Charting UI – USER GUIDE

CRIS - Centre for Railway Information Systems

TABLE OF CONTENTS

1	(General Information	4
	1.1	1 System overview	4
	1.2	Points of Contact	5
2	(Getting Started	6
	2.1	1 Starting Application	6
	2.2	2 User Login	7
	I	User Login Instructions:	7
	I	Password Change:	8
	2.3	3 Dashboard	9
3	ı	Preparing Charts1	0
	3.1	1 Skeleton Chart	0
	3.2	2 Test Chart1	4
	3.3	3 Final Chart1	6
4	ı	MMI Operations1	9
	4.1	1 Train Profile Change	0
	4.2	Partial damage 2	8
	,	Steps for Partially Damaging Berths2	8
	4.2	2 Addition of Coaches	2
	4.3	3 Provisional List	5
	4.4	4 Cabin Coupe Allotment	7
	4.5	5 TTE Coach Assignment 4	4

	4.6	View Profile Changes	49
	4.7	Unified MMI	51
	4.7	.1 Feeding Physical Coach ID and COACH Position	51
	4.7	.2. Addition of Coach	54
	4.7	.3 Train Profiling	55
	4.7	.4 Partial Damage	57
	4.8	HO Allotment in Added Coaches	59
	4.9	View Cabin Coupe Allotment	61
	4.10	VIEW HO ALLOTMENT IN ADDED COACHES	63
5	Uti	lities	65
	5.1	Enable Current Booking	65
	5.2	Current Booking List	66
	5.3	Ex booking List	67
	5.4	VIP List	68
	5.5	VIP for All Remotes	68
	5.6	Advanced VIP List	68
	5.7	Alphabetical List	70
	5.8	Insert Message in Chart	73
	5.9	Edit 1AC Chart	75
	5.10	Printer Job Status	79
	5.11	View Profile Changes for pairing trains	79
	5.12	Bogie Plan Layout	81
6	Dis	splay Chart	82

7	Gu	iided Charting	88
	6.2	Alphabetical List	85
	6.1	Provisional List	82

1 GENERAL INFORMATION

1.1 SYSTEM OVERVIEW

CHARTING APPLICATION is one of most important and crucial system of CONCERT software with main objective of preparing final passenger manifesto of given train-date-remote location. The CHART PREPARATION system of CONCERT system consisting of many procedures to accomplish the task of preparing the lists of passengers booked in a particular Train-Date combination with their status according to the format specifications of the Railways under various conditions of Normal and Contingency conditions of their operations.

Charting Front end interface is migrated to GUI interface for giving more agility and flexibility to the charting users.

User friendly Interface

UI has been designed, keeping in mind the ultimate user friendliness. Some of the features are

- Selective cabin coupe allotment
- Pictorial representation for ease of operation
- Drag and Drop features wherever possible
- Consolidated view of each set of operations
- Filter option for easy accessing

Improved accuracy

Following features has been added to improve the accuracy of operations

- Location based restrictions
- Minimal key in of Data
- Display of charts to be prepared in next N hours for ease of operations
- Review the work without preparation of Charts
- Enhanced error alerts
- Checklist to avoid manual errors

Enhanced Functional capabilities

Some the existing features has been improved and some new facilities has been added

- Ho quota distribution in added coach is improved with swapping facility and easy allotment of berths
- Auto allotment screen in cabin coupe allotment
- Customized messages can be added in charts
- Feedback/suggestion to CRIS
- Ease to Integrate with other Modules

Charting is not an independent system, it needs to communicate with lots of other facilities before doing so, we are designed the system such as it can communicate with other projects and reduce the workload of charting operators

- Charting can be integrated with ICMS for Coach related data
- Charting can be integrated with TTE Lobby for TTE data
- !mproved user assistance

The application will guide a less experienced staff, through predefined steps involved in charting so that he won't miss a single operation unknowingly.

1.2 POINTS OF CONTACT

For any query or feedback please update via Feed Back Form provided in Support menu Option.



Figure 1-1 Feedback Form

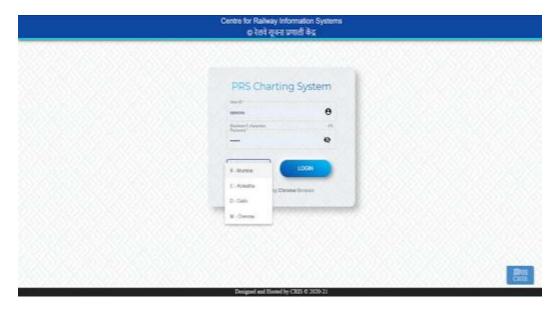
2 GETTING STARTED

2.1 STARTING APPLICATION

Open following URL on chrome (version 60 and above) or internet explorer (version 10 and above):

https://charting.prs

An authorized user ID and password is required to log onto web interface.



2.2 USER LOGIN

Login page consists of form fields to enter **User ID** and **Password**. User ID for Charting Operators will be unique. **Site ID** can be selected based on their respective zones belonging to the site. After successful login, the user will be redirected to the **Dashboard** page. Once logged in Charting functionalities will be available as per User privileges in left side Menu.



Figure 2-1 Login Page

User Login Instructions:

- 1. If *User Authentication* failed, please ensure the **User ID** and **Password** are entered correctly and also check if your **User ID** belongs to the **Site ID** provided.
- 2. Only valid users can login to the system, always update password before it expires. Password change form will be prompted if password is about to expire, while logging in.



Figure 2-2 Login Form

Password Change:

User can update their password using Reset Password option from sub menu by clicking User Icon on Top Right corner of the Menu Bar available on the page.

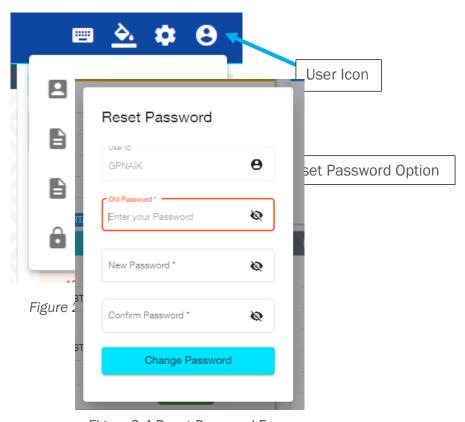


Figure 2-4 Reset Password Form

Reset password form will have **User ID** auto populated with old password and New password input box. Password will be updated only after validating **Old Password**. User needs to confirm the New Password in Confirm password box so as to avoid any mismatch in typing errors.

Password can be changed by the user when old password is about to expire or for any security reasons. If password is going to expire in 3 days, system will prompt a message every time user logs in to change the password.

2.3 DASHBOARD

After logging in, dashboard is the first page displayed on screen as shown below, which consists of Menu Bar, Navigation Menu, Pending Charts List, Missed Charts Statistics, Instructions list, User Activity etc.

Dashboard Page Layout



Figure 2-5 Dashboard Page

- Menu/Tool Bar: Topmost section of the page, which has a Navigation Maximize and Minimize button on the left. In the right end, options for Keyboard Shortcuts, Theme Selector, Settings and User Menu.
- 2. Navigation Menu: On the Left side of the page, consists of Logged User detail followed by Search bar and List of pages to navigate.
- 3. Pending Charts List: On the right side of the page, display's system time along with table with list of trains whose chart needs to be prepared in next few minutes/hours based on User's Chart Location.
- **4. Hot Instructions:** In the centre section of the page, Lists the instructions for the user based on its priority represented by colour. By clicking on the list, user can view the instructions briefly.
- **5. Missed Charts:** Displays a statistic of chart missed/prepared for the location.
- 6. User Activity: List of recent activities done by the user.
- 7. Release Details: Details of the recent releases of application.

3 PREPARING CHARTS

Except current booking and cancellation, it's last activity with respect to passenger booking in given train-date-remote location. It maps all confirmed passengers to their accommodation, provide unused or part vacant berths to waitlisted passengers, updated database, store various statistic related to train-date-remote and passengers booked in it, generate various list such as confirmed chart, waitlist chart, upgraded passengers list, SMS file, plasma display file, etc. These lists are of great help for passengers and Railway authority. At last it will enable current booking in train and update ADTF accommodation switch.

Chart Preparation consist of three types of chart: -

3.1 SKELETON CHART

Skeleton charts are without any adjustments or quota release. These charts/lists are as per standard coach profile. Database is not updated while doing skeleton chart preparation.

Following functional steps required to perform skeleton chart preparation:

- Provide the TRAIN NO., REMOTE LOCATION CODE and DATE.
- Select the train class or all class got selected by default.
- Press the prepare Chart Button. Or there is also a reset button to reset the TDRC details.



Figure 3-1 Skeleton Chart Input Form

Train Profile of 12601 on 08-04-2024 at MAS

Train Status: Train is running normally

Profile Changes

Profile Changes List

M. Code Source Destination Class Na.ACM Status New Code New Class Coach Na. New No. ACM

AEI 77 MAS MAQ 24 48 DUMMY COACH 0

BEI 72 MAS MAQ 34 64 DUMMY COACH 0

SEI 74 MAS MAQ 31 72 DUMMY COACH 0

Acting Conclus

After Clicking on Prepare Chart button, Train Profile window will open it will list the following details:

Figure 3-2 Train Profile View in Skeleton Chart

- List of VIP passengers dropped.
- Profile changes like Coach Damage, Replacement etc. with coach details.
- Added Coach information
- Partial damaged berth details
- Cabin Coupe Allotment details
 After you Proceed Charts preparation Activity will begin.

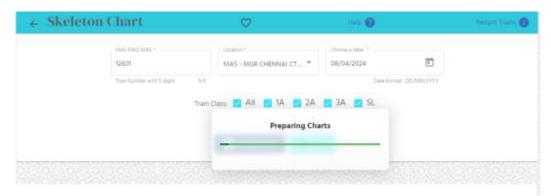


Figure 3-3 Preparing Charts

Once Charts are prepared system will fetch Chart Details and list the chart files prepared on the screen.



Figure 3-4 Skeleton Charts File list for view and printing

View Checklist – It will list Senior Citizens, VIPs Dropped, Class Dropped, Class Down-graded



Figure 3-5 View Checklist

PNR count etc.

Chart files View – Click on Files to open PDF in new window to view chart file.



Figure 3-6 View Confirmed List file

• **Print Charts** – Printer queues will be displayed for default printer locations, feed number of copies accordingly to respective queue and file.



Figure 3-7 Printer queue copy feed

• **Printer Location** – Default location will be set as remote, or location code can be updated so its queue will be loaded on screen.



Figure 3-8 Printer Location change

List of Charts prepared for 12601 at MAS date 08-04-2024

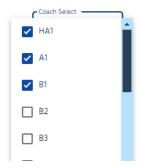


Figure 3-9 Coach selection menu

• Coach Select – Option is used only for Confirmed List to show view selected coach from the list.

3.2 TEST CHART

Test charts are with quota release and similar to Final Chart, database is not updated while doing test chart preparation. These charts/lists are as per standard coach profile.

Following functional steps required to perform test chart preparation:



Figure 3-10 Test Charts Input form

- Provide the TRAIN NO., REMOTE LOCATION CODE and DATE.
- Select the train class or all class got selected by default.
- Press the prepare Chart Button. Or there is also a reset button to reset the TDRC details

After Clicking on **Prepare Chart** button, Train Profile dialog box will open and it will list *VIP passengers dropped, Profile changes, Added Coaches, Partial damaged berths, Cabin Coupe Allotment done.* After you **Proceed,** Chart preparation activity will begin.



Figure 3-11 View Train Profile before preparation

Once Charts are prepared system will fetch Chart Details and list the chart files prepared on the screen.



Figure 3-12 Test Chart View & Print page

- View Checklist It will list Senior Citizens, VIPs Dropped, Class Dropped, Class Down-graded PNR count etc.
- Chart files View Click on Files to open PDF in new window to view chart file.
- Print Charts Printer queues will be displayed for default printer locations, feed number of copies accordingly to respective queue and file
- **Printer Location** Default location will be set as remote, or location code can be updated so its queue will be loaded on screen.
- Coach Select Option is used only for Confirmed List to show view selected coach from the list.

3.3 FINAL CHART

Final Chart will prepare final list of confirmed, waitlisted and dropped passenger and database is updated with accommodation. These charts/lists are as per standard coach profile.

Following functional steps required to perform Final chart preparation:



Figure 3-13 Final Chart Preparation Input Form

- Provide Train details like as Train Number, Remote Location Code, Remote date and Chart Language.
- For Final, additional captcha check is added. **Prepare Chart** button will be enabled only if captcha matches. Captcha can be refreshed if not readable with reload icon.



Figure 3-14 Final Chart Captcha Input

Final Chart can be prepared by all types of users but only privileged user can prepare chart after Chart time. A Confirmation dialog box will pop up before proceeding to Chart preparation.



Figure 3-15 Final Chart Confirmation box

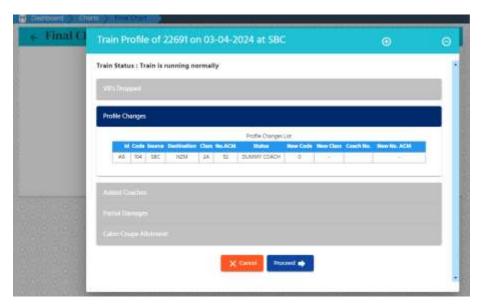


Figure 3-16 Final Chart Train profile

Train profile will be displayed until user proceeds with Chart Preparation.

Once Charts are prepared system will fetch Chart Details and list the chart files prepared on the screen.

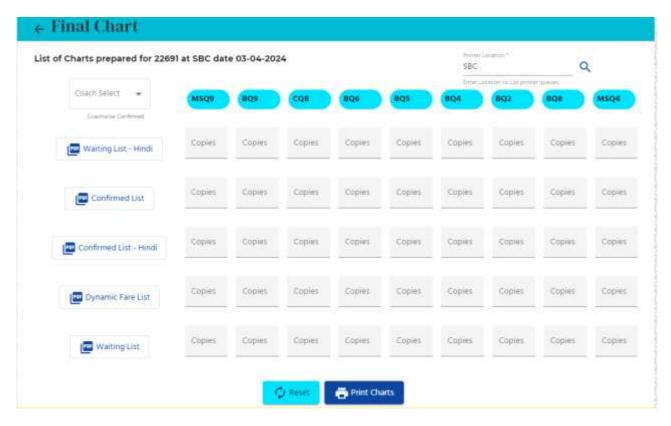


Figure 3-17 Final Chart List

- Chart files View Click on Files to open PDF in new window to view chart file.
- **Print Charts** Printer queues will be displayed for default printer locations, feed number of copies accordingly to respective queue and file
- **Printer Location** Default location will be set as remote, or location code can be updated so its queue will be loaded on screen.
- Coach Select Option is used only for Confirmed List to show view selected coach from the list

4 MMI OPERATIONS

For MMI operations TDRC details needs to be provided first shown in figure as follows in the input form and once "Proceed" is clicked it will lock the TDRC for MMI.



Figure 4-1 MMI Input form

Once TDRC lock is acquired, following menu will be shown. User can release lock using "Change Train" button shown on top along with train details. Until then MMI operations can be done by the Charting operator.



Figure 4-2 MMI operations menu

4.1 TRAIN PROFILE CHANGE

This section of the Manual Interface Management (MMI) is primarily used when there's a need to replace or report damage to coaches that are normally operational, or conversely, to revert changes when a particular coach becomes available or is repaired after an issue, like an AC or Mechanical failure.

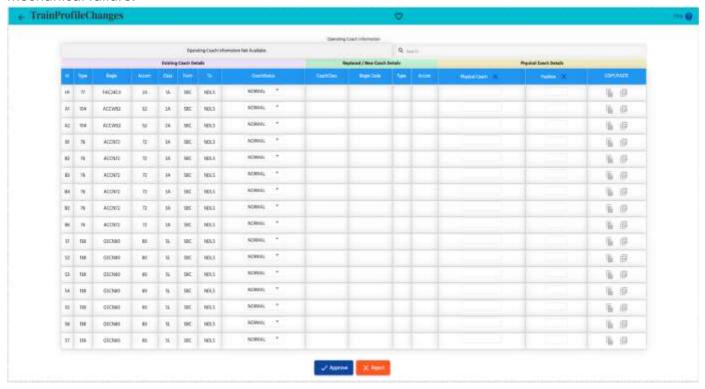


Fig: 4.1.1

On providing the input details as per 4.0, a table enlisting the coach details (Coach Id, Coach Type, Bogie Code, Accommodation, Class, Coach Source & Destination) & its profile operation (Coach Status, Reason for Replace or Damage), New Coach Details, Physical Coach number & position from Engine is displayed as shown in Figure in 4.1.1

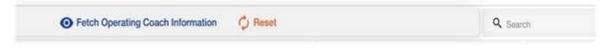


Fig: 4.1.2

The first row of the table has three actions as shown above in Figure 4.1.2 viz. Fetch Operating Coach Information, Clear ICMS data, Reset & Search option.

1. Fetch Operating Coach Information:

This feature retrieves details about coaches from the ICMS database, specifically their physical numbers and their positions in relation to the engine. If the system does not have this data,

it will notify you that the operating coach information is not available. This feature is particularly useful for obtaining up-to-date information without manual entry.

a. This button provides a feature to fetch data (Physical Coach Number & Position from Engine) from ICMS.



Fig: 4.1.3

b. If the ICMS doesn't contain this information, you'll see a message saying "Operating Coach Information not available."



Fig: 4.1.2

c. Clicking the **Fetch Operating Coach** button as per Fig 4.1.2 brings up a dialog box where you can transfer or reverse transfer the data to the system. When you click the '**Fetch Operating Coach Information**' button, a dialog box appears. This dialog lists the entire train formation, including details about each coach and its position. This view aids in understanding the current formation of the train and facilitates the data transfer process to the train profile.



Fig: 4.1.3

d. These options in the dialog box allow for two different ways of updating the train's formation. 'Transfer' inputs the coach information as is from the ICMS to the system, maintaining the same order. 'Reverse Transfer' does the opposite, inputting the data in reverse order. These functions are designed to match the physical arrangement of coaches with the system records accurately.



Fig: 4.1.4

Clear ICMS Information Button:

After the system has retrieved and filled in the physical coach numbers and their positions from the ICMS database, you may find that this data is not needed, or you might need to enter the data manually. In such cases, the 'Clear ICMS Data' button becomes useful. Clicking this button will erase all the populated data physical coach numbers and positions, giving you a clean profile to start over. This is particularly helpful if the auto-filled information is incorrect or irrelevant for the task at hand.

<u>Manual Data Entry</u>::If automated data fetching isn't required or if you prefer to enter the information yourself, you can manually input the physical coach numbers and their respective positions in the train profile table. Each column is editable, allowing for direct typing of the relevant details. This manual process is crucial when precise control over data entry is needed.

Reset Button:

When you use the "Reset" button, it acts as an undo feature for the entire Train Profile Change table. Any changes you've made, such as status updates, data entry, or modifications to the coaches, will be completely reversed, as if you never made them. It's a safeguard to start over if you encounter any errors or if you've changed your mind about the updates you've made.

Fig: 4.1.5

Q Search

Search

Physical Coach Details

Search Functionality:

The "Search" feature is your tool for quickly locating specific items within the MMI table. It works like a filter, allowing you to narrow down the list based on various coach attributes. For example, you can search for a coach by its ID, the class it belongs to, or the bogie code. It's designed to save you time by pulling up the exact data you need without having to manually comb through the entire table. Ex: Search by Coach ID, Class, Bogie Code etc.

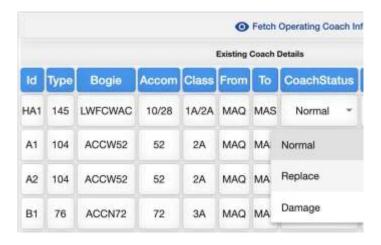


Fig: 4.1.5

Coach Status Dropdown:

Within the Train Profile Change interface, each train coach is assigned a status to reflect its current operating condition. This status is editable through a dropdown menu located in the 'Coach Status' column of the interface. When you first access the table, or when a coach is newly added to the system, its status will automatically be designated as 'NORMAL'. The 'NORMAL' status indicates that the coach is functioning as expected and is fit for service without any reported issues.

The working of the said dropdown options is enumerated below:

- 1. **NORMAL**: This is the standard condition of a coach, Unless the coach is made Dummy, suspended or you've made a change, coaches will remain in this status. Even after REPLACE/DAMAGE is modified, the coach can be changed back to Normal.
- 2. **REPLACE:** This is typically used when a coach is unavailable or sick due to AC/Mechanical or any other failures that prevent it from being part of the train's formation.



Fig: 4.1.6

- a. When you mark a coach as 'REPLACE' in the status column, the row for that coach will turn blue. This visual indication confirms that you've initiated the replacement process for that particular coach.
- b. Following this, you'll need to fill in the particulars of the new coach that will take its place. These details are selected from a dropdown menu labelled 'New Coach Class,' where you choose the class of the replacement coach to complete the update in the train profile. This step is important for ensuring that the train profile reflects the current status and the upcoming changes accurately.

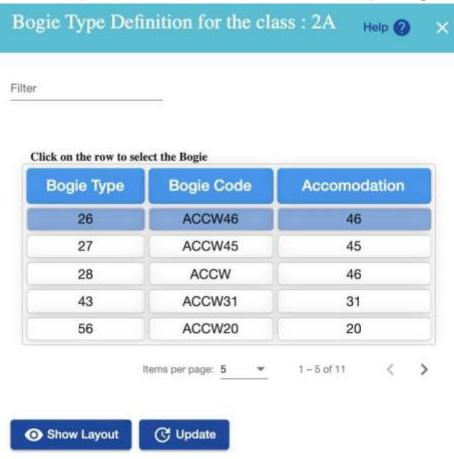


Fig: 4.1.7

On selecting the particular Class, This dialog box assists users in selecting the appropriate bogie type for a coach when updating or replacing a coach's information in the Train Profile Changes system. It ensures the coach's physical characteristics.

Bogie Selection:

Users can select the desired bogie by clicking on a row in the 'Bogie List' table. The list displays bogie types, bogie codes, and their corresponding accommodation capacities.

Filter

There's a filter field at the top of the dialog box that allows users to narrow down the bogie list based on specific criteria, making it easier to find the needed bogie type.

Accommodation Details:

Next to each bogie type, the accommodation number is listed, which indicates the capacity of each bogie.

Pagination:

Users can navigate through the list of available bogies using the pagination controls at the bottom of the list, which is particularly useful if there are many bogie types to browse through.



Fig: 4.1.8

Show Layout:

The 'Show Layout' button can be used to view a graphical representation or layout of the selected bogie type, providing a visual confirmation of the bogie's structure.

Update:

Once the desired bogie type is selected, the user can confirm the selection by clicking the 'Update' button, which will then record the selected bogie type for the coach class in the Train Profile Changes system



Fig: 4.1.9

c. If the Replaced coach is a Higher-Cass Coach, an alert message pops up saying that "You are Replacing a Higher-Class Coach. Are you sure you want to continue.?". If Yes is selected, the operation shall continue & if No is selected, New Class coach may be modified again.

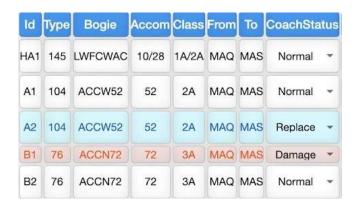


Fig: 4.1.10

3. **DAMAGE**: The status of normal coach may be modified as DAMAGE if the coach is DAMAGED & unable to find a suitable replacement. The row will be displayed in red. Once the DAMAGE option is selected. Further none of the operation will be enabled in this row. Only status can be changed back to Normal or Replace again, if required.

Fig: 4.1.11

SE1 138 GSCN80 80 SL MAQ MAS Dummy
D1 171 GSCZ100 100 2S MAQ MAS Normal

4. **DUMMY**: The DUMMY coach will be displayed in red colour by default while fetching the Coach details. No operations can be performed as the dropdown will be disabled. In other words Coaches with 'DUMMY' status are effectively non-operational within the train profile.

Validations

Physical Coach: When entering the Physical Coach number, ensure proper Zone Code and 4 to 5 numbers are keyed in, which typically includes the correct length and format. If you enter only a number like "SR12," the system will flag an error stating that the length should be longer (7 or 8 characters) and must be a valid physical coach number & if you enter values like "XX12345" the system will flag an error stating that it should start with zone code

Position from Engine: Position from Engine field must be a number starting from 1 & may range up to 50.

Copy/Paste Feature

This feature is particularly useful when you need to replicate the details of a replaced coach to another row with the same class. If the next coach requires similar replacement details, you can

use the Copy/Paste icons located at the end of each row to duplicate the data, avoiding the need to re-enter the same information manually.

Accept and Reject Buttons

- Accept: Once you have entered all the required details without any validation errors, the
 Accept button will finalize your changes. However, this button will only be enabled if all the
 fields pass the system's validation checks, as indicated by the absence of highlighted error
 messages. Clicking Accept will prompt a confirmation dialog box asking, "Are you sure you
 want to save the train profile?" Once confirmed by the user, this will result in a success
 message: "Train profile saved successfully."
- Reject: If you decide not to proceed with the changes you have made, or if you wish to revert
 to the original data, the Reject button will reset the modified train profile back to its initial,
 unmodified state. It is a quick way to discard changes if you encounter an error or change your
 mind.

When performing operations on the Train Profile Changes interface, it is important to review all entries for accuracy and completeness. The system's built-in validations are designed to help you maintain data integrity and ensure that only correct and complete information is saved to the train profile. Remember that until you click the Accept button, all modifications can be altered. However, once you confirm and save, the changes are permanent for that session.

4.2 PARTIAL DAMAGE

Partial Damage is part of MMI operation where berths in a coach are damaged one by one or in series. Partial Damage page will list the coaches available for the selected Train including replaced and added coaches. After selecting coach, a coach layout will be displayed with berth numbers. Berths can be damaged either by clicking on berth icon or manually by typing berth number in the input box form, which can be updated using Approve button.

Steps for Partially Damaging Berths

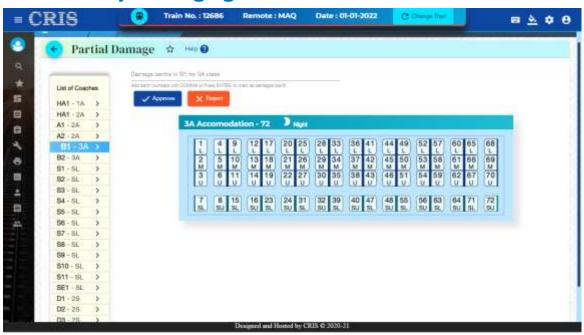


Figure 4-3 Partial Damage Page

- 1. Select the coach from List of coaches.
- 2. Coach layout will appear with Damage Berth Input box as shown below.



Figure 4-4 Damage berth Input and Coach layout

- 3. Berths can be damaged using two methods: **Providing berth numbers in Input box** or by **Clicking on berths in the layout**.
- 4. Damage berth using Input box:
 - i. Input berth numbers separated by comma can be entered to damage berths one by one.



Figure 4-5 Damaging berth using input field

ii. Damage series of berth by providing range from and up to berths numbers separated by hyphen (Example: '8-10' to damage berths between 8 to 10).



Figure 4-6 Damaging berth with input range of numbers

- 5. Damage berth clicking on Berths in layout:
 - i. Left Click on **Berth Number** in layout to damage berth one by one, damaged berths will be coloured in Red as shown below.



Figure 4-7 Damage berth by clicking berths on layout

- ii. To revert damaged berth back to normal, click on berth number again until it's colour is restored.
- iii. To start damaging range of berths, Right click on berth number and select **Start Damage Berth**.



Figure 4-8 Mouse Right Click Option on Layout

- iv. Right click on the berth where you need to end range of damaged berths and opt for **End Damage Berth**.
- v. Use Reset to clear Start Damage Berth, if you have wrongly selected the starting



Figure 4-9 End Damage berth option

range.

6. Damaged berth will be displayed on right hand side table shown below.

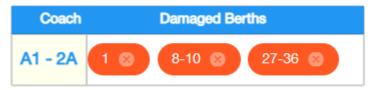
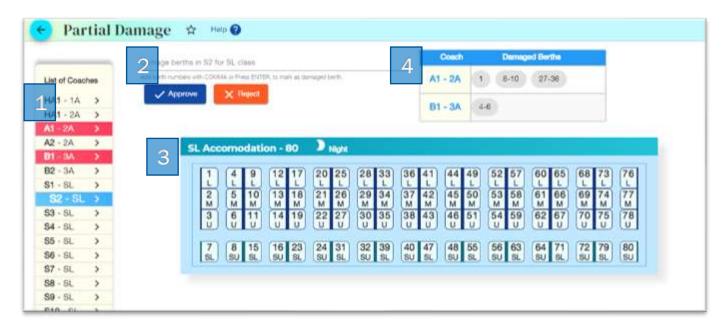


Figure 4-10 Damaged Berth List Table

- 7. To revert damaged berths to normal from the list, click on x ic...
- 8. Update the partially damaged berths by clicking on **Approve** or else **Reject** to clear the partial damage changes.



Figure 4-11 Approve and Reject after partial damage



Partial Damage Page Layout

- 1. List of Coaches with Coach ID and Class.
- 2. Input box with Approve and Reject button.
- 3. Coach Layout with berth numbers.
- 4. List of Damaged Berths with Coach ID.

4.2 ADDITION OF COACHES

This feature streamlines the process of adding a new coach to the train profile before charting. The interface is divided into two sections: on the left, users can view the list of added coaches, while on the right, they can input details for a new coach.

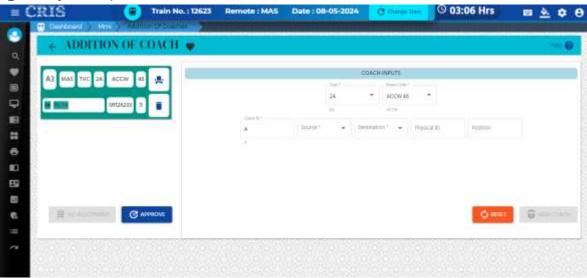


Figure 4-12 Addition of Coach Form

In the coach input form on the right pane, users can input relevant details for the new coach. They can select the class and bogie code, which triggers additional fields to input, along with a prefilled coach ID for the chosen class. Upon entering the coach ID, source, and destination selections, input fields for quota distribution become available. Notably, the "Physical ID" and "Position" fields are optional. Users can opt out of providing quota distribution details by clicking the close button.



Figure 4-13 Coach Information fed

For users wishing to add quota distribution, they can do so by clicking a plus sign and selecting the coach and quota distribution details. Additional quotas can be added using the plus sign at the bottom of the quota distribution input fields. The "ADD COACH" button is activated only when all necessary fields are filled properly.

After inputting the information, users can click "ADD COACH" to include the new coach in the

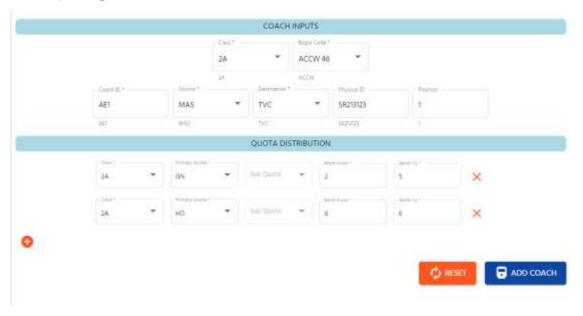


Figure 4-14 Quota information in Addition of Coach

list on the left pane. The "APPROVE" button on the left allows users to sync their work with the server after any modifications to the added coaches.

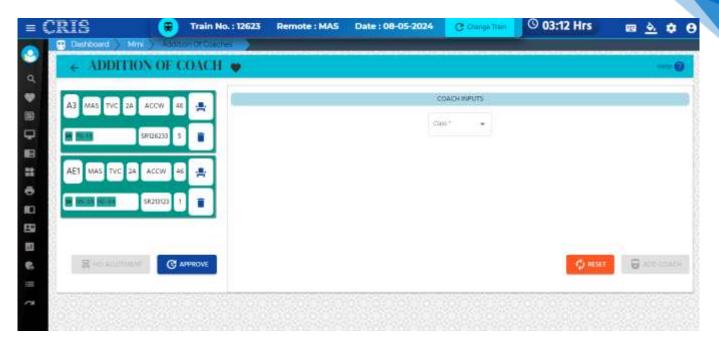


Figure 4-15 View Added Coach on left panel

-If any coaches have HO berths defined, the HO allotment button on the right pane becomes active. Clicking it permits users to navigate to the HO allotment page for further actions.

4.3 PROVISIONAL LIST

Provisional list contains the list of passengers boarding from all remotes starting from the current remote. Inputs for MMI is same for provisional list preparation. Provisional list Preparation under MMI lists all passengers in First class/First AC coach with details of cabin/coupe choice, with their probable status after chart preparation. Provisional List page displays Coach destination and number of cabins and coupes. Also linked PNR details and RS station and no of berths.

Search pagination option also provided in provisional list view User can search any keyword



Figure 4-16 Provisional List

in provisional list table and any number of items can be displayed in the table using paginator option provided.



Figure 4-17 Provisional List Search option

If Cabin Coupe Allotment already exists when a user tries to prepare provisional lists, proper error message and notification will be used in GUI. User should confirm whether they want to prepare provisional list again, if cabin coupe allotment exists. If user's response is yes, then previous cabin coupe allotment will be lost and provisional list will be prepared again.

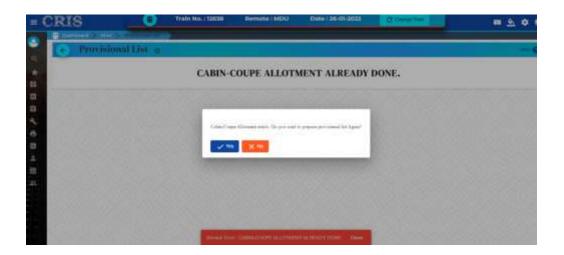


Figure 4-18 Provisional List Preparation: CCA already exists

If there are no passengers in 1AC or No 1AC Coach available a proper error message will be displayed in GUI.

4.4 CABIN COUPE ALLOTMENT

First AC passengers can be allotted using Cabin Coupe Allotment page by considering the priorities and choices of the IAC passenger. Passengers are allotted by Charting operator after preparing provisional list, which consists list of passengers that are confirmed or waitlisted. Operator can view both provisional list and Coach layout in Cabin Coupe page.

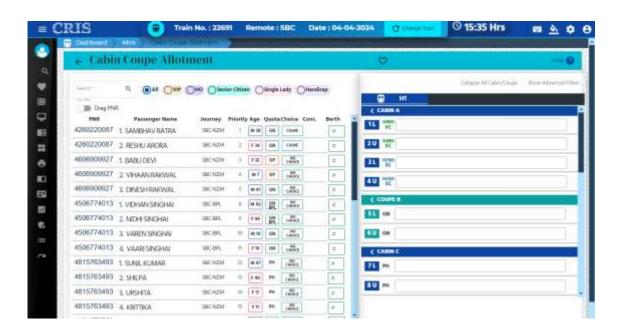
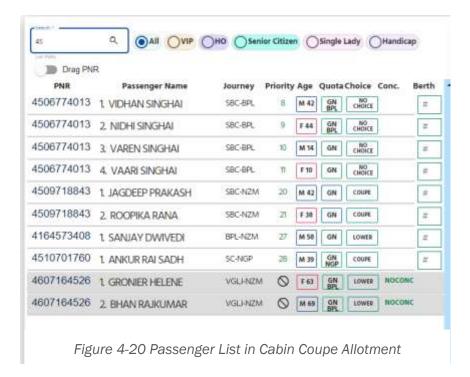


Figure 4-19 Cabin Coupe Allotment page.

- Passenger List On left side of the page list of 1 AC passengers are displayed.
- Coach List Coach layout is displayed on the right part of the page.

Passenger List

Passenger details consists of PNR Number with passenger index in PNR followed by Passenger Name, Journey From and Upto Station code, Priority, Age & Gender, Quota, Berth Choice, Concession Code.



- PNR Search Search bar is available to search PNR, Name to filter from list.
- Passenger Filters Passengers can be filter using radio buttons for VIP, HO, Senior Citizen, Single lady and Handicapped.
- **Drag PNR** Toggle button is provided switch between dragging PNR wise (with all passengers in PNR) or passengers one by one.

PNRs which cannot be allotted are disabled with Grey background (Next Remote passengers) and Red background (Waitlisted Passengers)

Coach List

Coach details consists of Coach ID Tab followed by Cabins and Coupe list. With each having berths with Berth Number, Berth Type (L – Lower, U - Upper) and Berth Quota. Berth is an empty box where passengers can be dropped after dragging from passenger list.

Cabin / Coupe Selection - Drop down allows to selectively display list of Cabins/coupes

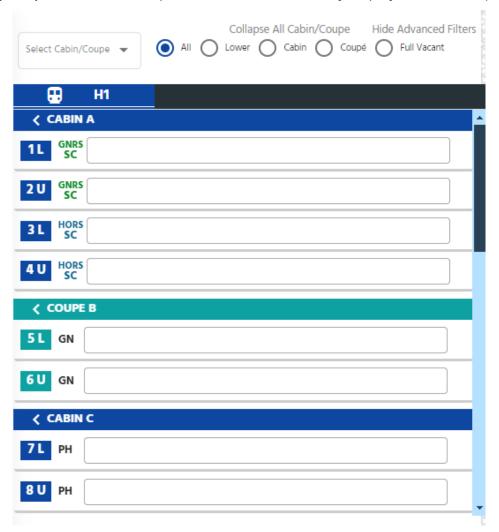


Figure 4-21 Coach List in Cabin Coupe Allotment

• Berth Filters - Filters to only display Lower Berths, Cabins, Coupes, Full Vacant berth

Drag & Drop

Passengers can be dragged using mouse from *list on the left to the berth box on the right side*. Allotted passengers can be seen within the berth when mouse was dropped. Those passengers are listed with *strike and light red background* as shown in the following figure.

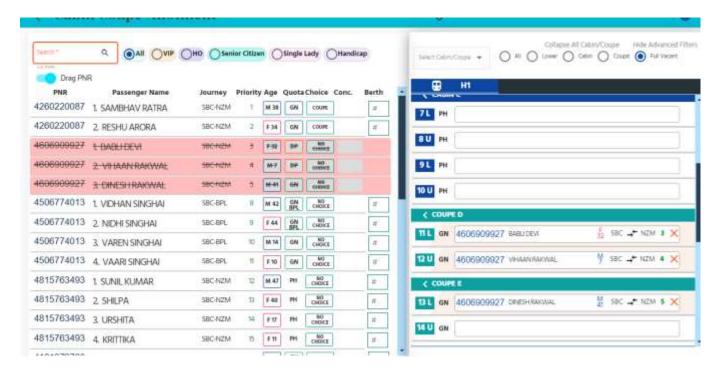


Figure 4-22 Passengers allotted after drag and drop

Passengers can also be dragged and dropped between the berths on the right. To remove passengers from the berth use \times icon.

- Linked Passengers If any of the linked passengers are dragged and dropped, passenger linked together will be allotted in the same berth.
- Drag PNR enabled If Drag PNR is enabled, drag and drop will allot all the passengers of the PNR one by one into the suitable berths where first dragged passenger was dropped.

Allot Berth using berth number

Passengers can be allotted using the input box next to the passenger details by feeding the berth number of the coach selected on right.



Figure 4-23 Allotment using berth number input

Auto-allotment

Auto allot button is available at the bottom of the screen. It can be used to allot all passengers into appropriate berths as per systems allocation strategy for best compaction. **"Clear All"** can be used to de-allot passengers and clear the berths.

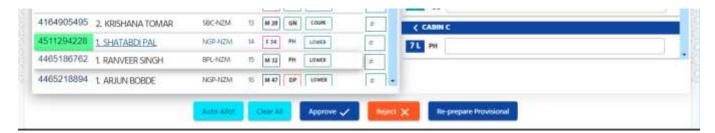


Figure 4-24 CCA - Auto allotment & Clear All buttons

Cabin Coupe Summary

Cabin coupe summary will be displayed once "Approve" button is clicked after cabin coupe allotment is completed. It will analyze the allotments done by the operator and list out cases like:

- Senior citizens passengers allotted in Upper berth.
- Pregnant lady passengers allotted in Upper Berth
- Single Lady passengers who were allotted in Coupe
- Passengers whose berth choices like upper or lower which was not honored while allotting.
- Passengers choice of Cabin or Coupe which was not honored.

PNRs whose passengers are allotted in different cabin/coupe.

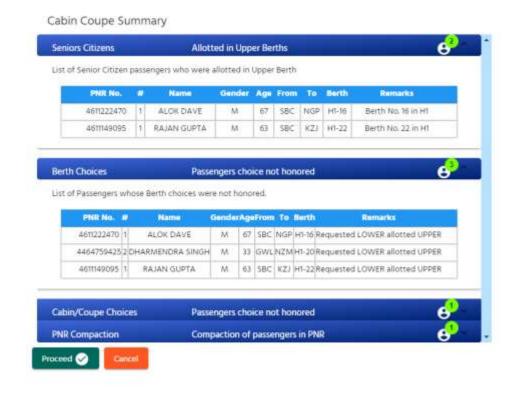


Figure 4-25 Cabin Coupe Summary before approval

Operator can continue with Proceed and system will update the allotment or Cancel to do any further



Figure 4-26 Warning icon on passengers for cases listed in Summary

changes in the allotment given.

While allotment is done Berth will show few cases as warning icon shown in the figure below so that operator can do necessary changes during allotment itself.



Figure 4-27 Final confirmation for Approval of CCA Update

Once **proceed** is clicked a final confirmation will be prompted to user for updating Cabin Coupe allotment

4.5 TTE COACH ASSIGNMENT

TTE Coach Assignment: TTE Coach Assignment is one of the MMI Operations in Charting Application. For all MMI operations input TDRC should be provided at MMI input section. In TTE coach assignment, TTE can be assigned to each coach between From and To ISLs of the train. A user can assign TTE, TS or TCP by using this option under MMI.

Here the user needs to select the designation as either TTE, TS or TCP. Next, they need to provide name of the TTE, TS or TCP. Next select the boarding and deboarding stations—from the list of ISLs provided. After that they need to select the coaches to be manned by the TTE. Boarding and deboarding stations need not be same. Boarding station will show all the ISLs from source ISL of the Train up to destination ISL. The deboarding station lists all the ISL follows the selected boarding station up to train destination.

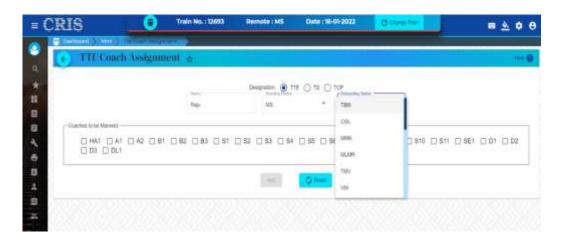


Figure 4-28 TTE Coach assignment-TTE Input

A TTE already assigned to some selected coaches between a pair ISLs, then a user tries to add a TTE between the same pair of ISLs or stations overlapped between the added TTE's ISLs, then the coaches to be manned will display all the coaches in train except those manned coaches of added TTE.

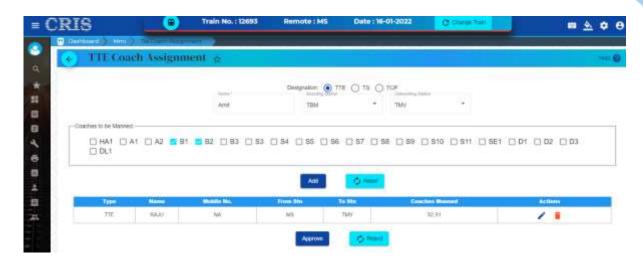


Figure 4-29 TTE Coach assignment-TTE Input if TTE exists between same pair of ISLs

If TS or TCP is selected then boarding and de boarding fields will be auto filled with source and destination ISL of the train and the coaches to be manned auto checked all the coaches of train and all these fields appeared in disabled mode. If TS is selected by the user, user should provide a valid ten digits mobile number of TS.

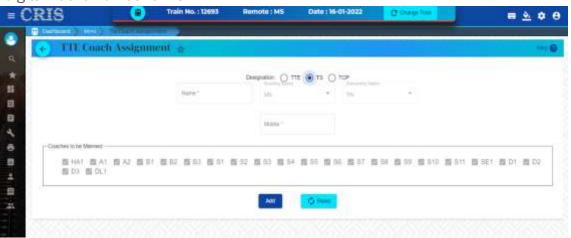


Figure 4-30 TTE Coach assignment-TS Input

If TCP is selected, TCP coach ID and accommodation or seat number also need to be provided. TCP coach ID need to be selected from a dropdown list of valid coach IDs. And accommodation is a valid berth number less than the maximum ACM no of the selected coach.

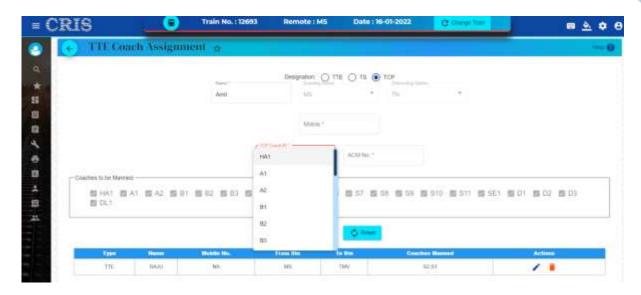


Figure 4-31 TTE Coach assignment-TCP Input



Figure 4-32 TTE Coach assignment-TCP Input

After providing all these input details a user can click the add button provided, this button will add the selected TTE, TCP or TS to the selected coach between selected ISLs. And the input fed can be reset by clicking the reset button provided.

Added TTE, TCP, TS will be appeared in a table below and added details can be edited by clicking the edit button provided to the right side of each row in the table, and deleted by clicking delete button



Figure 4-33 TTE Coach Assignment- TTE Added

The Edit button click will populate all the added details of the TTE, TS or TCP to the input field and user can edit all the input and can de-select the already selected coaches and select new coaches to be manned and edited details cab be updated by clicking add button provided below.



Figure 4-34 TTE Coach Assignment-Edit Button click

A user cannot add TCP and TS at the same train. If a user tries to add TCP if TS already exists, then an error message shows as "Either TCP or TS can be entered, First delete TCP and then Try again vice versa. Then user can add TS by deleting TCP first and then add operation.

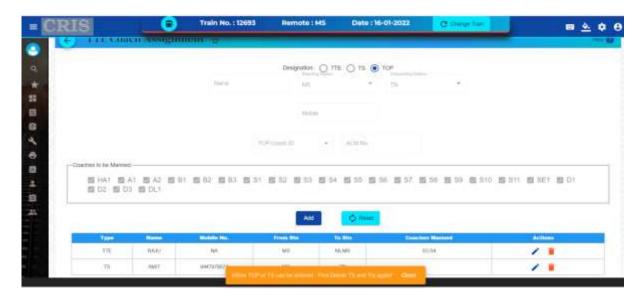


Figure 4-36 TTE Coach assignment-TS Exists

If TS already added and user tries to add again an error message "TS Name already entered" will be displayed.



Figure 4-35 TTE Coach assignment-TS Exists

User can save the added details to the database by clicking the approve button. On clicking the "Approve" button, a pop window will appear for asking confirmation from user. On clicking "Yes" the added details will be updated or saved to the database. And the changes can be rejected without saving to database by clicking reject button.

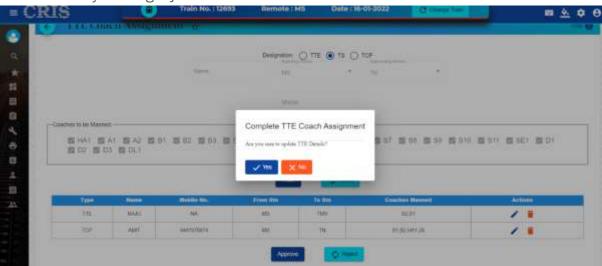


Figure 4-37 TTE Coach Assignment-Approve Button Click

4.6 VIEW PROFILE CHANGES

This section provides interface to view various profile changes. This includes profiles of added coaches, partially damaged coaches, and standard profile changes. The interface is designed to help easily navigate through different sections to find specific information. There is a Expand/Collapse All at the top right to expand or collapse all sections simultaneously.

Sections of the Interface

The interface is divided into multiple sections, each contained within an expandable panel that can be independently viewed:

- 1. Profile List: Displays the full list of profile changes.
- 2. Partial Damage List: Shows all coaches that have partially damaged profiles.
- 3. Added Coach List: Lists all newly added coaches.

Each section provides a detailed table listing specific attributes related to each profile, such as coach number, class, quota, and source and destination information. You can sort the data by any column to organize the view according to your preferences. Integrated search functionality allows you to quickly find specific entries within the table.

Help and Assistance

The interface is equipped with a 'Help' feature, providing step-by-step instructions for various tasks and functionalities within the interface. This is especially useful for new users or complex tasks.

Conclusion

This interface is designed to streamline the process of viewing profile changes within the system, ensuring that all information is accessible and manageable in a user-friendly format. If further assistance is needed, the help section provides comprehensive guidance, or you can contact system support.

4.7 UNIFIED MMI

The Unified MMI is the standout feature of the latest charting application. It is designed to make it easy for users to handle various train related tasks like adding coaches, train profiling, and partial damage, all from one screen.



Figure 4-38 Unified MMI page

Its main goal is to prevent mistakes by allowing users to make multiple coach changes at once. When you enter the Unified MMI for the first time after acquiring the MMI lock for the TDRC, you will see the train profiling done by the database operator of your zone.

4.7.1 Feeding Physical Coach ID and COACH Position

In the toolbar, there is a button labelled "Feed Physical No / POS" which lets users input a Unique ID of coaches provided by the train operations team along with their positions.



The background colour (green/red) of the button "ICMS" to indicate whether ICMS data is available. Clicking this button redirects to the dialog with the coach details and ICMS data for all available coaches.



Figure 4-39 ICMS Coach ID and Position entry Form

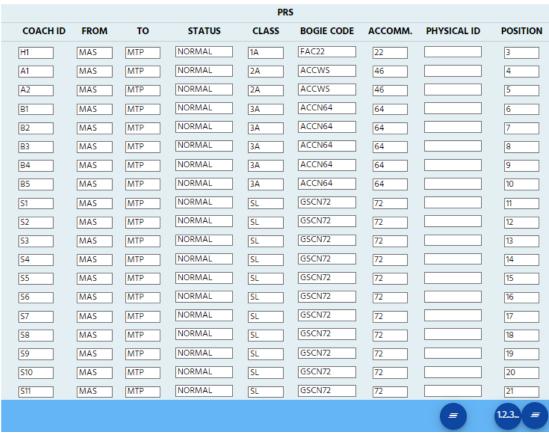
Under the ICMS Physical ID and Position columns, there are buttons to copy ICMS data to your train profiling data. You can also copy data from the position to the train profiling data in the same order or in reverse order.



If ICMS data isn't available, you can manually input your data using the provided text box against each coach. There is also a button to clear data filled in the Physical ID and Position columns.



At the bottom of the Position column, there is a button labelled "123" which lets you input position numbers in ascending order. If you leave the first coach position as blank, it will start numbering from 1. If you specify a starting number in the first position and press this button, numbering will begin from that position.



Once you've completed all your tasks, you can submit the data by clicking the "SUBMIT" button. Now, all the data you entered on the data entry page will be available on the main page.



Figure 4-40 Data entry after Submit

4.7.2. Addition of Coach

The "Coach Addition" button in the toolbar allows users to add a coach to the train profile. When clicked, it opens a dialogue box where users can input details for the new coach. Users can select the class and relevant bogie code, which then displays additional fields to be filled along with

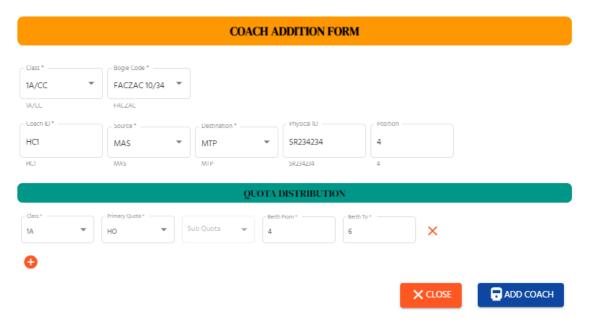
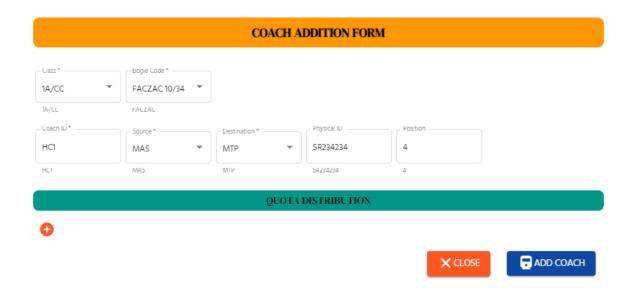


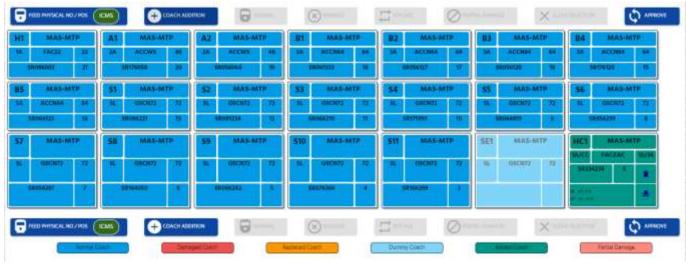
Figure 4-41 Unified MMI - Coach Addition Form

a pre-filled coach ID for the selected class. Once a proper coach ID is entered along with source and destination selection, input fields for quota-distribution appear. The "Physical ID" and "Position" are not mandatory fields in the coach details. Users can discard the quota distribution input fields by clicking the close button if they choose not to provide any quota distribution for the coach.



If user wants to add quota distribution, they can click a plus sign and select the class and quota distribution details they want to input. Additional quotas can be added by clicking the plus sign provided at the bottom of the quota distribution input fields. The "Add Coach" button is enabled only when the form is filled with proper data. After completing all the details, users can click the "Add Coach" button to submit the data to the main page.

The added coach will then be visible on the page, appearing last among the regular coaches. In the added coach, the "Delete" button allows users to remove the added coach, while the "Edit" button



enables users to modify the information of the added coach.

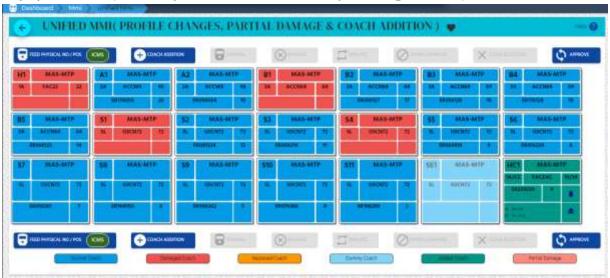
4.7.3 Train Profiling

Train profiling can be done by selecting one or many regular coaches. Clicking on a coach selects it, and clicking again deselects it. You can select or deselect any number of coaches at a time. To revert selections, there is a "Clear Selection" button in the toolbar.



When one or more coaches are selected, various operations with enabled buttons become available in the toolbar for making changes to the train profile. For instance, if you want to mark multiple coaches as damaged, you can select them and then click the "Damage" button. After clicking this button, the selected coaches turn red, indicating that they are damaged.

Similarly, you can replace any number of coaches by clicking the "Replace" button. This action



prompts a dialogue box where you can input information about the replacement coach, such as class and bogie code. Once this information is filled, a "Copy" button is enabled for that coach. Clicking this button enables a "Paste" button for coaches of the same type if available, allowing for easy replacement of multiple coaches with the same replacement coach.

After submitting the replaced coach information, it appears on the main page of the Unified



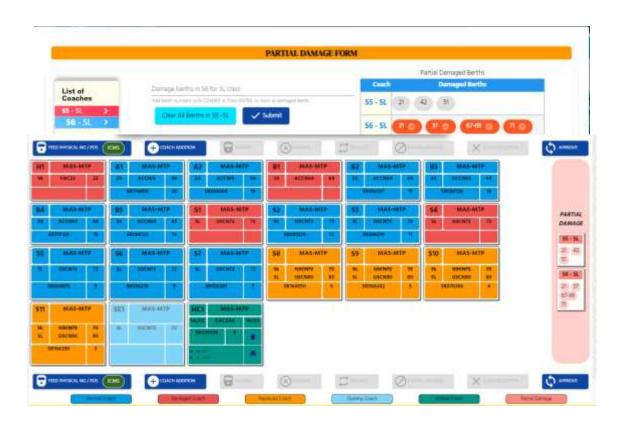
MMI. Replaced coaches are displayed with an orange background, with the old coach information strike out and the new coach information appended below it.



To revert any damage or replacement, simply select the coach again and click the "Normal" button. This action changes the coach's background to blue, indicating that it's back to normal, with only relevant information displayed.

4.7.4 Partial Damage

Similarly, partial damage to coaches can be carried out by selecting one or multiple coaches. After clicking the "Partial Damage" button, the selected coaches are displayed in a dialogue box, where users can specify the extent of damage for each coach. Once the operation is completed, users can submit the data to the main view of the Unified MMI.



Upon submission, a separate table containing the partial damage information is visible on the right pane of the main page of the Unified MMI.

To modify or delete existing partial damage entries, users need to select the coaches again and perform the partial damage operation.



After completing all the MMI operations, users can save the data by clicking the "Approve" button. Upon clicking this button, the data is synchronized with the server, and an alert message appears confirming the successful completion of the Unified MMI work.



4.8 HO ALLOTMENT IN ADDED COACHES

This section of MMI outlines the process for allotting HO or HORS berths to passengers in added coaches. This operation is only functional when HO/HORS berths have been made available through the quota distribution system.

Interface Layout

The interface is divided into two main sections:

- Left Section: Displays details such as Coach, Class, Quota, Berth list, and the journey's Source
 & Destination.
- Right Section: Features a Search PNR (Passenger Name Record) option to fetch details for passengers according to the selected coach class and list based on search

Process for Allotment

- 1. Ensure HO/HORS Availability: The ability to allot HO/HORS berths is contingent upon these being made available through the quota distribution process for the added coaches.
- 2. Selecting Details:
 - Start by selecting the Coach from the available list.
 - Choose the Class and the Quota applicable, select the Sub Quota if HORS is selected.
 - The interface will display the Source and Destination for the selected journey segment.
- 3. Searching for Passenger PNR:
 - Use the Search PNR option on the right to enter a Waitlisted PNR.
 - Once a PNR is entered, the passenger details will be listed below.
- 4. Allotting Berths to Passengers:

Passengers can be allotted berths from the HO/HORS berths list by two methods:

- Drag and Drop: Drag the passenger from the passenger list and drop them onto the desired berth in the berth list.
- Manual Entry: Key in the available berth number directly next to each passenger's details.
- 5. Approving or Rejecting Allotments:
 - Approve: Once you have allocated the berths either by dragging or keying in the numbers, click the 'Approve' button to save the data. This action finalizes the allotment.
 - Reject: If you need to clear the filled data, click 'Reject'. This action will undo the changes you have made.

This interface is designed to facilitate the efficient allocation of HO/HORS berths in added coaches, ensuring that passengers are accommodated according to the available

quotas and preferences. By following these steps, you can effectively manage berth allotment for your passengers.

4.9 VIEW CABIN COUPE ALLOTMENT

View Cabin Coupe Allotment under MMI option is user for displaying the cabin coupe allotment done before the Chart preparation. There are two options available for cabin coupe allotment view page. First option is Tabular format and the second is Cabin Coupe view similar to final chart view. After clicking View Cabin Coupe Allotment option under MMI, all the 1AC coaches will be displayed first. User need to select the 1AC coach to view Cabin Coupe allotment from the displayed 1AC Coaches. Then Select Normal view option for viewing in tabular format and Cabin coupe View for viewing in Cabin Coupe format. Input TDRC provided for invoking all MMI operations.



Figure 4-44 View Cabin Coupe Allotment: Select Normal View (5items per page)



Figure 4-43 View Cabin Coupe Allotment: Select Normal View



Figure 4-456 View Cabin Coupe Allotment: Select Normal View (Search Cabin A)

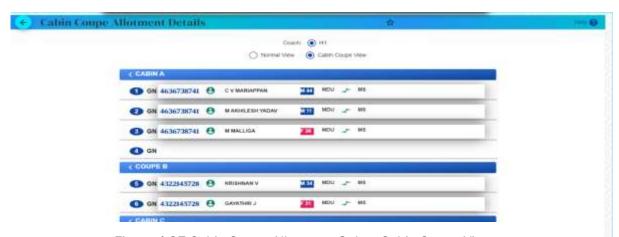
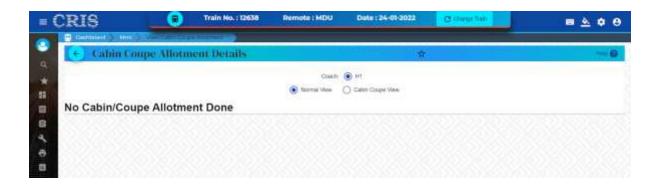


Figure 4-27 Cabin Coupe Allotment: Select Cabin Coupe View

If Cabin/coupe allotment not done and user tries to view cabin coupe allotment, then proper error message will be displayed.



4.10 VIEW HO ALLOTMENT IN ADDED COACHES

View HO Allotment in added coaches is one of the functionalities under MMI module. Input TDRC for view HO Allotment in added coach is sane as MMI Input. All the added coaches in input TDRC is displayed as radio buttons. And by default, ALL option is checked in added coaches and HO Allotment in all the added coaches are displayed in table. Paginator is added in the display table, where user can select the items per page to display as 5, 10, 15...etc.



Figure 4-46 View HO Allotment in Added Coach AE1



Figure 4.9-8 View HO allotment in added Coach: Search key PNR No: 4121668732



Search option also provided in display table, where user can filter items in table based on search Key.

Help button also provided at the top of the page, on clicking the button, will displays the instructions for performing View HO Allotment in added coaches in Charting UI Application.

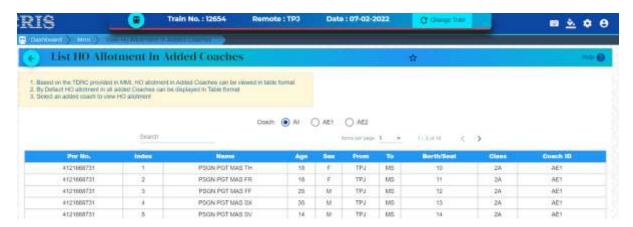


Figure 4.9-10 View HO allotment in added Coach: Help button

If User want to View HO allotment in a specific added coach, select that coach, then HO allotment in that coach only displayed. If Added coaches not exists or HO quota not defined, the proper error

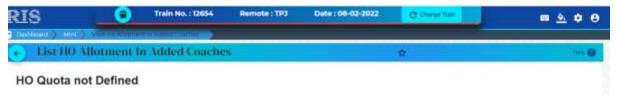


Figure 4-48 View HO allotment in added Coach: HO quota not defined message is displayed in UI.

5 UTILITIES

5.1 ENABLE CURRENT BOOKING

If current booking is disabled after chart, user can enable it from Utilities option "Enable Current booking". Train, Date and Remote can be fed to enable current booking.



Figure 5-1-1 Enable Current Booking Form

Current booking can be enabled if Charts are prepared and Current booking is disabled or else error

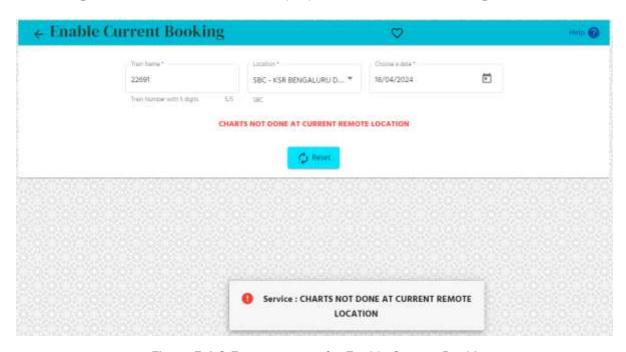


Figure 5-1-2 Error message for Enable Current Booking

message will be shown as below.

5.2 CURRENT BOOKING LIST

Current Booking List can be prepared after Final Chart is prepared and passengers will be listed who were booked after chart through current booking. Once the current booking list is prepared it will disable booking of any current booking passengers. To prepare current booking list enter the following TDRC details for the remote.



Figure 5-2-1 Current booking list Input form

Once Current Booking List is prepared page will list files (including Hindi, if language is selected) with Printer Queues available as shown in the figure below.



Figure 5-2-2 Current Booking Files List

Click on the Filename to view PDF format of the Current Booking List prepared.



Charting UI - User Guide

5.3 EX BOOKING LIST



Figure 5-3-1 Ex-booking List Preparation Input Form

Ex-Booking List will be available for preparation after Final Chart is prepared and passengers will be listed based on the locations which can be selected while feeding the TDRC details as shown in the form below.

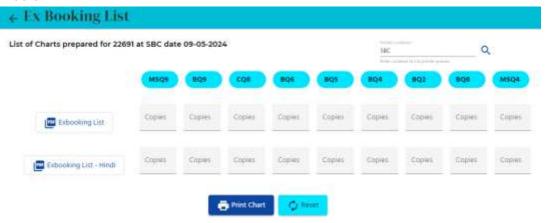


Figure 5-3-2 Ex-booking File listed with Printer Queue

Once Exbooking list is prepared for the location files will be listed as shown below. Click on the Filename to view PDF format of the List prepared.



Figure 5-3-3 Exbooking List PDF View

5.4 VIP LIST

Input Details

On opening VIP List for Display, You'll need to enter specific train details to access the already prepared VIP list. Input the Train Number, select the Remote location related to the VIP list, and specify the Date. These fields come with intuitive tooltips that appear on hover, offering additional guidance as needed.

Accessing the VIP List

With the necessary details provided, the system will fetch the previously-prepared VIP list and should load automatically for your review.

Viewing and Printing

The VIP list, once retrieved, will appear on screen in PDF format. You can print a copy, using the 'Print Chart' button. Ensure your printer is set up and ready to create the hard copies you need.

5.5 VIP FOR ALL REMOTES

Entering the Date

Enter the date corresponding to the VIP list required for all Remotes. The date should be entered in the DD/MM/YYYY format, or you may select it through the calendar feature for ease and accuracy.

Accessing the VIP List

Since the VIP List for all remotes has already been prepared, you can retrieve the comprehensive VIP List for all remotes based on the train number and date you've provided.

Viewing the Prepared List

The VIP List for all remotes, once fetched, will be displayed in a PDF format, allowing for straightforward review and verification. If the system encounters any issues during retrieval, it will display an error message to alert you and provide guidance on resolving the issue.

Printing the VIP List

Click on the 'Print' button. Prior to printing, make sure to choose the correct printer location and determine the number of copies you need using the dropdown list for printers.

5.6 ADVANCED VIP LIST

Journey Type Selection

For the journey type, you have two checkboxes to select from:

- 1. Arriving: Use this option when you need to prepare a list for VIPs arriving at a station.
- 2. Boarding: Select this for VIPs who will be boarding at the station.

Choosing the Station

Next, select the specific station for which you want to prepare the Advanced VIP List. This list can be tailored for one or multiple stations, depending on the needs of the service.

Inputting the Date

Enter the date for which the VIP List is to be prepared. As with other lists, you may input the date manually in the DD/MM/YYYY format or pick a date from the interactive calendar feature for convenience and accuracy.

Including or Excluding VIP En-Route

You have the option to include VIPs who will be en-route. Select the appropriate option to either include or exclude VIPs en-route from your list, depending on the requirements.

Preparing the Advanced VIP List

Once all the information is set, click on the 'Proceed' button to initiate the preparation of the Advanced VIP List. This will prepare and display the list in a PDF format. If there's a problem during this step, an error message will be provided to alert.

Printing the List

After the Advanced VIP List is ready and you have reviewed it, you can print the list by clicking on the 'Print' button. Remember to select the correct printer location and the number of copies you need from the printer dropdown menu before initiating the print command.

5.7 ALPHABETICAL LIST

Alphabetical list preparation is a functionality under utilities module of Charting UI Application. For Alphabetical list preparation, user need to provide input for train number, remote station and date of journey. Then click the prepare button to prepare alphabetical list. And there is also a reset button to reset the input TDRC.



Figure 5-5 Alphabetical List Preparation



Figure 5-4 Alphabetical List Preparation input TDRC

On clicking the prepare button, alphabetical list has been prepared and displayed as pdf



Figure 5-6 Alphabetical List displayed as Pdf

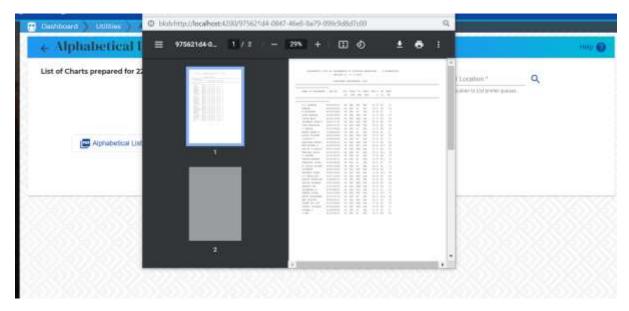


Figure 5-7 Alphabetical List opened as Pdf

User can view the prepared alphabetical list by clicking the pdf shown in display.

User need to prepare alphabetical list preparation after final chart preparation. If User tries to prepare before final chart preparation, then proper error message in displayed in UI.

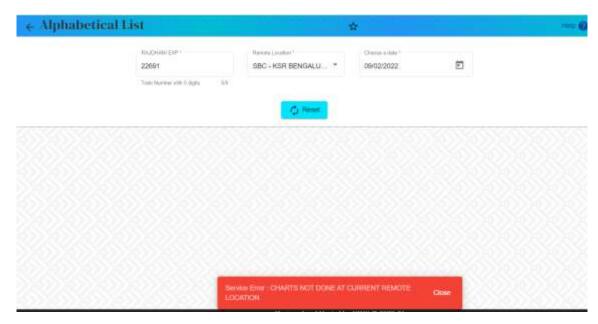


Figure 5-8 Alphabetical List preparation Before Final Chart Preparation

A Help button also provided at the top, on clicking the help button, user can see the instructions for preparing alphabetical List.



Figure 5-9 Alphabetical List Preparation: Help Button

5.8 INSERT MESSAGE IN CHART

Insert Message / Instruction is one of the functionalities under the Utilities module of Charting UI application. Where a user can insert particular message or instruction in Final Confirmed chart and Final Waitlist Chart. Before inputting message /instruction a user need to prepare the final chart of the particular TDRC. A user can insert message/instruction in all classes or from a specific class up to a specific class in Final Confirmed Chart and also in Final Waitlist Chart.



Figure 5-11 Insert Message/Instruction in Final Confirmed Chart

For inserting message/instruction in final chart, user need to provide valid TDRC and then select either confirmed chart or waitlist chart where the user want to insert message or instruction. For that Final chart should be prepared before trying message input. If Final chart is not prepared, an error message "No Chart Files Found" is displayed in UI. All input fields after this radio button got disabled in UI.

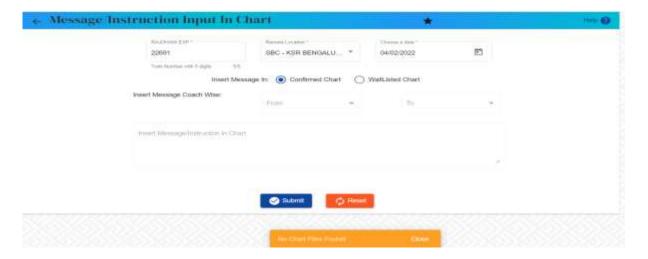


Figure 5-10 Insert Message/Instruction in Chart: No Chart Files

If User want to insert message in Final Waitlist chart, select Insert message in Waitlist chart. If Final Waitlist chart not prepared already, an error message "No Chart Files Found" displayed in UI. Otherwise all the classes in Final Waitlist chart got populated to "From" and "To" dropdown below. User can either select "ALL" option or specific class to insert message.

If Final chart is prepared all the classes in final chart got populated at From and To dropdowns. User can insert message either in all classes by selecting 'ALL' option provided as default in from and to dropdowns or any specific classes by providing input at from and to dropdowns. After that user can input the message /instruction in the description box provided below and press submit button.

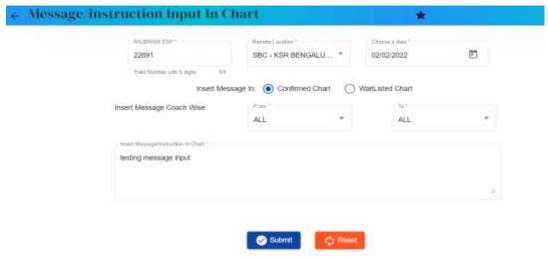


Figure 5-14 Insert Message/Instruction in All classes in Final Confirmed Chart

Submit button click will provide a confirm notification for user, whether sure to update message/instruction input. If user provide yes, the inserted message/instruction got updated in Final chart file, else user can try insert message again. Reset button click will refresh all the input fields.

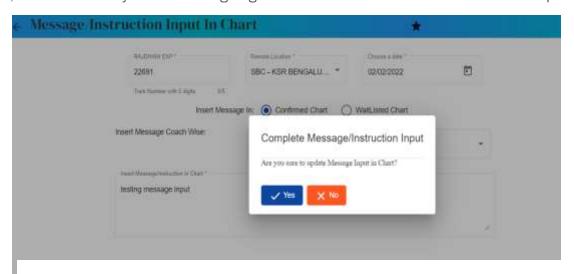


Figure 5-13 Insert Message/Instruction Chart: Submit button Confirm Notification

5.9 EDIT 1AC CHART

Edit 1AC chart is an option under utilities module of Charting UI Application. Here User can edit 1AC chart files by editing passenger berth details or swapping passengers in two berths. For Edit 1AC Chart operation user need to provide input TDRC and press Edit Chart File button.



Figure 5-15 Edit 1AC chart Input

Edit Chart File button click will displays all the 1AC coaches in the provided input TDRC. User need to select particular 1AC coach where he wants to do edit operation. Reset button will refresh the input fields.



Figure 5-16 Edit 1AC chart coach Selection

On selecting particular 1AC coach, the 1AC Coach layout with allotted passengers at Final Chart is displayed. User can edit passenger berth details by clicking the edit button on right side of berth index.

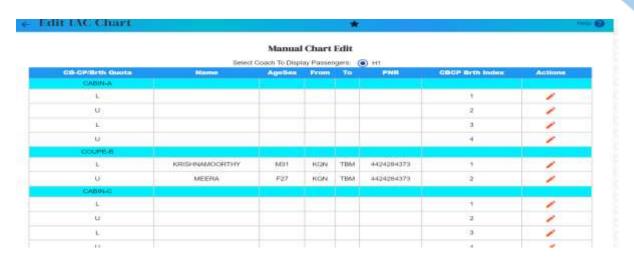


Figure 5-18 Edit 1AC final 1A chart layout



Figure 5-17 Edit 1AC final 1A chart layout

Edit button click will auto populate edited passenger details to the right side and user need to enter the new accommodation details by selecting the new coach, cabin/coupe and new berth index from the new accommodation details dropdown provided. And for performing edit operation user needs to press swap berth button and reset button will refresh all the inputs in edit form.

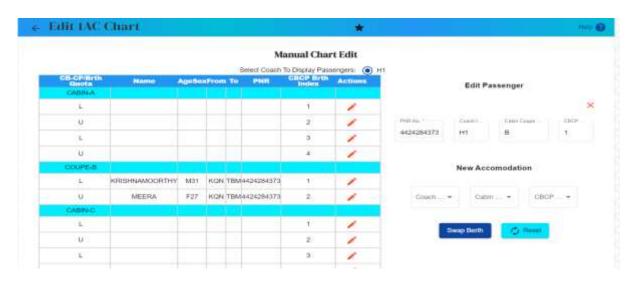


Figure 5-19 Edit 1AC final 1A chart Edit Button Click

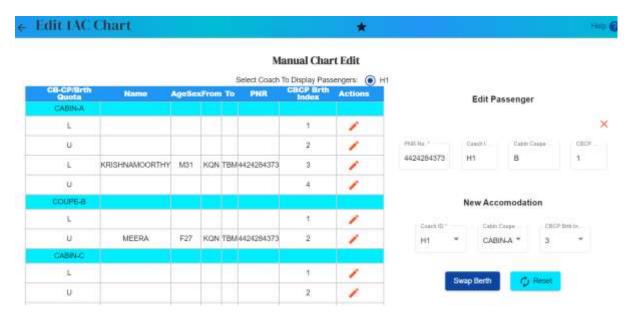


Figure 5-20 Edit 1AC final 1A chart Swap berth Operation

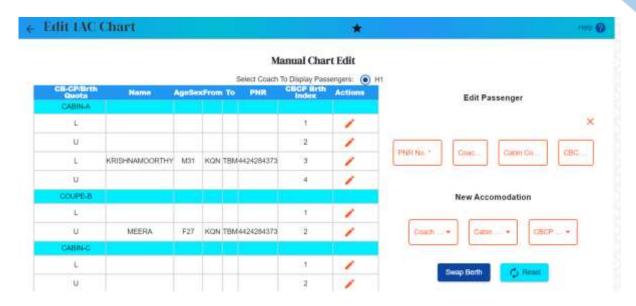


Figure 5-22 Edit 1AC final 1A chart Reset button click on edit form

After performing edit operation user can save or update the edited details to the database by clicking the approve button. On clicking a approve button confirm notification will be displayed to the user whether sure to approve edit 1AC operation. If user click yes, edited details will be updated to the database and proper message will be displayed as" Data updated successfully" or if user click no he can continue to edit or reject the edit operation performed earlier.

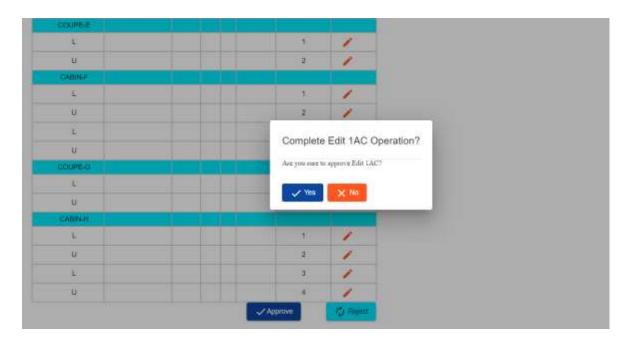


Figure 5-21 Edit 1AC approve Button Click

5.10 PRINTER JOB STATUS

This section is designed to help you to verify the Printer Job Status interface effectively. This section allows you to monitor and manage print jobs, check the status of various printer queues, and handle specific printer settings at your location.

Searching and Selecting Printer Location

- Printer Location Selection: Start by entering the printer location code in the provided field. As you type, an autocomplete feature will suggest available stations based on your input.
- Initiating Search: After selecting or typing the location, click the search icon next to the input field to list the printers associated with the specified location.

Printer Queue Selection

Queue List: Below the search area, a list of printer queues will be displayed. Each
queue can be selected to view specific job details. Hovering over a button toggle will
show a tooltip with the printer queue and location name for better identification.

Viewing Printer Jobs

- Job Status Overview: Once a printer queue is selected, the interface will display the current status of the queue, including all active print jobs.
- Job Details Table: A detailed table will list all the jobs in the selected queue. Information such as job entry number, job name, job owner, job status, and job size will be displayed. This table allows for comprehensive monitoring and management of print jobs.

Job Management

- Selecting Jobs: Each job can be selected using a checkbox next to its details. This
 feature is useful for performing bulk actions like deletion.
- Deleting Jobs: To delete one or more selected jobs, click the 'Delete Jobs' button. This will remove the selected jobs from the queue.

5.11 VIEW PROFILE CHANGES FOR PAIRING TRAINS

This section of the interface is specifically designed to view profile changes for pairing trains—trains that are returning from other stations. It provides a structured and navigable environment to view changes across different profiles of trains, added coaches, partially damaged coaches, and standard profile changes. Expand/Collapse All: Located at the top right of the interface, this feature allows you to expand or collapse all sections simultaneously for a comprehensive or compact view, respectively.

Sections of the Interface

The interface is systematically divided into multiple sections, each within its own expandable panel. These sections can be independently accessed to view specific types of profile changes:

- Profile List: Displays the comprehensive list of profile changes for all pairing trains.
- Partial Damage List: Shows all pairing trains that have partially damaged profiles, providing details of the damages and affected services.
- Added Coaches: Lists all the coach additions.

Each section is equipped with detailed tables that enumerate specific attributes related to each train's profile, such as train number, class, quota, and journey source and destination information. You can sort the data by any column to organize the view according to your preferences, enhancing the ease of data management. Integrated search functionality allows you to quickly locate specific entries within the table, making it easy to find relevant information without manual browsing.

Help and Assistance

The interface includes a 'Help' feature that offers detailed, step-by-step instructions for using various aspects of the interface. This is particularly beneficial for new users or when dealing with complex tasks.

This interface streamlines the process of viewing and managing profile changes for pairing trains. It ensures that all relevant information is easily accessible and manageable in a user-friendly format.

5.12 BOGIE PLAN LAYOUT

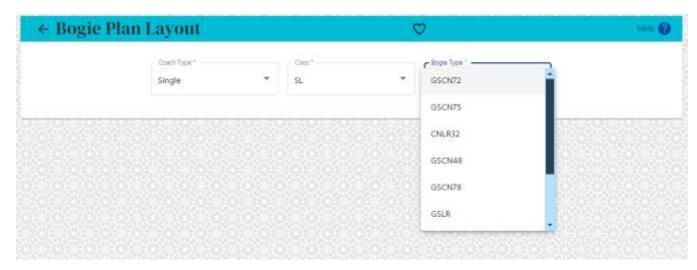


Figure 5-23 Bogie Plan Layout Form

User can view Coach Layout from Bogie Plan Layout option. First option is to select Type of Coach i.e. *Single* or *Composite*. Single type coaches have only one class whereas Composite type coach have two different class in a single coach. Next user has to select Coach Class and accordingly and the list of Bogie Codes will be displayed for the class. Once Bogie code is selected Layout will appear in below. Berths will be displayed with *Berth Number* and Berth type

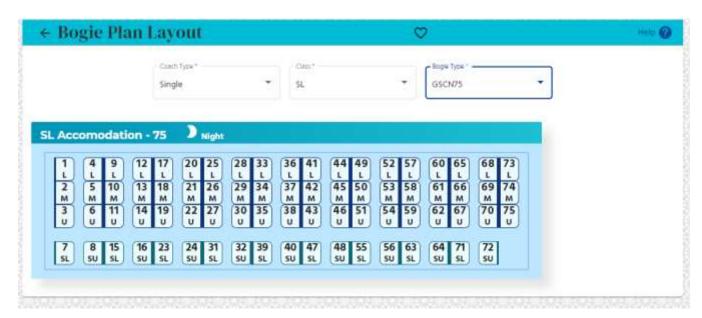


Figure 5-24 Coach Layout for Selected Coach

Berth Type : L – Lower , M – Middle, U – Upper, SU – Side Upper, SL – Side Lower, SM – Side Middle, W – Window Seat, S – Seat/Aisle Seat.

6 DISPLAY CHART

6.1 PROVISIONAL LIST

For Provisional list display user need to provide input TDRC, first train number followed by remote and date. Then there is a view button to view the prepared Provisional list. There is a reset button also there to reset the input TDRC.

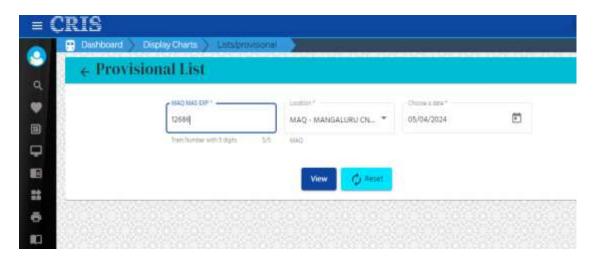


Figure 6-1 Provisional List Display Input TDRC

On clicking the view button prepared provisional list is displayed as a pdf list. The Pdf can be viewed by clicking the provisional list Pdf.



Figure 6-3 Provisional List Display View Button Click

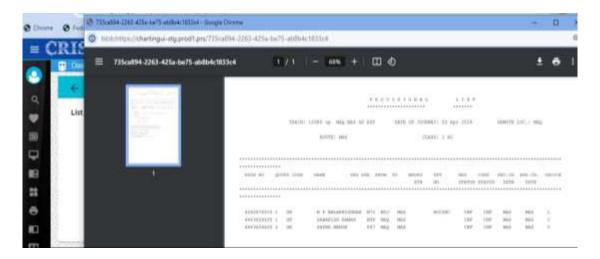


Figure 6-2 Provisional List Display Pdf View

On entering the Printer location Code, Existing Printer Queues will be displayed and user can select printer queue and number of copies and can print the provisional list.

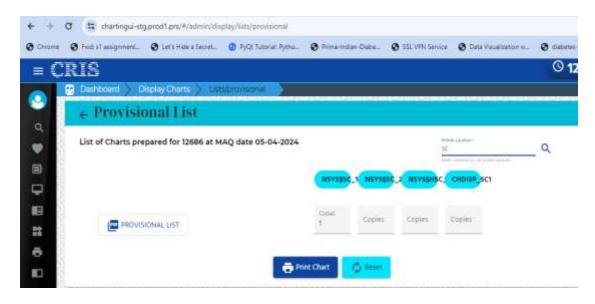


Figure 6-5 Provisional List display: Print Option

If user tries to display provisional list that is not prepared earlier, then proper error message will be displayed "No Chart Files Found".

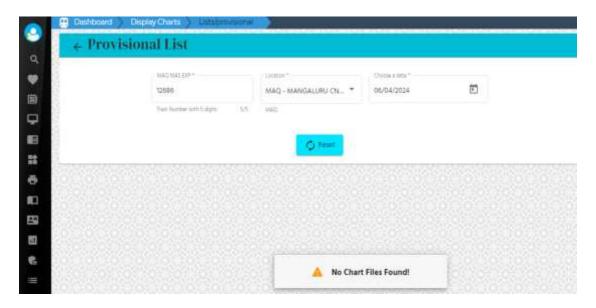


Figure 6-4 Display Provisional list if not prepared

6.2 ALPHABETICAL LIST

Alphabetical list display is a functionality under Display Chart Module. Where user can view prepared alphabetical list. If list is not prepared proper error message got displayed in display.



Figure: 6.11.1 Alphabetical List Display

For Alphabetical list display user need to provide input TDRC, first train number followed by remote and date. Then there is a view button to view the prepared alphabetical list. There is a reset button also there to reset the input TDRC.

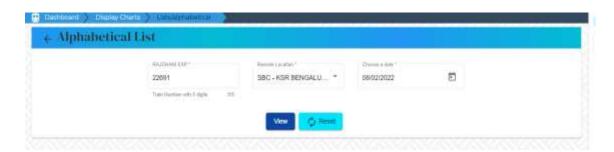


Figure: 6.11.2 Alphabetical List Display: Input TDRC



Figure: 6.11.3 Alphabetical List Display View Button Click

On clicking the view button prepared alphabetical list is displayed as a pdf list. The Pdf can be viewed by clicking the alphabetical list Pdf.

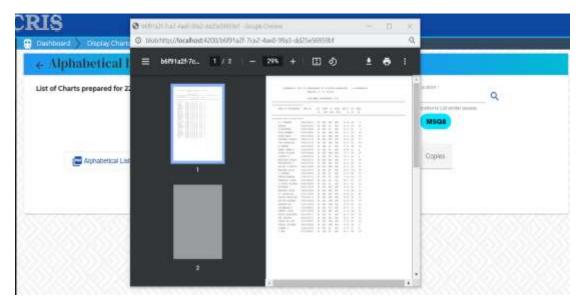


Figure: 6.11.4 Alphabetical List Display: View Alphabetical list pdf

There is options for printing alphabetical list, by providing printer location, printer names and number of copies.



Figure: 6.11.5 Alphabetical List Print Option

If Alphabetical list is not prepared, proper error message is displayed in UI.

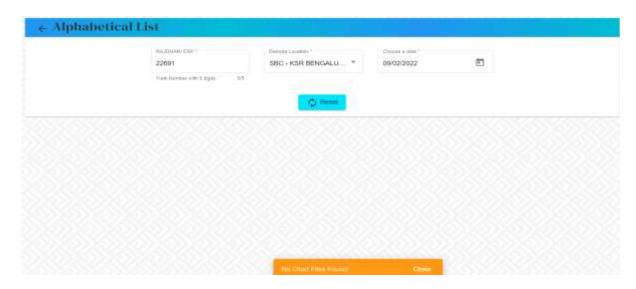


Figure 6-6 Alphabetical List: Not Prepared Error message

7 GUIDED CHARTING

Guided Charting is a crucial feature that encompasses essential operations like MMI operations and chart preparations, typically done by users before charting on trains. It is designed to streamline the process, allowing users to switch between operations seamlessly without repeatedly inputting train data and with minimal clicks, all within a single-page view.

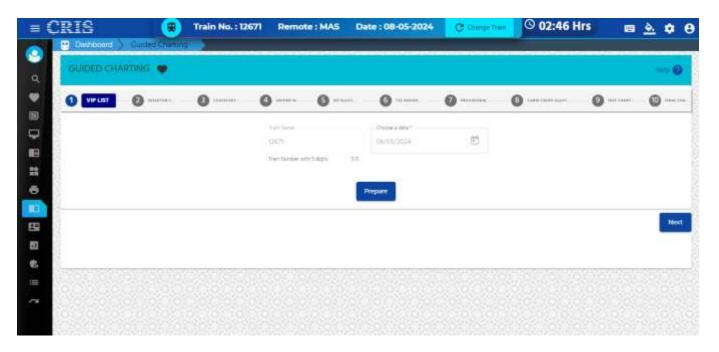


Figure 7-1 Guided Charting Page

- 1. Stepper Menu
- 2. View
- 3. Navigation Bar (Next, Previous)



The stepper menu lists all the operations that can be performed for each step on a particular train type. For instance, a train with only first AC coaches will display options like provisional list and cabin coupe allotment steps. Users can visit any step by clicking the relevant operation in the stepper menu or using the buttons in the navigation toolbar.



It is important to note that each step must be visited at least once to move to the next page.

Visited pages are marked with an editing button in blue, while unvisited ones appear in a disabled state. Users have the freedom to navigate between visited steps without any restrictions by directly clicking on the stepper button corresponding to the desired step. This feature enables users to revisit and review any previously visited page as needed. This flexibility ensures efficiency and ease of use, empowering users to make adjustments and updates as needed without any hassle.

In steps such as VIP list, skeleton chart, test chart, and final chart preparation, users will find a "Prepare Chart" button to initiate the chart preparation process. Upon clicking this button, the chart processing will commence, and upon successful completion, the available charts prepared during the process will be listed with printing and viewing options.

For steps like coach details, unified MMI, TTE assignment, and cabin coupe allotment, which involve user inputs and operations, it is important to save the data before moving to the next page. This can be done by clicking the "Approve" button provided on the relevant pages. The provisional list gets re-prepared every time whenever users visit the pages.