

EmployeeTrack Data Feed Integration Guide

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Getting Started

This guide provides information for Compliance Officers with EmployeeTrack accounts requesting a data feed from the IB generic reporting interface for purposes of integrating that data with third-party software. We provide, on request, reporting data for accounts, positions, trades and securities, each in a separate file.

The information in this guide pertains to new data feeds NOT listed on the <u>Third-Party</u> <u>Integration</u> page of our website, and to IB in-house data feeds.

This chapter includes the following topics:

- Data Feed Integration Process
- » File Types
- Requesting a Data Feed
- File Naming Convention
- " Configuring Data Files
- Transmitting Files

Data Feed Integration Process

Integrating your IB data with third-party software includes the following steps:

- Request a data feed from Interactive Brokers by sending an email to employeetrack@interactivebrokers.com. Include any configuration options with your request.
- 2. Interactive Brokers prepares the requested files.
- 3. The data files are transmitted to the customer via FTP. See <u>Transmitting Files</u> for detailed instructions.
- 4. You integrate the reporting data files with third-party software.

Chapter 1 File Types

File Types

You can choose to receive any of the following types of data files:

Accounts - Contains general account information, including Account ID, Title, etc.

- Positions Contains positions (including cash) as of the report date.
- Transactions Contains all trade activity.
- Securities Contains detailed security information for all assets traded or held.

See File Layouts for detailed descriptions of the contents of each type of file.

Requesting a Data Feed

To request an EmployeeTrack data feed from Interactive Brokers, you send an email to employeetrack@interactivebrokers.com. Your emailed request must contain the following information:

- Include the text "I would like to integrate my Interactive Brokers EmployeeTrack data with _____." Fill in the blank with the name of the software vendor.
- The software vendor's contact information.
- Your Interactive Brokers Account ID.
- The file types you are requesting.
- Delivery information: Tell us how you want the files delivered. IB can host the files on its FTP site, can upload them to your FTP site, or can make them available for download. Include your PGP Public Key if you want to receive encrypted files. See <u>Transmitting Files</u> for detailed instructions.
- Selected options. See Configuring Data Files for detailed instructions.

Note that the date of the reporting data is always the last business day. Typically there is no data available for Christmas Day and New Year's Day.

File Naming Convention

All reporting data files are text files (*.txt). Regardless of the type of reporting file you choose to receive, the file name follows this convention:

<CompanyAbbreviatedName>_<FileType>_<AsOfDate:yyyyMMdd>.*

where:

- ** <CompanyAbbreviatedName> was set up during your EmployeeTrack account application process.
- > <FileType> is the type of file: Accounts, Positions, Transactions or Securities.
- ** <AsOfDate:yyyyMMdd> is the "as of" reporting date, in the format yyyymmdd. This is always the last business day.

File Format: .txt or .csv

Examples

ABC ACCT 20150505.txt

or

ABC_ACCT_20150505.csv

This example uses a Company Abbreviated Name of ABC, Accounts as the file type (ACCT), and a reporting date of May 5, 2015 (20150505).

Configuring Data Files

When you request EmployeeTrack data, you can configure the features listed below. You must include your configuration options in your request email so that we can create the files correctly.

- File Type: You can choose one or more of these file types: Accounts, Positions, Transactions or Securities.
- Field Delimiter: Specify pipe or comma. If a data field contains a delimiter character, the data will be wrapped in double quotes. This option is required.

Chapter 1 Transmitting Files

Date Format: Indicates how dates will appear in the report data. The default date format is mm/dd/yyyy but you can specify whatever date format you prefer. For example, you could request that the date format be yyyymmdd.

- Include Header Records: Specify whether or not you want header records included in the data. If you want header records, they will be included in ALL file types.
- "Use PGP Encryption: Specify whether or not to use PGP encryption for the data files. If you choose to use PGP encryption, you must provide us with your Public Key. You must tell us if you want PGP Encryption; if you do not, your files will not be encrypted.

You do not have to request all of the above configuration options. The default value will be used for any configuration option you do not request.

Use line feed (LF) as the end-of-line character.

Transmitting Files

Data files can be delivered via FTP hosted by Interactive Brokers or FTP/sFTP hosted by the third party software.

If you choose FTP, either IB- or third party-hosted:

" IB or third-party will provide FTP host name, username, password, and directory.

Be sure to tell us in your request email that you would like us to host the files. We will provide you with the FTP login information.

If you choose third-party hosted sFTP:

The third party will provide sFTP host name, username, and directory. The third party will also be required to upload IB's RSA key for key -based authentication.

We strongly recommend that you request PGP Encryption to protect your data files. If you select this option, provide us with your PGP Public Key in your request email.

File Layouts

This chapter describes the layout of each data file. The following topics are included:

- » Account File Layout
- Positions File Layout
- Transactions File Layout
- » Securities File Layout
- » Asset Types
- Note: The Version column in the file layout tables indicates the version number when a field first appeared.

See Sample Files in the next chapter for samples of reporting files.

Accounts File Layout

Header Record

Column	Туре	Version	Comments
Line Discriminator	Character	Any (If header is enabled)	Value will be "H"
File Type	Alphanumeric		Accounts
File Type Abbreviation	Alphanumeric		ACCT
Run Date	Alphanumeric		Date format is configurable
Run Time	Alphanumeric		HH:MM:DD in 24 hour format System Clock Time
As of Date	Alphanumeric		Data On Record As-Of Date (date format is configurable)

Column	Туре	Version	Comments
Version	Numeric		Version of the file layout used.

Accounts Record

Column	Туре	Version	Column Header	Comments
Line Discriminator	Character	Any (If header is enabled)	С	Value will be "D" for data
Account ID	Alphanumeric	1.0	AccountID	Account number
Broker	Alphanumeric	1.0	Broker	Broker Name. For example, INTERACTIVE BROKERS
Employee Reference	Alphanumeric	1.0	EmployeeReferenceID	Optional field internal ID populated by Compliance Officer
Account Title	Alphanumeric	1.0	AccountTitle	Full account title
Account Type	Alphanumeric	1.0	AccountType	Account Type
Comments	Empty	1.0	Comments	Field will be empty
Street	Alphanumeric	1.3	Street	Street address
Street2	Alphanumeric	1.3	Street2	Additional street address
City	Alphanumeric	1.3	City	City
State	Alphanumeric	1.3	State	State
Postal Code	Alphanumeric	1.3	PostalCode	Postal code
Country	Alphanumeric	1.3	Country	Country
DateOpened	Alphanumeric	1.3	DateOpened	Date account was

Column	Туре	Version	Column Header	Comments
				opened - MM/DD/YYYY
Employee Relationship	Alphanumeric	1.3	EmployeeRelationship	
Customer Type	Alphanumeric	1.3	CustomerType	
Date Linked	Alphanumeric	1.3	DateLinked	MM/DD/YYYY

Positions File Layout

Header Record

Column	Туре	Version	Comments
Line Discriminator	Character	Any (If header is enabled)	Value will be "H"
File Type	Alphanumeric		Positions
File Type Abbreviation	Alphanumeric		POS
Run Date	Alphanumeric		Date format is configurable
Run Time	Alphanumeric		HH:MM:DD in 24 hour format System Clock Time
As of Date	Alphanumeric		Data On Record As-Of Date (date format is configurable)
Version	Numeric		Version of the file layout used.

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Positions Record

	I			
Column	Туре	Version	Column Header	Comments
Line Discriminator	Character	Any (If header is enabled)	С	Value will be "D" for data
Account ID	Alphanumeric	1.0	AccountID	Account number
Broker	Alphanumeric	1.0	Broker	Broker Name. For example, INTERACTIVE BROKERS
Asset Type	Alphanumeric	1.0	AssetType	For more information, see Asset Types
Currency	Alphanumeric	1.0	Currency	The currency of the asset
Symbol	Alphanumeric	1.0	Symbol	The ticker symbol of the security
Security Description	Empty	1.0	SecurityDescription	Description of the security
CUSIP	Alphanumeric	1.0	CUSIP	Will populate only for US securities
ISIN	Alphanumeric	1.0	ISIN	Will populate only for non-US securities
Quantity	Numeric	1.0	Quantity	Positive quantity indicates a long position; negative quantity indicates a short position
Market Price	Numeric	1.0	MarketPrice	Current market price in local currency
Market Value	Numeric	1.0	MarketValue	Current market value in local currency

Column	Туре	Version	Column Header	Comments
Report Date	Alphanumeric	1.0	ReportDate	MM/DD/YYYY
Comments	Empty	1.0	Comments	Field will be empty
Multiplier	Numeric	1.1	Multiplier	
BBG Ticker	Alphanumeric	1.2	BBGTicker	Bloomberg ticker
BBG Ticker and Exchange Code	Alphanumeric	1.2	BBGTickerAnd ExchangeCode	Bloomberg ticker + exchange code
Underlying Symbol	Alphanumeric	1.2	UnderlyingSymbol	
Bloomberg Global ID	Alphanumeric	1.4	BloombergGlobalID	Bloomberg Global ID

Transaction File Layout

Header Record

Column	Туре	Version	Comments
Line Discriminator	Character	Any (If header is enabled)	Value will be "H"
File Type	Alphanumeric		Transactions
File Type Abbreviation	Alphanumeric		CONF
Run Date	Alphanumeric		Date format is configurable
Run Time	Alphanumeric		HH:MM:DD in 24 hour format System Clock Time
As of Date	Alphanumeric		Data On Record As-Of Date (date format is configurable)
Version	Numeric		Version of the file layout used.

Transaction Record

Column	Туре	Version	Column Header	Comments
Line Discriminator	Character	Any (If header is enabled)	С	Value will be "D" for data
Account ID	Alphanumeric	1.0	AccountID	Account number
Broker	Alphanumeric	1.0	Broker	Broker Name. For example, INTERACTIVE BROKERS
Asset Type	Alphanumeric	1.0	AssetType	For more information, see Asset Types
Currency	Alphanumeric	1.0	Currency	The currency of the asset
Symbol	Alphanumeric	1.0	Symbol	The ticker symbol of the security
Security Description	Alphanumeric	1.0	SecurityDescription	Description of the security
CUSIP	Alphanumeric	1.0	CUSIP	Will populate only for US securities
ISIN	Alphanumeric	1.0	ISIN	Will populate only for non-US securities
Transaction Type	Numeric	1.0	MarketPrice	Current market price in local currency
Exchange	Numeric	1.0	MarketValue	Current market value in local currency
Trade Date	Alphanumeric	1.0	TradeDate	MM/DD/YY YY (In time zone setup in account settings (DB))

Column	Туре	Version	Column Header	Comments
Trade Time	Alphanumeric	1.0	TradeTime	HH:MM:SS in 24 hour format System(In time zone setup in account settings (DB))
Settle Date	Alphanumeric	1.0	SettleDate	MM/DD/YY YY
Quantity	Numeric	1.0	Quantity	Quantity of the trade. Note the following regarding sign: "If buy 100: 100 If sell 100: -100 If cancel buy: -100 If cancel sell: 100
Trade Price	Numeric	1.0	TradePrice	Unit price of the security
Commission	Numeric	1.0	Commission	Negative amount indicates commission charged. Positive amount indicates commission rebate. For Forex trades, the commission is reported in base currency.
Other Fees	Numeric	1.0	OtherFees	Tax, if applicable
Net Amount	Numeric	1.0	NetAmount	Total cash received or delivered. For Futures and CFDs, this is the transaction MTM.
Cancel Flag	Alphanumeric	1.0	CancelFlag	Y if the trade has been canceled

Column	Туре	Version	Column Header	Comments
				N if the trade has not been canceled
Correct Flag	Alphanumeric	1.0	CorrectFlag	Y if the trade has been changed N if the trade has not been changed
Trade ID	Alphanumeric	1.0	TradeID	
Related Trade ID	Alphanumeric	1.0	RelatedTradeID	Original TradeID for canceled or corrected trade
Order ID	Numeric	1.3	OrderID	
Related Order ID	Numeric	1.3	RelatedOrderID	Original Order ID
Report Date	Alphanumeric	1.0	ReportDate	MM/DD/YYYY
Comments	Empty	1.0	Comments	Field will be empty
Multiplier	Numeric	1.1	Multiplier	
BBG Ticker	Alphanumeric	1.2	BBGTicker	Bloomberg ticker
BBG Ticker and Exchange Code	Alphanumeric	1.2	BBGTickerAnd ExchangeCode	Bloomberg ticker + exchange code
Bloomberg Global ID	Alphanumeric	1.4	BloombergGlobalID	Bloomberg Global ID
Underlying Symbol	Alphanumeric	1.2	UnderlyingSymbol	

Securities File Layout

Header Record

Column	Туре	Version	Comments
Line Discriminator	Character	Any (If header is enabled)	Value will be "H"
File Type	Alphanumeric		Transactions
File Type Abbreviation	Alphanumeric		SEC
Run Date	Alphanumeric		Date format is configurable
Run Time	Alphanumeric		HH:MM:DD in 24 hour format System Clock Time
As of Date	Alphanumeric		Data On Record As-Of Date (date format is configurable)
Version	Numeric		Version of the file layout used.

Security Record

Column	Туре	Version	Column Header	Comments
Line Discriminator	Character	Any (If header is enabled)	С	Value will be "D" for data
Internal Asset ID	Alphanumeric	1.0	InternalAssetID	Internal unique iden- tifier for all asset types
Asset Type	Alphanumeric	1.0	AssetType	For more information, see Asset Types
Security ID	Alphanumeric	1.0	SecurityID	US Security - CUSIP Foreign security - ISIN

Chapter 2 Asset Types

Column	Туре	Version	Column Header	Comments
				Only for applicable securities
Symbol	Alphanumeric	1.0	Symbol	The ticker symbol of the security
BBG Ticker	Alphanumeric	1.2	BBGTicker	Bloomberg ticker
BBG Ticker and Exchange Code	Alphanumeric	1.2	BBGTickerAnd ExchangeCode	Bloomberg ticker + exchange code
Bloomberg Global ID	Alphanumeric	1.4	BloombergGlobalID	Bloomberg Global ID
Description	Alphanumeric	1.0	SecurityDescription	Description of the security
Underlying Symbol	Alphanumeric	1.2	UnderlyingSymbol	
Multiplier	Alphanumeric	1.0	Multiplier	
Expiration Date	Alphanumeric	1.0	ExpirationDate	
Option Type	Alphanumeric	1.0	OptionType	
Option Strike	Alphanumeric	1.0	OptionStrike	
Maturity Date	Alphanumeric	1.0	MaturityDate	
Issue Date	Alphanumeric	1.0	IssueDate	

Asset Types

The following table lists all of the asset types referenced in the Positions, Transactions and Securities file layouts.

Code	Version	Description
BILL	1.0	Treasury Bills
BOND	1.0	Bonds (includes corporate and municipal)
CASH	1.0	Forex

Chapter 2 Asset Types

Code	Version	Description
CFD	1.0	Contracts for Differences
CMDTY	1.0	Metals
FOP	1.0	Future Options
FSFOP	1.0	Options on Futures (Futures Style)
FSOPT	1.0	Options (Futures Style)
FUND	1.0	Mutual Funds
FUT	1.0	Futures
OPT	1.0	Equity and Index Options
STK	1.0	Stocks (includes ADR, ETF)
WAR	1.0	Warrants

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