USER MANUAL
FOR
DATA PORTAL

INDEX

ABSTRACT

The **Data Portal** is an essential internal management application designed to facilitate efficient tracking and management of credit health and trade history for clients attached to the organization of Riemer Plus. This user manual provides a detailed overview of the application, including its functionality, architecture, user interface, and future considerations. Technologies used are React JS with Material UI as well as ReactStrap on Front end, Node JS and Nest on Back End and Oracle database for the application's data accumulation.

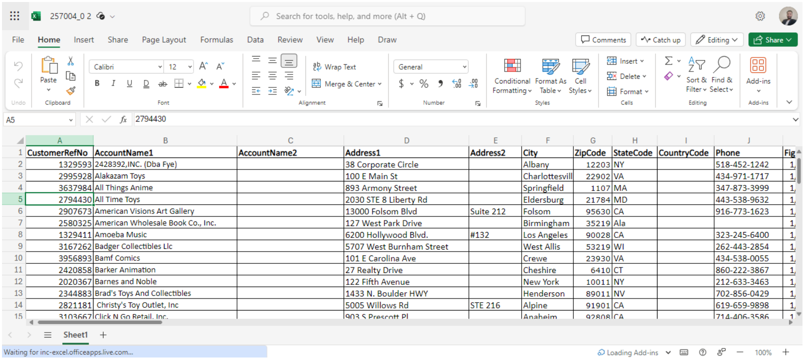
The application is, in layman terms, a revamped product of Riemer Plus's existing EDI Submitter application which also serves as a legacy platform for this application. The employees affiliated with the organization will utilize this application to analyze Trade Tapes, provided by their clientele and will have the ability to perform corrections as well as mapping operations for their own ease of access. The application is also integrated with automation-based procedures for setting up the configurations on trade tapes and incoming data which was earlier done manually. This will result in saving hours of manual labor which was done to correct a wide range of diversified trade tapes sent by the clients to Riemer Plus organization.

<u>DECODING THE PROCESS</u>

- The Trade Tapes will be received by the application from Riemer's very own S3 bucket and will also provide an internal functionality to upload them. The format of trade tapes will be either **.txt**, **.xlsx, .xls** or **.csv**.
- Once the user is done with the uploading process, he/she can view that file's/trade tape's history on the application's home page which will be "**Import History Page**".
- From "**Import History**", User will receive a "**Template-oriented**" status for the trade tapes.
- The definition of a **Template** here is a configuration comprising of data and column-based sequences present in the trade tape. For example, earlier, the trade tapes provided by the account holders at Riemer Plus differed widely and in many instances, were inconsistent.
- This was a challenge for Riemer employees as they had to manually check each trade sheet and correct the column names according to the columns present in their original database.
- So, the user had to check sheet and correct sheet twice- first for the column-sequencing and sheet validation and then for data correction/validation. This will now be automated in the Data Portal application.
- Depending on the status, the user will be redirected to either "**Import Preview Page**" or "**Import Settings Page**".
- If the template (sheet-based configuration) is incorrect or does not exist in Data portal application, then user will be redirected to "**Import Settings Page**".
- If the Template is correct, then user will be redirected to "**Import Preview Page**".
- From "**Import Preview**", user can either correct data or map the corrected data to specific account attached to Riemer's database.
- Please Note that this will not occur always. If the template and data is correct, the entire process will be automated, and data will be captured in Riemer's database.

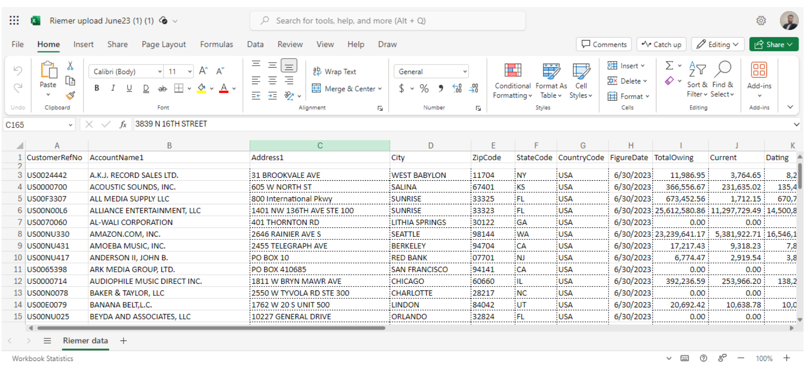
Some Sample Trade Tapes received by Riemer Plus

Example 1:



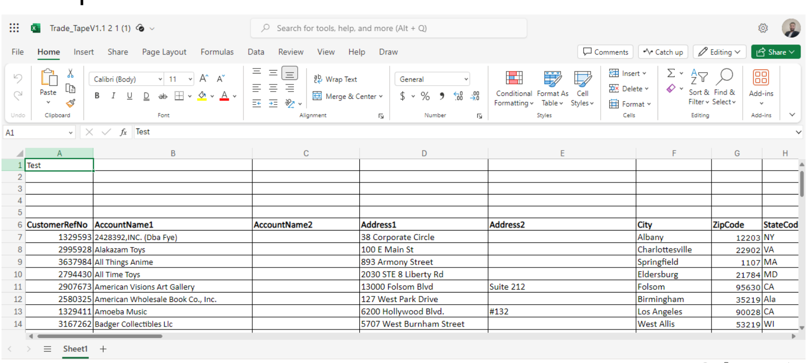
	CustomerRefNo	AccountName1	AccountName2	Address1	Address2	City	ZipCode	StateCode	CountryCode	Phone	Fig
2	1329593	2428392,INC. (Dba Fye)		38 Corporate Circle		Albany	12203	NY		518-452-1242	1,
3	2995928	Alakazam Toys		100 E Main St		Charlottesvill	22902	VA		434-971-1717	1,
4	3637984	All Things Anime		893 Armony Street		Springfield	1107	MA		347-873-3999	1,
5	2794430	All Time Toys		2030 STE 8 Liberty Rd		Eldersburg	21784	MD		443-538-9632	1,
6	2907673	American Visions Art Gallery		13000 Folsom Blvd	Suite 212	Folsom	95630	CA		916-773-1623	1,
7	2580325	American Wholesale Book Co., Inc.		127 West Park Drive		Birmingham	35219	Ala			1,
8	1329411	Amoeba Music		6200 Hollywood Blvd.	#132	Los Angeles	90028	CA		323-245-6400	1,
9	3167262	Badger Collectibles Llc		5707 West Burnham Street		West Allis	53219	WI		262-443-2854	1,
10	3956893	Bamf Comics		101 E Carolina Ave		Crewe	23930	VA		434-538-0055	1,
11	2420858	Barker Animation		27 Realty Drive		Cheshire	6410	CT		860-222-3867	1,
12	2020367	Barnes and Noble		122 Fifth Avenue		New York	10011	NY		212-633-3463	1,
13	2344883	Brad's Toys And Collectibles		1433 N. Boulder HWY		Henderson	89011	NV		702-856-0429	1,
14	2821181	Christy's Toy Outlet, Inc		5005 Willows Rd	STE 216	Alpine	91901	CA		619-659-9898	1,
15	3103667	Click N Go Retail, Inc.		903 S Prescott Pl		Anaheim	92808	CA		714-406-3586	1

Example 2:



	CustomerRefNo	AccountName1	Address1	City	ZipCode	StateCode	CountryCode	FigureDate	TotalOwing	Current	Dating
2											
3	US0024442	A.K.J. RECORD SALES LTD.	31 BROOKVALE AVE	WEST BABYLON	11704	NY	USA	6/30/2023	11,986.95	3,764.65	8,2
4	US0000700	ACOUSTIC SOUNDS, INC.	605 W NORTH ST	SALINA	67401	KS	USA	6/30/2023	366,556.67	231,635.02	135,4
5	US00F3307	ALL MEDIA SUPPLY LLC	800 International Pkwy	SUNRISE	33325	FL	USA	6/30/2023	673,452.56	1,712.15	670,7
6	US00N00L6	ALLIANCE ENTERTAINMENT, LLC	1401 NW 136TH AVE STE 100	SUNRISE	33323	FL	USA	6/30/2023	25,612,580.86	11,297,729.49	14,500,8
7	US0070060	AL-WALI CORPORATION	401 THORNTON RD	LITHIA SPRINGS	30122	GA	USA	6/30/2023	0.00	0.00	
8	US00NU330	AMAZON.COM, INC.	2646 RAINIER AVE S	SEATTLE	98144	WA	USA	6/30/2023	23,239,641.17	5,381,922.71	16,546,1
9	US00NU431	AMOEBA MUSIC, INC.	2455 TELEGRAPH AVE	BERKELEY	94704	CA	USA	6/30/2023	17,217.43	9,318.23	7,8
10	US00NU417	ANDERSON II, JOHN B.	PO BOX 10	RED BANK	07701	NJ	USA	6/30/2023	6,774.47	2,919.54	3,8
11	US0065398	ARK MEDIA GROUP, LTD.	PO BOX 410685	SAN FRANCISCO	94141	CA	USA	6/30/2023	0.00	0.00	
12	US0000714	AUDIOPHILE MUSIC DIRECT INC.	1811 W BRYN MAWR AVE	CHICAGO	60660	IL	USA	6/30/2023	392,236.59	253,966.20	138,2
13	US00N0078	BAKER & TAYLOR, LLC	2550 W TYVOLA RD STE 300	CHARLOTTE	28217	NC	USA	6/30/2023	0.00	0.00	
14	US00E0079	BANANA BELT,L.C.	1762 W 20 S UNIT 500	LINDON	84042	UT	USA	6/30/2023	20,692.42	10,638.78	10,0
15	US00NU025	BEYDA AND ASSOCIATES, LLC	10227 GENERAL DRIVE	ORLANDO	32824	FL	USA	6/30/2023	0.00	0.00	

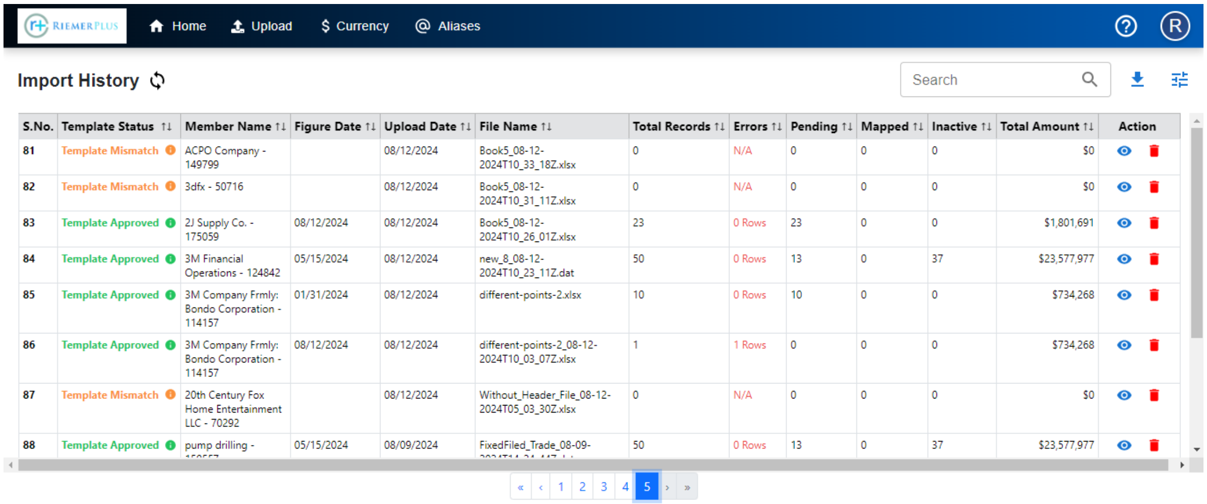
Example 3:



1	Test							
2								
3								
4								
5								
6	CustomerRefNo	AccountName1	AccountName2	Address1	Address2	City	ZipCode	StateCod
7	1329593	2428392,INC. (Dba Fye)		38 Corporate Circle		Albany	12203	NY
8	2995928	Alakazam Toys		100 E Main St		Charlottesville	22902	VA
9	3637984	All Things Anime		893 Armony Street		Springfield	1107	MA
10	2794430	All Time Toys		2030 STE 8 Liberty Rd		Eldersburg	21784	MD
11	2907673	American Visions Art Gallery		13000 Folsom Blvd	Suite 212	Folsom	95630	CA
12	2580325	American Wholesale Book Co., Inc.		127 West Park Drive		Birmingham	35219	Ala
13	1329411	Amoeba Music		6200 Hollywood Blvd.	#132	Los Angeles	90028	CA
14	3167262	Badger Collectibles Llc		5707 West Burnham Street		West Allis	53219	WI

SCREENS INVOLVED

1. **IMPORT HISTORY SCREEN**->



S.No.	Template Status	Member Name	Figure Date	Upload Date	File Name	Total Records	Errors	Pending	Mapped	Inactive	Total Amount	Action
81	Template Mismatch	ACPO Company - 149799		08/12/2024	Book5_08-12-2024T10_33_18Z.xlsx	0	N/A	0	0	0	$0	
82	Template Mismatch	3dfx - 50716		08/12/2024	Book5_08-12-2024T10_31_11Z.xlsx	0	N/A	0	0	0	$0	
83	Template Approved	2J Supply Co. - 175059	08/12/2024	08/12/2024	Book5_08-12-2024T10_26_01Z.xlsx	23	0 Rows	23	0	0	$1,801,691	
84	Template Approved	3M Financial Operations - 124842	05/15/2024	08/12/2024	new_8_08-12-2024T10_23_11Z.dat	50	0 Rows	13	0	37	$23,577,977	
85	Template Approved	3M Company Frmly: Bondo Corporation - 114157	01/31/2024	08/12/2024	different-points-2.xlsx	10	0 Rows	10	0	0	$734,268	
86	Template Approved	3M Company Frmly: Bondo Corporation - 114157	08/12/2024	08/12/2024	different-points-2_08-12-2024T10_03_07Z.xlsx	1	1 Rows	0	0	0	$734,268	
87	Template Mismatch	20th Century Fox Home Entertainment LLC - 70292		08/12/2024	Without_Header_File_08-12-2024T05_03_30Z.xlsx	0	N/A	0	0	0	$0	
88	Template Approved	pump drilling -	05/15/2024	08/09/2024	FixedFiled_Trade_08-09-	50	0 Rows	13	0	37	$23,577,977	

Figure A-> **Import History Screen**

Description- This screen shows the history log of Trade tapes uploaded from either S3 bucket or Data Portal's internal upload functionality. In this screen, from the Figure A, you can see the Template-based statuses along with history data of the trade tapes such as which Member from Riemer it belongs to, what is its file name, how may records that trade tape holds, how much is the amount data gathered from that sheet and an 'EYE' - based action icon which will redirect the user to either *Import Preview* or *Import Settings* page.

Template Statuses->

a. '*Template Approved*'- when the template configuration for a specific customer/member is already present in Riemer's database and it matches the configuration of uploaded trade tape. In this case, the user will be redirected to the 'Import Preview Page' where he/she can validate the data present in the uploaded sheet.

b. '*Template Mismatched*'- when the uploaded file's configuration does not match any existing template configuration for that particular customer/member and the header row does not exist in the provided Trade Tape, then this status appears. In this scenario, the user will be redirected to the ‘Import Settings Page’ to configure a new template configuration for that existing customer.

c. ‘<u>No Template</u>’-> when the customer/member is new to the Data Portal and is uploading trade tape for the first time and the file is without the header row, they will not be having any template configuration present in Riemer’s database. So, in that scenario, user will be redirected to the ‘Import Settings Page’ where they can configure template for the first time.

d. ‘<u>*Template Error*</u>’-> when the user has uploaded a file but due to some error it was not uploaded properly. In that case, user will see this status and has to re-upload the trade tape.

e. ‘<u>*Unmatched Columns*</u>’-> when the provided trade tape’s header columns do not match the names/aliases present in our database and application, then user will see this Template Status. This status will redirect the user to ‘Mismatched Column Configuration’ screen.

<u>Included Functionalities</u>->

a. Each row in the table is provided with an **EYE –** icon under the ‘Action’ column, which will redirect the user to either Import Preview or Import Settings depending on their Template Status.

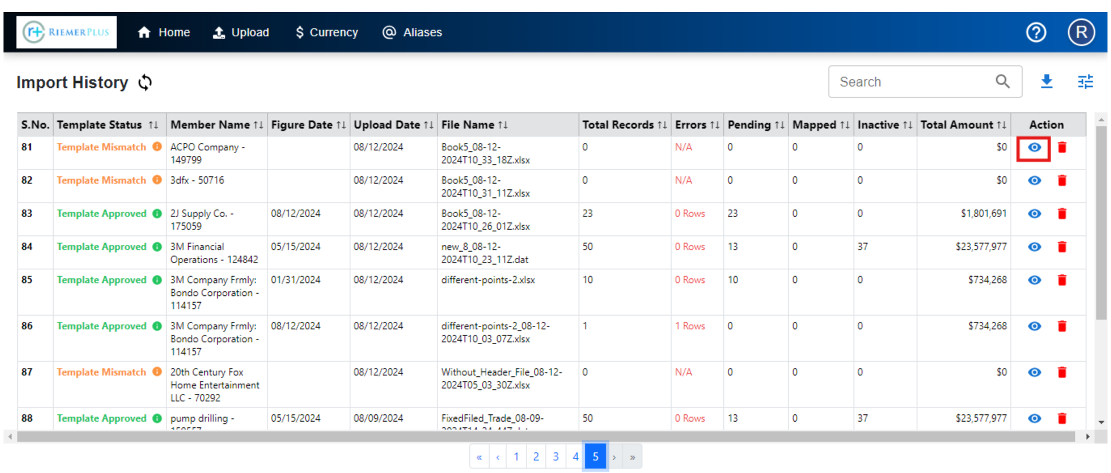
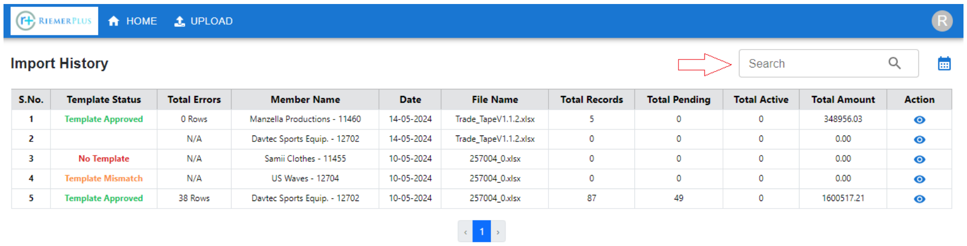


Figure B-> Eye icon on Action Column

b. The user will have the functionality to search a trade tape from a search-based text field.



S.No.	Template Status	Total Errors	Member Name	Date	File Name	Total Records	Total Pending	Total Active	Total Amount	Action
1	Template Approved	0 Rows	Manzella Productions - 11460	14-05-2024	Trade_TapeV1.1.2.xlsx	5	0	0	348956.03	
2		N/A	Davtec Sports Equip. - 12702	14-05-2024	Trade_TapeV1.1.2.xlsx	0	0	0	0.00	
3	No Template	N/A	Samii Clothes - 11455	10-05-2024	257004_0.xlsx	0	0	0	0.00	
4	Template Mismatch	N/A	US Waves - 12704	10-05-2024	257004_0.xlsx	0	0	0	0.00	
5	Template Approved	38 Rows	Davtec Sports Equip. - 12702	10-05-2024	257004_0.xlsx	87	49	0	1600517.21	

Figure C-> Search Functionality.

c. The user also has the functionality to filter the import history data according to customers and date range.

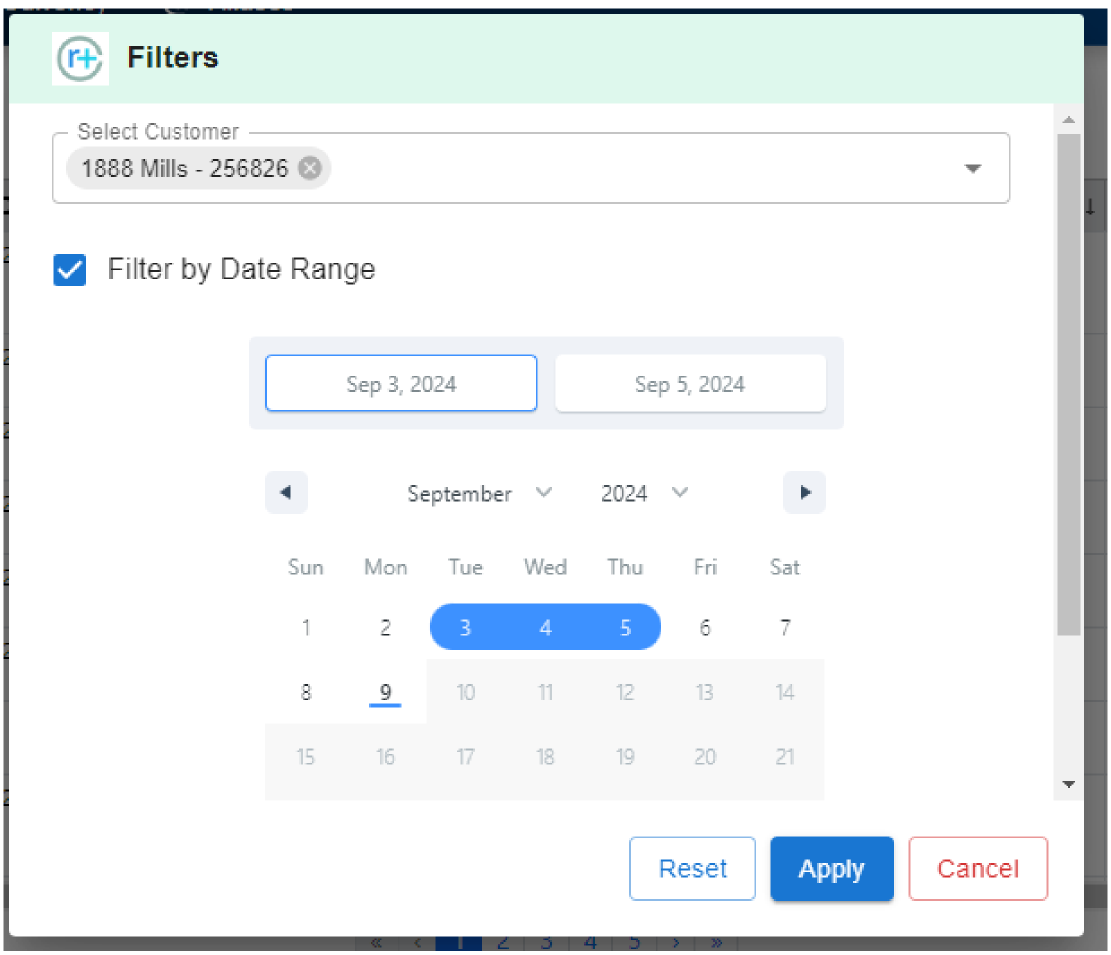
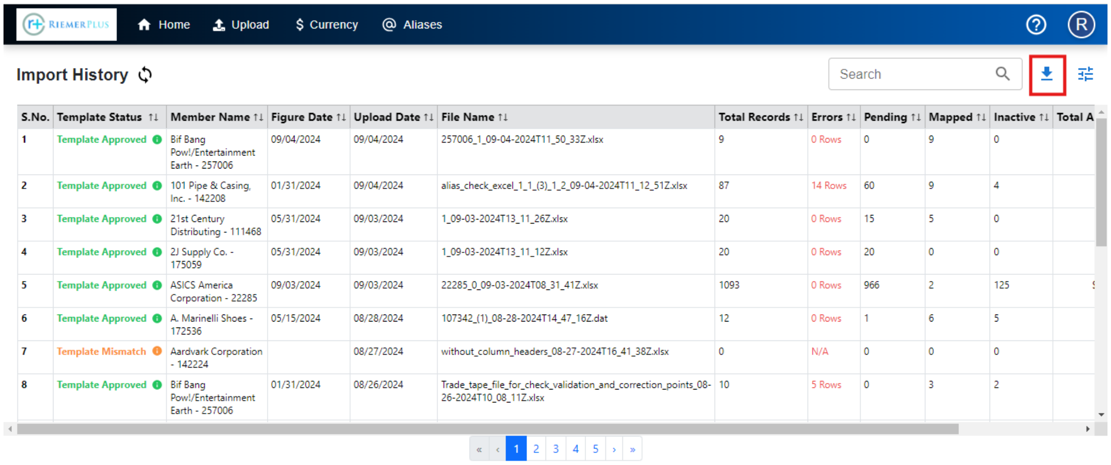


Figure C(b)-> Filter functionality in Import history

d. The user can also export the Import history data into an excel sheet. The user can simply click on EXPORT button, and the excel sheet will be downloaded into their system.



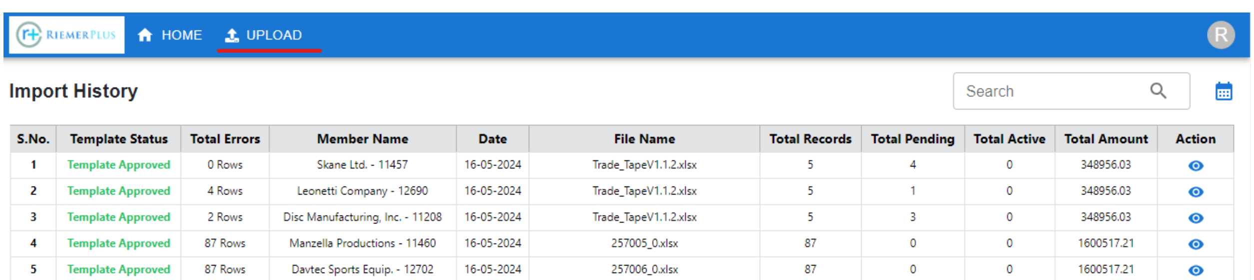
S.No.	Template Status	Member Name	Figure Date	Upload Date	File Name	Total Records	Errors	Pending	Mapped	Inactive	Total A
1	Template Approved	Bif Bang Pow!/Entertainment Earth - 257006	09/04/2024	09/04/2024	257006_1_09-04-2024T11_50_33Z.xlsx	9	0 Rows	0	9	0	
2	Template Approved	101 Pipe & Casing, Inc. - 142208	01/31/2024	09/04/2024	alias_check_excel_1_1_(3)_1_2_09-04-2024T11_12_51Z.xlsx	87	14 Rows	60	9	4	
3	Template Approved	21st Century Distributing - 111468	05/31/2024	09/03/2024	1_09-03-2024T13_11_26Z.xlsx	20	0 Rows	15	5	0	
4	Template Approved	2J Supply Co. - 175059	05/31/2024	09/03/2024	1_09-03-2024T13_11_12Z.xlsx	20	0 Rows	20	0	0	
5	Template Approved	ASICS America Corporation - 22285	09/03/2024	09/03/2024	22285_0_09-03-2024T08_31_41Z.xlsx	1093	0 Rows	966	2	125	
6	Template Approved	A. Marinelli Shoes - 172536	05/15/2024	08/28/2024	107342_(1)_08-28-2024T14_47_16Z.dat	12	0 Rows	1	6	5	
7	Template Mismatch	Aardvark Corporation - 142224		08/27/2024	without_column_headers_08-27-2024T16_41_38Z.xlsx	0	N/A	0	0	0	
8	Template Approved	Bif Bang Pow!/Entertainment Earth - 257006	01/31/2024	08/26/2024	Trade_tape_file_for_check_validation_and_correction_points_08-26-2024T10_08_11Z.xlsx	10	5 Rows	0	3	2	

Figure D(c)-> Export functionality.

1. a **UPLOAD TRADE TAPE POPUP**->

A. This is an internal utility provided by the application to manually upload trade tapes.

B. The user can open this pop up by clicking on 'UPLOAD' button present in the navigation bar of the application.



S.No.	Template Status	Total Errors	Member Name	Date	File Name	Total Records	Total Pending	Total Active	Total Amount	Action
1	Template Approved	0 Rows	Skane Ltd. - 11457	16-05-2024	Trade_TapeV1.1.2.xlsx	5	4	0	348956.03	
2	Template Approved	4 Rows	Leonetti Company - 12690	16-05-2024	Trade_TapeV1.1.2.xlsx	5	1	0	348956.03	
3	Template Approved	2 Rows	Disc Manufacturing, Inc. - 11208	16-05-2024	Trade_TapeV1.1.2.xlsx	5	3	0	348956.03	
4	Template Approved	87 Rows	Manzella Productions - 11460	16-05-2024	257005_0.xlsx	87	0	0	1600517.21	
5	Template Approved	87 Rows	Davtec Sports Equip. - 12702	16-05-2024	257006_0.xlsx	87	0	0	1600517.21	

Figure E(a) -> Upload popup Navigation

C. After opening, the upload pop up will be displayed.

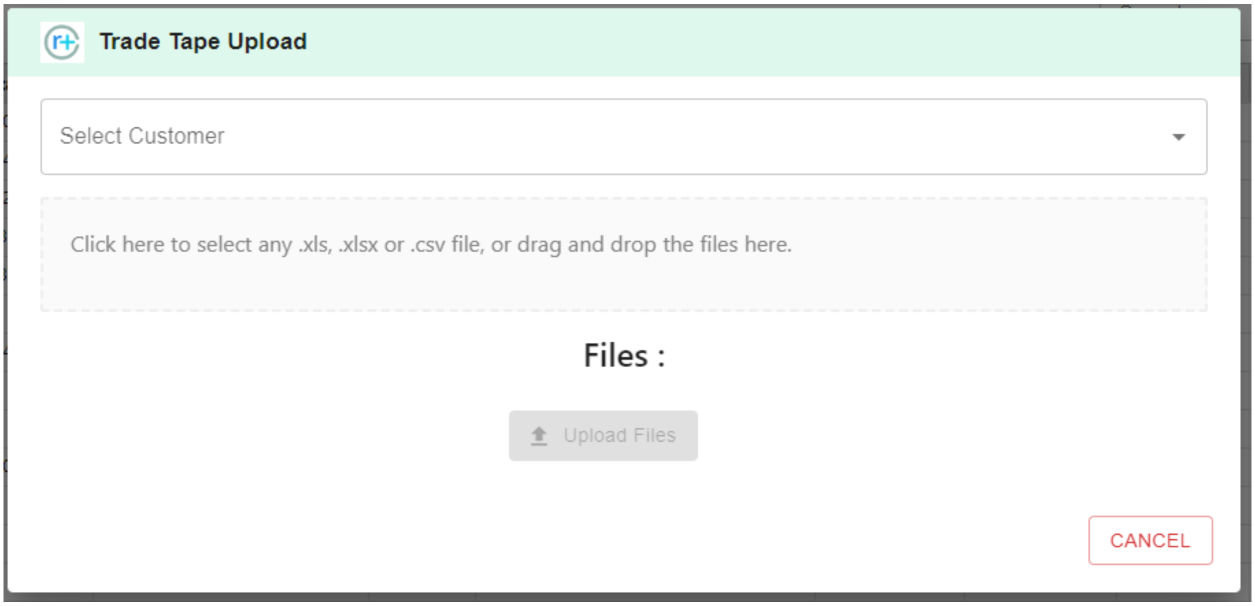


Figure E(b)-> Upload Trade Tape popup

D. After opening, user can select customer based on their name, their data site and also, check the **Processing notes** if present, and then click on grey area or just drag and drop any trade tape. Once they do that the popup will appear something like this->

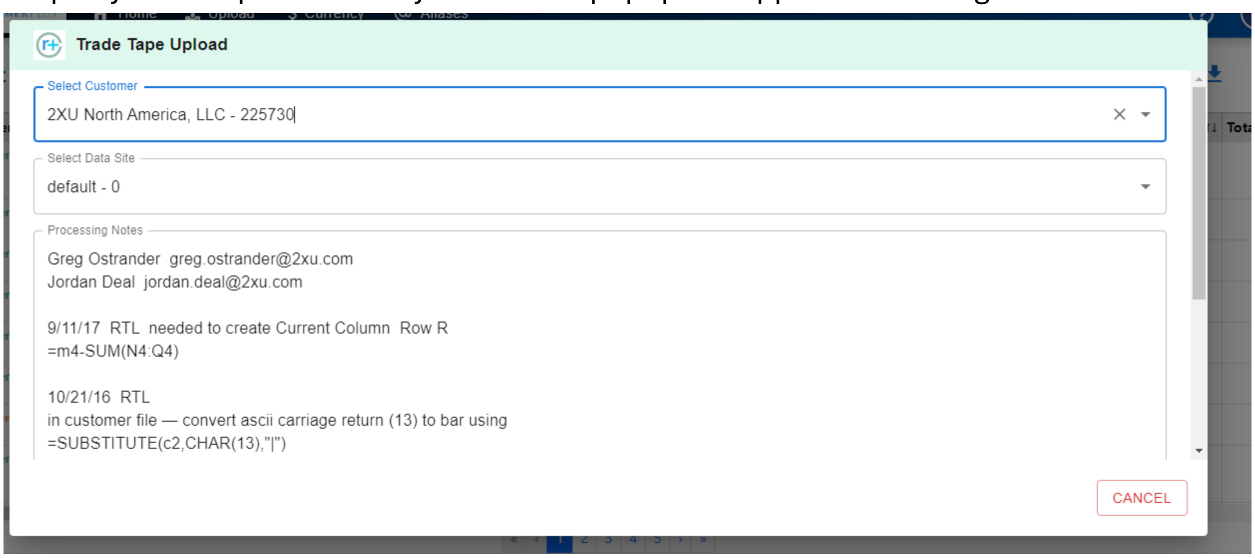


Figure E(c)-> Showing Processing Notes.

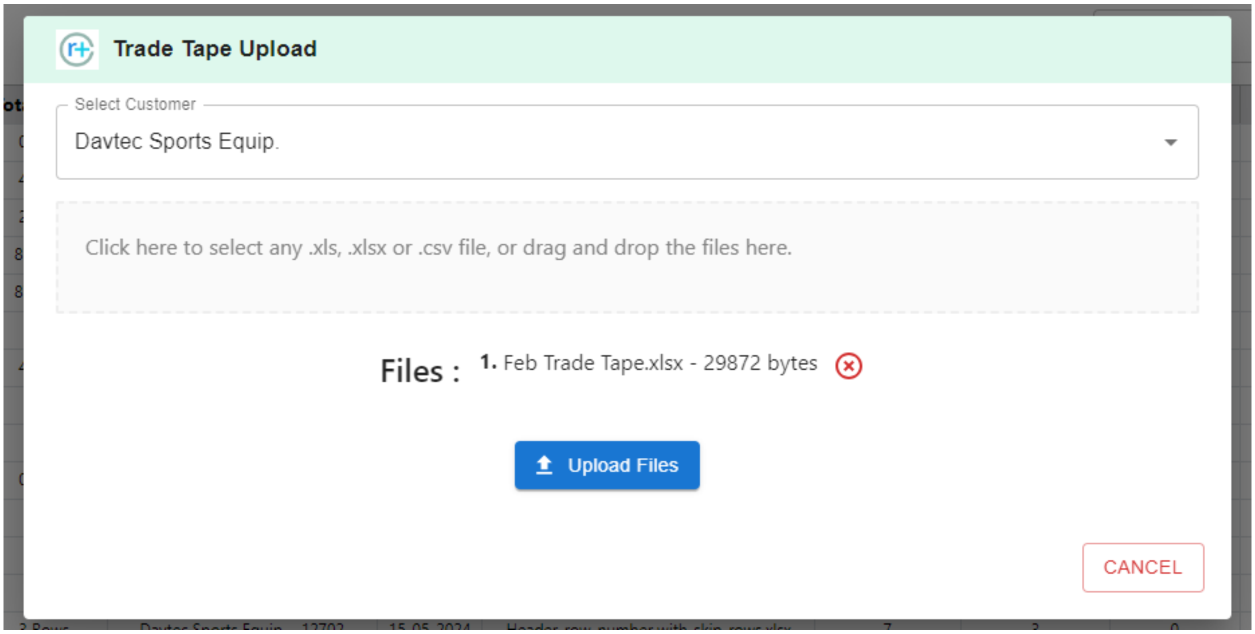


Figure E(d)->Trade Tape Upload popup after filling details.

E. After selecting customer and trade tape, user can click on ‘Upload Files’. Once the user does that the file will be uploaded and will be displayed on the ‘Import History’ Screen.

2. **<u>IMPORT SETTINGS SCREEN</u>**->

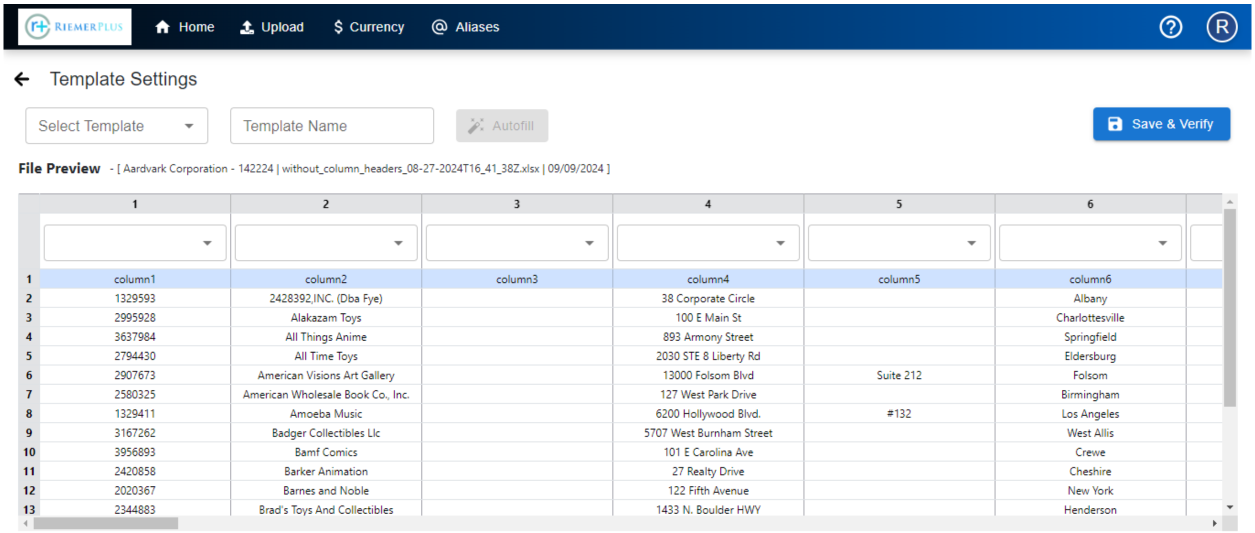


Figure F---> **Import Settings Screen**

<u>Description</u>- The user is redirected to this screen if the status of trade tape is either '**No Template**' or '**Template Mismatch**' and no header row is present. From this screen user can configure/map the columns as per their needs. As per figure E, on the left part of the screen is the preview of the entire uploaded trade tape and on the right, are the options needed for column mapping functionality. The user can fill all the fields, save them and also can verify that whether the columns and template are properly configured according to their database sequence. If verification/validation is a success, then user is redirected back to 'Import History' page and the Template's status is changed to 'Template Approved'.

<u>Included Functionalities</u>->

a. '<u>Select Template</u>'-> if the member/customer already has a template saved, then they can select that template to re-configure it. This will be in case of 'Template Mismatch'. If the user is creating a new template configuration, then they can select '**New Template**' option from the dropdown. If they choose '**New Template**', a text field will appear where user can type and save the name of template for future.

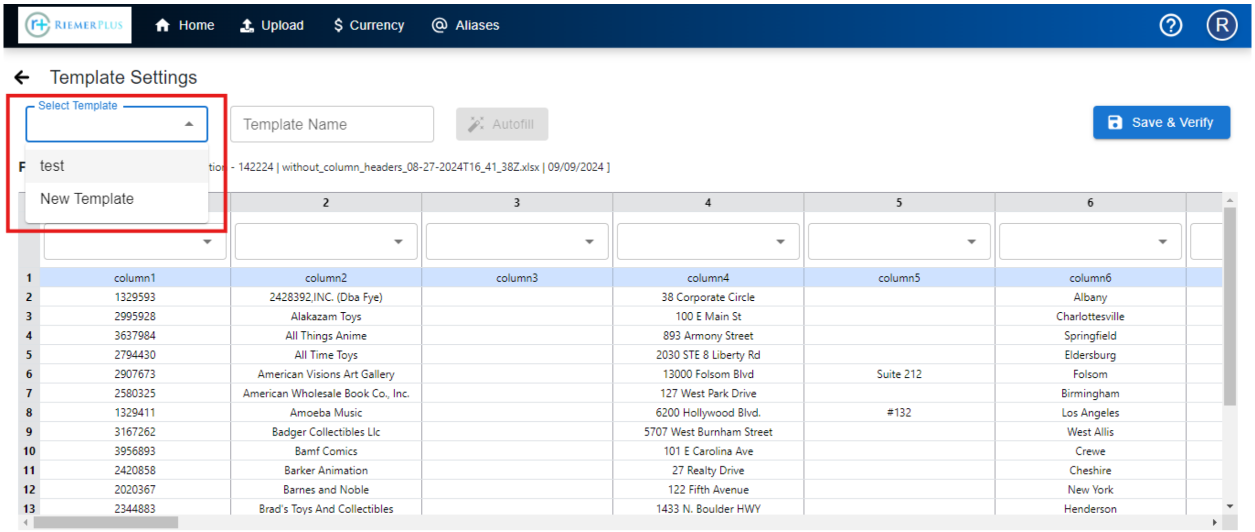


Figure G(a)--> Selecting an existing Template.

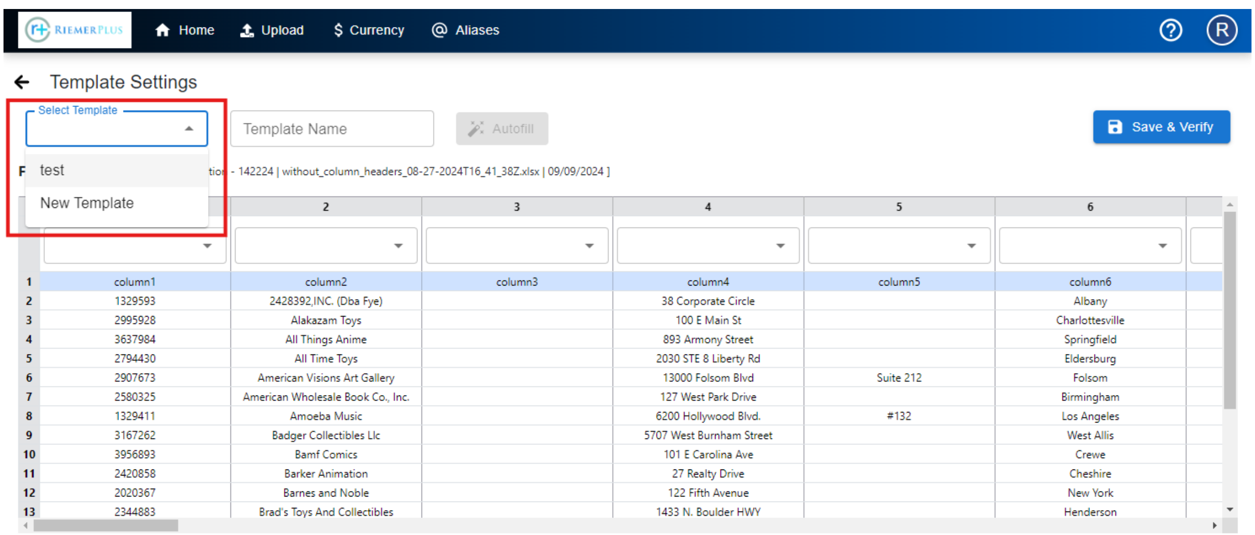


Figure G(b)--> Selecting a 'New Template'.

e. '<u>Column Mapping Dynamic Dropdowns</u>'-> The user is provided with dynamic dropdowns below 'skip columns' dropdown, which has labels based on columns names, present originally in the Riemer's database. On selecting any column-based dropdown, an option list will appear, and user can select the column from excel sheet that they want to map to their database column. Also, once they select any value in one column dropdown, then that specific value will be removed from all the next column-based dropdowns. Furthermore, on the left-sided table, the sheet column name will appear as cut or with a strikethrough and below that the database selected column will appear. This will provide ease to the user.

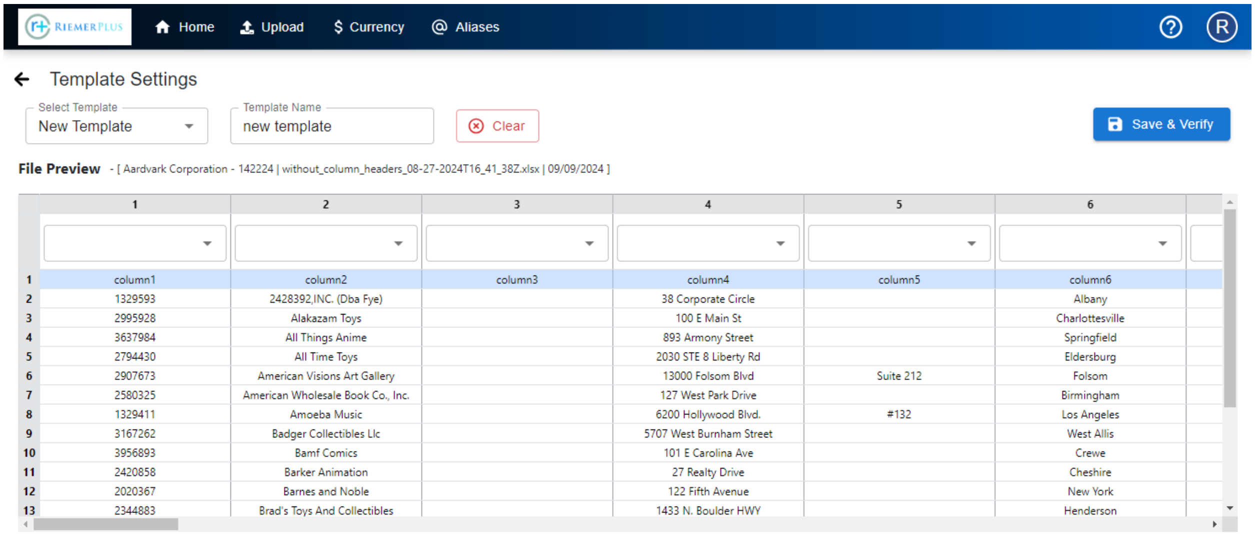


Figure K -> Database column mapping

f. ‘<u>Save and Verify Button Functionality</u>’-> **Save** is the penultimate functionality. Once the user has filled all the fields, he/she can click on Save button. After that, an API will trigger from Back-end which will save all the data for template configuration and once the API returns a success message, the final step of the process which is ‘Verify’ will be enabled and then user can click on the green ‘Verify’ button to verify the template configuration that he/she just saved.

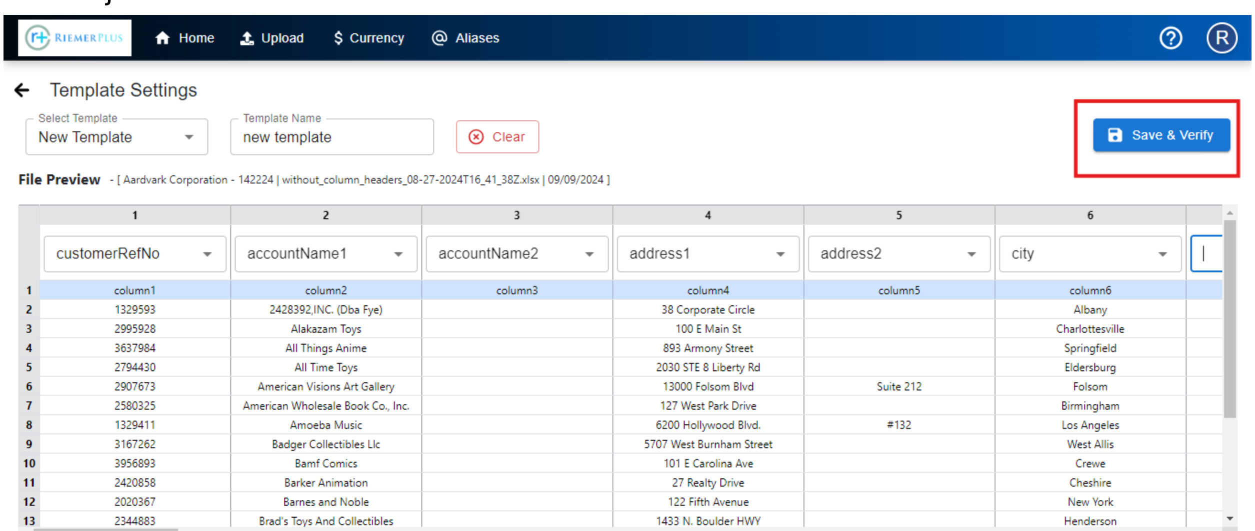


Figure L (a)---> Save and Verify button functionality

3. **<u>IMPORT PREVIEW SCREEN</u>**->

<u>Description</u>-> The user is redirected to this screen from 'Import History' page and only when the Template status is 'Template Approved'. This screen shows the approved Template data uploaded by the user. Now, in this screen, either the Data might be incorrect, or it might not be mapped to an account associated with Riemer Plus database. Users, from this screen can correct the invalid/incorrect data and can map specific data rows to accounts associated with Riemer Plus organization. Each data row here in the Tabular format has a particular status. Also, each ID-based record has two rows included in them. One will show application-based data status and the second will show a status of '**History**' which basically has the unchanged data import from trade tape. The table also has an 'Actions' column on the extreme right which will have two icons, one for 'Trade Tape Corrections' popup which is used to correct the data errors (in crimson red) and another in yellow color for 'Trade Tape Mapping' popup.

<u>Data Status included</u>->
1. *<u>Data Error</u>*-> This status appears when the record/row has invalid/incorrect data in it. This status appears in a light red color to signify errors. There is also an Info icon beside the status, on hover of which errors and warnings for that Data Error row are shown inside a tooltip. The user can view errors from there only and then can select the 'Trade Tape Corrections' icon from the 'Actions' column.

2. *<u>Pending-></u>* This status (in yellow color) comes after all the Data errors are fixed for a specific record. This status basically appears when the data is correct, but it has not been mapped to a specific account associated with Riemer Plus organization. To resolve this status, users can click on the 'Trade Tape Mapping' icon in yellow color present in the 'Actions' column. Once the user has clicked that icon, 'Trade Tape Mapping' popup will appear through which user can map the data to a particular account.

3. *<u>Mapped</u>*-> This is the Final Status for the Data (in green color). It signifies that Data is correct and record is mapped properly to an Riemer account. User doesn't have to do anything after this status has appeared for a specific data row.

4. *<u>History</u>*-> This is just a status that is displayed to denote the unchanged sheet data that was imported from the trade tape.

5.*<u>Invalid</u>*-> if the data row has no last sale date, it is considered as invalid.

Included Functionalities->

A. The Screen provides text-search-based functionality to search records.

B. There's also a 'Select Status' From which user can filter out the data based on three statuses-> 'Pending', 'Mapped' and 'Data Error'.

C. The third functionality is a Toggle Switch present on the right corner beside 'Select Status' filter. This is for 'Show History Log'. User can switch it on or off to show/hide the History data rows in the table.

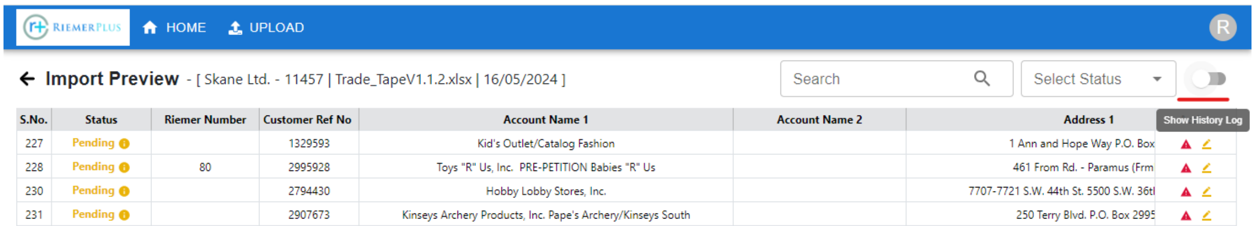


Figure N-> show History logs

D. On the hover of info icon of Data Error, user can see all the errors and warnings for that specific data row.

E. On the hover of info icon of Pending Status-based row, user can see all the warnings.

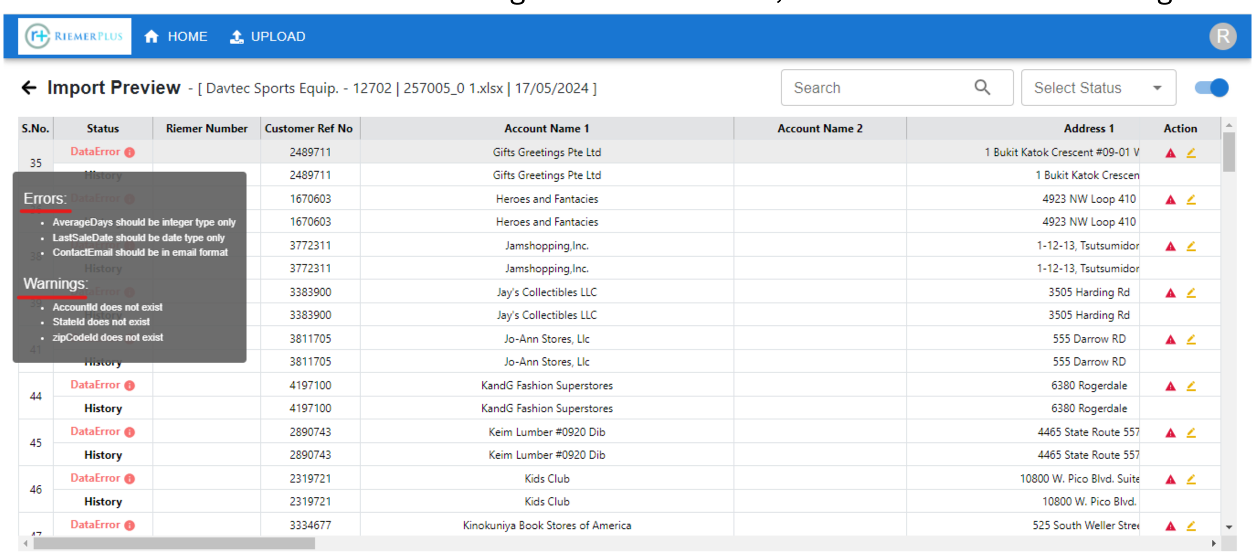


Figure-> Warnings and Errors.

F. The columns in Table-> S.no, Status, Riemer Number, Customer Ref No. And Action are all frozen, i.e., user can either scroll vertically or horizontally, they will still see those columns and their data.

3.a **<u>TRADE TAPE CORRECTIONS POPUP</u>**->

A. This is a popup that will open once you click on any row and is a place where you can correct the data errors present in a specific record.

B. This pop is also divided into two parts, left and right. On the right side, user can view all the errors present in the data row in an ordered as well as numbered list.

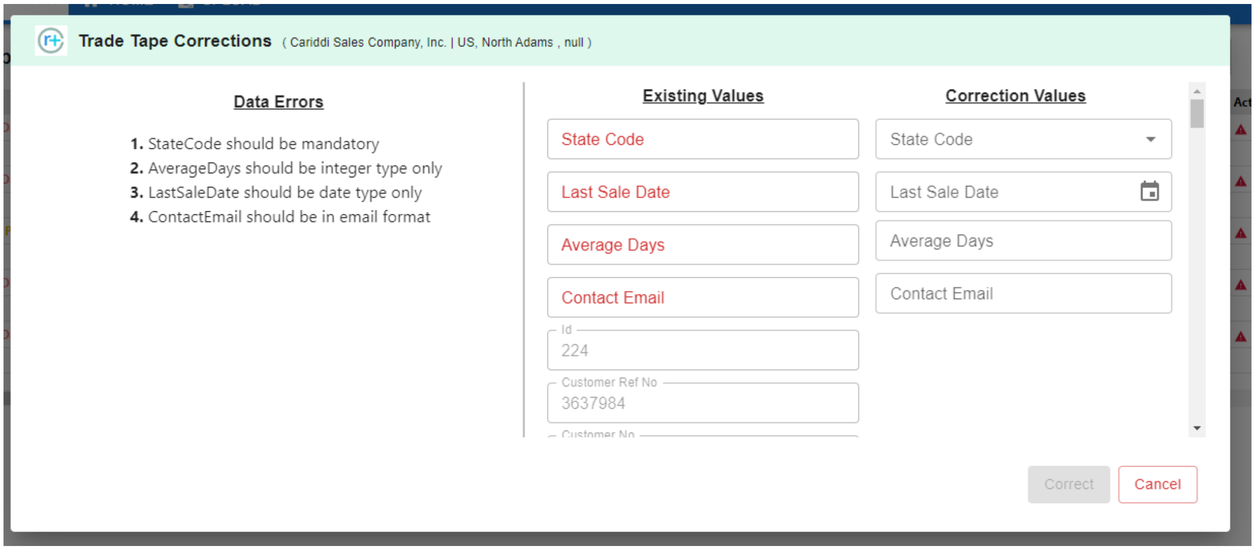


Figure O->Trade Tape Corrections Popup

C. on the right side, user can see two column sections-> one is **Existing Values,** where you'll see all the error-based fields on the top and rest will be displayed below. Second is **Correction values** which will only provide the user with the form fields based on error columns. for example, if the error on left displays "State code should be mandatory", then under **Existing Values,** state code field will be highlighted in red color and under **Correction values,** user will see a form field for State code where he/she can fill the state and correct the data.

D. After correcting the data, user can click on 'Correct' button and save their changes. This will change the status of the row from 'Data Error' to 'Pending'.

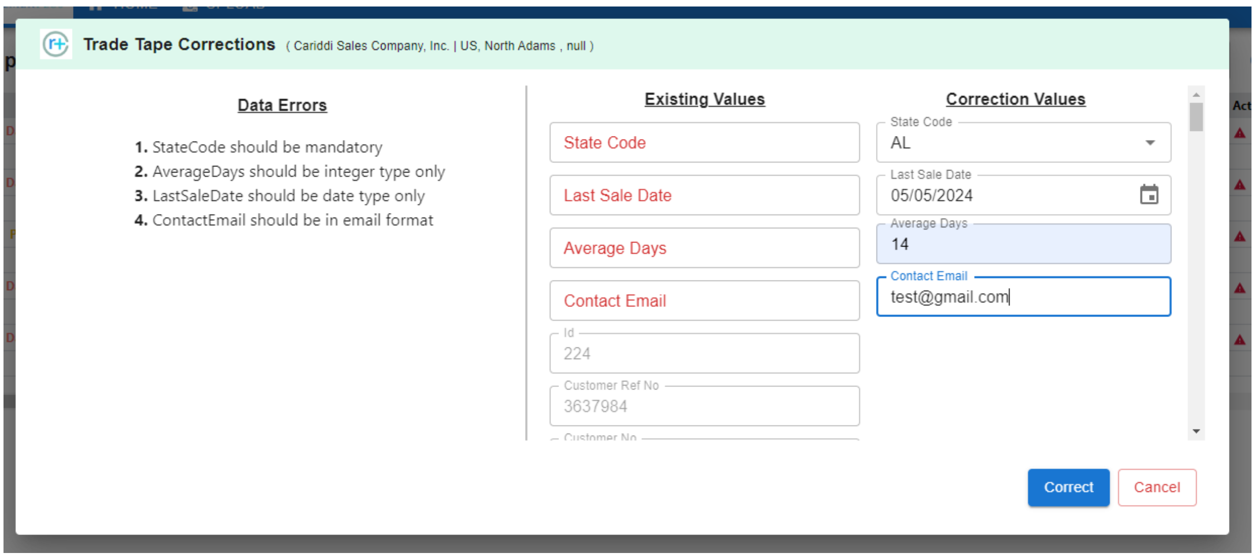


Figure P-> Trade Tape Corrections popup after filling the details.

3.b <u>TRADE TAPE MAPPING POPUP</u>->

A. Trade Tape Mapping Popup is a functionality that can map the ‘Pending’ data to specific account associated to Riemer.

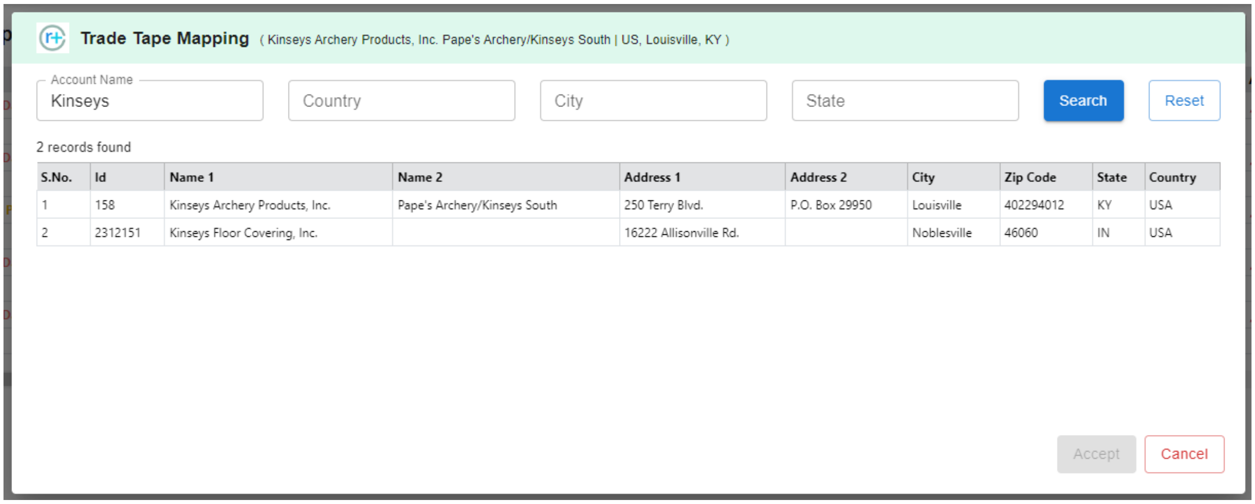


Figure Q->Trade Tape Mapping Popup

B. User can navigate to this popup with the help of yellow-colored icon present in the ‘Actions’ Column.

C. after the opening of popup, the API will trigger first automatically by taking first seven characters of **Account Name**. If user wants to search some other account, he/she can just click on reset and search with fields provided there. The fields provided in the popup are-> Account Name, Country, City and State.

D. The result of the search is displayed below the form fields, in a tabular format. The user can just click an account row and after clicking that row will be highlighted with a light-yellow color. After selecting the row, the user can click on ‘Accept’ button to map the data to that account associated with Riemer.

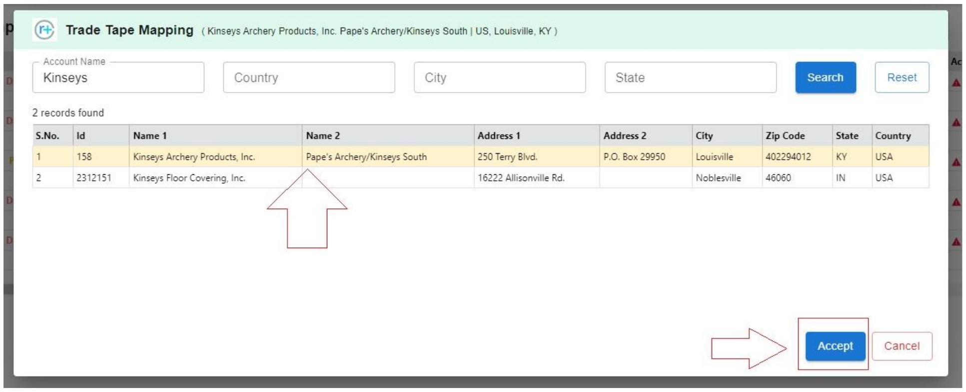


Figure R-> Trade Tape Mapping Popup Accept Button display.

E. After clicking Accept, an API will trigger to map the data. Now again on Import Preview Screen, you can the status of the data row as 'Mapped'. Thus, completing the functionality.

4. **Currency Exchange Rate Screen->**

i. The currency exchange rate screen is the internal functionality provided by the application to change the exchange rates for Canadian Dollar, British Pound and Euro according to the latest market trends into dollars to process the incoming trade tape's amount data efficiently.

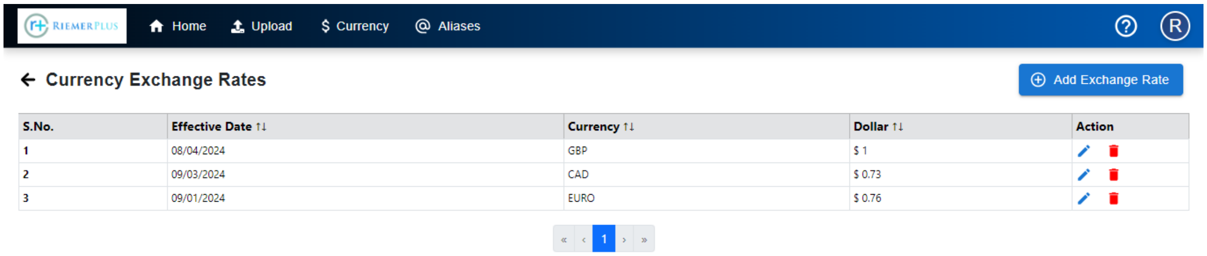


Figure 4(a)-> Currency Exchange screen rates.

ii. The user has the option to either Add, Edit or delete the conversion rates depending upon his/her own needs. On click on 'Add Exchange Rate' button on top-right, the user can get a popup like this.

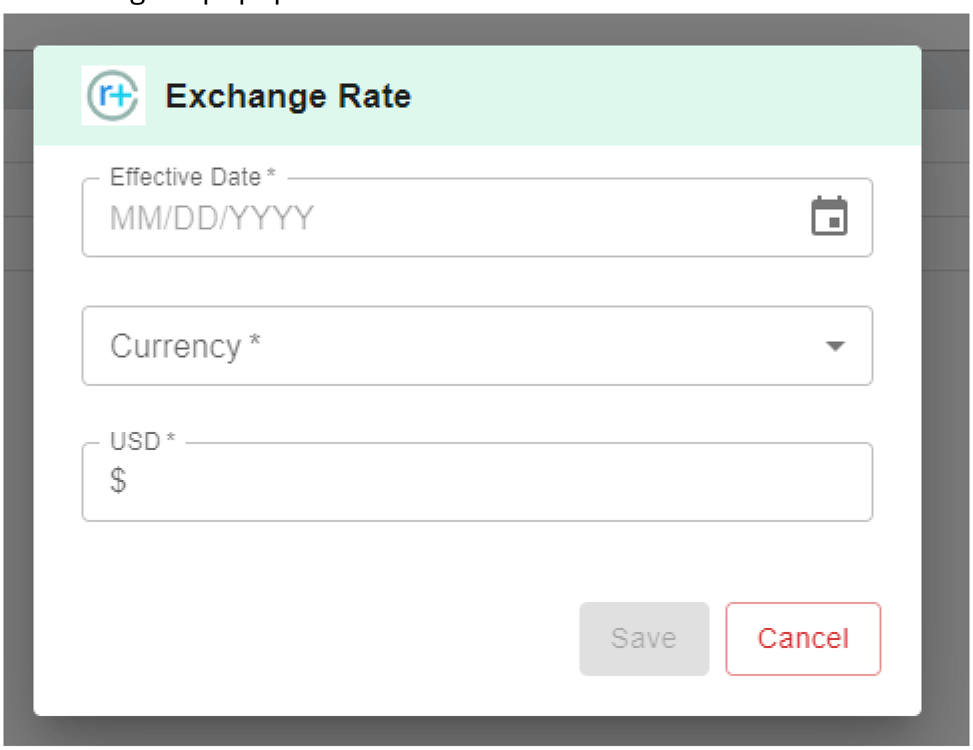


Figure 4(b)-> Add Exchange Rate

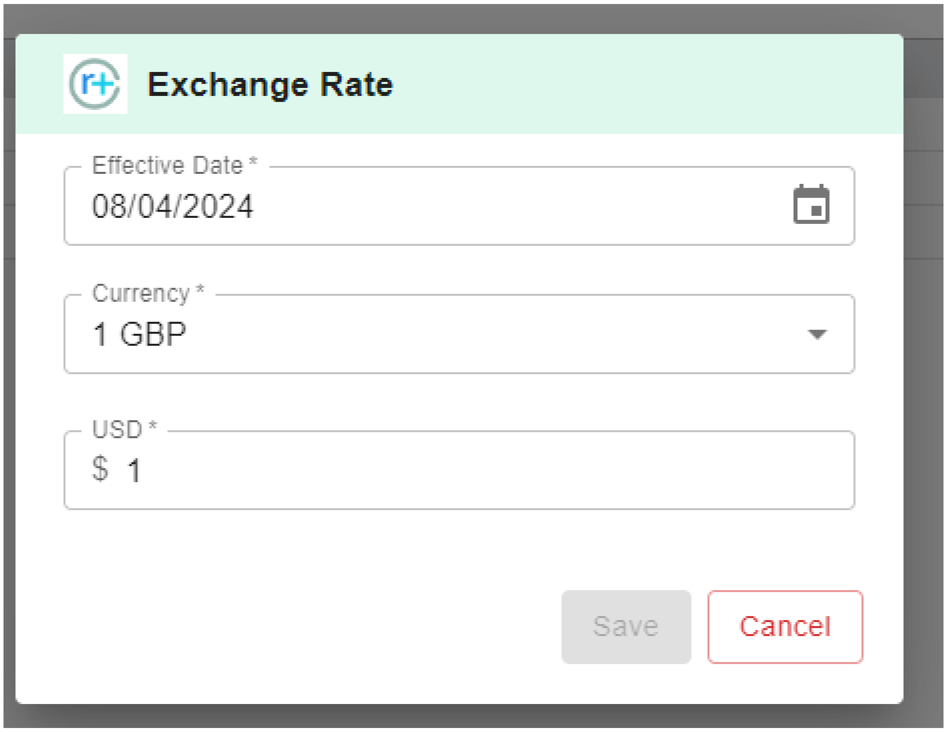


Figure 4(c)-> Edit Exchange rate (from pencil icon in 'Actions' column)

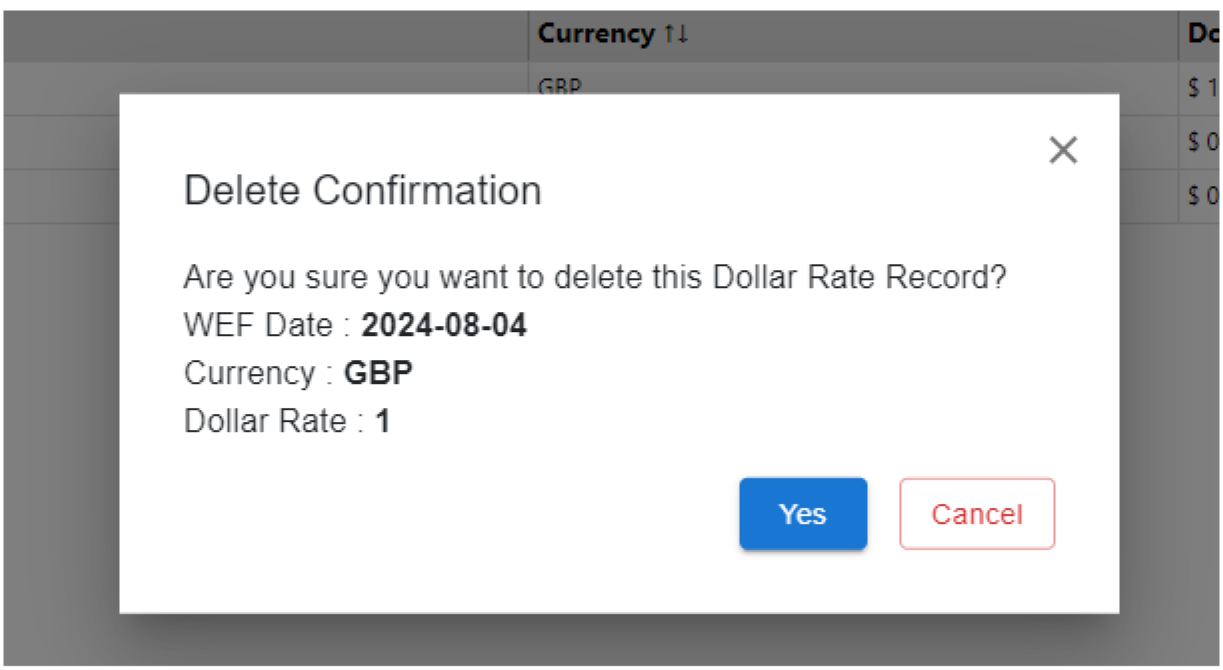


Figure 4(d)-> Delete individual exchange rate. (on click of Bin Icon in 'Actions' Column)

5. **Aliases Screen**->

i. Aliases Screen is another crucial part of application. Since, Riemer clientele provides trade tapes with often distinct header names, the Aliases screen maintains all those proper names along with their different aliases. These aliases are attached to the proper database columns due to which a trade tape with header row will get automatically processed.

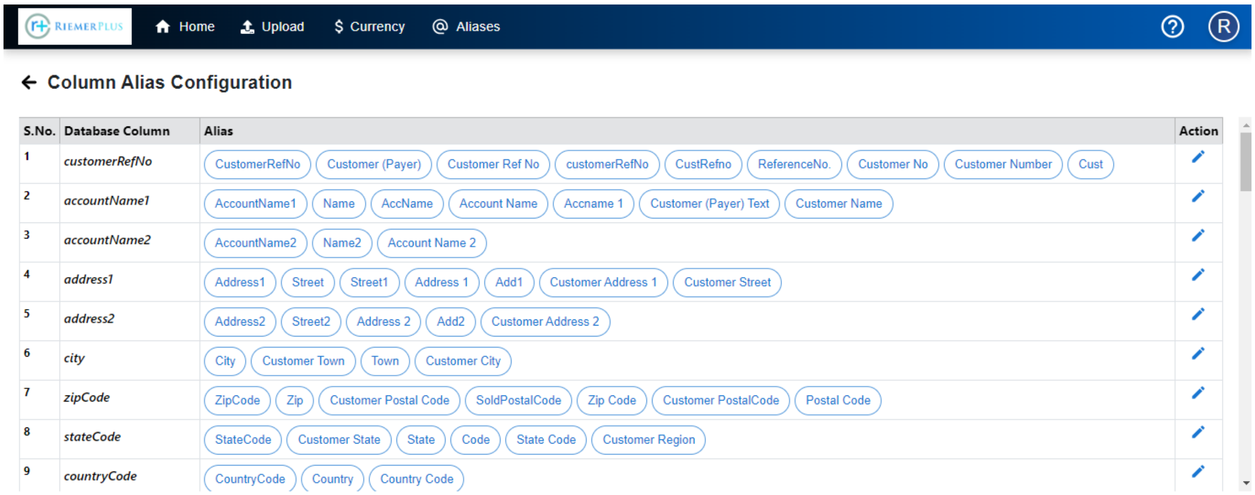


Figure 5(a)-> Aliases Table Screen

ii. The user can also add, or remove certain or even multiple aliases with ease by clicking on the pencil icon under Action Column.

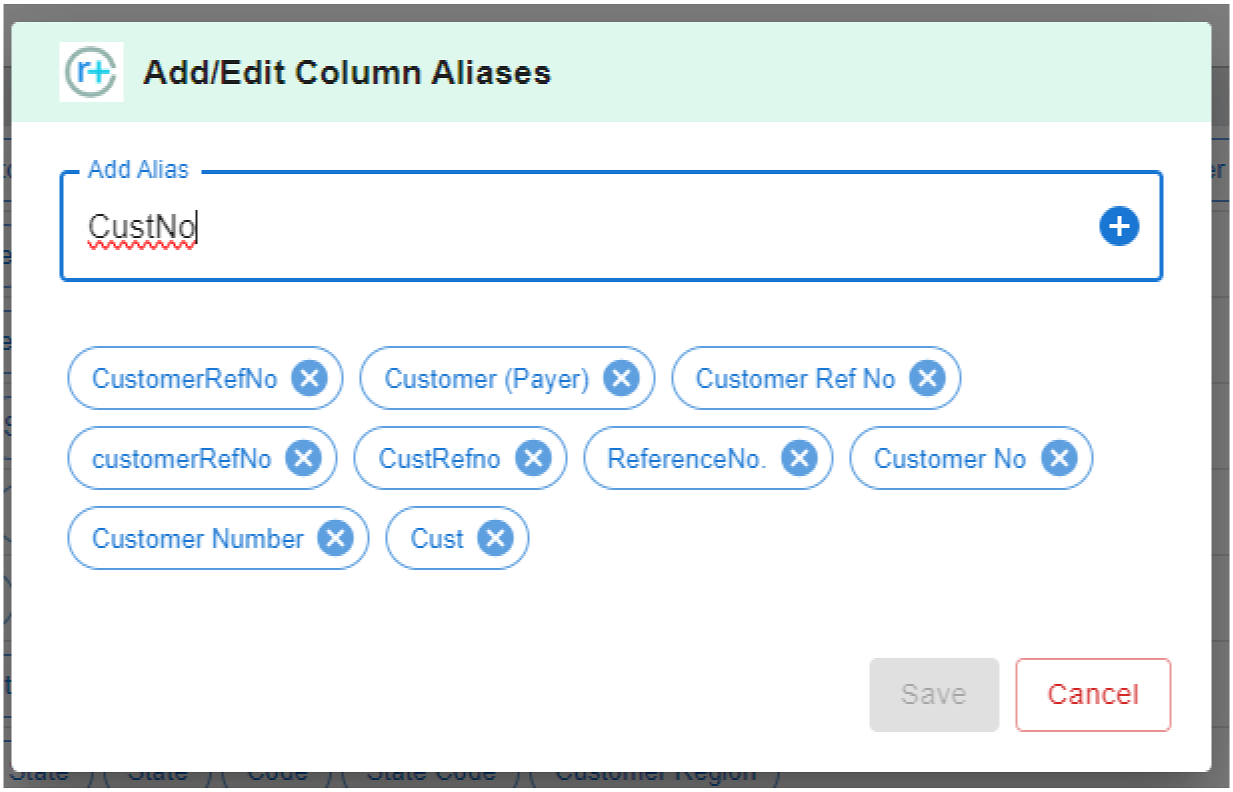
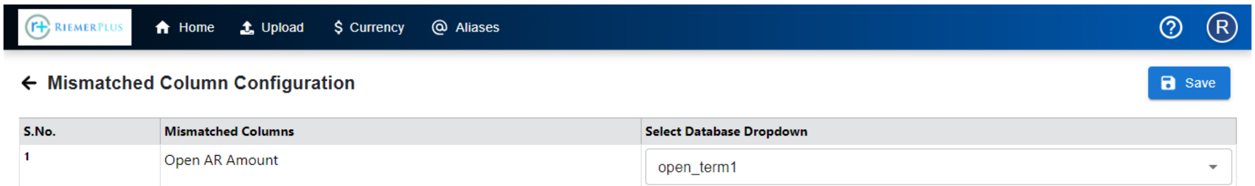


Figure 5(b)-> Add/Edit Aliases

iii. The user just needs to type the alias and then press 'Enter' key or click on the 'Plus' icon. The new alias will be displayed below as a Chip. Then, user can click on save. In case, user wants remove the alias, he/she just need to click on the cross icon present for each chip and that alias will be removed after hitting on save.

<u>6. Mismatched Column Configuration</u>->

i. The user is redirected to this screen when the Template status of the trade tape is 'Unmatched Columns'. The header columns whose aliases did not match in our application are displayed on this screen. The user can simply choose the correct database column for that trade tape column and click on save. The processing will be approved for the trade tape, post this step.



<u>Figure 6(a)-> Mismatched Columns Screen</u>

7. Help Section->

<u>Figure 7(a)-> Help Section screen</u>

i. This screen is for providing help to the user. Each section gives the information pertaining to screens present in our application. In the last accordion of the page, titled 'User Manual', the user has been provided with the link to download this User manual for their ease and help.

CONCLUSION

In Conclusion, **Data Portal** is an efficient internal application to consolidate and track a wide range of data received by Riemer. The processes can be further enhanced in future and will help the employees of Riemer Plus with respect to time consumption and their efforts.
Furthermore, the procedures defined in the application are in accordance with Riemer's scope and their requested validations to ease their work applications that was done earlier over wide range of applications.