

TSG Leverages ImageCapture Suite™ SDK to Develop a Document Management Application for a Healthcare Client

SUMMARY

Technology Services Group™ (TSG) is a Chicago-based Enterprise Content Management (ECM) consulting firm. A healthcare client had requested they develop a simple but powerful document scanning application. The client was using a document management solution that it didn't find to suit its needs. They wanted to efficiently scan patient documents, such as insurance cards and driver's licenses. To expedite time to market and keep costs down, TSG adopted a Dynamsoft™ software development kit (SDK), ImageCapture Suite™, to develop the document scanning and image management module for the application. The SDK saved TSG a lot in terms of costs related to devoting staff resources. It might have taken a half a year or longer to develop the scanning module from scratch. Dynamsoft's solution instead kept it to two months – from the point of the client's request on through to planning and a final application demo. Since TSG found the scanning capabilities to be top-notch, they also implemented it into their own interface software, HPI.

THE COMPANY



technology services group

Technology Services Group (TSG) is a Chicago-based ECM consulting firm. The firm primarily works with *Fortune 500* companies to implement EMC® Documentum® or Alfresco® based ECM applications. TSG has a suite of open source products that work with ECM repositories. TSG's offerings include HPI for streamlined access to an ECM repository, Active Wizard for electronic

forms and change control, and OpenMigrate for content migration to or from an ECM repository. Founded in 1996, TSG also develops custom ECM applications.

<http://www.tsggrp.com>

THE CHALLENGE

When TSG originally began work on its OpenCapture application, it started as a proof-of-concept request from a client. The healthcare client was looking for an application they could use for simple scanning. Documents to be scanned would include insurance cards and driver's license documents for patients entering the Chicago-area clinic. The client was already using other document scanning software but, users found it to be too slow, bulky and unwieldy. The client wanted a streamlined interface for scanning documents into the system. Approximately 15 staff members from the client were involved in providing input to the TSG team to develop the application to suit their needs. They included IT management, pharmacists, business SMEs, and others. The input yielded an application that TSG has since also integrated as a scanning module into its primary interface product, HPI. For the scanning interface, TSG turned to Dynamsoft for an SDK.

The company used Dynamsoft's SDK to build its scanning capabilities. TSG's challenge was to stay focused on its core capabilities of providing ECM consulting. This was instead of devoting resources for many months to building a scanning system.

THE SOLUTION

To ensure it could remain focused, TSG researched a few image capture tools that included Captiva InputAccel and Kofax. But, when they compared them to Dynamsoft's image capture SDKs, they found Dynamsoft's SDKs to have nicer application programming interfaces (API). They also found Dynamsoft to be less on cost. In the end, the Dynamsoft SDK significantly improved time to market. The chosen Dynamsoft SDK was ImageCapture Suite.

ImageCapture Suite

Dynamsoft's ImageCapture Suite SDK provides a variety of built-in capabilities. It allows developers to write just a couple of lines of code to interact with TWAIN-based scanners and DirectShow webcams. This is instead of taking months to learn the TWAIN standard and DirectShow, and then taking many more months to develop an application with hundreds to thousands of lines of code.

The document imaging SDK enables developers to more easily create and deploy web-based document scanning applications.

This SDK provides an integrated rasterizer to convert PDF files into images and a barcode generator to add 1D/2D barcodes to images. ImageCapture Suite also provides an optical character recognition (OCR) engine. This host of features makes it ideal for users in industries requiring heavy scanning and digital document management like healthcare, finance, government and more.

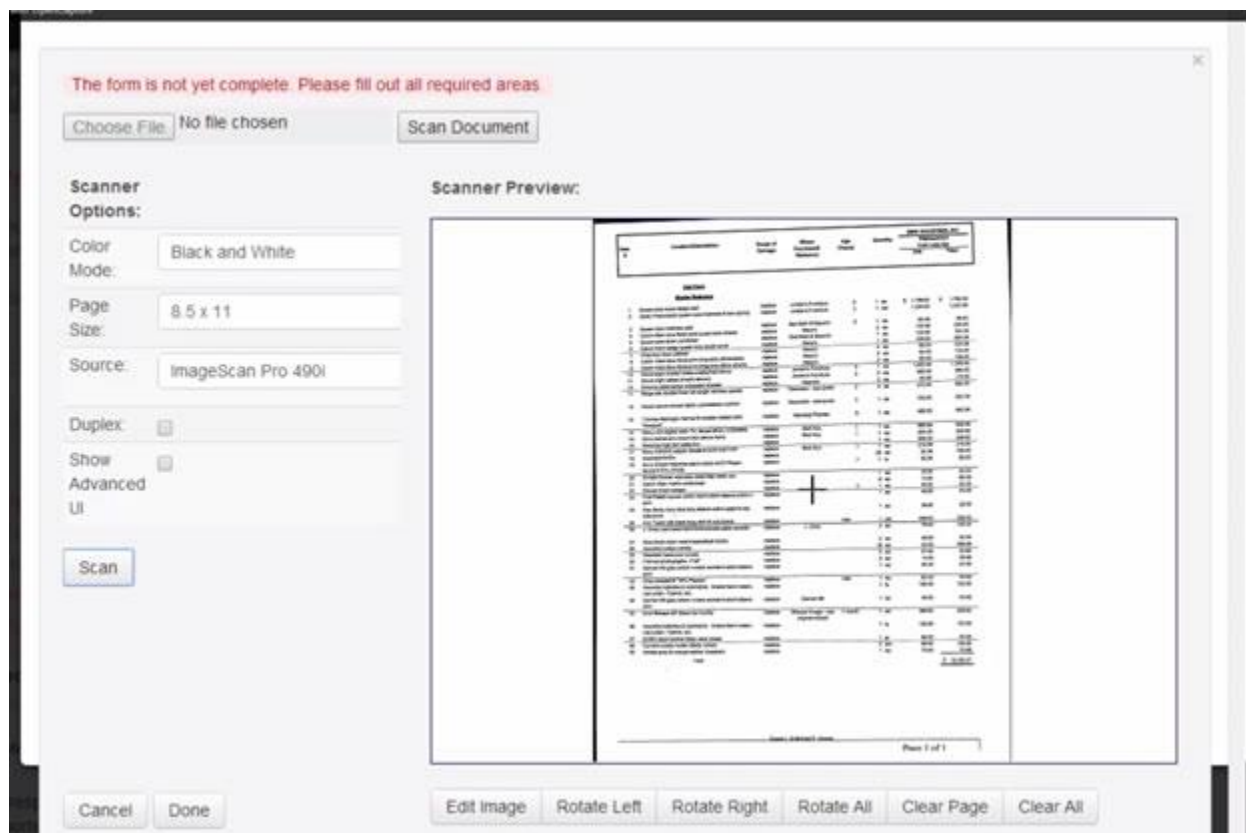
ImageCapture Suite also helps ensure application robustness and security with Sandbox security integration. The SDK enables the use of popular browsers for document scanning and management. Browsers supported include 32-bit and 64-bit Internet Explorer® (IE); Firefox®; Chrome™; Safari®; and Opera®. Devices supported include TWAIN-compatible scanners and UVC-compatible webcams. For webcams, it supports snapshot grabs from live video streams. The SDK has built-in support for image rotate, crop, zoom in/out, and more. In addition, it features multi-threaded and secure image uploading and downloading to/from a database, file system, SharePoint® and more. It also has built-in JPEG, PNG, PDF and TIFF encoders for users to compress acquired images regardless if the TWAIN source has the capability or not. ImageCapture Suite works with JavaScript® on the client side and ASP.NET (C#); PHP; JSP; ASP; VB.NET on the server side.

With these features, Dynamsoft's SDK helped TSG quickly move from proof-of-concept, through planning, and a final demonstration. TSG actually started the project with a different Dynamsoft SDK – Dynamic Web TWAIN – and migrated to ImageCapture Suite for its optical character recognition (OCR) features. Still, because of the SDK's time-saving capabilities, development time was not really affected. Completion of the application took just two months. An additional month was then taken to integrate OpenCapture into TSG's HPI software. Many months and a lot of expenses were saved in not having to code a document scanning module from scratch.

THE BENEFITS

In addition to rapidly meeting a client's needs, the company's HPI software now also has a powerful but simple-to-use scanning module. It is ideal for a myriad of document management implementations. The application and scanning module are fast, simple and web-based for added flexibility. It allows the user to control many scanning capabilities: color type (color/black and white/grayscale), resolution, duplex on/off, rotate pages, and more. The configurable scanning interface allows users to define document types and required attributes. OCR is also provided for added flexibility. Document and image storage in the ECM repository is now easy. The application

and scanning capabilities are simple and fast and allow the web-based capture of documents many organizations need.



The user steps are simple and quickly accomplished. While logged in to HPI, the user navigates to a folder where the document will be placed. Within the Add Documents folder action, the user clicks a button to initiate the scan process. The document is then scanned using all of Dynamsoft's ImageCapture Suite capabilities. The user completes the document metadata and finishes, which imports the scanned image to the ECM repository. Alternatively, the user can initiate a new scan before finalizing the import to ingest multiple documents at once.

Add Documents

Drag documents here
or
Click "Add Another Document"

X Remove Document

Select Object Type:
Claim Document ▼

Hide Properties

Name: Loss Report 02-11-2014

Claim Number: 103123

Examiner Name: Michael SCott

Claimant Name: John Smith

Policy Holder: TSG

Status: Closed

Add Another Document Cancel Submit Documents

TSG effectively leveraged Dynamsoft's SDK to enable powerful features in its HPI plus OpenCapture application. It is ideal for organizations requiring a cost-effective, flexible and powerful document scanning and management application.

HPI Search Dashboard Collections Create Wizard Form Create New Folder Heli, George Steimer Logout Admin

Trac Insurance Demo

Folder Properties:

Claim Number: 103123
 Claimant Name: John Smith
 Loss Date: 08-01-2013
 Policy Number: 121212

Actions

Folder Actions

- View Properties
- Add Documents
- Folder Notes
- Send Email
- Export Folder

Related Objects

Folder Contents

- Correspondence
- Reports

Loss Report 02-11-2014

Item #	Location/Description	Scope of Damage	Where Purchased/Reference	Age (Years)	Quantity	Item ADJUSTERS, INC.	
						Replacement Cost Less Est.	Total
1	Queen-size wood sleigh bed	replace	Jordan's Furniture	3	1 ea	1,799.00	1,799.00
2	Sealy Posturpedic queen-size mattress & box spring	replace	Jordan's Furniture	3	1 set	1,200.00	1,200.00
3	Queen-size mattress pad	replace	Bed Bath & Beyond	3	1 ea	80.00	80.00
4	Calm Khan blue floral print queen-size sheets	replace	Macy's	2	ea	100.00	200.00
5	Queen-size down comforter	replace	Bed Bath & Beyond	1	ea	150.00	150.00
6	Calm Khan beige queen-size duvet cover	replace	Macy's	1	ea	220.00	220.00
7	King-size down pillow	replace	Macy's	4	ea	80.00	320.00
8	Calm Khan blue floral print king-size pillowcases	replace	Macy's	2	ea	60.00	120.00
9	Calm Khan blue floral print king-size pillow shams	replace	Macy's	2	ea	80.00	160.00
10	Wood eight drawer dress white/black mirror	replace	Jordan's Furniture	3	1 ea	1,300.00	1,300.00
11	Wood night tables (match above)	replace	Jordan's Furniture	2	ea	420.00	840.00
12	Chrome table lamp exploded shades	replace	Home's	2	ea	85.00	170.00
13	Beige silk double lined full length window panels	replace	Decorators - see quote	3	3 ea	275.00	825.00
14	Wood bench w/rose fabric upholstered cushion	replace	Decorators - see quote	3	1 ea	100.00	300.00
15	Thomas Munkittrick framed & double matted print "The Artist"	replace	Kennedy Frames	8	1 ea	480.00	480.00
16	Sony LCD digital color TV, Model #KDL-1V32XBR2	replace	Best Buy	1	1 ea	899.99	899.99
17	Sony wall'd art mount (for above item)	replace	Best Buy	1	1 ea	200.00	200.00
18	Memorex high def cable box	replace	Best Buy	1	1 ea	308.00	308.00
19	Sony DVD player, Model # DVP-DR1000P	replace	Best Buy	1	1 ea	219.99	219.99
20	Assorted DVD's	replace		28	ea	25.00	700.00
21	Sony Dream Machine stereo deck w/CDD Player, Model # RM-127432	replace		7	1 ea	50.00	50.00
22		replace			1 ea	35.00	35.00

http://www.tsgrp.com/Open_Source/OpenCapture/open-capture.jsp



It is time-consuming and costly to develop a comprehensive image capture application. Dynamsoft's ImageCapture Suite SDK eliminated these time and cost concerns. We were efficiently able to meet our client's needs for a good document scanning application. We ended up liking it so much, we also used it for our own software offering."

George Steimer
 TSG Product Manager