



WMS API & Third-Party Logistics Integration Checklist 2026

Pre-Integration Requirements & Documentation

Verification of API documentation, endpoint availability, authentication protocols, and mapping of data fields between the WMS and 3PL systems.

API Endpoint URL

Authentication Method

- ☐ OAuth 2.0
- ☐ API Key
- ☐ Basic Auth
- ☐ Token-based

API Documentation/Swagger File

 Upload File

Integration Project Kickoff Date

Enter date...

Required Data Objects

- ☐ SKU Master Data
- ☐ Purchase Orders
- ☐ Sales Orders
- ☐ Inventory Adjustments
- ☐ Shipping Manifests

Data Mapping Constraints & Business Rules

Write something...

Authentication & Security Protocol Validation

Audit of OAuth tokens, API keys, SSL/TLS certificate validity, IP whitelisting, and encryption standards for data in transit.

Authentication Method

- ☐ OAuth 2.0
- ☐ API Key / Token
- ☐ Basic Auth
- ☐ mTLS (Mutual TLS)

API Endpoint URL

Write something...

Security Protocols Verified

- ☐ SSL/TLS Certificate Validation
- ☐ IP Whitelisting Confirmed
- ☐ Encryption at Rest Verified
- ☐ Token Expiration Policy Audited

Last Security Audit Date

Enter date...

Security Certificate / Key Reference

 Upload File

Security Officer Approval

Data Mapping & Payload Synchronization

Validation of JSON/XML schema alignment, field-level mapping for SKU, order ID, and quantity, and ensuring real-time data synchronization consistency.

Source System Field Name

Write something...

Target WMS Field Name

Write something...

Data Type Mapping

- ☐ String
- ☐ Integer
- ☐ Decimal
- ☐ Boolean
- ☐ DateTime

Transformation Rules Applied

- ☐ Concatenation
- ☐ Truncation
- ☐ Unit Conversion
- ☐ Format Standardization
- ☐ Lookup/Translation

Mapping Logic Documentation

Write something...

Schema Definition Document

 Upload File

Error Handling & Exception Management

Configuration of retry logic, automated error notification triggers, handling of 4xx/5xx HTTP response codes, and dead-letter queue monitoring.

Detected Error Types

- ☐ Authentication/Token Expiry
- ☐ Data Format/Schema Mismatch
- ☐ Timeout/Latency Issue
- ☐ Duplicate Request/ID Collision
- ☐ Missing Required Payload Fields

Error Log Reference ID

Write something...

Error Description & Root Cause Analysis

Write something...

Severity Level

- ☐ Low (Information only)
- ☐ Medium (Retry required)
- ☐ High (Process halted)
- ☐ Critical (System-wide failure)

Date of Error Detection

Enter date...

Error Payload/Log Dump

 Upload File

Technical Lead Approval

Connectivity & Latency Testing

Assessment of webhook reliability, API response time benchmarks, network bandwidth stability, and end-to-end latency monitoring between WMS and 3PL servers.

Test Execution Date

Enter date...

Average API Response Time (ms)

Network Connection Status

- ☐ Stable
- ☐ Intermittent
- ☐ Unstable
- ☐ Down

Tested Endpoints

- ☐ Inventory Sync Endpoint
- ☐ Order Injection Endpoint
- ☐ Shipping Label Endpoint
- ☐ Tracking Update Endpoint

Latency Anomalies or Timeout Observations

API Response Logs / Trace Report

 Upload File

Inventory & Order Status Sync Verification

Testing the accuracy of real-time updates for stock level changes, order status transitions (e.g., Picked, Packed, Shipped), and tracking number injection.

Verified Sync Statuses

- ☐ Order Received
- ☐ Picking In-Progress
- ☐ Packing Completed
- ☐ Shipped/Dispatched
- ☐ Delivered

Inventory Discrepancy Count

Enter a number...

SKU/Batch ID Under Test

Write something...

Last Successful Sync Timestamp

Enter date...

Discrepancy Details & Log Notes

Write something...

Verification Officer Approval

Load Testing & Throughput Capacity

Stress testing the API endpoints during high-volume scenarios to ensure the integration handles peak seasonal order surges without degradation.

Peak Transactions Per Minute (TPM) Target

Testing Environment Used

- ☐ Sandbox/Staging
- ☐ Production-Mirror
- ☐ Live Production

Load Test Execution Summary

Load Test Performance Report

 Upload File

Test Completion Date

Identified Bottleneck Areas

- ☐ Database Latency
- ☐ API Gateway Timeout
- ☐ Network Bandwidth
- ☐ Payload Size Constraints
- ☐ Third-Party (3PL) Endpoint Lag

Post-Integration Monitoring & Alerting

Setup of automated dashboards, uptime monitoring, logs audit trails, and alert escalation workflows for integration failures.

Last System Sync Audit Date

Integration Status

- ☐ Operational
- ☐ Degraded Performance
- ☐ Critical Failure
- ☐ Maintenance Mode

Average API Response Time (ms)

Monitored Alert Triggers

- ☐ Webhook Timeout
- ☐ Authentication Failure
- ☐ Data Mismatch
- ☐ Payload Size Threshold Exceeded

Incident Logs & Discrepancy Notes

Write something...

System Administrator Verification

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🔑 Finish

🔗 Generate Sample Report