Vision Insight

User Manual

For

BI DASHBOARD WEB APPLICATION

Version: 1.1

Prepared By:

Hanwha Vision

Table of Contents

Contents

1. Introduction

The **BI Dashboard Web Application** is a web-based platform designed to help users monitor, analyse, and manage business intelligence data efficiently. It provides an intuitive interface for visualizing camera analytics, site performance, and AI-based insights across multiple locations.

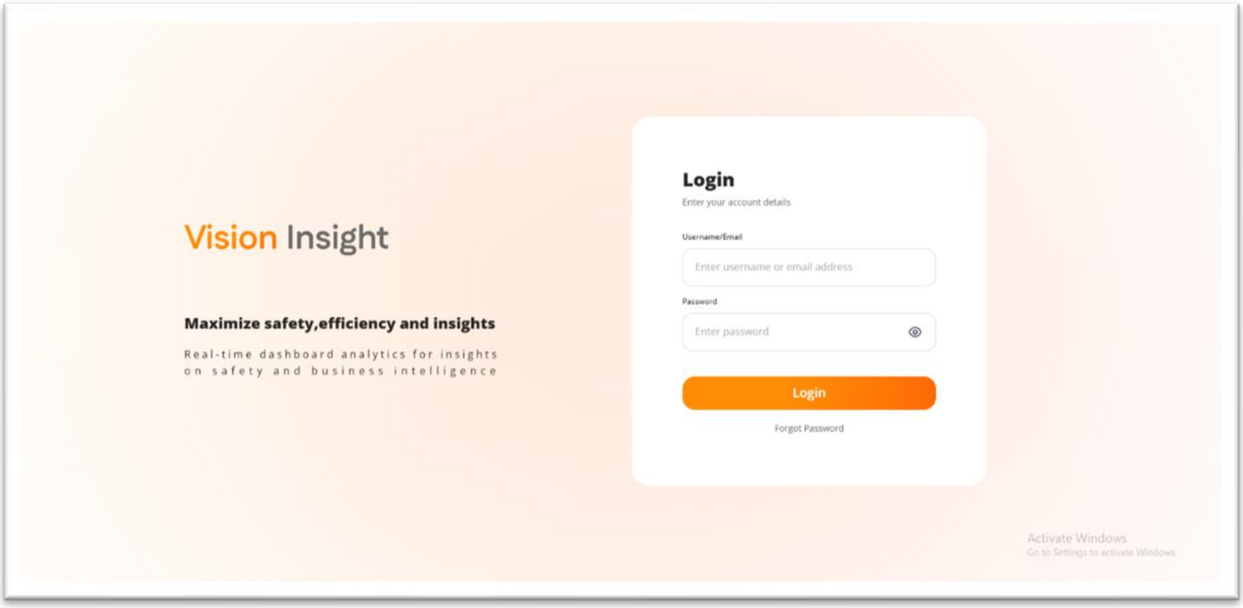
This manual serves as a guide for administrators and users to understand system features, configurations, and daily operations—such as managing users, roles, devices, floor plans, dashboards, and reports.

2. Getting Started

- This section explains how users can log in to the BI Dashboard Web Application.
- Password reset or change cannot be done by the users directly. In such cases, the user must contact the System Administrator.

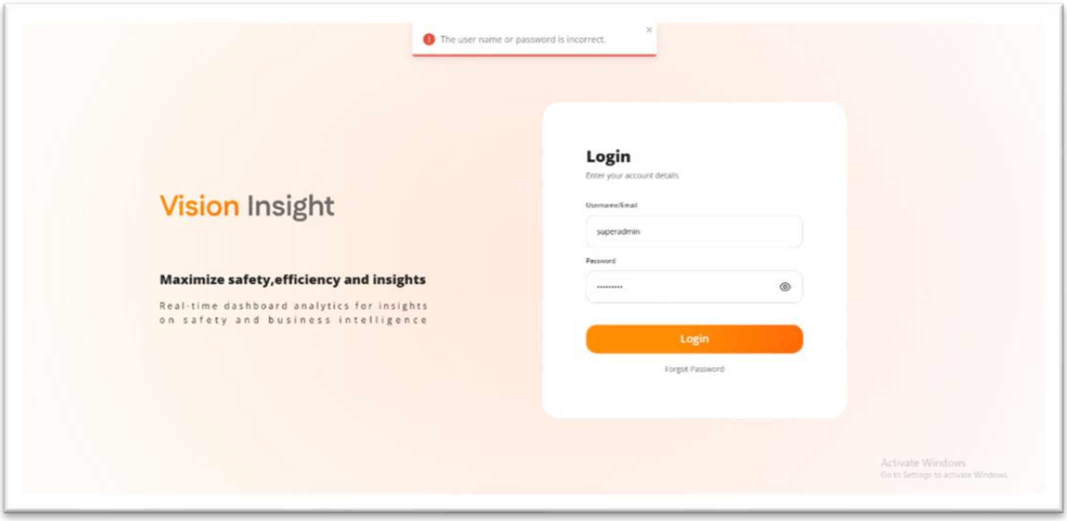
2.1 Login Process:

- Screen



- Steps to Login

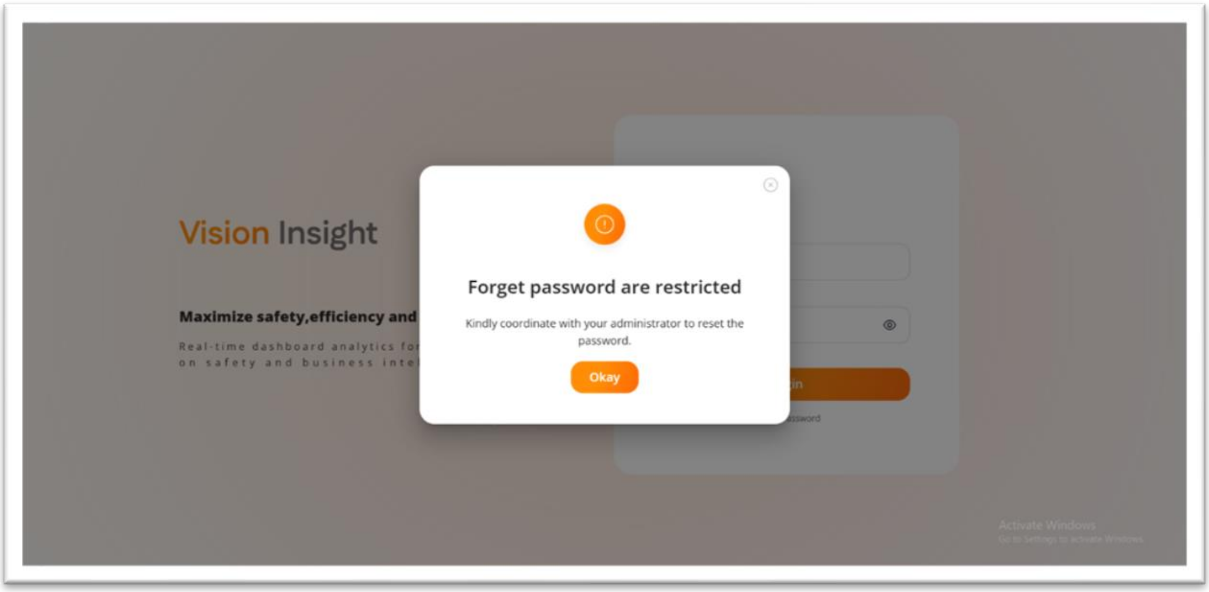
  - ✓ Enter **Username or Email** and **Password** in the respective fields.
  - ✓ Click **Login** to proceed.
  - ✓ On successful validation, the user is redirected to the **Dashboard** page.
  - ✓ If invalid credentials are entered, an appropriate **error message** is displayed.
  - ✓ If the account is **Inactive** or **Deleted**, login is denied, and the user must contact the **Super Admin or authorized user** for assistance.



- If credentials are invalid, appropriate error message will be shown.
- If account is Inactive/Deleted, login is denied, and user must contact an active admin.

2.2 Forgot Password

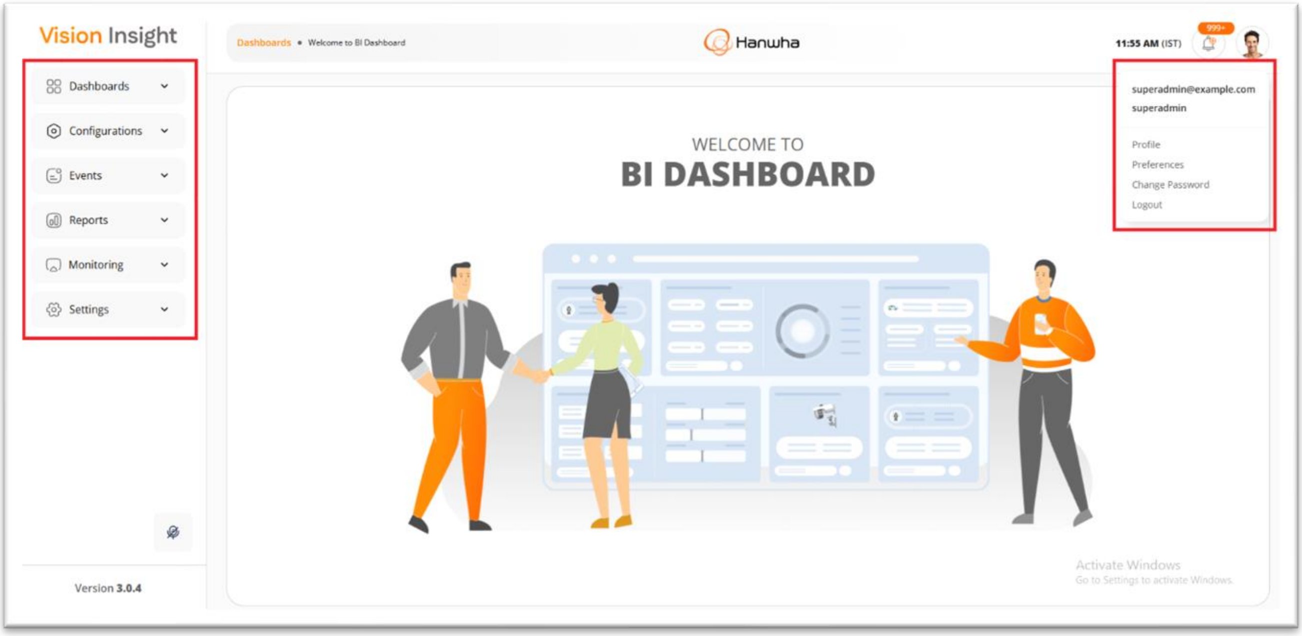
- **Screen:**



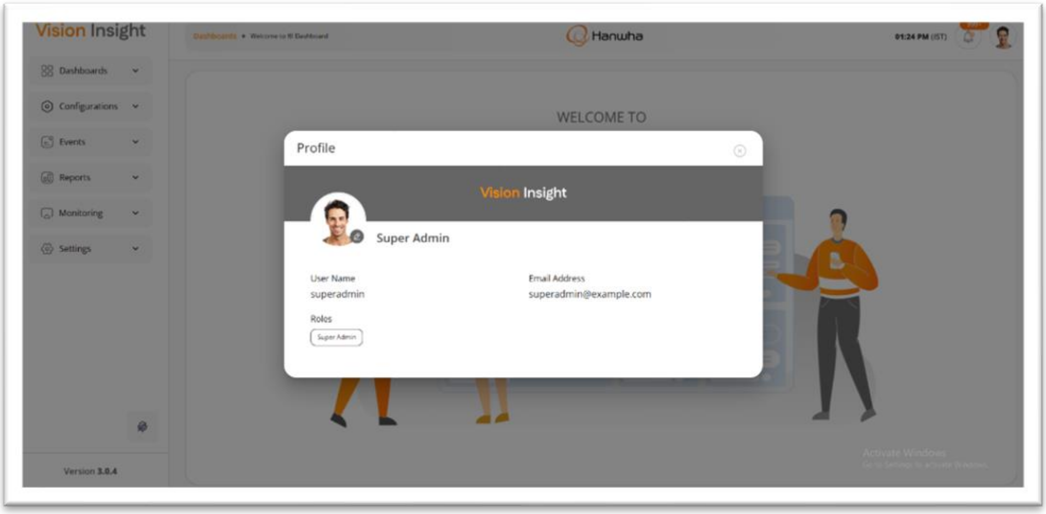
- **Flow & steps:**
  - Clicking on the **Forgot Password** link displays the message: “Kindly coordinate with your administrator to reset the password.”

3. Navigation Overview

Screen:



- **Menu Options:**
  - **Dashboards** – Create and manage multiple dashboards with custom names.
  - **Configurations** – Manage Devices, Floor Plans & Zones.
  - **Events** – View and acknowledge Event Logs.
  - **Reports** – Access My Reports, Site Performance Comparison, and Zone Performance Comparison Reports.
  - **Monitoring** – Create and manage multiple monitoring setups.
  - **Settings** – Manage Users, Roles & Permissions, Multisite Setup, General Settings, and License.
- **Profile Menu (Top-Right Corner):**
  - **Profile** – View user details.
    - **Screen**



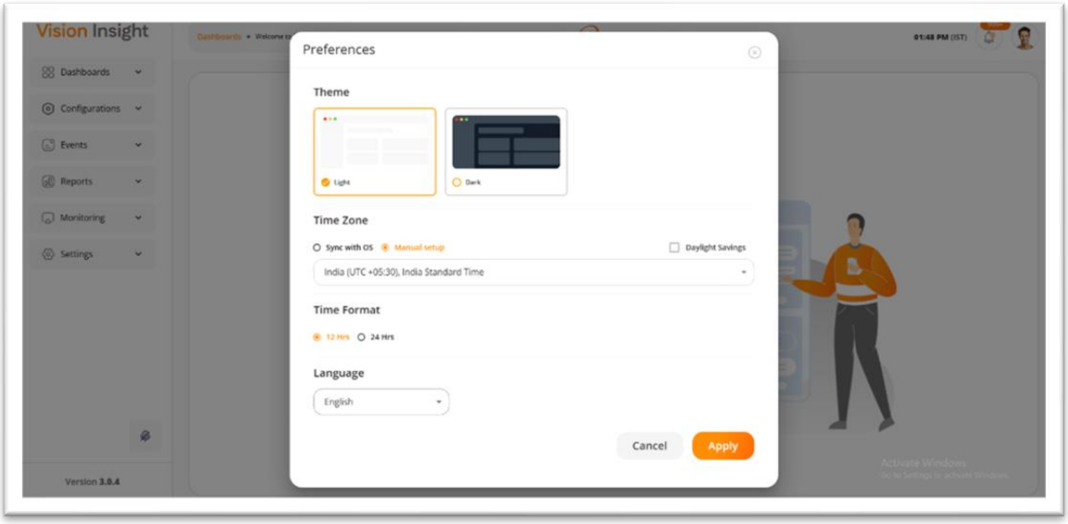
- **Steps to View Profile:**
  - ✓ Click on the **Profile** option from the top-right corner of the application header.
  - ✓ The system displays information specific to the logged-in user.

- **Details Displayed:**
  - Profile Image
  - Full Name (First & Last Name)
  - Username
  - Email Address
  - Roles (assigned from Manage Users page)

- **Actions Available:**
  - ✓ Users can **view** their profile details.
  - ✓ Users can **update their profile image** by clicking on the current image and selecting a new one.
  - ✓ The updated profile picture appears across the system after re-logging in.

- **Preferences** – Manage theme, time zone, and language preferences.

  - **Screen**



- **Steps to Access:**
  - ✓ Click on the **Profile icon** at the top-right corner of the screen.
  - ✓ Select **Preferences** from the dropdown menu.
  - ✓ The Preferences page will appear with options to customize the interface and display settings.

- **Options Available:**

  - **Color Theme**
    - ✓ Users can choose between **Light** and **Dark** themes.
    - ✓ The application interface updates instantly based on the selected theme.
    - ✓ By default, the **Light** theme is applied.

  - **Time Zone**
    - ✓ Users can configure the time zone using either of the following:
      - o **Sync with OS:** The system automatically applies to the device's time zone.
      - o **Manual Setup:** Users can select from a predefined list of time zones.
    - ✓ Optionally, enable **Daylight Savings** for automatic time adjustment where applicable.
    - ✓ The selected time zone affects date and time display across the entire system.

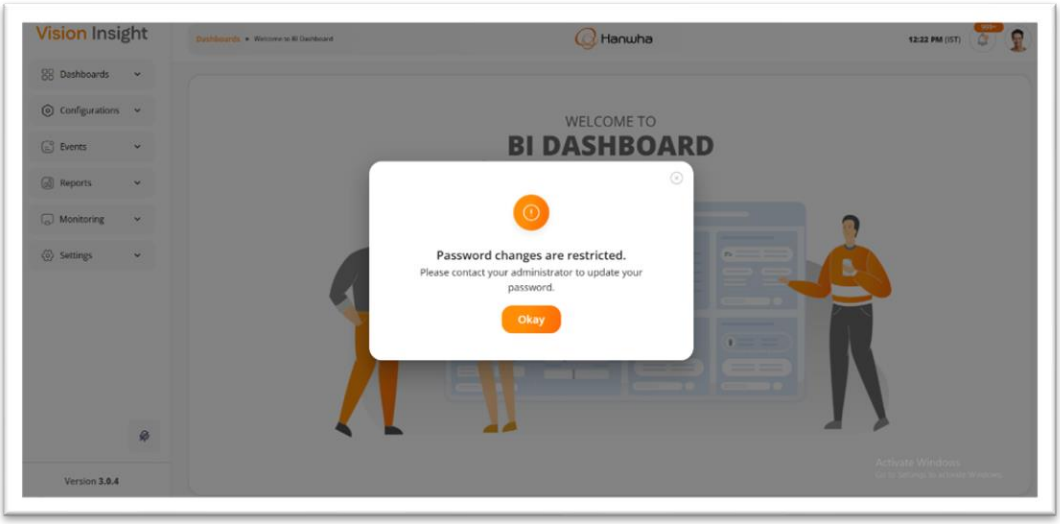
  - **Time Format**
    - ✓ Users can select their preferred time format:
      - o **12-Hour Format (AM/PM)**
      - o **24-Hour Format**
    - ✓ The selected format will be applied throughout the system wherever time is displayed.

  - **Language**
    - ✓ The system currently supports **English** only.

- **Save Changes:**
  - ✓ After updating preferences, click **Apply** to save the changes.
  - ✓ A success or error message will confirm whether the changes were saved successfully.

- **Change Password** – Request administrator supports for password changes.

  - **Screen**



  - **Steps to Access:**
    - ✓ Click on the **Profile icon** at the top-right corner of the screen.
    - ✓ Select **Change Password** from the dropdown menu.
    - ✓ The system displays an informational message regarding password changes.

  - **Functionality:**
    - ✓ Users **cannot** change or reset their own passwords directly through the BI Dashboard Web Application.
    - ✓ To reset or change a password, users must contact a **Super Admin** or an **authorized user**.
    - ✓ Only Super Admins or authorized users can update or reset passwords from the **Manage Users** page.

  - **System Message Displayed:**
    "Kindly coordinate with your administrator to change your password."

  - **Additional Note:**
    - ✓ If the **Super Admin** forgets their password, they must contact the **technical development team** to reset or change it.

- **Logout** – Securely log out of the system.

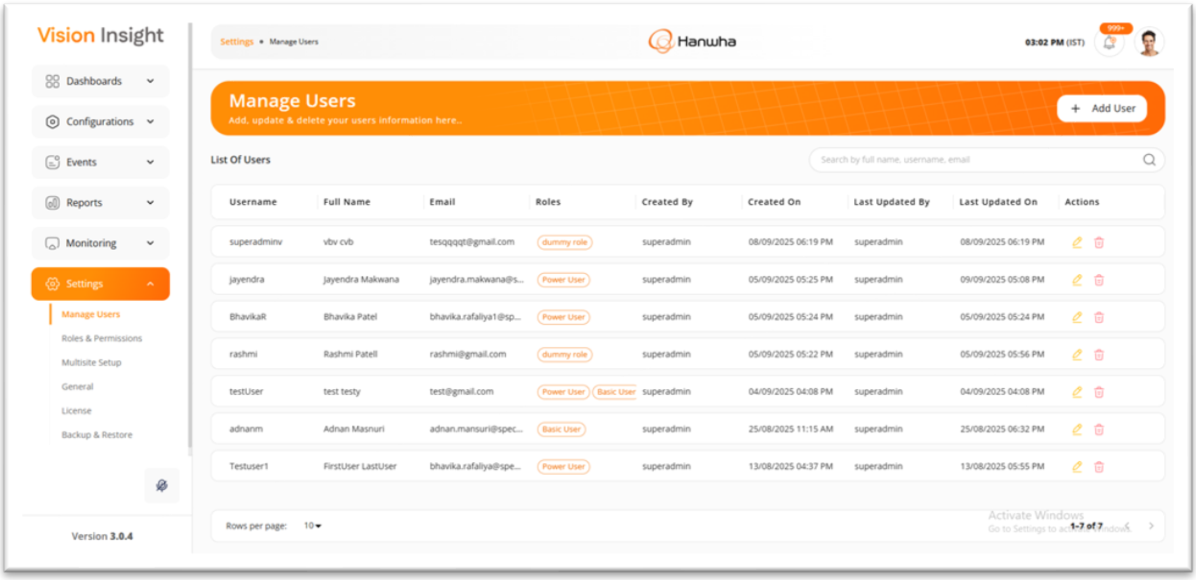
- **Access Rules:**
    - Users can view only the menus and actions permitted by their assigned roles.
    - All users can access **Profile**, **Preferences**, **Change Password**, and **Logout**.
    - Unauthorized menus and actions are automatically hidden from view.

4. Settings

- This section explains how admin users can create, edit, delete, and manage users within the BI Dashboard Web Application.
- It also covers rules for unique credentials, password policy, and soft delete functionality.

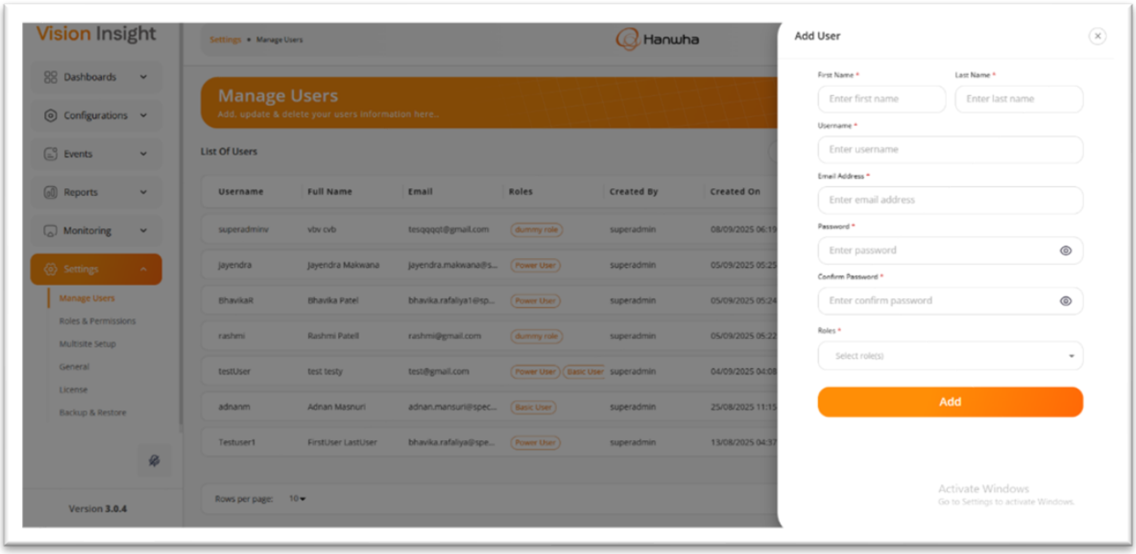
4.1 Manage Users

- **Screen:**



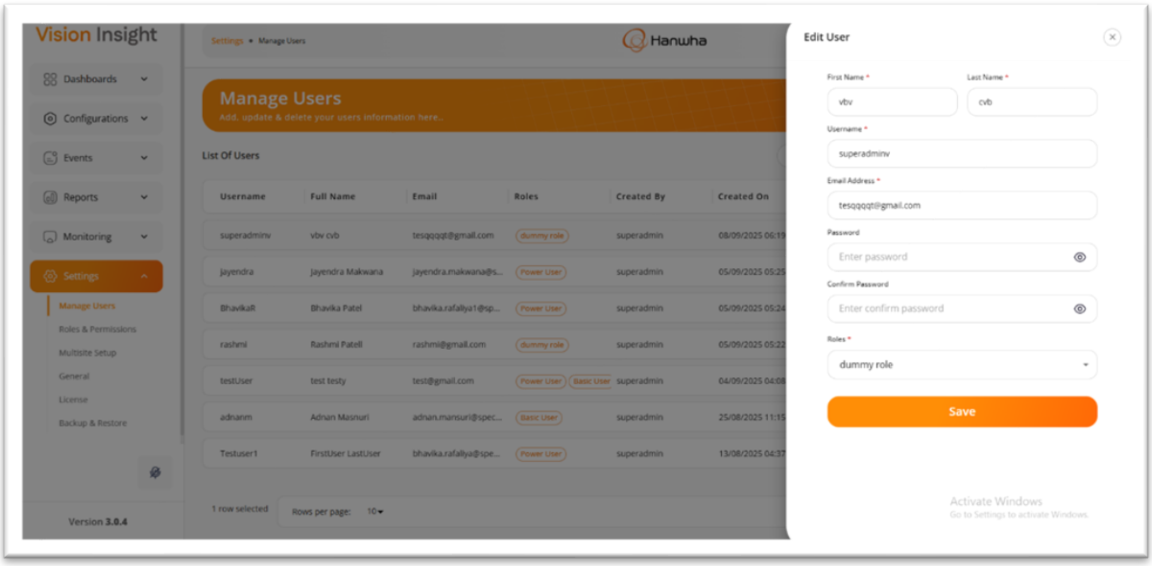
- **Steps to Access:**
  - ✓ Navigate to **Settings → Manage Users** from the left sidebar menu.
  - ✓ The system displays a list of all users created in the BI Dashboard Web Application.
  - ✓ Super Admin or authorized users can perform actions such as **Add**, **Edit**, or **Delete** based on assigned permissions.

- **Steps to Add a New User:**



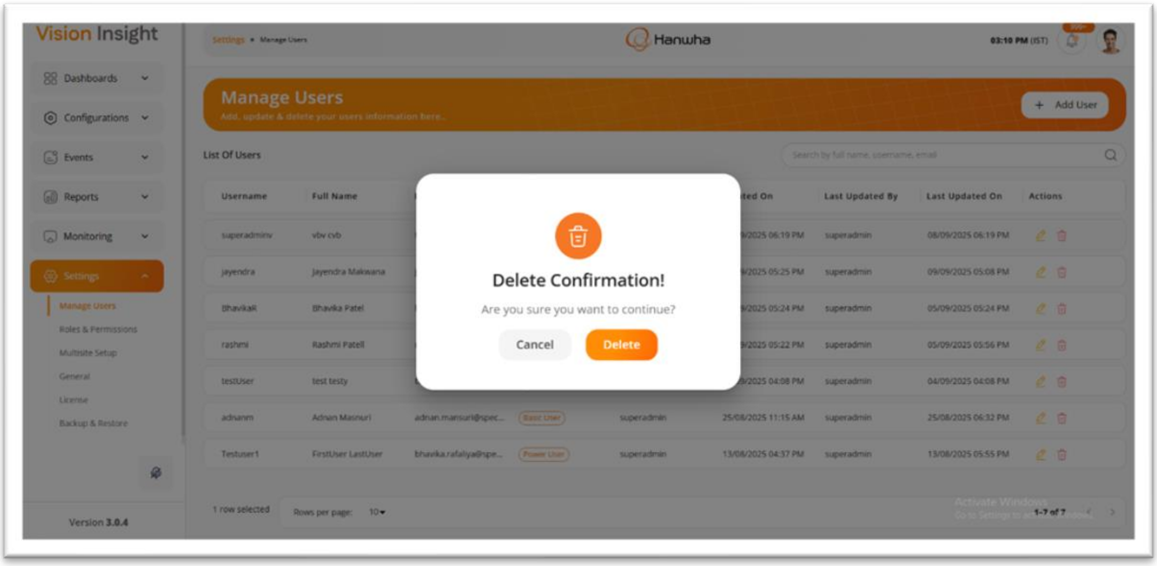
- ✓ Click **Add User**.
- ✓ Enter the required details in the form fields:
- ✓ First Name*
- ✓ Last Name*
- ✓ Username*
- ✓ Email Address*
- ✓ Password*
- ✓ Confirm Password*
- ✓ Roles*
- ✓ Click **Save** to create new user.

- **Steps to Edit an Existing User:**



- ✓ Click Edit next to the selected user.
- ✓ Update relevant details as required.
- ✓ The Password and Confirm Password fields will be visible only to authorized users.
- ✓ Click Update to save changes.

- **Steps to Delete a User:**



- ✓ Click Delete icon next to the selected user.
- ✓ A confirmation popup will appear.
- ✓ Click Yes to confirm deletion.
- ✓ The user record will be deleted.

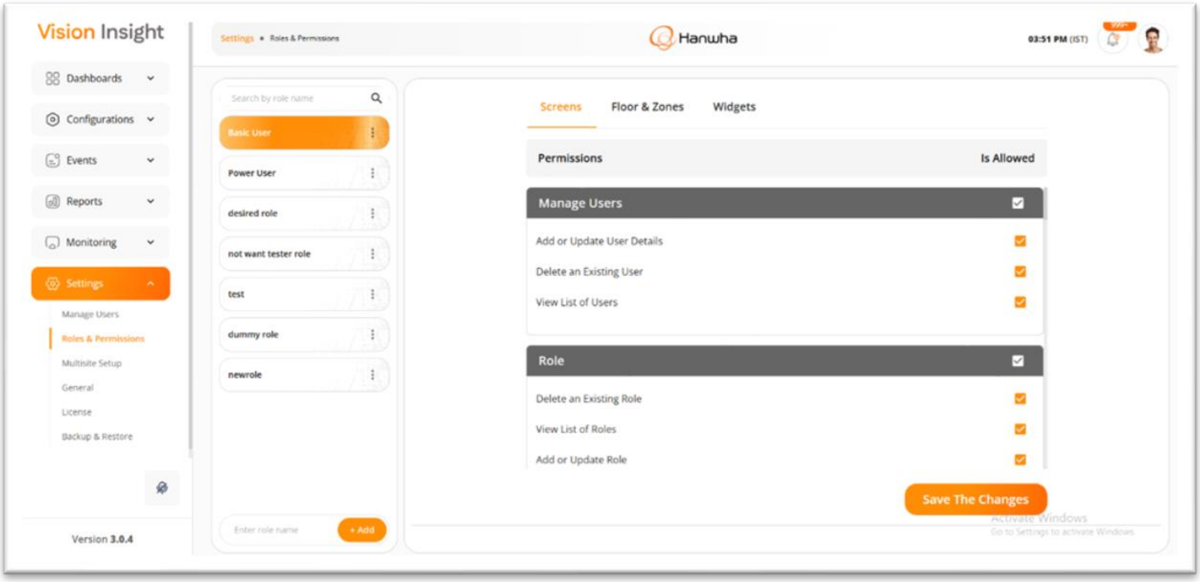
- **Password Criteria:**
  - ✓ Minimum 8 characters
  - ✓ At least 1 uppercase letter
  - ✓ At least 1 lowercase letter
  - ✓ At least 1 numeric digit
  - ✓ At least 1 special character (excluding "*")

- **Additional Information:**

  - ✓ Duplicate Email Address or Username entries are not allowed.
  - ✓ Authorized users can assign multiple roles to each user.
  - ✓ Filters like Sort, Filter, Hide Column, and Manage Columns are available for easier data handling.
  - ✓ Filters reset automatically when the page is reloaded or navigated away from.

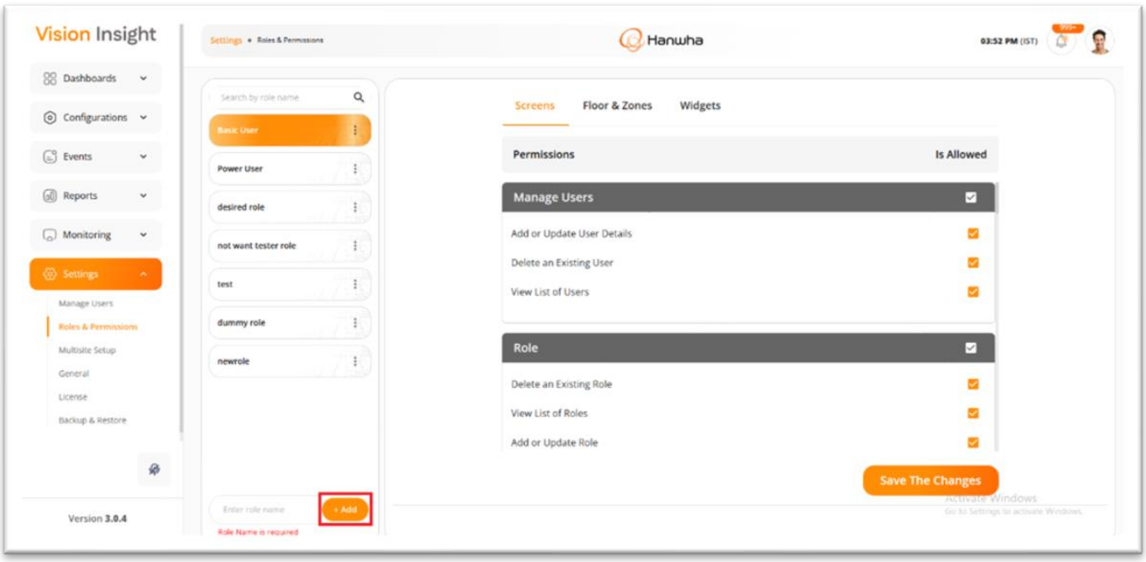
4.2 Role & Permission

- **Screen:**



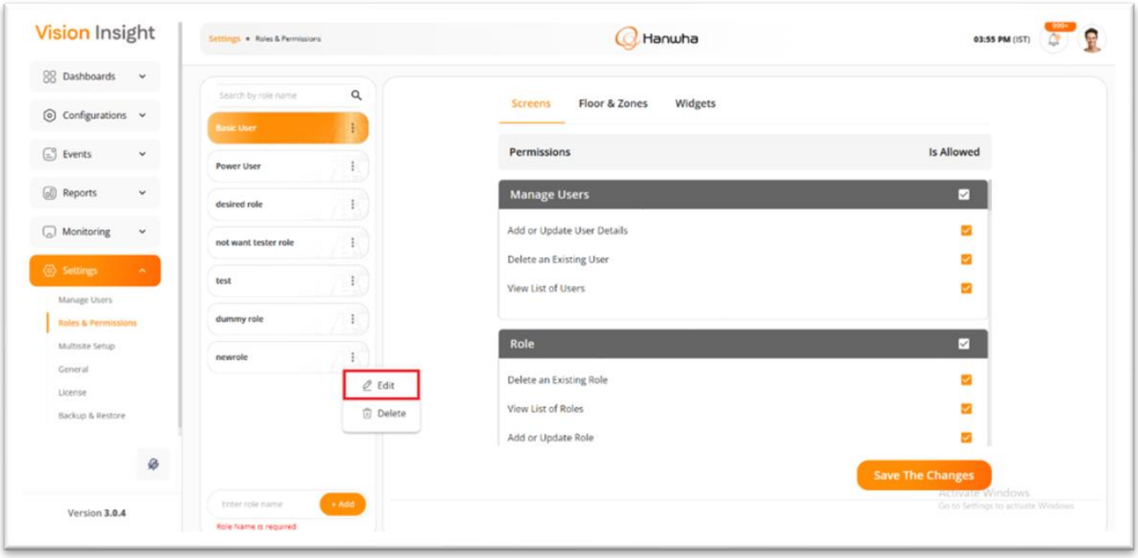
- **Steps to Access:**
  - ✓ Navigate to Settings → Roles & Permissions from the left sidebar menu.
  - ✓ The system displays a list of all existing roles with management options based on user permissions.

- **Steps to Add a New Role:**



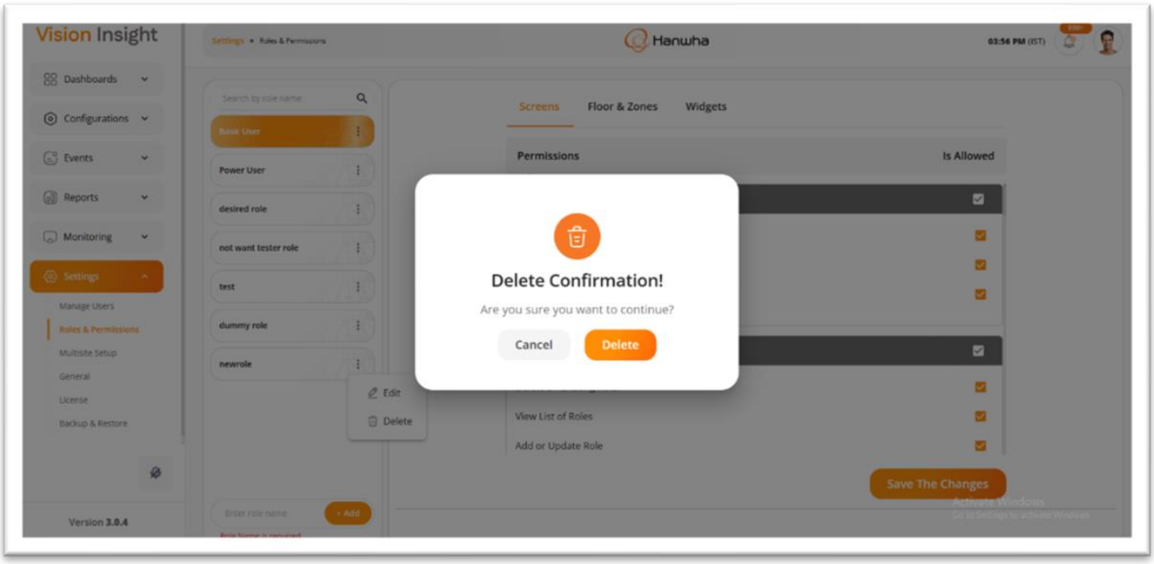
- ✓ Click Add Role.
- ✓ Enter the Role Name* in the form.
- ✓ Assign appropriate permissions such as Add, Update, Delete, and View for specific screens, zones, floors, and widgets.
- ✓ Click Save to create the new role.

- **Steps to Edit a Role:**



- ✓ Click Edit next to the selected role.
- ✓ Update the permissions or role details as required.
- ✓ Click Update to save the changes.
- ✓ The updated permissions will take effect only after the assigned users log in again.

- **Steps to Delete a Role:**



- ✓ Click Delete next to the selected role.
- ✓ A confirmation popup will appear.
- ✓ Click Yes to confirm deletion.
- ✓ The system performs a soft delete — the record remains in the database but is hidden from the web application.
- ✓ Roles associated with users cannot be deleted.

- **Floor & Zone Permissions:**

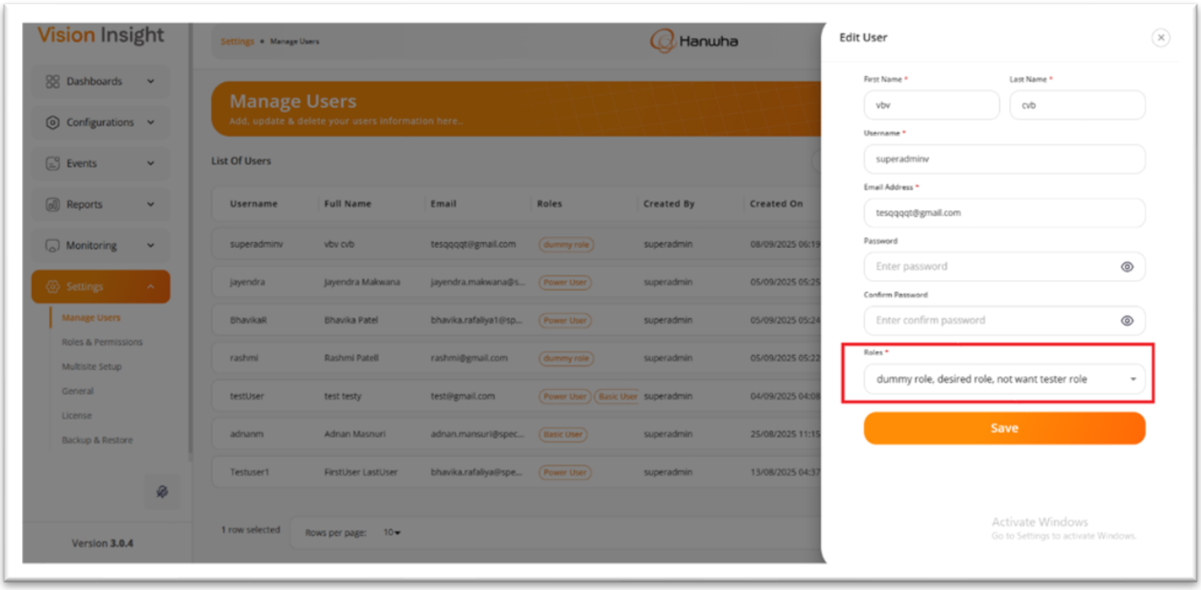
    - ✓ Permissions are managed at Floor Plan and Zone levels only.
    - ✓ The Admin User must manually assign appropriate permissions for each floor and zone.
    - ✓ The system does not automatically handle permissions for cameras mapped to multiple zones.
    - ✓ Displayed data strictly follows the permissions assigned at the floor and zone levels.

- **Additional Information:**

    - ✓ Role Name* is mandatory.
    - ✓ Duplicate roles or user-role mappings are not allowed.
    - ✓ Super Admin has full access by default.
    - ✓ Unauthorized actions such as Add/Edit/Delete cannot be assigned to screens like Profile, Change Password, or Preferences.
    - ✓ The system maintains a change history for all permission updates.

4.3 Assign Roles to Users

- **Screen:**



- **Steps to Access:**
    - ✓ Navigate to **Settings → Manage Users** from the left sidebar menu.
    - ✓ Select **Add User** or **Edit User**.
    - ✓ The **Roles** dropdown will be available within the user creation/edit form.

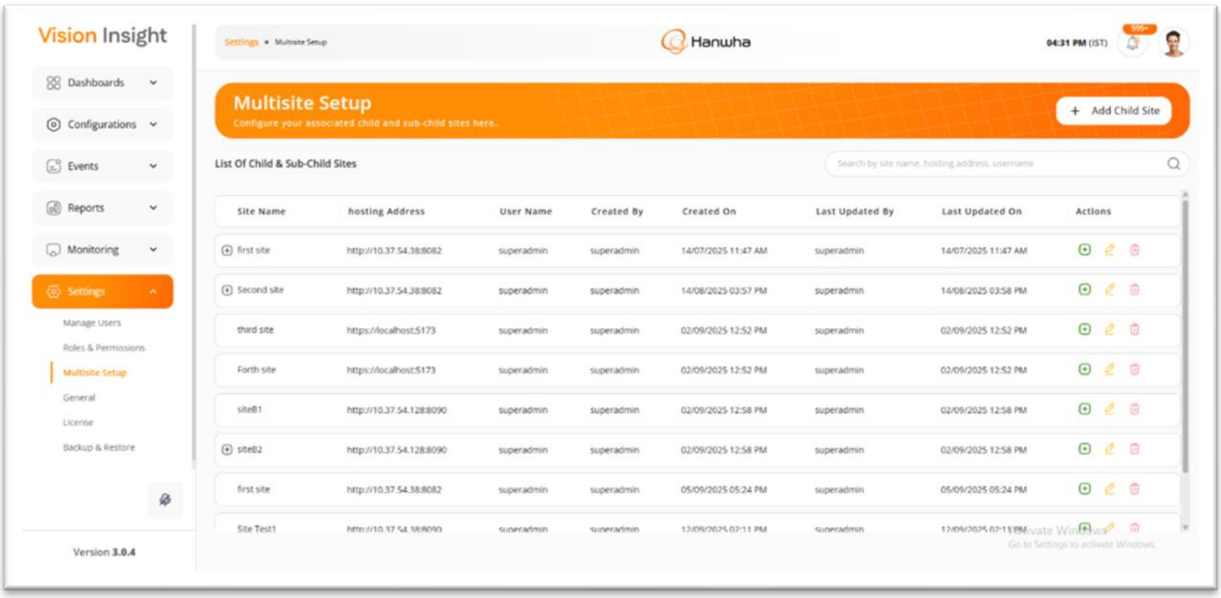
- **Steps to Assign Roles:**
    - ✓ From the **Roles** dropdown, select one or multiple roles to assign to the user.
    - ✓ Click **Save** to apply the role assignment.
    - ✓ The assigned roles define the user's access permissions within the system.

- **Steps to Modify Role Assignment:**
  - ✓ Open the **Edit User** form for the desired user.
  - ✓ Update the assigned roles as needed.
  - ✓ Click **Update** to save the changes.
  - ✓ The updated roles take effect after the user logs out and logs in again.

- **Access Rules:**
  - ✓ Only **Super Admins** or **Authorized Users** can assign or update user roles.
  - ✓ Role-based permission determines which screens, features, and actions are visible to each user.
  - ✓ The system ensures that users can access only the functionalities permitted by their assigned roles.

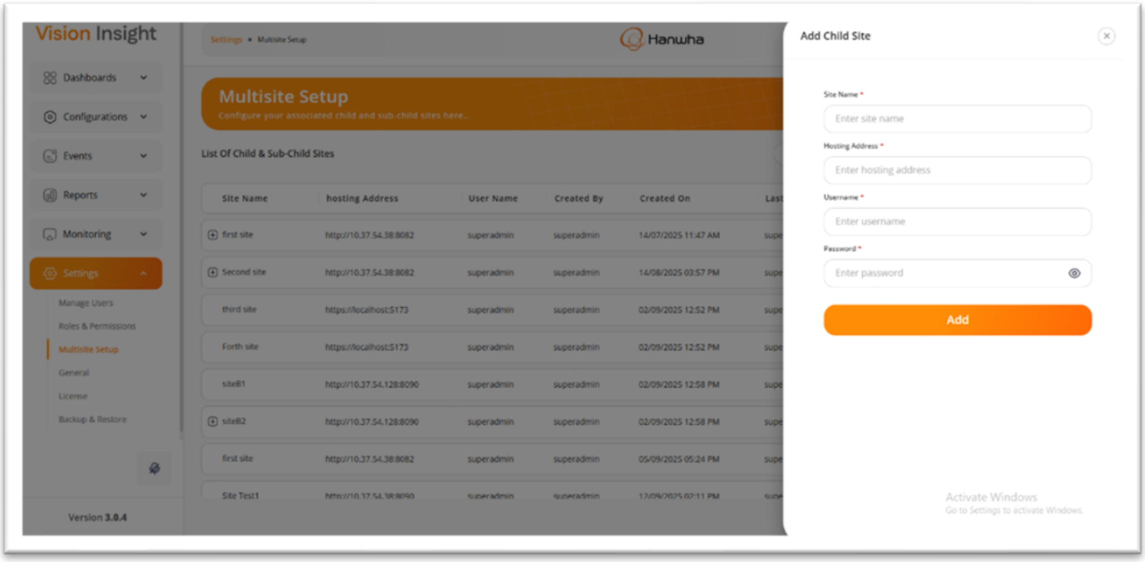
4.4 Multisite Setup

- **Screen:**



- **Steps to Access:**
  - ✓ Navigate to Settings → Multisite Setup from the left sidebar menu.
  - ✓ The system displays all configured child and sub-child sites in a hierarchical structure.
  - ✓ This screen is accessible only to Parent Site's Authorized Users or Super Admins.

- **Steps to Add a Child Site:**

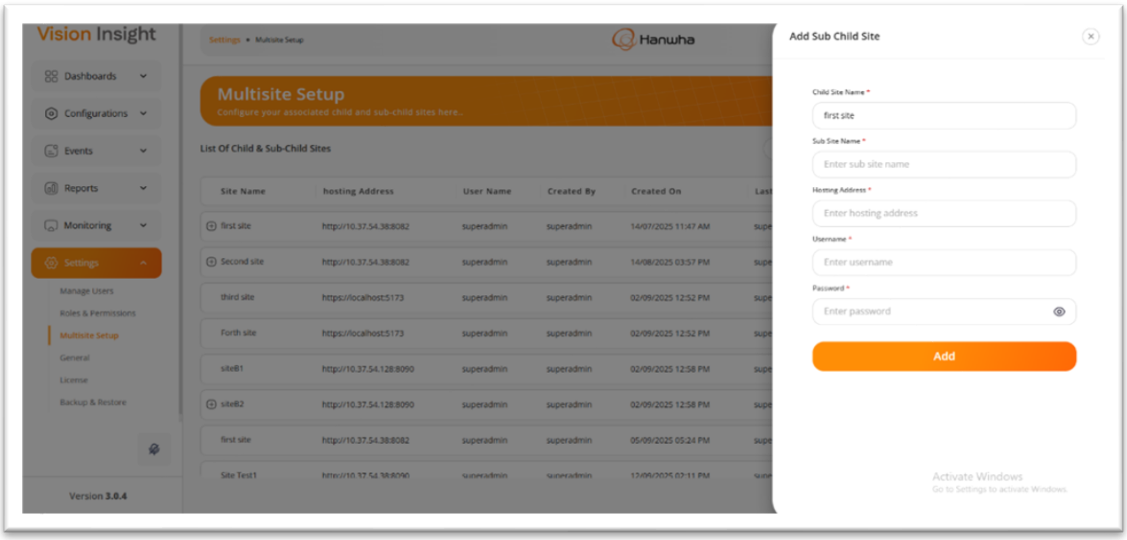


✓ Click Add Child Site.
  - Enter the required details:
  - Site Name
  - Hosting Address / URL
  - Username
  - Password

✓ Click Save to create the child site.

✓ The system validates the connection and displays a success or error message based on the result.

- **Steps to Add a Sub-Child Site:**



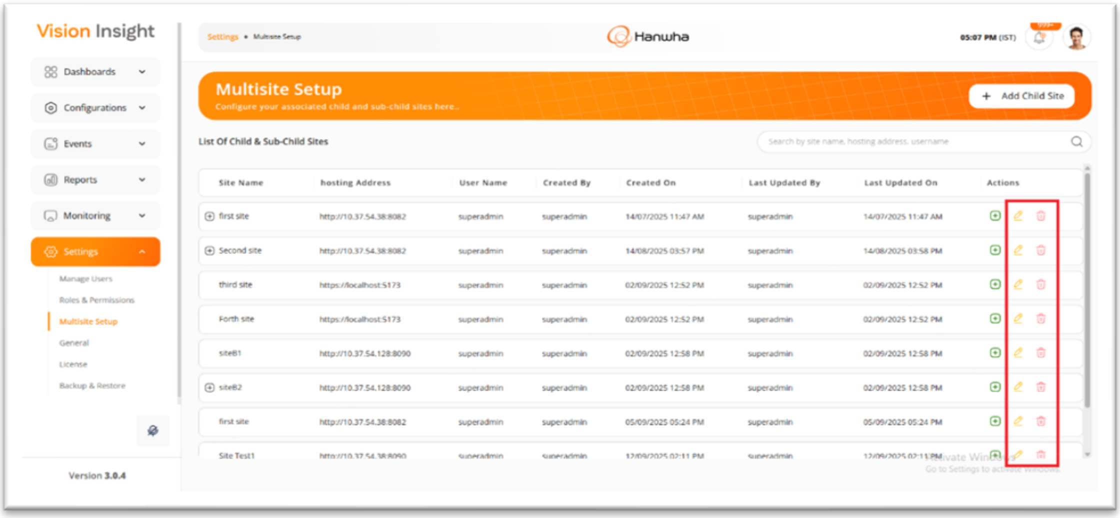
✓ Click the “+” icon next to a child site.

✓ Enter the required details in the Add Sub-Child Site form.

✓ The parent site name will appear as non-editable.

✓ Click Save to add the sub-child site.

- **Steps to Edit or Delete:**



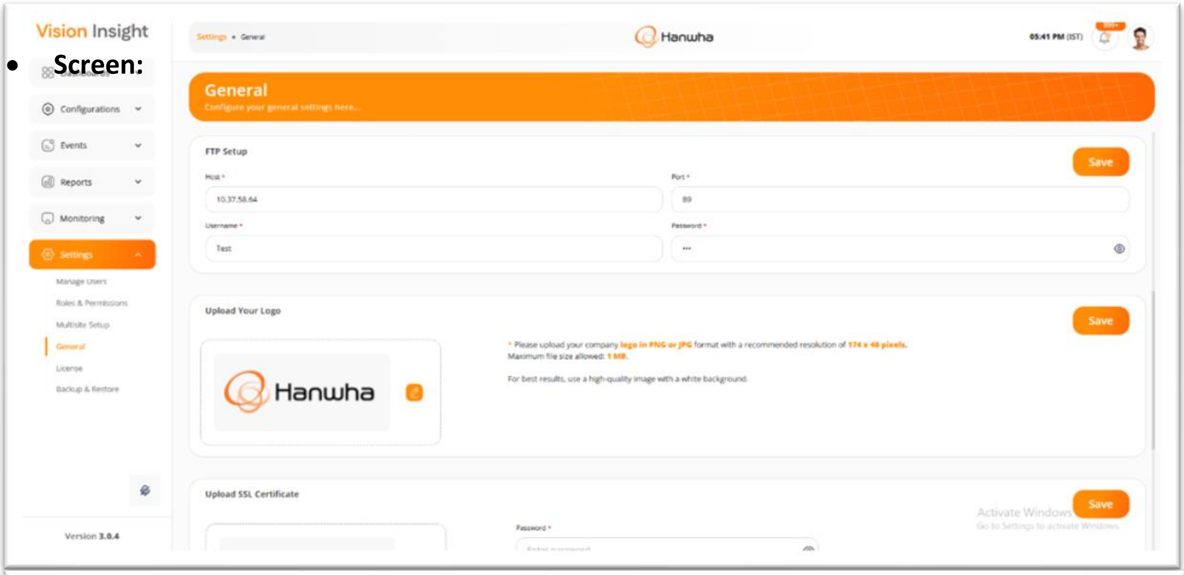
✓ Click Edit to update existing site information.
✓ Click Delete to remove a child or sub-child site.
✓ A confirmation popup will appear before deletion.
✓ Once confirmed, the record will be deleted from the list.

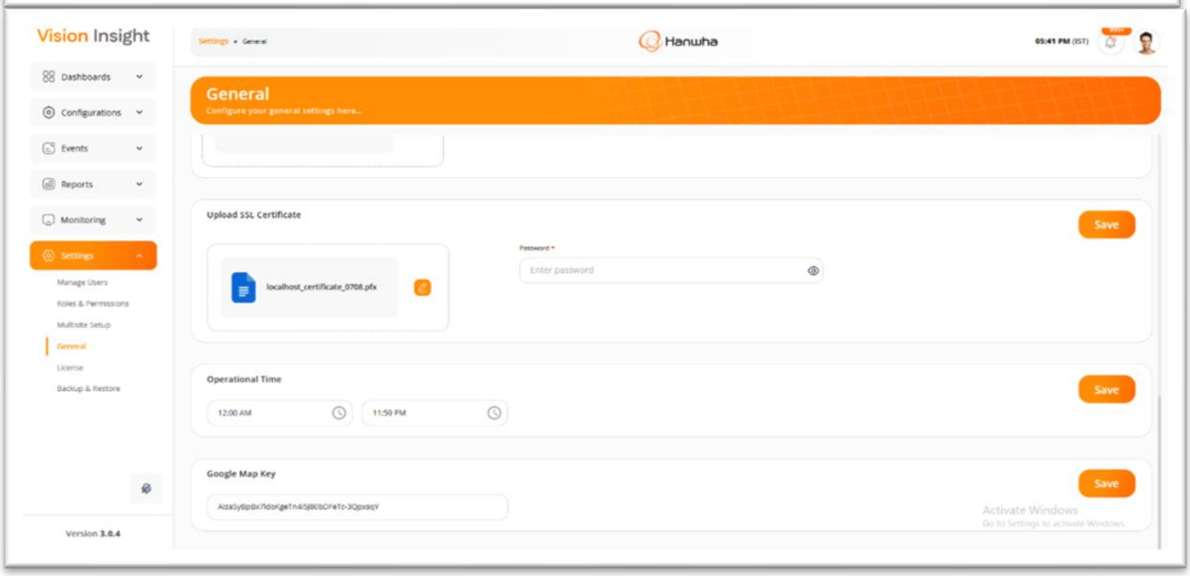
- **Permissions:**
  ✓ Only Parent Site's Authorized Users or Super Admins can configure multisite details.
  ✓ The system supports up to three levels: Parent → Child → Sub-Child.
  ✓ Super Admins must manually assign screen-level permissions during initial setup.
  ✓ Permissions are not automatically managed by the system.

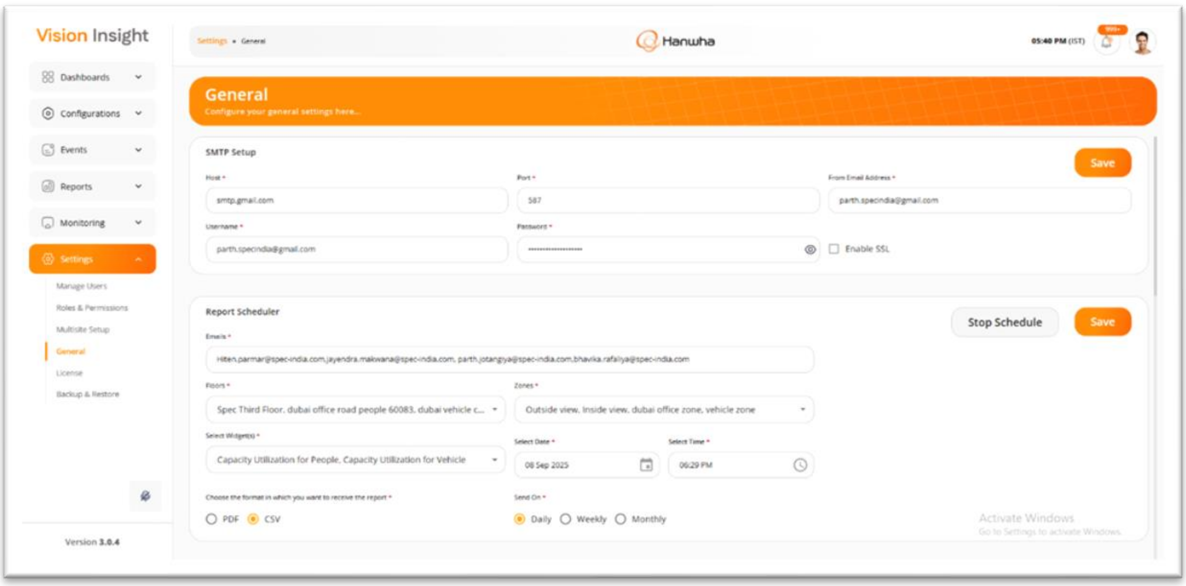
- **Additional Information:**
  ✓ Users can search sites using Site Name or Hosting Address.
  ✓ The system displays grouped Child and Sub-Child sites in a structured format.
  ✓ Vertical scrolling is supported for easy navigation (pagination not available).
  ✓ Users can expand a child site to view associated sub-child sites.
  ✓ Once configured, parent users can view data only for their own child and sub-child sites.

4.5 General

- **Screen:**







- **Steps to Access:**
  - ✓ Navigate to **Settings → General** from the left sidebar menu.
  - ✓ The page displays multiple independent configuration sections, each accessible only to **Super Admin** or **Authorized Users**.
- **SMTP Setup**
  - ✓ Configure outgoing email settings by entering the following details:

    - ❖ Host*
    - ❖ Port*
    - ❖ From Email Address*
    - ❖ Username*
    - ❖ Password*
    - ❖ Enable SSL **(**checkbox**)**

  - ✓ Click **Save** to apply settings.
  - ✓ The system sends email notifications only when SMTP is properly configured.

- **Report Scheduler**
  - ✓ Configure automated report delivery to specific recipients by entering the following fields:
    - ▪ Emails* – One or multiple recipient email addresses (comma-separated).
    - ▪ Floors* – Select one or more floors to include in the report.
    - ▪ Zones* – Select one or more zones to include.
    - ▪ Select Widget(s)***** – Choose one or more widgets such as *Capacity Utilization for People* or *Capacity Utilization for Vehicle*.
    - ▪ Select Date* – Choose the report generation date.
    - ▪ Select Time* – Choose the time to send the report.
    - ▪ Format – Choose PDF or CSV as the output format.
    - ▪ Send On – Choose the report frequency (Daily, Weekly, or Monthly).
  - ✓ Click **Save** to activate the schedule.
  - ✓ Use **Stop Schedule** to pause or cancel an existing report schedule.

- **FTP Setup**
  - ✓ Enter the following details:
    - ▪ Host* – IP address or server hostname.
    - ▪ Port* – Port number for FTP communication.
    - ▪ Username* – FTP user name.
    - ▪ Password* – FTP account password.
  - ✓ Click Save to apply and validate settings.
  - ✓ The system uses these credentials for file transfer operations and event video retrieval.

- **Upload Company Logo**
  - ✓ Click Upload Logo to select your company logo file.
  - ✓ Supported formats: PNG or JPG.
  - ✓ Recommended resolution: 174 × 46 pixels.
  - ✓ Maximum file size: 1 MB.
  - ✓ The uploaded logo is displayed in the header once configured.

- **Upload SSL Certificate**
  - ✓ Click Upload SSL Certificate to upload a valid SSL file.

- ✓ Once uploaded, the system uses this certificate for secure access.
- ✓ If no custom certificate is provided, the default Vision Insight SSL will be applied.

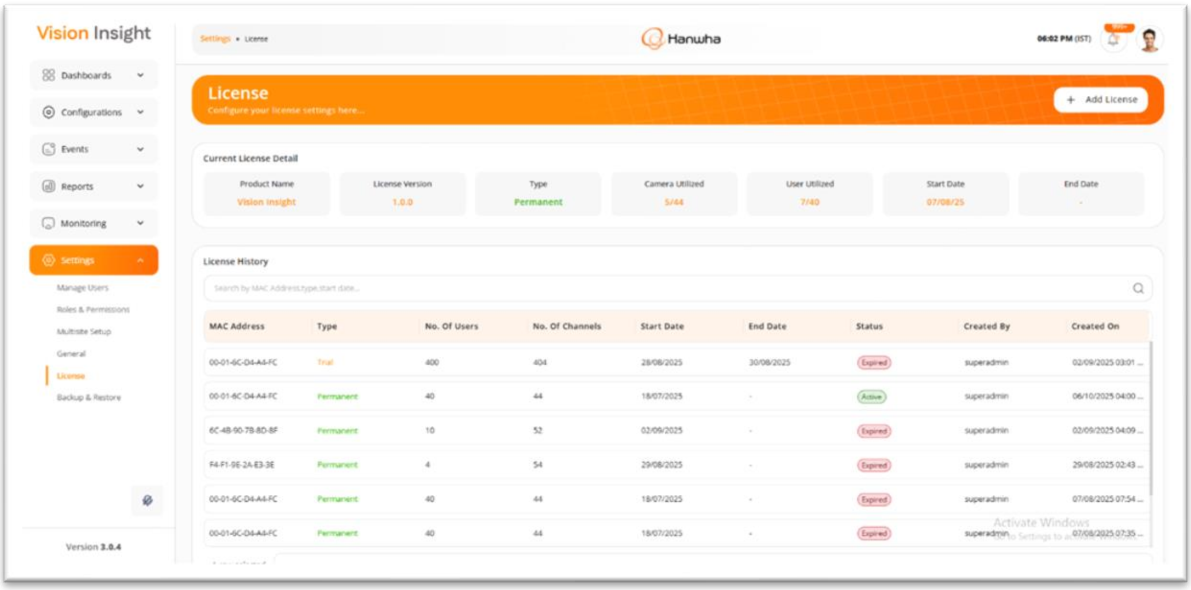
- **Operational Time**
  - ✓ Configure daily operational hours by entering:
    - Start Time*
    - End Time*
  - ✓ The system calculates all day-based data according to these values.
  - ✓ If not configured, the default operational time is 24 hours.

- **Google Map Key**
  - ✓ Enter the Google Map API Key to enable map-related features.
  - ✓ Maps will function only if a valid key is configured.
  - ✓ The API key must be purchased and managed by the client.

- **Save and Notifications**
  - ✓ Each configuration section must be saved individually using its Save button.
  - ✓ The system displays a “Success” or “Error” message after each save action.

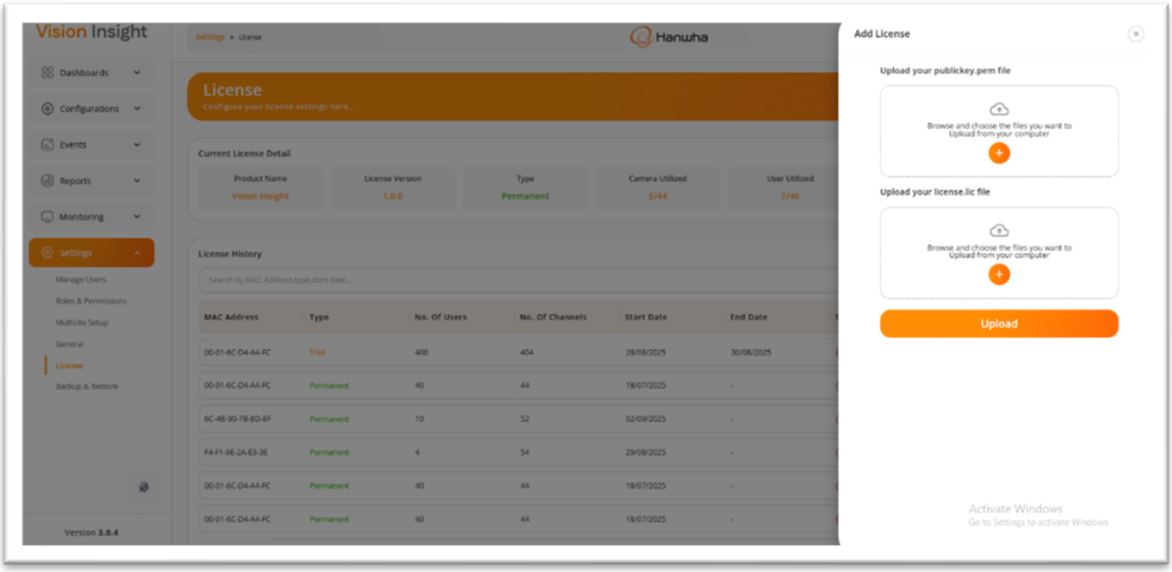
4.6 License

- **Screen**



- **Steps to Access:**
  - ✓ Navigate to Settings → License from the left sidebar menu.
  - ✓ This page is accessible only to Super Admins or Authorized Users with the required permissions.

- **Steps to Upload a License:**



✓ Click on the Add License button.

✓ Upload the following mandatory files:

  ❖ publickey.pem – Contains the customer's public key used for license authentication.

  ❖ license.lic – Contains the generated license details for the specific customer.

✓ Click Submit to upload the license files.

✓ The system validates the MAC Address of the customer's PC against the one stored in the license file.

  ❖ If the MAC Address matches, the license is uploaded successfully, and details are displayed.

  ❖ If the MAC Address does not match, an "Unauthorized" error message is shown, and the user is instructed to contact the administrator.

- **License Details Displayed:**
  - After successfully uploading, the system displays the following license information:
    - ❖ Product Name (e.g., Vision Insight)
    - ❖ Version (e.g., 1.0.0)
    - ❖ Type (Permanent / Trial)
    - ❖ Camera Utilized (e.g., 16/30)
    - ❖ User Utilized (e.g., 8/12)
    - ❖ Start Date (e.g., 25/03/2025)
    - ❖ End Date (e.g., 10/04/2025 or "–")
  - A confirmation message will also appear upon successful upload.

- **License History Section:**
  - The system maintains a complete record of all uploaded licenses.
  - License history is displayed in a searchable, tabular format with the following columns:
    - ❖ MAC Address
    - ❖ Type
    - ❖ No. of Users

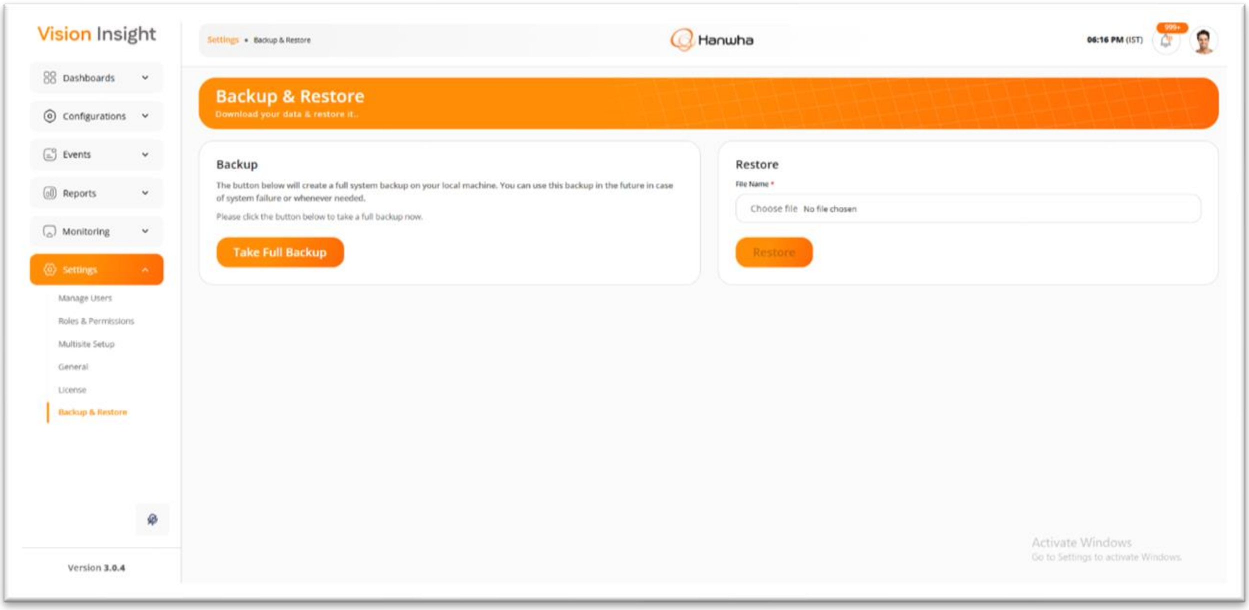
- ❖ No. of Channels
- ❖ Start Date
- ❖ End Date
- ❖ Status
- ❖ Created By
- ❖ Created On

- ▪ Users can search for specific licenses using MAC Address, Type, or Start Date.

- **Additional Information:**
  - ▪ Only one license can be active at a time in the system.
  - ▪ Older licenses remain accessible for audit purposes under the License History section.
  - ▪ Any new license upload replaces the previously active license.

4.7 Backup & Restore

- **Screen**



- **Steps to Access:**
  - ✓ Navigate to **Settings → Backup & Restore** from the left sidebar menu.
  - ✓ This page is accessible only to **Authorized Users** with the required screen-level permissions.

- **Take Full Backup:**
  - ✓ Click on the Backup button to create a full backup of the system data.
  - ✓ The system generates a backup file containing all current configuration and operational data.
  - ✓ Once completed, a success message confirms that the backup has been taken successfully.
  - ✓ Backups must be initiated **manually** — automated or scheduled backups are not supported.

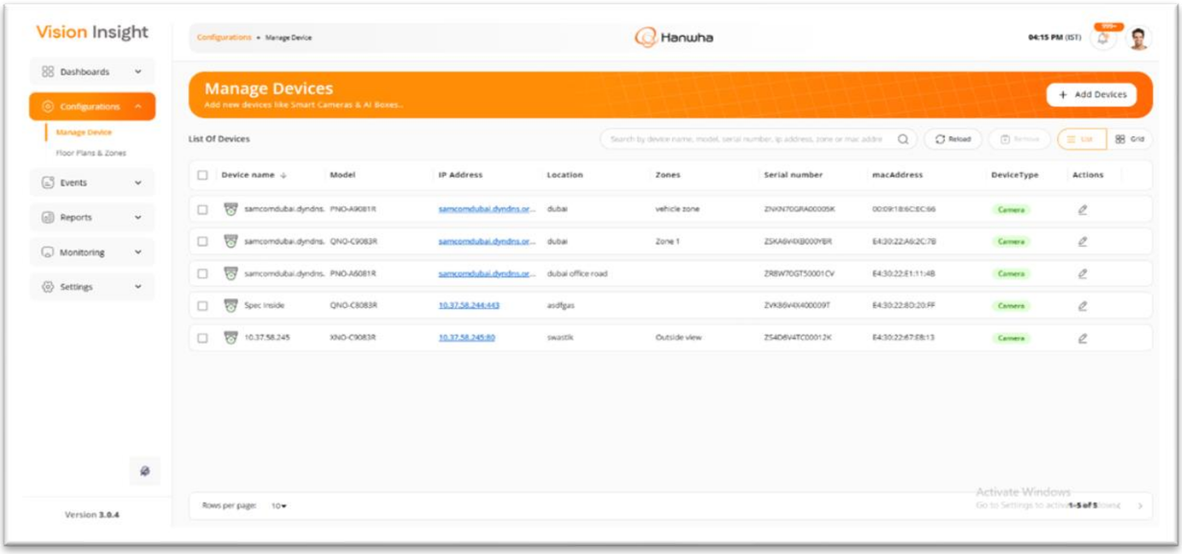
- **Restore Full Backup:**
  - ✓ Click on the Restore button to restore data from a previously taken backup file.
  - ✓ Confirm the restore action when prompted.
  - ✓ The system overwrites all existing data with the contents of the selected backup file.
  - ✓ Once the restore process is completed, only the restored data will remain in the system.

- **Additional Information:**
  - ✓ Only users with Restore permission can perform data restoration.
  - ✓ The system does not maintain history of backup or restore operations.
  - ✓ It is recommended to perform a backup before any major system update or configuration change.

5. Configuration

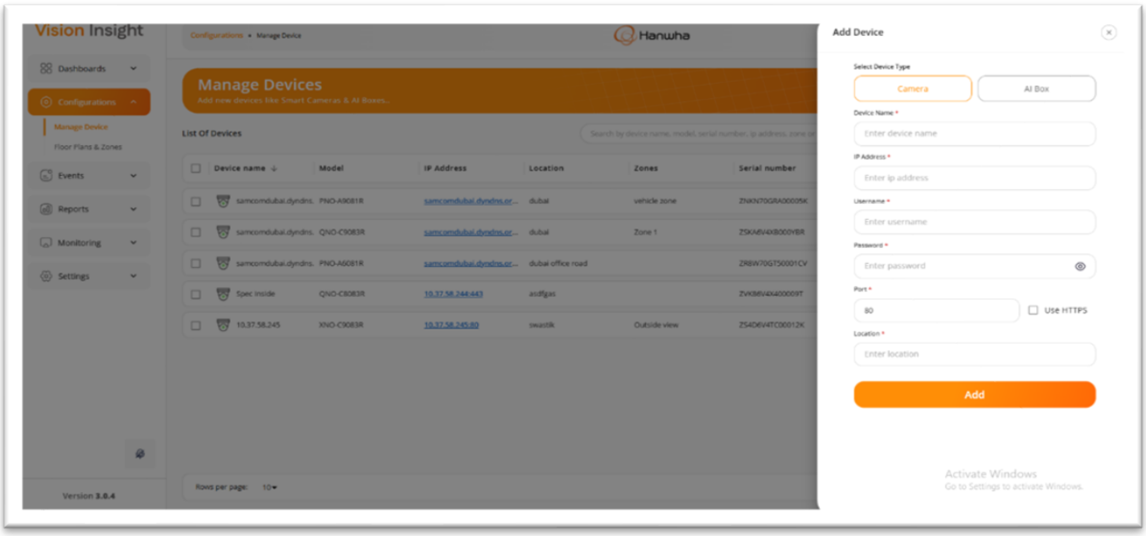
5.1 Manage Device

- **Screen**



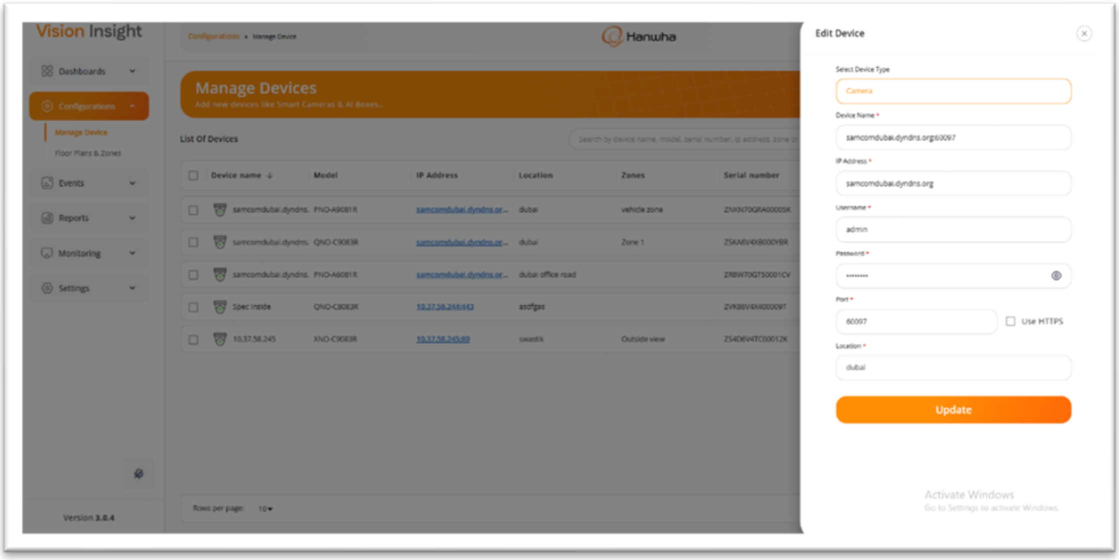
- **Steps to Access:**
  - Navigate to **Configurations → Manage Devices** from the left sidebar menu.
  - The page is accessible only to **Super Admin** and **Authorized Users** based on assigned permissions.
  - Devices can be viewed in **List View** or **Grid View** as per user preference.

- **Steps to Add a New Device:**



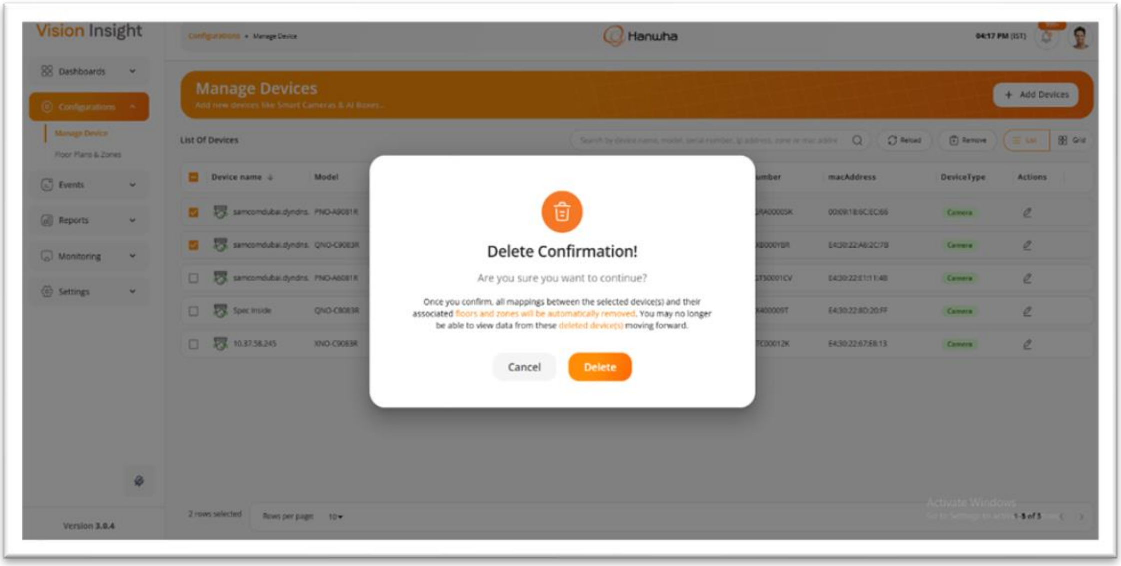
- Click **Add Device**.
- Select the **Device Type*** (Camera / AI Box).
- Enter the required details:
    - Device Name*
    - IP Address*
    - Username*
    - Password*
    - Device Port*
    - Location*
    - Use HTTPS (optional; default port is 443)
    - Total Channels (only for AI Box devices)
- Click **Save** to add the device to the system.
- The newly added device will appear in the list/grid view.

- **Steps to Edit an Existing Device:**



- Click **Edit** next to the desired device record.
- Update any required information and click **Update** to save changes.
- The system validates for duplicate **Device Name** and **IP Address** before updating.

- **Steps to Delete a Device:**



- Select one or multiple devices from the list.
- Click **Remove** and confirm the action in the popup.
- Upon confirmation, the system will:
  - **Unmap** the selected devices from associated floors and zones.
  - Perform a **soft delete** — the records remain in the database but are no longer visible in the web application.

- **Device Status and Reload Function:**
  - The **Reload** button updates the current online/offline status of all configured devices.
  - Upon clicking Reload, the system triggers API calls to fetch the latest device status.
  - A **loader** is displayed on the screen during the process.
  - Status information is stored in the database and reflected in the UI.
  - Device status data is also refreshed automatically by a background job every **15 minutes** (configurable).

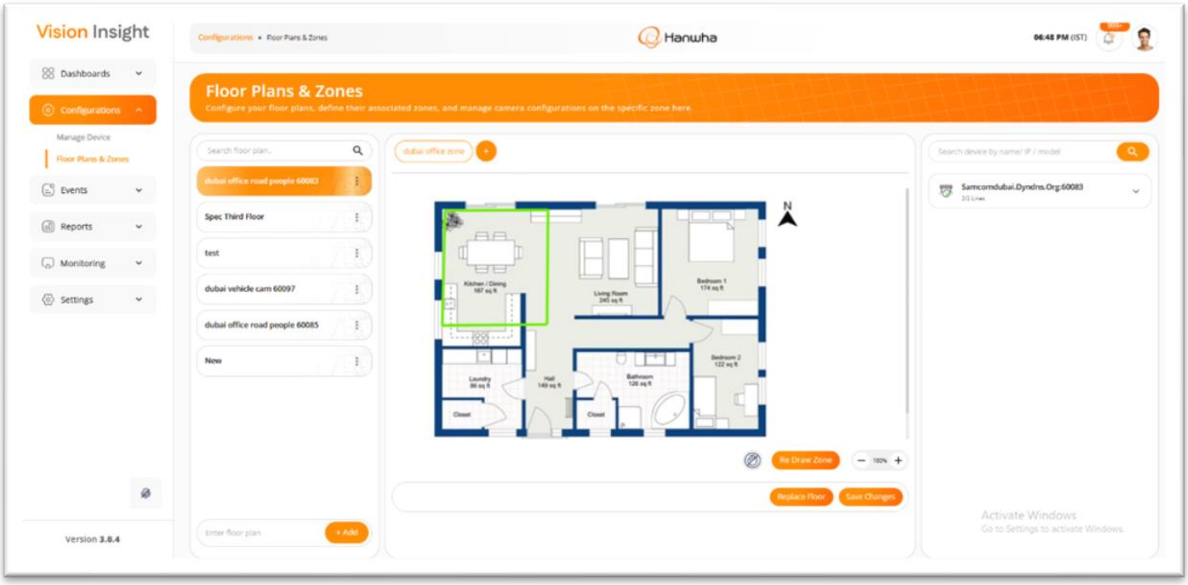
- **Viewing and Searching Devices:**
  - Users can switch between **List View** and **Grid View**.
  - Both views support **pagination** and adjustable rows per page.
  - The following columns are displayed:
    - Selection Checkbox
    - Online/Offline Status Icon
    - Device Name
    - Model
    - Location
    - Serial Number
    - MAC Address
    - Device Type
    - Action (Edit & View)
  - Users can search for devices using **Device Name**, **Model**, **Serial Number**, or **MAC Address**.
  - Clicking an **IP Address** opens the device URL in a new browser window.
    - Under **List View**, users can apply filters (Sort, Hide, Manage Columns)

❖ Filters are reset upon page reload or navigation.

- **Key Notes:**
  - Only authorized users can **Add**, **Edit**, or **Delete** devices.
  - The system prevents duplicate entries based on **Device Name** and **IP Address**.
  - Online/Offline status is reflected in real-time through scheduled background updates.

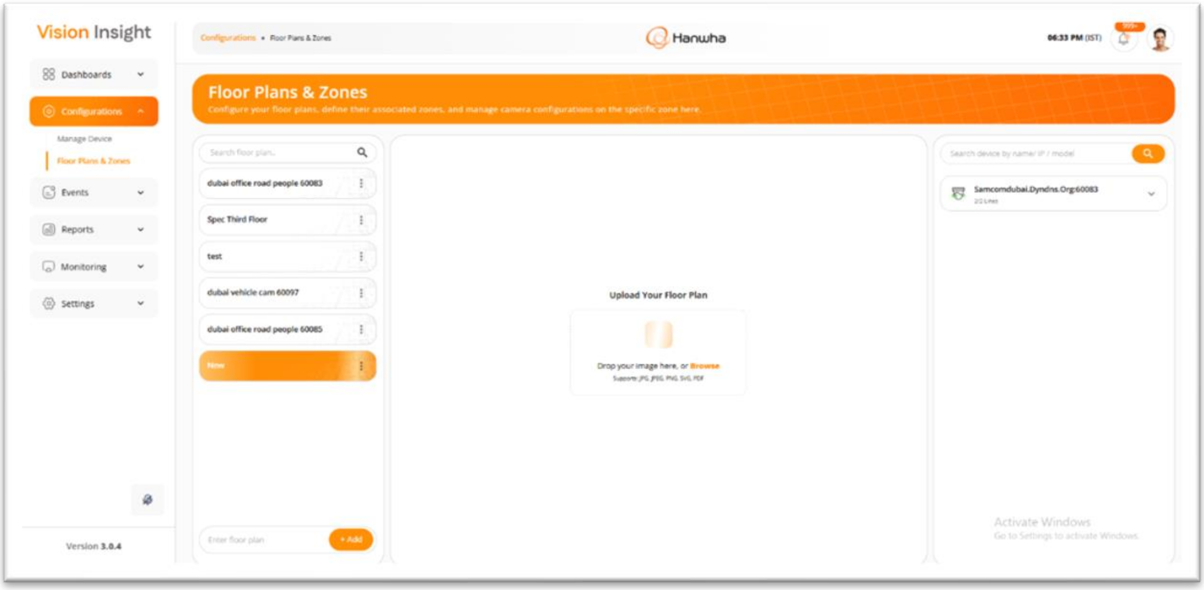
5.2 Floor Plans & Zones

- **Screen**



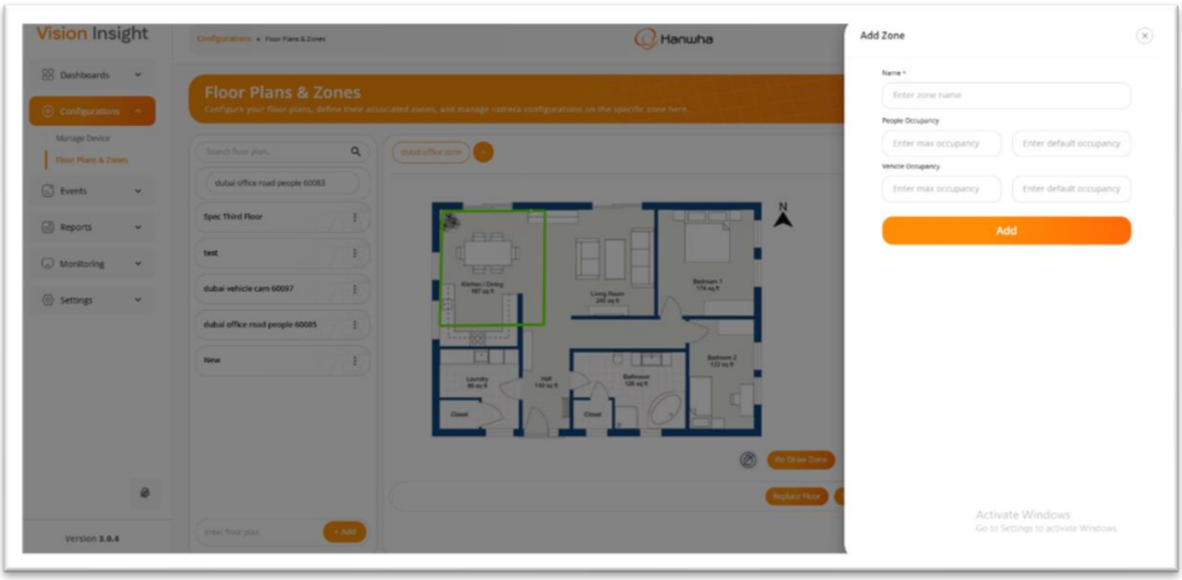
- **Steps to Access:**
  - Navigate to **Configurations → Floor Plans & Zones** from the left sidebar menu.
  - The page is accessible only to **Authorized Users** with assigned permissions.
  - The system displays either the **Add Floor Plan** option (if none exist) or a list of configured floor plans and their associated zones.

- **Steps to Add a Floor Plan:**



- Click **Add Floor Plan**.
- Enter the **Floor Plan Name***.
- Upload a floor plan image in one of the supported formats: **.pdf, .jpg, .png, .jpeg, or .svg**.
    - Maximum file size: **10 MB**.
    - Only **single-page PDFs** are supported.
- Click **Save** to create the floor plan.
- The system displays the new floor plan in the list view.

- **Steps to Add or Edit a Zone:**

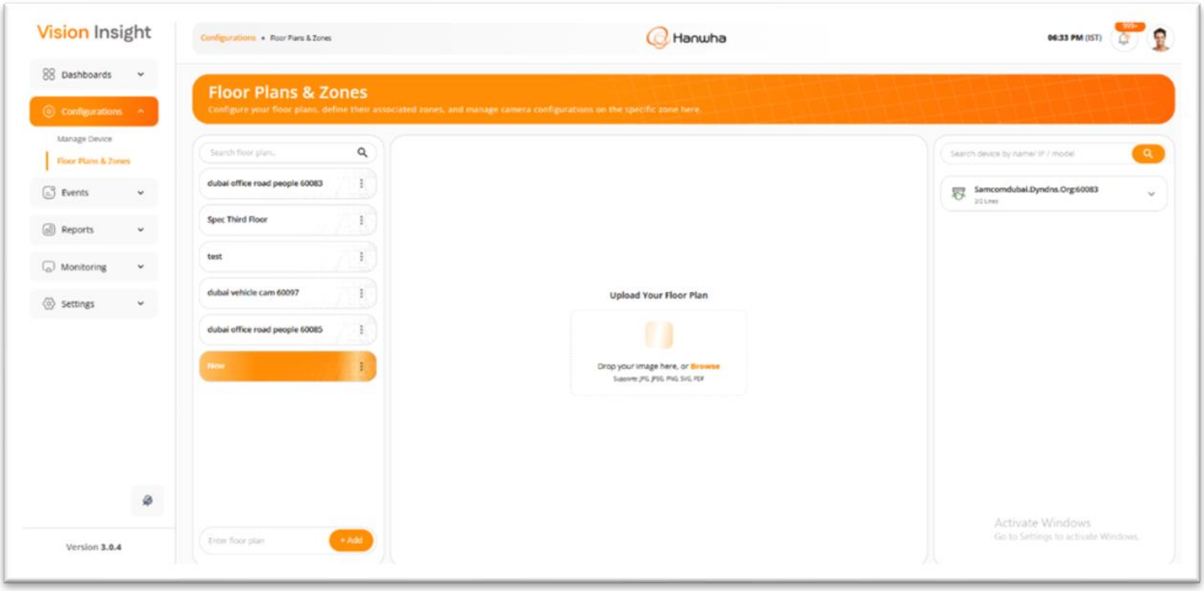


- Select a floor plan and click **Add Zone**.
- Enter the following details:

- Zone Name*
- People Occupancy* (Max / Default)
- Vehicle Occupancy* (Max / Default)
- (Note: Either People Occupancy or Vehicle Occupancy is mandatory.)

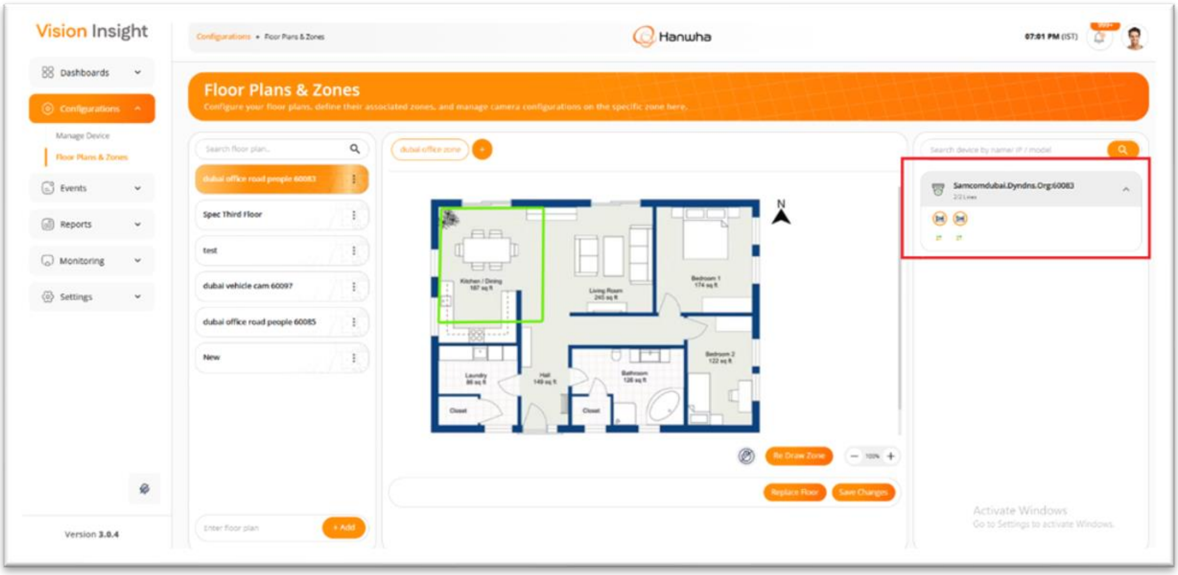
- Click **Save** to add the zone.
- To edit a zone, click **Edit**, update required details, and click **Update**.

- **Floor Plan Image Management:**



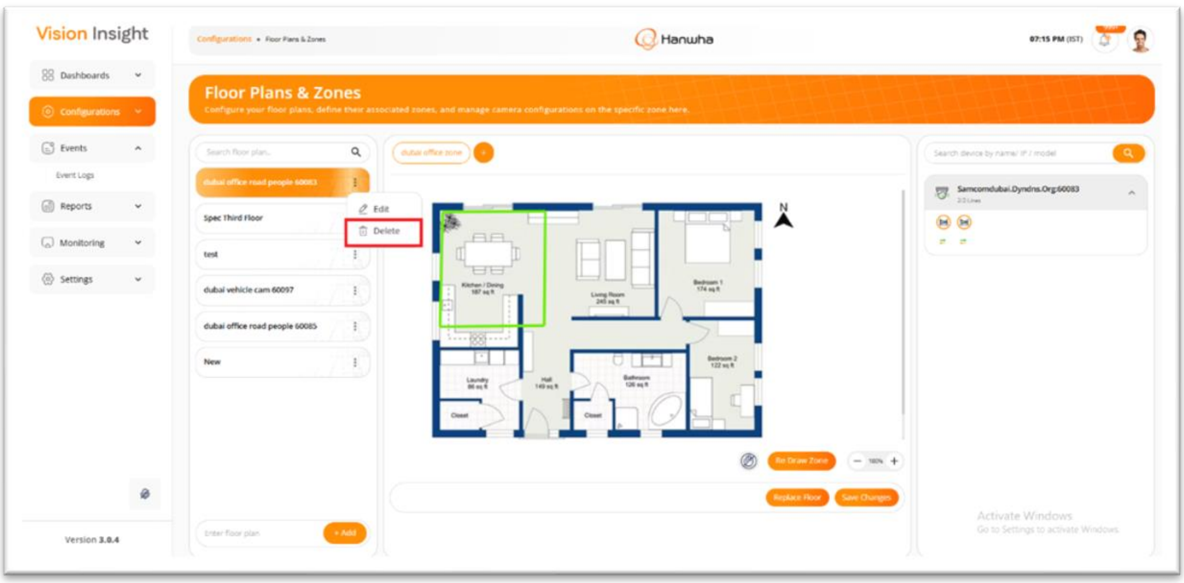
- Click **Upload Floor Plan Image** to attach or replace an existing layout image.
- Once uploaded, users can:
  - Zoom In / Zoom Out on the floor plan.
  - Replace the image at any time.
  - Save all applied changes.
- The system ensures visual consistency by maintaining image scaling and layout formatting.

- **Camera Configuration on Zones:**



- The right panel lists **online cameras and AI boxes** that are not yet mapped to any zone.
- Users can:
  - ✓ Search for devices by Camera Name, IP Address, or Model Name.
  - ✓ Drag and drop selected devices onto specific zones in the floor plan image.
  - ✓ Reposition or Rotate cameras as required.
  - ✓ Adjust Sphere or Focal View up to 100% and set the desired color.
  - ✓ Delete cameras from zones when necessary.
- After all changes, click **Save Changes** to update the configuration in the database.

- **Floor Plan & Zone Deletion:**



- When deleting a floor plan:

- ✓ The system prompts confirmation.
- ✓ Upon confirmation, all associated zones and devices are unmapped and removed from visibility.

- When deleting a zone:
  - ✓ The system also asks for confirmation.
  - ✓ Once confirmed, all devices linked to that zone are unmapped.
- The system performs **soft deletes**—records remain in the database but are hidden from the application.

- **Default Floor Plan Behavior:**
  - If a new device is added without an assigned zone, the system automatically creates a **Default Floor Plan** and **Default Zone**.
  - The unassigned device will be mapped to these defaults automatically.

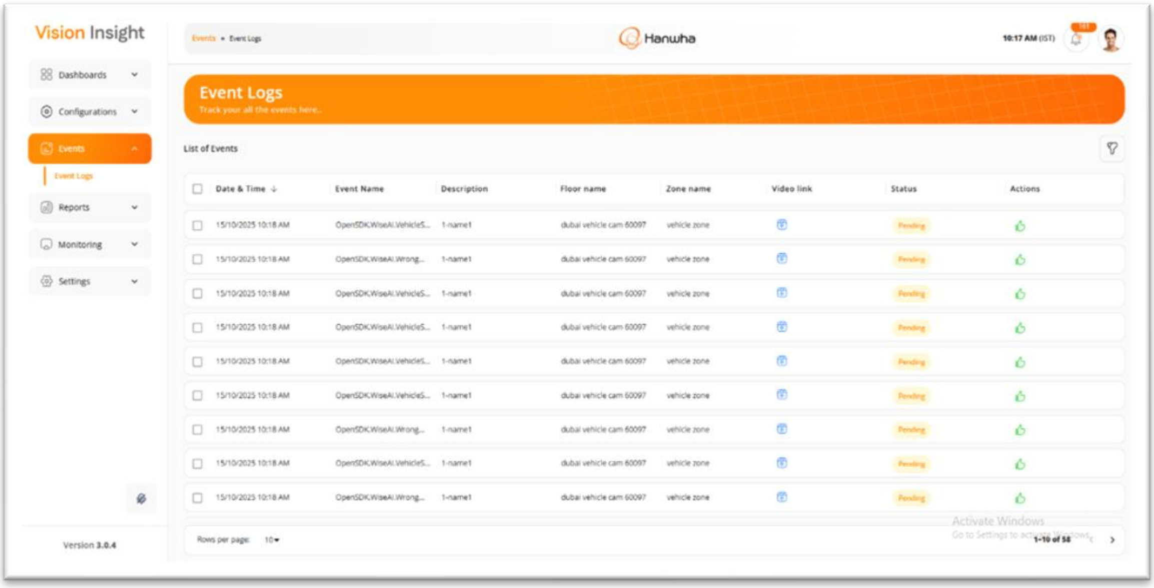
- **Permissions:**
  - Permissions are managed at the Floor Plan and Zone levels only.
  - The Admin User must assign specific access rights to roles for each floor and zone.
  - If a camera is mapped to multiple zones, the system will not automatically synchronize data across zones (handled manually by the admin).
  - Data visibility strictly follows the assigned permissions.

- **Additional Information:**
  - The system prevents duplicate names for floor plans and zones.
  - Users can search floor plans by Floor Plan Name.
  - Users can configure unlimited cameras within a single zone.
  - If the system cannot retrieve the camera model name from an AI Box, it defaults to a generic name (e.g., *Camera-1*, *Camera-2*).

6. Events

6.1 Event Log

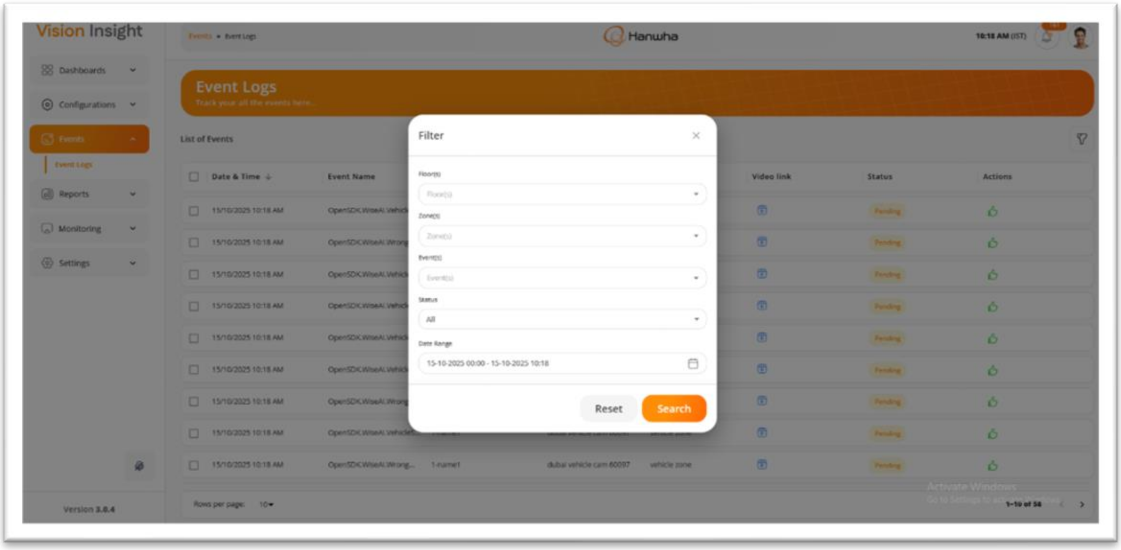
- **Screen**



- **Steps to Access:**
  - Navigate to Events → Event Logs from the left sidebar menu.
  - This page is accessible only to Super Admins and Authorized Users with appropriate permissions.
  - The screen lists all detected events captured by the system in descending order of their creation time.

- **Event List Overview:**
  - Each event record in the list displays the following details:
    - Date & Time
    - Event Name
    - Description
    - Floor Name
    - Zone Name
    - Video Link
    - Status – *Acknowledged / Pending*
    - Action – *(Acknowledge or View Video)*
  - Pagination is available for easy navigation through multiple event pages.

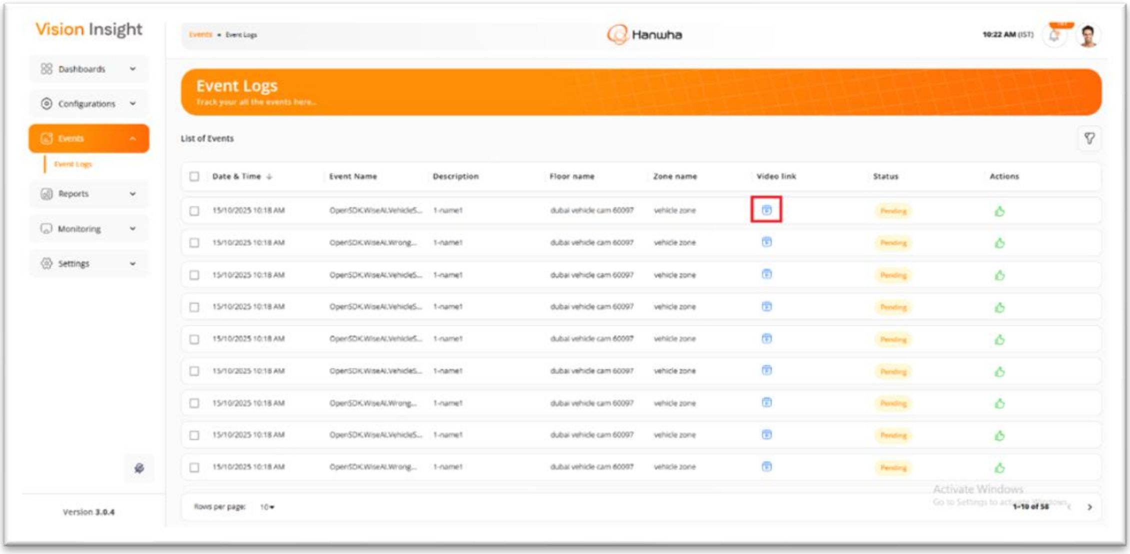
- **Filtering and Search Options:**



- Authorized users can search and filter events using the following options:
  - Event Name (text filter)
  - From Date – To Date (date range picker)
  - Floor Name (dropdown list)
  - Zone Name (dropdown list)
  - Status (Acknowledged / Pending dropdown)
- Additionally, the system provides advanced filter options like:
  - Sort By (ASC / DESC)
  - Hide / Manage Columns
- These filters are automatically reset when the page is reloaded or when the user navigates to another screen.

- **Acknowledging an Event:**
  - Events with a **Pending** status can be acknowledged by clicking the **Acknowledge** icon in the Action column.
  - Once acknowledged, the system updates the event's status to **Acknowledged** and displays a confirmation message.

- **Viewing Event Videos:**

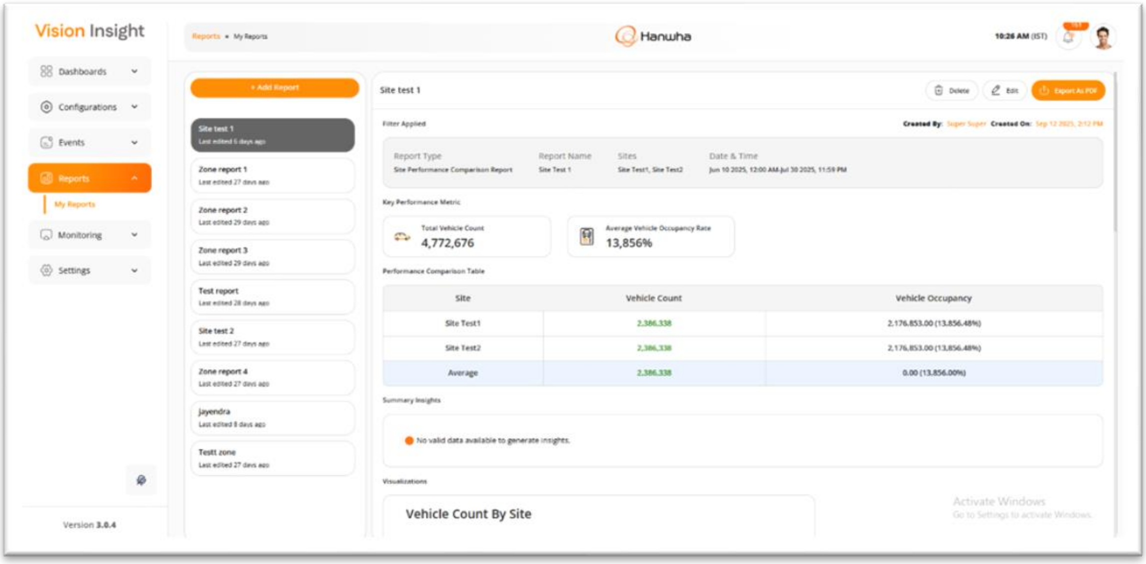


- Each event includes an option to view the associated pre- and post-5-second video clips.
- Click the Video Icon in the Action column to open the video popup.
- The BI Dashboard Web Application streams videos directly from the configured FTP server; no local or alternate storage is used.
- Users can preview both pre-event and post-event video clips within the popup.

- **Additional Information:**
  - Event data is sorted automatically in descending order (latest events appear first).
  - All video files are managed and stored on the FTP server configured under General Settings.
  - Only users with event access permissions can view or acknowledge events.

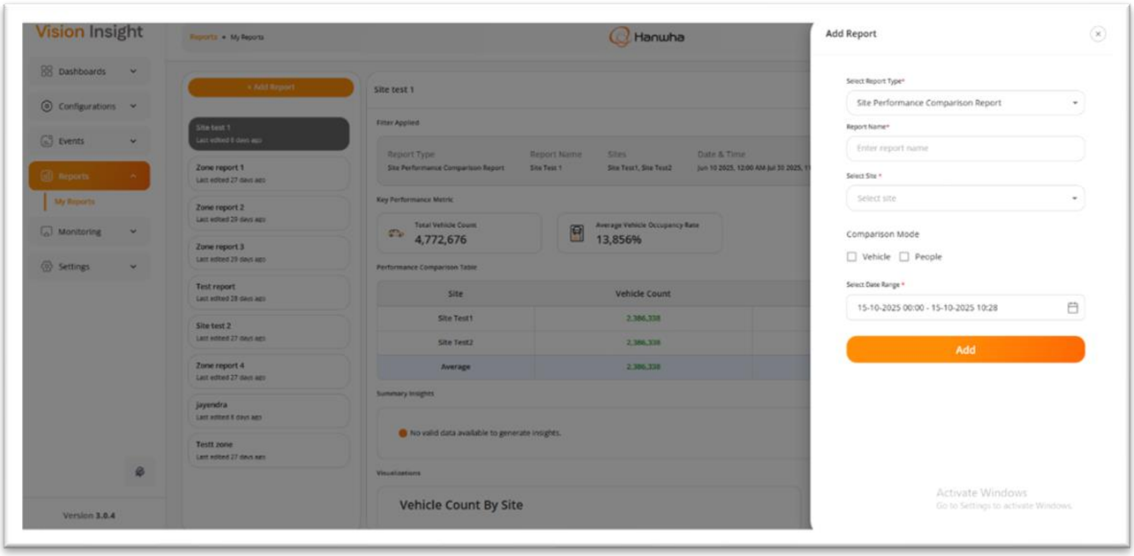
7. Reports

- **Screen**



- **Steps to Access:**
    - Navigate to Reports → My Reports from the left sidebar menu.
    - This page is accessible only to Super Admins and Authorized Users based on assigned permissions.
    - When no reports exist, the system displays a message: “There are no reports configured for you yet. To create a new report, please click the button below.”

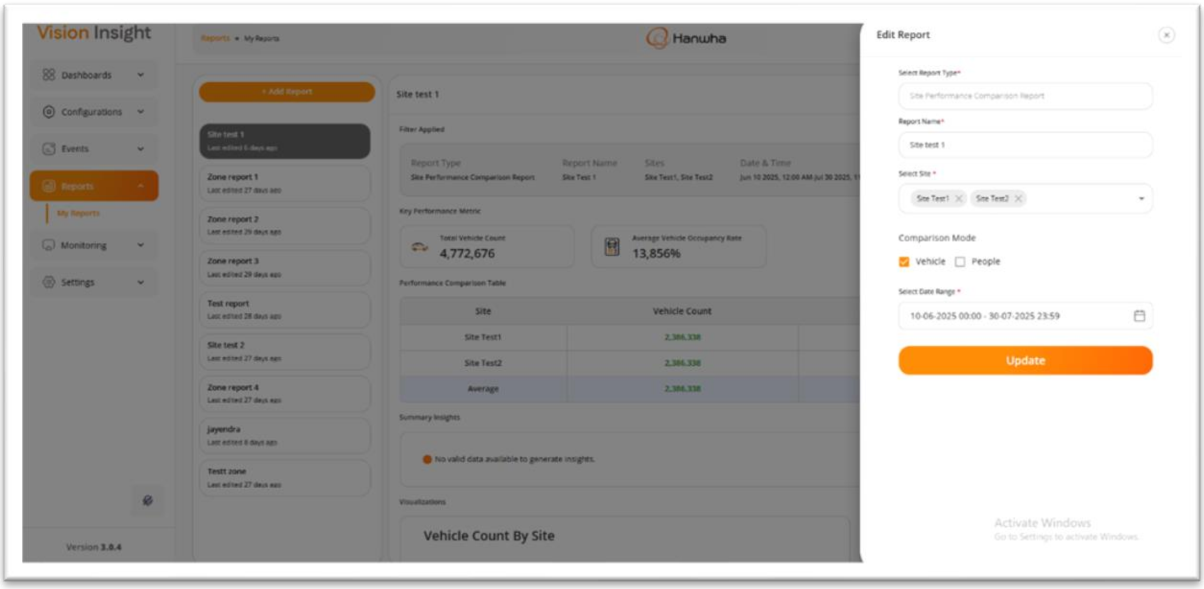
- **Steps to Add a New Report:**



- Click Add Report.

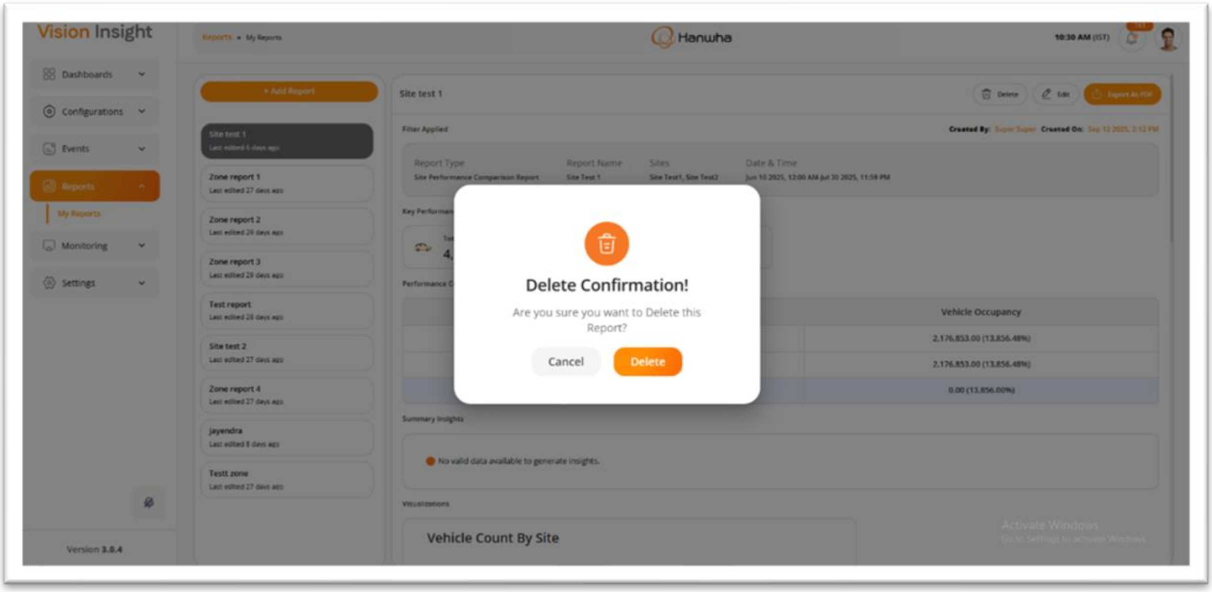
- Select a Report Type* from the dropdown list:
  - Site Performance Comparison Report
  - Zone Performance Comparison Report
- Enter the following required details based on the selected report type:
- **For Site Performance Comparison Report:**
  - Report Name* (custom input)
  - Select Site(s)* (multiple selection)
  - Select Date Range*
- **For Zone Performance Comparison Report:**
  - Report Name* (custom input)
  - Select Site* (single selection)
  - Select Floor*
  - Select Zone*
  - Select Date Range*
- Click Save to create the report.
- The report will appear in the list of configured reports.

- **Steps to Edit a Report:**



- Click Edit next to the desired report.
- Modify the report name, filters, or configuration details as required.
- Click Update to save the changes.

- **Steps to Delete a Report:**



  - Click Delete next to the selected report.
  - Confirm deletion when prompted.
  - The system performs a soft delete, meaning the record remains in the database but is hidden in the application.

- **Exporting a Report:**
  - Click Export as PDF to download the selected report.
  - The exported report includes charts, filters, and comparison data based on the selected report type.

- **Site Performance Comparison Report:**
  - Displays overall performance across multiple sites, including metrics, summaries, and visual charts.
  - Contains:
    - ❖ Header Information:
      - Title (user-defined)
      - Created By & Created On
    - ❖ Filters Applied:
      - Report Type
      - Report Name
      - Sites
      - Date & Time
    - ❖ Key Performance Metrics:
      - Total People Count
      - Average People Occupancy Rate
      - Total Vehicle Count
      - Average Vehicle Occupancy Rate
    - ❖ Performance Comparison Table:
      - Site Name
      - People Count

- People Occupancy
- Vehicle Count
- Vehicle Occupancy
- Averages of all metrics

❖ Summary Insights:
- Bullet-point summary providing key performance highlights.

❖ Visual Charts:
- People & Vehicle Counts by Site
- Occupancy Rate Comparison
- Traffic Composition (People vs Vehicles)

- **Zone Performance Comparison Report:**
  - Displays performance data at the zone level for a specific site and floor.
  - Contains:

❖ Header Information:
- Title (user-defined)
- Created By & Created On

❖ Filters Applied:
- Report Type
- Report Name
- Sites
- Floors
- Zones
- Date & Time

❖ Key Performance Metrics:
- Total People Count
- Average People Occupancy Rate
- Total Vehicle Count
- Average Vehicle Occupancy Rate

❖ Performance Comparison Table:
- Zone Name
- People Count
- People Occupancy
- Vehicle Count
- Vehicle Occupancy
- Averages of all metrics

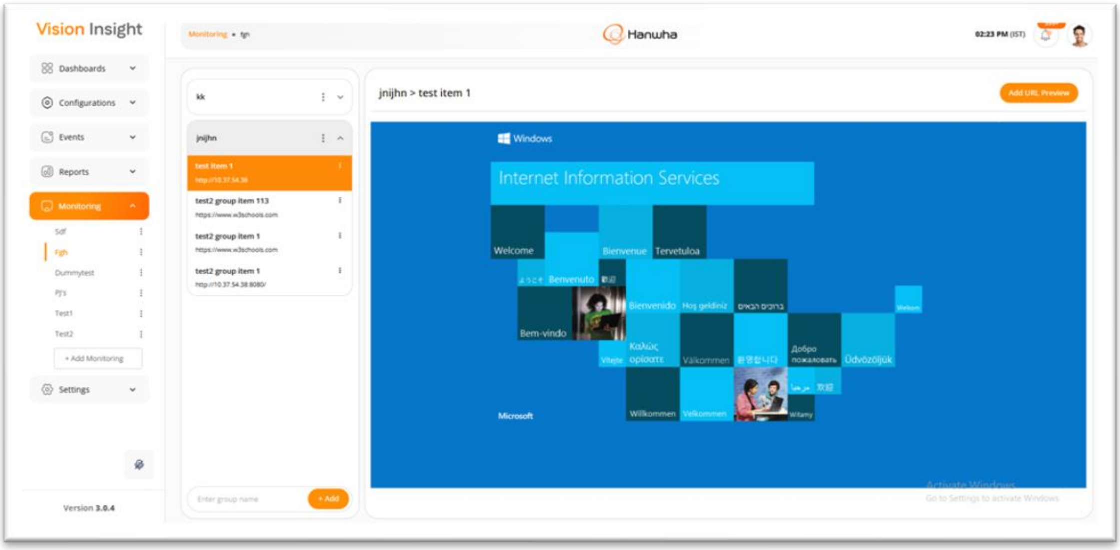
❖ Summary Insights:
- Bullet-point comparison summaries.

❖ Visual Charts:
- People & Vehicle Counts by Zone
- Occupancy Rate Comparison
- Traffic Composition (People vs Vehicles)

- **Additional Information:**
  - Multiple reports of the same type can be added.
  - Duplicate report names are not allowed.
  - Authorized users can scroll through and view reports with predesigned layouts and charts.
  - Reports can be edited or exported anytime based on permission.

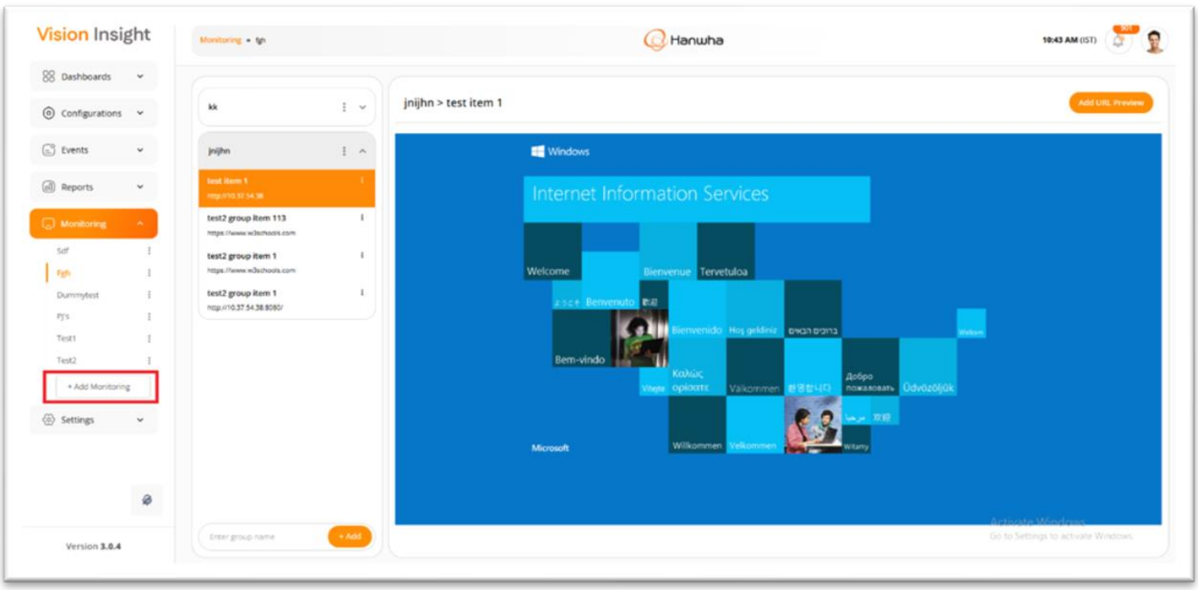
8. Monitoring

- **Screen**



- **Steps to Access:**
  - Navigate to **Monitoring → Monitoring Page** from the left sidebar menu.
  - This page is accessible only to **Super Admins** and **Authorized Users** based on assigned permissions.
  - The initial screen displays a message: “There are no groups configured for you yet. To create a new group, please click the button below.”

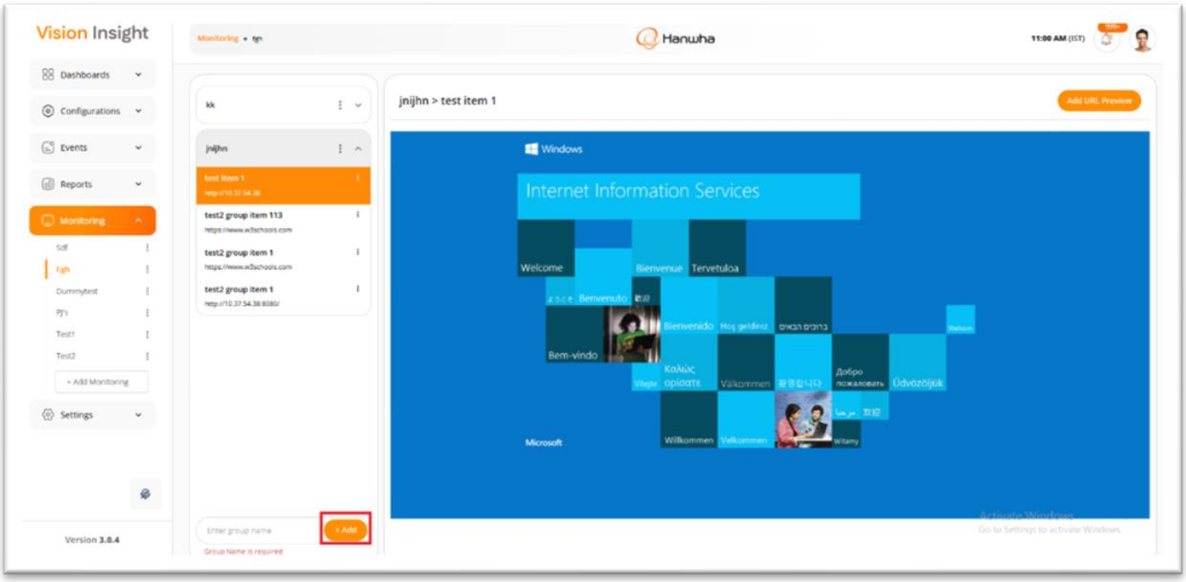
- **Steps to Add Monitoring:**



  - From the sidebar, click **Add Monitoring**.
  - Enter the **Monitoring Name***.

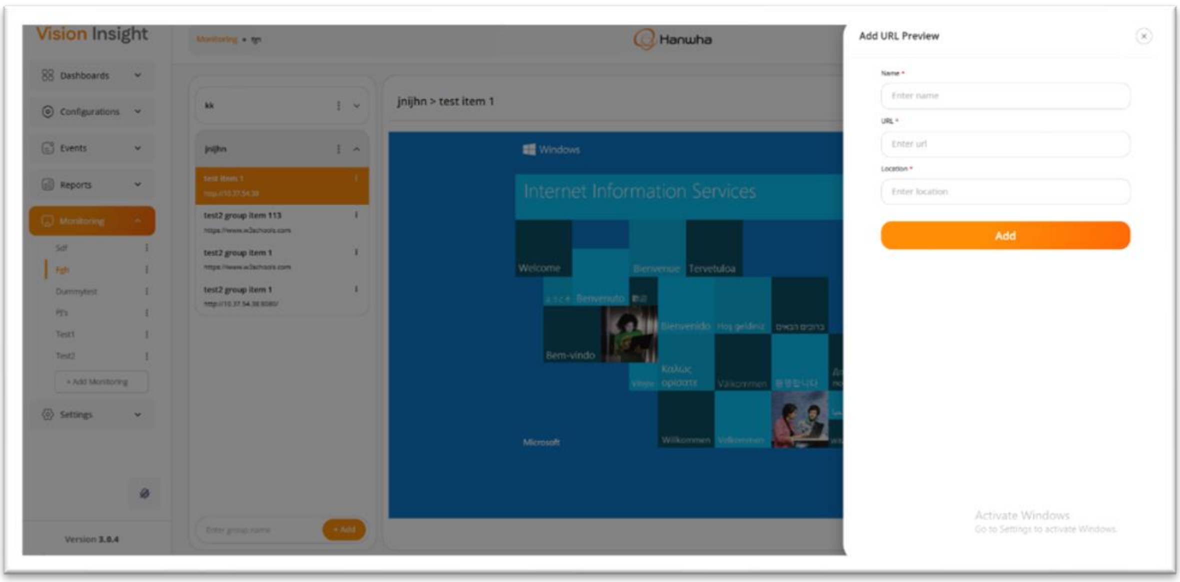
- Click **Save** to create a new monitoring setup.
- Each monitoring setup can contain multiple groups and URL previews.

- **Steps to Add a Group:**



- Open the desired monitoring setup.
- Click **Add Group**.
- Enter the **Group Name***.
- Click **Save** to create the group.
- The created group will appear in the list view under the selected monitoring.

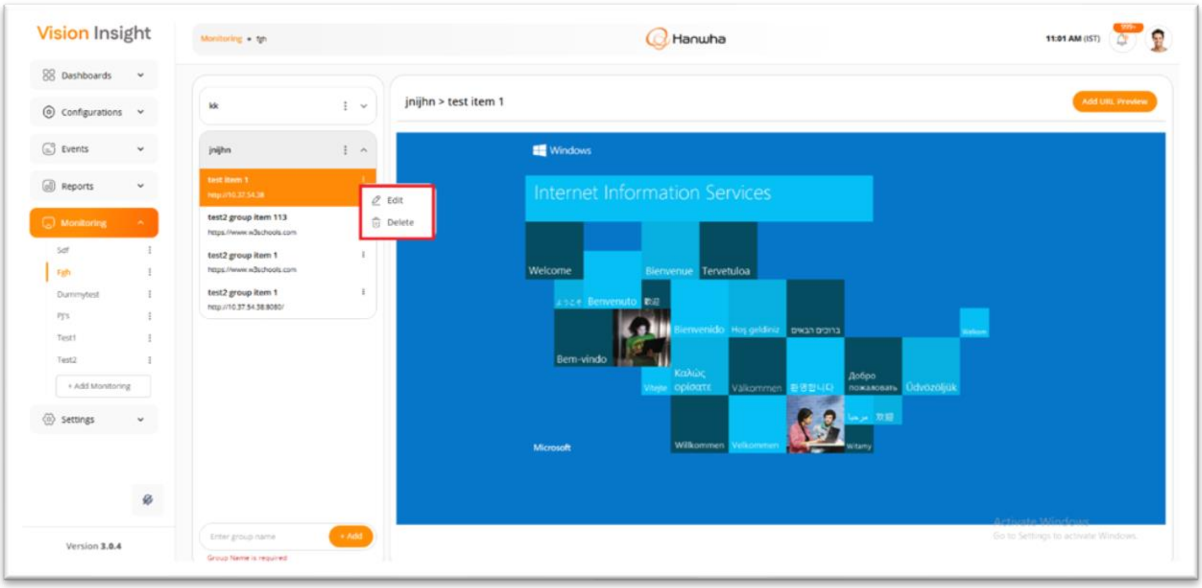
- **Steps to Add a URL Preview:**



- Within a group, click **Add URL Preview**.

- Enter the required details:
    - Name of the URL Preview*
    - URL* (the web page address to be embedded within the application)
    - Location* (for reference or identification)
- Click **Save** to add the URL preview.
- The added URL will display as an embedded **iframe** within the highlighted preview area on the screen.

- **Steps to Edit or Delete Entries:**



- To edit, click **Edit** next to any monitoring, group, or URL preview record.
- Update the required details and click **Update**.
- To delete, click **Delete** next to the item.
- Confirm the action when prompted.
- Once confirmed, the entry is removed from the list view.

- **Rules and Validations:**
    - The **Name**, **URL**, and **Location** fields are **mandatory** for URL Previews.
    - The system prevents duplicate entries for:
    - Monitoring name
    - Group name
    - URL Preview (Name + URL combination)
    - The added or updated URL Preview is displayed exactly as available at the provided URL within the BI Dashboard Web Application.
    - The system does not validate URL availability; if a link is inaccessible, it must be corrected manually.

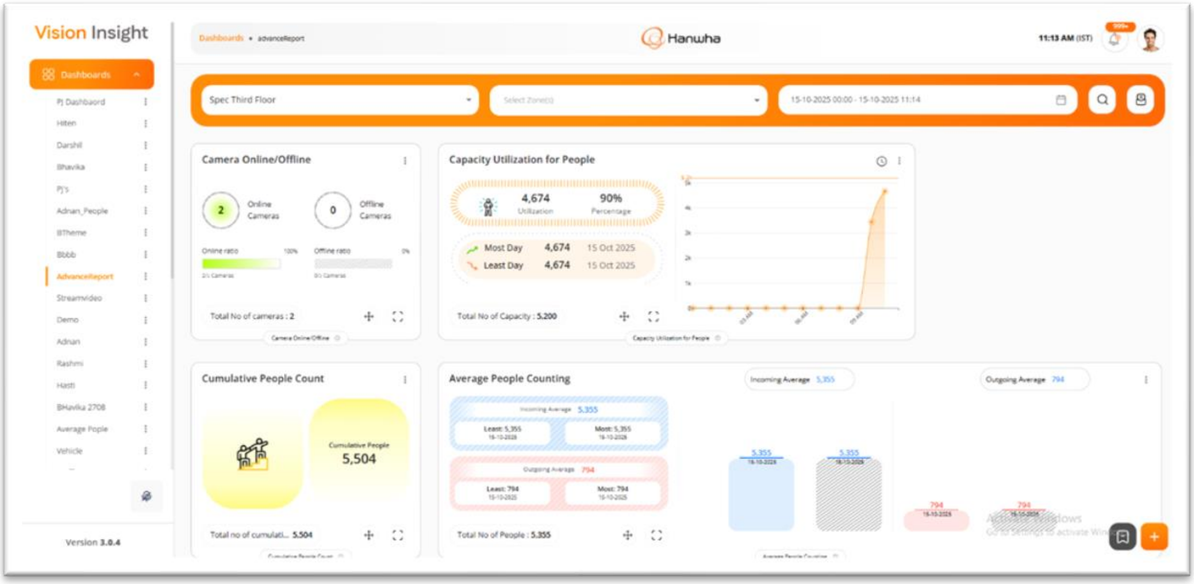
- **Additional Information:**
    - Each Monitoring setup can have **multiple groups,** and each group can include **multiple URL Previews (Poles)**.

- The embedded content is displayed directly within the application using an **iframe**.
- The system does **not handle** external website access issues or content rendering failures.
- Duplicate Monitoring and Group names are **not allowed**.

9. Dashboard

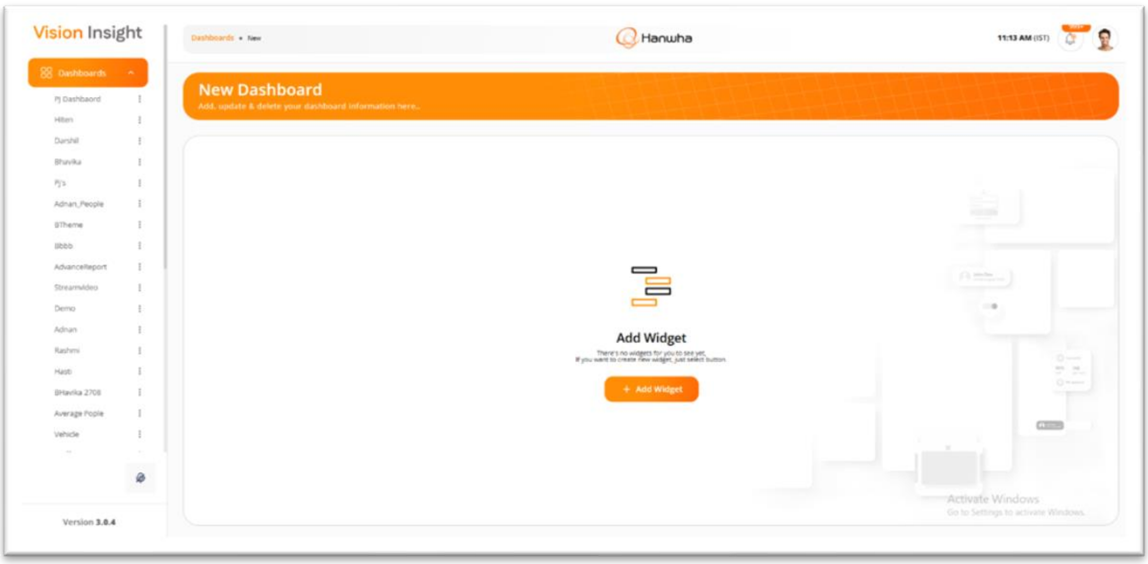
9.1 Dashboard Creation

- **Screen**



- **Steps to Access:**
  - Navigate to **Dashboards → Dashboard Creation** from the left sidebar menu.
  - This page is accessible only to **Authorized Users** based on their assigned widget permissions.
  - When no dashboards exist, the system displays a message:
    - ❖ "There are no widgets for you to see yet. If you want to create a new widget, just select the button below."

- **Steps to Add a New Dashboard:**



- Click **Add Dashboard**.
- Enter the **Dashboard Name*** in the provided text field.
- Click **Save** to create a new dashboard.
- Once created, the dashboard will appear in the dashboard list, ready for widget configuration.

- **Steps to Edit an Existing Dashboard:**
  - Select the dashboard from the list.
  - Click **Edit** and modify the **Dashboard Name** as required.
  - Click **Update** to save the changes.

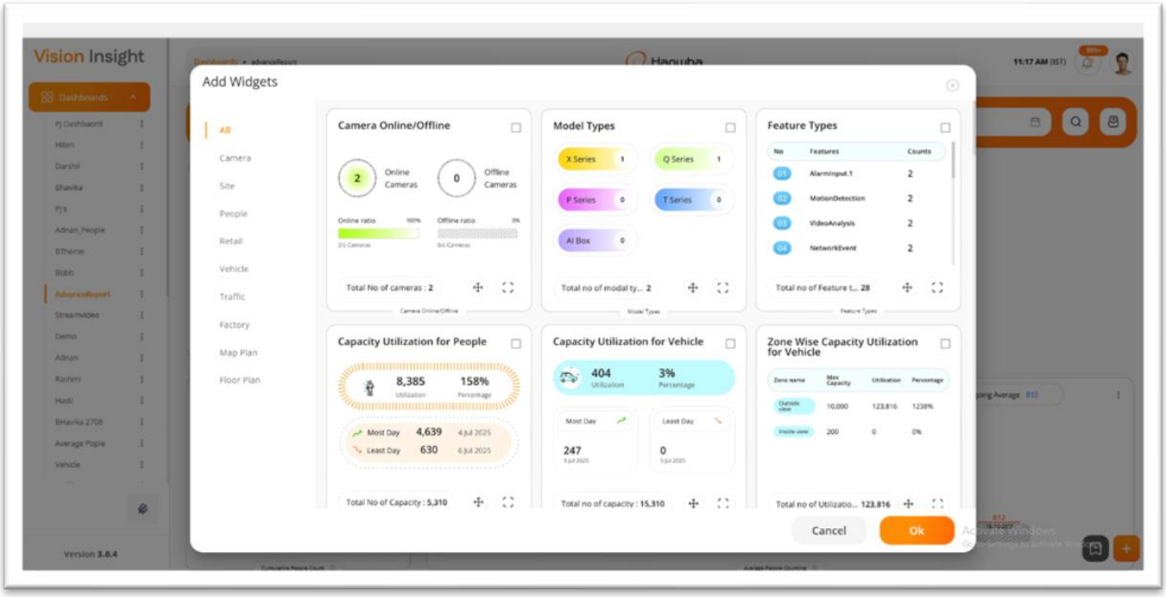
- **Steps to Delete a Dashboard:**
  - Select the dashboard to be removed.
  - Click **Delete** and confirm the action in the popup.
  - Upon confirmation, the dashboard will be deleted from the system.

- **Field Validation:**
  - **Dashboard Name*** is a **mandatory field**.
  - The system allows **alphabetic and numeric characters only** in the dashboard name.
  - Duplicate dashboard names are **not allowed**.

- **Additional Information:**
  - Authorized users can create **any number of dashboards** based on their operational or analytical needs.
  - Each dashboard can later be customized with widgets as per role-based permissions.
  - User permissions on widgets determine which features and data will be accessible on each dashboard.

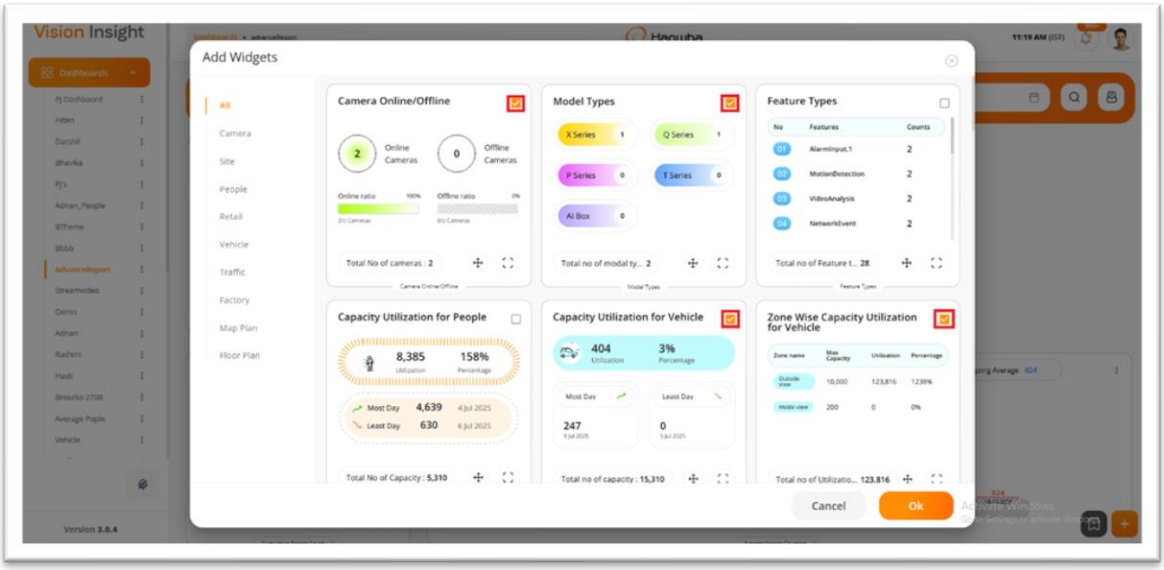
9.2 Add Widget Screen

- **Screen**



- **Steps to Access:**
  - Navigate to **Monitoring → Monitoring Page** from the left sidebar menu.
  - Navigate to the required **Dashboard**.
  - Click **Add Widget** either:
  - From the **blank screen** when no widgets are yet configured, or
  - By clicking the **"+" button** at the bottom-right corner when widgets already exist on the dashboard.
  - The system opens the **Add Widget popup** showing a categorized list of available widgets.

- **Steps to Add Widgets:**



  - In the **Add Widget popup**, the left panel lists widget categories, and the right panel displays widgets under the selected category.
  - By default, the **"All"** category is selected, displaying every widget available in the system.

- Click any category on the left to view its related widgets on the right.
- Select one or multiple widgets by clicking their respective checkboxes.
- Click **Add** to insert the selected widgets into the current dashboard.
- The newly added widgets will appear instantly on the dashboard layout.

- **Widget Categories and Examples:**
  - **All**
    - Displays all available widgets regardless of their category.
  - **Camera**
    - Camera Online / Offline
    - Model Types
    - Feature Types
  - **Site**
    - Capacity Utilization for People
    - Capacity Utilization for Vehicle
    - Zone Wise Capacity Utilization for People
    - Zone Wise Capacity Utilization for Vehicle
  - **People**
    - Slip & Fall Detection
    - People In & Out
    - Average People Counting
    - People Count by Gender
    - Cumulative People Count
    - New vs Total Visitors
    - Safety Measures
    - Zone Wise People Counting
    - People Counting Heatmap
  - **Retail**
    - Shopping Cart Counting
    - Queue Events for Shopping Cart
    - Queue Events for People
    - Shopping Cart Heatmap
    - Block Exit Detection
  - **Vehicle**
    - Vehicle Count by Type
    - Vehicle In & Out
    - Vehicle in Wrong Direction
    - Vehicle U-Turn Detection
    - Pedestrian Detection
    - Average Vehicle Counting
    - Vehicle Queue Analysis
    - Stopped Vehicle Count Time
    - Vehicle Turning Movement Counts
    - Vehicle Detection Heatmap

- Speed Violation by Vehicle
- Traffic Jam by Day

- **Factory**
  - Counting for Forklift
  - Queue Events for Forklift
  - Detected Forklifts
  - Forklift Heatmap
  - Forklift Speed Detection
  - Block Exit Detection

- **Map Plan**
  - Map Plan

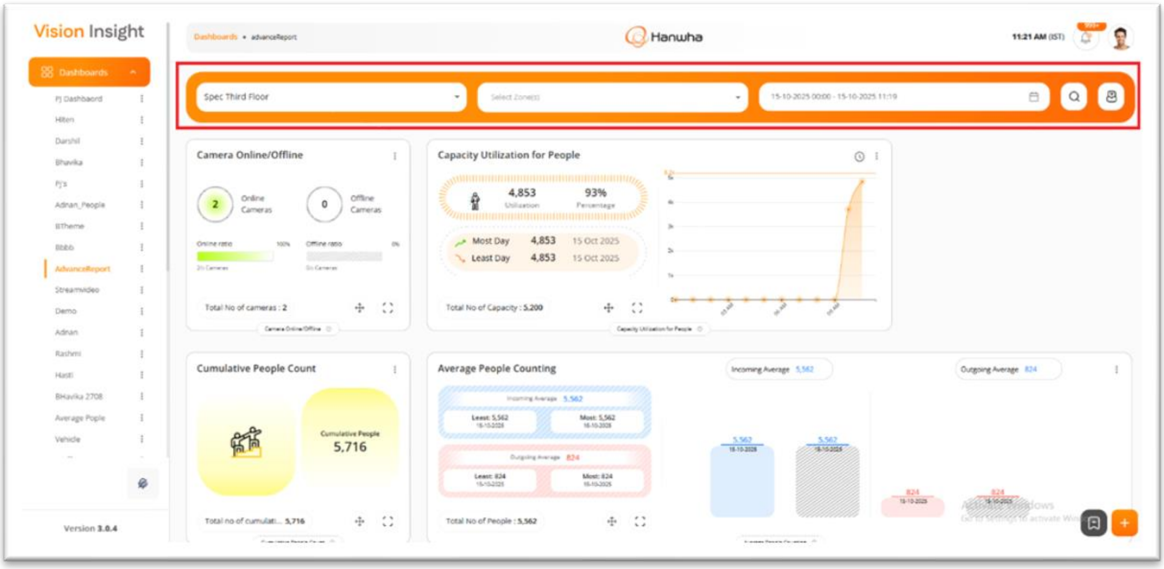
- **Floor Plan**
  - Floor Plan

- **Steps to Delete a Widget:**
  - Each added widget has a **Delete** option on its panel.
  - Click **Delete** to remove it.
  - The system displays a confirmation popup before deletion.
  - Once confirmed, the widget is permanently removed from the dashboard.

- **Business Rules & Validations:**
  - Authorized users can add **any number of widgets** to a dashboard based on their permissions.
  - The system prevents **duplicate widget entries** within the same dashboard.
  - Once a widget is added, it no longer appears in the **Add Widget** list for that dashboard.
  - The same widget can be added to **different dashboards**.
  - When no widgets are configured, a blank screen message appears: *"There are no widgets for you to see yet. If you want to create new widget, just select the button below."*
  - The list of widgets and categories is dynamically loaded based on the permissions assigned to the logged-in user.

9.3 Filter and Export Option

- **Screen**



- **Steps to Access:**
  - Navigate to **Monitoring → Monitoring Page** from the left sidebar menu.
  - Navigate to **Dashboards → [Select Dashboard]** from the left sidebar menu.
  - Filters and export options become available **only after at least one widget** is added to the dashboard.
  - Users can apply filters or export widget data directly from the dashboard interface.

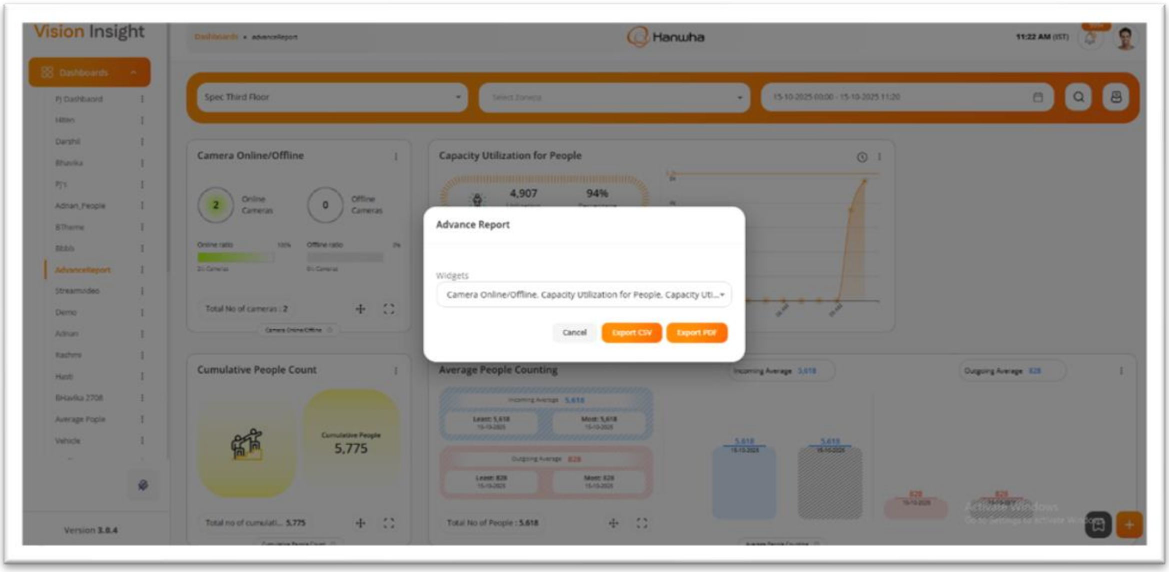
- **Filter Options:**
  The system provides the following filters on each dashboard:
  - **Floors**
    - ❖ Multi-select dropdown list allowing users to select one or more floors.
    - ❖ By default, the system selects the **default floor** automatically.
  - **Zones**
    - ❖ Multi-select dropdown list allowing users to select one or more zones associated with the selected floors.
  - **Date & Time Range**
    - ❖ Allows users to choose from a range of predefined time periods:
    - ❖ *Today, Yesterday, Two Days Ago, 7 Days, 1 Month, 3 Months, 6 Months, 1 Year.*
    - ❖ Users can also manually select custom date and time ranges using the date-time picker.

- **Default Selection Behavior:**
  When no filters are applied or when the page is reloaded:
    - Default Floor will be selected.
    - Default Zone will be selected.
    - Today's date & time range will be applied automatically.

- **Data Handling:**
  - The system updates all widgets based on the applied filters in real time.
  - Applied filters are stored temporarily.
  - Applied filters are cleared when the user manually reloads or closes the browser window.

- **Export Report Options:**
  Authorized users can export dashboard data using the **Export Icon** located at the top-right corner of the dashboard.
  - **Steps to Export:**
    - ✓ Click the **Export Icon** on the dashboard.
    - ✓ A popup window appears with the following options:
      - Select Widget(s): Choose one or more widgets to export (optional).
      - Export CSV: Generates a CSV file of the selected widget data.
      - Export PDF: Generates a PDF file of the selected widget charts and summaries.
  - **Export Rules:**
    - ❖ If specific widgets are selected, the export includes data for **only those widgets**.
    - ❖ If no widgets are selected, the system exports **all widgets** currently added to the dashboard.

- **Export File Details:**



  - **CSV Export Includes:**
    - ❖ Exported By
    - ❖ Exported On (Date & Time)
    - ❖ Selected Date Range & Time
    - ❖ Data from all selected widgets, including any filters applied

  - **PDF Export Includes:**
    - ❖ Company Logo (Vision Insight or custom uploaded logo)
    - ❖ Exported By
    - ❖ Exported On (Date & Time)
    - ❖ Selected Date Range & Time
    - ❖ Images of all selected widgets, reflecting current filters applied on the dashboard

- **Additional Information:**
  - Only **Authorized Users** can use export functionality.
  - Data exported from widgets reflects the filters applied at the time of export.
  - Exports are generated instantly and downloaded through the user's browser.

9.4 Widgets

- **Steps to Access:**
  - ✓ Navigate to **Dashboards → [Select Dashboard]** from the sidebar.
  - ✓ Widgets are visible and manageable only for users with **assigned permissions** via the **Roles & Permissions** module.
  - ✓ Data across all widgets updates dynamically based on applied **Floor, Zone, and Date Range filters**.

- **Actions Available on Each Widget:**
  Authorized users can:
  - ✓ Apply **Duration Filters** to view time-specific data.
  - ✓ **Expand** widgets for a larger, detailed view.
  - ✓ **Delete** widgets from the dashboard (after confirmation).
  - ✓ **Export CSV** reports for selected widgets.
  - ✓ Configure **Widget Setup** (size/layout customization).
  - ✓ **Move** widgets anywhere within the dashboard layout area.

  All actions depend on role-based access permissions.

- **Widget Descriptions**
  Below is the complete list of **40 widgets**, categorized and described in detail:

  - **Camera-Based Widgets**

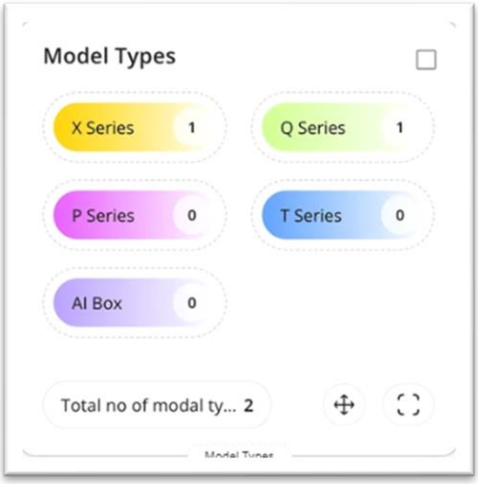
    - ❖ **Camera Online / Offline**

Displays the total number and ratio of **online vs offline cameras**.

- Charts: Pie chart (status ratio) and bar chart (count comparison).

- Source: Data fetched from connected cameras in the system.

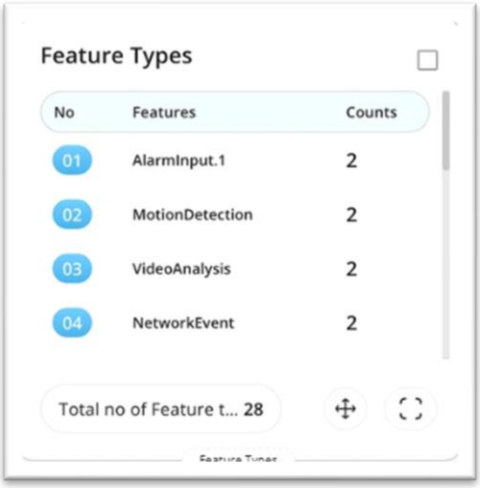
❖ **Model Types**



Shows the **distribution of cameras** by model or series type.

- Charts: Bar chart by model name and numeric summary.
- Purpose: Helps track hardware deployment and diversity.

❖ **Feature Types**

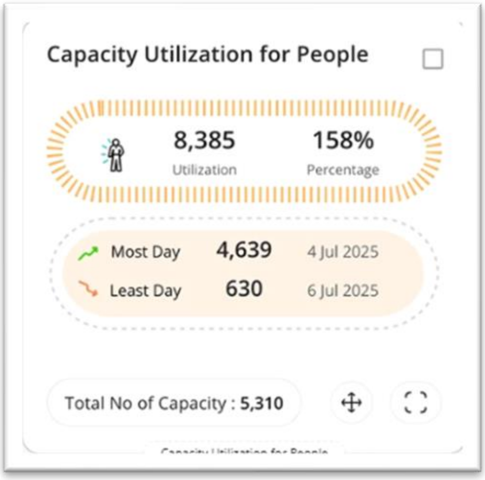


Displays **camera counts by feature** (e.g., motion, AI detection, night vision).

- Charts: Bar or donut chart grouped by feature type.
- Purpose: Analyzes hardware capability utilization.

▪ **Site & Utilization Widgets**

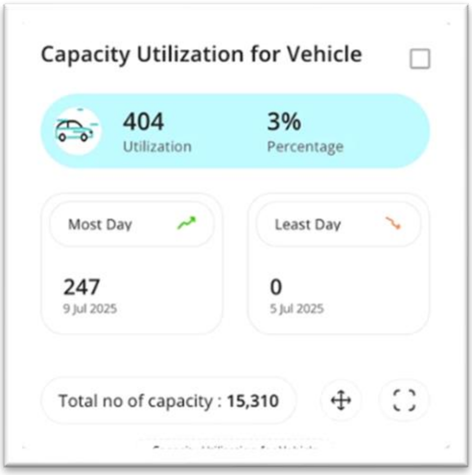
❖ **Capacity Utilization for People**



Displays **total capacity, current utilization %, and busiest/least busy days**.

- Charts: Bar, line, and summary table.
- Use: Tracks people occupancy across zones and days.

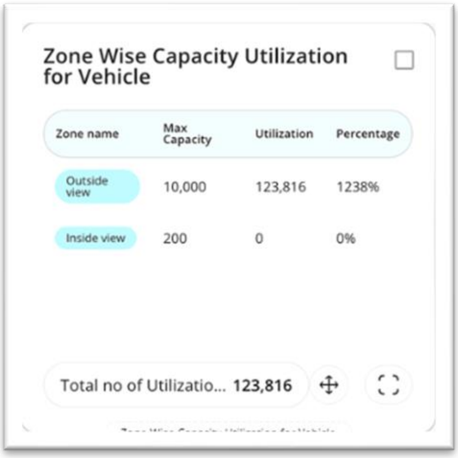
❖ **Capacity Utilization for Vehicle**



Displays **total capacity, current utilization %, and busiest/least busy days** for **vehicles** (e.g., parking or site traffic).

- Charts: Bar and trend comparison.
- Use: Evaluates space utilization for vehicles.

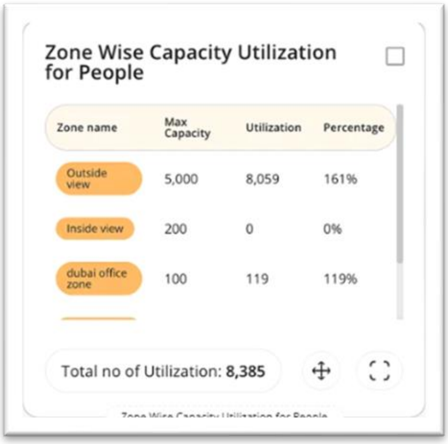
❖ **Zone Wise Capacity Utilization for People**



Shows **maximum capacity, used capacity, and utilization %** for each zone.

- Charts: Horizontal bar chart and summary grid.

❖ **Zone Wise Capacity Utilization for Vehicle**



Displays **vehicle capacity usage per zone** with live updates.

- Charts: Horizontal bar chart; tooltips show occupancy metrics.

▪ **People Analytics Widgets**

❖ **People In & Out**

Displays **entry and exit counts** across configured zones or cameras.

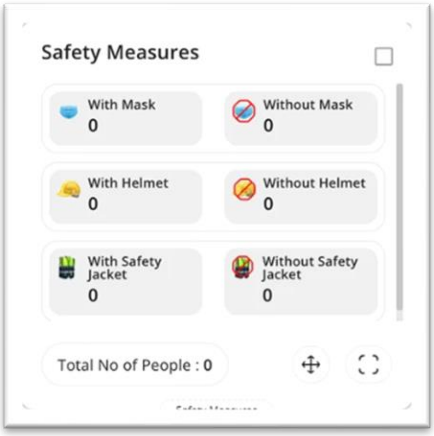
- Charts: Dual bar chart (IN vs OUT).
- Use: Understand site footfall and movement trends.

❖ **Average People Counting**

Shows **average number of people IN/OUT per day** and identifies most and least active days.

- Charts: Trend line + comparative table.

❖ **Safety Measures**



Displays the number of people **with or without safety gear** (mask,)
Charts: Pie chart + stacked bar for compliance breakdown.

- Use: Ensures workplace safety monitoring.

❖ **Slip & Fall Detection**

Tracks incidents where individuals **slipped or fell**.

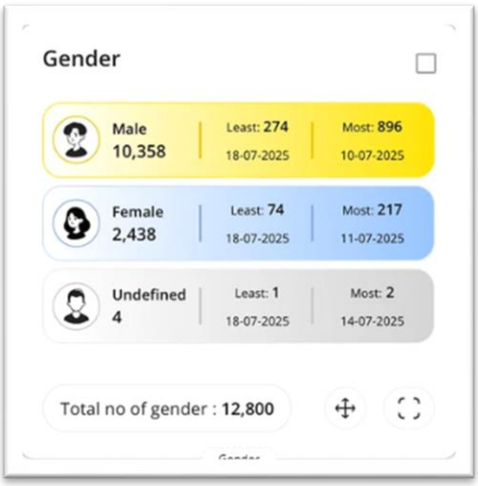
- Charts: Daily occurrence bar chart.
- Use: Safety analytics for incident management.

❖ **Zone Wise People Counting**

Displays IN/OUT **people count per zone**.

- Charts: Multi-bar zone comparison chart.

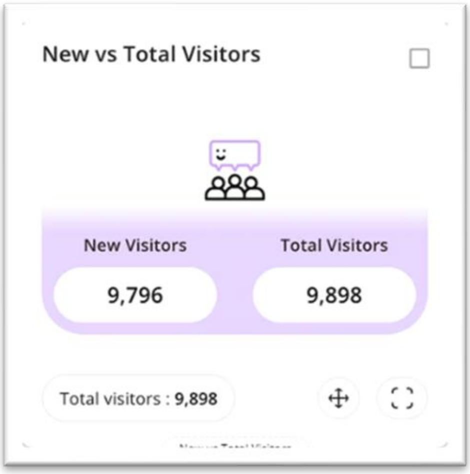
❖ **Gender**



Shows **male vs female** counts and busiest day for each group.

- Charts: Comparative bar + gender pie chart.

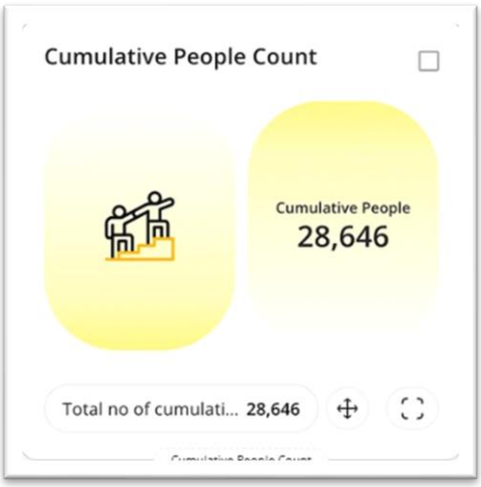
❖ **New vs Total Visitors**



Compare **new visitors counts vs repeat visitors** within a date range.

- Charts: Side-by-side bars and summary percentages.

❖ **Cumulative People Count**



Shows cumulative totals for people detected over time.

- Charts: Line chart displaying cumulative growth.

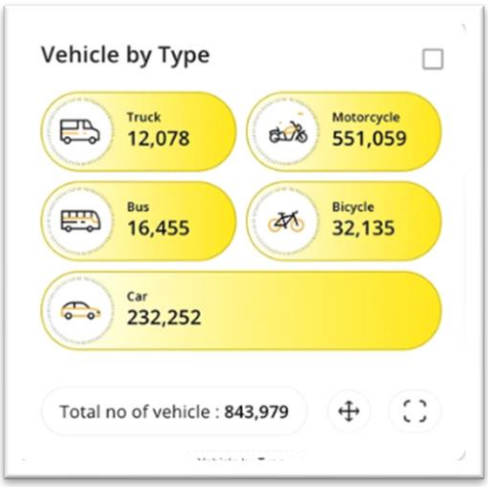
❖ **People Counting Heatmap**

Displays **heatmap visualization** of people density across zones.

- View: Color-coded overlay for movement hotspots.

- **Vehicle Analytics Widgets**

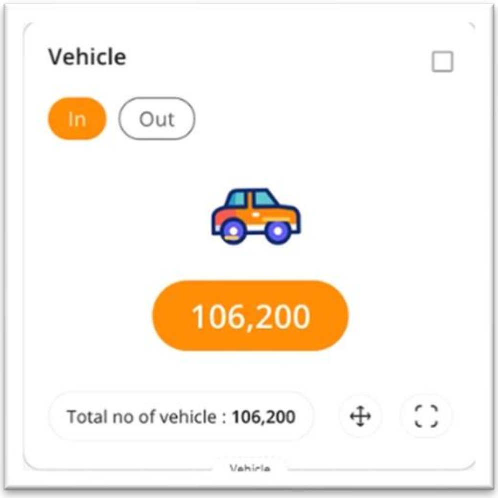
❖ **Vehicle count by Type**



Displays total vehicles detected by category (e.g., car, truck, bike).

- Charts: Pie or stacked bar chart.

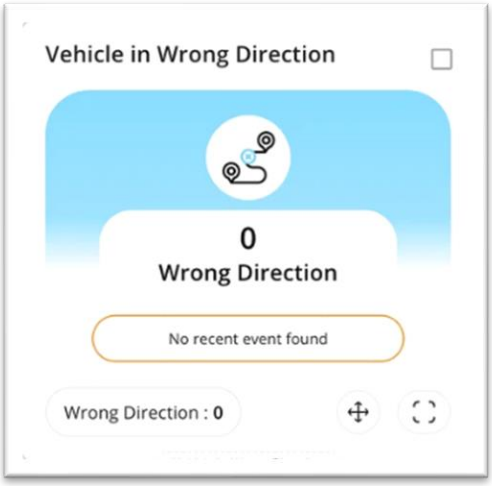
❖ **Vehicle In & Out**



Tracks **vehicle entries and exits** during the selected period.

- Charts: Dual bar (IN vs OUT) + daily trend line.

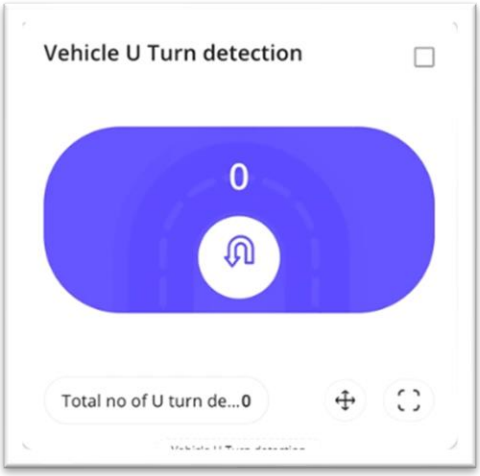
❖ **Vehicle in Wrong Direction**



Detects and counts vehicles moving in the **wrong direction**.

- Charts: Line or column trend.
- Alerts: Supports visual flags for violation instances.

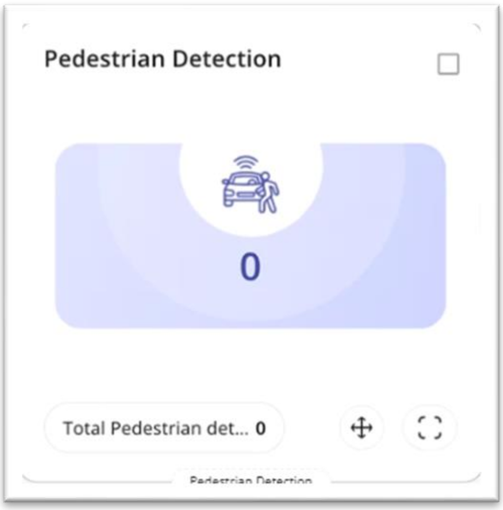
❖ **Vehicle U-Turn Detection**



Shows total **U-turn incidents** detected.

- Charts: Trend and frequency summary.

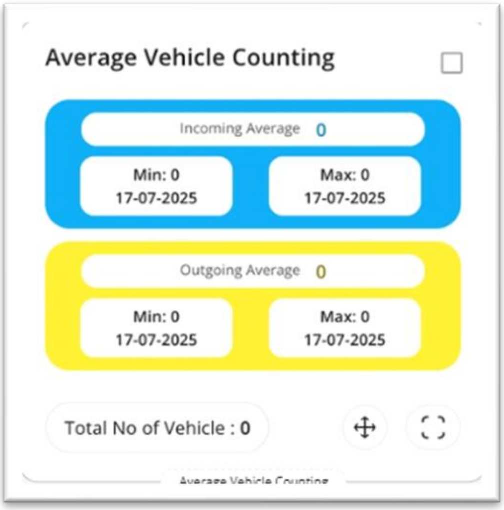
❖ **Pedestrian Detection**



Displays the number of **pedestrians detected** in vehicle zones.

- Charts: Daily counts and cumulative summary.

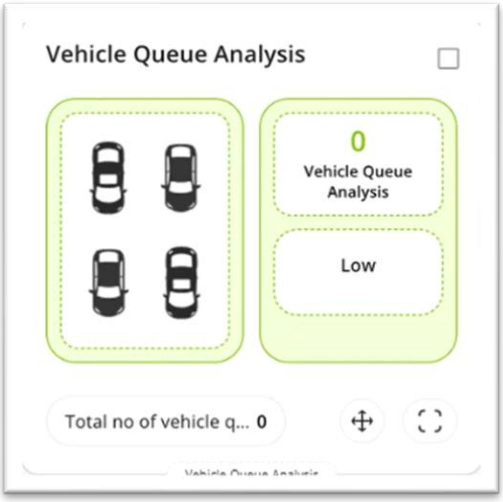
❖ **Average Vehicle Counting**



Displays **average vehicle flow rates** and most/least active days.

- Charts: Line + bar comparison.

❖ **Vehicle Queue Analysis**



Shows **vehicle queues and waiting durations**.

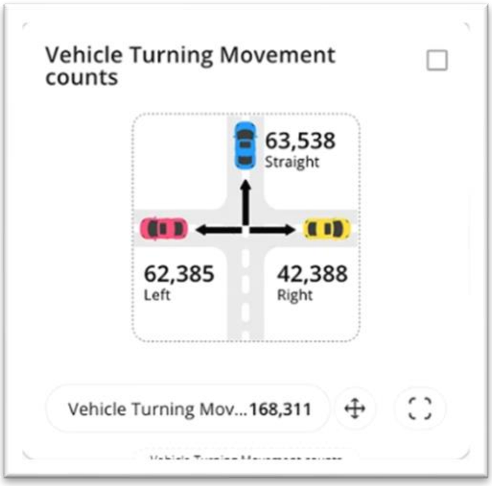
- Charts: Queue length vs time chart.
- Use: Identifies congestion points.

❖ **Stopped Vehicle Count Time**

Displays the number of vehicles **stopped**, grouped by type.

- Charts: Column chart with average duration per stop.

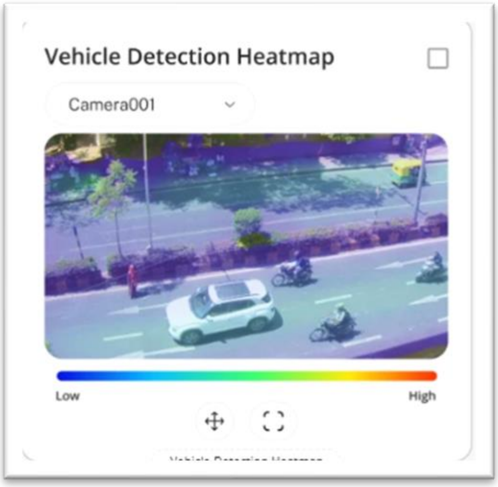
❖ **Vehicle Turning Movement Counts**



Tracks **turning directions** (left, right, straight) for traffic pattern analysis.

- Charts: Polar chart or grouped bar chart.

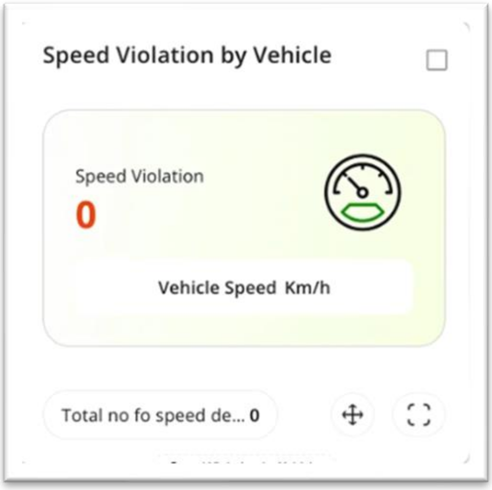
❖ **Vehicle Detection Heatmap**



Heatmap showing **vehicle density** across the monitored area.

- View: Color intensity represents frequency of detections.

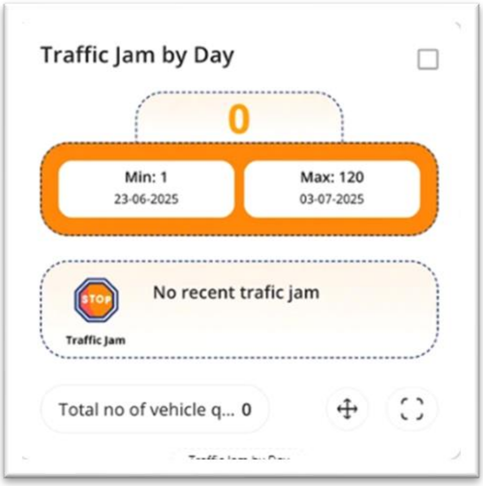
❖ **Speed Violation by Vehicle**



Displays vehicles that **exceeded defined speed thresholds**.

- Charts: Count by vehicle type or speed range.

❖ **Traffic Jam by Day**



Display days with the **highest and lowest congestion** levels.

- Charts: Bar chart comparing daily jam durations.

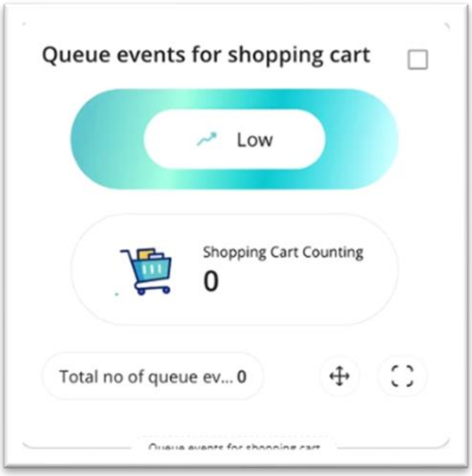
- **Retail Analytics Widgets**

  - **Shopping Cart Counting**

Shows the number of **shopping carts detected** in monitored areas.

- Charts: Daily trend line or bar chart.

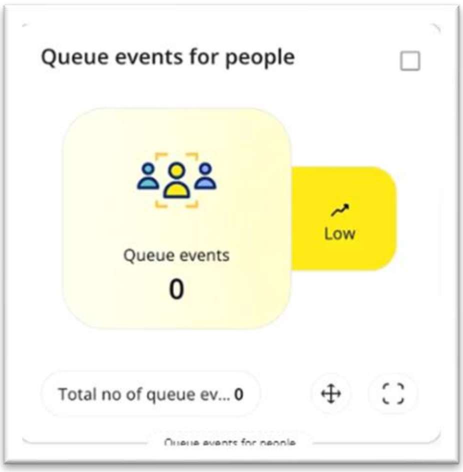
  - **Queue Events for Shopping Cart**



Displays number of **shopping carts in queue lines**.

- Charts: Time-based event count visualization.

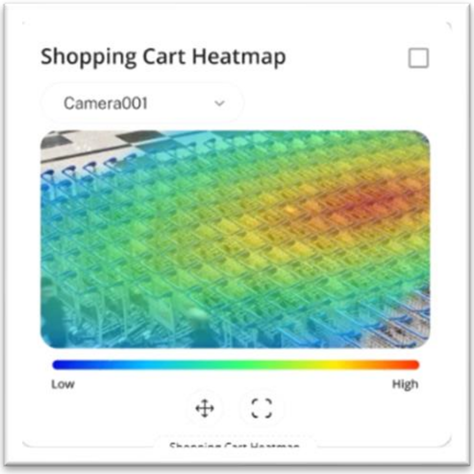
❖ **Queue Events for People**



Tracks **queue events involving people** in retail zones.

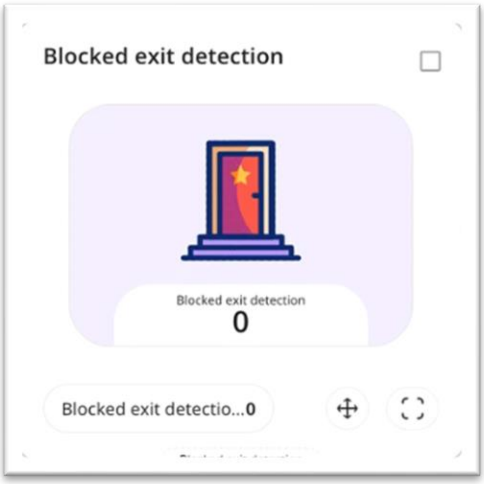
- Charts: Bar chart per hour or day.

❖ **Shopping Cart Heatmap**



Displays **heatmap visualization** of shopping cart activity across zones.

❖ **Block Exit Detection (Retail)**



Shows instances where **exits are blocked** by carts or objects.

- Charts: Bar + alert indicator.

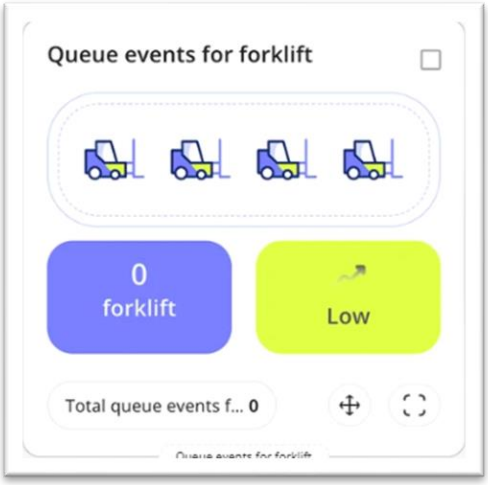
▪ **Factory & Safety Widgets**

❖ **Counting for Forklift**

Displays total **forklift detections** within the premises.

- Charts: Trend + total count summary.

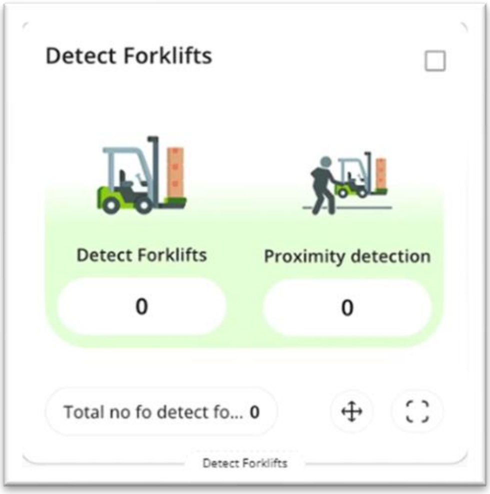
❖ **Queue Events for Forklift**



Tracks forklift queues to monitor warehouse traffic.

- Charts: Queue count by duration.

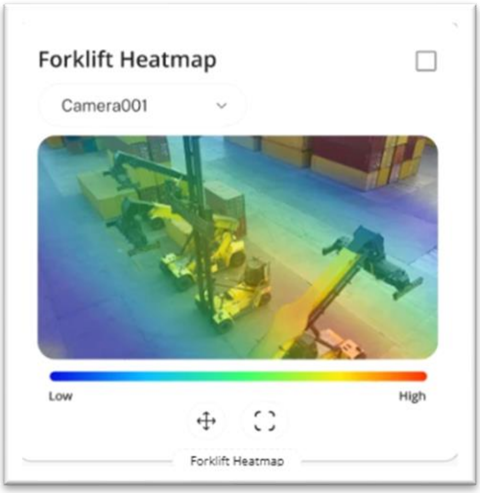
❖ **Detected Forklifts**



Displays forklift detections and proximity data (for collision alerts).

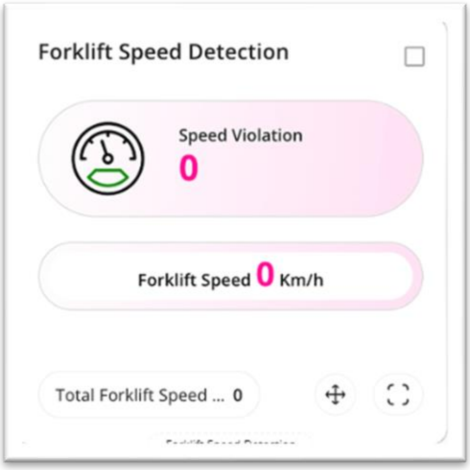
- Charts: Count + distance monitoring.

❖ **Forklift Heatmap**



Shows movement heatmap for forklifts across floors/zones.

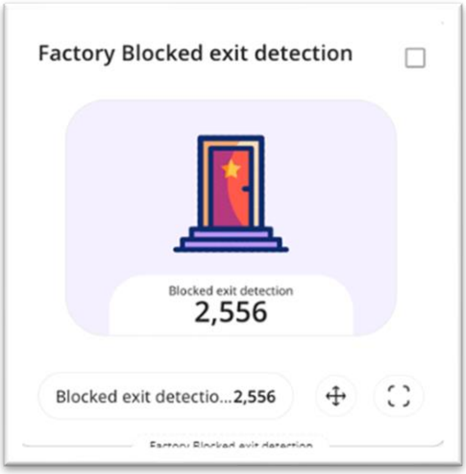
❖ **Forklift Speed Detection**



Displays speed violations detected among forklifts.

- Charts: Count vs speed range.

❖ Block Exit Detection (Factory)

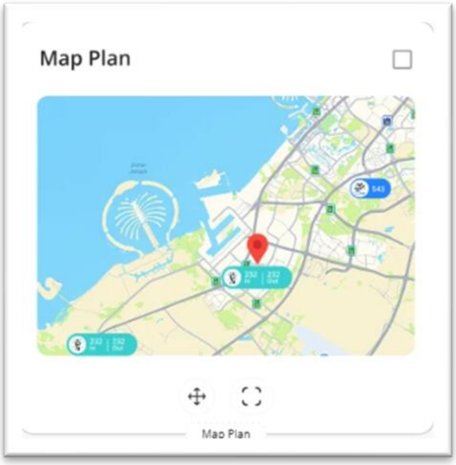


Identifies **blocked exits** in manufacturing zones.

- Charts: Count and event logs summary.

▪ Spatial Visualization Widgets

❖ Map Plan



Displays data metrics on **interactive maps** based on user-selected features.

- View: Map overlay with live camera or device indicators.

❖ **Floor Plan**

Displays live **data overlays on uploaded floor plan images**, showing people/vehicle density or activity levels.

- View: Graphical layout with positioned cameras and data hotspots.

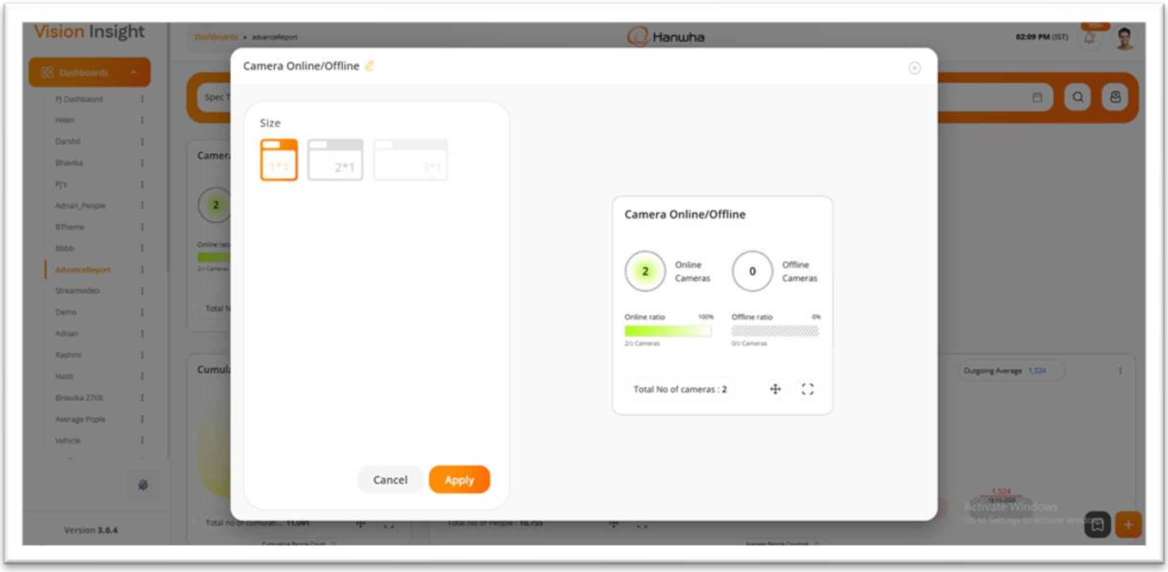
- **Business Rules & Permissions:**
  - Each dashboard can include up to **40 widgets**.
  - Widgets are visible and configurable **only if permissions are assigned**.
  - Data updates dynamically according to active filters (floors, zones, time).
  - The system prevents duplicate widgets in the same dashboard.
  - Users can reposition, resize, expand, or delete widgets as per their role rights.

- **Dropdown Filter Features:**
  - People In & Out Count
  - Slip & Fall Count
  - Vehicle In & Out Count
  - Pedestrian Detection Count
  - Vehicle Queue Analysis Count
  - Speed Violation by Vehicle Count

- Traffic Jam by Day
- Shopping Cart Count
- Forklift Count

9.5 Setup Page

- **Screen**



- **Steps to Access:**
  - ✓ Navigate to **Dashboards → [Select Dashboard]**.
  - ✓ Locate the desired widget configured on the dashboard.
  - ✓ Click the **"Setup"** option available within that widget.
  - ✓ The system opens the **Setup Popup**, displaying customization options such as size and expanded view.

- **Steps to Configure Widget Setup:**
  - ✓ Open the desired widget and click **Setup**.
  - ✓ In the setup popup, configure the following options:
    - **a. Size**
      - Defines the display size of the selected widget.
      - Available options:
        - **1×1** – Standard compact view.
        - **2×1** – Medium view with more chart area.
        - **3×1** – Expanded view with maximum chart visibility.
      - The system automatically **enables or disables** specific size options based on the widget's design and data type (as per predefined UI layout in Figma).
    - **b. Expanded View**
      - Allows users to choose how many charts are displayed when the widget is expanded.
      - Options: up to **3 charts** depending on widget type and available data.

- This option appears only when the **2×1** or **3×1** layout is selected.
- A **live preview** on the right-hand side displays how the widget will look once applied.

✓ Click **Apply** to save the selected configuration.
✓ The system renders the widget on the dashboard according to the chosen setup.

- **Business Rules:**
  - Only **Authorized Users** can access and modify the **Setup** option.
  - Changes made in the setup popup affect **only the selected widget** and **specific dashboard**.
  - Users can **reopen the Setup option** anytime to modify size or layout.
  - The **Apply** button must be clicked to save and reflect changes immediately.
  - The setup configuration controls how the widget is visually displayed but does not alter underlying data or filters.

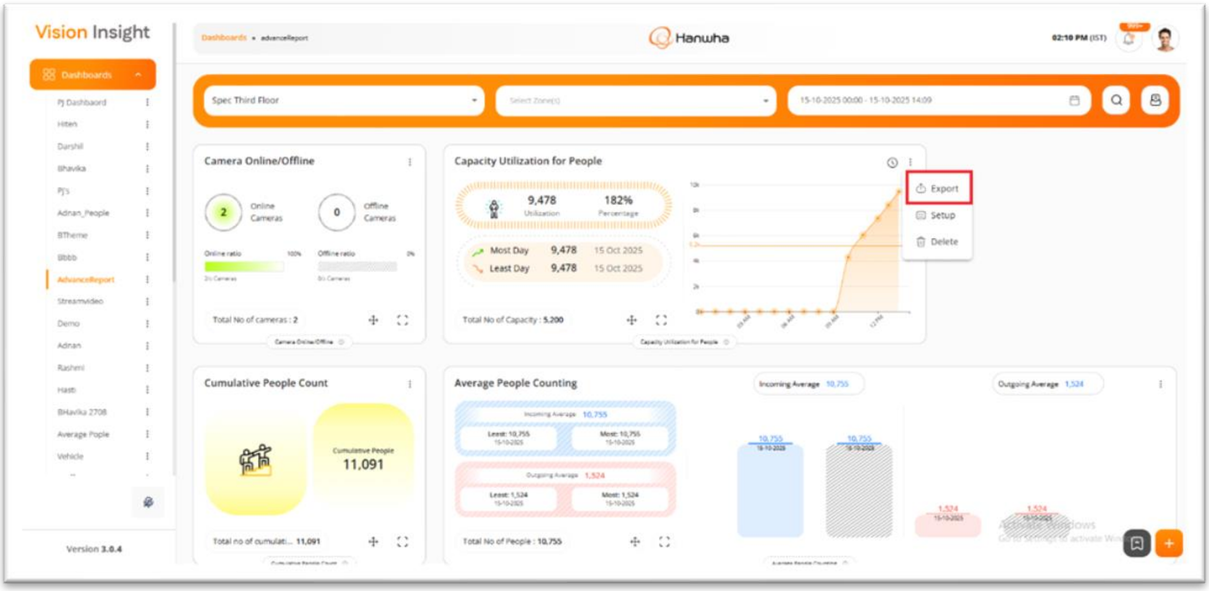
- **Example Configurations:**

Size Option	Chart Display	Description
1×1	Single chart	Compact widget view showing key metrics only.
2×1	Up to 2 charts	Balanced layout with moderate visualization.
3×1	Up to 3 charts	Full-width view with multiple charts and insights.

- **Additional Information:**
  - Widget size and expansion availability depend on the widget's default layout and supported chart types.
  - Each widget's setup is stored locally for the logged-in user's session.
  - The system dynamically updates the dashboard layout once setup is applied.

9.6 Export as CSV Option

- **Screen**



- **Steps to Access:**
  - ✓ Navigate to **Monitoring → Monitoring Page** from the left sidebar menu.
  - ✓ Navigate to **Dashboards → [Select Dashboard]**.
  - ✓ Locate the desired widget configured under the selected dashboard.
  - ✓ Click the **"Export CSV"** option available within that widget.
  - ✓ The system opens a popup allowing the user to select **duration** (date & time range) before exporting.
  - ✓ Once the range is selected, click **Export** to download the report in .csv format.

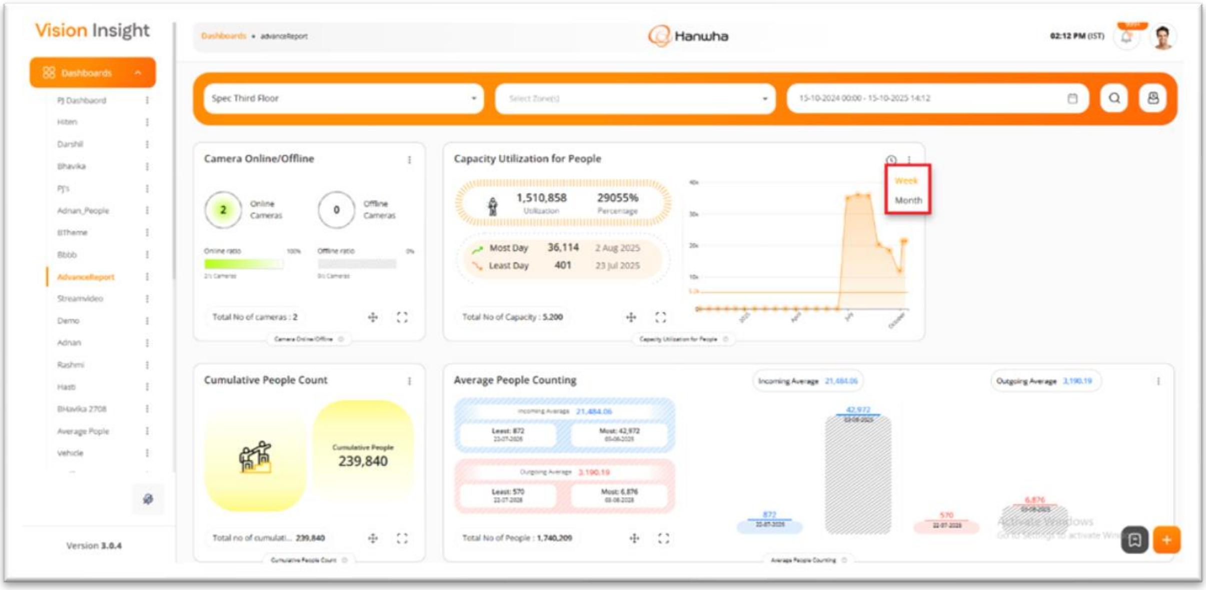
- **Steps to Export Data:**
  - ✓ Select the **duration** (Date and Time Range) for which you want to export the data.
  - ✓ Click the **Export CSV** button within the widget's control menu.
  - ✓ The system validates the data based on the applied filters.
  - ✓ The report is automatically downloaded in .csv format to the user's system.

- **CSV Report Contents:**
  The exported CSV file will include the following information:
  - **Exported By:** Username of the user who generated the export.
  - **Exported On:** Date & Time when the export was performed.
  - **Selected Date Range & Time:** The filters and timeframe applied before exporting.
  - **Widget Data:** The complete dataset of the selected widget, including all filters (Floors, Zones, or other applied parameters) as displayed on the dashboard.

- **Business Rules:**
  - Only **Authorized Users** can access the **Export CSV** option.
  - The option is available **only for widgets that support data export** functionality.
  - Exported data reflects the filters and time period currently applied to the widget.
  - CSV export generates structured, tabular data compatible with Excel or BI tools for offline analysis.
  - The export is instantaneous and downloaded directly via the user's browser.

9.7 Duration Selection Filter Option

- **Screen**



- **Steps to Access:**
  - ✓ Navigate to **Monitoring → Monitoring Page** from the left sidebar menu.
  - ✓ Navigate to **Dashboards → [Select Dashboard]**.
  - ✓ Locate the desired widget configured on the selected dashboard.
  - ✓ The **Duration Filter** option will be available below or within the widget (only for widgets where it is applicable).
  - ✓ Select a duration value to update and visualize data accordingly.

- **Steps to Use the Duration Filter:**
  - ✓ Open the specific widget under the desired dashboard.
  - ✓ Locate the **Duration Filter** dropdown or button group.
  - ✓ Choose any of the available duration options:
    - **15 Mins**
    - **30 Mins**
    - **Hour**
    - **Day**
    - **Week**
    - **Month**
  - ✓ Upon selection, the system will **refresh and re-render** the widget's charts based on the chosen time duration.

- **Business Rules:**
  - The **Duration Filter** is available only for widgets that support time-based visualization.
  - The system automatically **manages the visibility** of duration options depending on the selected **date range** at the dashboard level.
  - Only relevant filter options are displayed based on the context of the selected period (e.g., "15 Mins" and "30 Mins" may be hidden when the user selects a multi-month date range).
  - Widget charts dynamically update to reflect aggregated or detailed data

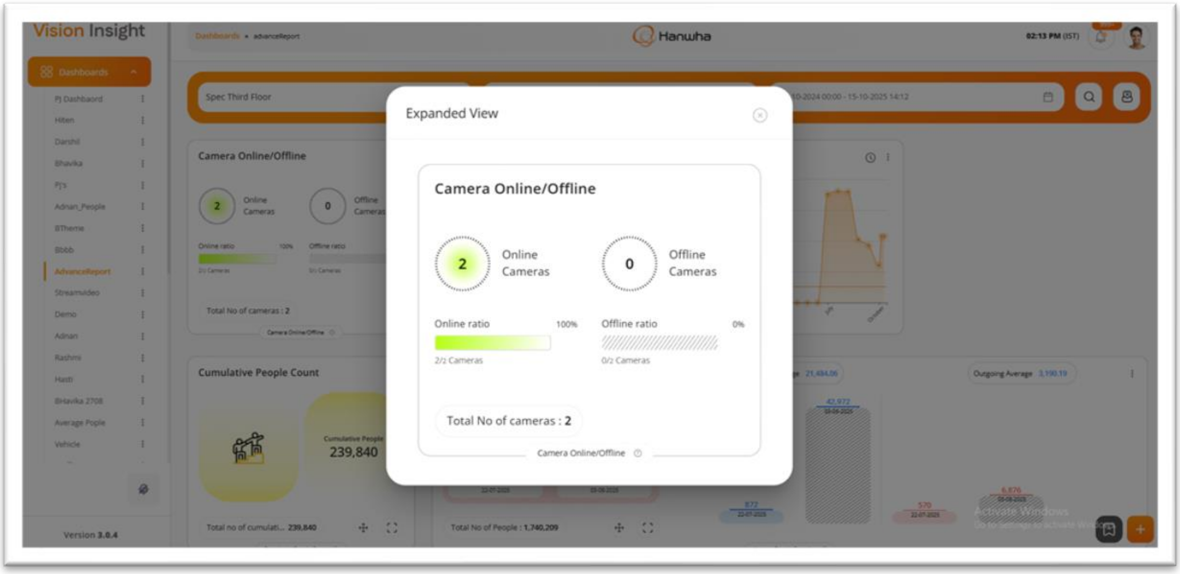
corresponding to the selected duration.
  - The system automatically selects a **default duration** based on the chosen date range on the dashboard.
  - Users can change and select any enabled value at any time to instantly refresh the data.

- **Example:**
  If the user applies a **1 Week** date range filter on the dashboard:
  - The system will automatically default to the **Day** duration view.
  - Users can manually switch to **Week** or **Hour** view if available.
  - All associated charts (e.g., *People In & Out*, *Vehicle Queue Analysis*) will be refreshed to show data distribution for the selected duration.

- **Additional Information:**
  - Duration selection is **widget-specific** and does not affect other widgets on the same dashboard.
  - The filter's behaviour is temporary and resets when the user refreshes or reopens the dashboard.
  - This feature ensures flexible data visualization by allowing fine-grained control over chart granularity.

9.8 Expand Option

- **Screen**



- **Steps to Access:**

  ✓ Navigate to **Monitoring → Monitoring Page** from the left sidebar menu.
  ✓ Navigate to **Dashboards → [Select Dashboard]**.
  ✓ Locate the desired widget configured on the selected dashboard.
  ✓ Click the **"Expand"** icon available on the widget toolbar.
  ✓ The system opens a popup displaying the widget in expanded mode.

- **Expanded View Options:**
  The expanded preview layout depends on the widget's configured size:
  - **1×1 Widget:** Displays a single, enlarged chart or summary view.
  - **2×1 Widget:** Displays up to **two charts** or data panels in expanded view.
  - **3×1 Widget:** Displays up to **three charts** or visual components simultaneously.
  - Each view automatically adjusts based on the widget's setup configuration and available data visualization type.

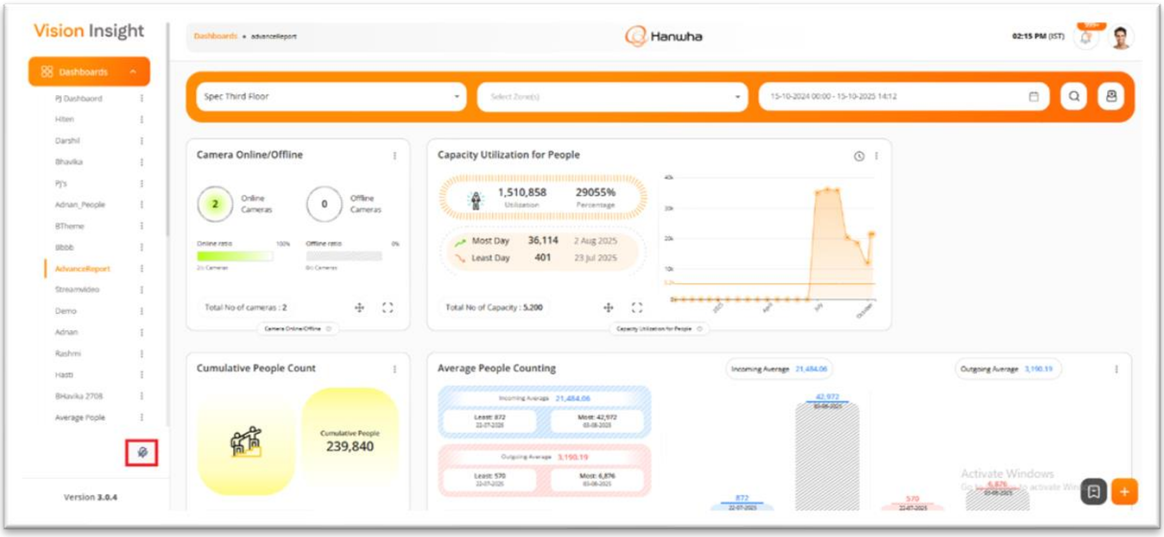
- **Steps to Use:**
  - ✓ Click the **Expand icon** on the desired widget.
  - ✓ The system opens a **popup window** showing the widget in a full expanded view.
  - ✓ Users can analyze the data in greater detail, review trends, and scroll through the expanded content if applicable.
  - ✓ To exit, click the **Close (X)** button on the top-right corner of the popup.

- **Business Rules:**
  - Only **Authorized Users** can access the **Expand** feature.
  - The **Expand icon** appears only for widgets that support enlarged visualization.
  - The system opens a dedicated popup window when the expand option is selected.
  - The popup provides a **close button** to return to the standard dashboard view.
  - Expanded view displays the **live data** currently reflected on the dashboard (based on active filters and duration selection).
  - The expanded chart layout (1×1, 2×1, or 3×1) is determined by the widget's setup configuration.

- **Additional Information:**
  - Expanded view improves visibility for complex charts or multi-metric widgets.
  - Users can take screenshots or analyze data trends directly from the expanded popup.
  - The feature is purely **visual** and does not affect any underlying data or dashboard layout.

10. Voice Command

- **Screen**



- **Feature Overview:**
  - The BI Dashboard Web Application supports voice command to provide a hands-free, voice-controlled experience for viewing Dashboard Widgets.
  - Users can open any specific Dashboard by below commands:

    ✓ *open* [DashboardName] *dashboard*
    ✓ *show the* [DashboardName] *dashboard*
    ✓ *go to the* [DashboardName] *dashboard*

  - Once the Dashboard is opened, user has to give voice command to open any widget visible on the open dashboard, in full view.

    ✓ *open* [WidgetName] *widget*
    ✓ *show the* [WidgetName] *widget*
    ✓ *go to the* [WidgetName] *widget*

  - User can use the close or remove command to close or remove the open widget.

    ✓ *close* [WidgetName] *widget*
    ✓ *hide the* [WidgetName] *widget*
    ✓ *remove the* [WidgetName] *widget from the screen*