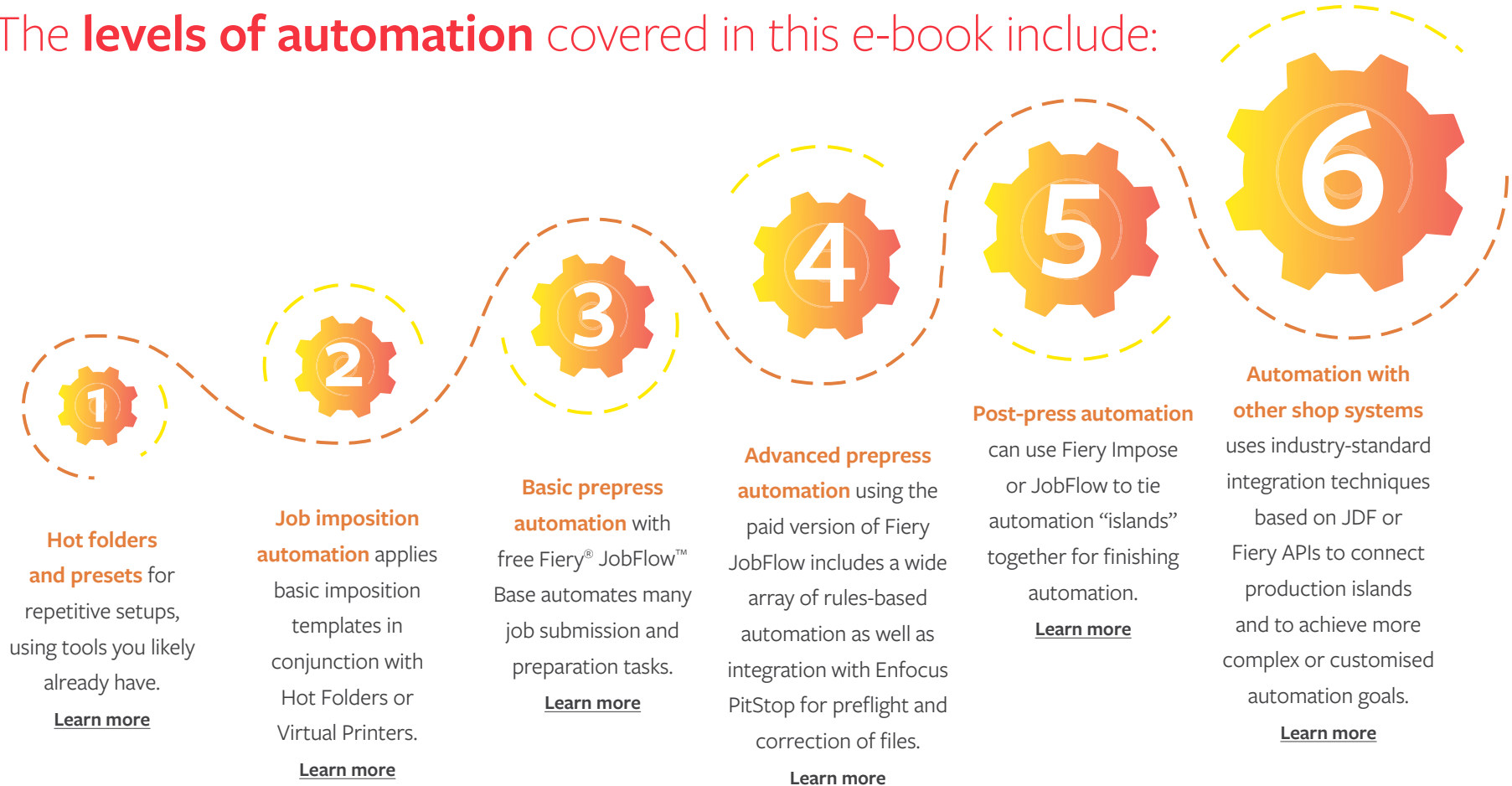# Automation Building Blocks:

6 easy ways to streamline your print production.

efi® | fiery®

The **levels of automation** covered in this e-book include:

1 — **Hot folders and presets** for repetitive setups, using tools you likely already have.

Learn more

2 — **Job imposition automation** applies basic imposition templates in conjunction with Hot Folders or Virtual Printers.

Learn more

3 — **Basic prepress automation** with free Fiery® JobFlow™ Base automates many job submission and preparation tasks.

Learn more

4 — **Advanced prepress automation** using the paid version of Fiery JobFlow includes a wide array of rules-based automation as well as integration with Enfocus PitStop for preflight and correction of files.

Learn more

5 — **Post-press automation** can use Fiery Impose or JobFlow to tie automation "islands" together for finishing automation.

Learn more

6 — **Automation with other shop systems** uses industry-standard integration techniques based on JDF or Fiery APIs to connect production islands and to achieve more complex or customised automation goals.

Learn more

Workflow automation.
It's the secret to maximum efficiency.

In a highly dynamic and competitive marketplace, manufacturers understand the need to automate processes to the maximum extent possible to reduce costs and increase throughput. The same holds true for the printing marketplace, whether you're a large commercial printer, digital printer, or an in-plant operation. But for many smaller print businesses, automating their printing workflow can seem like a daunting — and expensive — challenge.

Recent research from **Keypoint Intelligence shows**:

57%

63%

87%
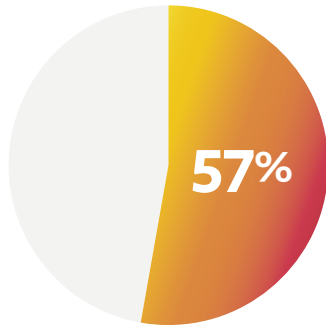
Number of respondents who say their strategic business direction is to **focus on reducing production costs and improving efficiencies.**
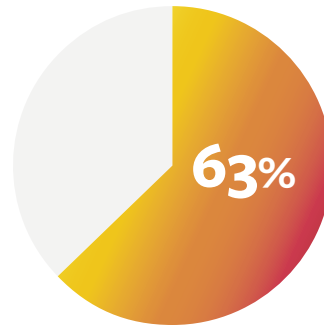
Number of same respondents who report that **none of their volume is produced using a 100% automated workflow.**
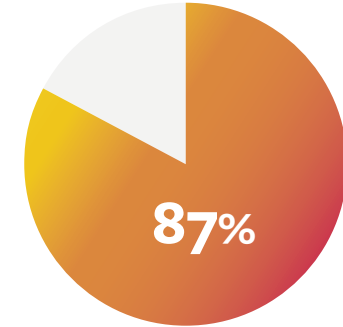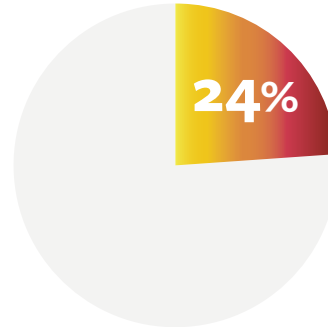
Number of same respondents who state they are working with all or **mostly manual processes.**

Keypoint Intelligence Software Investment Outlook 2019/2020

Respondents also report that their **biggest issues**, or **greatest inefficiencies** in their current workflows include:

57%
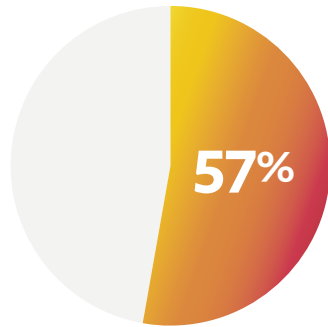
dealing with a **high number of smaller jobs**

24%

increasing throughput and **shortening** production times

24%
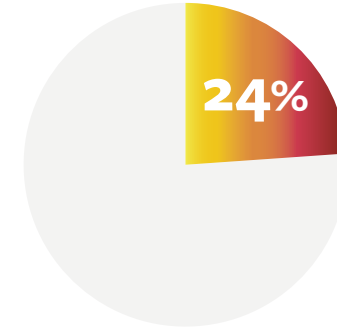
connecting islands of automation

The ability to **improve finishing automation** was also cited in the firm's 2019 research as a key objective for improving workflow effectiveness.

Automation is **easier** than you think.
And way more **powerful** than you imagined.

The good news for companies that have limited or no workflow automation is that automating workflow in a printing business is easier — and less costly — than you might think. In this e-book, we identify 6 easy ways to add automation to your printing workflow. We begin at a simple level, where you may already have tools in place to quickly implement and see immediate returns. Then move to slightly more advanced levels that can be implemented over time. We offer ROI tools you can use to justify making the necessary investments.

Each level is a discrete step that you can move through at your own pace, and each will produce efficiency gains that help justify continued investments to deliver even more automation — and greater profitability.

Rather than thinking about automation as an all or nothing venture, from manual to lights out, this e-book will help you think about automation in manageable chunks. Each will deliver almost immediate positive results in operational efficiency, reduced costs and cycle time, and finally — improved profits.

By beginning at Level 1 and working your way through to Level 6, you'll be amazed at the difference your shop will see.

Father and son team John and Tim Rozema experienced this in their business. At Get It Now Print, they were running about 20 jobs a day. **By implementing a suite of EFI automation tools, they are now able to produce more than 100 jobs per day.**

By following our six easy steps to automation, you can develop your business over time, to achieve the kind of results Get It Now Print has seen. You'll not only improve your bottom line, but you'll free up resources and gain reference clients that will help you boost the top line as well — increasing volumes from existing customers and acquiring new ones.

Let's get started on your automation journey!

" We implemented a suite of EFI tools. It's all easy-to-use software that is easily programmable, very user friendly, and integrates with our MIS. Now we can really get the job done. Clients are always amazed at how fast we can get work out compared to others they have used in the past. We can offer them a better price, too, based on the increased volume we are able to put through our printer, "
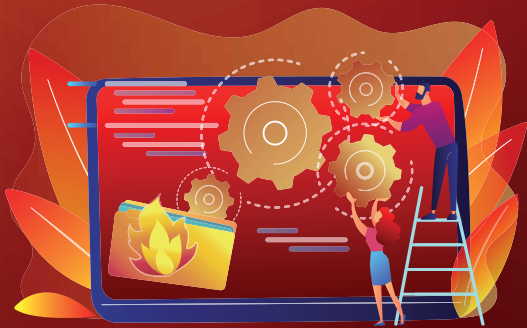
John Rozema, CEO, Get It Now Print

Start your workflow journey to higher profitability, quality, and efficiency.

1

Hot folders and presets

This first step is the easiest to implement, and is most likely already available with your current digital front end (DFE). Every EFI™ Fiery® server can use presets, and Fiery Hot Folders is standard on all external — and many embedded — Fiery servers.

Hot folders and presets relieve users of the repetitive task of configuring print settings for multiple jobs. Presets allow you to configure job properties once and save them as a custom name. These presets can then be applied to future jobs using a Virtual Printer or Fiery Hot Folder, reducing setup to one step. This is especially helpful if operators are new, or not as familiar with the ins and outs of job configuration.

" Our operators are using various shortcuts such as Fiery Presets to apply the same settings for jobs that require similar options to decrease turnaround time. For example, for repeat jobs that require similar imposition methods, our operators have created presets and are using them frequently. "

Himanshu Pandey, Avantika

Once you've configured a hot folder, simply copy or drop documents into it. This will then send jobs automatically to a Fiery server with the pre-defined print settings. In a printing operation, it is quite common to be processing very similar jobs, such as a tri-fold brochure or a business card.

Hot folders can also be used to preflight jobs, checking them for problems before they are printed, reducing waste due to errors or rejects. Even though hot folders can automate relatively complex actions, it doesn't take an IT expert to use them.

And the benefits of hot folders don't end there. Hot folders can play a role in even more advanced automation. Becoming familiar with their use in the early stages of automation positions you to continue advancing their use throughout the remaining levels.

" Automation with Fiery Hot Folders gives the production staff the ability to drag and drop jobs with identical layout and setup requirements. This functionality ultimately allows them to spend more time on valuable customer service needs and less on redundant and repetitive tasks, saving time for Kellmatt and money for our customers. "

Matt Weir, Owner and Managing Director, Kellmatt Ltd

" Once we receive files, our front counter personnel simply drag them to a hot folder, and the job doesn't need to go through prepress. "

Jim Morrell, General Manager, Morrell Printing

1

Get started with free resources in less than an hour

Take an eLearning class

Use a How-to guide

Once you've mastered presets and hot folders, it's time to move on to the next step: **job imposition automation**.

2

Job imposition automation

In Level 1, we mentioned that hot folders and presets can be used to automate job setup and job submission. Now, in Level 2, we focus on adding imposition templates to the hot folder/preset workflow. This takes workflow automation beyond basic job settings and submission by automating job layout and makeready.

Manually imposing jobs can be time-consuming and error prone. Skilled staff can easily create imposition templates to automate this task. By using standard or custom imposition templates, you can prevent errors and take another one of those annoying repetitive tasks off the shoulders of staff, who can then be better employed with other tasks.

❝ Imposing a job with Fiery Impose is a breeze. In only a few clicks, I can compile a new form with bleed, registration, crop, and colour marks. And it's extremely easy to save the form as a template so I can use it again for a similar job. ❞

Martin Klop, Head of Prepress and Digital Print, CREZÉE

Fiery Hot Folders can contain imposition settings. Those imposition settings, or templates, streamline job submission and reduce both clicks and errors. Fiery Impose can let you automate imposition by using included templates, or it's easy to create your own templates.

This can be especially helpful in booklet imposition, where errors might not be discovered until the finished booklet is reviewed. By then, it's a pretty expensive error!

❝ I learned how to save time by automating production on repetitive booklet types, for example, by dropping files to Fiery Hot Folders containing print settings, including Fiery Impose templates. **❞**

Cindy Ley, Production Specialist, Allied Reliability Group

Get started with free resources in less than an hour

Request your **free trial** of Fiery Impose | Watch an **Express Video**
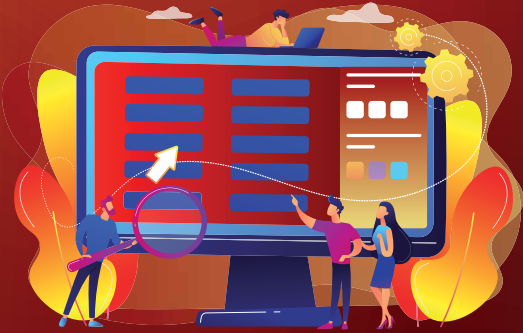
Use a **How-to guide**

Try it yourself in a **Simulation Learning**

Calculate your **ROI** from automating imposition

So far, so good. Now let's look at the **next logical stage of basic prepress automation**.

3

Basic prepress automation

So far, we've seen how easy it is to use presets or hot folders to automate certain activities and streamline imposition. Now let's put all of that together, and more, with Fiery JobFlow Base, a browser-based, easy to use, free prepress workflow automation solution.

This powerful system will allow you to advance your workflow automation capabilities by incorporating the steps we have already outlined (presets, hot folders, imposition templates) and building them into streamlined workflows. In fact, using JobFlow Base to automate manual job setups can greatly reduce the number of clicks required for setup. For example, manual setup of a multi-up booklet can require 15 different clicks. By automating the process in JobFlow Base, 15 clicks are reduced to just 1 click — submitting the job.

And the best news? It's free! JobFlow Base has a browser-based interface and runs on an external Fiery server or a PC in your shop. You can use Fiery JobFlow Base to build basic workflows, automating such things as image enhancement, imposition, and preflighting. You can even automatically archive jobs to reprint later or save as a template. Or receive email notifications on the processing steps that are important to you. JobFlow Base allows you to manage, import, and export workflows for maximum productivity and efficiency.

Here are just a few of the things you can **automate** with Fiery JobFlow Baseno*:
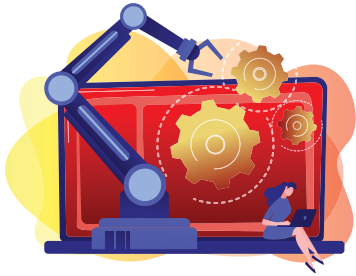
Automate imposition, including the ability to batch and impose jobs based on job or page count using the Collect module. Batching can also be intelligent. For example, you can set up a workflow to collect all business cards submitted that day. At 3 PM, the workflow can automatically submit all the files received that day to the Fiery server for batch production. This makes the entire business card production process much more efficient, and you can still achieve same-day turnaround for your clients!
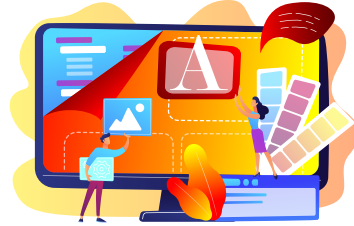
Automatically enhance images to make sure you get the best possible outcome based on your printers and inks/toners, the substrates you are using and more.
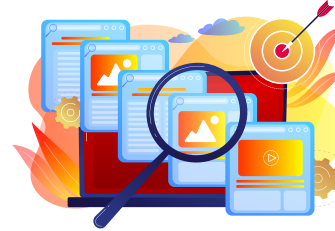
Automate preflight by using Fiery Preflight, part of the suite of Fiery Graphic Arts Packages (more information here and here) and the Fiery Automation Package, to inspect files for missing or corrupted assets and generate a report outlining the findings.

Manage files going in and out of the shop — not just submitting jobs to print, but automatically archiving jobs in a specified location. You can also automatically retrieve your customers' jobs from various locations including Dropbox, FTP, smart folders, and more.

*Embedded Fiery servers require the Fiery Productivity Package or Fiery Automation Package to enable JobFlow Base

Have a PDF workflow? Of course you do!
But not all files come in as PDFs.

With Fiery JobFlow Base, you can automatically convert source files to PDFs without any human intervention, so they are ready to proceed through the workflow. And you can save sets of actions as workflows that can be shared across the shop.

EFI also maintains a free sample workflow library for many common job setups that you can download. Import the sample workflows into JobFlow Base, and you're ready to get started immediately! Most customers are able to set up JobFlow Base on their own, but Fiery Professional Services support is available to help if needed.

> " By learning how to use JobFlow Base, we are creating more complex and automated workflows and minimizing mistakes. "
>
> **MATJAŽ GOMBAČ, CEO, SILVECO**

Get started with free resources in less than an hour

Take an eLearning course

Use a How-to guide

Configure Fiery JobFlow locations | **Create a workflow with imposition**

You've now mastered the basics of workflow automation and can now advance to more **advanced prepress automation**.

4

Advanced prepress automation

When you're ready, take it up a notch with the paid version, Fiery JobFlow. This will allow you to automatically inspect, troubleshoot, and correct jobs using Enfocus PitStop. The gold standard in the industry for advanced preflighting, it's conveniently integrated with Fiery JobFlow. You can also submit multiple jobs and intelligently route them to other workflows, plus allow for both internal and external review and job approval.

> " We now plan to invest in the full version of JobFlow, mainly due to the advanced scripting, which allows us to build our own prepress processes accordingly to suit the variables of printed materials. It is extremely powerful and highly flexible, and as far as we have found, it has no real competition. "
>
> **MATJAŽ GOMBAČ, CEO, SILVECO**

If you really want to get into the spirit of automation, you can use advanced scripting to incorporate job processing from other third-party applications as well. Use JobFlow's Connect module to develop custom modules that address just about any workflow need. We've also already done the work of integrating Fiery JobFlow to EFI MarketDirect StoreFront® to allow online orders to flow seamlessly through production.

Again, JobFlow Base and JobFlow are relatively easy to use, but Fiery Professional Services support is available if needed. Most workflows can be set up in one to three days, getting you up and running quickly and cost effectively.

" I can correlate JobFlow to payroll savings because I don't have to bring in a new, specific person for typesetting, direct mail, social media, and campaign projects. "

**Jeff Routman, President,
Allegra Tampa Downtown**

Get started with free resources in less than an hour

Watch a 2-minute video | **Request your free trial of Fiery JobFlow**

Use a How-to guide

Create rules-based workflows | **Create a workflow using Enfocus Smart Variables**

Watch a recorded webinar | **Calculate your ROI from automating prepress tasks**

And now let's look at integration with offline finishers for **even more automation**!

5

Post-press automation

Mistakes in post-press can be the most expensive mistakes a printing operation can make. To prevent these costly errors, the next logical step in your workflow automation journey is to automate job submission from the printer to the finisher. By establishing a workflow that integrates with offline finishers, you can tie together the various production islands in your print shop, including connecting from prepress to the bindery. This lets you automate error-prone processes, reduce makeready time, and virtually eliminate waste in the bindery.

With an automated EFI Fiery workflow, it's easy to eliminate bindery bottlenecks by integrating with offline slitter/cutter/creasers from almost all manufacturers in the market. Do you have offline finishers from Ausjutech, Duplo, Graphic Whizard, Horizon, MBM, Morgana, Plockmatic, or Uchida? We've got you covered with how-to-guides for each partner brand that will help eliminate time-consuming and repetitive manual setups — **with as much as a 70% reduction in job setup time**!

Here's how it works

In Fiery Impose, a barcode is added to the job, in addition to applying the imposition template. This barcode includes all the setup information for the finisher. When the barcode is scanned on the finisher, it knows what to do with no manual setup needed by the operator.

And by using JobFlow, there are even more setups that can be automated for Duplo finishers. For Duplo's offline spot UV coater, it automatically adds the registration marks, separates out the CMYK layer and the spot UV layer of a file, sending each as a separate file to the respective device. And, of course, it includes the same imposition and barcode application in an Impose template. For the Duplo die cutter, JobFlow also adds registration marks, barcodes, and performs a slight page rotation.

" We save so much time not having to send jobs back to prepress for incorrect bleeds, having a more efficient production process with more work coming out in fewer hours, and even extending into finishing where barcodes can now automatically set up the finishers and we are not standing around waiting for test sheets to come out. We just hit start and the job will just be done when it's done. "

Tim Rozema, CEO, Get It Now Print

" Fiery Impose helps us to drastically shorten processing times, especially for large orders, by using stored imposition layouts. It's also very useful to export cutting and creasing marks from the Fiery Impose system to our Duplo finishing devices to automatically prepare a job for finishing "

Karl Scheibhofer, Owner, Kaindorfdruck

" With Fiery JobFlow, we can automate processes for a business card like adding cut marks, colour correction, and specifying the page size. Plus, it connects to the Duplo DC-616, allowing us to move jobs from the printer to the cutter in a fast, simple, and secure way — all automatically. "

Luis Guillermo, Tekkrom

1 2 3 4 5

Get started with free resources in less than an hour

Watch a 2-minute video | **Watch a recorded webinar**

Download How-to guides for each manufacturer:

Ausjetech | **Duplo** | **Graphic Whizard** | **Horizon**
MBM | **Morgana** | **Plockmatic** | **Uchida**

Find more advanced integrations with Duplo equipment:
Slitter/cutter/creasers | **Spot UV coaters** | **Die cutters**

Now that you've automated your post-press finishing processes, you're ready for the most advanced level of workflow automation: **integrating with other shop systems**.

6

Integration with other shop systems

Up to this point, you've likely been able to achieve very significant automation — and the bottom line benefits that go with it — with your existing staff. And you've made them not only more productive, but happier in their jobs. But there's much more that you can do.

Think about your other shop systems and how you can further integrate to Fiery Driven™ printers.

- Use your offset prepress system to send short-run jobs to digital printers
- Integrate your own or EFI e-commerce/web-to-print system
- Integrate to your own or EFI MIS system
- Connect other job submission or business systems

This level of automation will virtually eliminate operational islands throughout the organisation, giving you a fully integrated and highly automated workflow. The companies we've seen that have taken automation to this level are achieving amazing results for themselves and their customers, and are well-positioned to weather any economic challenges or downturns that come their way.

Hybrid workflows

If you have hybrid production with both offset and digital technologies, you may already be using one of the leading offset workflow solutions.

Fiery DFEs are already compatible with Kodak Prinergy, Agfa Apogee, Heidelberg Prinect, and Screen Equios —allowing you to use them to send short-run jobs directly to your Fiery Driven digital printers. **Read the benefits other customers experience**:

❝ Within hours from when the technician said he was ready, we started real life production — this is how easy the Fiery system is to operate, and how well it integrated with our Agfa Apogee workflow. ❞

Hakan Walhed, Managing Director, Skånetryck

❝ With our Fiery Driven press integrated with Kodak Prinergy, our customers — and their customers — are delighted with the fast turnaround and high quality of proofs, and we have benefitted from increased margins while providing a lower-cost solution for our customers. ❞

Dennis Low, President, PointOne Graphics

❝ The EFI Fiery server allows us to integrate the digital presses to our existing Heidelberg Prinect MIS and workflow system. We now have a much higher throughput of jobs than before, which we manage with the same number of staff, or even slightly fewer than before. ❞

Brian T. Hansen, Project Manager, Fynske Medier
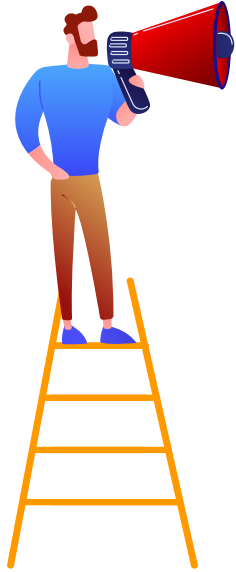
Integrating with **EFI Productivity Software**

Of course, we've already done the work for you of integrating Fiery workflow with <u>EFI eCommerce MarketDirect StoreFront</u> and EFI MIS solutions such as <u>PrintSmith Vision</u>, <u>Pace</u>, and <u>Monarch</u>; as well as with other EFI software modules.

"We saved hundreds of thousands of dollars when we brought the print shop on campus with the new Fiery Driven digital press, our new EFI MarketDirect StoreFront, and our move under marketing."

Kelly Huebscher, Printing Services Manager, <u>Trevecca Nazarene University Print Services</u>

"We've had great success so far with MarketDirect StoreFront integrated with Pace and Fiery."

Thomas Koceja, Ecommerce Manager, <u>Imperial Communications</u>

"With EFI Fiery integration, we can have two-way communication between Pace and our EFI printing equipment...And we can manage all of our printers from a single Fiery Command WorkStation® interface."

Phil MacNamara, Partner, <u>Maverick Concepts</u>

Build **customised workflows**

To connect other MIS systems, third-party solutions or systems you developed for your shop, you may want to look at integrations based on Fiery JDF and Fiery API. Explore using a programmer or IT specialist, or provide extra training for an existing employee who has the aptitude and interest in taking their career to the next level. You could also work with an outside consultant or EFI Professional Services to get you on this final path.

You can take advantage of Fiery certified JDF technology to automate processes from job submission to output by integrating print workflow and business management systems. Or you can use Fiery API to quickly develop unique applications and tools for specific business needs. For example, you can extract job data for cost analyses, optimise scheduling, and submit jobs with basic settings from existing applications. Believe us, it's much easier than it sounds!

For example, Endicia used the Fiery API to create a custom software application that builds the postage stamps and sets up custom integration between its partner's ordering system and Endicia's Fiery DFE, reducing the process from 11 steps to one. Farry reports he had a demonstration application up and running within a couple days.

> " Building a workflow with Fiery API takes that potential for user error out of the process. The software system tells the server, 'This is what it is and how to print it.' So it's always correct. "
>
> **Brian Macomber, Information Systems Manager, AG Spectrum Company**

> " We went from 25 orders a day to several thousand each day during our busiest period, and we only hired one more full-time person to handle the increased business. "
>
> **Patrick Farry, Application Architect, Endicia**

Get started with free resources

Take an eLearning course

Access the EFI Developer Portal

....

Use a How-to guide

Configuring Fiery JDF settings with Fiery Integration Manager | **Specify job content using JDF files**

....

Learn more about EFI Productivity Software

MarketDirect StoreFront | **PrintSmith Vision** | **Pace** | **Monarch**

....

Learn more about Fiery Integration

Finally, let's look at production analytics tools to measure
and improve your **automation efforts**.

Plan. Do. Check.

Is your automation doing what it's supposed to be doing?

Now let's add just one bonus level: Take advantage of <u>EFI IQ</u>, a suite of cloud-based applications such as <u>EFI Insight</u>, to monitor production performance of all your Fiery Driven sheetfed devices! EFI Insight, free to use with all your Fiery DFEs, captures key print production data and transforms it into useful visual analytics to provide valuable, actionable information that will help you measure the results of your automation efforts and continue to progress in future automation efforts.

EFI Insight will help you take steps to maximise printer uptime, use job source information to identify opportunities to increase the use of automated workflows, compare print device performance, identify production bottlenecks, uncover areas where your staff may need additional training, compare shift performance, and much more.

Did we say it was free?

> " With EFI IQ applications, we can improve our production performance. Because we can see our data, we can identify inefficiencies, make process improvements to be more productive, and make better all-around decisions. "

Kara Marcal, BOND Reproductions

So, what's next? **How do I get started today?**

The first step is to assess your current investments to make sure you are using them to the fullest. If you have Fiery DFEs, you already have the first steps available to you. Are you taking full advantage of them? It might also be handy to perform a workflow analysis to determine your most common job types, and identify opportunities for automated workflows to improve efficiency.

Perhaps you are already using presets and/or hot folders. That's great news! Then you have already seen what this simple step can gain for you in terms of improved productivity and job throughput. And you'll understand the ease of use and fast ROI for investing in additional automation modules.

From there, the rest of your automation journey just makes good business sense, and we've created the tools, solutions, and learning materials that can quickly get you there.

Concerned about training?

We've got lots of online learning available to you at no charge. If you want on-site or remote support to get things off the ground, we can cover that as well with our Professional Services team.

And don't forget about tomorrow. Let your **automation goals** drive your **investment decisions**.

In a nutshell, here's our advice: Use what you have today and think about tomorrow's investments in a different way than you may have in the past. If you plan to acquire a new digital printer, make sure that printer/DFE investment complements or advances your automation journey, either by integrating with existing processes or providing the ability to advance to another automation level. Also ensure that any printer/DFE investment integrates with offline finishers, something to keep in mind when making finisher investments as well. And finally, if you have an existing print MIS or web-to-print system, the printer/DFE should also be able to integrate with that. In other words, make investment decisions within a holistic framework, rather than looking at each department or software/equipment purchase separately.

What's new in **Fiery technology**?

Fiery technology is always evolving, and a brand-new innovation is Fiery JobExpert, available on external Fiery servers running Fiery FS400 Pro software. Fiery JobExpert is a breakthrough new technology that analyses incoming PDF files and dynamically chooses the optimal print settings to achieve the highest quality while optimising processing time. It makes any existing automation even more intelligent because, when the job gets to the Fiery server, JobExpert takes the guesswork out of choosing the right colour and imaging settings for that job. Even if prepress staff have the skills to do this right, with short turnaround times and smaller runs, you literally cannot afford to spend prepress time on processes that you can easily automate.

So, when you're planning your next printer/DFE investment, make sure you make the right choice to put you in the best position to take full advantage of new technology advancements like Fiery JobExpert!

Laying the automation foundation today for a completely automated job preparation and submission process in the future will make you even better prepared to adopt new technologies for your next printer/DFE investment.

Get started today and watch your **productivity improve**, along with **employee and customer satisfaction**!

Fiery Server Presets | **Fiery Hot Folders** | **Fiery Impose**
Fiery JobFlow Base/Fiery JobFlow | **Fiery Integration** | **Fiery JobExpert**

We develop breakthrough technologies for the manufacturing of signage, packaging, textiles, ceramic tiles, building materials add personalized documents, with a wide range of printers, inks, digital front ends, and a comprehensive business and production workflow suite that transforms and streamlines the entire production process, increasing your competitiveness and boosting productivity. Visit www.efi.com or call 650-357-3500 for more information.