MORNINGSTAR Wealth

ByAllAccounts
Integration Guide for Advisors

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Table of Contents

Overview

This guide is intended for ByAllAccounts customers that want to provide their Advisors with ByAllAccounts^{SM} aggregation data. This guide uses:

- ByAllAccounts DataConnect API to create Advisor users, authenticate them for single sign on (SSO), and to collect data.
- ByAllAccounts AccountView for Advisors to aggregate their accounts.

The DataConnect API calls to get started with ByAllAccounts for Advisors are provided in a Postman collection.

Get setup for access

1. Contact your implementation manager to discuss getting set up for providing ByAllAccounts aggregation to Advisors.
2. Your implementation manager will:
   - Review your statement of work (SOW) to confirm use case details which will inform how we configure your access to our system.
   - Create a definition for a Firm in our system, configured for your needs.
   - Provide you with an Administrator login and password to perform DataConnect API calls for registering and authenticating Advisor users and collecting aggregated data.
   - Provide you with a "technical support administrator" login for AccountView, which can be used as an effective troubleshooting tool for data and connectivity errors.
   - Discuss what you want as the Exit URL for AccountView.

Postman collection of DataConnect API operations

The DataConnect API operations to get started with ByAllAccounts for Advisors are provided in a [Postman collection](#).

User registration

Use our DataConnect API to create users with the Advisor role and single sign on (SSO) access. Specifically, use the Add User operation <USERADDRQ> with the <IS_SSO> tag. Note that you will need the <ID> from the response to authenticate the Advisor user in the future.

[Link to Postman for DataConnect API operation for creating new Advisor user](#).

Note: For DataConnect operations in Postman, use "Send and Download" then save the response as a .zip file. The response XML is inside that .zip file.

For more about this operation, refer to the "Add User" section of the [DataConnect V4 Ultra User Guide](#).

Single Sign On (SSO) authentication for Account View

Single sign on (SSO) authentication is managed using ByAllAccounts DataConnect API.

Application integration outline

The main events in the application life cycle for single sign on (SSO) AccountView are outlined here.

1. Session Authentication Request – Parent application uses a DataConnect request to authenticate and obtain session tokens. Session tokens are a Session ID and a Cross-Site Request Forgery (CSRF) Token.

2. Invoke AccountView using URL and session tokens provided by step 1 (SSL is required).
3. AccountView Accept/Decline User Agreement – This step is optional and is handled by AccountView. For more information, refer to "Additional AccountView Configuration of Interest to SSO", in the AccountView Single Sign On Guide.
4. AccountView application is presented in browser/frame.
5. If the "keep alive" URL is specified as a dynamic URL or configured for the firm, then that URL is invoked in iFrame in AccountView when there is activity in the session.
6. Application termination events to URLs that are specified as dynamic URLs or configured for the firm.
   - Session expiration causes redirect to the Session Timeout URL
   - User invoked "Exit" causes redirect to the Exit URL.

DataConnect SSO operations

Single sign on (SSO) authentication for AccountView consists of invoking a DataConnect API <SESSIONAUTHRQ> request. You provide your Administrator login name and password, identify the Advisor being authenticated plus providing the <ID> from the <USERADDRS> response as the <PERSON_ID> in <USER_IDENT>. We recommend that you expire the session using <SESSIONEXPIRERQ>.

Link to Postman for DataConnect API operation for authenticating an Advisor.

Link to Postman for DataConnect API operation for expiring the authenticated session.

Note: For DataConnect operations in Postman, use "Send and Download" then save the response as a .zip file. The response XML is inside that .zip file.

For more about these operations, refer to AccountView Single Sign On Guide.

More about SSO and configuration options

This section presents some SSO configuration options to control the application authentication behavior. Additional information is in the AccountView Single Sign On Guide.

SSO navigation options

Your implementation manager can configure what URL to direct to upon AccountView application exit. By default, user exit directs to http://www.byallaccounts.net/WebPortfolio/avSSOExit.html. Your implementation manager can set a different exit URL and can set exit URLs for other types of behavior including for session time out and session "keep alive". Optionally, you can dynamically handle the URLs. Refer to AccountView Single Sign On Guide for information about the Exit URLs including how to dynamically handle them.

Aggregation (AccountView)

Use AccountView to perform account aggregation. We have test financial institutions (FIs) that enable you to examine different scenarios and help you develop retrieval operations of the aggregated data. The available test FIs include those shown here. Each test FI has data suited for evaluating different scenarios.

Test Financial Institutions (FIs)

FI Name	Login Name	Password	Multi-factor authentication (MFA) Type	Required MFA value	Comments
Data Test 1 - 401(k) (Investment)	*Any Value*	*Any Value*			This test FI has complete positional data and historical transactional data. There are other data tests (Data Test 2, 3, 4) which can be used as well that support different account types.
TEST: TechFirst Investments Advisor (Demo)	*This must be a non-blank value. Must be a new string to receive a prompt for more information. We recommend using 'yourname_number'.*	*A non-blank value* *Use 'badpassword' to cause a 1007 error*	Activation Code	1234	Useful for Advisors testing activation code workflow. Also useful for simulating "large" account volume aggregation. For quality positional data use Data Test 1 - 401(k) (Investment).
TEST: ByAllAccounts Demonstration FI #2 (SQA) (Investment)	username	*Any value*	Security Question	Boston	Login and security answer are case sensitive. Incorrect values will cause a login error. This test FI enables you to see the multi-factor authentication (MFA) workflow and you can break it by using an incorrect username or security answer.

Training Videos

Refer to these resources to help use AccountView for troubleshooting aggregation and data errors.

- Key Areas in AccountView -- [Reference Guide](#)
- Troubleshooting Aggregation Errors -- [Video](#), [Transcript](#)
- Data Troubleshooting – [Video](#), [Transcript](#)
- Troubleshooting Aggregation and Data Issues FAQ – [FAQ](#)

These resources and more are available on the [ByAllAccounts Workflow Training](#) page. Administrators should focus on the section "For Support and Administrative Roles". You can additionally share with Advisors the training videos that were created to support them using AccountView and setting up accounts. Those videos are in "For Advisors" section.

Run as Advisor functionality in AccountView

Administrator users can be given the privilege "Run as Advisor". This capability enables administrator users to log into AccountView as an Advisor for any firm(s) they have the right to access. Using the tech support Admin login, the administrator then can run the AccountView application and get the same view and access to the data as the Advisor, with a few key differences. The administrator cannot change the login or password for the Advisor and cannot create or edit assistant users. Likewise, client logins and passwords are not editable. There is a Switch User option to enable the administrator to switch to another Advisor and/or Firm. Export, Export Table, and Extract Account Source options are available even if they are not enabled for the firm. Each access is recorded with an operational audit trail.

Best practices for running as Advisor

- Access this URL https://www.byallaccounts.net/BAAWebApp/BAALogin.html.
- Use the technical support administrator login you received from your implementation manager.
- Choose to "Run as Advisor".
- Use the internal ID (Person ID) to identify the Advisor to run as. Alternately, use "Search for User" and leave fields blank and the interface will show all Advisors you can choose to run as.

Data Extraction

Use DataConnect to extract the aggregated data in one of two ways, each providing different file types. The methods also produce somewhat different data sets and which one you choose depends largely on what you want to do with the data.
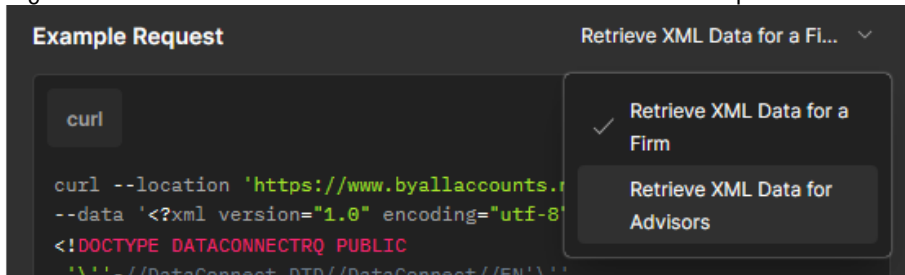
Retrieve XML data

Use the DataConnect Get Data (asynchronous) <DATAGETRQ_A> operation to retrieve a wide scope of data, including personal profile, position, and transaction information, for one or more Investor users in XML format. Additionally, use the DataConnect <DATACLAIMRQ> operation to poll for completion and collect the resulting data.

Note: For DataConnect operations in Postman, use "Send and Download" then save the response as a .zip file. The response XML is inside that .zip file.

- [Link to Postman for DataConnect API operation for retrieving XML data - step 1](#) featuring Get Data <DATAGETRQ_A>. There are two examples, one retrieves data for the Firm and the other retrieves data for

multiple Advisors. The examples include tags for account, holdings, transactions, and security objects. Other tags can be used to include additional information. Use the dropdown in Postman to select the example.

- Link to Postman for DataConnect API operation for retrieving XML data - step 2 featuring Claim Data <DATACLAIMRQ> which returns the data in XML format.

In the examples, <INCTX> is an empty tag so the operation will retrieve all transactions. You can use a <INCTX> aggregate to limit the transactions returned to a range of transactions by ID, by transaction start date (and optionally end date), or by settlement start date (and optionally settlement end date). For more about these operations, refer to the DataConnect V4 Ultra User Guide. For <DATAGETRQ_A> refer to the "Get Data (Asynchronous)" section. For details about <DATACLAIMRQ>, refer to the "Asynchronous Helper Operations" section. For more about the <INCTX> aggregate, refer to "<INCTX> Aggregate" section.

Retrieve CSV files

The DataConnect operations Export Data (asynchronous) <DATAEXPORTRQ_A>, Claim Data <DATACLAIMRQ>, and Claim File <FILECLAIMRQ> retrieve accounts, holdings, and transactions in CSV-delimited format. The CSV file is created using additional business rules to logically organize data. While the CSV export does not include all the fields that the XML data does (retrieved using <DATAGETRQ_A>), such as multicurrency, the files are easier to review and more easily loaded into and consumed by other systems.

Note: For DataConnect operations in Postman, use "Send and Download" then save the response as a .zip file. The response XML is inside that .zip file.

- Link to Postman for DataConnect API operation for retrieving CSV data - step 1, featuring <DATAEXPORTRQ_A> with tags to identify fields to include in the export.
- Link to Postman for DataConnect API operation for retrieving CSV data - step 2, featuring <DATACLAIMRQ> using the receipt from the <DATAEXPORTRQ_A> operation.
- Link to Postman for DataConnect API operation for retrieving CSV data - step 3, featuring <FILECLAIMRQ> using the using the receipt from the <DATAEXPORTRQ_A> operation. Response is ZIP file containing CSV files and readme.txt.

You can optionally restrict the transactions output to a date range. For more about these operations, refer to the DataConnect V4 Ultra User Guide. For details about the export files, refer to AccountView and DataConnect Export.

Cumulative Changes

This section keeps a running list of released versions and a summary of the changes that are integral to the implementation.

Date	Change	Description
November 30, 2023	Postman update	DataConnect base URL was incorrect in a few places in Postman. This error has been corrected.
December 12, 2024	Documentation and Postman update	Updated to use new links to Postman collection