Health Monitoring System

Health Monitoring System (User Manual)

"The Health Monitoring System is a digital platform for tracking, analyzing, and managing the performance and condition of checkgate components or devices to ensure real-time monitoring, operational efficiency, and compliance with safety standards."

Prepared For

Directorate of Geology and Mining,
Uttarakhand

Prepared By

ITI LIMITED
(A Government of India Undertaking)

ITI Limited

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1.0 Introduction

The **Health Monitoring System** is an advanced online surveillance solution designed to ensure the reliability, efficiency, and smooth functioning of the **iCheckGate Monitoring Tool**. This system continuously monitors the operational health of all components installed within iCheckGate, including sensors, cameras, AI modules, networking devices, and solar backup units.

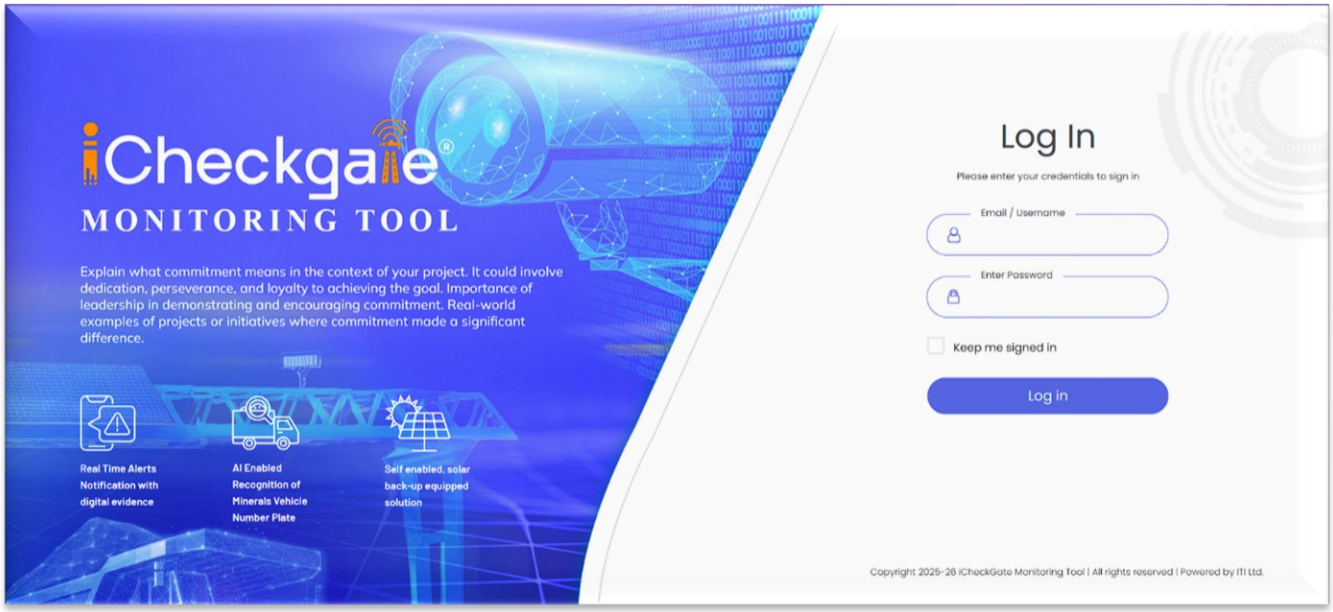
By providing **real-time status updates**, the Health Monitoring System enables administrators and operators to track the performance of each component, identify potential failures, and take preventive measures before critical breakdowns occur. The system also generates timely alerts and diagnostic reports, ensuring that issues can be resolved quickly to maintain uninterrupted service.

1.1 Steps how to portal & interface

Go to search browser

Enter url: *http://malert.ukmdtss.in:5000/#/login*

After that, you will see the Login screen



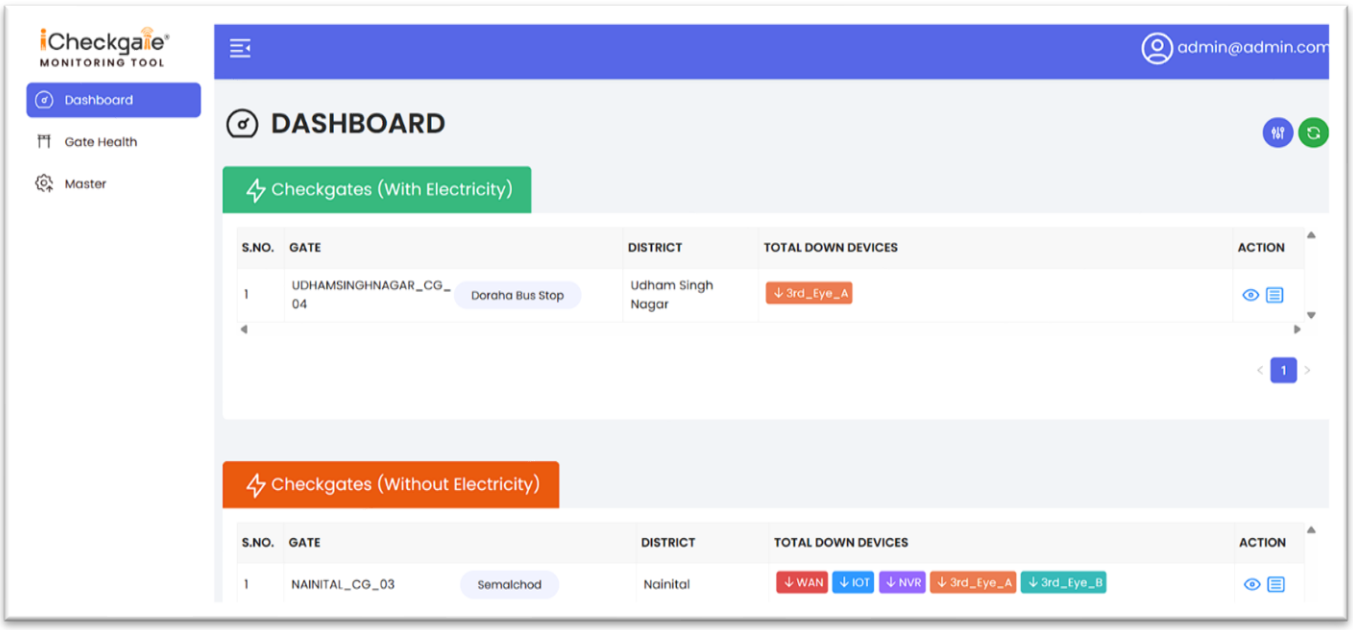
1.1.1 Login process

S#	User Action	System Response	Next Outcome
1	User lands on the **Login Page**	Displays login form with fields (Email/Username, Password, "Keep me signed in")	User proceeds to enter credentials
2	User enters **Email/Username**	Input captured in text field	Moves to password field
3	User enters **Password**	Input captured and masked (hidden)	User reviews entered details
4	User checks/unchecks **"Keep me signed in"**	If checked, session persists beyond logout/browser close	User prepares to submit
5	User clicks **Log In** button	System validates credentials with backend database	Decision point: Valid or Invalid
6	Credentials **Valid**	Access granted → Redirected to **Dashboard/Homepage**	User navigates through modules (Alerts, AI Recognition, Health Monitoring, Reports)
7	Credentials **Invalid**	Error message displayed (e.g., "Invalid username or password")	User retries login (back to Step 2)

Then enter email & password

Then it redirects to dashboard

2.0 Dashboard



Purpose

The purpose of this Dashboard screen is to provide administrators with a real-time overview of the operational health of all iCheckGate installations.

It helps in:

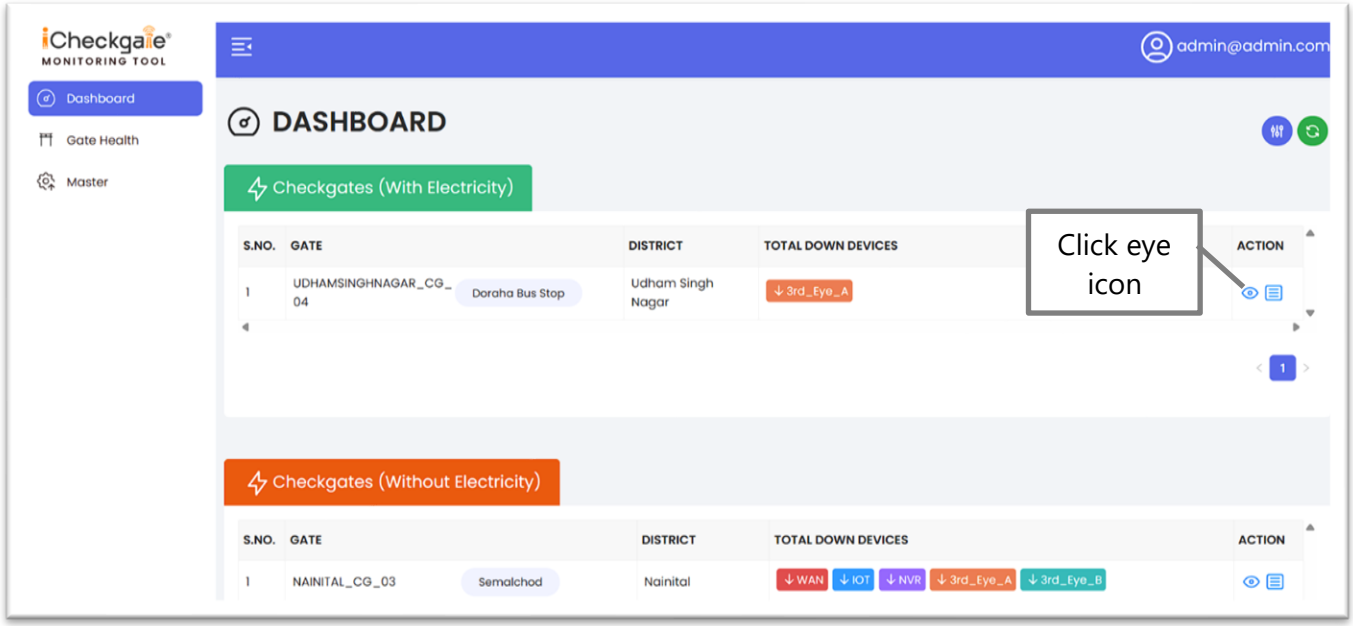
- Quickly identifying which gates are working fine (with electricity).
- Detecting gates that are offline or facing power/device failures.
- Pinpointing the specific devices that are down at each gate.
- Allowing users to take immediate action (via the "View" icon).

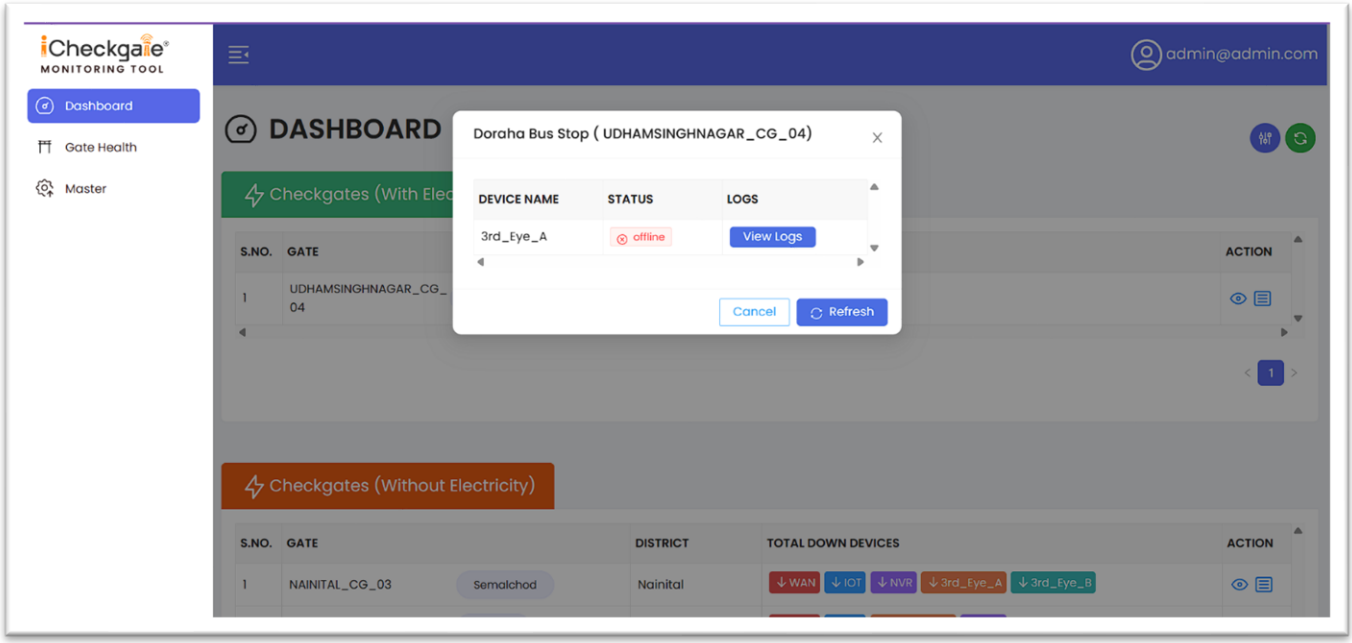
This acts as a control centre for monitoring infrastructure reliability.

2.1 Dashboard Overview

S#	Key Section	Description
1	Checkgates (With Electricity)	Shows all gates currently operational and powered. Displays Gate ID, Location, District, and down devices (if any).
2	Checkgates (Without Electricity)	Lists gates that are offline or without electricity, highlighting device failures like WAN, IoT, NVR, or cameras.
3	Columns (S.No., Gate, District, Total Down Devices, Action)	Provides structured details of each gate, including malfunctioning components and options for detailed view.
4	Total Down Devices	Highlights the specific devices at each gate that are not functioning properly.
5	Action (View Icon)	Allows administrators to open a detailed view of the gate's health status.
6	Navigation Sidebar	Quick access to different modules: Dashboard, Gate Health, and Master.
7	User Profile (Top Right)	Displays the logged-in user (e.g., admin@admin.com) for session identity and security.

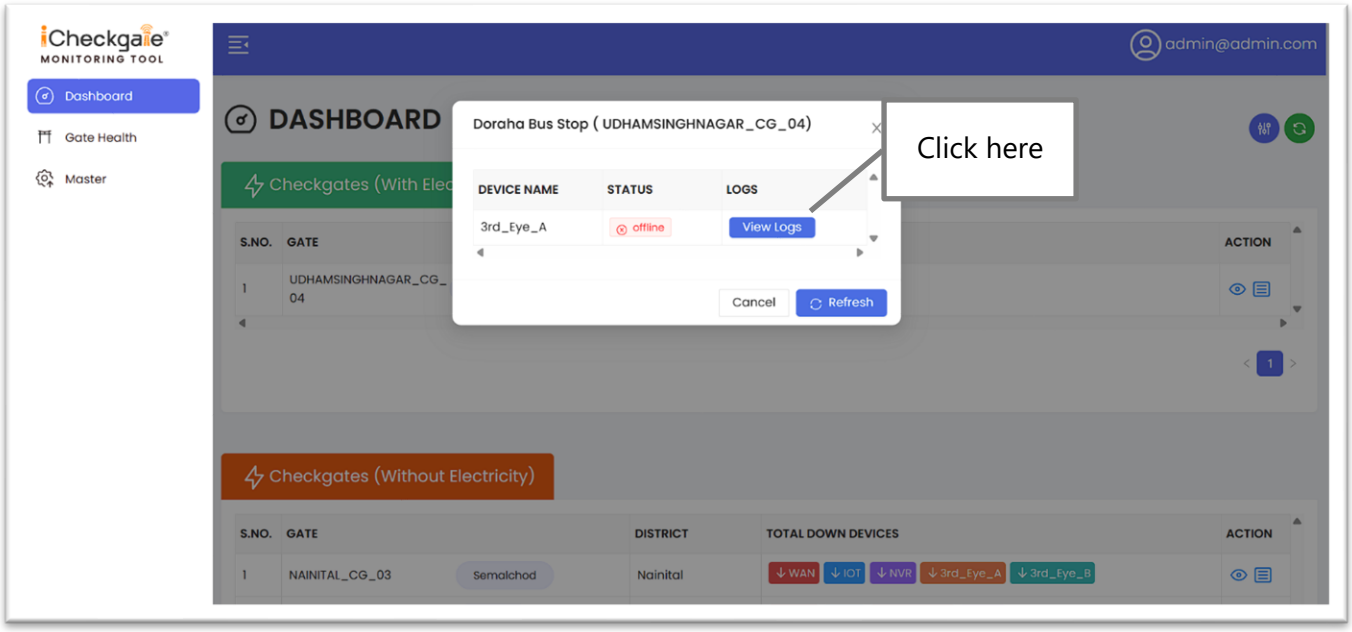
Click eye icon inside Checkgate(without electricity)



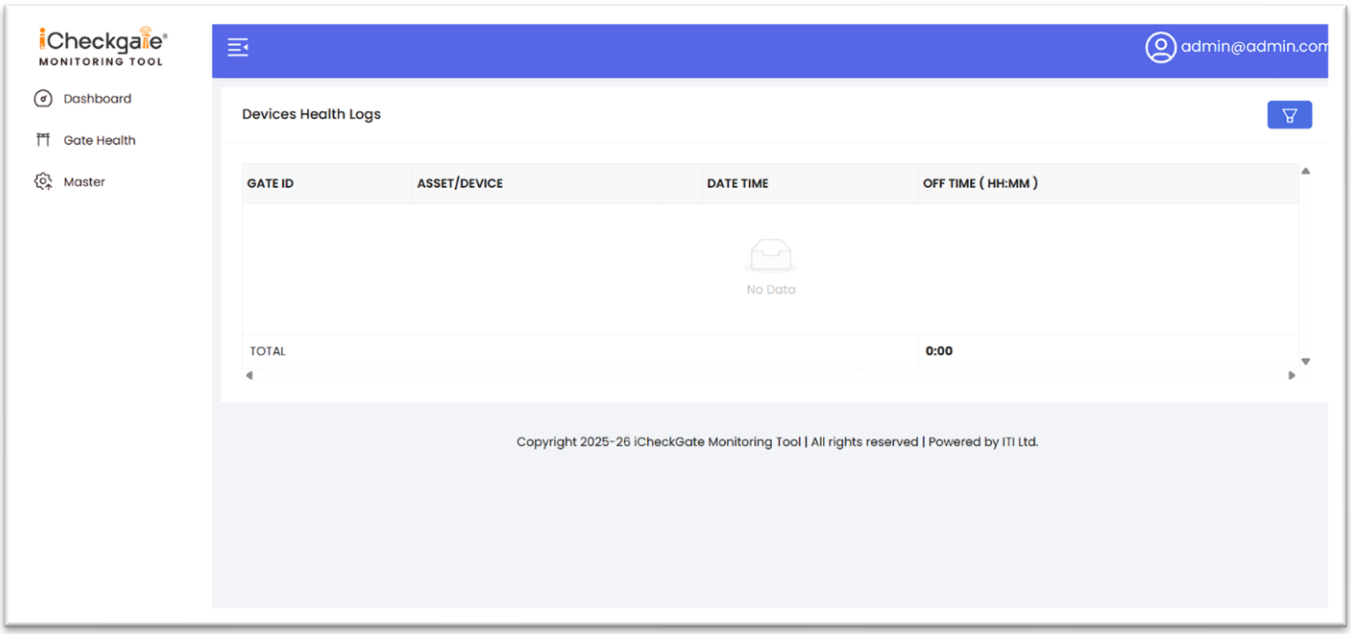


2.2 Eye icon overview

S#	User Action	System Response
1	User logs in and navigates to the **Dashboard**.	Dashboard displays checkgates (with electricity & without electricity).
2	User clicks the **Action (Eye icon)** for a specific gate (e.g., `UDHAMSINGHNAGAR_CG_04`).	A popup window opens showing detailed device status.
3	Popup displays device list under the selected gate: - **Device Name** - **Status** (online/offline) - **Logs**.	Device status is shown (e.g., `3rd_Eye_A → Offline`).
4	User clicks **"View Logs"** for a specific device.	System fetches and displays historical logs of that device.
5	User clicks **"Refresh"**.	System re-checks live status of devices and updates display.
6	User clicks **"Cancel"** or the **X (close)** button.	Popup closes and system returns to Dashboard.

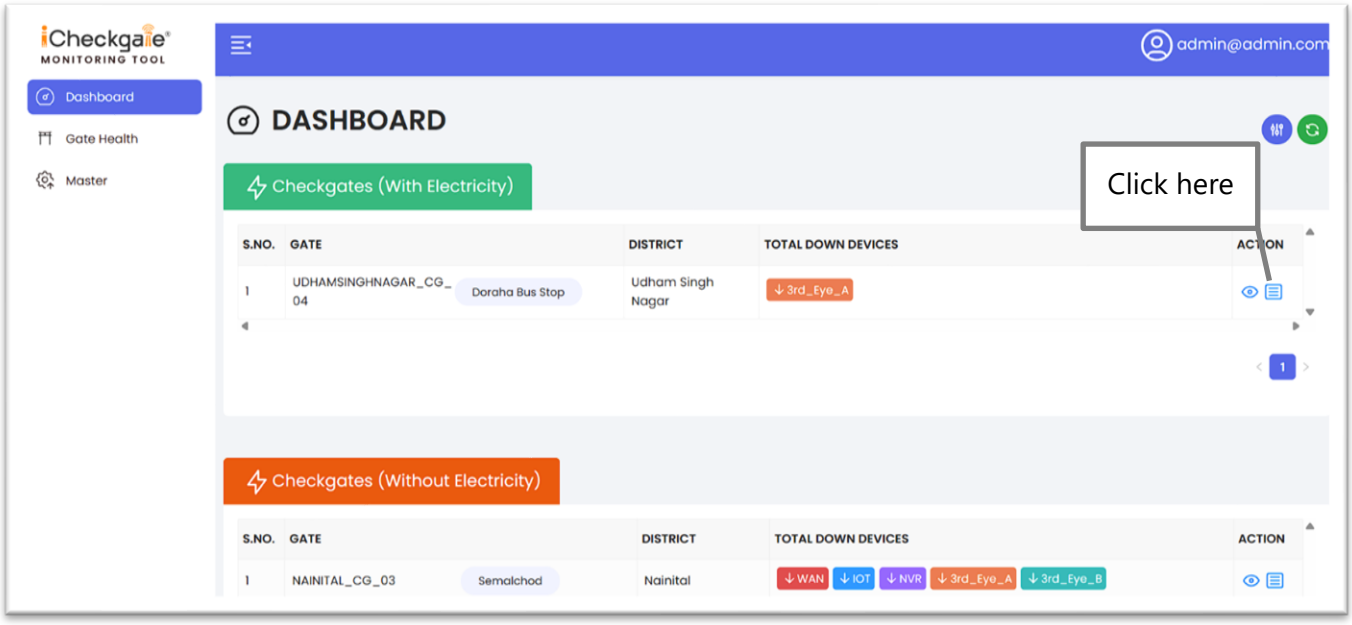


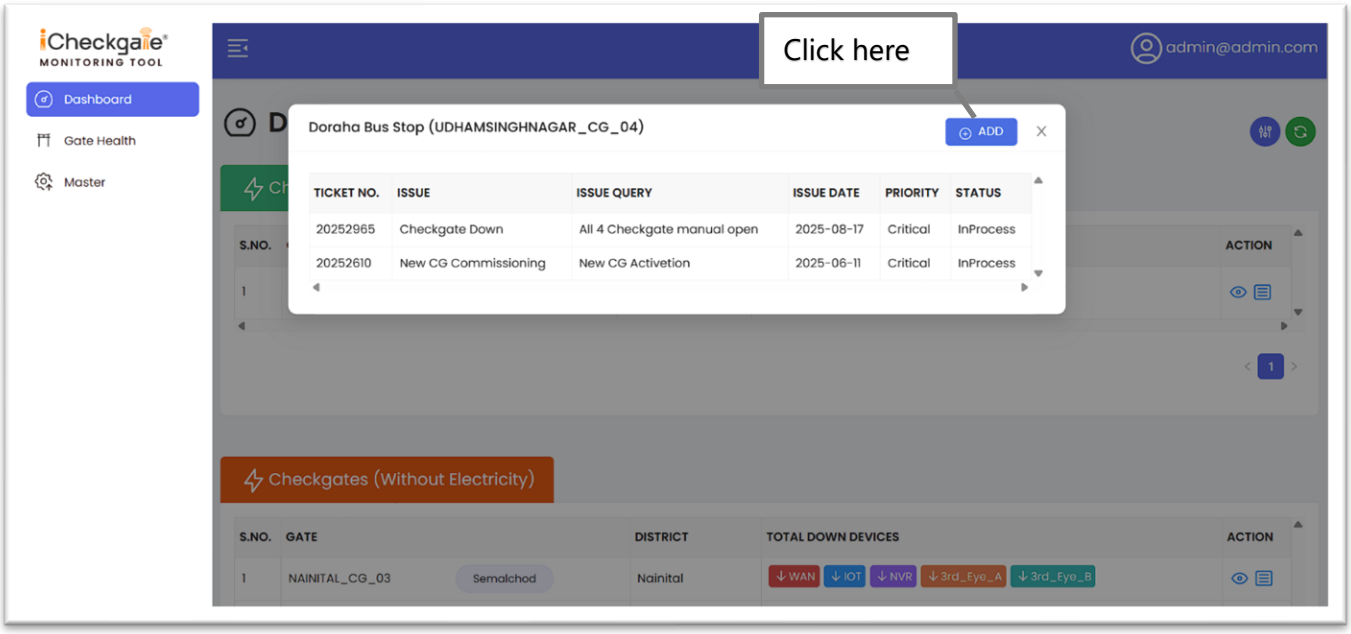
Then click view logs

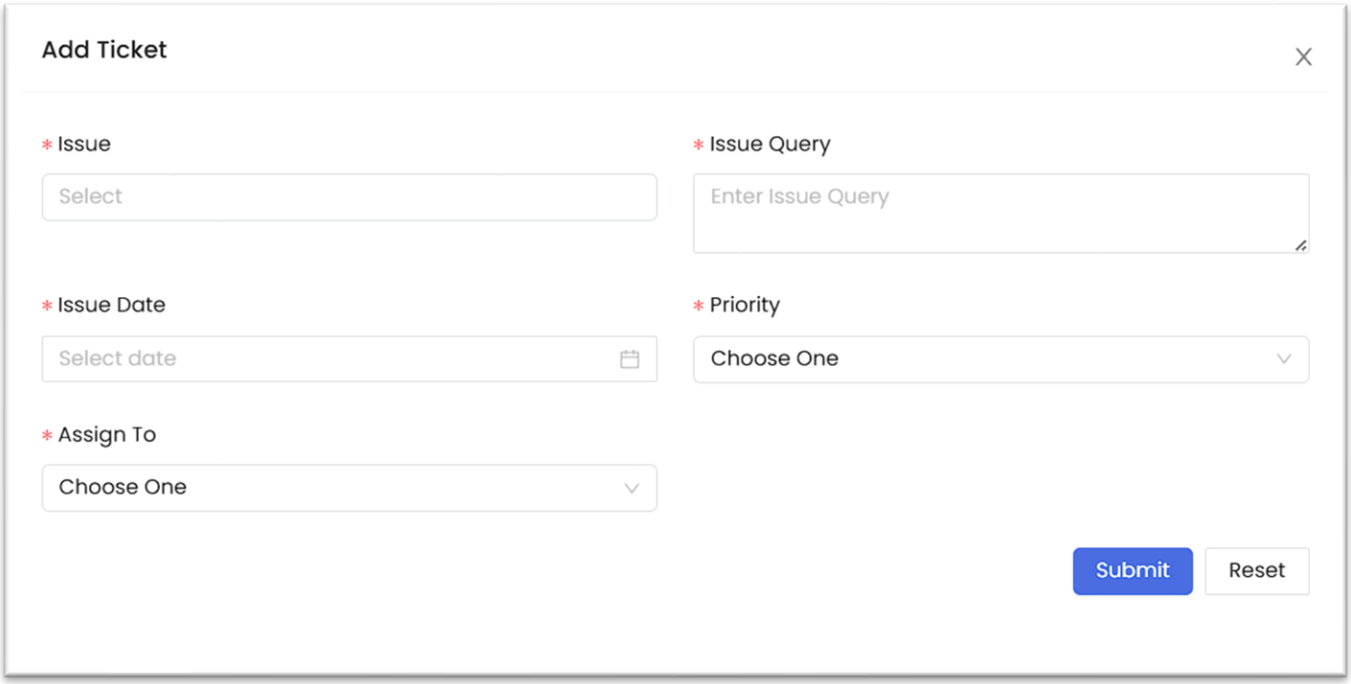


2.3 View logs overview

S#	User Action	System Response
1	From the **Dashboard**, user clicks **Action → Eye icon** for a gate.	Device-level popup appears.
2	User clicks **"View Logs"** for a specific device (e.g., `3rd_Eye_A`).	System navigates to **Devices Health Logs** screen.
3	System displays logs with the following columns: - **Gate ID** - **Asset/Device** - **Date Time** - **Off Time (HH:MM)**	User sees operational/offline history.
4	If no logs are available, screen shows **"No Data"**.	System also shows **Total Off Time** at the bottom.
5	User can apply **filters** (via filter icon at top right).	Logs update as per filter criteria (date, device, etc.).
6	User navigates back to Dashboard or Gate Health.	Dashboard reloads with real-time data.







When you click on the **ticket list icon** (📋) for a particular gate or location, a popup window opens showing all the tickets/issues related to that gate.

2.4 Ticket list overview

S#	Field	Description
1	Ticket No.	A unique system-generated number for tracking the issue.
2	Issue	The type of problem (e.g., **Checkgate Down**, **New Commissioning**).
3	Issue Query	A short description or query related to the issue (e.g., **All 4 Checkgate manual open**).
4	Issue Date	The date when the issue was reported.
5	Priority	The urgency level (**Critical**, **High**, **Medium**, **Low**).
6	Status	The current stage of the issue (**In Process**, **Resolved**, **Pending**).

This allows the user to **quickly review all existing issues** for that particular gate and take action accordingly.

If a new issue arises, the user can click on the **Add button** in the Ticket List popup. This opens the **Add Ticket Form**, where details of the new issue can be entered.

2.5 Add ticket

If a new issue arises, the user can click on the **Add (+) button** in the Ticket List popup. This opens the **Add Ticket Form**, where details of the new issue can be entered.

S#	Field	Type
1	Issue	Dropdown
2	Issue Query	Text
3	Issue Date	Date Picker
4	Priority	Dropdown
5	Assign To	Dropdown

At the bottom of the form:

Submit, Saves the ticket and assigns it for processing.

Reset, Clears the form to re-enter details**.**

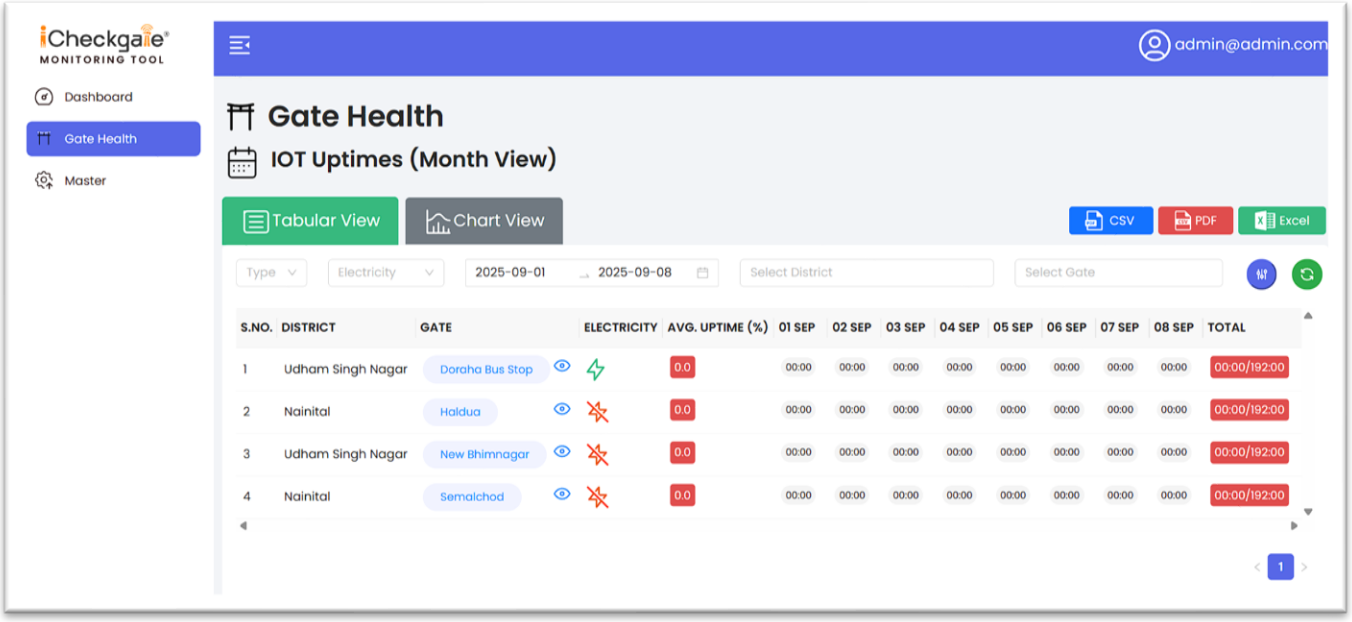
Flow Explanation

1. Click Ticket List Icon (📋): **Opens the popup showing existing tickets.**
2. Review Existing Issues: **Check Ticket No., Issue, Date, Priority, and Status.**
3. Click Add (➕): **Opens the Add Ticket form.**
4. Fill Details & Submit: **A new ticket gets added and assigned for action.**

Important Notes

The ticket list for iCheckGate with electricity is the same as the ticket list without electricity.

3.0 Gate Health



Purpose

Monitor monthly uptime (and electricity status) of each gate, filter by attributes (type/district/gate/date), review daily breakdowns, and export the result set.

3.1 Tabular View

Open module

- From the left sidebar, click **Gate Health** screen loads in **Tabular View** by default.

Set view

Stay in **Tabular View** (green button) or switch to **Chart View** (grey button) if you prefer visuals.

Choose filters

- **Type** (dropdown) → select gate type/category.

Electricity (dropdown) → e.g., All/With Electricity/Without Electricity.

Date range → pick **From** and **to** month dates.

Select District (searchable dropdown).

Select Gate (searchable dropdown).

Apply / refresh

- Data auto-updates after selections, or click the **refresh icon** (green circular arrow) to reload with current filters.
- (Optional) click the **settings/filters icon** to open advanced filter panel (if configured).

Review results table

- Columns: **S.No., District, Gate, Electricity, Avg. Uptime (%), Daily columns (01 SEP … 08 SEP), Total**.
- **Gate** names are clickable chips.
- **Icons per row**:
- **Eye** → open gate details/logs view.

- **Lightning** (green) → electricity OK; **crossed bolt** (red) → electricity/connectivity issue.
- **Daily cells** show HH:MM uptime; **Total** shows accumulated time (e.g., `00:00/192:00`).

Drill-down

- Click the **eye** icon (or gate name) → open gate detail/logs for the selected period (view-only page or modal).

Export / share

- Click **CSV**, **PDF**, or **Excel** buttons to export the currently filtered dataset.

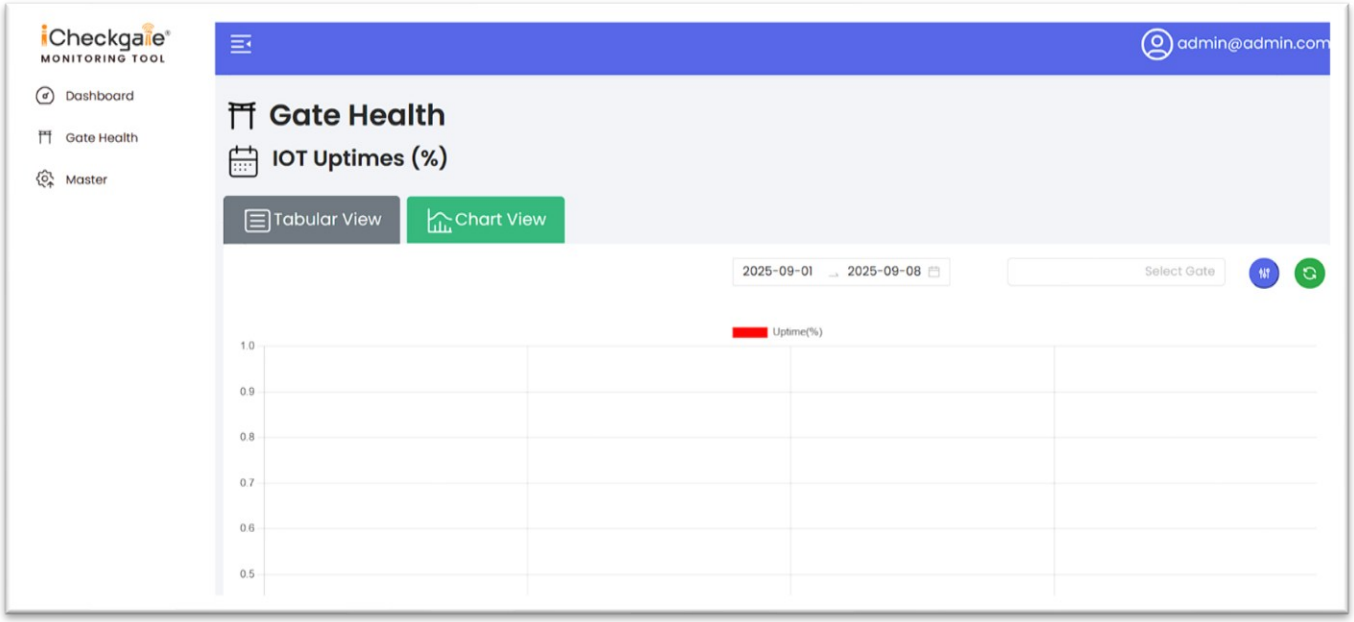
Pagination

- Use the pager at the bottom-right (e.g., page **1**, next arrow) to navigate additional rows.

Reset

- Clear selections or use the **refresh** icon to return to default state.

3.2 Chart view



Open module

- Left sidebar → **Gate Health** → click **Chart View** (green button).

Pick date range

- Use the **From** → **To** picker (e.g., 2025-09-01 → 2025-09-08).

Select gate

- Use **Select Gate** (searchable).

Note: If no gate is chosen, the chart may stay empty (as shown).

(Optional) Advanced filters

- Click the **blue settings icon** to open extra filters (e.g., type/electricity) if enabled.

Apply /refresh

- Data updates automatically or click the **green refresh icon** to reload the chart with current filters.

Read the chart

- **X-axis:** Dates in the chosen range.
- **Y-axis: Uptime(%)** (0.0–1.0 = 0–100%).
- **Legend:** "Uptime(%)" (red).
- **Hover** points/bars to see exact % for that day.

Investigate further

If you spot a dip, switch to **Tabular View** to see daily HH:MM values or open gate details/logs from there.

Alternate/Supporting Actions

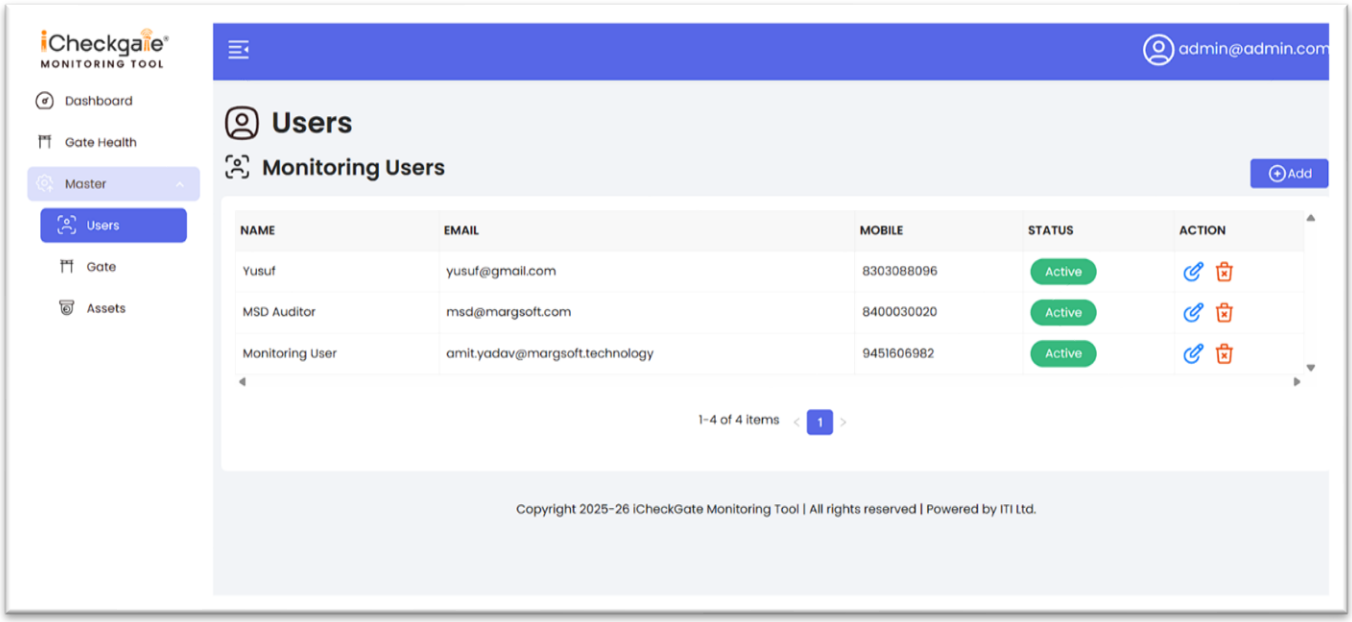
Reset: Clear selections or re-pick the original date range, then **refresh**.

Switch view: Use **Tabular View** anytime for exports (CSV/PDF/Excel) and per-day totals.

Empty/No-Data States

Blank chart usually means: no gate selected, no data in the range, or filters exclude all results. Adjust filters and refresh.

4.0 User



Purpose

This screen allows the admin to manage monitoring users who have access to the iCheckGate Monitoring Tool. Actions include **adding**, **editing**, and **removing** users, as well as viewing their details (name, email, mobile, status).

Navigate to Users

- Left sidebar → Click **Master** → Select **Users**.
- The **Monitoring Users** list loads by default.

View user list

Table columns:

- **Name** (full name of the user)
- **Email** (registered email address)
- **Mobile** (contact number)
- **Status** (Active/Inactive, shown as badges)
- **Action** (Edit / Delete icons)
- Pagination is available at the bottom (e.g., "1-4 of 4 items").

Add a new user

- Click the **Add** button (top-right).
- Fill out **Name, Email, Mobile, Role/Access Level, Status** in the form.
- Submit, New user appears in the list with status **Active** by default (or chosen).

Edit an existing user

- Click the **blue pencil (edit icon)** in the Action column.
- Update user details in the edit form.
- Save, List refreshes with updated information.

Delete a user

- Click the **red trash icon** in the Action column.
- System prompts for confirmation.
- On confirm, user is removed from the list.
- Supporting Actions

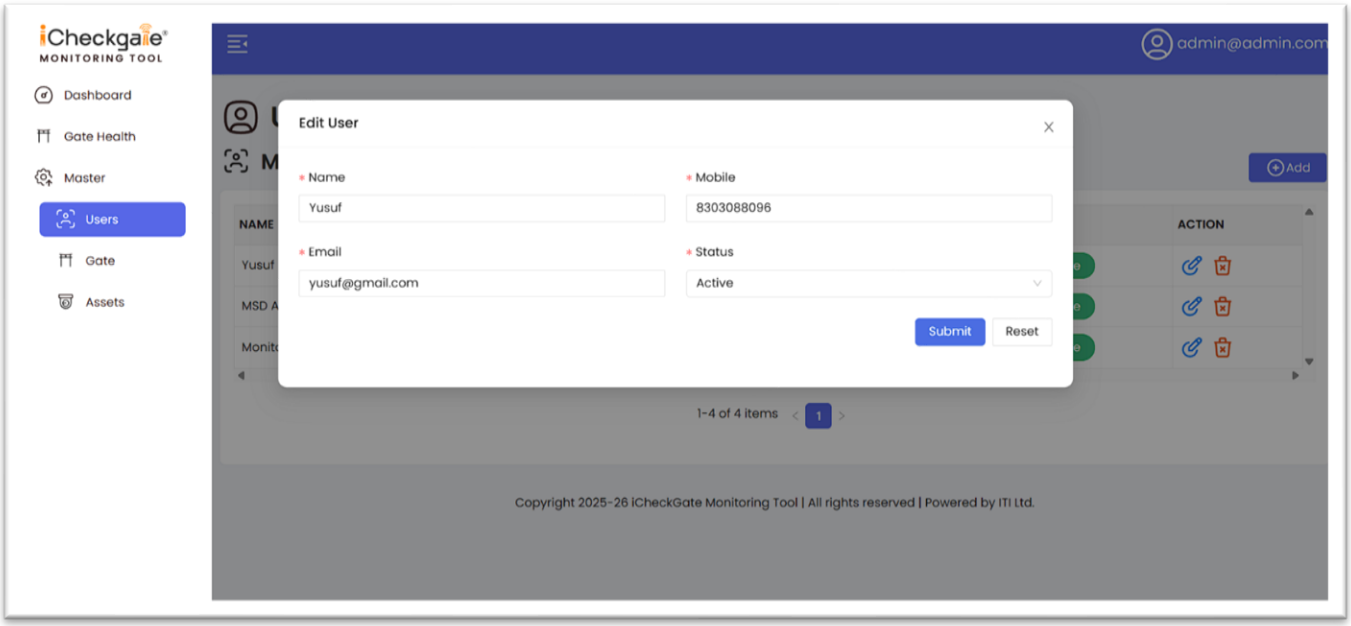
Status Management

- Status shows as **Active (green badge)**.
- If inactive users exist, they may appear with a different badge (e.g., "Inactive" in red/grey).

Search & Pagination

- The module may allow searching by name/email (not shown in screenshot but typically present).
- For large user bases, multiple pages can be navigated via pagination controls.

4.1 Edit user



Click Edit Icon

From the Users list table, under the Action column → click the blue pencil (edit) icon.

A modal window "Edit User" opens (as shown in screenshot).

Edit Form Fields

- Name – Update the user's full name.
- Mobile – Change the registered mobile number.
- Email – Modify the user's email ID.
- Status – Choose from dropdown (Active / Inactive).

Submit Changes

Click Submit, System validates inputs.

On success, the modal closes, and the updated user info reflects immediately in the Users list table.

A confirmation message may appear (e.g., "User updated successfully").

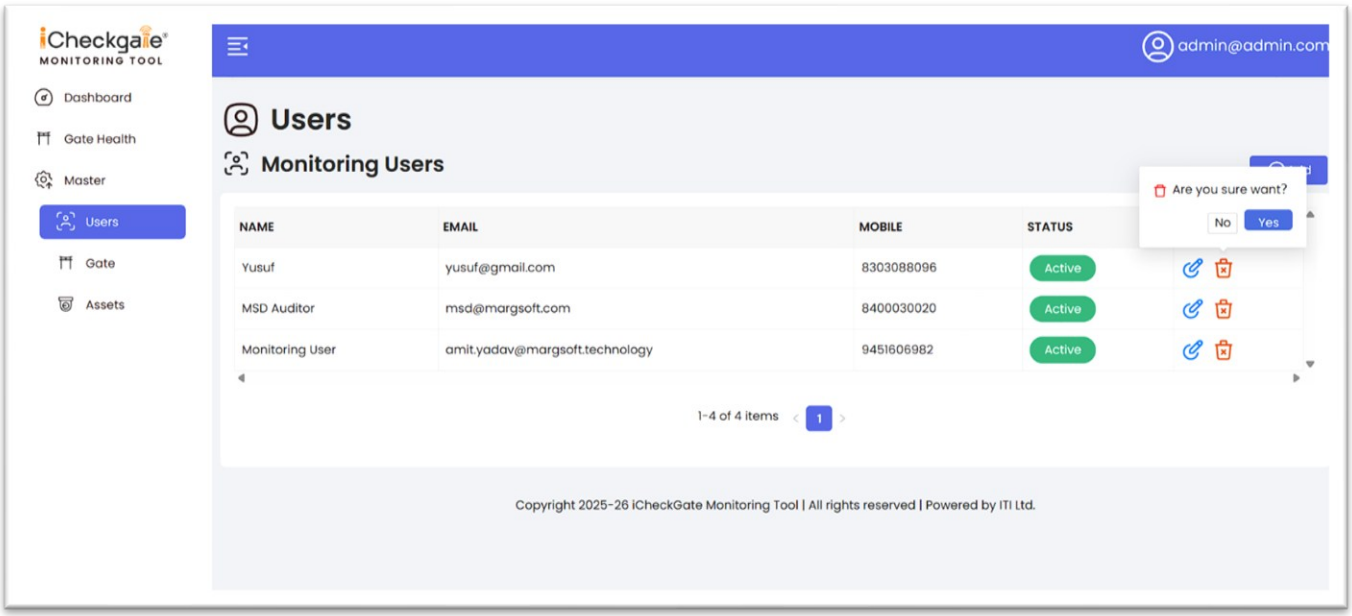
Reset Option

- If wrong entries are made click Reset.
- This clears all unsaved changes and reloads the original values.

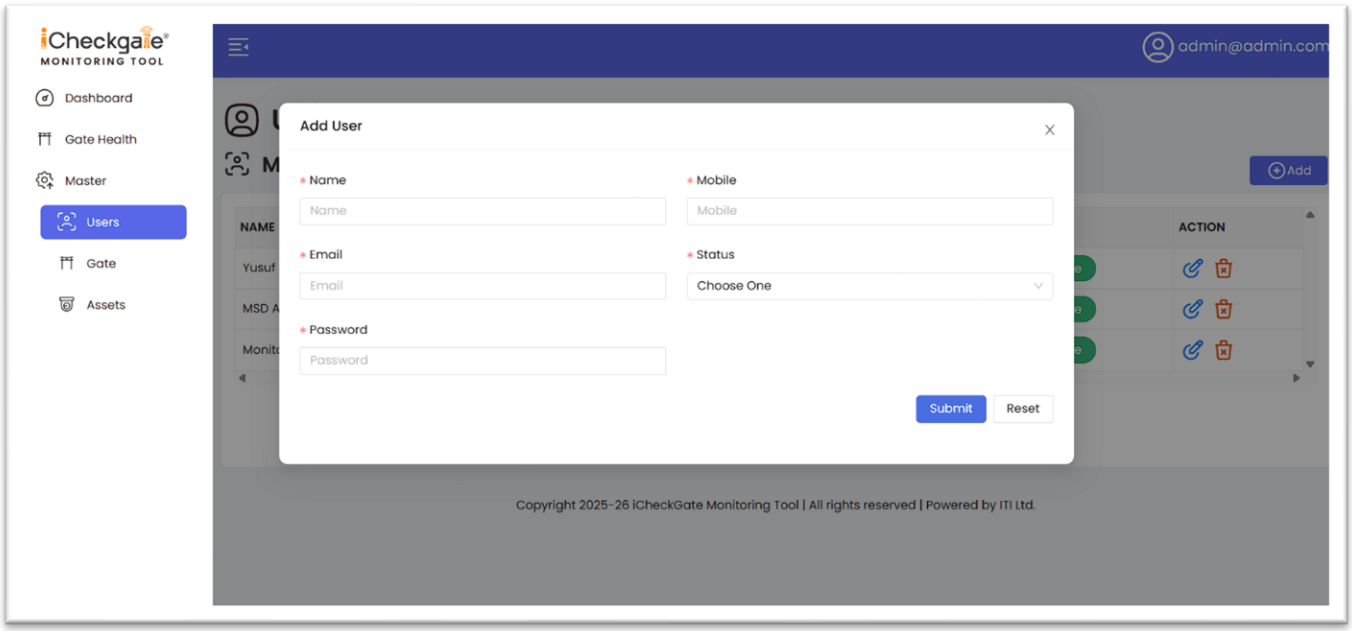
Close Modal

- Clicking the X (top-right of modal) or outside the form also closes it without saving changes.

4.2 Delete user



4.3 Add user



Navigate to Add User

Go to Master → Users from the left sidebar.

Click the + Add button (top-right).

The Add User modal window opens.

Fill in the Form Fields

Name* – Enter the full name of the user.

Mobile* – Enter the contact number.

Email* – Provide a valid email ID (this may be used as a login credential).

Password* – Set a password for the new user's account.

Status* – Select from the dropdown:

Active → User can log in and monitor.

Inactive → User is registered but cannot log in.

Submit the Form

Click Submit → System validates the entries.

If all fields are correct:

New user is added to the Monitoring Users list.

Status badge (Active/Inactive) appears in the table.

A success message confirms the action.

Reset Form

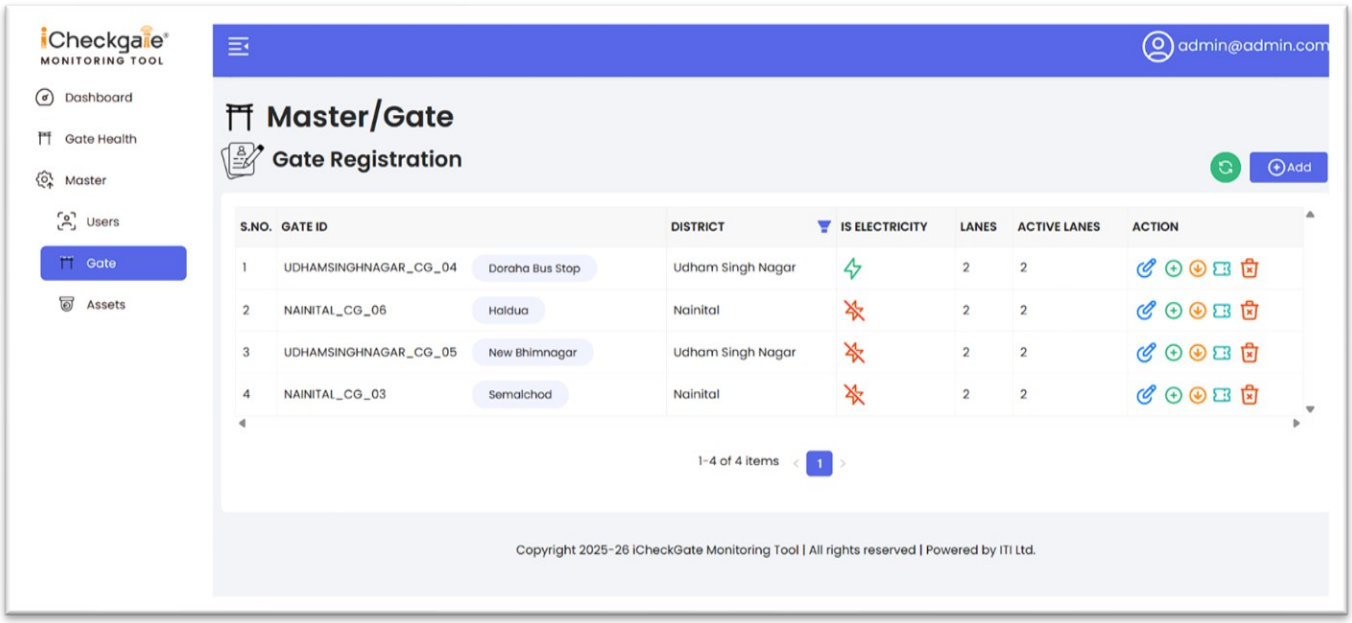
If wrong information is entered, click Reset.

This clears all inputs and reloads the form.

Close Modal

Click the X icon (top-right of modal) or outside the form to cancel without saving.

5.0 Gate



Purpose

The **Gate Registration** screen under **Master → Gate** is designed to **manage and configure gates** in the iCheckGate Monitoring Tool.

It allows admins to **register new gates**, update their details, monitor **electricity availability**, manage **lanes & active lanes**, and perform gate-specific actions.

This ensures that all entry/exit points (gates) are properly tracked for uptime, connectivity, and infrastructure status.

Navigate to Gate Registration

- From left sidebar → Click **Master → Gate**.
- The Gate Registration table loads with the list of all registered gates.

View Gate List

Table Columns:

- **S.No.** → Serial number.
- **Gate ID** → Unique identifier for each gate.
- **Gate Name** → Display name (e.g., Doraha Bus Stop, Haldwa).
- **District** → Location of the gate.
- **Is Electricity** → Shows electricity status:

Green lightning = Available

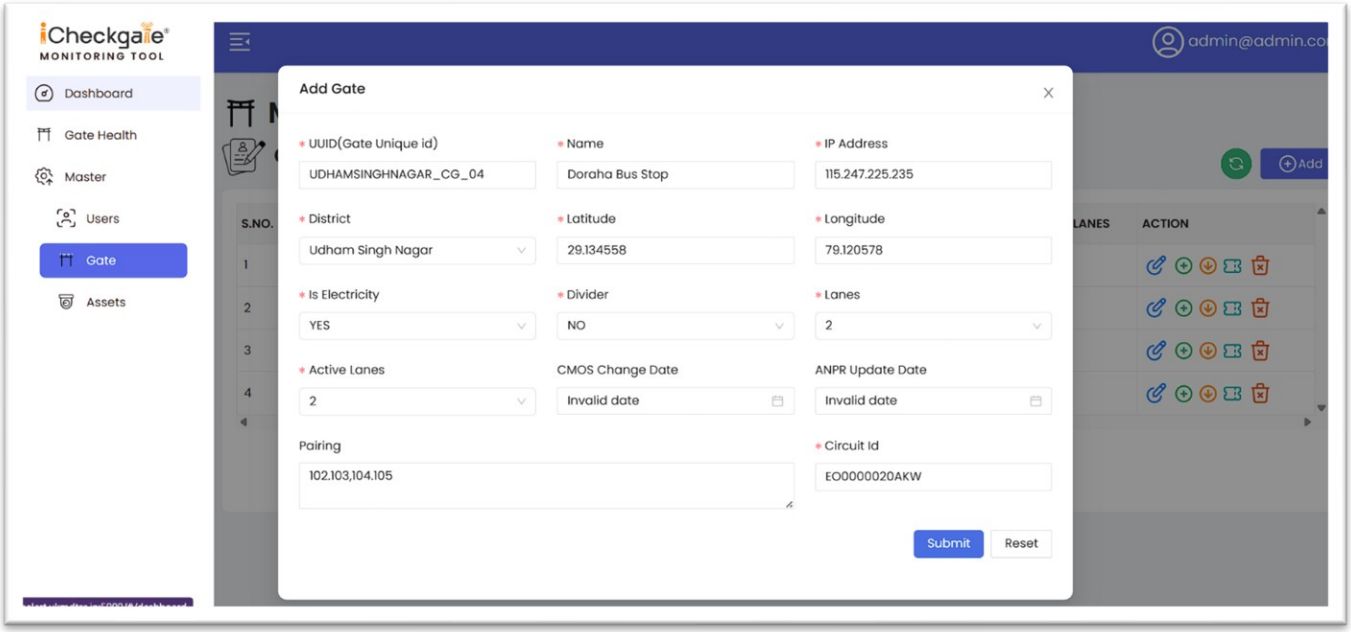
Red crossed icon = Not available

Lanes → Total number of lanes for the gate.

Active Lanes → Number of lanes currently operational.

Action → Set of actions available per gate.

5.1 Edit gate



UUID (Gate Unique ID)

- Example: UDHAMSINGHNAGAR_CG_04
- Unique identifier for the gate in the system.

Name*

- Example: Doraha Bus Stop
- The display name of the gate location.

IP Address*

- Example: 115.247.225.235
- Network IP address of the gate for monitoring connectivity.

District*

- Example: Udham Singh Nagar
- Dropdown to select the district where the gate is located.

Latitude*

- Example: 29.134558
- Geographic coordinate (north-south position).

Longitude*

- Example: 79.120578
- Geographic coordinate (east-west position).

Is Electricity*

- Dropdown (YES / NO).
- Specifies whether the gate has an electricity connection.

Divider*

- Dropdown (YES / NO).
- Indicates if the gate has a divider installed.

Lanes*

- Example: 2
- Total number of lanes available at the gate.

Active Lanes*

- Example: 2
- Number of lanes currently operational.

CMOS Change Date

- Example: Invalid date (date-picker field).
- Used to record CMOS configuration or hardware change date.

ANPR Update Date

- Example: Invalid date (date-picker field).
- Used to record the date of ANPR (Automatic Number Plate Recognition) software/hardware updates.

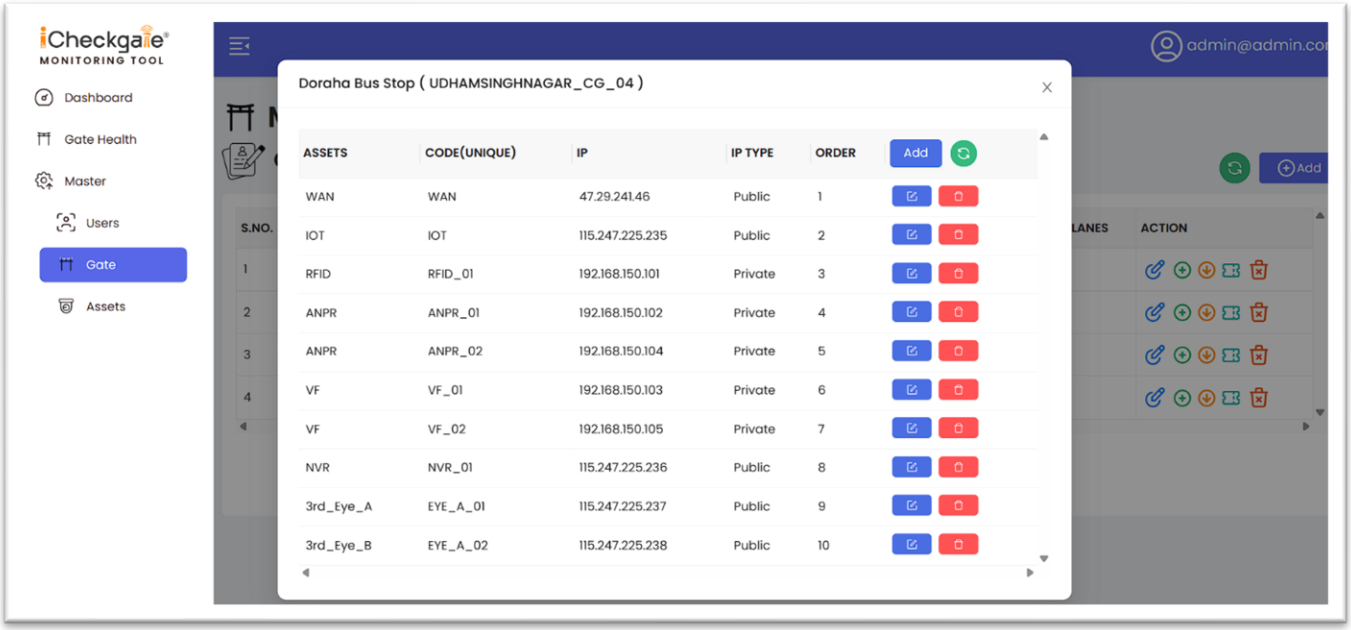
Pairing

- Example: 102.103,104.105
- Additional IPs or related identifiers paired with the gate.

Circuit ID*

- Example: EO0000020AKW
- Unique circuit ID assigned to the gate's electricity or network circuit.

5.2 Add Assets



Click on + Icon

In the Gate Registration list, locate a gate row (e.g., `Doraha Bus Stop (UDHAMSINGHNAGAR_CG_04)`).

Click the **green + icon** in the Action column.

A popup window opens showing the list of assets assigned to that gate.

View Asset Details

The popup table shows:

- **Assets** – Type of component (WAN, IoT, RFID, ANPR, VF, NVR, 3rd Eye).
- **Code (Unique)** – Unique identifier for each asset (e.g., RFID_01, ANPR_01).
- **IP** – IP address of the asset (Public or Private).
- **IP Type** – Specifies whether it is a **Public** or **Private** IP.
- **Order** – Execution/connection order for the assets.
- **Actions** –
- **Edit (blue pencil)** – Update asset details.
- **Delete (red trash)** – Remove the asset from the gate.

Add a New Asset

Click the **blue Add button** at the top-right of the popup.

Fill in the fields (Asset Name, Unique Code, IP Address, IP Type, Order).

Submit → Asset gets added to the table under the respective gate.

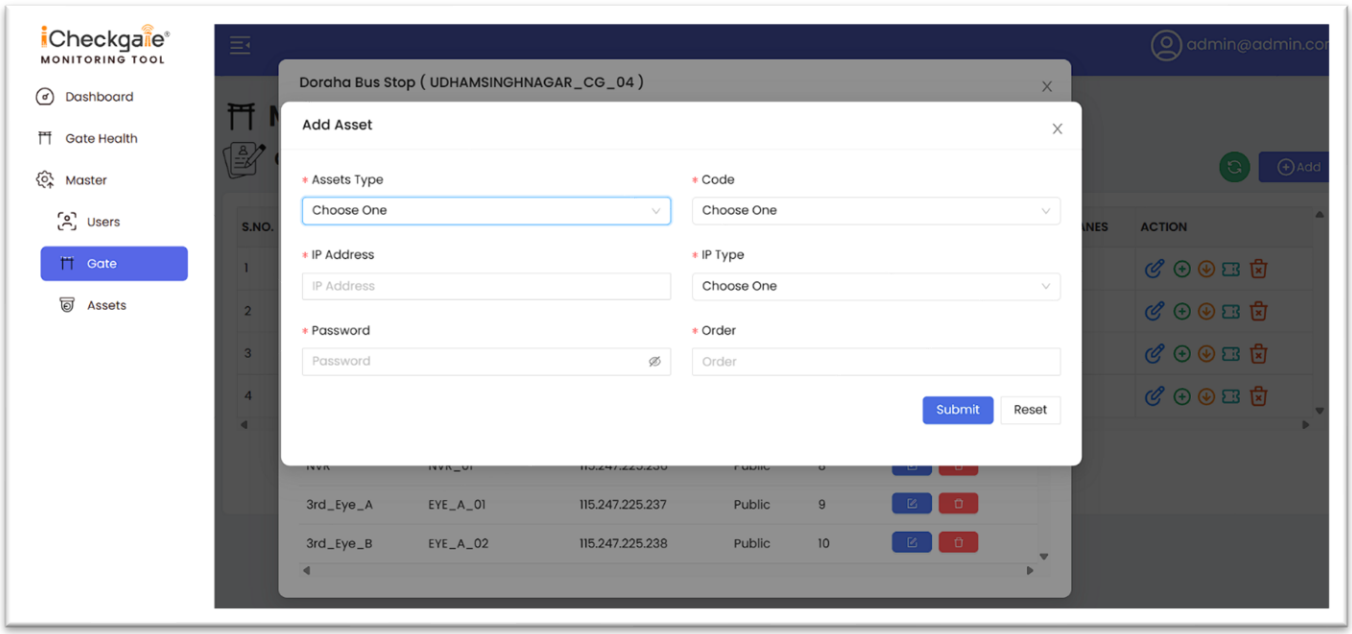
Manage Assets

Edit → Update IP or change order if required.

Delete → Remove faulty/unavailable assets after confirmation.

Refresh (green icon) → Reloads the list to show updated asset information.

5.2.1 Click add



Click Add Button

- Inside the Assets popup, click the **blue Add button** (top-right).
- The **Add Asset form** appears (as shown in your screenshot).

Fill Asset Details

- The admin fills the following fields:

Asset Type*

- Dropdown → Select asset category (WAN, IoT, RFID, ANPR, VF, NVR, 3rd Eye, etc.).

Code*

- Dropdown / Input → Assign a unique code for the asset (e.g., RFID_01, ANPR_02).

IP Address*

- Enter the device IP address.
- Example: 192.168.150.102.

IP Type*

- Dropdown → Choose between **Public** or **Private**.

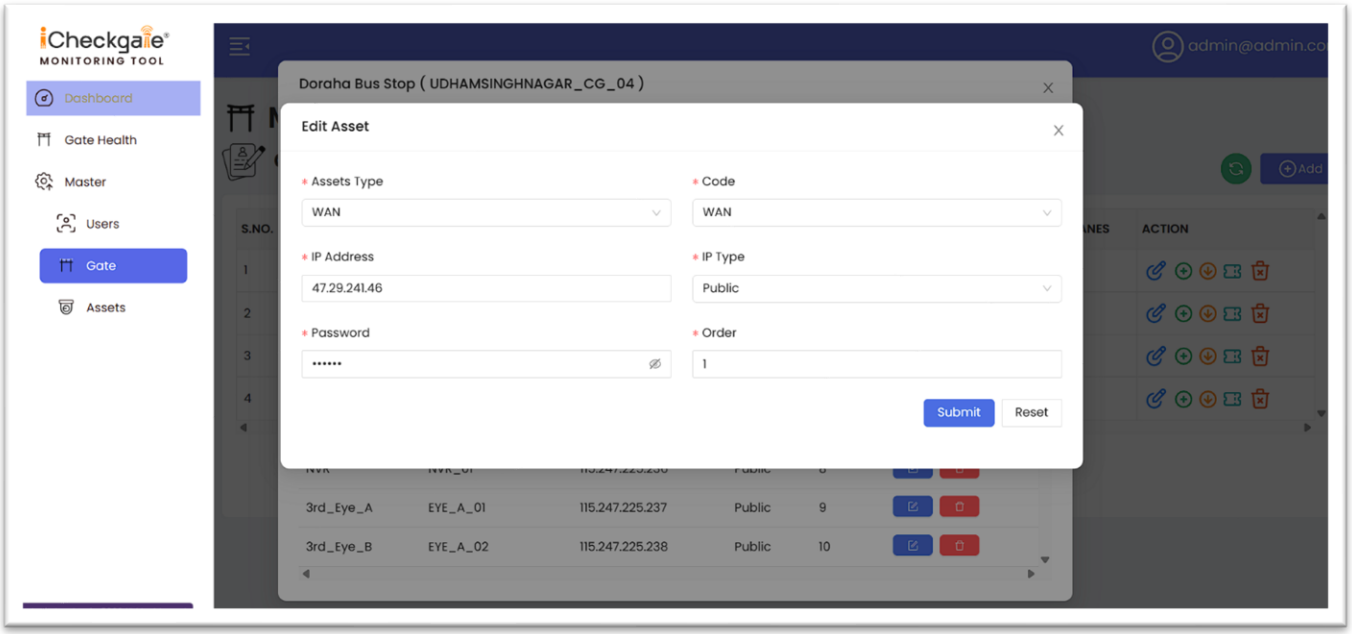
Password*

- Secure field for device login credentials (optional for some assets).

Order*

- Defines execution or priority order (numeric).
- Example: WAN = 1, IoT = 2, RFID = 3, etc.

5.2.2 Click edit



Open Assets List

- Navigate to **Master → Gate**.
- Locate a gate (e.g., **Doraha Bus Stop – UDHAMSINGHNAGAR_CG_04**).
- Click the **green + icon** under the Action column → Assets list opens.

Click Edit Icon

- In the Assets table, under the **Action column**, click the **blue pencil (edit)** icon for the asset you want to modify.
- Example: Editing the **WAN** asset.
- The **Edit Asset form** opens (as shown in your screenshot).

Note:

Click down arrow to download device configuration detail json file.

5.2.3 Click ticket

Update Asset Details

- The admin can modify the following fields:

Asset Type*

- Example: `WAN` (fixed to asset type).

Code*

- Example: `WAN` (unique identifier for asset).

IP Address*

- Example: `47.29.241.46` (update if asset network changes).

IP Type*

- Example: `Public` (can be changed to `Private` if configuration changes).

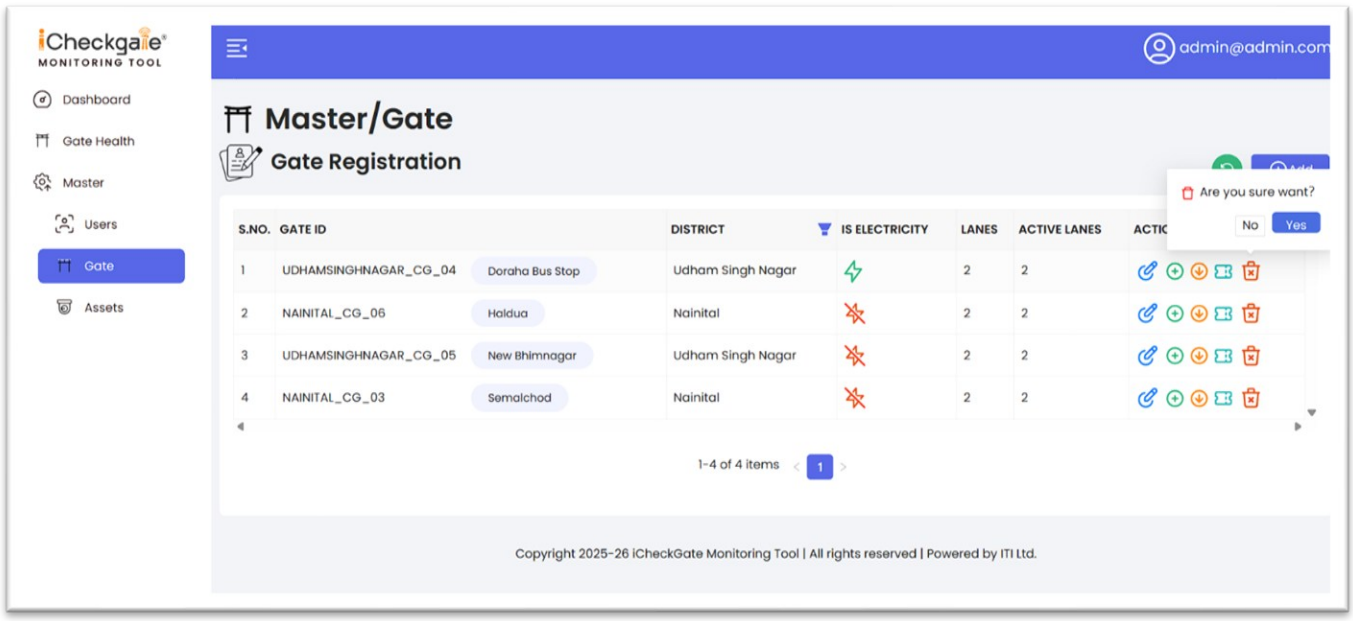
Password*

- Secure credential for the asset (masked for security).

Order*

- Example: `1` (sequence order; may be updated if priority changes).

5.2.4 Click Delete



In the **Action column**, click the **red trash icon** for the gate you want to delete.

Example: Deleting UDHAMSINGHNAGAR_CG_04 – Doraha Bus Stop.

Confirmation Prompt

A confirmation popup appears:

"Are you sure want?"

Two options are displayed:

No → Cancels the action (gate remains unchanged).

Yes → Confirms deletion.

If Yes (Confirm Deletion)

The selected gate record is **removed from the Gate Registration table**.

Any associated assets are unlinked from the gate.

System displays a success notification (e.g., **"Gate deleted successfully"**).

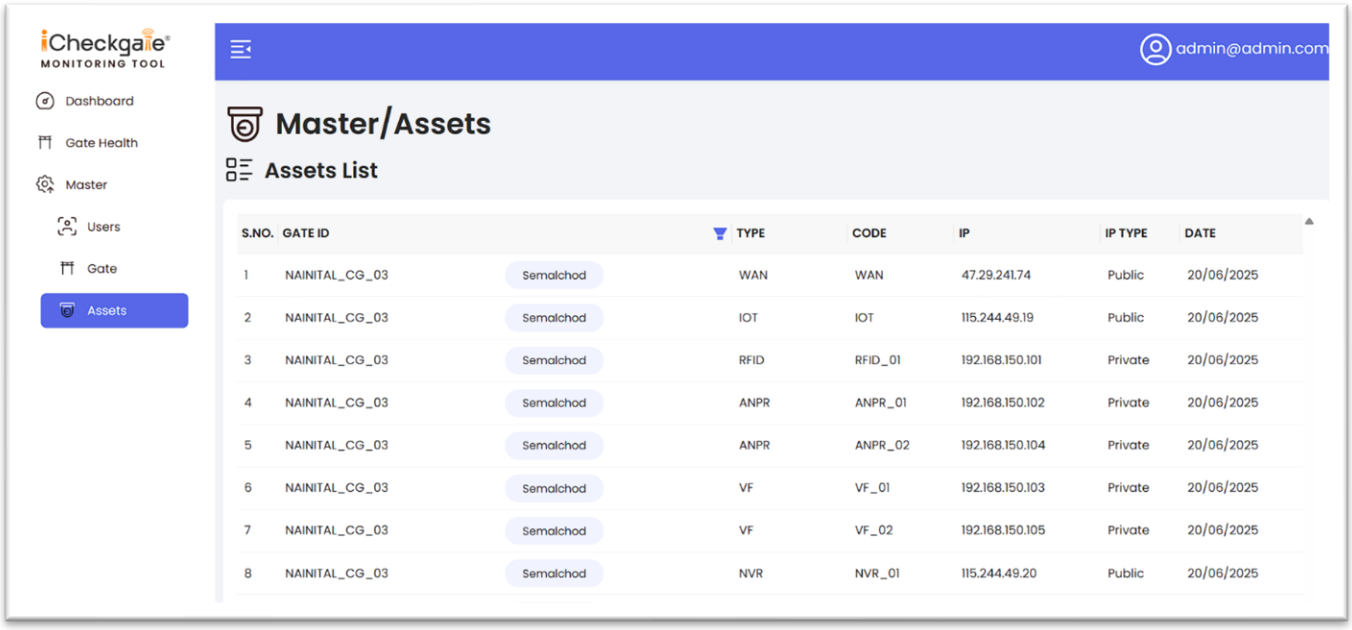
Table refreshes automatically without a full reloa

If No (Cancel)

The confirmation popup closes.

No changes are made to the Gate Registration list.

6.0 Assest



Purpose of the Screen

To display **all assets linked with gates**, including their unique code, IP address, type, and registration date.

To allow administrators to **verify connectivity, IP type (Public/Private), and proper asset assignment** under each gate.

To support system audits, troubleshooting, and compliance by keeping a **record of devices** installed at each gate.

1. Navigate to Assets

- From the sidebar, click **Master → Assets**.
- The **Assets List page** loads.

2. View Assets Table

Each row in the table represents a registered asset:

- **S.No.**, Serial number of record.
- **Gate ID** , Unique identifier of the gate (e.g., NAINITAL_CG_03).
- **Gate Name** , Friendly name (e.g., Semalchod).
- **Type** , Asset type (e.g., WAN, IoT, RFID, ANPR, VF, NVR).
- **Code** , Unique asset code (e.g., RFID_01, ANPR_02).
- **IP** , IP address of the asset (e.g., 192.168.150.102).
- **IP Type** , Shows whether IP is **Public** or **Private**.
- **Date** , Asset registration or update date (e.g., 20/06/2025).

3. Scroll for More Records

If multiple assets exist, scroll down to view the complete list.

Example shown: WAN, IoT, RFID, ANPR cameras, VF devices, and NVR all tied to **NAINITAL_CG_03**.

4. Actions (Behind the Scenes)

- While not visible in this view, in related screens:
- **Add** – New assets can be added under a gate.
- **Edit** – Modify existing asset details.
- **Delete** – Remove assets if decommissioned.
- **Refresh** – Reload updated asset information.