

# A PRINT SERVICES ORGANIZATION LEVERAGES TECHNOLOGY

## Automated production through integrated API solutions

### BACKGROUND

This large, internationally distributed print services organization is one of the largest mailers in North America and produces a significant percentage of international mail. They provide a broad range of services, including document composition, electronic presentment, print, postage optimization, marketing, mailing and related services.

#### The Challenge

The company produces over 1 Billion printed and electronic documents annually. The ability to accept files in different formats from a variety of customer, and to process and output for print, electronic presentment and archiving through an automated workflow is essential to their profitability and growth.

#### The Solution

Crawford Technologies worked with this organization to evaluate their needs in relation to their current multi-site, international infrastructure, factoring in production peaks, end-to-end workflows, and system redundancy requirements, as well as their expectations of growth. They needed a solution that could be called via API and easily integrated in their ADF for use in each of their facilities and handle all possible data streams and support an unlimited number of print and finishing devices. The solution was a deployment of Crawford Technologies Operation Express transform and document re-engineering solutions in conjunction with Crawford Technologies DDA Archiving products.

#### How it Works

The service provider uses Crawford Technologies products in four main ways:

##### 1 – Preparation of documents for the production factory

One of the key reasons this organization is successful is that they electronically prepare all documents in a consistent, operationally optimized manner. Crawford Technologies Operations Express is used to automatically analyze each document type that is received. This assessment uses business rules to extract data and embed critical metadata in TLEs and no-op records into each page of every document. Downstream systems then rely on this metadata for production planning, postage optimization, production scheduling, and routing to the most cost-effective production equipment. All is determined electronically and without human intervention.

##### 2 – Electronic document viewing speed optimization

Many of this organization's customer achieve significant production and postage savings using electronic presentment from their document archive.

### At a Glance

#### CrawfordTech Products:

API implementation supporting PRO Transforms, Operations Express and PRO Dynamic Document Archiving.

#### Objective:

To be able to accept and convert multiple input formats for print output, archiving and electronic presentment.

#### Approach:

The services provider implemented Operations Express transforms and re-engineering solution in conjunction with PRO Dynamic Document Archiving. Incoming files are automatically converted to AFP and PDF, with critical data extracted and embedded as metadata to drive downstream production. Archived documents are available and converted on-the-fly to PDF for viewing on an integrated secure web portal.

#### Results:

- Image conversion technology has improved processing times by as much as 1000% reducing the need for additional hardware.
- Intelligent file compression results in file sizes 25% to 90% smaller than the original print file.
- The services provider has significantly reduced costs and increased profits.



The company uses Crawford Technologies DDA archive technology to store their customer's documents in their native print file format, usually AFO, and to then retrieve the same files on-the-fly and convert them to PDF for presentation to end customers through integration with their clients' own web sites.

### 3 – Optimized for Color Inkjet Production

With the growth of full color inkjet printing, elements such as images, logos, graphs, and other graphical content are all contained as images in the print file. This use of graphical images in the print files saves money on pre-printed forms and provides more compelling personal and relevant content on each customer's document. However, these high-resolution images are large and can increase the time it takes to convert from AFP to PDF for electronic document presentment. Working with this organization, Crawford Technologies implemented techniques that use pre-converted images resulting in significant reductions in processing times and reducing the number of servers they would need for acceptable electronic presentment response time. Taking advantage of this capability has resulted in up to 1,000% speed improvements.

### 4 – Archive Storage Minimization

One of the largest costs associated with archives is the amount of storage required to store data. Another significant consideration is the validity of the data as the true representation of data at a specific point in time.

To address storage minimization, Crawford Technologies DDA technology employs intelligent compression and indexing to archive the original print file. This technique achieves the best available compression and typically yields between 25% to 90% smaller file sizes than the original AFP print file. In one case, a 1 million-page, 20 Gigabyte print-ready file was reduced in size to 2 Gigabytes.

To address data validity, the original print file is saved in the DDA archive. This ensures that the file that generates the printed output is what has been saved. It includes valuable data such as tray selection commands, finishing commands and other data that would be required to produce that document exactly as it was originally generated and mailed. Many regulations require the production of documents such as bills, invoices, statements, and other documents as the true record of financial and relationships, making the ability to reproduce these documents in true fidelity critical.

## Results

In working with Crawford Technologies, this organization has been able to achieve its original goal of implementing a highly efficient automated production process providing significant savings for them and their customer. They have been able to reduce postage costs, achieve more with fewer resources, and decrease hardware and infrastructure expenses.

## CrawfordTech Solutions

Crawford Technologies develops software and solutions to help enterprises optimize and improve the secure and accessible delivery, storage and presentment of their customer communications.

With over 1,800 customers on six continents, Crawfordtech solutions and know-how enable the largest banks, insurers, healthcare providers, utilities and print services companies to use their existing technologies, documents and data in new ways. We help them navigate the challenges in leveraging legacy applications in the platforms and applications of the future.

CrawfordTech's products, services and domain expertise reside at the nexus of content, data, and output management and are essential components of our customers' digital transformation, output management and document accessibility strategies.