



Target Integration with IFS via Ariba API

Streamlining Purchase Order Management through Intelligent API
Automation

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Table of Contents

Contents

Executive Summary	3
Background / Challenge	4
Solution / Approach	5
Flow Chart.....	6
Results / Metrics	7
Lessons Learned / Best Practices	8
About ESS.....	9

Executive Summary

This case study explores the transition of the Purchase Order integration process from the legacy Baan ERP system to the IFS ERP system via API. The primary goal was to ensure accurate order tracking, efficient communication, and seamless acknowledgment delivery from IFS to Target through the Ariba API.

While purchase orders are received automatically, the system still relies on manual order creation in IFS based on automated email notifications, ensuring necessary human oversight. Subsequent steps—such as order confirmation, generation of acknowledgments (Order and Shipping), and status tracking—are managed automatically through API integrations.

This approach enhances visibility into the purchase order lifecycle, improves accuracy, and provides a scalable framework for future business expansion.

Background / Challenge

The primary objective was to migrate the purchase order integration process from the Baan ERP system to IFS, establishing a more robust, automated, and secure workflow.

A major challenge was managing orders halted during processing due to validation issues known as “**Stop Reasons.**” These stoppages occur when shipment information or related details are missing or inconsistent.

Key scenarios leading to order stoppages included:

1. **Line Items with Different Ship-To Addresses:** Required additional validation to prevent misrouting.
2. **Missing Ship Tracking Numbers:** Essential for logistics and tracking; without them, orders could not progress.
3. **Missing Ship Via Codes:** Without a defined transportation carrier (e.g., FedEx, UPS), shipment assignment was impossible.

Additional integration challenges:

- **Data Formats:** Mismatches between JSON and XML structures caused transfer errors.
- **Field Mapping:** Differences in data structure and naming conventions between systems.
- **Data Security:** Ensuring protection of sensitive order data during transmission.
- **Failure Recovery:** Managing API timeouts and ensuring no data loss or duplication.
- **Scalability:** Designing the solution to accommodate future transaction volumes.

Solution / Approach

The solution introduced a structured integration workflow using APIs to bridge the external systems (Target/Ariba) and IFS.

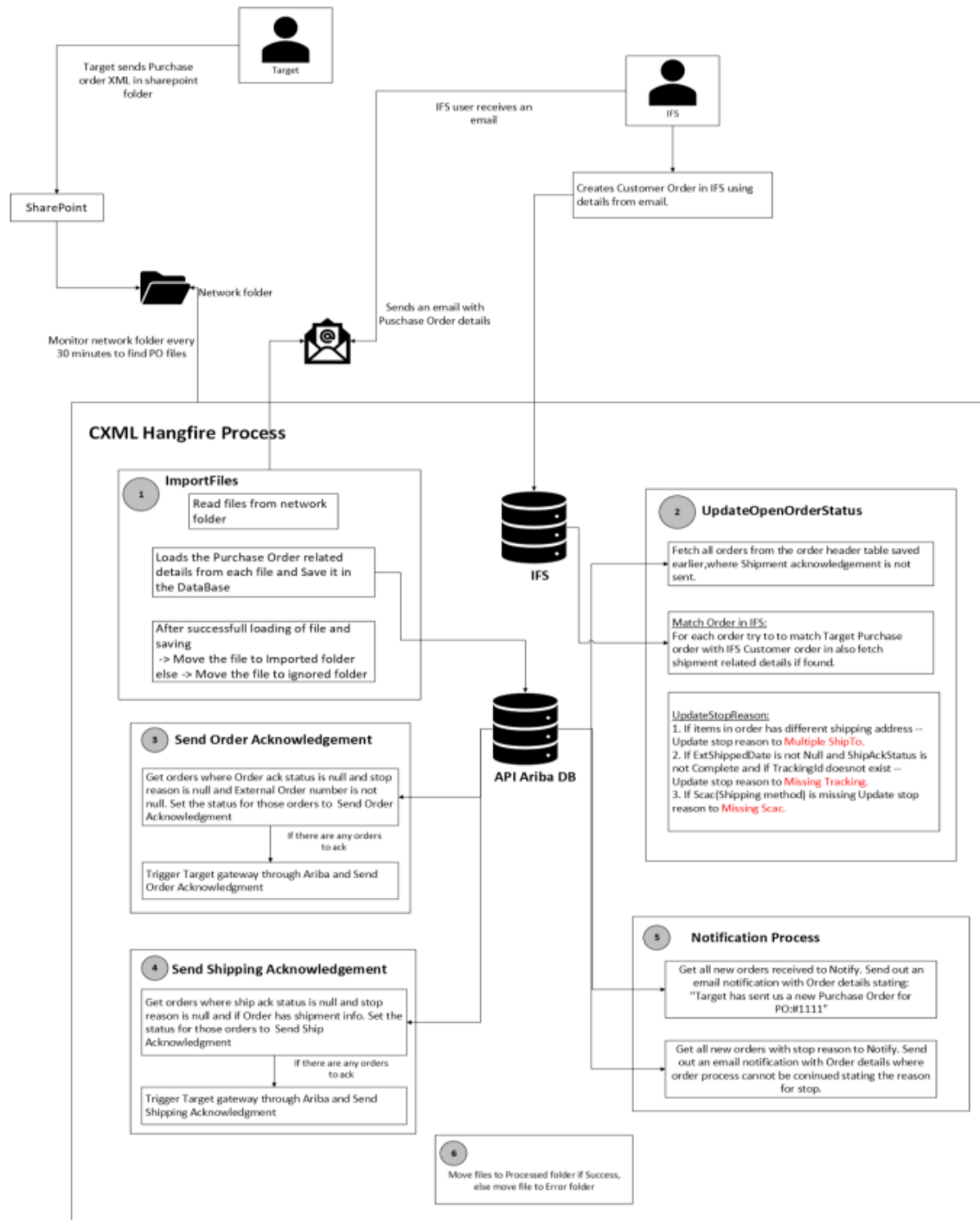
Integration Workflow Steps:

- 1. Receive Purchase Order from Target:**
Target drops POs into a designated network folder. The API monitors this folder and detects new POs, triggering automated email notifications to the team with key PO details.
- 2. Manual Order Creation in IFS:**
The designated team uses details from the notification email to manually create the purchase order in IFS, ensuring human verification and oversight.
- 3. Order Details Extraction from IFS:**
Once the order is entered in IFS, the API validates and retrieves order information for further processing.
- 4. Order Acknowledgment:**
Upon confirmation, the API generates and sends acknowledgment messages to Target via the Ariba API, confirming the order's processing status.
- 5. Shipping Acknowledgment:**
When shipment details are available, the API validates and sends shipping acknowledgments to Target through the Ariba API, providing real-time shipment tracking.

Order Shipment Validation and Error Handling:

- Automated email notifications alert the team whenever "Stop Reasons" are triggered, halting processing until resolved.
- Alerts also notify users of failures during data mapping or API communication.
- Retry mechanisms and failover strategies ensure reliability and system resilience.

Flow Chart



Results / Metrics

The integration delivered measurable improvements in efficiency, accuracy, and communication:

- **Enhanced Communication:** Automated notifications and acknowledgments reduced delays and ensured timely updates.
- **Accuracy and Reliability:** API-based validation ensured alignment between manual entries and system records.
- **Scalable Integration:** Architecture supports future expansion for additional document types and workflows.
- **Real-Time Tracking:** Provided visibility into the full PO lifecycle with automated status updates.

Lessons Learned / Best Practices

Key takeaways from the implementation include:

- **API Optimization:** Streamlined issue resolution processes minimized operational delays.
- **Data Validation:** Continuous validation ensured seamless synchronization between Target, Ariba, and IFS.
- **Automation Preparedness:** Introducing partial automation before full API-based creation ensured smoother adoption.

Future Plans:

- Integration with Electronic Data Interchange (EDI) tools to enhance communication with suppliers.
- Real-time updates for purchase orders and shipment details between IFS and third-party systems.
- Full automation of purchase order creation in IFS via API to further reduce manual effort and errors.

About ESS

Enterprise Software Solutions Inc. (ESS) is a premier enterprise resource management (ERP) implementation and support company, recognized for delivering successful projects across **manufacturing, distribution, and service** verticals for over **15 years**.

As a dedicated **IFS Gold Partner**, ESS specializes in comprehensive ERP implementation and migration services across **manufacturing, construction, and service** sectors.

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ESS offers complete, end-to-end ERP services, including:

- Full-cycle ERP implementation — from IFS Cloud licensing and customization to deployment support across service, manufacturing, and finance modules.
- Post-implementation support and managed services.
- Seamless third-party integration using APIs and middleware.
- Robust data migration and transformation solutions.

With **over 50 years of combined team experience**, ESS has successfully implemented and customized ERP systems for industries including **service, engineering, manufacturing, and distribution**. ESS also has deep expertise in **Epicor P21 ERP** implementation.

Technical Proficiency

ESS is widely known for its ability to:

- Bridge legacy and modern ERP platforms — synchronizing systems like IFS and Baan.
- Leverage deep technical knowledge in **RESTful APIs** and **IFS customization**.
- Develop proprietary extensions around **Microsoft, SAP, BAAN**, and **IFS** technologies.
- Enable **predictive maintenance** through IFS ERP implementations.

Mission and Focus

ESS's mission is to reduce client risk by ensuring **flawless, on-time delivery** through proven experience, technical innovation, and proprietary extensions.

We help organizations overcome challenges such as:

- Growth bottlenecks and scalability limitations.
- Risks from end-of-life or unsupported legacy systems.
- Manual, error-prone customer integrations.
- Rising operational costs from outdated technologies.

By combining strong industry expertise with modern ERP innovation, **ESS ensures every client's investment delivers a long-term strategic advantage**.

Global Presence

ESS operates globally, with offices located in **Kansas (USA)** and **Hyderabad (India)**.