

The Final Step in the Supply Chain Execution Process

An Introduction to JDA Warehouse Management

Nicole Hudson, Product Director
Richard Johnson, Product Director



Challenges of Today's Distribution Centers

Solution Overview

Configurability

Inbound Operations

Inventory Management

Outbound Operations

Warehouse Labor Management

Enhanced User Experience



I need a solution that can run
my operation...

Challenges

I need real time information
so I can react quicker to issues

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Value Added Services add
complexity I need help supporting

My system needs to be easier
to configure and maintain

Solution Overview

**Configurable
Workflow**

**Task
Management**

**User
Experience**

**Performance
Measurement**

**Inbound
Operations**

**Warehouse
Labor
Management**

**Inventory
Management**

**Outbound
Operations**

Configurability

Warehouse Configuration

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The top screenshot shows the 'Buildings' section of the JDA Warehouse Configuration interface. It features a 'Map View' and 'Grid View' toggle. The 'Grid View' is selected, showing a 'B1 Layout' with a 'View' dropdown and a 'B1' label.

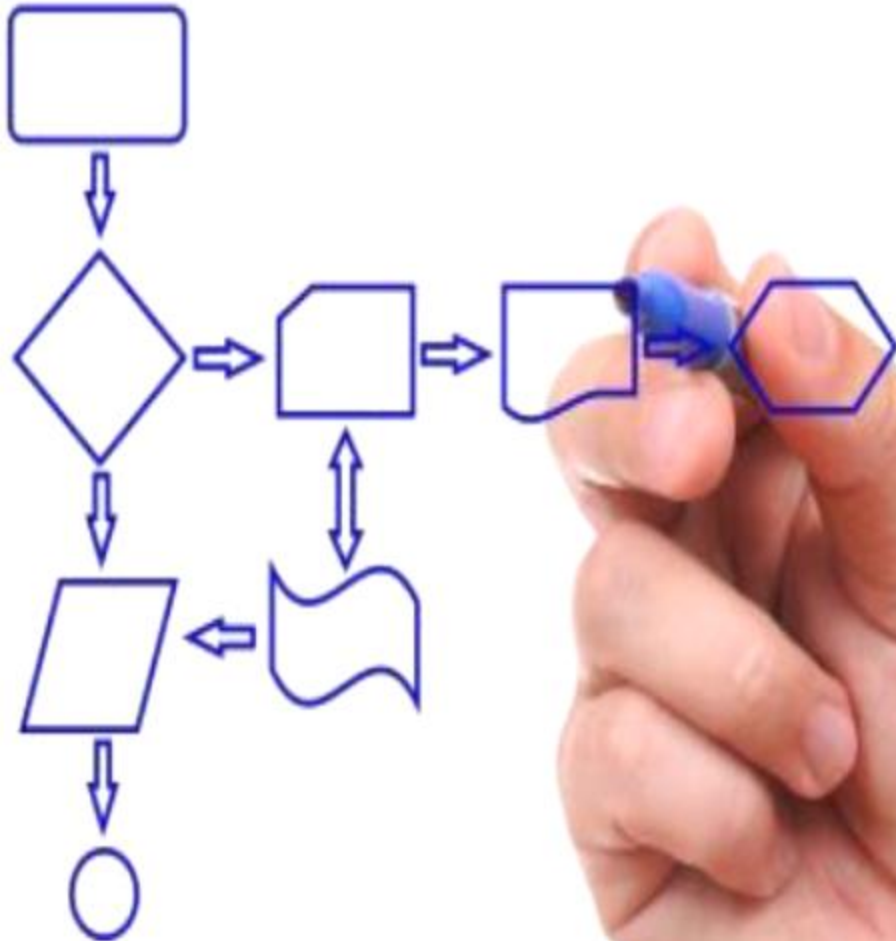
The bottom screenshot shows the 'Add Storage Locations - 1EAPF' form. It includes a 'Select Template' section with buttons for 'New Storage Template', 'Edit Template', and 'Delete Template'. Below this is a table for defining storage locations, with columns for 'Locations', 'Capacity', 'Location Dimensions', and 'Stack Height'. The table is divided into three sections: 'C', 'B', and 'A'.

Section	Locations	Capacity	Location Dimensions	Stack Height
C	1	1 Pallets	100 X 100 X 100	Pallet Stack
B	5	50 Eaches	20 X 20 X 20	Pallet Stack
A	50	10 Eaches	5 X 5 X 5	Pallet Stack

Removing the Expert through a **simplified & intuitive design**

Faster to Implement & **Easier** to Maintain

Configurable Workflow



Configurable Workflow
allows customers to manage
unique or exception processes
with **no coding required**

User response(s) to questions
and/or instructions **drives**
subsequent processing



Re-pack / Re-label



Inspection



Damage

Workflows can be **triggered by various** touch points, such as:

- Warehouse
- Vendor
- Item
- Carrier
- Customer
- Order Type
- Status

3PL – Third Party Logistics Support



Multiple Facilities



Data & Task Management



Customer Specific Rules

- > Multi-Client Architecture
 - Controls inventory ownership
 - Segregates data
 - Limits user access & security
 - Integrated in billing processes
- > Client specific or shared locations
- > Client configurable workflows
- > Clients can span multiple facilities
- > Users can be driven to work only on certain client tasks
- > Reports, labels, alerts can be segregated by client
- > Advanced third party billing capabilities

Inbound Operations

Inbound Operations – Yard Management



Full yard management capabilities **core functionality** within base WMS

Extended inventory visibility and operational **capabilities**

Labor estimates drive **expected duration** for appointment and **optimal dock door**

Inbound Operations - Putaway



System-suggested storage location to **optimize product placement** based on item and location characteristics, location capacity, inventory mixing rules, etc.

Movement paths with P&Ds to **facilitate material flow** and **enforce equipment restrictions**

Configurable storage location override processing

Inbound Operations - Putaway

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Storage suggestion logic will first consider possible cross-docks (e.g. outbound, workline, etc.) to **minimize product touches**

Execute **configurable rules** to determine **optimal storage location** (consider item, family supplier, status, receiving point, etc.)





Link to outbound order to
enhance return processing

Include unexpected inventory
in-line with standard returns
processing

Rule based disposition based
on customer return reason
and item

Support “next action” processing,
such as replacement, return to stock,
etc.

Inventory Management

Inventory Management

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Extensive capabilities
for lot control, serialization
and date processing

Multi-level inventory holds with
configurable hold characteristics,
controlled locally or network-wide



Detailed transaction
audit provides inventory
processing traceability

Real-time, system directed
summary and audit cycle counts
with configurable **cost &
quantity thresholds**

Scheduled counts (ABC)
supplemented by
**opportunistic and
exception counts**



Inventory Management – Product Placement

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System-directed storage location based on user-defined rules will direct product to the most optimal location

Automatic velocity recalculation can adjust item characteristics and re-direct product to new velocity zone as it arrives

Re-Slotting allows for product re-positioning at pre-determined intervals to accommodate for seasonality, promotions, and the like





Work Order Management capabilities for **Kitting, Assembly, and Production**

- Assembly & Disassembly
- BOM Administration
- Component Allocation, Picking & Line Delivery
- Component Level Tracking (lot, dates, COO, serial #, etc.)
- Work Order Reconciliation (scrap, RTS, consumption)

Outbound Operations

Outbound Operations – Wave Management

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Order Pool

Configurable Wave
Rules

(by store, depart time, etc.)

Wave
1

Wave
2

Wave
3



Task Management

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Determine the next, **most optimal** task for **one operator** as opposed to another

Tasks evaluated based upon **permission, priority, and proximity**

Tasks have configurable base priorities and **escalation profiles**



Task Management

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All available tasks are managed
in a **single work queue**



User & Equipment Authorizations
Task Priority and Strategies
Proximity



Her next, most optimal task

Outbound Operations – Pick & Replenish

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RF, Voice, Paper/Label
picking – **any or all** in
a single environment

Multi-method (e.g.
order, bulk, zone, etc.)
any or all in a single
environment

User-Defined pick
verification (e.g.
location, lot, etc.)

Replenish by Demand,
min/max, and top-off –
any or all in a single
environment



Outbound Operations – Pack Station



Touch-screen enabled
pack station functionality

Cartonization and pack station
order consolidation

Scan verification to capture
UPC, lot, serial number, etc.

In-line parcel execution

Outbound Operations – Cartonization

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JDA's answer to the age-old
problem

Calculate **appropriate
container** based on products to
be packaged



Outbound Operations – Cartonization

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JDA's answer to the age-old
problem

...while considering nesting
factors



Outbound Operations – Cartonization

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JDA's answer to the age-old
problem

...and product **mixing**
rules



Outbound Operations



Fluid/Live loading, stop sequence, and multi-zone **provide control** in directed and undirected mode

User-configurable labels and documents for **customer and/or carrier compliance**

Outbound ASN generation providing **downstream efficiency**

Warehouse Labor Management

So far the focus has been primarily on task execution...
...but that is only part of the equation





JDA provides a single, integrated solution to optimize the warehouse and enhance associate performance

Your **workforce** is one of your most **valuable resources**



Need to ensure their...

- productivity
- efficiency
- utilization

A labor program is as much about **people** as it is about software

A photograph of four warehouse workers, three men and one woman, standing behind a large stack of cardboard boxes. They are all wearing bright yellow high-visibility safety vests over their work clothes. The man on the far left is wearing a white shirt and a dark tie. The woman on the far right is wearing a grey hoodie. They are all smiling at the camera. The background shows a typical warehouse environment with high ceilings and metal shelving units filled with boxes.

Fair and **attainable** standards

Real time visibility

Actionable information

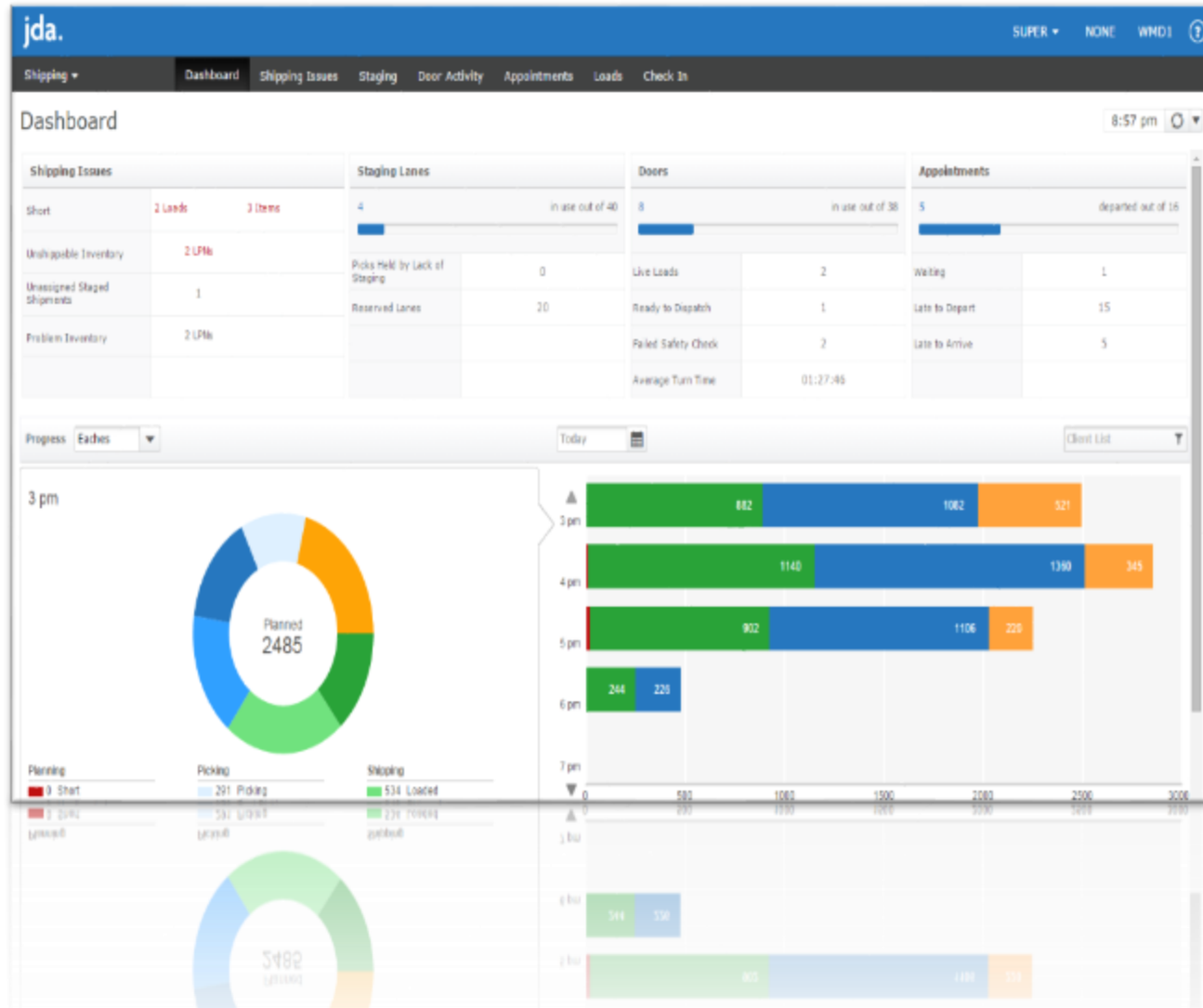
Enhanced User Experience

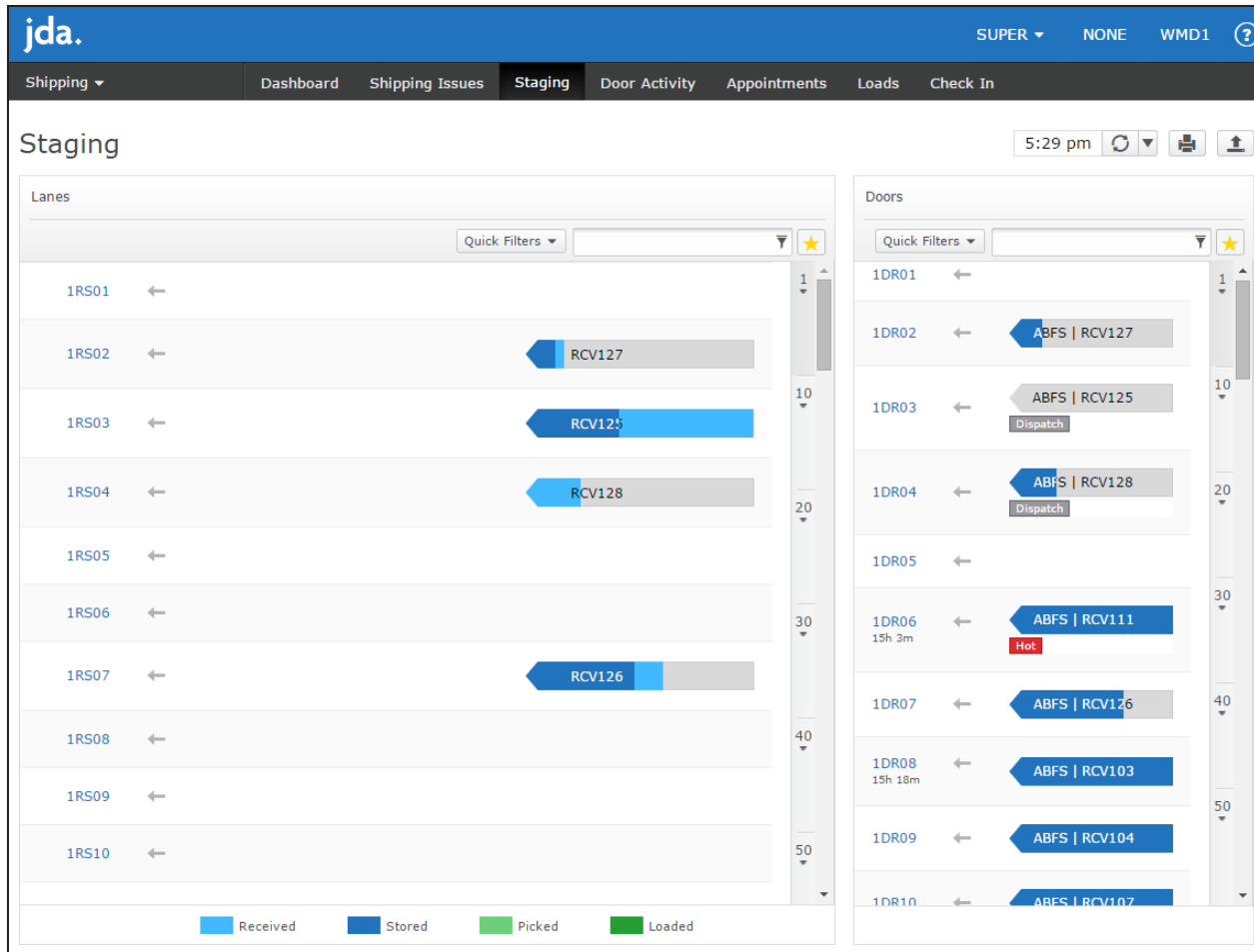
User Experience

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Mobility solution provides supervisors and managers **desk-free operability**

Web-based application provides **real-time visibility** and **actionable information**





Flexibly respond
to business demands
in and outside the
facility

Troubleshoot and
solve problems
before they impact
the operation



Multiple Deployment Options

Application Scalability

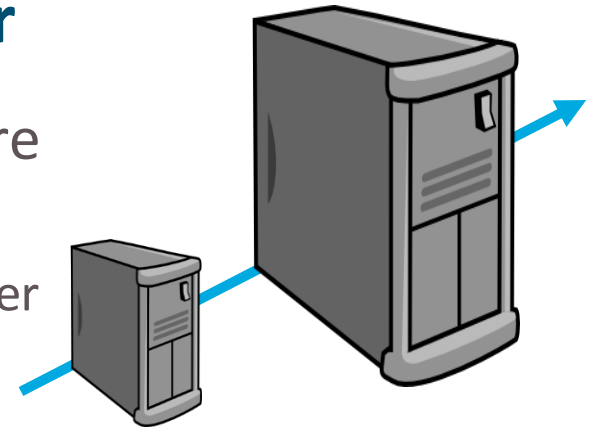
Achieving high performance & availability

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Scaling Up: Use a More Powerful Server

Greater performance is achieved using a more powerful server

Ability to leverage high-powered hardware like IBM Power Systems



Scaling Out: Use Multiple Servers

Portions of the WMS operate on two or more clustered servers

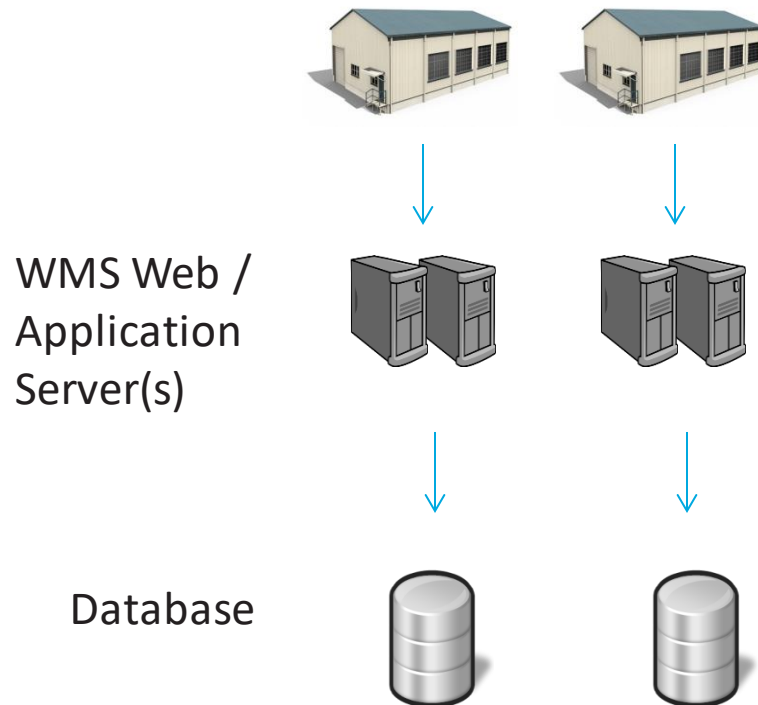
Ability to leverage virtual server capabilities for Scalability and High Availability



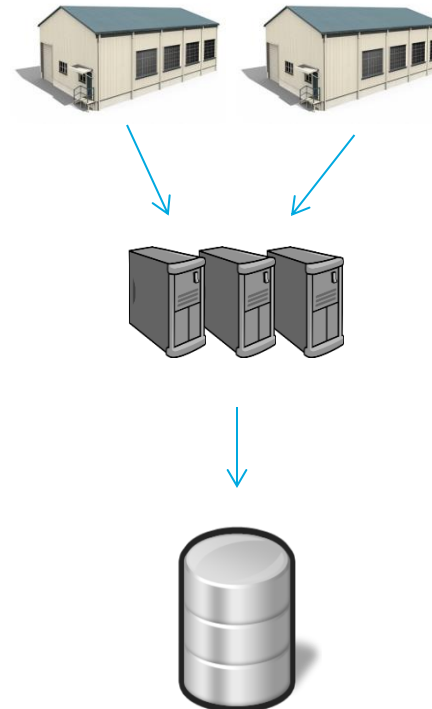
Single or Multi-Site Deployments

On JDA Cloud, on Private Cloud, or On-Premise

Option # 1 – Every DC uses dedicated application server(s) and DB. This option provides maximum flexibility for system maintenance, but it also has a higher IT cost.



Option # 2 – Two or more DCs share application servers and share a single DB. Since they are sharing IT resources there might be challenges scheduling system maintenance, but this option lowers IT costs.





Greatest Good Hockey Player

“A good hockey player plays where the puck is at. A great hockey player plays where the puck is going to be.”

- Wayne Gretzky