

E-Track Application

Makson Healthcare Pvt. Ltd.

The document details the summary of solution architecture and approach for the development of E-Track for Makson Healthcare. The document is based on the inputs, system study, discussions and meeting held between BCI & Makson Healthcare Teams.

Software Requirement Specification (SRS)

BAR CODE INDIA, 145 Udyog Vihar Phase 1, Gurugram, Haryana-122016, PH: 0124 4337555

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| 1.0.0 | 09-08-2023 | Prateeksha, Leena | Chandrakant Shindkar | Software Requirement Specification document for Makson Healthcare for DGFT eTrack Application. |

REVISION HISTORY

**Abbreviations:**

**Client:** Makson Healthcare Pvt. Ltd., henceforth will be referred as Makson Healthcare.

**Vendor:** Bar Code India, henceforth, will be referred as BCI.

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# Specification Organization

The objective of this document is to supply underlying concepts, procedures, and formats used in the design, development and installation of this software application. This specification consists of three sections organized as follows:

**Section 1: Introduction**

This section provides hardware requirements and documentation conventions.

**Section 2: User Interface**

This section depicts screen design and logic flow, and is categorized into two groups:

* Application Function Module
* Common Routine

**Section 3: System Architecture**

This section provides information of system architecture.

# Introduction

## Intended Audience and Reading Suggestions

The scope of this document is to provide the understanding of this solution to user & development teams associated with the application development & implementation.

This document major emphasizes on providing clear understanding of e-Track Application.

This solution comprises of:

* Device Application
* Desktop Application
* ERP Integration (API Interface)

## Project Scope

The e-Track application implements the persistent data requirement for management of packaging Serialization System in compliance with 21 CFR Part 11 requirements and Serialization guidelines of DGFT India.

This would require development of **Wi-Fi enabled application for real time transaction** i.e.the data will be captured in real-time, once the data has been collected, the database can then provide useful reports about status of material in warehouse.

# User Interface Specification Conventions

This section specifies the user interface portion of the application.

**Section Organization**

The User Interface Specification presents screen displays or “**Dialogs**”.

**Documentation Conventions**

This section incorporates illustrations of the application user interface. Each screen display “Dialog” consists of the screen display image, a process name, a paragraph documenting the processing required for the dialog, a paragraph listing the navigation options, and a table listing for each variable field on the dialog, its database source or destination, format, and any instructions required to process the field.

The following section contains a sample dialog with each area identified.

# System Log

System shall maintain internal logs for application.

## Error Logs

These logs will contain any errors encountered during runtime for faster resolution of any problem post deployment.

# Application Modules- Web, Desktop & Device

## Application Login

This login module will provide access to the application modules. Here the admin/user needs to enter the login detail to enter in the application and to perform the desired actions.



**Process:** User needs to enter the User Name/ID and Password in display fields and press the Login button. Application will validate the user credential.

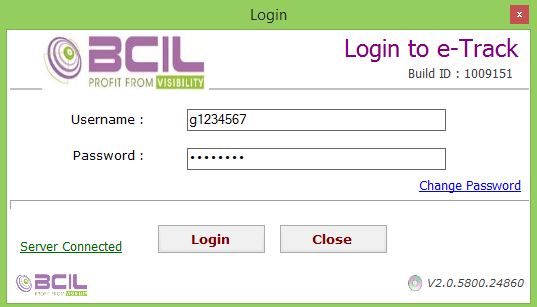
*User will be able to view only those screens/ modules of which he has been given access rights to.*

**Validation**

* User Name/ ID will be unique for all users.
* User Name/ ID and Password length will be set.

After successful login application menu screen will appear. Menu screen will have the Master, Label Printing, WIP, DB Settings and Reports options etc.

**Login Sample Screen:**



## D:\My files\BCI\Makson\Makson srs\docs by prateeksha\menu.jpgMenu

## User Management & Master Data

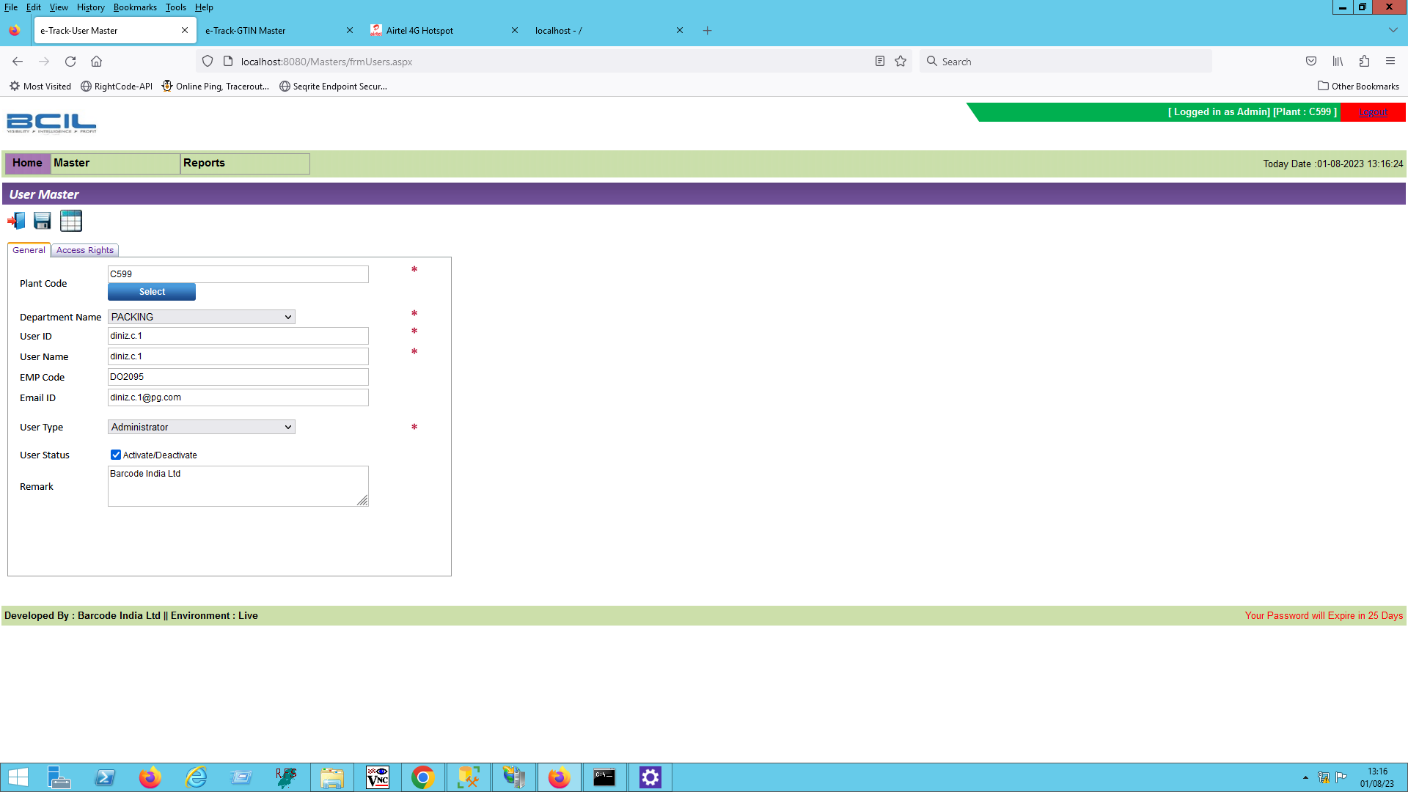
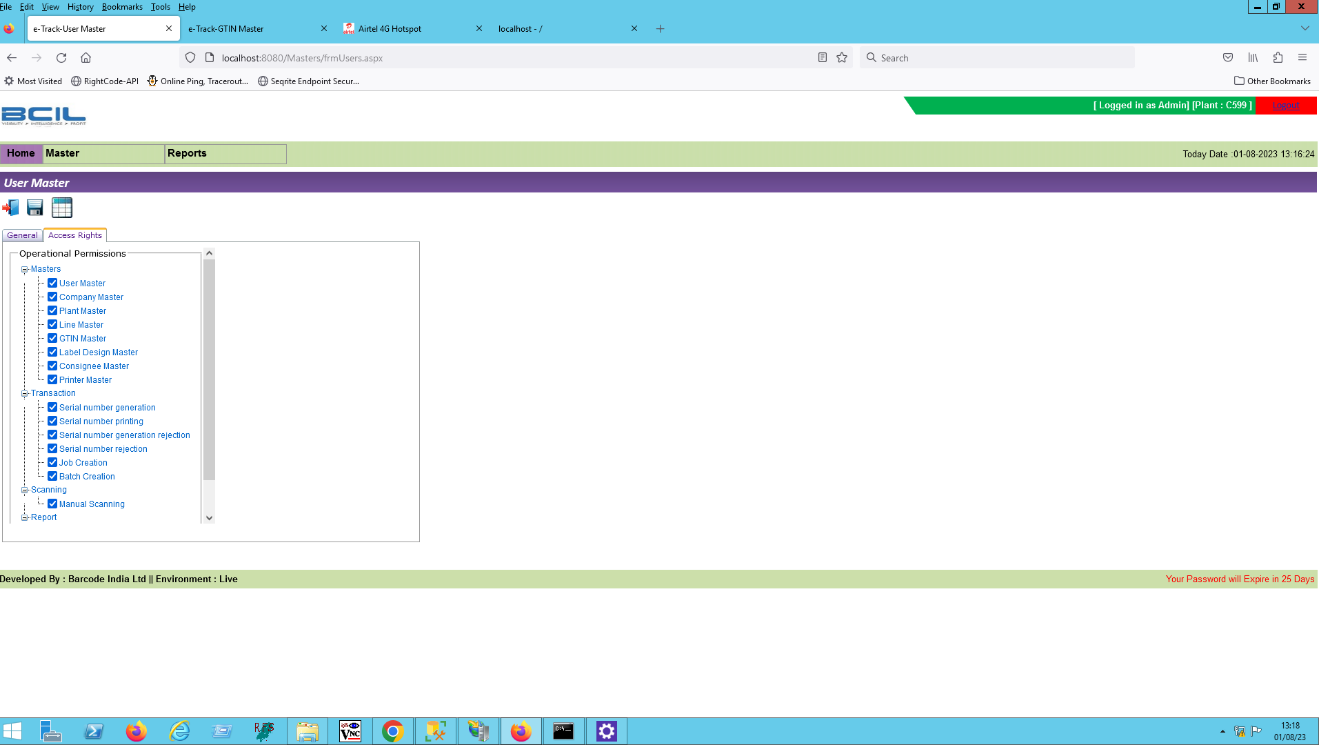
The module will let application administrator to manage the Users, and the rights assigned to the same; the rights will define authorized application access of users.

### User Master

The module will be used to add, save, delete a particular user details. Admin user will enter details of application’s user. The users will be provided with unique id and password through which they will be able to login to the system. Using this module, admin will provide the access rights of the required application modules to user.

|  |  |
| --- | --- |
| **Data Fields** | 1. Plant Code 2. Department Name 3. User Id 4. User Name 5. Employee Code 6. Email Id 7. User Status 8. Remark |
| **Process Steps** | 1. Select Plant Code from dropdown. 2. Select Department Name from dropdown. 3. Enter User Id, Username, Employee Code, Email Id and Remark.   *\*User Name and Password should be equal to or greater than eight characters.*   1. Select User Type from dropdown. 2. Select Modules for which Access rights needs to be assigned to user. 3. Save and Update the details in database. 4. User can export the details in Excel format, if required. |
| **Functions** | Add, Edit/Update, Delete and Export to Excel as per requirement |

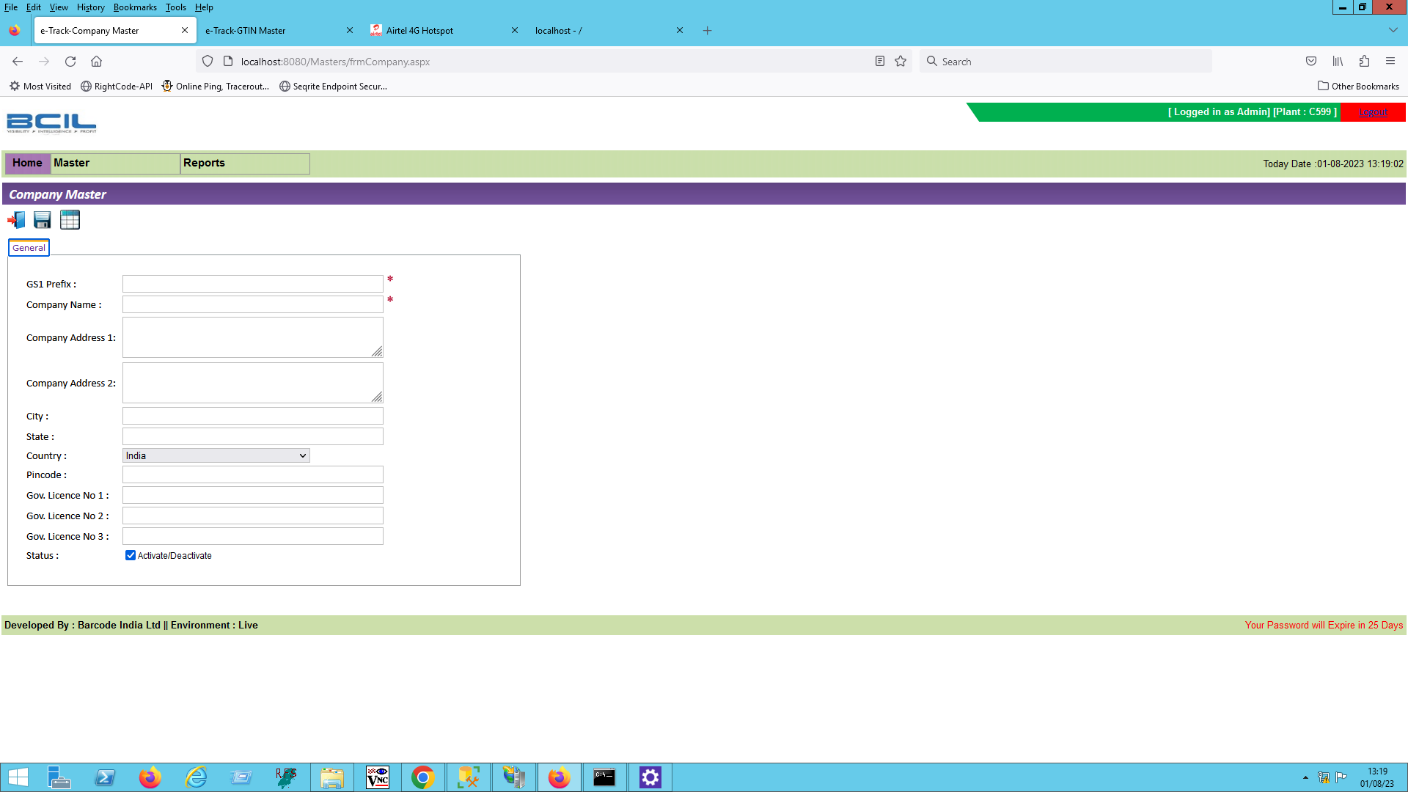
**Sample Screen:**



### Company Master

The master module will be used to save the Company details against in database.

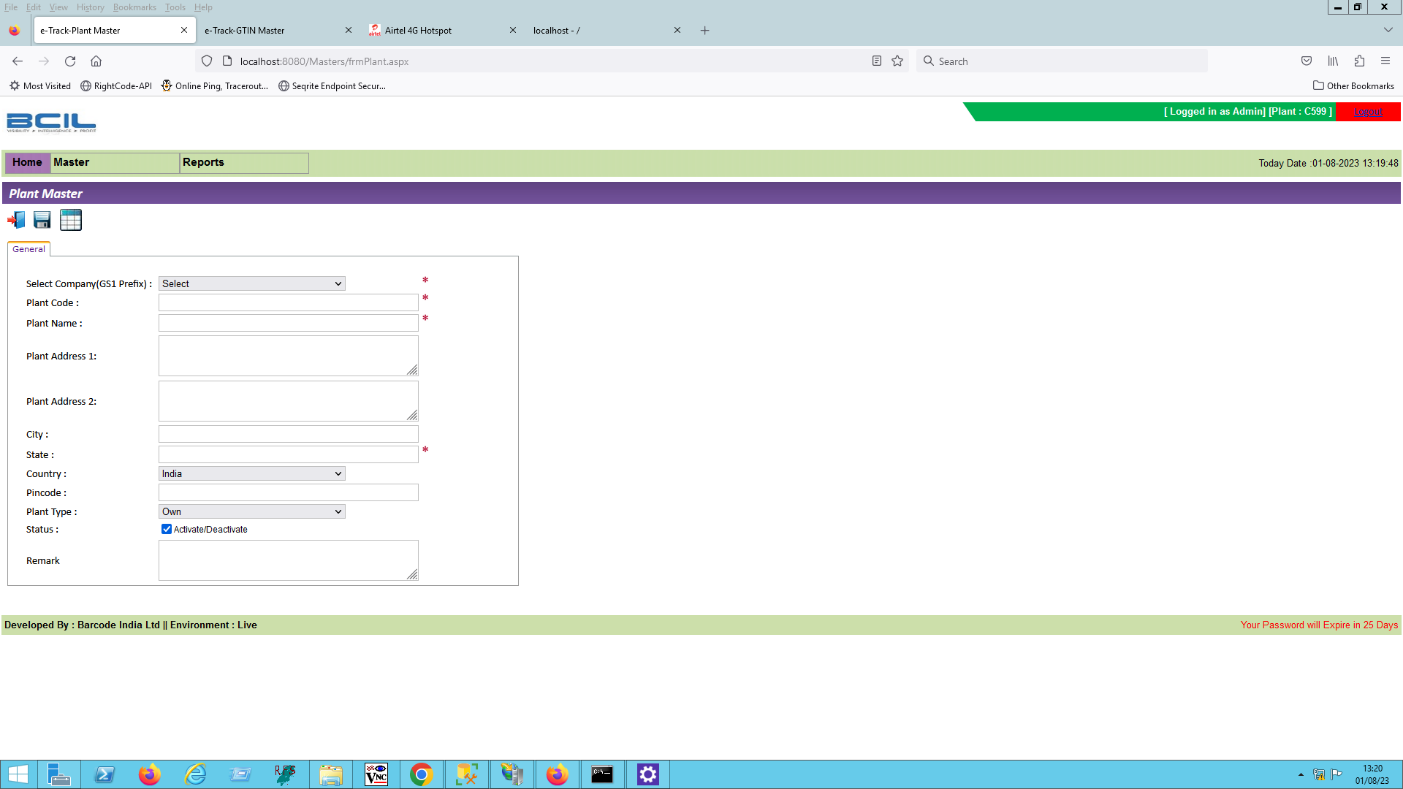
|  |  |
| --- | --- |
| **Data Fields** | 1. GS1 Prefix 2. Company Name 3. Company Address 1 4. Company Address 2 5. City 6. State 7. Country 8. Pincode 9. Govt. License No. 1 10. Govt. License No. 2 11. Govt. License No. 3 12. Status i.e. Active/ Inactive |
| **Process Steps** | 1. Enter GS1 Prefix, Company Name, City, State and other details. 2. Select Active/ Inactive Status. 3. Save details. 4. Newly added Company details will appear on screen in data grid. 5. User can export the details in Excel format, if required. |
| **Functions** | Add, Edit/Update, Delete and Export to Excel as per requirement |

**Sample Screen:**

### Plant Master

The master module will be used to save the Plant details against in database.

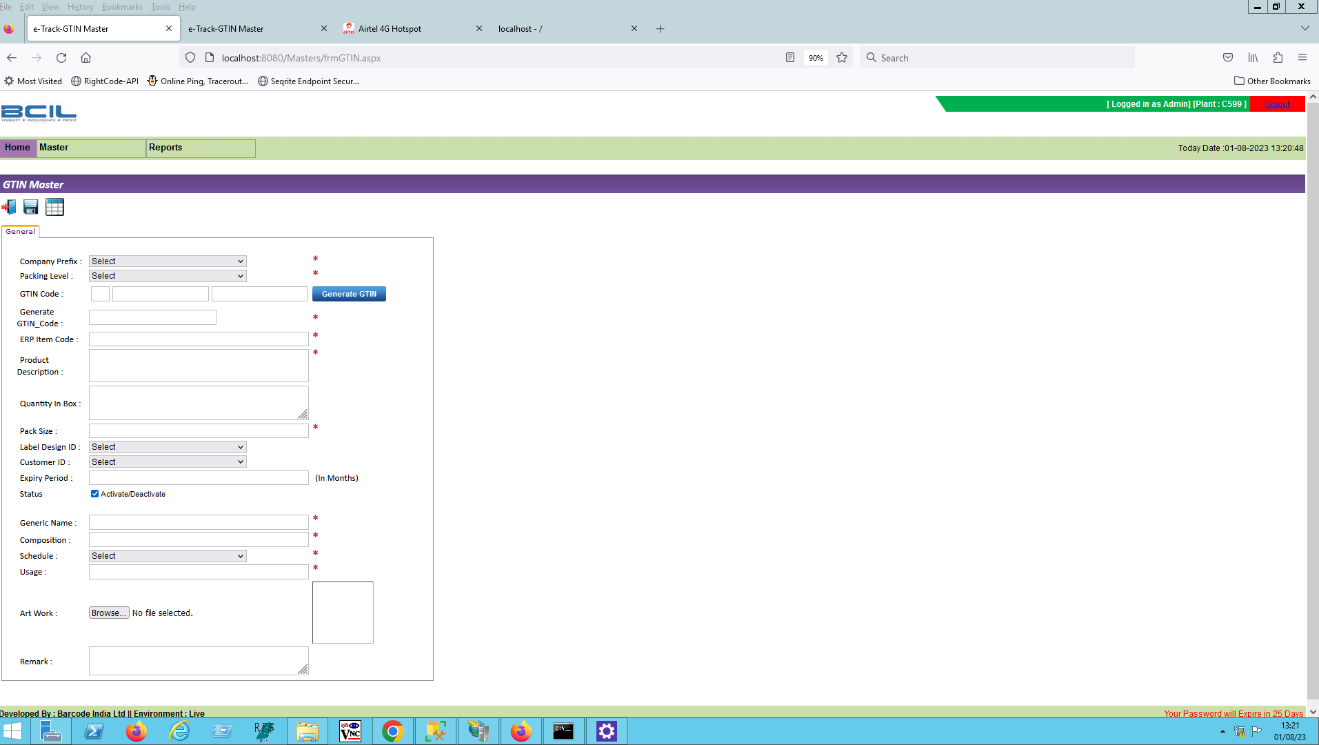
|  |  |
| --- | --- |
| **Data Fields** | 1. Company (GS1 Prefix) 2. Plant Code 3. Plant Name 4. Plant Address 1 5. Plant Address 2 6. City 7. State 8. Country 9. Pincode 10. Plant Type 11. Remarks 12. Status i.e. Active/ Inactive |
| **Process Steps** | 1. Select Company (GS1 Prefix) from dropdown. 2. Enter Plant Code, Plant Name, Plant Address 1, Plant Address 2, City, State and other details. 3. Save the details. 4. Newly added Plant details will appear on screen in data grid. 5. User can export the details in Excel format, if required. |
| **Functions** | Add, Edit/Update, Delete and Export to Excel as per requirement |

**Sample Screen:**

### GTIN Master

This master will be used to view the GTIN details in database. Using this module, user will be able to add, update and delete as per requirement.

|  |  |
| --- | --- |
| **Data Fields** | 1. Company Prefix 2. Packing Level 3. GTIN Code 4. Generate GTIN Code 5. ERP Item Code 6. Product Description 7. Quantity in Box 8. Pack Size 9. Label Design ID 10. Customer ID 11. Expiry Period 12. Status 13. Generic Name 14. Composition 15. Schedule 16. Usage 17. Art Work 18. Remark |
| **Process Steps** | 1. Click on Add button. 2. Select Company Prefix, Packing Level, Label Design ID, Customer ID. 3. Enter GTIN Code, Generate GTIN Code, ERP Item Code, Product Description, Quantity in Box, Pack Size, and other details. 4. Click on Status button to activate it. 5. Select Art Work file by clicking on Browse button.   *\*Fields marked with \* are mandatory.*   1. Click on Save. 2. Newly added GTIN details will appear on screen in data grid. 3. User can export the details in Excel format, if required. |
| **Functions** | Add, Update, Delete and Export to Excel as per requirement |

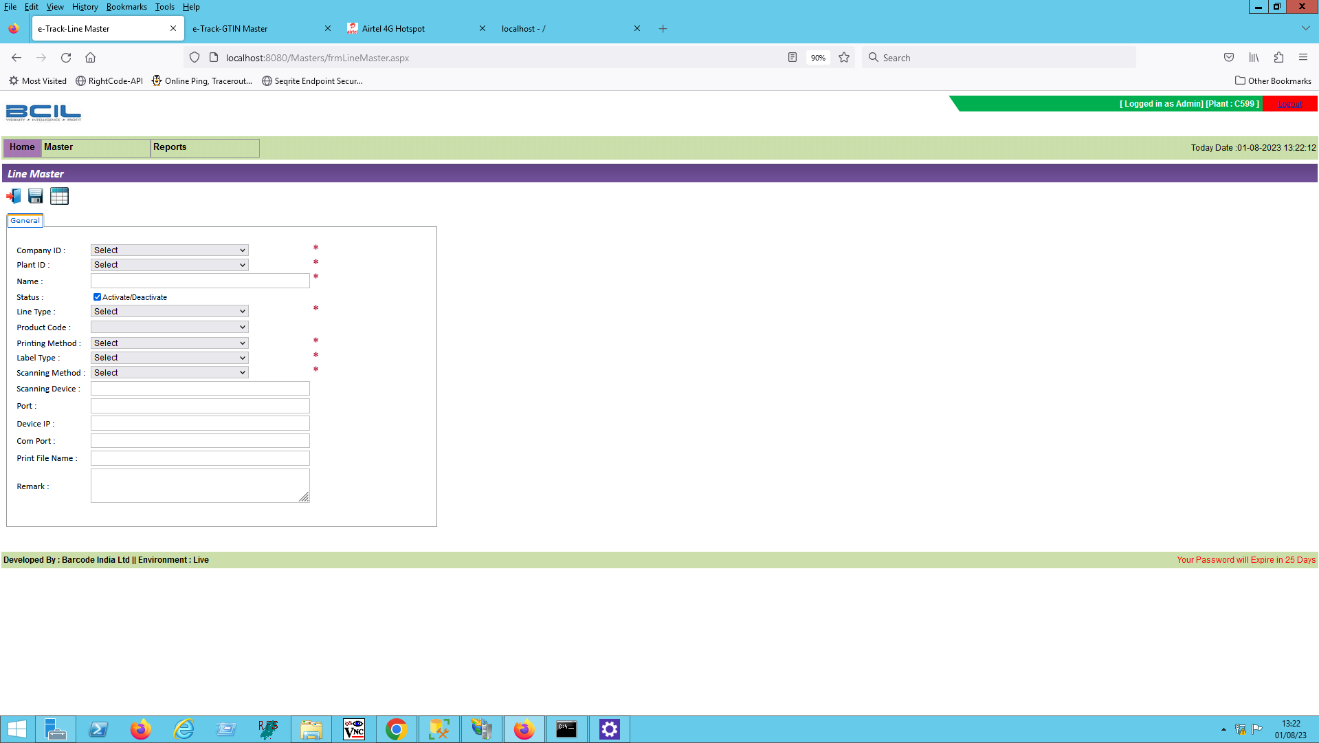
**Sample Screen:**

### Line Master

This module will allow user to Line details.

|  |  |
| --- | --- |
| **Data Fields** | 1. Company ID 2. Plant ID 3. Name 4. Status 5. Line Type 6. Product Code 7. Printing Method 8. Label Type 9. Scanning Method 10. Scanning Device 11. Port 12. Device IP 13. Com Port 14. Print File Name 15. Remark |
| **Process Steps** | 1. Click on Add button. 2. Select Company ID, Plant ID, Line Type, Printing Method, Label Type, Scanning Method from dropdown. 3. Enter Name, Product Code, Scanning Device, Port, Device IP, and other details. 4. Click on Status button to activate it. 5. Click on Save. 6. Newly added Line details will appear on screen in data grid. 7. User can export the details in Excel format, if required. |
| **Functions** | Add, Edit/Update, Delete and Export as per requirement |

**Sample Screen:**

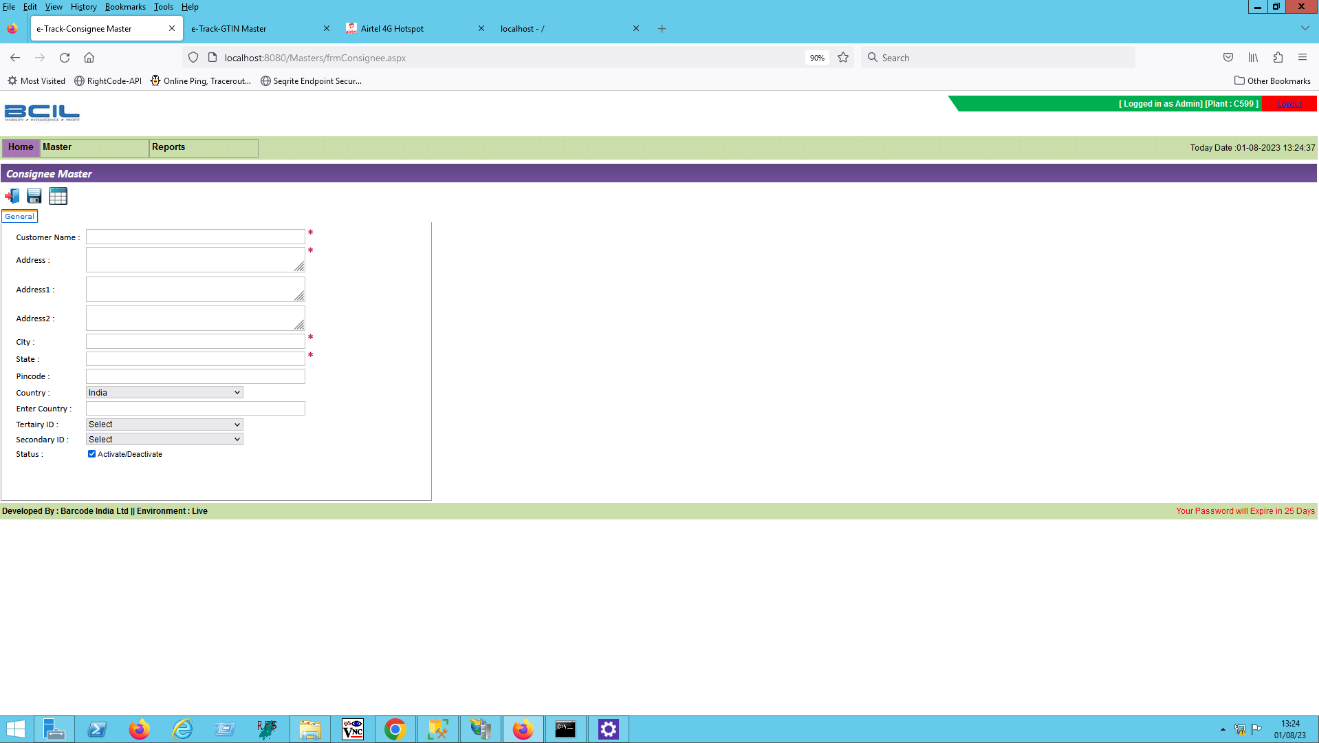


### Consignee Master

This master will be used to view the Consignee details in database. Using this module, user will be able to add, update and delete as per requirement.

|  |  |
| --- | --- |
| **Data Fields** | 1. Customer Name 2. Address 3. Address1 4. Address2 5. City 6. State 7. Pincode 8. Country 9. Tertiary ID 10. Secondary ID 11. Status |
| **Process Steps** | 1. Click on Add button. 2. Enter Customer Name, Address, Address1, Address2, Country. and other details. 3. Select Tertiary ID, Secondary ID from dropdown. 4. Click on Status button to activate it.   *\*Fields marked with \* are mandatory.*   1. Click on Save. 2. Newly added Consignee details will appear on screen in data grid. 3. User can export the details in Excel format, if required. |
| **Functions** | Add, Update, Delete and Export to Excel as per requirement |

**Sample Screen:**

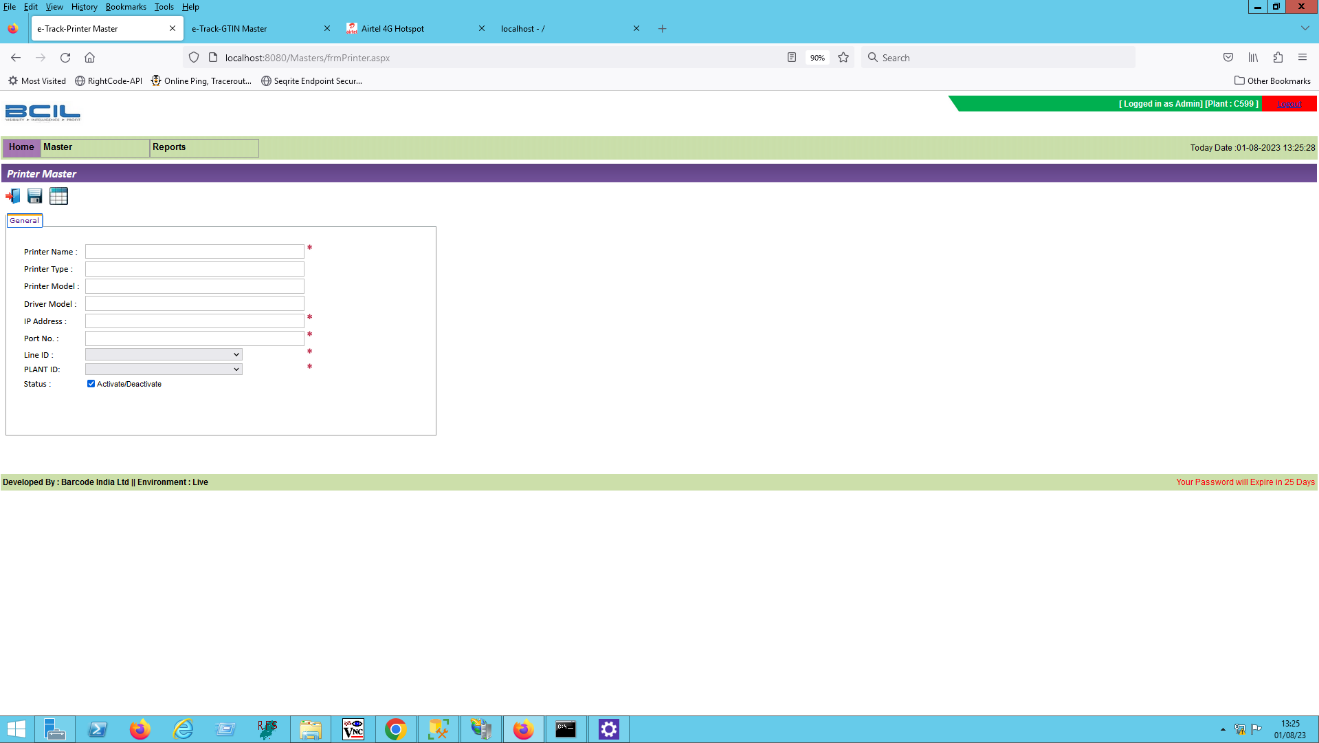


### Printer Master

This master will be used to view the Printer details in database. Using this module, user will be able to add, update and delete as per requirement.

|  |  |
| --- | --- |
| **Data Fields** | 1. Printer Name 2. Printer Type 3. Printer Model 4. Driver Model 5. IP Address 6. Port No 7. Line ID 8. Plant ID 9. Status |
| **Process Steps** | 1. Click on Add button 2. Enter Printer Name, Printer Type, Printer Model, Driver Model. and other details. 3. Select Line ID, Plant ID from dropdown. 4. Click on Status button to Activate it.   *\*Fields marked with \* are mandatory.*   1. Click on Save. 2. Newly added Printer details will appear on screen in data grid. 3. User can export the details in Excel format, if required. |
| **Functions** | Add, Update, Delete and Export to Excel as per requirement |

**Sample Screen:**

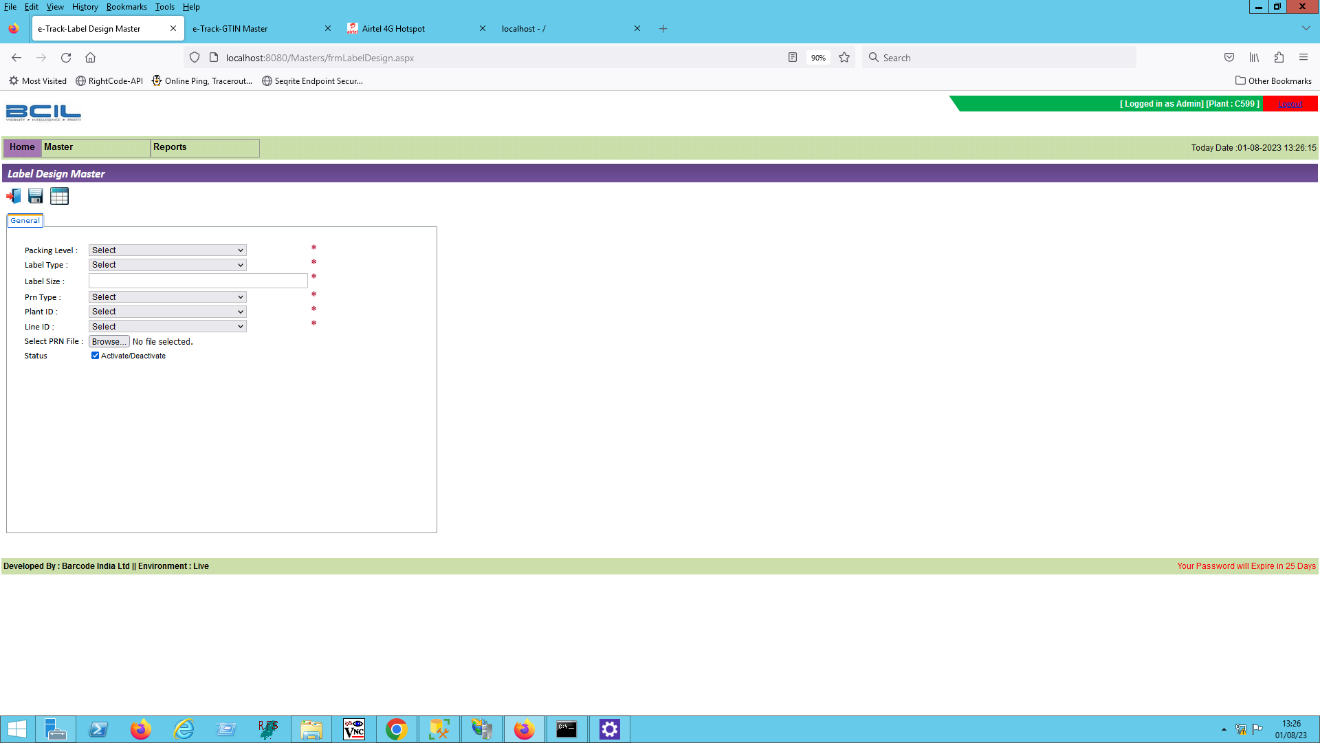


### Label Design Master

This master will save the EAN Code details in database.

|  |  |
| --- | --- |
| **Data Fields** | 1. Packing Level 2. Label Type 3. Label Size 4. PRN Type 5. Plant ID 6. Line ID 7. Select PRN File 8. Status |
| **Process Steps** | 1. Click on Add button. 2. Select Packing Level, Label Type, Label Size, PRN Type, Plant ID, Line ID from dropdown. 3. Enter Label Size. 4. Click on Browse button to select PRN file 5. Click on Status button to Activate it.   *\*Fields marked with \* are mandatory.*   1. Click on Save. 2. Newly added Label design details will appear on screen in data grid. 3. User can export the details in Excel format, if required. |
| **Functions** | Add, Edit/Update, Delete as per requirement |

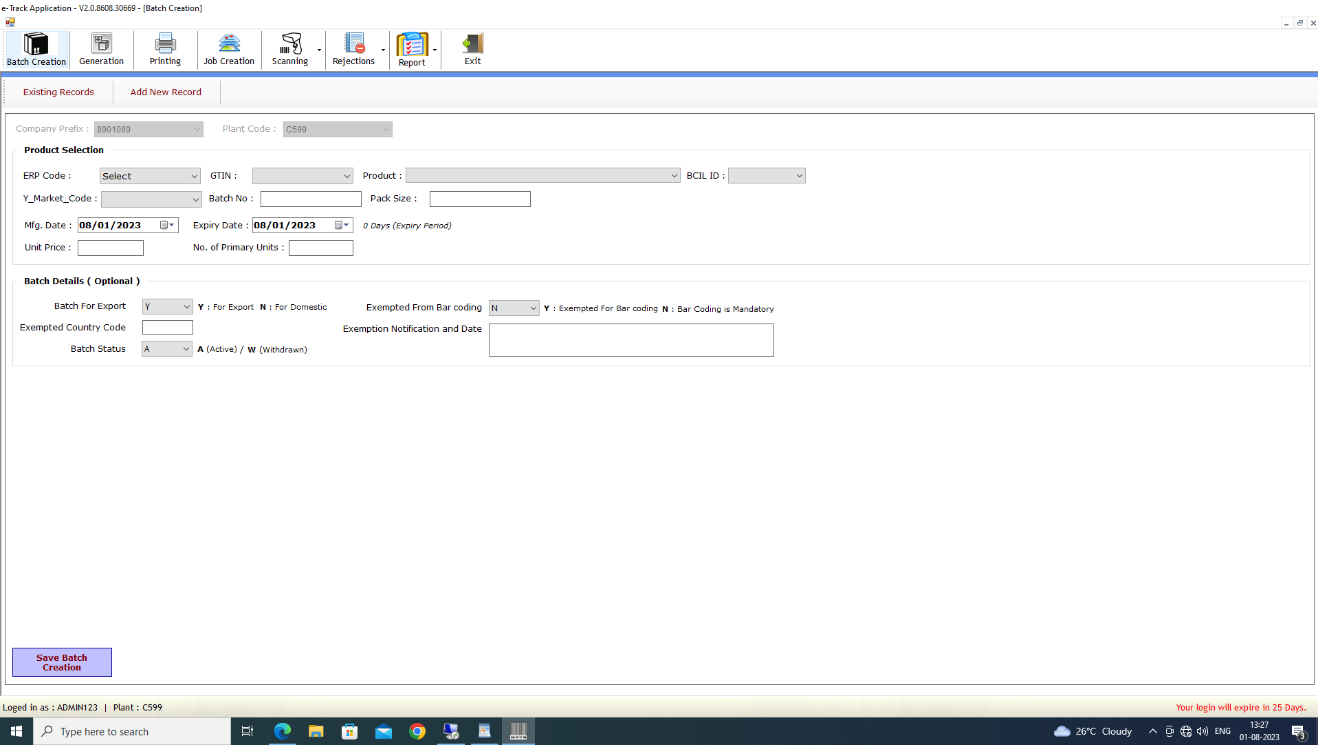
**Sample Screen:**



# Transactions

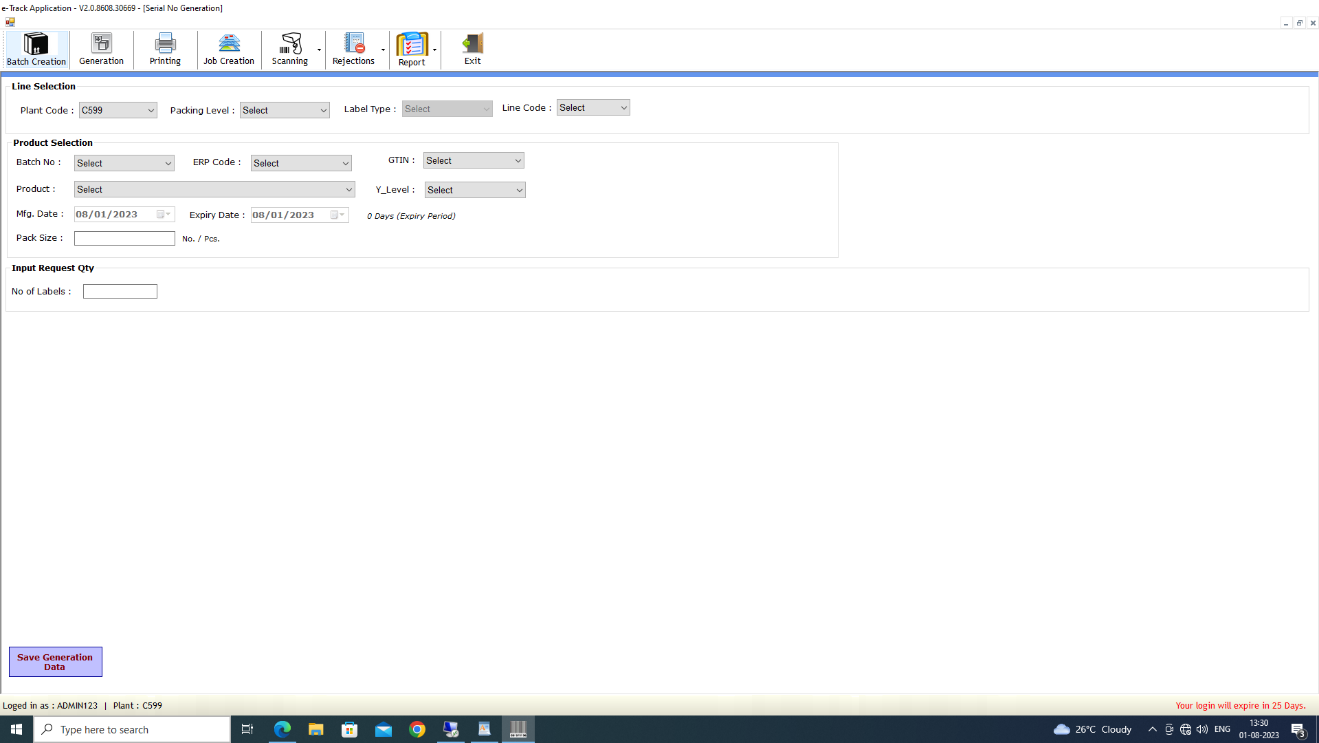
This application will Installed on Desktop Computer

## Batch Creation

1. The Batch Creation module is used to create/close batch.
2. To access this module, the User must select on Generation > Batch Creation menu. The Batch Creation screen will be displayed.
3. To Create a New Batch, the User should click on Add New Record.
4. The Plant Code and Company Prefix will be auto-displayed.
5. The User should then select the ERP Code. The corresponding the GTIN, Product, BCIL ID and Pack Size will be displayed.
6. The User will then update the Batch No, Unit price, Number of Primary Units and other batch related details.
7. To save the batch, Click on Save Batch Creation button to save batch.
8. To close an existing batch, the User should select batch from list which they wish to close and click on Close selected Batch(s) button.

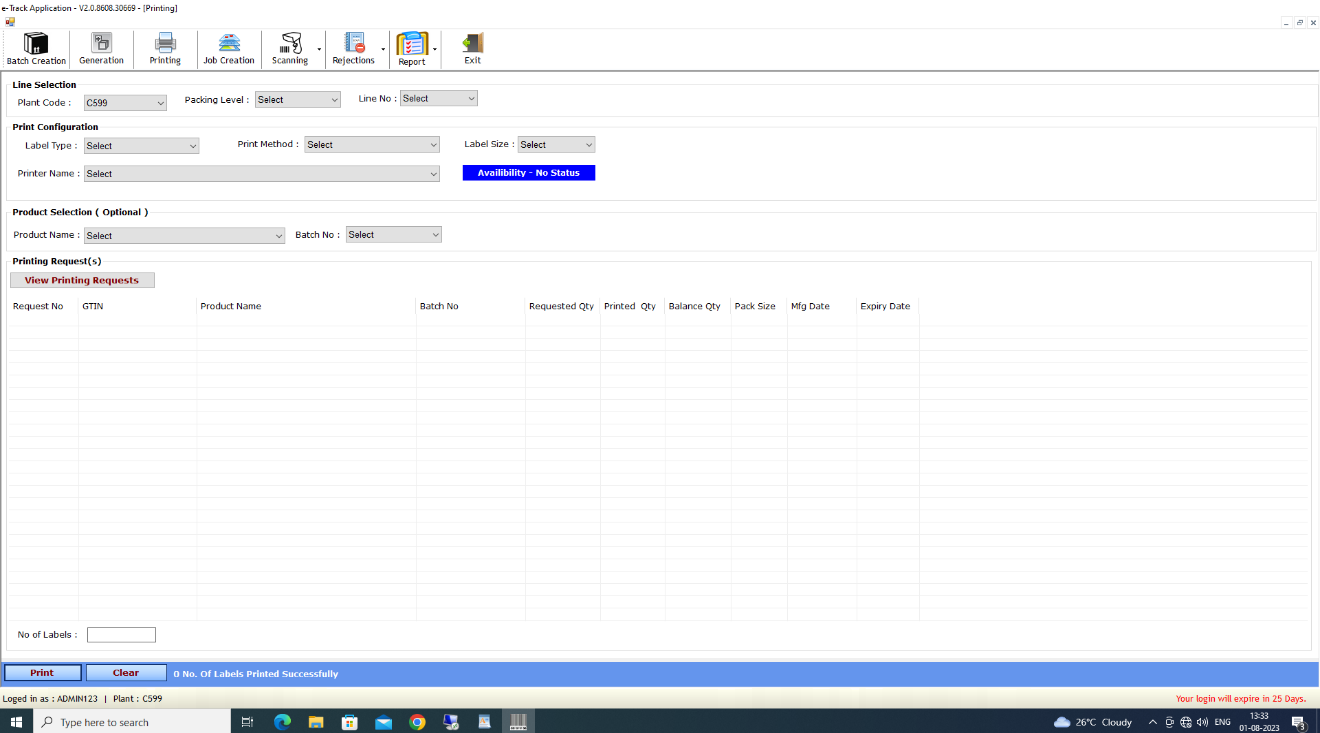
### Serial Number Generation

1. Serial No Generation module is used to generate request for a serial no printing.
2. To access this module, the User should select Generation > Serial No Generation menu. The Serial No Generation screen will be displayed.



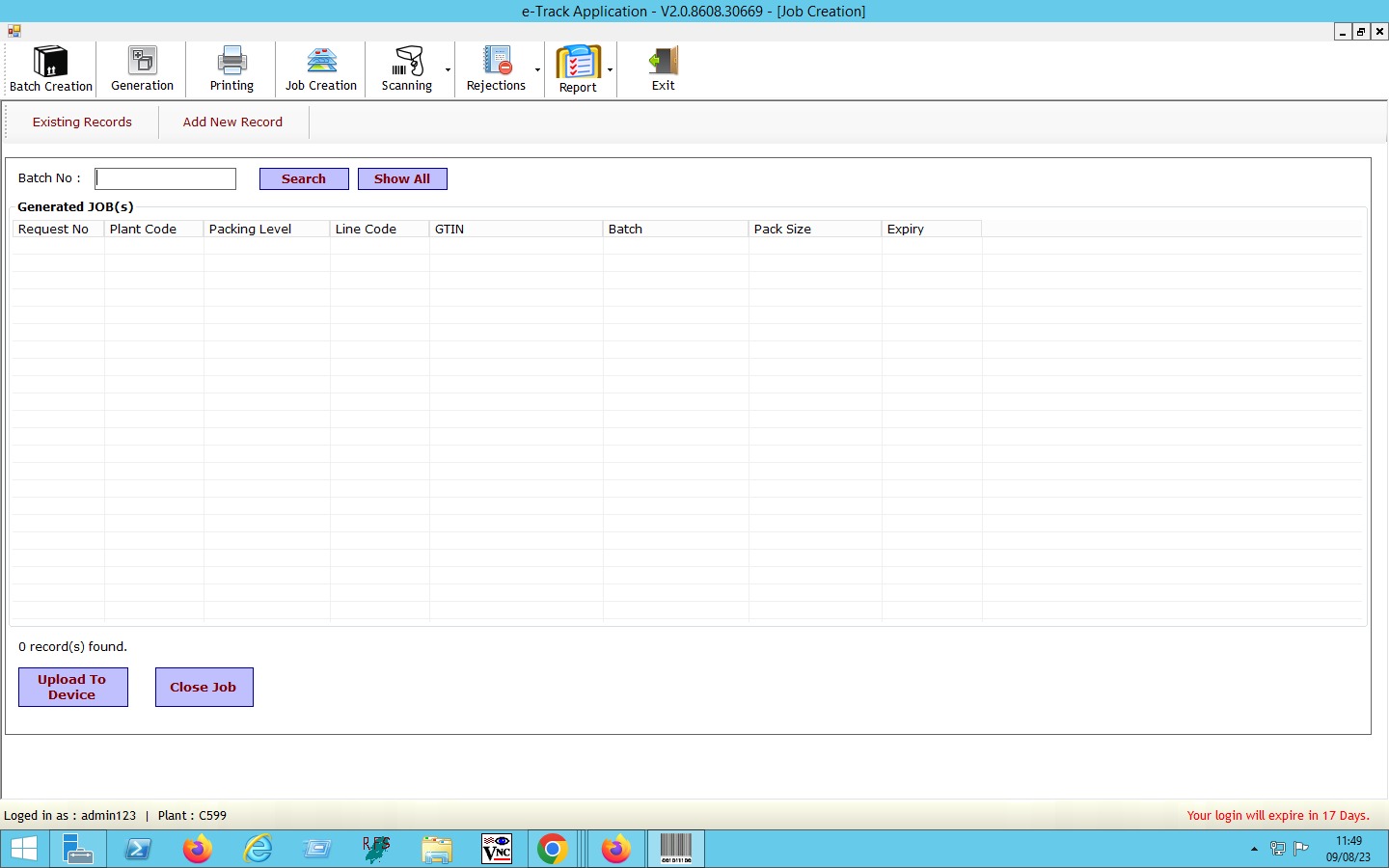
1. To generate request for printing, the User should select Plant Code, Packing Level, Label Type and Line Code in Line Selection.
2. The User should select product, GTIN and product related batch, ERP Code, Y\_Level from the list.
3. The User should enter the number of labels in Input Request qty and Pack Size.
4. To save the transaction, click on Save Generation Data Button.

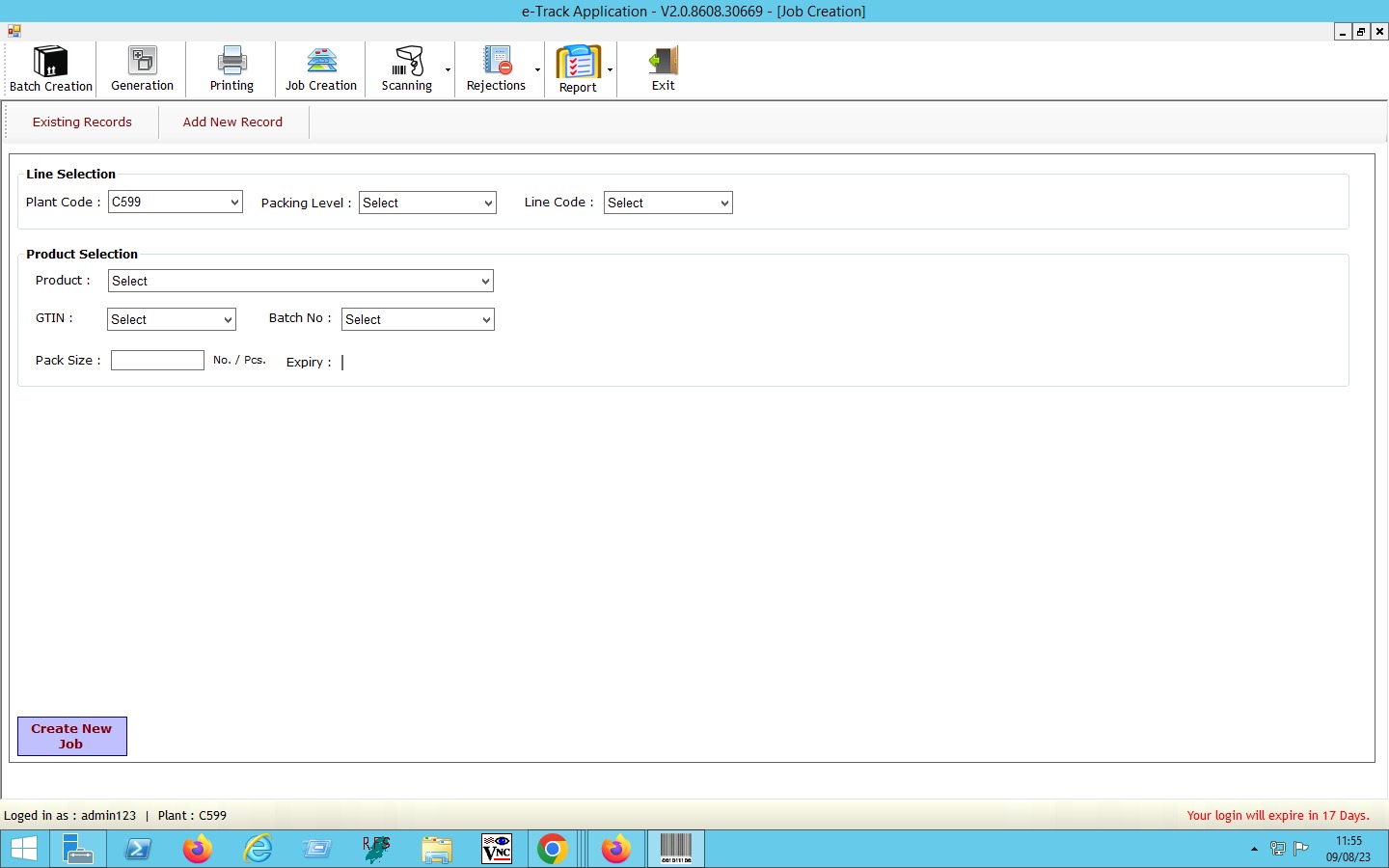
### Label Printing

1. Serial Number printing module is used to print labels.
2. To access this module, The User should click on Printing menu. The Serial Number Printing screen is displayed.
3. To Print Barcode Labels, the User should select Plant Code, Packing Level, and Line No in Line Selection.
4. After selecting Line, Label Type, Print Method and Label Size will get auto displayed for that line.
5. The User should then click on View Printing Requests Button. The generated request will be displayed for selected line.
6. The User should select any one record from list and enter No of labels qty (which they wish to print).
7. To print, click on print Button.

### Job Creation

1. Mapping Job Creation module is used to Create Job against specific GTIN and batch for a packing process.
2. To access this module, User should click on Job Creation menu. The Job Creation screen will be displayed.





1. To create a new Job, click on Add New Record button.
2. Select Plant Code, Packing Level, Line Code in Line Selection.
3. The User should then select Product, GTIN and Batch No in Product Selection.
4. Enter Pack Size.
5. After selecting Values, the User should click on Create New Job Button and Job will be displayed.

**To Upload to Device (For Offline Scanning)**

1. To perform the uploading process, the User should confirm if the device is connected.
2. The User should then select the Job from list which they wish to upload and click on Upload Button

**To Close Existing Jobs**

1. The User should select Job from list which they wish close and then click on **Close Job** Button

### Scanning

#### Parent Child Scanning (Homogenous)

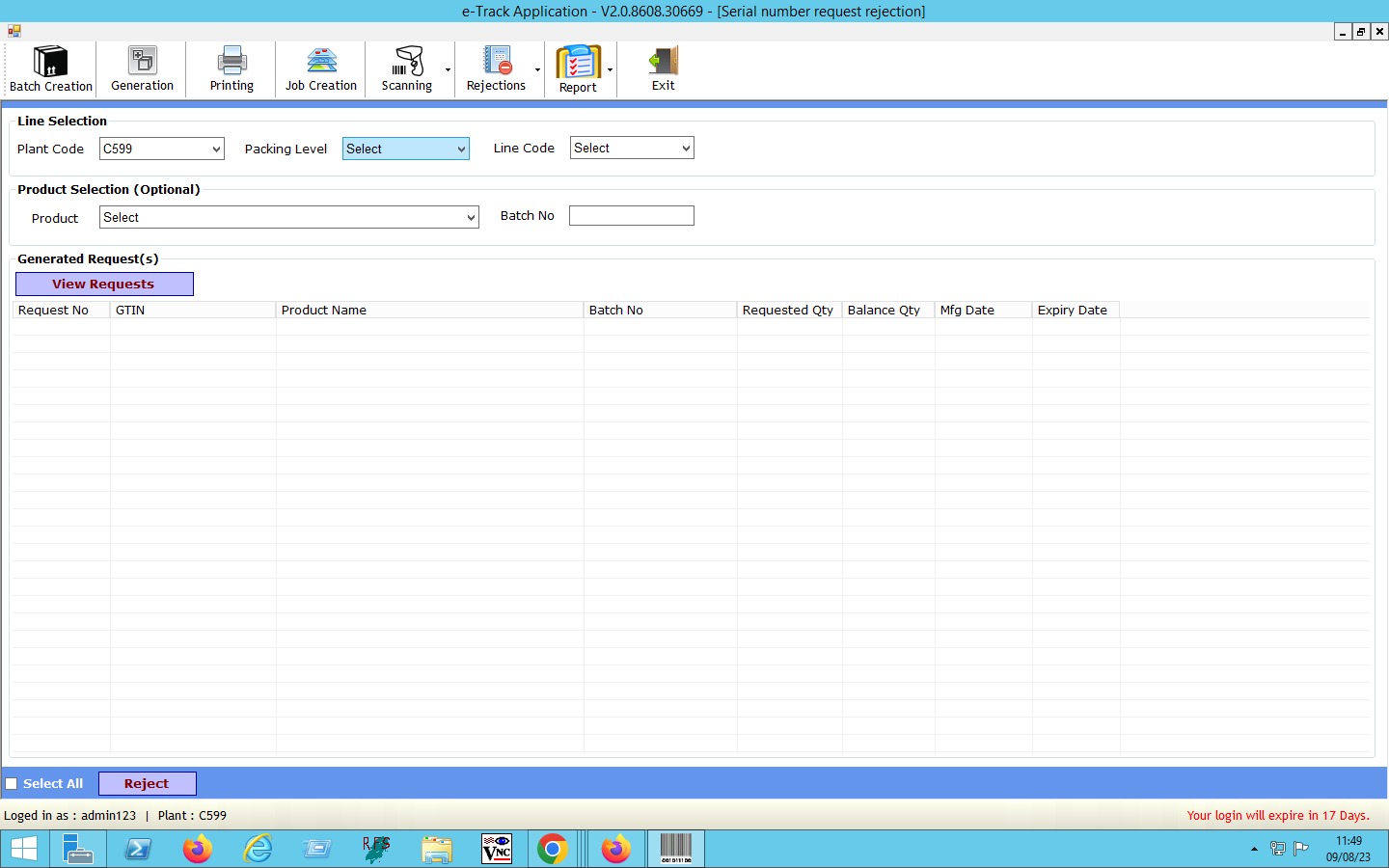
1. Click on Mapping Scanning. The Mapping Scanning will be displayed.
2. If device is connected, then the User should select Packing level as a ’Tertiary ’ and by default Homogeneous label type will get selected.
3. To scan Homogenous Tertiary level mapping, the User should check whether the Job is created for that GTIN and Batch
4. Then scan GTIN Barcode. If the job is created against that barcode then GTIN related details will be displayed. If not, create a new job against scan GTIN and batch.
5. After Scanning GTIN Barcode, the User should scan Parent Barcode Box.
6. After Scanning Parent Barcode Box, the User should scan (one by one) child barcode box of the same batch.
7. When Pack Size of scanned Tertiary will match with no of child barcode, then packing will get completed for that tertiary barcode.
8. Then the User can scan another tertiary barcode of same GTIN and batch and do the above process for a packing.

#### Parent Child Scanning (Heterogeneous)

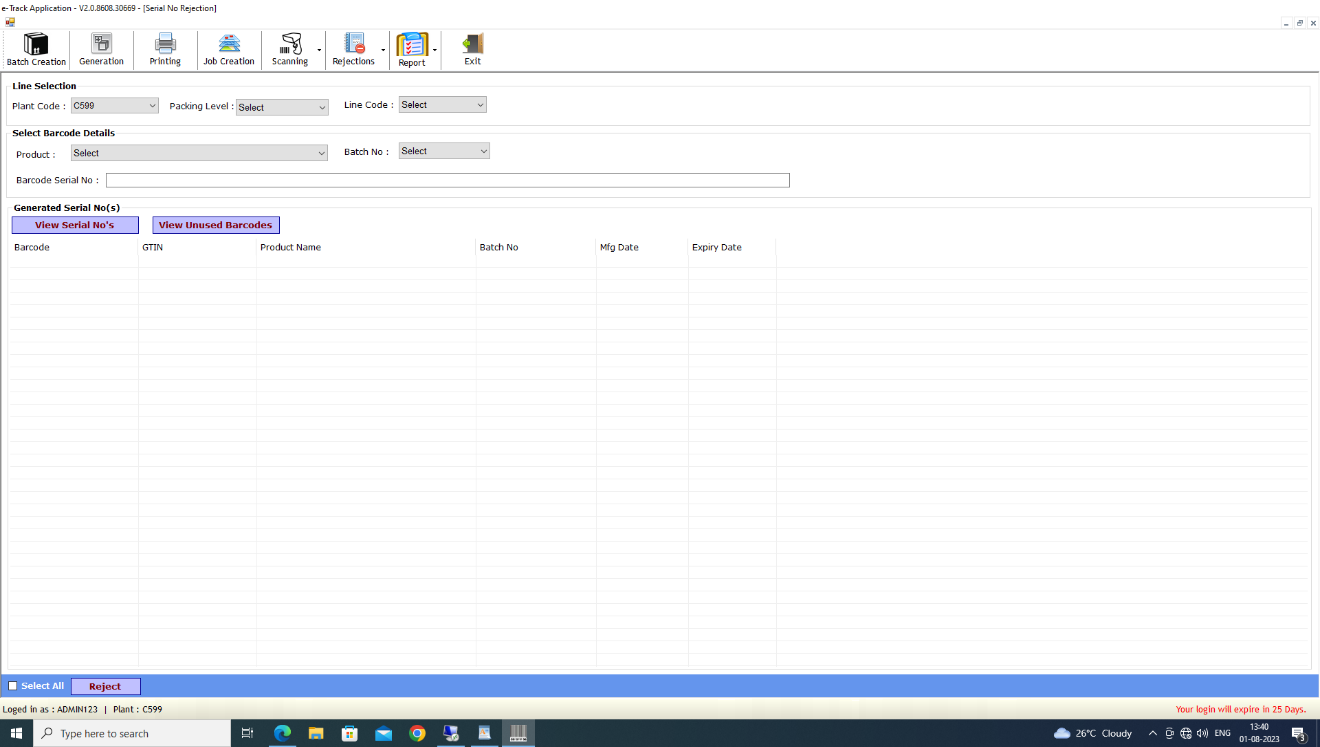
1. If device is connected, the User should select Packing level as a ‘Tertiary’ and select heterogeneous label type.
2. The User should scan Heterogeneous Parent Barcode Box.
3. After Scanning Parent Barcode Box, the User can scan (one by one) child barcode box of same/different batch.
4. The User can then repeat above process for another Heterogeneous packing.

### Rejection

#### General Request Rejection

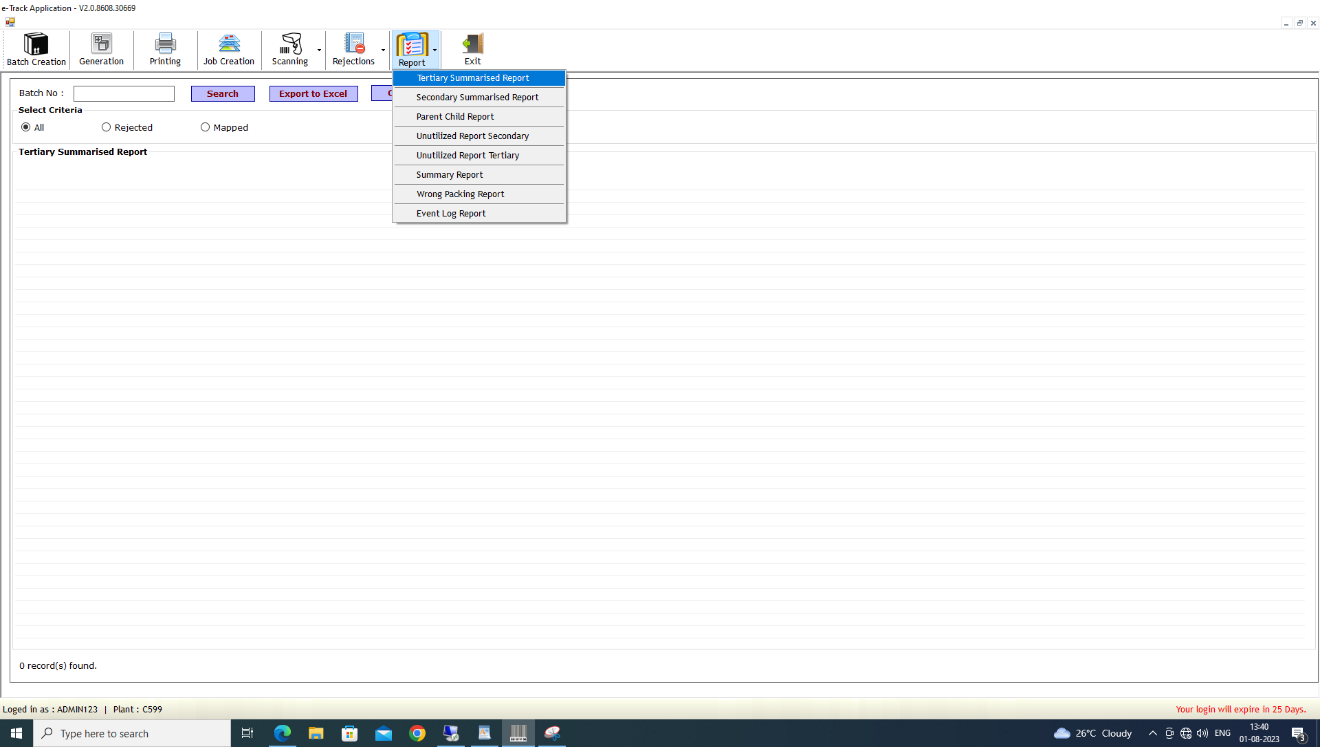
1. Generation Request Rejection module is used to Reject Serial No generation request.
2. To access this module, the User should click Rejection > Generation Request Rejection menu.
3. Select Plant Code, Packing Level, Line code from dropdown for Line Selection.
4. Select Product from dropdown for Product selection section.
5. Enter Batch No.
6. User can view requests in General Request section by clicking on View Requests. button.

#### Serial No Rejection

1. Serial Number Rejection module is used to reject printed barcodes.
2. To access this module, the User should click Rejection > Serial No Rejection.
3. For Serial No Rejection, the User should select Plant Code, Packing Level, and Line no in Line Selection.
4. The User should then select Product and Batch from Barcode Details.
5. After selecting Values, the User should click on View Serial No’s/View Unused Barcodes Button and generated Barcodes will be displayed.
6. Then select Barcode from list and Click on Reject button.

# Reports

* Tertiary Sumarised Report
* Secondary Summarised Report
* Unutilized Report Secondary
* Unutilized Report Tertiary
* Summary Report
* Wrong Packing Report
* Event Log Report



# SRS Scope Change Process

## Before Sign Off

Any changes in SRS need to be informed in writing by Makson Healthcare. It will be incorporated / confirmed only after doing detailed feasibility study by BCI.

* If any change is out of scope then this would be done as a CR post feasibility and priority will be decided based on mutual agreement.
* Once the change is developed , any further change in the same would be considered as a CR

## After Sign Off

Any changes in proposed solution after approval of this document by Makson Healthcare are subjected to confirmation from BCI, taking feasibility constraints into account. These changes will be incorporated (if any) into the solution only after delivering proposed solution & may be charged as extra.

* Any change in the proposed solution due to customer system design or process will be considered as CR
* Any process which is not mentioned in this document will not be considered as “mutual understanding or default presence or standard practice”.

The changes in proposed solution before & after acceptance will be mutually agreed and duly signed and accepted by Makson Healthcare & BCI.

## SRS Acceptance

|  |  |
| --- | --- |
| **For Makson Healthcare** | **For Bar Code India (BCI)** |
| **Name:** | **Name:** |
| **Designation:** | **Designation:** |
| **Department:** | **Department:** |

Agreed and Accepted by Makson Healthcare and Bar Code India