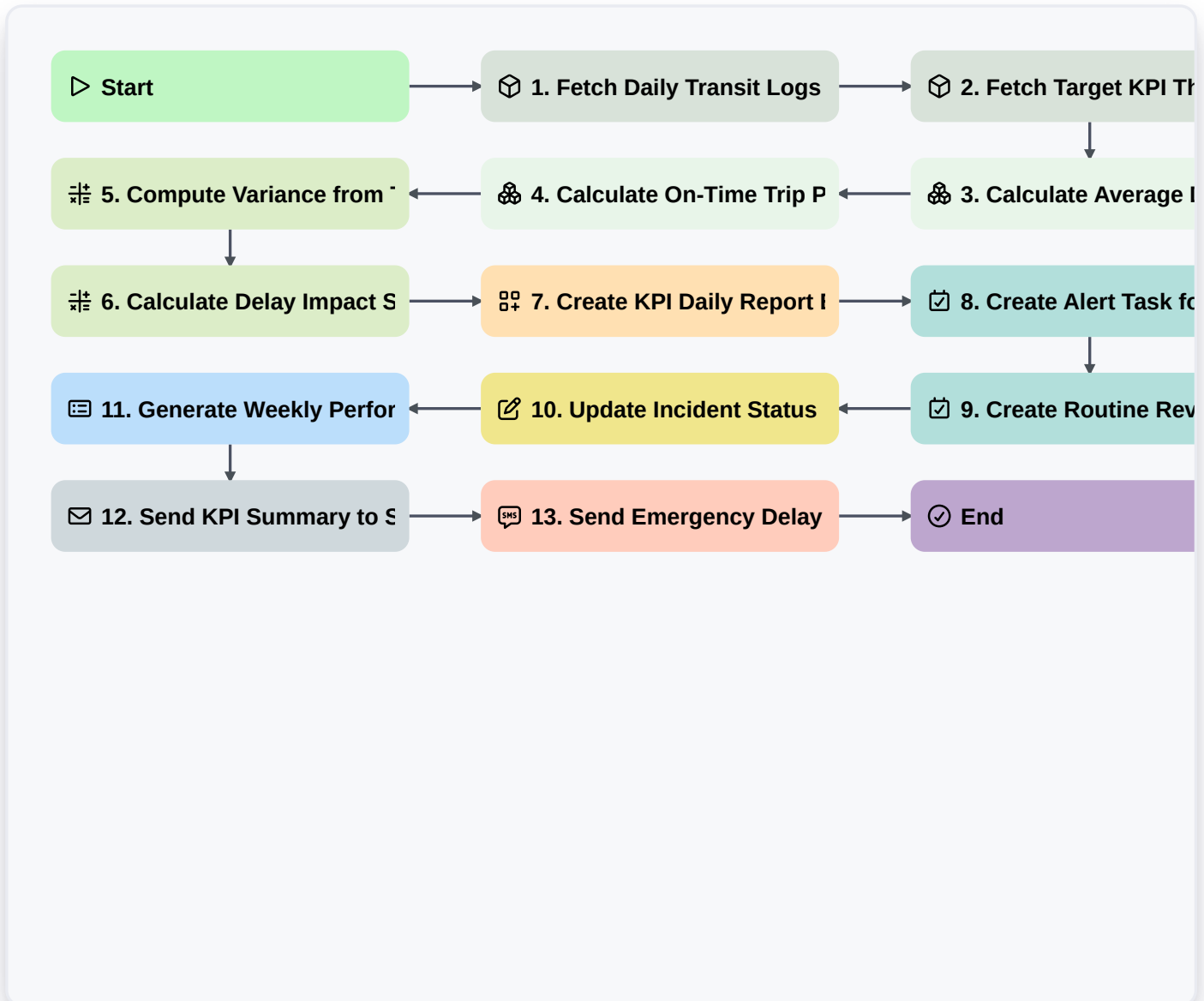


Transit Performance KPI Monitoring And Reporting



Start

Start of the Workflow/Process.

1. Fetch Daily Transit Logs

Retrieve all completed trip entries and delay logs from the Transit Logs data model for the specified period.

2. Fetch Target KPI Thresholds

Retrieve the predefined KPI targets (e.g., On-Time Percentage target) from the KPI Configuration data model.

3. Calculate Average Delay Duration

Calculate the average value of the 'delay_minutes' property from the fetched transit logs.

4. Calculate On-Time Trip Percentage

Calculate the percentage of trips where 'status' equals 'On-Time' relative to total trips.

5. Compute Variance from Target

Calculate the difference between the Actual On-Time Percentage and the Target KPI Threshold.



6. Calculate Delay Impact Score

Execute a formula combining average delay duration and frequency of delays to determine a severity score.

7. Create KPI Daily Report Entry

Create a new record in the KPI Reporting data model containing the calculated metrics for the day.

8. Create Alert Task for Critical Deviations

Create a task for the Operations Manager if the Variance from Target exceeds the allowed threshold.

9. Create Routine Review Task

Create a recurring task for the Data Analyst to verify the accuracy of the aggregated data.

10. Update Incident Status

Update the 'last_reviewed' timestamp in the KPI Reporting entry to indicate the monitoring cycle is complete.

11. Generate Weekly Performance Dashboard

Generate a visual report/dashboard summarizing the KPI trends from the KPI Reporting data model.

12. Send KPI Summary to Stakeholders

Send an automated email containing the daily KPI summary and variance results to the management distribution list.

13. Send Emergency Delay Alert

Send an SMS alert to the Fleet Supervisor if the Delay Impact Score exceeds the critical threshold.

End

End of the Workflow/Process.