# Hana Table Inventory Tracking System

## 1. Purpose

This system tracks the nationwide movement of Hana operating tables. Each table is assigned a unique form and QR code. When a driver scans the QR code, it opens a Google Form that logs pickup or delivery data. A weekly Apps Script audits inventory levels and emails alerts for discrepancies.

## 2. System Overview

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| Component | Description |
| Forms | 19 Google Forms (H1–H19) + Training form, each tied to a specific table or location. |
| QR Codes | Each QR links to a unique Form URL, printed and affixed to crates. |
| Google Sheet | Central log named 'Table Inventory'. Each submission feeds into this sheet. |
| Apps Script | Automated script validates inventory levels weekly and emails alerts for discrepancies. |
| Email Notification | Sends formatted alerts when actual inventory ≠ expected. |

## 3. Form Design

Each Google Form includes fields for Table ID, Location (Pickup/Delivery), Condition/Notes, Driver Name, and Timestamp. Each form submits to the same Google Sheet. Below is the mapping of forms:

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| --- | --- |
| Form ID | URL |
| H1 | https://forms.gle/Jmb49PrqEEvWusQT6 |
| H2 | https://forms.gle/ivQYwmGivtRpETj37 |
| H3 | https://forms.gle/Nq9oWhXmcAfRZdYP6 |
| H4 | https://forms.gle/gpTyjq155PvJHHFy5 |
| H5 | https://forms.gle/2PqKFC1GiPopre9z7 |
| H6 | https://forms.gle/srKMUjg7p9qVFofG6 |
| H7 | https://forms.gle/H93jeUj76ji4nRE17 |
| H8 | https://forms.gle/gCjMFCv8KVCqvWAJ9 |
| H9 | https://forms.gle/9DCVcA1cQjBtzHsV6 |
| H10 | https://forms.gle/JQJKEFJ8T7kpCNQ18 |
| H11 | https://forms.gle/VoYFGtUMcmfykAod9 |
| H12 | https://forms.gle/a1gj6saSpzC6y3wu6 |
| H13 | https://forms.gle/Bs94sxvpEhruMgj39 |
| H14 | https://forms.gle/37bmENZfx6FmkTSdA |
| H15 | https://forms.gle/sZ4cbrFRX7oUKxfo7 |
| H16 | https://forms.gle/aWPg8jqVPN4VrctM7 |
| H17 | https://forms.gle/Utr1i2fMSp4iPQwZ6 |
| H18 | https://forms.gle/wvczeY4ZNWGvBvx68 |
| H19 | https://forms.gle/L9FijwhwVSLB5VTW7 |
| Training | https://forms.gle/p2PgUYJyKKVza7R7A |

## 4. Google Sheet Setup

File: Mizuho Inventory | Sheet: Table Inventory

Key Ranges Used: B7:T7, B14:T14, B22:T22, B8:T12, B15:T21, B23:T23

These represent grouped items with defined thresholds and expected values.

## 5. Apps Script Automation

Script File: InventoryCheck.gs. The script runs weekly via trigger to verify inventory levels and email discrepancies. Functions include checkInventory(), getSheet(), getAlerts(), and sendInventoryAlerts().

Trigger setup: Weekly, Monday 6AM. Function: checkInventory.

## 6. Email Output Example

Subject: Hana Inventory Alert: Dallas has incorrect inventory

Body Example:  
This is your alert that Dallas is missing or overstocked on the following items:  
  
Item: H5 Table Crate  
Inventory Status: There is 1 of 2  
Timestamp: 2025-10-14T06:00:00Z  
  
View full inventory: https://docs.google.com/spreadsheets/d/1xzymMh5ijyPTwa1CS0blqxno89uI33QFgVs2tFTKA2Y/edit?usp=sharing

## 7. Migration / Transition Options

Airtable: Replace Google Forms with Airtable Forms. Use Airtable Automations to email alerts when counts deviate.

Microsoft 365: Use Microsoft Forms + Excel Online + Power Automate to replicate workflow and alert logic.

Custom Web App: Develop React/Streamlit UI and backend API integration with ERP (NetSuite or Airtable).

## 8. Recovery and Handover

Include in the handoff: Sheet link and ID, Apps Script file, trigger details, form URLs, QR codes, access list, and email list.

## 9. Recommended Enhancements

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| --- | --- |
| Category | Suggestion |
| Data Integration | Connect Sheet to NetSuite API for live reconciliation. |
| Dashboarding | Use Looker Studio or Power BI for visual tracking. |
| Logging | Add a log sheet to track script runs and results. |
| Driver Feedback | Add a 'Condition' dropdown to forms for reporting damage. |
| Inventory Lock | Implement validation to prevent duplicate submissions. |