

Route optimization and planning

Automatically optimizes delivery routes when new shipments are added, considering vehicle capacity, delivery windows, traffic conditions, and driver availability to minimize fuel costs and improve delivery performance.

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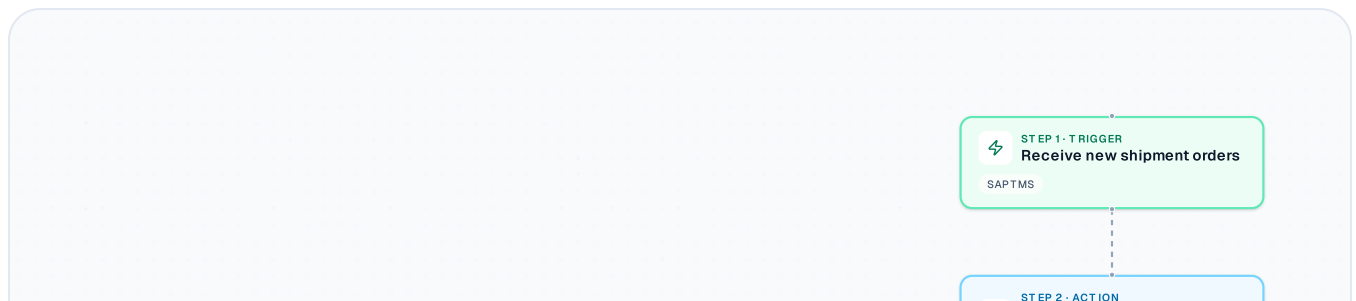


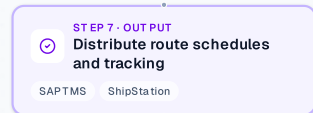
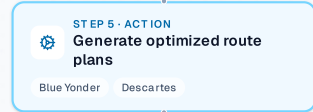
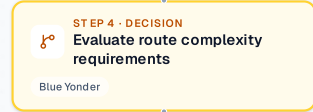
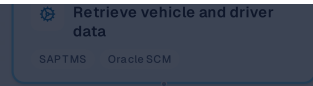
WORKFLOW TRIGGER

New shipment orders are received in the transportation management system requiring route assignment.

Visual Flow

Each node represents an automated step. Connections show how data and decisions move through the workflow.





Step-by-Step Breakdown

Detailed explanation of each automated stage in the workflow.

1

Receive new shipment orders

New delivery orders are automatically captured from the TMS with pickup/delivery addresses, time windows, weight, and priority levels.

SAP TMS

2

 ACTION

Retrieve vehicle and driver data

System pulls current vehicle locations, capacity constraints, driver schedules, and availability from the fleet management database.

SAP TMS

Oracle SCM

3

 ACTION

Analyze traffic and route conditions

Real-time traffic data, road conditions, and historical delivery times are retrieved to inform routing decisions.

Descartes

4

 DECISION

Evaluate route complexity requirements

System determines if shipments require basic optimization for simple routes or advanced multi-stop optimization with complex constraints.

Blue Yonder

 ACTION

5 **Generate optimized route plans**

AI Business OS

AI algorithms create optimal delivery sequences considering all constraints, minimizing total distance, fuel consumption, and delivery time.

Blue Yonder

Descartes

6

 ACTION

Assign routes to drivers

Optimized routes are automatically assigned to available drivers and vehicles, with delivery instructions sent to mobile devices.

SAP TMS

7

 OUTPUT

Distribute route schedules and tracking

Final route plans are distributed to drivers, dispatchers, and customers with real-time tracking capabilities activated.

SAP TMS

ShipStation



Outputs

- Optimized delivery route schedules
- Driver assignments with turn-by-turn directions
- Customer delivery time notifications

- Real-time shipment tracking links

AI Business OS



Key Metrics

- Average delivery time reduction
- Fuel cost savings percentage
- On-time delivery rate
- Vehicle utilization efficiency



Tools & Integrations

- SAP TMS
- Oracle SCM
- Descartes
- Blue Yonder
- ShipStation

AI Business OS

Actionable AI implementation strategies for business leaders ready to transform their operations.

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