Smart Software Gets Smarter
Labor, Employee and Tool Constraints Added to PrintFlow

The EFI™ PrintFlow® Dynamic Scheduling development team has always had one goal – to continually deliver the best automated tools for scheduling and workflow management. These enhancements build on this goal.

PrintFlow is based on the Theory of Global Optimization (TGO) developed by Udi Arieli, director of product management, EFI, and his team. The fundamental aim of TGO is the total optimization of all manufacturing processes and resources, increasing throughput and profits.

We know from our clients that employee and tool availability are important constraints. The complex mathematical formulas and the sheer number of scheduling possibilities, however, have always made automation of the scheduling of tools and individual employees (versus work centers) a challenge. As always, our team is persistent in working through challenges and we’ve developed a strong, workable solution.

PrintFlow now offers features for employee and tool constraints. This new capability can optimize a printing company’s complete schedule automatically, taking into considerations multiple, concurrent constraints including:

- Proof dates, material dates, and outside vendor dates.
- Automatic load balancing on parallel (group) cost centers.
- Switchover/make-ready minimization.
- Capacity utilization and optimization.
- Employee constraints including skills and calendars.
- Cost center constraints including capabilities and calendars.
- Tool constraints on cost centers.

“At EFI, we are proud and excited about this achievement. We think the employee and tool constraint features are the first in the print industry,” commented Udi Arieli. “A few competing products claim to manage these constraints, but our clients and prospects have told us that other systems lack optimization and automation – the two most important aspects of constraint management.”

The new PrintFlow employee and tool constraints include the following capabilities.

**Employee Skill Scheduling**
Skill scheduling matches work centers requiring employees with specialized skills directly with those employees. For example, if you have a work center that requires three skills, and you have three employees with some but not all those skills, you can match those three employees to that cost center. Or, you could match a cost center that requires a certain skill with all employees with that skill.

**Employee Pool Scheduling**
Employee pool scheduling is used to schedule one or more pools of interchangeable employees. Each employee in each pool knows how to operate the same work center(s). For example, you can now tell PrintFlow that you have three employees who can work on three finishing cost centers during the day shift, and two employees who can do so during the night shift.

PrintFlow now offers automated employee and tool optimization.

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All EFI newsletters are available on our website: www.efi.com/newsletters/.

July 2012
Drupa 2012: The Nano Drupa?

Nano printing is cool, but Nano profits are not!

Direct Employee Scheduling
Direct employee scheduling is used to schedule cost centers that, in order to run, require one or more specific employees.

Tool Scheduling
Tool scheduling schedules pools of interchangeable tools and available tools that could limit the use of a cost center. For example, you might define a pool of four inkjet heads that can be used on six binding lines. In this situation, PrintFlow ensures that binding lines wait for the availability of inkjet heads if they are needed for the job.

EFI is currently working with early adopters to refine these new capabilities. Contact your EFI representative about the new PrintFlow Employee and Tool Constraints capability.

Nano was all the buzz at drupa 2012 where Benny Landa introduced his new Nanographic Printing™ process that boasts a pigment particle about 10,000 times thinner than a human hair.

In his presentation, Mr. Landa stressed the importance of “reinventing” printing to protect the long term sustainability and profitability of the printing industry. Reinventing printing has been a long-time goal of EFI. During a press conference at Drupa, EFI’s CEO Guy Gecht emphasized the fact that EFI has – over the last 10 years – evolved from a one product company to a hardware, software and service provider with outstanding offerings in many categories – each focusing on three critical components: innovation, automation and profitability for the printer. To this end, the EFI stand at Drupa featured the Automated Workflow Experience, a demonstration of the end-to-end integrated, automated workflow available to EFI clients... today!

“Benny Landa’s demonstration of the new Nano printing technology represents a bright spot in the print industry’s future,” comment Udi Arieli, director of Workflow Automation, EFI. “While Benny and his team work on new offset innovations, EFI is working on the opposite end of the spectrum – battling ‘Nano’ (small) profits.”

Battling Nano Profits
EFI is winning the battle against Nano profits by delivering workflow solutions that maximize every job’s profit potential. The Automated Workflow Experience featured six short films that describe how EFI technologies work together to eliminate touch points, improve communication and reduce waste. The films are unique because they focus on what’s happening behind the scenes – highlighting the business and production benefits that are difficult to see in a standard product demonstration. Check out the films at www.efi.com.

Below is a snapshot of the other EFI products highlighted at drupa:

Fiery Color Power
EFI demonstrated the latest Fiery® digital print controller and Fiery XF proServer versions. It also showcased EFI Colorproof™ XF and eXpress for proofing workflows.

Productivity Software
The company unveiled its new cloud versions of EFI Pace™ and PrintSmith™ Print MIS solutions and an expanded version of Digital Store-Front®, a Web-to-print solution. Demonstrations included advanced direct and JDF-based connectivity and new Monarch Print MIS/ERP and PrintFlow® Dynamic Scheduling capabilities. Plus, EFI showed enhancements to the Radius packaging MIS/ERP solution.

High Definition Superwide Printer
EFI demonstrated the VUTEk® GS5000r five-meter, roll-to-roll UV printer with output up to 268 square-meters/hours. This versatile eight-color system delivers Point-Of-Purchase quality yet lets you print in other modes to produce billboards and banners. Plus, when you use co-branded EFI and 3M™ inks and print on select 3M flexible media, your output is covered by the 3M™ MCS™ Warranty!

Superwide Sublimation Printer
The EFI VUTEk TX3250r dye-sublimation printer was also highlighted. It combines industrial productivity, high quality output and application versatility to meet the requirements of the soft signage and digital textile market, while offering you a greener product. The VUTEk TX3250r is an ideal solution if you are looking to grow your soft signage and textile business with a production-level printer, or if you want to diversify your offering by converting traditional vinyl signage to a greener product with lower shipping costs and higher margins.

LED Technology
Attendees got a peek at the EFI VUTEk GS3250r, a fully loaded, production-level UV printer featuring LED technology designed to lower your costs. It prints boards, sheets and roll-to-roll prints on more substrates, including recycled and thinner materials without warping or head strikes.

EFI also unveiled the new VUTEk HS100 superwide UV inkjet press designed to convert higher-volume analogue screen press jobs to a digital UV device. Its imaging technology offers precise ink lay down for better image quality, gloss control, increased color gamut, wider output capabilities, and fewer artifacts.

It incorporates LED technologies and digital UV capability for mass customization and localization in small, medium and long runs.

New EFI VUTEk Pro Series Printers
EFI introduced the new VUTEk “GS Pro Series” printers, which give you added image quality at a lower cost.

Visit www.efi.com for more information on EFI’s full range of products and services.
Fiery Dashboard captures and aggregates a wide array of production data from one or multiple Fiery Driven™ digital print devices, giving users a single view into digital print productivity, including usage rates, uptime, error rates and more.

Users can dynamically generate reports based on date ranges and other factors, as well as set production goals and track progress. They can access all this information using a standard Web browser, even on mobile devices. It’s quick to add features and deploy them to all users, and to scale up Dashboard tools to support multiple devices as needs change.

This new cloud-based service lets you make data-driven decisions that can help drive down your costs and increase revenue.

Track Production Data More Efficiently and Profitably
With the new Fiery Dashboard, you can:

- Stay in control of business no matter where you are. Fiery Dashboard gives you all the information you need about Fiery Driven printers in real time from a standard Internet browser. So, you don’t need to be at the shop to be on top of your operation.

- Make proactive business decisions. Get the information you need to maximize efficiency and productivity at every level of detail from high-level metrics to underlying data.

- Be a more effective manager. Fiery Dashboard helps you make better use of your print engines, manage production or track your workloads to plan staffing more efficiently.

See it for yourself
To find out more about Fiery Dashboard, go to efi.com/fierydashboard. Be sure to watch the video to see how easy it is to get more visibility into your print shop operations.

To experience Fiery Dashboard in your environment, sign up for a 30-day free trial today.

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Drupa 2012: The Nano Drupa? cont...

per print. The GS hybrid printer owners can upgrade to grayscale capability to increase quality, speed and decrease costs. You also can benefit from a wider color gamut, better color accuracy and consistency, and the ability to accommodate more versioning/localization. Plus, you can achieve 20% – 30% ink savings compared to the ink usage in the binary modes.

The EFI VUTEk QS2 Pro is a two-meter, UV printer that combines true grayscale print quality, color accuracy and consistency with production-level speeds. Its true grayscale print head technology optimizes ink usage and lowers your cost per print.

You’ll be able to reach new markets with six colors plus three-layer white print capability.

EFI Wide Format Printers
EFI demonstrated its UV flatbed and roll-to-roll Wide Format printers at the event. These entry-level and midrange solutions cater to print businesses of all sizes and budgets. They are capable of producing true variable drop grayscale plus white image quality and can print widths up to 3.2 meters on a wide range of substrates.

Label Printing with EFI Jetrion
EFI showcased the Jetrion® 4900’s new and improved image, substrate and laser finishing capabilities. This single system combines digital printing and digital finishing, increasing your efficiency and giving you the lowest cost per finished label.

EFI Ceramic Inkjet Printers
EFI showed many samples from its ceramic tile printers that demonstrated the beauty and versatility of digital inkjet printing on ceramics.

Get the Scoop on these EFI Products. Visit www.efi.com to learn more about these products.

1The 3M™ MCS™ Warranty backs...
WTO recently invested in an EFI Jetrion® 4900 to extend its product range and offer customers small-format variable printing.

WTO WerbeTechnik Rothstein GmbH, headquartered in Wiehl-Bomig, Germany, was the first company in Europe to install the EFI Jetrion 4900. The goal was to create a portfolio of narrow-web products for outdoor use that satisfies customer demands for resistant inks. WTO is working with 3M to achieve this goal.

Since 1979 WTO has specialized in printing graphics for facades, containers, cars, buses and trains. In 2001, the company entered the digital printing arena to offer its customers flexible solutions with variable data. Since then the company has invested in three EFI VUTEk systems.

WTO’s latest expansion not only increases capacity but it also broadens its product range to include labels for outdoor use, printed with variable data.

### Outdoor requirements

Ink adhesion was pivotal in the decision to invest in a Jetrion 4900. “As we are using the new machine to produce labels for products like gas cylinders, it is of utmost importance that the inkjet inks are suitable for use outdoors and are resistant to climatic influences,” explained Günther Hinzel, legal executive at WTO. “They must also stand out for their durability and resistance to oils and solvents. The inks from EFI have impressed us in this regard.”

To meet all these requirements, WTO uses 3M UL-certified adhesive materials. “We have worked in partnership with 3M for years. They carry out the relevant tests in their laboratories to check and confirm the stability of the inks for outdoor use and resistance to chemicals,” said Hinzel. These tests not only verify that the inkjet inks meet WTO’s requirements, but also that the adhesive materials from 3M are suitable for applications in difficult environments and ensure color stability.

“Through our cooperation with 3M, we achieve the same resistance with the inkjet inks from EFI as we do with screen printing inks,” said Hinzel. “Even the light fastness is the same as with screen printing.”

In addition to screen and digital printing, WTO also uses the thermal transfer process for pre-die-cut labels. However, this division will be reduced and work gradually transferred to the Jetrion 4900.

WTO is doing well with its specialization in indoor and outdoor advertising because this gave the company, thanks to its high-quality products, continued growth. That is why Hinzel is confident that labels printed with durable inkjet inks will also be very popular with both existing and new customers alike.

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**EFI DSF 5.4 is Now Available!**

**Fiery Integration with EFI Digital StoreFront**

The latest version of EFI Digital StoreFront® (release 5.4) includes a standard module that provides enhanced workflow integration with EFI Fiery Driven™ devices to make digital production faster and more efficient.

### Improved Fiery Device Discovery

Now, customers can automatically find all available Fiery controllers and no longer need to know the IP address to add them to Digital StoreFront. Digital StoreFront automatically scans the print shop’s network and discovers all available Fiery devices.

### Media Synchronization

The Media Sync feature tries to automatically map the media between the print shop media library and the Fiery paper catalog based on attributes – making it much easier to set up media mapping. Any unmapped media can then be mapped manually.

### Device Capability Mapping

Digital StoreFront can now determine if a customer’s Fiery Driven engines are able to do what is needed to produce each job. Customers can map the device capabilities of their Fiery output devices to the print services they have configured in Digital StoreFront for a seamless production workflow. The discovered capabilities are listed in the Fiery Capability Mapping section.

Learn more about Digital StoreFront 5.4 at [www.efi.com/dsf](http://www.efi.com/dsf). Customers that already have Digital StoreFront can download 5.4 from the Admin page by hovering over the “What’s New” icon, clicking on the link to the software download, and applying the release.
Fiery-Prinergy Integration Now Commercially Available

Integrated solution provides flexibility and efficiency.

Now, technology offers the best of both worlds with integrated workflow using EFI Fiery® digital print servers, the leading digital printing technology, and Kodak Prinergy®, the world’s most popular prepress workflow solution for conventional printing.

This integrated solution provides flexibility and efficiency with centralized control that lets print service providers easily and quickly direct jobs to the appropriate offset or digital systems using the same content files and dynamic layouts for the target device. They can manage jobs for multiple devices and leverage existing conventional prepress systems to automate production for all job sizes and run lengths – all from a single operator station and without ever leaving the Prinergy user interface, reducing training and touch points.

Using a centralized workflow in a blended production environment also drives higher levels of automation and increased job control, both of which are key to delivering profitable print across different job sizes and run lengths.

“Connecting Prinergy Workflow to Fiery servers helps print service providers meet increasing demands for short-run jobs and faster turnaround, while giving them the competitive advantage to offer value-added services like personalization,” said John Henze, vice president of Fiery Marketing at EFI.

JDF Connectivity to Multiple Systems

Two-way flow of data between Kodak Prinergy Workflow and Fiery controllers is enabled by Job Definition Format/Job Messaging Format (JDF/JMF), allowing users to drive output to the most suitable device for the job, schedule jobs more easily, and maximize press usage, while also providing critical tracking and reporting information. Centralized control allows users to easily and quickly direct jobs to offset or digital systems using the same content files and dynamic layouts for the target device. This connectivity is available for Fiery digital print controllers, Fiery Central, and Fiery XF solutions.

Two-way flow of data between Kodak Prinergy Workflow and EFI Monarch™ or Pace™ MIS/ERP software can help improve job flow, minimize errors and provide better visibility into planned versus actual production costs. Connectivity to Fiery digital print servers allows users to drive output to the most suitable offset or digital device, schedule jobs more easily and maximize press usage – while also providing critical tracking and reporting information.

For More Information

See the five-minute video on the EFI Web site to learn more about all the things your customers can do more efficiently with Fiery integration to Kodak Prinergy Workflow. Visit www.efi.com/Fiery/Products/Fiery-Integration/Kodak-Prinergy-Integration

Cool Stuff Coming Soon

Auto-Count Browser-Based Plant Manager

The EFI Auto-Count® development team is working hard to bring you a browser-based Plant Manager. By moving Plant Manager from an installed client to a browser-based platform, you’ll be able to access your information on any tablet or laptop.

Additionally, you’ll have your own customizable dashboard containing the widgets you’ve selected along with drag and drop capabilities to position those widgets exactly where you want them. This customizable dashboard will be linked to the user’s login, so you can access it anywhere in the plant and see exactly what you need each time you log in.

This project will be demonstrated at GRAPH EXPO. Stay tuned for more details.

EFI Events

Join us for information on new products and updates at these upcoming industry events:

Labelexpo,
11 – 13 September
Chicago, IL, USA

Graph Expo
7 – 10 October
Chicago, IL, USA

SGIA
18 – 20 October
Las Vegas, NV, USA

Visit www.efi.com/events for a complete listing of EFI attended and supported events.
See inside for all the latest news and reviews from EFI:

- Smart Software Gets Smarter
- EFI DSF 5.4 is Now Available!
- Introducing Fiery Dashboard
- Drupa 2012: The Nano Drupa?
- Reaching New Markets

Introducing EFI Digital StoreFront 5.4! This latest release is packed with new features, like enhanced job preview capabilities, easy-to-use tools for ordering large format and superwide products, industry-leading variable data template products and much more.

Check out our article in this issue, or call 1-800-875-7117 to schedule your in-depth demo today.