Vizify Analytics

UNIFY: USER MANUAL

Prepared by Vizify Analytics Ltd

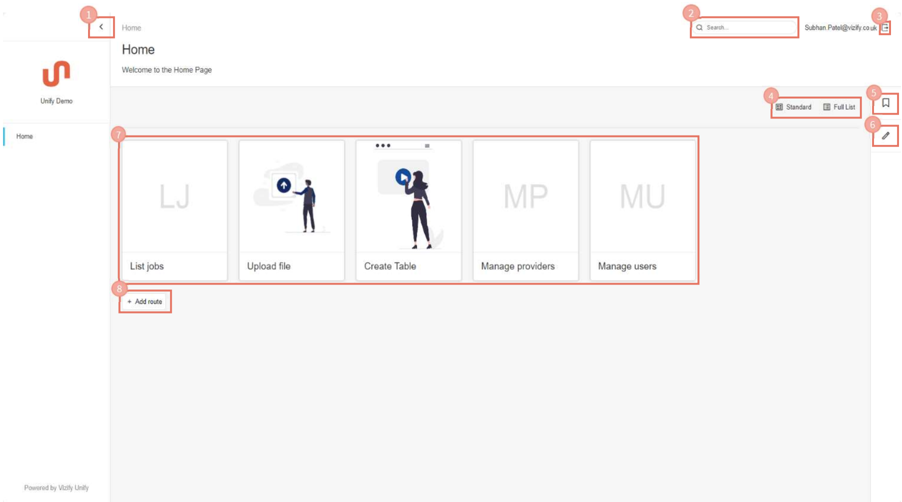
April 2024

Contents

1. Login & Home Page

The Unify login page serves to control access to Unify, ensuring it's accessible only to authorised individuals with valid credentials. To access Unify, visit the following link: https://deployment.vizify.co.uk/#/ and sign in using your credentials. You may be required to use MFA (Multi-Factor Authentication) for added security.

After logging in, you'll arrive at the Unify 'Home' page, which is customisable through both front-end and back-end configurations. Details regarding front-end customisation will be covered in the following sections. For information on customising Unify via the back-end, please refer to the appropriate section here.



1.1. Home Page Features

1. Side Bar

   On the Unify homepage, the Side Bar is positioned on the left. It grants convenient access to various tiles within the Unify platform. Access the Side Bar by clicking on the arrow icon. You will be able to add tile icons into the Side Bar via the Route Editor, detailed instructions on how to do this are provided here.

2. Search Bar

   Enables users to search within Unify to locate their desired tile.

3. Logout Button

   This will log you out of Unify. The next time you would like to use Unify, you will need to log back in with your credentials.

4. Tile View Format

   Enables users to toggle between Standard Viewing (the current view shown in the image above) or a 'Full List' which will display all tiles, regardless of their file path.

5. Collections

This allows the user to add pages to their 'collections'. It is a way of marking pages as favourites. More detailed instructions on 'Collections' are provided here.

Commented [SP1]: Not sure what this is or how it is used

Commented [SP2R1]: I have got an explanation from Ryan and this has now been resolved

6. Route Editor

   This is where you can Configure the page. More detailed instructions on the Route Editor are provided here.

7. Tiles

These tiles represent the various tasks that users can perform on Unify, and they can be selected by the user.

8. Add Route

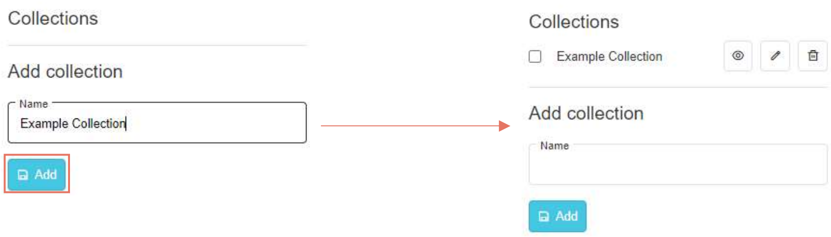
   This button enables the creation of a new ‘tile’ on the current page. The tile will initially be named 'New Route' and will be assigned a page type of 'Folder' by default. Information on Page Types can be found here.

2. Collections

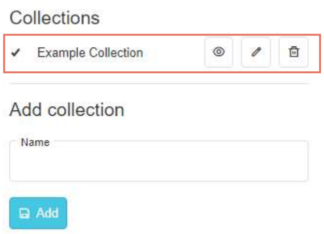
Collections provide users with a method to mark their preferred pages as favourites. They offer convenient access to your favourite pages from anywhere within Unify. You can create multiple collections, each containing a set of your preferred pages, and can be named to help distinguish between collections.

To create a Collection and add your preferred pages, follow these steps:

1. Create a name for your new collection and then click 'Add'.

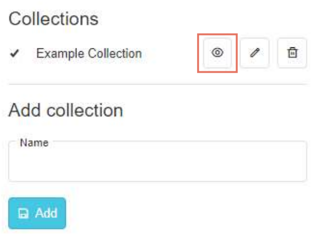


2. To add a page to your collection, navigate to the desired page, then click on the box on the left of the collection name, and it will fill with a tick. You have now added the page to your collection.

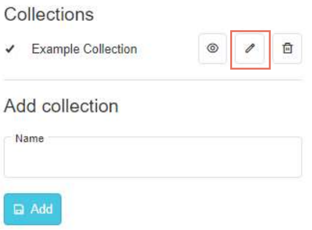


To view the pages on your collection, open the collections tab and click on the 'eye' icon.

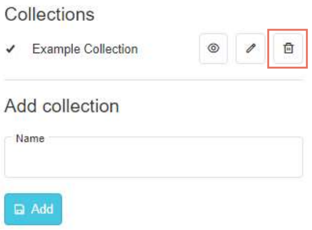
Commented [SP3]: Need to add screenshot of what you see after clicking the eye icon, as it is not visible currently



To edit the name of your collection, open the collections tab and click on the 'pencil' icon.



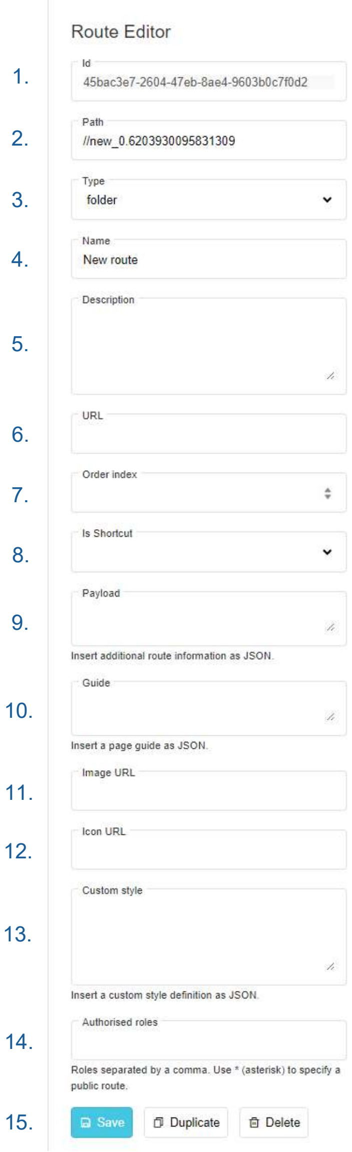
To delete your collection, open the collections tab and click on the rubbish bin icon.



3. Route Editor

The Route Editor is the main feature when configuring via the front end. Only users who have the required permissions will be able to view and access the Route Editor. After making any changes on the Route Editor, ensure you press 'Save' located at the bottom of the editor so as not to lose your configurations. In this section, we will describe each configuration option on the Route Editor.

Commented [SP4]: Any more info on this?



3.1. ID

The ID is autogenerated and is unique to every page.

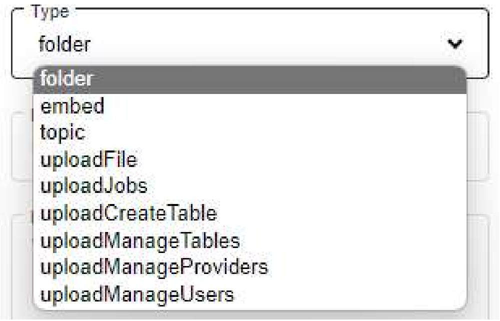
Commented [SP5]: Anything more to add?

3.2. Path

The path is the route in which was taken to get to the current page. This will be autogenerated. If the Path has been manually entered, and is entered incorrectly, it will only be visible when viewing the page as a ‘Full List’.

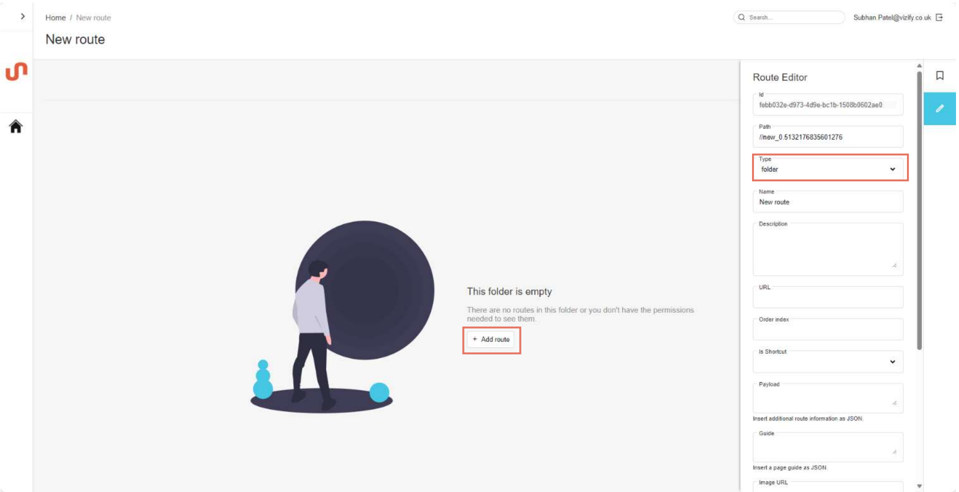
3.3. Type

'Type' specifies the functionalities and content available for viewing and interaction on the page. There are 9 different types that can be used when creating a page. In this section we will cover what each of them are.



i. Folder

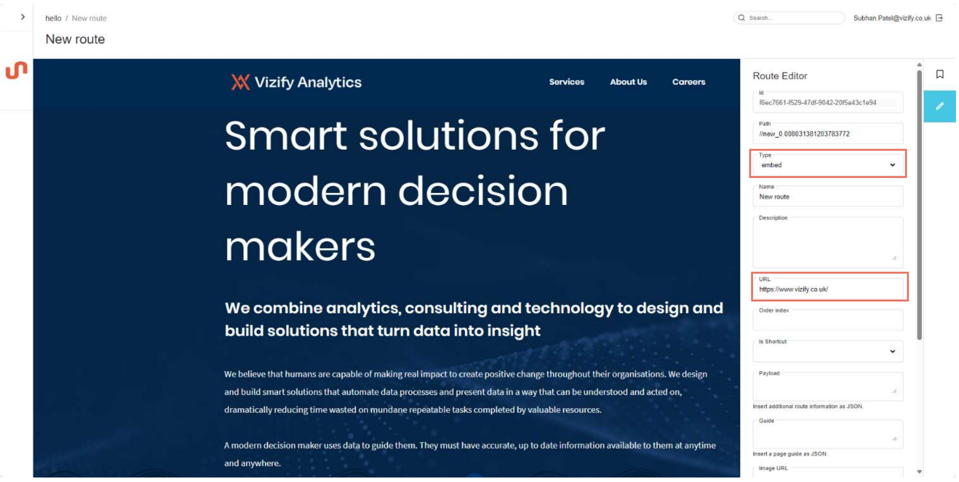
Upon adding a new route using the 'Add Route' button, a new tile will be generated with the type 'Folder', this is the default type for new tiles. Within a 'Folder', additional tiles can be added using the same 'Add Route' button, which will be located at the centre of the page.



ii. Embed

Embedding refers to the method of incorporating content from one source, such as a video, document, or dashboard, into another platform or webpage. In this case, when you embed something, you're essentially placing it within Unify so that users can view or interact with it directly without leaving the page.

To add content to the 'embed' page, just copy, and paste the URL of the desired content into the URL box of the Route Editor. An example of this is shown in the image below.



iii. Topic

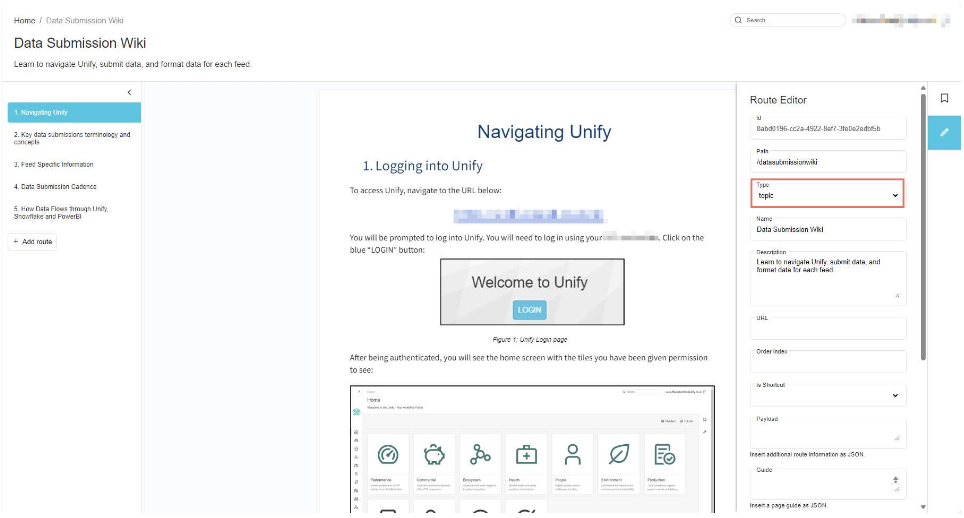
Commented [SP6]: Topic page does not appear, so I am unable to provide a screenshot and provide an explanation for it

Commented [SP7R6]: This has been resolved

The topic page enables you to incorporate content (through embedding) and divide it into sections (as shown in the image below). To create the sections, you will need to complete the following steps:

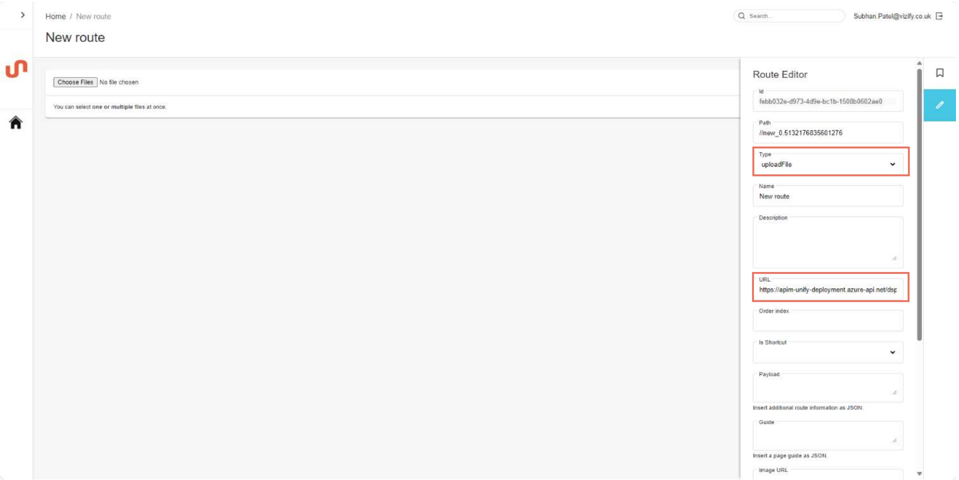
1. Add a new route.
2. Add another route and set the page type to embed.
    a. Follow the steps from ii. to configure an 'embed' page.
3. Navigate back to the newly added route in step 1 and set the page type to 'Topic'.

Please note, it is crucial to ensure that the path is sequential from the 'topic' page to the 'embed' page. For example, if the topic page has the path: /datasubmissionwiki, then the embed page should have the path: /datasubmissionwiki/navigatingunify.



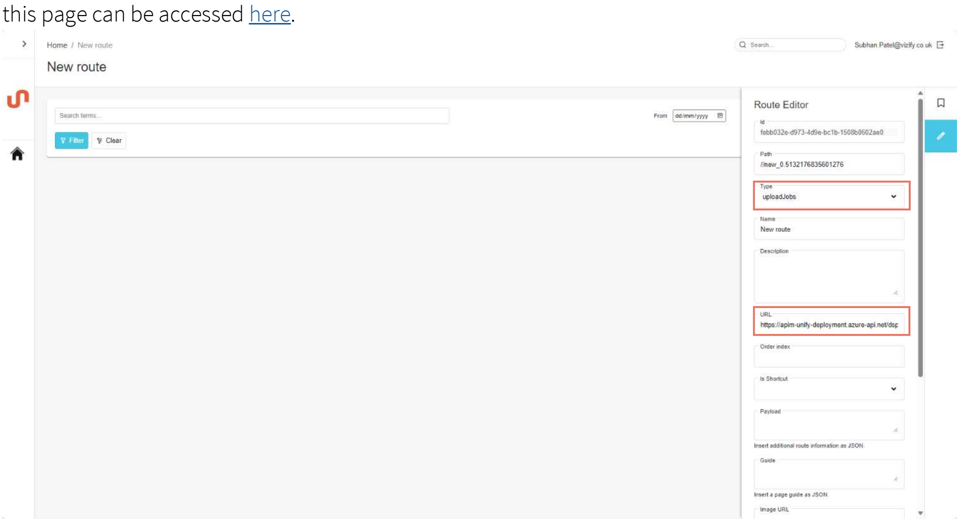
iv. UploadFile

The UploadFile page allows users to upload files into their created tables. When configuring the 'UploadFiles' page, ensure that it's linked to an API by entering the appropriate URL in the Route Editor's URL box. A guide on how to Upload files can be found here.



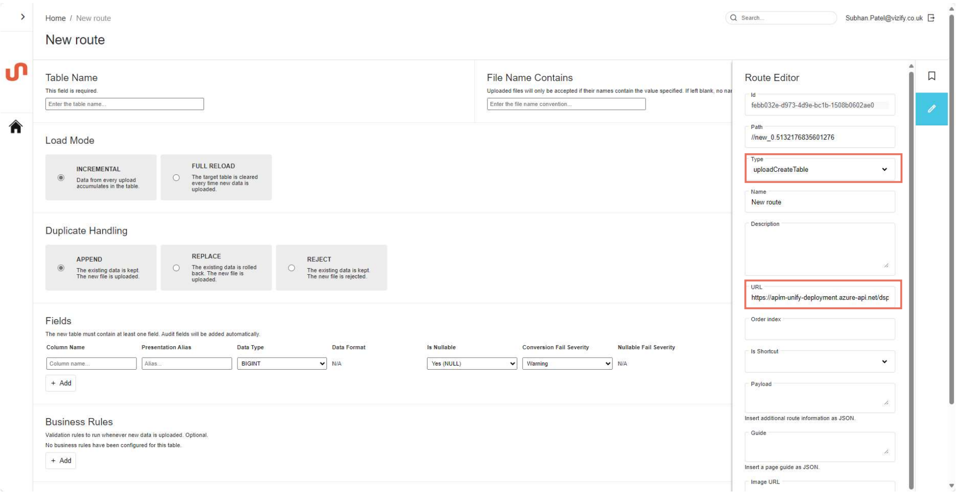
v. UploadJobs

The 'UploadJobs' page allows users to view the status of all files that have been uploaded to unify via the 'UploadFiles' page. When configuring the 'UploadJobs' page, ensure that it's linked to an API by entering the appropriate URL in the Route Editor's URL box. A guide on how to understand and utilise this page can be accessed here.



vi. UploadCreateTable

This page allows users to create tables and setup table rules. When configuring the 'UploadCreateTable' page, ensure that it's linked to an API by entering the appropriate URL in the Route Editor's URL box. Instructions on how to create a table can be found here.



vii. UploadManageTables

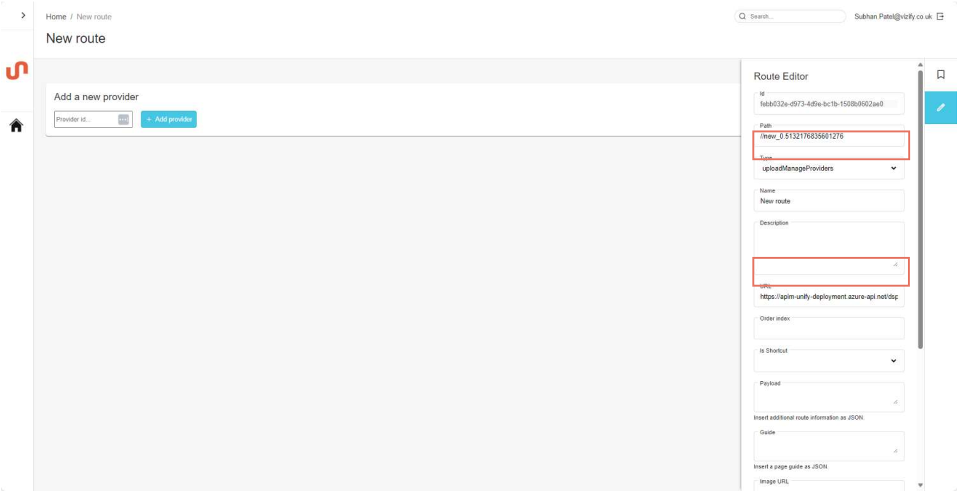
Commented [SP8]: Page does not appear for me so I am unable to add a screenshot

This page allows users to view or delete all tables that have been uploaded to Unify. When configuring the 'UploadManageTables' page, ensure that it's linked to an API by entering the appropriate URL in the Route Editor's URL box.

[Page does not appear for me so I am unable to add a screenshot]

viii. UploadManageProviders

This page will allow the user to Add or Remove new providers, as well as manage the tables that the provider will have access to. When configuring the 'UploadManageProviders' page, ensure that it's linked to an API by entering the appropriate URL in the Route Editor's URL box. A guide on how to utilise this page can be found here.



ix. UploadManageUsers

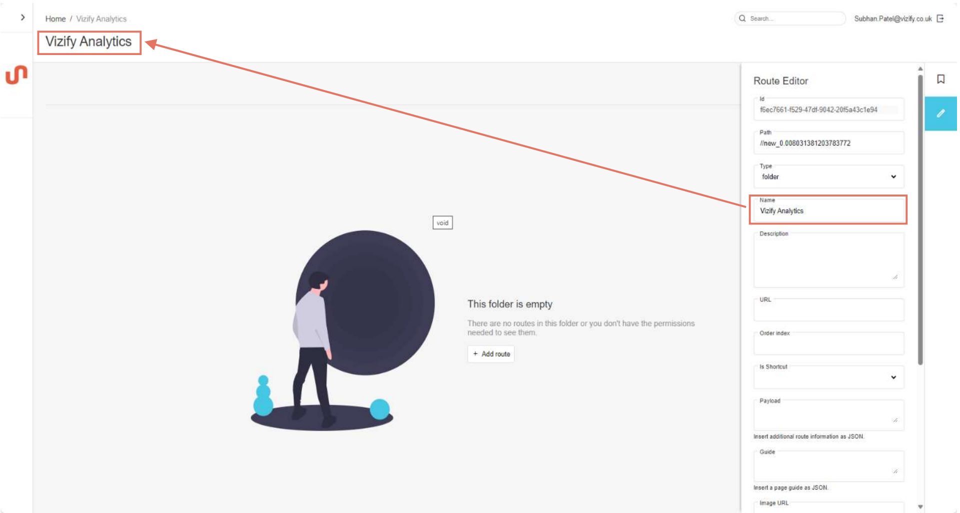
Commented [SP9]: Can't obtain screenshot of page as it does not load

The Manage Users page allows the authorised user to link Users to Providers. When configuring the 'UploadManageUsers' page, ensure that it's linked to an API by entering the appropriate URL in the Route Editor's URL box. A guide on how to utilise this page can be found here.

Can't obtain screenshot of page as it does not load.

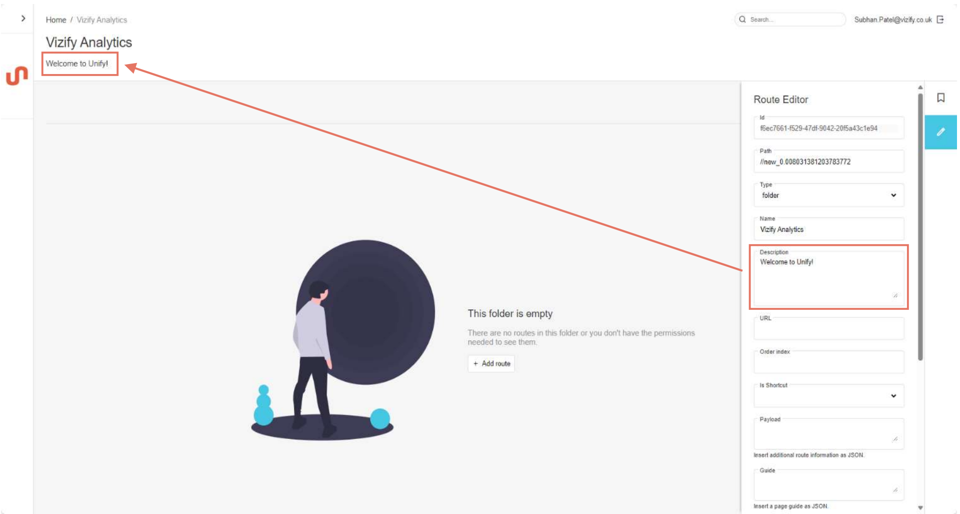
3.4. Name

Enables you to modify the page title.



3.5. Description

Enables you to modify the page description.

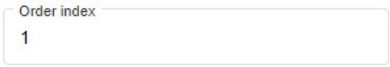


3.6. URL

The function of the URL varies according to the page type. If it's set to 'embed,' the URL can be utilised for embedding websites, documents, or dashboards. For page types prefixed with 'upload,' you can establish connections to data via the API URL.

3.7. Order Index

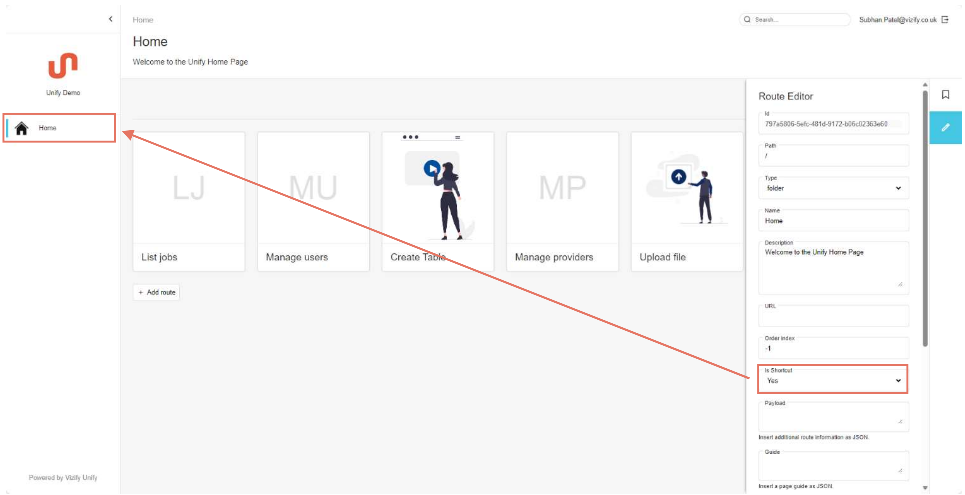
'Order Index' allows you to determine the position of the tile on the page. For instance, assigning an 'Order Index' of 1 will place the tile at the far left of all other tiles, and at the beginning of the first row if there are multiple rows.



3.8. Is Shortcut

This option allows you to decide whether to include a tile as a shortcut.

If 'yes' is selected, then the tile will appear as an option to select on the sidebar as shown here:



3.9. Payload

Commented [SP10]: Not sure what to enter here as I do not understand how this is used.

[Not sure what to enter here]

3.10. Guide

The ‘Guide’ option allows the user to create a help section which will appear on the right of the screen. To create a ‘Guide’, JSON code will need to be entered. There is a Guide – template file that can be used to generate the JSON code [Need to add where they can find it].

Commented [SP11]: Need to add where they can find the Guide template. Do I provide a file path? A link?

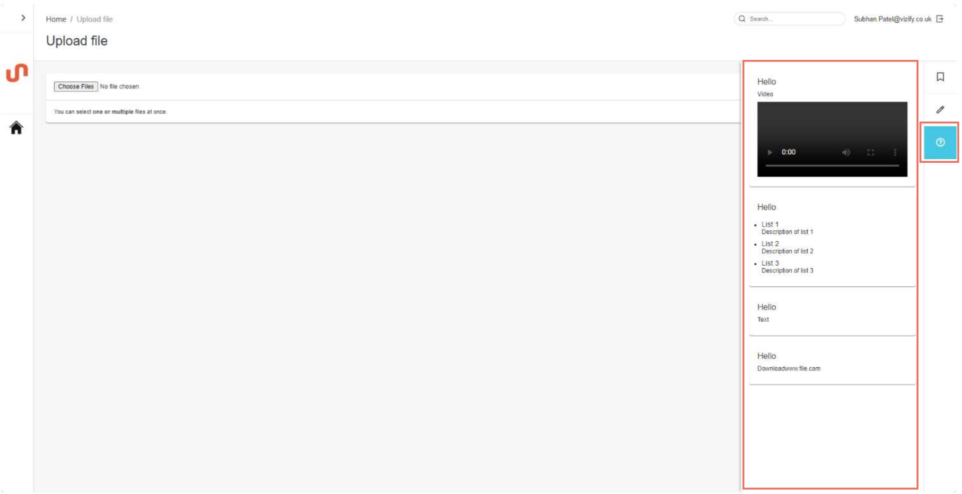
Type	Title	Text	Embedded item	List Title	List Text	Code			
Video	Hello	Video	www.link.com			{"title":"	","type": "vide	","src":"	"},
List	Hello	List		List 1	Description of list 1	{"title":"	","type": "list",	","body":"	"},
				List 2	Description of list 2		{"title":"	","body":"	"},
				List 3	Description of list 3		{"title":"	","body":"	"}]},
				etc...					
Text	Hello	Text				{"title":"	", "type": "tex	"},	
File	Hello	Download	www.file.com			{"title":"	","type": "file", "text":"		"}

To generate the code, input the 'Type', 'Title', 'Text', 'Embedded item', 'List Title', and 'List Text'. The 'Type' options include 'Video', 'List', 'Text', or 'File', each allowing for a title and text. For 'Video' or 'File' types, embed an item using a link. For 'List' type, provide the 'List Title' and corresponding 'List Text' for each ‘List Title’.

An example of the code generated from the above template is shown here:

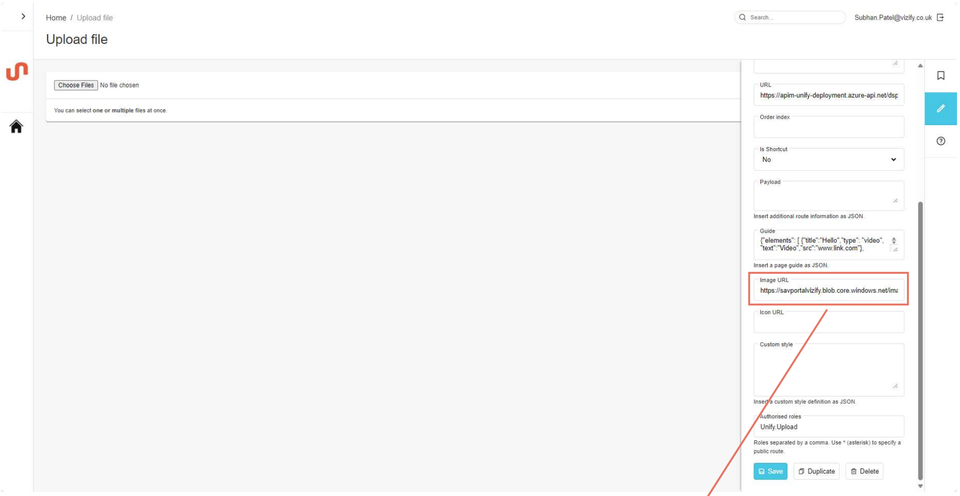
{"elements": [{"title":"Hello","type": "video", "text":"Video","src":"www.link.com"},{"title":"Hello","type": "list", "items":[{"title":"List 1","body":"Description of list 1"},{"title":"List 2","body":"Description of list 2"},{"title":"List 3","body":"Description of list 3"}]},{"title":"Hello", "type": "text", "text": "Text"},{"title":"Hello","type": "file", "text":"Downloadwww.file.com"}]}

The output of this code once inputted into the ‘Guide’ box is the following:

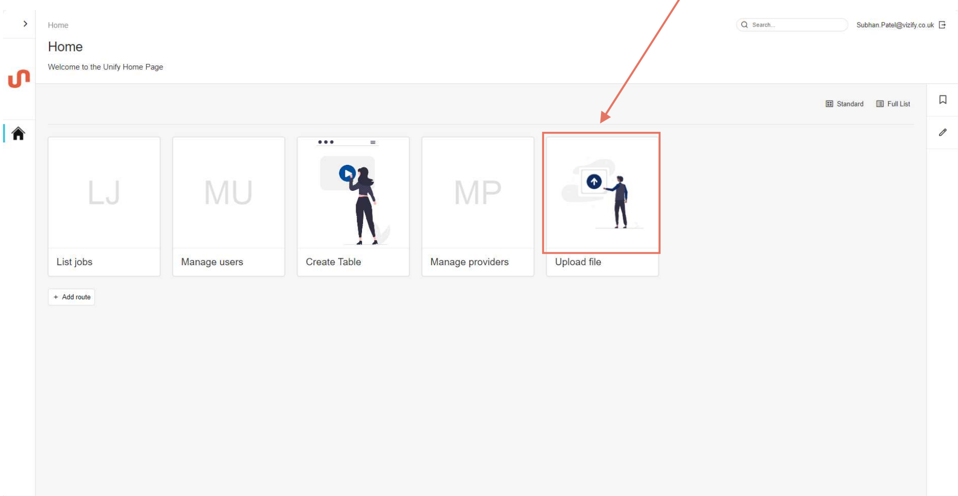


3.11. Image URL

The Image URL is what appears on the tile on a Page. Find your desired Image, and copy and paste the URL into the Image URL box. If the image has been found online, then open the image in a new tab and copy and paste the URL into the 'Image URL' box.

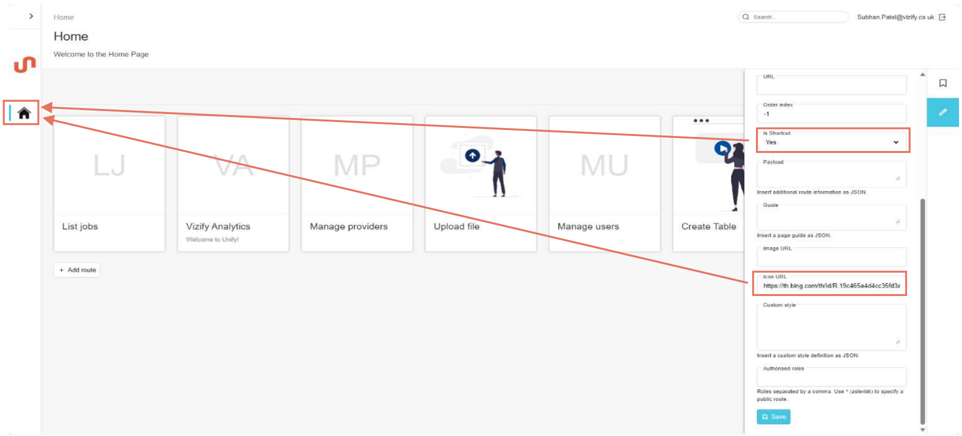


The Image URL will input the image onto the tile.



3.12. Icon URL

The Icon URL will allow an icon to appear in the sidebar. The tile Icon is displayed on the Sidebar when 'Is Shortcut' is set to Yes. This icon remains visible regardless of whether the sidebar is open or closed. Find your desired Image, and copy and paste the URL into the Icon URL box.



3.13. Custom Style

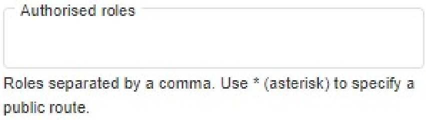
Commented [SP12]: Not sure what to say as I do not understand what Custom Style can do and how to use it.

[Not sure what to enter here]

3.14. Authorised roles

Commented [SP13]: Would like to mention the different roles and what they can and can't do depending on the roles. Need to ask Mike

This is where you can restrict viewing, usage, or access to a page to only those users that have been assigned the associated role. If there are multiple roles on a page, then these will need to be separated by a comma.



Roles are defined during the deployment of Unify and are generic to every Unify deployment. They assign users permission (via Group Membership) to complete specific actions within Unify. The Unify security model closely knits the front-end platform to the back-end privileges to prevent unauthorised users taking access. The roles are as follows:

Role	Role Purpose
Unify.CreateTargetTable	Allows a user to define new tables, naming specification, load modes, duplicate handling rules, column names, aliases, data types, nullability and business rules which will be created in the Snowflake cloud.
Unify.DeleteTargetTable	Provides a list of existing tables in the Snowflake cloud, with the ability to delete/drop tables.
Unify.ManageUsers	Displays a list of existing assignments of individuals/groups to Providers, allowing the addition or removal of new groups or individuals. This area will allow the user to manage the SCOPE of a user's access for the DMP.
Unify.ManageProviders	Allows a user to create new providers, add new tables to existing Providers, or remove tables from existing providers. This area will allow the user to manage the SCOPE of a user's access for the DMP.

Unify.Upload	Give access to the upload file screen. A user must have access to Providers to effectively upload a file.
Unify.Download	Displays the 'Download' file option on the 'Jobs' page. This downloads the original source file from the BLOB storage containers.
Unify.Rollback	Displays the 'Rollback' option on the 'Jobs' page. This will remove the data from a specific job from the SnowFlake database and move the file from 'Processed' to 'Rolled-back' folder in the BLOB storage container.

3.15. Save, Duplicate and Delete

After configuring the page via the Route Editor, remember to save your changes to apply them.

Clicking the 'Duplicate' button will create a duplicate page with identical configurations, and the new tile will appear next to the original one.

Clicking 'Delete' will remove the tile and all associated page configurations from Unify, it will also return you to the root location of the tile.

4. Back-end configurable elements

Commented [SP14]: Not sure what can or can't be configured in the backend.

The only changes that can be made to the front end - other than adding tiles - are via the Route Editor. There are additional configurations that can only be performed through the backend. These include:

- Sidebar logo
- Page Colouring
- . . .
- . . .
- . . .
- . . .
- . . .
- ...

Not sure what can or can't be configured in the backend.

5. Users and Providers

One of the ways securities are managed is through linking Users to Providers and Providers to tables. In this section we will explain the importance of the relationship between Users, Providers, and tables.

5.1. Users

Users are anyone who has the correct log in credentials for Unify. Each User will have different permissions and access depending on their assigned authorised role. Users can also be linked to many providers…

5.2. Providers

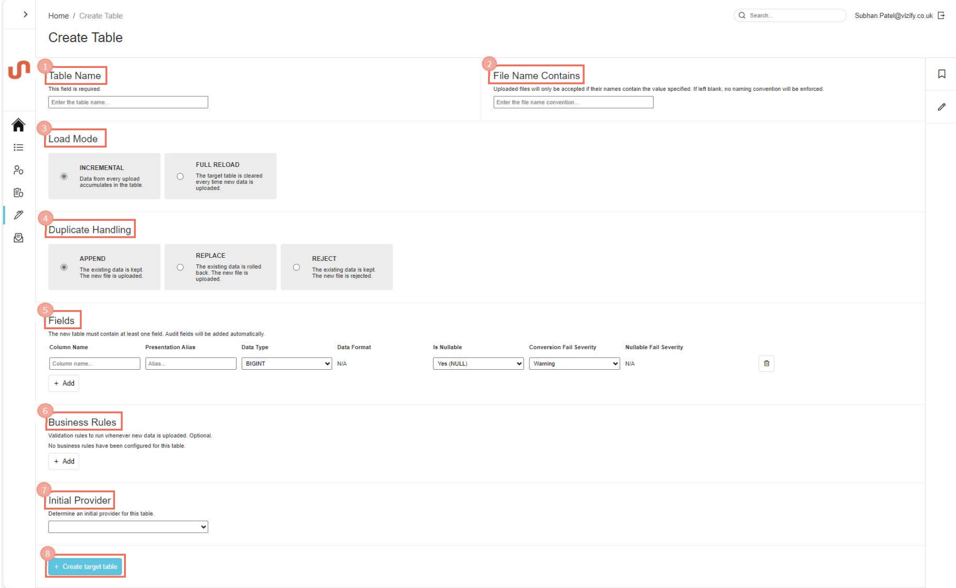
Providers contain tables, with each table required to be associated with a provider. Providers ensure that only users that have been linked to them can upload files to the linked tables and create tables within that provider.

If you would like to know how to link Users to Providers, then click here.

If you would like to know how to link Providers to tables, then click here.

6. Create a Table

Only those who have been assigned the [Unify.CreateTargetTable](#) role will be able to create a table. To create a table, navigate to the Create Table tile.



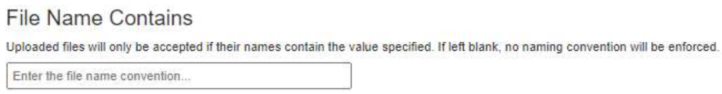
There are several fields to consider when creating a table. The following subsections will explain these fields in detail.

6.1. Table Name

This is a required field and defines the name of the table. Uploading a data file with a different name than the table name set is acceptable if other criteria are met, such as 'File Name Contains'.

6.2. File Name Contains

This field ensures that uploaded files adhere to the specified naming convention. Files not meeting this convention will be rejected upon upload. If this field is empty, no naming convention is enforced, and files will be accepted if other criteria are met.



6.3. Load Mode

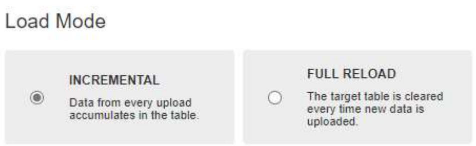
This determines the action to be taken on existing data when new data files are uploaded. There are two options available:

i. Incremental

New data is added to the existing data without removing any.

ii. Full Reload

All current data is replaced with the newly uploaded data.



6.4. Duplicate Handling

This setting dictates the handling of duplicate file uploads. Three options are provided:

i. Append

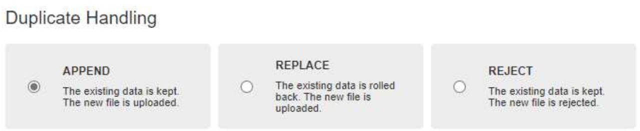
Retains all current data and adds the newly uploaded data.

ii. Replace

Removes existing data and substitutes it with the newly uploaded data.

iii. Reject

Declines the new file upload, preserving all existing data without any alterations.



6.5. Fields

This is where you can configure the columns that will exist in the table. There must be at least one column in a table.

If a data file uploaded to Unify includes a column that doesn't exist in our table, Unify will omit that column during the upload process.

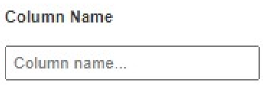
If a data file uploaded to Unify does not include a column we expect to see in our table, then the upload will fail.

To delete a column, click on the rubbish bin on the far right. To add a column, click on the '+ Add' button below the 'Column Name' field.

There are several options to consider when configuring columns:

i. Column Name

This represents the column name to be included in the table. It's crucial to ensure that the column name matches exactly with the corresponding column name in the data file intended for upload to Unify, including case sensitivity. If it does not match, the upload will fail.



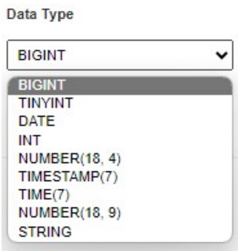
ii. Presentation Alias

You may want to alias the column to be more presentation friendly. For example, if you know the column name from a file will be coming in as 'Total_Spend', then you may want to alias this by removing the underscore and changing it to 'Total Spend'.

iii. Data Type

Every column must be allocated a Data Type. The available Data Type options may vary depending on whether Unify is deployed on Snowflake or Azure.

If Unify is deployed on Snowflake, then there are 8 Data Types to choose from:



a. BIGINT – A numeric data type for large integer values.

b. TINYINT – A numeric data type for small integer values.

c. DATE - Represents a specific calendar date format. A Date format will need to be further specified in the 'Data Format' field.

d. INT – A numeric data type.

e. NUMBER(18,4) – A numeric data type with a maximum of 18 digits and 4 decimal places.

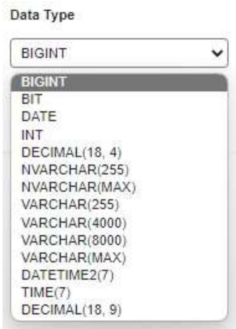
f. TIMESTAMP(7) – Represents date and time specific information.

g. TIME(7) - Represents a time value with precision up to 7 decimal places.

h. NUMBER(18,9) - A numeric data type with a maximum of 18 digits and 9 decimal places.

i. STRING - A sequence of characters, such as letters, numbers, or symbols.

If Unify is deployed on Azure, then there are 14 Data Types to select from, as depicted in the image below, the Data Types consistent with Snowflake include BIGINT, DATE, INT, and Time(7), while others differ:



a. BIT - A binary data type representing a Boolean value. It can store either 0 or 1, typically used to represent true/false, yes/no, or on/off states.

b. DECIMAL(18,4) – Similar to NUMBER(18,4) in Snowflake

c. NVARCHAR(255) - Represents variable-length Unicode (includes letters, numbers, symbols etc…) character strings with a maximum length of 255 characters

d. NVARCHAR(MAX) - Represents variable-length Unicode (includes letters, numbers, symbols etc…) character strings, can hold a very large amount of characters.

e. VARCHAR(255) - Represents a variable-length character string with a maximum length of 255 characters.

f. VARCHAR(4000) - Represents a variable-length character string with a maximum length of 4000 characters.

g. VARCHAR(8000) - Represents a variable-length character string with a maximum length of 8000 characters.

h. VARCHAR(MAX) - Represents a variable-length character string, can hold a very large amount of characters

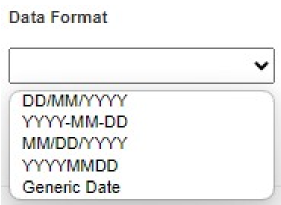
i. DATETIME2(7) – Similar to TIMESTAMP(7) in Snowflake

j. DECIMAL(18,9) - Similar to NUMBER(18,9) in Snowflake

iv. Data Format

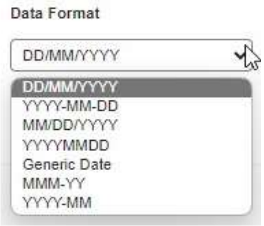
This sets the format of the Data Type. The available options may vary depending on whether Unify is deployed on Snowflake or Azure.

If Unify is deployed on Snowflake, configuring the 'Data Format' is only necessary when the Data Type is specified as 'DATE'. You'll need to choose the most appropriate format for the data, and if none are suitable, select 'Generic Date'.

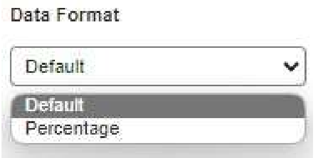


If Unify is deployed on Azure, configuring the Data Format is only necessary when the Data Type is specified as 'DATE', 'DECIMAL(18,4)' AND 'DECIMAL(18,9)'.

If the Data Type is 'DATE', you'll need to choose the most appropriate format for the data, and if none are suitable, select 'Generic Date'.

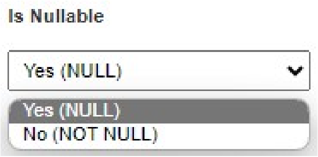


For data types 'DECIMAL(18,4)' or 'DECIMAL(18,9)', you'll be presented with two options to select: 'Percentage' or 'Default'.



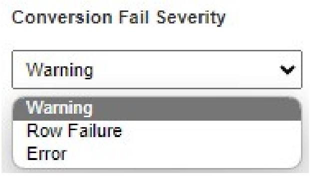
v. Is Nullable

Here you can decide whether the data field can contain Null values. Null values are where a data field has not been assigned a value or does not exist for a specific record or observation. Select 'Yes (NULL) if the field can contain Null values, and select 'No (NOT NULL)' if it cannot contain Null values.



vi. Conversion Fail Severity

This is where you can decide upon the severity level when data uploaded fails to convert to the assigned Data Type. There are three severity levels to choose from:



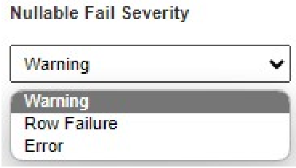
a. Warning – A warning message will display, notifying you of the issue, but all data will still be uploaded.

b. Row Failure – Only the specific row encountering the data type conversion failure will be affected; the remaining data will still be uploaded.

c. Error – The entire file upload will fail, and no data will be uploaded.

vii. Nullable Fail Severity

If the 'Is Nullable' field is set to 'No (NOT NULL)' then you will be able to set the severity level for when a data record contains Null values. There are three severity levels to choose from:



a. Warning – A warning message will display, notifying you of the issue, but all data will still be uploaded.

b. Row Failure – Only the specific row encountering the data type conversion failure will be affected; the remaining data will still be uploaded.

c. Error – The entire file upload will fail, and no data will be uploaded.

6.6. Business Rules

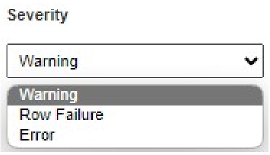
Here, you can establish rules tailored to your business context, which will execute each time new data is uploaded. These rules are exclusively set through SQL Expressions. For instance, if you aim to filter the uploaded data file to include only records after 2021, you would input the SQL Expression 'WHERE YEAR > 2021' (assuming a 'Year' column exists in your table). You can also provide a description of the Business Rule to make it easier for an external user to understand the SQL Expression.

These expressions are written using T-SQL and RegEx. Use the following syntax to check if a column's value is present in another column:

<ColumnName1> IN (SELECT <ColumnName2> FROM dbo.<TableName>)

Note: in order to refer to a column in another table, this one must have been created previously.

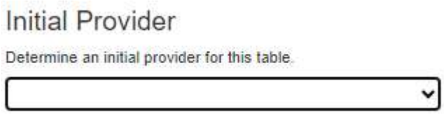
You can also set the Severity level to handle what to do if the data file does not align with the Business Rule. As before, there are three severity levels to choose from:



a. Warning – A warning message will display, notifying you of the issue, but all data will still be uploaded.
b. Row Failure – Only the specific row encountering the data type conversion failure will be affected; the remaining data will still be uploaded.
c. Error – The entire file upload will fail, and no data will be uploaded.

6.7. Initial Provider

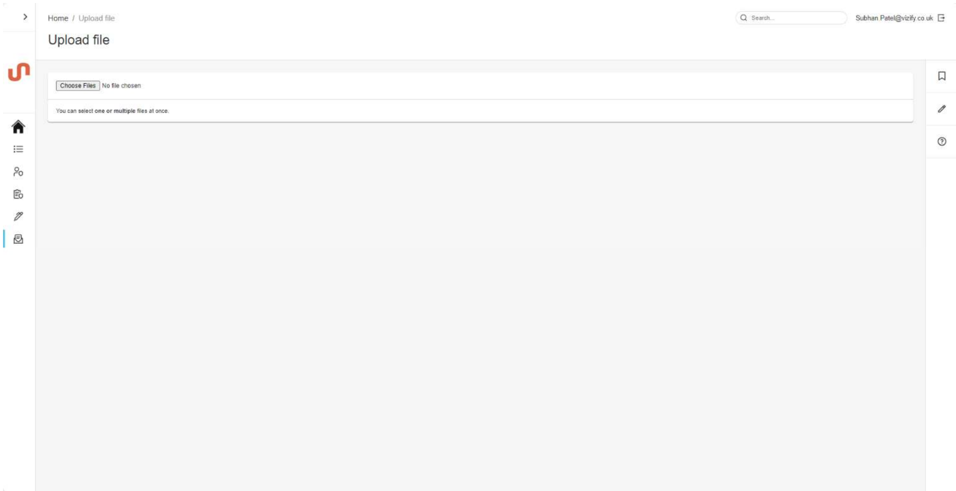
A user will have been assigned access to Providers. When a table is being created, an 'Initial Provider' will need to be assigned to that table. Only users who have access to their assigned Provider will be able to upload data files to that table. More Providers can be later added to the table on the 'Manage Providers' page.



6.8. Create Table

Once all fields have been configured. Clicking the 'Create Table' button will create the table.

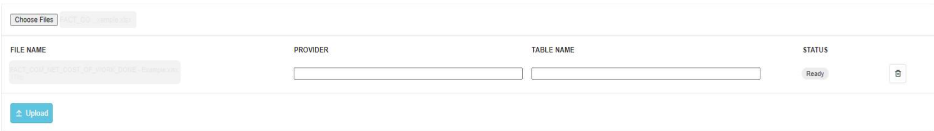
7. Upload a File



Only users who have been assigned the Unify.Upload role can view and access this page.

To Upload a data file to Unify, click the 'Choose File' button and select the file from your computer. Alternatively, you can drag the file from your computer and drop it into the 'Choose File' box. You have the option to upload one or multiple files simultaneously. You will need to continue by choosing a Provider from the dropdown menu, followed by selecting a Table Name from the subsequent dropdown. You can also input text into the boxes to filter the dropdown options.

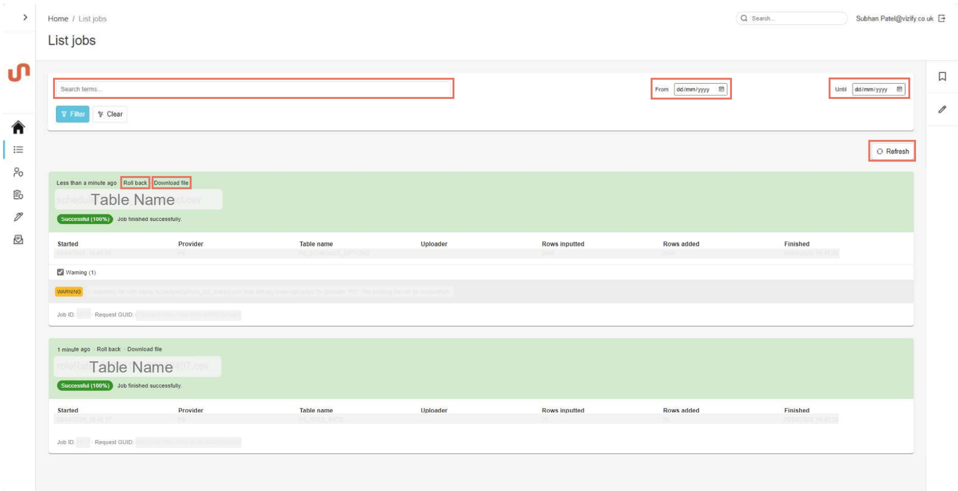
Next, if you want to delete the file instead of uploading the click on the rubbish bin on the far right, otherwise click on 'Upload'. The upload duration may vary depending on the file size, with larger files requiring more time to upload. The 'Status' will then transition from 'Ready' to 'Processing'. Upon successful upload, the 'Status' will switch to 'Successful'; otherwise, it will indicate 'Failed'. In case of a failed upload, an error message will be displayed for troubleshooting purposes.



8. List jobs page

The List Jobs page offers a comprehensive overview of all data file uploads along with their statuses, including any error or warning messages. It displays essential details such as Job ID, Request GUID, upload start and finish times, the assigned provider, table name, uploader information, the number of inputted and added rows, and options for rolling back or downloading the file. Only users who have been assigned the [Unify.Rollback]() and the [Unify.Download]() roles can rollback or download files respectively, if they have not been assigned these roles, then they will not be able to see the option to rollback and download.

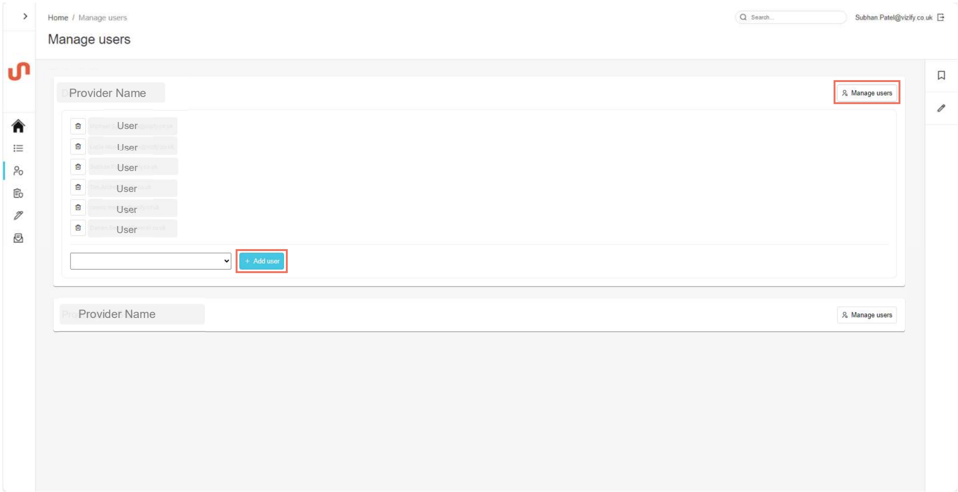
You can refine your search by entering keywords in the search bar or by selecting a date range using the filters situated at the top right corner of the page. Additionally, you have the option to clear any applied filters by clicking on the designated button, located just below the search bar, and to refresh the page using the 'Refresh' button positioned below the date filters.



9. Manage Users Page

The Manage Users Page is where you can link your Users to Providers that they have access to. Only those who have been assigned the Unify.ManageUsers role can view and access this page.

Click the 'Manage users' button situated on the far right of the corresponding Provider. This action will expand the box, displaying all users linked to this provider. Users can be removed by clicking the rubbish bin icon on the left of their name. Additionally, new users can be added by selecting a user from the dropdown menu and clicking 'Add user', you can only add one user at a time.



10. Manage Providers

The Manage Providers page is where you can link your Providers to the tables that they have access to. Only users who have been assigned the Unify.ManageProviders role can view and access this page.

This page allows you to access all tables associated with a Provider by clicking the respective 'Manage tables' button on the far right. Additionally, you can delete the Provider and its associated tables by clicking the 'Delete provider' button. To add more tables to a Provider, select a table from the dropdown and click the 'Add table' button within the Provider's box, you can only add one table at a time. If you need to add a new provider, enter the Provider ID in the 'Add a new provider' box at the bottom of the page, then click 'Add provider'.