BettrData.io User Guide

v.1.4.1

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Introduction

In today’s competitive market, having the right data consistently at your fingertips is one of the most valuable tools a business can take advantage of in order to be competitive, build business and remain successful. However, scrutinizing data to uncover what is most beneficial can be time consuming and costly.

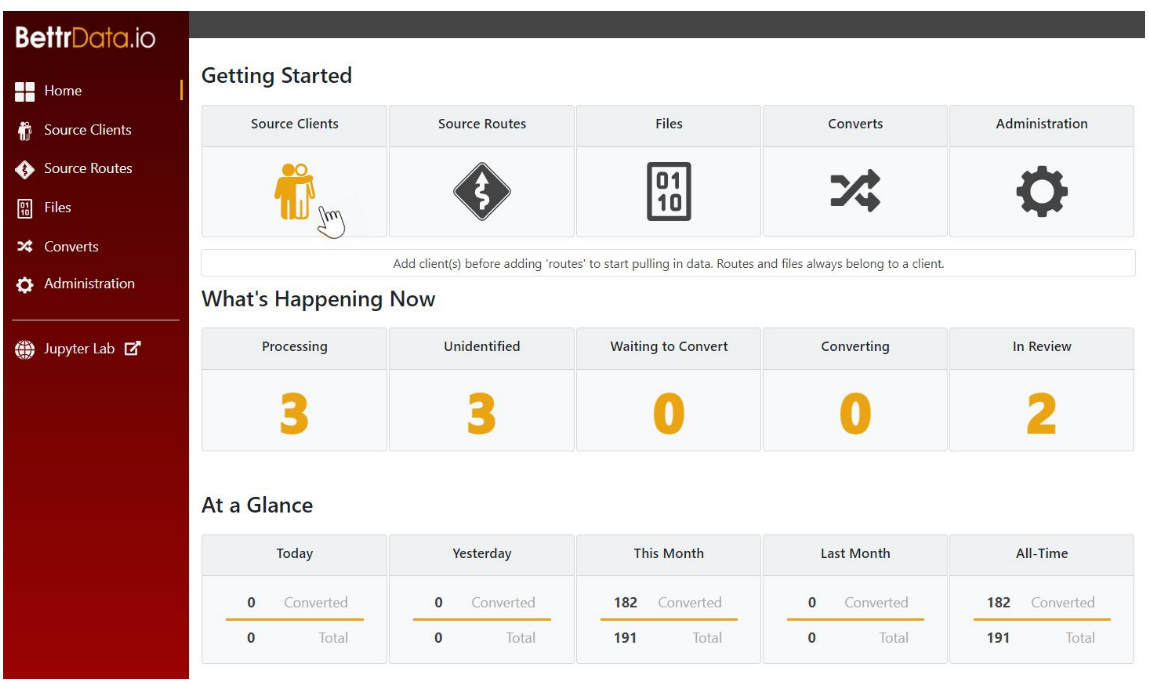
Bettrdata.io is a highly automated application that easily and aggressively manages data acquisition workflow to produce high quality and standardized data sets from many disparate data files and/or clients.

For organizations depending on high-quality transformed data from multiple sources, our platform is a data acquisition, data cataloging, data mapping, data profiling, data validation, and data conversion engine built for ease of use, agility, time and cost savings and consolidated management.

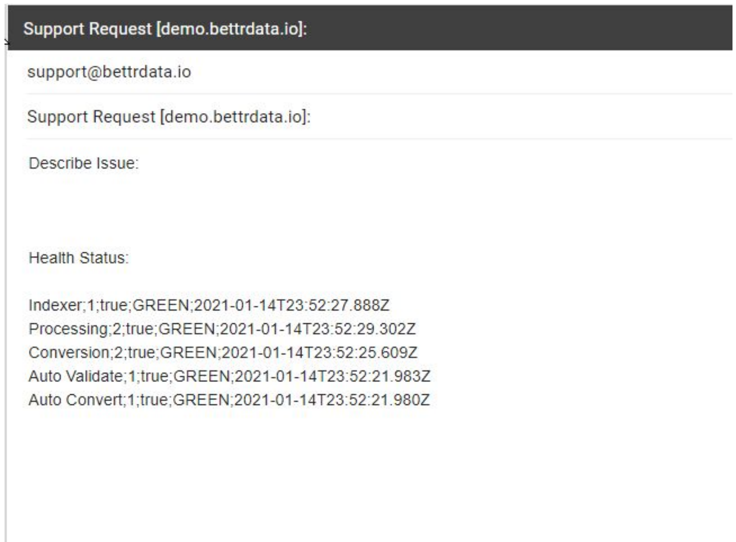
To access BettrData.io login at <client>.bettrdata.io. Your workspace and user logins will be provided to you by your BettrData.io account manager at setup.

Home

From the Home page, you can easily manage each component of the acquisition and conversion workflow including the ability to add Source Clients, setup Source Routes, manage Files, manage Converts, and perform system Administration. You can also view high level system counts and statistics.



To maneuver throughout the application simply click on a card or select an option from the left menu panel. Hovering over a card on the Home page will display instructional details about that component. Click on the icon located at the top right of the page to logout or the Email Support icon to send a Support Request. Support request emails will open in your default email client.


Support Request [demo.bettrdata.io]:

support@bettrdata.io

Support Request [demo.bettrdata.io]:

Describe Issue:

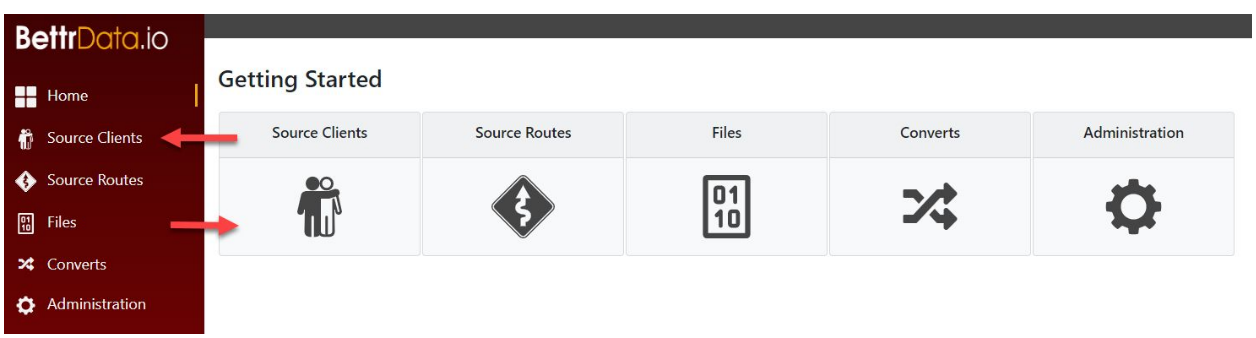
Health Status:

Indexer;1;true;GREEN;2021-01-14T23:52:27.888Z
Processing;2;true;GREEN;2021-01-14T23:52:29.302Z
Conversion;2;true;GREEN;2021-01-14T23:52:25.609Z
Auto Validate;1;true;GREEN;2021-01-14T23:52:21.983Z
Auto Convert;1;true;GREEN;2021-01-14T23:52:21.980Z

Be sure to include further information to the Subject Line after the colon (:) and describe the issue as thoroughly as you can. Then click the Send button.

Getting Started

To access the different management options from the Home page, select an option from the menu panel or click on a card.



Menu items include:

Home - located on the menu panel, clicking on Home will return you to the Home page.

Source Clients - click on this option to get started. You'll need to add client(s) before adding routes to start pulling in data.

Source Routes - Routes will need to be set up and enabled (or downloads triggered manually) to allow data to start to flow in. If enabled, the system then automatically scans Routes for new data.

Files - select Files to watch files flow through the different stages of the workflow, then add a convert type and Open in Builder to standardize and validate the data.

Converts - from here you'll be able to manage convert configurations produced in the Builder.

Administration - You'll start here if you are new or fine tuning. Add fields in the Field Configuration tab, then add those fields to a Convert Type in the next tab. Administration provides multiple options to view, validate and customize output.

What's Happening Now

From the Home page you'll also be able to monitor and quickly manage files as they advance through the workflow.

What's Happening Now

Processing	Unidentified	Waiting to Convert	Converting	In Review
5	3	3	0	0

The number of files that are Processing, Unidentified, Waiting to Convert, Converting or in Review can be viewed from the different Workflow Count cards. Click on a card to be taken to that segment of the workflow process.

At a Glance

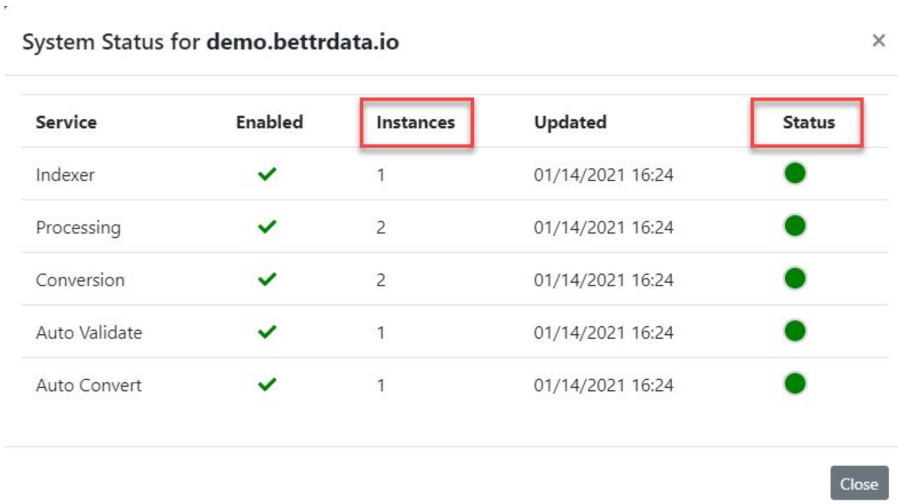
And to keep you updated on conversion trends, the Home page also provides a visual of the number of files that have been converted over time.

At a Glance

	Today	Yesterday	This Month	Last Month	All-Time
Converted	0	0	364	0	364
Total	0	0	563	0	563

System Status

Located at the lower right of the Home page and all pages of the applications is the System Status icon. Click on the icon to view the status of the application's different services.


System Status for **demo.bettrdata.io** ×

Service	Enabled	Instances	Updated	Status
Indexer	✓	1	01/14/2021 16:24	
Processing	✓	2	01/14/2021 16:24	
Conversion	✓	2	01/14/2021 16:24	
Auto Validate	✓	1	01/14/2021 16:24	
Auto Convert	✓	1	01/14/2021 16:24	

Close

If the service is running without issue, the Status icon will be **green**. A **yellow** icon means that the service is disabled but no problem exists and a red status icon reflects that the service is not responding or there is an error. In this circumstance, a system ticket will be automatically generated (if enabled in settings) and sent to the BettData.io support system.

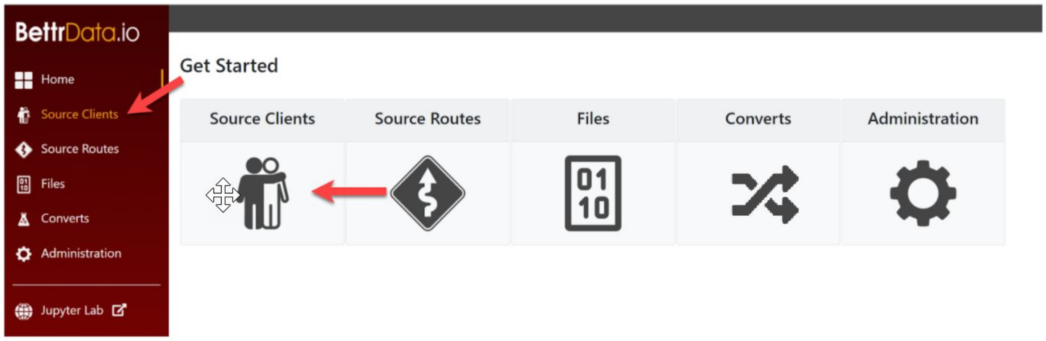
The Instances column displays the count of the services currently running. The number of running instances is part of your original setup and subscription plan, please contact support for more information or requested changes.

Source Clients

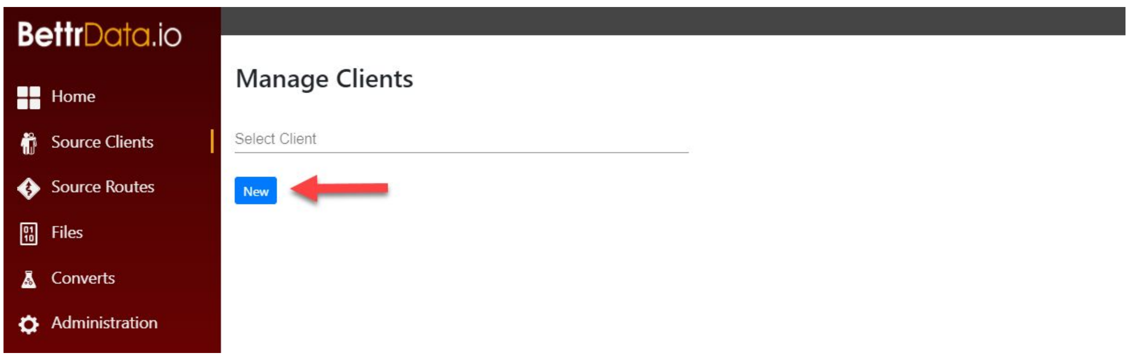
To set up and initiate the necessary acquisition workflow and begin to pull in data, you'll need to start by adding at least one Source Client. You can add one or multiple clients. You can also create Brands for each client and Titles for each brand. Brands and titles provide the ability to organize clients in a hierarchical structure, but is not required to use the platform effectively.

Creating a Client

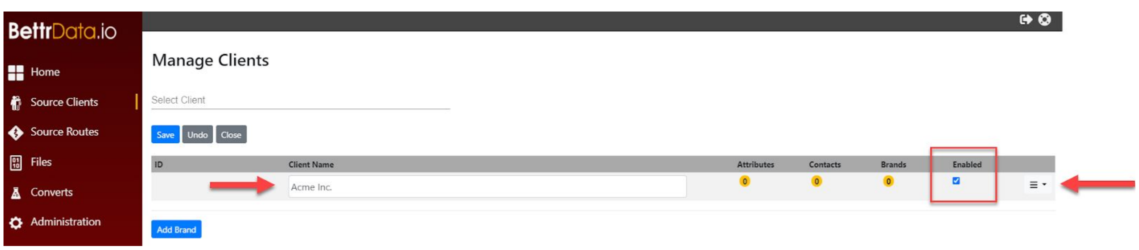
To create a new Client, select Source Clients from the menu panel or click on the Source Clients card on the Home page.



The Manage Clients page will display. Click on the New button.



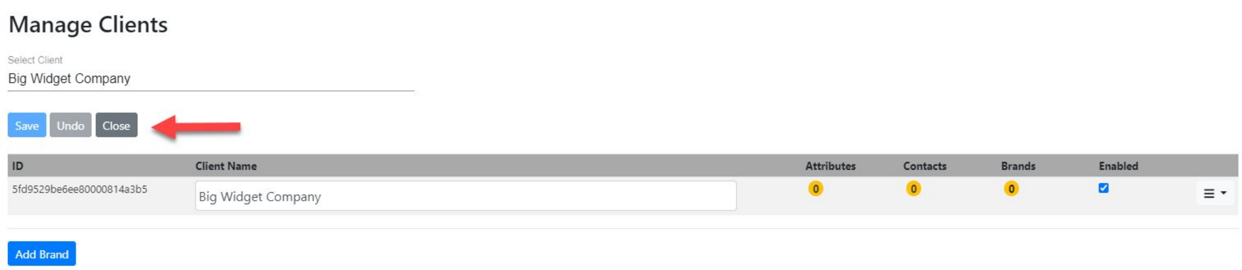
The Client Name field will display. Type in the new client's name.



You can also select the menu icon located to the right of the screen to add additional details to a client such as [Contacts]() or [Attributes]() or click on the [Add Brand]() button located beneath Client Name to include details to the client such as Brand and Title. Once client details have been completed, click the Save button.

If you'd like to revert changes made but would like to stay on the Manage Clients page, click the Undo button located to the right of Save.

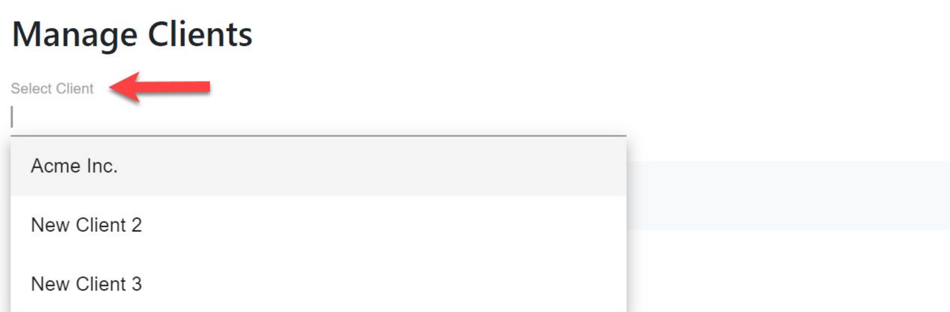
To add another client, click the Close button to be returned to a blank Manage Clients screen. Select the New button and repeat the process. There is no limit to the number of new clients that you can add and you can complete all necessary client details prior to selecting Save.



Note: Be sure to click the Save button prior to selecting Close so that any information entered or edited is not lost. The application provides tooltips letting you know whether an action taken such as Save has been successful.

Searching for a Client

To view a list of existing clients, select Source Clients and click on the Select Client text, a client menu will display. Click on a client to review its details.



The Manage Clients page will display allowing you to view or make changes to the source client's information. The Save button will become enabled if any changes are made allowing edited information to be saved to the client.

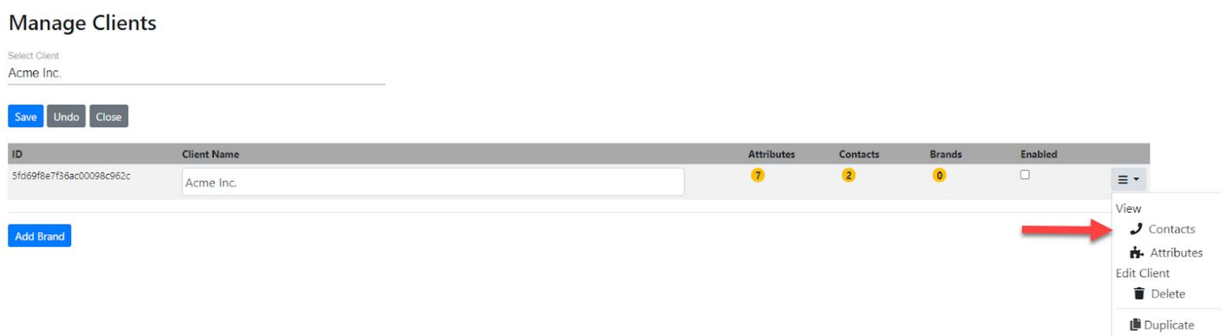
If information is entered in error simply select Undo to reset client information to its last saved status.

To select an alternate client, hover on the Select Client field, the X icon will display. Click on the icon, the client list will display. Select a client.

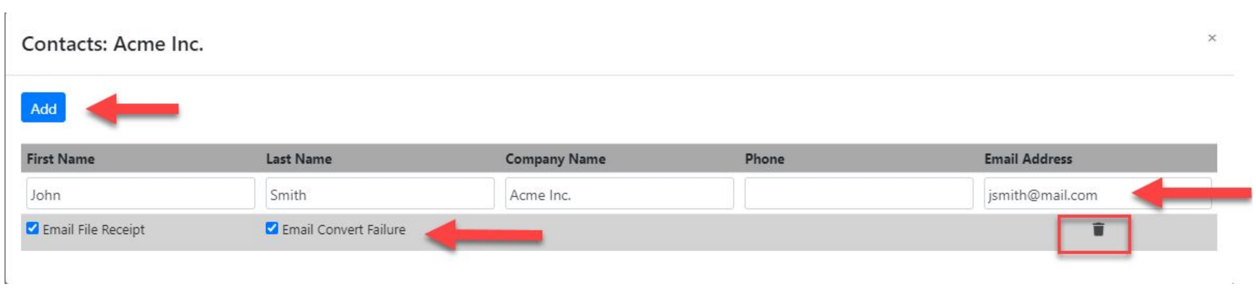
To delete a client, select the Delete option from the clients' menu icon. **Note** that for more substantial deletes (deletes that cannot be undone) such as deleting a client, the system will display an 'Are you sure you want to delete' message to confirm that this is the action you intended to take.

Add/Remove Contacts

You can designate client, brand or title Contacts to receive email notifications throughout the data acquisition process. Select a client, brand or title. Click on the Contacts option from the menu icon located to the right of the screen for the client, brand or title you wish to add a contact.



The Contacts screen will display. Click the Add button, contact information fields will display.



Enter pertinent contact information such as First Name, Last Name, Company Name, Phone and Email Address. Then check if the contact should receive email notification of:
☑ 'Email File Receipt'
☑ 'Email Convert Failure'
To add additional contacts, click the Add button again and repeat the process. If you'd like to remove a contact, click the trash can  icon located to the right of the screen.

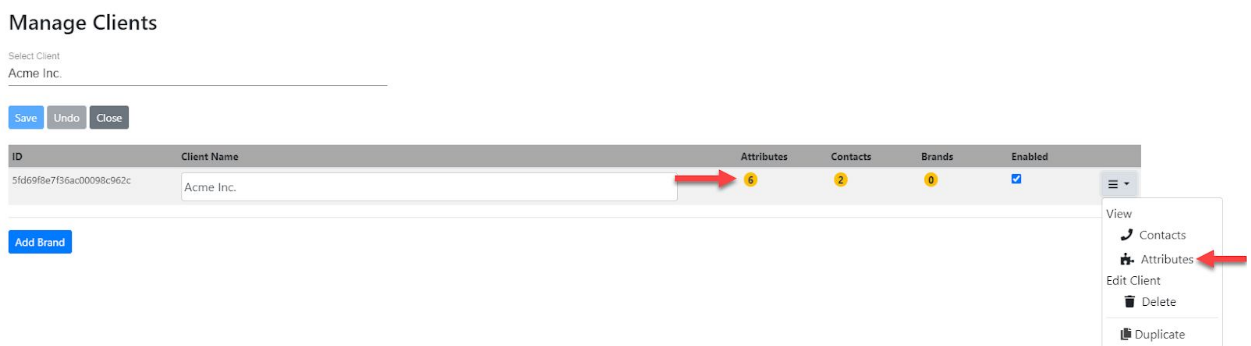
When add contacts have been completed, Close the screen and select the Save button on the Manage Clients screen. All contact information will be saved to the client and the number of created Contacts will display to the right of the client, brand or title name. You can easily retrieve the Contacts page by clicking on the Contacts Count badge.

To edit contact information, simply return to the Contacts screen, make necessary changes, close the screen and click the Save button on the Manage Clients screen. All changes will be saved to the selected client, brand or title.

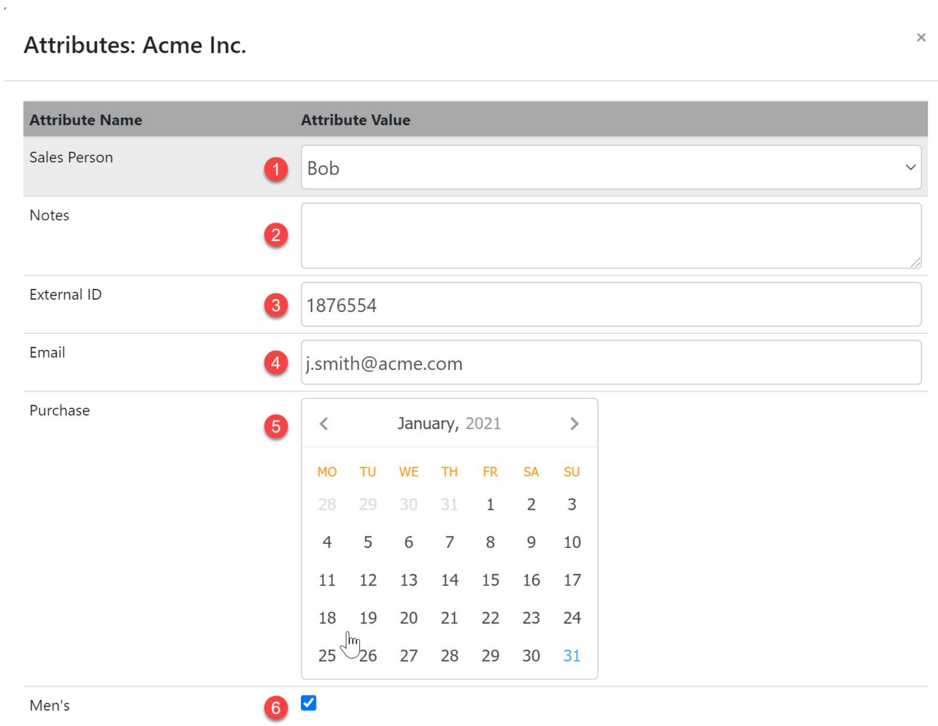
Add/Remove Attributes

You also have the ability to assign one or more Client Attributes to a client, brand or title enabling you to define custom properties to augment the client, brand or title with specific business attributes that can tie back to your Customer Relationship Management (CRM) system or other internal systems. In addition, attributes can be used in making data conversion decisions later in the process.

To assign an Attribute to a client, brand or title from customized attributes, select Attributes from the client, brand or title menu option or click on the Attributes Count badge.



The list of client Attributes will display.



Enter an Attribute Value for any attribute in the list that you want assigned to the client, brand or title. You are not required to update all attribute values. When attribute assignment is complete, click on the Exit (X) button and then click the Save button on the Manage Clients screen.

1 Attributes with a Data Type of Domain provide a dropdown menu for Attribute Value selection.

2 For attributes with a Data Type of Text, a free form text box is available for Attribute Value entry.

3 For attributes with a Data Type of Number, you can enter a number or use the arrows to select a number for the Attribute Value.

4 Attributes with a Data Type of String provide a text box to enter a string of characters for the Attribute Value. One example might be an email address.

5 Attributes with a Data Type of Date provide a calendar to select a date for the Attribute Value.

6 For attributes with a Data Type of Boolean, checking the checkbox equals ‘true’ for the Attribute Value.

To view or make changes to assigned attributes, go to the Source Clients screen, select a client, brand or title and then select Attributes from the menu icon. Assigned attributes will display. If changes are needed, be sure to click the Save button on the Manage Clients screen when finished.

The number of assigned Attributes will now display on the Client, Brand or Title Attribute Count badge on the bar. Click the badge to open the assigned Attributes screen.

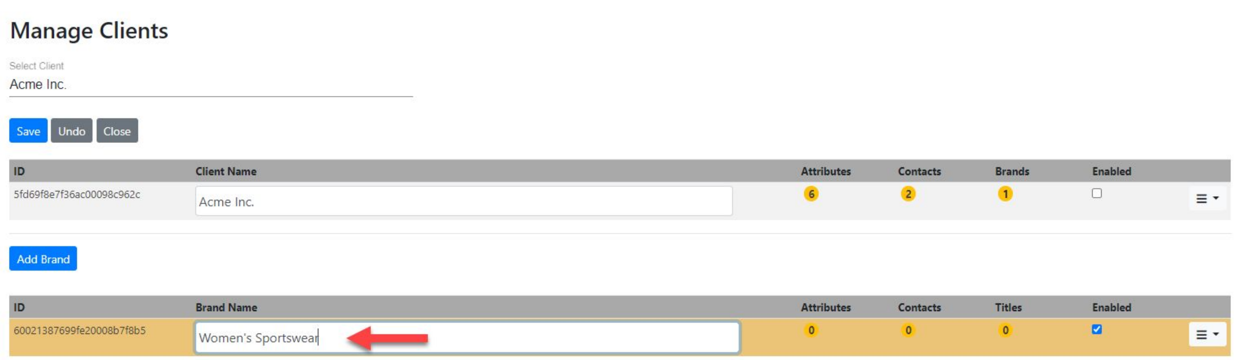
See Administration [Attributes] for information on creating Client Attributes.

Add/Remove Brands

Once a client has been created you can add one or multiple Brands to the client that identifies and distinguishes the client's product(s) from others in the marketplace. A Brand can consist of a name, term, label or service. Brands can be added prior to saving initial client information or any time after a client has been saved.

Click on the Add Brand button located beneath the client name.

The Brand Name field will display. Enter a Brand.

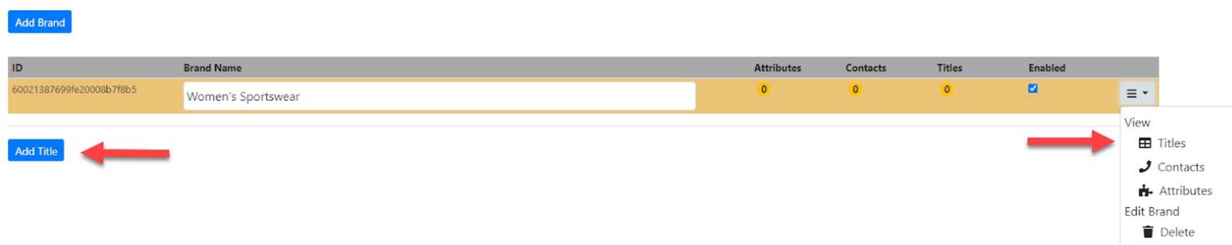


If you'd like to enter more than one brand, click on Add Brand again and complete the Brand Name field for each additional brand. When finished, click the Save button. You have the ability to add or remove client brands at any time.

To delete a brand, select the Delete option from the client's menu icon.

Add/Remove Titles

Once you've created a new brand, you can further differentiate the brand by assigning one or more titles to the brand. Click on a brand and then select Titles from the menu icon located to the right of the screen. The Add Title button will display. Click the Add Title button.



The Title field will display. Enter a title.

If you'd like to enter more than one title for the selected brand, just click the Add Title button again and complete the Title Name field for each additional title. You can repeat this process for any brand assigned to the client. Once you've completed title entry, click the Save button.

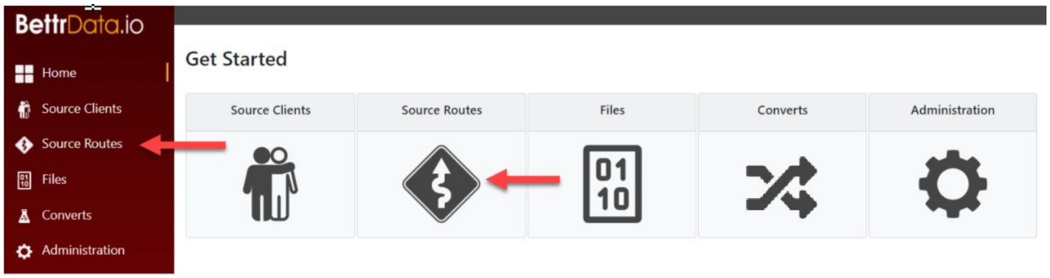
To delete a Title, select the Delete option from the client's menu icon.

Source Routes

The next step in the setup process is to specify the routes for transmitting one or multiple data files for an owner or owners. Clients, brands or titles can be selected as an Owner.

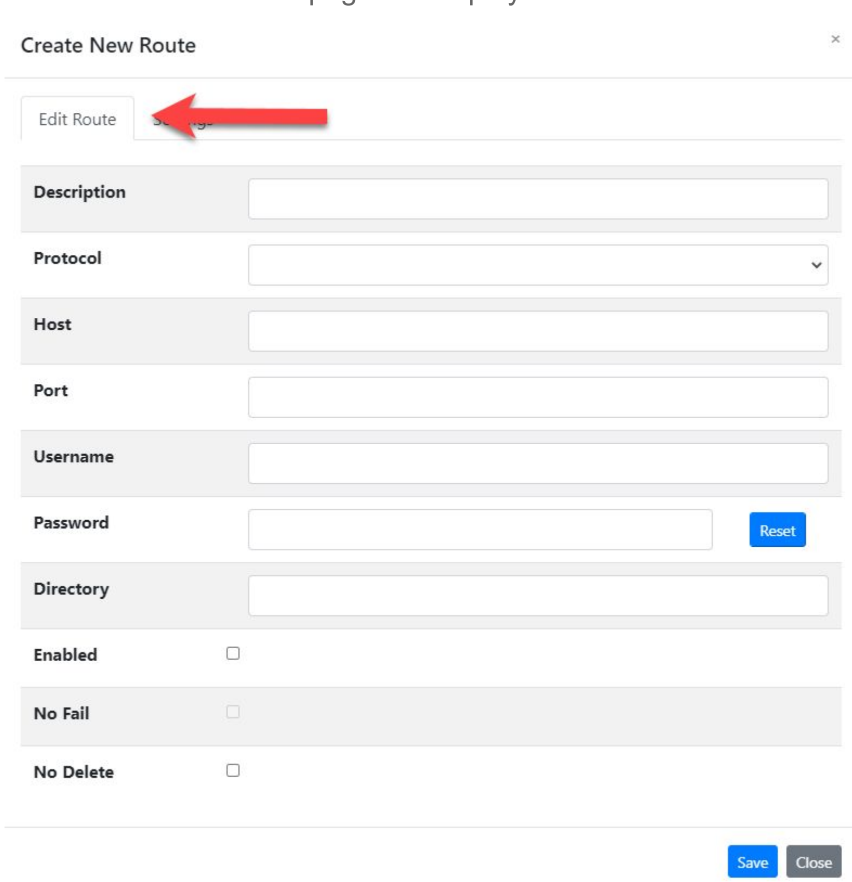
Create a Route

To create a New Route, select Source Routes from the menu panel or click the Source Routes card on the Home page.



The Manage Routes page will display. Click the New button.

The Create New Route page will display.

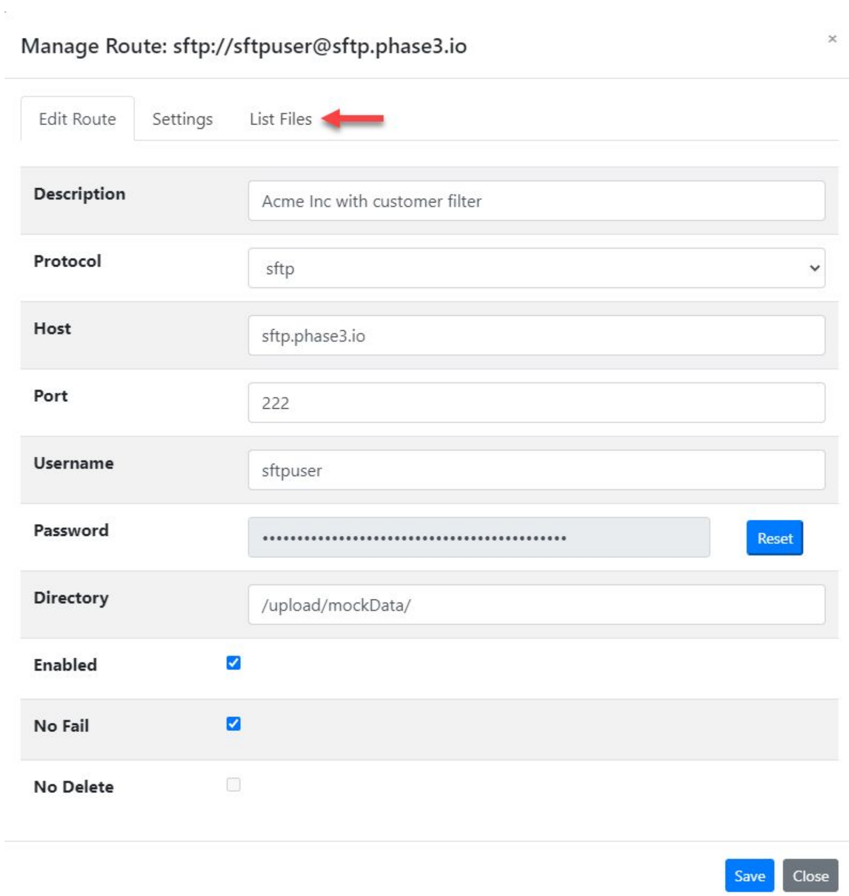


Begin by adding a Description to the route (this is an optional feature).

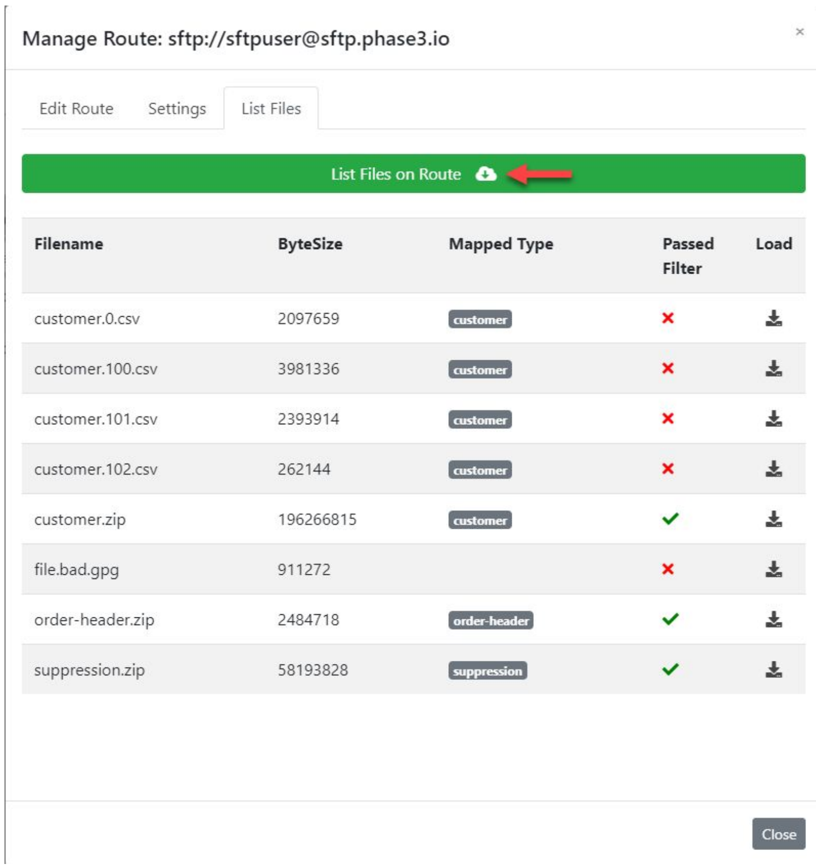
Select a Protocol for how the information will be structured for transmission, either sftp (secure file transfer protocol) or ftp (file transfer protocol) or local (load data from a preconfigured local file system directory).
Enter a Host server.
Select a Port number.
Enter a Username and connection Password. **Note** that you have the ability to update the password at any time. Just click the Reset button to enter a new password and then select Save.
Identify the Directory where the file(s) can be located.

To enable automatic download of the data, check the Enabled checkbox. **Note** that unless the No Delete checkbox is checked, data will be deleted once it is transmitted in order to reduce the risk of duplication.

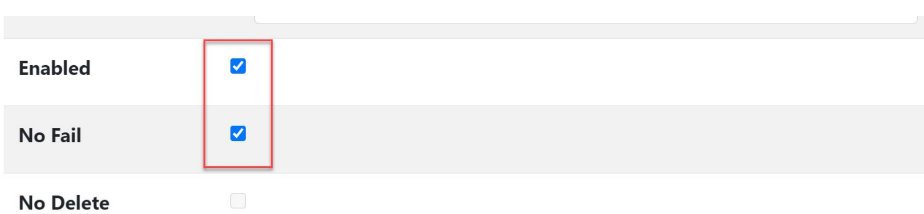
If you are unsure and would like to confirm that all files from a particular source should be enabled for automatic download, take the following steps before selecting the Enabled checkbox: Leave the Enabled checkbox unchecked and be sure that Protocol, Host, Port, User Name, Password and Directory have been completed and that you have Saved the route. The List Files tab will display at the top of the page. Select the List Files tab.



The List Files page will display. Click the List Files on Route button. All files included in the route will display.

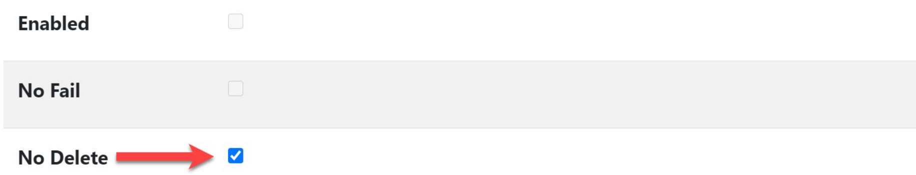


From here you can review each file and confirm whether you'd like all files in the route to be Enabled for automatic transmission. If you determine that all files on the route should be enabled, simply return to the Edit Routes page and check the Enabled checkbox. Files that are enabled for automatic conversion will display on the [Manage Files] page located on the Home page [Files] tab to begin processing.



Notice that when the Enabled checkbox is checked, the No Fail checkbox will default to checked which prompts the system to continue to try to pull in data if initially unsuccessful. Uncheck the No Fail checkbox to turn off this feature.

Also, checking the Enabled checkbox will disable the No Delete checkbox to avoid downloading the same file multiple times.



Checking the No Delete checkbox will prevent downloaded data from being deleted. For example, you may not have access rights to delete the data or the site owner may not want the data removed. To enable the No Delete feature, the Enabled checkbox must be unchecked.

Click Save when all the routing information has been completed.

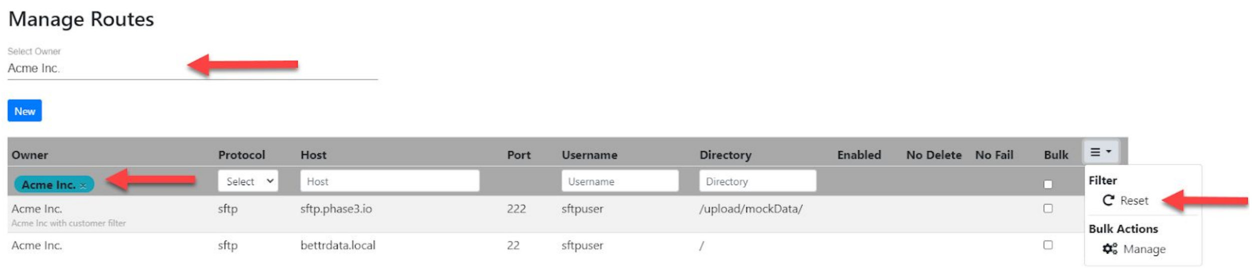
To create additional routes for the owner, click the New button on the Manage Routes page again and complete the process again. A single owner can include one or more routes.

Search for a Route

To search for a Route, select Source Routes from the menu panel, the Manage Routes page will display. From here you can select a filter(s) from the gray bar including Protocol, Host, Username or Directory to view routes across owners that contain the selected filter(s).

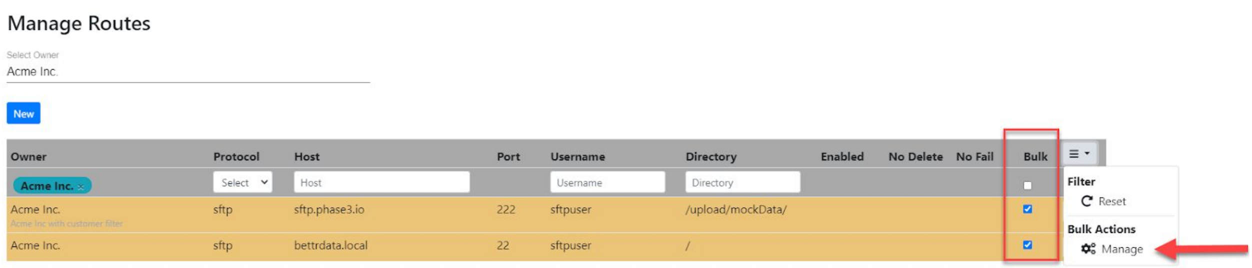
To search for a particular owner's routes, click on the Select Owner field and select an owner. Routes created for this owner will display. You have the ability to refine this list as well using the different filters in the gray bar.

To remove an owner from the screen, click the X located next to the blue highlighted owner name or select Reset from the gray bar menu. To select an alternate owner, hover on the Select Owner field, an X icon will display. Click the X to view the list of owners, make a selection.

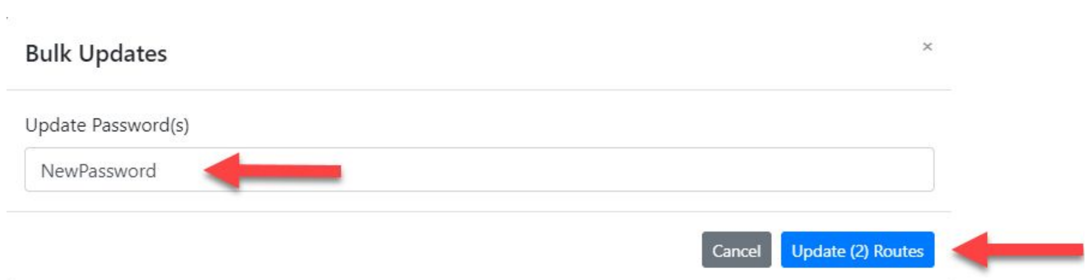


Manage by Bulk

Using the gray bar menu on the Manage Routes page you have the ability to update route passwords in bulk. In the Bulk column check the routes that you would like to include in the bulk update. Then select Manage on the gray bar menu.

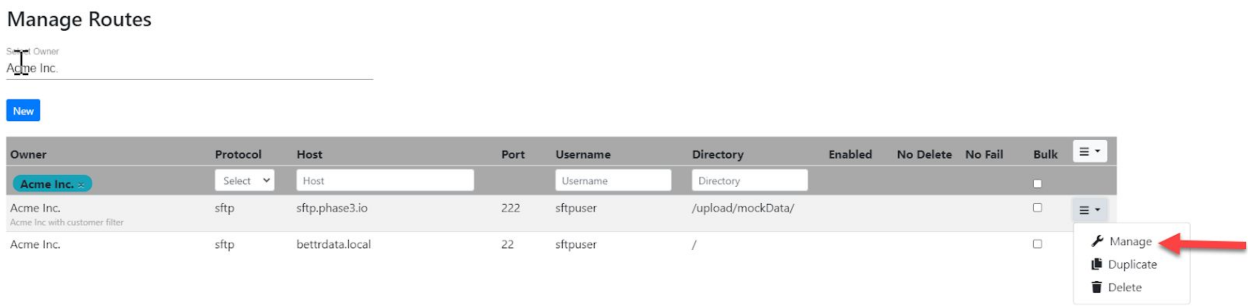


The Bulk Updates screen will display. Enter a new password and select the blue Update Routes button. The selected routes will be updated with the new password.



Managing a Route

From the Manage Routes page, you have the ability to manage an existing route. Just select the Manage option from a route menu icon. Route information will display. From here you can view or make changes to routing information, create or update different settings, or go to the List Files tab to view and manage files on the route.

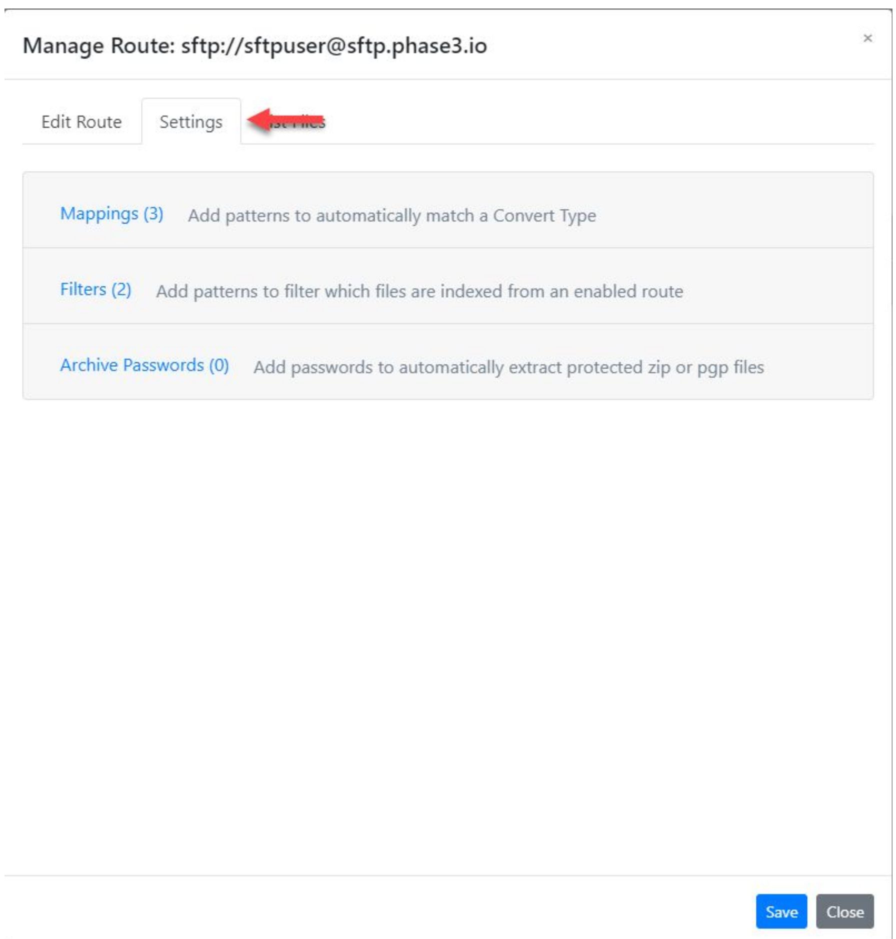


Edit Route

Go to [Create a Route]() for information on how to create or edit a route.

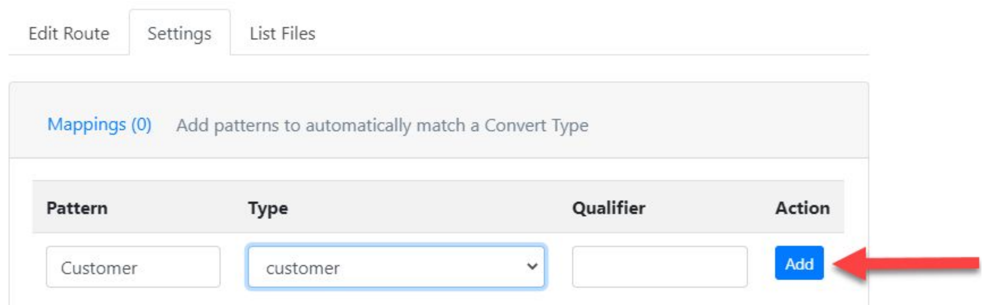
Settings

If you'd like to further distinguish files in an owner's route click on the Settings tab at the top of the Create or Manage Route screen. From here, [Mappings](), [Filters]() and [Archive Passwords]() can be assigned to a client route.



Mappings

The Mappings setting is used to create matching patterns to automatically assign a convert type based on filename. To create a Mapping, enter a Pattern (valid regular expressions are supported) and select a Type to automatically match a filename to a selected type. One example of a Pattern might be ‘Customer’ to map customer related data to a the convert type of customer.



While the system provides the ability to create custom Types using Convert Types, the default list of selectable Types include:

Layout- this type is usually informational in nature and if assigned, will not proceed through the conversion workflow
Ignore- Files marked as Ignore are removed from the workflow and are marked as Will not Convert
Duplicate- this type is byte for byte exactly the same as a file that already exists and will be treated as Ignore
Document- this type will be treated as Ignore
Parent- an archive that has produced at least one other file (EG. a zip file); this type will not proceed through the conversion workflow

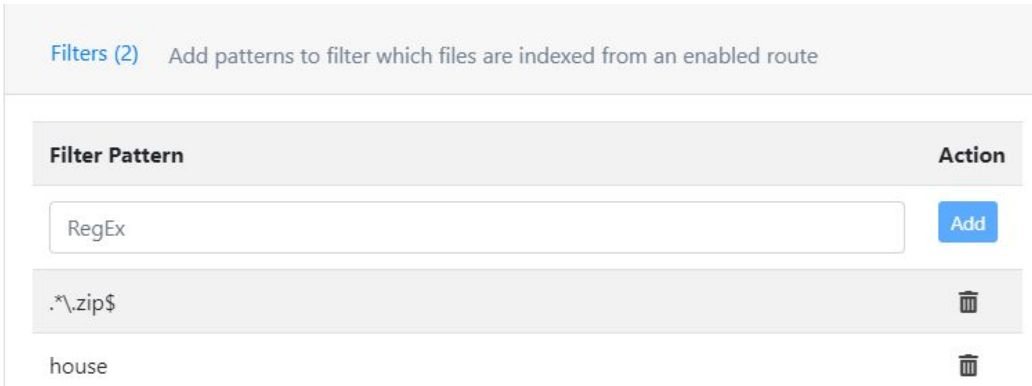
You can also enter a Qualifier in order to assign a more specific differentiator to the convert type. This is an optional feature. An example of a Qualifier for the Convert Type of customer might be ‘Colorado’ or ‘Utah’.

Once Mapping information has been entered, click the Add button. Mapping details will display on the Settings screen and will also be included in the count located next to the Mappings text. You can enter and map multiple Patterns to different data Types.

To remove a Mapping, simply click on the Delete icon for the selected item.

Filters

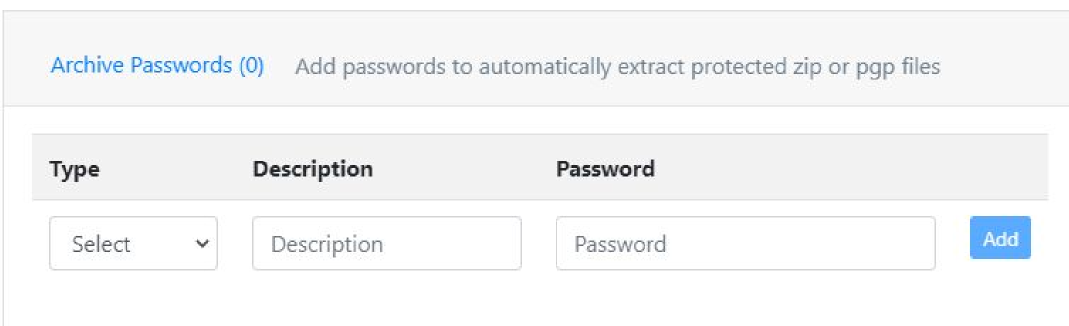
Filters provide the ability to limit the files that are downloaded from a route. Adding patterns enable you to filter which files are indexed from an enabled route. If a pattern is matched, the file will be downloaded. From the Settings page, click on Filters and enter a Filter Pattern (valid regular expressions are supported). Then click the Add button. The added filter will display beneath the Filter Pattern field and the filter pattern count will display next to the Filter text. You can enter multiple Filters to a Route.



To remove a Filter, click on the Delete icon for the selected item and save the route.

Archive Passwords

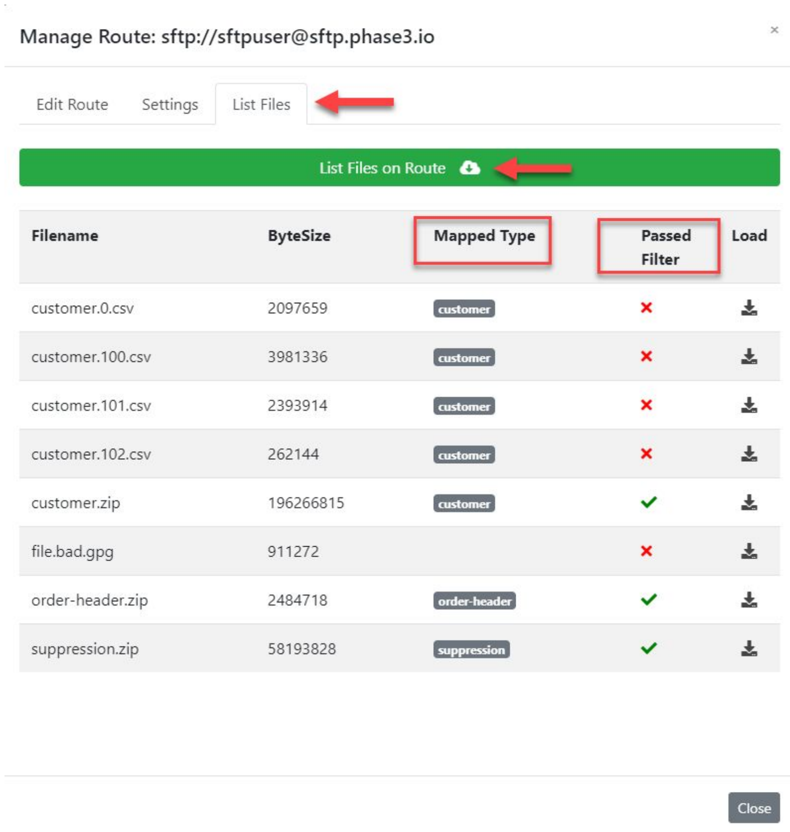
From the Settings page you can also add Passwords to automatically extract protected zip or pgp files. For example you may require a password to open an individual file. Select a Type, enter a Description and Password.

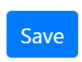


After completing Settings, click Save.

You can now select the List Files tab and click the List Files on Route button to see the Mapped Types and Passed Filters for the route's list of files. Files that pass the created filters will display with a checkmark, those outside of the filters will display with an X.

Note that filters are not respected when manually downloading data by clicking the Load icon.

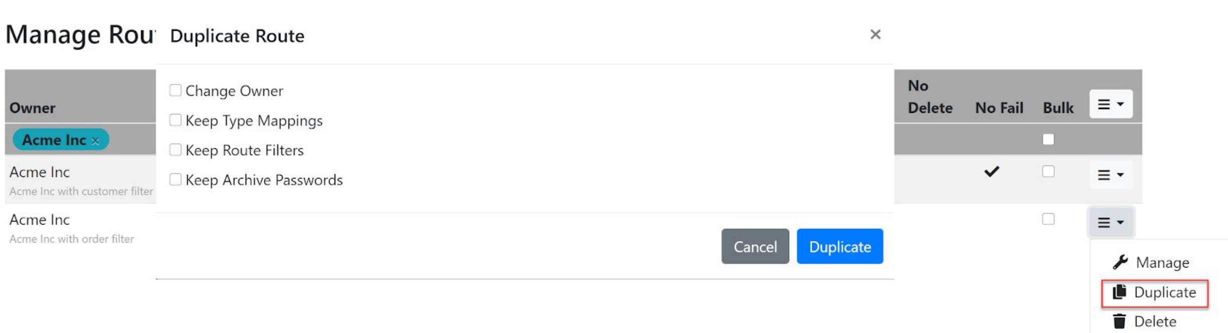


Be sure to click the Save 

button once all the owner's routing information has been completed. Click Close to return to the Manage Routes page where the Owner's routing information will now display.

Duplicate Routes

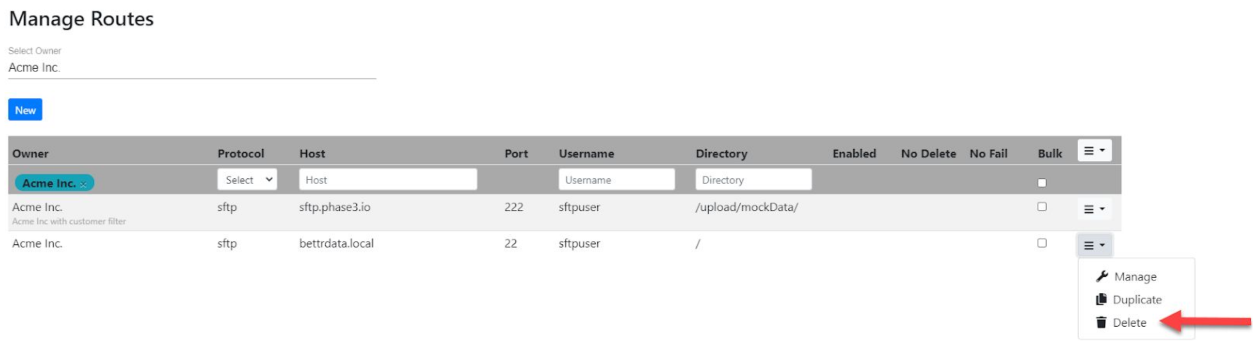
From the Manage Routes page, you can duplicate routes. Select the Duplicate option from the menu of the route that you wish to duplicate. The Duplicate Route screen will display providing further options to Change Owner, Keep Type Mappings, Keep Route Filters and/or Keep Archive Passwords.



Select the Duplicate button to create the update or click Cancel to return to the Manage Routes screen. The duplicated route will now display on the Manage Routes list.

Delete a Route

To delete an owner's route, select an Owner on the Manage Routes page and then select a route that you wish to delete. Click the Delete option from the menu icon of the route that you have selected.

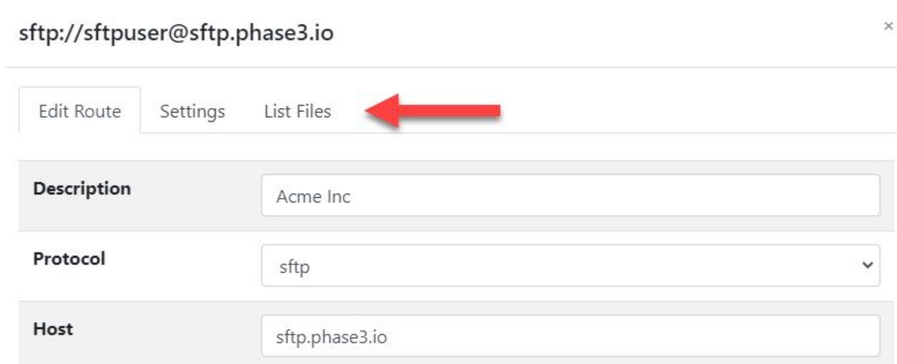


An acknowledgement will display confirming that Delete is the action you wish to take. Click Ok to delete. The route will no longer be available to take in new data sources. Or click Cancel to annul the action and return to the Manage Routes page.

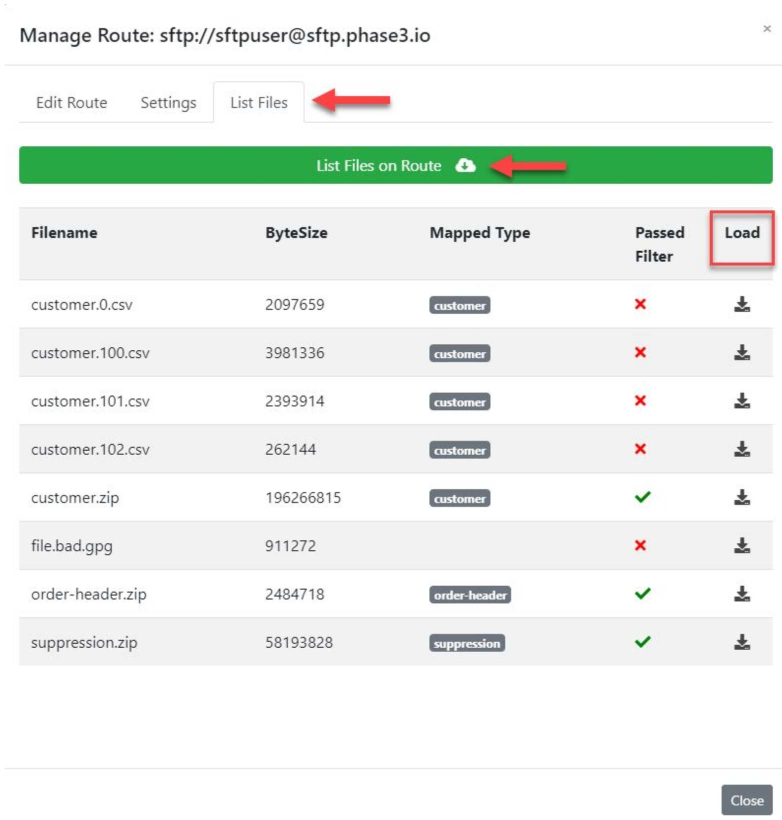
List Files

The List Files page enables you to view and manage a list of all files available on a route. Go to [Create a Route](#) or [Manage Route](#) to review details on the use of List Files for Enabling automatic file download.

If you choose not to Enable auto-download for all the files on a route, you have the ability to transmit one or more files on the List Files page manually.   From the Manage Route page, select the Manage option from the route's menu icon. Route information will display. Select the List Files tab.

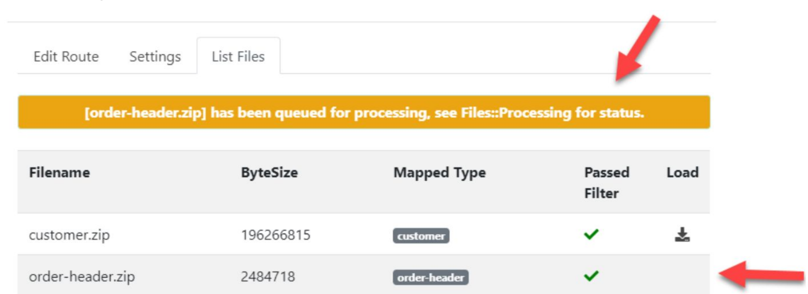


The List Files page will display. Click on the green List Files on Route button.



The list of files included on the route will display along with the Filename, ByteSize, any created Mapped Types or Filters and the Load column.

Select the download icon from the Load column for any files that you wish to download manually.



Notice that once the Load icon is selected, it will no longer display indicating that the file has been initiated for manual download. An alert will also display at the top of the page.

Click Close when download selection is complete (saving is not required after initiating a download). The new file entry will now display on the Manage Files page located on the Home page Files tab to begin processing.

Note that any files listed including those that did or did not pass a filter are eligible to be manually downloaded.

Files

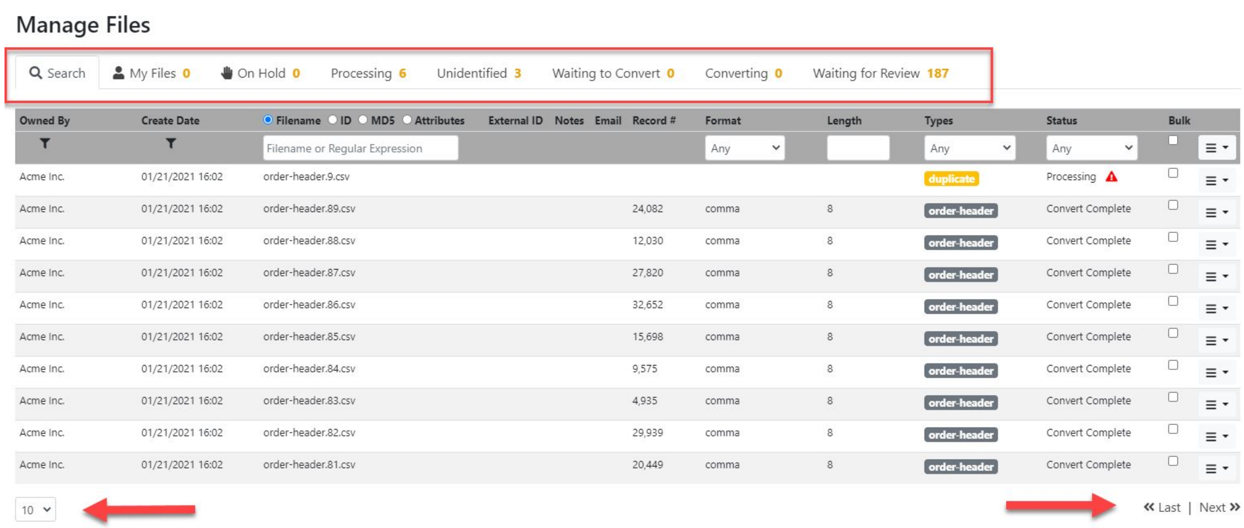
Once Source Routes have been assigned to Owners for the system to access its data, you can now begin to manage and process different files for the various owners. This is where you'll experience even more of the power of the product with benefits such as:

- File type automation, providing hints or just allowing the system to assign types for you as it learns
- Automatic download, detection, processing and out of the box support for multiple formats
- Ability to filter fields and organize data by client or in ways most beneficial
- Field mapping auto assignments that get better as the system learns
- Automatic processing end-to-end when new data is located and made available to downstream systems
- System continually learns and becomes smarter so you work less and benefit more

Select Files from the menu panel or click the Files card on the Home page.

The Manage Files page will display. Any files that the system is aware of from Owners where you have either Enabled the route from the [Edit Routes]tab or have manually downloaded a file from the List Files tab will be represented on the Files list.

You can manage the number of files that you see on the Files page by clicking on the row count located at the bottom left of the page. Additional files in the list can be viewed by selecting Next>> or << Last located to the bottom right of the page.



Workflow Tabs

The Workflow Tabs located across the top of the Manage Files page provide the ability to easily follow and manage the file processing workflow. You can click on each tab to view and manage files that fall into that particular segment of the workflow.

Tabs include:

Search - default view displaying all owners and files with the ability to search.

My Files - files with a status of Lock can be found on this tab.

On Hold - files with a status of Hold can be found on this tab.

The remaining processing tabs include a count of the number of files that fall into that segment of the workflow (for example, Processing **6**) and include statuses for:

Processing

Before processing actually begins, the system places each file in the Status of Waiting to Process as it pauses to assure that the file is not still growing. If the file remains static (with the same byte count) for two minutes, it is moved onto Processing. However if during the two minute pause the file size does change, the two minutes will restart and continue until the file size remains static. The count for the number of files Waiting to Process will appear on the Processing tab in the workflow. These statues (and others) are also available in the Status column menu on the Manage Files gray bar.

Once a file begins Processing, the system will begin to analyze the data, map the file to a Type if known and prepare the data for conversion. During Processing a file can be placed in different statuses or receive various alerts if problems arise during processing.

Note that these file types are currently supported: ASCII or UTF-8 fixed or delimited, zip, Excel, rar, gzip, json (depth=1), pgp/gpg. If a file does not meet its given specification or is invalid, the file type may not be supported.

Unidentified

This status is assigned to any file that is missing Type, Format, or Length. Format and Length are rarely not detected by the system and if missing is an indicator that there is an oddity with the data. See Types and Convert Types for more information on Types.

Waiting for Convert

At this status the file has everything it needs to be converted using the BettrData.io 'Builder. Files stay in Waiting to Convert for 1 of 2 reasons. Either there is no convert setup or Auto Convert is not enabled.

Converting

In this status, the data is being actively transformed. There are no user actions required when files are in this state.

Waiting for Review

A file is assigned the status of Waiting to Review if:

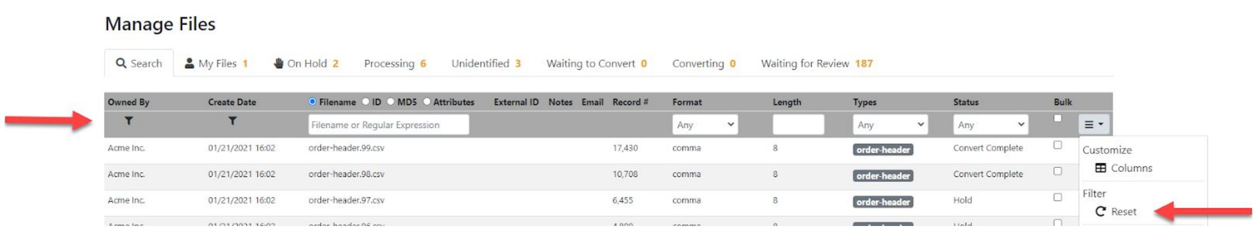
- A threshold configuration has not been created for the given convert
- A threshold validation has failed
- Or Auto Validate is turned off. When Auto Validate is turned on, the file will bypass the status of Waiting for Review automatically moving it onto Convert Complete if all validations have passed.

Convert Complete

The Convert process has been completed and standardized output data is ready for downstream processing.

Search Bar & Columns

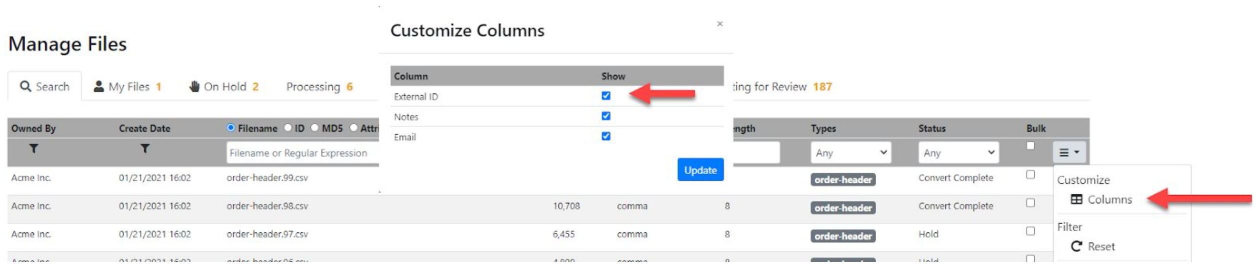
In addition the Files list gray bar provides further options to filter the list including filter by:



- **Owned by -** click the filter  icon to filter by owner. The selected owner's name will be highlighted in blue. Click the X located to the right of the highlighted name to remove the filter.
- **Create Date -** click the filter icon to filter by a date or time frame. The selected date(s) will be highlighted in blue. Click the X located to the right of the highlighted date to remove the filter.
- **Filename, ID, MD5, Attributes -** click a radio button and use the entry field to further specify these filters.
- **Format -** make a selection from the dropdown menu.
- **Length -** specify length in the entry field. This is either the number of columns for a delimited file or the line length of a fixed width file.
- **Types -** make a selection from the dropdown menu. **Note** that if Type is missing from the file, the Types column will read Select Type requiring the user to select a Type before the file can continue processing. While the system provides a set of default Types, you also have the ability to customize Convert Types.

- **Status -** make a selection from the dropdown menu. In addition to the statuses listed above, the Status menu includes other filter options including Today, Yesterday, This Month, Last Month, This Year and Last Year.

You also have the ability to add customized columns to better suit your needs. Select the Customize option from the gray bar menu. The Customize Columns screen will display.



Check any File Attributes that you want included as columns and click the Update button. The Files list will update immediately. To make further changes to the columns, return to the Customize Columns screen and check or uncheck the different options. **Note** that this is user specific and changing this setting only affects your user account.

To remove all of the filters and return the files list to its original state, select the Reset option from the gray bar menu. **Note** that Reset will remove all filters with the exception of the selected owner. Click the X next to the highlighted owner's name to remove the owner.

File Menu

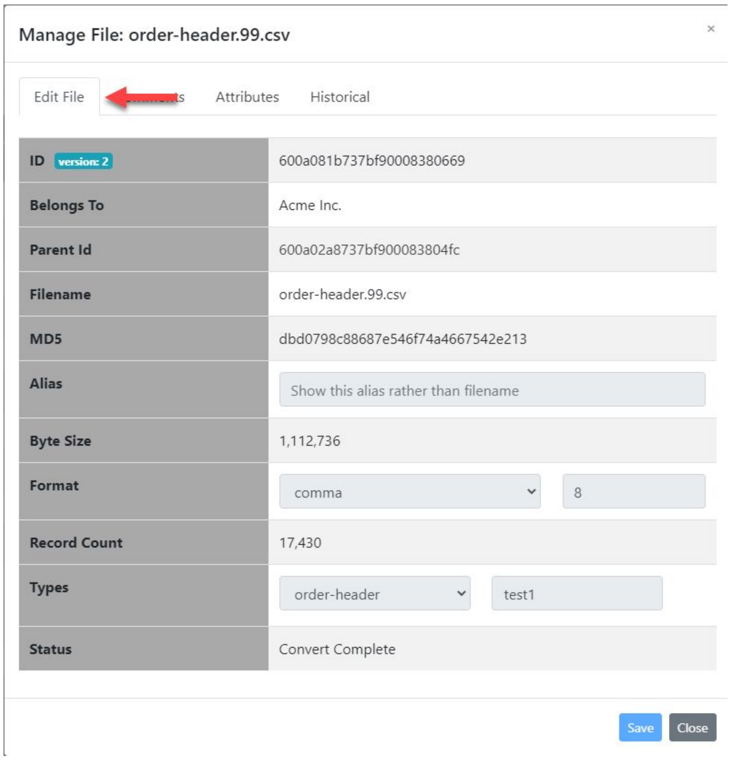
By clicking the menu icon ≡ ▾ to the far right of the file's table, you are able to access the following operations:

Manage

File information, its attributes and historical record counts can be viewed and managed from the Manage Files page.

Edit File

After choosing a file, click the menu icon and select Manage. File information will display on the Edit File tab .



File information including the Filename, ID, who the file belongs to, Parent ID, MD5, Alias, Byte Size, Format, Record Count, Version, Types and Status is available to view and/or edit. From the Edit File tab you can also Add or Delete the files' Types. If changes are made, click the Save button. **Note** that files in a status of Convert Complete are not available to edit.

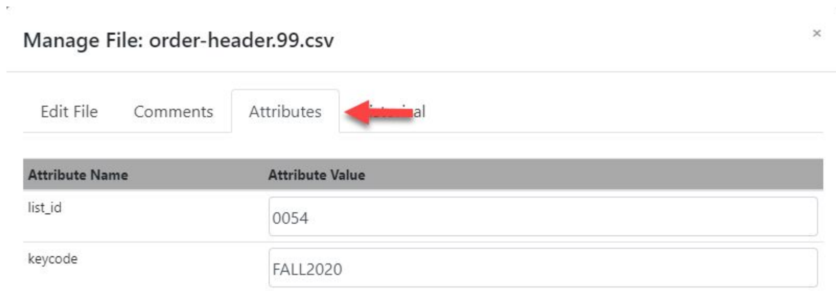
Comments

Click on the Comments tab to add comments associated with the file.

Then click the Add button. When Comments have been completed, click the Save button.

Attributes

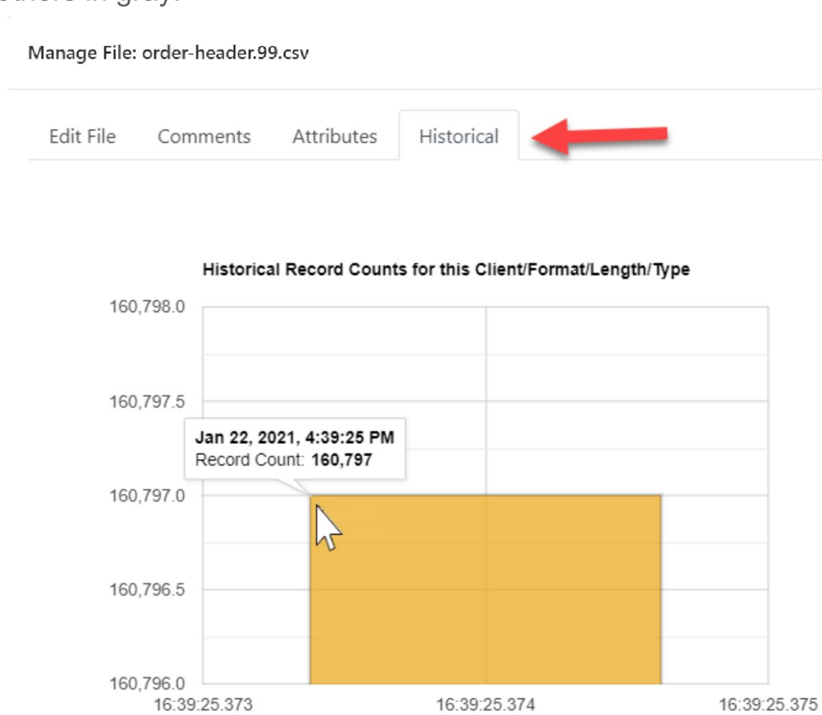
From the Attributes tab, you can enter Attribute Values to different attributes.



Once values have been entered in the Attribute Value fields, click the Save button.
See Administration [Attributes](#) for information on File Attributes.

Historical

The Historical tab shows historical record counts for the Client/Format/Length/Type enabling you to keep an eye on record counts over time. The file you are currently viewing is in yellow, others in gray.



View Sample

If unsure of a file Type, you can click on the View Sample option located on the file's menu where a sample of the file will display the top 100 lines of data to help in determining the file type.

Copy Input Path

This option located on the file's menu is used to copy the files' Input Path to your operating system clipboard.

Copy Output Path

Once a file has been converted, this option located on the file's menu can be used to copy the files' Output Path to your operating system clipboard.

Open in Builder

Located in the file's menu, this option opens the selected file in the BettrData Builder

View Summary

Located in the file's menu, this option opens the selected file in the Summary view if a Convert exists.

Run

Located in the file's menu, this option opens the selected file in the Run view if a Convert exists.

Hold

This option provides the user the ability to Hold files for processing if needed. When a Hold is set, it will override any workflow status. For example, before processing files you may want to clarify information with a client or you may have questions about certain fields so the file is placed on Hold. To remove a hold, select Remove Hold from the selected files' menu.

Lock

This option enables a file(s) to be Locked from processing by others. Different individuals assigned to manage certain owners is one example of how this option may be beneficial. Locked files will display on the My Files tab of the individual who placed the lock. To unlock a file, select Unlock from the selected files' menu.

Replace

This option can be used when you would like to replace files in the Convert Complete state that are found to be unacceptable or no longer valid with improved replacement files. This option deletes the output file and adds an Ignore tag to the file.

Delete

There may be occasions when you might want to delete the converted output of a file. The Delete option is available for output files only and the files are marked as deleted. **Note** that selecting this option **does not change or delete the input** and that deleted files will not automatically convert.

Examples of when deleting a file may be appropriate:

- ❖ A client decides to switch assigned columns such as city and state after a file has been logged into the system. The columns for city and state are corrected in Open in Builder. The old file can now be deleted and replaced with the corrected file that can be run through the conversion workflow.
- ❖ A file that may make it to the status of Waiting to Review but then is determined unsatisfactory can be deleted. The file can then be cleaned up and resubmitted to run through the process again. On subsequent processing, new files will then convert automatically.

An example of when deleting a file may not be the best solution:

- ❖ A client file that includes a column called 'Company Name' with a minimum threshold for missing data of 20% is logged into the system. Company Name can be found on 25% of the records, however the next file that comes in is smaller with Company Name present on only 18% of the records. In this circumstance, rather than deleting the file, the threshold can simply be adjusted and the file can run once again through the conversion process.

Note that deleted files will not automatically convert and the Delete option affects output files only.

Done Processing

When a file is in the Processing state and an error occurs, it will not automatically move to the next stage in the workflow. Several examples of this would be if a file has been identified as a duplicate file or a corrupted zip file. In order to move the file along, select Done Processing. Either Reprocess the file if the error is recoverable or has been fixed, or add an Ignore type to the file to change the status to Will Not Convert.

Reprocess

If there was a processing issue and the issue has been resolved by changing the underlying file or by updating a setting, Reprocess the file to retry processing. An example would be if a zip file has a password but that password was not present in the route's Archive Passwords. You would add the password to the route and Reprocess the file to retry unzipping and continue further analysis.

Review Complete

The Review Complete option provides the ability to confirm that a file that has Run Convert in a production environment has been reviewed. **Note** that if Review Complete has been selected on the Run Convert screen, the Review Complete option will not be available on the menu. See Run for further information on Review Complete.

Bulk Options

The Manage Files page provides the ability to implement bulk actions across files by clicking the checkbox in the Bulk column for any files you'd like to include in the action and then selecting one of the following options from the gray bar menu:

Virtual File

Selecting this bulk menu option provides the ability to copy or combine files into one without physically copying the data. For example, files can be copied and converted to a different Type without copying the input files. If selecting multiple files for this action, you must select files with the same owner, format and length.

Toggle Hold

This option can be used to set the Hold flag on multiple files at one time. See File Hold.

Toggle Lock

This option can be used to set the Lock flag on multiple files at one time. See File Lock.

Done Processing

This option can be used to set multiple files at one time to Done Processing. See File Done Processing.

Reprocess

This option can be used to queue multiple files at time to Reprocess. See File Reprocess.

Delete

This option can be used to Delete multiple files at one time. See File Delete.

Replace

This option can be used to mark multiple files at one time as Replaced. See File Replace.

Review Complete

This option can be used to mark multiple files at one time as Review Complete. See File Review Complete.

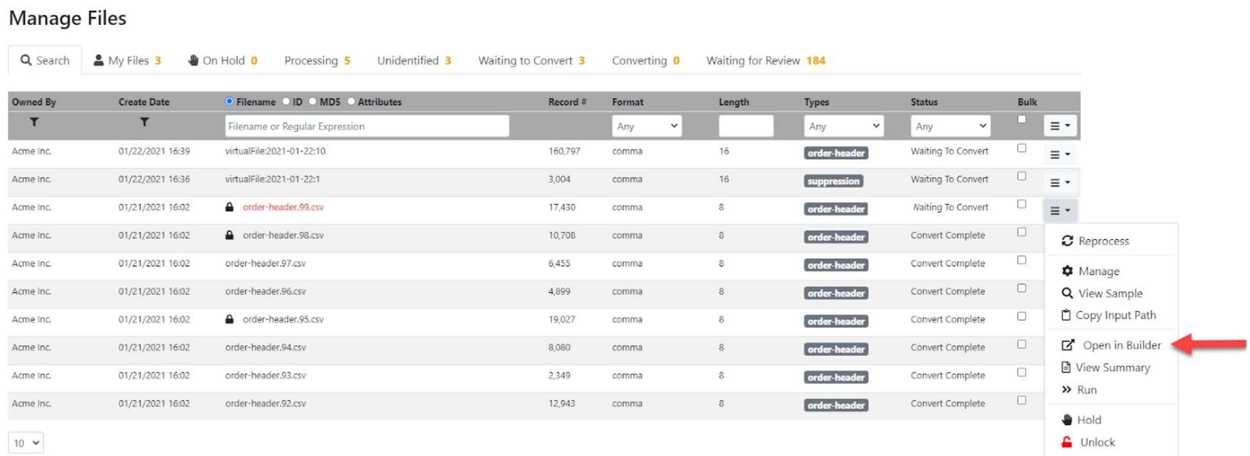
Builder

Overview

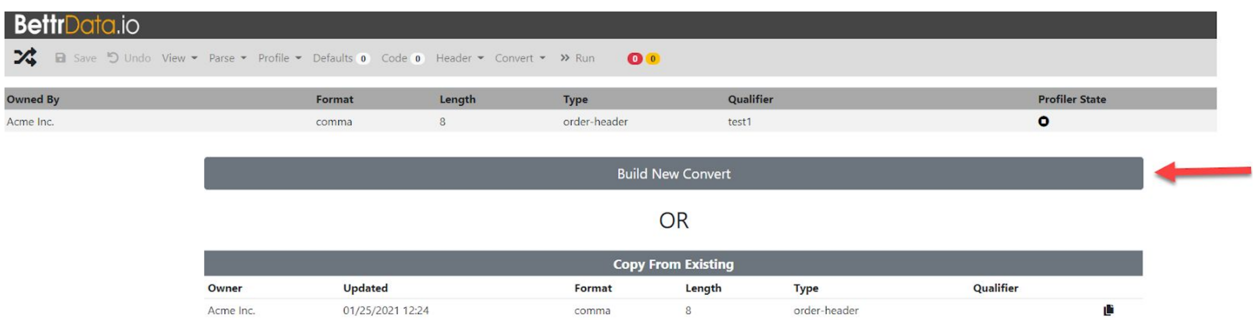
The BettrData.io Builder is the application that allows you to map and transform the incoming data from its original format to the selected Convert Type output format. Mapping fields, dropping records and normalizing data values are some of the common operations that can be performed in the Builder.

Create a New Convert from Scratch

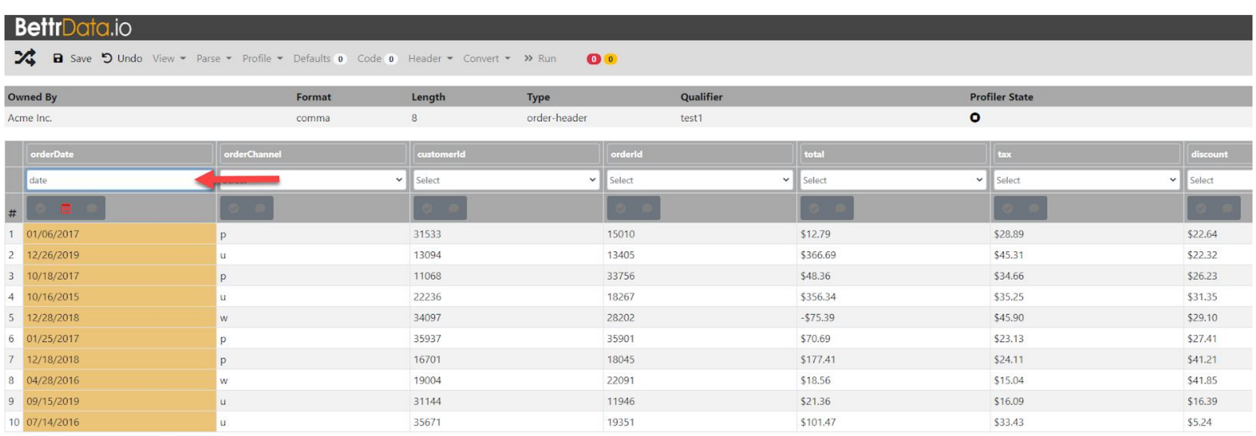
As a file begins to process it is first placed in the status of Unidentified, requiring a Type to be selected on the Manage Files page to move the file onto the Status of Waiting to Convert. You can now click on the files' menu and select Open in Builder to create a new convert.



The Build New Convert screen will display. The file's Owner, Format, Length, Type and Qualifier is visible on the screen confirming file selection. Click on the Build New Convert button.



The BettrData.io Builder will display.

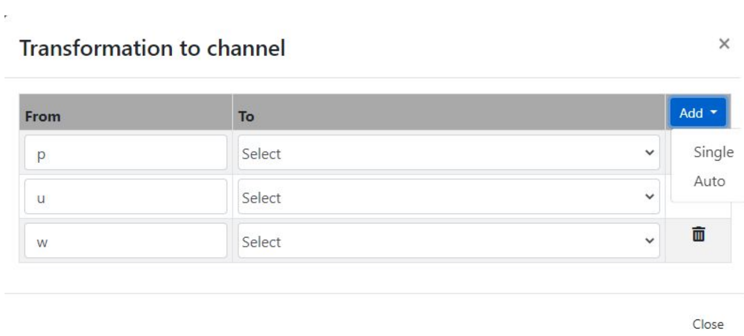


Columns for the file's output fields display across the screen along with different action buttons and features that can help you complete an accurate build. To identify and confirm each output field, make a selection for each column. Notice that the columns will turn yellow as selections are made. Each column also houses icons including a Field Toggle and a Show Field Comments icon. Go to [Profile](#) for more information on using the Field Toggle and profiling data.

Click on the Show Field Comments icon to display a Comment field that displays at the top of the column. Click the icon again to close the field.

Take note of any **red** icons including Set Date Format or Map Values that may display in a column once a selection is made. Click on the icon to Set Date Format or Map Incoming Values to the output field.

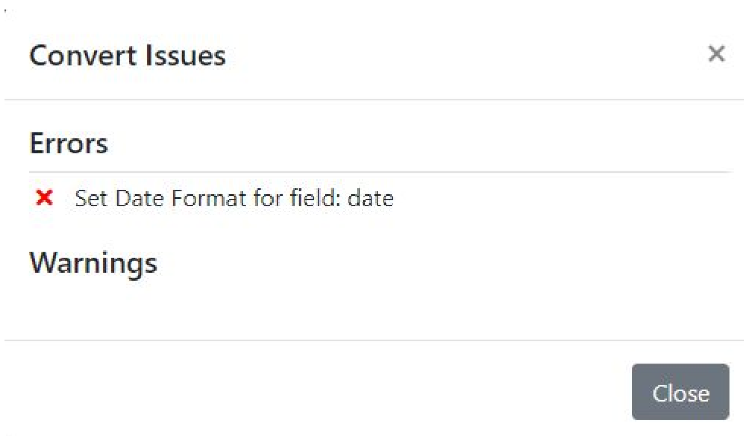
When addressing map values, you have the ability to map values individually by selecting Single or selecting Auto to display both the value to be mapped and a list of possible mapping options.



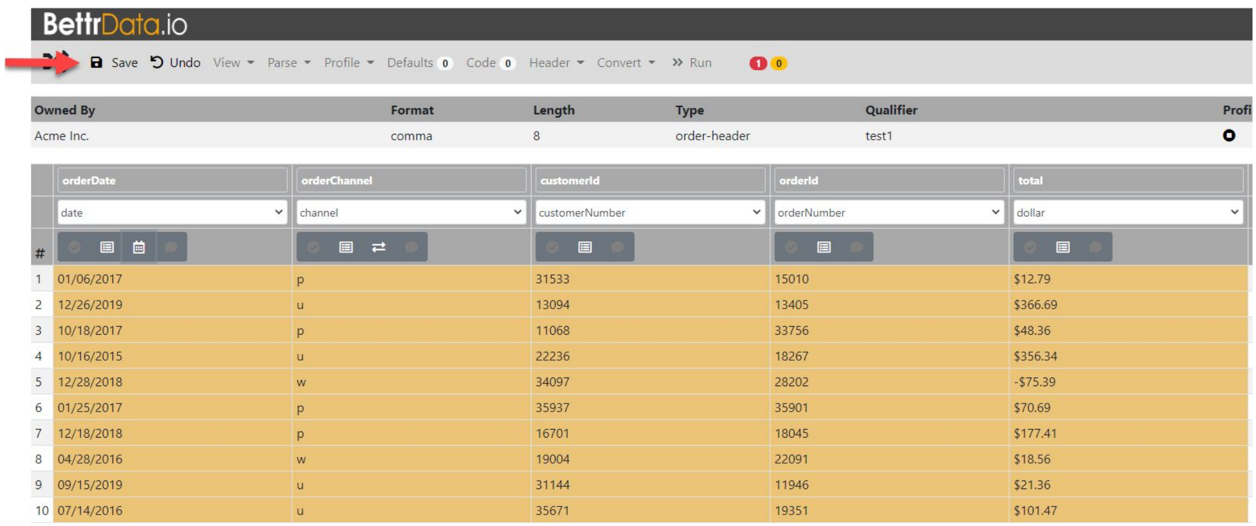
Once formatting and/or mappings have been completed, the associated icon will turn from red to white.

After making a selection for each column and addressing any red icons, check the gray bar for any convert issues that may have occurred during the build. Convert issue counts will display in **red** and **yellow** icons. Click on the icons.

The Convert Issues screen will display. **Red** corresponds to Errors and **yellow** equals Warnings.



When you feel the build is complete and accurate, click Save located in the gray bar. Be sure to select Save whenever changes are made.



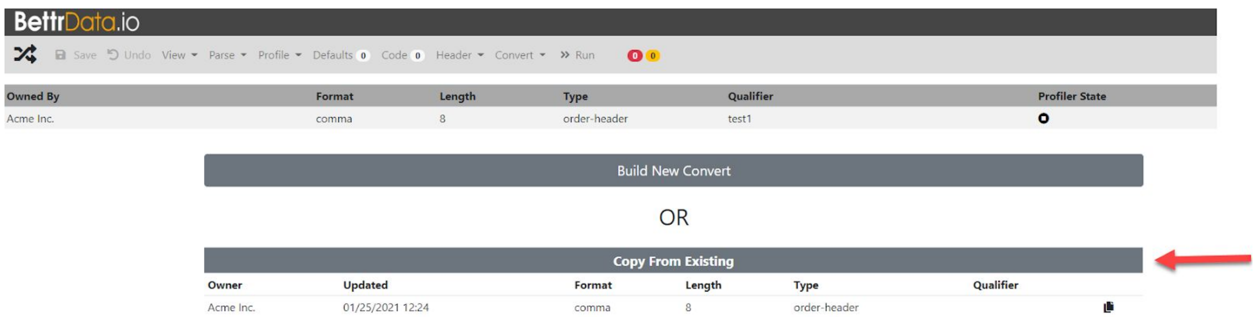
When you are ready, you can Run (transform the data from its original format to a standardized output) right from the build screen. Click on >>Run located on the gray bar to initiate file conversion.

Go to [Run](#) for further information on Run Convert.

Create a new Convert from a copy

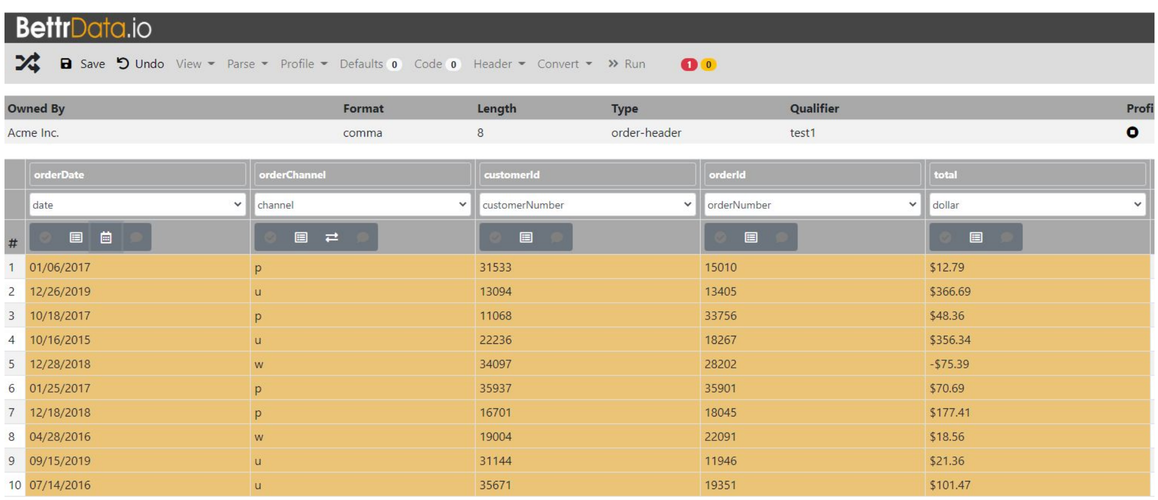
As a file begins to process it is first placed in the status of Unidentified, requiring a Type to be selected on the Manage Files page to move the file onto the Status of Waiting to Convert. You can now click on the files' menu and select Open in Builder to create a new convert.

The Build New Convert screen will display.



To help expedite the build process, the system will display any previous builds where the Convert contains the same format, length and type of the selected file regardless of owner. Select the copy icon to the right of the convert you would like to copy from.

The BettrData.io Builder will display the data from the selected file and the configuration of the new convert copied from the existing one.



From here you can make any changes that may be needed or Save the Convert as is. See [Create a New Convert from Scratch] for more information on creating a new convert in the Builder.

Once the build has been saved and you are ready, you can Run right from the build screen. Click on >>Run located on the gray bar to initiate file conversion.
Go to Run for further information on Run Convert.

Menu Bar Options

In addition to making it a painless process to create a New Convert, the BettrData.io Builder also offers several features that can help complete an accurate build.

Save

Save will be enabled anytime there are unsaved changes. Click Save to save the current convert configuration.

Undo

Located on the gray bar, the Undo option is enabled whenever changes to the builder have been made and when selected will remove the changes and return the builder to its previous state.

View

From the View menu located on the builder gray bar, you can review Profile Data, View Mode or select the number of Samples to show.

Profile Data

Show/Hide
Select this option to display parse text. To close the parse text, click the Show/Hide menu option again.

File Info
Select this option to view Current File Information including Filename, Byte Size and Record Count.

View Mode

From the View menu you can change the Main column presentation to review Code, look at a Summary or view the JSON for this Builder. To return to column presentation, select Main from under the View Mode menu.

Main

Code

Summary

JSON

Show Samples

And if you'd like to change the number of sample rows that display on the page, select a number count from Show Samples on the View menu.

Parse

Under the Parse menu, Build and Safe are available options.

Build

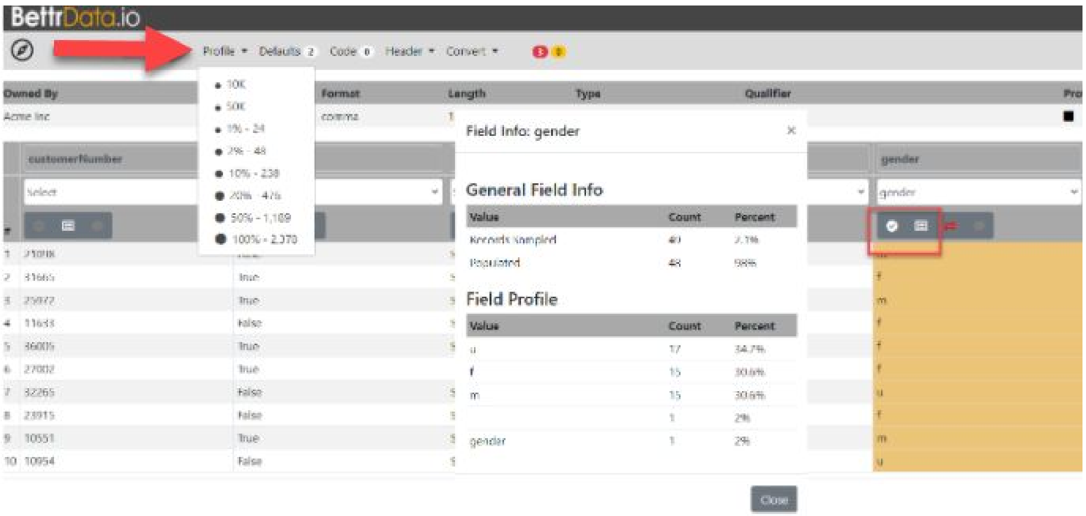
Selecting this option will take header data from the input file and wipe out an existing convert if there is one including all settings so that you can begin a build fresh.

Safe

When Safe is selected, the data in the table will re-display but existing settings and the convert configuration itself will not be touched.

Profile

To produce a field distribution report, click on the Profile Field Toggle icon located on the column that you would like to profile. Then select the percentage of records that you'd like to review from the Profile menu. Now click on the information icon located at the top of the column. Field profile information will display including the Value, Count and Percent for General Field Info and for Field Profile. **Note**, the maximum number of records you can profile is 2 million.



Default

(Field Profile Toggle not Selected)

Field Info: gender ×

General Field Info

Value	Count	Percent
Records Sampled	28208	100%
Populated	28167	99.9%

Close

Field Profile

(Toggle selected)

Field Info: gender ×

General Field Info

Value	Count	Percent
Records Sampled	28208	100%
Populated	28167	99.9%

Field Profile

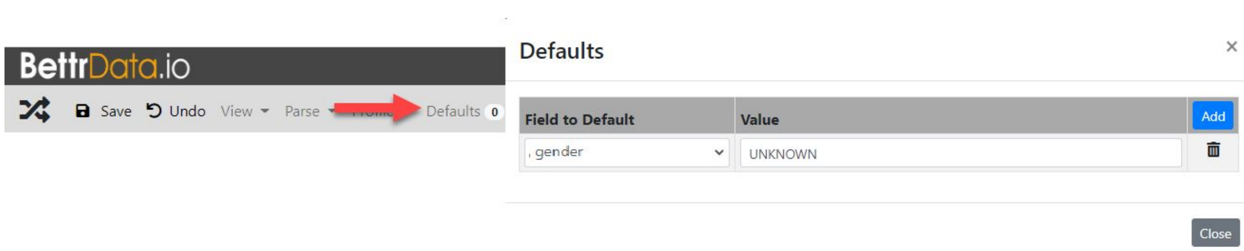
Value	Count	Percent
u	9,559	33.9%
m	9,352	33.2%
f	9,158	32.5%
gender	98	0.3%
	41	0.1%

Close

Defaults

If you want to create a new field on the output file that is not included in the input file or you want to default a field's value on output when the input is empty, you can use the Defaults feature. For example, if you have an input field called gender, some values are blank but you desire no empty values on output, you could select the Default field of gender and assign a value of Unknown. Now Unknown will plug into every row where the gender field is blank.

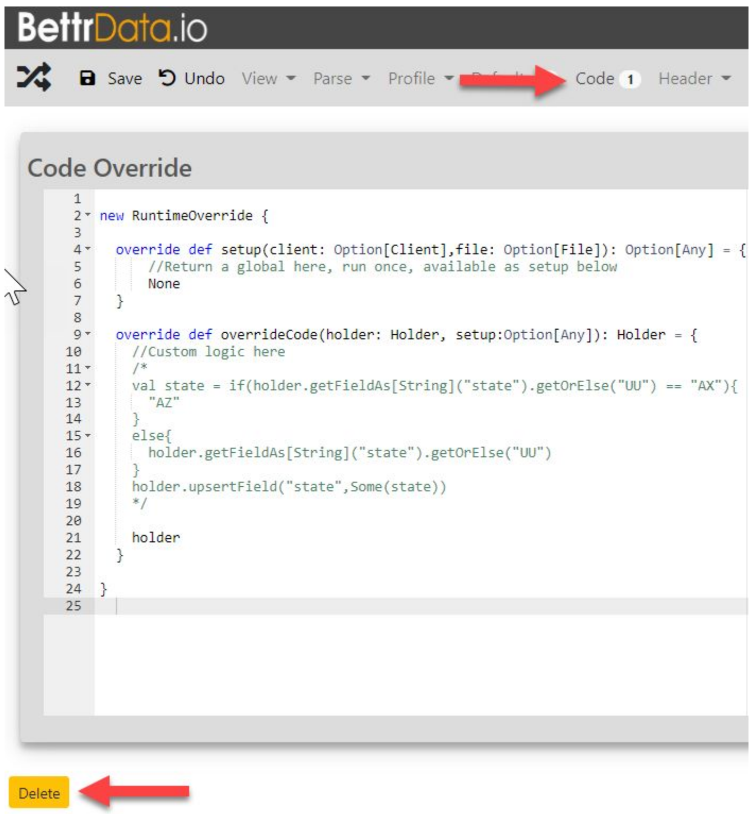
Click on Defaults in the menu bar. The Defaults screen will display.



Click the Add button. Then select a Field to Default and enter a Value. To enter additional defaults, click the Add button again. Then click Close. The number of created defaults will now display next to the Defaults menu.

Code

Selecting Code from the menu bar will display the Code Override screen enabling custom logic such as ‘if’ statements or lookup tables. If you choose not to use Code Override, click the Delete button so as not to impact performance.



Header

Drop

Selecting the Drop Option from the Header menu will cause the first row of the Header to drop on output. Once enabled, you will see a ‘1’ in the menu. If a file happens to have multiple header lines, increase the number to the desired count. Change it to zero to revert to not dropping any header records.

Convert

The Convert menu includes options for Enabled, Drop Empty Records, Duplicate and Run options.

Enabled

Selecting this Convert menu option will activate automatic file conversion. **Note** that if Enabled is turned off the file will stay in Waiting to Convert status until the switch is turned on or the file is manually converted. There are instances where you may wish to keep Auto Convert (Enabled) turned off. For example, you may want to continue working on the configuration or validation and do not want the file to convert yet. Turning on Enabled Auto Convert prompts the system to bypass the status of Waiting to Convert and will move to the Converting stage in the workflow.

Drop Empty Records

This menu selection will drop rows if there is **NO** data in the entire column and every cell is BLANK.

Duplicate

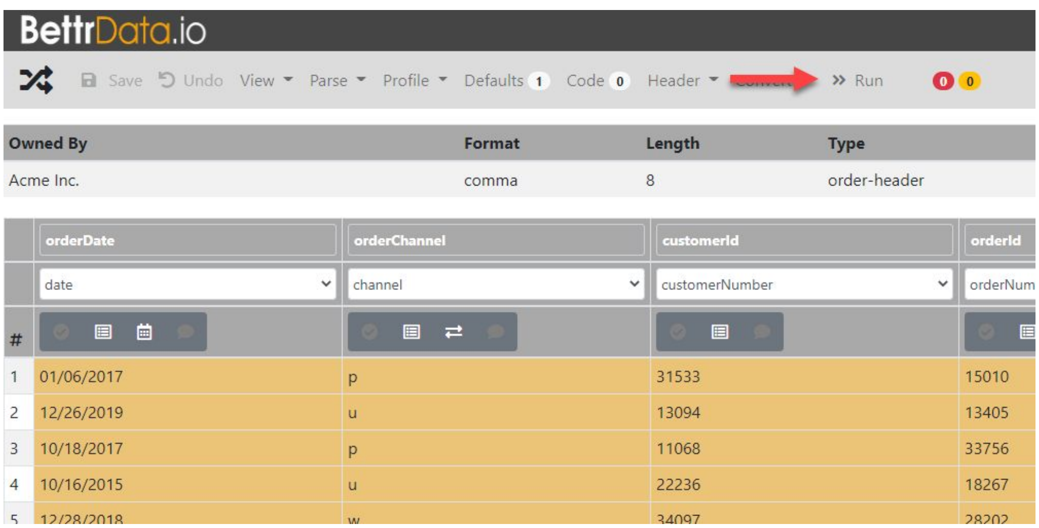
This menu option will duplicate the file and allow you to Change Owner or Change Qualifier.

Run

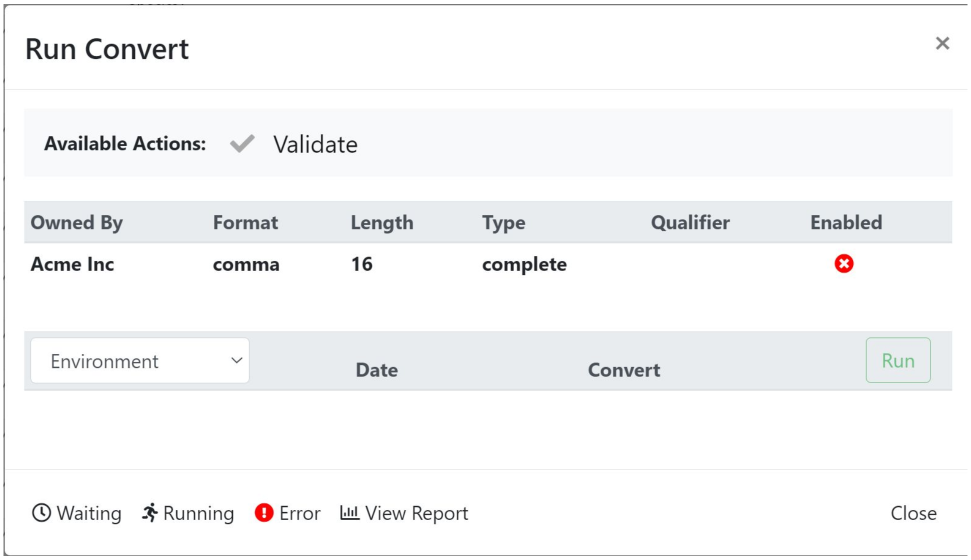
Selecting Run from the Convert menu will display the Run Convert screen so that you can initiate Convert Complete for the file.

Run

The Run Convert screen allows you to use the selected Convert to transform the selected file to it's desired Convert Type format.

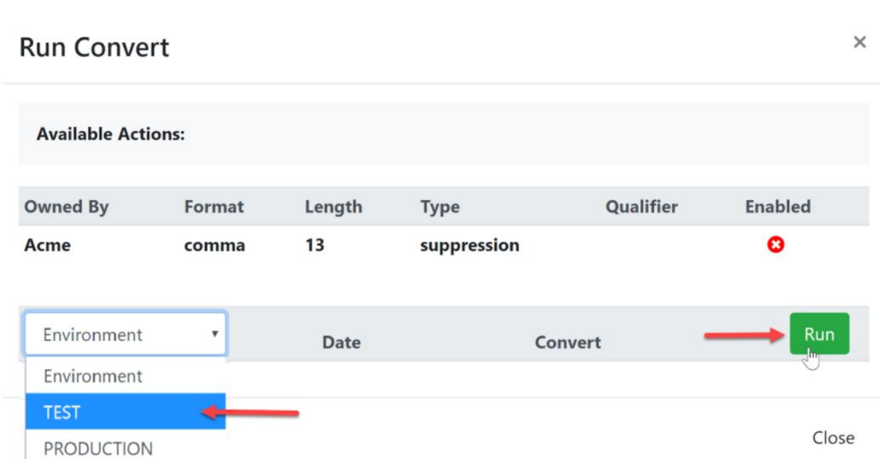


The Run Convert screen will display.



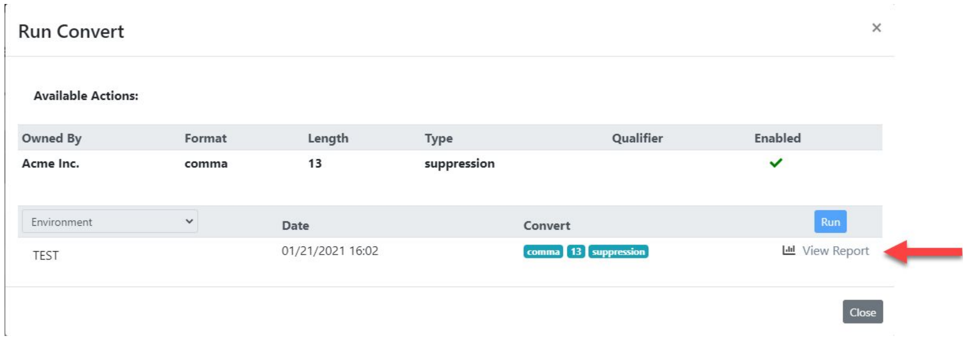
From this screen you can view file information including Owned By, Format, Length, Type, whether there is a Qualifier and whether the file has been Enabled for Auto Convert.

Select Test from the Environment menu to run the file for the first time. Click Run.



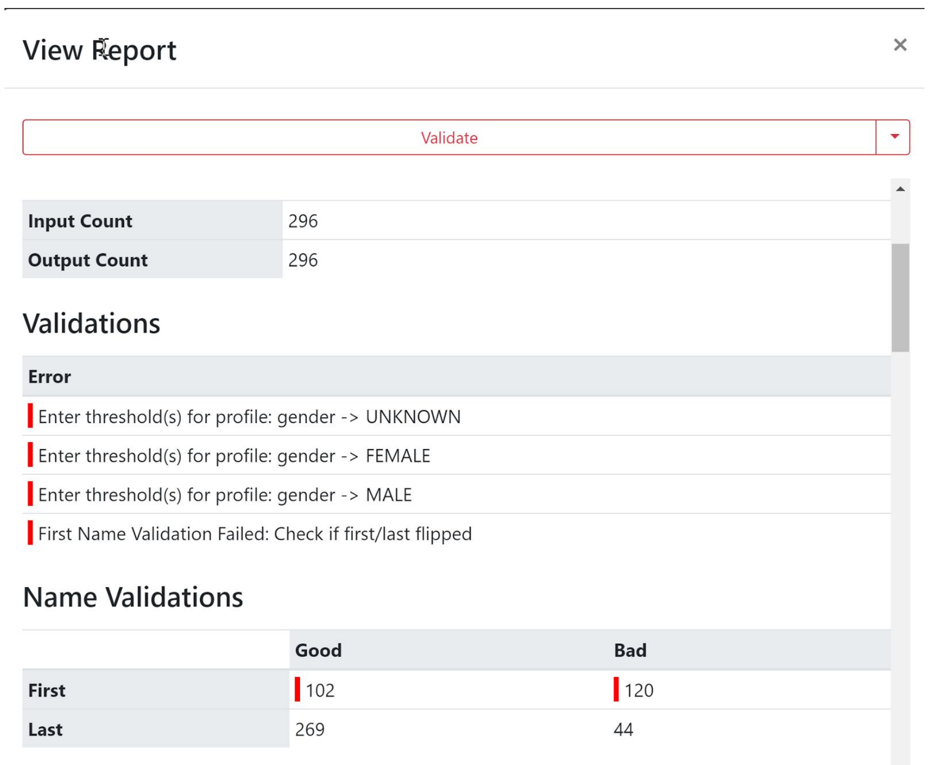
As the file proceeds through Run Convert, an icon and text will display on the lower right letting you know the current state the file is in including Waiting, Running, Error and View Report. The selected Environment, Date, and Convert (format, length, type) will also display.

When Run is complete, the View Report icon and text will display. Click on the icon.



View Report

The View Report page will display.



The Report page enables you to view Run results and make any needed adjustments and/or corrections before making the final Run for Production. You'll also have the ability to view the report following the Run in Production.

The Report page provides information including:

■ **Report Overview -** conveys the Owner, Create Date, File, the Run Environment, and Convert fields. The Report Overview is where you have the ability to check Auto Validate allowing any future Run of the file to automatically validate bypassing the status of Waiting for Review and moving it onto the status of Convert Complete. Be sure to review the report for accuracy and complete all validations and missing values before checking the Auto Validate checkbox.

Report Overview

Owned By	Acme
Create Date	03/16/2020 14:51
File	customer.6.csv
Environment	TEST
Convert	comma 16 customer
Auto Validate	☐

■ **General Counts -** display both Input and Output counts. Input Count consists of the raw data prior to conversion and the Output Count represents the transformed data including conversions, mappings and filters.

General Counts

Input Count	296
Output Count	296

■ **Validations -** Any Errors that need to be considered will display here. As Errors are addressed throughout the report, they are removed from the Validations Error list.

Validations

Error
Maximum threshold not met for Missing Value : do_not_mail
Enter threshold(s) for profile: do_not_rent -> N
Enter threshold(s) for profile: do_not_rent -> Y
Enter threshold(s) for profile: do_not_mail -> N
Enter threshold(s) for profile: do_not_mail -> Y

■ **Name Validations -** number of issues surrounding First and Last Name verifications. If the number of occurrences of bad exceeds the count of good, this will cause validation to fail.

Name Validations

	Good	Bad
First	222	0
Last	253	48

■ **Errors -** This is where report Errors can be viewed and the thresholds can be adjusted when the errors are within tolerable limits. The display includes an Error description, the Count and Percent of the error found in the file and Max % allotted. Adjust the Max % for any Errors highlighted in red, then click the Validate button to save and validate.

Validate

Errors

Error	Count	Percent	Max %
Parse Failure:Parse-Line-Failed	6	2.02%	3 %
Phone Parse Cast Failed:Phone	2	0.67%	1 %
Tranform No Match:Do Not Mail	138	46.46%	1 %

Note that when an error percent is less than the chosen max threshold percent, the errors are cleared from the Validations list. If the value is greater than the threshold, the field remains highlighted in **red** and the errors will continue to display on the Validations list until corrected.

■ **Missing Values -** provides the Count, Percent and Max % of any Missing Values found in the file. Adjust any Max % values that are highlighted in **red** and click the Validate button.

Missing Values

Field	Count	Percent	Max %
city	6	2.02%	3 %
zipcode	6	2.02%	3 %
address01	6	2.02%	3 %
company_name	6	2.02%	3 %
email	6	2.02%	3 %
state	6	2.02%	3 %
do_not_mail	144	48.48%	1 %

■ **Samples -** provides a view of results for a sample of output rows. To see additional samples, click the forward button. This provides the user the ability to visually verify that transformations were performed as expected.

Field	Value
lineNumber	4
city	Edenburg
zipcode	18598
name	first: MARK last: WOLFE gender: M
convertType	customer
address01	588 FERRIS STREET
company_name	TROLLERY
email	marks.wolfe@trollery.us
state	Hawaii

■ **Profile Validations -** When configured in the Convert Type settings, if a field is configured to perform a Profile Validation, the user is able to enter boundaries for each value encountered within the field. Enter a Min % and/or a Max % for each item in the Profile Validations list, then click the Validate button. If the given frequency percent is within the threshold, the Errors will be removed from the Validations list.

Note that while the system utilizes default thresholds for Errors, you have the ability to customize missing Max % for different Convert Types. See [Convert Types] for information on customizing Max Missing.

View Report

Validate

Profile Validations

Gender

Field	Count	Percent	Min %	Max %
UNKNOWN	99	33.45%	%	%
FEMALE	96	32.43%	%	%
MALE	98	33.11%	%	%

- **Data Profiles -** provides information on Field, Count and Percent.

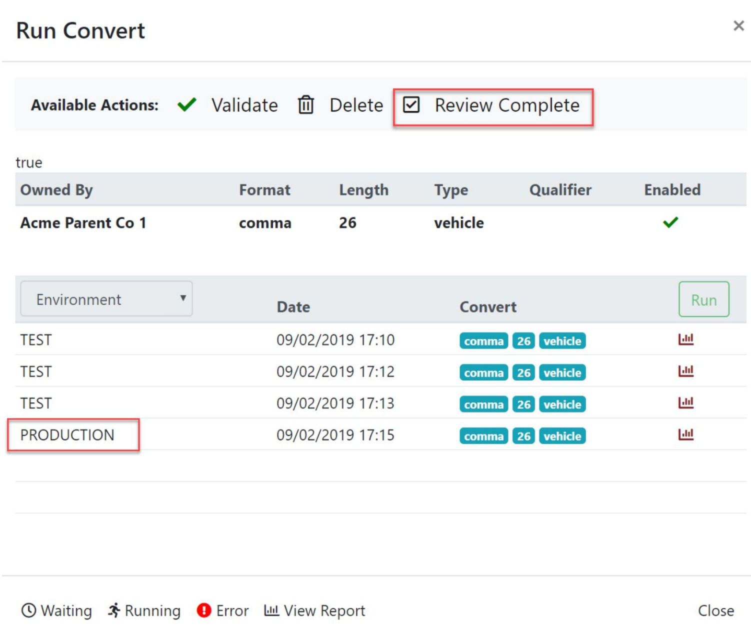
Data Profiles

State

Field	Count	Percent
American Samoa	5	1.69%
Tennessee	3	1.01%
Minnesota	6	2.03%
New Hampshire	6	2.03%
Kansas	4	1.35%
New Jersey	3	1.01%

Once the report has been reviewed and all necessary adjustments made, the Validate button will turn **green** when clicked (this also saves the threshold). Click Close. You will be returned to the Run Convert screen. Notice that a **green** checkmark at the top of the page reflects that the file has been validated. You can now Run the file in Production. Select Production from the Environment menu and click Run once again. **Note** you are not required to do a TEST run prior to a PRODUCTION run but it is recommended.

When Run is complete, the View Report icon will display and you will now be able to click on the Review Complete icon located at the top of the screen. Click Close to be returned to the Manage Files screen where the status for the file will now display Convert Complete. **Note** that if you do not select Review Complete on the Run Convert screen, the Review Complete option will be available from the file menu. The Run option is also available from the file menu.



Notice that from the Run Convert screen you also have the ability to Delete the file and iterate on this flow. See [Manage Delete](#) for more information on deleting files.

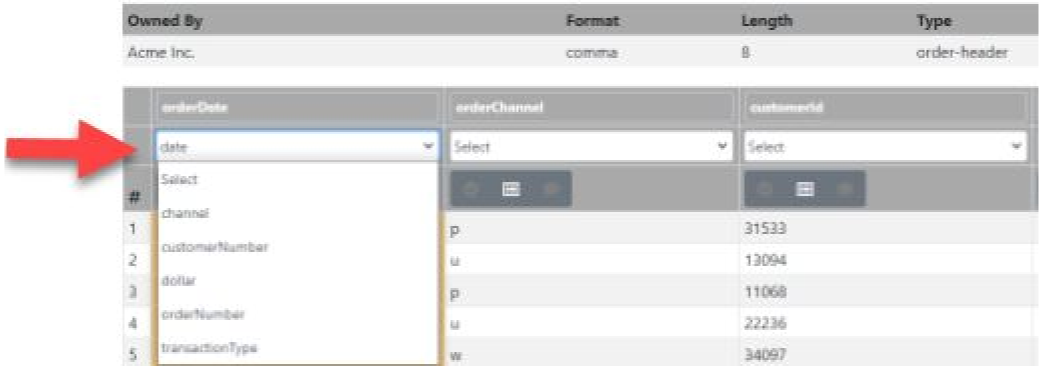
Other Builder Features

Label Line

The Label Line consists of the header of the first incoming CSV file or the provided headers in the case of fixed length data. If needed, labels can be changed in the Builder for greater clarity. Label changes will not affect the data.

Field Select Line

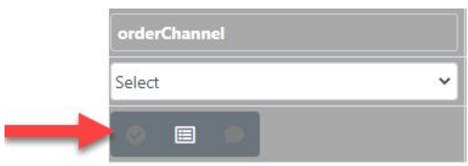
Click on the Select field to choose a standardized field name. By not selecting a field to map to, the incoming column will not be written to the output.



Column Options

Field Profile

Click the Profile Field Toggle to view profile field information.

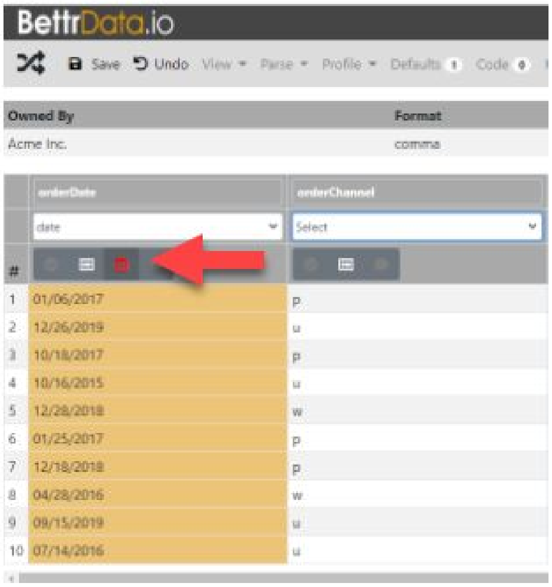


Comments

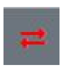
Click on the Show Field Comments icon to display a Comment field that will present at the top of each column. Click the icon again to close the Comment field. The icon will remain highlighted where comments are present.

Date Format

The Date Format icon will display for field selection of Date. Click the icon to define the format for date. See the included date format options and link for additional or advanced information.



Transformation Mapping

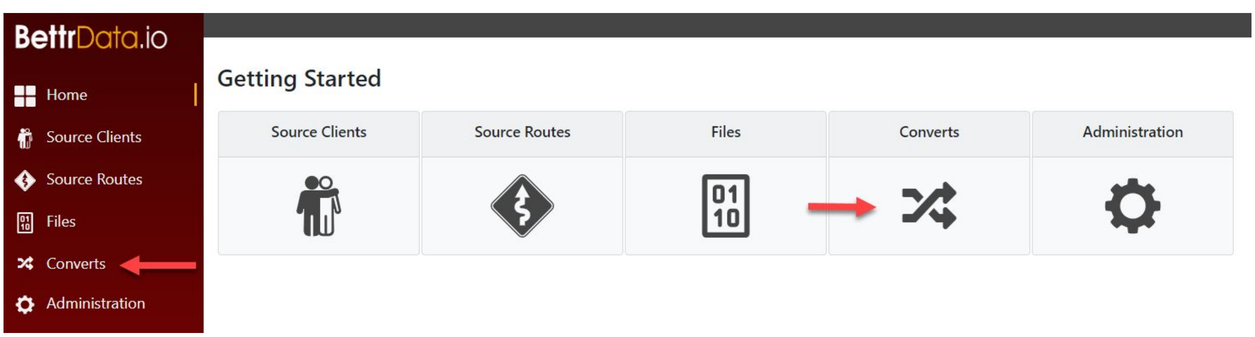
The Mapping  icon may display in a column once a field selection is made. Click on the icon to Map Incoming Values to the output field.

Go to [Create a New Convert from Scratch] to see more information about Options.

Converts

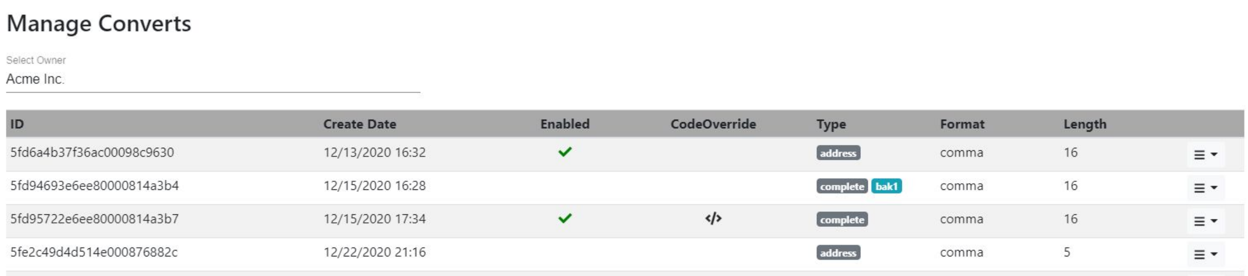
From the Converts page you can manage convert configurations produced in the Builder. By Owner, you can view, duplicate or delete files as needed.

Select Converts from the menu panel or click on the Administration card on the Home page. The Manage Converts page will display.

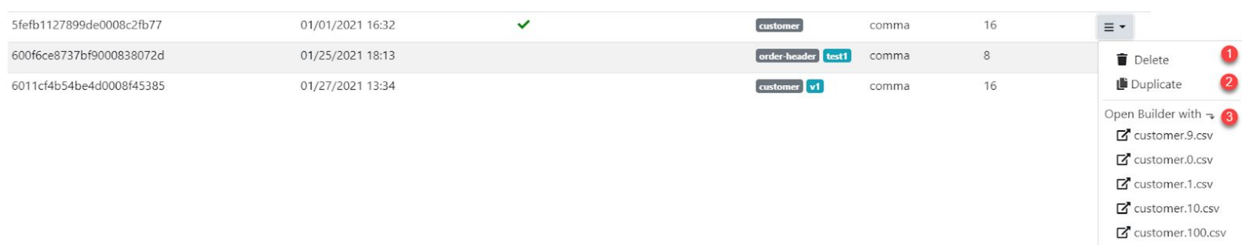


Manage Converts

Select an Owner to view their file conversions.

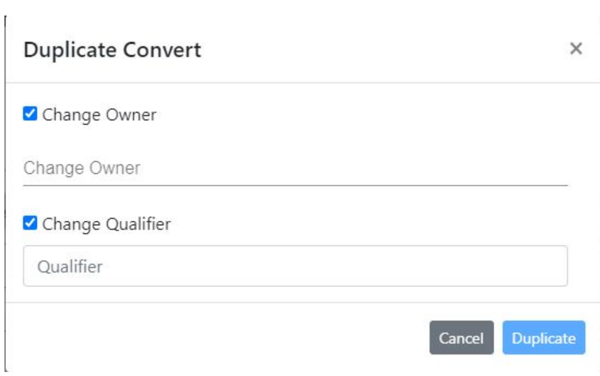


The Manage Converts list includes information for File ID, Create Date, whether the file was Enabled for Auto Convert, whether CodeOverride occurred (represented by an override </> icon), Type, Format and Length. From the file menu you can Delete or Duplicated files or Open Builder.



1 **Delete** - select this option from the files' menu to Delete a converted file. A confirmation message will display asking 'Are you sure you want to delete this convert?'. If yes, click OK or click Cancel to return to Manage Converts.

2 **Duplicate** - to duplicate a convert configuration, select the option from the files' menu. The Duplicate Convert screen will display.

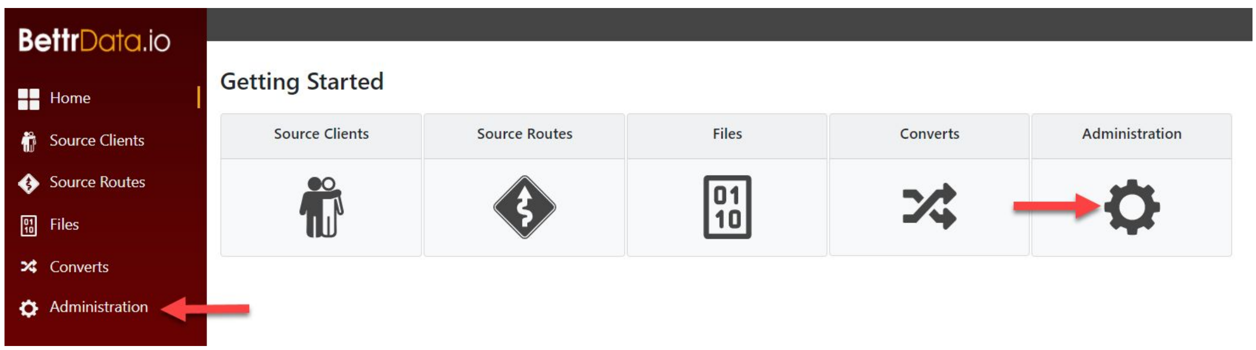


Click the Change Owner checkbox to select another owner and/or select the Change Qualifier checkbox and enter an alternate qualifier. You must change one or the other. Click the Duplicate button. For Change Owner duplications, the duplicated file will now display on the new owners Convert List. For Change Qualifier duplications, the duplicated file will display on the current owners Convert List.

3 **Open Builder** - you also have the ability to select a file from the files' menu that has the same owner, type, format and length to Open in Builder using the same code as the convert file. See Open in Builder for more information on the Builder.

Administration

Administration features enable you to Manage Configurations including Output Fields, Convert Types, Attributes, Code Snippets, and System Setting and provides information on the Current Build Version.

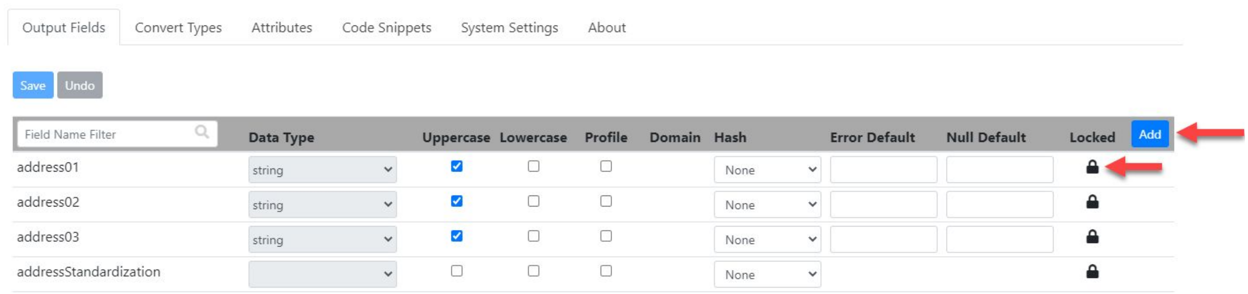


Output Fields

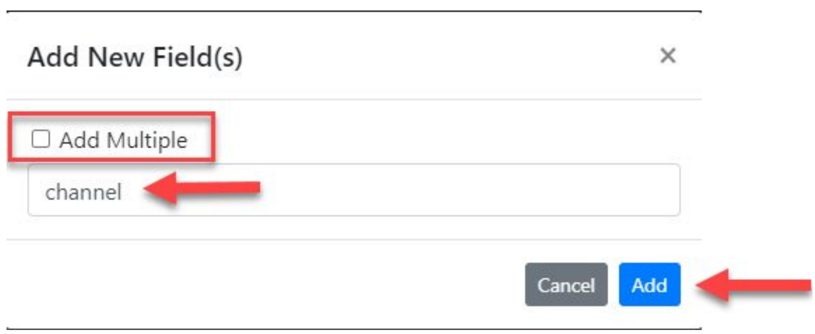
Select Administration from the menu panel or click on the Administration card on the Home page. The Manage Configurations page will display defaulted to the Output Fields tab. Fields added here represent all the shared fields that are available to the system. They must be added to a Convert Type to be used.

The Output Fields page enables you to create output fields that can be used across Convert Types. Notice that when you land on the Outputs Fields page for the first time, a set of locked default Field Names and their associated Data Types are represented on the list. These fields have been created by the system and cannot be deleted.

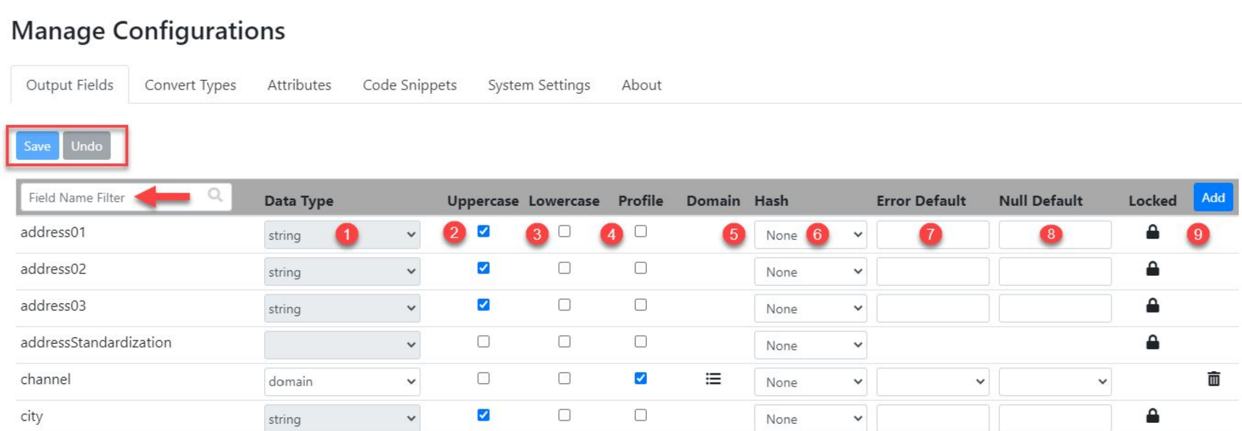
To create additional Output Fields, click on the Add button.



The Add New Field(s) screen will display.



Enter a Field Name and click the Add button. The name will now display on the Output Fields list. From the Add New Field(s) screen, you can also click the Add Multiple checkbox to add multiple field names at one time. Be sure to enter each field name on a separate line. When the Add button is selected all the entered field names will now display in the Output Fields list.



Make a selection for one or all of the Output Fields columns. The Field Name will display in the first column.

1 **Data Type -** make a selection from the menu. This column is required.

2 **Uppercase** - select this checkbox to have the data in the field present as UPPERCASE on output. You can view the output on the Run View Report.

3 **Lowercase** - select this checkbox to have the data in the field present as lowercase on output. You can view the output on the Run View Report.

4 **Profile** - make this selection if you would like to have the data on output included in the Run Report Profile showing a field distribution including Count and Percent. See Run View Report.

5 **Domain** - the Domain icon will display in this column if domain or transformation is selected as a Data Type. Click on the icon to view or Manage Domain for the field name.

6 **Hash** - selecting this feature transitions the field value into one of the selected hash types. This is a one-way algorithm that cannot be undone and currently supports SHA-256 and MD5.

7 **Error Default** - used to plug a value into a field's value on error. For example, if an integer type field does not parse correctly (contains 'ABC' for instance), you could plug 0 on the output by default. Anything done in the builder takes precedence.

8 **Null Default** - use this column to create rules that govern the field across convert types when Null occurs in the input. Adding a value here would replace a null value with the provided value. Anything done in the builder takes precedence.

9 The locked icon reflects that the field name is part of the system's default name set and cannot be deleted. Field names not included in the default set can be deleted. Select the trash can icon to remove a field. **Note** that if the Output field has been used in any Convert Type, a Warning message will display.

You also have the ability to search or filter the list by using the Field Name Filter. Be sure to select Save whenever entries or edits are made to the Output Fields page. Select Undo to revert the Output Fields page to its previously saved state.

Convert Types

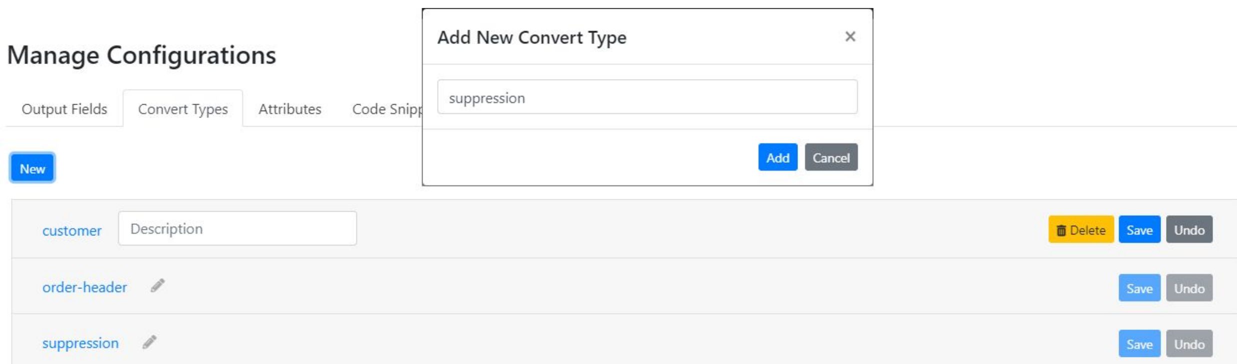
The system enables you to customize Convert Types dictating more specifically how you want a file to flow through the system. To customize Convert Types, select Administration from the menu panel or click the Administration card on the Home page. Convert Types must have at least one Output Field associated with it in order to be converted. Otherwise the system has no information as to how the file should be converted.

Note that Convert Types that do not have an output field associated with it will be treated as **Ignore** by the system. This might be used strategically to tag files that are not currently needed but might be referenced in the future.

Customized Convert Types are a very dynamic feature of the system. In addition to enabling customers to govern just how files flow through the system, customized types also allow a company to better address other unique needs.

For example, if a file is logged into the system that contains emails, however the company would prefer to deal with the emails at a later time, creating a custom convert type of Email without attaching an output field to the type can readily address this issue. As the file moves through the workflow and is placed in a status of unidentified, the file can easily be flagged for later use by selecting the convert type of Email. Because there is no output field attached to the Email type, the system will not convert the file enabling you to locate and address the file when ready. In addition, if there are no discrepancies in the workflow, the system begins to learn and will automatically assign similar files that come in the convert type of Email. You can also use customized convert types to simply organize data into categories without the intention of always converting.

The Manage Configurations page will display. Click on the Convert Types tab and select the New button. The Add New Convert Type screen will display.

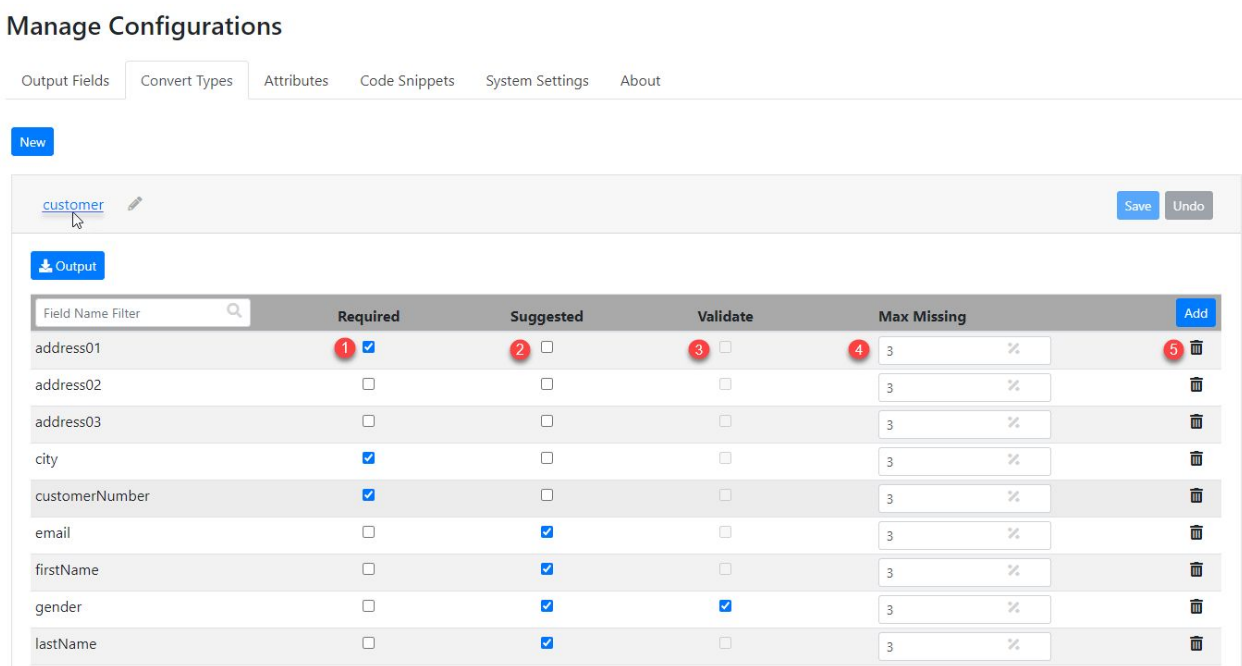


Enter a New Convert Type and click on the Add button.

The new Convert Type will now display on the Convert Types list. Click the Save button or to remove the convert type, click the Undo button. Click on the Edit icon to include an optional description of the Convert type, then click Save. From the Edit icon you also have the ability to Delete the Convert Type. To include additional Convert Types, click the New button and repeat the process. **Note** that you should not delete a Convert Type that is in use.

Once customized Convert Types have been created and saved, they can be used across files and owners and can be found on the Manage Files page in the Types menu.

Next, click on the Convert Type to open the list of Output Fields.



Make a selection for one or all of the Output Field columns. The Field Name will display in the first column.

1 Selecting the Required checkbox will prompt an Error in the build if the field is missing. See Create a New Convert from Scratch for more information on Errors.

2 Selecting the Suggested checkbox will prompt a Warning in the build if the field is missing. See Create a New Convert from Scratch for more information on Warnings.

3 To have the output field included as part of Validation on the output report, check the Validation checkbox. See View Report for more information on Validation.

4 From the Max Missing column you can change the output fields' default for percent of Missing Values. See View Report for more information on Missing Values.

5 Click the trash can icon to remove the selected field from being included as part of the Convert Type's output fields. **Note** that if the Output field has been used in a convert of the same convert type, a Warning message will display providing details about removing the field.

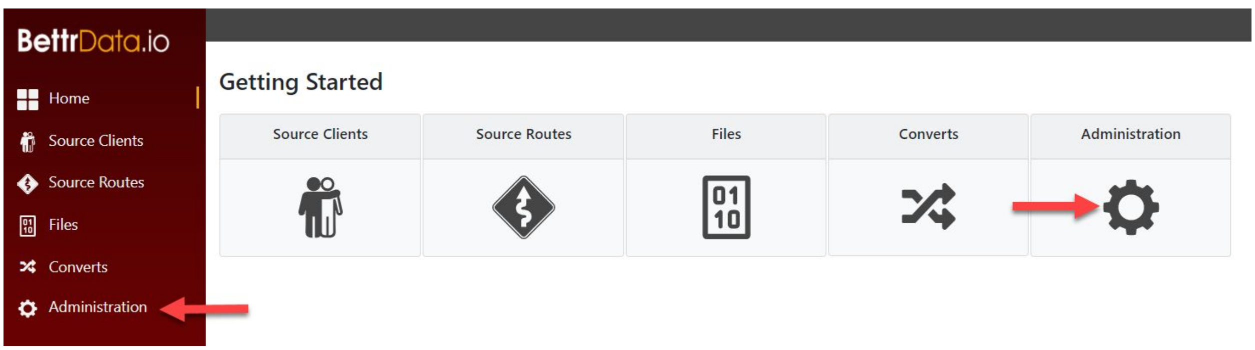
In addition you can use the Field Name Filter to filter or search field names in the list or click the Add button to Add fields to the Convert Type.

Click the Output button to select an Output Format of JSON, DELIMITED or FIXED. If an output format is not selected, JSON will be used as the default format. Select DELIMITED or FIXED if JSON is not desired and select the fields (field width for fixed) and field order for output.

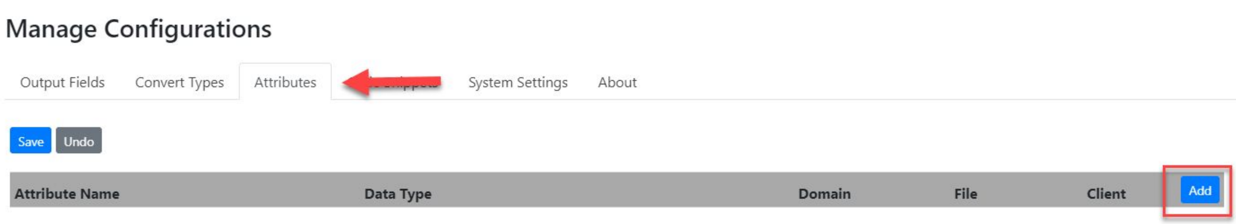
Attributes

One or more Attributes can be assigned to a client, brand, title or file. Attributes enable you to define custom properties to augment the object with specific business attributes that can tie back to your Customer Relationship Management (CRM) system as an example. In addition, attributes can be used in making data conversion decisions later in the process. In order to add an Attribute to one of these objects, you'll need to begin with creating and defining attributes.

First select Administration from the menu panel or click the Administration card on the Home page or select.

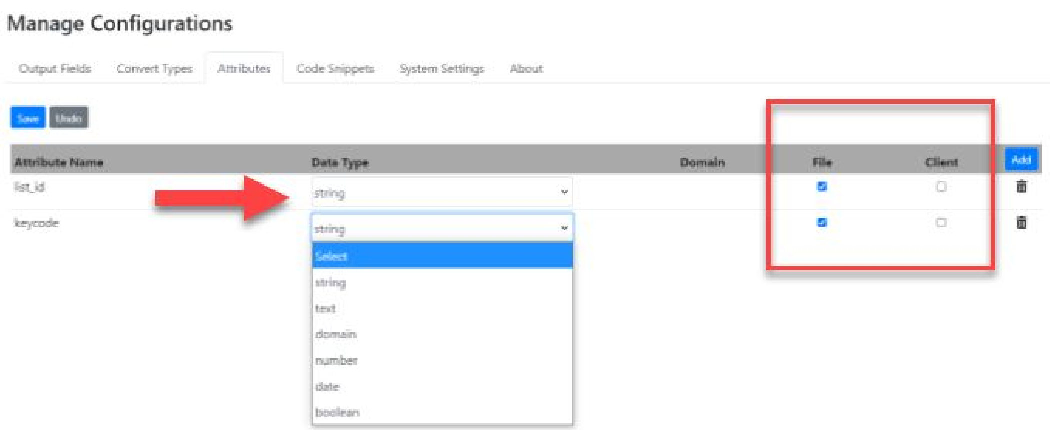


The Manage Configurations screen will display. Select the Attributes tab. The Attributes page will display. Click the Add button.

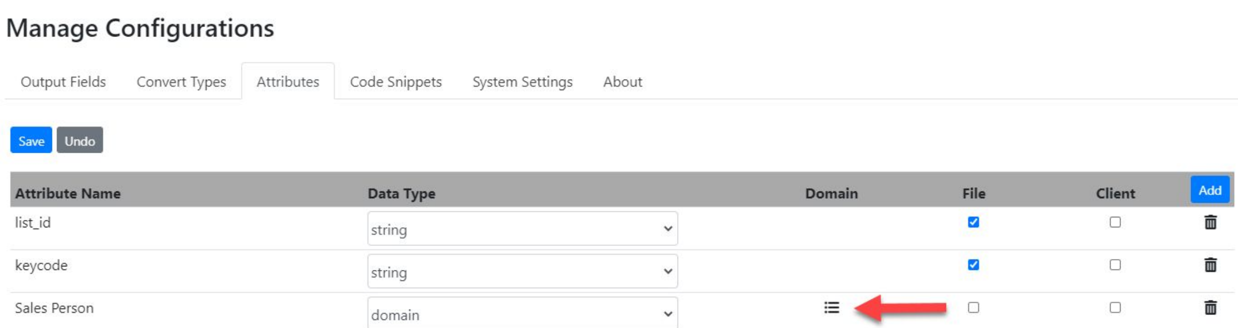


The Add New Attribute screen will display.

Enter an Attribute Name in the Name field and select the Add button. One or more Attributes can be added from the Add New Attribute screen. When finished click the Close icon. The new attributes will now display on the Attributes page. Next, select the kind of Data Type each attribute represents and check whether the attribute is related to File, Client or both. **Note**, only attributes checked as Client will be available for Client, Brand or Title attribute selection.



Data Types are created by the system and include:
String - text comprised of a set of characters that can also contain spaces, numbers or special characters. A street address is an example of a string data type.
Text - free form text such as a notes box
Domain - a limited list of choices such as male, female or unknown. Notice that a menu icon displays in the Domain column when Domain is selected as a data type. Click the icon.



The Manage Domain screen will display. Enter one or more New Domains for the selected Attribute, just select the Add button for each entry.

To remove a Field Domain, click the Trash icon. When you've completed the Manage Domain fields, click Close.
Number - can contain a whole number or number with a decimal.
Date - a specified date such as a start or end date.
Boolean - one of two possible values denoted as either true or false (check = true, unchecked = false).

Note that each attribute must be fully configured before it can be added to the Client Attributes list.

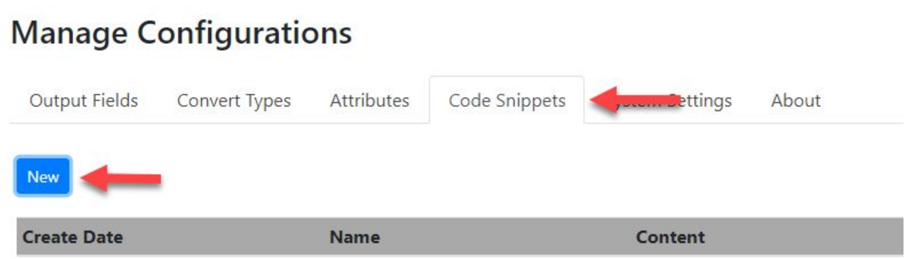
Once an attribute has been created, a Trash icon will be available to the right of the attribute and when selected will remove the attribute from the Attributes list. Once you've created your Attributes, select the Save button. **Note** that additional attributes can be added, updated or removed at any time and can be used as client, brand, title or file attributes.

To assign an attribute to a Client, Brand or Title go to Add/Remove Attributes.

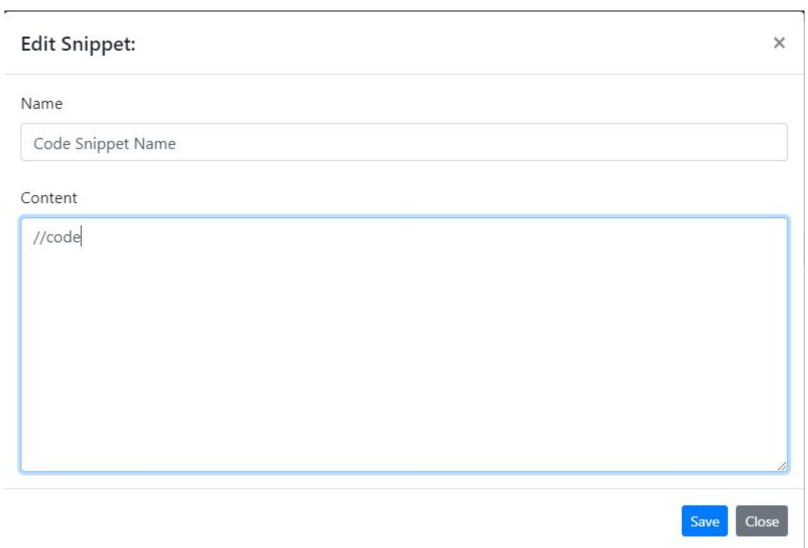
Code Snippets

Code Snippets enable you to write code that can be easily copied and used in the Builder. From the Administration Manage Converts page, click on the Code Snippets tab.

Click the New button.



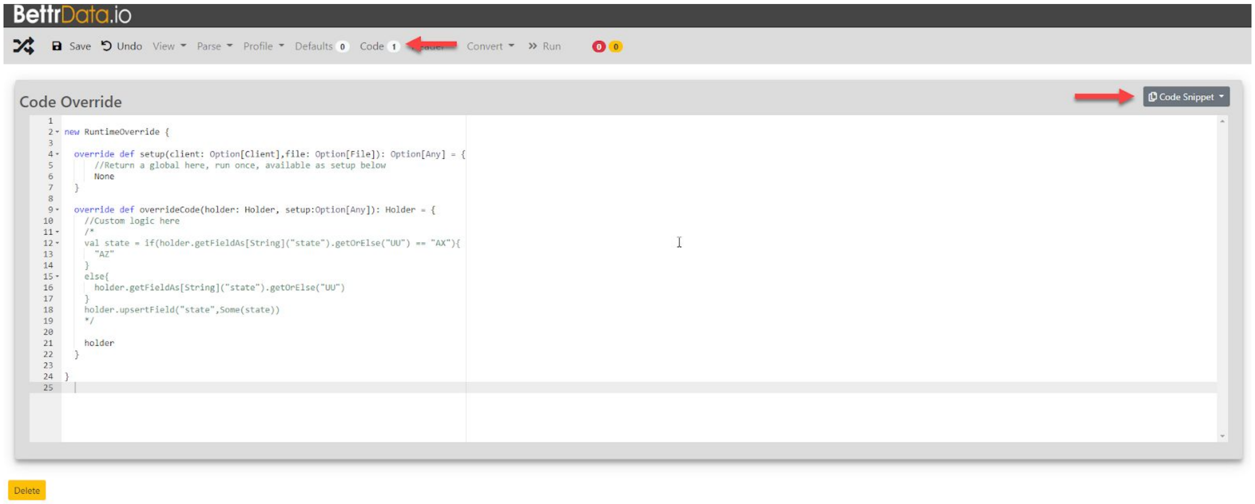
The Edit Snippet screen will display.



Enter a Name and code Content. Be sure that the code is in valid Scala language. Click Save. The Create Date, Name and Content will now display on the Code Snippets page. From the menu icon you have the ability to Edit or Delete the code snippet.

To copy the code, go to Files, the Manage Files page will display. Select a file and click the Open in Builder menu option. The Builder will display. From the menu bar, select Code.

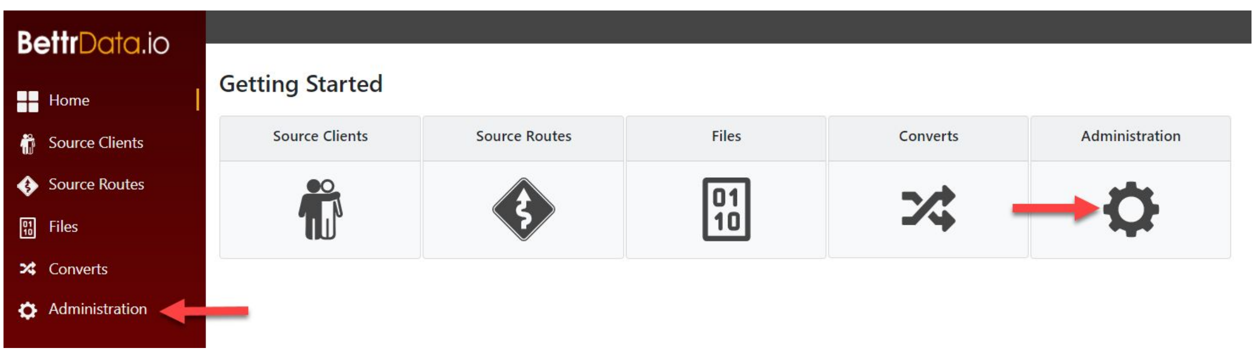
The Code Override screen will display.



Remove the code that you would like to replace, then click the Code Snippet button. The code snippet will be copied to the user's clipboard. Click the Code option in the menu bar again to close the Code Override screen. Be sure to select the Delete button if you choose not to use the Code Override as it may impact efficiency.

System Settings

System Settings enable you to customize and configure different components of the application. To access System Settings, select Administration from the menu panel or click on the Administration card on the Home page.



The Manage Configurations screen will display. Select the System Settings tab. The Global, Ingestion and Conversion tabs will display. Select the different tabs to enter or modify various System Settings.

Global

Global Settings address System Health Monitor, Email, Custom Web Links and Webhooks and include the following settings:

System Health Monitor	Description	Default
Enabled	If enabled, a ticket is created for BettrData support if the system goes into RED status. Disable for maintenance, etc.	Enabled
Email		
Enabled	Enable/disable all email with the platform	Disabled
Host	Enter a SMTP host	Blank
Port	Enter a SMTP port	Blank
Secure	Check if Use TLS for SMTP	Blank
User	Enter Username if required	Blank
Password	Enter Password if required. **Note** must be manually encrypted, please request support for initial setup.	Blank
From	Enter address-Email will be delivered using this address	Blank
Email Template File Recieved	Enter Email template used for file receipt	Blank
Email Template File Failed	Enter Email template used for file failures	Blank
Custom Web Links		
Custom Web Links	Enter Description, Url and Type. Can add one or multiple web links	Blank
Webhooks	A webhook delivers data to other applications as it happens	
File Created	This webhook fires when a new file is received	Blank
File Converted	This webhook fires when a file is converted	Blank
Review Complete	This webhook fires when a converted file is marked as reviewed	Blank
File Deleted	This webhook fires when a converted file is deleted	Blank

Be sure to click the Save button for each Global Setting where entries or changes have been made.

Ingestion

Data Ingestion is the process of streaming-in massive amounts of data into the system from different external sources for running analytics and other operations required by the business.

Click the Ingestion tab to view and manage Data Ingestion Settings including Indexer and Processing.

Indexer	Description	Default
Enabled	Enable/disable new files from being discovered and indexed on the platform	Enabled
Allowed Route Failures	Enter Number of sequential failures a route can have before being disabled	3
Processing		
Enabled	Enable/disable file analysis and processing (files will queue)	Enabled
Enable Smart Types	Enable/disable smart detection of convert types	Disabled
Forgive Non-Zero PGP Exit Enabled	If enabled, PGP decryption will continue on ERROR and if an output is produced. Enable at your own risk.	Empty
Forgive Non-Zero PGP - Whitelist	Click the Clients button to select Whitelist clients that allow a Non-Zero PGP Exit. If none, all will be enabled.	Empty
Enable Pre-Processing Hook	Enable a pre-processing script to customize file formatting, encoding or content	Disabled

Be sure to click the Save button for each Ingestion Setting where entries or changes have been made.

Conversion

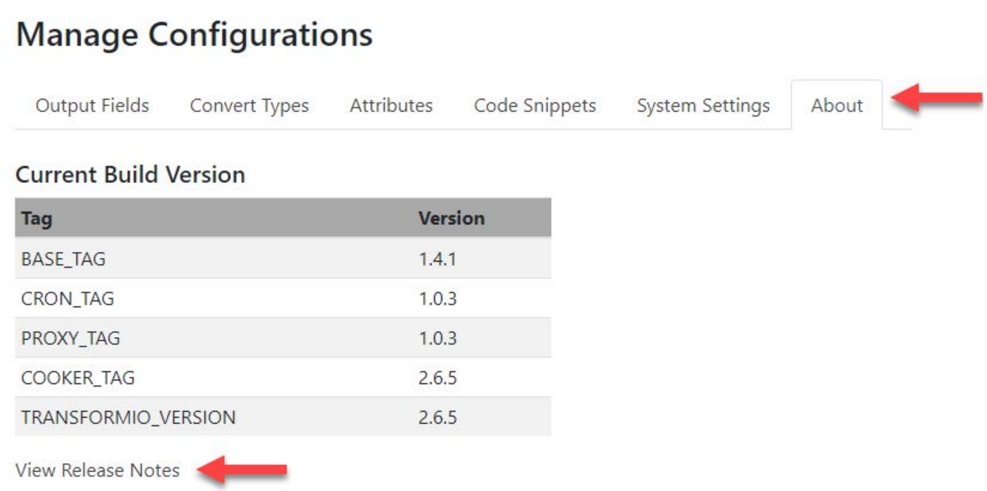
Click the Conversion tab to view and manage Conversion Settings including Conversion Service, Auto Conversion, Auto Validate and Output Settings.

Conversion Service	Description	Default
Enabled	Enable/disable all conversions from running on the platform	Enabled
Auto Conversion		
Enabled	Enable/disable automatic conversion from starting new converts	Enabled
Auto Validate		
Enabled	Enable/disable the automatic validation of conversions	Enabled
Output Settings		
S3 Enabled	Enable/disable outputting conversion data to S3	Disabled
Single File Output	Check to Write output to a single file vs multiple parts (affects performance)	Disabled
Number of Records or Tests	Enter Number of records to convert when using the TEST Environment	50000
Output by Convert Type	If enabled, output path is */DATA_ROOT/CLIENT_ID/**TYPE**/FILE_ID*, type is omitted if disabled	Enabled
User Friendly Output Root	Used for copy to clipboard feature, seat this to the mounted output root	/mnt/data/output/production
User Friendly Input Root	Used for copy to clipboard feature, seat this to the mounted output root	/mt/data/input
User Friendly Input Separator	Used for copy to clipboard feature, seat this to the desired path separator	/

Be sure to click the Save button for each Conversion Setting where entries or changes have been made.

About

About provides you information on the Current Build Version and provides easy access to View Release Notes. To access About, select Administration from the menu panel or click on the Administration card on the Home page. The Manage Configurations screen will display. Select the About tab.



Click on the View Release Notes link to access the latest release notes.You will be given access during onboarding. **Note** the BettrData.io Release Notes and User Guide are proprietary and only approved for use for BettrData.io customers or approved recipients.