



MINDBill®

Billing and Customer Care Solution

Point of Sale

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Executive Overview

MIND is a leading provider of innovative, real-time billing & customer care, mediation and provisioning solutions, dedicating its efforts to drive telecom service providers towards their realization of these goals. MIND's strength derives from its proven expertise in releasing award-winning products, a commitment to building high quality solutions for its customers, constant innovation and the ability to track the latest market trends and keep ahead of industry changes. MINDBill, MIND's convergent end-to-end billing and customer care solution, facilitates voice, data, video, and content services for both prepaid and postpaid subscribers. MIND offers service providers an integrated Point-of-Sale application, which ensures the flexibility, scalability, and reliability they need to increase customer satisfaction, reduce time to market and operational expenses, and keep up with the often-changing market conditions.

The POS Solution is aimed to both wireless and wire line retail market, enabling operators to offer their prepaid and postpaid products and services (CDMA, GSM, ADSL, Wire line, VOIP etc) in retail stores and manage the process within our enhanced solutions.

The system also comes together with an end-to-end dealer solution, which includes a complete wholesale interface used to allow mediating all the wholesale, and wholesale return flows between the service provider and its dealers, along with a dealer retail interface for subscriber sales.

POS is fully integrated into the MIND Billing and Customer Care solutions, allowing operators to offer seamlessly services, handsets/service enabling devices (models, data cards etc) and accessories for new and existing customers and even to non-subscribers. It also integrates with external systems such as the credit card clearinghouse, the external taxation engine and the address validation.

The MIND POS system is fully compatible with the OPOS standard, working smoothly with various hardware components such as: bar code reader, magnetic swipe reader, electronic signature pad/key pad, ribbon printer, label printer cash drawer etc.

There are three main POS modules working together: the Resource Management Module, the Sales Module (including a dealer retail sale solution) and the POS Supervisor Module.

Architecture Highlights

The MIND POS Multi-layered infrastructure is supported by a modular software architecture enabling real-time distribution processing, achieving performance, scalability and high availability.

The POS system uses an open architecture including the latest software paradigms – Service Oriented Architecture (SOA) and Document Oriented Architecture (DOA) - thus enabling the fast and seamless integration with other systems and third-party applications.

MIND POS is built using standardized best-of-breed object-oriented technologies such as Java and XML, and is also J2EE compatible, as it is powered by a commercial Application Server.

The POS solution is scalable to an unlimited number of Point-of-Sale terminal devices to be operated simultaneously.

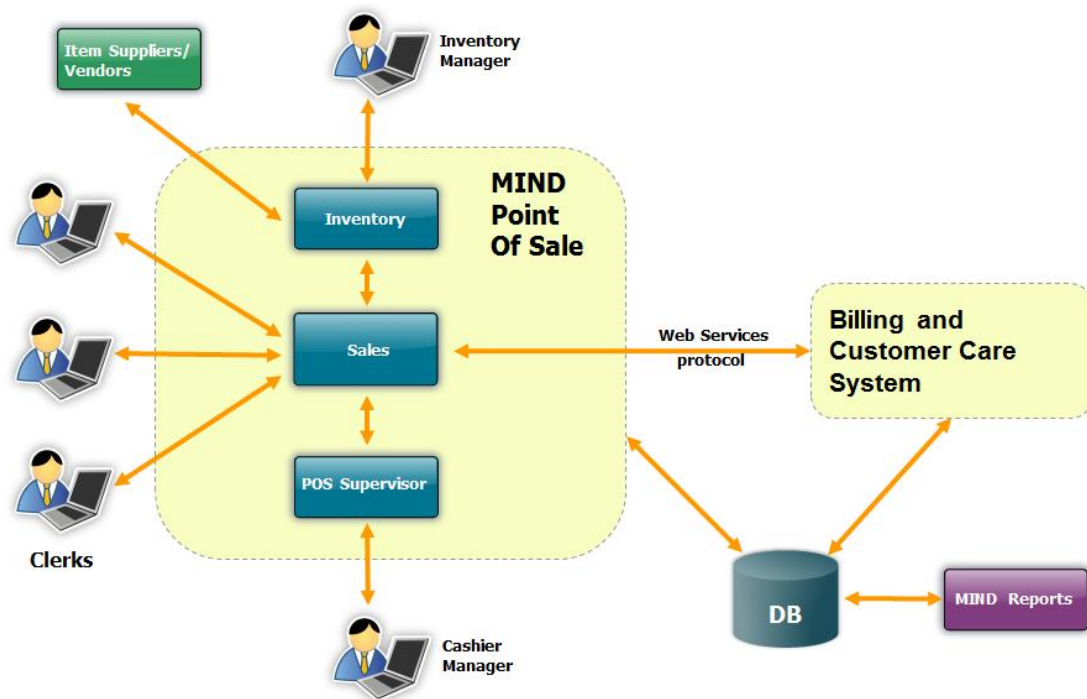


Figure 1: MIND POS System Architecture

Product Components

The Sales Module

The Sales module is an easy to use POS station that supports service activations, as well as handset/modems and accessories sales through one interface, on a single receipt/invoice.

It supports several payment methods, such as Cash, Check, Credit Card, Bill-to-account (for postpaid subscribers; with or without installment plan) etc. It provides full control of the cashier devices such as Cash Drawer, Credit Card swipe, Electronic Signature Pad/Key Pad, Bar Code reader and Ribbon printer.

The application interacts with the Resource Management module to show the sales clerk the items available for sale in the store warehouse, to assign sold items to customer accounts, and to enable flows such as returns and replacements.

POS – Retail Sale Flows

There are four major sale flows provided by the POS sale application:

- Sales to **new customers** (which also implies the collection of account information through the POS application);
- Sales to **existing customers**;

- Sales to **walk-in customers** (only non-service related items can be sold to these non-subscribers).
- **Payment collection** for dealer wholesales.

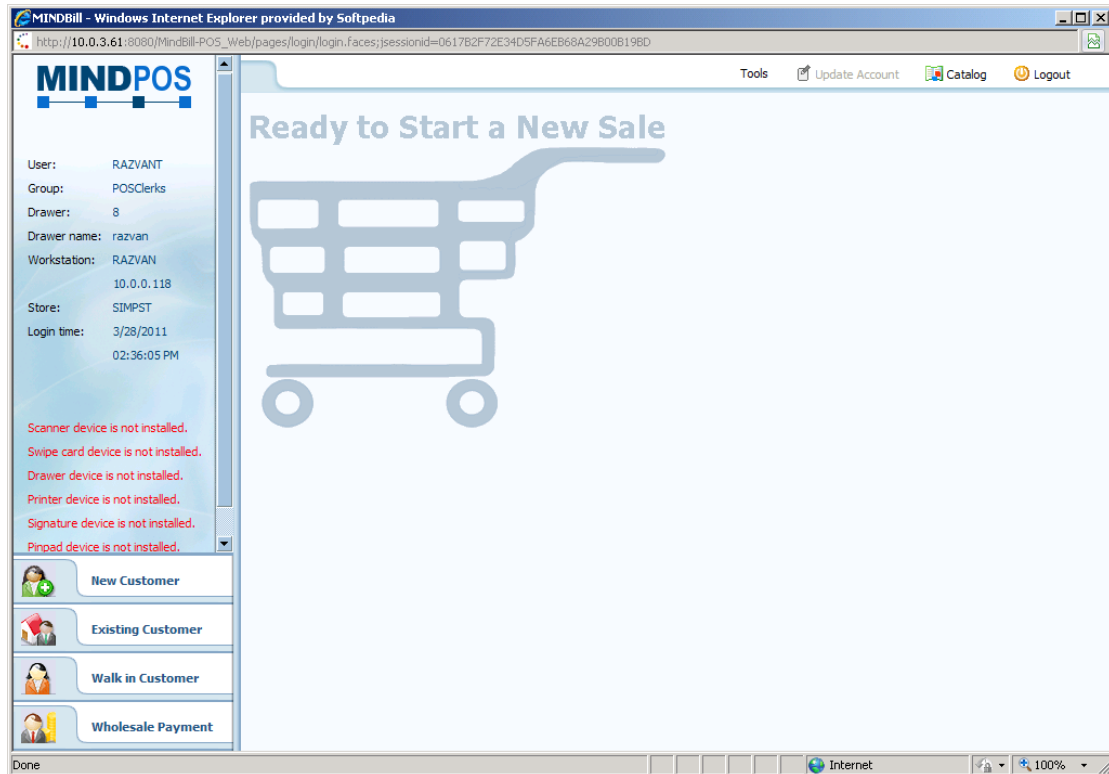


Figure 2: POS Sale Pivot

One of the main advantages of the POS system is the simplicity of the sale flows. Below is an example that describes a retail sale, step by step.

First, the main flow must be selected (new customer / existing customer / walk-in customer/ wholesale payment for dealer). Then, the sales clerk picks an item type, fills in the details and adds it to the cart. The action can be repeated as many times as needed (integration with the POS bar code reader device in order to scan the item faster). Note that the POS system allows managing and selling promotional packages, which are bundles of items including services and special discounts.

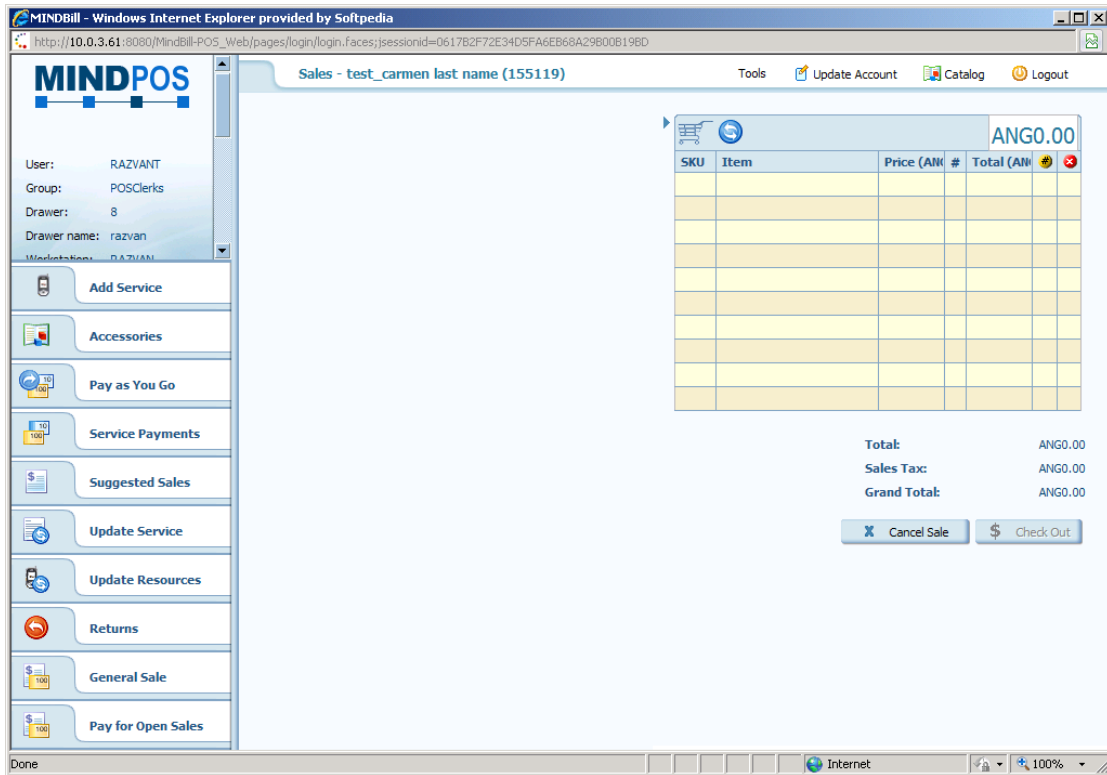


Figure 3: POS - Existing Customer Sale Pivot

The sale is checked out when all the items have been added to the cart. The payments for the cart are collected after checkout (integration with the POS drawer device). POS supports collecting payments in multiple currencies. For postpaid sales, the POS system allows the bill-to-account function, meaning that the customer can choose to fully or partially pay a fraction of this sale total in the next bill or with installments.

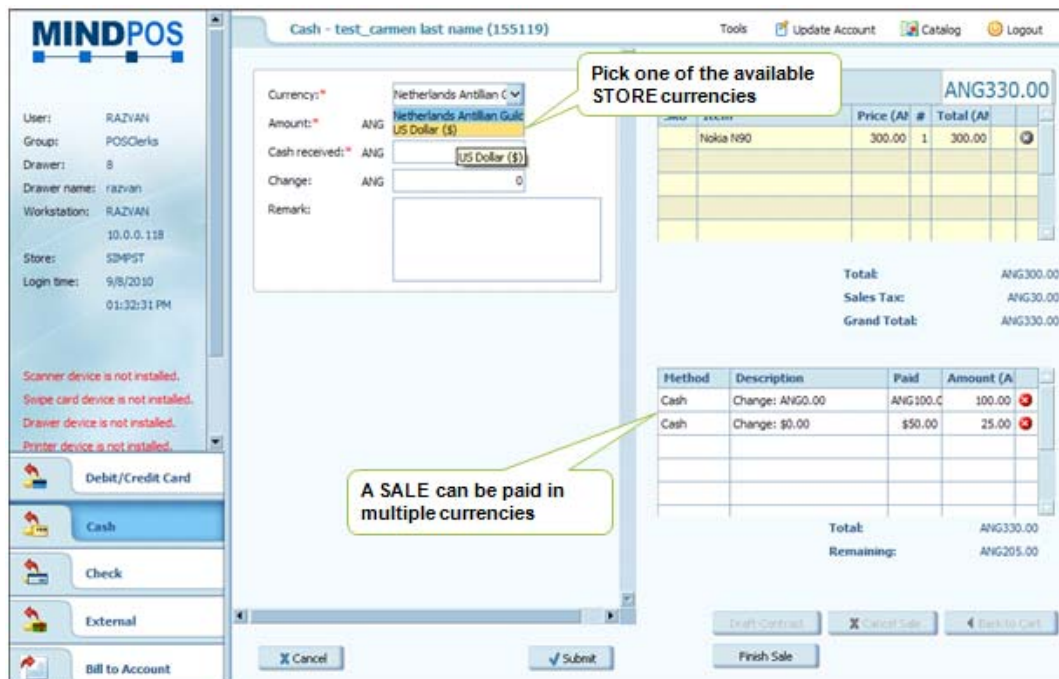


Figure 4: POS Checkout – Cash Payment

In case of a postpaid sale, the POS system generates CONTRACTS (a paper including a new line of service details, terms and conditions, contract length etc.) in order to be signed by the subscriber.

The sale is completed by printing the sale receipt (integration with the POS ribbon printer device).

Daily Store Activities

At the beginning of the working day and on each working shift change, the store supervisor should mediate a "drawer assignation" process where the clerks are assigned to a specific working station / drawer.

After the drawer is set up, the clerk can start the regular sale process that includes: registering new customers, selling items together with services to new or existing customers, making walk-in sales.

One common activity is also accepting payments for the monthly fee (for the pay in advance business), prepaid bucket replenishments (top-up payments) or invoice payments (for postpaid customers).

The POS sale application is empowered with a comprehensive return/replacement mechanism that supports the following features: return in cooling period, replacements in warranty conditions, insurance plans, loaner repairs etc

At the end of the day or at the end of the working shift, the drawer is passing through a comprehensive and elaborated "drawer closure" process, where the money is reconciled, next day bags are prepared, money is transferred into deposits and several monetary reports are printed in order to be signed by both the clerk and the supervisor.

At any time of the day, the store supervisor can monitor the store activity by issuing various transaction reports or even by remotely logging to a specific working station. All these activities are mediated by a comprehensive Cashier Management application.

POS – Retail Return & Replacement Flows

The POS system is empowered with a comprehensive return & replacement mechanism.

The system supports configuring a cooling period (such as 3 days or even 10 minutes) during which the customer will benefit from a full return of the sale with a full money refund. This is the only scenario where services are also accepted to be returned and refunded.

After the cooling period ends, the system accepts only item (handsets / accessories) returns. It is possible to configure various restocking fees to be applied to these standard return flows.

The system supports making handset replacements under warranty conditions or by subscribing to an insurance plan or loaner repair flows

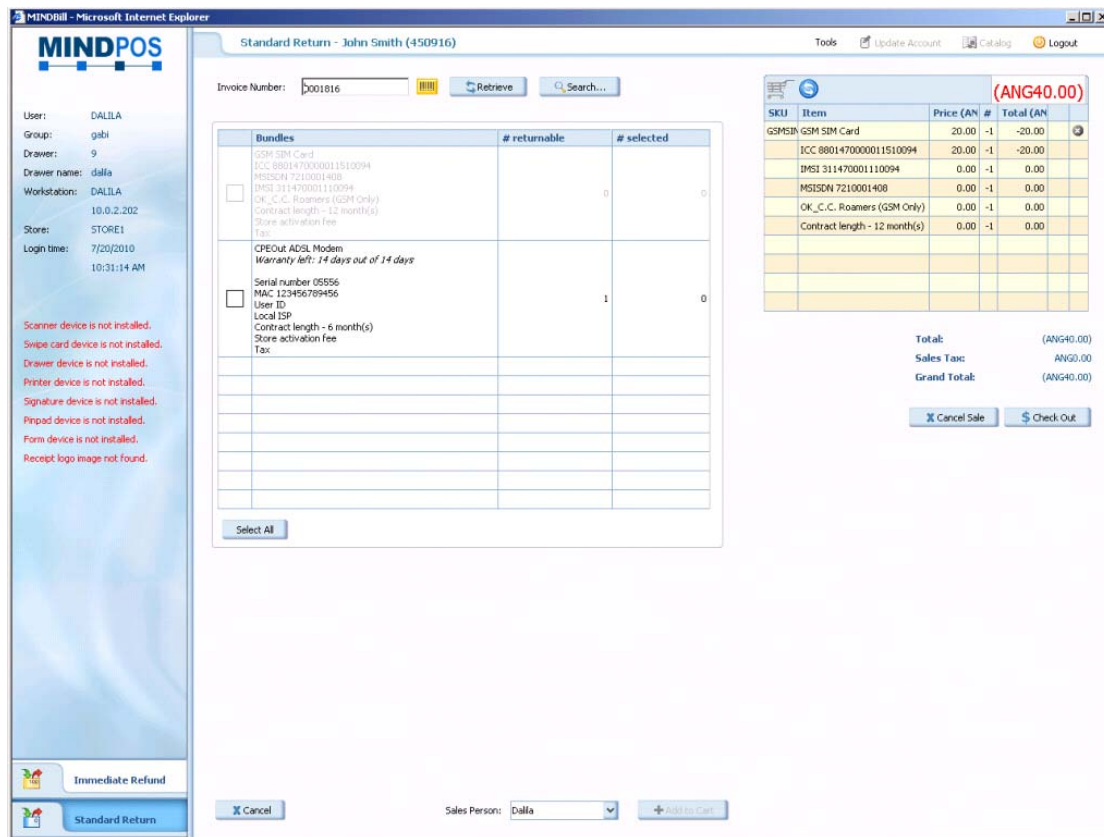


Figure 5: POS Standard Return

The Resource Management Module

The Resource Management module is a comprehensive inventory system that supports the warehouse chain of the operator and their stores. It automates the management and tracking of the equipment sold to subscribers.

The solution keeps track and manages the equipment by serial number, status, and location, providing the flow management from the purchase order through the reception of the items shipment, distributing the items to the stores and the allocation of the items to the customers.

Inventory Manager Activities

The inventory manager can view and manage its own store inventory or can update the inventory catalog by adding new items, updating the prices etc.

One common inventory activity is to perform transfers from one warehouse to another or even between stores.

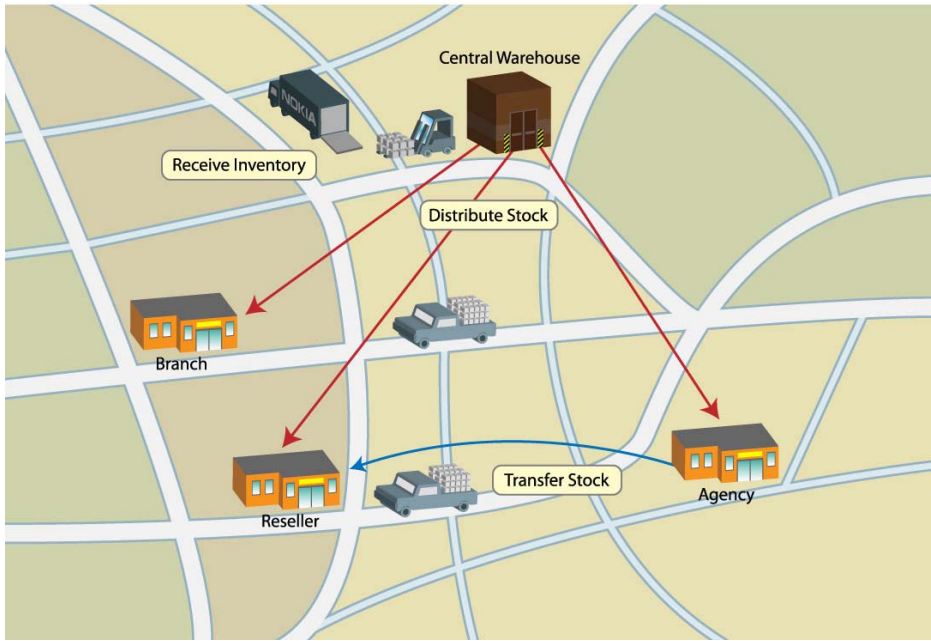


Figure 6: Inventory transfer between locations

When the stock levels drop below a certain threshold, the inventory manager can issue item purchase orders towards an item supplier. The resource management module is empowered with a comprehensive flow mechanism that mediates the full process from the purchase order agreement creation, up to the moment when the physical items are received into the store’s warehouses.

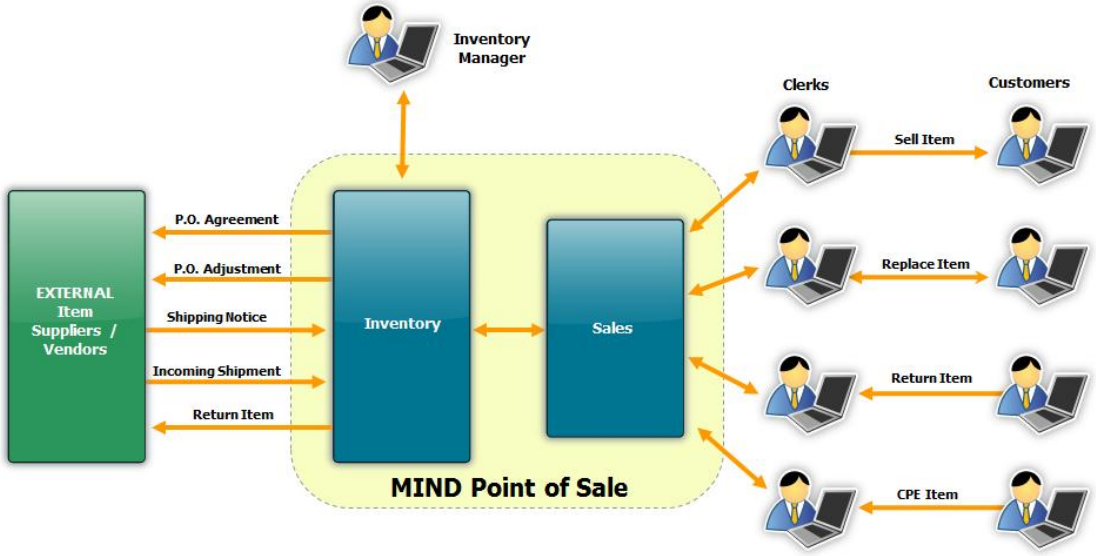


Figure 7: Supply chain management

Besides mediating purchase order agreements, the resource management tool also handles, in the same way, item return agreements with item suppliers or item repair vendors.

The POS solution comes with an embedded wholesale flow functionality, which allows negotiating prices (wholesale rates) in case the buyer is a reseller (dealer).

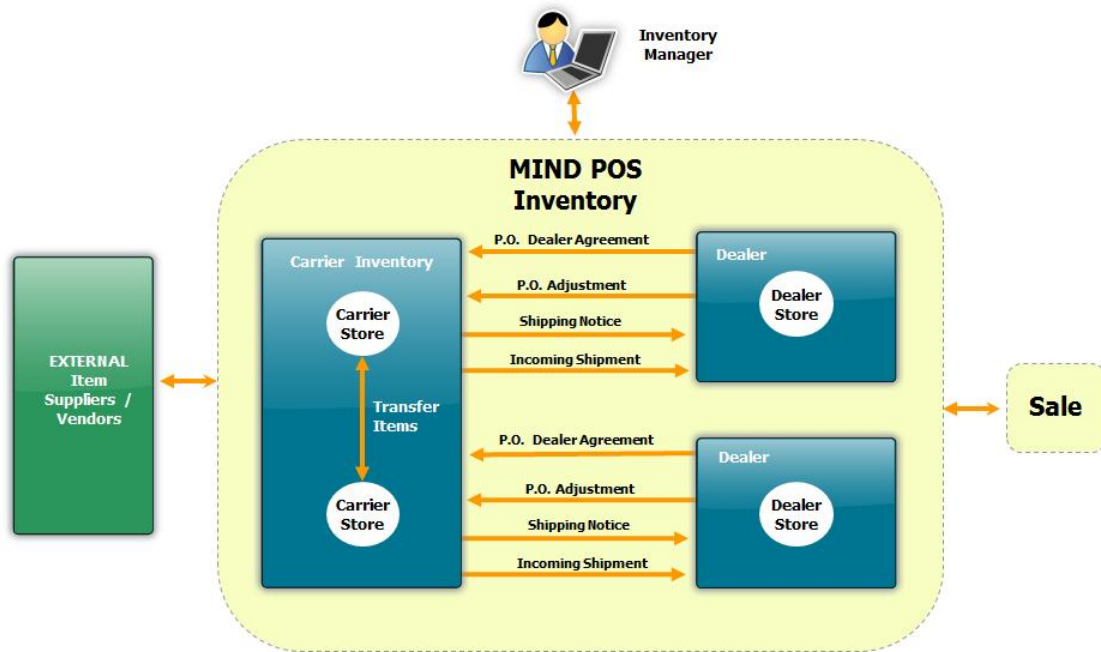


Figure 8: Supply chain management – dealers

Resource Management Features

- Items **hierarchy**: The MINDBill Resource Management module provides the ability to present items in a hierarchical structure, allowing a convenient way for item handling;
 - The hierarchy structure includes:
 - o **Item type (family)** – Specifies the type of the item, such as: Mobile handset
 - o **Item catalog** – Specifies the catalog item that the service provider offers to its customers, such as: Nokia 6120
- **Item instance (item)** – Specifies the physical items that are allocated to the customers. **Item statuses and flow**: Service providers may define the items' possible statuses and flow based on their operating mode and requirements. For each defined status the service provider defines what are the possible next statuses, and what is the logical behavior applied in this status. The logical behavior specifies the Resource Management behavior when the item is in this status, for example, whether the item may be assigned to customers;
- **Managing locations**: The management of items is done according to the physical locations. The service provider defines the warehouse locations most suitable for its operations and then assigns items to these warehouses. Providers using direct sale in multiple sites will usually define a nearby location with items for each CSR. The system allows easy transferring of items between warehouse locations, so items can be delivered to the CSR nearby location. Supports multi-store inventory (each store with its own warehouses / locations);
- Ability to fully manage an item catalog and pricing management per SKU;
- Supports inventory transfer between stores;

- Multi-Site Inventory Control (each store inventory manager will have access through security rights only to their store inventory in order to manage it);
- Handling of item reception & return including the full management of P.O. Agreements and Return agreements with the suppliers;
- Integration with a financial system for importing purchase order agreements / return agreements;
- On-hand count procedures user to reconcile between the items physically found in the inventory and the ones reported by the system;
- **Built-in reports:** The Resource Management system includes built-in reports that allow the service provider to receive information on the inventory items, such as an 'items stocked' value report. The reports can be filtered based on various criteria such as: item status, location and item catalog. The report output provides both a detailed and summarized view;
- Integration with POS hardware devices, such as the bar code reader, for easily locating an item by scanning or with label printer device for printing SKU, UPC or serial numbers;
- **Audit trail:** The system keeps track and records all operations performed by the Resource Management system. The audit trail provides the administrators with a user-friendly view that details the various operations, such as: Receipt of item, transfer of item between locations and assignment of the item to the customer. The administrator may view the operations filtered based on criteria such as: date, operation type, item status and location.

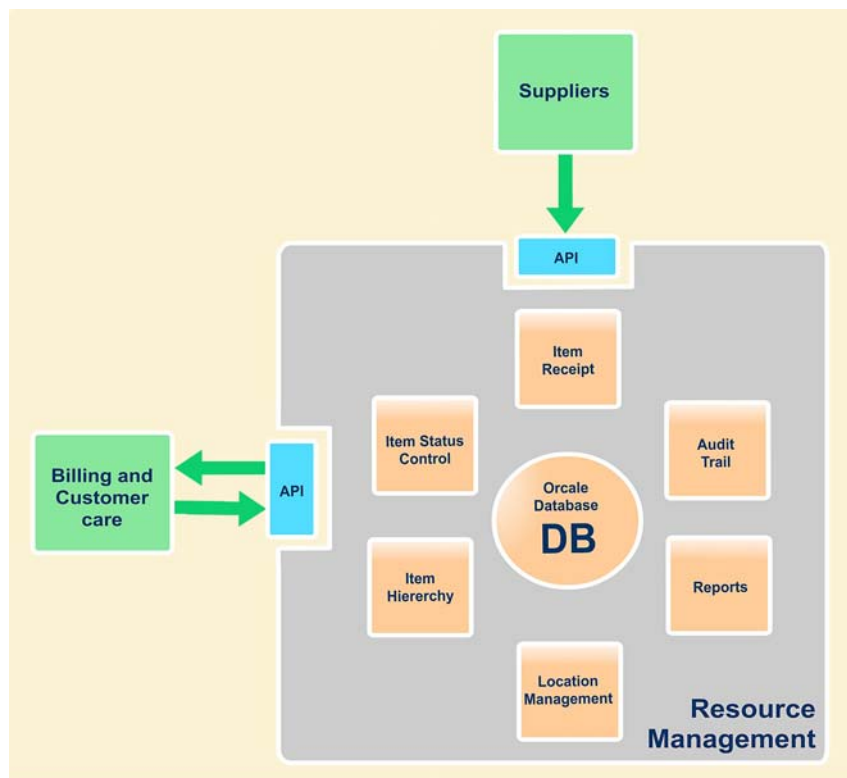


Figure 9: MIND Resource Management Architecture

The POS Supervisor Module

The POS Supervisor module is a comprehensive store management environment that implements, in coordination with the Sales module, drawer and workstation assignments to clerks, Open day and Close day procedures, Cash transfers between drawer and safe, as well as a rich set of reports.

Drawer Operations

The POS system is empowered with a comprehensive drawer management mechanism.

At the beginning of the working shift, the drawer passes through a comprehensive opening process, where the clerk is assigned to the station and money from the drawer is counted and reconciled, per currency. During the working shift, the drawer is synchronized with the payments and refunds resulted from all the sales done at the respective station. There are two standard procedures to leverage the surplus or lack of cash in the drawer:

- Pulling Cash from the Drawer when the accumulated money exceeds a threshold;
- Adding Cash to the Drawer when there is not enough money in that drawer.

At the end of the working shift, the drawer passes through a complex closure procedure, where the clerk is unassigned from the station, payments are counted and reconciled, the next day bag is prepared and several reports are issued.

Open Drawer - Microsoft Internet Explorer

Open Drawer

Drawer: 9 Drawer name: daila Assigned to: DALILA Status: Assigned

Netherlands Antillian Guilder (ANG) US Dollar (\$)

Bills	Close Count		Open Count	Sum
250	1	✓✗		
100	2	✓✗		
50	0	✓✗		
20	0	✓✗		
10	0	✓✗		
5	0	✓✗		
Total:				

Coins	Close Count		Open Count	Sum
Five Guilder	10	✓✗		
One Guilder	0	✓✗		
2½ Guilder	0	✓✗		
Fifty Cent	0	✓✗		
Twenty Five Cent	0	✓✗		
Ten Cent	0	✓✗		
Five Cent	0	✓✗		
One Cent	0	✓✗		
Total:				

Open Drawer Summary	
Close Total	ANG500.00
Open Total	ANG0.00
Variance	ANG500.00

Submit Cancel

Figure 10: Open drawer

MIND POS Dealer Solution

The POS system comes with a wholesale mechanism that enables the service provider to mediate all the wholesale sales and returns of equipments with a dealer or wholesale agent.

It also contains a POS Dealer Sale application, fully customized for the dealers' retail needs. The dealers will use this retail sale application in order to sell the items that they have previously bought from the service provider and make service registrations.

From the billing point of view, the POS system can fully manage the dealer entities. This includes issuing invoices for the wholesale sales or wholesale returns, giving commissions for the dealer retails sales on various criteria or accepting payments against the dealer's account total balance.

Summary

MIND (NASDAQ: MNDO) is a global provider of real-time mediation, rating, billing and customer care solutions for prepaid and post-paid voice, data, video and content. The company's solutions are deployed by telecommunication companies, ITSPs, ISPs, ASPs, enterprises, governmental bodies and financial institutions.

MINDBill is a convergent end-to-end billing and customer care solution that facilitates voice, data, video and content services for both prepaid and postpaid subscribers for mobile, broadband and wireline services providers, enabling the deployment of new revenue increasing services in the shortest time possible. The MIND solution gives providers the flexibility and reliability needed to increase customer satisfaction and profitability, while reducing the cost of ownership and operations and ensuring a fast return on investment due to its end-to-end capabilities combined with a modular architecture and cutting-edge technology.

MIND provides sales and support to its worldwide customers from offices in the United States, Europe and Israeli headquarters. MINDBill has a track record of over 100 successful installations. Service providers working with MINDBill found it to be a reliable tool that offers a fast return on investment and gives them the flexibility needed to meet any market demand. All these, together with the constant commitment toward quality and efficiency, make MINDBill the solution they need to move forward.

To learn more about MIND CTI, please visit www.mindcti.com or call a MIND representative.