TECHNICAL BULLETIN

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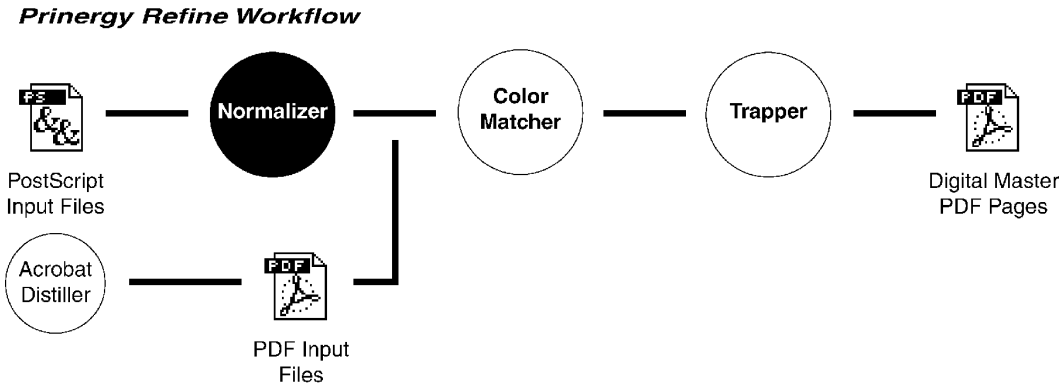
Prinergy Normalizer

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Introduction

Prinergy Normalizer is a job ticket processor (JTP) and is an integral part of the Refining step of the overall Prinergy workflow. There are many similarities and unique differences between Adobe® Acrobat™ Distiller 4.0 and the Prinergy Normalizer.

Both products can be used to produce reliable Portable Document Format (PDF) pages ready for automated or manual color management and trapping. However, the Prinergy Normalizer has been specifically designed to address the unique needs of the demanding prepress market. This paper describes and examines common characteristics and differences between the two products.

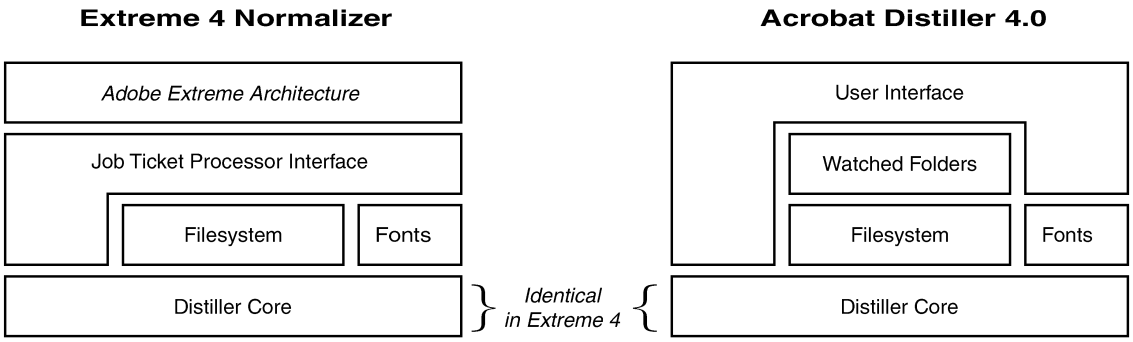


Ancestral Roots

The Normalizer JTP, in Prinergy and other systems utilizing Adobe Extreme™ 4, shares a common heritage with Adobe's Acrobat Distiller 4.0. In fact, both products descend from a common code library: the *Distiller Core*.

This core technology provides the basic services to interpret PostScript and convert it to optimized PDF. While both products make use of the *Distiller Core*, the difference in user experience is immediately apparent: Distiller 4.0 is an application installed by end-users onto their personal computers, while Normalizer participates in the Extreme environment as one of several JTPs operating on powerful servers.

Both products are designed to be compatible and produce first-rate PDF. Both products fully support PDF version 1.3, are PostScript 3 capable, and offer a number of optimizations specifically targeted at high quality printing.



Common Features

Whether using Acrobat Distiller 4.0 or making PDF with the Prinergy Normalizer, both deliver superior results. With either product, one can expect:

- Compatibility: Full support for Adobe PostScript 3, as well as with/for previous versions of the PostScript language.
- Optimized Content: all vector line art, text, fonts and images are stored in a compact format, reducing storage and transmission requirements. Images are automatically re-sampled to the resolution appropriate for output.
- Digital Masters: all graphics, fonts and images are embedded within the PDF file, eliminating the risk of losing "linked" files or having incorrect versions. Loss-less compression algorithms such as Flate and CCITT Group 4 are applied automatically.
- Modern Workflow: smooth shading for blends and gradients, DeviceN support for duotones, mixtures of composite and separated pages, digital signatures and digital mark-up are all available.

Improvements

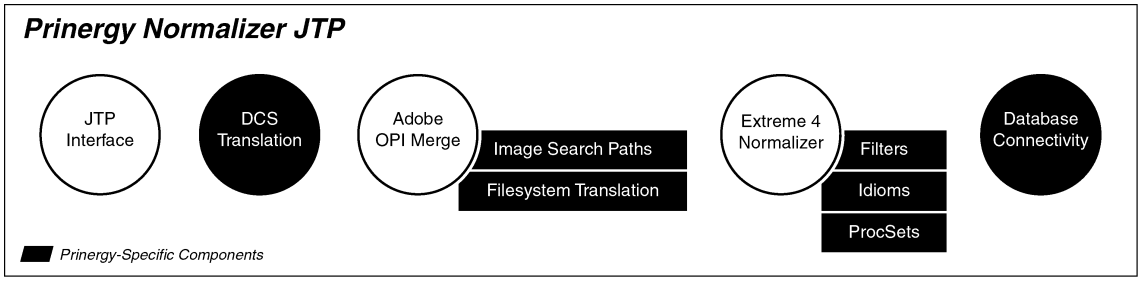
Acrobat Distiller 4.0 is a product targeted at many different business segments. As such, the user interface for Distiller 4.0 offers many customizable settings. Achieving results good enough for high quality printing requires users to create a *Job Options* file with the proper configuration.

To help users get best results with Distiller, Prinergy includes a *Job Options* file containing the same configuration used by the Prinergy Normalizer. By using this options file, users are assured of achieving excellent results right on their desktop computer. Heidelberg and Creo encourage users to share this options file with their customers, so everyone can achieve the absolute best results.

Prinergy Normalizer is specifically designed for prepress production. It includes many of the same features as Distiller, as appropriate to prepress. Adobe created the Normalizer JTP as part of Extreme for exactly this reason. In addition, Heidelberg and Creo have added a number of features to the basic Normalizer JTP.

To address the demanding prepress market, Prinergy Normalizer includes:

- Transparent distribution across multiple servers. Users can configure multiple Prinergy Normalizers to run in parallel, across multiple servers.
- Job context keeping all the PDF pages together. No matter which Prinergy Normalizer actually performs the work, the results (including progress information and status messages) are automatically collected together in a single user interface.
- OPI image replacement, supporting OPI 1 and 2, Scitex APR, Helios LAY, and ColorCentral SMP proxy images.
- Direct input of pages stored in DCS 1 and DCS 2 file formats.
- Font embedding from external font libraries.
- Smooth shading for composite spot color blends from QuarkXPress™ versions 3 & 4. Blends stay as spot colors, and can be trapped and color managed as spot colors.
- Detection and correction of hairlines that would otherwise disappear during printing.
- Page trim and offset information applied automatically for QuarkXPress and Adobe PageMaker™ files.
- Improvements for separated PostScript containing RGB images and JPEG-compressed images.
- Performance optimizations for copydot files from scanners like the Creo Renaissance.
- Detection and removal of emulated fonts. Even when the font emulation is due to Adobe Type Manager™, operators can prevent mysterious text re-flow problems.
- Detection of low-resolution contone and bitmap images, preventing unusable high- resolution film or plate output.



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Open

Every PDF created by Prinergy Normalizer follows the standard PDF 1.3 specification. Even with all the enhancements listed above, PDF is reusable in Prinergy or any other PDF workflow that supports PDF 1.3.

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