



DataProfiler SOP

APEX Consulting

About

DataProfiler is sort of the "home base" of data analysis for Apex Consulting. Its main functionality is the ability to upload client data files to the database, at which point the data can be loaded into the Data Profile Report.

Terms





Data directory

A folder with client data files. The folder should contain ALL files the user wishes to upload. See below for naming conventions:

ItemMaster.csv
InboundHeader.csv
InboundDetails.csv
Inventory.csv
OrderHeader.csv
OrderDetails.csv

Note: File names need to EXACTLY match what is listed above

Item Master is the only required file. Otherwise, the files given should match the "Process ___ Data" options chosen on the "Upload Data" screen. For example, if "Process Inbound Data" is set to true, both Inbound Header and Inbound Details must be present. Otherwise, neither are required and neither will be uploaded

Name	Date modified	Type	Size
 Inventory.csv	10/8/2024 8:15 AM	Microsoft Excel C...	7,520 KB
 ItemMaster.csv	10/8/2024 8:15 AM	Microsoft Excel C...	49 KB
 OrderDetails.csv	10/7/2024 10:06 AM	Microsoft Excel C...	65,323 KB
 OrderHeader.csv	10/7/2024 10:06 AM	Microsoft Excel C...	1,423 KB

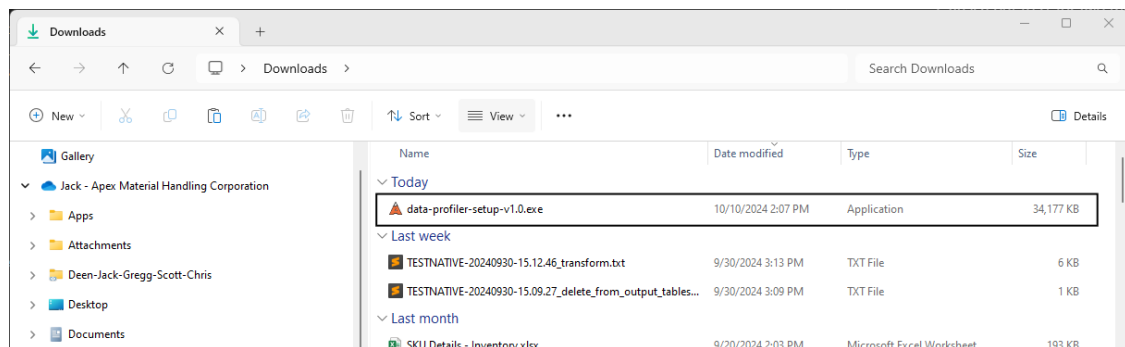
Data directory with no inbound data. "Process Inbound Data" should be set to false

Name	Date modified	Type	Size
InboundDetails.csv	9/23/2024 11:33 AM	Microsoft Excel C...	14,039 KB
InboundDetails_OutputTables.csv	9/25/2024 9:52 AM	Microsoft Excel C...	7,588 KB
InboundHeader empty.csv	9/30/2024 11:09 AM	Microsoft Excel C...	1 KB
InboundHeader.csv	9/30/2024 10:47 AM	Microsoft Excel C...	229 KB
InboundHeader_OutputTables.csv	9/25/2024 2:06 PM	Microsoft Excel C...	243 KB
Inventory.csv	9/27/2024 2:45 PM	Microsoft Excel C...	3,695 KB
ItemMaster.csv	9/30/2024 3:48 PM	Microsoft Excel C...	147 KB
OrderDetails.csv	9/30/2024 3:42 PM	Microsoft Excel C...	3,152 KB
OrderHeader.csv	9/30/2024 3:42 PM	Microsoft Excel C...	48 KB
velocity.csv	9/23/2024 3:47 PM	Microsoft Excel C...	20 KB

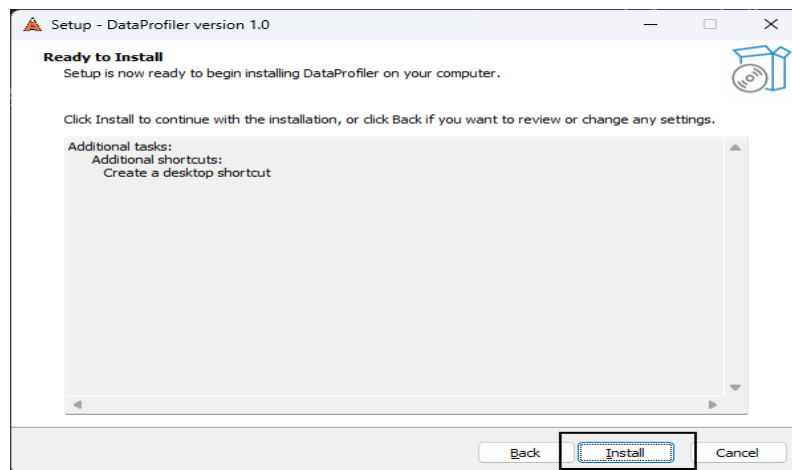
Data directory with all files present. All "Process __ Data" flags can be set to true, or only the ones you prefer. Notice also that other files can be present in the data directory - they will be ignored.

Installation

1. Acquire the EXE Installer for DataProfiler from IT or an analyst
2. Reach out to IT for two things:
 - a. Getting connected to the "Y" drive
 - b. Access to the database
3. Find the EXE installer in File Explorer



4. Double-click the installer file, and click through the wizard
 - a. Select "Create a desktop shortcut" if you'd like a shortcut
5. When prompted, click "Install"
 - a. The installation shouldn't take more than 30 to 60 seconds

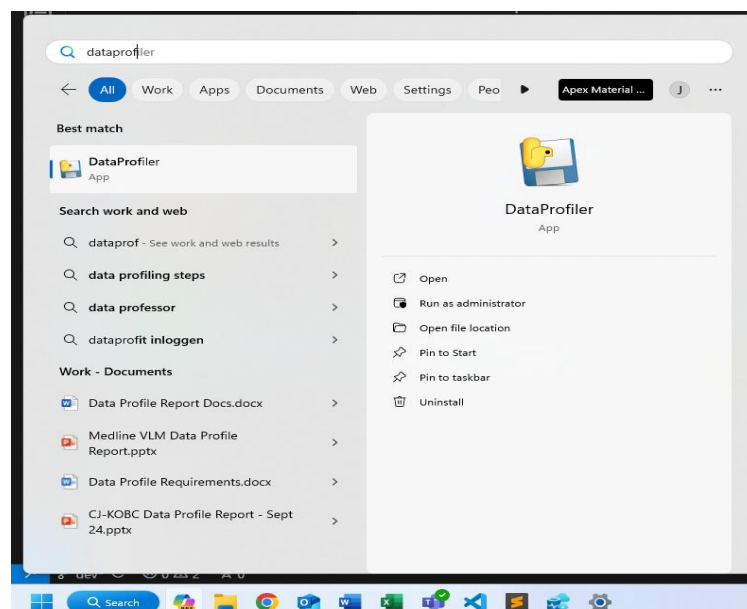


6. Click "Finish" to complete

Startup

There are a few options for starting up the *DataProfiler* application

1. Double-click your desktop shortcut, if you opted to create one
2. In the windows search bar, start typing "DataProfiler" until the app appears, at which point you can click the icon

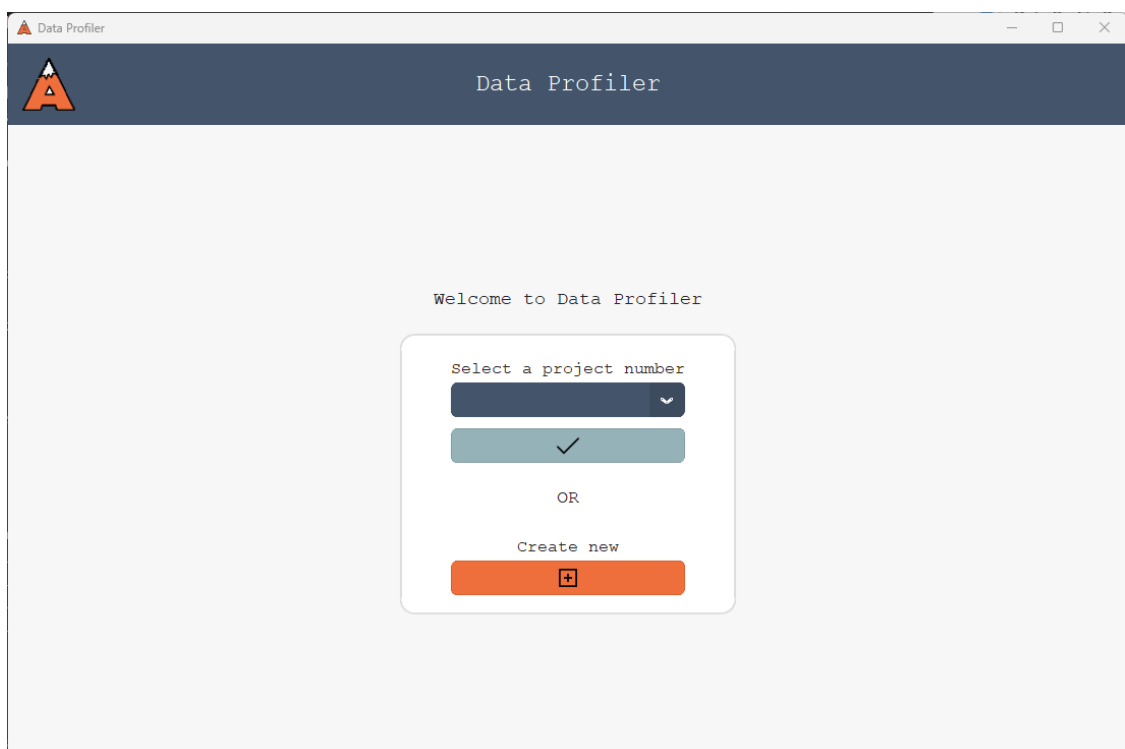


Using the application

Note: The application may take a minute to start up, especially if this is the first usage in a few hours or more. This is because the database connection takes a moment to "warm up"

If the startup fails because the database connection fails, or if it fails at any point due to this error, simply close the app and re-start it. Once the connection is established, it should run smoothly and quickly

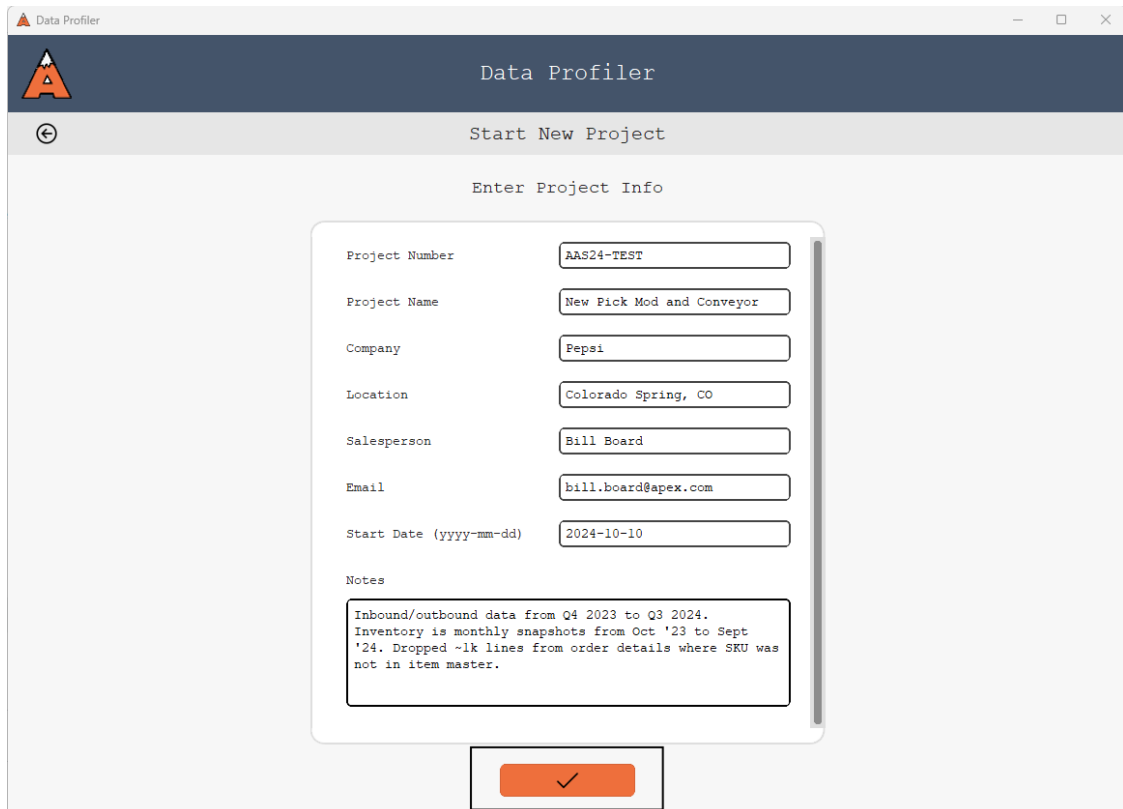
1. You will be greeted by the following window. As it prompts, either select an existing project number from the dropdown or click the orange button with the "+" icon to create a new one
 - a. This application is *NOT* connected to Business Central, and these "projects" are specifically "data projects." So, for this app, a project doesn't exist until you create one using this tool, even if it exists in BC



Start screen

2. Let's create a new project. Click on the orange button with the "+" icon

3. We're brought to the new project form. Enter the new project number and related information, including some notes about the project and its data
 - a. Be sure to include some good notes, as they can be very helpful for posterity. Some things to include may be the scope of the project, the date range of the data, and any note-worthy data cleaning done on the data
4. Click the orange button with the checkmark icon to create the project
 - a. If there are any errors with your inputs, make necessary corrections and try again



The screenshot shows the 'Data Profiler' application window. The title bar says 'Data Profiler'. The main header is 'Data Profiler' with a logo on the left. Below the header is a sub-header 'Start New Project' with a back arrow icon. The main content area is titled 'Enter Project Info'. It contains a form with the following fields:

- Project Number: AAS24-TEST
- Project Name: New Pick Mod and Conveyor
- Company: Pepsi
- Location: Colorado Spring, CO
- Salesperson: Bill Board
- Email: bill.board@apex.com
- Start Date (yyyy-mm-dd): 2024-10-10
- Notes: Inbound/outbound data from Q4 2023 to Q3 2024. Inventory is monthly snapshots from Oct '23 to Sept '24. Dropped ~1k lines from order details where SKU was not in item master.

At the bottom of the form is an orange button with a white checkmark icon.

New project form

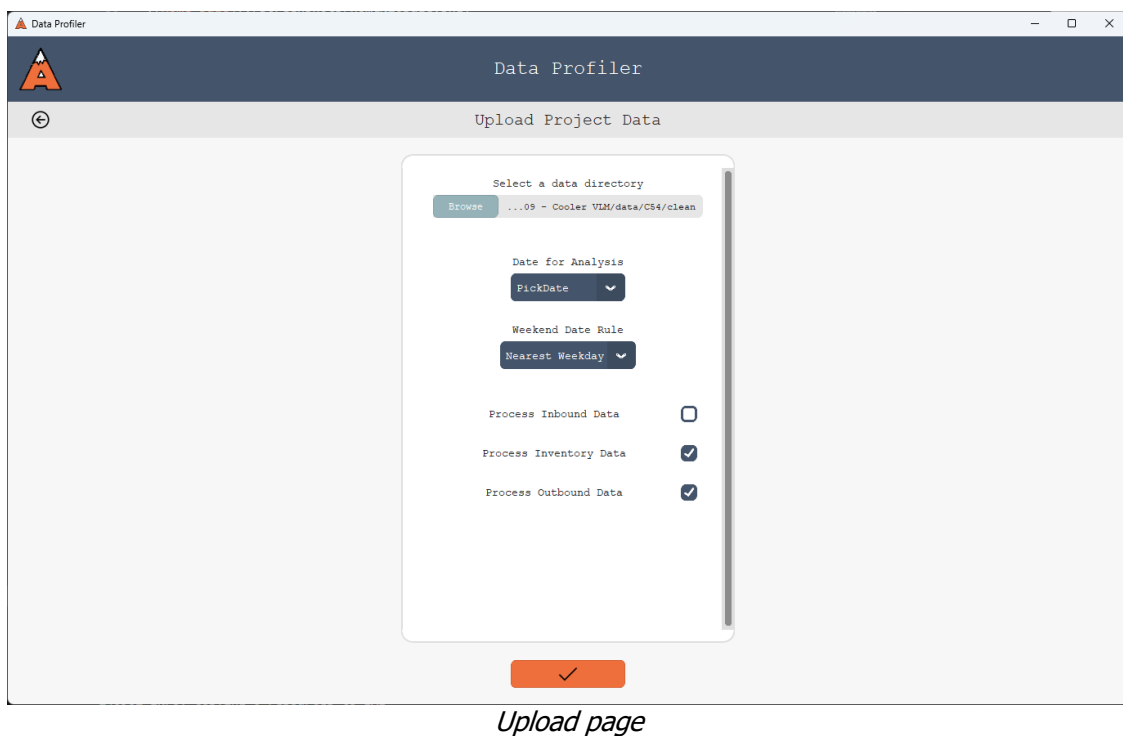
5. If successful, you will be brought to the project dashboard and notified by a pop-up window of success
 - a. On this page, you will see the project info you just entered as well as information about the project's data
6. Currently, there is no project data, so no information appears. To upload some data, click the orange button with the upload icon in the bottom right

The screenshot shows the 'Data Profiler' application window. The title bar says 'Data Profiler'. Below the title bar is a dark blue header with the 'Data Profiler' logo and the text 'Data Profiler'. Below the header is a light gray bar with a back arrow icon and the text 'Data Profile Dashboard'. The main content area is divided into two columns. The left column is titled 'Project Info' and contains a form with the following fields: 'Project Name' (New Pick Mod and Conveyor), 'Company' (Pepsi), 'Location' (Greenville, SC), 'Salesperson' (Bill Board), 'Email' (bill.board@apex.com), 'Start Date (yyyy-mm-dd)' (2024-10-10), and 'Notes' (Inboundoutbound data from Q4 2023 to Q3 2024. Inventory is monthly snapshots from Oct '23 to Sept '24. Dropped -lk lines from order details where SKU was not in item master.). Below the form is a blue button with a save icon. The right column is titled 'Project Data Info' and contains a form with the following field: 'Data Uploaded' (False). Below the form is an orange button with an upload icon.

Home page

7. Complete the form to upload data

- a. Click "Browse" and select the folder where the client data is stored
- b. Choose desired options for dealing with dates
- c. Select which data files should be processed
- d. Click the orange button with the checkmark icon to submit and upload



The screenshot shows a web browser window titled "Data Profiler". The main heading is "Data Profiler". Below it, the page title is "Upload Project Data". The form is centered and contains the following elements:

- Select a data directory:** A "Browse" button followed by a text field containing "...09 - Cooler VIM/data/CS4/clean".
- Date for Analysis:** A dropdown menu with "PickDate" selected.
- Weekend Date Rule:** A dropdown menu with "Nearest Weekday" selected.
- Process Inbound Data:** An unchecked checkbox.
- Process Inventory Data:** A checked checkbox.
- Process Outbound Data:** A checked checkbox.

At the bottom of the form is an orange button with a white checkmark icon. Below the button, the text "Upload page" is displayed.

8. If successful, the app will navigate back to the project dashboard and display another pop-up window notifying of success
 - a. Check the statistics listed in the pop-up window and ensure they look correct. Number of SKUs, outbound lines, etc.
 - b. Click "Open Log" and read through the log file to ensure the data transformation and upload went smoothly. Any errors will be expounded upon in more detail here
 - i. It may be useful to keep log files around. They are saved to Downloads, so navigate there in File Explorer and store them in your project folder
 - ii. Click "Close" to close the pop-up
 - c. Note that now, info about the project data appears on the right side

The screenshot shows the 'Data Profiler' application. A 'Success!' pop-up window is open in the top-left corner, displaying the following statistics: Total rows inserted: 25532, SKUs: 1108, Inbound Receipts: 0, Inbound Lines: 0, Inventory Lines: 242, Outbound Orders: 5460, and Outbound Lines: 6763. The pop-up has 'Close' and 'Open Log' buttons. The main application window is titled 'Data Profiler' and contains a 'Data Profile Dashboard'. On the left, under 'Info', there are input fields for 'Pick Mod and Conveyor', 'psi', 'Location' (filled with 'Greenville, SC'), 'Salesperson' (filled with 'Bill Board'), 'Email' (filled with 'bill.board@apex.com'), 'Start Date (yyyy-mm-dd)' (filled with '2024-10-10'), and a 'Notes' text area containing a paragraph about data from Q4 2023 to Q3 2024. On the right, under 'Project Data Info', there are several fields: 'Data Uploaded' (True), 'Upload Date' (2024-10-10), 'Date for Analysis' (PickDate), 'Weekend Date Rule' (Nearest Weekday), 'Inbound Processed' (0), 'Inventory Processed' (1), and 'Outbound Processed' (1). At the bottom of the dashboard, there are two buttons: a light blue button with a save icon on the left and a grey button with a trash icon on the right.

Home page – Results

Notice that the entry boxes on the left side of the home screen are active and editable, whereas the entries on the right side are not. Project Info can be changed in the dashboard and saved by clicking the light blue button in the bottom left. Project Data Info cannot be changed here, as it describes data stored in the database

9. Try updating some project info. You may add some notes after uploading the data. Click the blue button to save, and "Yes" to confirm

Data Profiler

Data Profiler

Data Profile Dashboard

Project Info

Project Name

New Pick Mod and Conveyor

Company

Fepsi

Location

Greenville, SC

Salesperson

Bill Board

Email

bill.board@apex.com

Start Date (yyyy-mm-dd)

2024-10-10

Notes

Inboundoutbound data from Q4 2023 to Q3 2024. Inventory is monthly snapshots from Oct '23 to Sept '24. Dropped -lk lines from order details where SKU was not in item master. Using pick date for analysis, as this is a picking-optimization project.

Project Data Info

Data Uploaded

True

Upload Date

2024-10-10

Date for Analysis

PickDate

Weekend Date Rule

Nearest Weekday

Inbound Processed

0

Inventory Processed

1

Outbound Processed

1

10. While you cannot change Project Data Info in the dashboard, you can delete the project's data. To do so, click the gray button with the trash can icon in the bottom right

- a. This may be necessary if you receive some new data cleaning directive or if you'd like to choose different upload options
- b. Otherwise, it is rarely advisable to delete project data

The screenshot shows the 'Data Profiler' application window. The title bar says 'Data Profiler'. Below it is a dark blue header with the 'Data Profiler' logo and the text 'Data Profiler'. The main content area is titled 'Data Profile Dashboard' and contains two panels: 'Project Info' and 'Project Data Info'.

Project Info

Project Name	New Pick Mod and Conveyor
Company	Pepsi
Location	Greenville, SC
Salesperson	Bill Board
Email	bill.board@apex.com
Start Date (yyyy-mm-dd)	2024-10-10

Notes

Inboundoutbound data from Q4 2023 to Q3 2024. Inventory is monthly snapshots from Oct '23 to Sept '24. Dropped -1k lines from order details where SKU was not in item master. Using pick date for analysis, as this is a picking-optimization project.

At the bottom of the 'Project Info' panel is a blue button with a save icon.

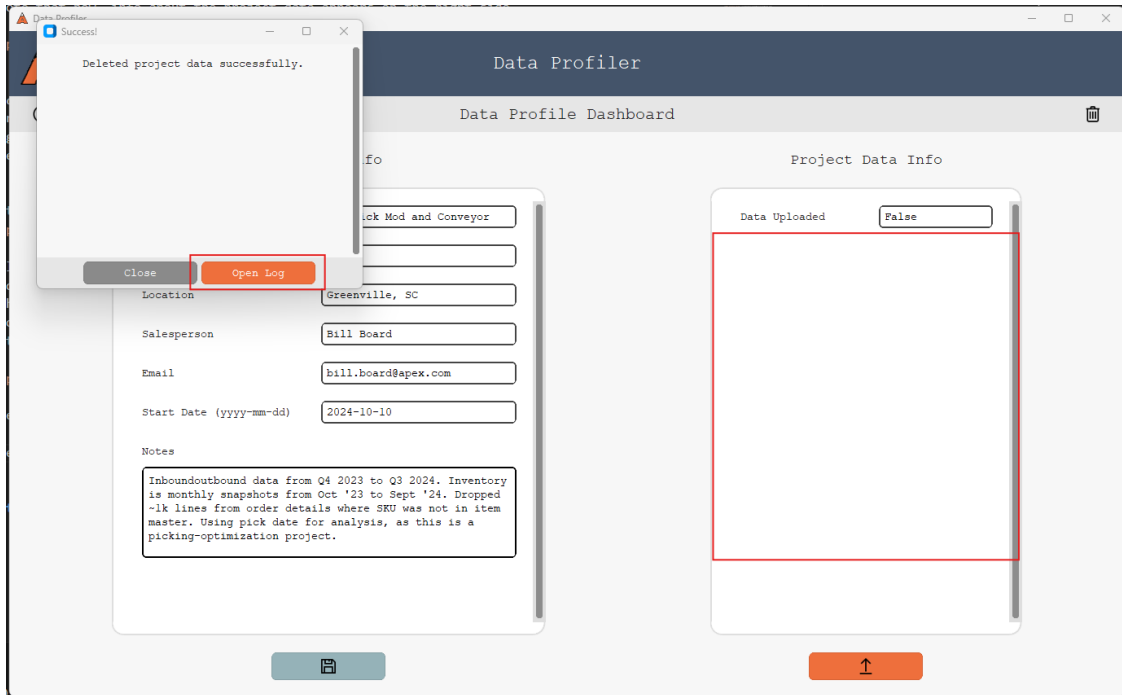
Project Data Info

Data Uploaded	True
Upload Date	2024-10-10
Date for Analysis	PickDate
Weekend Date Rule	Nearest Weekday
Inbound Processed	0
Inventory Processed	1
Outbound Processed	1

At the bottom of the 'Project Data Info' panel is a gray button with a trash can icon.

Home page – Delete data

11. Once again, if successful, you will be notified with a pop-up window and a button to open a log file
 - a. Be sure to browse the log file to ensure everything has gone smoothly
 - b. Notice that the data info has disappeared from the right side of the dashboard



Home page – Project data deleted

12. From here, you could upload a new data set, or the same one with new options by following steps 7-9 another time

13. The final functionality is to delete a project. This is not really ever advisable, but can be done by clicking the trash can icon in the top right, and clicking "Yes" to confirm

a. If successful, you will be navigated back to the start page

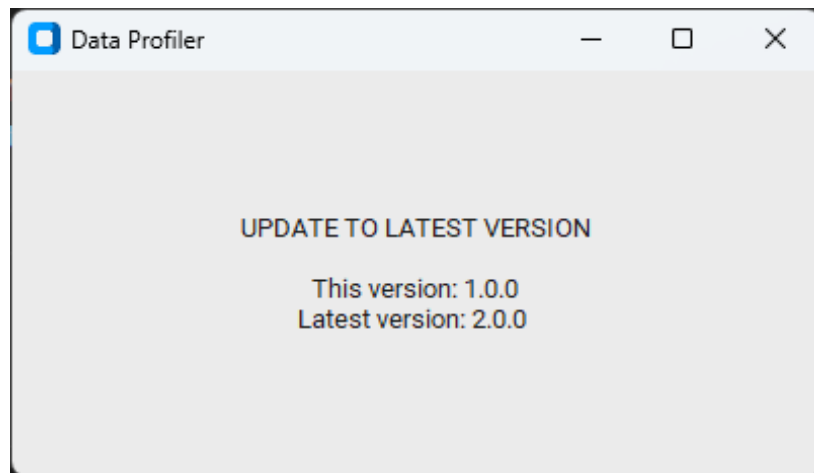
The screenshot shows the 'Data Profiler' application window. The title bar says 'Data Profiler'. Below it is a dark blue header with the 'Data Profiler' logo on the left and a trash can icon on the right, which is highlighted with a red rectangle. Below the header is a light gray bar with a back arrow on the left and the text 'Data Profile Dashboard' in the center. The main content area is divided into two columns. The left column is titled 'Project Info' and contains a form with the following fields: 'Project Name' (New Pick Mod and Conveyor), 'Company' (Pepsi), 'Location' (Greenville, SC), 'Salesperson' (Bill Board), 'Email' (bill.board@apex.com), and 'Start Date (yyyy-mm-dd)' (2024-10-10). Below these fields is a 'Notes' section with a text area containing the text: 'Inbound/outbound data from Q4 2023 to Q3 2024. Inventory is monthly snapshots from Oct '23 to Sept '24. Dropped -1k lines from order details where SKU was not in item master. Using pick date for analysis, as this is a picking-optimization project.' Below the form is a blue button with a save icon. The right column is titled 'Project Data Info' and contains a single field 'Data Uploaded' with the value 'False'. Below this field is an orange button with an upload icon.

Home page – Delete project

Version Updates

Periodically, updates to *DataProfiler* may be released. At such times, you should be notified by IT or an analyst of the new version and will be asked to update your app.

The following pop-up window will also appear on start-up when the application is out-of-date:

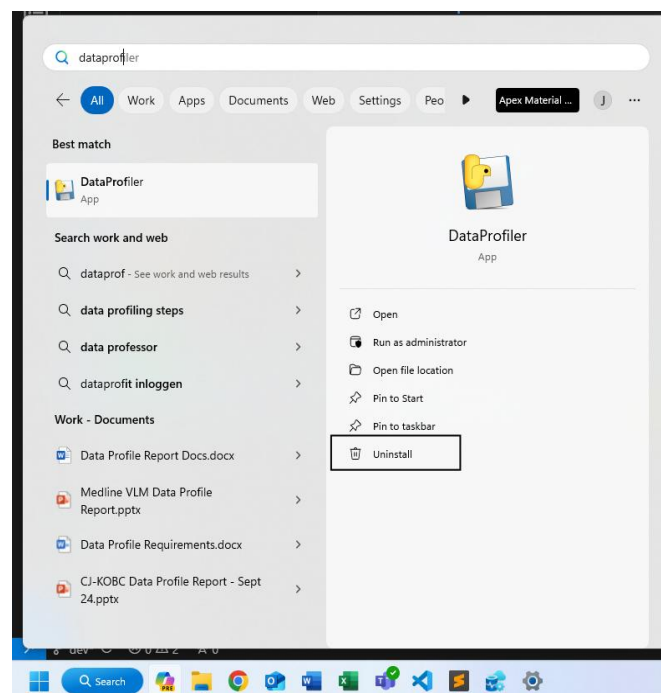


Note: It is important to update promptly, as the application will stop working once it becomes an out-of-date version.

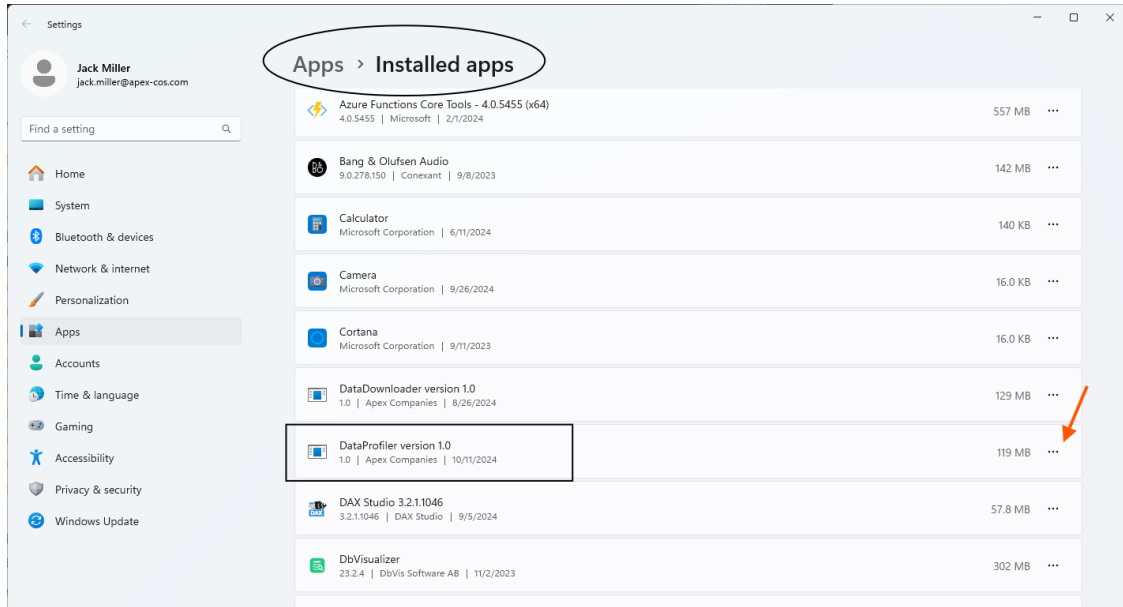
Steps

To update your version, you will need to 1) uninstall your current app and 2) install the new

1. Search for the application in the windows search bar, but click "Uninstall" rather than starting up the app



2. This will navigate you to the "Installed Apps" section of Settings. Scroll down to find your installed version of *DataProfiler*. Click the ellipsis on the far right of its rectangle and click "Uninstall." Confirm by clicking "Uninstall" again, and then "Yes"



3. If successful, click "OK" to confirm, and your app is deleted
4. Acquire the EXE installer for the new version of *DataProfiler*, either from IT or from an analyst.
5. Follow the remaining steps from Installation