

# SAP® Certified

## Integration with SAP NetWeaver®



## SHIPPING

### Overview

This company has been supplying customers with high quality fuels, oil, chemical and lubricant products for every application since 1985 and has become one of the largest petroleum marketers in the nation, with annual revenues exceeding \$1 billion. They also have a nationally recognized Emergency Fueling Response Division; a Fluids Purification & System Decontamination Unit; an Oil & Water Removal and Reclaiming Section; and a proprietary delivery fleet. They are also a supplier of Diesel Exhaust Fluids (DEF).

### The Challenge

In the customer's business process, due to the many variations in the bill of materials for any given shipping order, many accessory items are not stored as inventory. Rather, they are ordered on a purchase order for pickup by a driver when a shipping order calls for those parts. When the pickup driver arrives with the parts, the goods receipt posting needs to be committed as soon as possible such that the items can be loaded / issued for shipment. Currently, the goods receipt transaction is done manually using paper documents. The delay in posting this transaction leads to delays in shipping. The customer needed the ability to post this transaction as the driver arrives, so that the parts may be loaded for shipping immediately.

In the customer's current business process, the customer references Sales Order or Stock Transfer Order (STO) in the shop floor when picking parts for delivery. After users pick the parts, the document is returned to another user in the office, who manually posts the goods issue for the picked items. Goods issue posting for sales orders and Stock Transfer Orders in SAP requires creating an outbound delivery document for the material and quantity, then committing the Post Goods Issue (PGI) on the outbound delivery document. If the wrong part is pulled, or wrong quantity is pulled (e.g. an over shipment), the whole process to reverse this transaction is rather cumbersome, as the reversal process must refer to the Outbound Delivery Document number, rather than the original STO or SO. Moreover, communicating the part discrepancy back to the shop floor is time consuming and awkward.



The customer wanted to automate the entire process through the use of bar codes and mobile computers in order to remove errors and to reduce time spent shipping and correcting errors in shipping orders. Additionally, the customer wanted to streamline and simplify the steps required by the users in order to ship orders.

## **The Solution**

The *NLINK® ADC to SAP Solution* was installed on a central server running Windows Server 2003 and a set of customized SAP data collection transactions were delivered. Concurrently, Junot's hardware partner installed a wireless network and provided all the required bar coding hardware along with the necessary user training.

### **Hand-Held Devices**

Motorola Symbol MC9090s

#### **Problem No 1:**

**Need Real-Time inventory receipt posting for Purchase Order Items.**

#### **Solution No 1:**

The MB01-101 (Satellite Replenishment) interface gives the users the ability to post the Goods Receipt transaction from a hand held unit; thus, allowing the users to immediately post the received items into the system for the shipment order when the driver arrives. The interface is design to simplify the goods receipt process, prompting the user only for the minimum required information (purchase order number, material number & quantity). The detailed order information is displayed for the users to validate.

#### **Problem No 2:**

**Customer needed to simplify Goods Issue postings for Sales Orders / Stock Transport Orders.**

**Customer needed to simplify the process of updating quantities posted for Sales Orders.**

#### **Solution No 2:**

The VL01N/VL02N transaction for STO and for the Sales Order interfaces simplifies this process by giving the users on the shop floor the ability to post a goods issue without concern for the SAP-required intermediate step of having an Outbound Delivery Document. Users are prompted to enter only the minimum required information available to them (Sales Order / STO, material, quantity). The specific order details are displayed on the hand held unit for users to validate the picked items before they post to SAP. Since users are picking and posting directly against the Sales Order / STO, materials that are not on the Sales Order / STO cannot be picked (validated by the interface); thus, eliminating the possibility of picking the wrong parts. Outstanding quantities to fulfill the order are also displayed; thus, reducing the probability of picking more quantities than required for the order. For posting, all the SAP required transactions for PGI are committed in the background by the interface.

Additional features of the delivered interfaces included:

- Automatically looks for active Outbound Delivery Document for any given Sales Order / STO. If an active outbound delivery document exists, all postings will be made to that document. If an active outbound delivery document does not exist, the interface will create a new document with the scanned data, and post against the new document.



- For postings where an active outbound delivery document already exists, the interface will update the outbound delivery document with scanned data (if scanned data is different from document data) before posting the PGI.
- Validates scanned material against sales order / STO OR Active Outbound Delivery Document to ensure users are picking only the items that are on the order.
- Automatically looks-up past shipments and calculates outstanding quantity remaining for the order item, giving users a visual indication of the quantity remaining to satisfy the order.
- Automatically looks-up SAP material ID based on scanned UPC Code where applicable.

## Benefits

Although this customer is physically located just a few miles from Junot's corporate offices in Houston, Texas, all work was performed remotely, and Junot Systems' personnel did not ever need to visit the customer site, keeping their costs down and boosting efficiency.

The delivered solution was able to replace an inefficient, error-prone and time consuming manual process that had grown increasingly unwieldy and frustrating to the warehouse personnel. Automation and streamlining of the business process has yielded significant real world cost savings that have yet to be fully quantified.

### **About Junot Systems**

Junot Systems, Inc. is a specialist provider of SAP integration solutions for the manufacturing and process industries. Headquartered in Houston, Texas, Junot Systems, Inc. has deployed and supported its NLINK product suite for over 20 years in a variety of vertical markets, both in the US and overseas.

### **About Junot Systems' Solutions**

NLINK® is a configuration-based product suite that installs in minutes and requires absolutely no custom coding to be deployed. NLINK's patented and SAP Certified Interfaces work with any version of SAP and require no additional SAP components to be purchased or installed into the SAP landscape.

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