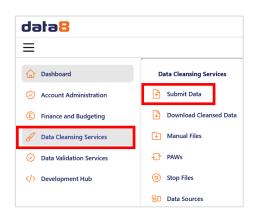


How To.... Run a Data Cleansing Job

This document serves as a guide to running a data cleansing job within Data8's Data Cleansing Solution. Data Cleansing is an essential process to ensure the accuracy and reliability of data by identifying and correcting errors, inconsistencies, and duplicates. This guide will cover the necessary steps and screens involved in running a data cleansing job, providing a detailed walkthrough from start to finish. By following this guide, you can maintain high-quality data that supports better decision-making and operational efficiency



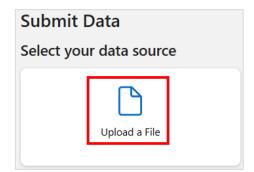
To start a Data Cleansing job, click on the **Data Cleansing Services** option in the menu on the left-hand side of the screen.

A new menu will be displayed, showing all the available services within Data Cleansing.

In this example, click on **Submit Data** (see screenshot left).

A new screen will then be displayed, providing the user with three options:

- 1. *Upload a File*: Allows the user to browse and locate the file they wish to cleanse within the system.
- 2. *Choose Existing File*: Allows the user to reuse a file that has previously been used within the system.
- Add a New CRM Connection: Allows the user to create a connection to one of their CRM systems, enabling data from a specified CRM system to be used in the cleansing process.



In this example, click the **Upload a File** button, see screenshot left.

A new screen will be displayed, allowing the user to select the file they wish to cleanse. At the top of this screen, it lists the accepted formats that can be used within Data8 Online:

- CSV
- Excel
- Delimited files



Additionally, ZIP files are accepted if they contain one of the supported file types, such as CSV, Excel, or Delimited files.

Below this section, there are two options for uploading a data file:

- 1. *Drag a File here to upload* Allows the user to drag and drop a data file into the designated area.
- 2. Click here to upload Enables the user to click the button to navigate and select the file. (See screenshot below.)



In this example, click **Browse** and select the file to be cleansed within the system.

Click Open.

As the file is imported, the system will verify that the selected file type is one of the accepted formats.

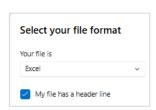
The data will now be displayed on the *Map Columns* screen.

As the data is imported, the system will auto-detect if it contains a header row and will tick or untick the checkbox accordingly. However, the user can override this setting by manually ticking or unticking the checkbox if the system has applied it incorrectly.

N.B. Always ensure that the checkbox is ticked if your file contains a header record.

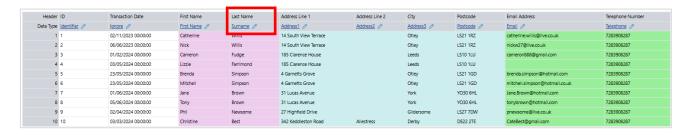
In this example, ensure My file has a header line is checked.

The top row displays the headers from the selected data file, if it contains a header row.





The row below displays the relevant system header. For example, in the screenshot below, the header field in the file is "Last Name," but the system recognises this as "Surname" and has automatically mapped the header accordingly.



Each field has been auto detected; however, any incorrectly mapped fields can be amended by clicking on the *Edit* button.

In this example, the system has mapped the "Transaction Date" to be ignored. We will include this in the data cleanse.

Click on the **Edit** button to the right of *Ignore*, under the *Transaction Date* header field (See Screenshot left.)

A Change Column Data Type pop-up box will be displayed on the screen.

This allows the user to adjust the mapping of each individual column.

In this example, click the **Last Transaction Date** radio button so that the data will be included in the data cleanse instead of being ignored.

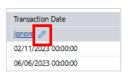
Click Save.

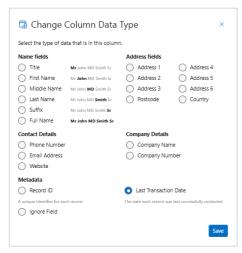
The previous data screen will now be displayed.

The *Transaction Date* header field has now been amended from *Ignore*, to *Last Transaction Date*. See screenshot left.

In this example, the system has mapped the "Telephone Number" to be mapped. We will exclude this in the data cleanse.

Click on the **Edit** button to the right of *Telephone*, under the *Telephone Number* header field (See Screenshot left.)

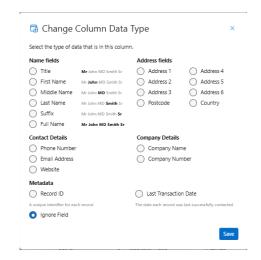




Transaction Date	
Last Transaction Date	9
02/11/2023 00:00:00	
06/06/2023 00:00:00	







A *Change Column Data Type* pop-up box will be displayed on the screen.

This allows the user to adjust the mapping of each individual column, with all available header fields displayed.

In this example, click the **Ignore Field** radio button so that the data will be excluded in the data cleanse.

Click Save.



The previous data screen will now be displayed.

The *Telephone Number* header field has now been amended from *Telephone*, to *Ignore*. See screenshot left.

At the bottom of the data preview screen, left and right arrows enable the user to navigate through the data. This ensures that:

- a) The data being imported for the cleanse is correct, and
- b) The data is correctly mapped, with no shifts into incorrect columns.

Click the right arrow to scroll further into the data, moving toward the end of the dataset.

Click the left arrow 1 to return to the beginning.

Below the right navigational arrow, there is a *Page 1* indicator along with single and double arrows for further navigation.

The page number indicates the user's current position within the data.

Click the single arrow (pointing right) to move one page forward.

Click the double arrow (pointing right) to move to the last page of the data.

Click the single arrow (pointing left) to move one page back.

Click the double arrow (pointing left) to move to the first page of the data.



Page 1 > >







Once the user is satisfied with the mapping of the data fields, they can then proceed with the data cleanse.

Click the **Continue** button located at the bottom right corner of the screen.

A *Check Column Types* pop-up will be displayed if the user hasn't already modified the mapping of any fields, allowing them to confirm they are satisfied with the current data field mappings.

If the user does not wish to see this pop-up on subsequent data cleanse jobs, enter a tick into the *Don't show again* checkbox.

If further mapping amendments are required, click *Cancel* to return to the previous data preview screen.

In this example, we will proceed with the data cleanse. Click the **Continue** button.

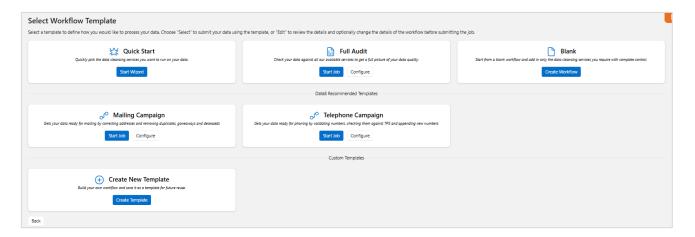
The Select Workflow Template screen will be displayed. See screenshot below. This page enables the user to choose from predefined templates or to create a new template from scratch.

The pre-defined templates available include:

- a) Quick Start
- b) Full Audit
- c) Mailing Campaign
- d) Telephone Campaign

The blank templates available are:

- a) Blank
- b) Create New Template.

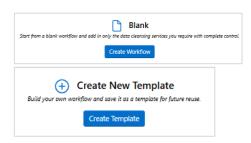


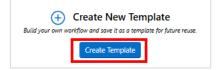
N.B. Additionally there is a Business Data Cleanse template only displayed when the data contains a business name.











The *Quick Start* template can be selected using the *Start Wizard* button, allowing the user to choose which data cleansing services to include in the cleanse.

The Full Audit, Mailing Campaign, and Telephone Campaign templates offer two options:

- a) Start Job Immediately starts the job using all the data cleansing services in the template with the pre-selected matching levels.
- b) Configure Opens the selected template, enabling the user to customise each data cleanse service to meet their specific requirements.

The *Blank* template can be started by clicking the *Create Workflow* button.

The *Create New Template* option can be started by clicking the *Create Template* button.

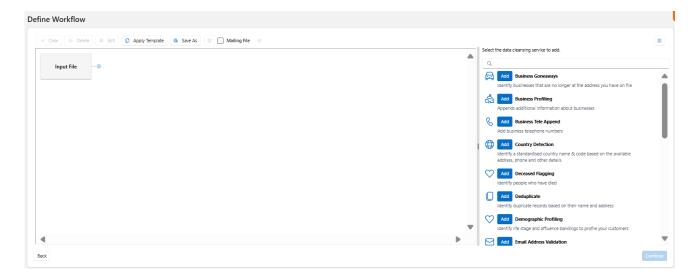
Both *Blank* and *Create New Template* options open a blank screen where each Data Cleansing Service must be manually added. If needed, the template can be saved and reused to expedite future data cleanse jobs.

Before starting the data cleanse job, if any final checks of the data are required, click the *Back* button located at the bottom left of the screen under *Create New Template*.

In this example, click the **Create Template** button located at the bottom of the *Create New Template* box. See screenshot left.

The *Define Workflow* screen will be displayed. See screenshot below





At the top of the screen there are several buttons,

N.B some buttons will be greyed out until you select a service:

- a) Clear This button removes all selected data cleanse services displayed on the screen.
- b) Delete This button removes an individual data cleanse service. Select the service to be removed, which will highlight it, and then click Delete.
- c) Edit This button allows the user to modify the selected service, including options such as match level and whether the data should be flagged or suppressed. The available options depend on each service.
- d) Apply Template This button displays a Select Template pop-up (see screenshot left).

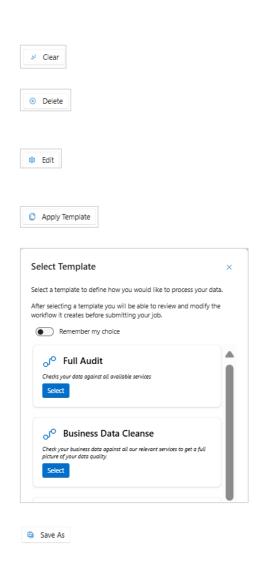
To ensure the system remembers the selected template, turn on the slider next to *Remember my choice*.

All templates available to the user will be displayed in this list. If the user wishes to use a template at this stage rather than starting from scratch, they can select from the list.

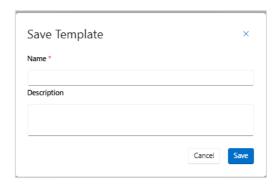
A *Confirmation* pop-up will be displayed, indicating that any previously selected services will be removed from the job.

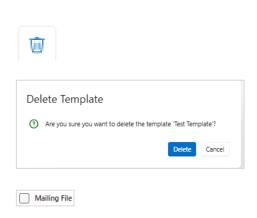
To override the current workflow, click *Yes*. To cancel applying the template, click *No*.

e) Save As - This button enables the user to save the current workflow as a template for future use. When selected a Save Template pop-up box will be displayed.









- The *Name* is a mandatory field, as shown by the red asterisk.
- The Description is an optional field.

N.B. Once a template has been saved, the user can either

- (a) click the Save button to overwrite the current template or
- (b) click the drop-down menu to the right of Save and select 'Save As.'

This will open the dialog box again, allowing the user to enter a new name for the template.

f) Delete the selected template – This button enables the user to delete any template created by the user within the system. N.B. System templates cannot be deleted.

When selected the *Delete Template* pop-up will be displayed. To complete the deletion of the template, click the *Delete* button. To retain the template click *Cancel*.

g) Mailing file – This checkbox ensures that the data file is output in the correct format for a mailing file.

N.B. The Mailing File service can only be selected when the PAF Cleansing service is selected and individual first and last name fields are available, either as part of the input data or via the Name Cleansing service.

Beneath the buttons described in the previous section, there is currently a blank work area displayed.

N.B. If you have selected a template, this work area may already contain data service selections.

To the right of this work area, you will find all the data services available within Data8's Data Cleansing solution.

At the top of the list, there is a search bar to easily locate known services.

If you are unsure about the name, use the scroll bar to navigate through the full list of services. All services are arranged in alphabetical order for easy navigation.



We will now create our own Mailing File Template which will include the following services:

- Mover (please note these addresses have not gone through the PAF validation service prior to this process)
- PAF cleansing
- Deduplicate
- Deceased Flagging
- Goneaway Flagging

Using the search bar start to type *Mover* and the list of services will be reduced to display only those which are related to Mover. See screenshot left.

Click the **Add** button to the left of *Mover* to display this in the workspace.

To select the match level for *Mover*, ensure that the *Mover* node is highlighted, then click on the settings button on the node.

Alternatively, once the *Mover* node is highlighted, click the *Edit* button at the top of the screen.

In this example, click the **Settings** button on the node.

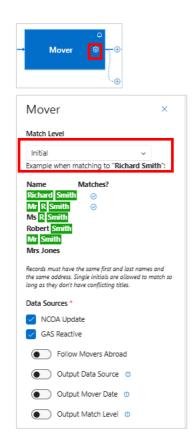
The *Mover Match Level* screen will be displayed on the right-hand side of the screen. See screenshot left.

Click in the drop-down next to *Initial*. There are three different match levels available, each matching the input data to the relevant information in the *Movers* file:

- Forename Matches against the full forename of the individual. For example, if the input forename is Richard, it will not only match to Richard, but also to variations or nicknames of Richard, such as Rich or Dick, due to fuzzy matching. It would not match to the initial "R".
- Initial Matches against the initial of the forename. For example, it will match anyone with a forename starting with R, such as Richard, Robert, Reggie, etc. If a full forename is provided in the input data, it will be used for matching; otherwise, the initial will be used.
- Surname Matches against the surname of the individual. For example, it will match anyone at the address with the surname Smith, regardless of their first name.

In this example, we will leave the match level at **Initial**.









Displayed beneath the *Match Level* drop-down is a demonstration illustrating how the different match levels—Forename, Initial, and Surname—would match "Richard Smith" against various names. See screenshot left.

The next section of this pop-up displays the *Data Sources* that will be used in this data cleanse. In our *Mover* example, *NCOA Update* and *Gas Reactive* are selected. To exclude a Data Source, simply remove the tick from its checkbox.

In this example we will use both Data Sources.

If an individual within the data file has moved abroad, you can move the slider next to *Follow Movers Abroad* to the right to include this information in the output, if available.

In this example we will not switch this on.

The *Output Data Source* slider, if turned on, will include in the output not only that the individual is a *Mover* but also whether the information was provided by *NCOA Update* or *Gas Reactive*, as in this example.

In this example we will not switch this on.

The *Output Mover Date* slider, if turned on, will include in the output the date of the mover if this is available.

In this example we will not switch this on.

The *Output Match Level* slider, if turned on, will include in the output the amount of name information used to match the record to the mover data source.

In this example we will not switch this on.

Click the *Cancel* button to discard any changes made on this screen.

In this example we want to apply the selections that have been made for Movers, click the **OK** button located at the bottom left of the pop-up.

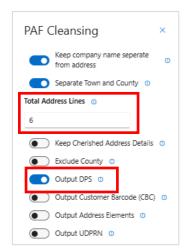
This now returns the user to the previous page where additional services can be added if required.

Search for PAF.

Click the **Add** button to the left of *PAF Cleansing* to display this in the workspace next to *Mover*.







In the PAF Cleansing service, users have the ability to specify the

total number of address lines. This ensures accurate address formatting and completeness.

Click the Settings button to adjust the options for this data

In this example ensure we have *Total Address Lines* of 6.

N.B. Different organisations may require a different number of address lines based on their specific needs. The number of address lines selected will impact the structure and details of the output file, so it is important to decide this requirement in advance.

In this example we will switch on the option to *Output DPS* (Delivery Point Suffix) code.

The DPS code is a two-character code that uniquely identifies each delivery point within a postcode. Including the DPS code in your output enhances the accuracy and precision of the address data, ensuring more reliable mail delivery and improved data quality.

N.B. Each data source has different settings available on its settings page.

In this example we want to apply the selections that have been made for PAF Cleansing, click the **OK** button located at the bottom left of the pop-up.

This now returns the user to the previous page where additional services can be added if required.

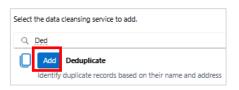
Search for *Deduplicate*.

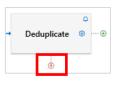
Click the **Add** button to the left of *Deduplicate* to display this in the workspace.

N.B. When the Deduplication data cleanse service is added to the screen, there is an additional line with a red cross displayed at the bottom of the *Deduplicate* node. See screenshot left. This feature allows the user to add a secondary service specifically for processing records identified as duplicates if this is required.

N.B. When the Deduplication data cleanse service is added to the screen, an additional line with a green cross appears to the right of the Deduplicate node. See screenshot left. This indicates that only records not identified as duplicates will proceed to the next selected service.

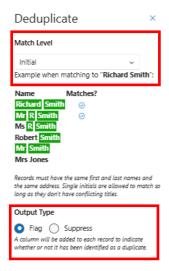
















Click the *Settings* button to adjust the options for this data source.

N.B. The *Deduplicate Match Level* offers the same options as described in the Mover section above, Forename, Initial, and Surname.

In this example, we will leave the match level at Initial.

In the *Output Type* settings, the user can choose between **Flagging** or **Suppressing** duplicate records:

- Flag: When records are flagged, duplicates are marked or tagged in the output file. This enables the user to review and address them later without removing them from the dataset. Flagging is useful to identify and manage duplicates manually or maintain a complete record for auditing purposes.
- Suppress: When records are suppressed, duplicates are removed from the output file. This option is ideal to ensure that the final dataset only contains unique entries, thereby eliminating any redundant information.
 Suppressing is beneficial for generating clean and concise data for analysis or reporting.

In this example, select Flag.

In this example we want to apply the selections that have been made for Deduplicate, click the **OK** button located at the bottom left of the pop-up.

This now returns the user to the previous page where additional services can be added if required.

In this example we want to apply the selections that have been made for *Deduplicate*, click the **OK** button located at the bottom left of the pop-up.

This now returns the user to the previous page where additional services can be added if required.

Search for Deceased Flagging.

Click the **Add** button to the left of *Deceased Flagging* to display this in the workspace.

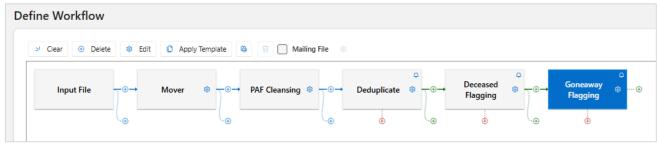




Search for Goneaway Flagging.

Click the **Add** button to the left of *Goneaway Flagging* to display this in the workspace.

In this example, we have now added all required services for the data cleanse (see screenshot below).





N.B. If the user has not reviewed a selected service, a bell icon will appear at the top right of the node. Once the user has opened the settings screen, this icon will no longer be displayed. See screenshot left.

If this will be a regular data cleanse job that a user will need for future tasks, in the following step the settings will be saved as a new template.



Click the Save button

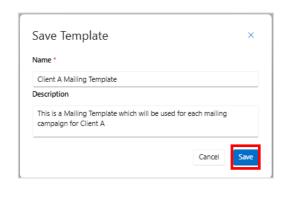
The Save Template pop-up will be displayed.

Insert a template name into the *Name* field. In this example the name will be **Client A Mailing Template**.

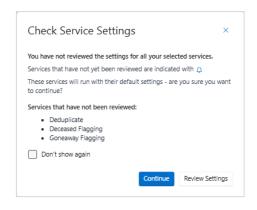
Insert a template Description into the *Description* field. In this example the description will be **This is a Mailing Template which will be used for each mailing campaign for Client A**.



To start the data cleanse, click the **Continue** button located at the bottom right of the screen.





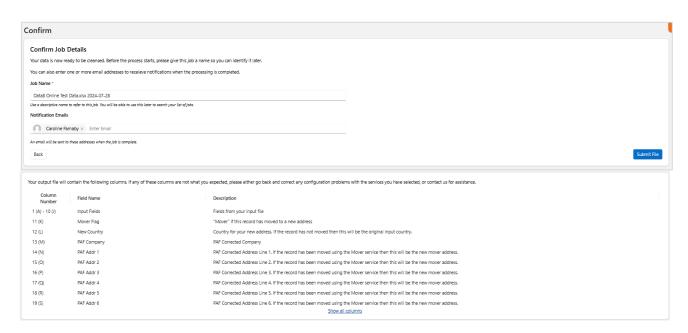


The *Check Service Settings* pop-up will be displayed if any of the services selected haven't been reviewed.

To look at the settings click on the *Review Settings* button which will return the user to the previous screen to check each of the services.

In this example we want the system to use the default settings, therefore click the **Continue** button.

The *Confirm Job Details* screen will be displayed. See screenshot below.



A default *Job Name* will be displayed. This can be amended by the user by clicking into the text box. Please note that when processing an Excel file, the default cleanse job name automatically includes the selected sheet name, to ensure each job is easily identified.

N.B. This is a mandatory field.

In this example, we will retain the default *Job Name*. The *Notification Emails* section includes the user who has run the data cleanse job by default.

Additional users can be added to receive notifications by clicking the *Enter email* text box. This will display a list of available email addresses, or users can manually type in the email addresses of those who should receive the notification once the job is complete.



In this example, we will not include any additional email addresses.

The Back button, located at the bottom left of the screen, enables the user to return to the *Define Workflow* page if any changes are needed to the services selected for the data cleanse job.

At the bottom of the page, you will see the fields that will be included in the output file, the list displayed includes the columns from your input file. If any of these columns are not as expected, you can return to the previous step to adjust your settings

Click the **Submit File** button to start the data cleanse job.

The *View Job Results* screen will be displayed. At the top of the screen, information about the job is displayed including:

- The date and time the job was processed
- The name of the user who initiated the cleanse
- The name of the data file used
- The name of the template used
- The number of records included in the data file
- The date and time when the job was completed (this information will be added upon job completion)
- The expiry date, noting that data is only available for one week following processing (this information will be added upon job completion)

A progress bar allows the user to track the status of the data cleanse. See screenshot below.



Upon completion of the job, an email will be sent to all email addresses specified during the notification stage which includes a copy of the Data Quality Audit Report.

Submit File

29/07/2024, 11:31:11
Caroline Farnaby
Data8 Test Data.xlsx

29/07/2024, 11:32:23

Expires 05/08/2024

☐ 11 Records

Data8 Test Data.xlsx 2024-07-29

Client A Mailing Template (modified)







Copy To New Job





The screen will be updated to include the following information:

- Purchase Output File A link to enable the purchase of the data.
- Data Quality Audit An Excel file link that enables the user to view the audit results.

Below the link to the Data Quality Audit, all the services selected for the cleanse are listed.

Information about each service is provided, including

- The number of records cleansed
- The number of matches made
- The cost for each service with price card details, and
- A Service Settings button. Clicking this button displays the *Match Level* pop-up, allowing users to review the settings.

Underneath the services, at the bottom left of the screen, is a *Copy to New Job* button. This allows the user to set up a new job using the same data but with different services or settings.

To the right of the *Copy to New Job* button, is an *Expire* button. This enables the user to manually archive the job before the 30-day expiration period. By expiring the job, both the job and its associated data will be archived and deleted from our server.

At the bottom right of the screen, there is a second link to purchase the output file.

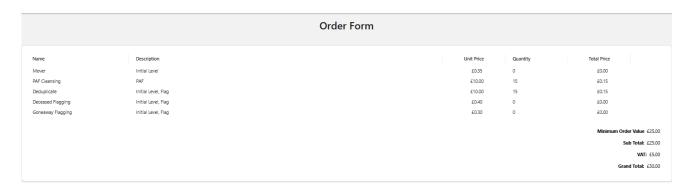
Below this link, the cost of the job is displayed.

To purchase the data, click on the **Purchase Output File** button located at the bottom right of the screen.

N.B. There is also a link beneath the expiry date at the top left of the screen.

The *Order Form* screen will be displayed. The top section of the screen includes information regarding the selected services and match levels, the unit price, the number of matches per service, and the total price. See screenshot below.







Beneath this is the *Order Description* which displays the name of the job.



At the bottom of the *Order Form* page, there are links to all Terms & Conditions and End User Terms for the different services.

Clicking on an individual link will open the relevant document.

In this example insert a tick into the **Agree All** checkbox so all T&C checkboxes are ticked.

At the bottom right of the *Order Form* page, there are four buttons.



1. Continue Shopping: Returns the user to the *View Job Results* screen.



Send Quote

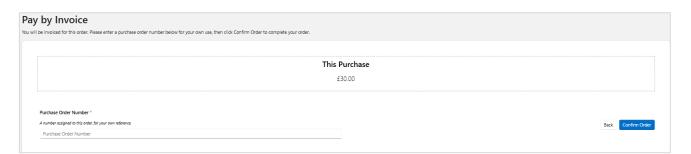
2. Send Quote: Displays a *Choose Email Addresses* pop-up screen. Enter the email addresses of the recipients and Click *OK* to send the quote.



- 3. Clear Cart: Cancels the job.
- 4. Confirm Order: Completes the purchase of the job.

In this example click Confirm Order.

The Pay by Invoice page will be displayed. See screenshot below.





At the top of this page, the cost of the job to be purchased is displayed under *This Purchase*.

At the bottom left, the user can add a Purchase Order Number.

At the bottom right there are two buttons:

- 1. *Back:* Returns the user to the previous page and cancels the purchase.
- 2. *Confirm* Order: In this example, click **Confirm Order** to complete the purchase of the cleansed data.

Order Complete

You've made a fantastic choice. Thank you!

Continue >

The *Order Complete* screen will now be displayed.

Click Continue.

View Job Results

Data8 Test Data.xlsx 2024-08-06

- iii 06/08/2024, 10:16:20
- Caroline Farnaby
- Data8 Test Data,xisx
- Client A Mailing Template
- 3 15 Record
- O6/08/2024, 10:17:30
- Expires 05/09/2024
- Download Output File
- Download File Format Document
- Download Invoice
- Data Quality Audit

This free report gives you an overview of the current quality of you

The user will now be returned to the View Job Results page.

This screen displays the same information as before, with the following additional options:

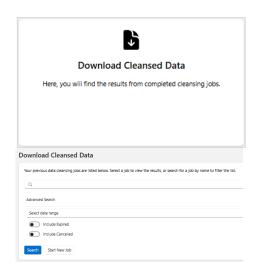
- *Download Output File*: Click this link to download the cleansed data.
- Download File Format Document: This link provides a downloadable document detailing the Column Number, Excel Column Name, Field Name, and a Description of the data included in the output file.
- Download Invoice: Click here to download a .pdf copy of the invoice.

This concludes the data cleansing process.

Data cleansing jobs do not need to be purchased immediately. Users can access and review previously run jobs within the system, enabling them to purchase the cleansed data any time prior to the expiry date.

Click on the **Data Cleansing Services** link this is located in the menu on the left-hand side of the screen.





The **Data Cleansing Services** screen will be displayed, featuring links to the various services available.

Click the **Download Cleansed Data** button.

The Download Cleansed Data page will be displayed.

At the top of the page, a search bar is available. Start typing to search for a specific job.

Beneath the search bar is the *Search* button. After entering text in the search bar, click the *Search* button to filter the data cleansing jobs based on the entered text.

Click on the *Advanced Search* text to display additional search criteria, such as specifying a date range to enable you to search within a particular period.

The first toggle button is *Include Expired*. When turned on, this will show jobs that have expired in the job list.

The second toggle button is *Include Cancelled*. When activated, this will display jobs that were cancelled in the job list.

To the right of the *Search* button is the *Start New Job* button. Clicking this allows the user to create a new data cleansing job.

Below this section, all previously run data cleansing jobs are listed. Clicking on any job enables the user to purchase it if it hasn't already been purchased, as long as the job hasn't expired. If the data was purchased previously, the user can download it at any time.

N.B. If the data for an individual job has been purchased, this status is shown just beneath the job name. See screenshot left.

