

ABC Supply: Capturing data, processing orders faster with RPA

America's leading supplier of exterior building products fully automates order processing, improves efficiency with Papyrus

Business Results

- High gains through 98 percent automation
- Substantially reduced order processing time
- End-to-end handling in less than 30 seconds
- Eliminated manual data entry, improved accuracy
- Business performs supervised training of the machine

The Company

ABC Supply Co., Inc. is the largest wholesale distributor of roofing in the United States and one of the nation's largest distributors of siding, windows and other building products. Since its start in 1982, ABC Supply has followed a clear product and service strategy, ensuring that contractors have the products they need, when and where they need them.

The Challenge

ABC Supply has a feature-rich e-commerce website with an online product order form, but many customers still place orders via fax or email. The specifics of these orders might be very loose and require an intelligent solution to capture data from structured documents in an automated way.

The company needed an AI-driven solution to automate processing of all orders coming through channels other than the website that could master various tasks, such as assembly of extracted order items vs. shipping location. All data extracted from faxes, email attachments, as well as SMS text messages and photos, needed to be routed to ABC branch managers across the country as fast as possible to process orders and initiate conversations with customers.

The Solution

The Papyrus Software capture solution allows ABC Supply to process fax and email orders faster with nearly 100% automation. Using a factory-like capture operation with various document processing modules, the solutions enables a flexible workflow for handling inbound documents. It connects to all inbound channels and can be configured to perform the entire order fulfillment process or pick specific steps depending on the scenario.

The solution imports orders from Microsoft Exchange via Papyrus Adapter Email/IMAP and classifies orders into different document types according to rules. The system can flexibly recognize the content, lift the data from incoming documents and automatically validate the extracted data based on different sources of information and business rules.

The classification runs to up to 94% automatically and extraction is up to 98% automated and exceptions delivered into the manual workplace for correction and completion.

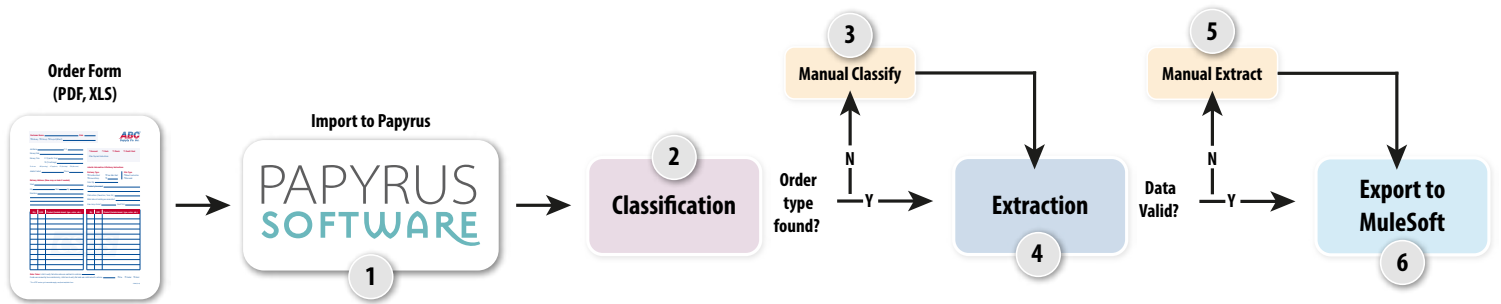


Functional Requirements

- Ability to ingest 'low-tech' orders sent via inbound channels like fax, email, etc.
- Handling different types of email attachments
- Using Papyrus Business Designer for non-technical users to create extract design and train the system
- High levels of automation: up to ~94% in the classification step, and up to ~98% in extraction
- Automated distribution to branch managers across the country to process the orders
- Integration with MS Exchange, MuleSoft, user management

Papyrus Products at ABC Supply

- Papyrus WebRepository
- Papyrus Business Designer
- Papyrus Adapter/Rest
- Papyrus Recognition Server
- Papyrus Designer/Capture
- Papyrus Client/Capture
- Papyrus Adapter/POP3/MAPI/IMAP
- Papyrus Office-In
- Papyrus PDF-In
- Papyrus Client



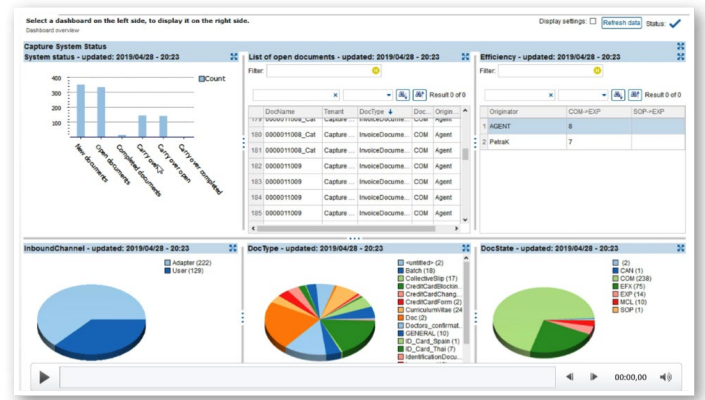
Inbound Capture in Action

The capture solution for ABC Supply started by implementing these use cases:

- Receiving an incoming email with attached PDF, generating a digital form and submitting the data along with the original PDF to the ABC Supply's MuleSoft endpoint as a fully automated process with no intervention.
- Receiving an incoming email with attached XLS, generating a digital form and submitting the data along with the original PDF to the MuleSoft endpoint as a fully automated process with no intervention.
- Receiving an incoming email with image attachment that has been print out or free formed, and scribbled on, then take a picture of it, and generate a digital form and submit the data along with the original PDF to the MuleSoft endpoint as a fully automated process with no intervention.
- Receiving an incoming email with unformatted data text, using Papyrus Business Designer to create extract design template, manage through Adaptive Case Management (ACM), and learn process, fix, and pass on. The system should learn, recognize and move on without human intervention.

With the **Papyrus Business Designer**, business users perform supervised training supported by pattern recognition to extract everything they need for their business processes without involving the IT department. They train for new data field extractions and perform re-training to improve the capture results. The system automatically learns and includes new fields in the data extraction of further jobs.

Automated routing of communication is determined based on freely-definable rules and configured according to ABC Supply requirements. The solution provides full internal control and auditing of what documents entered the process, where did they go, what happened, how long it took to process the orders, etc.



Fully Integrated Monitoring

Papyrus provides a monitoring API (Restful JSON Service) that provides real-life data about the general system health as well as workflows and tasks. This API is integrated into the overall infrastructure and enables seamless integration to Service Now (for tickets) as well as other notification channels, such as emails.

High Availability Assures Dependency

Process failure due to hardware or process problems can be prevented by applying one of the available hot backup strategies or a combination of them to production-critical nodes. This strategy enables a setup where the central system node as well as server nodes are available permanently, with process instances distributed over different machines.

ABC Supply processes about 5,000 orders per month with nearly full automation on Papyrus Software's inbound capture solution.

Snapshot

- **Organization:** ABC Supply
- **Business Challenge:** Automated Order Processing
- **Goals:** Gathering of orders sent by fax, email, and other input channels
- **Integration:** Import documents from MS Exchange mailbox through Adapter/ IMAP. Export documents and extracted data to Mulesoft through Adapter Rest/JSON API.
- **Solution:** Papyrus Capture, Adaptive Case Management ACM

