Business Requirements Document (BRD)

***Project:*** Warehouse Integration of OpenBoxes to ShipStation – Order Mapping

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# 1. Executive Summary

This document defines the business case, requirements, and scope for integrating OpenBoxes (Warehouse Management System) with ShipStation (Transportation Management System) at Magic Logistics, a 3PL currently using both systems independently. The project aims to eliminate manual double-entry of outbound order data, reduce shipment errors, and increase operational efficiency.

# 2. Business Objective

Enable automatic transfer of outbound orders marked 'Ready to Ship' from OpenBoxes to ShipStation in near real-time, allowing for quicker label generation, improved tracking, and better order visibility across shipping workflows.

# 3. Scope

In Scope:

* One-way integration from OpenBoxes to ShipStation
* Sync of outbound order headers and line items
* Validation of addresses and SKUs before transfer
* Limited to domestic U.S. orders in Phase 1

Out of Scope:

* Return label generation or RMA handling
* Tracking number sync from ShipStation back to OpenBoxes (Phase 2)
* Integration with other carrier APIs

# 4. Stakeholders & Systems

Primary Stakeholders:

* Minnie Mouse – Warehouse Ops Manager (Business Sponsor)
* Donald Duck – IT Project Manager (Project Owner)
* Goofy Goof – Lead Developer (Technical Lead)
* Daisy Duck – Shipping Clerk (End User)

Systems Involved:

* OpenBoxes (https://openboxes.com)
* ShipStation (https://www.shipstation.com)
* Internal Web App (Angular front end, .NET backend; managed and run in Azure)

# 5. Requirements & Constraints

* Orders must only be sent to ShipStation when their status is "Ready to Ship"
* SKUs in OpenBoxes must match preloaded SKUs in ShipStation
* API authentication credentials must be securely stored and rotated every 90 days
* Integration must support future multi-location shipping logic in Phase 2
* Initial deployment limited to U.S.-based shipments only

# 6. Success Criteria

* 95% of eligible orders appear in ShipStation within 5 minutes of WMS approval
* 0% data mismatches for address fields and SKUs between systems
* 100% user satisfaction from warehouse team during pilot
* Elimination of all manual double-entry between WMS and TMS systems
* 100% of errors logged and reported to super-users in the warehouse.

# 7. Assumptions & Dependencies

* SKUs are already loaded and active in ShipStation before go-live
* OpenBoxes API is accessible and stable throughout the project timeline
* The internal IT team has admin-level access to both systems for setup and testing
* Phase 1 is domestic shipments only; international shipments may require additional customs fields not yet mapped