

PERSONAL FINANCIAL WEBSITE

Your Guide to Data Aggregation

What Is Data Aggregation?

Data aggregation is the process of gathering digital information—like your checking account, 401(k), and investment account balances—from a variety of separate sources to combine the data into a unified set. Your Personal Financial Website uses Connections to aggregate your financial account information, allowing us to build a financial plan with all your information in mind. At eMoney we use three different data aggregation methods to collect your important financial data.

Data Aggregation Methods:



Bulk File Feed or Direct Feed:

Direct Feeds are typically used for advisor-based connections and involve eMoney directly receiving files from an outside institution. Direct feeds are used for the transmission of **large** sets of data. Our system processes the data from those files on a regular schedule.



Parsers or Screen Scraping:

Screen scraping is a common method used in the data aggregation process and refers to the collection and transfer of data from one application to another. When you log into your Personal Financial Website and submit your log-in credentials, parsers "scrape" or copy financial data to bring it all together in one view.

Risk of Screen Scraping

Screen scraping, while commonly used, does have a few risks and challenges.

- **1. Security Concerns:** Screen scraping relies on you sharing your log-in credentials with your Personal Financial Website, which copies your data from your financial institution. We uphold the strictest security standards to protect your information and keep your login credentials private.
- 2. Broken Parsers and Connection Errors: Using your credentials can be tricky for parsers—there are things like multi-factor authentication that make it difficult to maintain the connection day over day, resulting in the need to update credentials every time you want to get refreshed data. Connections can break from time to time and we see this most frequently in screen scraping or parser connections. Parsers are essentially built for a specific page layout for a specific institution, so if that institution updates their website in any way, the parser will break, requiring eMoney to rebuild that parser. We rely on the institution to provide the updated page layout, which in many cases can take a significant amount of time.

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API Connections:

An API, or application program interface, allow two systems to interact and connect with each other in a secure way to create a streamlined flow of data.

Benefit of APIs:

- **1. Security:** APIs offer a more secure way to collect and copy data because they do not require access to login credentials, which means no transactions can be made. Think of APIs as offering "view only" access to account data.
- 2. Reliability: With traditional screen scraping methods, your access to your data may be disrupted by password changes, or changes an institution makes to its website, which may require screen scraping logic to be adjusted. By aggregating data through APIs, you have more reliable access to your data as they are not impacted by institution changes like these.

The Transition to APIs:

While our current aggregation standards follow industry best practices, we are always looking to innovate. We continually push ourselves to set new standards and over the past few years eMoney has worked to transition several of our parser connections to APIs due the added security and reliability. We have successfully converted seven of our most connected institutions and plan to have over 60 percent of parsed account converted by the end of 2020.

How Will This Affect My Personal Financial Website?

You may have already noticed that some of your connections have been converted from screen scraping to APIs. If your connection has been converted to an API-based connection, there may be a few actions you need to take to establish the new API connection.

Typically, you will receive an error prompting you to re-enter your credentials for that institution. You may be re-directed to the institution's website to log-in directly and authorize eMoney to access to your data.

Once the new API connection is established, things like multi-factor authentication and password changes will not impact your connection.



Is My Data Protected?

We have never sold client data, and we never will. Some data aggregators use client financial information regarding spending habits, income, and other transactional data for advertising. Know that eMoney has never and will never share your data with advertisers. We believe that your data is private and should always remain under your control.

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