

AccountView Export Files for Universal

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Enhanced AccountView Export for Universal

AccountView (AV) has an enhanced, licensed export capability for firms that want to extract financial data and export it in files formatted in our Universal (generic) format. This capability was formerly available from our Custodial Integrator Universal Desktop application.

This enhanced export capability is referred to as Custodial Integrator Software as a Service (CI SaaS), and the capability replaces Custodial Integrator Desktop. CI SaaS moves existing Custodial Integrator Desktop features into the AccountView platform. Within AccountView, the Downloads tab contains all of the Custodial Integrator capabilities, eliminating the need to install or locally manage Custodial Integrator Desktop.

Who can access CI SaaS for Universal

You can access the CI SaaS for Universal features and export the files described in this guide if you have an advisor login at a firm that has CI SaaS Universal enabled.

About this Document

This guide describes the files that can be output by AccountView, the ByAllAccountsSM Aggregation Service in our Universal format. These are the same as those exported by Custodial Integrator (CI) for Universal. The files and their formats are listed in [AccountView Universal Export Files](#) on page 2.

These export files are different than the standard export files, which are described in the [AccountView and DataConnect Export](#) Guide.

Related Documents for CI SaaS Universal

Firms converting from Custodial Integrator Desktop to CI SaaS Universal can find additional information here:

- [Overview of Migrating to AccountView CI SaaS](#) – web-based instructions for migrating
- [Custodial Integrator Software as a Service - CI SaaS](#) – a page with links to reference documents and training videos about CI SaaS

About Configuration Settings and Options

The AccountView Universal export files have consistent formats, but there are download settings within AccountView that can affect the data contained in them. This document focuses on the file formats for AccountView Universal files. For information about the settings used to configure the download, the account translations, and the security translations refer to:

- [Configuring AccountView](#), page 38
- Overview features are described in the training videos:
<https://www.morningstar.com/products/byallaccounts/training-resources>

AccountView Universal Export Files

AccountView (AV) for Universal produces delineated export files listed in the following table, where “yyyymmdd” in the file name is replaced with the prior business day’s date.

If prices for business days before the prior business day are requested then AccountView will generate a Security and Price file for each of those prior business days and these files will be named with the corresponding business date.

File Type	File Name	More information
Account	BAAACT_yyyymmdd.csv	Account File , page 3
Transaction	BAATRX_yyyymmdd.csv	Transaction File , page 11
Position	BAAREC_yyyymmdd.csv	Position File , page 23
Security	BAASEC_yyyymmdd.csv	Security File , page 32
Security Price	BAAPRI_yyyymmdd.csv	Price File , page 34

The files are zipped into a file with the name “export_yyyymmdd_<timestamp>.zip”, where yyyymmdd is the date of the prior business day and <timestamp> represents the beginning of the export process. The zip file will be retained for fourteen days (by default) and may be downloaded by the user any number of times. Additional details for each file are included in the following sections.

Data Types in Export Files

The following table defines the Data Types for the columns included in the output files.

Data Type	Description
BOOLEAN	Value is either 1 (indicating TRUE) or 0 (indicating FALSE).
CHARn	Alphanumeric string containing up to n characters.
DATE	Date in the form YYYYMMDD , where YYYY is a 4-digit year (e.g., 2003), MM is a 2-digit month code from 01 (January) through 12 (December), and DD is a 2-digit day code from 01 to 31.
NUMBER	Amounts, quantities, and prices use this numeric data type that can contain up to 39 numeric characters including the decimal point. Negative values are indicated by a leading minus sign (-). Values that do not represent whole numbers (e.g., 1.3504) include a decimal point to indicate the start of the fractional amount. Values gathered directly from a Financial Institution may have six or more digits to the right of the decimal point. No punctuation is used to separate thousands, millions, etc.
TIMESTAMP	Provides a full time stamp, including time zone of the WebPortfolio server. The timestamp uses the form: YYYYMMDDHHmmSS [{gmt-offset}:{tz-name}] where: YYYY is a 4-digit year (e.g., 2003), MM is a 2-digit month code from 01 (January) through 12 (December), DD is a 2-digit day code from 01 to 31,

	<p>HH is a 2-digit hour code in 24-hour format (00 through 23), mm is a 2-digit minute code (00 through 59), SS is a 2-digit seconds code (00 through 59) gmt-offset is the number of hours that the time zone is offset from GMT; has a leading + or - tz-name is the name of the time zone (e.g., EST).</p> <p>Example: 20030721143522 [-5:EST] is July 21, 2003 2:35:22 PM, Eastern Standard Time</p>
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Account File

Export Universal Files generates an entry in the Account file (BAACT_YYYYMMDD.csv) for each account identified as included in the Account translations tab in AccountView.

Account File Format

The following table defines the columns of output for the Account file (BAACT_YYYYMMDD.csv).

Col #	Column Header	Value Required	Data Type	Description
1	ACCOUNT_IDENTIFIER	√	CHAR128	String that identifies this account within the set of accounts configured within AccountView. The content of this field is the account identifier specified by the user during the account translation process.
2	NAME	√	CHAR64	User-assigned nickname for the Account from AccountView.
3	ONLINE_ACCESS_ENABLED	√	BOOLEAN	TRUE (1) if this Account has sufficient online access credentials for AccountView to gather data from the Financial Service identified for this Account; FALSE (0) in all other cases.
4	LAST_UPDATED		TIMESTAMP	Date/time on which data for this Account was (successfully) last retrieved from the associated Financial Institution (may not be available for the off-line accounts).
5	ACCOUNT_NUMBER		CHAR128	Alphanumeric string used to identify this Account at the Financial Service where this Account is held.

Col #	Column Header	Value Required	Data Type	Description
6	UPDATE_STATUS_INFO		CHAR1024	The status (textual description) of the last attempt to download this Account from the Financial Institution.
7	UPDATE_STATUS_ERRCODE		CHAR6	Error code for the result of the last attempt to download this Account from the Financial Institution.
8	LAST_UPDATE_ATTEMPT		TIMESTAMP	Date/time of the last access test or update attempt for this Account.
9	CAPTIVE	√	BOOLEAN	If TRUE, then the Advisor managing this Account for the Investor considers this Account to contain captive assets (assets under management).
10	DATA_BASIS	√	CHAR12	States whether the data in the account is SETTLEMENT (value "SETTLEMENT") basis or TRADE basis (value "TRADE").
11	FINANCIAL_INSTITUTION_NAME		CHAR256	Name of the financial institution in which the account is held.
12	PRIOR_BUSINESS_DAY_DATE		DATE	The date of the business day prior to the day that the file was generated.
13	ADVISOR_IDENTIFIER		CHAR64	Unique internal identifier for the Advisor user associated with this account in the ByAllAccounts service.
14	ADVISOR_FIRST_NAME		CHAR64	First name of advisor user associated with this account.
15	ADVISOR_MIDDLE_NAME		CHAR64	Middle name of advisor user associated with this account.
16	ADVISOR_LAST_NAME		CHAR64	Last name of advisor user associated with this account.
17	CLIENT_IDENTIFIER	√	CHAR64	Unique internal identifier for the Investor user (also called Client) associated with this account in the ByAllAccounts service.
18	CLIENT_FIRST_NAME	√	CHAR64	First name of investor user associated with this account.
19	CLIENT_MIDDLE_NAME		CHAR64	Middle name of investor user associated with this account.

Col #	Column Header	Value Required	Data Type	Description
20	CLIENT_LAST_NAME	√	CHAR64	Last name of investor user associated with this account.
21	FI_ID		CHAR64	Unique internal identifier for the financial institution where the account is held.
22	FI_SUPPLIED_REP_ID		CHAR32	Advisor/Rep ID supplied by the Financial Institution. Only available for select Financial Institutions.
23	FI_SUPPLIED_ACCOUNT_TAXID		CHAR32	Tax ID (SSN or TIN) associated with the account, supplied by the Financial Institution
24	FI_SUPPLIED_ACCOUNT_NAME		CHAR128	Name for the account, supplied by the Financial Institution
25	FI_SUPPLIED_ACCOUNT_TITLE		CHAR128	Title for the account, supplied by the Financial Institution.
26	FI_SUPPLIED_CLIENT_FIRST		CHAR64	First name for the account holder, supplied by the Financial Institution
27	FI_SUPPLIED_CLIENT_MIDDLE		CHAR64	Middle name for the account holder. supplied by the Financial Institution
28	FI_SUPPLIED_CLIENT_LAST		CHAR64	Last name for the account holder, supplied by the Financial Institution
29	FI_SUPPLIED_CLIENT_DOB		CHAR12	Date of birth of the client who owns this account in standard date format YYYYMMDD.
30	FI_SUPPLIED_CLIENT_EMAIL		CHAR64	Email address of the client who owns this account.
31	FI_SUPPLIED_CLIENT_PHONE		CHAR32	Phone number of the client who owns this account, in the format provided by the custodian.
32	FI_SUPPLIED_ADDRESS_STREET		CHAR64	Street address of the client who owns this account.
33	FI_SUPPLIED_ADDRESS_LINE2		CHAR64	Additional street address of the client who owns this account.
34	FI_SUPPLIED_ADDRESS_LINE3		CHAR64	Additional street address of the client who owns this account.
35	FI_SUPPLIED_ADDRESS_LINE4		CHAR64	Additional street address of the client who owns this account.
36	FI_SUPPLIED_ADDRESS_LINE5		CHAR64	Additional street address of the client who owns this account.

Col #	Column Header	Value Required	Data Type	Description
37	FI_SUPPLIED_ADDRESS_LINE6		CHAR64	Additional street address of the client who owns this account.
38	FI_SUPPLIED_ADDRESS_CITY		CHAR32	City portion of the address of the client who owns this account.
39	FI_SUPPLIED_ADDRESS_STATE		CHAR32	State portion of the address of the client who owns this account.
40	FI_SUPPLIED_ADDRESS_ZIP_CODE		CHAR16	Zip code portion of the address of the client who owns this account.
41	FI_SUPPLIED_ACCOUNT_TYPE		CHAR64	Custodian reported account type for this account.
42	FI_SUPPLIED_FIRM_ID		CHAR32	FI-supplied Firm ID (Advisor's firm) for the account.
43	SSN_TIN		CHAR32	The social security number (SSN) or tax identification number (TIN) associated with the account.
44	ACCOUNT_ID		CHAR50	The internal account identifier for the account.
45	CREATION_DATE		DATE	Date the account was created.
46	ACCOUNT_TYPE		CHAR64	Account type as determined by the system from information available from the custodian. Possible types are listed in Account Types , page 7.
47	FI_SUPPLIED_CUSTODIAN_CODE		CHAR32	Custodian-reported custodian code.
48	FI_SUPPLIED_CUSTODIAN_NAME		CHAR128	Custodian-reported custodian name.
49	IS_FEED		BOOLEAN	Value is TRUE when the account belongs to a "feeds" FI. Blank otherwise.
50	EXTERNAL_SERVICE_LEVEL		CHAR20	The value for this field may be Positional or Transactional. If the user is an Investor the value defaults to Positional. If the user is not an Investor the value defaults to Transactional.

Account Types

Valid values for ACCOUNT_TYPE in accounts are listed in this table.

Account Types	
Type	Description
INVESTMENT_CASHMANAGEMENT	Cash management account that provides access to short-term investments such as money market mutual funds and Certificate of Deposit (CDs).
BANKING_CD	Certificate of Deposit (CD) is a time deposit financial product commonly sold by banks, thrift institutions, and credit unions.
BANKING_CHECKING	A checking account offers access to money for daily transactional needs via a debit card or checks.
INVESTMENT_COVERDELL	A Coverdell Education Savings Account is a trust or custodial account created or organized in the United States only for the purpose of paying the qualified education expenses of the designated beneficiary of the account.
BANKING_CREDITLINE	A line of credit may take several forms, such as overdraft protection, demand loan, special purpose, export packing credit, term loan, discounting, purchase of commercial bills, traditional revolving credit card account, etc. It is effectively a source of funds that can readily be tapped at the borrower's discretion.
BANKING_DEPOSIT	Interest earning account at a bank or other depository institution, the withdrawals from which are limited to the amount of the account's credit balance.
BANKING_MONEYMARKET	A Money Market Account is a type of savings account that pays interest based on current interest rates in the money markets. The minimum balance for this account is often considerably higher than the minimum balance of a basic savings account.
BANKING_OTHER	Banking account; more specific type is not known.
BANKING_SAVINGS	A savings account is an interest-bearing deposit account held at a bank or another financial institution and which provides a modest interest rate.
CREDITCARD	<p>The issuer of the card (usually a bank) creates a revolving account and grants a line of credit to the cardholder, from which the cardholder can borrow money for payment to a merchant or as a cash advance. Credit cards charge interest and are primarily used for short-term financing.</p> <p>A credit card is different from a charge card, which requires the balance to be repaid in full each month.</p>
HEALTHACCOUNT_FSA	Health Savings account of the type Flexible Spending Account (FSA).
HEALTHACCOUNT_HRA	Health Savings account with Health Reimbursement Arrangement (HRA).

Account Types	
Type	Description
HEALTHACCOUNT_HSA	Health Savings Account (HSA) is a savings account used in conjunction with a high-deductible health insurance policy. The HSA enables users to save money tax-free against medical expenses.
HEALTHACCOUNT_OTHER	Health Savings account; more specific type is not known, may be HSA, FSA, or HRA.
INSURANCE_ANNUITY	A contractual financial product sold by financial institutions that is designed to accept and grow a lump sum from an individual and then pay out a stream of regular disbursements to the individual at a later point in time
INSURANCE_LIFEINSURANCE	A life insurance policy is a contract with an insurance company. In exchange for premium payments, the insurance company provides a lump-sum payment, known as a death benefit, to beneficiaries upon the insured's death.
INSURANCE_OTHER	Insurance account; more specific type is not known.
INVESTMENT_401A	A 401(a) plan is a retirement savings plan in which employees cannot choose or change the amount contributed to the plan. It is also called a "money purchase plan".
INVESTMENT_401K	A 401(k) is a retirement savings plan sponsored by an employer. It lets workers save and invest a piece of their paycheck before taxes are taken out. Taxes are not paid until the money is withdrawn from the account.
INVESTMENT_403B	The 403b plan is an employer-sponsored supplemental retirement savings plan that, similar to a 401k plan, allows employees to contribute on a pre-tax or (if permitted by the 403b plan) Roth after-tax basis. A 403b plan can only be sponsored by a public school or a 501(c)(3) tax-exempt organization.
INVESTMENT_457B	A 457b plan is a supplemental retirement plan for employees who meet eligibility criteria. Typically, if employer is a governmental entity, state or local law will determine who is eligible to participate.
INVESTMENT_529	A plan operated by a state or educational institution, with tax advantages and potentially other incentives to make it easier to save for college and other post-secondary training for a designated beneficiary, such as a child or grandchild.
INVESTMENT_BROKERAGE	A brokerage account is an arrangement between an investor and a licensed brokerage firm that allows the investor to deposit funds with the firm and buy and sell stocks, bonds, mutual funds, exchange-traded funds and other types of investments through the brokerage.

Account Types	
Type	Description
INVESTMENT_IRA	An Individual Retirement Account (IRA) is a type of savings account that is designed to help individuals save for retirement and offers many tax advantages. There are two different types of IRAs: Traditional and Roth. See also INVESTMENT_ROTHIRA.
INVESTMENT_KEOGH	A Keogh plan is a tax-deferred retirement savings plan for people who are self-employed, and is much like an individual retirement account (IRA). The main difference between a Keogh and an IRA is the contribution limit, with Keogh plans allowing significantly more contributions than IRAs.
INVESTMENT_MUTUALFUND	Mutual Fund Account is an investment program funded by shareholders that trades in diversified holdings and is professionally managed.
INVESTMENT_OTHER	Investment account; more specific type is not known.
INVESTMENT_PENSION	A pension is a retirement account that an employer maintains to provide employee a fixed payout upon retirement retire. It is a defined benefit plan in which the benefit on retirement is determined by a set formula, rather than depending on investment returns.
INVESTMENT_PREPAIDTUITION	Pre-paid tuition plans generally allow college savers to purchase units or credits at participating colleges and universities for future tuition and, in some cases, room and board. Most prepaid tuition plans are sponsored by state governments and have residency requirements. Many state governments guarantee investments in pre-paid tuition plans that they sponsor.
INVESTMENT_PROFITSHARE	A profit-sharing plan is a defined contribution plan in which the employer has discretion to determine when and how much the company pays into the plan. The amount allocated to each individual account is usually based on the salary level of the participant (employee).
INVESTMENT_RETIREMENT	An account containing investments for retirement; more specific type is not known.
INVESTMENT_ROTHIRA	A Roth IRA is a retirement savings account that allows money to grow tax-free. A Roth IRA is funded with after-tax dollars, meaning taxes were already paid on the money deposited. In return for no up-front tax break, money grows and grows tax free, and when withdrawn at retirement, the investor pays no taxes.
INVESTMENT_SARSEP	A SARSEP is a simplified employee pension (SEP) plan set up before 1997 that includes a salary reduction arrangement. Under a SARSEP, employees can choose to have the employer contribute part of their pay to their Individual Retirement Account or Annuity (IRA) set up under the SARSEP (a SEP-IRA).

Account Types	
Type	Description
INVESTMENT_SAVINGSBOND	An account in which one can purchase and manage U.S. Savings Bonds.
INVESTMENT_SEPIRA	A Simplified Employee Pension Individual Retirement Account (SEP IRA) is a variation of the Individual Retirement Account used in the United States. SEP IRAs are adopted by business owners to provide retirement benefits for themselves and their employees.
INVESTMENT_TREASURYBOND	An account in which one can purchase and manage U.S. Treasury Bonds.
INVESTMENT_TRUST	With a bank trust account, the bank serves as custodian and a trustee keeps legal control of assets in the account. These assets can include cash, savings bonds, stocks, bonds, mutual funds, real estate and other property and/or investments.
INVESTMENT_UGMA	A Uniform Gift to Minors Act (UGMA) account is a type of custodial trust account for a minor. It provides a way for minors to own securities without requiring the services of an attorney to prepare trust documents or the court appointment of a trustee.
INVESTMENT_UTMA	Similar to UGMA accounts, a Uniform Transfers to Minors Act (UTMA) account is a type of custodial trust account that also allows minors to own other types of property, such as real estate, fine art, patents and royalties, and for the transfers to occur through inheritance.
LOAN_AUTO	Account used to manage an automobile loan.
LOAN_BANK	Account used to manage a general bank loan.
LOAN_BOAT	Account used to manage a boat loan.
LOAN_HOMEEQUITY	Account used to manage a home equity loan.
LOAN_MORTGAGE	Account used to manage a mortgage.
LOAN_OTHER	Account used to manage a loan. The specific type of loan is not known.
LOAN_PERSONAL	Account used to manage a personal loan.
LOAN_STUDENT	Account used to manage a student loan.
OTHER	An account with an account type that is not represented in our current type set. FI_SUPPLIED_ACCOUNT_TYPE field in file may contain useful information.
UNKNOWN	Unable to determine the type for this account.

Transaction File

Export Universal Files generates an entry in the Transaction (BAATRX_yyyymmdd.csv) file for each transaction in the current download. The entry may include transactions from business days other than the prior business day.

Transaction File Format

The following table defines the columns of output for the Transaction file (BAATRX_yyyymmdd.csv).

Col #	Column Header	Required	Data Type	Description
1	ACCOUNT_IDENTIFIER	√	CHAR128	String that identifies this account within the set of accounts configured within AccountView. The content of this field is the account identifier specified by the user during the account translation process.
2	SYMBOL	√	CHAR512	<p>Symbol used to identify this security. The value may be a CUSIP, TICKER, SEDOL, ISIN, or a dummy symbol (when no official symbol can be determined). The dummy symbol may be the security name prefixed with either "999999" by default or with a string set by the user, or it may be an internal identifier.</p> <p>If used, the internal identifier is the position ID, if available, prefixed with the letter "H" for holding. If the position ID is not available, it is the transaction ID prefixed with the letter "T". For example, if the transaction ID is 56789, the security symbol shows 'T56789'.</p> <p>A SEDOL is only delivered when SEDOLs are enabled for firm.</p>
3	SYMBOL_TYPE	√	CHAR6	Describes the type of the symbol in the SYMBOL field. Text is one of the following: CUSIP, TICKER, SEDOL, ISIN, OTHER.
4	FI_SUPPLIED_CUSIP		CHAR20	Security's CUSIP as provided by the Financial Institution. A CUSIP is only delivered when CUSIPs are enabled for the firm.

Col #	Column Header	Required	Data Type	Description
5	FI_SUPPLIED_TICKER		CHAR32	Security's Ticker as provided by the Financial Institution.
6	FI_SUPPLIED_SEDOL		CHAR7	Security's SEDOL as provided by the Financial Institution. A SEDOL is only delivered when SEDOLs are enabled for firm.
7	FI_SUPPLIED_ISIN		CHAR12	Security's ISIN as provided by the Financial Institution.
8	ID	√	NUMBER	Unique numeric ID for this Transaction. This is a ByAllAccounts Internal ID and is unique across all transactions within the ByAllAccounts service repository.
9	TX_TYPE	√	CHAR20	Type of Transaction. For valid values, see Transaction Type Codes , page 20.
10	EXECUTION_DATE	√	DATE	Date on which this Transaction was executed. Also called Trade Date.
11	SETTLEMENT_DATE		DATE	Date on which this Transaction was settled.
12	COMMISSIONS_FEES		NUMBER	Commission and/or fees associated with this Transaction.
13	UNITS		NUMBER	Number of units (of security) involved in this Transaction.
14	UNIT_PRICE		NUMBER	Per share price of the Security for purposes of this Transaction.
15	TOTAL_AMOUNT		NUMBER	Total \$ value associated with this Transaction (may be negative).
16	CURRENCY_CODE		CHAR3	ISO 4217 currency code for the TOTAL_AMOUNT.
17	FI_SUPPLIED_CURRENCY		CHAR64	Currency identifier supplied by the Financial Institution for TOTAL_AMOUNT.
18	PRINCIPAL_UNITS		NUMBER	Principal units of the transaction as reported by the Financial Institution.
19	PRINCIPAL_TOTAL_AMOUNT		NUMBER	Principal amount of the transaction as reported by the Financial Institution.
20	INCOME_UNITS		NUMBER	Income units of the transaction as reported by the Financial Institution.

Col #	Column Header	Required	Data Type	Description
21	INCOME_TOTAL_AMOUNT		NUMBER	Income amount of the transaction as reported by the Financial Institution.
22	TOTAL_AMOUNT_BASE		NUMBER	Total amount of the transaction in the Base currency for the account.
23	UNIT_PRICE_BASE		NUMBER	Unit price of the transaction in the Base currency for the account.
24	CURRENCY_CODE_BASE		CHAR3	ISO 4217 currency code for the account's base currency.
25	FI_SUPPLIED_CURRENCY_BASE		CHAR64	Currency identifier supplied by the Financial Institution for TOTAL_AMOUNT_BASE.
26	PRINCIPAL_TOTAL_AMOUNT_BASE		NUMBER	The principal portion of the amount of the transaction converted to the base currency of the account
27	INCOME_TOTAL_AMOUNT_BASE		NUMBER	The income portion of the amount of the transaction converted to the base currency of the account
28	TOTAL_AMOUNT_LOCAL		NUMBER	The amount of the transaction in the local currency.
29	UNIT_PRICE_LOCAL		NUMBER	The share price of the security involved in the transaction in the local currency.
30	CURRENCY_CODE_LOCAL		CHAR3	ISO 4217 currency code for TOTAL_AMOUNT_LOCAL and UNIT_PRICE_LOCAL.
31	FI_SUPPLIED_CURRENCY_LOCAL		CHAR64	The local currency of the transaction as provided by the institution.
32	PRINCIPAL_TOTAL_AMOUNT_LOCAL		NUMBER	The principal portion of the amount of the transaction in the local currency.
33	INCOME_TOTAL_AMOUNT_LOCAL		NUMBER	The income portion of the amount of the transaction in the local currency.
34	EXCHANGE_RATE_LOCAL_TO_BASE		NUMBER	The local-to-base exchange rate as provided by the Financial Institution.
35	EXCHANGE_RATE_LOCAL_TO_USD		NUMBER	The local-to-USD exchange rate as provided by the Financial Institution.
36	NAME		CHAR512	Either the name of the Security or a short description of the Transaction.

Col #	Column Header	Required	Data Type	Description
37	DESCRIPTION		CHAR2000	Text provided by the Financial Service that describes the transaction.
38	FI_SUPPLIED_TX_TYPE		CHAR64	Text provided by the Financial Institution that describes the type of activity that this transaction represents.
39	FI_SUPPLIED_TX_TYPE2		CHAR64	Secondary text provided by the Financial Institution that describes the type of activity that this transaction represents.
40	FI_SUPPLIED_TX_TYPE_CODE		CHAR16	Transaction type code or abbreviation provided by the Financial Institution.
41	FLOW_AMOUNT	√	NUMBER	Total amount of the cash flow for this transaction relative to the cash balance of the account. For information about signs, refer to Signs for Flow Amount and Flow Units fields in the Transaction File , page 21.
42	FLOW_UNITS		NUMBER	Normalized units for the transaction. Whereas UNITS contains the units value directly from the Financial Institution and may have great variations in sign within a given transaction type, FLOW_UNITS contains this same units value but normalized by transaction type (e.g. Withdrawal will always have negative FLOW_UNITS). For some transaction types, the sign is determined by the transaction subtype. For information about signs, refer to Signs for Flow Amount and Flow Units fields in the Transaction File , page 21.
43	CREATION_DATE	√	DATE	Date when this Transaction object was created in the ByAllAccounts service.
44	ORIG_TX_TYPE		CHAR20	Transactions reported as a reversal or cancellation by the Financial Institution have the original transaction type code for in this field. For valid values, see Transaction Type Codes , page 20.

Col #	Column Header	Required	Data Type	Description
45	CONTRACTUAL_SETTLEMENT_DATE		DATE	The date by which the transaction must contractually settle as provided by the Financial Institution.
46	POST_DATE		DATE	The date that the transaction posted as provided by the Financial Institution.
47	ACCOUNT_NUMBER		CHAR128	Alphanumeric string used to identify this Account at the Financial Service where this Account is held.
48	NET_AMOUNT		NUMBER	<p>For Reinvestment transactions on cash equivalents this is set to the absolute value of the first non-null of the following:</p> <ul style="list-style-type: none"> ▪ PRINCIPAL_TOTAL_AMOUNT_LOCAL + INCOME_TOTAL_AMOUNT_LOCAL, ▪ FLOW_AMOUNT, ▪ TOTAL_AMOUNT. <p>For all other transactions this is set to the absolute value of the first non-null of the following:</p> <ul style="list-style-type: none"> ▪ PRINCIPAL_TOTAL_AMOUNT + INCOME_TOTAL_AMOUNT, ▪ FLOW_AMOUNT, ▪ TOTAL_AMOUNT
49	NET_AMOUNT_LOCAL		NUMBER	<p>For Reinvestment transactions on cash equivalents this is set to the absolute value of the first non-null of the following:</p> <ul style="list-style-type: none"> ▪ PRINCIPAL_TOTAL_AMOUNT_LOCAL + INCOME_TOTAL_AMOUNT_LOCAL, ▪ FLOW_AMOUNT, TOTAL_AMOUNT. <p>For all other transactions this is set to the first non-null of the following:</p> <ul style="list-style-type: none"> ▪ PRINCIPAL_TOTAL_AMOUNT_LOCAL + INCOME_TOTAL_AMOUNT_LOCAL, ▪ FLOW_AMOUNT, ▪ TOTAL_AMOUNT
50	PRIOR_BUSINESS_DAY_DATE		DATE	The date of the business day prior to the day that the file was generated.

Col #	Column Header	Required	Data Type	Description
51	TX_SUBTYPE		CHAR20	<p>The transaction's subtype as determined by CI. Possible subtype values are in bold followed by the transaction types to which they apply in parentheses:</p> <ul style="list-style-type: none"> ▪ ACCRUED (BUY, SELL), ▪ TAX (DEBIT, CREDIT), ▪ FOREIGN TAX (DEBIT, CREDIT), ▪ MATURITY (SELL) ▪ SHORTTERM GAIN, ▪ LONGTERM GAIN, ▪ UNCLASSIFIED GAIN, ▪ MIDTERM GAIN (DIVIDEND, REINVESTMENT), ▪ IN, OUT (ATM, INCOME, INTEREST, JOURNAL, POINT_OF_SALE, TRANSFER)
52	SECURITY_TYPE	√	CHAR20	<p>Transaction's security type. Possible values:</p> <ul style="list-style-type: none"> ▪ BOND ▪ CASH ▪ STOCK ▪ MUTUAL FUND ▪ OPTION ▪ OTHER
53	FI_ID		CHAR64	<p>Unique internal identifier for the financial institution that reported the transaction</p>
54	TX_COMPOSITE_TYPE	√	CHAR128	<p>Customizable transaction type composite field that is the concatenation of one or more of the following transaction fields:</p> <ul style="list-style-type: none"> ▪ TX_TYPE, ▪ TX_SUBTYPE, ▪ SECURITY_TYPE, ▪ FI_ID <p>Default composition: TX_TYPE-TX_SUBTYPE-SECURITY_TYPE</p>

Col #	Column Header	Required	Data Type	Description
55	CI_SYNTHESIZED	√	BOOLEAN	1 indicates the transaction was created by CI SaaS (sweeps). 0 indicates the transaction was not synthesized by CI SaaS. 0 is the default.
56	REVERSAL	√	BOOLEAN	1 indicates the transaction is a reversal. 0 indicates the transaction is not a reversal.
57	ACCRUED_INCOME		NUMBER	Amount of accrued interest
58	ACCRUED_INCOME_BASE		NUMBER	Amount of accrued interest in the account's base currency
59	ACCRUED_INCOME_LOCAL		NUMBER	Amount of accrued interest in the account's local currency
60	FI_SUPPLIED_DESCRIPTION		CHAR2000	Transaction description
61	INCOME_TYPE		CHAR20	Type of income for REINVESTMENT type only. Possible values: INCOME, INTEREST, DIVIDEND.
62	POSITION_ID		NUMBER	Unique numeric ID for the position with which this transaction is associated. This is a ByAllAccounts Internal ID and is unique across all positions within the ByAllAccounts service repository.
63	PRINCIPAL_OR_INCOME		CHAR1	Defaults to 'P'. Set to 'I' if the transaction has a non-zero and non-blank value in the INCOME_TOTAL_AMOUNT field.
64	ADVISOR_IDENTIFIER		CHAR64	Unique internal identifier for the Advisor user associated with the account containing this transaction within the ByAllAccounts service.
65	FI_SUPPLIED_REP_ID		CHAR32	FI-supplied Advisor/Rep ID. Only available for select Financial Institutions.
66	FI_SUPPLIED_CLIENT_DOB		CHAR12	Date of birth of the client who owns this account in standard date format YYYYMMDD.
67	FI_SUPPLIED_CLIENT_EMAIL		CHAR64	Email address of the client who owns this account.
68	FI_SUPPLIED_CLIENT_PHONE		CHAR32	Phone number of the client who owns this account, in the format provided by the custodian.

Col #	Column Header	Required	Data Type	Description
69	FI_SUPPLIED_ADDRESS_STREET		CHAR64	Street address of the client who owns this account.
70	FI_SUPPLIED_ADDRESS_LINE2		CHAR64	Additional street address of the client who owns this account.
71	FI_SUPPLIED_ADDRESS_LINE3		CHAR64	Additional street address of the client who owns this account.
72	FI_SUPPLIED_ADDRESS_LINE4		CHAR64	Additional street address of the client who owns this account.
73	FI_SUPPLIED_ADDRESS_LINE5		CHAR64	Additional street address of the client who owns this account.
74	FI_SUPPLIED_ADDRESS_LINE6		CHAR64	Additional street address of the client who owns this account.
75	FI_SUPPLIED_ADDRESS_CITY		CHAR32	City portion of the address of the client who owns this account.
76	FI_SUPPLIED_ADDRESS_STATE		CHAR32	State portion of the address of the client who owns this account.
77	FI_SUPPLIED_ADDRESS_ZIP_CODE		CHAR16	Zip code portion of the address of the client who owns this account.
78	FI_SUPPLIED_ACCOUNT_TYPE		CHAR64	Custodian reported account type for this account.
79	FI_SUPPLIED_SEC_TYPE		CHAR64	Security type provided by the financial institution.
80	FI_SUPPLIED_FIRM_ID		CHAR32	FI-supplied Firm ID (Advisor's firm) for the account.
81	FI_SUPPLIED_ACCOUNT_TAXID		CHAR32	FI-supplied TAX ID (SSN or TIN) associated with the account.
82	FI_SUPPLIED_ACCOUNT_NAME		CHAR128	FI-supplied name for the account.
83	FI_SUPPLIED_ACCOUNT_TITLE		CHAR128	FI-supplied title for the account.
84	FI_SUPPLIED_CLIENT_FIRST		CHAR64	FI-supplied first name for the account holder.
85	FI_SUPPLIED_CLIENT_MIDDLE		CHAR64	FI-supplied middle name for the account holder.
86	FI_SUPPLIED_CLIENT_LAST		CHAR64	FI-supplied last name for the account holder.

Col #	Column Header	Required	Data Type	Description
87	MORNINGSTAR_SECID		CHAR10	Morningstar security identifier (SECID) for this security.
88	COMMISSIONS		NUMBER	Commission associated with this transaction.
89	FEES		NUMBER	Non-commission fees associated with this transaction.
90	ACCOUNT_ID		CHAR50	The internal account identifier for the account.
91	FI_SUPPLIED_CUSTODIAN_CODE		CHAR32	Custodian-reported custodian code.
92	FI_SUPPLIED_CUSTODIAN_NAME		CHAR128	Custodian-reported custodian name.

Transaction Type Codes

The following table shows the valid values for the **TX_TYPE** and **ORIG_TX_TYPE** columns.

TX_TYPE Value	Description
ATM	ATM debit or credit (depends on signage of amount)
BUY	Buy a Security
CHECK	Check written
CLOSURE	Close a position for an option
COVER	Occurs when a BUY's position has negative units
CREDIT	Generic credit
DEBIT	Generic debit
DEPOSIT	Deposit
DIRECT_DEBIT	Merchant initiated debit
DIRECT_DEPOSIT	Direct deposit
DIVIDEND	Dividend paid
FEE	Financial Institution fee
INCOME	Investment income is realized as cash into the investment Account
INTEREST	Interest earned or paid (depends on signage of amount)
INVESTMENT_EXPENSE	Miscellaneous investment expense that is associated with a specific Security
JOURNAL	Journal cash or Securities between Sub-Accounts within the same investment Account
MARGIN_INTEREST	Margin interest expense
OTHER	Other
PAYMENT	Electronic payment
POINT_OF_SALE	Point of sale debit or credit (depends on signage of amount)
REINVESTMENT	Reinvestment of income
REPEAT_PAYMENT	Repeating payment/standing order
RETURN_OF_CAPITAL	Return of capital
SELL	Sell a Security
SERVICE_CHARGE	Service charge
SHORT	Occurs when a SELL's position has negative units
SPLIT	Stock or Mutual Fund split
TRANSFER	Transfer cash or Holdings in or out (depends on signage of amount)
WITHDRAWAL	Withdraw funds from Account

Signs for Flow Amount and Flow Units fields in the Transaction File

The following table defines the sign used for the FLOW_AMOUNT and FLOW_UNITS field in the Transaction file. Signs available are:

- Positive
- Negative
- Neutral – used only by FLOW_AMOUNT, this is a flow of 0
- As is – the sign in the original data from the Financial Institution, usually used to preserve the full meaning of the transaction.

Typically, the sign is based on the transaction type. For ATM, Income, Interest, Journal, Point of Sale, and Transfer the sign is also determined by TX_SUBTYPE where IN is positive and OUT is negative.

TX_TYPE (TX_SUBTYPE) Value	FLOW_AMOUNT Sign	FLOW_UNITS Sign
ATM (IN)	Positive	Positive
ATM (OUT)	Negative	Negative
Buy	Negative	Positive
Check	Negative	Negative
Closure	Neutral	As is
Credit	Positive	Positive
Debit	Negative	Negative
Deposit	Positive	Positive
Direct Deposit	Positive	Positive
Direct Debit	Negative	Negative
Dividend	Positive	Positive
Fee	Negative	Negative
Income (IN)	Positive	Positive
Income (OUT)	Negative	Negative
Interest (IN)	Positive	Positive
Interest (OUT)	Negative	Negative
Investment Expense	Negative	Negative
Journal (IN)	Positive	Positive
Journal (OUT)	Negative	Negative
Margin Interest	As is	As is
Other	Neutral	As is
Payment	Negative	Negative
Point of Sale (IN)	Positive	Positive
Point of Sale (OUT)	Negative	Negative
Reinvestment	Neutral	Positive

Repeat Payment	Negative	Negative
Return of Capital	Positive	Negative
Sell	Positive	Negative
Service Charge	Negative	Negative
Split	Neutral	As is
Transfer (IN)	Positive	Positive
Transfer (OUT)	Negative	Negative
Withdrawal	Negative	Negative

Position File

Export Universal Files generates an entry in the Position file (BAAREC_YYYYMMDD.csv) for each position in the accounts that are listed in the Accounts Translation tab. The units and market value for the positions are as of the prior business day. AccountView Universal does not currently provide a way to obtain a Position file for a business day other than the prior business day.

Position File Format

The following table defines the columns of output for the Position file (BAAREC_YYYYMMDD.csv).

Col #	Column Header	Required	Data Type	Description
1	ACCOUNT_IDENTIFIER	√	CHAR128	Account identifier for the account that contains this position. The content of this field is the account identifier specified by the user during the account translation process.
2	SYMBOL	√	CHAR512	Symbol used to identify this security. The value may be a CUSIP, TICKER, SEDOL, ISIN, or a dummy symbol when no official symbol can be determined. The dummy symbol may be a string prefixed with either "999999" by default or by a string set by the user, or it may be an internal identifier. If used, the internal identifier is the position ID prefixed with the letter "H" for holding. For example, if the position ID is 12345, the security symbol in the output file will be 'H12345'. A SEDOL is only delivered when SEDOLs are enabled for the firm.
3	SYMBOL_TYPE	√	CHAR6	Describes the type of the symbol in the SYMBOL field. Text is one of the following: CUSIP, TICKER, SEDOL, ISIN, OTHER.
4	FI_SUPPLIED_CUSIP		CHAR20	Security's CUSIP as provided by the Financial Institution. A CUSIP is only delivered when CUSIPs are enabled for the firm.
5	FI_SUPPLIED_TICKER		CHAR32	Security's Ticker as provided by the Financial Institution.

Col #	Column Header	Required	Data Type	Description
6	FI_SUPPLIED_SEDOL		CHAR7	Security's SEDOL as provided by the Financial Institution. A SEDOL is only delivered when SEDOLs are enabled for firm.
7	FI_SUPPLIED_ISIN		CHAR12	Security's ISIN as provided by the Financial Institution.
8	NAME		CHAR128	The holding's name (typically identifies the security) as provided by Financial Service or entered by the user (offline accounts).
9	UNITS		NUMBER	Units of the Security held.
10	COST_BASIS		NUMBER	Financial Service-supplied cost basis for the Holding. If the cost basis is not available, this field may be populated with a calculated value, derived by multiplying the average Financial Service-supplied per-share cost by the total units of the Holding.
11	MARKET_VALUE		NUMBER	Total market value for this Holding as retrieved from the Financial Institution or entered by the user.
12	UNIT_PRICE		NUMBER	Unit price for the security as provided by the Financial Institution.
13	PRICE_DATA_AS_OF		DATE	Date for which the UNIT_PRICE is valid.
14	CURRENCY_CODE		CHAR3	ISO 4217 currency code for MARKET_VALUE and UNIT_PRICE
15	FI_SUPPLIED_CURRENCY		CHAR64	Currency identifier for MARKET_VALUE and UNIT_PRICE as provided by the Financial Institution.
16	ACCRUED_INCOME		NUMBER	Value of the income that has accrued to the holding but has not yet been distributed.
17	PRINCIPAL_UNITS		NUMBER	Principal units as reported by the Financial Institution.
18	PRINCIPAL_COST_BASIS		NUMBER	Principal cost basis as reported by the Financial Institution.
19	PRINCIPAL_MARKET_VALUE		NUMBER	Principal market value as reported by the Financial Institution (e.g. PRINCIPAL CASH market value).

Col #	Column Header	Required	Data Type	Description
20	INCOME_UNITS		NUMBER	Income units as reported by the Financial Institution.
21	INCOME_COST_BASIS		NUMBER	Income cost basis as reported by the Financial Institution.
22	INCOME_MARKET_VALUE		NUMBER	Income market value as reported by the Financial Institution (e.g. INCOME CASH market value).
23	MARKET_VALUE_BASE		NUMBER	The market value of the position converted to the base currency of the account.
24	UNIT_PRICE_BASE		NUMBER	The price of the position converted to the base currency of the account.
25	CURRENCY_CODE_BASE		CHAR3	ISO 4217 currency code of the base currency of the account as determined from the FI_SUPPLIED_CURRENCY_BASE field.
26	FI_SUPPLIED_CURRENCY_BASE		CHAR64	The base currency of the account as provided by the Financial Institution.
27	ACCRUED_INCOME_BASE		NUMBER	Value of the income in the base currency that has accrued to the holding but has not yet been distributed.
28	PRINCIPAL_MARKET_VALUE_BASE		NUMBER	The principal portion of the market value of the position in the base currency of the account.
29	INCOME_MARKET_VALUE_BASE		NUMBER	Income market value as reported by the Financial Institution (e.g. INCOME CASH market value).
30	MARKET_VALUE_LOCAL		NUMBER	The market value of the position in the local currency of the holding.
31	UNIT_PRICE_LOCAL		NUMBER	The price of the position in the local currency of the holding
32	CURRENCY_CODE_LOCAL		CHAR3	ISO 4217 currency code of the local currency of the holding as determined from the FI_SUPPLIED_CURRENCY_LOCAL field.
33	FI_SUPPLIED_CURRENCY_LOCAL		CHAR64	The local currency of the holding as provided by the Financial Institution.

Col #	Column Header	Required	Data Type	Description
34	ACCRUED_INCOME_LOCAL		NUMBER	Value of the income in the local currency that has accrued to the holding but has not yet been distributed.
35	PRINCIPAL_MARKET_VALUE_LOCAL		NUMBER	Principal market value as reported by the Financial Institution (e.g. PRINCIPAL CASH market value).
36	INCOME_MARKET_VALUE_LOCAL		NUMBER	Income market value as reported by the Financial Institution (e.g. INCOME CASH market value).
37	EXCHANGE_RATE_LOCAL_TO_BASE		NUMBER	The local-to-base exchange rate as provided by the Financial Institution.
38	EXCHANGE_RATE_LOCAL_TO_USD		NUMBER	The local-to-USD exchange rate as provided by the Financial Institution.
39	COUPON		NUMBER	The interest payment rate of a debt instrument.
40	MATURITY_DATE		DATE	The date a debt instrument becomes due and pays in full.
41	ORIGINAL_FACE		NUMBER	The original face or par value for a security that amortizes or accretes (e.g., a mortgage). For such securities the "current face" is available in the UNITS field.
42	LAST_UPDATED		TIMESTAMP	Date/time on which the data for this Holding was last updated with information from the Financial Service. Absent for Holdings maintained manually by the user.
43	DATA_AS_OF		DATE	The date which the holding data is 'as of' as reported by the Financial Institution. If the Financial Institution does not report a date then this field is empty.

Col #	Column Header	Required	Data Type	Description
44	VALUE_SOURCE	√	CHAR12	The source of the market value for this holding. May be one of the following strings: FI, WPAPPROX, or USER. <ul style="list-style-type: none"> ▪ FI - the market value was collected from the Financial Institution. ▪ WPAPPROX – the ByAllAccounts service approximated the market value using the units reported by the Financial Institution and a closing security price obtained from a third party. ▪ USER – the user edited the market value.
45	ACCOUNT_NUMBER		CHAR128	Alphanumeric string used to identify this Account at the Financial Service where this Account is held.
46	PRINCIPAL_OR_INCOME		CHAR1	Defaults to 'P'. Set to 'I' if the position has a non-zero and non-blank value in the INCOME_UNITS field.
47	PRIOR_BUSINESS_DAY_DATE		DATE	The date of the business day prior to the day that the file was generated.
48	ASSET_CLASS		CHAR64	The asset class of this security, one of: <ul style="list-style-type: none"> ▪ Unclassified ▪ Stocks ▪ Bonds ▪ Cash ▪ Real Estate ▪ Other
49	ASSET_SUBCLASS		CHAR128	The asset subclass of this security, see Asset Subclasses , page 29.
50	POSITION_ID		NUMBER	Unique numeric ID for the Position. This is a ByAllAccounts Internal ID and is unique across all positions within the ByAllAccounts service repository.
51	FI_ID		CHAR64	Unique internal identifier for the financial institution where the position is held.

Col #	Column Header	Required	Data Type	Description
52	ADVISOR_IDENTIFIER		CHAR64	Unique internal identifier for the Advisor user associated with the account containing this transaction within the ByAllAccounts service.
53	SECURITY_TYPE	√	CHAR20	Position's security type. Possible values: BOND, CASH, STOCK, MUTUALFUND, OPTION, OTHER.
54	FI_SUPPLIED_REP_ID		CHAR32	FI-supplied Advisor/Rep ID. Only available for select Financial Institutions.
55	FI_SUPPLIED_CLIENT_DOB		CHAR12	Date of birth of the client who owns this account in standard date format YYYYMMDD.
56	FI_SUPPLIED_CLIENT_EMAIL		CHAR64	Email address of the client who owns this account.
57	FI_SUPPLIED_CLIENT_PHONE		CHAR32	Phone number of the client who owns this account, in the format provided by the custodian.
58	FI_SUPPLIED_ADDRESS_STREET		CHAR64	Street address of the client who owns this account.
59	FI_SUPPLIED_ADDRESS_LINE2		CHAR64	Additional street address of the client who owns this account.
60	FI_SUPPLIED_ADDRESS_LINE3		CHAR64	Additional street address of the client who owns this account.
61	FI_SUPPLIED_ADDRESS_LINE4		CHAR64	Additional street address of the client who owns this account.
62	FI_SUPPLIED_ADDRESS_LINE5		CHAR64	Additional street address of the client who owns this account.
63	FI_SUPPLIED_ADDRESS_LINE6		CHAR64	Additional street address of the client who owns this account.
64	FI_SUPPLIED_ADDRESS_CITY		CHAR32	City portion of the address of the client who owns this account.
65	FI_SUPPLIED_ADDRESS_STATE		CHAR32	State portion of the address of the client who owns this account.
66	FI_SUPPLIED_ADDRESS_ZIP_CODE		CHAR16	Zip code portion of the address of the client who owns this account.
67	FI_SUPPLIED_ACCOUNT_TYPE		CHAR64	Custodian reported account type for this account.

Col #	Column Header	Required	Data Type	Description
68	FI_SUPPLIED_SEC_TYPE		CHAR64	Security type provided by the financial institution.
69	FI_SUPPLIED_FIRM_ID		CHAR32	FI-supplied Firm ID (Advisor's firm) for the account.
70	FI_SUPPLIED_ACCOUNT_TAXID		CHAR32	FI-supplied TAX ID (SSN or TIN) associated with the account.
71	FI_SUPPLIED_ACCOUNT_NAME		CHAR128	FI-supplied name for the account.
72	FI_SUPPLIED_ACCOUNT_TITLE		CHAR128	FI-supplied title for the account.
73	FI_SUPPLIED_CLIENT_FIRST		CHAR64	FI-supplied first name for the account holder.
74	FI_SUPPLIED_CLIENT_MIDDLE		CHAR64	FI-supplied middle name for the account holder.
75	FI_SUPPLIED_CLIENT_LAST		CHAR64	FI-supplied last name for the account holder.
76	MORNINGSTAR_SECID		CHAR10	Morningstar security identifier (SECID) for this security.
77	ACCOUNT_ID		CHAR50	The internal account identifier for the account.
78	PAYDOWN_FACTOR		NUMBER	The paydown factor, when available, comes from the financial institution.
79	ASSET_LIABILITY_INDICATOR		CHAR9	Valid values are: <ul style="list-style-type: none"> ▪ Asset ▪ Liability
80	FI_SUPPLIED_CUSTODIAN_CODE		CHAR32	Custodian-reported custodian code.
81	FI_SUPPLIED_CUSTODIAN_NAME		CHAR128	Custodian-reported custodian name.

Asset Subclasses

Asset subclass values:

- Unclassified
- Large Cap Growth (US)
- Large Cap Core (US)
- Large Cap Value (US)
- Mid Cap Growth (US)
- Mid Cap Core (US)

- Mid Cap Value (US)
- Small Cap Growth (US)
- Small Cap Core (US)
- Small Cap Value (US)
- Large Cap Growth (Emerging Foreign)
- Large Cap Core (Emerging Foreign)
- Large Cap Value (Emerging Foreign)
- Mid Cap Growth (Emerging Foreign)
- Mid Cap Core (Emerging Foreign)
- Mid Cap Value (Emerging Foreign)
- Small Cap Growth (Emerging Foreign)
- Small Cap Core (Emerging Foreign)
- Small Cap Value (Emerging Foreign)
- Large Cap Growth (Developed Foreign)
- Large Cap Core (Developed Foreign)
- Large Cap Value (Developed Foreign)
- Mid Cap Growth (Developed Foreign)
- Mid Cap Core (Developed Foreign)
- Mid Cap Value (Developed Foreign)
- Small Cap Growth (Developed Foreign)
- Small Cap Core (Developed Foreign)
- Small Cap Value (Developed Foreign)
- Unclassified Stocks
- Invest. Grade Short (US Tax Exempt)
- Invest. Grade Intermediate (US Tax Exempt)
- Invest. Grade Long (US Tax Exempt)
- Medium Grade Short (US Tax Exempt)
- Medium Grade Intermediate (US Tax Exempt)
- Medium Grade Long (US Tax Exempt)
- High Yield Short (US Tax Exempt)
- High Yield Intermediate (US Tax Exempt)
- High Yield Long (US Tax Exempt)

- Invest. Grade Short (US Taxable)
- Invest. Grade Intermediate (US Taxable)
- Invest. Grade Long (US Taxable)
- Medium Grade Short (US Taxable)
- Medium Grade Intermediate (US Taxable)
- Medium Grade Long (US Taxable)
- High Yield Short (US Taxable)
- High Yield Intermediate (US Taxable)
- High Yield Long (US Taxable)
- Invest. Grade Short (Foreign)
- Invest. Grade Intermediate (Foreign)
- Invest. Grade Long (Foreign)
- Medium Grade Short (Foreign)
- Medium Grade Intermediate (Foreign)
- Medium Grade Long (Foreign)
- High Yield Short (Foreign)
- High Yield Intermediate (Foreign)
- High Yield Long (Foreign)
- Unclassified Bonds
- Cash
- Real Estate
- Hedge Funds
- Private Equity Investments
- Options & Futures
- Precious Metals
- Natural Resources
- Other Investments
- Unclassified Other

Security File

Export Universal Files generates an entry in the Security file for each security referenced by a position or transaction in the current data download.

Security File Format

The following table defines the columns of output that **Export Universal Files** creates for the Security file (BAASEC_yyyymmdd.csv).

Col #	Column Header	Required	Data Type	Description
1	SYMBOL	√	CHAR512	Symbol used to identify this security. The value may be a CUSIP, TICKER, SEDOL, ISIN, or a dummy symbol when no official symbol can be determined. The dummy symbol may be a string prefixed with either "999999" (by default) or a string set by the user, or it may be an internal identifier. A SEDOL is only delivered when SEDOLs are enabled for firm. For output configuration, refer to Adjusting Output Configuration Settings, page 38.
2	SYMBOL_TYPE	√	CHAR6	Describes the type of the symbol in the SYMBOL field. Text is one of the following: CUSIP, TICKER, SEDOL, ISIN, OTHER.
3	NAME	√	CHAR128	Name for this Security (e.g., "Ford Motor Company")
4	SECTYPE	√	CHAR20	Type of Security, one of: <ul style="list-style-type: none"> ▪ BOND ▪ CASH ▪ MUTUALFUND ▪ OPTION ▪ OTHER ▪ STOCK
5	TICKER		CHAR32	Ticker symbol for this Security (e.g., "F"), if available
6	CUSIP		CHAR9	Committee on Uniform Security Identification Procedures (CUSIP) for this Security (e.g., "345370860"), if available A CUSIP is only delivered when CUSIPs are enabled for the firm.

Col #	Column Header	Required	Data Type	Description
7	SEDOL		CHAR7	Stock Exchange Daily Official List number for this security, if available. SEDOL is a code used by the London Stock Exchange to identify foreign stocks, especially those that are not actively traded in the U.S. and do not have a CUSIP. A SEDOL is only delivered when SEDOLs are enabled for the firm.
8	ISIN		CHAR12	ISIN for this security, if available. A unique international code that identifies a securities issue. Each country has a national numbering agency that assigns ISIN numbers for securities in that country.
9	COUPON		NUMBER	Coupon rate for debt instruments.
10	MATURITY_DATE		DATE	Maturity date for debt instruments.
11	PRIOR_BUSINESS_DAY_DATE		DATE	The date of the business day prior to the day that the file was generated.
12	ASSET_CLASS		CHAR64	The asset class of this security, one of: Unclassified Stocks Bonds Cash Real Estate Other
13	ASSET_SUBCLASS		CHAR128	The asset subclass of this security, see list under Security file description.
14	FI_SUPPLIED_SEC_TYPE		CHAR64	Security type provided by the financial institution.
15	MORNINGSTAR_SECID		CHAR10	Morningstar security identifier (SECID) for this security.

Price File

Export Universal Files generates an entry in the Price file (BAAPRI_yyyyymmdd.csv) for each security referenced by a position or transaction in the current download and for which a price is available for the prior business day.

Price File Format

The following table defines the columns of output that **Export Universal Files** creates for the Price file (BAAPRI_yyyyymmdd.csv).

Col #	Column Header	Required	Data Type	Description
1	SYMBOL	√	CHAR512	Symbol used to identify this security. The value may be a CUSIP, TICKER, SEDOL, ISIN, or a dummy symbol when no official symbol can be determined. The dummy symbol may be a string prefixed with either "999999" (by default) or a string set by the user, or it may be an internal identifier. A SEDOL is only delivered when SEDOLs are enabled for firm. For output configuration, refer to Adjusting Output Configuration Settings, page 38.
2	SYMBOL_TYPE	√	CHAR6	Describes the type of the symbol in the SYMBOL field. Text is one of the following: <ul style="list-style-type: none"> ▪ CUSIP, ▪ TICKER, ▪ SEDOL, ▪ ISIN, ▪ OTHER.
3	CLOSE_PRICE	√	NUMBER	The closing price of the security for the date in PRICE_AS_OF.
4	PRICE_AS_OF	√	DATE	The date for which CLOSE_PRICE is the closing price of the security.
5	CURRENCY_CODE		CHAR3	ISO 4217 currency code. Always USD or blank.
6	PRIOR_BUSINESS_DAY_DATE		DATE	The date of the business day prior to the day that the file was generated.

Col #	Column Header	Required	Data Type	Description
7	SECURITY_TYPE	√	CHAR20	The position's security type. Possible values: <ul style="list-style-type: none"> ▪ BOND, ▪ CASH, ▪ STOCK, ▪ MUTUALFUND, ▪ OPTION, ▪ OTHER
8	FI_SUPPLIED_SEC_TYPE		CHAR64	Security type provided by the financial institution.
9	MORNINGSTAR_SECID		CHAR10	Morningstar security identifier (SECID) for this security.
10	PAYDOWN_FACTOR		NUMBER	The paydown factor, when available, comes from the financial institution.

Additional Data Standardization

CI SaaS provides additional standardization of the data, in particular, transaction data, to make it more uniform across custodians. This standardization is done via several mechanisms. These are the most common transactions that require this additional standardization:

- Reinvestments

Custodians report reinvestment activity in a variety of ways, sometimes with multiple transactions and other times with just a single transaction. This behavior can even vary by account within a single custodian. CI SaaS provides standardization to a single Reinvestment transaction in these cases when the "Combine dividend with other transactions that represent a single reinvestment into a reinvestment transaction" option is selected. (Downloads > Downloads Dashboard > More Actions > Edit Output Configuration > Advanced (next to Include Transactions for export). For more information, refer to Reinvestments on page [36](#).

- Exchanges

Often reported as "Transfers" the activity of exchanging one mutual fund for another in a retirement account is more correctly modeled as a trade (Buy, Sell) rather than an asset transfer. CI SaaS converts exchanges that are reported by the custodian using "Transfer" type code or language to a Buy or Sell as needed.

- Retirement account Contributions and Distributions

Many retirement plan web sites do not report on cash activity explicitly. The account holder's contributions to the account are often reported as a single "Contribution" transaction with a related mutual fund (or other security). The transaction actually represents a deposit of cash to the account and a subsequent purchase of the security. Similarly compact reporting is made on the withdrawal side, where a "Distribution" transaction with a related mutual fund actually represents a sell of the fund and a withdrawal of cash. CI

SaaS converts these transactions to appropriately account for cash by generating a Cash Deposit and a Buy for Contributions and a Sell and a Cash Withdrawal for Distributions.

- Retirement account Fees

Similar to the previous item, Fees may be reported as a Fee against a mutual fund (or other security). The Fee transaction describes the selling of the fund and then a withdrawal of cash to pay the named fee. CI SaaS converts these transactions to appropriately account for cash by converting them to a Sell and a Fee.

CI SaaS provides options to control how certain types of transactions are output:

- Bond purchase/sale - You can opt to have CI SaaS identify and combine Bond purchase transaction pairs where one transaction is the bond purchase and the other is the purchase of the associated accrued interest. The same option controls combining Sell and Sell Accrued transactions for Bonds. Since some custodians report a single transaction that includes the accrued income while other custodians report two transactions, this option lets you produce a consistent single transaction for these cases regardless of which way the custodian reports the activity. (The “Combine the buy or sell of bonds with their matching accrued transactions” feature can be found at Downloads > Downloads Dashboard > More Actions > Edit Output Configuration > Advanced (next to Include Transactions for export).
- Reinvestments - You can opt to have CI SaaS identify and combine two transactions (Dividend and Buy, Dividend and Reinvestment) into a single Reinvestment transaction. Some custodians report reinvestment of dividends using multiple transactions while others use just a single transaction. This option lets you consistently produce a single transaction for a reinvestment regardless of custodian behavior. (Downloads > Downloads Dashboard > More Actions > Edit Output Configuration > Advanced (next to Include Transactions for export).

Data Customization

CI SaaS provides support for the following data customizations:

- Position Filters

Position filters can be implemented for you by ByAllAccounts and placed into your CI SaaS Configuration to omit from CI SaaS output any positions you do not want delivered to your target system. When the filter is implemented, those filtered positions are not included in the BAAREC_YYYYMMDD.csv file.

The position filters also act upon transactions associated with the position. When a position is omitted, all associated transactions are also omitted. Filtered transactions are not included in the BAATRX_YYYYMMDD.csv file.

For more about filters, refer to [Custom Filters](#), page 41.

- Transaction Filters

Transaction filters can be implemented for you by ByAllAccounts and placed into your CI SaaS Configuration to omit from CI SaaS output any transactions you do not want delivered to your target system. When the filter is implemented, those filtered transactions are not included in the BAATRX_YYYYMMDD.csv file.

For more about filters, refer to [Custom Filters](#), page 41.

- Custom Transaction Translation

CI SaaS provides a default set of transaction translations for standardization purposes. You can override these translations to produce different transaction output using the custom transaction translation mechanism. Custom transaction translations are implemented for you by ByAllAccounts.

Security Identification and Security Translations

Several of the Universal Export files (transaction, position, price) require a security reference. Due to the variations in source data from Financial Institutions and the limitations of the ByAllAccounts Security Master, a valid symbol may not always be available in AccountView for use in its output. Please note that you can define security translations in AccountView. The following lists the default security identification behavior in the various situations that can occur.

Note that CUSIP will only be present if the firm is licensed for CUSIP data and the firm is enabled to deliver it.

1. Security found in ByAllAccounts Security Master:
 - a. The position or transaction as presented by the Financial Institution has a Ticker and/or a CUSIP and the symbol identifies a security in the ByAllAccounts Security Master. AccountView will use the Ticker from the ByAllAccounts Security Master in this case as the security symbol for the Position and all transactions against this position. If no Ticker is available in the ByAllAccounts Security Master then AccountView will use the CUSIP from the ByAllAccounts Security Master. If there is no Ticker and CUSIP delivery is turned off, refer to item [3](#).
 - b. The position or transaction as presented by the Financial Institution has no symbol information but AccountView is able to identify it as a security in the ByAllAccounts Security Master through evaluation of descriptive information for the position. AccountView will use the Ticker from the ByAllAccounts Security Master in this case as the security symbol for the position and all transactions against this position. If no Ticker is available in the ByAllAccounts Security Master then AccountView will use the CUSIP from the ByAllAccounts Security Master. If there is no Ticker and CUSIP delivery is turned off, refer to item [3](#).

2. Symbol information provided by institution but not found in ByAllAccounts Security Master:

The position or transaction as presented by the Financial Institution has a Ticker and/or a CUSIP but AccountView is unable to identify a corresponding security in the ByAllAccounts Security Master using this symbol information. AccountView will use the symbol information from the Financial Institution (Ticker if present, otherwise CUSIP) to identify the security in the output files. AccountView has no way to ascertain if the Financial Institution is providing a 'dummy' or otherwise invalid symbol. AccountView will use the security type 'OTHER' in this case.

3. No Symbol Information:

The position or transaction as presented by the Financial Institution has no symbol information and ByAllAccounts is not able to identify it as a security in the ByAllAccounts security master. In this case, AccountView has no symbol information for the security.

How AccountView determines what data to use when the Ticker or CUSIP is not available is controlled by "Security Options" setting described in [Adjusting Output Configuration](#) Settings, starting on page 38.

Configuring AccountView Downloads

Adjusting Output Configuration Settings

Use **Downloads > Downloads Dashboard > More Actions > Edit Output Configuration** to access the Edit Output Configuration interface. Adjust the global settings described in the following table. These settings apply on a global basis. Typically these options are set once then applied to all future Universal Files exports. You can override some settings on individual basis in the AccountView user interface (not described here).

Type	Option and Description
Account Options	<p>Exclude accounts at institutions not validated</p> <p>Selected by default. Export files will only include accounts at institutions with the validation state of 'validated'. Deselecting this option will cause the inclusion of all accounts, regardless of their validation state (including Invalid, Withdrawn, Blocked, and In Process accounts). This option is only presented if the firm has the validation feature turned on.</p> <p>Account identifiers</p> <p>Select the data to use for the account identifier:</p> <ul style="list-style-type: none"> ▪ Account number ▪ Unique numeric identifier, which is the system's database ID for the account <p>Additionally, you can set the:</p> <ul style="list-style-type: none"> ▪ Max length of account identifiers

Type	Option and Description
<p>Security Options</p>	<p>Security symbol preferred usage order Defines the order in which to use security symbols.</p> <p>String used when none of these symbols is available Specifies what data to use for the security symbol when the Ticker or CUSIP is not available. Choices are:</p> <ul style="list-style-type: none"> ▪ Security name with prefix, which the name derived from the descriptive name for position or transaction presented by the Financial Institution, with a given prefix. If no name is present for a position or transaction then AccountView will use a unique numeric identifier. This case will show up as an 'automatic' security translation in the Security Translations tab and you should create an override to provide a more appropriate symbol ▪ Internal identifier, which is the system's database ID for the position or transaction <p>Column Delimiter Define the column delimiter. Comma by default.</p> <p>Enclose column values with double quotes (") Optionally, enclose column values with double quotes.</p> <p>Advanced > Output Options Select which fields to include or exclude, and adjust order of fields. Settings are available for all output files.</p>

Type	Option and Description
Import/Export Defaults	<p>Include accounts for export Include accounts for export or not.</p> <p>Include transactions for export Include transactions for export or not.</p> <p>Advanced > Transaction Export Options Include or exclude the following options</p> <ul style="list-style-type: none"> ▪ Combine the buy or sell of bonds with their matching accrued transactions ▪ Combine dividend with other transactions that represent a single reinvestment into a reinvestment transaction <p>Include positions for export Include positions for export or not.</p> <p>Advanced > Position Export Options Include or exclude content using the following options:</p> <ul style="list-style-type: none"> ▪ Exclude positions in stale accounts This is the default setting. Will only include positions from accounts that have aggregated successfully today and whose positions are not stale. ▪ Exclude positions in failed accounts Positions in failed accounts will be excluded when stale positions are allowed. In other words, only stale positions in successfully aggregated accounts are allowed. ▪ Create separate income positions For any position that has a non-zero value for INCOME_UNITS as well as a value for either UNITS or PRINCIPAL_UNITS, this option specifies that Custodial Integrator should create a new position in the position file to represent the Income portion of the position. The new position will have units, cost basis, and market value all set to the value from the INCOME_UNITS field. The PRINCIPAL_OR_INCOME field will be set to 'I' and all of its PRINCIPAL fields will be set to the default (blank or zero). All remaining fields in the income position will be set from the original position. The original position will have its INCOME_UNITS field set to the default (blank or zero). ▪ Combine positions with duplicate account, security id, and principal/income designation (Future) ▪ Remove positions that have no units Exclude any position that has zero in the units field. ▪ Positions with no units or price. The choices in the pulldown are: <ul style="list-style-type: none"> ▪ make no changes ▪ set Units to Market Value and Price to 1 ▪ set Units to 1 and Price to Market Value

Type	Option and Description
	<p>Include securities for export Include securities for export or not.</p> <p>Include security prices for export Include security prices for export or not.</p> <p>Advanced > Price Export Options Set how the system should respond when the price is missing.</p> <ul style="list-style-type: none"> ▪ Calculate the price from position's prior business day market value and units This is the default behavior; when the price is missing it is calculated. ▪ Use the price from an earlier business day when prior business day price cannot be determined When this is selected, if the prior business day price cannot be calculated then the system will use the price from an earlier business day. ▪ Days of historical prices Select the number of days from the pulldown. Can be left blank or a value from 1 to 6. <p>Select for import only up-to-date and offline accounts that have not yet been exported today (Future) Choose whether or not to import only up-to-date and offline accounts that have not yet been exported today.</p>

Custom Filters

For firms that need it, a custom customer-specific filter can be created to prevent select positions and their associated transactions from being delivered to the export files. AccountView will always gather all of the positions and balances in an account as well as related transactions for those positions/balances. Accounts may contain positions that you do not want to track for some reason, for example either because they are duplicated in another account or they are not a managed asset. The custom filter file enables you to filter out positions by name or symbol for a specific account at a Financial Institution or for all accounts at a Financial Institution. ByAllAccounts will create and maintain this file for you for any positions you wish to filter out at your request.

For some more information about the types of filters, refer to [Data Customization](#), page 36.