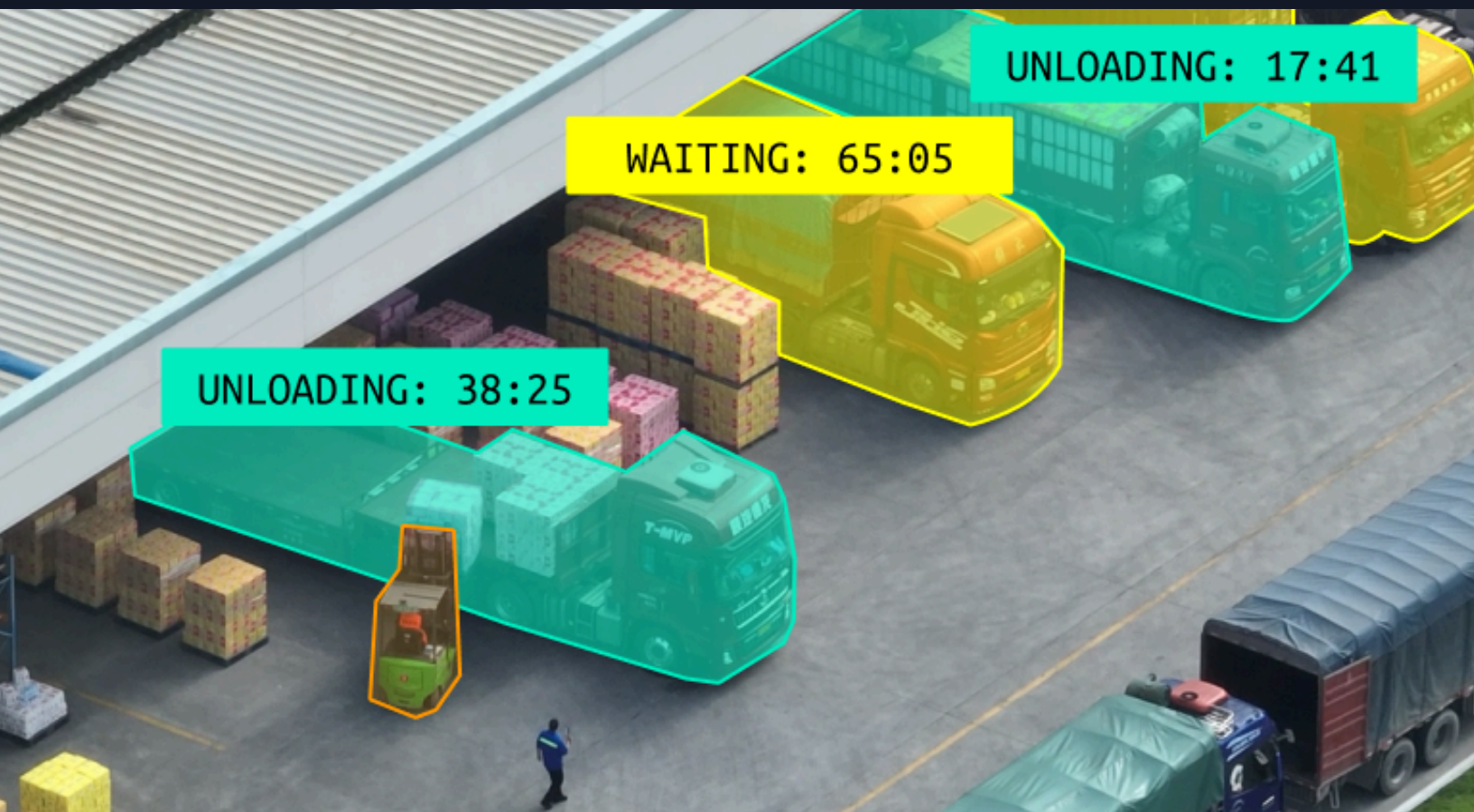# The AI Playbook
for Logistics

Discover top use cases
and key insights

Driving Efficiency in Logistics with Vision AI

Streamline yard management, improve visibility throughout your network, and minimize unexpected disruptions. Vision AI delivers improved efficiency and strategic insights.
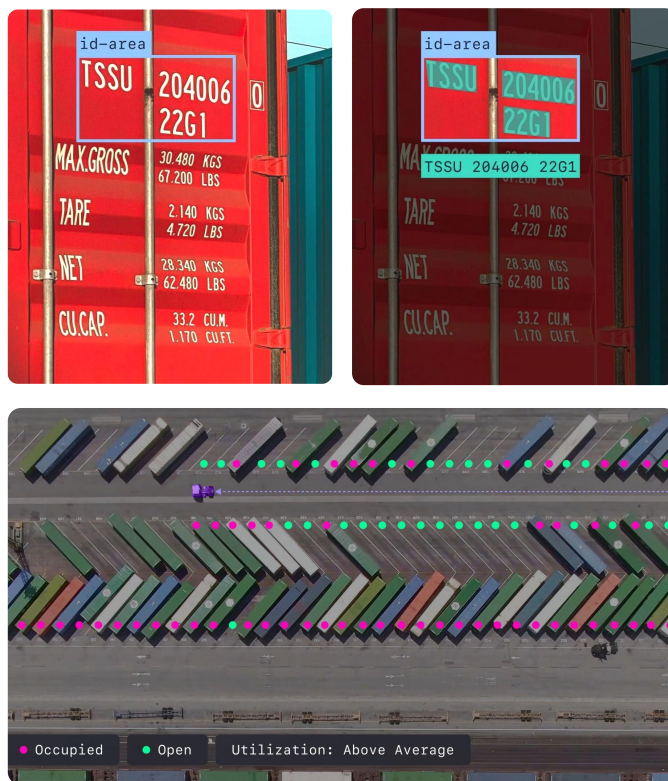
90% Less Time on Yard Inventory

Large logistics operators have faced significant challenges related to manually updating intermodal yard inventory. This time-intensive and error-prone process resulted in outdated data, underutilized storage, and temporarily lost containers.

These organizations leverage vehicle-mounted cameras and vision AI models made in Roboflow. As millions of containers flow through these yards, the AI systems automatically identify and log the precise geolocation of containers in real time, updating yard inventory instantly.

Vision-powered systems reduced inventory time by 90% and eliminated discrepancies from human errors. This real-time, accurate data provides complete visibility, preventing lost containers and enhancing customer satisfaction through improved throughput and reliable asset monitoring.

"Achieving positive results using AI in a lab environment is easy. The real challenge is scaling across a network like ours without disrupting day-to-day operations. Our partnership with Roboflow is allowing us to do just that."

Asim Ghanchi AVP of Technology, BNSF Railway

Achieve immediate, organize-wide results.

Roboflow provides the flexibility to deploy state-of-the-art foundation models or develop highly specialized, purpose-trained solutions, enabling enterprises to tackle complex and nuanced challenges with precision.
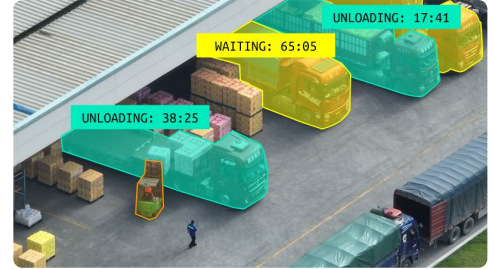

Inventory management

- Get real-time stock updates
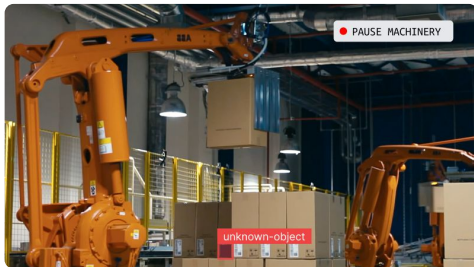- Log item location and assist picking
- Optimize storage footprint

Boost quality, reduce claims

- Detect damaged goods
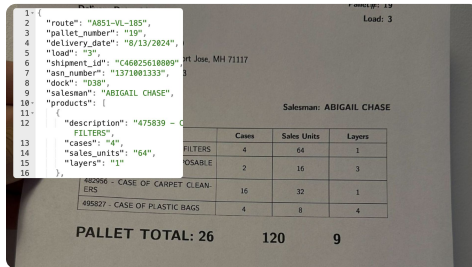- Identify misplaced items
- Count and route packages

Optimize yard operations

- Track vehicle flow and location
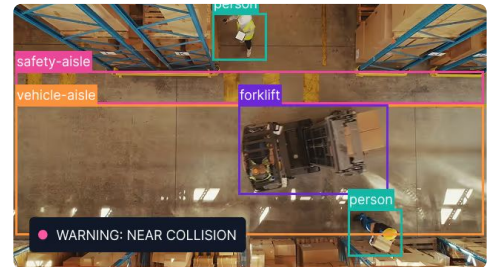- Inspect container condition
- Monitor cycle and idle times

Predict maintenance

- Monitor equipment wear
- Spot machinery anomalies
- Inspect fleet safety

Analyze and verify data

- Extract data from labels & forms
- Find missing or damaged labels
- Track parcels across locations

Improve safety compliance

- Track safety procedures
- Identify people in red zones
- Monitor PPE compliance

From data centers to delivery vehicles

Run vision AI on your preferred infrastructure and scale easily.

JETSON ORIN NX

IP24 ENCLOSURE
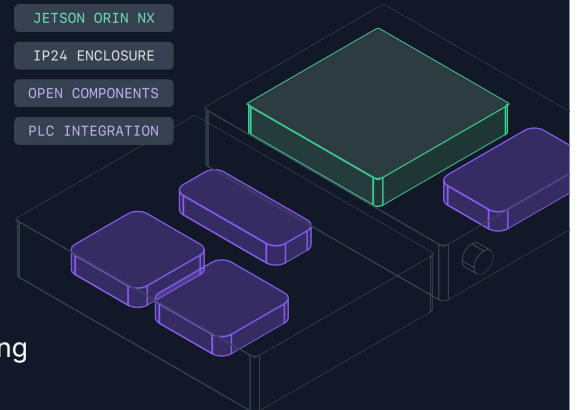
OPEN COMPONENTS

PLC INTEGRATION

In the Cloud

Quickly deploy with Roboflow's cloud or use your own infrastructure.

At the Edge

Run locally, without internet, using hardware of your choice.
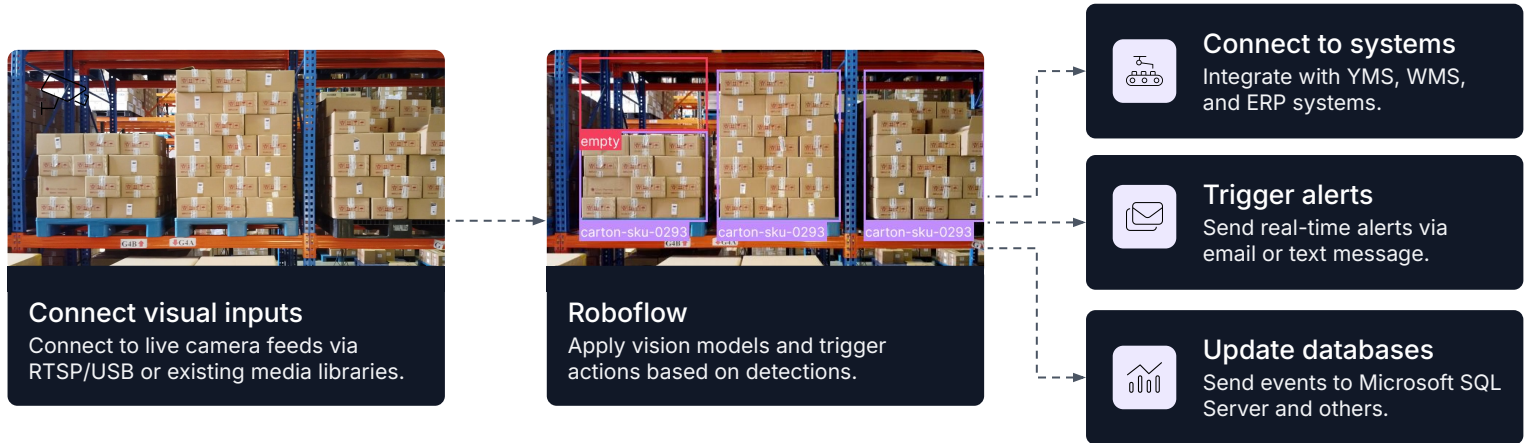
Bring sight to yards, facilities, and vehicles

Build vision-powered automations to control machinery, trigger alerts, and more.

Connect visual inputs
Connect to live camera feeds via RTSP/USB or existing media libraries.

Roboflow
Apply vision models and trigger actions based on detections.

Connect to systems
Integrate with YMS, WMS, and ERP systems.

Trigger alerts
Send real-time alerts via email or text message.

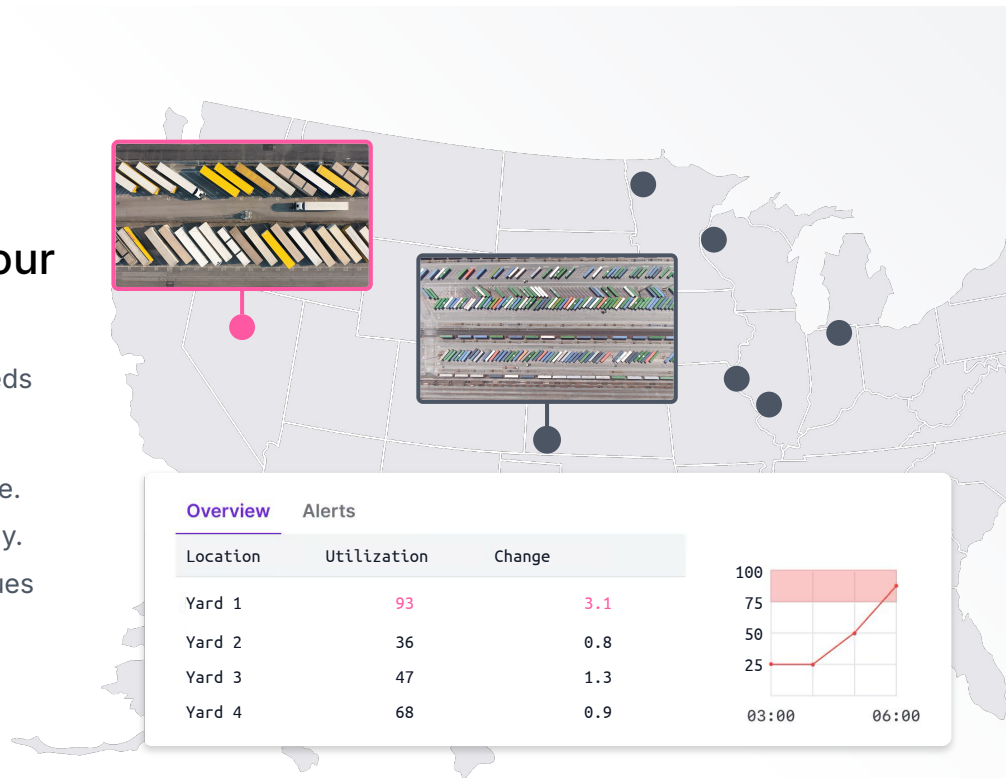### Update databases
Send events to Microsoft SQL Server and others.

Visual intelligence across your logistics network

Transform data from hundreds of camera feeds into real-time, actionable insights.

- See metrics across facilities in one console.
- Trigger alerts to resolve issues immediately.
- Analyze trends and alleviate recurring issues

Overview   Alerts

Location	Utilization	Change
Yard 1	93	3.1
Yard 2	36	0.8
Yard 3	47	1.3
Yard 4	68	0.9

Join 1,000,000 developers and half the Fortune 500

Driving Efficiency in Logistics with Vision AI | Consult an AI Expert