



MAYO CLINIC

Mayo Clinic Improves Customer Service and Realizes Thousands in Postal Savings



Mary Ann Rowan
Chief Experience Officer
Solimar Systems, Inc.



Tony Fenner

Manager, eDocument Solutions

Mayo Clinic



Pat McGrew

Managing Director

McGrewGroup



Topics

- Solimar Positioning
- Introducing Tony Fenner
- The Mayo Clinic Story
- The Process
 - Replace Manual Workflow
 - Standardize on PDF
 - Automate Booklet Creation
- Improve Support for Nurses & Patients
- Householding Jobs
- Overall ROI Benefits
- Q&A

2025 Solimar CAC Members



































































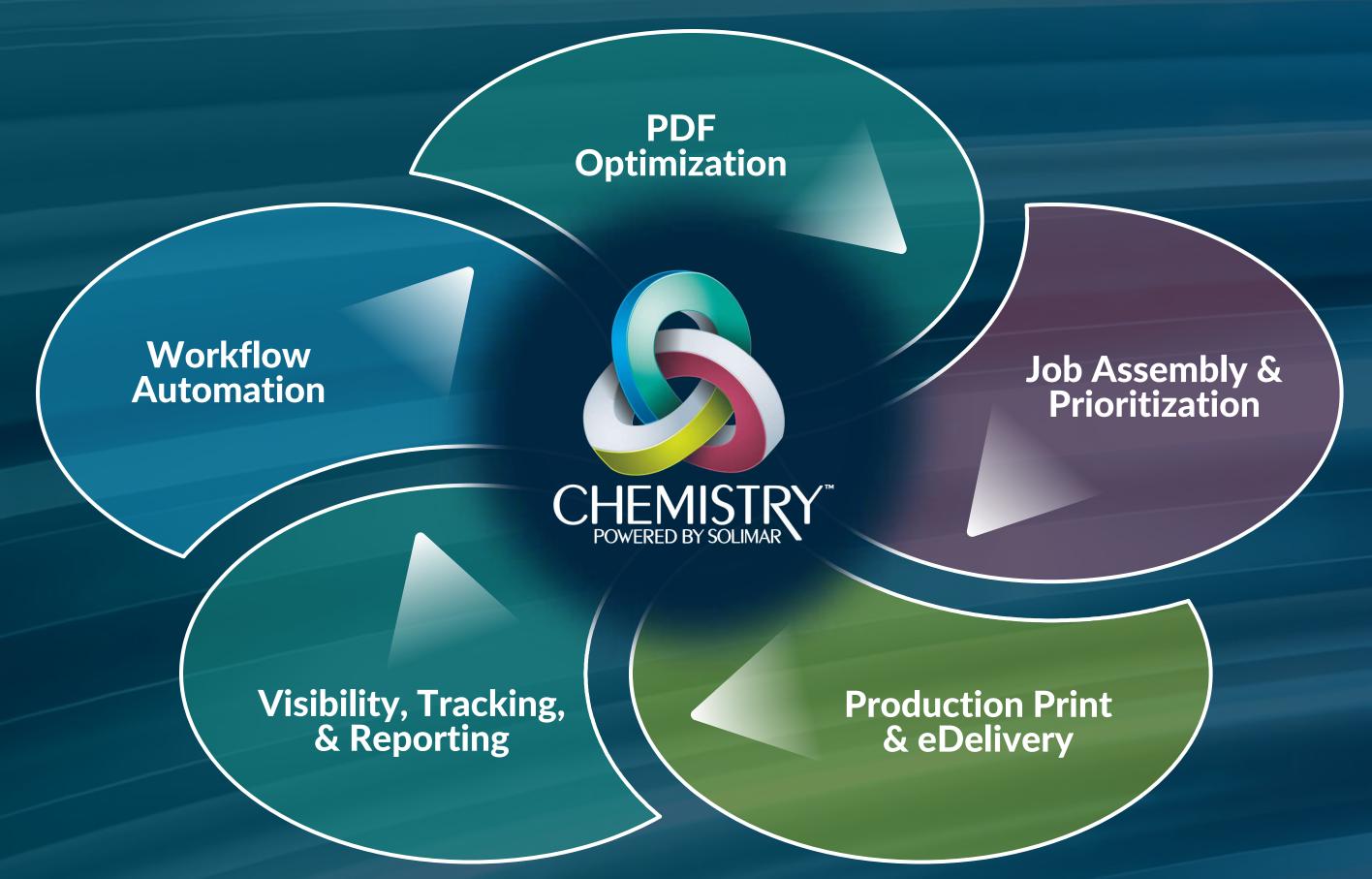








The Solimar Chemistry Platform



Post-Composition DIGITALLY RETROFITS Data and Documents for Print, Finishing & eDelivery

INCOMING APPLICATIONS

BOOKS
LABELS
PRINT ON DEMAND
RAW DATA
TRANSACTIONAL

COMPOSITION & DATA MANAGEMENT SYSTEMS COMPOSITION MIS SYSTEMS HOME GROWN APPLICATIONS POSTAL CLEANSING STOREFRONTS CAMERAS

PRINT MANAGEMENT & WORKFLOW SOLUTIONS CHEMISTRY POWERED BY SOLIMAR









Mayo Clinic's Solimar Solutions





Solimar® Indexing Tools



Rubika[®]



ReadyPDF[®]
Prepress Server™







Tony Fenner

Manager,
eDocument Solutions
Mayo Clinic



Major Projects





Householding

EFFORT: LOW



Patient Education

EFFORT: MEDIUM



Embassy Workflows

EFFORT: HIGH

Project: Householding





EFFORT:

SUMMARY

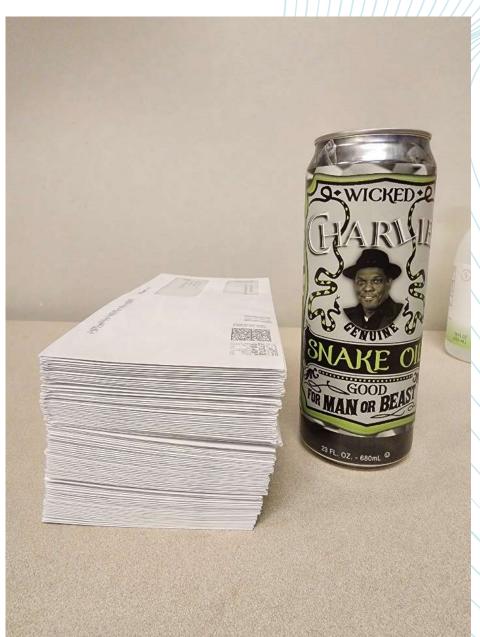
- Understanding workflows, incoming data streams and production processes
- We were able to enhance the print workflows by bringing letters of the same type into a single envelope and redesign for a clearer communication.



Householding Project



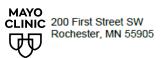






Householding Project





If you are unable to pay in full, please call Patient Account Services: 1-844-217-9591 www.mayoclinic.org

Date	Guarantor ID	Amount Due
10/11/2023		\$337,935.35



Visit #: Visit Balance: \$1,047.80

FINAL NOTICE

Dear

Thank you for choosing the Mayo Clinic for your healthcare needs. We appreciate the opportunity to provide your healthcare needs, and hope you are satisfied with the care you have received.

Your guarantor account balance of \$337,935.35 has a past due amount of \$1,047.80 for account

You can make a payment online from your Patient Online Services account, use Quick Pay online at www.quickpay.mayoclinic.org, mail your payment using your monthly statement or pay over the phone.

This is our final attempt to collect, and if there is no mutual resolution by 10/21/23, your account may be referred to a collection agency. A referral to a collection agency may result in a delay in scheduling future appointments for you or your family members.

If you have any questions concerning your account or wish to speak with a Patient Account Representative, please contact our office at 1-844-217-9591.

Mayo Clinic offers financial assistance to individuals who are unable to pay medical treatment costs. For more information, you may call Mayo Clinic at 844-217-9591 or visit Mayo Clinic's website at www.mayoclinic.org/financialassistance to learn more about Mayo Clinic's Financial Assistance Policy application process, and whether you qualify for discounted or free medical care.

Thank you for your prompt attention to resolve your account balance with Mayo Clinic.

Sincerely,

Patient Account Services



200 First Street SW Rochester, Minnesota 55905

If you are unable to pay in full, please call Patient
Account Services:
1-844-217-9591

www.mayoclinic.org

Date	Guarantor ID	Amount Due
10/11/23		\$337,935.35



FINAL NOTICE

Dear

Thank you for choosing the Mayo Clinic for your healthcare needs. We appreciate the opportunity to provide your healthcare needs, and hope you are satisfied with the care you have received.

Your guarantor account balance of \$337,935.35 has past due amount(s) for the account(s) listed below:

Visit#	Visit Balance	Visit#	Visit Balance
	\$15,542,49		\$1,047.80
	\$817.70		\$72.15
	\$2,832.70		\$72.15
	\$2,017.60		\$1.032.85
to the second second	\$2,579.34	W	\$817.70

You can make a payment online from your Patient Online Services account, use Quick Pay online at www.quickpay.mayoclinic.org, mail your payment using your monthly statement or pay over the phone.

This is our final attempt to collect, and if there is no mutual resolution by 10/21/23, your account may be referred to a collection agency. A referral to a collection agency may result in a delay in scheduling future appointments for you or your family members.

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Thank you for your prompt attention to resolve your account balance with Mayo Clinic.

Sincerely

Patient Account Services

Householding Collection Letters

 Collection letters are sent to patients for each visit. A patient could have multiple and appointments. Each patient visit could trigger a collection letter.

 Bringing common letters together reduced the total number of envelopes to patients and reduced the sheet count by over 1500 sheets per day.

2024 Postal Savings



TOTAL HOUSEHOLDED

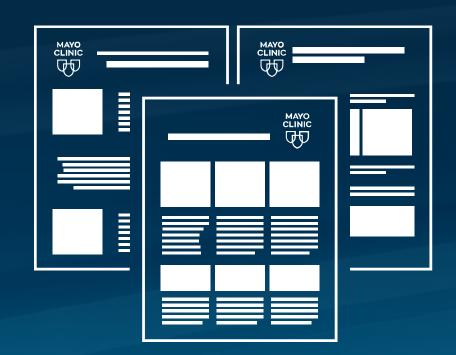
Annual: 351,489

POSTAGE SAVED

\$244,000

Project: Patient Education





EFFORT: MEDIUM

SUMMARY

- We needed to integrate with the upstream staff and systems to configure the education materials that needed to be communicated.
- We were able to take a data feed and create a combined patient education experience.
- Instead of staff needing to order, store, assemble and mail packets of information to patients; they now can request the packet and we can dynamically create their request to print and mail.



Content Examples



CLINIC Φ

200 First Street SW Rochester, Minnesota 55905

MAYO CLINIC QD

PATIENT EDUCATION

Oral Anticoagulant Therapy: Warfarin CLINIC

PATIENT EDUCATION

September 13, 2023

Dr. Charles Mayo Rochester MN 55905

Welcome to the Primary Care Anticoagulation Program. Working with warfarin medication will be vital to safe and effective anticoagulation Important member of your anticoagulation team. We are here to su lifestyle choices and monitoring needed to assure safe and effective a

We encourage you to learn more by taking advantage of the following

- · Attend the Warfarin: Managing Your Medication Patient Educ This class provides helpful information you can use when disc team. You can attend this class in person or virtually.
- · Review the attached patient education materials

It is important that you receive regular INR monitoring so we can parwarfarin dose decreases your risk of developing blood clots and/or b nursing staff, we will provide education based on your unique situation attached materials so please have them available during your anticox

As always, if you have any questions or concerns related to your antido not hesitate to contact us.

Thank you.

Your Anticoagulation Team

Anticoagulation Patient Information Welcome

Table of Contents

Reference Description	MC Number	Page Number
Oral Anticoagulant Therapy Warfarin	MC2082	1
Vitamin K: Managing Your Intake Oral Anticoagulant Therapy: Warfarin	MC2082-07	1.5
Do foods with flavonoids like grapefruit and wine affect my INR?	MC2082-14	19
Taking Over-the-Counter Medications While Taking Warfarin	MC2082-13	21
Warfarin: Comes in Many Colors and Shapes	MC2082-18	23
Does eating ice cream affect my INR?	MC2082-12	25
Does vaccinations affect my INR?	MC2082-16	27
Patient Online Services Flyer	MC0684-134	29
Self INR Testing	MC2082-08	31

taged by a team of health care pe ur health care team; the succes provider who manages your wa

This information is meant to help you understand anticoagulant medication and treatment with warfarin

s with health care providers for of ource, however, the terms health our anticoagulant medication.

agulants

our body's way of preventing too r prevent too much bleeding. If thes nd you could lose too much blood could form inside your blood vessel

k against clotting or coagulation. lood, but they cause the blood to t

er the skin.

t medication your health care provi

diagnosed with a blood clot in the

Page 1 of 34

When to Contact Your Health Care Provider

Contact your health care provider about your warfarin dosage for the following reasons.

· Your medication regimen changes in ANY way. For example, you begin taking a new medication, you stop taking one, the dosage changes or the brand changes. This includes changes in prescription and over-the-counter medication and herbal supplements.

· You missed two or more doses.

. You have major changes in your diet, such as you are eating significantly more or less of any one food.

· You decide to stop or start using tobacco or marijuana.

. Your activity level changes, such as you are starting a new walking program.

· You are pregnant or plan to become pregnant.

· Before any surgical procedures including tooth extractions and certain non-surgical procedures (for

- . You have a fever or you have diarrhea or vomiting that lasts longer than 24 hours.
- You have an illness that lasts more than three days in a row, especially if you are not eating normally.

Bleeding

- · You notice a change in how you bleed.
- · You notice dark or bright-red stools or blood in your urine.

See "When to Seek Emergency Care" for symptoms of obvious and less obvious bleeding.

Leg changes

· You have a painful or swollen leg.

While you are taking warfarin, it is important to watch for symptoms of bleeding and clotting.

Page 9 of 34

I TAKE WARFARIN.

Taking Over-the-Counter Medications While Taking Warfarin

Recommendations:

Talk to the provider who manages your warfarin

Before you take any new over-the-counter medications.

If you are taking regularly scheduled acetaminophen for more than 2 days. If you start taking a new prescription medication,

such as an antibiotic.

If you get sick, especially if you have

. Signs of infections, which include:

madin™,

Ratio, may

you are

fillness.

le) euch

Nuprin™) n^{mr}) may

libiotics

rease your

s, may lower

ents can

(38 degrees Celsius) or greater. · Increased tendemess, redness or swelling. steroidal

· increased pain, or pain not relieved by pain

. Temperature of 100.4 degrees Fahrenheit.

A bad-smelling odor or new or increased

drainage, · Chilis.

Diamhea, decreased appetite, or you are throwing up for longer than 24 hours.

Chest pain or shortness of breath: Worsening or new symptoms during self-treatment.

If you have tried the options listed here and have

Page 21 of 34



Content Examples



Drug-free options to help you feel better

Increasing fluid intake, including water, low-sodium soup broth, or electrolyte drinks ("sports drinks").
 Gerting extra rest.

- Using a humidifier to loosen mucus and promote sinus drainage.
- Raising the head of your bed by using more pillows when you sleep.

Over-the-counter products that may be used with warfarin Avoid over-the-counter products with multiple ingredients if possible.

Nasal symptoms (congestion or runny nose)	Aches, pains or fever	Sore th	
 Saline nasal spray, drops, or neti pot rinse Antihistamines, such as loratadine (Claritin™), cetirizine (Zyrtec™), levo- cetirizine (Xyzal™), or fexofenadine (Allegrai™) Cromolyn nasal spray (Nasalcrom™) 	Acataminophen (Tylendi ^M) not more than 2,000 mg in a 24-hour time frame	Salir mou Loca spra as p (Chk throi Men lozer couc	

Talk to your provider before starting or stopping any over-the-counter

This material is fix year education and adjointation only. This content dues we replace market New modified research many change this information. If you issue quantities about a worked area 03019 Mayo Foundation for Medical Education and Research

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PATIENT EDUCATION



me2062-08pf

PATIENT EDUCATION

Self INR Testing

MAYO CLINIC PATIENT EDUCATION

Warfarin: Comes in Many Colors and Shapes

Pink	Lavender	Green	Tan	Blue	Peach	Teal	Yellow	White
1 mg	2 mg	2.5 mg	3 mg	4 mg	5 mg	6 mg	7.5 mg	10 mg

Facts about warfarin:

- Warfarin is the generic name of an oral blood thinner that you take by mouth. Coumadin and Jantoven
 are brand names of warfarin.
- · Doses change often
- The color, size and shape of the tablets depend on the dose you take. They also depend on the brand
 of warfarin you use. See the image above as an example of what colors and sizes there are.
- · Your INR can be affected when you switch brands of warfarin.

Your health care team recommends that you:

- Check to make sure the color and strength of your warfarin tablets are correct before you leave the pharmacy. Also check the color and strength before you take a tablet.
- Check again when your prescription is refilled. Check the color, shape and size of the tablets. If you
 think something is not correct or is different, contact your pharmacist right away. Or contact the
 health care provider who manages your warfarin right way.
- . Get your INR checked more often whenever your tablets change.



IEED A VACCINE.

n of your health care

risk for people who take warfarir o protect you from vaccine-previ etp you determine if it is safe for r can talk with you about a diffen

to your muscle, make sure to ap

er if you notice bruising or bleed d to be checked if you have thes r example, TylenolTM) before you ertain level, your health care pri R is in goal range.

n only. This content does not replace medical a n. If you have questions about a medical condit and Research

Page 27 of 34



Access your care from anywhere, anytime



and convenient access to all your health information in one place. Scan below to create your patient portal account.



h care provider" refers to the health care provider who prescribes your

tion is adjusted based on the results of a blood test. This blood test is ratio (INR). A health care team member or a team member at a laboratory

ar INR yourself, called self INR testing or home INR monitoring. To be to meet certain criteria which may include:

cation has been stable for about three months.

h care provider will continue to prescribe your anticoagulant medication

testing, talk with your health care provider.

det:

dy INR testing helps keep your INR in the range that is best for you to

s your INR. Because you test weekly, you will be better able to tell what make good choices and give you a better chance for keeping your INR in

without going to your health care provider or a laboratory.

v anyone else to use your INR testing equipment.

Page 31 of 34

This natural is for your advantes and information only. This content does not replace medical advice, diagnosis or instruent.

New modest research may change this information. If you have questions about a modest condition, always talk with your health core provides.

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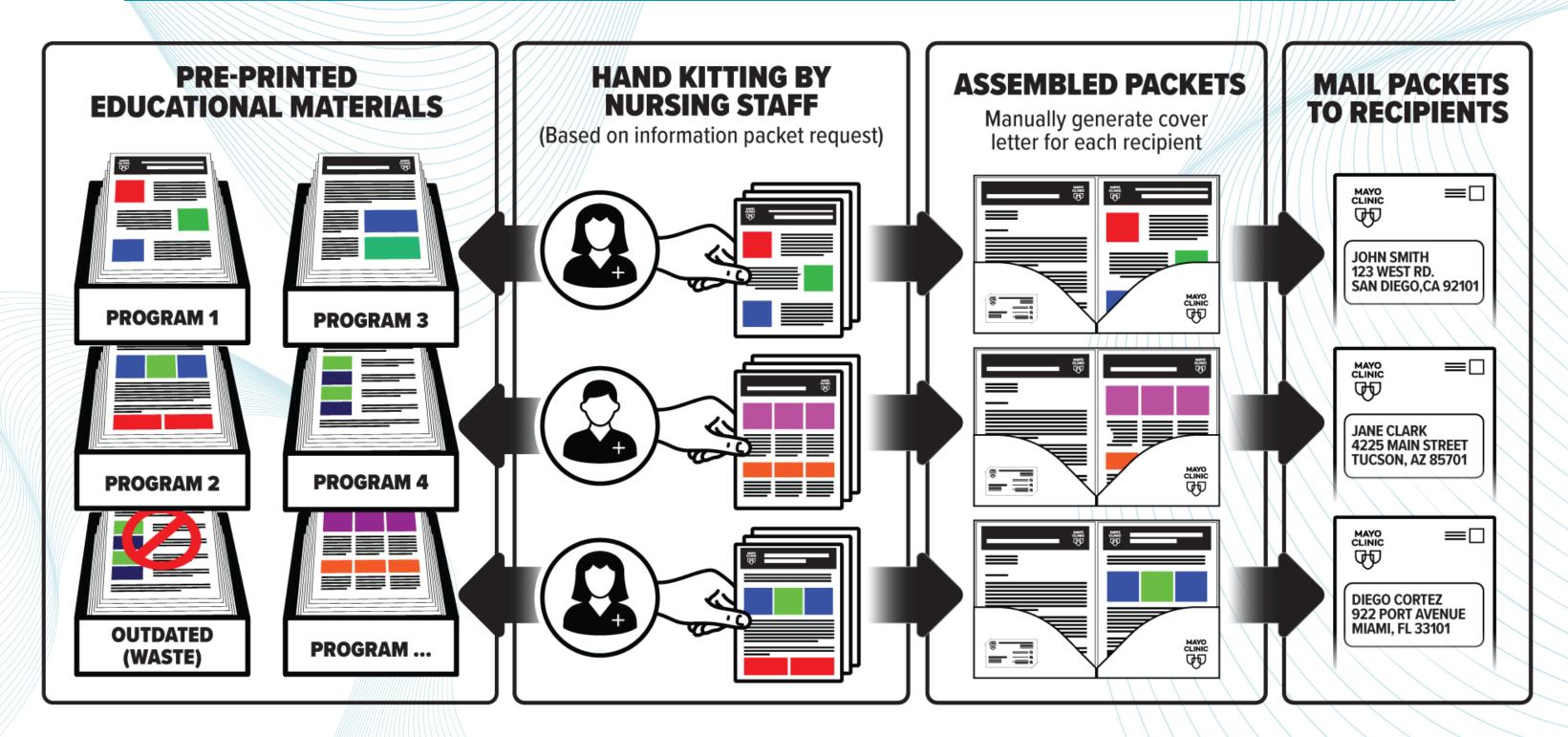
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Mayo Clinic - Patient Care Folders

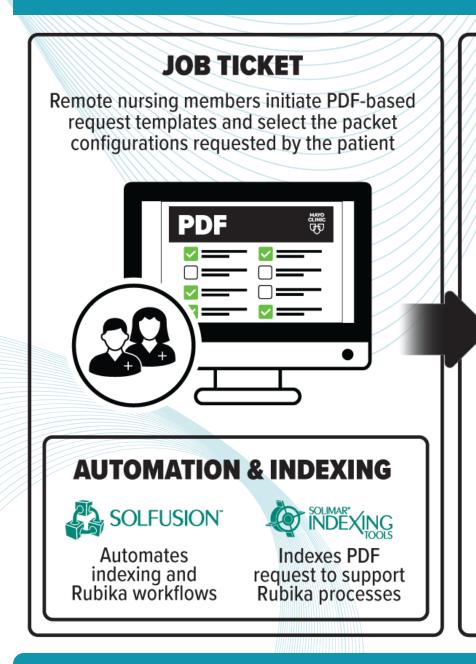


BEFORE: STOCK MANAGEMENT & HAND KITTING



Personalized Patient Booklets

AFTER: IN-HOUSE DYNAMIC PERSONALIZED BOOKLET CREATION

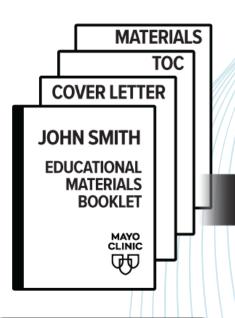


DYNAMIC BOOKLET CREATION

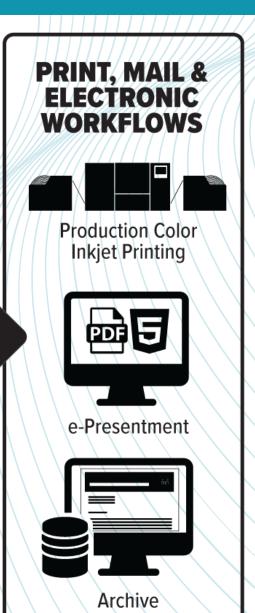
Selected program materials and additional content are pulled from a standardized PDF library



- Assembles booklets with materials specified in the PDF request
- Creates cover letter based on Name, Address and Clinic ID
- Creates table of contents based on selected programs
- Pages are dynamically renumbered to match booklet page count
- Adds required barcodes and finishing marks to the booklet
- Concatenation and householding of daily booklet requests







"Being able to electronically facilitate sending our patients written education materials is a critical part of our maintaining a virtual care program."

Kris, Mayo Clinic Primary Care Clinical Nurse Specialist







MAYO CLINC HTTP: HTTP

Solution Highlights



Gained 1.5-2 hours per week of time saved by automated booklet creation



Dynamically generated patient packets ensuring content versioning and customization per patient



Moved to a PDF workflow eliminated pre-printed materials and the need to manage and store them

Project: Embassy Workflows





EFFORT: HIGH

SUMMARY

- This was a multi year project with many steps to arrive at our current state.
- **Step 1:** We started by carving out insurance claims from the claim files where we can print and deliver them to the embassy team. The team would then locally print detail bills to go with each claim. These were then grouped together by embassy and mailed together.
- **Step 2:** We started receiving detail bills to print. There are identifiers on the detail bills that would help us match them to the correct claim. When these were matched, we would combine them together, sort by patient MRN all grouped by Embassy. The embassy team can now review the printed bills and claims together. These are then boxed and shipped to the embassy.
- Step 3: We moved to a fully digital process. We would still pair the claims and bills together. Instead of printing, we deliver these combined PDFs to a folder for each embassy. The team can now review these digitally; make adjustments and recreate any items that need to be updated. Approved PDFs of claims and bills are moved to a folder that are ready to print. When the embassy team is ready to send to the embassy, they deliver a final letter PDF to the folder that we pickup, combine all the documents together, print and ship to each embassy. Cost savings of printing and shipping every day is replaced with digital PDFs and only the final versions are printed and mailed by the print team.



ORIGINAL STATE



The Embassy team would locally print one detail bill and one claim for every Patient Visit#.

One patient could have many visits.

Each Patient Visit# requires a matching detail bill and claim.





VISIT#: 123-1112



VISIT#: 123-1113



PATIENT:

Paul Klinger



VISIT#: 132-1121

VISIT#:

144-1301



VISIT#: 132-1122



VISIT#: 132-1123



Each pair is reviewed and updated based on each **Embassy's unique** requirements.



CLAIM	DETAIL	CLAIM	DETAIL ##
	==		-

PATIENT: Jane Collins



PATIENT: Paul Klinger





Once approved, all of the documents were collected and shipped to the **Embassy either monthly or** quarterly.

MANUAL PROCESSES



Checkpoint #1 (Post EHR Implementation)



Claims were printing through our automated printing process.





VISIT#: 123-1112



VISIT#: 123-1113

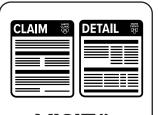




VISIT#: 132-1121



VISIT#: 132-1122



VISIT#: 132-1123



This allowed for easier receipt of the printed output for manual review.



The Secure Document team finds and identifies any items regarding each Embassy and moves them to their own print file.



All printed sets were manually scanned into archiving system.





MANUAL PROCESSES



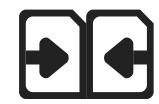
Checkpoint #2 (Detail Bill Automation)



Certain details couldn't be printed on the detail bills, so we enhanced the system to allow customization.



Once the system was able to automatically create the detail bill, they were sorted by Embassy Name and placed in a holding area with the claims.



Combine all detail bills and claims into one file.



Index File



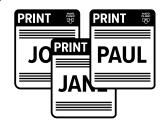
Sort and match detail bills with claims based on Patient# and Visit#.



If the process found a match, or bills/claims were older than 48 hours, the systems ort

them into print files.

If no match is found, the system would hold onto all unmatched bills/claims for up to 48 hours.



Print jobs are sorted and separated by Embassy, Patient# and Visit#.



Within each Embassy, the system separates matching bills/claims, followed by unmatched detail bills sorted the same, and lastly a segment for unmatched claims sorted the same.



The Embassy team would still need to be on site and sort, group and assemble printed packages for each Embassy.



Documents were collected and shipped to the Embassy either monthly or quarterly.



All printed sets were manually scanned into archiving system.







MANUAL PROCESSES



Checkpoint #3 (Digital Delivery)



Instead of printing and delivering claims physically, we create PDF files.





Each PDF file is named to be easily sorted by Embassy, Patient# and Visit#.



The Embassy team could now open, review, edit, and recreate any documents without the need to print or reprint files physically.



When it was time to package and ship, the team would place all PDFs for their Embassy into a folder.



Then a 'finished' letter PDF file is placed into the folder.



Based on the file name, we will then pickup and assemble the PDF(s) into a print file.





We then can print, track and ship using our standard secure print equipment.



All printed sets are digitally created and automatically moved to archiving system.







AUTOMATED PROCESSES

Automation Efficiencies





Reduced office printer pages (much higher cost)

- **18,000** sheets/mo.
- 24 package shipments



Reduced physical sorting of all documents for patients



Reduced assembly, sorting, and packaging



Staff no longer needed to be on site, or in a particular location (work from anywhere)



No more physical scanning into archiving system





Mary Ann Rowan
Chief Experience Officer
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linkedin.com/in/maryannrowan www.solimarsystems.com

Ready to discuss your needs and questions? Let's have a chat! Ping us at: SOLichat@solimarsystems.com





Bonus Information & Links to Peruse

Tactical Strategic Modular Integrated Configurable

Data Stream Transforms & Print Management



Solimar[®] Print Director™ **Enterprise (SPDE)**



ReadyPDF® **Prepress** Server™



Secure **IPP Print** Server™



iCONVERT™

Workflow Automation & Templated Process Control



SOLfusion™



Solimar® **Indexing Tools**

Post-Composition Enhancement & Mailing Efficiencies



Rubika®



CHEMISTRY POWERED BY SOLIMAR

Optimize Data & Customer Communications



ReadvPDF®



Accessibility Engine



Redaction Engine

eDelivery, Custom Portals & Secure Archive Visibility, Job/Piece Tracking, Alerts & Reporting



SOLitrack™



SOLitrack™ Mobile



SOLsearcher™ **Enterprise (SSE)**

SOLindexer™

Create Optimized PDF from Any Print Stream

INCOMING		OUTGOING PDLs									
PDLs	AFPDS	HTML5	IPDS	METACODE	PCL	PDF	POSTSCRIPT	TIFF	XML		
AFPDS											
IPDS					/						
LCDS/METACODE					/						
LINE DATA		/	~		/						
PCL			~								
PDF					/						
PostScript			~								
TIFF	~		~								
VIPP®			~		/						









PDFOPTIVE ZATON PROOF PRINT-ARCHIVE

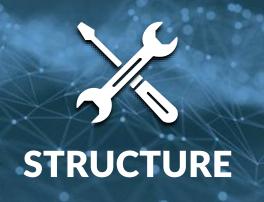








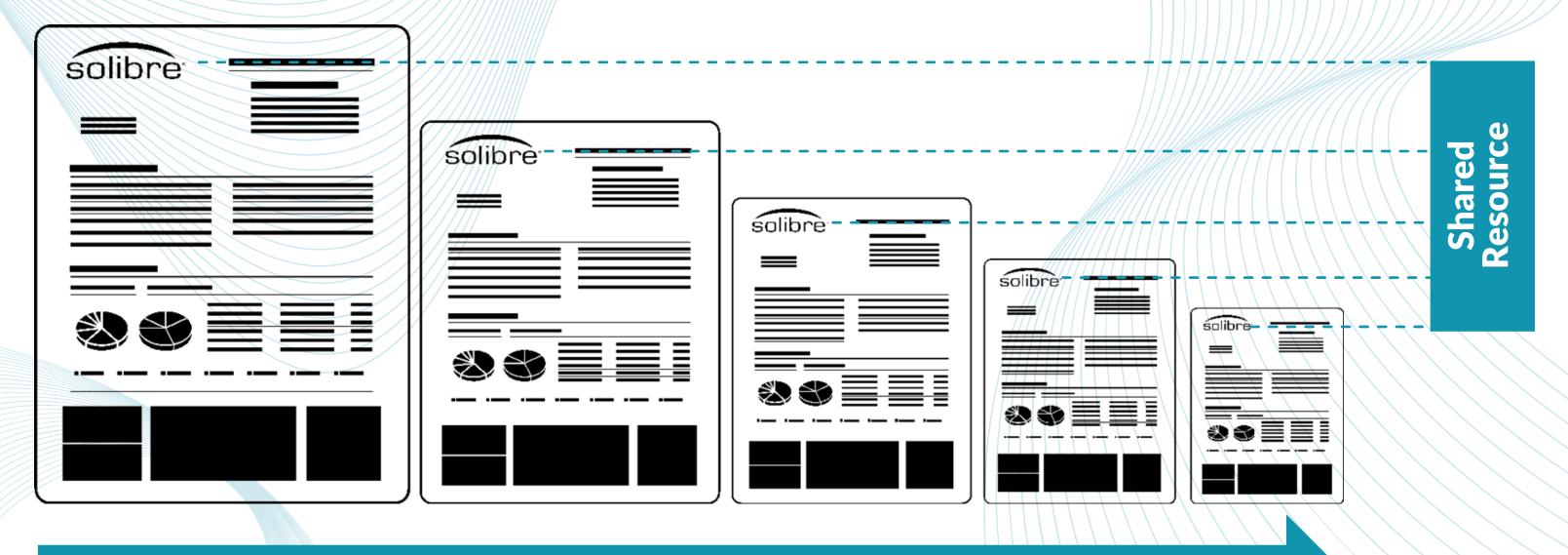








Combine & Reuse Resources

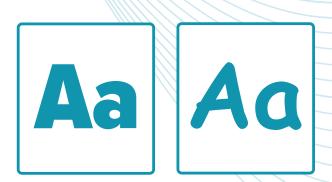


File Size & Complexity



BENEFIT: Jobs start printing faster with no clutching

Embed & Consolidate Fonts



Reduce/Merge fonts





Replace subsets with full font families

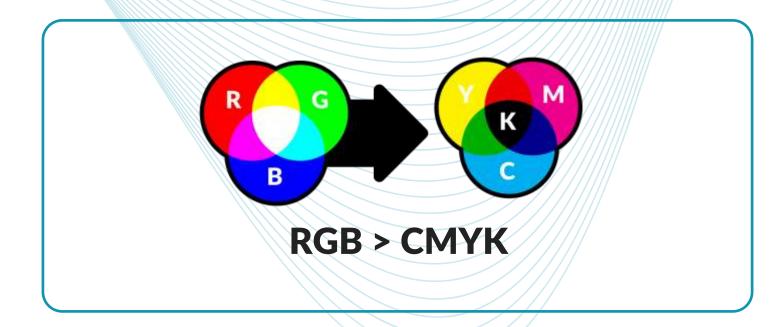


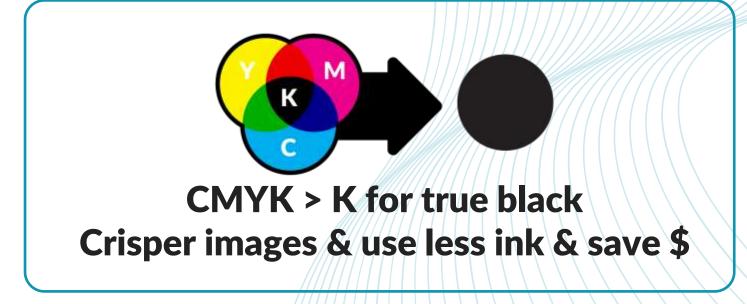
Some DFEs can't print subsets & certain types of fonts

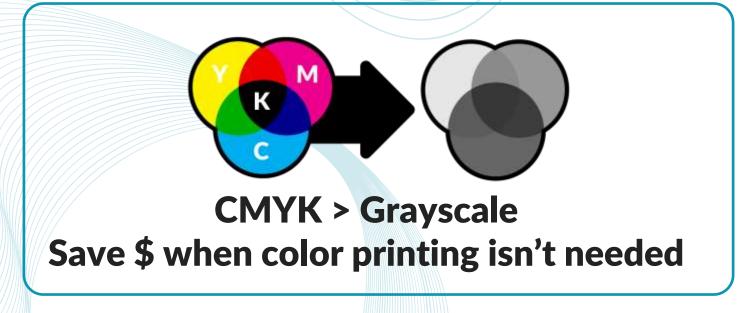


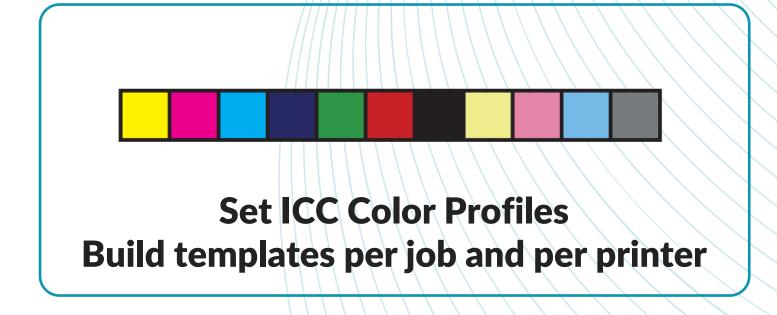
BENEFITS: Files are smaller and jobs print faster with no character drop out

Color Tuning





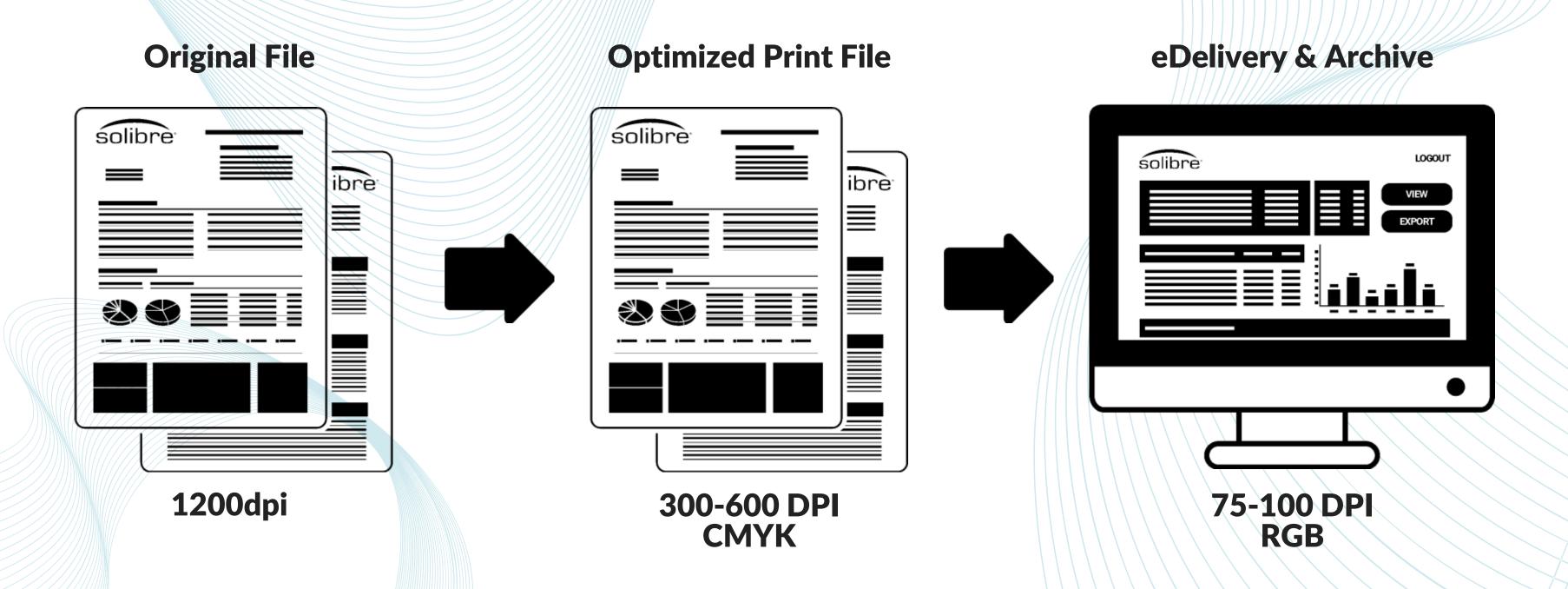






BENEFITS: Crisper barcodes & color profiles produce for consistency across devices

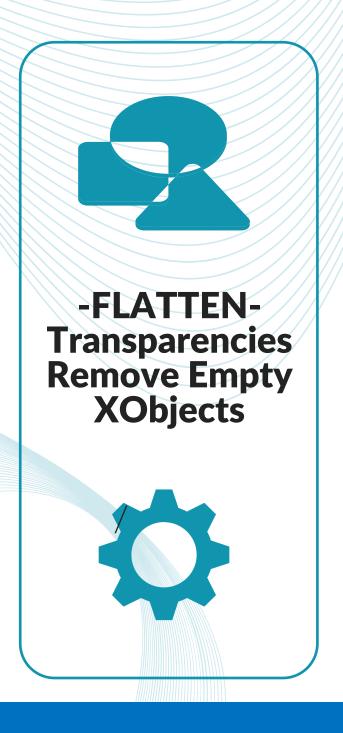
Optimize Image Sizes





BENEFIT: Jobs and reprints print faster and electronic output can be even smaller

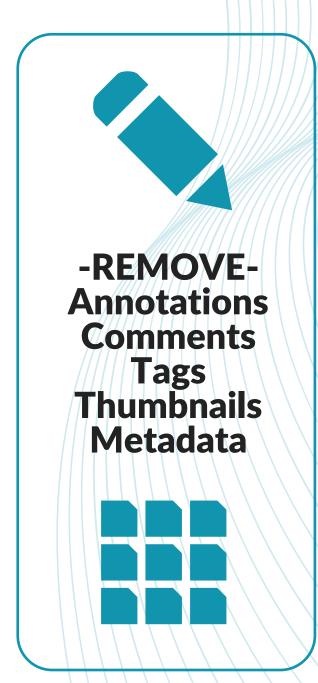
Correct Structural Issues





-REMOVE-Bookmarks from print production files







BENEFIT: Fixes most issues in test files enabling fast print sample creation



READYPOF* Protect PII with Obfuscation

Original





B.J. FULLENKAMP 888 E AURORA RD MACEDONIA.OH 44056- 1904

Transactions since your last statement

REF#	TRANS DATE	DETAILS	AMOUNT(S)
1	JAN 01	ARCO GAS STATION	\$44.50
2	JAN 01	STARBUCKS - 555 EAST STREET LA MESA	\$14.25
3	JAN 01	ALBERTSONS - ALPINE CA	\$144.85
4	JAN 01	TICKETMASTER ONLINE PURCHASING	\$200.00
5	JAN 03	STARBUCKS - 555 EAST STREET LA MESA	\$5.99
	1011111111	000	Shoot on species

1

DETACH AND FOLLOW PAYMENT HISTRUCTIONS DIK RESENSE





B.J. FULLENKAMP 888 E AURORA RD MACEDONIA.OH 44056- 1904

երԱդրկարկարկարգրերակարկարկարև

NEW BALANCE \$995.37 MINIMUM PAYMENT \$19.91 PAYMENT DUE DATE

February 28, 2021

հրժեղըվրդմերդինըկրըընդորհրդիրի SOLIBANK CARDS

123 MAIN BLVD SAN DIEGO, CA 92101

ACCOUNT NUMBER

XXXX XXX XXX XXX 111

All text obfuscated

SOLibank



CXO G pDN:0 B 65277 vetldCu0,vXtlwefvvCfawv/XXW



XXXXXXX

Febru

MONTHLY ST

or Payback™ rewards,

SOLibank Paybac

If you have any questions regarding

1 800 555 1234 / 619 555 1235

TTY Service 1 800 555 4321

Payment due date

Total minimum payment

Current minimum payment

Previous balance, Feb 28/21

Payments/credits Purchases/charges

New balance Credit timit Available credit

Cash advances

Payment Record

Purchases

Date paid

Check #

Amount paid

Interest Information

Annual interest rates as of Feb 28/21

Make checks payable to: \$1

C,L,J OJJL RPER H 666LE OMDMBMO RE KANUDFE.DP 55419,5140

SLeuveYfleBCCluYo vegf tCvfClefowaBl

NYk\$	SNKMT RKSL	RYFKIEK	hWPBMF)=
2	yBG 72	XDSC NXC YWXWICG	+55:27
5	yBG 72	YWXKAeOTY, 424 uXCKY KKpuWhB muYX	_23:12
8	yBG 72	XhApKKYNGY / BdWiQu QB	+735:68
5	y8G 72	WSTuWinB CWpD C0hlGp WsKSk XYION	_577:77
4	y8G 78	YWXKAe OTY/ 424 uXCKY KKpuWhB muYX	_4:66
		Favi	well-teri be Teller





LnSSaLOb

C.L.J OJJL RPER H 666LE OMDMBM O RE KANUDÆ. DP 55419, 5140

MUMU hr KMaY Ksa kBRF MBWnYD #579/82 hWP8MFYRsEkKYo N IRINB W UhcWYME =37/53 UhcWYMFRPLR KSL kapfnel.g 03: 7832 WesYUdY kUo ai UvUrUnos 4.77EV toFitti

լալ...այադատարատատալատու

LHalg eogr. leta vLHioUyHoLgfFUJlaay.

TPEIdeBOU eadeY

it vXq pesa CBqDqaCflXuvLoyefqlB

2 677 424 7143 - 926 424 2184

KWS YaicrFU 2 677 424 5452

OevWoBf bno bCfo

SefCiw IBIWgW hegwoBf

SkiJaof Y IdlY EM beJMaof

WieVinEUpeteovU hUp 56#21.

XHsYUdv#FiUndv

Mam pCiCBXo

XoeltHpta vJalLrf

OHULHn VeoFaU

OevWoBf NaYXfq

WEJFLHUUU

RHlabHm

SLUFu/

BYn kolb Hrn

WEJFLHUUU-vLHioUv\$

iBloLoCfi ureLWCfleB

hBBgCt lufaLoCfLefoC eC Xr kop 03#32

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XLUegdeY0=L aV Cfqv:

YNh/VXOT SBDRY 718 mBIG AhBG CXO GioDN-OB 65277

Exclusions

SOLibank

AAAA PAA PAA PAA 722

cUpJkHJJ 77: 5721

2 0 5

#559,89

SOLibank

YBG GiuNC:S B 65272

solibank.solimarsystems.com

A.F.I OJEADPBRH 666 A BHNUNBN N RB KLNDRFEUP 05418-9140

Transactions since your last statement

REF#	TRANS DATE	DETAILS	AMOUNTO
2	yXG 72	BDON DBC YKXWICO	_35:47
5	yXG 72	YKXDA8 SRC- 442 pBCKCWDuuK dX mpCX	_25:54
4	yXG 72	BhAuDWCNGC - XdXfOu SB	+733.68
3	yXG 72	WIORpKmXYKpD NGhiGp WsKSa XYiOD	_177:77
4	yXG 74	YKXDAe SRC- 442 pBCKCWDuuK dX mpCX	+2:66
	1.00	cont	inued on revers



SOLibank Payback VISA MONTHLY STATEMENT

If you have any questions regarding this or Payback™ rewards, call: 2 377 442 7585/ 976 442 7584 TTY Service 2 377 442 3812

Payment due date Total minimum payment	TadLnC	Lv 03. 7839 =35/73
Current minimum payment		+76:67
Previous balance, hUp 56#20		_44:12
Interest	+	+1:55
Payments/credits	+	_44:12
Purchases/charges	+	+664:74

Credit limit	_77,777:3
XVeltHgta vJanll	\$6/775:9

Annual interest rates as of kop 00#32

New balance

Interest Information

Purchases	70:77_	
Payment Record		
Onto and	nieto oreaniem en un mieter	

Date paid %\$\$%%\$\$%\$\$%\$%%\$\$\$% %\$\$%%\$\$%\$\$%\$%%\$% Amount paid %\$\$%%\$\$%\$\$%\$%%\$ Check #

Make checks payable to: SOLIBANK CARDS



DETACH AND FOLLOW PROVIENT INSTRUCTIONS ON REVEIGH

A.F.I OJEADPBRH 666 A BHNUNBN N RB KLNDRFE.UP 05418-9140 NEW BALANCE #559,89 MINIMUM PAYMENT =35/73PAYMENT DUE DATE TadLnCLv 03: 7839

ACCOUNT NUMBER AMOUNT END OSED

Payment must be received by 5:00pm local time on the payment due

411,011400,000400,000000000000000000

date to avoid late charges and other fees

SOLIBANK CARDS 718 mBiG VhvG YBG GIUNC:S B 65272



Payment must be received by 5:00pm local t date to avoid late charges and other fees

լալուպադատուրատեսալատեսալուուու



ReadyPDFv9.3 Big Features!





Really Bad PDFs

We can raster a page, certain pages or the entire PDF



Missing Fonts

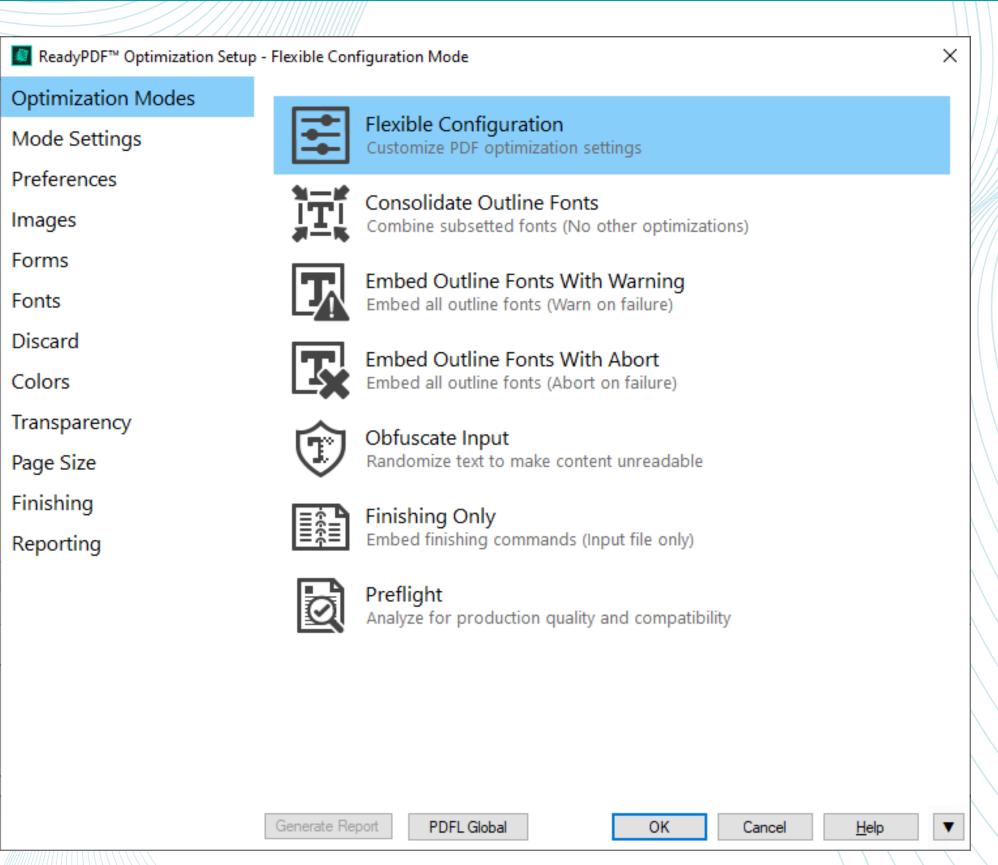
We can embed a standard font like Helvetica



Traffic Cop

We can redirect work based on the DFE limitations

No Code Configuration Templates





Before & After Reporting:

- Color Usage
- Fonts
- Embedded Fonts
- Fonts Not Embedded
- XObject Forms, Images & Details
- Image Optimization
- Inline Images and Details
- Transparencies
- Removed and Discarded Items
- Optimization Stages and Times
- · & more





SPDE Version: 9.2.002598 / Report Version: v14.33

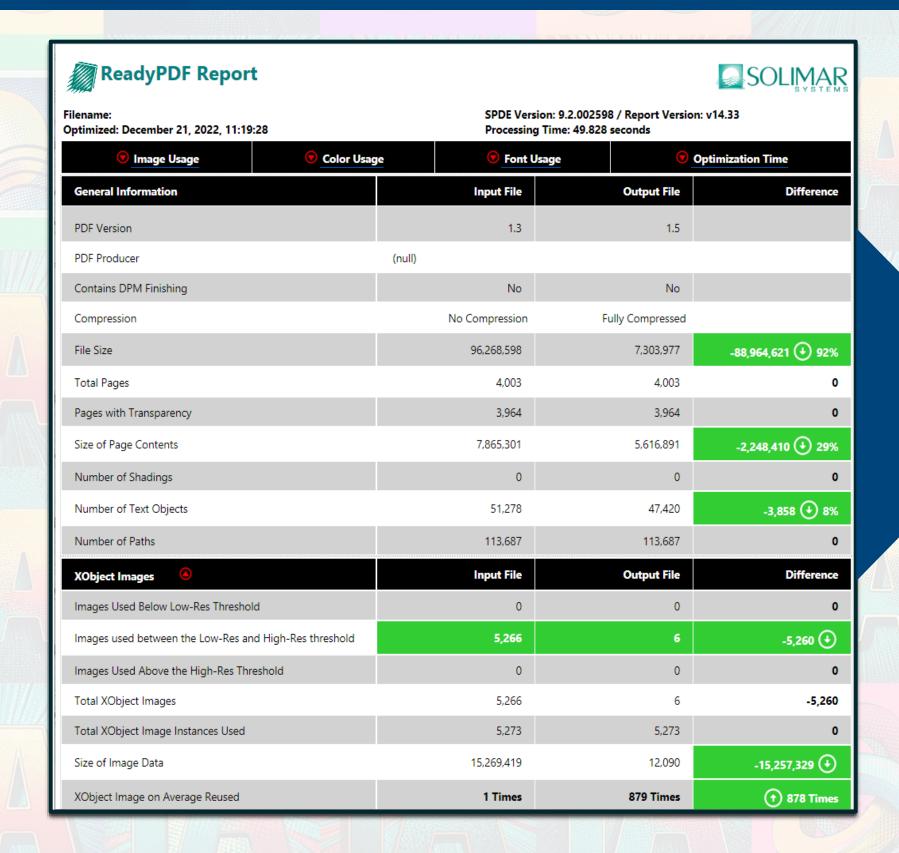
Optimized: December 21, 2022, 11:19:28 Processing Time: 49.828 seconds

Optimized: December 21, 2022, 11:19:28		Processing Time: 49.828 seconds		
⊚ Image Usage	Color Usage	Font Usage	Optimization Time	
General Information		Input File	Output File	Difference
PDF Version		1.3	1.5	
PDF Producer	(null)			
Contains DPM Finishing		No	No	
Compression		No Compression	Fully Compressed	
File Size		96,268,598	7,303,977	-88,964,621 🕙 92%
Total Pages		4,003	4,003	o
Pages with Transparency		3,964	3,964	c
Size of Page Contents		7,865,301	5.616,891	-2,248,410 🕕 29%
Number of Shadings		0	0	C
Number of Text Objects		51,278	47,420	-3,858 🕕 8%
Number of Paths		113,687	113,687	c
XObject Images		Input File	Output File	Difference
Images Used Below Low-Res Threshold		0	0	C
Images used between the Low-Res and High-Re	s threshold	5,266	6	-5,260 🕕
Images Used Above the High-Res Threshold		0	0	C
Total XObject Images		5,266	6	-5,260
Total XObject Image Instances Used		5,273	5,273	c
S <mark>i</mark> ze of Image Data		15,269,419	12,090	-15,257,329 💽
XObject Image on Average Reused		1 Times	879 Times	(1) 878 Times



Al Prompt:

Attached is a Before and After report from Solimar Systems ReadyPDF. Can you please create a **HIGH-LEVEL SUMMARY** for me?



Client: SOLibank | Project: PDF Optimization | Date: January 25, 2022

Key Outcomes:

- File size reduced by 85% (from 503MB to 76MB)
- Page content size reduced by 80%
- · Font data size reduced by 99.96%

Performance Metrics:

- Total pages: 3,098 (unchanged)
- · PDF version: 1.6 (unchanged)
- · Optimization time: 166 seconds

Notable Achievements:

- · Maintained all original content and functionality
- Significant reduction in font programs (17,039 to 9)
- No loss of image quality or color management

Benefits to Client:

- Improved file sharing and storage efficiency
- Faster document loading times
- · Reduced bandwidth usage for digital distribution

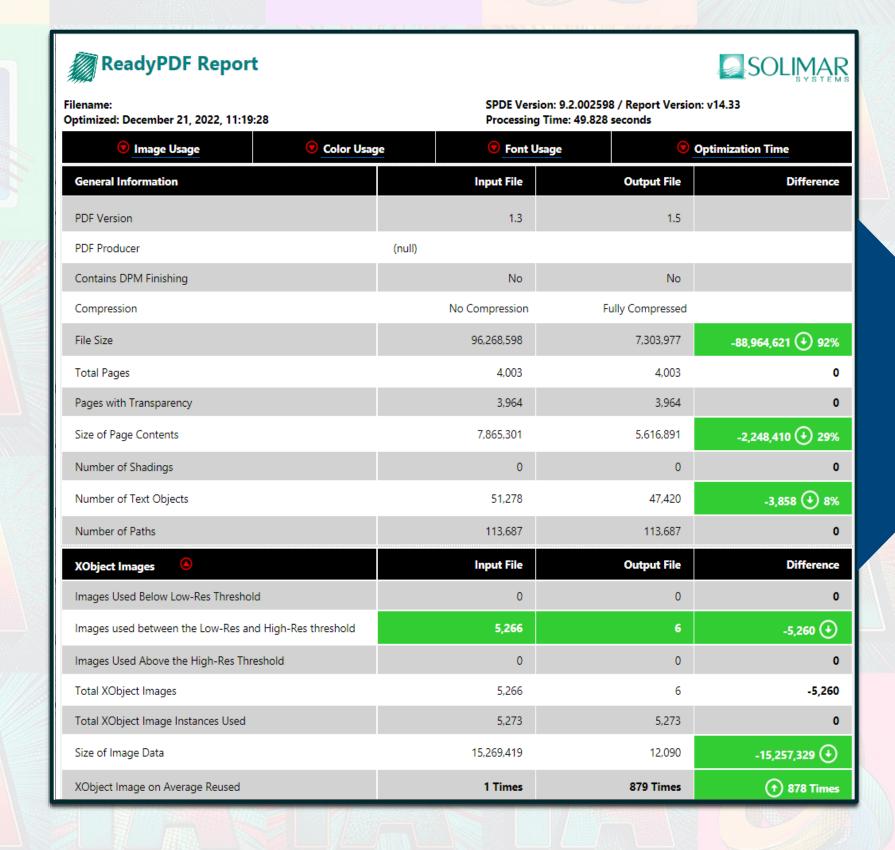
Next Steps:

- · Recommend client feedback on optimized PDF performance
- · Explore potential for batch processing of similar documents
- Schedule follow-up to discuss any additional optimization needs



Al Prompt:

Attached is a Before and After report from Solimar Systems ReadyPDF. Can you please create a **CUSTOMER FACING REPORT** for me?



PDF Optimization Report Summary: SOLibank 20220125 Customer Report

Key Optimization Results

These metrics represent the core achievements of the optimization process, highlighting dramatic improvements in file efficiency. The 85% reduction in file size while maintaining all 3,098 pages demonstrates the effectiveness of the optimization strategy.

- File Size: Reduced from 503,112,427 bytes to 75,928,940 bytes (85% reduction)
- Page Content Size: Decreased from 349,789,993 bytes to 68,518,183 bytes (80% reduction)
- Total Pages: 3,098 (unchanged)
- PDF Version: 1.6 (unchanged)

Font Optimization

Font handling proved to be a major source of efficiency gains, with intelligent consolidation dramatically reducing redundancy while maintaining document appearance.

- Subsetted fonts: 17,039 (unchanged)
- Font programs reduced from 17,039 to 9
- Font data size reduced from 134,186,894 bytes to 47,524 bytes (99.96% reduction)

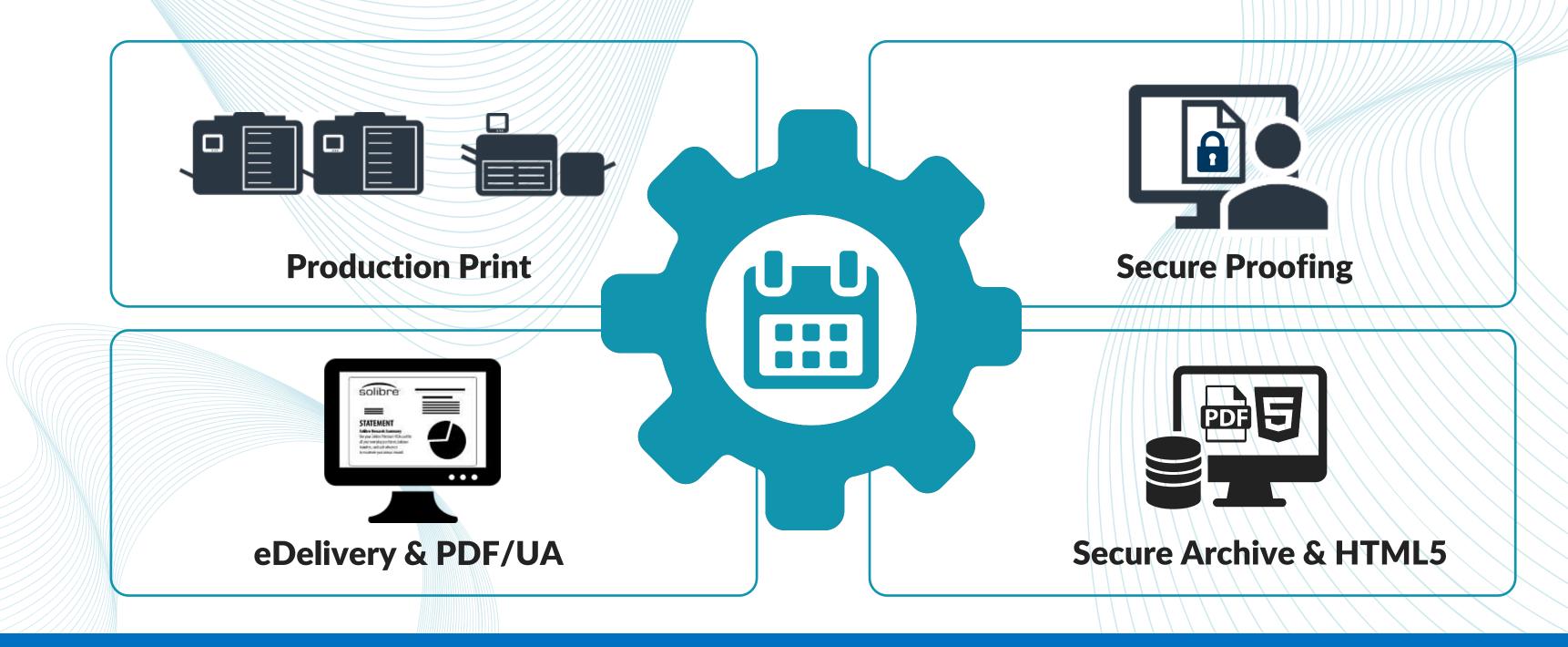
Font types:

- Type 1 fonts: 3,098
- TrueType fonts: 13,941

Conclusion

The optimization process successfully reduced the PDF file size by 85% while maintaining essential content and quality. Significant reductions were achieved in page content size (80%) and font data size (99.96%). The optimized file is more efficient for sharing and storage without compromising functionality.

Automate Industrial PDF Workflows





BENEFIT: Creates optimized PDFs for multi-channel needs of print centers



ReadyPDF Validation Testing

Production Print Optimizations

Applications Tested:



Transaction Statements Mono & Color



Direct Mail (DM) Letter & Mailer



Book for VITS Books **System Demo**



16 Panel Z-fold



Posters -Duplex



Postcards -Duplex

RIP SPEEDS

UP TO O/O

IMPROVEMENT

Reduced the time to the first page sent to the print engine.

FILE SIZES

REDUCTION

Optimized network bandwidth with reduction of the original file size.

FONTS

REDUCTION

Consolidated, embedded, subsetted and reduced the number of fonts.

COLOR SPACES

REDUCTION

Optimized managed, separation, and spot color spaces.

IMAGE DATA

REDUCTION

Downsampled images to optimize delivery, archive and storage.

ReadyPDF default configuration produced significant results.



Detects and corrects problems before they hit the production floor.

Reduces file sizes to optimize use of the network bandwidth.



Reduces ink consumption by applying color profiles and conversions.



Reduces file sizes to optimize use of file storage and archive cost.

Optimizes color spaces for color consistency and faster processing.



Deletes unneeded overhead from file transforms and legacy indexing.



XML-accessible file reports are generated for analysis.

Document Facelifting





Jonathan H. Marshall

LIVONIA, MI 48017

12623 NEWBURGH ROAD

Solibre Corporation Variable Annuity

QUARTERLY STATEMENT

STATEMENT PERIOD: April 1, 2000 - June 30, 2000 ACCOUNT NUMBER: 0390 9504 5668 5004

PIN NUMBER 2134

ANNUITANT JONATHAN H. MARSHALL ANNUITY ADVISOR: Lisa Elizabeth Irskine 2004 Urban Park Center, Suite 351

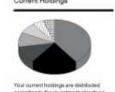
Atlanta GA 38122

Account Summary

Value last statement	\$66,380.93	
Additions	+750.00	
Withdrawals	-0.00	
Fees and Charges	-0.00	
Change in market value	+671.31	
Value this statement	\$67,802.24	

Contract date	5/20/196
Maturity date	3/15/202
Surrenders to date	\$0.0
Value if surrendered	\$65,293.5
Charge if surrendered	\$2,508.6

Account Allocations



Allocation of

Allocation of Current Premium

SC Small Cap Value

SC VIP Index 500 SC VIP High Income

FUND NAME SC VIP Balanced

Domestic Equity Domestic Equity Fixed Income Growth Growth Stoome

Domestic Equity-Growth and Income

ALLOCATION % BY FUND

15%

30%

Domestic Equity

Value of Current Holdings INVESTMENDBJECTIVE %-OF PORTFOLIO UNITROWNED X UNITVALUE - VALUE TOTALVALUE SC VIP Balanced \$13,560.45 4,755.977 \$1,425623 \$6,780.23 5,816.436 \$1.165700



Facelift Output

Mask Sensitive Data

Update Forms

Introduce Color

Data Mining

Add/Change Barcodes

Digital Inserts

Promotional Messages

Sequence Numbering

State of Colorado/IDS Success Story





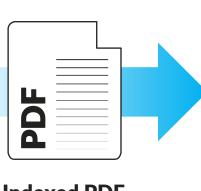


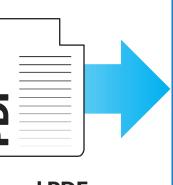


SOLFUSION

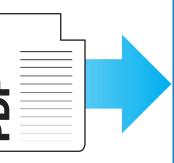
Indexing













CSV file containing

address

information





Document Enhancement

Import/ **Export**





RUBIKA



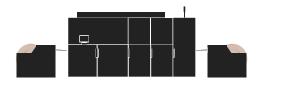
Sort

CSV file containing cleansed addresses

Print Ready Jobs

Exception file containing bad addresses

Production Print and Finishing Workflows



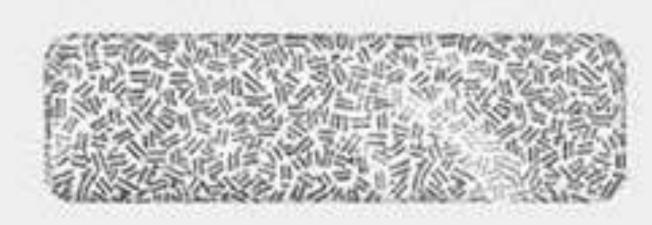




BCC Software receives indexed CSV data to perform address cleansing via NCOALINK®, CASS™ and PAVE™. Updated CSV file is sent back to Rubika for additional processing.

CA SB 1096 Effective January 1, 2025 Conditional Dynamic Messaging





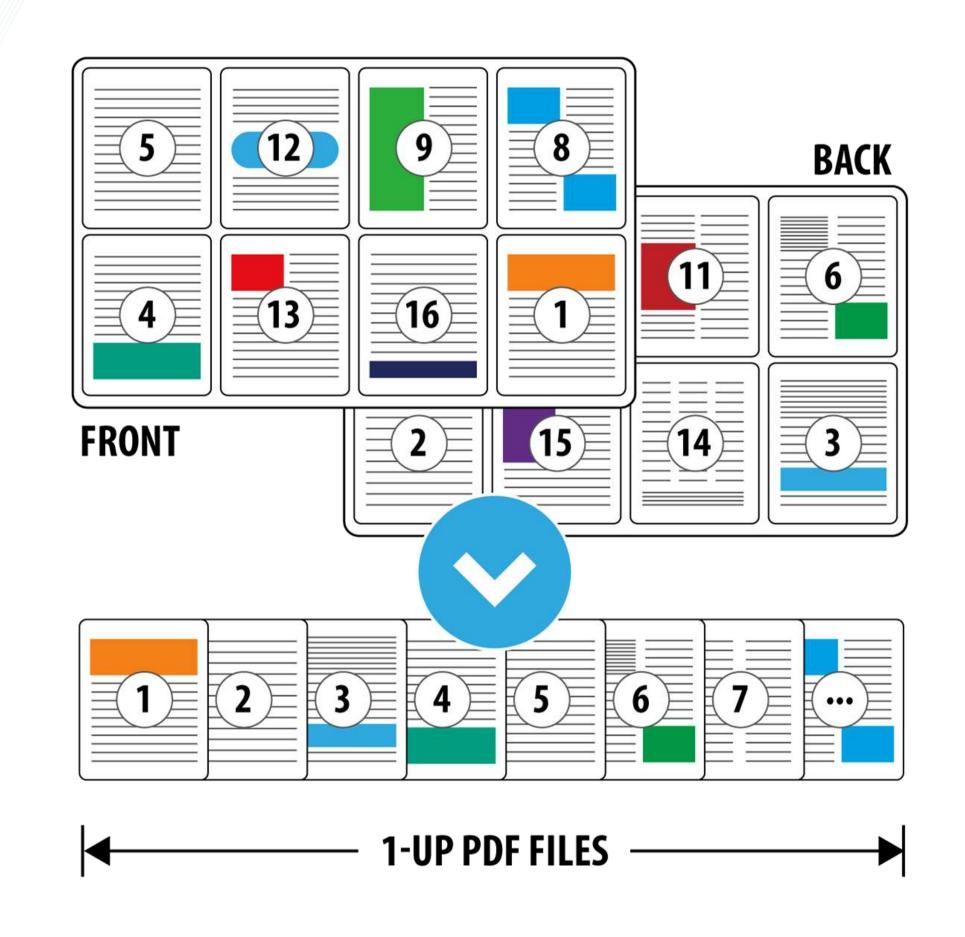
ADVERTISEMENT

You are not required to make any payment or take any other action in response to this offer

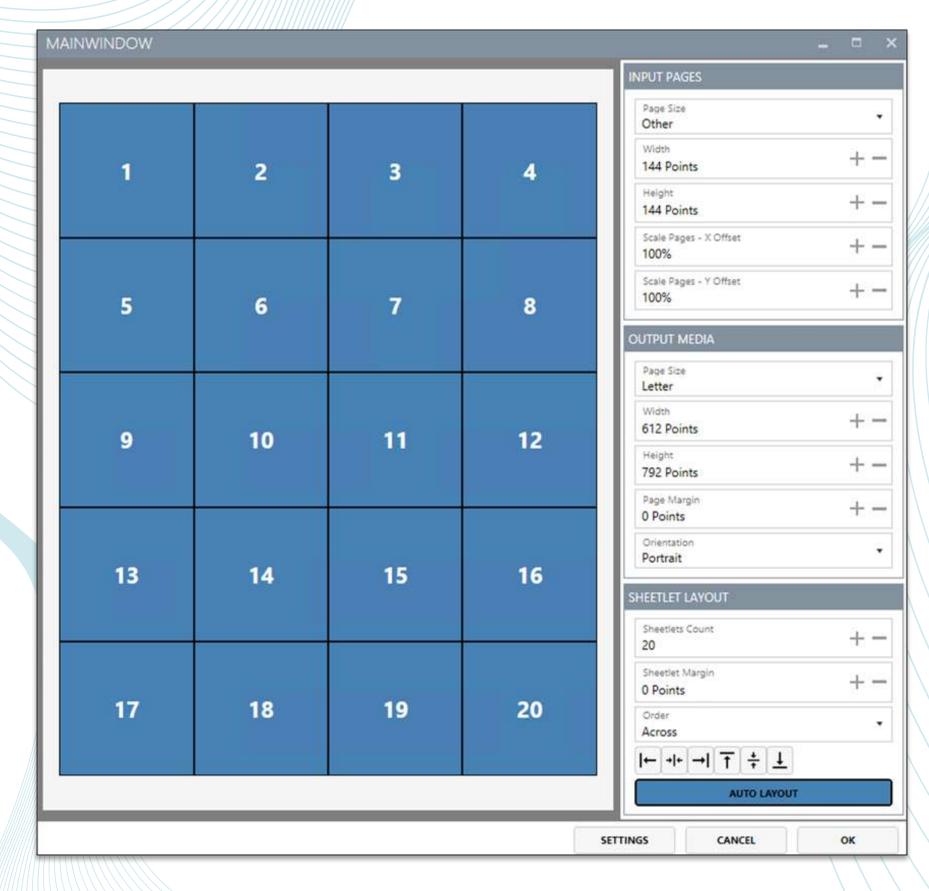
De-Imposition

- Create 1-up documents from imposed PDF document
- Uses the same, simple, UI as our imposition module to extract and output individual pages one up
- Supports N-Up, Book Block and Booklet impositions
- Ideal for Reprints and repurposing offset catalogs and other content



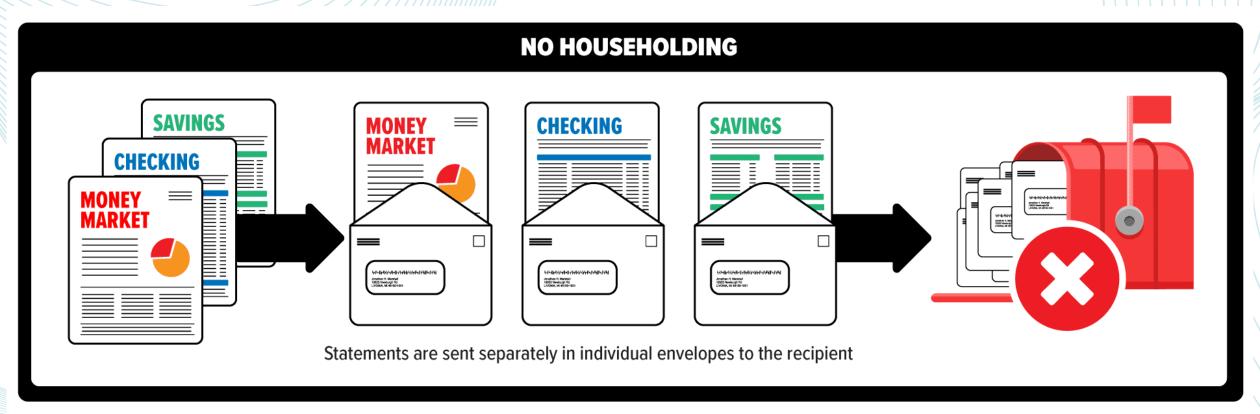


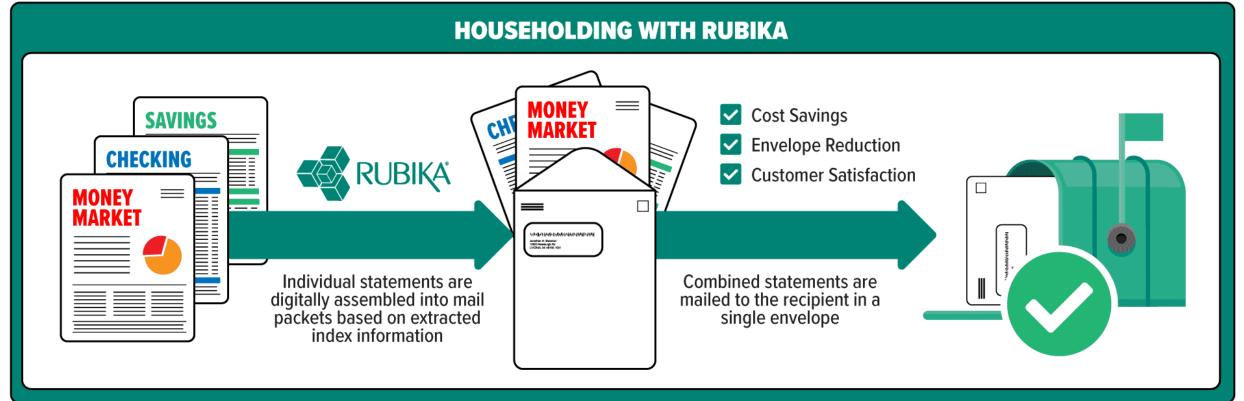
Imposition / Re-Imposition





Householding & Digital Commingling







Kennickell Group – Commercial Printer Time ROI for 50,000, 6"x11" Postcard Mailer

Original Workflow

6-color, 40" Offset Press

Print
Cut
Sort by Hand

Total hours: 21
2-day SLA

Workflow with KM 1e

8-up, 6 color, 40" Offset Press

Print
Cut
Sort by Hand

Total hours: 16
Next Day SLA

Workflow with KM 1e & Solimar Software

8-up, 6 color, 40" Offset Press

Print
Cut While Printing
Sort at Cutter

Total hours: 9.5
Same Day SLA

Success Cases - ROI Results Achieved





MATRIX

Matrix Imaging Solutions 95% PDF files size reduction for archive & e-Delivery

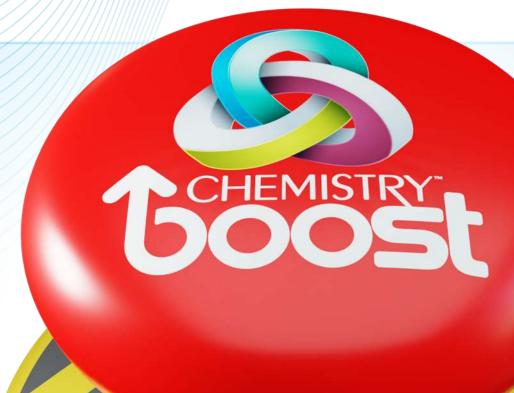








Visibility dashboard with





Making Better Happen[™]

IWCO

Saved \$110K+ in optimizing finishing equipment









online proofs/approval live in 45 days



BORNS GROUP

Borns Group

Grew revenue \$400K in year 1 and achieved white paper factory

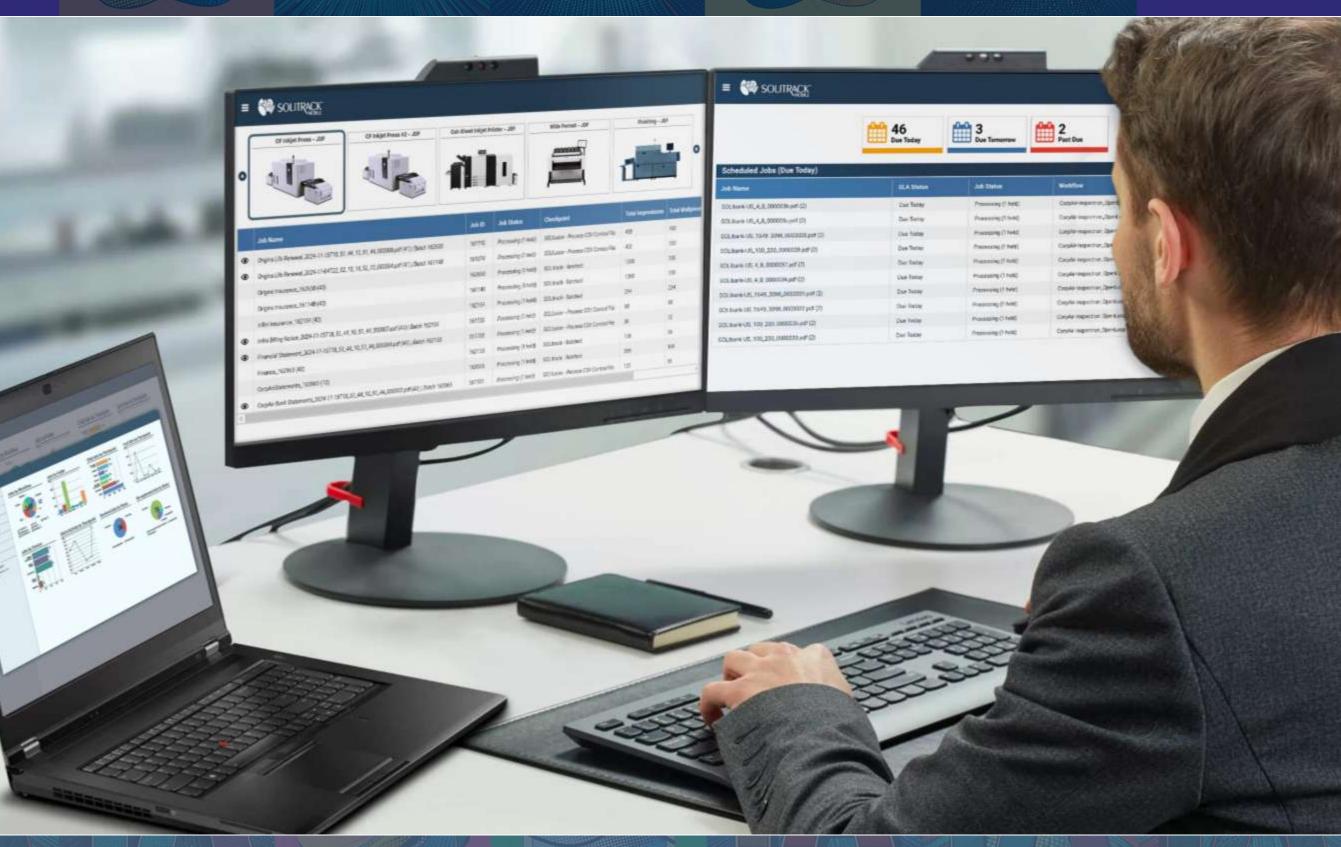


BEINTHERNOW









Cut-sheet Inkjet Print Workflows

Incoming Jobs



Print Data Files AFP, IPDS, LCDS, Metacode, PCL, PDF, PostScript, VIPP®

Data Stream Conversion



Secure IPP Print Server™





PDF Optimization



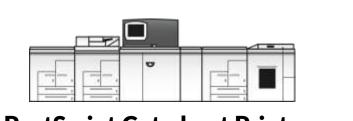
PostScript Workflow



AFPDS::PostScript

Converts PDF to PostScript & adds Finishing Annotations





w/annotations



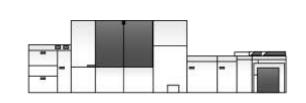


PDF::PostScript

Sets media & plex selection in the PDF-VT files



PostScript w/finishing commands



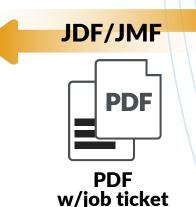
PostScript Cut-sheet Printers

PDF/JDF Workflow



Generate Job Ticket(s)

- Sets media & plex selection in a PDF file that contains Solimar's Finishing Annotations
- Customized JDF templates can be used as well





PDF#JDF Job Ticketing



JDF Workflow System - Real-time job and device status and production visibility



SOLitrack

Onboarding & Job Tracking (AFP, IPDS, LCDS Metacode, PCL, PDF, PostScript®, VIPP®)



SOLfusion & Rubika Process Automation & Document Enhancement





iCONVERT, ReadyPDF **SOLitrack & SPDE** Output & Device Management



SOLitrack & SSE Job and Piece Level Tracking & Reporting



Print Files & JDF Job **Ticket**



JMF Job Messages





JMF Job Messages















MIS

Receives reporting on all production data:

operator, job info, sheet counts, speed,

materials, production time, etc.. This data can

be accessed for post-production analysis.

accounting, or other management functions.





Ink presetting, preflight, data indexing, data stream conversion, document enhancement, optimization, obfuscation, redaction, batching, print suppression

PREPRESS



PRESS



Print-ready PDF files with finishing controls (tray calls, plex, staple, jogging, etc.) are sent to production print devices: color inkjet and presses, roll-fed, wideformat, and cutsheet printers



POSTPRESS

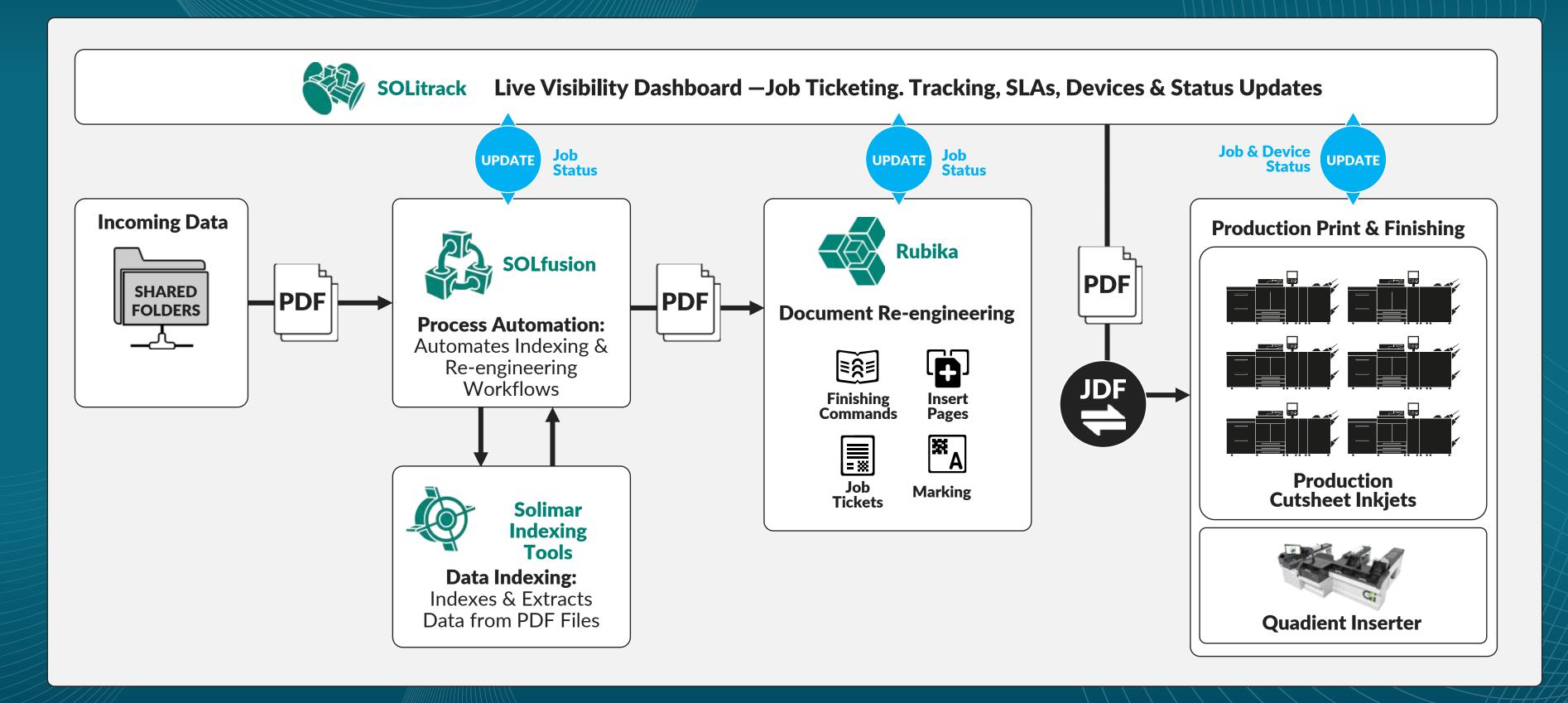


Finishing and insertion devices, bindery equipment, labeling and packaging systems

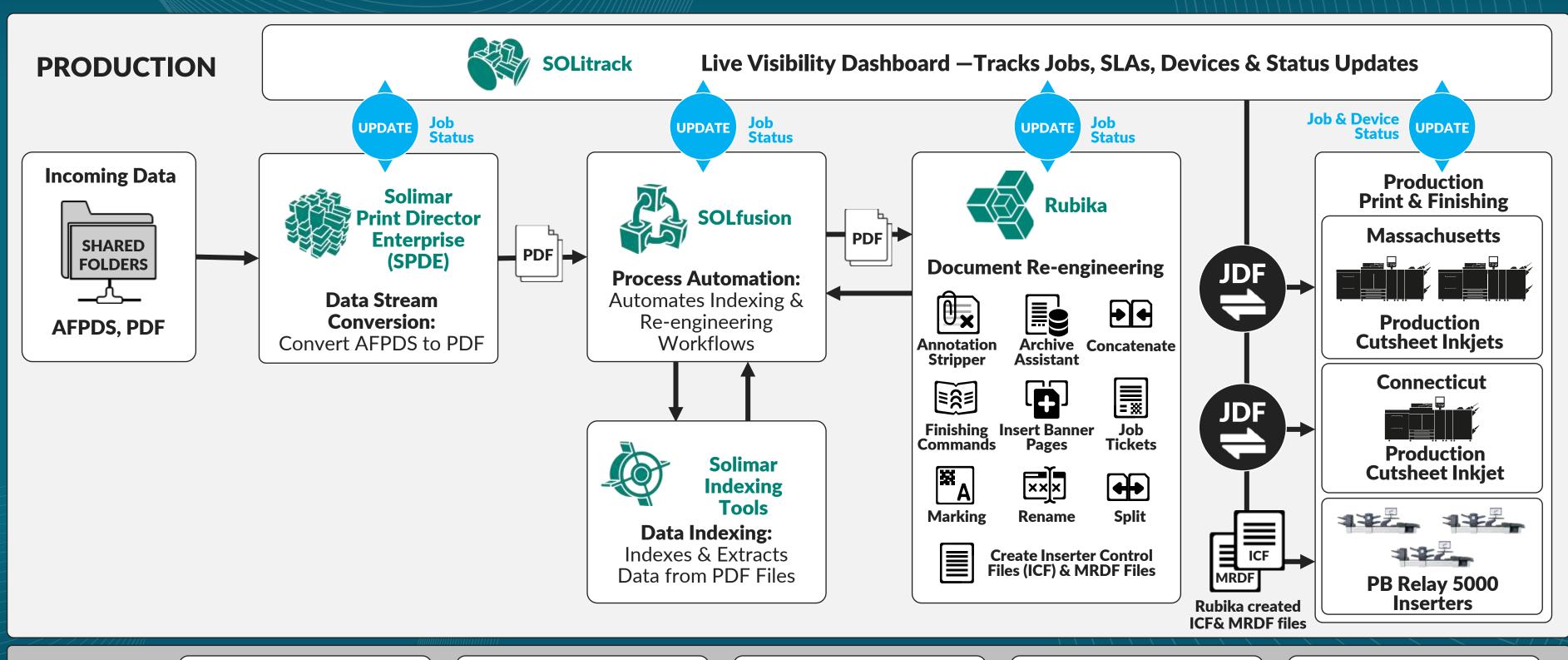
Solimar JDF Job Ticketing seamlessly routes PDF jobs through desired workflows



NE Insurance Company - PDF Workflow with JDF/JMF



In-plant Insurance - PDF + JDF Workflow Diagram



STAGING





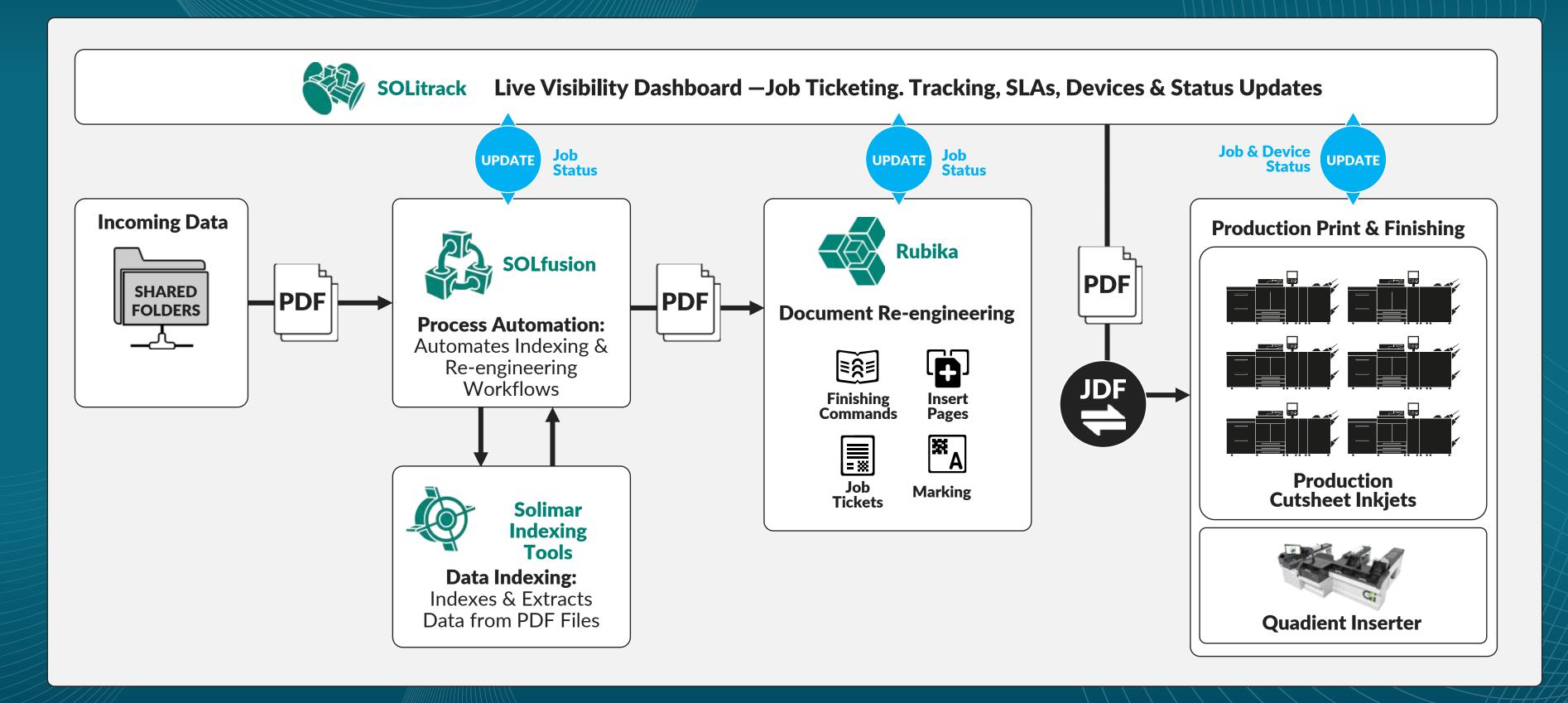




Solimar Indexing Tools

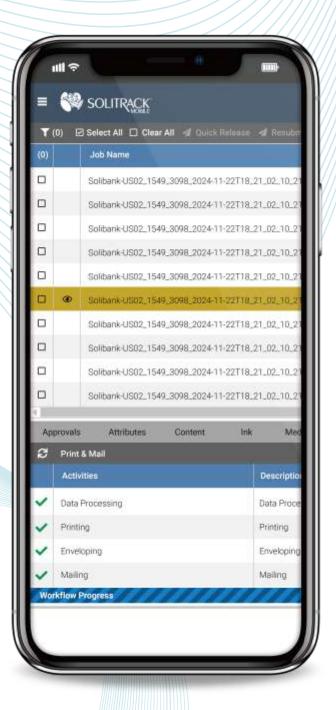


NE Insurance Company - PDF Workflow with JDF/JMF



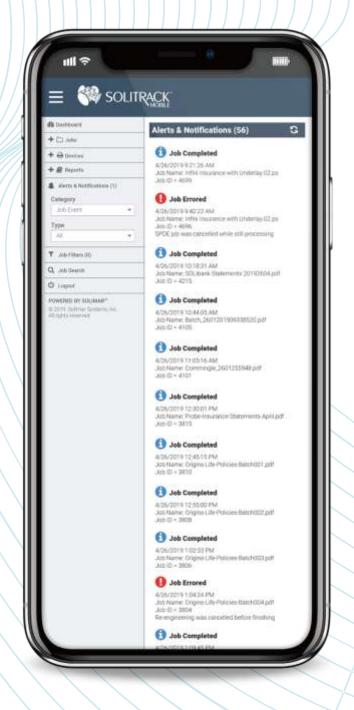
Live Mobile Visibility into Factories











Secure (SSA) Skinnable Login Find/View Jobs In Production Proof, Approve Hold & Reject Jobs & Individual Items Device Status Updates Receive Alerts Per Location

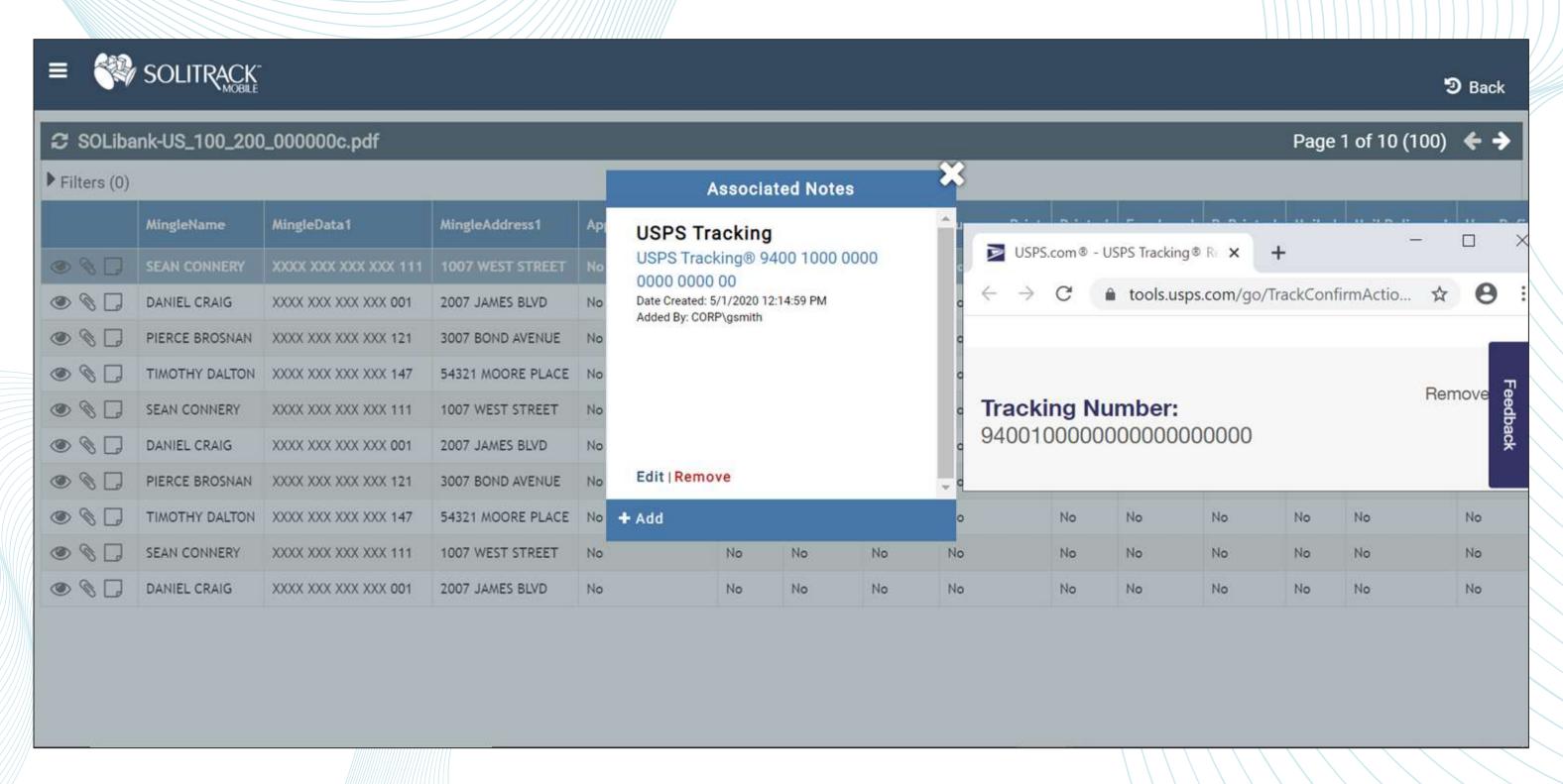
Skinnable Due Out Schedule



Scheduled Jobs (Due Today) Page 1 of 5 (46)					
Job Name	SLA Status	Job Status	Workflow	Due Date	
SOLibank-US_4_8_000003b.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:39 PM	
SOLibank-US_4_8_000003a.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:39 PM	
Solibank-US_1549_3098_0000038.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:36 PM	
SOLibank-US_100_200_0000039.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:36 PM	
SOLibank-US_4_8_0000037.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:35 PM	
SOLibank-US_4_8_0000034.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:35 PM	
Solibank-US_1549_3098_0000035.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:33 PM	
Solibank-US_1549_3098_0000032.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:31 PM	
SOLibank-US_100_200_000036.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:30 PM	
SOLibank-US_100_200_0000033.pdf (2)	Due Today	Processing (1 held)	CorpAir-Inspectron_OpenLoop	4/29/2024 1:42:30 PM	

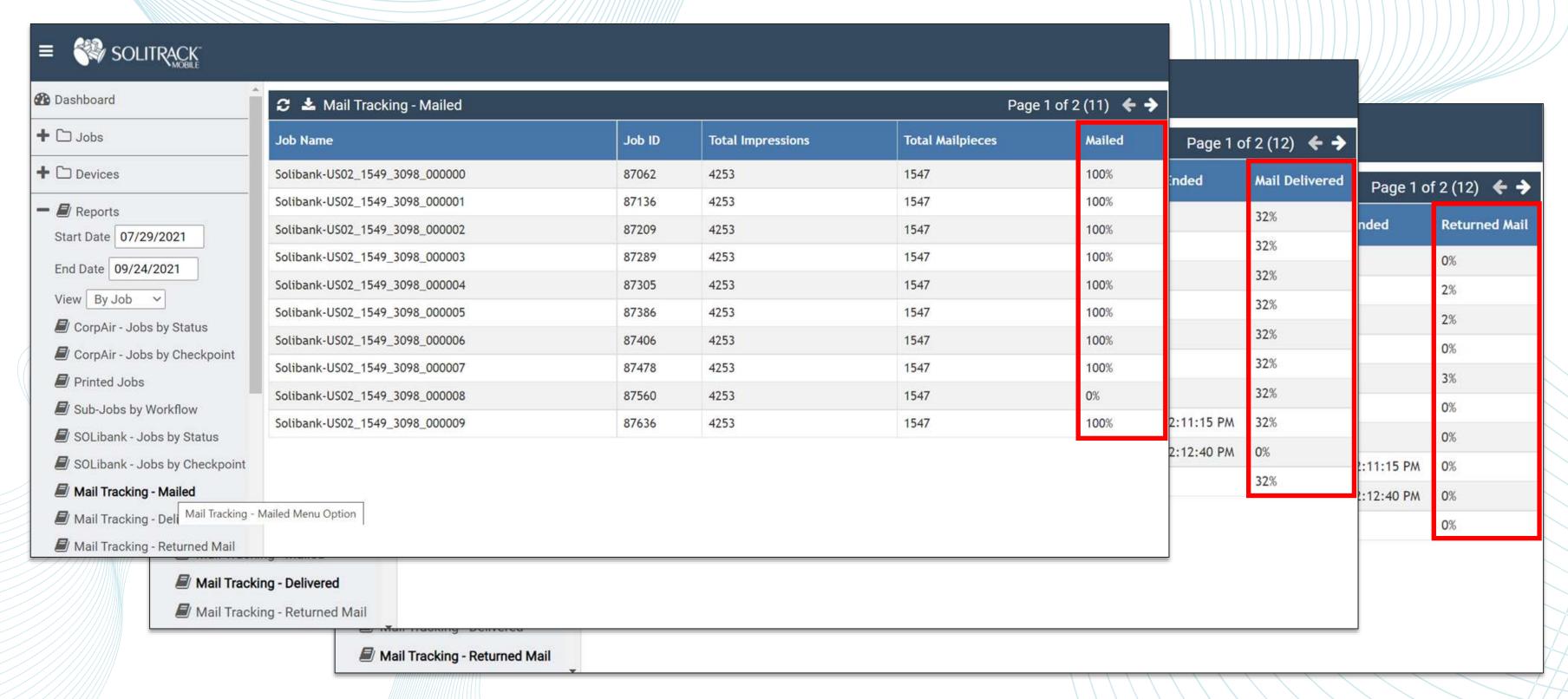


USPS Piece Level Tracking



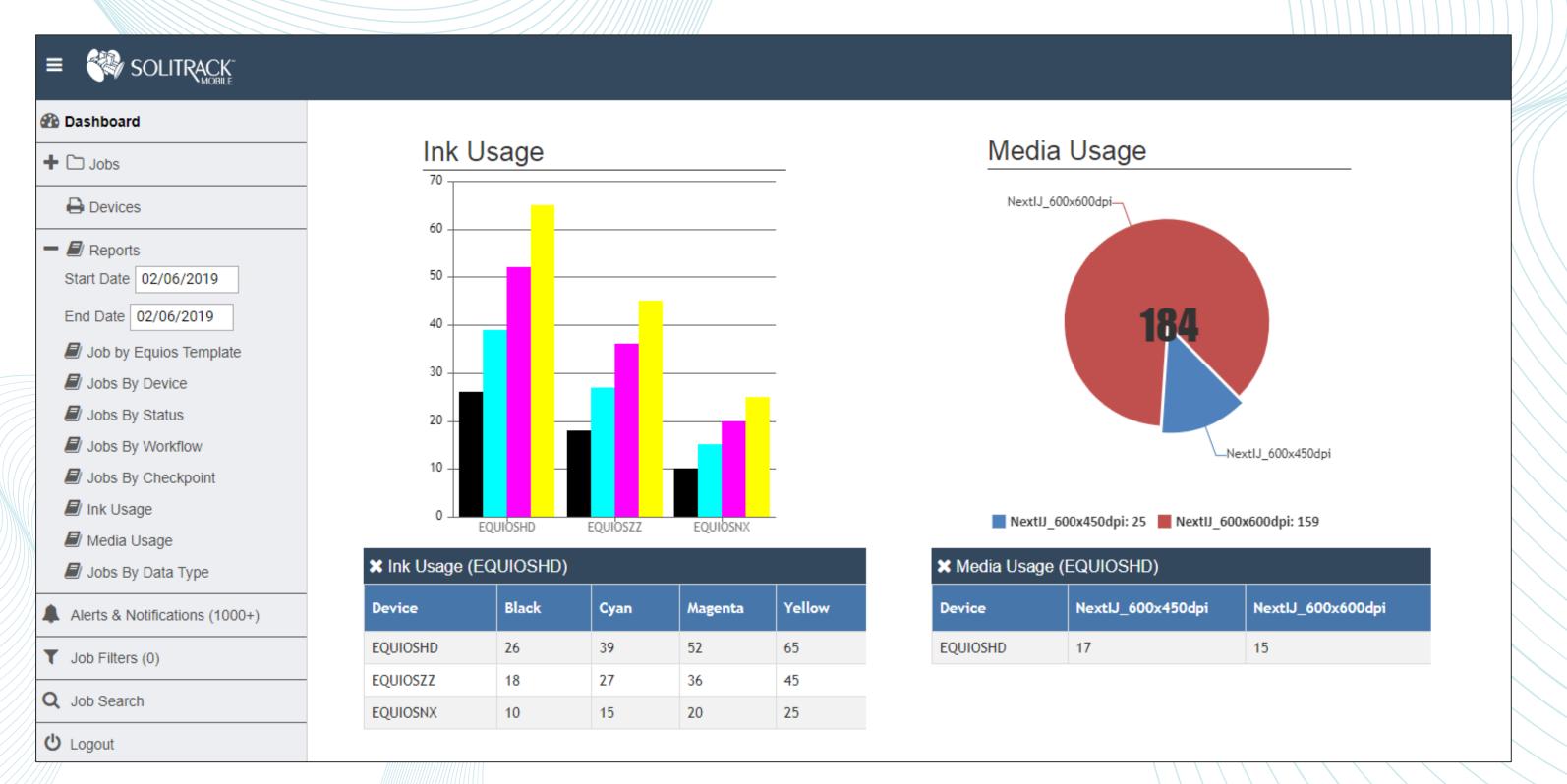


Piece Level Status Reports





Dynamic Reports & Ink/Media Usage





Self-Service Proofs & Approvals



Piece Level Tracking with USPS Integration

Workflow progression and job status are stored and updated in the SOLitrack SQL database.



AFP, IPDS, LCDS, Metacode, PCL. PDF. PostScript®. VIPP®

Print jobs are received and logged into the database to provide workflow tracking and visibility.

BATCHING





SOLITRACK UPDATE

BCC software receives

indexed CSV data to

perform address cleansing via NCOA^{LINK®}. CASS™ and

PAVE M. Updated CSV file is sent back to Rubika for

additional processing.

PAVET

NCOALINK

IPP and SNMP communication, and DF/JMF integration SOLITRACK

PRODUCTION PRINT & ARCHIVE / E=DELIVERY SOLitrack, and SPDE Queue Manager

INKJET PRESSES

POSTAL

SORT

CUT-SHEET & CF DEVICES





CAMERAS &

SCANNERS



SOLSEARCHER™

ENTERPRISE (SSE)

FINISHING & INSERTION

UPDATE

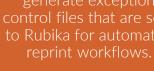
Completed print jobs





REPRINTS

Camera integrity systems, and piece-level tracking solutions generate exception control files that are sent to Rubika for automated



PIECE-LEVEL TRACKING

SOLITRACK

EXCEPTIONS

Optimizes, combines and sorts jobs

with similar characteristics into larger

batch jobs to facilitate householding.

and automation.



POSTAL CLEANSE & PRESORTING

Address information is

commingling, tracking, managing SLAs,

RUBIKA®

exported to postal software for cleansing. Updated addresses are then remported and undeliverables



CONVERSION &

OPTIMIZATION

Data streams are

optimized and





SOLIMAR® PRINT DIRECTOR™

ENTERPRISE (SPDE)

AUTOMATION & DATA INDEXING





SOLfusion automates data workflows. PDF files are indexed and jobs are sent to for additional processing.



DOCUMENT RE-ENGINEERING & REPRINTS



MAXIMIZE POSTAL SAVINGS & REDUCE COSTS

CASSTW

Rubika & SOLitrack provide additional functionality to help optimize print output, reduce mailing costs, and maximize postal savings:



Barcode & Marking



Add digital overlays and underlays Digital Commingling &



Assemble, Merge, and **Concatenate documents**



Split & Segment documents







Import & Export data

N-Up Imposition



Add digital inserts and messaging including messaging including Augmented Reality (AR) **Experiences**

Solimar JDF Job Ticketing Article & Video





Three Automation Wins with Practical JDF

JDF in practice can be a powerful tool to support automation in your print workflow. Let Solimar show you how to win with JDF in your print workflow!



SOLIMARSECRETS VIDEO

JDF: The Key to Successful Print Shop Automation

Pat McGrew, Managing Director, McGrewGroup, and Drew Sprague, President & CEO, Solimar Systems, discuss the growing importance of Job Definition Format (JDF) in the print industry.

Zero-Trust Whitepaper & Video



REQUEST TO RECEIVE
THE BUILD A ZERO-TRUST
TESTING ENVIRONMENT
WITH SOLIMAR
WHITEPAPER

WHITEPAPER

Zero-Trust Test Environment Whitepaper

Contact your Solimar team to learn more about creating a Zero-Trust Testing Environment with special licensing and functionality for obfuscation and redaction to make your testing PII-safe.



SOLIMARSECRETS VIDEO

Zero-Trust Test Environments in the Print Industry

Pat McGrew, Managing Director, McGrewGroup, and Ryan McAbee, Chief Analyst of PixelDot Consulting explore the importance of zero-trust test environments in the print industry.



Universal, Modular, Scalable, No Code, Workflow Solutions







Applications Books, Catalogs Commercial, Direct

Composition FTP/Hot Folders Mail L&P, Signage, Transactional



Preflight

Storefronts

Web2Print

Print Data Files AFP, IPDS, LCDS, Metacode, PCL, PDF, PostScript, VIPP[®]



Cache Resources Downsample Images Obfuscate Text Fields Optimize Files & Fonts Tune Color Profiles





JDF/JMF Integration



SOLSEARCHER[™] **ENTERPRISE (SSE)** Archive & eDelivery Storage Management



Automated Reprints



Preferences: Accessibility PDF/UA

Piece Level Tracking:

Proof/Reject/Approve

Track Delivery & Returns

USPS Integration



Security: Auto-Deletion Encryption Obfuscation Redaction Secure IPP

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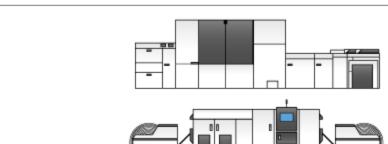


PRINT QUEUE

PDF print jobs sent to printers

Production

Print Queue(s)



Production Printers & Inkiet Presses

CENTRALIZED PRINT & MAIL

DISTRIBUTED PRINT



Office Printers & Multi-function Devices

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SOLIMAR SYSTEMS HEADQUARTERS SAN DIEGO, CA SINCE 1991

Solimar At-a-Glance

Experts in PDF Multi-channel Distribution

- Off-the-shelf configurable software
- No code / low code for rapid onboarding
- Minimal remote professional services
- JDF Integration with job ticketing & reporting
- Job & piece level tracking & management
- Live factory visibility with customizable dashboards

Steady-State Architecture

• Scalable, multi-tenant, language localization, globalized releases

Active Members & Focus:

- AFP Consortium
- CIP4 Advisory Council, XJDF standards
- PDF Standards Committee (2.0/3.0)
- Solimar University Online (SUO)
- Solimar Customer Advisory Council 40 members















Solimar Global Channel Partners



















Thank you!

I'm happy to host a web meeting to discuss specific opportunities and arrange demos or test files.





Mary Ann Rowan
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