# **Microsoft Power BI Action**

The Power BI Action is available as an Add-On to Alchemer accounts. Interested in purchasing this Action? Contact us for more information.

The Power BI Action allows users to push data from Alchemer to utilize several data analytics features in the tool. Microsoft Power BI allows one to make decisions with confidence and leverage data as soon as it is available, offering several methods to visualize information. Use the Power BI Action to push data seamlessly into Power BI and utilize advanced reporting analysis.

<u>NOTE</u>: The Power BI Action in Alchemer utilizes the *streaming dataset* feature which must be setup in the web-based version of Power BI. Streaming datasets can later be referenced in the desktop version.

There are **3 ways** to push Alchemer responses into Power Bi:

- 1. Use the Power BI Action in Alchemer to live stream data.
- 2. Export previously collected responses from Alchemer as a CSV and import the CSV into Power BI
- **3.** Utilize a Data Warehouse to pass responses through to connect historical and live streaming data in Power BI.

### Live Streaming data into Power BI

Setup

To move live streaming data into Power BI, Alchemer users must use the web-based application of Power BI.

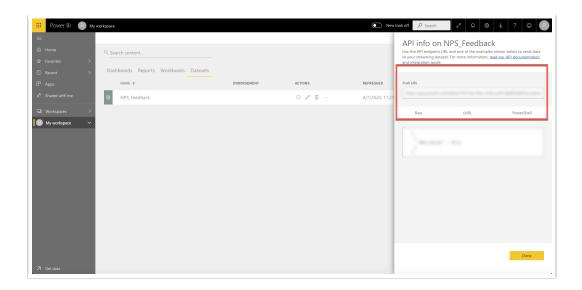
 Mapping data begins with creating a *dataset* to capture information pushed from Alchemer to Power BI. Start by logging into the dedicated Power BI account. Navigate to My workspace. Select New in the top right of the screen and choose Streaming Dataset > API > Next

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2. Provide a name for the dataset and the values from the stream. These reflect what exists in the survey where the action will be created. If the question being added is one with numerical values, change the dropdown to read number. To aggregate live responses that will be saved long term in Power BI, turn Historical Data Analysis *on*. Select Create:

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**3**. Choose **Next**. Copy the **Push URL** and save it for later use. This is referenced later in the platform to send data to Power BI. Click **Done**:



- 4. Navigate back to Alchemer. Add the Power BI Connect Action to the page *after the questions* one would like to push to Power BI by clicking Action.
- 5. Paste the Push URL from Power BI in the Dataset Push URL text box. Add each question one would like to send to Power BI. Provide the Values to Stream Name that was created earlier in step 2 in Power BI in the Variable Name text box as seen below:

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- 6. Navigate back to the Power BI workspace where the Dataset resides . Create a report to store the data from Alchemer using the + New icon in the top left.
- 7. Click on Pick a published dataset and select the applicable dataset. Click Create a blank report as seen below.

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For more insight on the Visualization types available, visit Power BI documentation for additional information.

• Head back into Alchemer and to the **Share tab.** Populate a survey response via the **Primary Link** to see data is being passed into the report. The report can be refreshed to see the data pulled in real time.

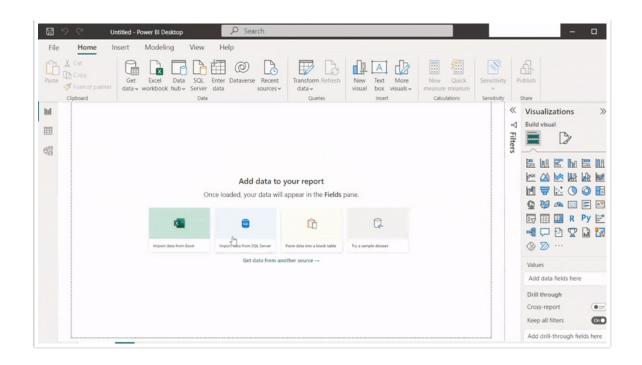
For more information on how to leverage Power BI and their analytics, check out Power BI Documentation.

### Power BI Desktop - Get Data from the web-based streaming dataset

The Power BI streaming dataset collects all the metadata from the dataflow and is not stored in a table. Reports can be built in the desktop app and reference this metadata.

#### Setup

- 1. Open up the Power BI Desktop application.
- 2. Click File>Get Data. From the Data Hub, select the live streaming dataset and choose the dataset created from above. Click connect as seen below.



Once the project is saved, the Publish feature can share reports/projects to a specified workspace.

## Uploading Previously Recorded Responses from Alchemer into Power BI using a CSV

Power BI allows for CSV files to be uploaded into the platform. This provides Alchemer users the ability to utilize Power BI for previously collected surveys and responses!

Setup

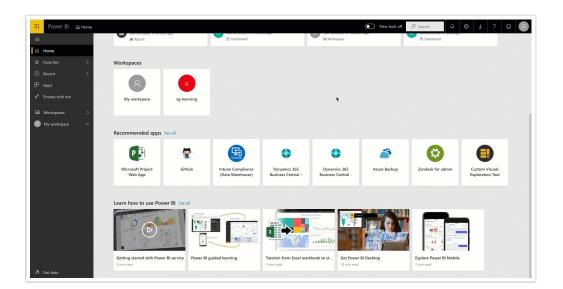
 Log into Alchemer. Select the survey that contains previously collected responses. Choose Results > Exports > CSV/Excel. Select each field Display Option to be included in the CSV File. Select Create Report:

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 This displays the Edit Report Settings window. Select what questions and data to include in the file. After selecting/deselecting the available fields for the export, click Save. On the Export complete page, select Download Export to CSV:

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- 3. Once the file is downloaded and accessible on the device of choice, Navigate into Power BI.
- 4. Within power BI, select Get Data from the navigation menu. Select Get from the Files tile. Choose the source of the file for upload:



5. Once pulled into Power BI, Select Create > Report. Choose a dataset to create the report. The file uploaded into Power BI is listed here. Click the dataset and select Create:

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6. This brings one to the reports page where users create custom visualizations of their data. First select the visualization of choice from the menu on the right. The Fields section represents the columns that exist in the CSV file.

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- 7. When a visualization is selected, a blank chart will display in the section below the menu items. Simply drag each column from the fields into each blank chart to start to build visualizations.
- 8. Once fields exist in a visualization, change the value settings based on user needs. One can rename each value in the chart as well as have charts display the sum, average, standard deviation, variance, and more:

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For more information on Visualizations in Power BI Reports, click here.

### Limitations

- Re-firing the Power BI Action does **not** update or change alterations in a response that was previously collected.
- The Power BI Action is not compatible with answer option piping.
- Desktop Application of Power BI cannot be used to stream live data.
- Historical data imports cannot be combined with live streaming datasets.
- Power BI REST API Limitations

## Compatible Question Types

- Radio Button
- Net Promoter Score
- Textbox
- Checkbox
- Radio Button Grid (Rows)
- Slider
- Checkbox Grid as visualization
- Drag and Drop
- Hidden Values

### Additional Resources

- Get started building with Power BI
  - Introduction to Power BI
  - Use Power BI
  - Building blocks of Power BI
  - Touring Power BI Service
- Analyze data with Power BI

- View your data
- Filter data with Power BI
- Apply filters to reports
- Use visuals in Power BI
  - Introduction to visuals in Power BI
  - Create and customize visualizations
  - Create slicers
  - Map visualizations
  - Page layout and formatting

### **Related Articles**