



TRACE

inTegration & haRmonizAtion
of logistiCs opERations

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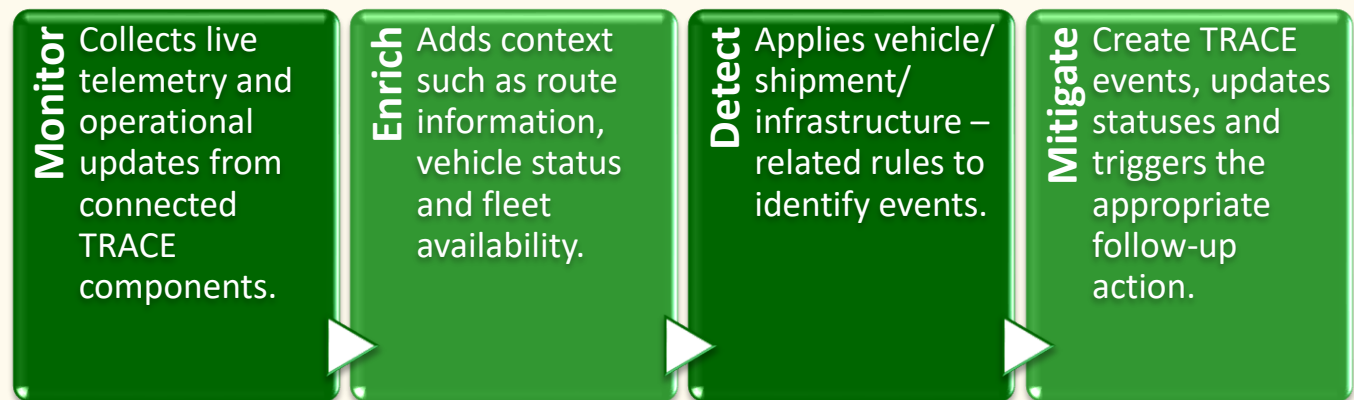
REManager

From real-time monitoring to
coordinated mitigation

A rule-based, event-driven component that detects operational conditions and transforms them into clear actions for safer and more resilient logistics operations.

What is REManager?

REManager connects live operational data with practical response mechanisms. It receives operational data from many sources such as sensors, UGVs, vehicles, lockers etc. and evaluates them to detect possible events and apply the appropriate actions.



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What REManager can do?

1 Vehicle & cargo monitoring

Evaluates vehicle's and cargo conditions such as temperature, humidity, pressure, gas etc.

2 Shipment & delivery events

Monitors shipment status changes, loading and unloading, delivery completion, schedule acceptance and locker workflows.

3 Route & infrastructure awareness

Identifies route deviation, sensor failures and weather-related road risks such as snow, flooding or slippery conditions.

4 Multimodal logistics support

Handles operational events from multiple type of vehicles including failures, delivery status etc.

Key benefits

- ❖ Event awareness: Operational events are detected as new monitoring data becomes available, enabling a faster response to emerging situations.
- ❖ Rule-based logic: Explicit rules make event detection transparent, repeatable and easy to validate.
- ❖ Coordinated mitigation: Detected events are connected with appropriate follow-up actions, including status updates, replacement-vehicle searches etc.
- ❖ Support for multiple vehicle types: REManager supports multimodal logistics operations involving trucks, UGVs, bike platoons, smart lockers etc.

Status
change

The new vehicle status is received and evaluated

Event
detection

Rules identify that the vehicle's status is damages, delivery interruption and possible reloading needs.

Mitigation
request

REManager records the event and request a search for nearby replacement vehicles.

Fleet
feedback

Eligible vehicles are identified and their availability is returned to the operational flow.