

# Loco Installation Workflow Management System (LIWFMS)

**Operational Manual** 

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#### Acronyms

Acronym	Description
LIWF	Loco Installation Workflow Application
QA	Quality Assurance
PE	Product Engineering
DC	Document Controller
ECR	East Central Railway
ER	Eastern Railway
I&C	Installation and Commissioning
QC	Quality Control



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# 1.0 Login Module

Login to the loco installation workflow management system (LIWF), a web application with user id and password as shown in the Figure 1. For security purpose, change the password after logging in first time to the application. Procedure to change the password – once logged in, click on profile icon on top right corner and select "Profile" from the dropdown menu as shown in the below Figure 2.

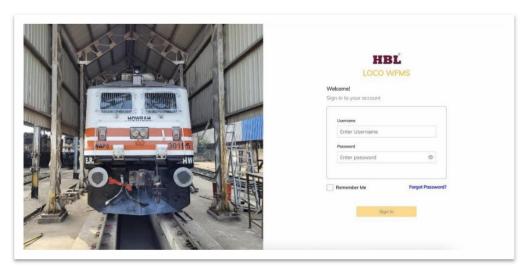


Figure 1 - Login



Figure 2 – Profile

After login using the user id and password, the application will display the admin dashboard as below shown in figure 3.

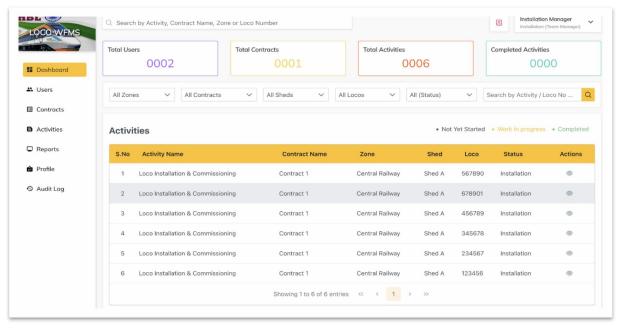


Figure 3 – Dashboard for Manager



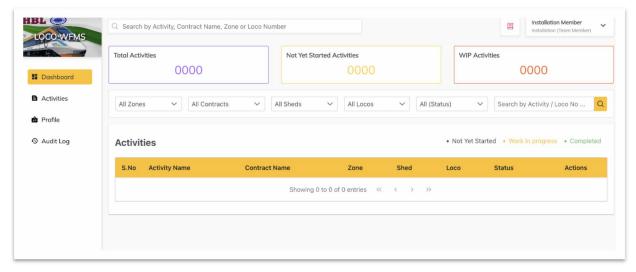


Figure 4 – Dashboard for Team Member

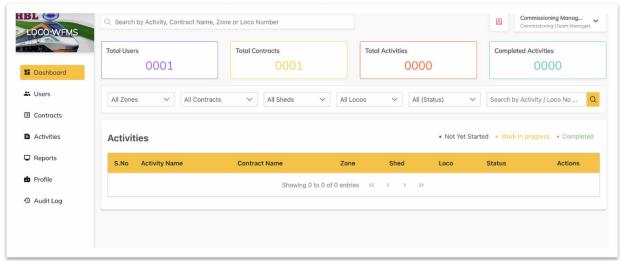


Figure 5 - Dashboard of commissioning Manager

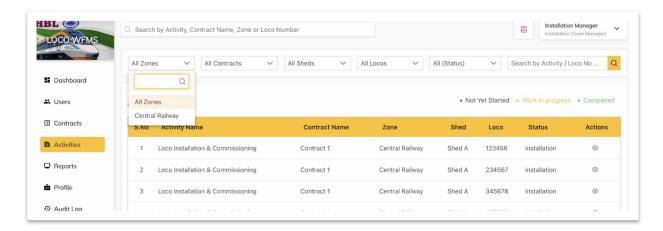


Figure 6 – Team Manager Dashboard

Similar Screens for Managers and Team members as shown in above figures 5 and 4 respectively.



### 2.0 Loco Workflow Management System

The workflow involves the below departments:

- 1. I&C Department
- 2. Project Engineering (PE) Department
- 3. Quality Control
- 4. Document Control
- 5. Commissioning

Admin will create the contract and users. The users can then access the activities and workflow for the contracts. The workflow is as below and more details are described in next few sections.

- 1. Customer allots the locomotive and provides a Loco Allocation Letter. Accordingly, Installation team conducts the survey and records actuals in Survey Report.
- 2. As a first step, I&C assigns the Loco allocation letter and Survey report to Engineering.
- 3. Based on Loco Survey report, the Engineering department user generates the "Loco file generation report" and the report is assigned to I&C for further process.
- 4. Once I&C activities are completed, I&C Shall prepares the below listed reports and assign it to Quality Control for inspection.
  - Loco Kavach Installation Checklist.
  - Loco configuration Checklist.
  - Loco Kavach Health Report.
  - Commissioning Test Report.
  - PCCL Report
  - Simulator Test Report
- 5. Quality team conducts in-process inspection and the results are recorded in QC In-process Inspection report and assigned report is sent to document controller.
- 6. The cycle to-from I&C department and QC will continue till all the open issues are closed by I&C department.
- 7. Document Controller will store the all documents in external storage.

The main modules of LIWF used during the entire process are provided on the left navigation menu. Below is the list of menu items

- 1. Dashboard to get an overview the number of users, activities, contracts in their department and status of activities at a glance
- 2. Users shows the list of users active from their department
- 3. Contracts the contracts that are currently being worked on
- 4. Activities shows the activities in progress and the activities completed and the activities that are initiated
- 5. Reports provides all the parameters involved in the application, like zones, stations, contracts, status etc. User can select the required parameters and generate a report
- 6. Profile this will be visible for all users with their details and they can change their details as and when required
- 7. Audit Log provides a list of all tasks performed by the user



# 3.0 Users from Departments - I&C/PE/QC/DC

The workflow involves the below departments. Each activity goes through all these departments

- 1. I&C Department
- 2. Project Engineering Department
- 3. Quality Control
- 4. Document Control
- 5. Commissioning

The functionalities are common for the departments

- 1. Activities Module
- 2. Users Module
- 3. Contracts Module
- 4. Reports
- 5. Profile
- 6. Audit Log

The roles of users in each department are as below

- 1. Manager
- 2. Team Lead
- 3. Team Member

The Screens and descriptions in next few sections are common for all the users.



#### 4.0 Dashboard

The dashboard provides a high-level overview of the HBL LIWF system. It displays key metrics and a list of recent activities along with key features summary as shown in figures 3, 4 and 5.

- Total users display's the total number of users in the system
- Total contracts display's the total number of contracts in the system
- Total activities displays the total number of activities in the system
- Completed activities shows the total number of activities that are marked as completed

The dashboard displays the list of activities and status with a colour code - green are for completed activities, orange for activities that are work in progress and black for activities not yet started.

Also, the dashboard can be accessed by clicking on the dashboard on the left-hand navigation menu. To search or a particular activity use keywords in the search box to locate a specific Activity – search by activity name, Contract name, Zone or Loco number. In addition, use the drop-down menus to filter and to search for a specific activity based on contract name, zone, local number or activity, status or activity name as shown in below figure 7.

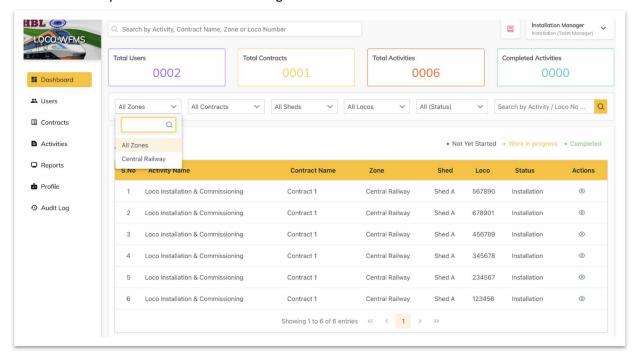


Figure 7 – Search Functionality

In the list of activities table, each activity has a view icon as shown in the below figure 8.



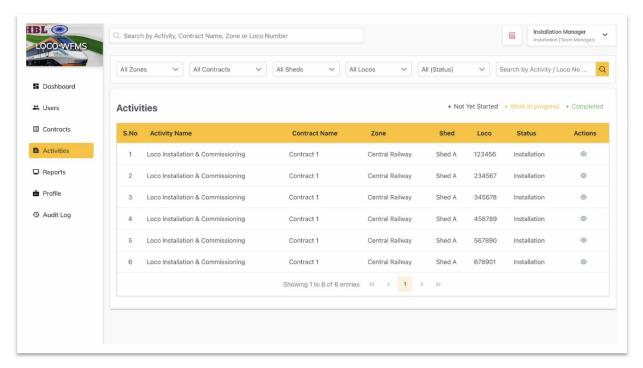


Figure 8 – View Activities

Click the view icon in the actions column to see detailed view and workflow of that specific activity as shown in figure 9.

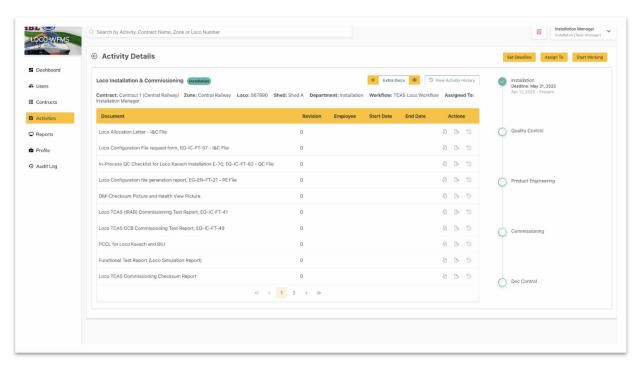


Figure 9 - View Activity

Users can logout by selecting logout on top right corner as shown in below figure.



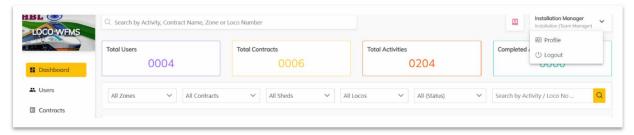


Figure 10 – User Logout

More detailed description of activities is explained in section 7.



#### 5.0 Users Module

Admin can perform the below functionalities using the Users Module

- 1. Search for a user
- 2. List of all users
- 3. Download the list of users to a excel sheet and save it on the system
- 4. View and Edit user details

The Users module can be accessed by clicking on "Users" on the left-hand navigation menu.

The user's screen is displayed by selecting the "Users" item from the left navigation menu as shown below in Figure 11

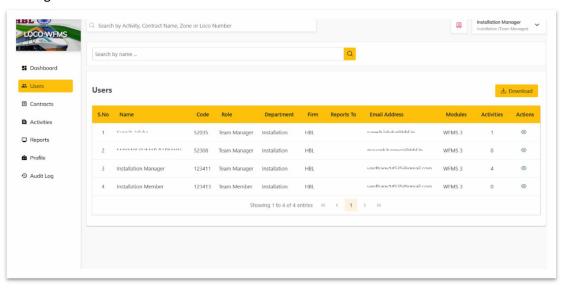


Figure 11 – View Users

To search for a user, there are two options, search by the user's name.

Type the user's name in the "Search by name" input box above and click on search icon as shown below in Figure 12.

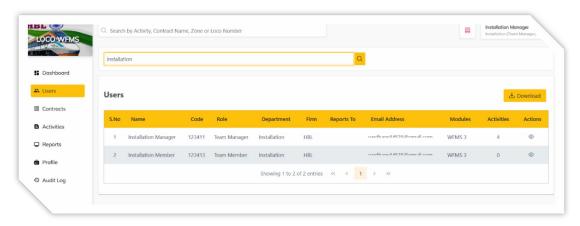


Figure 12 – Search User

To view or edit user details, click on the view icon against the user's name in the list of users and edit required details and click on save as shown in below Figure 13.



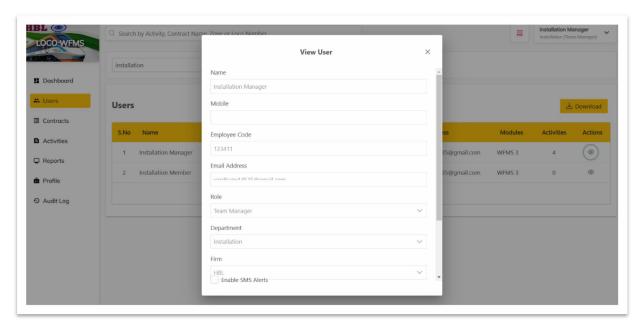


Figure 13 – View/Edit User

Click on download button (right top of the table) to download the list of users to a excel file as shown below in Figure 14.

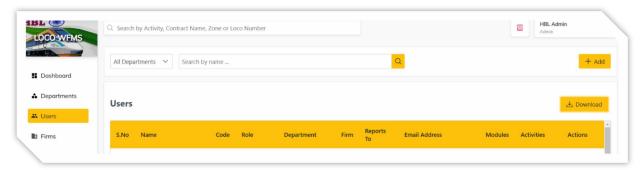


Figure 14 - Download Users List

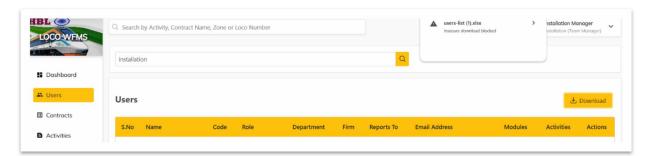


Figure 15 – Downloaded sheet is saved on system download folder

The downloaded file can be viewed using Microsoft excel as shown below.



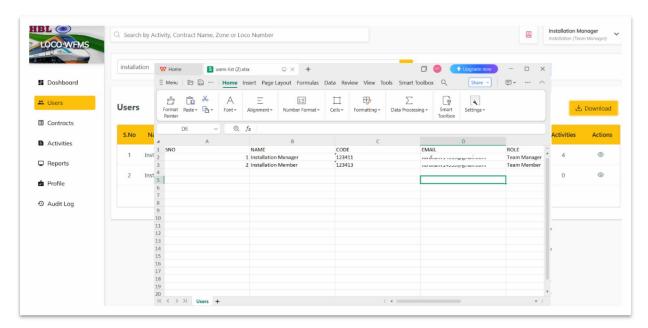


Figure 16 – Download List of Users



#### 6.0 Contracts Module

The admin can perform the below functionalities using the Contract Module

- 1. Search for a contract
- 2. List of all contracts
- 3. View and Edit details of any contract

The contract's screen can be accessed by selecting the "Contracts" item from the left navigation menu as shown below in Figure 17.

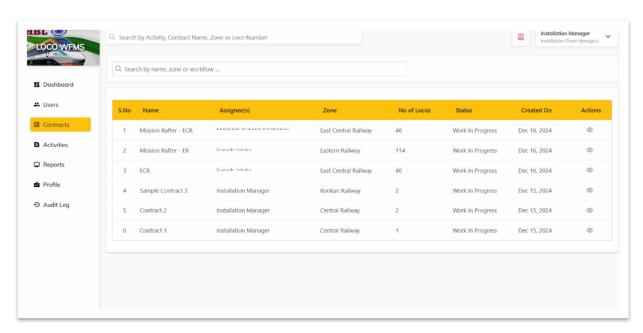


Figure 17 - View List of Contracts

To view or edit contract details, click on the view icon against the contracts name in the list of contracts and edit required details and click on save as shown in below Figure



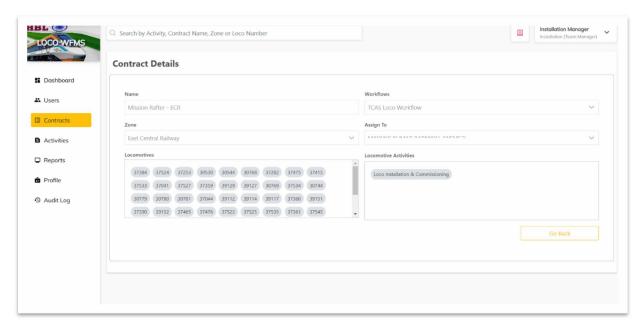


Figure 18 – Edit Contract

Search for a contract by typing in the name of the contract as shown below in Figure 19.

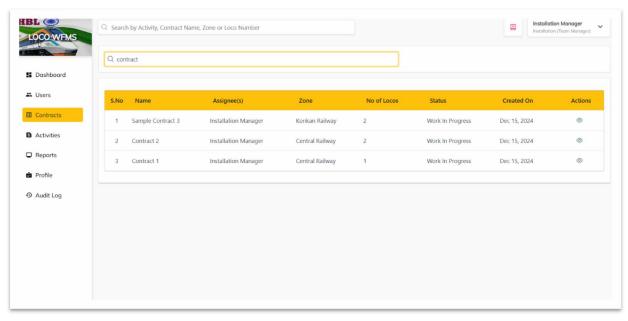


Figure 19 – Search Contract



#### 7.0 Activities Module

Admin can perform the below functionalities using the Activities Module

- 1. List of all Activities
- 2. View details of any Activity
- 3. Search for any Activity
- 4. Send an Activity to a particular user/department
- 5. View Activity History
- 6. Download document of any activity
- 7. View document history of any activity
- 8. Add extra documents
- 9. View the extra documents

The Activities screen is displayed by selecting the "Activities" item from the left navigation menu as shown below in Figure.

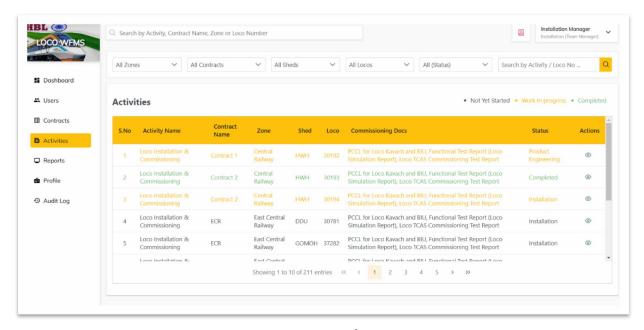


Figure 20 – View List of Activities

Note: The activities completed are highlighted in green colour, the activities which are work in progress are highlighted in blue colour and the activities that are yet to start work on are highlighted in black colour.



To view activity details, click on the view icon against the activities name in the list of activities as shown in above Figure. Admin can view the status of any document/activity on the progress bar shown on right side of the activity table as shown in figure 21.

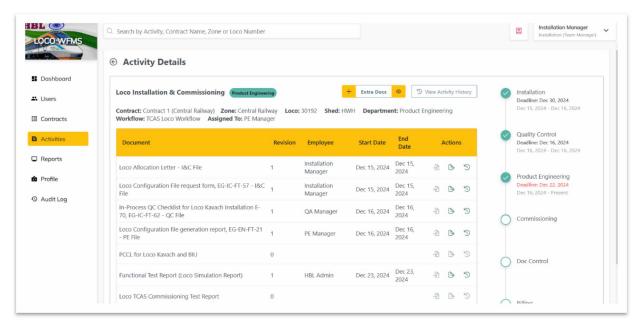


Figure 21 – View Activity

Search for an activity by typing in the name of the activity as shown below in Figure 22. Note: The activities can be searched based on any of these parameters:

- ✓ Search by contracts
- ✓ Search by zone
- ✓ Search by Sheds
- ✓ Search by Locos
- ✓ Search by Status
- ✓ Search by name of activity



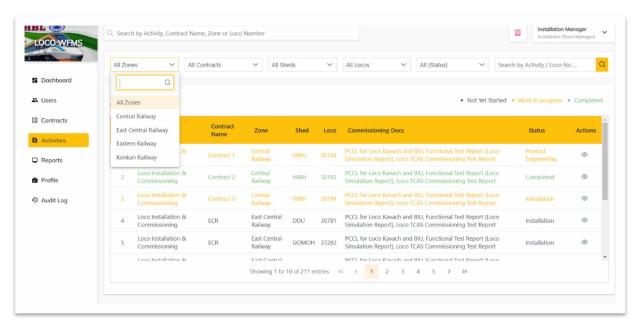


Figure 22 – Search Activity

After clicking the **View** icon under the **Action** button, as shown in *Figure 22* in the **Activities** section, the interface appears as shown in *Figure 23*. There are three actions that can be performed for each activity, represented by three icons under the **Action** column:

**Upload** – Upload files or documents related to the activity.

**Download** – Download the activity or related documents

**History** – View the activity history.

To begin working on an activity, first click **Set Deadline**. Once a deadline is set, two buttons will appear at the top: **Start Working** and **Assign To**.

To assign an activity to a particular department:

#### Click **Assign To**.

Enter the name of the department.

Select the member to whom you are assigning the task.

Optionally, you can add a comment for additional context.

There are few other features in the activity's module — View activity history, Extra doc .Click on view activities history button to view the activities history and click on the history icon against any of the activities to view the document history for that particular activity. The screens for view activity history, Extra Docs and view document history is shown in the below Figures.

Below screen to view the activity history. Click on view activities history button on top of the activities table to view the activities history.



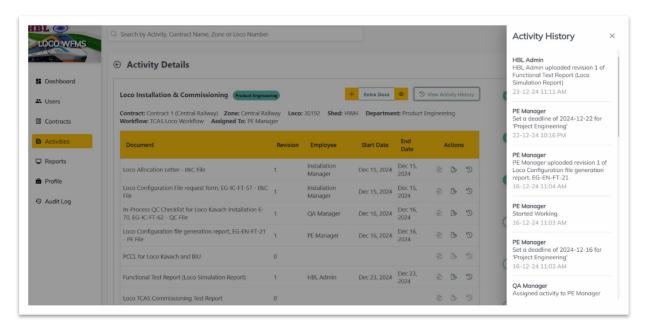


Figure 23 – Activity History

Below shows the icon to download an activity document

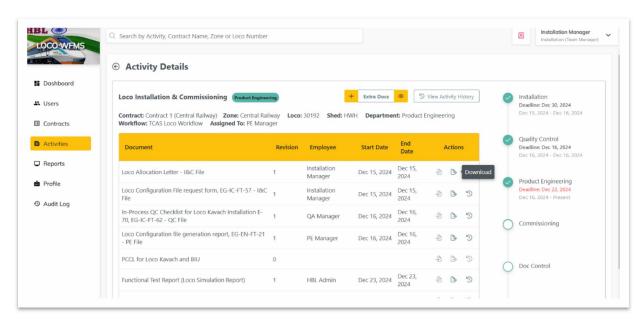


Figure 24 – Download Activity Document

Below screen shows the icon to view the document history, click the document history icon to view the history on the right panel.



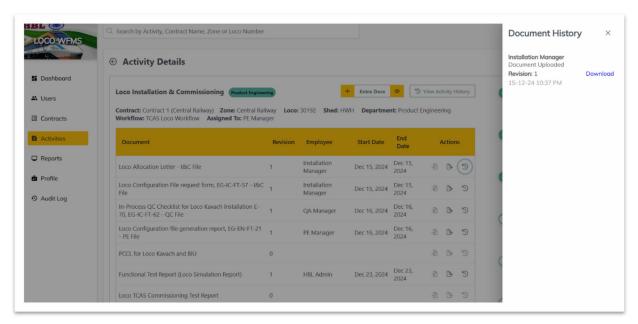


Figure 25 – Document History

To View any additional documents added to a workflow click on the view icon on right side of "Extra Docs" and the document name and details can be seen on the right panel as shown in below figure.

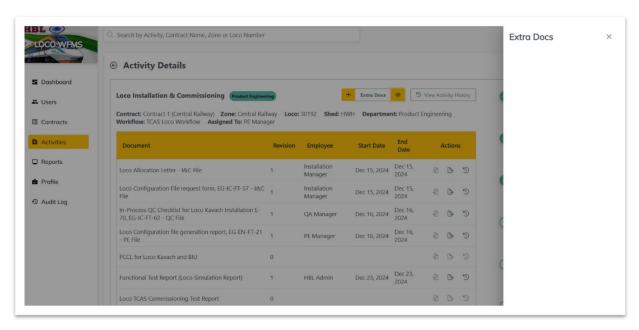


Figure 26 – View Extra Documents

To add any additional documents to a workflow, click on the + icon on left side of "Extra Docs", upload the document and click on save.



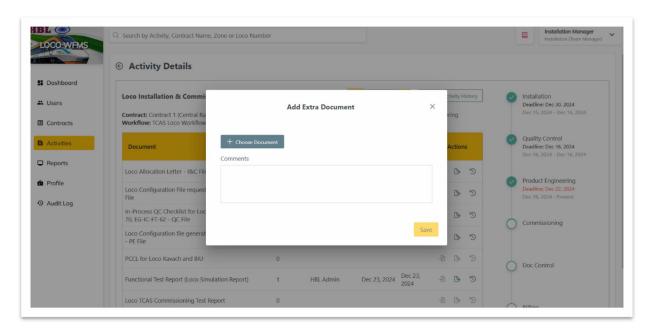


Figure 27 – Add Extra Document



# 8.0 Reports Module

Reports – provides all the parameters involved in the application, zones, stations, locos, contracts, status and departments. User can select the required parameters from the dropdown as shown below and generate a report.

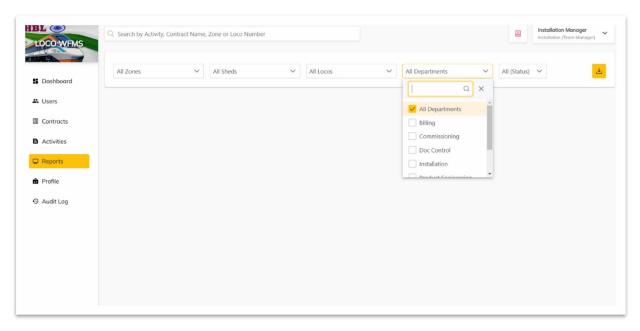


Figure 28 – Reports Main Screen

Click on download to download the report to the system as shown below and an email is sent with the report within 15minutes.

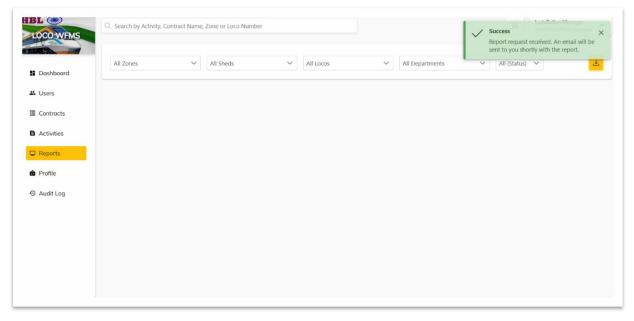


Figure 29 – Download Success Message



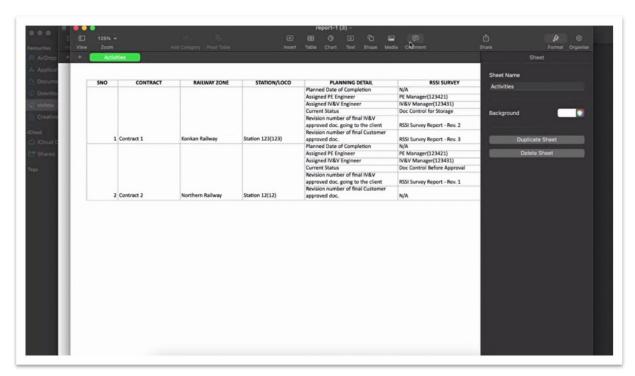


Figure 30 – Sample Report



# 9.0 Profile Module

Profile – this will be visible for all users with their details and they can edit their details as and when required.

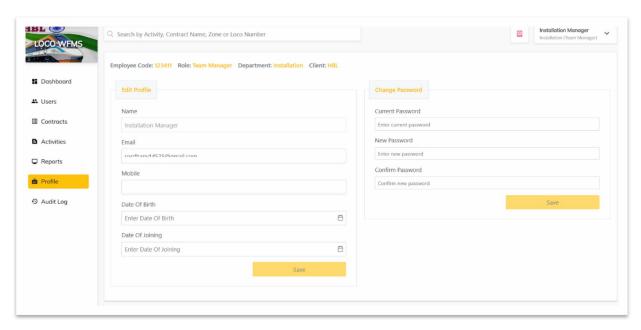


Figure 31 – View / Edit Profile



# 10.0 Activity Logs Module

Audit Log – provides a list of all tasks performed by the user in the form of a log to refer to at any time during the workflow cycle. The audit log can be downloaded by clicking on download button on top right corner as shown in below figure.

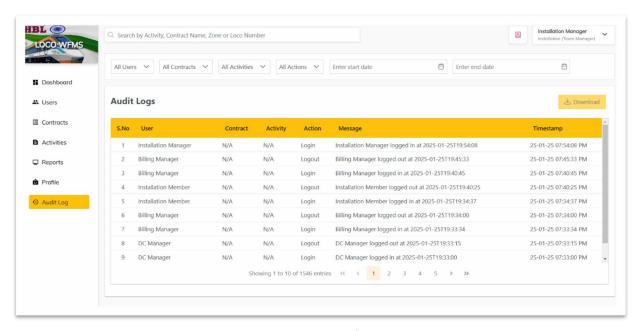


Figure 32 – View Audit Logs

Select the start date and end date to download the audit logs report as shown in below figure.

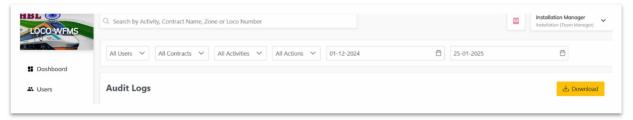


Figure 33 – Download Audit logs



# 11.0 User Manual

To view the user manual, click on the "Manual" icon on the top menu as shown below. The manual can be accessed from any screen or module.

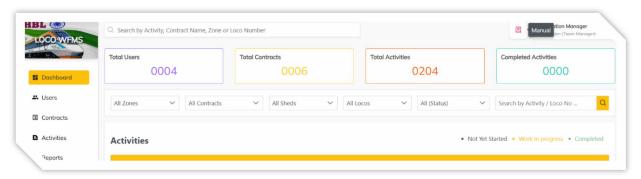


Figure 34 – User Manual

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