



BUSINESS AUTOMATION SOFTWARE FOR PRINT AND PACKAGING

EFI Monarch

Enterprise Resource Planning for Print



You Fight Hard to Win Work but, are You Maximizing the Profit Potential of Every Job?

Enterprise Resource Planning for Print

Streamline and Automate Your Operation to Eliminate Gaps, Improve Productivity, and Maximize Performance Potential

According to the Harvard Business Review (July - August 2008) most businesses deliver less than two-thirds of their corporate strategy's performance potential and the causes of this "strategy-to-performance gap" are often invisible to top management.

This execution gap is even more profound for many businesses in the printing industry where, according to the NAPL 2008 – 2009 Operating Ratio Studies, the average net profit per employee was 285% higher for the top 25% of businesses. While market niche and competition may account for a percentage of this gap; it's more likely that – for many businesses on the lower end of the study – there exists an execution gap between planning and performance. The Monarch Print MIS/ERP system takes direct aim at these gaps!

Disconnected Processes and Isolated Pockets of Information can Slow Operations, Introduce Errors, Create Waste and Devastate Your Profit Potential

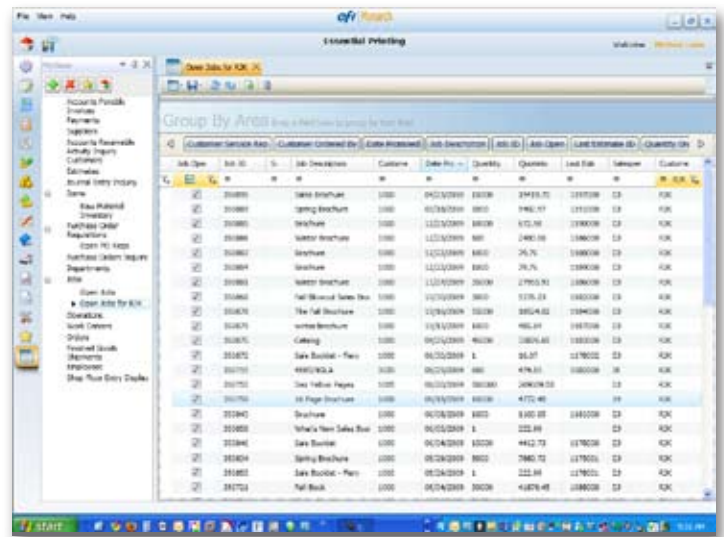
Monarch goes beyond the traditional definition of a "management" system. We realize your organization probably already has ample financial and operational data. With Monarch, the competitive difference comes from the delivery of an end-to-end solution with an ability to organize,

analyze, interpret and leverage data for process improvement across your enterprise – eliminating islands of information and barriers between your customers, sales, office, and production teams.

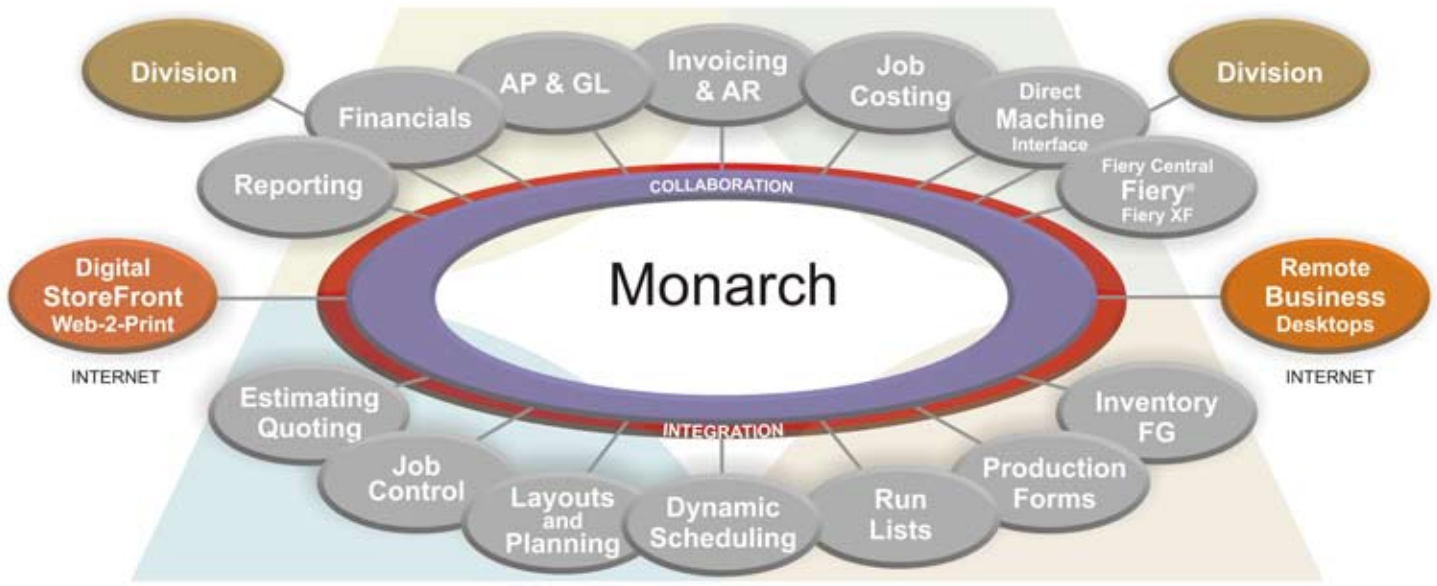


Monarch Employs Smart Analysis and Planning Tools to Ensure "Sustainable" Best Practices – Maximizing Value Creation

Monarch's combination of process flexibility, integration, and intelligence is designed to drive management excellence by providing your executive team with a foundation of automation and business control unequalled in the printing industry.



Monarch utilizes a powerful user interface designed to handle anything from a simple, two page output to a complex project with multiple versions and ship-to locations. The interface is intuitive and flexible, with multi-tiered security, user-defined desktops, and fast inquiry tools to keep your teams current and moving forward with confidence and accuracy.



Get End-to-End Profitable Workflow Control

Monarch gives you unprecedented visibility and control through integration, process intelligence and patented algorithms customized for your business – all designed to improve capacity utilization, reduce waste, streamline operations, and grow your profit potential.

“By Partnering with EFI, I have been able to stay on the leading edge. Due in large part to implementation of the EFI suite of products, we have been able to double our revenues in the last three years, including an additional \$250,000 in author’s alternations that we can now capture and make an informed decision about whether or not to bill.”

Tim Uchwat

Chief Financial Officer, JohnsByrne, Niles, IL

Monarch Addresses Every Aspect of Your Business

- Internet-based client desktops.
- Intelligent estimating and quoting.
- Visual, complex planning without templates.
- Version management for complex jobs.
- Quantity management.
- Dynamic rules-based scheduling with global optimization.
- Order entry/job tracking desktop.
- Electronic and printed production forms.
- Automated inventory allocations.
- Real-time data collection.
- CIM: JDF and DMI (Direct Machine Interfaces).
- Inventory management.
- Roll stock management.
- Invoicing and receivables.
- Payables, GL and financials.
- Sales and process analysis.
- Visual business analysis.
- Finished goods, fulfillment and mailing management.
- Internet-based catalogs.
- Multi-process, multi-language, multi-company, multi-division, multi-currency.

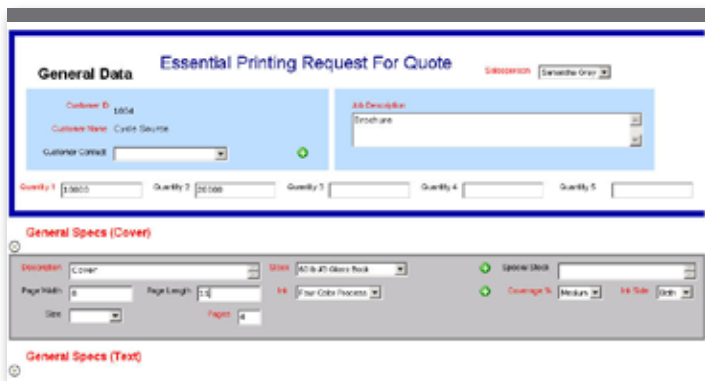
Leverage Integration, Automation and Optimization

Maximize Your Profit Potential with the Monarch MIS/ERP

Reduce Errors and Delays by Automating your Acquisition Process

Monarch leverages the Internet and several industry-leading EFI products to make your job acquisition process faster and more accurate. We begin on your customer's desktop with EFI Digital StoreFront®, giving your print buyers a customized 24/7 solution for submitting specifications and files, placing orders, reviewing invoices, and managing their product catalogs. For your field sales team, EFI Monarch Portal lets them build and submit specifications, review and dispatch quote letters, check job history, and submit and manage their jobs. These on-line tools deliver information seamlessly to your management and production teams and eliminate rekeying, errors, and delays typically associated with manual or disconnected processes.

Digital StoreFront and Monarch Portal Internal represent a critical launching point for your workload, providing validation and speed. In many instances, you'll have the opportunity to win work before your competition can decipher their salespeople's notes.



Monarch Portal Internal provides a fast, accurate solution for your sales team, gathering the information required for production in a specification ticket designed for your business and its workload. This form maps directly to your Monarch's estimating and planning processes, providing unequalled speed and accuracy.

Improve Estimating Accuracy and Speed with Monarch

Monarch Estimating utilizes automation routines to generate all operations from prepress through finishing, including outside materials. The estimating logic, tailored to your business, selects the production path for each quantity, generating a detailed plan including prepress, plate, stock, press, cutting, folding, finishing, and shipping operations and materials. Monarch's estimating automation saves time and improves accuracy.

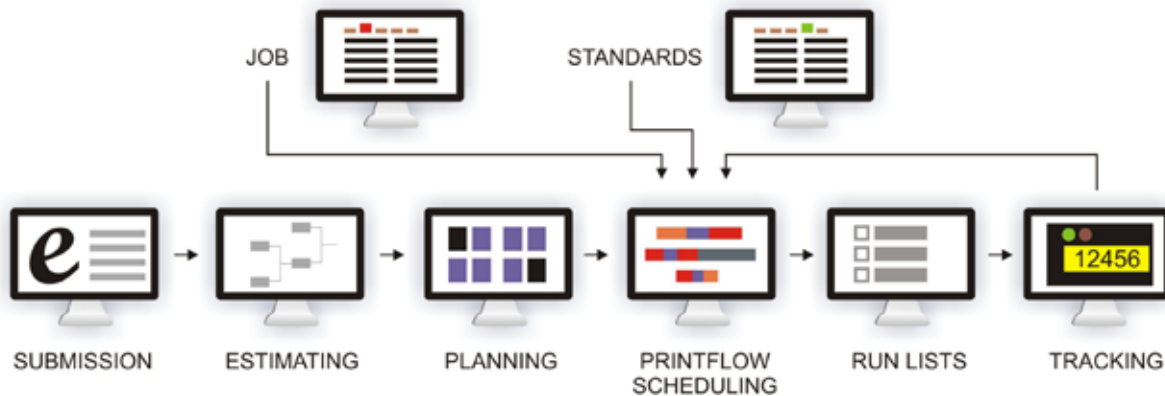
While we strive to increase the efficiency and consistency of estimating through automation, EFI recognizes that estimators need the option to update and adjust estimates. With Monarch, you retain the ability to edit any input or system calculation. Overrides are flagged for easy identification and reset buttons can automatically reconfigure an estimate following changes, selecting the optimum configuration based on new information. And "message logging" alerts the estimator when problems exist such as "no stock" or "sheet too small". The estimator is prompted to resolve the problem before the final quote is generated.

Eliminate the Need to Maintain Template Libraries with Dynamic Planning

Monarch Planner builds templates on demand – automatically adjusting specifications based on the individual job with the ability to apply a master template to multiple components and sizes. When the press is selected, dynamic planning automatically makes adjustments for the plate surface size, default marks and any imposition variables. The process continues with the automated development of a distribution and shipping plan.

Monarch Planner provides your operation with a detailed layout including: content page positions; process marks; folding instructions; color bars; and punch and side guides – everything necessary for automated plate creation. This process creates a comprehensive manufacturing instruction set for all production process steps, including reconciled distribution planning and detailed instructions for page-level version assignments. Additionally, Monarch provides a high level of real-world flexibility. Even the pre-press operator, for example, can make last-minute adjustments when necessary.

EFI PrintFlow Dynamic Scheduling



PrintFlow is a true dynamic scheduling solution providing a new level of visibility, control and global optimization. With PrintFlow, daily production meeting times can be cut by 50 to 80%, overtime is greatly reduced, and your overall plant capacity is increased without adding equipment or personnel.

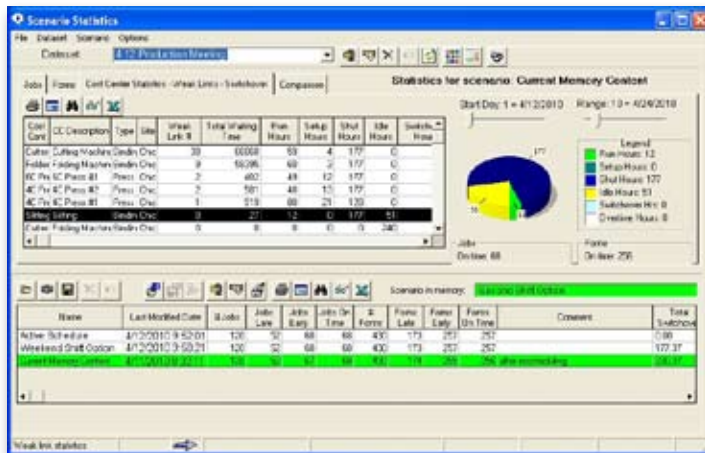
Provide Your Business with an Operational Umbrella

Dynamic Scheduling Based on the Science of Global Optimization

Monarch leverages the power and intelligence of EFI PrintFlow® Dynamic Scheduling to build a logical, efficient plan based on real-time production and delivery priorities. PrintFlow's automation sequences jobs based on priorities and production characteristics. Sheet size, paper type/weight and ink are only a few job sequence characteristics that, when factored into the production schedule, reduce make-ready time, switch-over time, waste and overall production time. PrintFlow performs this sequencing while managing critical workflow and delivery requirements. The end result

is the electronic delivery of a real-time run list – that represents the most up-to-date and cost effective schedule – to each work center.

PrintFlow works with all components of the Monarch estimating, planning, job control center, shop floor data collection, and the EFI Auto-Count® Direct Machine Interface. The plan developed in the estimating and planning processes is used by PrintFlow to automatically build the requirements for all work centers. These operations are combined with critical dates from the job control center to build a scheduling scenario that considers the work requirements, delivery dates, and equipment capabilities for virtually every job and operation in your plant. Once a schedule is approved, run lists are delivered to all work centers. As work is completed, the schedule is updated automatically, in real time, for every work center.



PrintFlow's "What-if" Scenario generator enables real-time responses to real-world situations. Each scenario includes a detailed analysis of all jobs affected by any change and identifies weak links in the production process.

"We used to schedule only the pressroom with manual tags. With PrintFlow, we now can predict the effects that incoming jobs will have on our schedule. We can usually forecast accurately the need to add capacity in the immediate future, as soon as we get the job, instead of finding out in the morning that the shift has to work overtime to get the work out on time and we schedule our entire plant."

Judi Hansen

Director of Information Technology, J. S. McCarthy

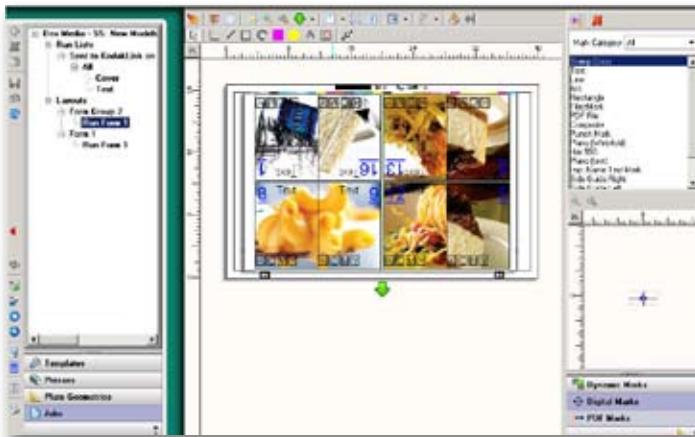
Use Just-in-Time Plating for All Jobs

Make Complex Work Predictable and Profitable

Eliminate Touch Points, Improve Communications and Optimize Production

The pressroom floor is an ever-changing sequence of rush jobs. You need to allow schedules to shift and jobs to change at any stage of the process, to take advantage of open capacity and to allow for quick responses to customer change requests. Global optimization is your best chance to improve the profitability of your existing jobs.

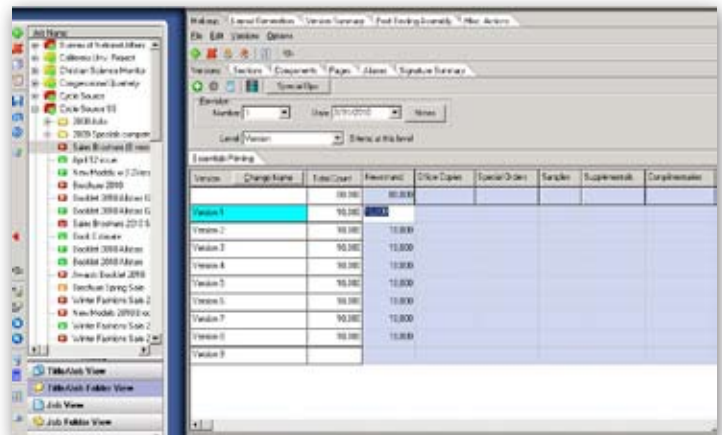
Monarch prepares impositioned press runs for direct RIPing to CtP devices – through prepress workflow systems such as Prinergy and Apogee. The Monarch Planner begins the process by receiving content links and images from, for example, Kodak's Prinergy and InSite page submission systems. The content is automatically linked to pages in the Planner, where the user views spreads and imposed views directly on-screen. With Monarch, when presses change, layouts respond and content flows automatically into its new positions. Likewise, paper sizes adjust, causing color guides and plate marks to shift and scale automatically – without user intervention.



Monarch's object-oriented, parts-based specification process enables the creation of complex jobs through a simple drag-and-drop approach. Extraordinary behind-the-scene intelligence automatically generates complex planning instructions with minimal effort. This automation supports a "Just-in-Time" plating operation, allowing greater flexibility in complex production environments – eliminating costs related to late changes and/or corrections.

Make Version Management Profitable

Monarch understands the parent/child relationship when managing versions. If a production run requires multiple black plate changes to accommodate distribution requirements, it automatically calculates and manages the related activities and materials to help control costs by reducing waste and improving workflow. Streamlining version control significantly impacts your ability to deliver on time and on target for cost and profitability.



Version	Change Name	Total Cost	Revenue	Order Dates	Special Order	Sample	Supplements	Completion
Version 1		95,000	95,000					
Version 2		95,000	10,000					
Version 3		95,000	10,000					
Version 4		95,000	10,000					
Version 5		95,000	10,000					
Version 6		95,000	10,000					
Version 7		95,000	10,000					
Version 8		95,000	10,000					
Version 9		95,000	10,000					

Monarch provides interdependent process planning capabilities for prepress, plating, press, post press, binding, post-binding and distribution planning. This planning capability includes complex version control. In a manual or "disconnected" process, skilled planners must review job detail and build production plans. These plans vary from planner to planner, introducing a high level of process instability. Monarch streamlines and standardizes planning efforts, eliminating this instability while improving overall production planning and performance.

Improve Quantity Management

Most planning systems utilize a flat percentage or rely on the operator to guesstimate production counts to allow for materials spoiled during the printing and subsequent finishing processes. These guesstimates result in excessive overruns or underruns that seriously impact costs and profitability.

Monarch's planning and Auto-Count's data collection capability use equipment sensors, scales, and complex algorithms to automate and improve accuracy. As a result, production schedules and material allocations are more accurate, and when the target moves due to a customer change, Monarch automatically rebuilds the plan with the new activities, counts and costs – creating a comprehensive manufacturing instruction set for all steps of the production process.



Improve Cash Flow Management

Achieve Sustainable Results for Long Term Business Growth

Choose Best-in-Class Software, Services and Development

Monarch provides a powerful toolset for improving cash flow and profitability, beginning with a complete specification for more accurate quotes and job plans with fewer surprises and less rework. An accurate, efficient production plan – combined with Monarch’s workflow control and optimization tools – means you can produce jobs with maximum efficiency and minimum cost. Add fast invoicing with detailed alteration tracking and you’re able to invoice jobs more quickly and keep more dollars. The value of more accurate, faster invoicing and an improved cash flow, by itself, provides an excellent ROI.

Manage Production and Finished Goods Inventories More Profitably

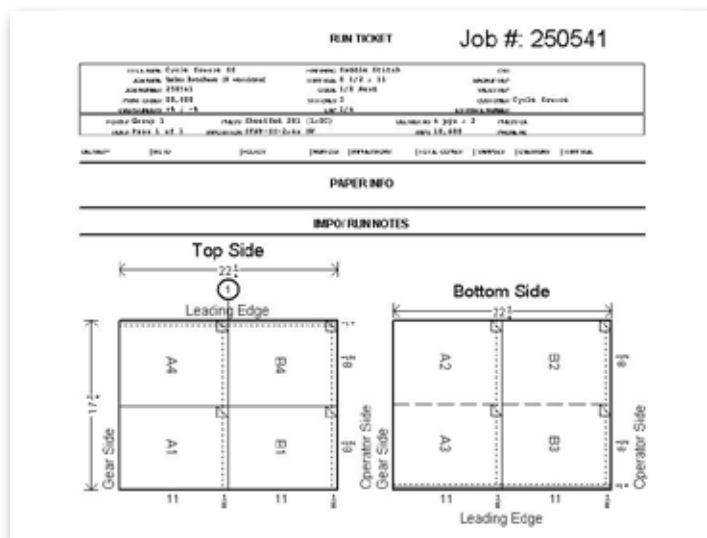
From the generation of purchase orders to real-time roll-stock inventory management, Monarch effectively manages and controls your most expensive outside costs.

And for businesses managing customer inventories, Monarch’s Finished Goods and Fulfillment tools maximize your process and profit potential with on-line client desktop options for catalogs, ordering, status, and inventory management.

Invest in a Foundation for the Long Term Business Success

Monarch gives you a total package including software, support and on-going development – the tools necessary for immediate and long-term success. Software without a proven support team and an innovative development team will not only cost you money, but it can cripple your

business. EFI has been recognized by our clients and the printing industry for its innovations and dedication. As part of EFI, our industry-leading market share in management and workflow solutions also serves as a strong testament to our commitment to help our clients succeed. We’ve listened (and are listening) to our clients and, based on their input, have created a powerful, flexible and intelligent Print MIS/ERP solution for large single and multi-plant operations.



EFI Monarch provides improved visibility for salespeople, estimators, planners, production personnel, and your executive team. This visibility may be in the form of a bar graph, a Gantt chart, an automated layout, or almost any combination of these. Information is collected, organized, analyzed and presented in a format that makes it relevant to your decision-making processes.



Monarch’s inventory impact begins with the intelligence of our planning module and continues with our Auto-Count DMI (for monitoring sheetfed and finishing equipment) and Auto-Count Paper Monitor, which monitors the consumption and yield of every roll.

“Freeport Press went from 28 to 8 people in prepress with Monarch: Our 100% PDF workflow accepts only print-ready files and Monarch does the job planning, layout, impositions and job tickets. With the EFI integrated combination of management, planning, DMI and scheduling, we have an efficient, enterprise-wide system that fully integrates order processing, inventory, accounting and billing, and we have electronic, automated, real-time scheduling that optimizes our production throughput.”

David Pilcher
President, Freeport Press, Freeport, Ohio

EFI Monarch

For more information on EFI Monarch solution,
contact EFI at 800 875-7117 or visit www.efi.com/monarch

For more information
on EFI Monarch go to
www.efi.com/monarch



EFI's portfolio
of integrated
solutions increases
productivity and
improves your
bottom line.
Find out more at
www.efi.com.

Print to Win™ with EFI

EFI™ (www.efi.com) helps businesses worldwide bring their visions and goals to life with a scalable, digital product portfolio. Our powerful servers; controllers; RIPs; inkjet printers, and precise color and imaging solutions increase companies' brand recognition and market reach on signs, buildings, bus wraps, graphic displays and more. Our business automation software helps companies work faster and more cost-effectively. Our office, enterprise and mobile cloud solutions help companies create, access, and communicate impactful information that wins them more business.



303 Velocity Way
Foster City, CA 94404
650-357-3500
www.efi.com

Auto-Count, BioVu, BioWare, ColorWise, Command WorkStation, Digital StoreFront, DocBuilder, DocBuilder Pro, DocStream, EDOX, the EFI logo, Electronics For Imaging, Fabrivu, Fiery, the Fiery logo, Inkware, Jetrion, MicroPress, OneFlow, PressVu, Printellect, PrinterSite, PrintFlow, PrintMe, PrintSmith Site, Prograph, RIP-While-Print, UltraVu and VUTEk are registered trademarks of Electronics for Imaging, Inc. in the U.S. and/or certain other countries. BESTColor is a registered trademark of Electronics for Imaging GmbH in the U.S. The APPS logo, AutoCal, Balance, ColorPASS, Dynamic Wedge, EFI, Estimate, Fast-4, Fiery Driven, the Fiery Driven logo, Fiery Link, Fiery Prints, the Fiery Prints logo, Fiery Spark, FreeForm, Hagen, the Jetrion logo, Logic, Pace, Printcafe, the PrintMe logo, PrintSmith, Print to Win, PSI, PSI Flexo, Rastek, the Rastek logo, RIPChips, SendMe, Splash, Spot-On, UltraPress, UltraTex, UV Series 50, VisualCal, the VUTEk logo and WebTools are trademarks of Electronics for Imaging, Inc. in the U.S. and/or certain other countries. Best, the Best logo, Colorproof, PhotoXposure, Remoteproof, and Screenproof are trademarks of Electronics for Imaging GmbH in the U.S. and/or certain other countries. All other terms and product names may be trademarks or registered trademarks of their respective owners, and are hereby acknowledged