Market Data

Xpressfeed User Guide

S&P Global
Market Intelligence

Client Support

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Table of Contents

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Document Overview

What You Will Find in This Manual

The purpose of this manual is to provide a comprehensive overview of the S&P Capital IQ Market Data packages. This manual describes:

- the full selection of Market Data packages and add-ons offered by S&P Capital IQ
- the data structure of Market Data packages, including schemas, tables, and all other tangible components of the data
- the integration of Market Data with S&P Capital IQ Base Files and other S&P Capital IQ packages
- common ways of querying the Market Data packages using examples

Who Should Read This Manual

This manual is for use by Xpressfeed clients utilizing the Loader and those who are directly downloading the files from the FTP server.

The Xpressfeed Loader generates a database schema and structure and loads Market Data as a set of fully indexed tables. The Loader includes functionality to automate the daily updates of Market Data and, thus, keep your database up to date.

Non-Xpressfeed Loader clients download the files directly from the FTP server and write their own loading procedures.

Supporting Documentation

- *Xpressfeed Loader User Guide* – This user guide outlines the features and capabilities of the Xpressfeed Loader.
- *EDX FTP File Delivery Technical Guide for Xpressfeed* – This document provides information for clients who download S&P Capital IQ data files directly from the FTP server and write their own loading procedures.
- *EDX File Format Spreadsheets* – These spreadsheets contain details for each file delivered in your subscription including: full and change file zip file prefixes, individual text file names, and information for each column in the file (e.g., column names, column data types, field character length, field order, whether the column is nullable, and primary keys).

- *Expected Xpressfeed (EDX FTP) Delivery Schedules* – These schedules provide expected full and change file delivery times for Index data packages.
- *S&P Capital IQ Base Files User Guide* – This guide describes the type of data included in the Base files, the data structure of the Base Files and all other tangible components of the data, as well as integration of Base Files with other S&P Capital IQ data sets.

Client Support

S&P Capital IQ is committed to quality products and customer service. Any time you have questions about your Xpressfeed data, you will find our Client Support Center to be an important resource. Staffed by a team of dedicated professionals, our Client Support Center is available to assist you at clientsupport@standardandpoors.com.

Please refer to the Client Support contact information provided at the beginning of this document.

Executive Summary

The S&P Capital IQ Market Data set provides daily pricing history for equity securities[1], and represents global data covering approximately 188 exchanges in 93 countries. Pricing data includes open, close, high, low, volume, adjustment factor, shares outstanding, volume-weighted average price[2], and other data points. All pricing data is given in the traded currency and is split-adjusted. There are three Price Equity packages available based on the desired history:

- **Recent History Intraday** – January 1st 2000 to current
- **1990s Intraday** – from January 1st 1990 to December 31st 1999
- **Extended History Intraday** – from January 1st 1968 to December 31st 1989

To supplement the pricing data, Market Data provides three add-on packages:

- The **Splits** package contains a time series of all stock splits in a security's history, including the rate of the split, associated dates (exdate, paydate, etc.) and the split adjustment factor.
- The **Dividends** package provides all dividends paid in a security's history according to date and type.
- The **Capitalization** package provides the pre-calculated market cap for a company, including limited partner shares, the total enterprise value, and the non-traded shares outstanding.

All S&P Capital IQ Market Data is sourced from Interactive Data Corporation (IDC). More information on IDC is available on their website.

An S&P Capital IQ-sourced **Indicated Annual Dividend** table is also available separately from the Market Data packages. It provides annual dividend amounts for primary trading items and can be linked to the pricing data to calculate dividend yield. For more details, see Appendix C: Indicated Annual Dividend Table.

[1] It should be noted that the Market Data set does not include pricing data for bonds or other fixed-income securities, nor does it include index pricing.
[2] Volume weighted average pricing is available for North American securities

Updates to Market Data

Market Data change files are delivered in various frequencies as indicated below. A full data package is available weekly.

Package	Update Frequency	Regional Market File Delivery Sequence	Full Update
Price Equity	5x Daily	.01 file - Asia .02 file - Mid East/Africa .03 file - Europe .04 file - North America .05 file - Other	Weekly
Dividends	Daily		Weekly
Splits	Daily		Weekly
Capitalization	Daily		Weekly

For specific file delivery times, please refer to the *Expected Xpressfeed File Delivery Schedule* available on the S&P Capital IQ Support Site.

Important Things to Know About the Data

Linking to the Base Equity Security (IDCEquitySecurity) Package

Please note that the Prices Intraday 1990s (PriceEquity1990sIntraday), Prices Intraday Extended History (PriceEquityExtendedHistoryIntraday), and the Prices Intraday Recent History (PriceEquityRecentHistoryIntraday) packages are delivered multiple times per day, while the IDCEquitySecurity package is delivered once per day. When a new security/trading item enters our universe, S&P Global Market Intelligence delivers it in the Price Equity feed as soon as it is available, which may be before the IDCEquitySecurity package is delivered. This may result in security/trading items which do not match between the two packages.

For details on linking the two packages, see Linking from Symbol/Helper Files to Market Data.

Market Data and Trading Items

Pricing, Dividends, and Splits main tables all contain the *tradingItemId* for querying a given set of data. A trading item is a security traded on a specific exchange. One company can have many securities, and individual securities can be traded on several exchanges. The trading item represents this security and exchange combination, and is used as the basis for records in the Market Data tables (excluding the Capitalization add-on, which uses *companyId*).

For more information, see Linking from S&P Capital IQ Base Files to Market Data.

Currency and Currency Changes

All pricing data is given in the latest currency associated with the trading item. Dividend amounts are given in the currency designated by their particular *currencyId* (see the **ciqDividend** and **ciqDividendCache** tables). The divAmount is translated from the dividend reporting currency to the currency the security trades in. When the dividendDate > current date, the divAmount is untranslated and reflects the reporting currency. The divAmount will be translated into the pricing currency on the dividendDate (ex-date).

For **Capitalization** data, the market cap and total enterprise values are given in millions of the company's primary trading item currency (for an example on how to determine the currency for these figures, see this sample query).

If a company's primary currency changes, the appropriate pricing and capitalization data is recalculated for the entire history to match the new currency.

To determine the currency of pricing, dividend or market data, see Linking Market Data Tables to Currency and Exchange Tables.

Non-Trading Days for Pricing and Capitalization data

For **Capitalization** data, if a trading item is not traded on a given day, values are carried forward to fill in the gap—records are created which reflect the last known capitalization values. So for instance, as a result of September 11th 2001, markets were closed for several days, and capitalization data records were created on those days that reflect the last calculated values.

For **Pricing** data, if a trading item is not traded on a given day, no values are carried forward to fill in the gap. In the example of September 11th 2001, you would see no records available for pricing on the days the markets were closed.

Database Schemas

The S&P Capital IQ Market database schema is a highly normalized structure organized into logical groups represented by a single database table (or text file). Primary keys appear in bold font in the database tables and are designated with the initials **PK**.

All schemas reflect Xpressfeed Loader table names. The associated file name for Non-Xpressfeed Loader clients is given in parentheses beneath each table.

Price Equity Schema

The Price Equity data comes in three different packages based on history: **Recent History Intraday, 1990s Intraday,** and **Extended History Intraday**. All three packages share the following table schema:

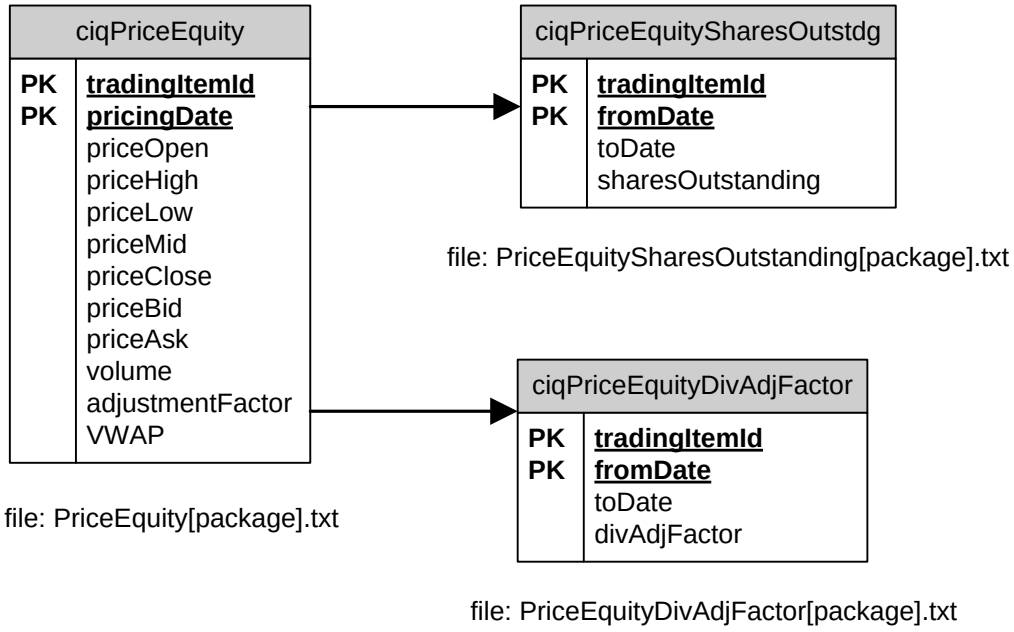

Figure 1. S&P Capital IQ Price Equity Database Schema

More Information

For a detailed description of the tables and fields in the Price Equity schema, refer to the Price Equity section of Table Descriptions.

Dividends Schema

The **Dividends** package provides information on particular dividend payments and a time-series of dividend data for securities based on a *tradingItemId* and *dividendDate*. The Dividend data can be used in conjunction with the Price Equity data to calculate equity yields and returns.

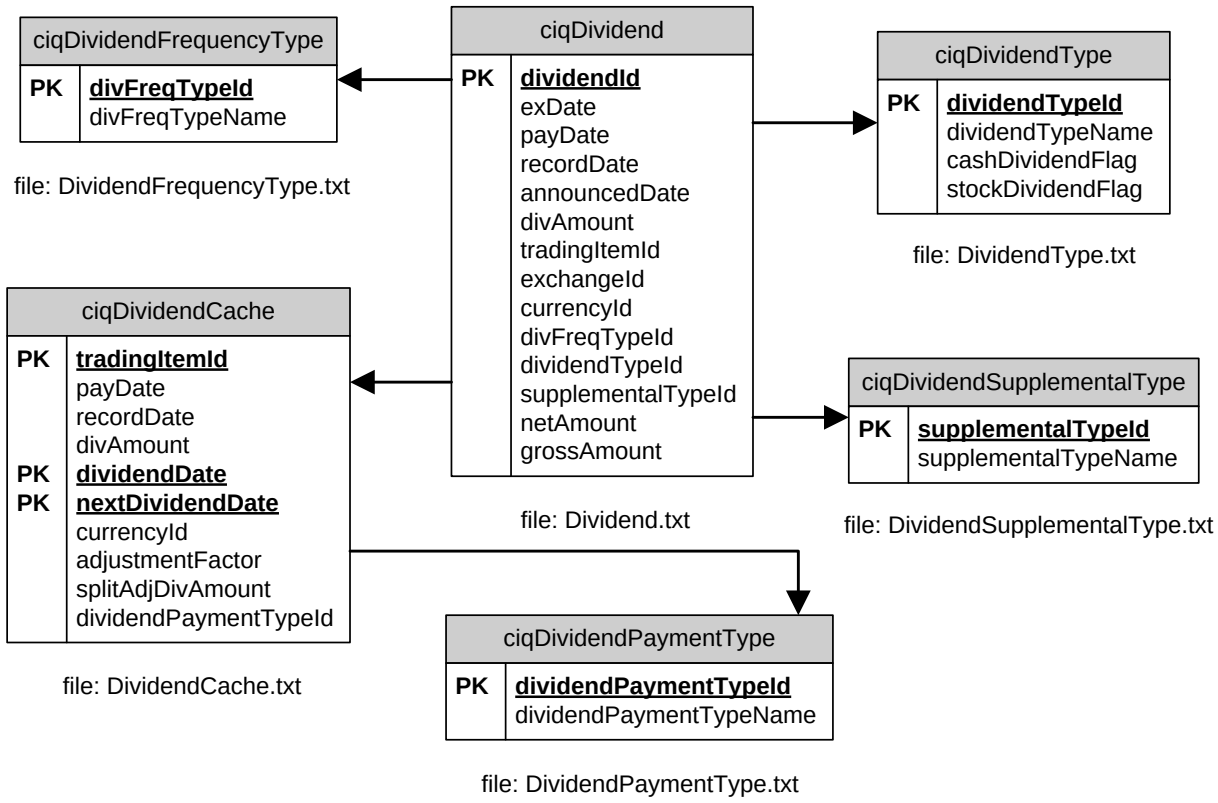

Figure 2. S&P Capital IQ Dividends Database Schema

More Information

For a detailed description of the tables and fields in the Dividends schema, refer to the Dividends section of Table Descriptions.

Splits Schema

The **Splits** package provides information on individual splits and a time-series of stock splits data based on a *tradingItemId* and *splitDate*.

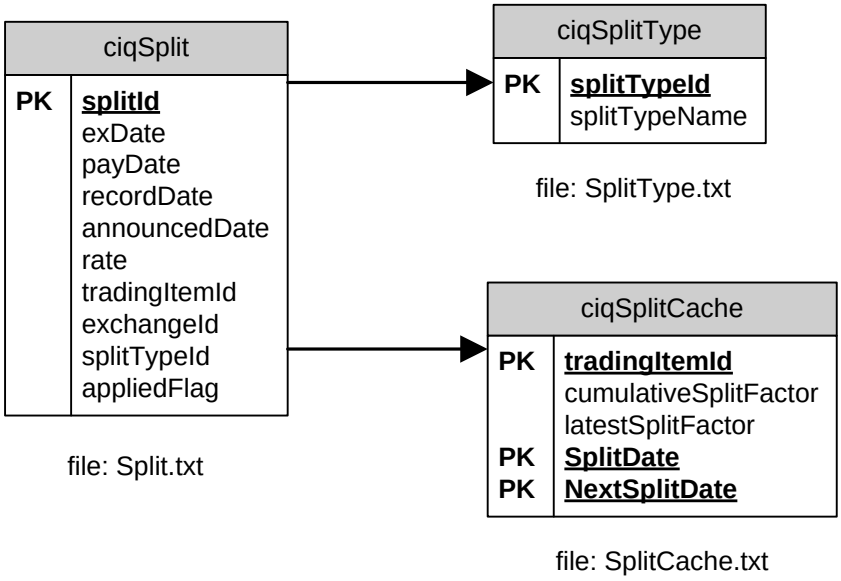

Figure 3. S&P Capital IQ Splits Database Schema

More Information

For a detailed description of the tables and fields in the Splits schema, refer to the Splits section of Table Descriptions.

Capitalization Schema

The **Capitalization** package provides a daily history of company level market capitalization, including limited partner shares, and total enterprise value. In addition it provides a time series of the non-traded shares outstanding of a company.

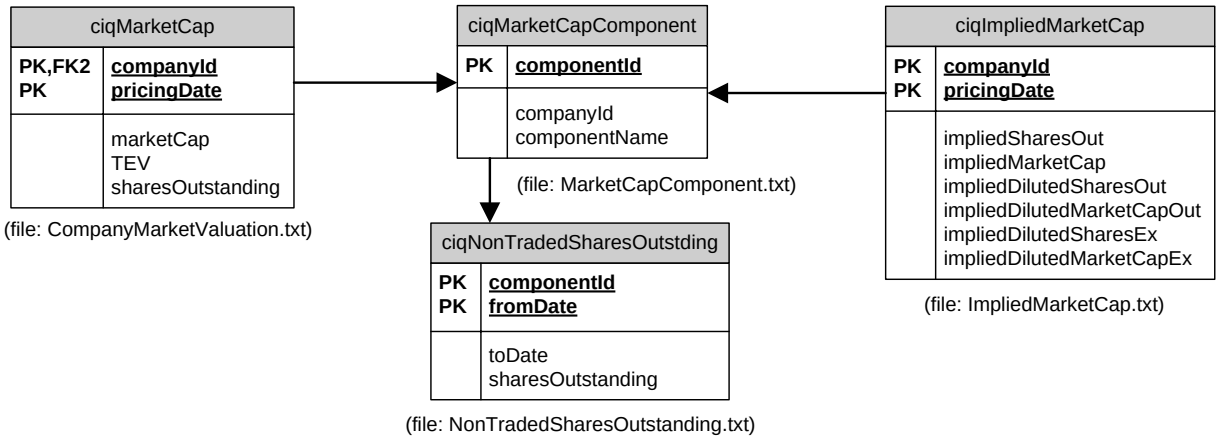

Figure 4. S&P Capital IQ Capitalization Database Schema

More Information

For a detailed description of the tables and fields in the Capitalization schema, refer the Capitalization section of Table Descriptions.

Linking from S&P Capital IQ Base Files to Market Data

The base files are the required foundation for all other S&P Capital IQ data packages. The base files provide a base set of companies, securities, exchange rates, symbols and data items from which to link across all other S&P Capital IQ data sets.

Linking Basic Company to Price Equity, Dividends, and Splits

The Basic Company File links indirectly to the Pricing, Dividends, and Splits data through the *tradingItemId*. Pricing, Dividends, or Splits main tables all contain the *tradingItemId* for querying a given set of data based on a trading item. A trading item is a security traded on a specific exchange. One company can have many securities, and individual securities can be traded on several exchanges. The trading item represents this security and exchange combination, and is used as the basis for records in the Market Data tables (excluding the Capitalization add-on, which uses *companyId*).

To link from Basic Company to Market Data, you can query using the *companyId* in the **ciqCompany** table to link to the *securityId*(s) in the **ciqSecurity** table, then link to the *tradingItemId*(s) in the **ciqTradingItem** table. Once specific *tradingItemId(s)* are found, you can link to the **ciqPriceEquity, ciqDividend,** and **ciqSplit** tables in Market Data. This relationship is shown below:

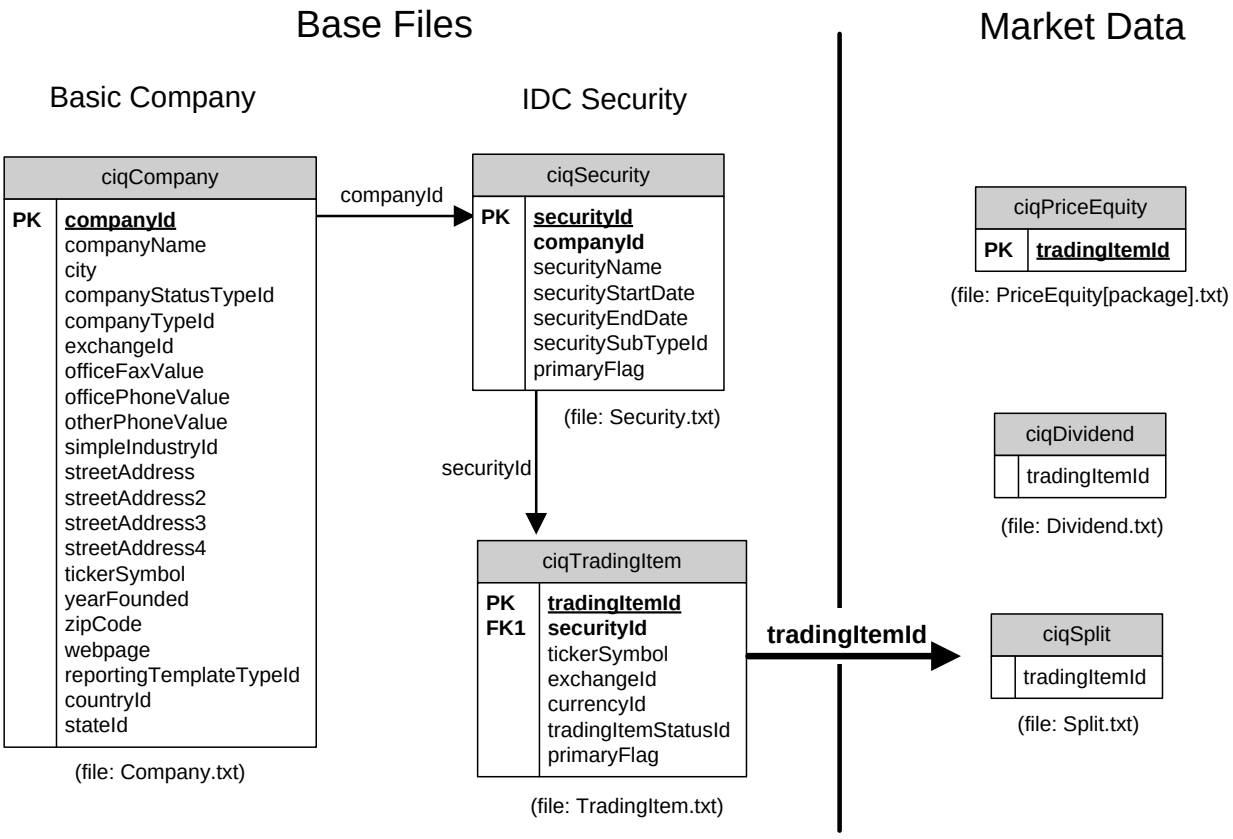

Figure 5. Schema Showing the Basic Company File linking to Price Equity, Dividends and Splits

Linking Basic Company to Capitalization

The Basic Company file links directly to the Capitalization package directly through the *companyId*, as shown in the diagram below:

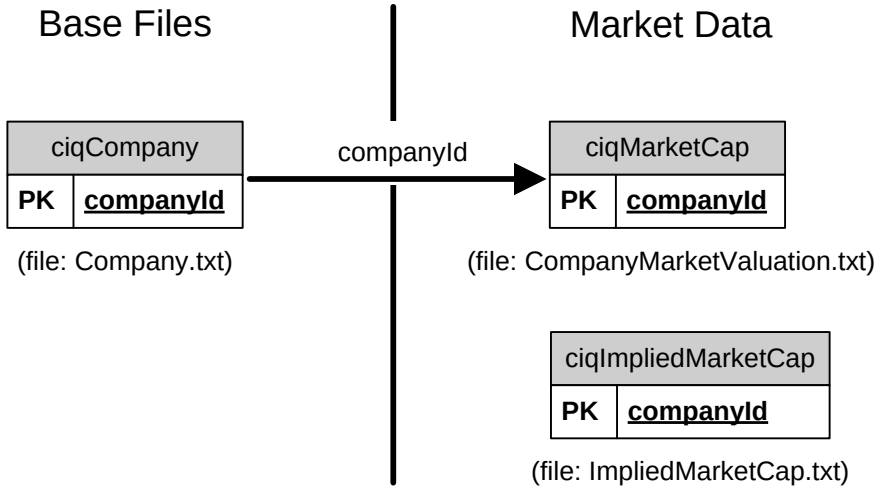

Figure 6. Schema Showing How S&P Capital IQ Base Files link to Capitalization data

Linking Market Data Tables to Currency and Exchange Tables

The Base Files contain Currency and Exchange tables for determining the following: the exchange the trading item trades on (found in **ciqExchange**), the currency of pricing, dividend and capitalization values (found in **ciqCurrency**), and the exchange rate to U.S. dollars for a given date (found in **ciqExchangeRate**).The following schemas describe how to link to these tables from Market Data.

The **ciqPriceEquity** table presents pricing data in the currency of the associated trading item, and can be linked to Currency and Exchange tables using the *tradingItemId*:

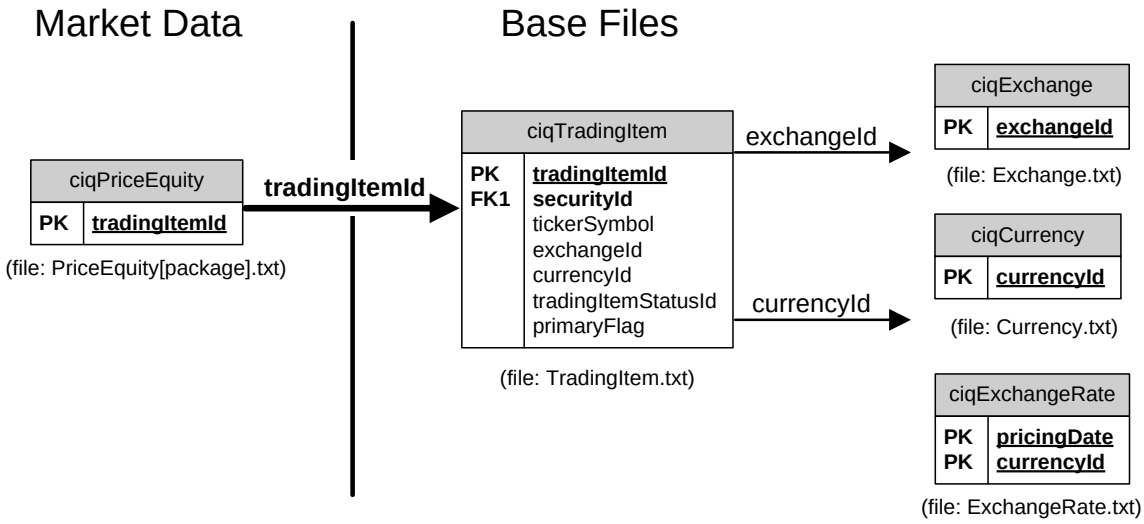

Figure 7. Schema Showing How Price Equity table Links Currency and Exchange Base Files

Several Dividend and Split tables contain the *currencyId* and *exchangeId* fields for linking to the Currency and Exchange tables directly. The schema below shows Dividend and Split tables that have direct links:

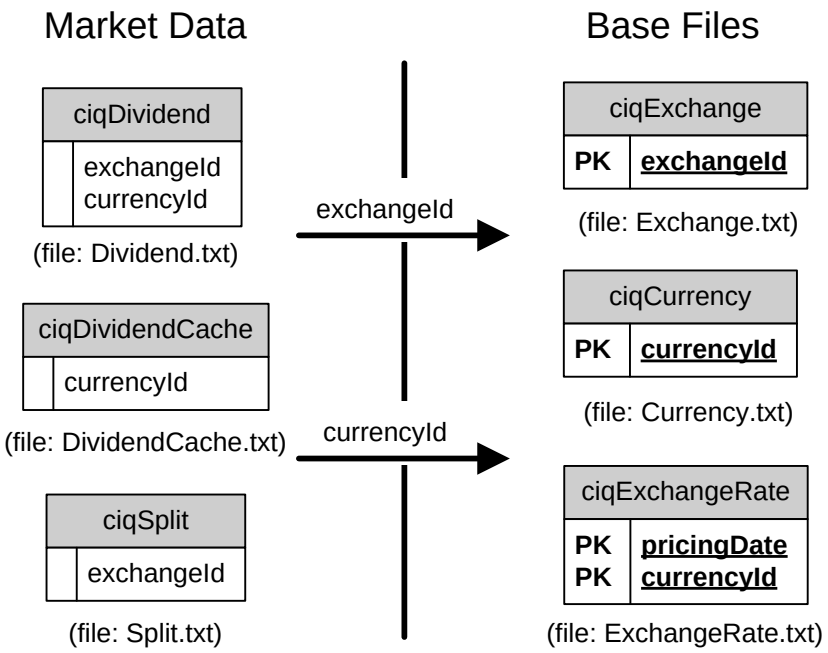

Figure 8. Schema Showing How Dividend and Split tables Links to Currency and Exchange Base Files

Note that when linking the **ciqDividend** and **ciqDividendCache** tables to **ciqCurrency**, the *currencyId* in those tables should be used (as shown in Figure 8) rather than the *currencyId* of the associated trading item. The dividend *currencyId* may differ from the *currencyId* of the associated trading item, as a company can give out a dividend in a different currency than the one the security is traded in.

To determine the currency of market cap and TEV figures, the **ciqMarketCap** table and the **ciqImpliedMarketCap** table link to Currency and Exchange tables indirectly via the *companyId*. Because the market cap, implied market cap, and total enterprise values are calculated in the currency of the primary trading item for a company, the link is made through the **ciqSecurity** table to derive the primary trading item in the **ciqTradingItem** table:

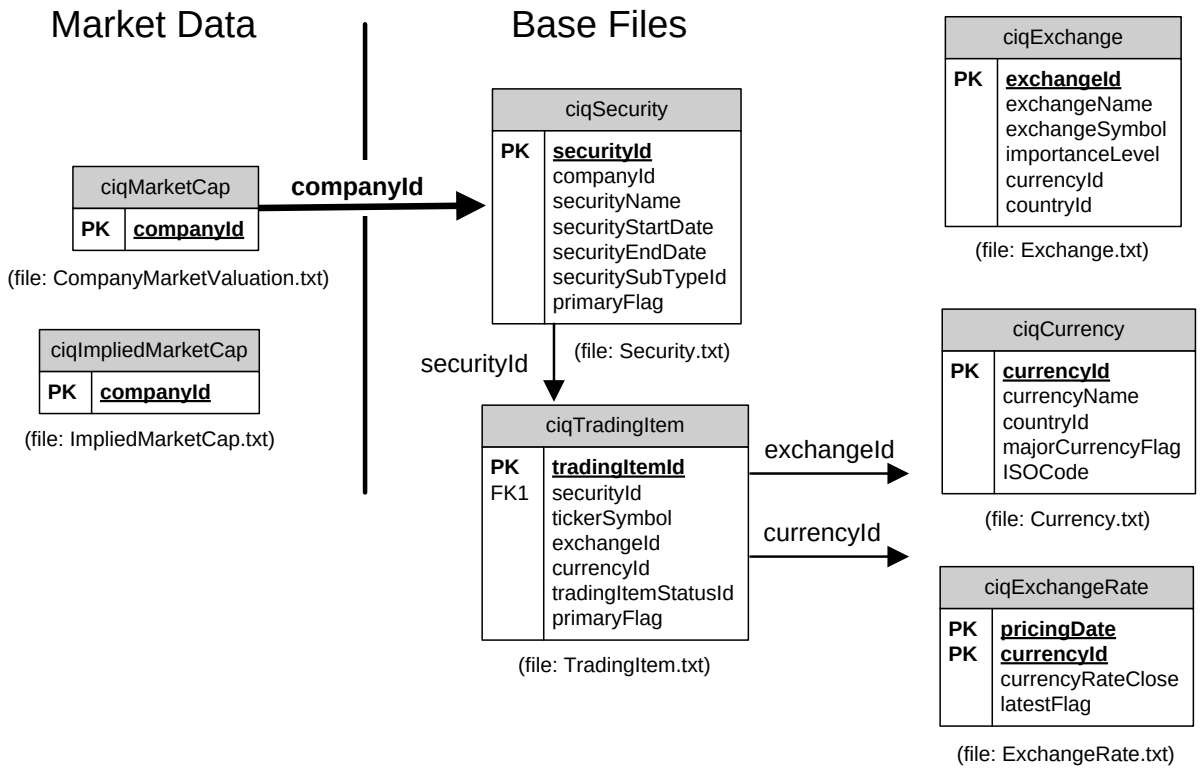

Figure 9. Schema Showing How the Market Cap and the Implied Market Cap Tables Link to Currency and Exchange Base Files

Note that in the link between **ciqSecurity** and **ciqTradingItem**, both *primaryFlag*s must equal 1 to find the primary trading item. For an example query of how this linking works, see this sample query.

Linking from Symbol/Helper Files to Market Data

The S&P Capital IQ Symbol/Helper files provide a way to look up companies, securities and trading items through common symbols such as ticker, CUSIP, SEDOL, and GVKEY. Any of the three Symbol/Helper tables can be linked to the Price Equity, Dividends or Splits tables via the *objectId*. Depending on the *symbolTypeId* in the Symbol/Helper tables, the *objectId* can be a *tradingItemId*, which would link to the Market Data.

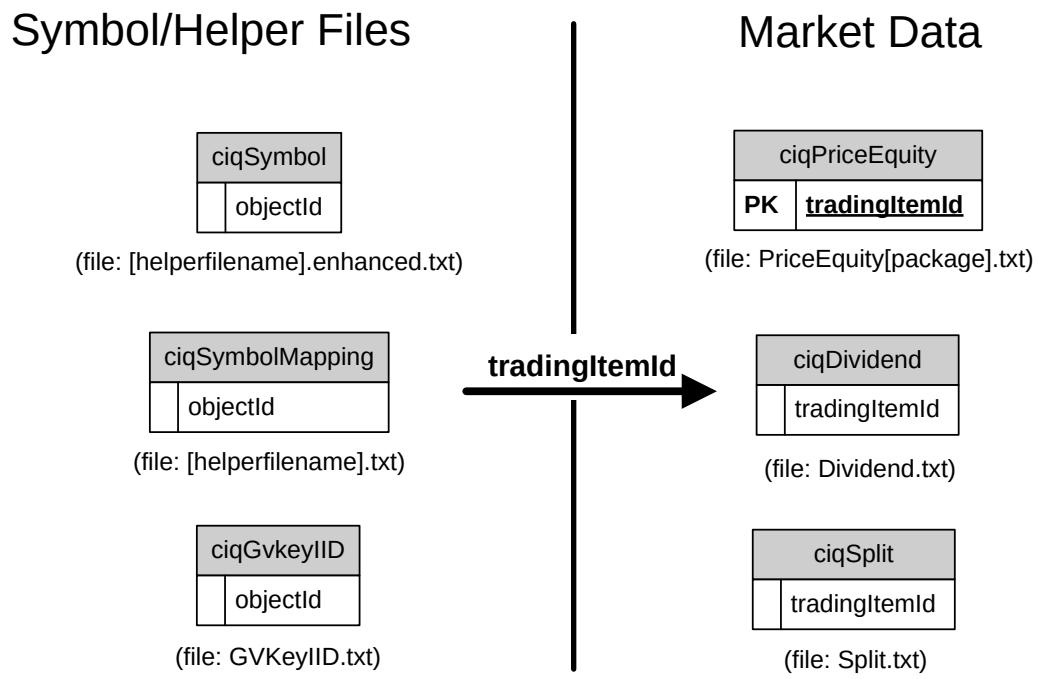

Figure 9. Schema Showing How the Symbol/Helper Files Link to Market Data tables

For an example query that shows the full linking of tables when looking up Market Data via the Symbol/Helper files, refer to the first query in Appendix D.

More Information

For a more detailed discussion of the S&P Capital IQ Base files, please refer to the *S&P Capital IQ Base Files User Guide*.

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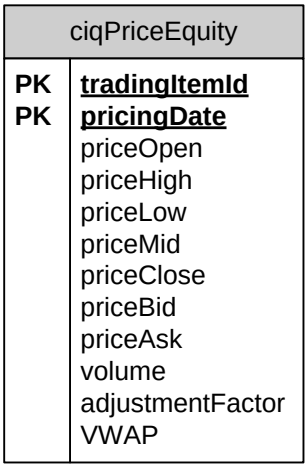
Table Descriptions

Following is a list that provides a brief description of each table, and then a detailed description of each field in each table.

Price Equity

Price Equity Table

The **Price Equity** table provides a time-series of pricing data by *tradingItemId* and *pricingDate*. Pricing data is given in the currency of the associated trading item, and is split-adjusted through history (figures can be adjusted back to the actual historical price using the *adjustmentFactor*).



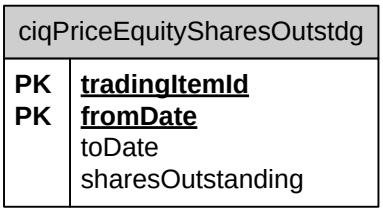
file: PriceEquity[package].txt

Column Name	Data Type	Description
tradingItemId	int	Unique identifier defining a company security traded on a specific exchange. It links to the **ciqTradingItem** table within the Base Files.
pricingDate	datetime	Market date of the pricing data
priceOpen	numeric(28,6)	Price of the trading item at market open
priceHigh	numeric(28,6)	Highest price of the trading item during the market day

Column Name	Data Type	Description
priceLow	numeric(28,6)	Lowest price of the trading item during the market day
priceMid	numeric(28,6)	Mid-point (or average) between the closing buy and ask prices
priceClose	numeric(28,6)	Price of the trading item at market close
priceBId	numeric(28,6)	Bidding price at market close
priceAsk	numeric(28,6)	Asking price at market close
volume	bigint	Volume of shares traded during the trading day
adjustmentFactor	numeric(19,10)	Cumulative adjustment factor accounting for splits and secondary offerings, but not including dividends. This can be used to calculate historical price, as the split adjustment factor is already applied to pricing data. **Example:** priceClose x adjustmentFactor = historical priceClose without splits
VWAP	numeric(28,6)	Volume Weighted Average Price: the average price throughout the day, adjusted for volume of shares traded. This figure is only available for North American securities.

Price Equity Shares Outstanding Table

The **Price Equity Shares Outstanding** table gives the number of shares outstanding of a trading item using a *fromDate* and *toDate* time series.

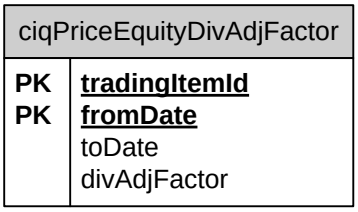


file: PriceEquitySharesOutstanding[package].txt

Column Name	Data Type	Description
tradingItemId	int	Unique identifier defining a company security traded on a specific exchange. It links to the **ciqTradingItem** table within the Base Files.
fromDate	datetime	The date from which this security's number of shares was outstanding
toDate	datetime	The date to which this security's number of shares was outstanding. If the *toDate* is null, this security's number of shares outstanding is still current.
sharesOutstanding	bigint	Number of shares outstanding for the trading item (between the *fromDate* and *toDate)*.

Price Equity Dividend Adjustment Factor Table

The **Price Equity Dividend Adjustment Factor** table provides a time-series of cumulative dividend adjustment factors based on a *fromDate* and *toDate*. The *divAdjFactor* can be multiplied by pricing data to create a pricing series adjusted for the effects of dividends in order to calculate total return.



file: PriceEquityDivAdjFactor[package].txt

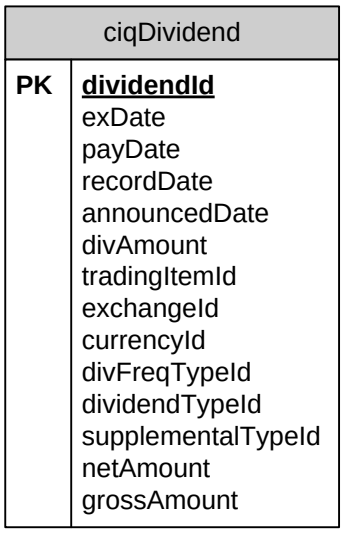
Column Name	Data Type	Comments
tradingItemId	int	Unique identifier defining a company security traded on a specific exchange. It links to the **ciqTradingItem** table within the Base Files.
fromDate	datetime	The date from which the dividend adjustment factor is applicable
toDate	datetime	The date to which the dividend adjustment factor is applicable. (If the *toDate* is null, the dividend adjustment factor is current).
divAdjFactor	numeric(19,10)	The dividend adjustment factor that applies to the trading item between the *fromDate* and *toDate*. This can be multiplied by pricing data to create a pricing series adjusted for the effects of dividends in order to calculate total return. For details with an example, see Appendix B.

Dividends

Dividend Table

The Dividend table provides information on individual dividends. This data includes all relevant dates, dividend amounts and a dividend type. All dividend amounts are given in the currency indicated by the *currencyId*.

Note: Historical dividend data is provided on an un-adjusted basis.



file: Dividend.txt

Column Name	Data Type	Description
dividendId	int	Unique identifier for each dividend record
exDate	datetime	Date prior to which the stock must be owned in order to be eligible to receive the associated dividend.
payDate	datetime	Date the company pays the dividend
recordDate	datetime	The date when you must be on the company's books as a shareholder to receive the dividend. This is the second business day after the ex-date.
announcedDate	datetime	Date the dividend was announced to investors
divAmount	numeric(19,10)	Per share dividend amount, given in currency indicated by the *currencyId.* Note that companies may give more than one dividend on the same day.
tradingItemId	int	Unique identifier defining a company security traded on a specific exchange. It links to the **ciqTradingItem** table within the Base Files.
exchangeId	int	Unique identifier of the exchange the associated trading item trades on. The *exchangeId* can be linked to the **ciqExchange** table in the Base Files.

Column Name	Data Type	Description
currencyId	smallint	Unique identifier of the currency the dividend is given in. The currencyId links to the Base Files in two ways: to the **ciqCurrency** table to determine the currency, and to the **ciqExchangeRate** table to determine the exchange rate for dividend amounts. Note that this dividend *currencyId* may differ from the currency associated with the *tradingItemId,* as a company can give out a dividend in a different currency than the one the security is traded in.
divFreqTypeId	tinyint	Reference identifier for the frequency type of the dividend, which links to the **ciqDividendFrequencyType** table. Referenced values include: Quarterly, Annual, Semi-Annual, Bonus Payment, etc.
dividendTypeId	tinyint	Reference identifier for the type of the dividend, which links to the **ciqDividendType** table
supplementalTypeId	tinyint	Reference identifier for the supplemental type of the dividend, which links to the **ciqDividendSupplementalType** table
netAmount	numeric(19,10)	Dividend amount net of tax withholding
grossAmount	numeric(19,10)	Gross dividend amount

Dividend Type Table

The **Dividend Type** table describes the type of dividend given, and whether it was given in cash or stock. All dividends have a dividend type.

ciqDividendType	
PK	**dividendTypeId** dividendTypeName cashDividendFlag stockDividendFlag

file: DividendType.txt

Column Name	Data Type	Description
dividendTypeId	tinyint	Unique identifier for the type of the dividend
dividendTypeName	varchar(200)	Textual description of the dividend type. Examples include the following: 11 – Stock dividend 13 – Issues called 20 – Stock dividend in stock of another issue or company (this is a catchall code for spinoffs, mergers, etc.) 33 – Scrip Cash Dividend 6 – U.S. withholdings income tax not required from non-residents
cashDividendFlag	bit	Flag indicating the dividend is a cash dividend. A value of 1 indicates it is a cash dividend.
stockDividendFlag	bit	Flag indicating the dividend is a stock dividend. A value of 1 indicates it is a stock dividend.

Dividend Supplemental Type Table

The **Dividend Supplemental Type** table provides additional information on the dividend type. Not all dividends have a supplemental dividend type.

ciqDividendSupplementalType	
PK	**supplementalTypeId** supplementalTypeName

file: DividendSupplementalType.txt

Column Name	Data Type	Comments
supplementalTypeId	tinyint	Unique identifier for the supplemental type of the dividend
supplementalTypeName	varchar(100)	Textual description of the dividend type. Examples include the following: 1 – Regular cash dividend 2 – Initial dividend short period 3 – Initial dividend long period 4 – Principal payment 5 – Dividend in arrears

Dividend Frequency Type Table

The **Dividend Frequency Type** table provides the frequency descriptor of the dividend (whether it is monthly, quarterly, annual, etc.).

ciqDividendFrequencyType	
PK	**divFreqTypeId** divFreqTypeName

file: DividendFrequencyType.txt

Column Name	Data Type	Description
divFreqTypeId	tinyint	Unique identifier for the dividend frequency type
divFreqTypeName	varchar(100)	Textual description of the dividend frequency type. The following are a list of all applicable frequency types:

divFreqTypeId	divFreqTypeName
1	Monthly
2	Quarterly
3	Semi-Annual
4	Annual
5	Interim Payment
6	Final Payment
7	Bonus Payment
8	Other Dividend
31	Z - Special payment

Dividend Cache Table

The **Dividend Cache** table provides a time series of dividend amounts and split-adjusted dividend amounts using a *dividendDate* and a *nextDividendDate* (similar to a fromDate and toDate). It should be noted that the *divAmount* in this table is a summed amount for a given day: some companies may pay more than one dividend on a given day (for example, a regular dividend and a special dividend), and these dividends are summed in this field. A *dividendPaymentTypeId* of **5 – Multiple Dividends** indicates there was more than one dividend paid on the same day.

ciqDividendCache	
PK	**tradingItemId**
	payDate
	recordDate
	divAmount
PK	**dividendDate**
PK	**nextDividendDate**
	currencyId
	adjustmentFactor
	splitAdjDivAmount
	dividendPaymentTypeId

file: DividendCache.txt

Column Name	Data Type	Description
tradingItemId	int	Unique identifier defining a company security traded on a specific exchange. It links to the **ciqTradingItem** table within the Base Files.
dividendDate	datetime	Ex-date of the dividend (first date the security trades without the dividend). This acts like a fromDate in the time series to indicate when the adjustment factor applies.
nextDividendDate	datetime	Date of the next dividend. This acts like a toDate in the time series to indicate when the adjustment factor applies. If there is no next dividend date, the date **6/5/2079** is given.
payDate	datetime	Date the company pays the dividend
recordDate	datetime	Date the company determines who will receive the dividend
divAmount	numeric(18,5)	Per share dividend amount, summed for a given day: some companies may give out more than one dividend in a day, and these dividends are summed in this field. Amount is given in the currency indicated by the *currencyId.*

Column Name	Data Type	Description
currencyId	smallint	Unique identifier to reflect the currency of the dividend. The divAmount is translated from the dividend reporting currency to the currency the security trades in. When the dividendDate > current date, the divAmount is untranslated and reflects the reporting currency. The divAmount will be translated into the pricing currency on the dividendDate (ex-date).
adjustmentFactor	numeric(19,10)	The cumulative split adjustment factor that that can be applied to the dividend amount. Within the table, the following applies: **divAmount / adjustmentFactor = splitAdjDivAmount**
splitAdjDivAmount	numeric(18,5)	The dividend amount after the split adjustment factor has been applied.
dividendPaymentTypeId	tinyint	Unique identifier for the dividend payment type

Dividend Payment Type

The **Dividend Payment Type** provides a textual description of the dividend payment type.

ciqDividendPaymentType	
PK	**dividendPaymentTypeId** dividendPaymentTypeName

file: DividendPaymentType.txt

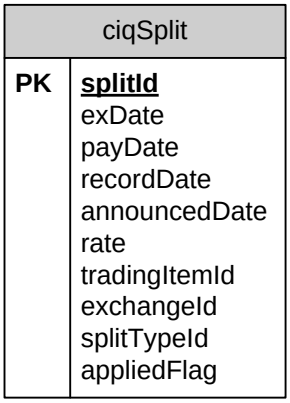
Column Name	Data Type	Description
dividendPaymentTypeId	int	Unique identifier for the dividend payment type
dividendPaymentTypeName	varchar(200)	Textual description of the dividend payment type which has the following values: 1 Cash 2 Stock 3 Spin-off 4 Rights 5 Multiple Dividends *

* Multiple Dividends indicates that more than one dividend was paid on the same day. Note that multiple dividends may not be reflected as separate records in the ciqDividend table, though their nature may be indicated in the ciqDividendType table.

Splits

Split Table

The **Split** table provides information on a particular split.



file: Split.txt

Column Name	Data Type	Description
splitId	int	Unique identifier for each split
exDate	datetime	First date the security trades with the split
payDate	datetime	Date the company factors the split into stockholder shares
recordDate	datetime	Date the company determines stockholder shares to factor in the split to
announcedDate	datetime	Date the split was announced to investors
rate	numeric(19,10)	Split rate/factor
tradingItemId	int	Unique identifier defining a company security traded on a specific exchange. It links to the **ciqTradingItem** table within the Base Files.
exchangeId	int	Unique identifier of the exchange the associated trading item trades on. The *exchangeId* can be linked to the **ciqExchange** table in the Base Files.
splitTypeId	int	Reference identifier for the split type, which links to the **ciqSplitType** table
appliedFlag	bit	**1** means the split adjustment factor has been applied to pricing, while **0** means the split is a future split the company has announced and therefore has not yet been applied to pricing.

Split Type Table

The **Split Type** table provides a descriptor of the type of split.

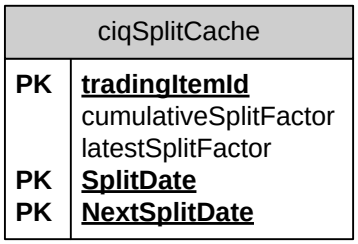
ciqSplitType	
PK	**splitTypeId** splitTypeName

file: SplitType.txt

Column Name	Data Type	Description
splitTypeId	int	Unique identifier for the split type
splitTypeName	varchar(200)	Textual description of the split type. Examples include the following: 2 – Less Canadian taxes presently undetermined 3 – Less foreign taxes other than Canadian 9 – Dividend rate presently unknown 10 – Foreign currency other than Canadian 11 – Stock dividend 12 – Stock split

Split Cache Table

The **Split Cache** table provides a time-series of split adjustment factors using a SplitDate and a NextSplitDate (similar to a fromDate and toDate).



file: SplitCache.txt

Column Name	Data Type	Description
tradingItemId	int	Unique identifier defining a company security traded on a specific exchange. It links to the **ciqTradingItem** table within the Base Files.
SplitDate	datetime	Ex-date of the split (first date the security trades after having been split). This acts like a fromDate in the time series to indicate when the split factor applies.
NextSplitDate	datetime	Date of the next split. This acts like a toDate in the time series to indicate when the split factor applies. If there is no next split date, the date **6/5/2079** is given.
cumulativeSplitFactor	numeric(18,5)	Cumulative split factor that applies from the *SplitDate* to the *NextSplitDate*
latestSplitFactor	numeric(18,5)	Split factor applied on the *SplitDate*

Capitalization

Market Cap Table

The **Market Cap** table provides the market cap and total enterprise value of a company based on *companyId* and *pricingDate*.

ciqMarketCap	
PK,FK2 PK	**companyId pricingDate**
	marketCap TEV sharesOutstanding

file: CompanyMarketValutation.txt

Column Name	Data Type	Description
companyId	int	Unique identifier which links to the **ciqCompany** table in the Base Files.
pricingDate	smalldatetime	Pricing date from which to derive the market cap
marketCap	numeric(38,6)	Market capitalization figure, given in millions of the currency of the primary trading item. This figure is calculated using Common Stock.
TEV	numeric(38,6)	Total Enterprise Value, in millions of the currency of the primary trading item.
sharesOutstanding	bigint	Number of traded shares outstanding *Note:* History goes back to 1970.

Market Cap and Total Enterprise Value Calculations

Market Cap Calculation

$$\left(\sum \begin{array}{l}\text{For each traded Security}\\ \text{of a company, the sum of:}\\ \text{The Primary Trading Item}\\ \text{Price of the Security } \mathbf{x}\\ \text{Security Shares Outstanding}\end{array} \right) + \begin{array}{l}\text{Primary Trading Item Price (company level) } \mathbf{x}\\ \text{Non-Traded Shares Outstanding}\end{array}$$

As an example of this calculation, a company has 3 securities: A, B, C.
A and B trade; C does not trade.
A is the primary security of the company.

Security A trades on exchange x and exchange y, resulting in two trading items A_x and A_y. The primary trading item for this security is A_x.

Security B trades on exchange x and exchange z, resulting in two trading items B_x and B_z. The primary trading item for this security is B_z.

The Market Cap calculation for the company is:

Total Traded Market Cap
(Price of A_x x Shares $Outstanding_{security\ A}$) + (Price of B_z x Shares $Outstanding_{security\ B}$)
+
Total Non-Traded Market Cap
(Price of A_x x Shares $Outstanding_{security\ C}$)

Note: Since A is also the primary security of the company, A_x is the ultimate primary trading item of the company and is therefore used to calculate Non-Traded Market Cap.

Total Enterprise Value Calculation

Market Cap
- Cash & Short Term Investments (data item 1002) *
+ Total Debt (4173)
+ Preferred Equity (1005)
+ Minority Interest (1312)

* For Insurance companies, Cash and Equivalents (1096) is subtracted instead.

Market Cap Component and Non-Traded Shares Outstanding Tables

The **Market Cap Component** and **Non-Traded Shares Outstanding** tables can be used to break down the Market Capitalization value by providing the number of non-traded shares outstanding used in the calculation (Market Capitalization uses non-traded shares as well as traded shares; see Market Cap and Total Enterprise Value Calculations for more details).

The **Market Cap Component** table provides the text description of every security a company has issued in its history.

ciqMarketCapComponent	
PK	**componentId** companyId componentName

file: MarketCapComponent.txt

Column Name	Data Type	Description
componentId	int	The unique identifier for a particular company's debt obligation or equity component.
companyId	int	Unique identifier which links to the **ciqMarketCap** and the **ciqImpliedMarketCap** tables and the **ciqCompany** table in the Base Files.
componentName	varchar(255)	Text description of the market cap security component. Components for a given company represent all securities that a company has issued in its history.

The **Non-Traded Shares Outstanding** table provides a time-series of security components of a company, including the number of shares outstanding.

ciqNonTradedSharesOutstding	
PK **PK**	**componentId** **fromDate** toDate sharesOutstanding

file: NonTradedSharesOutstanding.txt

Column Name	Data Type	Description
componentId	int	The unique identifier for a particular company's debt obligation or equity component.
fromDate	datetime	Date the non-traded shares were outstanding from in the time-series
toDate	datetime	Date the non-traded shares were outstanding to in the time-series
sharesOutstanding	bigint	Number of non-traded shares outstanding

Implied Market Cap Table

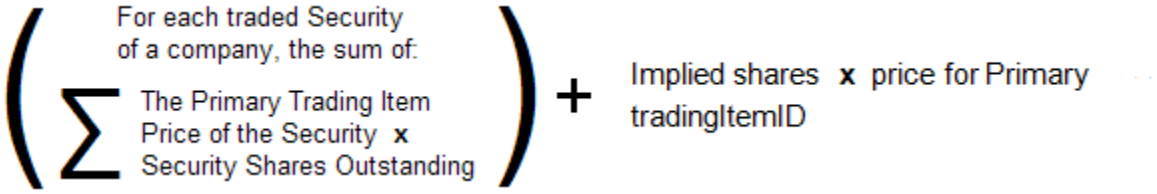
The **Implied Market Cap** table provides company-level market cap and shares outstanding values that include limiter partner shares. Limited partner shares are excluded in the **ciqMarketCap** table.

ciqImpliedMarketCap	
PK **PK**	**companyId** **pricingDate**
	impliedSharesOut impliedMarketCap impliedDilutedSharesOut impliedDilutedMarketCapOut impliedDilutedSharesEx impliedDilutedMarketCapEx

File: ImpliedMarketCapEx

Column Name	Data Type	Description
companyId	int	Unique identifier which links to the **ciqCompany** table in the Base Files.
pricingDate	date	Pricing date from which to derive the market cap.
impliedSharesOut	bigint	Shares outstanding, including limited partner shares
impliedMarketCap	numeric(38,6)	Market capitalization figure, given in millions of the currency of the primary trading item, and includes limited partner shares. *Note:* History goes back to 1996.
impliedDilutedSharesOut	bigint	Shares outstanding, including limited partner shares and options/warrants outstanding (these are only included in the figure if the company has options/warrants).
impliedDilutedMarketCapOut	numeric(38,6)	Market capitalization, in millions, including limited partner shares and options/warrants outstanding (these are only included in the figure if the company has options/warrants).
impliedDilutedSharesEx	bigint	Shares outstanding, including limited partner shares and options/warrants that are exercisable (these are only included in the figure if the company has options/warrants).
impliedDilutedMarketCapEx	numeric(38,6)	Market capitalization, in millions, including limited partner shares and options/warrants that are exercisable (these are only included in the figure if the company has options/warrants).

Implied Market Cap Calculation



We apply the following definition of implied market cap:

> Market value of a company's shares outstanding, including the company's limited partner shares converted into common equity.

We typically apply the following two criteria for the creation of a minority interest component to calculate implied market cap:

- Units/shares relating to minority interest component should be convertible into the primary stock of the holding company.

  Note: A holding company's limited partners, pursuant to the exchange agreement and subject to vesting and minimum retained ownership requirements and transfer restrictions in place, may exchange their limited partnership interests (i.e., class b) for shares in the holding company's class of common stock. When limited partner units/shares are exchanged for a share of class a common stock , the corresponding share of class b common stock will be retired and canceled.

- Holding company normally issues a special class of stock like class b or LLC units (either in the same proportion as that of minority interest units—a one-for-one basis—or some other ratio) to provide voting power to the minority stake holders by entitling holders certain votes per share. However, this special class of stock does not have economic rights.

Appendix A: Frequently Asked Questions

1. **How do I calculate total return using the dividend adjustment factor?**

   See Appendix B.

2. **When are file updates available on the FTP server?**

   See the Market Data Update section of the Executive Summary.

3. **Why is the divAmount in the ciqDividend table different than the divAmount in the ciqDividendCache table?**

   These amounts may differ because the ciqDividendCache table gives a summed dividend amount for a given day: if a company distributes more than one dividend in a day, the amounts are summed to create the divAmount. The ciqDividend table, on the other hand, provides records for each dividend amount.

4. **What currency are pricing, capitalization and dividends figures given in? How do I determine the currency?**

   See the Currency and Currency Changes section. For specific linking of tables, see Linking Market Data Tables to Currency and Exchange Tables.

5. **Why is there a currencyId in the ciqDividend table? Is this the same currencyId as the associated trading item?**

   The *currencyId* in the **ciqDividend** table may be different than the currency of the associated trading item, as companies can issue dividends in a different currency than the one the security is traded in. To determine the currency of dividend amounts, the *currencyId* in the **ciqDividend** table should be used.

6. **How does pricing and capitalization data handle gaps when companies don't trade?**

   See Non-Trading Days for Pricing and Capitalization data.

7. In what currency are the Market Cap and TEV figures given in?

They are given in millions of the currency of the primary trading item associated with the company. For an example query on how get the currency for market cap figures, see this sample query.

8. How are Market Cap and TEV figures calculated?

See the section Market Cap and Total Enterprise Value Calculations.

9. How is Implied Market Cap calculated?

See the section Implied Market Cap Calculation.

10. How do I calculate dividend yield using the Indicated Annual Dividend table?

See the section Example Query: Calculating Dividend Yield.

Appendix B: Calculating Total Return

One method of calculating total return in a pricing time-series is to add in dividends over time—as each dividend is distributed by the company, the dividend amount can be added into the price, creating a series of dividend-adjusted prices that can be used to calculate total return.

The Price Equity package uses a different method involving a dividend adjustment factor. Instead of adding in dividends to the series, the dividend adjustment factor is multiplied by price, resulting in a time-series that can be used to calculate total return. The dividend-adjusted prices are adjusted for stock dividends, spin-offs, splits, and rights issuances. Calculating total return using these prices assumes payments of dividends in cash are reinvested.

Let's take a look at an example of a query that creates a dividend-adjusted price time-series for IBM. Using the **ciqPriceEquity** and **ciqPriceEquityDivAdjFactor** tables, the dividend adjustment factor is matched to the pricing date, and then multiplied by the *priceClose* to create dividend-adjusted prices:

```
SELECT pe.tradingItemId
,pe.pricingDate
,pe.priceClose
,isnull(daf.divAdjFactor,1) as divAdjFactor
--Multiply by the divAdjFactor to create the adjusted price
,(pe.priceClose*isnull(daf.divAdjFactor,1)) divAdjPrice
FROM ciqPriceEquity pe
left join ciqPriceEquityDivAdjFactor daf on
pe.tradingItemId=daf.tradingItemId
and pe.pricingDate>=daf.fromDate --Match the divAdjFactor
and (pe.pricingDate<=daf.toDate or daf.toDate is null) --to
the pricingDate
WHERE
pe.tradingItemId=2621697 --trading item for IBM
ORDER BY pe.pricingDate desc
```

Here is a sub-section of the query results:

tradingItemId	pricingDate	priceClose	divAdjFactor	divAdjPrice
2621697	2010-5-7 00:00:00	122.1	0.929290953	113.466425
2621697	2010-5-6 00:00:00	123.92	0.929290953	115.157735
2621697	2010-5-5 00:00:00	127.46	0.924551905	117.843386
2621697	2010-5-4 00:00:00	128.12	0.924551905	118.45359
2621697	2010-5-3 00:00:00	129.6	0.924551905	119.821927
…	….	…	…	…
2621697	2010-2-5 00:00:00	123.52	0.920435134	113.692148
2621697	2010-2-4 00:00:00	123	0.920435134	113.213521
2621697	2010-2-3 00:00:00	125.66	0.920435134	115.661879
2621697	2010-2-2 00:00:00	125.53	0.920435134	115.542222
2621697	2010-2-1 00:00:00	124.67	0.920435134	114.750648
2621697	2010-1-29 00:00:00	122.39	0.920435134	112.652056
2621697	2010-1-28 00:00:00	123.75	0.920435134	113.903848
2621697	2010-1-27 00:00:00	126.33	0.920435134	116.27857
2621697	2010-1-26 00:00:00	125.75	0.920435134	115.744718

The adjusted dividend price (*divAdjPrice*) can then be used to calculate total return. The following calculates total return for the week of 5/3/2010 to 5/7/2010 for IBM (the top five rows in the table above):

$$\frac{(113.466425-119.821827)}{119.821927} \approx -5.3\%$$

Note: Sample queries are provided in order to demonstrate table relationships and business rules. Please feel free to optimize the queries for best performance based on your use case.

Appendix C: Indicated Annual Dividend Table

The **Indicated Annual Dividend** table provides a time-series chain of indicated annual dividends for the **primary trading item** of global companies. S&P Capital IQ sources the data from various places where it is indicated, including company websites, stock exchanges and dividend documents.

The purpose of providing the indicated annual dividend table is to be able to easily calculate Dividend Yield: by linking to the **ciqPriceEquity** table, the indicated annual dividend can be divided by price to derive the Dividend Yield for a trading item. For an example query showing this calculation, see the section Example Query: Calculating Dividend Yield.

Calculation

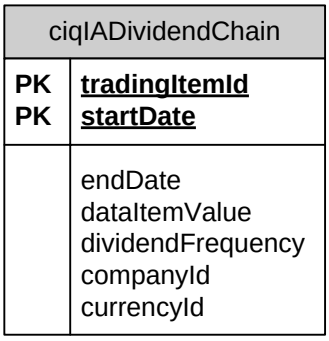
The indicated annual dividend amount is annualized according to the frequency of payments:

- If the company pays an annual dividend, we multiply the dividend amount by 1
- If the company pays a semi-annual dividend, we multiply the dividend amount by 2
- If the company pays a quarterly dividend, we multiply the dividend amount by 4
- If the company pays a monthly dividend, we multiply the dividend by 12
- If the company pays 3 dividends per year, we mark it as semi-annual and **sum the last 3 dividends**
- If the company pays an irregular dividend, we sum up **the last year's dividends**

Special dividends are not included in the calculation unless the company pays the dividend consistently in more than 1 period.

Table and Fields

The **ciqIADividendChain** table provides indicated annual dividends for the primary trading item of a company. The time series is a chain with a **startDate** and **endDate** representing the period an annualized dividend value remained constant.



file: IndicatedAnnualDividend.txt

Column Name	Data Type	Description
tradingItemId	Int	Unique identifier defining a company security traded on a specific exchange. Note that indicated annual dividends are provided for the primary trading item of companies.
startDate	smallDate	The startDate is the first date that the specified indicated annual dividend is effective for the trading item. startDates are inclusive: The dividend shown for the startDate is effective on that day.
endDate	smallDate	The endDate marks the change to a new indicated annual dividend. endDates are exclusive: the dividend shown for the endDate is effective through the day before the endDate.
dataItemValue	Decimal(18,6)	Indicated annual dividend amount in local currency
dividendFrequency	Decimal(28,5)	Number of times a year a dividend is paid
companyId	int	Unique *companyId* which links to the **ciqCompany** table
currencyId	Smallint	The currency of the indicated annual dividend. This links to the **ciqCurrency** table.

Example Query: Calculating Dividend Yield

The following query calculates the dividend yield for all available trading items on January 11, 2011. Because price and the indicated annual dividend may be in different currencies, both are converted to USD for the calculation.

```
select
pe.pricingDate
,ch.companyId
,c.companyName
,pe.tradingItemId
,pe.priceClose/er.currencyRateClose as priceCloseUSD
,ch.dataItemValue/er1.currencyRateClose as AnnualizedDivUSD
,((ch.dataItemValue/er1.currencyRateClose)/(pe.priceClose/er.curre
ncyRateClose))*100 as DivYield

from ciqIADividendChain ch
join ciqPriceEquity pe on pe.tradingItemId = ch.tradingItemId
      and pe.pricingDate between ch.startDate and
      isnull(ch.endDate,GETUTCDATE())
join ciqTradingItem ti on ti.tradingItemId = pe.tradingItemId
join ciqExchangeRate er on er.currencyId = ti.currencyId
      and er.pricingDate = pe.pricingDate
join ciqCurrency cu on cu.currencyId = er.currencyId
join ciqExchangeRate er1 on er1.currencyId = ch.currencyId
      and er1.pricingDate between ch.startDate and
      isnull(ch.endDate,GETUTCDATE())
      and er1.pricingDate = pe.pricingDate
join ciqCompany c on c.companyId = ch.companyId

where pe.pricingDate = '2011-11-01'
order by DivYield desc
```

Note: Sample queries are provided in order to demonstrate table relationships and business rules. Please feel free to optimize the queries for best performance based on your use case.

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Appendix D: Sample Query Solutions

This section provides sample queries and solutions for S&P Capital IQ Market Data. All sample queries are written in SQL Server script.

Note: Sample queries are provided in order to demonstrate table relationships and business rules. Please feel free to optimize the queries for best performance based on your use case.

Sample Query 1

Identify prices for a range of dates using a CUSIP identifier through the ciqSymbol table. This query also pulls data from the ciqPriceDivAdjFactor and ciqPriceEquitySharesOutstanding tables.

```
SELECT c.companyName
,sm.symbolValue CUSIP
,pe.tradingItemId
,pe.pricingDate
,pe.priceClose
,isnull(daf.divAdjFactor,1) as divAdjFactor
,so.sharesOutstanding
FROM ciqSymbol sm
join ciqCompany c on c.companyId=sm.relatedCompanyId
join ciqTradingItem ti on sm.objectId=ti.tradingItemId
join ciqPriceEquity pe on pe.tradingItemId=ti.tradingItemId
left join ciqPriceEquityDivAdjFactor daf on pe.tradingItemId=daf.tradingItemId
and daf.fromDate<=pe.pricingDate --Find dividend adjustment factor on pricing
date
and (daf.toDate is null or daf.toDate>=pe.pricingDate)
join ciqPriceEquitySharesOutstdg so on pe.tradingItemId=so.tradingItemId
WHERE sm.symbolTypeId=15 --Specify the symbol type as CUSIP
and sm.symbolValue='369604103' --CUSIP for GE
and pe.pricingDate>='2010-06-01'
and pe.pricingDate<'2010-07-01'
and so.fromDate<=pe.pricingDate --Find shares outstanding on pricing date
and (so.toDate is null or so.toDate>=pe.pricingDate)
```

View Results:

companyName	CUSIP	tradingItemId	pricingDate	priceClose	divAdjFactor	sharesOutstanding
General Electric Company	369604103	2614632	2010-6-30 00:00:00	14.42	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-29 00:00:00	14.48	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-28 00:00:00	15	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-25 00:00:00	14.91	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-24 00:00:00	15.08	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-23 00:00:00	15.39	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-22 00:00:00	15.79	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-21 00:00:00	16.1	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-18 00:00:00	15.95	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-17 00:00:00	15.91	0.876119676	10676518000
General Electric Company	369604103	2614632	2010-6-16 00:00:00	15.85	0.870592107	10676518000
General Electric Company	369604103	2614632	2010-6-15 00:00:00	15.785	0.870592107	10676518000
General Electric Company	369604103	2614632	2010-6-14 00:00:00	15.39	0.870592107	10676518000
General Electric Company	369604103	2614632	2010-6-11 00:00:00	15.56	0.870592107	10676518000
General Electric Company	369604103	2614632	2010-6-10 00:00:00	15.68	0.870592107	10676518000
…	…	…	…	…	…	…

Sample Query 2

Dividend data for a specified tradingItemId and date range using the ciqDivFrequencyType table

```
SELECT c.companyName
    ,d.dividendId
    ,d.exDate
    ,d.payDate
    ,d.recordDate
    ,d.divAmount
    ,d.divFreqTypeId
    ,ft.divFreqTypeName

FROM ciqDividend d
  join ciqTradingItem ti on d.tradingItemId=ti.tradingItemId
  join ciqSecurity s on ti.securityId=s.securityId
  join ciqCompany c on s.companyId=c.companyId
  join ciqDividendFrequencyType ft on d.divFreqTypeId=ft.divFreqTypeId

WHERE d.exDate>='2006-01-01'
  and d.exDate<'2007-01-01'
  and ti.tradingItemId=20146923
```

View Results:

companyName	dividendId	exDate	payDate	recordDate	div Amount	DivFreq TypeId	divFreqType Name
Banco do Estado de Sao Paulo SA	1170028	2006-12-22	NULL	2006-12-21	4.2735300000	8	Other Dividend
Banco do Estado de Sao Paulo SA	1117648	2006-10-03	NULL	2006-10-02	2.4912900000	8	Other Dividend
Banco do Estado de Sao Paulo SA	1037473	2006-01-03	2006-02-08	2006-01-02	6.4888400000	8	Other Dividend
Banco do Estado de Sao Paulo SA	1037479	2006-01-27	2006-02-08	2006-01-26	13.1709700000	6	Final Payment
Banco do Estado de Sao Paulo SA	1037480	2006-01-27	2006-02-08	2006-01-26	14.3525200000	5	Interim Payment
Banco do Estado de Sao Paulo SA	1088479	2006-06-29	2006-12-27	2006-06-28	2.7037000000	8	Other Dividend

Sample Query 3

Annual dividends in December 2009 for German companies traded on the Deutsche Boerse, from the ciqDividendCache and ciqDividend tables

```
SELECT dc.tradingItemId
     ,c.companyName
     ,s.securityName
     ,d.divFreqTypeId
     ,dc.payDate
     ,dc.divAmount
     ,dc.dividendDate
     ,dc.nextDividendDate
     ,dc.adjustmentFactor
     ,dc.splitAdjDivAmount

FROM ciqDividendCache dc
  join ciqDividend d on dc.tradingItemId=d.tradingItemId and
dc.dividendDate=d.exDate
  join ciqTradingItem ti on dc.tradingItemId=ti.tradingItemId
  join ciqSecurity s on ti.securityId=s.securityId
  join ciqCompany c on s.companyId=c.companyId

WHERE c.countryId=76   --Germany
  and c.exchangeId=32   --Deutsche Boerse AG
  and d.divFreqTypeId=4   --Annual
  and s.securitySubTypeId=1   --Common Stock
  and dc.dividendDate>='2009-12-01'
  and dc.dividendDate<='2009-12-31'
```

View Results:

trading ItemId	company Name	securityName	Div Freq TypeId	payDate	div Amount	dividend Date	nextDividend Date	adjustment Factor	splitAdj DivAmt
37945576	KWS Saat AG	Bearer Shares	4	2009-12-18	1.8000000000	2009-12-18	2079-06-05	1.0000000000	1.80000
20197158	KWS Saat AG	Bearer Shares	4	2009-12-18	1.8000000000	2009-12-18	2079-06-05	1.0000000000	1.80000
32517005	KWS Saat AG	Bearer Shares	4	2009-12-18	1.8000000000	2009-12-18	2079-06-05	1.0000000000	1.80000
20205235	Fortec Elektronik AG	Ordinary Shares	4	2009-12-18	0.3000000000	2009-12-18	2079-06-05	1.0000000000	0.30000
32517407	Fortec Elektronik AG	Ordinary Shares	4	2009-12-18	0.3000000000	2009-12-18	2079-06-05	1.0000000000	0.30000
37874889	Fortec Elektronik AG	Ordinary Shares	4	NULL	0.3000000000	2009-12-18	2079-06-05	NULL	NULL
52643229	Deka-Euroland DiscountStrategie CF	EUROLAND DISCOUNTSTRATEGIE CF	4	2009-11-30	0.1029000000	2009-12-01	2079-06-05	1.0000000000	0.10290
54131249	COMINVEST Fund Deluxe	COMINVEST FUND DELUXE I	4	NULL	0.3347000000	2009-12-14	2079-06-05	NULL	NULL
52655329	Deka - UmweltInvest CF	DEKA-UMWELTINVEST CF	4	2009-12-01	0.0177000000	2009-12-01	2079-06-05	1.0000000000	0.01770
52655259	Deka - UmweltInvest CF	DEKA-UMWELTINVEST CF	4	NULL	0.0177000000	2009-12-01	2079-06-05	NULL	NULL
54132026	Cominvest Multi Asia Active	MULTI ASIA ACTIVE	4	2009-12-14	0.1317000000	2009-12-14	2079-06-05	1.0000000000	0.13170
52648073	First Private Europa Aktien ULM	ULM CAM	4	NULL	1.3838000000	2009-12-01	2079-06-05	NULL	NULL

Sample Query 4

Identify US public companies with non-traded shares outstanding that have a market cap of more than $20 billion.

```
SELECT c.companyName
     ,c.tickerSymbol
     ,mc.companyId
     ,mc.pricingDate
     ,mc.marketCap
     ,mc.TEV
     ,mcc.componentName
     ,ntso.sharesOutstanding nonTradedSharesOut

FROM ciqMarketCap mc
  join ciqCompany c on mc.companyId=c.companyId
  join ciqMarketCapComponent mcc on mc.companyId=mcc.companyId
  join ciqNonTradedSharesOutstding ntso on
mcc.componentId=ntso.componentId

WHERE mc.marketCap>20000
  and ntso.sharesOutstanding >0
  --Find non-traded shares outstanding on pricing date
  and ntso.fromDate <= mc.pricingDate
  and (ntso.toDate is null or ntso.toDate >= mc.pricingDate)
  and mc.pricingDate='2010-06-01'
  and c.countryId=213   --USA
  and c.companyTypeId=4   --Public Company
  order by mc.marketCap desc
```

View Results:

companyName	ticker Symbol	companyId	pricingDate	marketCap	TEV	componentName	nonTraded SharesOut
Epazz Inc.	NULL	23574572	6/1/2010 0:00	2500000	2500000.757	Class B Common Stock	2500000
Alphabet Inc.	NULL	29096	6/1/2010 0:00	153628.3373	127114.3373	Old Class B Common Stock	145772196
United Parcel Service, Inc.	NULL	238570	6/1/2010 0:00	60587.41221	67501.41221	Class A Common Stock	270136836
Comcast Corporation	NULL	173341	6/1/2010 0:00	50174.266	77814.266	Class B Common Stock	9444375
Ford Motor Co.	NULL	106335	6/1/2010 0:00	38869.08596	144152.086	Class B Common Stock	70852076
NIKE, Inc.	NULL	291981	6/1/2010 0:00	34572.16458	31101.76458	Class A Common Stock	359960992
Carnival Corporation	NULL	258823	6/1/2010 0:00	28302.89248	38194.89248	PLC Ordinary Shares	175024618
Newmont Mining Corporation	NULL	291795	6/1/2010 0:00	26844.85805	30033.85805	Exchangeable Shares	7846441
VMware, Inc.	NULL	125757	6/1/2010 0:00	26631.89449	24325.41349	Class B Common Stock	300000000
Prudential Financial, Inc.	NULL	1038328	6/1/2010 0:00	26431.52	51309.52	Class B Common Stock	2000000
MasterCard Incorporated	NULL	6477196	6/1/2010 0:00	26212.55661	23140.55661	Class B Common Stock	199776570
American International Group, Inc.	NULL	250388	6/1/2010 0:00	22901.82557	241256.8256	Series C Participating Preferred Stock	533595819

Sample Query 5

Identify the currency for market cap and TEV figures in the ciqMarketCap table

```
SELECT mc.companyId
    ,mc.pricingDate
    ,mc.marketCap
    ,mc.TEV
    ,ti.currencyId
    ,c.currencyName

 FROM ciqMarketCap mc
 join ciqSecurity s on mc.companyId=s.companyId
 join ciqTradingItem ti on s.securityId=ti.securityId
 join ciqCurrency c on c.currencyId=ti.currencyId

 WHERE s.primaryFlag=1  --Specifies the primary security
 and ti.primaryFlag=1  --Specifies the primary trading item for each security
 and mc.pricingDate='2010-09-02'
 and mc.marketCap>50000
```

View Results:

companyId	pricingDate	marketCap	TEV	currencyId	currencyName
24624725	2010-09-02	53409.146290	68439.146290	156	Taiwan Dollar
6043453	2010-09-02	485935.766270	368316.766270	156	Taiwan Dollar
877467	2010-09-02	406217.995117	500104.363117	156	Taiwan Dollar
9933842	2010-09-02	53132.378265	59985.532265	156	Taiwan Dollar
10975476	2010-09-02	137016.357208	161797.637208	156	Taiwan Dollar
881878	2010-09-02	83965.815448	68805.053448	156	Taiwan Dollar
1433510	2010-09-02	117997.125942	108710.470942	156	Taiwan Dollar
19691	2010-09-02	117192.818520	92615.818520	160	US Dollar
397232	2010-09-02	59613.168849	60227.465655	160	US Dollar
247483	2010-09-02	78119.824650	92299.020650	160	US Dollar
391687	2010-09-02	112417.292520	NULL	160	US Dollar
24816	2010-09-02	50329.469740	47538.469740	160	US Dollar
255251	2010-09-02	199848.594017	234616.594017	160	US Dollar
19049	2010-09-02	133198.400000	NULL	160	US Dollar
22532593	2010-09-02	63782.122158	119020.669208	117	Norwegian Krone
....	....	....	...	....	....

Sample Query 6

Identify companies that trade primarily on the NYSE and had a stock split during the 2006 calendar year. Also included are the ciqSplitCache and ciqSplitType tables.

```
SELECT c.companyName
    ,sp.splitId
    ,sp.exDate
    ,sp.payDate
    ,sp.rate
    ,sp.tradingItemId
    ,st.splitTypeName
    ,sc.cumulativeSplitFactor
    ,sc.latestSplitFactor
    ,sc.NextSplitDate

 FROM ciqSplit sp
 join ciqTradingItem ti on sp.tradingItemId=ti.tradingItemId
 join ciqSecurity s on ti.securityId=s.securityId
 join ciqCompany c on s.companyId=c.companyId
 join ciqSplitCache sc on sp.tradingItemId=sc.tradingItemId and
sp.exDate=sc.SplitDate
 join ciqSplitType st on sp.splitTypeId=st.splitTypeId

 WHERE s.primaryFlag=1 and ti.primaryFlag=1 --Query the primary trading item
 and sp.exchangeId=106   --NYSE
 and sp.exDate>='2006-01-01'
 and sp.exDate<='2006-12-31'
```

View Results:

companyName	splitId	exDate	payDate	rate	tradingItemId	splitTypeName	cumulativeSplitFactor	latestSplitFactor	NextSplitDate
PAR Technology Corp.	1016218	2006-01-09	2006-01-06	1.5000000000	2637684	Stock split	1.50000	1.50000	2079-06-05
Sierra Health Services Inc.	1023432	2006-01-03	2005-12-30	2.0000000000	2650312	Stock split	1.00000	2.00000	2079-06-05
Old Republic International Corp.	1024123	2006-01-03	2005-12-30	1.2500000000	2635671	Stock split	1.25000	1.25000	2079-06-05
Financial Federal Corp.	1025614	2006-02-01	2006-01-31	1.5000000000	2611524	Stock split	1.50000	1.50000	2079-06-05
EMCOR Group Inc.	1025960	2006-02-13	2006-02-10	2.0000000000	2608990	Stock split	2.00000	2.00000	2007-07-10
ITT Corporation	1031041	2006-02-22	2006-02-21	2.0000000000	2619996	Stock split	2.00000	2.00000	2079-06-05
Titanium Metals Corporation	1033553	2006-02-17	2006-02-16	2.0000000000	2658204	Stock split	4.00000	2.00000	2006-05-16
Schlumberger Limited	1034022	2006-04-10	2006-04-07	2.0000000000	2649102	Stock split	2.00000	2.00000	2079-06-05
Peabody Energy Corp.	1035416	2006-02-23	2006-02-22	2.0000000000	2638064	Stock split	2.00000	2.00000	2079-06-05
Eagle Materials Inc.	1036085	2006-02-27	2006-02-24	3.0000000000	8441460	Stock split	3.00000	3.00000	2079-06-05
Aetna Inc.	1037321	2006-02-21	2006-02-17	2.0000000000	2587390	Stock split	2.00000	2.00000	2079-06-05
SJW Corp.	1038653	2006-03-17	2006-03-16	2.0000000000	2644373	Stock split	2.00000	2.00000	2079-06-05
Freeport-McMoRan Corporation	1038656	2006-03-13	2006-03-10	2.0000000000	2638902	Stock split	2.00000	2.00000	2079-06-05
Anadarko Petroleum Corporation	1039253	2006-05-30	2006-05-26	2.0000000000	2589895	Stock split	2.00000	2.00000	2079-06-05
Curtiss-Wright Corp.	1040510	2006-04-24	2006-04-21	2.0000000000	2604237	Stock split	2.00000	2.00000	2079-06-05
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Revision History

The changes made to this document include the following:

Document Version	Date	Changes
1.0	06/29/2011	Initial version
1.1	09/21/2011	Added Appendix C: Indicated Annual Dividend Table
1.2	07/13/2012	Updated with new Branding
1.3	01/13/2014	Revised definition of *componentId*
1.4	04/04/2014	• Revised definition for *currencyId* as it pertains to the ciqDividendCache table • Updated schema and tables to reflect physical order of fields • Updated copyright and disclaimer information
1.5	05/21/2014	• Added a note to the ciqDividend table that historical dividend data is provided on an un-adjusted basis
1.6	8/12/2014	• Updated sample queries for: o Appendix B: Calculating Total Return o Appendix D: Identify prices for a range of dates using a CUSIP identifier through the ciqSymbol table. • Added clarifying language for sample queries
1.7	11/23/2015	• Added clarifying language for regional file delivery sequence

Document Version	Date	Changes
1.8	04/27/2016	Adjusted for the V2 package: • Updated the Capitalization Schema: o Added a new table: ciqImpliedMarketCap o Added a new field to the ciqMarketCap table: *sharesOutstanding* • Updated the Linking from S&P Capital IQ Base Files to Market Data section: o Added the ciqImpliedMarketCap table to the schema showing how S&P Capital IQ Base Files link to capitalization data. o Added the ciqImpliedMarketCap table to the schema showing how the ciqMarketCap and ciqImpliedMarketCap tables link to Currency and Exchange Base Files.
	05/03/2016	• Adjusted the description for the Implied Market Cap table. • Numbered sample queries for ease of use. • Adjusted sample query 4 and generated updated results.
1.9	09/08/2016	• Added information on linking the Prices Intraday 1990s (PriceEquity1990sIntraday), Prices Intraday Extended History (PriceEquityExtendedHistoryIntraday), and the Prices Intraday Recent History (PriceEquityRecentHistoryIntraday) packages to the Base Equity Security (IDCEquitySecurity) package.
2.0	11/2/2016	• Updated definitions for startDate and endDate in **ciqIADividendChain** table