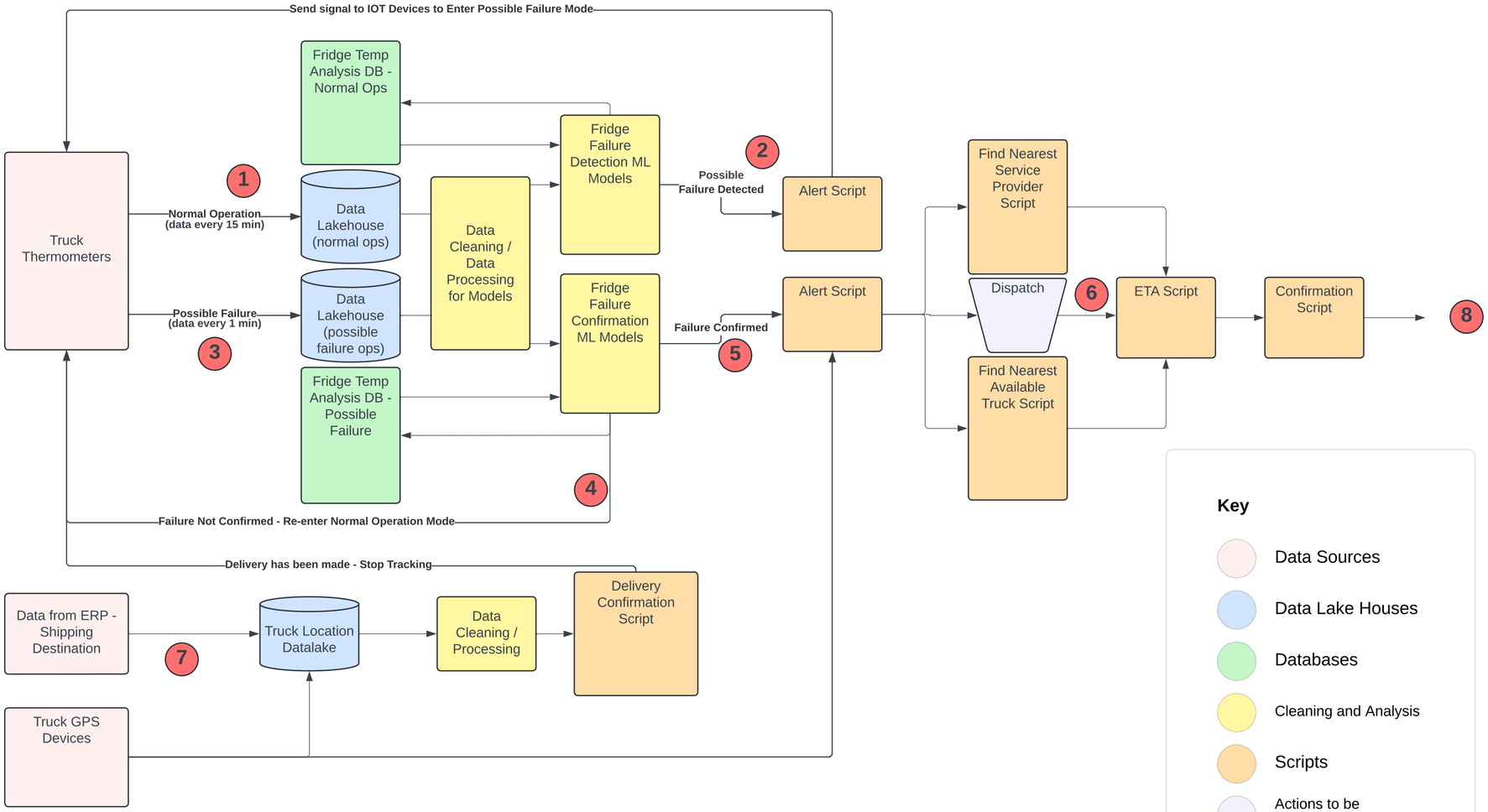
Temperature Monitoring Solution Architecture Diagram



Key

- Data Sources
- Data Lake Houses
- Databases
- Cleaning and Analysis
- Scripts
- Actions to be performed by a person

1. Take a temperature measurement every 15 minutes. Send the results back to the cloud server. Store information in the normal ops lakehouse. Clean data using analysis techniques and failure detection machine learning model.

2. If a possible failure has been detected by the ML model, send an alert back to the truck IOT.

3. Begin collecting data every minute and send to the cloud server. Store info in the possible failure ops lakehouse. Clean the data and run fridge failure confirmation ML model.

4. If not an actual failure, return IOT to normal operations. Store information in the fridge temp analysis possible failure database.

5. If the failure is confirmed, pull gps information, send an alert to us, the company, and the truck driver. Begin finding nearest available service provider, and nearest available replacement truck. Give options to company via dispatch.

6. Once decision on course of action has been made, begin taking steps to proceed with chosen resolution. Send ETA and confirmation to company and truck driver.

7. Based on the truck's destination and location, track if the shipment is complete. If so, store information, clean data, and send script to stop tracking IOT.

8. If repairs are required, refer to the truck maintanence soluction architecture diagram.