF file format is rapidly becoming the de facto standard for electronic documents and document exchange in the corporate enterprise. The adoption rate is also gaining momentum in the professional print publishing community, although at a much slower pace.

The success of PDF can be attributed to its ability to contain fonts, raster and vector elements, and security and platform independence, all in a compressed, self-contained format. Equally important is that Adobe has made PDF the common thread format in all of its applications. This is to ensure a smooth, integrated workflow between its applications and to ensure the long life of the PDF format itself. If you also consider that Apple's new OS X operating system uses the basic PDF structure for its Quartz display environment, there is compelling evidence that PDF will be around for a long time to come.

Perhaps the biggest advantage of PDF lies in Adobe Acrobat, the primary application for creating and using PDF files. With each successive version update, and with the newly released PDF 1.4 and Acrobat 5, Adobe has progressively added many new features, not only to the PDF format but also to the Acrobat application.

Even with all of the new features, the huge success of Acrobat and PDF may lie in the extensibility of the Acrobat application. Through the use of third-party plug-ins, the functionality can be enhanced and tailored to fit the specific needs of a wide and varied audience.

COMPLEMENTARY PLUG-INS

If we look back in the history of print publishing, we can see that this same type of extensibility was the main differentiator between Quark Inc.'s QuarkXPress and its competition. QuarkXpress has, as a result, become the primary page layout application in use today. This extensibility allowed for much faster and more specialized development that satisfied the varied needs of the entire print publishing industry — without burdening Quark to come up with solutions to solve the issues of niche segments. It also allowed developers to create full and bridge applications that integrated QuarkXPress with new and existing products.

This same flexibility exists in Acrobat, but the benefits are much more far-reaching. Plug-ins and complementary applications have been developing rapidly. Many of these third-party plug-ins not only add functionality to the processes, but also ensure their success.

It is important to understand that while we think of a plug-in as a small piece of software that can add some functionality to an application, it could also be nothing more than the interface to a fairly significant external application. This article will highlight some of the current plug-ins and complementary applications that should possibly be part of your software toolbox.

PDF CREATION

The most important application for those working with PDF files is Adobe Acrobat. This core package ships bundled with a number of applications. It is the base application that supports the plug-ins and is used for reading, working with and printing PDF files. Also included are Distiller, the configurable application that creates PDF files, and

Acrobat Catalog, which lets you create searchable indexes of all of your PDF files. While the free Acrobat Reader is currently shipped with many applications to support their documentation and is also available as a download from the Adobe website (www.adobe.com), the complete Acrobat package is essential to take full advantage of the plug-in software discussed here.

There are a number of output system manufacturers that create PDF files as part of their broader production solutions, but they are not usually available as standalone products. In addition to Acrobat Distiller, however, there are a number of other standalone PDF creation products available. Agfa Apogee Create is a Job Ticket-based Adobe Normalizer application that also checks the files as part of the creation process, utilizing an embedded version of Enfocus PitStop Server. A new product, Synapse, from CreoScitex, automates the creation of PDF files using a Quark extension, in conjunction with Distiller. In addition, it includes PDF verification through the use of Enfocus' PitStop libraries. Jaws PDF Creator is a PDF creation application from 5D Publishing, now part of Global Graphics (the same company that owns RIP manufacturer Harlequin). EZ-PDF is a PDF creation application from Acquired Knowledge, one of the early PostScript preflight tool creators. Should you need to create a PDF/X-1 file, PDF/X-1 Creator is an add-on module to the Apago Piktor software.

While there are other PDF creation applications and utilities, be cautious in the selection process, because many of them will not create a PDF file that will support the requirements of the print manufacturing process. Even the supplied, chooser-based Adobe PDF Writer creates PDF files that are not usually sufficient for final print output.

PREFLIGHT

By now, most of the design and print community understands the importance of a preflight step in the production workflow. Just as there are a number of good utilities that will preflight application files, there is also a good selection of preflight tools to use when working with PDF production workflows. Each of them allows you to create set-up files that will address your specific production requirements, although some applications perform a more in-depth preflight than others.

Adobe InProduction is a plug-in application that preflights PDF files, but it also features a number of other tools, such as a color converter to perform some color management functions; Separator, which allows users to print preprepared files to the RIP; a tool for managing trim and bleed; and a tool to trap files going to specific RIPs that contain Adobe InRIP Trapping capability.

Callas Software's pdfInspektor plug-in is part of the pdfToolbox, a collection of plug-ins to support PDF print workflows.

Enfocus has developed a suite of PDF preflighting tools. Enfocus PitStop Pro is a standalone plug-in solution that offers preflighting in addition to other PDF editing tools. PitStop server allows users to automate the PDF preflighting process, and create action scripts to immediately correct or change PDF files. Enfocus' newest product, PDF Certify, manages and keeps track of preflighting and alterations to PDF files, providing accountability throughout the entire production process.

OneVision offers ASURA, a PDF preflighting application with both manual and automated capabilities.

Additionally, Markzware FlightCheck and Extensis PreflightPro are two familiar preflight applications that support layout applications like Quark, and also have support for PDF files. Both companies, along with Adobe, offer online PDF preflighting solutions.

Should you want to “clean” your PostScript prior to distilling the PDF file, there are a number of programs that will handle that. Preflight2000 Colour Chameleon from Grafik-Huset will detect and convert color space, including overprint characteristics. It also will convert PostScript Level 1 and 2 gradients into PostScript 3 shadings for smoother output.

As a Windows-based application, this product also addresses some of the problem areas of Windows-based PostScript creation. Enfocus DoubleCheck is another server product that will preflight the PostScript prior to distilling the PDF

file. Most of the functional advantage, however, can also be achieved after PDF creation using the PitStop Server product.

EDITING

Once you make the move to a PDF workflow, it is important to have a way to handle the many changes that are so much a part of print production. While the applications used to create the initial design and layout files have fairly robust editing capabilities, there has been a lot of advancement in the editing flexibility of a PDF file. At a very basic level, Adobe Acrobat installs plug-ins that launch and edit embedded raster images through Photoshop and vector images through Illustrator, if the applications are available on your system. Once edited, the changes are automatically saved back into the PDF file.

Acrobat also allows the direct editing of text in PDF files, although there are some limitations. These currently include the limitation of editing within a line (no line returns are possible), and you are limited to the characters that have been included in the PDF file during its creation (PDF creation allows you to include only a subset of the font, or only the characters actually used, to minimize the size of the final file).

CreoScitex has also created Pagelet, a page assembly plug-in for Adobe Acrobat. This new tool gives printers and prepress professionals the ability to create full-page PDF files from a partial PDF. Utilizing some manipulation tools, grids and snap-to functionality, users can control precise placement as they assemble the page.

Should you want more significant editing tools, there are numerous available. The previously mentioned Enfocus PitStop Professional and PitStop Server products offer extensive manual and automated editing tool sets, respectively. In addition, Enfocus recently released PowerUp PDF, which offers a subset of the tools available in PitStop Professional for those who don't need the whole professional package. These tools exist as a standalone solution that will handle text, color, layout and image editing directly within the PDF file.

A newly released product from Lantana (one of the earliest PDF tool developers), PDF ImageWorks, is an Acrobat-native image-editing tool. It provides control of color space, sampling, resolution, size, location, orientation and appearance of images for both print and the Web.

OneVision offers an application called Solvero that also has extensive editing tools for PDF files. In addition, the company recently released Solico, which essentially combines and enables some of the same functionality of its Solvero and Asura products in one application.

Quite Software, another one of the early PDF developers, created Quite A Box of Tricks. This collection of plug-ins allows for repurposing, color conversion of images, scaling and transformation. In addition, much of it can be automated using the pdfBatchProcess Pro, part of the pdfToolBox from Callas Software. The pdfToolbox package includes a total of six Acrobat plug-ins: pdfBatchMeister, pdfInspektor, pdfOutput, pdfCropMarks, pdfCropMeasure and pdfBatchProcess Pro, and MadeToPrint.

OUTPUT PRODUCTION

In the past few years, there has been a lot of development in the necessary tool sets required to facilitate the successful output of PDF files. CreoScitex, Agfa, Screen and Fuji have designed complete solutions, and there has been extensive development in third-party utilities and plug-ins.

The PDF format and the corresponding workflows were designed to work in a composite mode where all of the separation color information is consolidated in the file. Most RIP engines based on PostScript Level 2 and later have the potential to support this type of composite workflow. Since there are still legacy files and output RIP systems that only support pre-separated workflows, however, there are a number of utilities that also facilitate this type of workflow with PDF files. Lantana offers one of the original plug-in solutions in Crackerjack. In addition to addressing many of the output requirements of pre-separated PDF, it offers a broader set of tools, including a watched folder level of automation. Adobe has also addressed this pre-separated issue in its InProduction application.

There is also the need to include digitized legacy film into a composite PDF workflow. While there are solutions to address this in many of the turnkey output production systems, one of the most powerful standalone tools available is PDF Seps2Comp. This software, recently acquired and now distributed by CreoScitex, allows users to take these pre-separated digitized legacy films and create a composite PDF page that can be incorporated into almost any PDF output workflow system. In addition to working with digitized film files, it also works with other separated files, including DCS 2.0, TIFF-IT and CT/LW.

Another issue that undoubtedly needs to be addressed in output is trapping. Outside of the turnkey systems, which often include trapping as part of their solution, there are a number of applications that apply trapping to individual PDF files. If the RIP being used for output includes Adobe InRIP Trapping, then Adobe InProduction offers the necessary trapping tools. If you need to go to other types of PostScript 3 RIPs, or aren't sure where the file may ultimately wind up being processed, one solution is Supertrap. Said to be the first trapping plug-in designed for Acrobat, Supertrap uses algorithms derived from Heidelberg's DaVinci trapping engine to execute vector-based trapping on native PDF. Supertrap is a standalone plug-in, which is essentially the same as the trap editor found in the Prinergy PDF workflow management system co-developed by Heidelberg and CreoScitex. ScenicSoft TrapWise and Ultimate Technographics Trapeze both support the trapping of native PDF files.

Imposition is usually an essential part of the output production process. There are a number of imposition solutions that support a PDF workflow. One solution comes from ScenicSoft, in the latest version of its widely used Preps product. Preps 4.0 offers native PDF support, without the need to create a PostScript output stream to the RIP. Pandora is ScenicSoft's PDF-based packaging imposition software.

Farrukh Systems' Imposition Publisher PDF is designed specifically for PDF workflows. Its PDF Interrogation engine enables PDF files to be imposed directly, without any intermediate processing.

Dynagram's latest version of Dynastrip features PDF-In and PDF-Out, avoiding the need for PostScript conversion.

Of course, this type of native PDF solution will only work with a RIP that supports direct PDF input, unless it is printed to PostScript through Acrobat. Ultimate Technographics' ImposStrip, another popular standalone imposition programs offers native imposition of PDF files, but outputs a PostScript stream that can be sent directly to most RIPs. Quite Software offers Quite Imposing, which also imposes PDF files but outputs PostScript.

Batch-Print from Action Software, and BatchPrintPDF from Brook House Publishing use hot folders to batch print PDF files, which can be helpful in a busy production environment. Just drag, drop and print.

In addition to these production tools, new solutions that will allow process collaboration while using PDF 1.4 and Acrobat 5 are about to be released. This collaboration will include basic support for real time annotation and automated project packaging and delivery, just to mention a few.

NEW PRODUCTION PARADIGMS

In the extensive use of PDF in the corporate enterprise, on the Web as well as in print, there is a need to leverage not just the PDF pages themselves, but also the PDF-based content in each of these areas across the entire publishing field. The PDF format is now supported in most publishing distribution models, including print, Web, eBook and Palm. This will only further support the need for PDF content reuse.

The PDF file format is created from many distinct objects. Each of these objects can be identified, isolated and then reused. As a result, there are many plug-in utilities, as well as applications, that will facilitate these new requirements. With the extensive tagging support incorporated in the release of PDF 1.4 and Acrobat 5, along with many new third-party products, this will increasingly become easier to do.

Some of the many third-party companies and plug-ins that facilitate the leveraging of PDF pages and component objects include BCL Computers, with its suite of plug-in utilities that includes Freebird, Jade and Magellan, which handle conversion and extraction. Another good extraction tool is Gemini from Icen Technology.

In addition, there are many standalone and server-based applications that will then take all of those objects and reassemble them in almost any combination. There are too many to mention, and many of them are dependent on individual needs. You should start your research using some PDF interest websites (see box, above left).

Remember that each of these plug-ins and applications can offer a set of complementary tools to enhance new or existing workflows. Since many of them are niche solutions, however, not all of them are necessarily compatible or beneficial to one specific workflow. It is also important to note that this is just a small sampling of the many plug-ins and complementary applications that are available today — many more are in development.

For an up-to-date list of what is new and available, or to purchase many of these products, visit the following PDF-specific websites: PlanetPDF.com and PDFzone.com. There, you will find listings of everything related to PDF, as well as special-interest lists that you can join and query with questions you may have.

In closing, remember that the PDF file format, along with Acrobat and the many other third-party solutions, can significantly streamline your print and other publishing production workflows. Your early adoption of these workflows will not only serve you today, but will also prepare you for many new opportunities in the future.

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