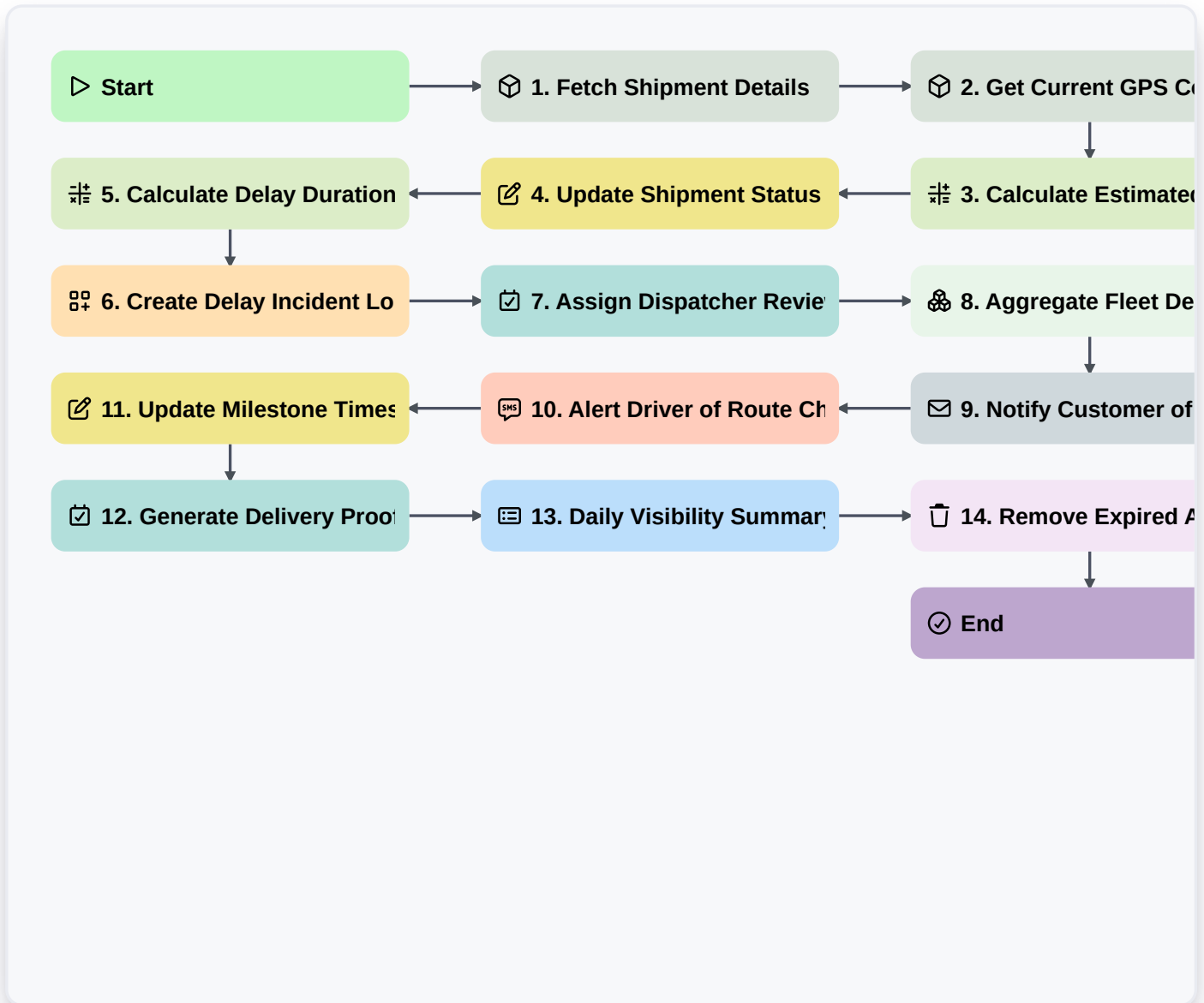


Real-Time Shipment Tracking & Visibility Process



▷ Start

Start of the Workflow/Process.

📦 1. Fetch Shipment Details

Retrieve the primary shipment record including origin, destination, and carrier information.

📍 2. Get Current GPS Coordinates

Retrieve the latest telemetry/location data from the linked IoT or driver mobile device.

🕒 3. Calculate Estimated Time of Arrival (ETA)

Calculate new ETA based on current location, remaining distance, and average vehicle speed.

📝 4. Update Shipment Status

Update the 'Current Status' field in the Shipment Data Model (e.g., In Transit, Delayed, Delivered).

🕒 5. Calculate Delay Duration

Calculate the difference between the original scheduled arrival and the new calculated ETA.



6. Create Delay Incident Log

Create a new entry in the Incident Log data model if the delay exceeds a specific threshold.

7. Assign Dispatcher Review

Create a task for the Dispatcher to review and approve the updated ETA and delay reason.

8. Aggregate Fleet Delay Metrics

Sum the total number of delayed shipments across the entire fleet for the current shift.

9. Notify Customer of Delay

Send an automated email to the customer containing the updated ETA and shipment details.

10. Alert Driver of Route Change

Send an SMS to the driver if the system detects a necessary rerouting due to traffic or weather.

11. Update Milestone Timestamp

Update the 'Last Checkpoint' timestamp in the shipment record.

12. Generate Delivery Proof Task

Create a task for the driver to upload the signed Proof of Delivery (POD) upon arrival.

13. Daily Visibility Summary Report

Generate a daily report summarizing all completed, in-transit, and delayed shipments.

14. Remove Expired Alerts

Delete temporary way-point alerts from the system once the shipment has passed the milestone.

End

End of the Workflow/Process.