



Whitepaper: Automating the work orders process for Large Home Improvement Store Chain



Integration Technology	.Net Java Linux SQL Server Unix
Industry	Retail
Enterprise Applications	RightFax
Document Flow	Outbound
SNAPS Products	Snapsflow

Executive Summary

The client is a well known home improvement store. The project involves custom orders from inside the store that depend on labor from outside contractors. The client was creating a new web application to automate the faxing of documents to outside contractors. There are thousands of contractors and the easiest way to communicate with them is by fax. Our solution allows them to send Snapsflow documents and the information about them via web services. Once the transaction is completed and approved we will bundle all of the documents and projects for the contractors and send them as one fax per contractor.

Case Study Details

The client was writing a custom Java based application that converted the hand drawn and filled out documentation of custom orders and installations from pen and paper to electronic format. The requirements of the system were:

1. It needs to be able to take entered orders and associate them with the payment information to make sure that the customers actually paid for the order.
2. It needs to give the stores time to manually change which contractor is being used for the custom installation
3. It needs to bundle multiple orders from multiple stores to send the installation vendor a single fax or email.
4. It needs to notify the store when faxes are successfully sent or if there is a transmission problem (such as a busy signal or disconnected phone number). The system will attempt to send the documents 3 times throughout the day before sending an abandonment message back to the store.

The system is scaled to handle over 10,000 orders/day. Prior to the installation of the Snapsflow solution, the individual stores were responsible for aggregating the orders and sending them to the various vendors. We used Rightfax, Snapsflow EAI with the Rightfax and XML module, and the Snapsflow XML listener to receive messages from the customer's order system. There were also some SQL Server database tables created to maintain the list of orders.

The SNAPS products used were Snapsflow with the Rightfax and XML modules. The Snapsflow XML Listener was used to receive the documents and XML information from their systems and Rightfax to send the documents to the contractors. The Snapsflow XML Listener receives a Base64 encoded PDF document as well as XML information about the vendor number and order number when the order is created and when the order is paid for. It stores the PDF in a local directory and it creates or updates the database information to keep track of the orders. Three times a day the system will request updates about the orders from the customer's UNIX system by posting to a web service. This web service will designate whether to fax, email, hold, or delete the document. The installation time was 2 weeks. This time included installing the Snapsflow test and development environment, expanding their RightFax environment, and completing all custom work and testing.

Business Need

This client was implementing a new system to automatically provide sub-contractors with project information when customers select and purchase custom home improvement projects, such as buying carpet or kitchen cabinets. The client was converting from a pen and paper system to a computer based system. They had all of the pieces in place except for a way to connect their UNIX based system to their Rightfax server. They wanted to significantly reduce the time that employees within each store needed to communicate with sub-contractors.

Benefit/ROI

The customer was able to:

1. Free up their in store associates from the burden of doing the paperwork for these projects and allowed them to spend that time assisting customers.
2. Accurately track which orders had been sent to vendors and which had issues so they could be handled more expeditiously.
3. Have all stores using a centralized and consistent process for communicating with their installation vendors.
4. They were able to expand and utilize the Snapsflow EAI tool for additional projects.
5. The ROI recovery time was approximately 6 months.