# **DATAFEED**<sup>SM</sup>

## Data Available

This collateral describes the financial data currently available in Interactive Data Pricing and Reference Data's DATAFEED<sup>SM</sup> service, and is designed to complement the DATAFEED Software Program collateral.

## Data descriptions are grouped in three ways:

- data available by security type,
- data available by category, and
- data available by DATAFEED format

## **Data Available by Security Type**

U.S. and Canadian Corporate, Government, and Agency Securities	<u>Format</u>
Daily bid evaluations and yields (latest and historical)	V, J
Daily bid evaluations and yields (latest and historical) and quality ratings	Р
FASTPRICE <sup>SM</sup> exchange listed securities closing prices	&P
Exchange listed securities daily/weekly/monthly open, high, low, close, and volume data (latest and historical)	H, L
Descriptive/issue information including quality ratings	!A
Changes in or latest descriptive/issue information including quality ratings	!B
Security identification data	R
Daily issue/issuer announcements (latest six months)	!R
Quality Ratings	!G, !B
Call, put, sinking fund schedules	!D
Daily bid evaluations and yields (latest and historical), quality ratings, and bond amount outstanding	&E

U.S. Municpal Securities	<u>Format</u>
Daily bid evaluations and yields (latest and historical)	V, J
Daily ask/bid/mean evaluations and yields (latest and historical) and quality ratings	Р
Descriptive/issue information including latest quality ratings	!A,
Changes in or latest descriptive/issue information including quality ratings	!B
Security identification data	R
Daily issue/issuer announcements (latest six months)	!R
Quality ratings	!G, !B
Call, put, sinking fund schedules	!D
Daily bid evaluations and yields (latest and historical) with quality ratings	&E

U.S. Collateralized Mortgage Obligations (CMOs) and Asset-backed Securities (ABSs)	<u>Format</u>
Daily bid evaluations and yields (latest and historical)	V, J



## **Data Available by Security Type**

Daily bid evaluations and yields (latest and historical) and quality ratings	ſ	Р
Descriptive/issue information including quality ratings	!	!A,
Changes in or latest descriptive/issue information including quality ratings	ļ!	!B
Security identification data	F	R
Descriptive and factor data (latest and historical)	ſ	F
Projected cash flows	!	!F
Quality ratings	į	!G, !B
Daily bid evaluations (latest and historical) and quality ratings	8	&E

Global Commodity/Futures Contracts	<u>Format</u>
Exchange listed contracts daily/weekly/monthly high, low, close, volume, open interest, and cash/spot prices (latest and	
historical)	H, L
Daily closing prices (latest and historical)	V, &E
Daily closing prices, open interest, and cash prices (latest and historical)	Р
Contract identification data	R

U.S. and Canadian Equity Securities (including Indices and Mutual Funds)	<u>Format</u>
Daily closing prices and bid evaluations and shares outstanding (latest and historical)	V
FASTPRICE exchange listed securities closing prices	&P
Exchange listed securities daily/weekly/monthly open, high, low, close, volume, and split factors (latest and historical)	H, L
Daily closing prices and bid evaluations (latest and historical), EPS, indicated annual dividend, quality ratings and rankings, and split factors	Р
Dividend rates, types, ex-/record-/pay-dates (latest and historical)	D
Indicated annual dividend data	!Υ
Shares outstanding (latest and historical)	!S
Security identification data	R
Daily issue/issuer announcements (latest six months)	!R
Issue status, quality ratings and rankings, indicated annual dividend, EPS, shares outstanding, and dividend pay code/dates	U
Changes in issue status, quality ratings and rankings, indicated annual dividend, EPS, shares outstanding and dividend pay codes/dates	!U
Quality ratings and rankings	!G
Alpha and beta	!K
Daily closing prices and bid evaluations and shares outstanding (latest and historical) and quality ratings and rankings	&E

Forward and Spot Conversion Rates	<u>Format</u>
Spot conversion and forward exchange rates (latest and historical)	!X
Conversion rates (latest and historical)	P. V

Non-North American (non-U.S. and non-Canadian) Securities	<u>Format</u>
Daily closing prices, exchange, country, market, currency of quotation, and price type (latest and historical)	V
Daily closing prices, exchange, country, and currency of quotation, and price type (latest and historical), EPS, and indicated annual dividend	Р
Daily closing prices and currency conversion codes (latest and historical)	!!
Exchange listed securities daily/weekly/monthly open, high, low, close, volume, exchange code, country code, currency code (latest and historical)	Н
Dividend data (latest and historical)	!N
Descriptive/issue information	!A
Changes in or latest descriptive/issue information	!B

## **Data Available by Security Type**

Security identification data	R
Live indicator, general/cross reference marker/SEDOL®, indicated annual dividend, EPS, currency code, shares outstanding,	
dividend pay code/date	U
Changes in live indicator, general/cross reference marker/SEDOL, indicated annual dividend, EPS, dividend pay date	!U
Daily closing prices (latest and historical), share and bond amount outstanding, and quality ratings and rankings	&E

<u>Market Indicators</u>	<u>Format</u>
Volume, new highs, new lows, advances, declines, number unchanged, upside and down-side volume, odd-lot sales (short,	
customer purchase, other), number large block composite transactions	. 1

U.S. Pass-through Securities (FHLMC, FNMA, GNMA, SBA)	<u>Format</u>
Daily bid evaluations and yields (latest and historical)	V, J, P
Daily bid evaluations (latest and historical)	&E
Security identification data	R
Descriptive and factor data (current and historical for F format)	F

<u>Namesearch</u>	<u>Format</u>	
CUSIP®, exchange, ticker, Interactive Data Instrument Identifier (IDII), SEDOL, name, rate, maturity date	N	ì

U.S. and Candian Options	<u>Format</u>
Daily closing prices	V, &E
Daily closing prices, open interest, underlying prices, closing bids, closing asks, and split factors (latest and historical)	Р
Exchange listed securities closing price - U.S. and Canadian securities only	&P
Exchange listed daily/weekly/monthly high, low, close, volume, open interest, and split factors (latest and historical)	H, L
Security identification data	R

## **Data Available by Category**

Prices and Evaluations	<u>Format</u>
Returns latest and historical closing prices and bid evaluations for global equity securities (including mutual funds and indices), corporate, government, and agency securities, options, and commodity/futures contracts, and U.S. municipal securities, pass-through securities, CMOs, and ABSs.	&E
Returns latest and historical daily/weekly/monthly closing pricing information for global exchange listed securities. It does not cover any unlisted securities; e.g., fixed income securities. Interactive Data recommends that you use the similar L format to retrieve latest pricing data, for efficiency reasons.	Н
Returns latest and historical daily/weekly/market indicator information from NYSE®, NYSE MKT, and NASDAQ® Stock Market.	1
Returns latest and historical daily bid evaluations and yields for U.S. & Canadian corporate, government, and agency securities, and U.S. Municipal securities and pass-through securities.	J
Returns latest alpha and beta calculations for U.S. & Canadian equity securities.	!K
Returns latest daily/weekly/monthly pricing information for U.S. & Canadian exchange listed securities. It does not include any unlisted securities.	L
Returns latest and historical daily portfolio analysis data (closing prices and bid evaluations and other related data) on global equity securities, options, corporate, government, and agency securities, and commodity/futures contracts, and U.S. municipal securities, pass-through securities, CMOs, and ABSs.	P
Returns latest daily closing prices for stocks, options and corporate securities trading on the NYSE, NYSE MKT, NASDAQ Stock Market, TSX <sup>TM</sup> , and the five U.S. options exchanges.	&P
Returns latest and historical daily closing prices and bid evaluations and yields on global equity securities, options, corporate, government, and agency securities, and commodity/futures contracts; and U.S. municipal securities, pass-through securities, CMOs, ABSs.	V

## **Data Available by Category**

## Corporate Actions, Dividends, Splits and Shares

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Returns latest and historical dividend information for U.S. & Canadian equity securities.	D
Returns, among other data items, shares outstanding data for global equity securities and bond amount outstanding data for	&E
global corporate, government, and agency securities.	
Returns latest and historical dividend information for non-North American equity securities and investment trusts.	!N
Returns, among other data items, indicated annual dividend data and latest twelve months' earnings for global equity securities.	P (type codes E, F, R, 9)
Returns among other data items, dividend payment frequency code, indicated annual dividend data, latest twelve months' EPS, and latest shares outstanding for U.S. & Canadian equity securities; also returns dividend payment frequency code and indicated annual dividend data for Non-North American equity securities.	U
Returns selected notification announcements such as CUSIP and company name changes, liquidations, distributions, mergers, and acquisitions, etc.	!R
Returns latest and historical shares outstanding for U.S. & Canadian equity securities, and latest shares outstanding for non- North American equity securities.	!S
Returns among other data items, changes in indicated annual dividend data, latest twelve months' EPS, and latest shares outstanding for U.S. & Canadian equity securities; also returns changes in indicated annual dividend data for non-North American equity securities.	!U
Returns, among other data items, latest and historical number of shares outstanding for U.S. & Canadian equity securities.	V (type code S)
Returns indicated annual dividend yield data for exchange listed U.S. & Canadian equity securities, including U.S. mutual funds and selected indices.	İΥ

<u>Descriptive</u> <u>Format</u>

Returns descriptive and issue information for global corporate, government, and agency securities, and U.S. municipal securities, pass-through securities, CMOs, and ABSs.	!A
Returns selected descriptive and issue data items for global corporate, government, and agency securities, and U.S. municipal securities, pass-through securities, CMOs and ABSs that can change over time.	!B
Returns call, put and mandatory sinking fund schedules for U.S. & Canadian corporate, government, and agency securities, U.S. municipal securities and non-North American fixed income securities.	!D
Returns descriptive and identifier information for global equity securities, options, corporate, government and agency securities, commodity/futures contracts, U.S. municipal securities, pass-though securities CMOs, and ABSs.	R
Returns selected notification announcements such as CUSIP and company name changes, liquidations, distributions, mergers, acquisitions, etc.	!R

FactorsFormatReturns factor and descriptive information for U.S. pass-through securities, CMOs, and ABS.FReturns descriptive information regarding projected cash flows for CMOs and ABSs. It also returns the projected cash flows.!F

<u>Quality Ratings and Rankings</u> <u>Format</u>

Returns, among other data items, the latest S&P®, Moody's® and Fitch® quality ratings for U.S. & Canadian corporate, government, and agency securities, U.S. municipal securities, CMOs, and ABSs. Also returns, among other data items, the latest S&P and Moody's quality ratings for non-North American fixed income securities.	!A
Returns, among other data items, changes in S&P and Moody's quality ratings for U.S. & Canadian corporate, government, and agency securities, U.S. municipal securities, CMOs, and ABSs. Also returns, among other data items, changes in Fitch quality ratings for U.S. & Canadian corporate, government, and agency securities and U.S. CMOs and ABSs and latest only Fitch quality ratings for U.S. municipal securities.	!В
Returns, among other data items, the latest S&P and Moody's quality ratings for global corporate, government, and agency securities, U.S. municipal securities, CMOs and ABSs.	&E
Returns the latest S&P, Moody's and Fitch quality ratings for U.S. & Canadian corporate, government, and agency securities, U.S. municipal securities, CMOs, and ABSs. Also returns the latest S&P ranking codes for U.S. & Canadian common and preferred equity securities and latest Moody's and Fitch quality ratings for U.S. & Canadian preferred equity securities.	!G
Returns, among other data items, the latest S&P and Moody's quality ratings for U.S. & Canadian corporate, government, and agency securities, U.S. municipal securities, CMOs and ABSs, and the latest S&P ranking codes for common and preferred equity securities.	Р

## **Data Available by Category**

Returns, among other data items, the latest S&P ranking codes for U.S. & Canadian common and preferred stocks, and the	U
latest Moody's preferred stock quality ratings for U.S. & Canadian preferred stocks.	
Returns, among other data items, any changes in S&P ranking codes for U.S. & Canadian common and preferred stocks	ΙU
and any changes in Moody's preferred stock quality ratings for U.S. & Canadian preferred stocks.	

Non-North American	<u>Format</u>
Returns latest and historical pricing for non-North American equity securities (including mutual funds and indices), corporate, government, and agency securities, and options; also returns shares outstanding data for non-North American equity securities; bond amount outstanding for non-North American corporate, government and agency securities; and the latest S&P and Moody's quality ratings for non-North American corporate securities.	&E (type code I)
Returns daily/weekly/monthly historical pricing information for non-North American exchange listed securities, as well as U.S. & Canadian pricing described above. It does not cover any unlisted non-North American securities.	H (type code I)
Returns latest and historical prices and currency conversion codes and rates for non-North American securities and indices.  Returns security identifier mnemonics for non-North American securities.	II N (type codes G, I, 4)
Returns latest and historical dividend information for non-North American equity securities and investment trusts.  Returns daily portfolio analysis data on non-North American equity securities, options, and corporate, government, and agency securities.	!N P (type code F)
Returns descriptive and identifier information for non-North American equity securities, options, and corporate, government, and agency securities.	R (type code I)
Returns latest shares outstanding for non-North American equity securities.	!S (type code I)
Returns issue status and other information for non-North American equity securities, investment trusts, indices, corporate, government, and agency securities, and options.	U (type code F)
Returns any changes in issue status and other information for non-North American equity securities, investment trusts, indices, corporate, government, and agency securities, and options.	!U (type code F)
Returns daily pricing data on non-North American equity securities, options, and corporate, government, and agency securities.	V (type code F)
Returns latest and historical spot conversion data and WM/Reuters Forward Rate data. The data is returned in local currency with a conversion rate to U.S. dollars, British pounds, and euro.	!X

## **Data Available by DATAFEED Format**

## Bond Descriptive and Issue Data format (!A)

Returns data for global corporate, government, and agency securities, U.S. municipal securities, pass-through securities, CMOs, and ABSs. Data includes:

## For U.S. & Canadian corporate, government, and agency securities:

-Issuer symbol, issuer name, Moody's, S&P, and Fitch quality ratings, interest payment frequency, issue features, industry group, coupon rate, maturity date, dated date, latest call date, latest call price, next call date, next call price, average life date, sinking fund activation date, first interest payment date, latest put date, latest put price, next put date, next put price, issue status code, called date, called price, called amount, called type code, premium code, redemptions options code, sinking fund code, offer price, offer date, issue status code, and reset frequency.

-Current coupon source, current coupon, current coupon reset/effective date, current determination date, current coupon source reset/effective date, next coupon reset/effective date, next determination date, and reset frequency period.

#### For U.S. municipal securities:

-Issuer symbol, issuer name, Moody's, S&P, and Fitch quality ratings, interest payment frequency, issue features, state, coupon rate, maturity date, issue or dated date, called date full only, first call date, premium for first call rate, second call date, premium for second call rate, first coupon date, first coupon rate, put date, put price, issue status code, called date, called price, called amount, called type code, premium code, redemptions options code, sinking fund code, and issue status code date.

#### For U.S. pass-through securities:

-Issuer symbol, pool number, issuer name, CUSIP, interest payment frequency, state, coupon rate, maturity date, issue date, original pool amount, latest bid yield, latest bid yield date, Macaulay duration, constant prepayment rate assumption, original weighted average coupon, original weighted average maturity, monthly prepayment fee factor, latest average weighted coupon,

latest weighted average coupon date, latest weighted average maturity, latest weighted average maturity date, latest average life, latest average life date, latest bid yield code, Macaulay duration date, Macaulay duration code, constant prepayment rate assumption date, constant prepayment rate assumption code, and latest average life code.

#### For U.S. CMOs and ABSs:

-Issuer symbol, issuer name, Moody's, S&P, and Fitch quality ratings, interest payment frequency, collateral description code, CMO type, coupon rate, floating rate coupon date, maturity date, issue date, first interest payment date, original balance, latest yield to average life, latest yield to average life date, latest Macaulay duration, latest Macaulay duration date, latest prepayment speed, latest prepayment speed date, bond interest payment delay, latest average life, latest average life date, issue price, and first factor payment date.

#### For non-North American fixed income securities:

-Identifier, issuer name, issuer description, country of quotation, Moody's and S&P quality ratings, issue currency, accrued interest basis, interest currency, payment frequency, issue features, conversion type, conversion SEDOL, conversion SEDOL currency, coupon rate, issue date, date of first coupon, maturity date, latest call date, latest call price, next call date, next call price, conversion exchange rate, conversion date, conversion rate, next put date, next put price, next sinking fund date, next sinking fund price, ISIN number, date of official ISIN number change, income general marker B, income general marker B date, nominal value/unit of quotation, nominal value/unit of quotation currency code, nominal value/unit of quotation marker, issued capital/shares in issue, issued capital/shares in issue, date of last change to issued capital/shares in issue, accrued interest calculation basis, accrued interest pricing basis.

#### Changes in the Bond Descriptive and Issue Data format (!B)

Returns any descriptive data items for global corporate, government, and agency securities, U.S. municipal securities, pass-through securities, CMOs, and ABSs that change over time. Data includes:

#### For U.S. and Canadian corporate, government, and agency securities:

- -Change in Moody's, S&P, and Fitch quality ratings and effective dates.
- -Change in reset frequency, current coupon source, current coupon, current coupon reset/effective date, current determination date, current coupon source reset/effective date, next coupon reset/effective date, next determination date, and reset frequency period.
- -Latest value of current call date, current call price, next call date, next call price, current put date, current put price, next put date, next put price, called date, called price, called amount, called type code, premium code, redemption options code, sinking fund code, issue status code, and maturity date.

#### For U.S. municipal securities:

- -Changes in Moody's and S&P quality ratings and effective dates.
- -Latest Fitch quality ratings.
- -Latest value of called date full only, first call date, premium for first call rate, second call date, premium for second call rate, put date, put price, called date, called price, called amount, called type code, premium code, redemptions options code, sinking fund code, issue status code, and issue status code date.

#### For U.S. pass-through securities:

-Latest value of coupon rate, coupon rate date, latest bid yield, latest bid yield date, Macaulay duration, Macaulay duration date, constant prepayment rate assumption, constant prepayment rate assumption date, monthly prepayment fee factor, monthly prepayment fee factor date, latest average weighted coupon, latest weighted average coupon date, latest weighted average maturity, latest weighted average mitig, latest average life, latest average life date, latest bid yield code, Macaulay duration code, constant payment rate assumption code, and latest average life code.

#### For U.S. CMOs and ABSs:

- -Change in Moody's, S&P, and Fitch quality ratings and effective dates.
- -Latest value of coupon rate, floating rate coupon date, latest yield to average life, latest yield to average life date, latest Macaulay duration, latest Macaulay duration date, latest prepayment speed, latest prepayment speed date, latest average life, latest average life date, and latest prepayment speed flag.

### For non-North American fixed income securities:

-Latest value of identifier, current call date, current call price, next call date, next call price, next put date, next put price, next sinking fund date, next sinking fund price, conversion type, conversion SEDOL, conversion SEDOL currency, conversion exchange rate, conversion date, conversion rate, issue currency, accrued interest basis, interest currency, ISIN number, date of official ISIN number change, income general marker B, income general marker B date, nominal value/unit of quotation, nominal value/unit of quotation currency code, nominal value/unit of quotation marker, issued capital/shares in issue, issued capital/shares in issue, date of last change to

issued capital/shares in issue, accrued interest calculation basis, and accrued interest pricing basis.

#### Dividend Data Format (D)

Returns latest and historical dividend (including splits) information for United States and Canadian equity issues. Data includes descriptive information, original or previous descriptive information, full dividend/split type codes (25 types are distinguished), original or previous full dividend/split type code, dividend type (nine types are distinguished), alternate dividend/split type code (23 types are distinguished), original or previous alternate dividend/split type code, entry or latest revisions date, original entry or previous revision date, ex-date, original or previous ex-date, dividend rate, original or previous dividend rate, record-date, original or previous record date, payment date, original or previous payment date, alternate rate, original or previous alternate rate, mutual fund dividend/capital gain type code, mutual fund capital gains (including short-term gains, long term gains, five year capital gains) and associated flags, cash amount of dividend, qualified dividend tax status code, original or previous qualified dividend tax status code, potentially qualified dividend amount, potentially qualified dividend amount type, tax status code, original or previous tax status code.

If your application is tracking capitalization changes (splits and stock dividends), you can specify that only dividends affecting share position be returned. If desired, you can request information on cash or income dividends only.

Dividends can be requested for a single security for a range of dates relative to the ex-date and in some cases relative to the entry or latest revision date. Although we offer access either by entry/latest revision date or by ex-date, we **strongly suggest** that you access the data by entry/latest revision date so that your customers retrieve the latest revisions/changes/updates.

#### Call, Put, and Sinking Fund Schedules format (!D)

Returns call, put, and mandatory sinking fund schedules for U.S. and Canadian corporate, government, and agency securities, U.S. municipals, and non-North American fixed income securities. Data includes:

#### For U.S. & Canadian corporate, government, and agency securities and non-North American fixed income securities:

-Identifier, call timing, call notice minimum, call price quotation method, call date, call price, put price quotation method, put code, put type, put timing, put date, put price, mandatory sinking fund amount code, issue size, mandatory sinking fund date, mandatory sinking fund price, and mandatory sinking fund amount.

#### For U.S. municipal securities:

-Identifier, call timing, call timing in part, call notice minimum, call price quotation method, call date, call price, put notification window indicator, put price quotation method, put extension flag, put code, put type, put timing, put frequency code, put provision start date, put provision ending date, put notification window maximum number of days, put notification minimum number of days, put date, put price, mandatory sinking fund amount code, issue size, mandatory sinking fund date, mandatory sinking fund price, and mandatory sinking fund amount.

#### Pricing, Shares/Bond Amount Outstanding, and Ratings format (&E)

Returns latest and historical pricing for global equity securities (including mutual funds and indices), corporate, government, and agency securities, options, commodity/futures contracts, U.S. municipal securities, pass-through securities, CMOs, and ABSs. In addition, this format returns shares outstanding data for global equity securities, bond amount outstanding data for global corporate, government, and agency securities, and S&P and Moody's quality ratings for global corporate bonds, and U.S. municipal securities, CMOs, and ABSs. Data includes:

#### For U.S. and Canadian securities:

-Security type code, nine-character CUSIP, S&P and Moody's quality ratings, indicated annual dividend, date, and footnote, close, price type, date, and comment code, outstanding shares/bond amount and date, and conversion rate.

#### For non-North American securities:

-Security type code, seven-character SEDOL, exchange, country, exchange code, pricing source, currency of quotation, price type code and note, S&P and Moody's quality ratings, indicated annual dividend, gross/net flag, and currency code, issued capital/shares in issue amount, reason for last change, last change, and date of last change, nominal value amount and marker, and conversion rate to U.S. dollar.

#### Factor and Descriptive Data format (F)

Returns latest pool description, corresponding coupon CUSIP, last factor date, pool factor, issue date, maturity date, coupon rate, comment code, factor date, current weighted average maturity, original weighted average maturity, current weighted average coupon, and original weighted average coupon for individual FNMA, GNMA, FHLMC and SBA pass-through pools. Historical data for pool factor, factor date, current weighted average maturity, and current weighted average coupon is also available. For CMOs, data returned includes latest issuer description, pool factor payment date, pool factor, maturity date, coupon rate, comment code, record date, most recent payment date, and bond interest payment delay. Historical data for pool factor is also available. You can request data for up to 20 securities of the same security type at a time for a specified date.

#### Projected Cash Flows for Collateralized Mortgage Obligations and Asset-Backed Securities format (IF)

Returns two types of data: descriptive information regarding projected cash flows for CMOs and ABSs, and the projected cash flows. Specifically, the format returns name, number of cash flows, cash flow speed, original balance, issue date, principal, interest, principal outstanding, speed type and cash flow method.

### **Quality Ratings and Ranking Information format (!G)**

Returns the latest Moody's, S&P, and Fitch quality ratings for U.S. and Canadian corporate, government, and agency securities and CMOs and ABSs. For U.S. municipals, the format returns the latest Moody's and S&P quality ratings. And, the format returns the latest S&P ranking codes for U.S. and Canadian common and preferred equity securities and the latest Moody's and Fitch quality ratings for U.S. and Canadian preferred equity securities. You can request data for up to 20 securities at a time.

#### Listed Security Data formats (H and L)

Returns latest and historical daily, weekly, or monthly open, high, low, close, and volume information for U.S. and Canadian exchange listed bonds (corporate, government, and agency) and options, and global exchange listed equity securities (composite values) and commodity/futures contracts. Data includes:

#### For U.S. & Canadian exchange listed corporate, government, and agency securities:

-Both formats return open, high, low, close, and volume.

#### For U.S. & Canadian equity securities:

-Both formats return open, high, low, close, volume, NASDAQ Market Center code, previous day close, and open price flag; the H format also returns split factors, comment codes, and expiration date, and for mutual funds, the H format returns the dividend rate.

#### For global commodity/futures contracts:

-Both formats return open, high, low, close, contract level and commodity level volumes, contract level and commodity level open interest, and cash price; the L format also returns first and last days of cash prices, exchange code, comment codes, and commodity level estimated volume.

### For U.S. & Canadian options:

-Both formats return open, high, low, close, volume, open price flag, split factors, expiration date, ask, and bid; the H format also returns open interest.

#### For non-North American equity securities:

-The H format returns open, high low, close, volume, close date, ask, bid, SEDOL, price type, exchange code, country code, high low type, bid ask type, price qualification marker, volume marker, and currency code.

The L format does not return any data for non-North American securities.

The H format returns information for a single security for one date or a range of dates. The L format returns data for up to 20 securities of the same security type at a time for a specified date.

#### Market Indicator Data format (I)

Returns latest NYSE, NYSE MKT, and NASDAQ data: volume, new highs, new lows, advances, declines, number of unchanged securities, upside volume, downside volume, odd-lot short sales, odd-lot customer purchases, odd-lot other sales, and number of large block composite transactions.

#### Non-North American Pricing Data format (!I)

Returns latest and historical closing prices, and currency conversion codes and rates for non-North American securities including equity securities, fixed dividend capital, preferential capital, loan stocks, debentures, unit trusts, insurance and property bonds, eurodollars, foreign bonds, offshore and overseas funds, and government stocks. The format also includes information for non-North American indices. You can request data for up to 20 securities at a time for a specified date.

#### Fixed Income Evaluated Prices and Yields format (J)

Returns, for U.S. and Canadian fixed income securities, the latest and historical closing price or bid evaluation and yield, comment code, price type and code, conversion rate, and date of price or evaluation if it is not as of the date requested. You can request data for up to 20 securities at a time for a specified date.

#### Alpha and Beta Data for Equity Securities format (!K)

Returns latest alpha and beta for U.S. and Canadian equity securities. You can request data for up to 20 securities at a time.

Namesearch Utility format (N)
Allows you to look up security identifiers by specifying names and characteristics. Data include:
For commodity/futures contracts:
-Commodity exchange, commodity contract symbol, commodity name, contract month, contract year, and expiration date.
For U.S. & Canadian corporate, government, and agency securities:
-CUSIP, name, coupon rate, bond type, maturity date, and evaluation/pricing type code.
For CMOs and ABSs:
-CUSIP, name, coupon rate, maturity date, and evaluation/pricing type code.
For U.S. & Canadian equity securities:
-CUSIP, exchange ticker, Interactive Data symbol, name, and evaluation/pricing type code.
For U.S. municipal securities:
-CUSIP, description, and dated date.
For U.S. & Canadian options:
-CUSIP, option exchange ticker, name, and exchange code.
For non-North American securities:
-Identifier, issuer and issue description, and evaluation/pricing type code.

#### Non-North American Dividend Data format (!N)

Returns latest and historical dividend information for non-North American securities. Specific data items include income-type, identifier, country of quotation, announced income value currency, subsection code, income tax qualification marker, optional stock dividend, gross income equivalent, announced income value, entry/amendment date, ex-date, payment date, record date, adjusted value, adjusted value currency, value marker, tax marker, dividend number, gross income equivalent currency, unadjusted tax credit or tax, unadjusted tax credit or tax currency, announcement date, and bearer stock coupon number.

If your application is tracking capitalization changes (splits and stock dividends), you can specify that only dividends affecting share positions be returned. If desired, you can request information on cash or income dividends only.

Dividends can be requested for a single security for a range of dates relative to either ex-date or entry/amendment date. Although we offer

access either by entry/amendment date or by ex-date, we **strongly suggest** that you access the data by entry/amendment date so that your customers retrieve the latest revisions/changes/updates.

### Portfolio Analysis format (P)

Returns latest and historical pricing and evaluations, and latest descriptive and related data. The evaluation/price date is returned if the price/evaluation is not as of the date requested. You can request data for up to 20 securities of the same security type at a time for a specified date. Data includes:

#### For U.S. & Canadian corporate, government, and agency securities:

-Moody's and S&P quality ratings, bid evaluation, yield, date, comment code, and type-code, and conversion rate.

#### For global commodity/futures contracts:

-Closing price, date, comment code, and evaluation/price type code, contract level open interest, cash price, and conversion rate.

#### For U.S. & Canadian equity securities:

-S&P quality ranking code, trade or bid quote or bid evaluation, date, comment code, and evaluation/price type code, conversion rate, NASDAQ Market Center code, latest 12-month earnings per share, indicated annual dividend, period split factor, and split exdate.

#### For U.S. municipal securities:

-Moody's and S&P quality rating, ask evaluation, bid evaluation, mean evaluation, mean yield, and evaluation/price type.

#### For U.S. pass-through securities:

-Bid evaluation, yield, date, and comment code.

#### For U.S. CMOs and ABSs:

-Moody's and S&P quality ratings, bid evaluation, yield, date, and comment code.

#### For U.S. & Canadian options:

-Closing price, open interest, underlying price, closing bid, closing ask, period split factor, and split ex-date.

#### For non-North American securities:

-SEDOL, new SEDOL, exchange, country, exchange code, pricing source, currency of quotation, earnings amount, date, and currency ISO code, forecast total dividend/interest, currency ISO code, and rule evaluation/price type code and note, closing price and date, earnings qualification marker, latest twelve-month earnings amount, date, currency ISO code, marker, and qualification tax marker, cum ex marker settings, income general marker C, amendment date, and current conversion rate to U.S. dollars.

#### FASTPRICE format (&P)

Provides latest daily end-of-day closing exchange prices for exchange listed U.S. and Canadian securities (except options) by about 4:30 p.m. (ET). For options, the data is available by approximately 5:00 p.m. (ET). Coverage includes U.S. stocks and bonds trading on the NYSE and NYSE MKT exchanges; NASDAQ-listed (NMS) securities (quotes, closing prices, and bid quotes); U.S. options for equity securities, currencies, debt, interest rates, and stock indices from the five major U.S. exchanges by about 5:00 p.m. (ET); and Canadian stocks (prices in U.S. dollars). You can specify up to 20 securities of the same security type at a time for a specified date.

The issues that are returned in the global files are constantly changing and are determined at the time you make the request

#### Security Identification format (R)

Returns descriptive data, based upon one identifier (a CUSIP, ticker, Interactive Data Instrument Identifier (IDII), or SEDOL). Data includes:

#### For U.S. & Canadian corporate, government, and agency securities:

-Eight and nine character CUSIP identifiers, exchange code, ticker symbol, Interactive Data Instrument Identifier (IDII), SIC code, primary issuer name, coupon rate, maturity date, and secondary issue name.

#### For U.S. municipal securities:

-Eight and nine character CUSIP identifiers, issuer description, coupon rate, maturity date, and issue supplementary description.

#### For U.S. CMOs and ABSs:

-Eight and nine character CUSIP identifiers, issuer description, coupon rate, maturity date, and issue description.

#### For global commodity/futures contracts:

-Commodities/futures contract identifier, exchange code, contract description, expiration date, and contract expiration description.

For U.S. & Canadian equity securities (including indices and mutual funds):

-Eight and nine character CUSIP identifiers, exchange code, ticker symbol, Interactive Data Instrument Identifier (IDII), SIC code,
primary issuer name, expiration date (for warrants and rights), and secondary issue name.

### For U.S. pass-through securities:

-Eight and nine character CUSIP identifiers, pool number, pool number suffix (only for GNMA pools), pool name, coupon rate, maturity date, and pool secondary description.

#### For U.S. & Canadian options:

-Eight and nine character CUSIP identifiers, CUSIP, exchange code, ticker symbol, SIC code, primary issuer name, exercise price, expiration date, and issue description.

#### For non-North American securities:

-Six-digit SEDOL, issuer name, security description, live indicator, ISO country of quotation, coupon rate, maturity date, security type code, ISIN, and date of official ISIN change.

#### Reorganization Data format (!R)

Re	eturns latest and historical (latest six months) daily issue and issuer announcements data for:			
	-CUSIP and company name changes			
	-Mergers, acquisitions, tender offers, liquidations, distributions, bankruptcies, reclassifications, exchanges, etc.			
	-Redemptions, including partial and complete calls			
	-Stocks dividends and stock splits			
	-Tender agent/depositary delivery information			

#### Shares Outstanding Data format (!S)

Provides latest and historical shares outstanding data for U.S. & Canadian equity securities. The format also returns the latest identifier, issue-capital shares in issue marker, reason for last change in issues capital shares in issue, issue capital shares in issue, date of last change in issued capital shares in issue, and last change in issued capital/shares in issue for non-North American equity securities, regardless of date entered. You can request data for up to 20 equity securities at a time.

#### Issue Status and Other Information format (U)

Returns latest data for U.S. and Canadian equity securities and non-North American equity securities, investment trusts, indices, corporate, government, and agency securities, and options. The data includes:

- -For U.S.& Canadian equity securities: identifier, issue status, S&P quality ranking code and date, Moody's preferred quality stock rating and date, dividend payment frequency code, indicated annual dividend, date, and footnote, EPS and date, shares outstanding and date, dividend pay date, and common or preferred stock code.
- -For non-North American securities: identifier, live indicator, general reference marker, cross-reference marker A, SEDOL and date, dividend payment frequency code, forecast total dividend/interest, gross/net flag, rule marker, and currency ISO code, income general marker C and date, and latest dividend pay date.

#### Changes in Issue Status and Other Information format (!U)

Returns data that change over time for U.S. & Canadian equity securities, and for non-North American equity securities, investment trusts, indices, corporate, government, and agency securities, and options. Data includes:

#### For U.S. & Canadian equity securities:

-Identifier, S&P quality ranking code and date, Moody's preferred stock quality rating and date, indicated annual dividend, date, and footnote, EPS and date, latest shares outstanding and date, latest dividend pay date, and common or preferred stock code.

#### For non-North American securities:

-Identifier, live indicator, general reference marker, cross-reference marker A, SEDOL and date, forecast total dividend/interest, gross/net flag, rule marker, and currency ISO code, income general marker C and date, and latest dividend pay date.

#### Portfolio Pricing format (V)

Provides the latest and historical pricing and evaluation data for global equities, options, corporate, government, and agency securities, commodity/ futures contracts, U.S. municipal securities, pass-through securities, CMOs and ABSs. Data includes:

#### For U.S. & Canadian corporate, government, and agency securities:

-Bid evaluation, date, comment code, and type-code, yield, comment code, conversion rate, nine-character, issue and issuer description, and currency code.

#### For global commodity/futures contracts:

-Closing price, date, comment code, evaluation/price type, and evaluation/price type code, conversion rate, and issuer and issue description.

#### For U.S.& Canadian equity securities:

-Trade or bid quote or bid evaluation, date, and comment code, shares outstanding and date, evaluation/price type code, conversion rate, NASDAQ Market Center code, ticker symbol, nine-character CUSIP, issuer and issue description, indicated annual dividend, date, and footnote, and currency code.

## For U.S. municipal securities:

-Bid evaluation, date, and comment code, yield, evaluation/price type, nine-character CUSIP, and currency code.

#### For U.S. pass-through securities:

-Bid evaluation, date, and comment code, yield and comment code, nine-character CUSIP, issue and issuer description, and currency code.

#### For U.S. CMOs and ABSs:

-Bid evaluation, date, and comment code, yield to average life, latest average life, nine-character CUSIP, issue and issuer description, and currency code.

#### For U.S. & Canadian options:

-Closing price, date, and comment code, ticker symbol, nine-character CUSIP, issue and issuer description, and currency code.

#### For non-North American securities:

-SEDOL, new SEDOL, exchange, country, exchange code, pricing source, currency of quotation, evaluation/price type code and note, closing price, date, cum ex marker settings, and current conversion rate to U.S. dollars.

The actual date of the latest closing/bid/bid evaluated price is returned as well if the price/evaluation is not as of the date requested. You can request data for up to 20 securities of the same security type at a time for a specified date.

#### Spot Conversion and Forward Exchange Rate Data format (!X)

Returns latest and historical spot conversion and forward exchange rate data. The data include spot conversion rates to U.S. dollars, British pounds, and euro and dates; ask 1-month forward rate, bid 1-month forward rate, ask 2-month forward rate, bid 2-month forward rate, bid 3-month forward rate, ask 6-month forward rate, bid 6-month forward rate, ask 12-month forward rate, and bid 12-month forward rate. You can specify up to 20 currency codes at a time for a specified date.

#### Indicated Annual Dividend Data for Equity Securities (Including Mutual Funds and Selected Indices) format (!Y)

Returns indicated dividend yield data for U.S. and Canadian exchange listed equity securities including mutual funds and selected indices. The data includes indicated annual dividend yield, indicated annual dividend yield date, latest ex-date, and latest payment date. You can specify up to 20 securities at a time for a specified date.

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