CRSP® CENTER FOR RESEARCH IN SECURITY PRICES, LLC

An Affiliate of the University of Chicago Booth School of Business

CRSPSift USER GUIDE

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CRSP® | CENTER FOR RESEARCH IN SECURITY PRICES, LLC

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CHAPTER 1: INTRODUCTION

CRSPSift, CRSP's Securities Information Filtering Tool, lets you extract data from your Stock & Index, CRSP/Compustat Merged, US Treasury, and Mutual Fund databases. In addition to an updated interface, CRSPSift offers many features designed to make accessing CRSP databases easier. Some of these features include:

- **Data Environments:** Create a data environment for each set of data you use. To use a different data set, simply select its environment from a menu and rerun your query.
- **Multiple Queries:** Edit and run up to ten queries simultaneously.
- **Direct Edit:** Type or paste an existing request file from a command-line utility into a window and then save it as a CRSPSift query. CRSPSift automatically updates its graphical interface to reflect your query options.
- **Company Selection:** A company lookup utility. Search and sort results by Company Name, PERMNO, ticker symbol, or other identifier.
- **Filtering Options:** A point-and-click interface to simplify filtering query results by exchange, share type, NASDAQ Market Tiers, portfolio assignments, SIC Code, or group membership.

CRSPSIFT UTILITIES

TsQuery is a tool for extracting time-series data – based in fixed and relative ranges – for the CRSP security universe, CRSP Indexes, and CRSP/Compustat linked companies (for Compustat subscribers).

StkQuery is an access tool for CRSP security data. Use it to extract event histories for name and identifier changes, distributions, delisting. It can also perform time-series extractions.

IndQuery is an access tool for CRSP Indexes included in the CRSP US Stock or Stock & Index Databases.

CCMQuery enables you to access all Compustat data from the CRSP/Compustat Merged Database link history data by using Compustat's GVKEY and IID identifiers.

TrsQuery is a tool for accessing CRSP Daily and Monthly US Treasury Databases.

MutQuery provides access to the CRSP Mutual Funds database containing fund and holdings data items.

CRSPSIFT MINIMUM SYSTEM REQUIREMENTS FOR THE PROFESSIONAL EDITION

- Microsoft Windows 10
- Display resolution of 1024 x 768 or higher

Note: CRSP recommends using CRSPSift Professional with a local system account, for databases installed locally.

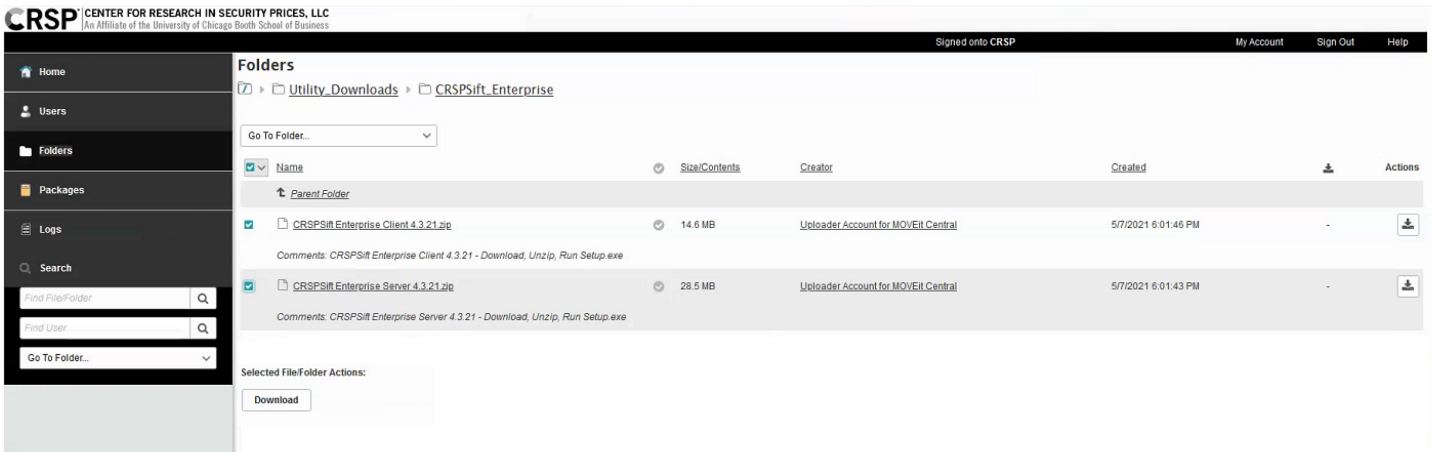
CHAPTER 2: INSTALLATION AND SETUP

This chapter shows you how to install the CRSPSift software on your computer and describes the configuration options available when you launch it for the first time.

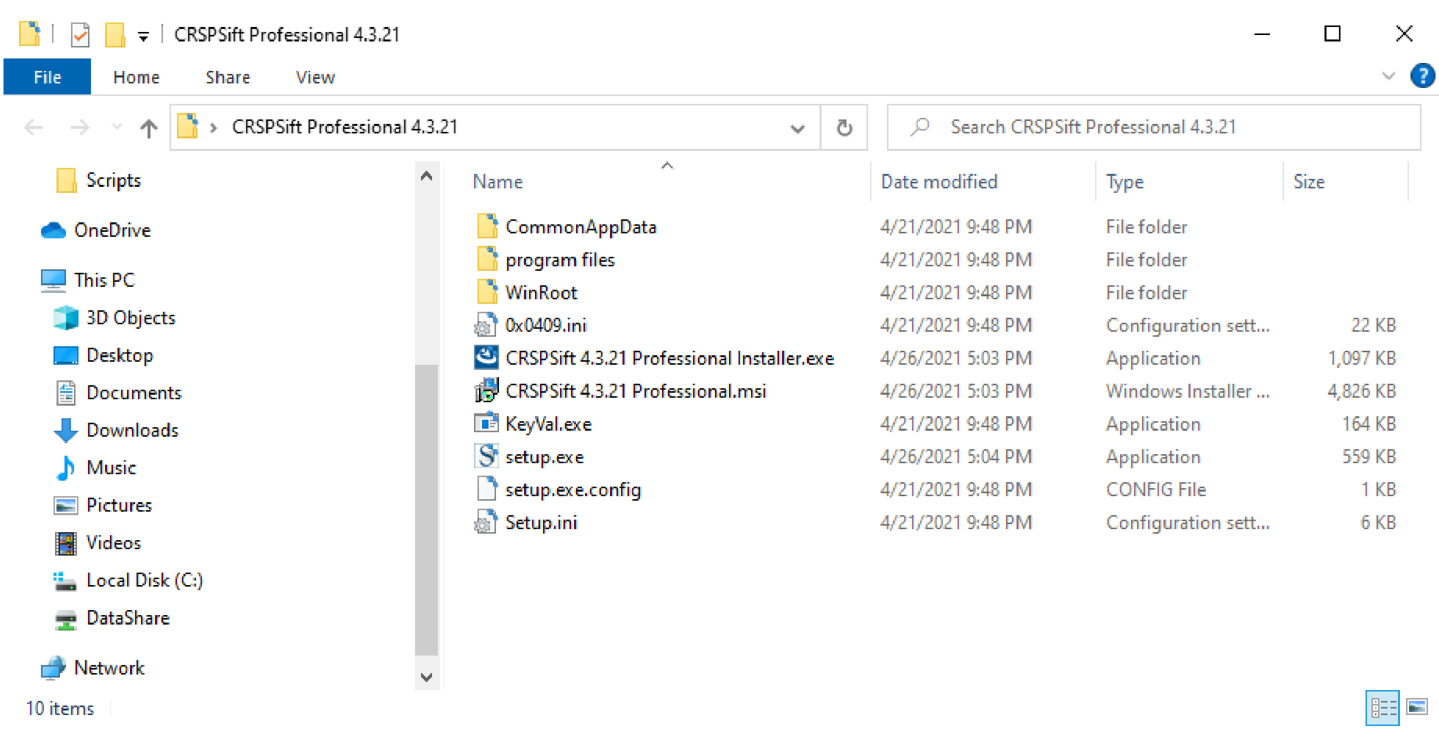
INSTALLING CRSPSIFT

CRSPSift is available for download through CRSP's IPSwitch MoveIT account at https://crsp.moveitcloud.com.

1. Login and go to cloud folder: /Utility_Uploads/CRSPSift_Professional
2. This file is available: CRSP_Sift_Professional_Ver*.zip



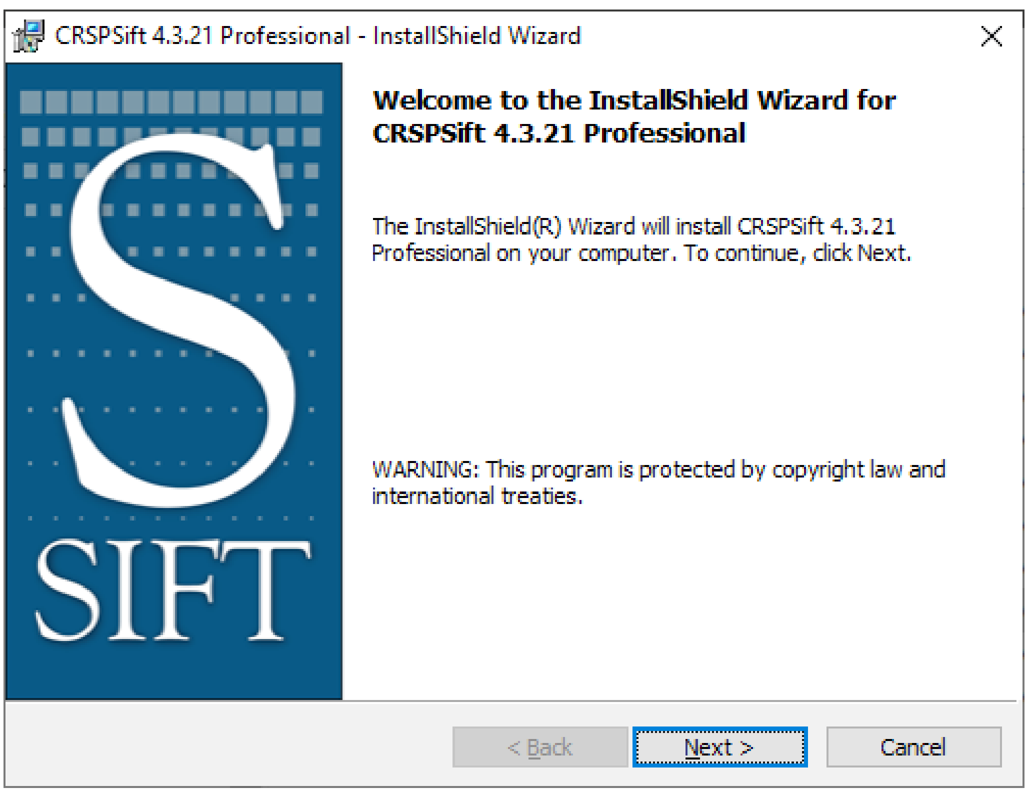
3. File is downloaded from cloud to local machine
4. File is unzipped on local machine
5. Run setup.exe to install SIFT:



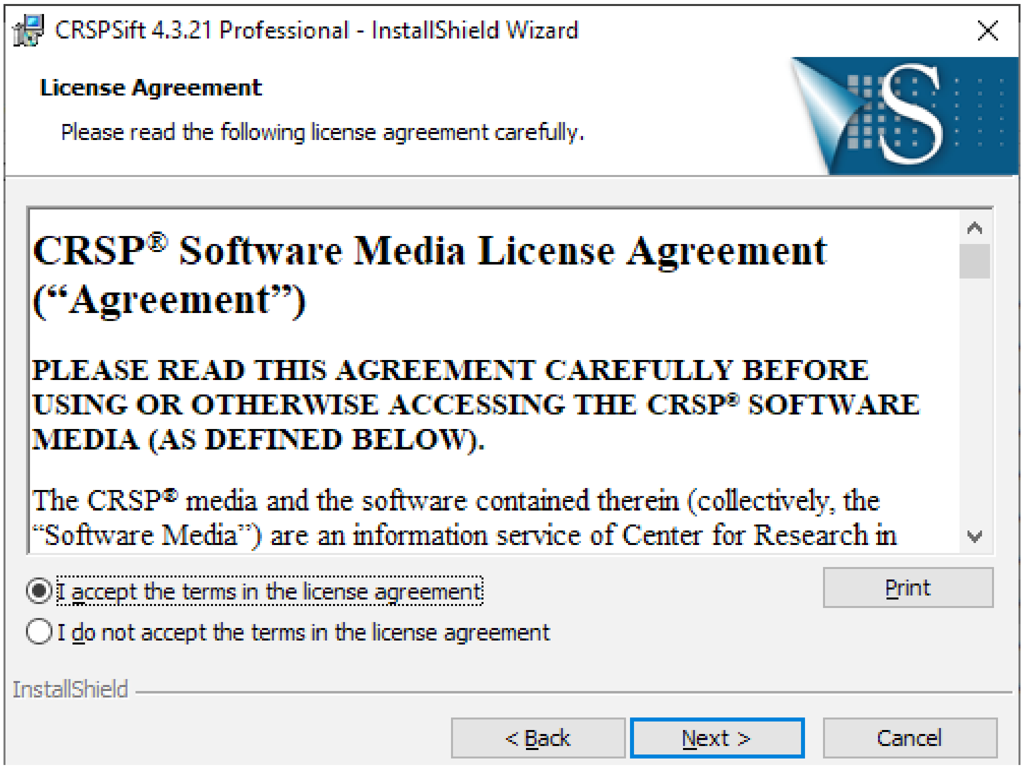
INSTALL PREREQUISITES

A list, with the status of the prerequisites, will be displayed at the beginning of the installation. If any prerequisites are missing, a pop-up screen will appear with the necessary links.

Welcome Screen



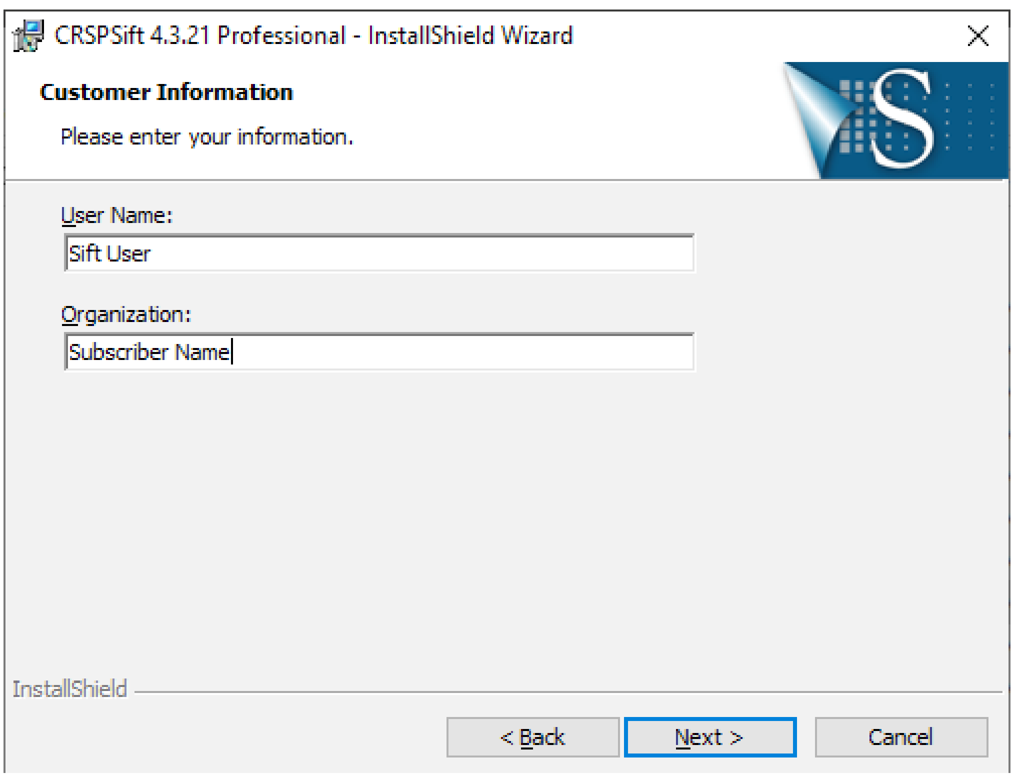
License Agreement



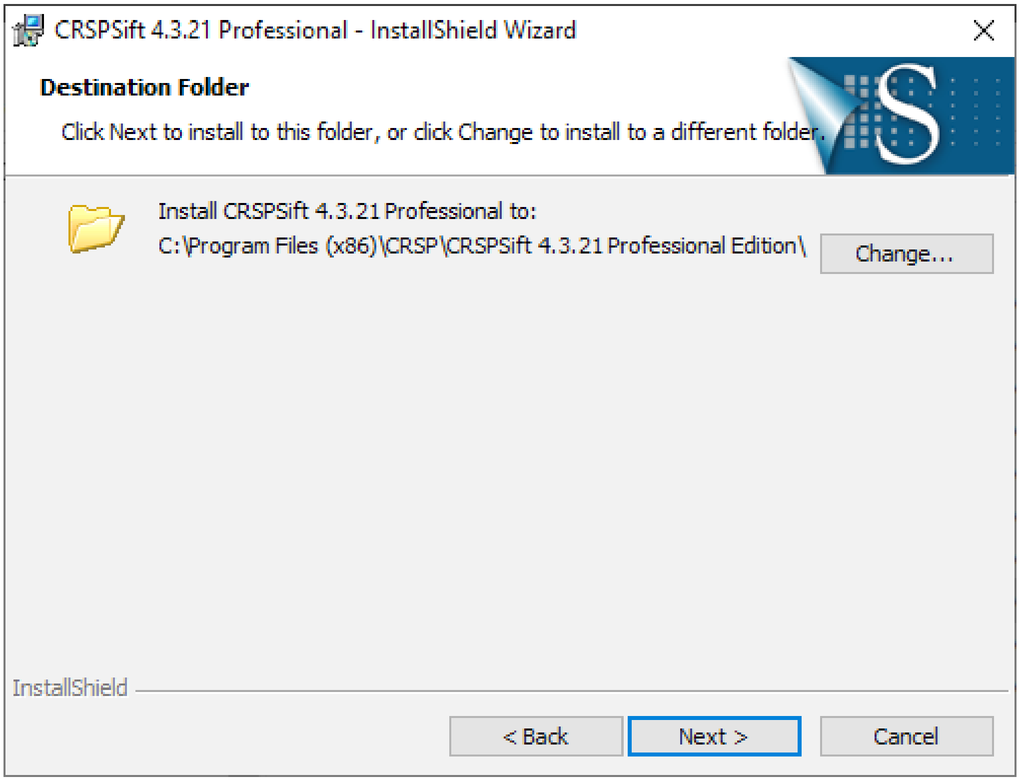
User Information

Required information:

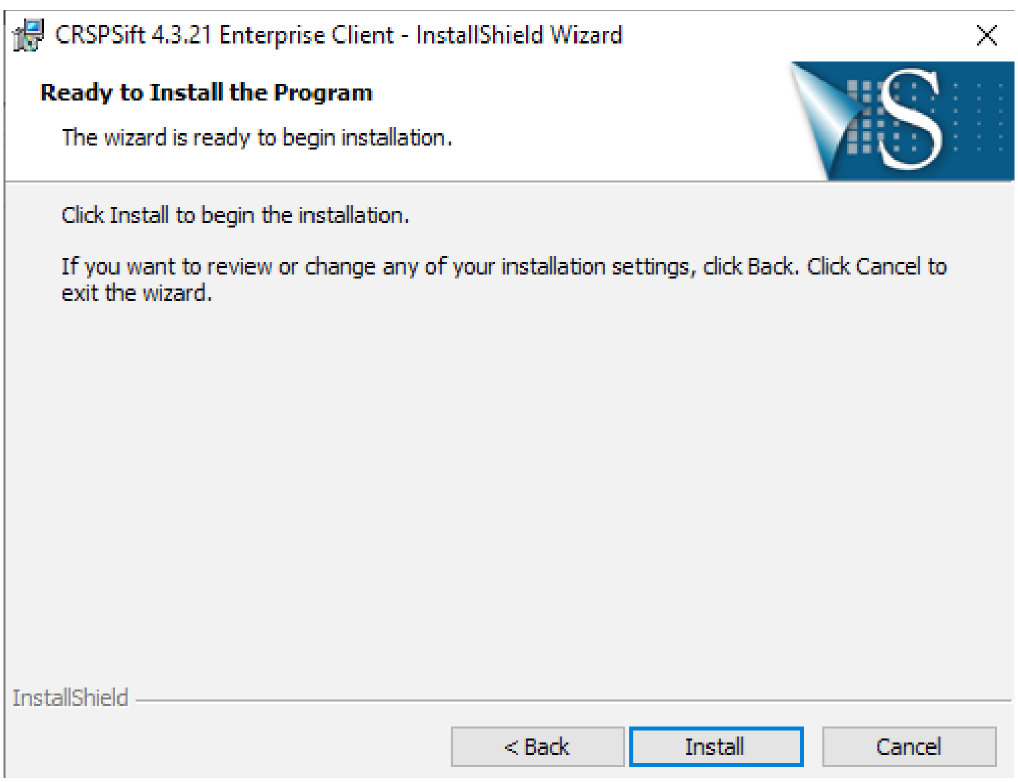
- User Name
- Organization



Installation Destination Folder

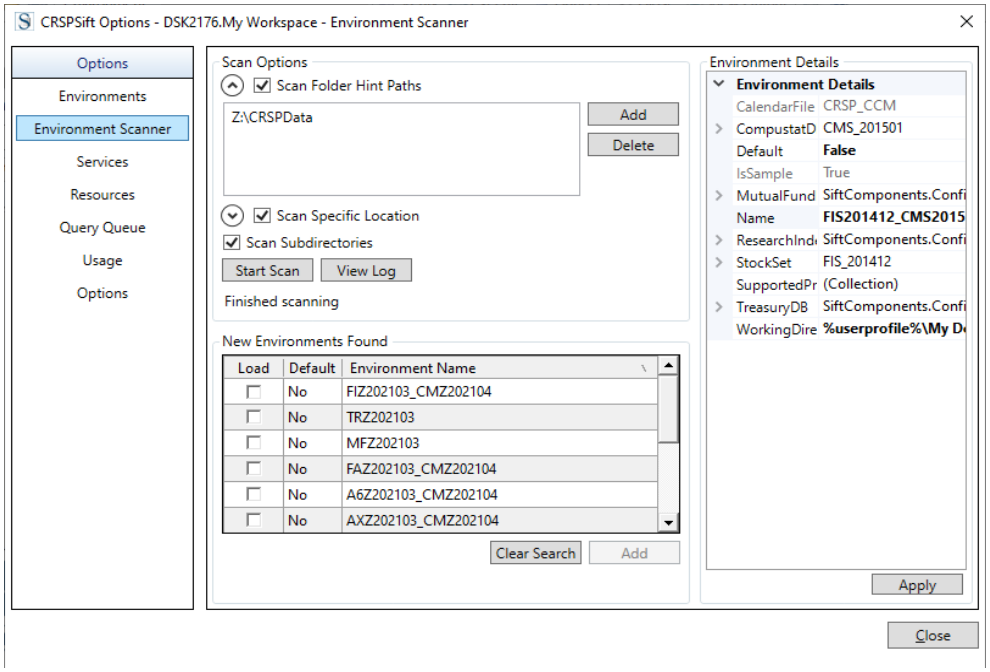


Ready to Install Screen



LAUNCHING CRSPSIFT FOR THE FIRST TIME

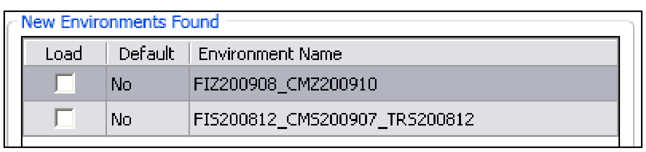
The install creates a shortcut to the CRSPSift application on your Desktop. Double-click the shortcut icon to launch CRSPSift. Before you can use CRSPSift you must tell it the location of your installed CRSP databases. The first time you run the application you are presented with the Environment Startup Scanner.



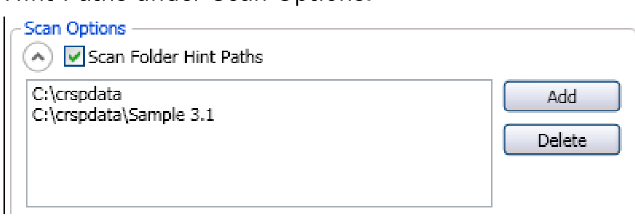
Using this tool you create what are known as data environments. A data environment is a collection of one or more compatible database products.

FINDING ENVIRONMENTS

Upon launch, the Environment Startup Scanner automatically searches the default CRSP database installation directory (C:\ crspdata). It builds and displays environments for the most recent databases found.



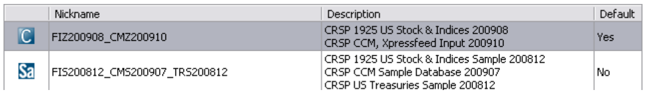
If your CRSP databases are installed in a directory other than the default, click the disclosure triangle next to Scan Folder Hint Paths under Scan Options.



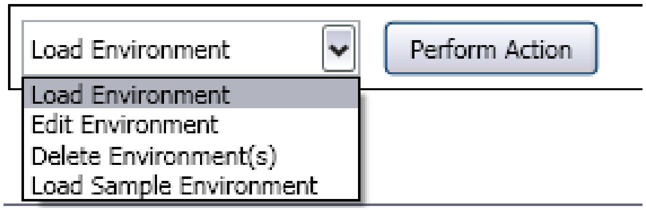
A folder hint path serves as a guide telling the Environment Scanner where to look for CRSP databases. The default locations are already listed. To add your own, click the Add button and navigate to the directory where your CRSP databases are installed. Then click the Start Scan button to scan again with the new directory included.

The Environments screen is where you can manage the environments detected by CRSPSift on its initial launch. To manage your environments, select Options... from the Tools menu to open the CRSPSift Options window. Then click Environments in the list of options categories on the left.

A list of all your saved environments appears in the main area of the screen.



And at the bottom of the screen are controls for managing them. You can edit or delete existing environments, as well as create new ones.



ADDING A NEW ENVIRONMENT

To add a new environment, click the Load Environment button. Provide the environment with a name, and check the Set as Default box if you want this to the default environment for new queries. All Stock Databases and CRSP/Compustat Merged Databases, for Compustat subscribers, are detected by CRSPSift and will appear in the lists below.

When you select a Stock Database, The Select CRSP/Compustat table below displays Compustat databases compatible with it, if any are installed. Select a database from the list if you wish to include CRSP/Compustat data in your environment. Finally, click the Browse button to select a working directory where input and output files for this environment will be directed. Click the Save button to save the new environment.

Only the environments that reflect the newest data cuts will automatically be displayed. Additional combinations can be created.

EDITING AN EXISTING ENVIRONMENT

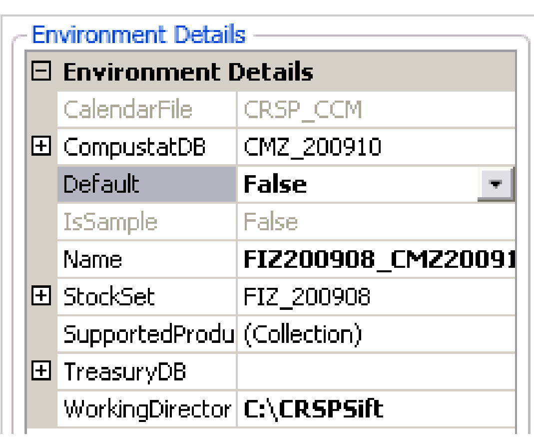
You can also edit an existing environment to change its name and working directory, add or remove Compustat data, or modify the environment's combination of daily and monthly stock databases.

To modify an environment, select it in the environments list and then click the Edit Environment button. The procedure for editing an environment is the same as that for creating a new one. Refer to the discussion above for instructions.

ENVIRONMENT DETAILS

The Environment Details area displays the properties of the environment currently selected in the New Environments Found list. Some of these properties may be changed, including an environment's name, its default status, and the working directory where query output files are saved.

To make an environment the default for new queries, first select its row in the list. Next, in the Environment Details area, click the **False** value next to the **Default** option. Select **True** to make this environment the default for new queries.

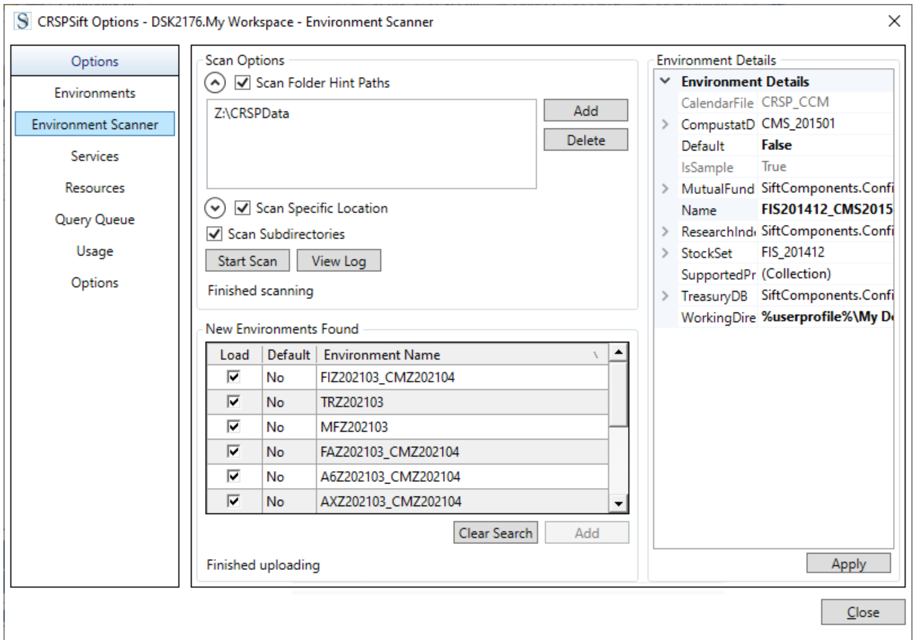


Likewise for the Name and Working Directory properties. Click the value next to the property name and change it to the desired setting.

Note: CRSP provides default environment names that we believe to be intuitive. We encourage you to edit names so that they are meaningful to you for your purposes.

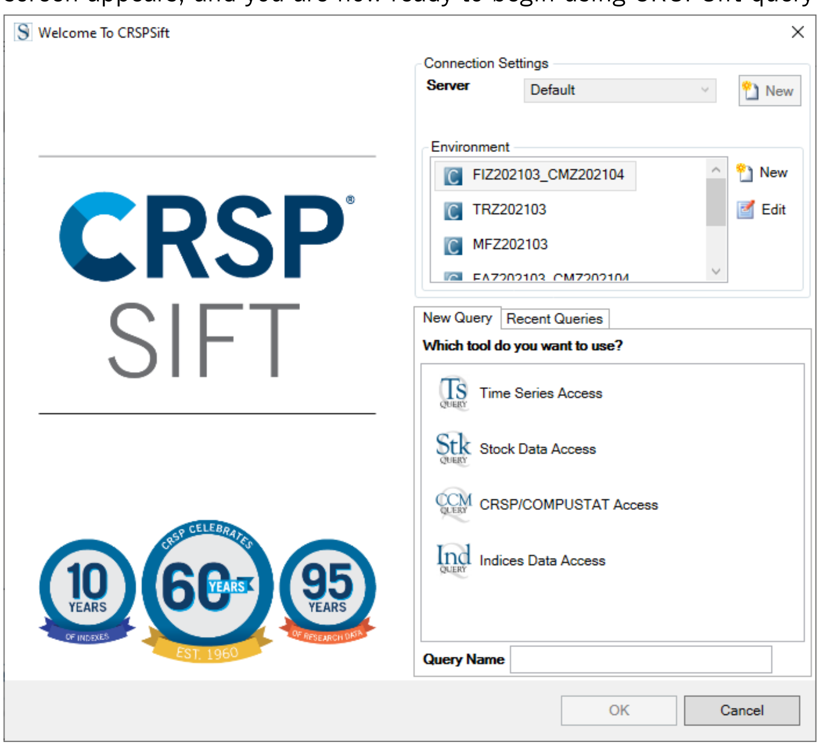
LOADING ENVIRONMENTS

Once installed databases have been scanned and combined into environments, and each environment's properties are set appropriately, you can select which environments you wish to load into CRSPSift.



For each environment you wish to load, click the checkbox in the Load column to the left of its name.

Click the Add button to load the selected environments. When the progress message below the environments list displays "Finished uploading," click the Close button to close the Startup Environment Scanner window. The CRSPSift Welcome screen appears, and you are now ready to begin using CRSPSift query tools.



CHAPTER 3: TSQUERY: TIME SERIES ACCESS

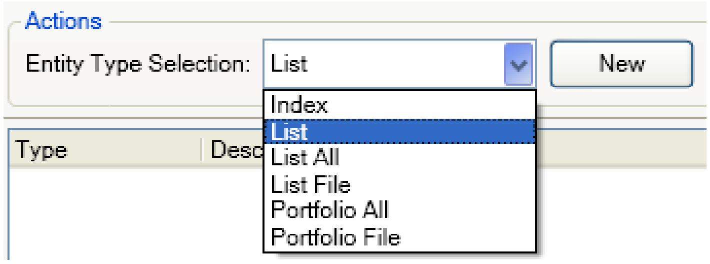
TsQuery is designed to generate output from a combination of database frequencies, and varying types of data into different formats and layouts that serve a range of purposes.

Click the New Query button on the CRSPSift toolbar. Select the Data Environment you wish to use and highlight the TsQuery icon. Optionally give your query a name in the Query Name field, and then click the OK button. You may now fill out the screens required to define your query: entities, data items, date information, and report layout.

ENTITIES

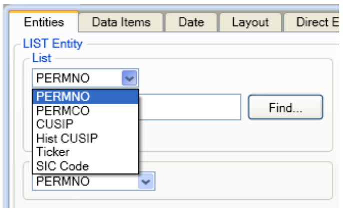
In the Entities screen, you select which securities, indexes, or portfolios your query will use. To add an entity, select an entity type from the drop-down menu and click the New button.

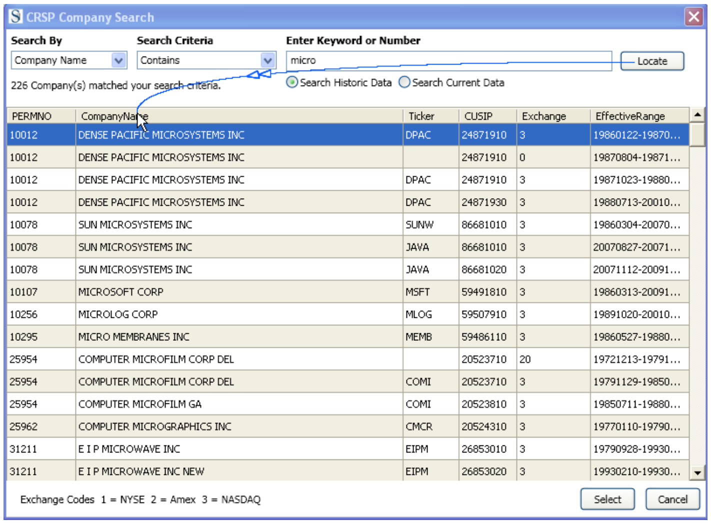
- **List**, the default, is meant for entering a single security, or a small number of securities, manually.
- **List All** calls the full universe of securities in the database selected.
- **List File** accesses securities specified in a user-created input file.
- **Portfolio All** allows the user to create an equal- or value-weighted portfolio from the full universe.
- **Portfolio File** accepts a user-created input file of securities in a portfolio.



LIST

Once the Entity Type Selection is made, a series of options become available. Under List, a menu of identifier keys is available from the drop down menu. Next, identify the issue/issues of interest. If you know the identifier, you may type it in, or you may click on Find... to do a search.

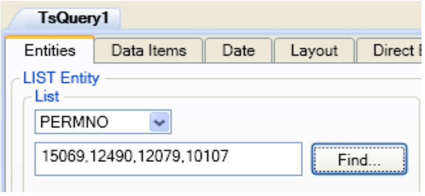




Use the search form to locate a particular company in the CRSP database. Companies matching your search criteria appear in a table, initially sorted by PERMNO. If your search yields many matches, click the column labels to resort the table in the order most useful to you.

When you have found the company/companies you want, click its row in the table, and then click the Select button. To select more than one company, hold down the Ctrl key while making selections.

The PERMNO of that company will appear in the identifier field.

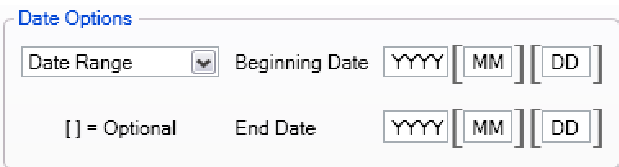


DATE OPTIONS

There are two options on the Entities screen for restricting query output by date: Date Range and Event Date. The Date Options allow you to target date ranges or single dates specific to an entity.

Date Options selected on the Entities screen are further tied to the Date Range option on the Date tab. If Date Range is selected on the Entities tab, a Fixed Date Range must be specified on the Date tab. Likewise, an Event Date must be paired with a Relative Date Range on the Date tab.

Date Range



If given, a Date Range must include both beginning and ending dates. Dates may be in YYYYMMDD, YYYYMM, or YYYY format. For formats that do not specify months or days, the beginning date in the range will start with the first period within the specified range. The ending date will be the last period in the range.

For example, the output of a query with Entity Date Range 200605 - 200703 would include daily data from May 1, 2006 through March 31, 2007, or monthly data from May 31, 2006 through March 31, 2007.

The valid query output is the union of the security's trading history, the Date Range specified on the Entities tab, and the Fixed Date Range given on the Date tab. The Entity Date Range must fall within the Fixed Date Range. Note that the Entity Date Range must also exceed the frequency duration of the calendar selected for your output. For example, if your calendar is set to report annually, the Date Range must span more than 12 months.

Event Date

The Entity Event Date specifies a single date in YYYYMMDD. An Entity Event Date must be paired with a Relative Date Range on the Date tab. The Relative Date Range controls the number of calendar periods before and after the Event Date to report in output. Event Date does not work with indexes or portfolios.

For example, suppose you enter an Entity Event Date of 19991231. Next, in the Date tab, you select the Daily calendar and give a Relative Date Range of 2 days before and 2 days after the Entity Event Date. The query output will include data for trading days 19911229 through 19920104, including the event date.

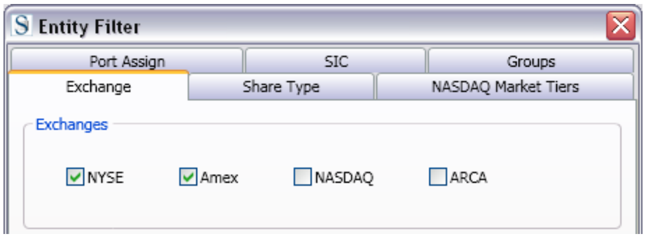
For more information about calendars, Fixed Date Ranges, and Relative Date Ranges, refer to the section on the Date tab below.

ENTITY FILTERS

Several entity filters are available in TsQuery, allowing you to refine your selection of securities by such criteria as stock exchange, share type, and SIC code. These options are available for list and portfolio entity types but will not work with indexes.

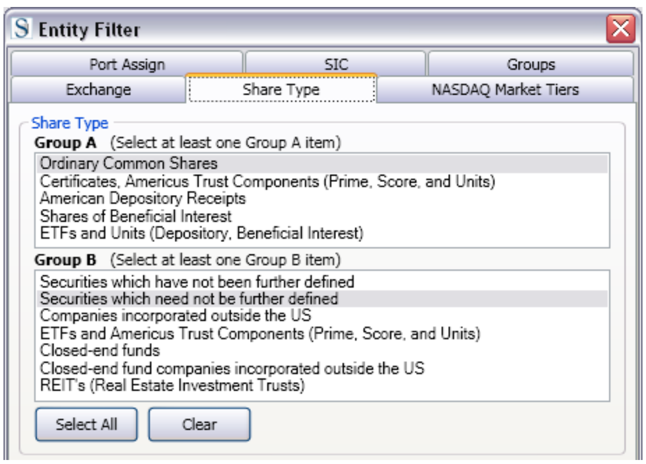
Exchange

The Exchange Filter allows you to filter the trading history of issues on the basis of stock exchange. This option is available only when using the List and Portfolio Entity Types.



Share Type

The Share Type Filter allows you to restrict the output on the basis of share type for individual securities. The selection is based on the CRSP Share Type Code variable.



Select at least one item from both Group A and Group B. Hold the Control button while clicking to select multiple items from a group.

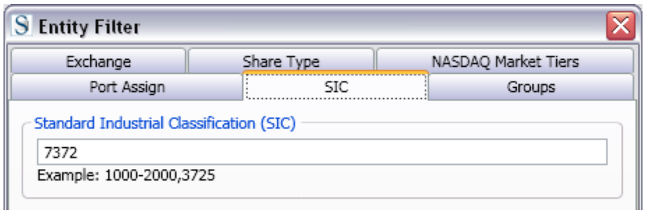
NASDAQ Market Tiers

When the NMSIND option is used, only NASDAQ issue ranges are restricted. The filter has no effect on data from issues trading on other exchanges.

SIC

SIC issue range restriction is applicable to List and Portfolio Entity Types. Each number represents a single SIC Code. You can filter the data to output a range of SIC values or an individual SIC value.

For example, 1000-2000,3725 would extract all securities with SIC Codes between 1000 and 2000, and all with and SIC code of 3725.

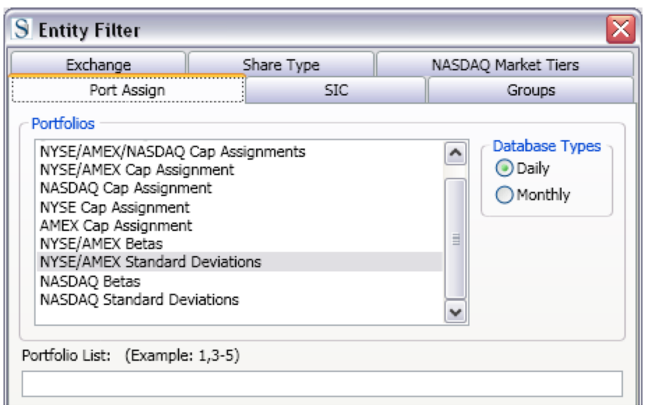


Portfolio Assignment

Portfolio Assignments are only available for use with a Stock and Index Database. A Stock and Index Database subscriber has access to nine sets of daily and eight sets of monthly portfolios. Each entity in the CRSP universe may be a member of a number of CRSP portfolios, which are based on combinations of market capitalization and exchange membership or group membership.

The Port Assign Filter allows you to restrict your query to a subset of the CRSP universe, composed of your choice of portfolio sets and the portfolios within them.

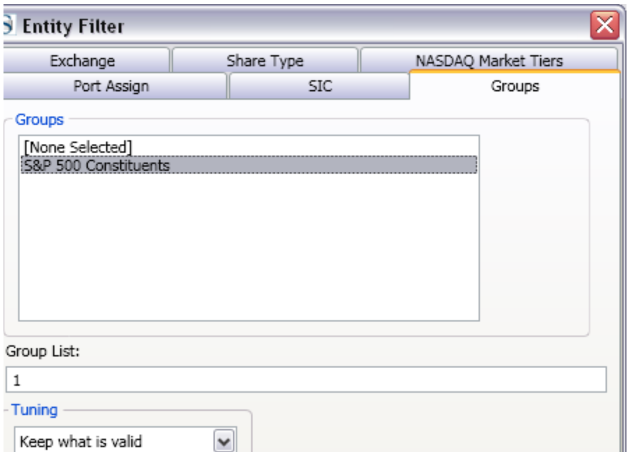
To filter by portfolio assignment, select a Database Type, Daily or Monthly, and then select a portfolio set from the list of portfolio sets. Next enter a list or range of portfolios from the set. For example, to choose portfolios 1, 3, 4, 5, and 10, enter "1,3-5,10" in the Portfolio List field. Refer to Chapter 4 of the Stock and Index Data Description Guide for a list of all portfolios and sets of portfolios



Note: Be sure to match the database type of the items you select on the Data Items tab to the database type of the portfolio you filter by here. For example, if you filter by portfolios in the Monthly NYSE Cap Assignment, select items only from the Monthly Stock & Index group on the Data Items tab.

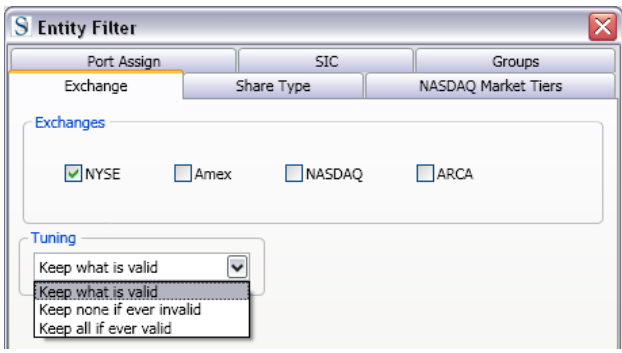
Groups

Currently the only group defined is the S&P 500 Constituents. Selecting this filter limits output to those issues listed in the S&P 500 during the time period covered by the query. Use of Groups is limited to Stock and Index Database subscribers.



Filter Tuning

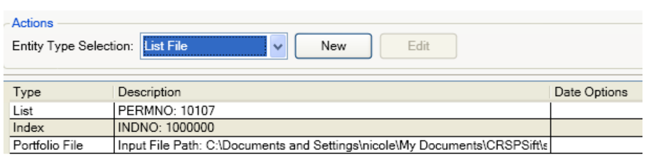
Each entity filter can be further refined by selecting one of three tuning flags. The flags are:



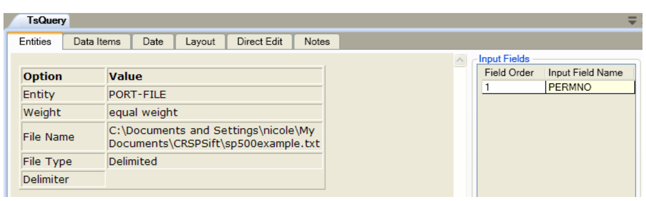
- **Keep what is valid -** Keep only the trading history of an issue where the selected filter applies.
- **Keep none if ever invalid -** Discard all data on an issue if the selected filter fails to match at any point in the time period of the query.
- **Keep all if ever valid -** If the selected filter matches an issue at any point during the time period of the query, all data on that issue is kept.

THE ENTITY HOPPER

After setting appropriate options, click the Add button to add this entity to the hopper in the lower area of the screen.



Clicking an entity's row in the hopper displays the options and values you have set for it.



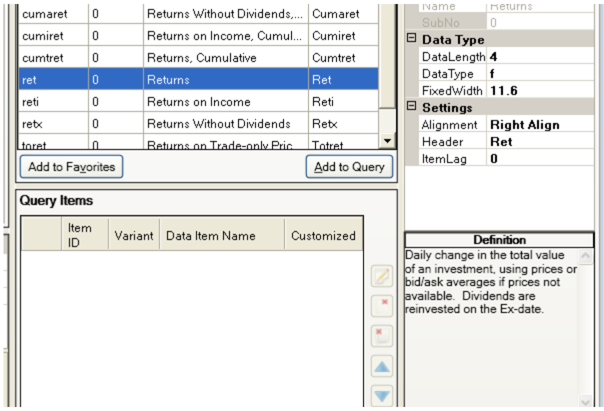
Using this method, add as many entities as your query requires. If you wish to change the order in which entities appear in the hopper, click on a row and use the arrow buttons to move it up or down.

To go back and edit an entity click its row in the hopper, and then click the Edit button.

When you have finished editing the entity, click the Save button to save your changes. To delete an entity from the hopper, select its row and click the Remove button. The Remove All button deletes all entities that you have added.

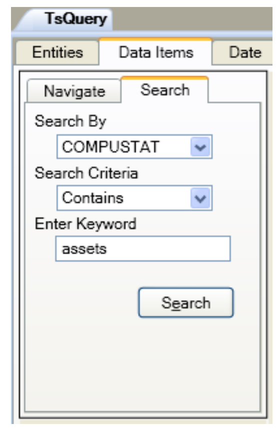
DATA ITEMS

In the Data Items screen you can select the CRSP data items relevant to your query. Please see **"Ts_Query Data Items" on page 29** for a detailed list of item names and their descriptions.



SEARCHING AND NAVIGATING DATA ITEMS

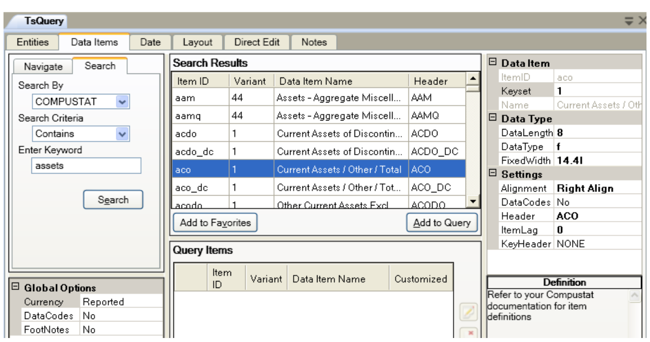
Data items are grouped in the Navigate tab according to the database to which they belong: Daily Stock, Monthly Stock, Compustat (available to CCM Database subscribers), and Favorites. Click the plus sign next to a database to open a categorized list of data items. When you select a category, a list of the data items from that category populates the Search Results area in the central area of the screen.



In addition to navigating items by category, you can search the available data items. To find items this way, click the Search tab.

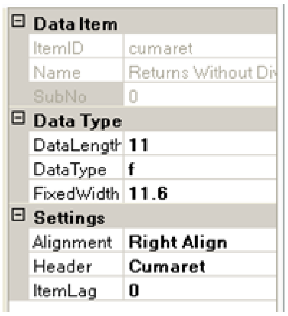
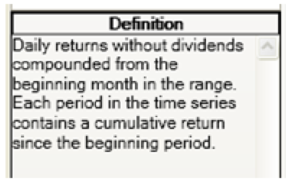
Search is limited to the database selected in the Search By menu. Additional criteria can be supplied as well, such as whether results must be an exact match for the search term, begin or end with the term, or simply contain the term.

Both mnemonic codes and full item names are searched and returned for each item. Click the column names—Item ID, Variant, Data Item Name, or Header—to change the order in which items are sorted.



DATA ITEM PROPERTIES

Further details about an individual item are available on the far right of the screen.

<table>
<tr><th>Data Item Settings</th><th>Data Item Description</th></tr>
<tr><td>
</td><td>
</td></tr>
</table>

After selecting a data item, if you want to keep its default settings, click the Add button to add that item to the hopper below. Otherwise, click the value of a setting you wish to change, modify the settings, and then click Add. Values that appear in bold type are editable. Changing default settings affects the item report formatting.

Data Length

CRSP recommends keeping the Data Length field consistent with the Fixed Width so that the item is not truncated. Data Length is based on the values in the underlying data items.

Data Type

CRSP recommends that Data Type not be edited. What appears in the field is what CRSP has identified to be appropriate for the underlying data item.

Fixed Width

The allotted number of characters that an item will be given in the output file. Fixed Width must be greater than or equal to the Data Length for the requested item. Note that expanding Fixed Width does not increase a data item's numeric precision.

Header

If column headers are used, more descriptive names may replace the default itemids.

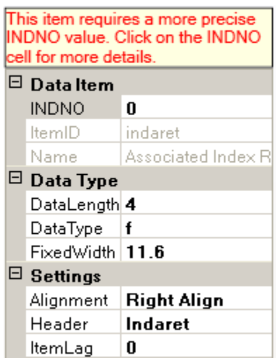
Item Lag

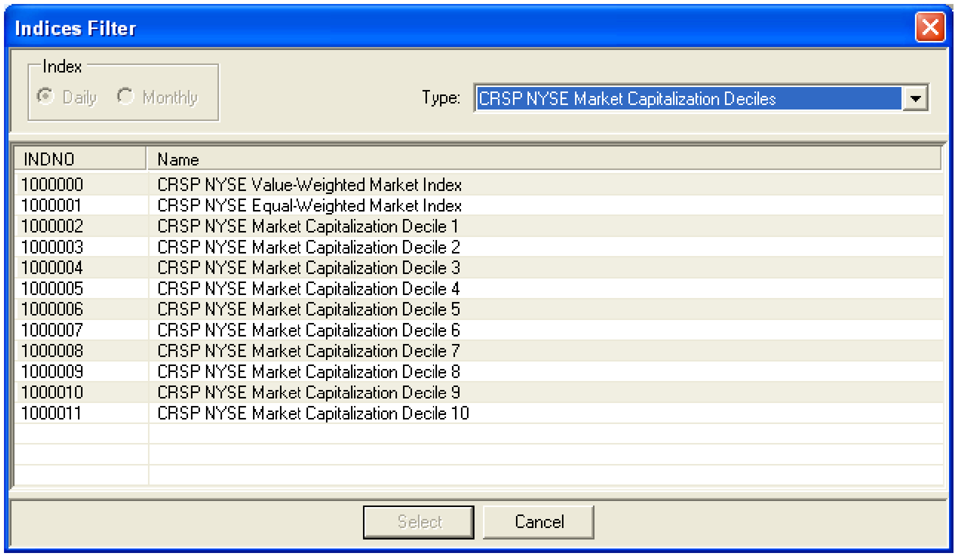
Used to either lead or lag a data item. A positive number of periods will lag the data by the number of periods designated in the output calendar, while a negative number will lead the data item. For example, given a December 2006 date in an output file, prices requested with a two month lag will return the October 2006 values, and prices requested with a two month lead will return prices for February 2007.

INDNO/SUBNO

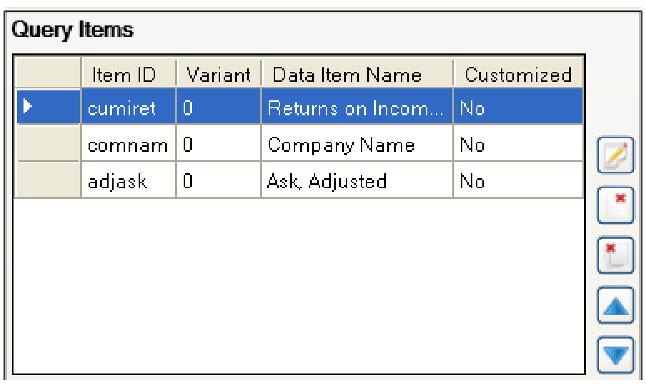
Data items related to an index or portfolio require more specific information before they can be added to the item hopper - a particular INDNO value for an index, or a particular SUBNO value for a portfolio. When these items are selected, red text instructing you how to refine your selection appears above the Data Item Settings area.

Click on the INDNO or SUBNO to open the list of available indexes or portfolios to which the item may be related.



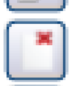


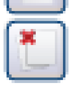
Repeat this process until all the data items of interest to you appear in the hopper at the bottom of the screen. As in the Entities screen, use the arrow buttons to the right of the hopper to change the order in which data items appear.



To remove a single item, select its row and click the single document button. To remove all items from the hopper, click the multiple document button.

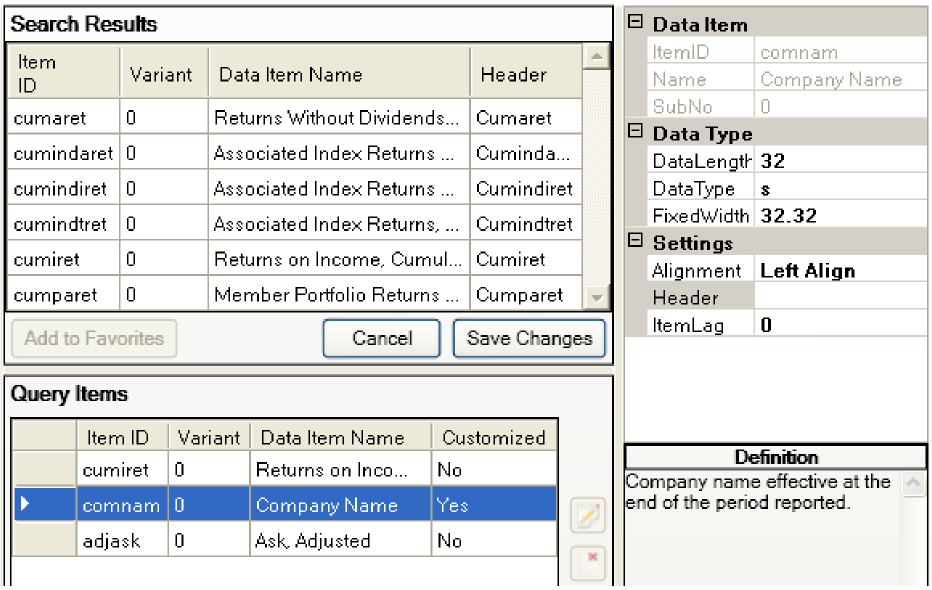
 Edit. Click this to edit an item's attributes.

 Remove the selected item from your query.

 Remove all items from the Query Items list.

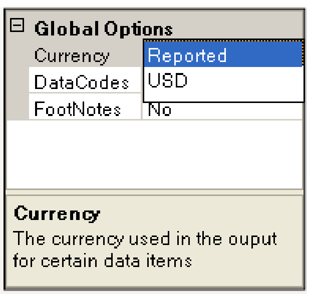
Click the OK button to confirm the addition of the selected items to your query. Click cancel to exit the StkQuery Data Items window without making any changes.

To modify the settings for a data item in the hopper, select its row and click the Edit button. Change the data item settings to your liking, and then click the Save Changes button. When you change an item's settings from the default, its entry in the hopper displays a Yes in the "Customized?" column. To cancel changes, click the Cancel button.



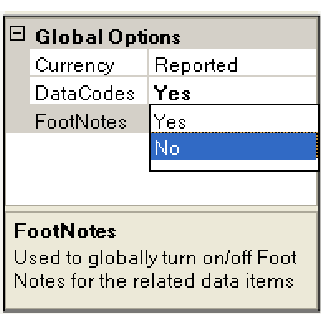
GLOBAL ITEM OPTIONS

When selecting Compustat data items using the new CCM databases, several global option settings are available. The default currency conversion option is to report data items in the currency in which they are reported. By clicking on the drop down menu, you may change this option to convert all items to US Dollars.



You can also choose to include footnotes and/or data codes for the Compustat items in your query that have them. The Footnote and Data Code items can also be extracted automatically for all items that have them by choosing Yes for the settings. This can also be done manually by selecting the individual data codes or footnotes for select data items in the Data Item Settings.

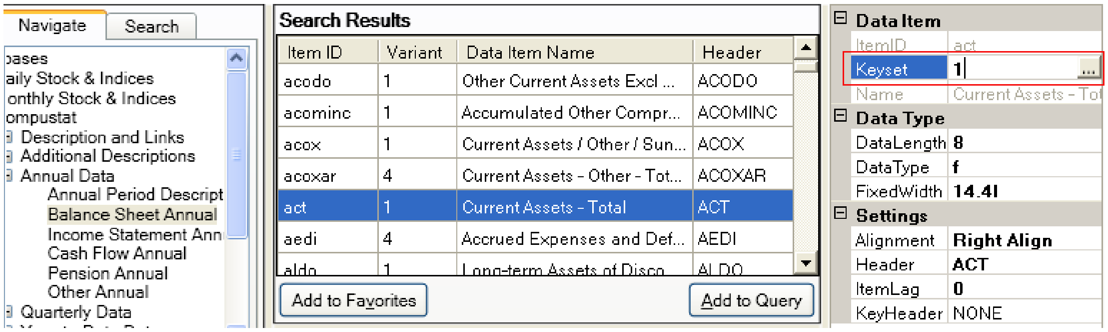
NOTE: Global options must be selected before choosing data items in order for them to be applied.



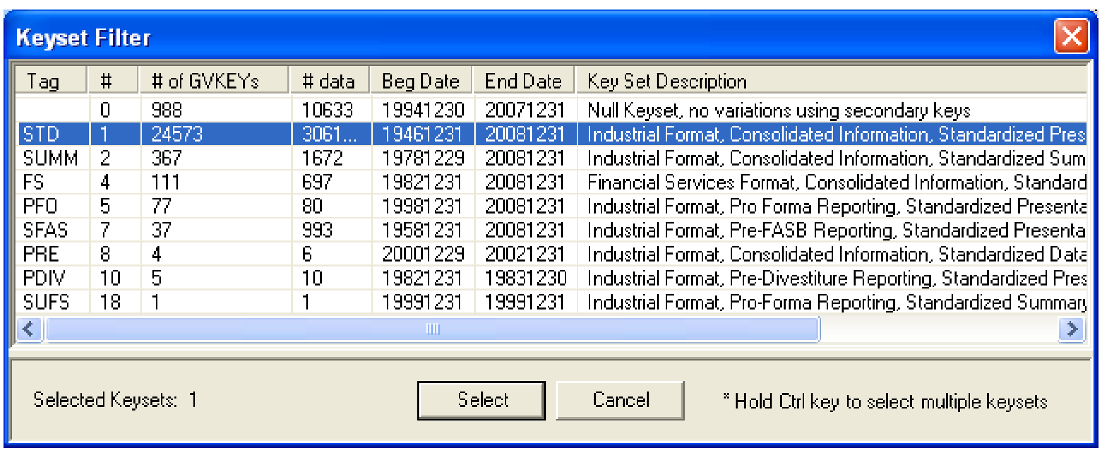
It is important to note that the Global Item Options apply only to Compustat data accessed from the CRSP/Compustat Merged Database.

KEYSETS

Keysets are CRSP-created groups of Compustat secondary keys that are used to further define Compustat data items. CRSP has identified a default keyset for each data item. Sift allows you to override the default keysets, or select multiple keysets in Sift.



On the Data Items screen, clicking on the Keyset box opens a table of all existing keysets for the items with statistics about each. The default keyset is highlighted upon opening the box and is typically STD, or Standard. The Keyset number is provided, the number of GVKEYs, the number of data points, the date range populated by the data, and a description of the Keyset.



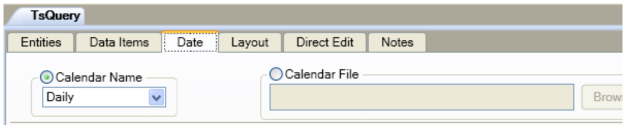
Choose different or additional keysets and click the Select button to close the window.

DATE

The Date screen allows you to control what dates will be used in the output for the data items selected for each entity.

CALENDAR OPTIONS

You can define your own set of dates for a query, or you can select one of several predefined calendars. To use a predefined calendar, click the "Calendar Name" radio button and select a calendar—Daily, Weekly, Monthly, Quarterly, or Annually—from the menu.

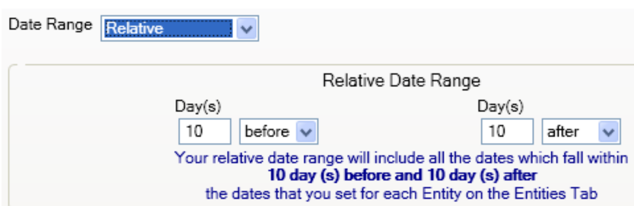


You may want to create a custom calendar with dates for output that are not available in one of the standard Calendar Name options. Click on the Calendar File radio button to select a user-generated calendar.

Refer to the Calendar File Wizard chapter in this guide for information on creating a custom calendar file.

DATE RANGE

Date usage is linked to any date information entered in the Entities screen. If an event date is assigned to an issue, either in the Entities screen, or included in the list entity input file, Relative Date Range should be selected.



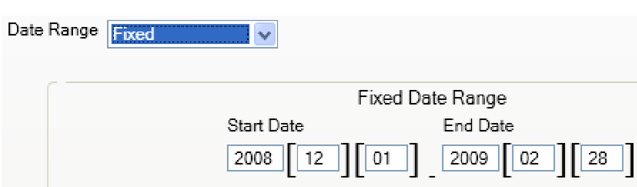
A relative date range specifies a window of time, in days, based on the event date chosen in the Entities screen. It is tied to the calendar selected for the output. Take, for example, an event date of October 18, 2005, with the Daily calendar selected for output. We would like to limit the results of our query to information from the five trading days preceding, but not including, the event date. To accomplish this, we first set the date range type to Relative. Then, in the Relative Event Date Range controls, we set the first parameter to five trading days before and the second parameter to one trading day before.

The query will now return information only from October 13, 2005 to October 17, 2005. Similarly, depending on your needs, you could set the range to a window of days either surrounding or after a selected event date.

Helpful hint:

When using relative dates, include Date, caldt, as an output item in your query. Without caldt, all that returns is an item's position relative to the event date, with the event date always equal to zero.

For all queries that do not employ event dates, the default Fixed Date Range should be selected in the Date screen.



If a date range is specified in the Entities tab, Fixed Date Range acts as an umbrella to the beginning and ending dates selected, and must cover all dates requested. For example, if you used the following list entity input file, the Fixed Date

Range set in the Date screen would need to span 19751230-19961231.

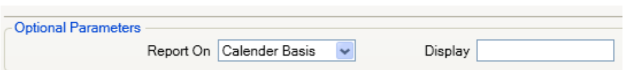
12490 19751230 19861001 IBM

10107 19900930 19961231 Microsoft

Optional Parameters

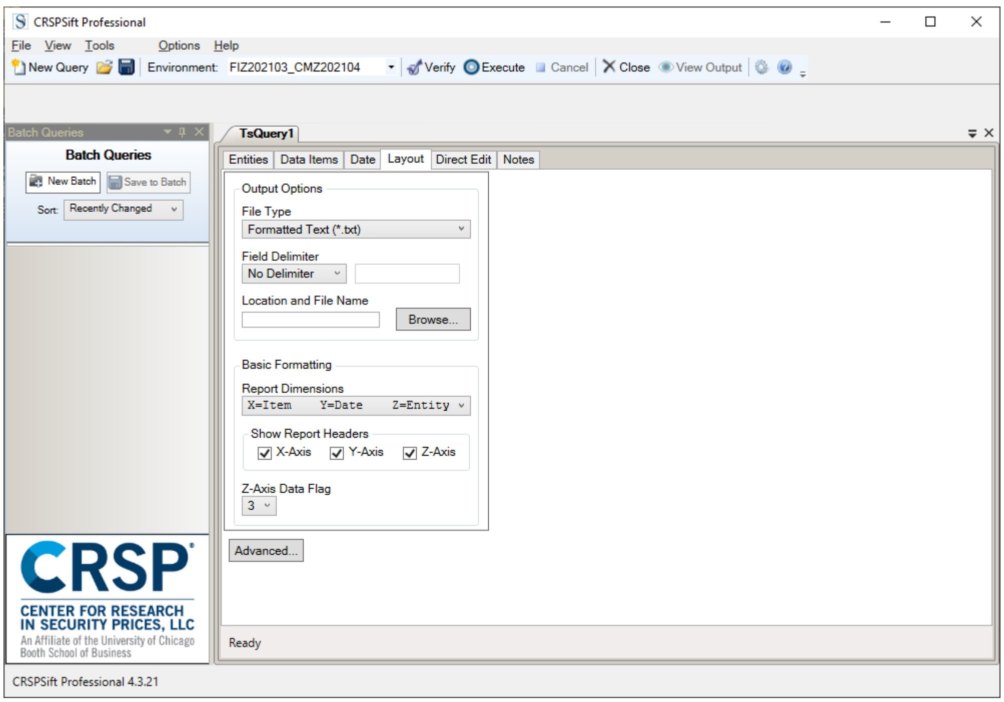
The Report On menu allows you to select either a Calendar Basis or Fiscal Basis for reporting. This option applies only to Compustat data items, controlling whether to report based on a security's fiscal year or the December calendar year. Queries accessing only CRSP data report on the December calendar basis.

The Display field allows you to select specific dates or a range that falls within a fixed date range that will be displayed in the output.



LAYOUT

On the Layout screen you specify the file type, save location, and physical layout of a query's output.



OUTPUT OPTIONS

TsQuery can save report output in a variety of file formats. By default TsQuery saves reports as Formatted Text files with no field delimiter, which is intended to be human-readable.

Choosing a Field Delimiter

If you plan to import query output into another program for further processing, select a field delimiter from the Field Delimiter menu. A field delimiter is a marker that tells the importing program where to split a data record into its constituent data fields. Available options are Pipe (|), Comma (,), and Space ( ). You can enter your own preferred field delimiter by selecting Custom and typing a value in the text field next to the menu.

Supported File Formats

In addition to Formatted Text, TsQuery can save query output directly to any of the following file formats:

- **Excel 2007 Workbook (*.xlsx)** - Excel version 2007
  NOTE: This Excel version has a row limit of 1,048,576 total rows. If a query generates more than that number of rows, the output will be truncated at the row limit.
- **MAT-files (*.mat)** - Matlab version 7
- **SAS Dataset (*.sas7bdat)** - SAS version 7
- **Stata File** (*.dta)
- **SPSS File** (*.sav)

BASIC FORMATTING

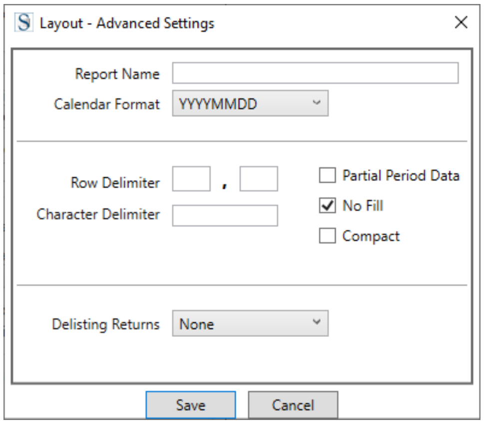
In the default Formatted Text format, X, Y, and Z correspond to the Data Item, Date, and Entity information added to the query. The preview pane of the Layout screen shows an animated preview of how your report will appear, allowing you to visualize it without first having to execute the query. The preview is best used to visualize the appearance of Formatted Text (.txt) output. The appearance of output in other formats, such as Excel or Matlab, will vary according to the target application. Previewing saves time and enhances the readability of your output. If, for instance, your query uses only a few entities, you may wish to place Entity on the report's X axis. If it uses many, you may prefer to place it along the Y or Z axis to limit the output's physical width.

The nature of your query will determine the proper report layout. Use the controls to the left of the preview pane to test various scenarios. To see how a report will look given particular settings, modify the layout controls, and then click the Preview button. The contents of the pane will reorganize to reflect your settings, and the axes will briefly flash with color to identify themselves: X is purple, Y is green, and Z is red. It may be helpful to think of X as "rows," Y as "columns," and Z as "page".

When you have found a suitable layout, click the Browse... button next to the Location and File Name field. Navigate to where you want to save your report, give the file a descriptive name, and then click the Save button. When you execute the query, CRSPSift will save the report in this file.

ADVANCED LAYOUT SETTINGS

Click the **Advanced...** button to access the following advanced layout settings.



Report Name

A text description that will appear at the top of the report. (Formatted Text output only)

Calendar Format

Controls formatting of the dates appearing in the output when date headers are chosen. Options include:

FORMAT	EXAMPLE
`YYYYMMDD` (default)	`20071231`
`YYMMDD`	`071231`
`MM/DD/YY`	`12/31/07`
`MM/DD/YYYY`	`12/31/2007`
`DD-mmm-YYYY`	`31-Dec-2007`
Cal-Based	`2007.4` (for the quarterly calendar)

Row Delimiter

Controls the number of rows between output lines. The first integer is the number of blank lines between rows when the Z-axis value changes and impacts Z-flag options 1 and 3. The second integer is the number of blank lines between all data rows. The default is 0,0.

Character Delimiter

A character string placed before and after all character string fields—Company Name, for example—in report records. The default is no character string delimiter. For example, a value of `*` would cause the character string field Company Name to be surrounded by asterisks in output.

Partial Period Data

Includes partial-period data in the output. If not selected, ts_print will not include the last month of data for a company that stopped trading mid-month, because only months with end-of-month data are normally included. This option applies to monthly data.

No Fill

The No Fill option, enabled by default, causes rows outside an issue's date range or the user's date specification not to print to the output file. No Fill is applicable under the following conditions:

- Item is chosen for the X-axis
- Date is the Y-axis
- Entity is the Z-axis

- Z-Axis Data Flag is set to 1 or 3
- Fixed Date Range is selected on the Date tab.

No Fill does not work with relative dates.

Compact

Compresses output by removing all spaces and trailing decimal zeros in numbers. Compact is ideal for producing output to be loaded into another program.

Delisting Returns

Default Missing: Outputs the default value (`-88.0`) for missing delisting returns for entities that have delisted during the selected dates. You must have a Returns data item selected in the Data Items tab in order to include Delisting Returns in your output.

Custom Missing: Outputs user-specified missing delisting return codes. You may assign missing values for a range of delisting codes for select beginning and ending exchanges. To do this, create a text input file containing the following fields in the following order: begin delist code, end delist code, begin exchange code, end exchange code, alternate delisting return value, alternate delisting return without dividends value.

For example:

```
200   299 1 3 -0.50 -0.55

500   570 3 3 -0.40 -0.45

571   600 3 3 -0.30 -0.35
```

Note that in this example, the first row would assign a `-0.50` value to missing delisting returns for securities with delisting codes 200-299 that initially traded on NYSE and ended up trading on NASDAQ, and `-0.55` for missing delisting returns without dividends. If your query includes a security with a missing delisting return that was not included in your input file, the default missing delisting return, `-55.0`, would be used instead.

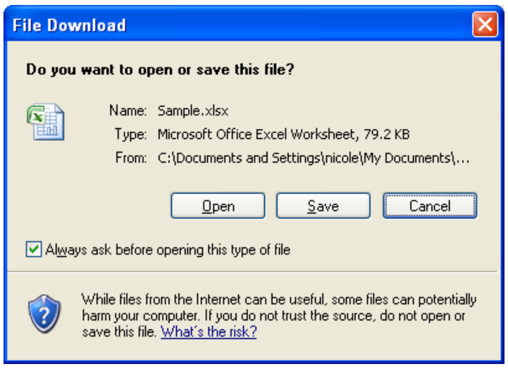
DIRECT EDIT

To use this feature, click the Direct Edit tab. Click the Edit button above the text area there, and then type or paste your query code, overwriting the template query code. When you are finished, click Save. If the syntax of your query is correct, CRSPSift automatically populates the appropriate fields in the other screens to reflect your query code.

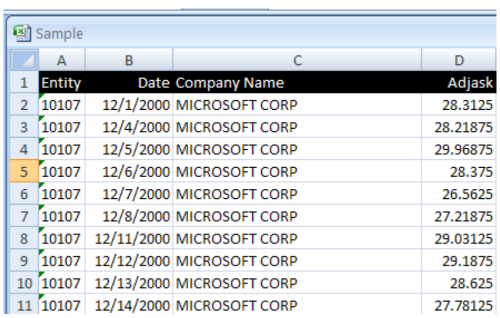
EXECUTING A QUERY

After executing a query, click the View Output button on the CRSPSift toolbar.

The File Download window opens, prompting you to open the output file in the target application or to save it in a different location.



Click Open to open the output file in the target application (Excel 2007, in the example shown below).



	A	B	C	D
1	Entity	Date	Company Name	Adjask
2	10107	12/1/2000	MICROSOFT CORP	28.3125
3	10107	12/4/2000	MICROSOFT CORP	28.21875
4	10107	12/5/2000	MICROSOFT CORP	29.96875
5	10107	12/6/2000	MICROSOFT CORP	28.375
6	10107	12/7/2000	MICROSOFT CORP	26.5625
7	10107	12/8/2000	MICROSOFT CORP	27.21875
8	10107	12/11/2000	MICROSOFT CORP	29.03125
9	10107	12/12/2000	MICROSOFT CORP	29.1875
10	10107	12/13/2000	MICROSOFT CORP	28.625
11	10107	12/14/2000	MICROSOFT CORP	27.78125

TS_QUERY DATA ITEMS

DAILY DATA

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
Identification STK_ID						
cusip	CUSIP, Header	CUSIP	0	%8s	list	The latest 8 character CUSIP identifier for a security.
permco	PERMCO	PERMCO	0	%6d	list, index	A unique permanent company identification number assigned by CRSP to all companies with issues on a CRSP File. This number is permanent for all securities issued by a company regardless of name changes.
permno	PERMNO	PERMNO	0	%6d	list, index	A unique permanent identification number assigned by CRSP to each security. You can track a security through its entire trading history in CRSP's files with one PERMNO, regardless of name or capital structure changes.
compno	NASDAQ Company Number	COMPNO	0	%8d	list	The latest 8 character CUSIP identifier for a security.
Name History DSTK_NAMES						
comnam	Company Name	Company Name	0	%-32.32s	list	Company name associated with the security, effective at the end of the period reported.
comnam	Company Name, End of Previous Period	Effective Name	1	%-32.32s	list	Company name effective at the end of the period preceding the period reported.
comnam	Company Name, Most Recent	Last Company Name	2	%-32.32s	list	The most recent company name known to CRSP.
exchcd	Exchange Code	EX	0	%2d	list	Integer code(s) indicating the exchange(s) on which the security is listed at the end of the period reported.
exchcd	Exchange Code, End of Previous Period	EXE	1	%2d	list	Integer code(s) indicating the exchange(s) on which the security is listed at the end of the period preceding the period reported.
exchcd	Exchange Code, Most Recent	EXL	2	%2d	list	The most recently known integer code(s) indicating the exchange(s) on which the security is listed.
ncusip	CUSIP, Most Recent	NCUSIPL	2	%-8.8s	list	The most recently used 8 character CUSIP identifier for a security through the end of the file.
ncusip	CUSIP, End of Previous Period	NCUSIPE	1	%-8.8s	list	8 character CUSIP identifier for a security at the end of period preceding the period reported.
ncusip	CUSIP	NCUSIP	0	%-8.8s	list	The 8 character CUSIP identifier for a security at the end of the period reported.
primexch	Primary Exchange	Ex1	0	%c	list	Character code indicating the exchange on which the security has its primary listing at the end of the period reported. (N = NYSE, A = NYSE MKT, Q = NASDAQ, X = Other)
primexch	Primary Exchange, End of Previous Period	Primexche	1	%c	list	Character code indicating the exchange on which the security has its primary listing at the end of the period preceding the period reported. (N = NYSE, A = NYSE MKT, Q = NASDAQ, X = Other)
primexch	Primary Exchange, Most Recent	Primexchl	2	%c	list	As of the period being accessed, the character code indicating the exchange on which the security has its most recently known primary listing. (N = NYSE, A = NYSE MKT, Q = NASDAQ, X = Other)
secstat	Security Status	Sst	0	%c	list	Character code describing the status of a security at the end of the period reported. (W=when issued, R = regular way, E = Ex-distributed, Q = bankruptcy)

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
secstat	Security Status, End of Previous Period	Secstate	1	%c	list	One-character code describing the status of a security at the end of the period preceding the period reported. (W=when issued, R = regular way, E = Ex-distributed, Q = bankruptcy)
secstat	Security Status, Most Recent	Secstatl	2	%c	list	One-character code describing the most recently known status of a security at the end of the period reported. (W=when issued, R = regular way, E = Ex-distributed, Q = bankruptcy)
shrcd	Share Type Code, End of Previous Period	SCE	1	%2d	list	2-digit code as of the period preceding the period reported. First digit describes the type of security, second digit provides further security or company detail.
shrcd	Share Code	SH	0	%2d	list	2-digit code as of end of period. First digit describes the type of security, second digit provides further security or company detail.
shrcd	Share Type Code, Most Recent	SCL	2	%2d	list	2-digit code, most recently known as of end of period. First digit describes the type of security, second digit provides further security or company detail.
shrcls	Share Class, End of Previous Period	CLE	1	%-1.1s	list	Character identifying the class of stock as of the period preceding the period being accessed, generally left blank. Assigned by the exchange in cooperation with the company.
shrcls	Share Class, Most Recent	CLL	2	%-1.1s	list	Character identifying the most recently known class of stock as of the end of period, generally left blank. Assigned by the exchange in cooperation with the company.
shrcls	Share Class	CL	0	%-1.1s	list	Character identifying the class of stock as of the end of period, generally left blank. Assigned by the exchange in cooperation with the company.
siccd	Standard Industrial Classification (SIC) Code	SIC	0	%4d	list	The SIC code used to group companies with similar products or services at the end of the period reported.
siccd	SIC Code, End of Previous Period	SICE	1	%4d	list	The SIC code used to group companies with similar products or services at the end of the period preceding the period reported.
siccd	SIC Code, Most Recent	SICL	2	%4d	list	The most recent SIC code used to group companies with similar products or services.
snaics	NAICS, Most Recent	Naicsl	2	%-7.7s	list	The most recently known North American Industry Classification System, 6-character industry code.
snaics	North American Industry Classification System (NAICS)	Naics	0	%-7.7s	list	North American Industry Classification System, 6-character industry code, at the end of period reported.
snaics	NAICS, End of Previous Period	Naicse	1	%-7.7s	list	North American Industry Classification System, 6-character industry code, at the end of period preceding the period reported.
ticker	Ticker Symbol	Ticker	0	%-5.5s	list	An alphabetic symbol assigned to a security by an exchange at the end of the period reported.
ticker	Ticker, End of Previous Period	Tickere	1	%-5.5s	list	An alphabetic symbol assigned to a security by an exchange at the end of the period preceding the period reported.
ticker	Ticker, Most Recent	Tickerl	2	%-5.5s	list	The most recently used alphabetic symbol assigned to a security by an exchange.
trdstat	Trading Status	Tst	0	%c	list	One-character field describing the status of a security at the end of the period. (A = active, H = halted, S = suspended, X = unknown)

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
trdstat	Trading Status, End of Previous Period	Trdstate	1	%c	list	One-character field describing the status of a security at the end of the period preceding the period reported. (A = active, H = halted, S = suspended, X = unknown)
trdstat	Trading Status, Most Recent	Trdstatl	2	%c	list	One-character field describing the status of a security most recently known at the end of the period. (A = active, H = halted, S = suspended, X = unknown)
tsymbol	Trading Ticker Symbol	Symbol	0	%-10.10s	list	Trading symbol listed by exchanges and consolidated quote systems, including all temporary values, share classes and share type suffixes, at the end of the period reported.
tsymbol	Trading Ticker Symbol, End of Previous Period	Symbole	1	%-10.10s	list	Trading symbol listed by exchanges and consolidated quote systems, including all temporary values, share classes and share type suffixes, at the end of the period preceding each period reported.
tsymbol	Trading Ticker Symbol, Most Recent	Symboll	2	%-10.10s	list	Trading symbol listed by exchanges and consolidated quote systems, including all temporary values, share classes and share type suffixes, most recently known.
Prices DSTK_PRICES						
adjask	Ask, Adjusted	Adjask	0	%12.5f	list	Closing ask on the trading date being accessed, adjusted for distributions.
adjask	Ask Adjusted, Last Available Nonmissing	Adjaskprev	1	%12.5f	list	Last available non-missing closing ask as of the trading date being accessed, adjusted for distributions.
adjaskhi	Askhi, Adjusted	Adjaskhi	0	%12.5f	list	Highest trading price during the day, or the closing ask if trading price not available, adjusted for distributions. Ask identified by a leading dash -.
adjbid	Bid, Adjusted	Adjbid	0	%12.5f	list	Closing bid on the trading date being accessed, adjusted for distributions.
adjbid	Bid Adjusted, Last Available Nonmissing	Adjbidprev	1	%12.5f	list	Last available non-missing closing bid as of the trading date being accessed, adjusted for distributions.
adjbidlo	Bidlo, Adjusted	Adjbidlo	0	%12.5f	list	Lowest trading price during the day, or the closing bid if trading price not available, adjusted for distributions. Bid identified by a leading dash -.
adjopenprc	Open Price, Adjusted	Adjopenprc	0	%12.5f	list	Daily open price, representing the first trade of the day, adjusted for distributions.
adjprc	Price, Adjusted	Adjprc	0	%12.5f	list	Daily close, adjusted for distributions. Replaced with bid/ask average if price not available. Bid/ask average identified by a leading dash -.
adjprc	Price Adjusted, Last Available Nonmissing	Adjprcprev	1	%12.5f	list	Last available non-missing daily close or bid/ask average, adjusted for distributions. Bid/ask average is used if price is not available. Bid/ask average identified by a leading dash -.
adjtprc	Trade-only Price, Adjusted, Last Available Nonmissing	Adjtprcprev	1	%12.5f	list	Last available non-missing trade-only price as of date being accessed, adjusted for distributions.
adjtprc	Trade-only Price, Adjusted, End of Period	Adjtprc	0	%12.5f	list	Last trade-only price of a day, adjusted for distributions.
ask	Ask	Ask	0	%12.5f	list	Closing ask on the trading date being accessed.
ask	Ask, Last Available Nonmissing	Askprev	1	%12.5f	list	Last available non-missing closing ask as of the trading date being accessed.

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
askhi	Ask or High Price	Askhi	0	%12.5f	list	Highest trading price during the day, or the closing ask if trading price not available. Ask identified by a leading dash -.
bid	Bid	Bid	0	%12.5f	list	Closing bid on the trading date being accessed.
bid	Bid, Last Available Nonmissing	Bidprev	1	%12.5f	list	Last available non-missing closing bid as of the trading date being accessed.
bidlo	Bid or Low Price	Bidlo	0	%12.5f	list	Lowest trading price during the day, or the closing bid if trading price not available. Bid identified by a leading dash -.
high	Highest Close	High	0	%12.5f	list	Highest daily closing price within the selected output calendar.
low	Lowest Close	Low	0	%12.5f	list	Lowest daily closing price within the selected output calendar.
openprc	Open Price	OpenPrc	0	%12.5f	list	Daily open price, representing the first trade of the day.
prc	Price or Bid/Ask Average	Prc	0	%12.5f	list	The daily closing price of a security. If unavailable, the number in the price field is replaced with a bid/ask average (marked by a leading dash).
prc	Price, Last Available Nonmissing	Prcprev	1	%12.5f	list	The last non-missing daily closing price or bid/ask average of a security. If price is unavailable, the number in the price field is replaced with a bid/ask average (marked by a leading dash).
tprc	Trade-only Price, End of Period	Tprc	0	%12.5f	list	Last trade-only price of a day.
tprc	Trade-only Price, Last Available Nonmissing	Tprcprev	1	%12.5f	list	Last available non-missing trade-only price as of date being accessed.
Returns DSTK_RETURNS						
cumaret	Returns Without Dividends, Cumulative	Cumaret	0	%11.6f	list, index	Daily returns without dividends compounded from the beginning month in the range. Each period in the time series contains a cumulative return since the beginning period.
cumiret	Returns on Income, Cumulative	Cumiret	0	%11.6f	list, index	Daily returns on income compounded from the beginning month in the range. Each period in the time series contains a cumulative return since the beginning period.
cumtret	Returns, Cumulative	Cumtret	0	%11.6f	list, index	Daily total returns compounded from the beginning day in the range. Each trading day in the time series contains a cumulative return since the beginning period.
ret	Returns	Ret	0	%11.6f	list, index, port	Daily change in the total value of an investment, using prices or bid/ask averages if prices not available. Dividends are reinvested on the Ex-date.
reti	Returns on Income	Reti	0	%11.6f	list, index	Return on dividends, can be derived from the difference between total return and return without dividends.
retx	Returns Without Dividends	Retx	0	%11.6f	list, index	Day-to-day capital appreciation of a security, calculated as a change in price, or bid/ask average if prices not available.
toret	Returns on Trade-only Prices	Totret	0	%11.6f	list	Daily change in the total value of an investment, using trade-only prices. Dividends are reinvested on the Ex-date.

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
toretx	Returns Without Dividends, Trade-only Prices	Toretx	0	%11.6f	list	Daily total returns, using trade-only prices, compounded from the beginning day in the range. Each trading day in the time series contains a cumulative return since the beginning period.
Returns vs Index DSTK_IRETURNS						
cumindaret	Associated Index Returns Without Dividends, Cumulative	Cumindaret	0	%11.6f	list	Price appreciation only, of an index that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
cumindiret	Associated Index Returns on Income, Cumulative	Cumindiret	0	%11.6f	list	Compounded return, on income only, of an index that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
cumindtret	Associated Index Returns, Cumulative	Cumindtret	0	%11.6f	list	Compounded total returns of an index that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
cumxsaret	Excess Returns Without Dividends vs. Index Series, Cumulative	Cumxsaret	0	%11.6f	list	Compounded difference between a security's capital appreciation and the capital appreciation of an index that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
cumxsiret	Excess Returns on Income vs. Index Series, Cumulative	Cumxsiret	0	%11.6f	list	Compounded difference between a security's return on income and the return on income of an index that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
cumxstret	Excess Returns vs. Index Series, Cumulative	Cumxstret	0	%11.6f	list	Compounded difference between a security's total return and the total return of an index that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
indaret	Associated Index Returns Without Dividends	Indaret	0	%11.6f	list	Compounded price appreciation only, of an index that a user selects to be associated with a security or group of securities.
indiret	Associated Index Returns on Income	Indiret	0	%11.6f	list	Returns on income only of an index that a user selects to be associated with a security or group of securities.
indtret	Associated Index Returns	Indtret	0	%11.6f	list	Total returns of an index that a user selects to be associated with a security or group of securities.
xsaret	Excess Returns Without Dividends vs. Index Series	Xsaret	0	%11.6f	list	Difference between a security's capital appreciation and the capital appreciation of an index that a user selects to be associated with the security.
xsiret	Excess Returns on Income vs. Index Series	Xsiret	0	%11.6f	list	Difference between a security's return on income and the return on income of an index that a user selects to be associated with the security.
xstoret	Excess Returns on Trade-only Prices vs. Index Series	Xstoret	0	%11.6f	list	Difference between a security's total return based on trade-only prices and the total trade-only price return of an index that a user selects to be associated with the security.
xstret	Excess Returns vs. Index Series	Xstret	0	%11.6f	list	Difference between a security's total return and the total return of an index that a user selects to be associated with the security.

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
Returns vs Portfolio DSTK_PRETURNS						
cumparet	Member Portfolio Return Without Dividends, Cumulative	Cumparet	0	%11.6f	list	Compounded price appreciation only, of a portfolio that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
cumpiret	Member Portfolio Return on Income, Cumulative	Cumpiret	0	%11.6f	list	Compounded return, on income only, of a portfolio that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
cumptret	Member Portfolio Return, Cumulative	Cumptret	0	%11.6f	list	Compounded total returns of a portfolio that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
cumxsparet	Excess Returns Without Dividends vs. Associated Portfolios, Cumulative	Cumxsparet	0	%11.6f	list	Compounded difference between a security's capital appreciation and the capital appreciation of a portfolio that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
cumxspiret	Excess Returns on Income vs. Associated Portfolios, Cumulative	Cumxspiret	0	%11.6f	list	Compounded difference between a security's return on income and the return on income of a portfolio that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
cumxsptret	Excess Returns vs. Associated Portfolios, Cumulative	Cumxsptret	0	%11.6f	list	Compounded difference between a security's total return and the total return of a portfolio that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
cumxstoret	Excess Returns on Trade-only Prices vs. Index Series, Cumulative	Cumxstoret	0	%11.6f	list	Compounded difference between a security's total return based on trade-only prices and the total trade-only price return of an index that a user selects to be associated with the security. Each period in the time series contains a cumulative return since
portaret	Associated Portfolios Returns Without Dividends	Portaret	0	%11.6f	list	Price appreciation only, of a portfolio that a user selects to be associated with a security or group of securities.
portiret	Associated Portfolios Returns on Income	Portiret	0	%11.6f	list	Returns on income only of a portfolio that a user selects to be associated with a security or group of securities.
porttret	Associated Portfolios Returns	Porttret	0	%11.6f	list	Total returns of a portfolio that a user selects to be associated with a security or group of securities.
portxsaret	Excess Returns Without Dividends vs. Associated Portfolios	Portxsaret	0	%11.6f	list	Difference between a security's capital appreciation and the capital appreciation of a portfolio that a user selects to be associated with the security.
portxsiret	Excess Returns on Income vs. Associated Portfolios	Portxsiret	0	%11.6f	list	Difference between a security's return on income and the return on income of a portfolio that a user selects to be associated with the security.
portxstoret	Excess Returns on Trade-only Prices vs. Associated Portfolios	Portxstoret	0	%11.6f	list	Difference between a security's trade-only price total return and the trade-only price total return of a portfolio that a user selects to be associated with the security.

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
portxstret	Excess Returns vs. Associated Portfolios	Portxstret	0	%11.6f	list	Difference between a security's total return and the total return of a portfolio that a user selects to be associated with the security.
Shares STK_SHARES						
adjshr	Shares Outstanding, Adjusted for Rights	Adjshrxr	1	%9d	list	The number of publicly held shares on NYSE, NYSE MKT, and NASDAQ exchanges, recorded in 1000s and adjusted for rights only.
adjshr	Shares Outstanding Mapped to Time Series, Adjusted	Adjshr	0	%9d	list	The number of publicly held shares on NYSE, NYSE MKT, and NASDAQ exchanges, recorded in 1000s and adjusted for all price factors.
shr	Shares Outstanding, Unadjusted for Rights	Shrxr	1	%9d	list	The number of publicly held shares on NYSE, NYSE MKT, and NASDAQ exchanges, recorded in 1000s and adjusted for price factors other than rights.
shr	Shares Outstanding Mapped to Time Series	Shr	0	%9d	list	The number of publicly held shares on NYSE, NYSE MKT, and NASDAQ exchanges, recorded in 1000s.
Volume DSTK_VOLUME						
adjvol	Volume, Adjusted	Adjvol	0	%13.0lf	list	Total volume traded within the selected output calendar, adjusted for splits. For example, the weekly calendar will sum the 5 trading days within each week.
numtrd	NASDAQ Number of Trades	Numtrd	0	%9d	list	The number of trades made on NASDAQ for each security for each date. Available for NASDAQ-traded securities.
tvol	Volume, Total	Tvol	0	%13.0lf	list	Total volume traded within the selected output calendar. For example, the weekly calendar will sum the 5 trading days within each week.
volavg	Volume, Average	Volavg	0	%9d	list	Average daily volume traded within the selected output calendar. For example, the weekly calendar will average the 5 trading days within each week.
volmed	Volume, Median	Volmed	0	%9d	list	Median daily volume traded within the selected output calendar. For example, the weekly calendar will select the median value for the 5 trading days within each week.
Dividends DSTK_DIV						
adjdiv	Adjusted Dividend Amount in Period	Adjdiv	0	%11.5f	list	Ordinary and return-of-capital dividends, adjusted using the Price adjustment factor.
adjodiv	Adjusted Ordinary Dividend Amount in Period	Adjodiv	0	%11.5f	list	Ordinary cash dividends paid, adjusted using the price adjustment factor.
cumfacpr	Cumulative Factor to Adjust Prices Over a Date Range	Cumfacpr	0	%11.6f	list	Cumulative factor from a base date used to adjust prices after distributions so that equivalent comparisons can be made between prices before and after the distribution.
cumfacshr	Cumulative Factor to Adjust Shares/ Volume Over a Date Range	Cumfacshr	0	%11.6f	list	Cumulative factor from a base date used to adjust shares and volume after distributions so that equivalent comparisons can be made between values before and after the distribution. Represented as a ratio.
facprc	Factor to Adjust Price in Period	Facprc	0	%11.6lf	list	Factor from a base date used to adjust prices after distributions so that equivalent comparisons can be made between prices before and after the distribution.

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
odivamt	Ordinary Dividend Amount in Period, Beginning Basis	Odivamt	0	%11.5f	list	Ordinary cash dividends paid during the period, adjusted to beginning of period basis.
tdivamt	Dividend Amount in Period, Beginning Basis	TDivamt	0	%11.5lf	list	Ordinary and return-of-capital dividends during the period, adjusted to beginning of period basis.
Capitalization DSTK_CAP						
cap	Capitalization, End of Previous Period	Cap	0	%15.2lf	list, index	Closing price * shares outstanding (in 1000s) at the end of the previous period. If an index, capitalization is the total market value of the issues used in the index at the beginning of the previous period.
tcacp	Capitalization, End of Period	TCap	0	%15.2lf	list, index	Closing price * shares outstanding (in 1000s), as of end of the period. If an index, capitalization is the total market value of the issues used in the index at the beginning of the period.
Index Levels & Counts DSTK_LEVEL						
alvl	Price Index Level	ALvl	0	%11.2f	list, index	Value of an index, excluding ordinary dividends, relative to its value at one fixed point in time.
ilvl	Index Level of Returns on Income	ILvl	0	%11.2f	list, index	Ordinary dividend value of an index, relative to its value at one fixed point in time.
tlvl	Total Return Index Level	TLvl	0	%11.2f	list, index	Value of an index, including all distributions, relative to its value at one fixed point in time.
NASDAQ DSTK_NASDAQ						
mmcnt	NASDAQ Market Makers Count	Mmcntl	0	%4d	list	Number of registered market makers for an issue trading on NASDAQ, at the end of the period reported.
mmcnt	NASDAQ Market Makers, End of Previous Period	Mmcnte	1	%4d	list	Number of registered market makers for an issue trading on NASDAQ, at the end of the period preceding the period reported.
mmcnt	NAS(DAQ Market Makers, Most Recent	Mmcnt	2	%4d	list	Number of registered market makers for an issue trading on NASDAQ, the most recently known value.
nmsind	NASDAQ National Market Indicator, Most Recent	Nmsindl	2	%2d	list	One-digit integer code indicating an issue's membership within the NASDAQ Market tier system, most recently known value.
nmsind	NASDAQ National Market Indicator, End of Previous Period	Nmsinde	1	%2d	list	One-digit integer code indicating an issue's membership within the NASDAQ Market tier system, as of the previous period.
nmsind	NASDAQ National Market Indicator	Nmsind	0	%2d	list	One-digit integer code indicating an issue's membership within the NASDAQ Market tier system.
nsdinx	NASDAQ Index Code, Most Recent	Nsdinxl	2	%2d	list	Integer code indicating the issue's classification within NASD's internal business description categories, the most recent value.
nsdinx	NASDAQ Index Code, End of Previous Period	Nsdinxe	1	%2d	list	Integer code indicating the issue's classification within NASD's internal business description categories, at the end of the period preceding the period reported.
nsdinx	NASDAQ Index Code	Nsdinx	0	%2d	list	Integer code indicating the issue's classification within NASD's internal business description categories, at the end of each period reported.
trtscd	NASDAQ Status Code, Most Recent	Trtscdl	2	%2d	list	One-digit integer describing the trading status of an issue listed on NASDAQ, most recently know value, as of the end of each period reported.

ITEM ID	DATA ITEM NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
DAILY DATA						
trtscd	NASDAQ Status Code, End of Previous Period	Trtscde	1	%2d	list	One-digit integer describing the trading status of an issue listed on NASDAQ, at the end of the period preceding each period reported.
trtscd	NASDAQ Status Code, End of Period	Trtscd	0	%2d	list	One-digit integer describing the trading status of an issue listed on NASDAQ, at the end of each period reported.
Others DSTK_OTHER						
altdt	Date - YYYYMMDD Trading Date (partial period data)	Altdt	0	%8d	list	Trading dates used with partial period data.
caldt	Date	Caldt	0	%8d	list, index	Last quotation date in the month
cnt	Index Count Used	Cnt	0	%6d	list, index, port	Number of issues used to create a specific index or portfolio during one calendar period.
tcnt	Index Count Total	TCnt	0	%6d	list, index, port	Total number of securities in an index universe with a valid price on the selected trading date.
date1	Entity Begin Date Range or Event Date	Date1	0	%9d	list	First period in a selected date range, or event date for an entity.
date2	Entity End Date Range	Date2	0	%9d	list	Last date in a selected date range for an entity.
grpflag	Group Flag of Associated Index, Last Flag, All Periods	LSPInd	2	%4d	list	Last known code identifying a group to which a security belongs. Currently, S&P 500 group flag 16 is the only active group.
grpflag	Group Flag of Associated Index, End of Previous Period	ESPInd	1	%4d	list	Code identifying a group to which a security belongs, in the period preceeding the period reported. Currently, S&P 500 group flag 16 is the only active group.
grpflag	Group Flag	Grpflag	0	%4d	list	Group flag
port	Portfolio Assignment	Port	0	%4d	list	Integer portfolio assignment of a security for the portfolio type.
stat	Portfolio Statistic Value	Stat	0	%16.5lf	list	Statistic calculated for the security based on the rules for the selected portfolio type.

MONTHLY DATA

ITEM ID	FULL NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
MONTHLY DATA						
Identification MSTK_ID						
mcusip	CUSIP, Header	CUSIP	0	%8s	list	The latest 8 character CUSIP identifier for a security.
mpermco	PERMCO	PERMCO	0	%6d	list, index	A unique permanent company identification number assigned by CRSP to all companies with issues on a CRSP File. This number is permanent for all securities issued by a company regardless of name changes.
mpermno	PERMNO	PERMNO	0	%6d	list, index	A unique permanent identification number assigned by CRSP to each security. You can track a security through its entire trading history in CRSP's files with one PERMNO, regardless of name or capital structure changes.
mcompno	NASDAQ Company Number	COMPNO	0	%-8s	list	The latest 8 character CUSIP identifier for a security.
Name History MSTK_NAMES						
mcomnam	Company Name	Company Name	0	%-32.32s	list	Company name associated with the security, effective at the end of the period reported.
mcomnam	Company Name, End of Previous Period	Effective Name	1	%-32.32s	list	Company name effective at the end of the period preceding the period reported.
mcomnam	Company Name, Most Recent	Last Company Name	2	%-32.32s	list	The most recent company name known to CRSP.
mexchcd	Exchange Code	EX	0	%2d	list	Integer code(s) indicating the exchange(s) on which the security is listed at the end of the period reported.
mexchcd	Exchange Code, End of Previous Period	EXE	1	%2d	list	Integer code(s) indicating the exchange(s) on which the security is listed at the end of the period preceding the period reported.
mexchcd	Exchange Code, Most Recent	EXL	2	%2d	list	The most recently known integer code(s) indicating the exchange(s) on which the security is listed.
mncusip	CUSIP, Most Recent	NCUSIPL	2	%-8.8s	list	The most recently used 8 character CUSIP identifier for a security through the end of the file.
mncusip	CUSIP, End of Previous Period	NCUSIPE	1	%-8.8s	list	8 character CUSIP identifier for a security at the end of period preceding the period reported.
mncusip	CUSIP	NCUSIP	0	%-8.8s	list	The 8 character CUSIP identifier for a security at the end of the period reported.
mprimexch	Primary Exchange	Ex1	0	%c	list	Character code indicating the exchange on which the security has its primary listing at the end of the period reported. (N = NYSE, A = NYSE MKT, Q = NASDAQ, X = Other)
mprimexch	Primary Exchange, End of Previous Period	Primexche	1	%c	list	Character code indicating the exchange on which the security has its primary listing at the end of the period preceding the period reported. (N = NYSE, A = NYSE MKT, Q = NASDAQ, X = Other)
mprimexch	Primary Exchange, Most Recent	Primexchl	2	%c	list	As of the period being accessed, the character code indicating the exchange on which the security has its most recently known primary listing. (N = NYSE, A = NYSE MKT, Q = NASDAQ, X = Other)
msecstat	Security Status	Sst	0	%c	list	Character code describing the status of a security at the end of the period reported. (W=when issued, R = regular way, E = Ex-distributed, Q = bankruptcy)
msecstat	Security Status, End of Previous Period	Secstate	1	%c	list	One-character code describing the status of a security at the end of the period preceding the period reported. (W=when issued, R = regular way, E = Ex-distributed, Q = bankruptcy)

ITEM ID	FULL NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
MONTHLY DATA						
msecstat	Security Status, Most Recent	Secstatl	2	%c	list	One-character code describing the most recently known status of a security at the end of the period reported. (W=when issued, R = regular way, E = Ex-distributed, Q = bankruptcy)
mshrcd	Share Type Code, End of Previous Period	SCE	1	%2d	list	2-digit code as of the period preceding the period reported. First digit describes the type of security, second digit provides further security or company detail.
mshrcd	Share Code	SH	0	%2d	list	2-digit code as of end of period. First digit describes the type of security, second digit provides further security or company detail.
mshrcd	Share Type Code, Most Recent	SCL	2	%2d	list	2-digit code, most recently known as of end of period. First digit describes the type of security, second digit provides further security or company detail.
mshrcls	Share Class, End of Previous Period	CLE	1	%-1.1s	list	Character identifying the class of stock as of the period preceding the period being accessed, generally left blank. Assigned by the exchange in cooperation with the company.
mshrcls	Share Class, Most Recent	CLL	2	%-1.1s	list	Character identifying the most recently known class of stock as of the end of period, generally left blank. Assigned by the exchange in cooperation with the company.
mshrcls	Share Class	CL	0	%-1.1s	list	Character identifying the class of stock as of the end of period, generally left blank. Assigned by the exchange in cooperation with the company.
msiccd	Standard Industrial Classification (SIC) Code	SIC	0	%4d	list	The SIC code used to group companies with similar products or services at the end of the period reported.
msiccd	SIC Code, End of Previous Period	SICE	1	%4d	list	The SIC code used to group companies with similar products or services at the end of the period preceding the period reported.
msiccd	SIC Code, Most Recent	SICL	2	%4d	list	The most recent SIC code used to group companies with similar products or services.
msnaics	NAICS, Most Recent	Naicsl	2	%-7.7s	list	The most recently known North American Industry Classification System, 6-character industry code.
msnaics	North American Industry Classification System (NAICS)	Naics	0	%-7.7s	list	North American Industry Classification System, 6-character industry code, at the end of period reported.
msnaics	NAICS, End of Previous Period	Naicse	1	%-7.7s	list	North American Industry Classification System, 6-character industry code, at the end of period preceding the period reported.
mticker	Ticker Symbol	Ticker	0	%-5.5s	list	An alphabetic symbol assigned to a security by an exchange at the end of the period reported.
mticker	Ticker, End of Previous Period	Tickere	1	%-5.5s	list	An alphabetic symbol assigned to a security by an exchange at the end of the period preceding the period reported.
mticker	Ticker, Most Recent	Tickerl	2	%-5.5s	list	The most recently used alphabetic symbol assigned to a security by an exchange.
mtrdstat	Trading Status	Tst	0	%c	list	One-character field describing the status of a security at the end of the period. (A = active, H = halted, S = suspended, X = unknown)
mtrdstat	Trading Status, End of Previous Period	Trdstate	1	%c	list	One-character field describing the status of a security at the end of the period preceding the period reported. (A = active, H = halted, S = suspended, X = unknown)

ITEM ID	FULL NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
MONTHLY DATA						
mtrdstat	Trading Status, Most Recent	Trdstatl	2	%c	list	One-character field describing the status of a security most recently known at the end of the period. (A = active, H = halted, S = suspended, X = unknown)
mtsymbol	Trading Ticker Symbol	Symbol	0	%-10.10s	list	Trading symbol listed by exchanges and consolidated quote systems, including all temporary values, share classes and share type suffixes, at the end of the period reported.
mtsymbol	Trading Ticker Symbol, End of Previous Period	Symbole	1	%-10.10s	list	Trading symbol listed by exchanges and consolidated quote systems, including all temporary values, share classes and share type suffixes, at the end of the period preceding each period reported.
mtsymbol	Trading Ticker Symbol, Most Recent	Symboll	2	%-10.10s	list	Trading symbol listed by exchanges and consolidated quote systems, including all temporary values, share classes and share type suffixes, most recently known.
Prices MSTK_PRICES						
madjask	Ask, Adjusted	Adjask	0	%12.5f	list	Closing ask on the trading date of the month of the period being accessed, adjusted for distributions.
madjask	Ask Adjusted, Last Available Nonmissing	Adjaskprev	1	%12.5f	list	Last available non-missing month-end closing ask as of the trading date being accessed, adjusted for distributions.
madjaskhi	Askhi, Adjusted	Adjaskhi	0	%12.5f	list	Highest trading price during the month, or the highest bid-ask spread if trading price not available, adjusted for distributions. Bid-ask spreads identified by preceding dash -.
madjbid	Bid, Adjusted	Adjbid	0	%12.5f	list	Closing bid on the last trading date of the month of the period being accessed, adjusted for distributions.
madjbid	Bid Adjusted, Last Available Nonmissing	Adjbidprev	1	%12.5f	list	Last available non-missing month-end closing bid as of the trading date being accessed, adjusted for distributions.
madjbidlo	Bidlo, Adjusted	Adjbidlo	0	%12.5f	list	Lowest trading price during the month, or the lowest bid-ask spread if trading price not available, adjusted for distributions. Bid-ask spreads identified by preceding dash -.
madjprc	Price Adjusted, Last Available Nonmissing	Adjprcprev	1	%12.5f	list	The last non-missing closing price of a security for the last trading day of the month, adjusted for distributions. If unavailable, the number in the price field is replaced with a bid/ask average (marked by a leading dash).
madjprc	Price, Adjusted	Adjprc	0	%12.5f	list	The closing price of a security for the last trading day of the month, adjusted for distributions. If unavailable, the number in the price field is replaced with a bid/ask average (marked by a leading dash).
mask	Ask	Ask	0	%12.5f	list	Closing ask on the last trading date of the month.
mask	Ask, Last Available Nonmissing	Askprev	1	%12.5f	list	Last available non-missing month-end closing ask as of the trading date being accessed.
maskhi	Ask or High Price	Askhi	0	%12.5f	list	Highest trading price during the month, or the highest bid-ask spread if trading price not available. Bid-ask spreads identified by preceding dash -.
mbid	Bid	Bid	0	%12.5f	list	Closing bid on the last trading date of the month.
mbid	Bid, Last Available Nonmissing	Bidprev	1	%12.5f	list	Last available non-missing month-end closing bid as of the trading date being accessed.

ITEM ID	FULL NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
MONTHLY DATA						
mbidlo	Bid or Low Price	Bidlo	0	%12.5f	list	Lowest trading price during the month, or the lowest bid-ask spread if trading price not available. Bid-ask spreads identified by preceding dash -.
mhigh	Highest Close	High	0	%12.5f	list	Highest month end closing price within the selected calendar. Appropriate to use with quarterly and annual output calendars.
mlow	Lowest Close	Low	0	%12.5f	list	Lowest month end closing price within the selected calendar. Appropriate to use with quarterly and annual output calendars.
mprc	Price or Bid/Ask Average	Prc	0	%12.5f	list	The closing price of a security for the last trading day of the month. If unavailable, the number in the price field is replaced with a bid/ask average (marked by a leading dash).
mprc	Price, Last Available Nonmissing	Prcprev	1	%12.5f	list	The last non-missing closing price of a security for the last trading day of the month. If unavailable, the number in the price field is replaced with a bid/ask average (marked by a leading dash).
Returns MSTK_RETURNS						
mcumaret	Returns Without Dividends, Cumulative	Cumaret	0	%11.6f	list, index	Monthly returns without dividends compounded from the beginning month in the range. Each period in the time series contains a cumulative return since the beginning period.
mcumiret	Returns on Income, Cumulative	Cumiret	0	%11.6f	list, index	Monthly returns on income compounded from the beginning month in the range. Each period in the time series contains a cumulative return since the beginning period.
mcumtret	Returns, Cumulative	Cumtret	0	%11.6f	list, index	Monthly total returns compounded from the beginning month in the range. Each period in the time series contains a cumulative return since the beginning period.
mret	Returns	Ret	0	%11.6f	list, index, port	Month-end to month-end change in total investment of a security, with ordinary dividends reinvested at the month-end.
mreti	Returns on Income	Reti	0	%11.6f	list, index	Return on dividends, can be derived from the difference between total return and return without dividends.
mretx	Returns Without Dividends	Retx	0	%11.6f	list, index	Month-end to month-end capital appreciation of a security, calculate as a change in price only.
Returns vs Index MSTK_IRETURNS						
mcumindaret	Associated Index Returns Without Dividends, Cumulative	Cumindaret	0	%11.6f	list	Compounded price appreciation only, of an index that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
mcumindiret	Associated Index Returns on Income, Cumulative	Cumindiret	0	%11.6f	list	Compounded return, on income only, of an index that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
mcumindtret	Associated Index Returns, Cumulative	Cumindtret	0	%11.6f	list	Compounded total returns of an index that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
mcumxsaret	Excess Returns Without Dividends vs. Index Series, Cumulative	Cumxsaret	0	%11.6f	list	Compounded difference between a security's capital appreciation and the capital appreciation of an index that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.

ITEM ID	FULL NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
MONTHLY DATA						
mcumxsiret	Excess Returns on Income vs. Index Series, Cumulative	Cumxsiret	0	%11.6f	list	Compounded difference between a security's return on income and the return on income of an index that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
mcumxstret	Excess Returns vs. Index Series, Cumulative	Cumxstret	0	%11.6f	list	Compounded difference between a security's total return and the total return of an index that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
mindaret	Associated Index Returns Without Dividends	Indaret	0	%11.6f	list	Price appreciation only, of an index that a user selects to be associated with a security or group of securities.
mindiret	Associated Index Returns on Income	Indiret	0	%11.6f	list	Returns on income only of an index that a user selects to be associated with a security or group of securities.
mindtret	Associated Index Returns	Indtret	0	%11.6f	list	Total returns of an index that a user selects to be associated with a security or group of securities.
mxsaret	Excess Returns Without Dividends vs. Index Series	Xsaret	0	%11.6f	list	Difference between a security's capital appreciation and the capital appreciation of an index that a user selects to be associated with the security.
mxsiret	Excess Returns on Income vs. Index Series	Xsiret	0	%11.6f	list	Difference between a security's return on income and the return on income of an index that a user selects to be associated with the security.
mxstret	Excess Returns vs. Index Series	Xstret	0	%11.6f	list	Difference between a security's total return and the total return of an index that a user selects to be associated with the security.
Returns vs Portfolio MSTK_PRETURNS						
mcumparet	Member Portfolio Returns Without Dividends, Cumulative	Cumparet	0	%11.6f	list	Compounded price appreciation only, of a portfolio that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
mcumpiret	Member Portfolio Returns on Income, Cumulative	Cumpiret	0	%11.6f	list	Compounded return, on income only, of a portfolio that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
mcumptret	Member Portfolio Returns, Cumulative	Cumptret	0	%11.6f	list	Compounded total returns of a portfolio that a user selects to be associated with a security or group of securities. Each period in the time series contains a cumulative return since the beginning period.
mcumxsparet	Excess Returns Without Dividends vs. Associated Portfolios, Cumulative	Cumxsparet	0	%11.6f	list	Compounded difference between a security's capital appreciation and the capital appreciation of a portfolio that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
mcumxspiret	Excess Returns on Income vs. Associated Portfolios, Cumulative	Cumxspiret	0	%11.6f	list	Compounded difference between a security's return on income and the return on income of a portfolio that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.

ITEM ID	FULL NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
MONTHLY DATA						
mcumxsptret	Excess Returns vs. Associated Portfolios, Cumulative	Cumxsptret	0	%11.6f	list	Compounded difference between a security's total return and the total return of a portfolio that a user selects to be associated with the security. Each period in the time series contains a cumulative return since the beginning period.
mportaret	Associated Portfolios Returns Without Dividends	Portaret	0	%11.6f	list	Price appreciation only, of a portfolio that a user selects to be associated with a security or group of securities.
mportiret	Associated Portfolios Returns on Income	Portiret	0	%11.6f	list	Returns on income only of a portfolio that a user selects to be associated with a security or group of securities.
mporttret	Associated Portfolios Returns	Porttret	0	%11.6f	list	Total returns of a portfolio that a user selects to be associated with a security or group of securities.
mportxsaret	Excess Returns Without Dividends vs. Associated Portfolios	Portxsaret	0	%11.6f	list	Difference between a security's capital appreciation and the capital appreciation of a portfolio that a user selects to be associated with the security.
mportxsiret	Excess Returns on Income vs. Associated Portfolios	Portxsiret	0	%11.6f	list	Difference between a security's return on income and the return on income of a portfolio that a user selects to be associated with the security.
mportxstret	Excess Returns vs. Associated Portfolios	Portxstret	0	%11.6f	list	Difference between a security's total return and the total return of a portfolio that a user selects to be associated with the security.
Shares MSTK_SHARES						
madjshrxr	Shares Outstanding, Adjusted for Rights	Adjshrxr	1	%9d	list	The number of publicly held shares on NYSE, NYSE MKT, and NASDAQ exchanges, recorded in 1000s and adjusted for rights only.
madjshr	Shares Outstanding Mapped to Time Series, Adjusted	Adjshr	0	%9d	list	The number of publicly held shares on NYSE, NYSE MKT, and NASDAQ exchanges, recorded in 1000s and adjusted for all price factors.
mshr	Shares Outstanding, Unadjusted for Rights	Shrxr	1	%9d	list	The number of publicly held shares on NYSE, NYSE MKT, and NASDAQ exchanges, recorded in 1000s and adjusted for price factors other than rights.
mshr	Shares Outstanding Mapped to Time Series	Shr	0	%9d	list	The number of publicly held shares on NYSE, NYSE MKT, and NASDAQ exchanges, recorded in 1000s.
Volume MSTK_VOLUME						
madjvol	Volume, Adjusted	Adjvol	0	%13.0lf	list	Total volume traded within the selected output calendar, adjusted for splits. For example, the quarterly calendar will sum the 3 months within each quarter.
mtvol	Volume, Total	Tvol	0	%13.0lf	list	Total volume traded within the selected output calendar, adjusted for splits. For example, the quarterly calendar will sum the 3 months within each quarter.
mvolavg	Volume, Average	Volavg	0	%9d	list	Average monthly volume traded within the selected output calendar. For example, the quarterly calendar will average the 3 month-end volumes in the quarter.
mvolmed	Volume, Median	Volmed	0	%9d	list	Median monthly volume traded within the selected output calendar. For example, the quarterly calendar will select the median value for the 3 month-end volumes in the quarter.

ITEM ID	FULL NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
MONTHLY DATA						
Dividends MSTK_DIV						
madjdiv	Dividend Amount in Period, Adjusted	Adjdiv	0	%11.5f	list	Ordinary and return-of-capital dividends, adjusted using the Price adjustment factor.
madjodiv	Dividend Amount in Period, Ordinary, Adjusted	Adjodiv	0	%11.5f	list	Ordinary cash dividends paid, adjusted using the price adjustment factor.
mcumfacpr	Cumulative Factor to Adjust Prices Over a Date Range	Cumfacpr	0	%11.6f	list	Cumulative factor from a base date used to adjust prices after distributions so that equivalent comparisons can be made between prices before and after the distribution.
mcumfacshr	Cumulative Factor to Adjust Shares/ Volume Over a Date Range	Cumfacshr	0	%11.6f	list	Cumulative factor from a base date used to adjust shares and volume after distributions so that equivalent comparisons can be made between values before and after the distribution. Represented as a ratio.
mfacprc	Factor to Adjust Price in Period	Facprc	0	%11.6lf	list	Factor from a base date used to adjust prices after distributions so that equivalent comparisons can be made between prices before and after the distribution.
modivamt	Dividend Amount in Period, Ordinary, Beginning Basis	Odivamt	0	%11.5f	list	Ordinary cash dividends paid during the period, adjusted to beginning of period basis.
mtdivamt	Dividend Amount in Period, Beginning Basis	TDivamt	0	%11.5lf	list	Ordinary and return-of-capital dividends during the period, adjusted to beginning of period basis.
Capitalization MSTK_CAP						
mcap	Capitalization, End of Previous Period	Cap	0	%15.2lf	list, index	Closing price * shares outstanding (in 1000s) at the end of the previous period. If an index, capitalization is the total market value of the issues used in the index at the beginning of the previous period.
mtap	Capitalization, End of Period	TCap	0	%15.2lf	list, index	Closing price * shares outstanding (in 1000s), as of end of the period. If an index, capitalization is the total market value of the issues used in the index at the beginning of the period.
Index Levels & Counts MSTK_LEVEL						
malvl	Price Index Level	ALvl	0	%11.2f	list, index	Value of an index, excluding ordinary dividends, relative to its value at one fixed point in time.list
milvl	Index Level of Returns on Income	ILvl	0	%11.2f	list, index	Ordinary dividend value of an index, relative to its value at one fixed point in time.
mtlvl	Total Return Index Level	TLvl	0	%11.2f	list, index	Value of an index, including all distributions, relative to its value at one fixed point in time.
NASDAQ MSTK_NASDAQ						
mmmcnt	NASDAQ Market Makers, Most Recent	Mmcnt	2	%4d	list	Number of registered market makers for an issue trading on NASDAQ, the most recently known value.
mmmcnt	NASDAQ Market Makers, End of Previous Period	Mmcnt	1	%4d	list	Number of registered market makers for an issue trading on NASDAQ, at the end of the period preceding the period reported.
mmmcnt	NASDAQ Market Makers Count	Mmcnt	0	%4d	list	Number of registered market makers for an issue trading on NASDAQ, at the end of the period reported.
mnmsind	NASDAQ National Market Indicator, Most Recent	NmsindI	2	%2d	list	One-digit integer code indicating an issue's membership within the NASDAQ Market tier system, most recently known value.

ITEM ID	FULL NAME	ITEM HEADER	VARIANT	FORMAT	ENTITY TYPE(S)	DESCRIPTION
MONTHLY DATA						
mnmsind	NASDAQ National Market Indicator, End of Previous Period	Nmsinde	1	%2d	list	One-digit integer code indicating an issue's membership within the NASDAQ Market tier system, as of the previous period.
mnmsind	NASDAQ National Market Indicator	Nmsind	0	%2d	list	One-digit integer code indicating an issue's membership within the NASDAQ Market tier system.
mnsdinx	NASDAQ Index Code, Most Recent	Nsdinxl	2	%2d	list	Integer code indicating the issue's classification within NASD's internal business description categories, the most recent value.
mnsdinx	NASDAQ Index Code, End of Previous Period	Nsdinxe	1	%2d	list	Integer code indicating the issue's classification within NASD's internal business description categories, at the end of the period preceding the period reported.
nsdinx	NASDAQ Index Code	Nsdinx	0	%2d	list	Integer code indicating the issue's classification within NASD's internal business description categories, at the end of each period reported.
mtrtscd	NASDAQ Status Code, Most Recent	Trtscdl	2	%2d	list	One-digit integer describing the trading status of an issue listed on NASDAQ, most recently know value, as of the end of each period reported.
mtrtscd	NASDAQ Status Code, End of Previous Period	Trtscde	1	%2d	list	One-digit integer describing the trading status of an issue listed on NASDAQ, at the end of the period preceding each period reported.
mtrtscd	NASDAQ Status Code, End of Period	Trtscd	0	%2d	list	One-digit integer describing the trading status of an issue listed on NASDAQ, at the end of each period reported.
Others MSTK_OTHER						
maltdt	Date - YYYYMMDD Trading Date (partial period data)	Altdt	0	%8d	list	Trading dates used with partial period data.
mcaldt	Date	Caldt	0	%8d	list, index	Last quotation date in the month
mcnt	Index Count Used	Cnt	0	%6d	list, index, port	Number of issues used to create a specific index or portfolio during one calendar period.
mtcnt	Index Count Total	TCnt	0	%6d	list, index, port	Total number of securities in an index universe with a valid price on the selected trading date.
mdate1	Entity Begin Date Range or Event Date	Date1	0	%9d	list	First period in a selected date range, or event date for an entity.
mdate2	Entity End Date Range	Date2	0	%9d	list	Last date in a selected date range for an entity.
mgrpflag	Group Flag of Associated Index, Last Flag, All Periods	LSPInd	2	%4d	list	Last known code identifying a group to which a security belongs. Currently, S&P 500 group flag 16 is the only active group.
mgrpflag	Group Flag of Associated Index, End of Previous Period	ESPInd	1	%4d	list	Code identifying a group to which a security belongs, in the period preceeding the period reported. Currently, S&P 500 group flag 16 is the only active group.
mgrpflag	Group Flag	Grpflag	0	%4d	list	Group flag
mport	Portfolio Assignment	Port	0	%4d	list	Integer portfolio assignment of a security for the portfolio type.
mstat	Portfolio Statistic Value	Stat	0	%16.5lf	list	Statistic calculated for the security based on the rules for the selected portfolio type.

CHAPTER 4: STKQUERY: STOCK DATA ACCESS

StkQuery is used to extract CRSP stock header, event, and time-series data items. Designed primarily to access data on an individual security, it can also access a list of securities supplied in an input file, or all securities in the database.

Locate the StkQuery toolbar below the main CRSPSift toolbar.

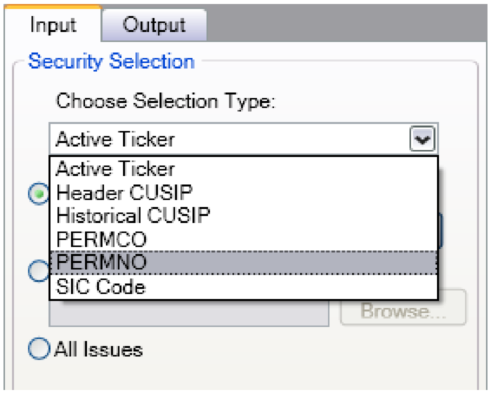
In the Database field, select which CRSP database your query will use, either Daily or Monthly. Next, specify a date range. Enter dates using one of the following formats: YYYYMMDD, YYYYMM, or YYYY. The following table provides examples of how to use the various formats.

START	END	RESULT
199609	199612	all data from the beginning of September through December of 1996
1990	(empty)	all data in the year 1990
1994	19940615	all data from the beginning of 1994 until June 15, 1994
19961231	(empty)	data only on the date December 31, 1996

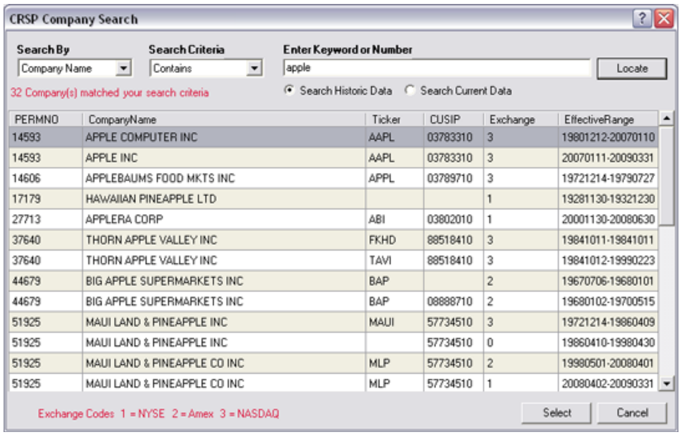
By default, StkQuery returns data from the last three months of the CRSP database being accessed.

SECURITY SELECTION

From the Choose Selection Type drop-down menu in the Security Selection area, specify the key, such as PERMNO or Active Ticker symbol, your query will use.



Next, identify the issue or issues of interest. If you know an identifier, you can enter it directly. For example, the ticker symbol of Apple Computer is AAPL. Given that knowledge, you can set the key to Active Ticker and type AAPL as the identifier. If you do not know an identifier, click the Find… button to open the Company Search window.



Use the search form to locate a particular company in the CRSP database. Companies matching your search criteria appear in a table, initially sorted by PERMNO. If your search yields many matches, click the column labels to resort the table in the order most useful to you. When you have found the company you want, click its row in the table, and then click the Select button. The PERMNO of that company will appear in the identifier field.

You may also choose to access all issues in the database, or issues you specify in an input file. To search all issues, click All Issues in the Security Selection area. To use an input file, first create a plain text file (using the Microsoft Windows Notepad accessory, for instance) with an entry for each issue, one per row, using the active key of your choice.

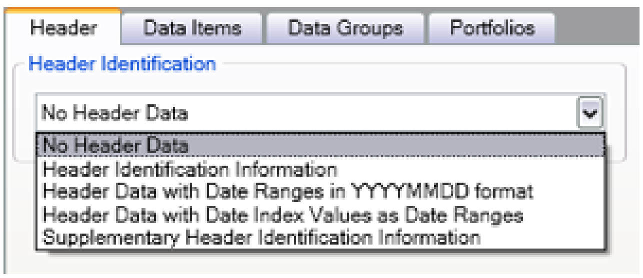
For example, to search for Apple and Microsoft by PERMNO using an input file, create and save the following two line text file:

```
14593
10107
```

Next, select PERMNO from the Active Key menu. Click Input File in the Security Selection area, and then click the Browse... button to locate the file you created.

HEADER IDENTIFICATION

Click the Header tab if it is not the active tab. In this screen, select the stock header information that you want in your report and how it should appear.

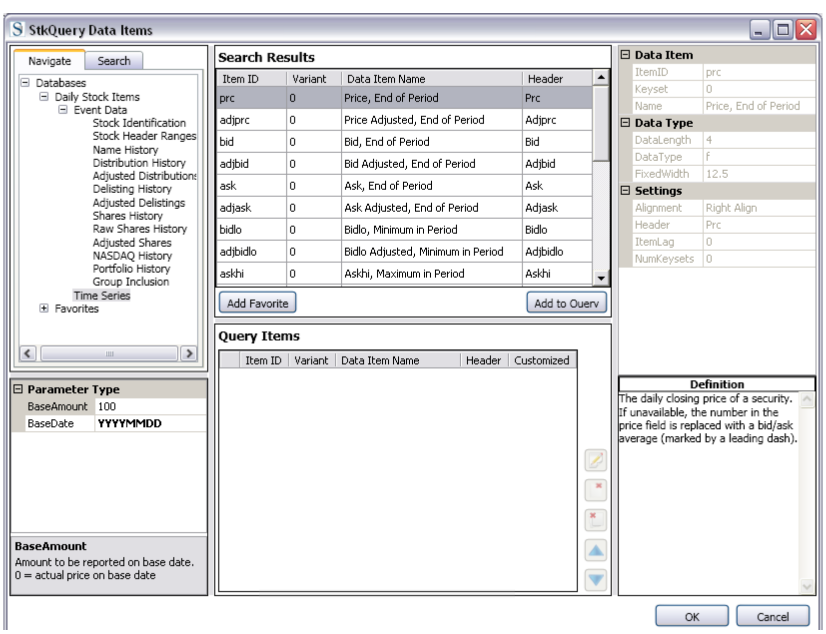


DATA ITEMS

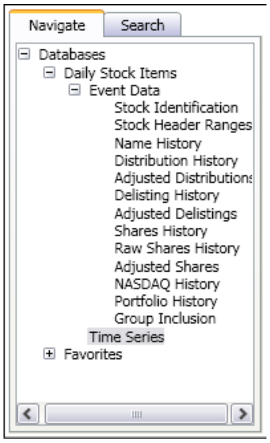
Use the Data Items tab to control what individual event and time series data items your query will use.

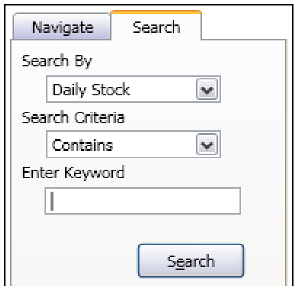
SELECT/EDIT DATA ITEMS

Clicking this button launches the interface for selecting individual event and time series items in StkQuery. The StkQuery Data Items window is divided into several areas.

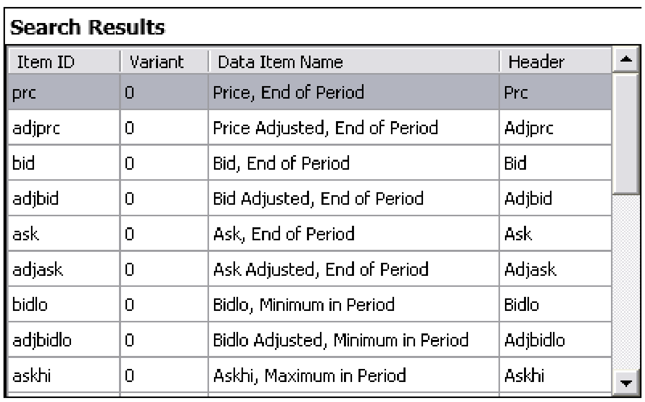


Items are divided into logical groups in the Navigate/Search area.





Clicking the name of a group causes its data items to appear in the Search Results area. Or, rather than browsing by category, click the Search tab. There you can enter a descriptive keyword (e.g., "NASDAQ") to find items of interest. Browsing and searching both cause the data items found to appear in the Search Results area of the window.

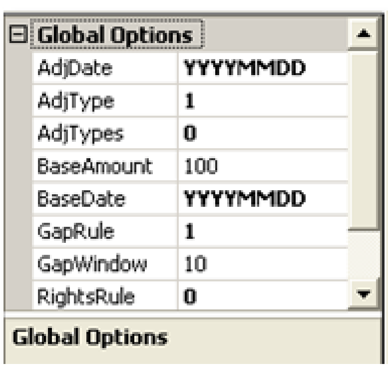


Search Results

Item ID	Variant	Data Item Name	Header
prc	0	Price, End of Period	Prc
adjprc	0	Price Adjusted, End of Period	Adjprc
bid	0	Bid, End of Period	Bid
adjbid	0	Bid Adjusted, End of Period	Adjbid
ask	0	Ask, End of Period	Ask
adjask	0	Ask Adjusted, End of Period	Adjask
bidlo	0	Bidlo, Minimum in Period	Bidlo
adjbidlo	0	Bidlo Adjusted, Minimum in Period	Adjbidlo
askhi	0	Askhi, Maximum in Period	Askhi

When you highlight an item in the Search Results area, its attributes and a short text description appear in the window areas to the right.

GLOBAL OPTIONS



Global Options	
AdjDate	YYYYMMDD
AdjType	1
AdjTypes	0
BaseAmount	100
BaseDate	YYYYMMDD
GapRule	1
GapWindow	10
RightsRule	0

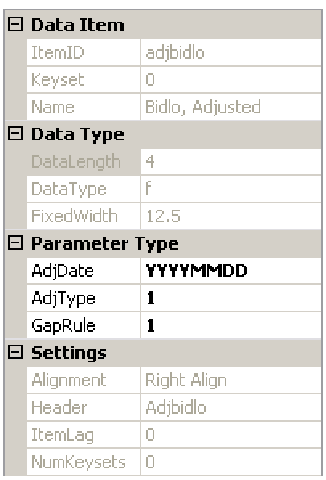
Global Options

StkQuery allows users to modify output data items by changing default parameters for certain types of items. Defaults can be modified for all items selected in a query by defining parameters in the Global Options table on the Data Items screen.

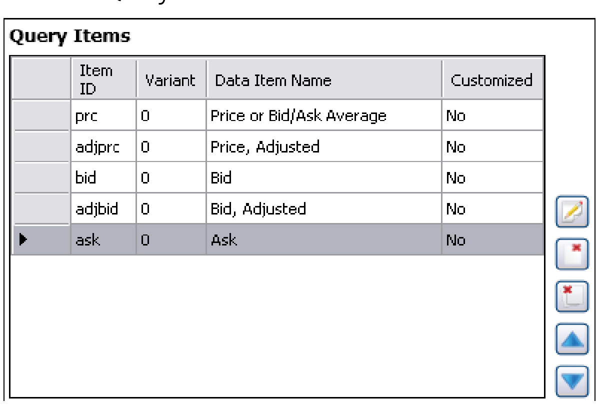
PARAMETER	DEFAULT	DEFINITION
AdjDate	Default is to adjust values through the latest date of the database.	The adjustment date is the anchor date on which all data are presented as they were reported and are adjusted back in time by selected or default factors from that point.

PARAMETER	DEFAULT	DEFINITION
AdjTyp	Default is to apply all factors	The adjustment type value represents the factors that are applied to price adjustments. Choices are 1 = Apply All Factors or 2 = Apply Stock Splits and Dividends
AdjTypes	Default is to apply stock splits and dividends	The adjustment types values represents the factors that are applied to shares and volume adjustments. Choices are 1 = Apply All Factors or 2 = Apply Stock Splits and Dividends
BaseAmount	Default is 100	The base amount is the amount to be reported on a specified base. For use with Time Series items Total Return Index Level and Price Index Level.
BaseDate		If specifying a base amount, a base date must be provided for the date to apply the amount. Values before and after the specified date will be indexed to the amount.
GapRule	Default is to set values to missing upon exceeding the specified gap	Gap rule defines when and if to introduce missing values when a specified number of periods passed with no new data. Choices are 0 = Continue data after the gap and 1 = set missing values after the gap
GapWindow	Default is 10	The gap window defines the maximum number of dates allowed to pass between two dates where the previous value of an item remains valid. For example, with the default of 10, a price from up to ten trading dates ago is eligible for use in the returns calculation if there are no more current prices. Once that 10th day has passed, using the default gap rule, the price is considered missing and will no longer be available for use in the returns calculation.
RightsRule	Default is to use Share History	The rights rule is used to apply share factors from rights distributions. Choices are 0 = Use shares history, 1 = Recreate shares history.
ValidExch	Default is all exchanges	Valid exchange identifies the exchanges of interest to be used. Choices can be modified by clicking on the text box and checking/unchecking available exchanges. Valid exchanges is used in conjunction with the calculated returns items, cret and cretx.

Fields that can be edited are parameters in bold, black text associated with adjusted values. These are set to default values and may be modified.

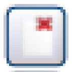


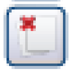
Select each item you want in your query, adjust its parameters if necessary, and then click the Add to Query button to add it to the Query Items area below the Search Results.



Items in the Query Items area appear in the order that they will appear in your query's output. To adjust the position of an item, select it and click the blue up and down arrows to move it up or down the list. The other buttons are:

 Edit. Click this to edit an item's attributes.

 Remove the selected item from your query.

 Remove all items from the Query Items list.

Click the OK button to confirm the addition of the selected items to your query. Click cancel to exit the StkQuery Data Items window without making any changes.

Import Data Item File...

Clicking this button allows you to import a list of data items into your query from a text file. The file contains a single column of item mnemonics item IDs.

Export to File...

Use this option to output the Selected Data Items list to a text file containing each item's mnemonic itemid. This text file may then be imported into other queries using the Import Data Item File... button.

DATA GROUPS

The Data Groups tab allows you to select combinations of related event or time series data items.

Available groups include:

Event Data

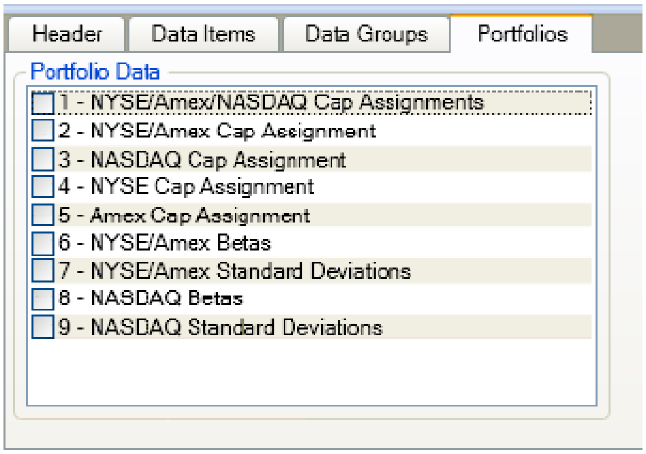
- Adjusted Delistings
- Adjusted Distributions
- Adjusted Shares
- Delisting History
- Distribution History
- Group Inclusion
- NASDAQ History
- Name History
- Name History - Short
- Portfolio History
- Raw Shares History
- Shares History

Time Series Data

- Adjusted Market Summary
- Adjusted Price, Shares
- Market Summary
- Price and Index Levels
- Price and Returns
- Price and Shares

PORTFOLIOS

The Portfolios screen is applicable for Stock and Index Databases only. It provides a list of predefined portfolios. Choose one or more of them to view the performance of an issue or issues over time, using the selected portfolios as benchmarks. The data frequency — daily or monthly — will determine the list of available portfolios.



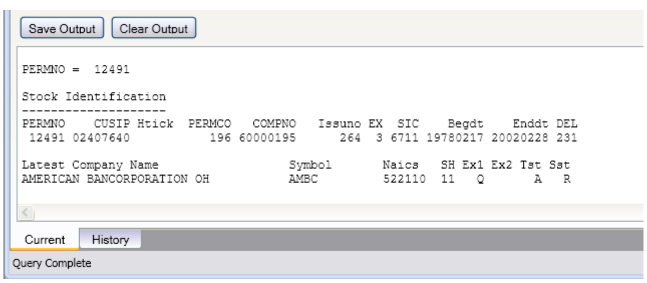
OUTPUT OPTIONS

You can save the output of a StkQuery in one of several formats. Click the Output tab to show the Output Options panel.

OUTPUT TO SCREEN

The default option is text-based output, formatted to fit the screen width specified in the Width control. 80 characters is the default output width.

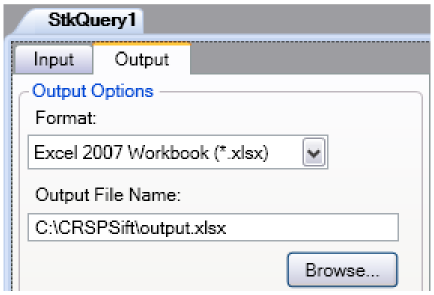
Screen output appears in the output area at the bottom of the StkQuery window.



By default, the output of the last query execution is shown in the Current tab. The Save Output and Clear Output buttons at the top of the output area allow you to save output to a text file or to clear it away. Clicking the History tab shows you the output of every query execution since the StkQuery session was launched. When you switch to the query history view, the buttons above the output area change to Save History and Clear History. Save History allows you to capture the output of an entire session. You can select a new security, or different data or options related to the same security. Each time you click Execute the new output is saved in the History tab. By clicking Save History, you can save all the output to one text file.

OUTPUT TO FILE

You can also save query output in a number of external file formats. When you choose a non-screen output format, the Output File Name field becomes active. In order to successfully execute the query, you must select a location to store the output file. Click the Browse button to do so.

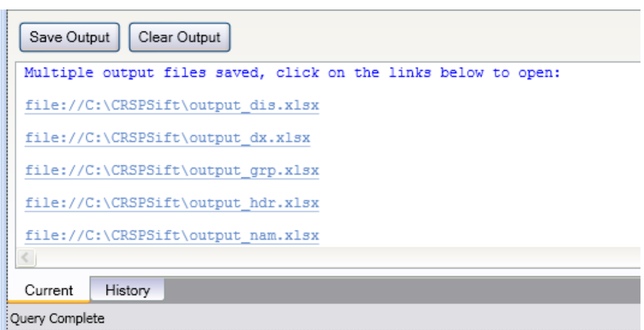


Supported File Formats

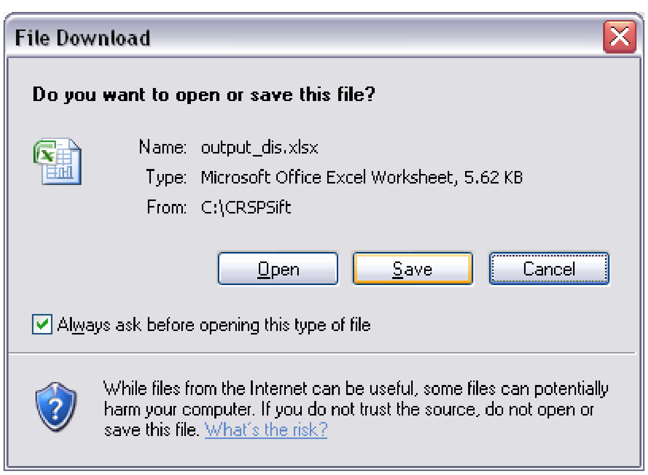
- Pipe(|) Delimited, For Import - pipe-delimited ASCII text, suitable for importing into databases or software packages not directly supported by CRSPSift. This option generates a single output file.
- Excel 2007 Workbook (*.xlsx) - Excel version 2007
  NOTE: This Excel version has a row limit of 1,048,576 total rows. If a query generates more than that number of rows, the output will be truncated at the row limit.
- Excel 2007 Workbook (*.xlsx) - Excel XML
- MAT-files (*.mat) - Matlab version 7
- SAS Dataset (*.sas7bdat) - SAS version 7
- Stata File (*.dta)
- SPSS File (*.sav)

VIEWING OUTPUT FILES

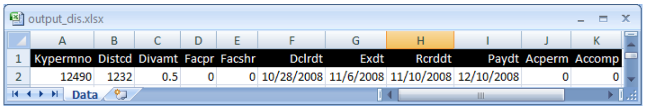
With the exception of the Pipe Delimited option, if you select a non-screen output format, StkQuery will generate one or more output files, one for each unique output of the query. When the query completes execution, the output area displays links to the output files generated. Each file will have the name specified in the Output File Name field, with the addition of an extension identifying the type of data it contains.



Clicking one of the output files links opens the File Download dialog box.

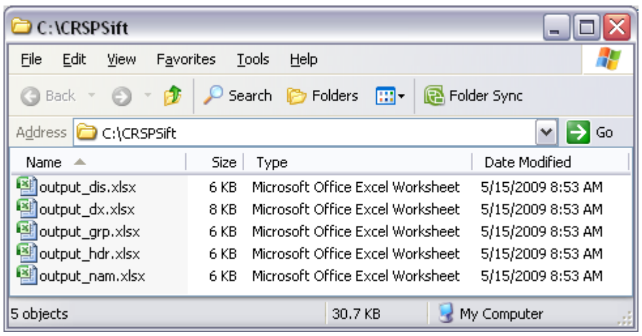


Click Open to open the output file in the appropriate application (Excel 2007, in the example shown below).



Alternatively, you can click the View Output button, located in the CRSPSift toolbar, to view the output files generated by your query.

If a query generated only one file, the target application will open the file directly, as shown above. If the query resulted in multiple output files instead of opening the files, CRSPSift will open a Windows Explorer window showing the folder where you chose to save output.



OUTPUT FILE SUFFIXES

The following table lists output file suffixes and the type of data they indicate is contained in a file.

DATA GROUP CATEGORY	OUTPUT FILE SUFFIX	
	DAILY	MONTHLY
Adjusted Delistings	adel	madel
Adjusted Distributions	adis	madis
Adjusted Shares	ashr	mashr
Delisting History	del	mdel
Distribution History	dis	mdis
Group Inclusion	grp	mgrp
Name History	nam	mnam
Name History – Short	nams	mnams
NASDAQ History	ndi	mndi
Portfolio History	port	mport
Shares History	shr	mshr
Shares, Escl Imputed	rshr	mrshr
Adjusted Market Summary	adj	madj
Adjusted Price, Shares	adjwgt	madjwgt
Market Summary	dd	md
Price and Index Levels	ds	ms
Price and Returns	dr	mr
Price and Shares	dx	mx

CHAPTER 5: INDQUERY: INDEX DATA ACCESS

IndQuery is used to access index header and time-series data.

Locate the IndQuery toolbar below the main CRSPSift toolbar.

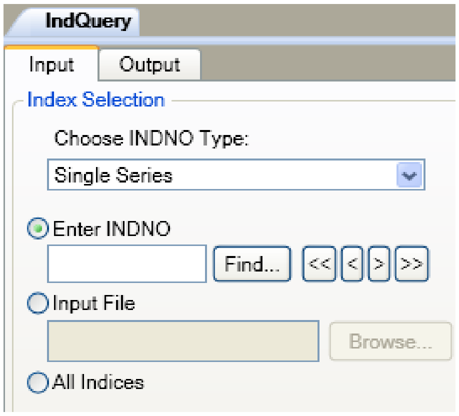
First select whether your query will use the Daily or Monthly database from the Database menu.

Specify a date range for your query. Enter dates using one of the following formats: YYYYMMDD, YYYYMM, or YYYY. The following table shows some examples of how to use the various formats.

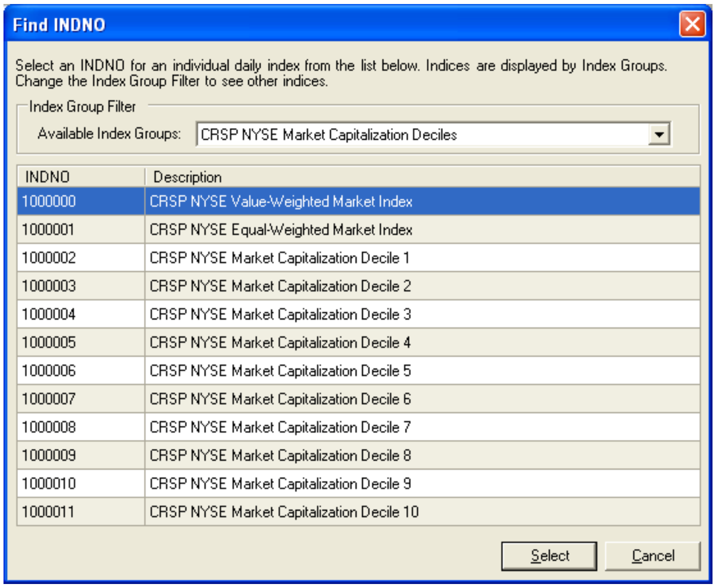
START	END	RESULT
199609	199612	all data from the beginning of September through December of 1996
1990	(empty)	all data in the year 1990
1994	19940615	all data from the beginning of 1994 until June 15, 1994
19961231	(empty)	data only on the date December 31, 1996

INDEX SELECTION

In the Choose Indno Type drop-down menu, specify whether your query will access a Single Series (an individual index) or a Group of Portfolios. Note that Single Series is for use only with a Stock and Index Database.

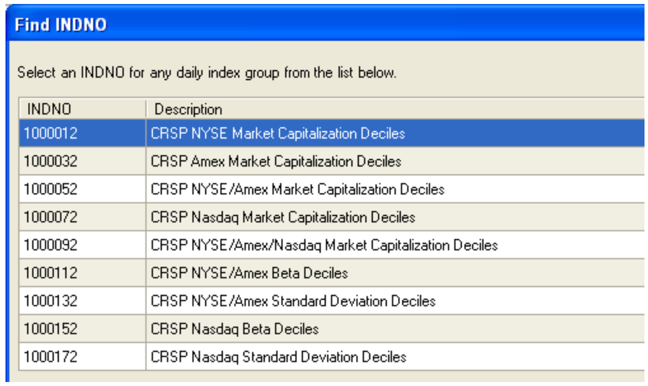


If you know the INDNO of an index, you can type it directly in the Enter INDNO box. Otherwise, click the Find… button to open the Find INDNO window. If your query will access an individual daily index, make sure you have selected Single Series from the INDNO Type menu. The Find INDNO window will appear as shown below.



From the Available Index Groups menu, select the index group that contains the index you want. Click the table row containing your target index, and then click the Select button. That index's INDNO will now appear in the Enter INDNO box.

If you are using the Daily database, and you selected Group of Portfolios from the INDNO Type menu, the Find INDNO window will instead look like this:



Simply click to choose the index group you want, and then click the Select button. The index group's INDNO will appear in the Enter INDNO box.

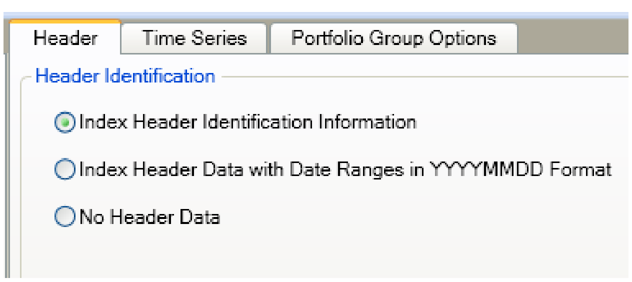
You may also choose to access all indexes in the database, or those that you specify in an input file. To search all indexes, click All Indexes in the Index Selection area. To use an input file, create a text file and enter the INDNO of each index your query will use, one per line. For example, to specify that your query will access the CRSP NYSE Value-Weighted Market Index (INDNO 1000000) and the CRSP NYSE MKT Value-Weighted Market Index (INDNO 1000020), create and save the following two line text file:

```
1000000
1000020
```

Click Input File in the Index Selection area, and then click the Browse... button to locate the input file you created.

HEADER IDENTIFICATION

In the Header tab, choose what header information you want at the top of your query report. Options include standard index header information, header information with date ranges in YYYYMMDD format, or no header information.

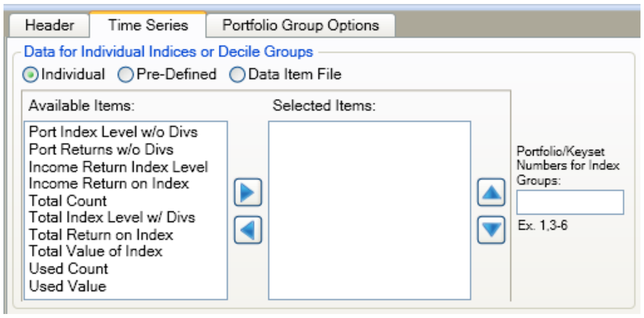


TIME SERIES DATA

In the Time Series tab, you can select the time series data items that are relevant to your query. You can select individual data items, choose pre-defined groups of items, or supply a list of data items in an input file.

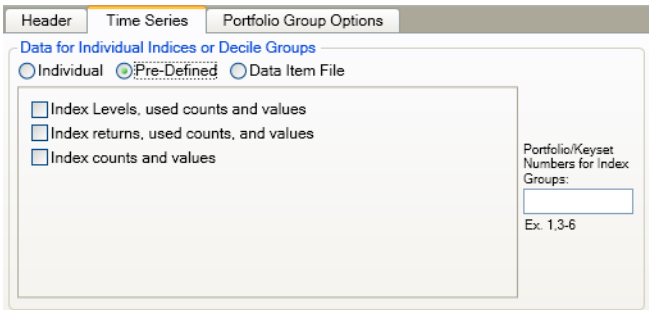
INDIVIDUAL ITEMS

Select an item from the Available Items list at left, and then click the right arrow to move it to the Selected Items list.



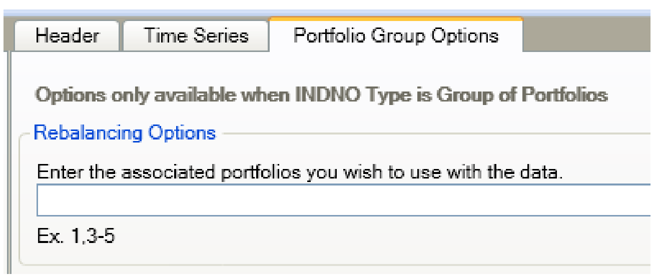
PRE-DEFINED ITEM GROUPS

Alternatively, you can select pre-defined groups of data items.



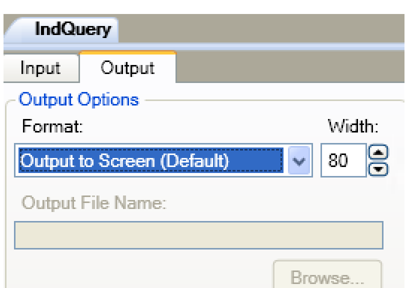
PORTFOLIO GROUP OPTIONS

The Portfolio Group Options is for use only with a Stock and Index Database. Its tab is enabled only if you have selected Group of Portfolios from the INDNO Type menu. Here you can select portfolio range and rebalancing options for your query.



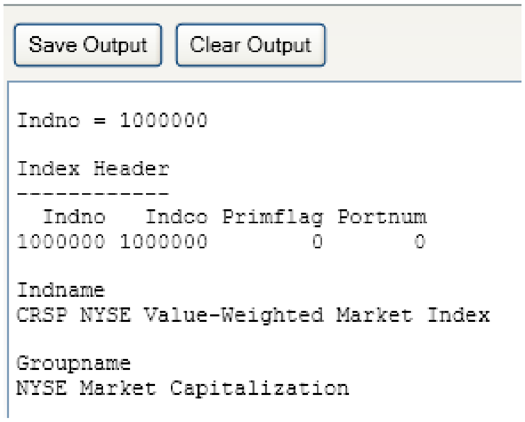
OUTPUT OPTIONS

You can save the output of an IndQuery in one of several formats. Click the Output tab to show the Output Options panel.



OUTPUT TO SCREEN

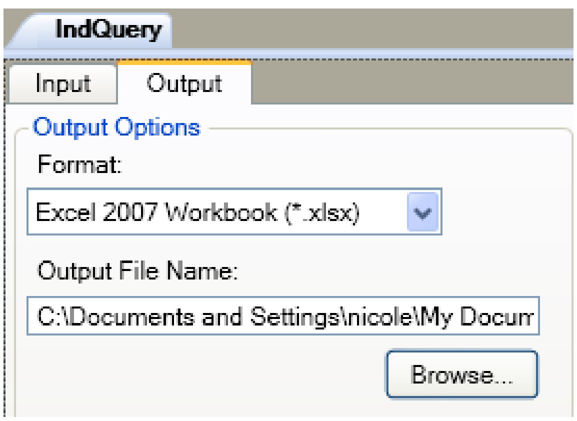
The default option is text-based, formatted to fit the screen width specified in the Width control. 80 characters is the default width. Screen output appears in the hopper at the bottom of the IndQuery window.



By default, the output of the last query execution is shown in the Current tab. The Save Output and Clear Output buttons at the top of the output area allow you to save to a text file or to clear it away. Clicking the History tab shows you the results of every query execution since the session was opened. When you switch to the query history view, the buttons above the output area change to Save History and Clear History. Save History allows you to capture the entire session. You can select a new index, or different data or options related to the same index. Each time you click Execute the new output is saved in the history. Then, by clicking Save History, you can save all the output to one text file.

OUTPUT TO FILE

You can also save data in a number of external file formats. When you choose a non-screen output format, the Output File Name field becomes active. In order to successfully execute the query, you must select a location to store the output file. Click the Browse button to select a location to save the file.

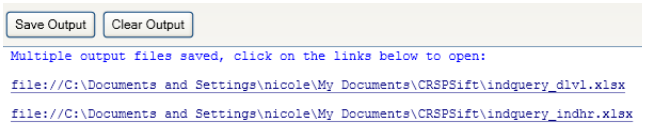


Supported File Formats

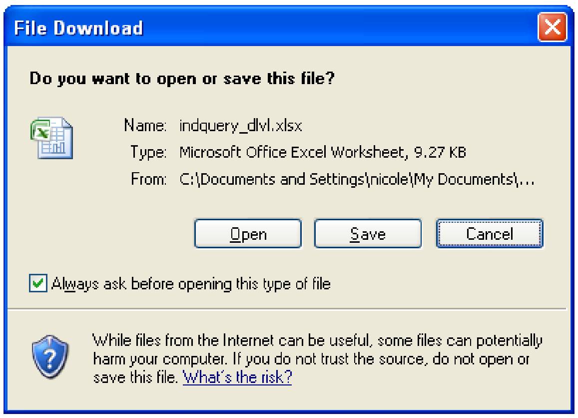
- **Pipe(|) Delimited, For Import -** pipe-deliimited ASCII text, suitable for importing into databases or software packages not directly supported by CRSPSift. This option generates a single output file.
- **Excel 2007 Workbook (*.xlsx)** - Excel version 2007
  NOTE: This Excel version has a row limit of 1,048,576 total rows. If a query generates more than that number of rows, the output will be truncated at the row limit.
- **MAT-files (*.mat)** - Matlab version 7
- **SAS Dataset (*.sas7bdat)** - SAS version 7
- **Stata File** (*.dta)
- **SPSS File** (*.sav)

Viewing Output Files

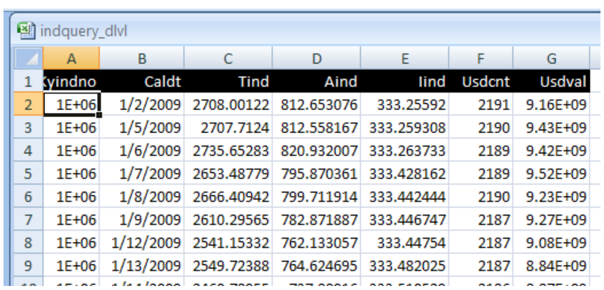
If you select a non-screen output format, IndQuery will generate one or more output files, one for each unique output of the query. When the query completes execution, the output area displays links to the output files generated. Each file will have the name specified in the Output File Name field, with the addition of an extension identifying the type of output it contains.



Clicking one of the output files links opens the File Download dialog box.



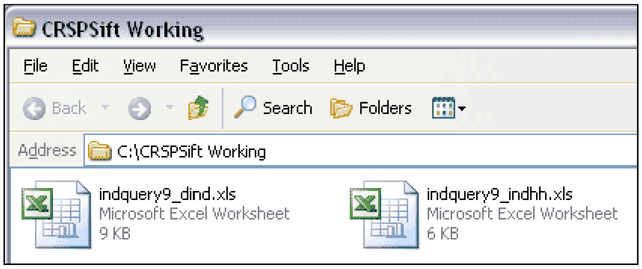
Click Open to open the output file in the appropriate application (Excel 2007, in the example shown below).


indquery_dlvl

	A	B	C	D	E	F	G
1	kyindno	Caldt	Tind	Aind	Iind	Usdcnt	Usdval
2	1E+06	1/2/2009	2708.00122	812.653076	333.25592	2191	9.16E+09
3	1E+06	1/5/2009	2707.7124	812.558167	333.259308	2190	9.43E+09
4	1E+06	1/6/2009	2735.65283	820.932007	333.263733	2189	9.42E+09
5	1E+06	1/7/2009	2653.48779	795.870361	333.428162	2189	9.52E+09
6	1E+06	1/8/2009	2666.40942	799.711914	333.442444	2190	9.23E+09
7	1E+06	1/9/2009	2610.29565	782.871887	333.446747	2187	9.27E+09
8	1E+06	1/12/2009	2541.15332	762.133057	333.44754	2187	9.08E+09
9	1E+06	1/13/2009	2549.72388	764.624695	333.482025	2187	8.84E+09

Alternatively, you can click the View Output button, located in the CRSPSift toolbar, to view the output files generated by your query.

If a query generated only one file, the target application will open the file directly, as shown above. If the query resulted in multiple output files, however, instead of opening the files, CRSPSift will open a Windows Explorer window showing the folder where you chose to save output.



OUTPUT FILE SUFFIXES

The following table lists output file suffixes and the type of data they indicate is contained in a file.

	OUTPUT FILE SUFFIX	
INDIVIDUAL TIME SERIES	**DAILY**	**MONTHLY**
	Dind	mind
PRE-DEFINED TIME SERIES	**DAILY**	**MONTHLY**
Index Levels, used counts and values	dlvl	mlvl
Index returns, used counts, and values	dret	mret
Index counts and values	dval	mval

CHAPTER 6: CCMQUERY: CRSP/COMPUSTAT MERGED DATABASE ACCESS

CCMQuery provides access to Compustat data for all securities in the Compustat universe as well as linking information for those securities also in the CRSP Universe.

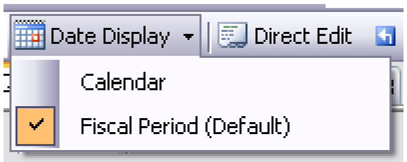
Click the New Query button on the CRSPSift toolbar. Select a data environment that includes a CRSP/Compustat database. Highlight the CCMQuery icon, enter a descriptive name, and then click the OK button.

THE CCMQUERY TOOLBAR

First specify a date range for your query. Enter dates using one of the following formats: YYYYMM, or YYYY. The following table shows some examples of how to use the various formats.

START	END	RESULT
199609	199612	All data from the beginning of September through December of 1996
1990	(empty)	All data in the year 1990

Next, from the Date Display menu, choose either Fiscal Period (the default) or Calendar.



COMPANY SELECTION

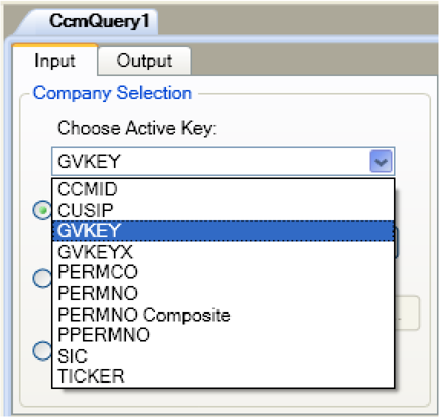
Entities in the CCM Database are accessed by:

- GVKEY - company identifier
- GVKEY.IID - security identifier
- GVKEYX - index

Securities linked with CRSP can be accessed by CRSP identifiers also (PERMNO and variations, PERMCO).

Each GVKEY has associated with it a primary issue. When using GVKEY with no IID, CCMQuery will automatically attach the IID of the primary issue, most often .01.

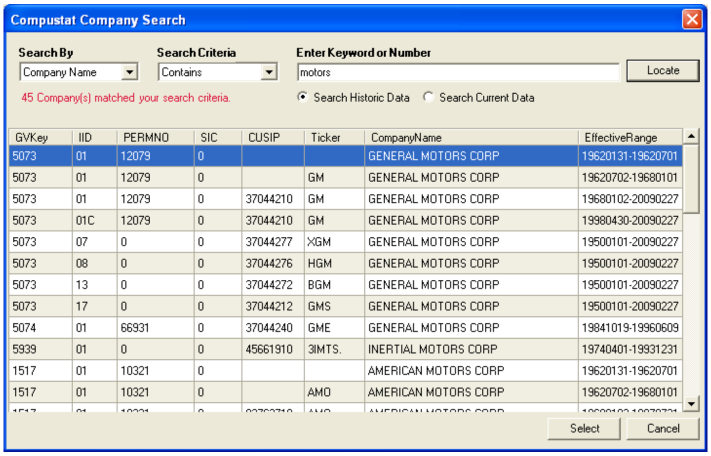
From the drop-down menu in the Company Selection area, specify the key type you wish to use.



Next, identify the issue or companies of interest. If you know an identifier, enter it directly. For example, the GVKEY of

Apple Computer is 1690. Given that knowledge, you can set the key to GVKEY and enter 1690 as the identifier.

If you do not know an identifier, click the Find… button to open the Company Lookup window.



Use the search form to locate a particular company in the CCM database. Companies matching your search criteria appear in a table, initially sorted by GVKEY, then by IID. If your search yields many matches, click the column labels to re-sort the table in the order most useful to you. When you have found the company you want, click its row in the table, and then click the Select button. The GVKEY of that company will appear in the identifier field.

Queries can be run against the full universe by selecting All Issues, or by creating a list of keys and selecting Input File. To use an input file, create a text file with an entry for each company, one per row, using the active key you selected. For example, to search for Apple and Microsoft by GVKEY using an input file, select GVKEY from the Active Key menu.

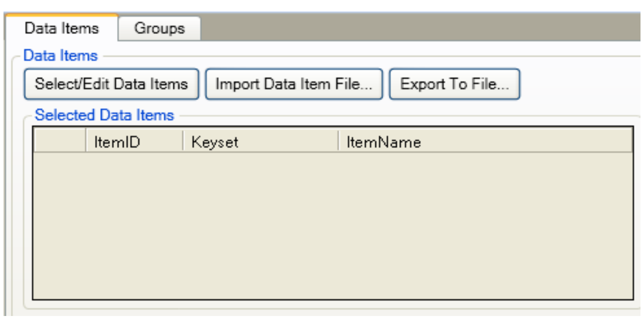
Next create and save the following two line text file in the format GVKEY.IID:

```
1690.01
12141.01
```

For company and financial statement data, if the IID is not explicitly provided, the primary issue default will be provided. If security-level data is requested, both GVKEY and IID are necessary. Accessing security data using an input file without IID will result in an error message and the query will return no data.

Once your input file is properly created, Click Input File in the Company Selection area.

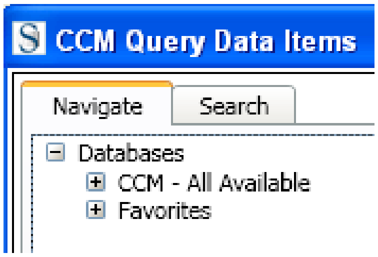
DATA ITEMS AND GROUPS



Compustat data may be accessed either by selecting and combining individual data items in a query, or by selecting pre-defined groups of data items.

DATA ITEMS

Click on Select/Edit Data Items to open a screen that offers two categories: Compustat data items and Favorites.

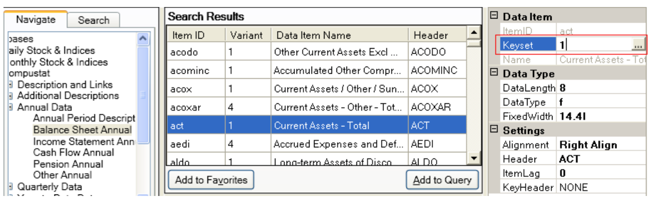


Expand the Compustat data items category (CCM-All Available) to see categories of Compustat data items.

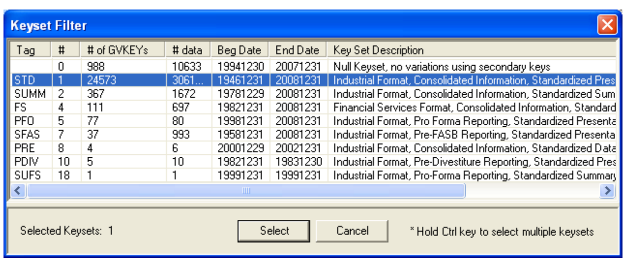
Select Subgroups within the categories and view items within each of the subgroups. When you select a subgroup, a list of its items appears in the Search Results area. Further details about the selected item are shown in the area to the right of the Search Results. Highlight items to be added to your query and click the Add to Query button. Added items appear in the Query Items section of the screen.

KEYSETS

Keysets are CRSP-created groups of Compustat secondary keys that are used to further define Compustat data items. CRSP has identified a default keyset for each data item. Sift allows you to override the default keysets, or select multiple keysets in Sift.



On the Data Items screen, clicking on the Keyset box opens a table of all existing keysets for the items with statistics about each. The default keyset is highlighted upon opening the box and is typically STD, or Standard. The Keyset number is provided, the number of GVKEYs, the number of data points, the date range populated by the data, and a description of the Keyset.



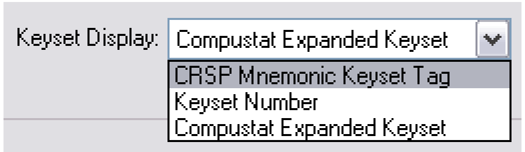
Choose different or additional keysets and click the Select button to close the window.

KEYSET DISPLAY

Compustat data items can be qualified by a set of secondary keys. For example, the data item SALE has secondary keys for industry format, data format, population source, and consolidation level. A different value of company sales can be available for different combinations of these keys, such as a combination that represents the originally reported sales or the final restated sales from a later filing.

CRSP calls these collections of keys and values a keyset and assigns a numeric code and mnemonic tag to each unique collection. Each of these represents different output series. When multiple keysets are available the user can specify both the item and keyset to identify the series of interest, or use the default preset combination most commonly used.

The Keyset Display drop-down menu in CCMQuery's Output tab affects how a data item's keyset is represented in query output.



Options include CRSP Mnemonic Keyset Tag, Keyset Number, and Compustat Expanded Keyset. The following examples illustrate these options using Microsoft Excel output.

CRSP MNEMONIC KEYSET TAG

Output represents the item's keyset using a mnemonic tag assigned by CRSP.

KYGVKEY	KEYSET_TAG	FYYYY	FYRA	SALE
1690	STD	2005	9	13931
1690	STD	2006	9	19315
1690	STD	2007	9	24006

KEYSET NUMBER

Output represents the item's keyset using a keyset number assigned by CRSP.

KYGVKEY	KEYSET	FYYYY	FYRA	SALE
1690	1	2005	9	13931
1690	1	2006	9	19315
1690	1	2007	9	24006

COMPUSTAT EXPANDED KEYSET

Each component of the item's keyset is broken out into its own column in output.

KYGVKEY	CONSOL	DATAFMT	INDFMT	POPSRC	FYYYY	FYRA	SALE
1690	C	STD	INDL	D	2005	9	13931
1690	C	STD	INDL	D	2006	9	19315
1690	C	STD	INDL	D	2007	9	24006

KEYSET AVAILABLE DATA

Reference Codes (Default key)

Reference code data can be used in two ways: to return a list of unknown codes, or to find the meaning of a specific code.

DESCRIPTION	BASE ITEM	DATA ITEMS
Accounting Standard	ACCTSTD	ACCTSTDCD ACCTSTDDESC
Acquisition Method	ACQMETH	ACQMETHCD ACQMETHDESC
Balance Sheet Presentation	BSPR	BSPRCD BSPRDESC
Comparability Status	COMPST	COMPSTCD COMPSTDESC
Constituent	CONTYPE CONVAL	CONTYPECD CONVALCD CONVALDESC

DESCRIPTION	BASE ITEM	DATA ITEMS
Country	FIC, LOC, EXCNTRY	ISOCNTRYCD ISOCNTRYCDDESC
Data Code	*_DC	DATCDCD DATCDDESC
Data Format	DATAFMT	DATAFMTCD DATAFMTDESC
Exchange Rate Type	EXRATTPD	EXRATTPDCD EXRATTPDDESC
Footnote	*_FN* POPSRC	FND_FNCD FND_POPSRC FND_FNDESC
Footnote	*_FN*	FNCD FNDESC
Internal Control Auditor Opinion	AUOPIC	AUOPICCD AUOPICDESC
Industry Format	INDFMT	INDFMTCD INDFMTDESC
Industry Presentation	IPCD	IPCDCD IPCDDESC
Issue Status Alert	STALT	ISALRTCD ISALRTDESC
Issue Type	TPCI	TPCICD TPCIDESC
Index	INDEXTYPE INDEXVAL	IDXTYPECD IDXVALCD IDXVALDESC
Level of Consolidation	CONSOL	CONSOLCD CONSOLDESC
Market Holiday	ISOCNTRYCD	ISOCD HCAL_DATADATE
Major Index	INDEXID	IDXIDCD IDXCAT IDXIDDESC
Note Subtype	NOTETYPECD SUBTYPE	SUB_NOTETYPECD SUBTYPECD SUBTYPEDESC
Note Type	NOTETYPE	NOTETYPECD NOTETYPEDESC
Officer SOX Certification	CEOSO, CFOSO	OSOCD OSODESC
Oil & Gas Method	OGM	OGMCD OGMDESC
Officer Title	OFCD	OFCDCD OFCDDESC
Research Company Reason for Deletion	DLRSN	DLRSNCD DLRSNDESC
Status Alert	STALT	STALTCD STALTDESC
State / Province	STATE, INCORP	STATECD STATEDESC

Reference Numbers

Reference Numbers are numeric codes assigned to Compustat data. Like Reference Codes, Reference Number data can be used in two ways: to return a list of unknown numeric codes, or to find the meaning of a specific numeric code.

DESCRIPTION	BASE ITEM	ITEMS
Auditor Opinion	AUOP	AUOPCD AUOPDESC
Auditor	AU	AUCD AUDESC
Cash Flow Format	SCF	SCFCD SCFDESC
Source Document	SRC	SRCCD SRCDESC
Source Document (Quarterly)	SRCQ	SRCQCD SRCQDESC
S&P Economic Sector	SPCSEC	SPSECCD SPSECDESC
Stock Exchange	EXCHG	EXCHGCD EXCHGDESC
Fortune Industry	FORI	FORICD FORISTAT FORIDESC
GICS	GGROUP, GIND, GSECTOR, GSUBIND	GICCD GICSTAT GICDESC
S&P Industry Index	SPII	SPIICD SPIISTAT SPIIDESC
Income Statement Model	ISMOD	ISMODCD ISMODDESC
Inventory Valuation	INVVAL	INVVALCD INVVALDESC
NAICS	NAICS	NAICSCD NAICSTAT NAICSDESC
Price Status	PRCSTD	PRCSTDCD PRCSTDDESC
SIC	SIC, SICH	XPFSICCD SICSTAT SICDESC
S&P Industry Sector	SPIND	SPINDCD SPINDDESC
S&P Major Index	SPMI	SPMICD SPMISTAT SPMIDESC
Stock Ownership	STKO	STKOCD STKODESC
Update	UPD	UPDCD UPDDESC

Currency Data

Currency data items include information about a country's currency as well as a history of daily and monthly exchange rates.

Note on Exchange Rate Data: Exchange rates are listed "from" a common currency, "to" the currency in question. Currently, "GBP" (Pounds Sterling) is used as the common "from" currency.

Currency Data

ITM_NAME	DESCRIPTION
ISOCURCD	ISO Currency Code
ISOCURBD	Currency Birth Date
ISOCURDD	Currency Death Date
ISOCURLNK	Currency Link Code
ISOCURTR	Currency Tier Number
ISOCURNM	Currency Name

Daily Exchange Rate

ITM_NAME	DESCRIPTION
EXRATD	Daily Exchange Rate

Monthly Exchange Rate

ITM_NAME	DESCRIPTION
EXRATM	Monthly Exchange Rate

Monthly Exchange Rate Averages

ITM_NAME	DESCRIPTION
EXRAT1M	Monthly Exchange Rate, 1 Month Average
EXRAT2M	Monthly Exchange Rate, 2 Month Average
EXRAT3M	Monthly Exchange Rate, 3 Month Average
EXRAT4M	Monthly Exchange Rate, 4 Month Average
EXRAT5M	Monthly Exchange Rate, 5 Month Average
EXRAT6M	Monthly Exchange Rate, 6 Month Average
EXRAT7M	Monthly Exchange Rate, 7 Month Average
EXRAT8M	Monthly Exchange Rate, 8 Month Average
EXRAT9M	Monthly Exchange Rate, 9 Month Average
EXRAT10M	Monthly Exchange Rate, 10 Month Average
EXRAT11M	Monthly Exchange Rate, 11 Month Average
EXRAT12M	Monthly Exchange Rate, 12 Month Average
EXRAT13M	Monthly Exchange Rate, 13 Month Average
EXRAT14M	Monthly Exchange Rate, 14 Month Average
EXRAT15M	Monthly Exchange Rate, 15 Month Average
EXRAT16M	Monthly Exchange Rate, 16 Month Average
EXRAT17M	Monthly Exchange Rate, 17 Month Average
EXRAT18M	Monthly Exchange Rate, 18 Month Average

Country Economic Indicator Data

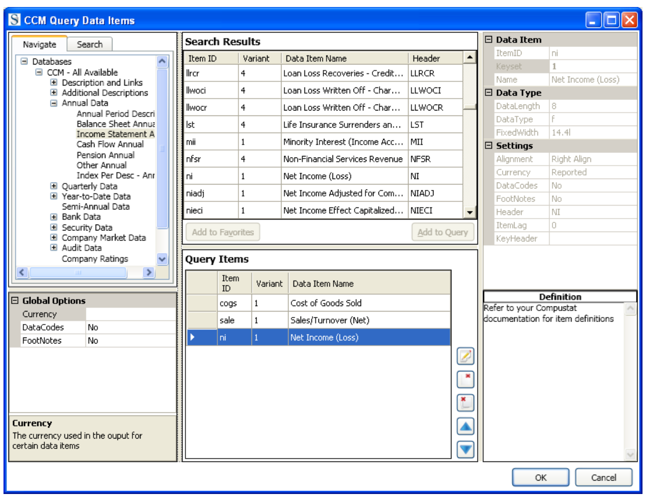
Economic Indicator Data

ITM_NAME	DESCRIPTION
AUTO	Sale of Passenger Cars
BOND10YR	Government Bonds – 10 Year (Canada Only)
BOND20YR	Government Bonds – 20 Year (U.S. Only)
BOND30YR	Government Bonds – 30 Year (U.S. and Canada)
CABGDP1	Current Account Balance (Annual)
CABGDP2	Current Account Balance (Quarterly)
CPI	Consumer Price Index
CPI1	Consumer Price Index Inflation Rate (Index Value – Annual)
CPI3	Consumer Price Index Inflation Rate (Index Value – Monthly)
CPIR	Consumer Price Index Inflation Rate (Percent)
EMPLOY	Employment – Nonfarm
EMPLOYT1	Employment – Total (Annual)
EMPLOYT2	Employment – Total (Quarterly)
FEDFUNDS	Federal Funds Rate
GDP	Gross Domestic Product
GDPN1	Nominal Gross Domestic Product (Annual)
GDPN2	Nominal Gross Domestic Product (Quarterly)
GDPR1	Real Gross Domestic Product (Annual)
GDPR2	Real Gross Domestic Product (Quarterly)
HOUSE	Housing Starts
IP1	Industrial Production Growth Rate (Index Value – Annual)
IP3	Industrial Production Growth Rate (Index Value – Quarterly)
IPGR	Industrial Production Growth Rate (Percent)
IPPI	Industrial Product Price Index – Canada
LIBOR1M	London Interbank Offering Rate – 1 Month
LIBOR2M	London Interbank Offering Rate – 2 Month
LTGDR	Interest Rate on Long Term Government Debt
M1	Money Supply
M2	Money Supply
MBROAD1	Broad Money Supply (Annual)
MBROAD3	Broad Money Supply (Monthly)
NOTE10YR	Government Notes – 10 Year
NOTE2YR	Government Notes – 2 Year
NOTE3YR	Government Notes – 3 Year
NOTE5YR	Government Notes – 5 Year
NOTE7YR	Government Notes – 7 Year
POPT	Population
PPI	Producer Price Index
PRIME	Prime Interest Rate
RAWMAT	Raw Material Price Index

ITM_NAME	DESCRIPTION
RTLSALES	Retail Sales
STGDR	Interest Rate on Short Term Government Debt
TBILL12M	Treasury Bill – 12 Month
TBILL3M	Treasury Bill – 3 Month
TBILL6M	Treasury Bill – 6 Month
TXCR	Corporate Income Tax Rate
UNEMP	Unemployment Rate
UNEMP1	Unemployment Rate (Annual)
UNEMP2	Unemployment Rate (Quarterly)
WPI1	Wholesale Price Index Inflation Rate (Index Value – Annual)
WPI3	Wholesale Price Index Inflation Rate (Index Value – Monthly)
WPIR	Wholesale Price Index Inflation Rate (Percent)

Favorites

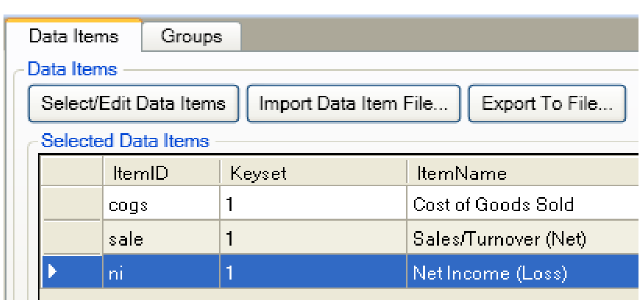
If you find that you commonly use a certain subset of items, at any time, you may highlight them and click the Add to Favorites button. Favorites is a user-created category designed to house these commonly accessed data items. It allows storage of Daily and Monthly CRSP stock items as well as Compustat data items.



To control the order in which your report will display data items, use the up and down arrows to the right of the Query Items list. Click an item and then click the up or down arrow to reorganize the list. To remove an item or group of items, select them from the list and click the X button, located above the arrow buttons.

Select Global Item Options to include Footnotes or Data Code items for those items that have them, and to change the default from providing output in its Reported Currency to converting it to US Dollars.

When items and options are selected, click on OK to return to the main CCMQuery screen. Selected items appear in the Screen.



Note: Global options must be set prior to selecting data items in order for them to be applied.

IMPORTING DATA ITEMS FROM A FILE

Instead of choosing data items using the item selection screen, you can import a set of data items from a text file. To do so, click "Import Data Item File…" The file should contain one data item per line, in the format `itemid.<keyset>`. Keyset number is optional; the item's default keyset will be used if it is omitted, as for the data item `filedate` in the following example.

```
ofid.0
ofcd.0
ofnm.0
filedate
sale.5
```

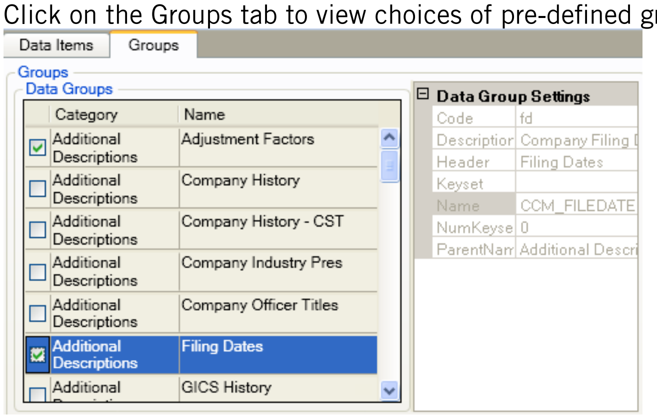
Imported items will be added below any items already present in the Selected Data Items list.

EXPORTING DATA ITEMS TO A FILE

Click "Export To File…" to export items in the Selected Data Items list to a text file in the format described above.

Groups

Click on the Groups tab to view choices of pre-defined groups of Compustat data.

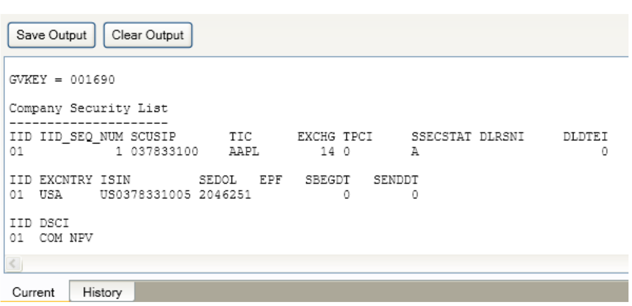


Groups provide a convenient way to select multiple related data items at once. For example, there are five items related to Filing Dates data. These items are found under the Filing Dates sub-category of the Additional Descriptions category in the data items selection screen. There you can add each of the five items to your query, one by one. That method is best if you want to modify properties (such as keyset or output header) of some but not all items.

Alternatively, you could add all five items at once by selecting Filing Dates under the Groups tab. This is an efficient way of selecting multiple items if you intend to apply the same properties to all items in the group.

Output to Screen

The default option is text-based, formatted to fit the screen width specified in the Width control. 80 characters is the default width. Screen output appears in the hopper at the bottom of the CCMQuery window.



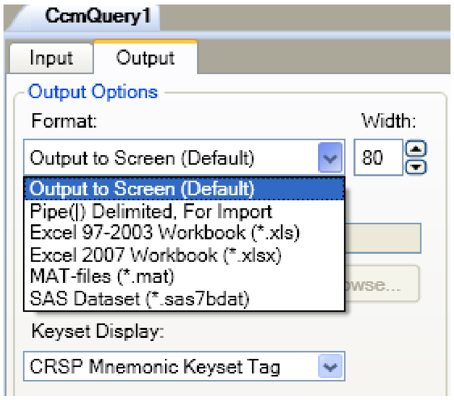
By default, the output of the last query execution is shown in the Current tab. The Save Output and Clear Output buttons at the top of the output area allow you to save output to a text file or to clear it away. Clicking the History tab shows you the output of every query execution since the session was opened.

When you switch to the query history view, the buttons above the output area change to Save History and Clear History. Save History allows you to capture the output of an entire session. You can select a different key (GVKEY or PERMNO, for example), or different data or options related to the same key. Each time you click Execute the new output is saved in the history. Then, by clicking Save History, you can save all the output to one text file.

Output to File

You can also save data in a number of external file formats. When you choose a non-screen format, the Output File Name field becomes active and is required.

Click the Browse button to select a location to save the file.

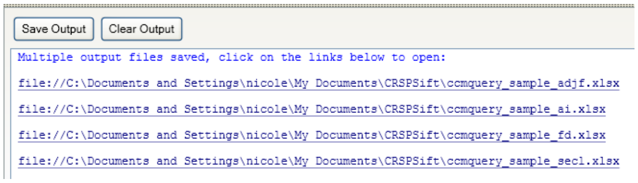


SUPPORTED FILE FORMATS

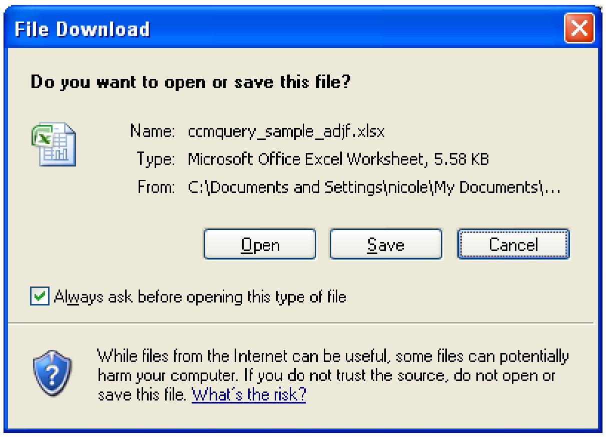
- **Pipe(I) Delimited, For Import -** pipe-delimited ASCII text, suitable for importing into databases or software packages not directly supported by CRSPSift. This option generates a single output file.
- **Excel 2007 Workbook (*.xlsx)** - Excel version 2007
  NOTE: This Excel version has a row limit of 1,048,576 total rows. If a query generates more than that number of rows, the output will be truncated at the row limit.
- MAT-files (*.mat) - Matlab version 7
- SAS Dataset (*.sas7bdat) - SAS version 7
- Stata File (*.dta)
- SPSS File (*.sav)

VIEWING OUTPUT FILES

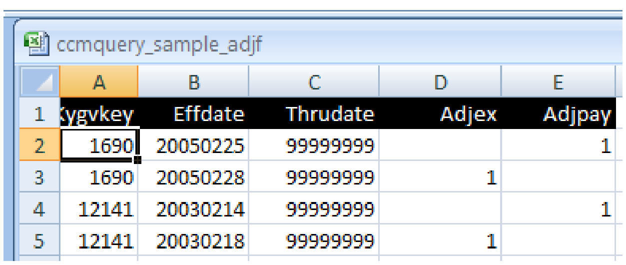
If you select a non-screen output format, CCMQuery will generate one or more output files, one for each unique output of the query. When the query completes execution, the output area displays links to the generated output files. Each file will have the name specified in the Output File Name field, with the addition of an extension identifying the type of output it contains (for example, "fd" for Filing Dates data, or "adjf" for Adjustment Factors data).



Clicking one of the output files links opens the File Download dialog box.



Click Open to open the application and output file to which the data items were written.



OUTPUT FILE SUFFIXES

The following table lists output file suffixes and the type of data they indicate is contained in a file.

DATA CATEGORY	DATA GROUP NAME	OUTPUT FILE SUFFIX
Additional Descriptions	Adjustment Factors	adjf
Additional Descriptions	Company History	hcom
Additional Descriptions	Company History – CST	hcst
Additional Descriptions	Company Industry Pres	ipcd
Additional Descriptions	Company Officer Titles	off
Additional Descriptions	Filing Dates	fd
Additional Descriptions	GICS History	hgic
Annual Data	Index Per Desc – Annl	xades
Audit Data	Audit Data – Annl	aaud
Audit Data	Audit Data –Qtr	iaud
CCM – Common Subsets	Company Summary	cos

DATA CATEGORY	DATA GROUP NAME	OUTPUT FILE SUFFIX
CCM – Common Subsets	Period Summary – Annl	pa
CCM – Common Subsets	Period Summary – Qtr	pq
Company Market Data	Fortune 500 Data	fo
Company Market Data	Market Data – Annl	amkt
Company Market Data	Market Data – Qtr	imkt
Description and Links	CCM Header and Ranges	mstr
Description and Links	Company Description	com
Description and Links	Company Security List	secl
Description and Links	Index Header	in
Description and Links	Index Header – pre GICS	spind
Description and Links	Link History	link
Description and Links	Link Used	ulink
Description and Links	Link Used Ranges	lnkrng
Operating Segment	Segment Currency	test_sr
Operating Segment	Segment Customer	test_sc
Operating Segment	Segment Detail	test_sd
Operating Segment	Segment Geographic Area	test_sg
Operating Segment	Segment Item	test_sm
Operating Segment	Segment NAICS	test_sy
Operating Segment	Segment Product	test_sp
Operating Segment	Segment Source	test_ss
Quarterly Data	Index Per Desc – Qtr	test_xqdes
Security Data	Security – Constituents	test_hidx
Security Data	Security – Dividend FN	test_divfn
Security Data	Security – Header	test_sec
Security Data	Security – Header Hist	test_hsec
Security Data	Security – S&P	test_sind
Security Data	Security – S&P Constit	test_idx
Security Data	Security – Split Ev FN	test_sptfn
Security Data	Security – Split Events	test_spt

CHAPTER 7: TRSQUERY: TREASURIES DATA ACCESS

CRSPSift's TrsQuery tool is used to access CRSP Daily and Monthly US Treasuries Data. Individual treasury issues and a variety of treasury series are available.

QUERY DATE RANGE SPECIFICATION

Locate the TrsQuery toolbar below the main CRSPSift toolbar.

Specify a date range. Enter dates using one of the following formats: YYYYMMDD, YYYYMM, or YYYY. The following table provides examples of how to use the various formats.

START	END	RESULT
199609	199612	all data from the beginning of September through December of 1996
1990	(empty)	all data in the year 1990
1994	19940615	all data from the beginning of 1994 until June 15, 1994
19961231	(empty)	data only on the date December 31, 1996

By default, TrsQuery returns data from the last three months of the CRSP database included in your query's Environment. For more information on Environments, see Chapter 8: Environments.

TREASURY SELECTION

SELECTING A KEY TYPE

Select what type of key your query will use from the Choose Key Type drop-down menu in the Treasury Selection area. Available keys are:

TREASNO - (default) CRSP's Unique US Treasury Number Identifier can be used to access individual issues. TREASNOs are 6-digit numbers between 200001 and 206341.

CUSIP - Treasury CUSIP. The Committee on Uniform Security Identification Procedures began assigning CUSIP identification numbers in 1968. Issues that matured prior to 1968 are assigned the value OXX. The earliest maturity in the file with a CUSIP is February 15, 1969.

CRSPID - The CRSP Issue Identification Number in the format YYYYMMDD. TCCCCE, where:

YYYY	Maturity Year
MM	Maturity Month
DD	Maturity Day
T	Type of Issue (TYPE)
CCCC	Integer part of Coupon Rate (COUPRT * 100)
E	Uniqueness Number (UNIQ)

For example, 19850515.504250 identifies a 4¼% callable bond which matures May 15, 1985.

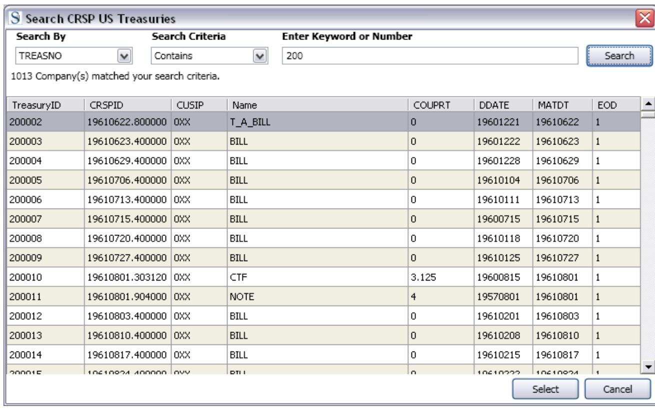
TREASNOX - CRSP's Unique US Treasury Index Number Identifier. Index TREASNOX's are 7-digit numbers between 2000001 and 2000069. The complete list of treasuries indexes is below:

TREASNOX	TERM TYPE DESCRIPTION
INDEX FAMILY: RISKFREE **RISKFREE**	
2000001	Risk-Free Rates – 1 Month
2000002	Risk-Free Rates – 3 Month
RISKFREE2	
2000061	Risk Free 4-Week
2000062	Risk Free 13-Week
2000063	Risk Free 26-Week
INDEX FAMILY: FIXEDTERM **FIXED TERM**	
2000003	1 Year Bonds, Start Date 1/31/1941
2000004	2 Year Bonds, Start Date 1/31/1941
2000005	5 Year Bonds, Start Date 4/30/1941
2000006	7 Year Bonds, Start Date 4/30/1941
2000007	10 Year Bonds, Start Date 5/31/1941
2000008	20 Year Bonds, Start Date 1/31/1942
2000009	30 Year Bonds, Start Date 11/29/1941
INDEX FAMILY: TERMSTRUCT **FAMA TERM STRUCTURE**	
2000010	Fama 12 Month T-Bills – 1 Month
2000011	Fama 12 Month T-Bills – 2 Month
2000012	Fama 12 Month T-Bills – 3 Month
2000013	Fama 12 Month T-Bills – 4 Month
2000014	Fama 12 Month T-Bills – 5 Month
2000015	Fama 12 Month T-Bills – 6 Month
2000016	Fama 12 Month T-Bills – 7 Month
2000017	Fama 12 Month T-Bills – 8 Month
2000018	Fama 12 Month T-Bills – 9 Month
2000019	Fama 12 Month T-Bills – 10 Month
2000020	Fama 12 Month T-Bills – 11 Month
2000021	Fama 12 Month T-Bills – 12 Month
2000022	Fama 6 Month T-Bills – 1 Month
2000023	Fama 6 Month T-Bills – 2 Month
2000024	Fama 6 Month T-Bills – 3 Month
2000025	Fama 6 Month T-Bills – 4 Month
2000026	Fama 6 Month T-Bills – 5 Month
2000027	Fama 6 Month T-Bills – 6 Month
INDEX FAMILY: BONDMAPORT **FAMA BOND PORTFOLIO RETURN**	
2000028	Fama BondPort Return – 6Mo Range <=6Month
2000029	Fama BondPort Return -6Mo Range <=12Month
2000030	Fama BondPort Return -6Mo Range <=18Month
2000031	Fama BondPort Return -6Mo Range <=24Month
2000032	Fama BondPort Return -6Mo Range <=30Month
2000033	Fama BondPort Return -6Mo Range <=36Month
2000034	Fama BondPort Return -6Mo Range <=42Month
2000035	Fama BondPort Return -6Mo Range <=48Month
2000036	Fama BondPort Return -6Mo Range <=54Month
2000037	Fama BondPort Return -6Mo Range <=60Month
2000038	Fama BondPort Return > 60 <= 120 Month
2000039	Fama BondPort Return > 120 Month
2000040	Fama BondPort Return -12Mo Range <=12Month
2000041	Fama BondPort Return -12Mo Range <=24Month
2000042	Fama BondPort Return -12Mo Range <= 36Month
2000043	Fama BondPort Return -12Mo Range <= 48Month
2000044	Fama BondPort Return -12Mo Range <= 60Month
2000045	Reserved for future use – Duplicate of 2000038
2000046	Reserved for future use – Duplicate of 2000039
INDEX FAMILY: DISCBOND **FAMA-BLISS DISCOUNT BONDS**	
2000047	Fama Bilss Discount Bonds 1 Year
2000048	Fama Bilss Discount Bonds 2 Year
2000049	Fama Bilss Discount Bonds 3 Year
2000050	Fama Bilss Discount Bonds 4 Year
2000051	Fama Bilss Discount Bonds 5 Year
INDEX FAMILY: RATES **RATES**	
2000052	1-Month Certificate of Deposit Rate
2000053	3-Month Certificate of Deposit Rate
2000054	6-Month Certificate of Deposit Rate
2000055	30-Day Commercial Paper Rate
2000056	60-Day Commercial Paper Rate
2000057	90-Day Commercial Paper Rate
2000058	Federal Funds Effective Rate
2000059	Federal Funds Minimum Trading Range
2000060	Federal Funds Maximum Trading Range

ENTERING A KEY VALUE

Identify the treasury or treasuries of interest. There are three ways to specify a key value. First, if you know the key value you want, you can type it directly in the text field. Another option is to browse the database sequentially. Use the arrow buttons to the right of the Find... button to step through the database in the order of the key type you have chosen. Finally, the Find... button opens the Treasuries Search window, where you can use a search form to locate a particular treasury in the CRSP database.

USING THE TREASURIES SEARCH WINDOW



If you have selected TREASNOX as your query's key type, you can search by partial or complete TREASNOX, Index Family, or Term Type Description.

If you have chosen any of the other three key types, search the Treasuries Search window by one of the following criteria: TREASNO, CRSPID, CUSIP, Date Issued, or Maturity Date.

Treasuries matching your search criteria appear in a table in the main area of the window. If your search yields many matches, click the column labels to re-sort the table in the order most useful to you. When you have found the treasury you want, click its row in the table, and then click the Select button. Its TREASNO will appear in the identifier field of the Input tab.

ACCESSING ALL TREASURIES

To access all treasuries in the database, select the All Treasuries radio button.

USING AN INPUT FILE

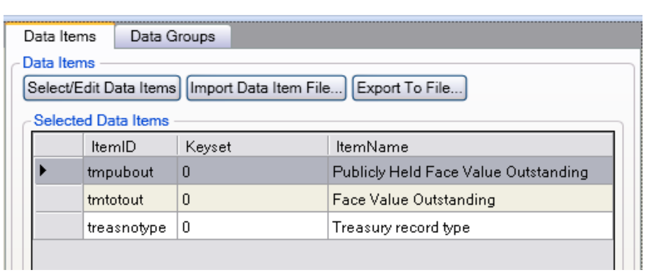
Finally, you may choose to access only certain treasuries specified in an input file. To use an input file, first create a plain text file (using the Microsoft Windows Notepad accessory, for instance) with an entry for each treasury, one per row, using the key type of your choice. For example, to access four particular treasuries by TREASNO, create the following four line file:

```
200007
200014
200158
200161
```

Save the file in your data environment's working directory. Next, Click the Input File option in the Treasury Selection area, and then click the Browse... button to locate the input file you created. The Browse window opens automatically to the working directory. Now select the preferred key type from the Choose Key Type menu.

DATA ITEM SELECTION

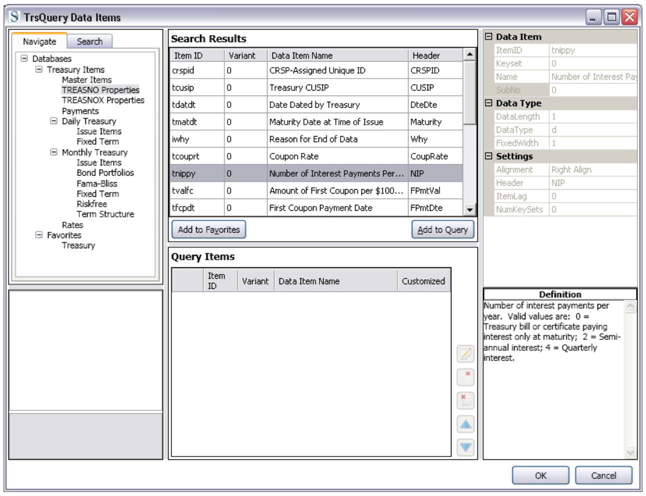
Use the Data Items tab to control what individual data items your query will use. Any items you have chosen appear in the Selected Data Items table.



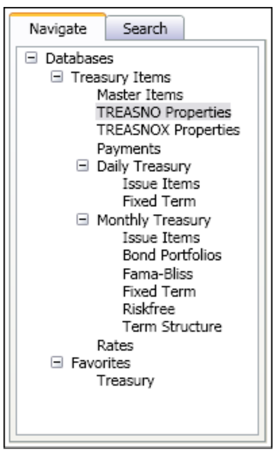
SELECT/EDIT DATA ITEMS

Clicking this button launches the interface for selecting individual items in TrsQuery.

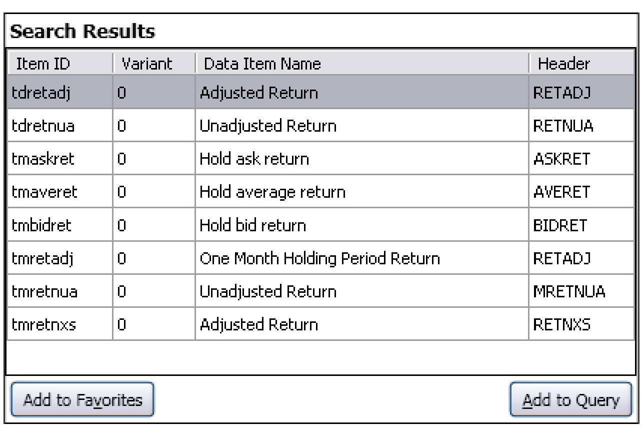
Note: For complete definitions of data items and calculations employed by the **CRSP US Treasury Databases**, refer to the Treasury Guide at www.crsp.org/documentation.



The TrsQuery Data Items window is divided into several areas. Items are divided into logical groups in the Navigate/Search area.



Clicking the name of a group causes its constituent data items to appear in the Search Results area. Or, rather than browsing by category, click the Search tab. There you can enter a descriptive keyword (e.g., "return") to find items of interest. Navigate and Search both result in found data items appearing in the Search Results area of the window.



When you highlight an item in the Search Results area, its attributes and a short text description appear in the right panel of the screen.

Data Item	
ItemID	tdretadj
Keyset	0
Name	Adjusted Return
SubNo	0
Data Type	
DataLength	14
DataType	f
FixedWidth	14.4l
Settings	
Alignment	Right Align
Header	RETADJ
ItemLag	0
NumKeySets	0

Select each item you want in your query, and click the Add to Query button to add it to the Query Items area below the Search Results.

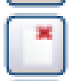
Query Items

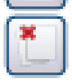
Item ID	Variant	Data Item Name	Customized
tmpubout	0	Publicly Held Face Value Out...	Yes
tmtotout	0	Face Value Outstanding	Yes
treasnotype	0	Treasury record type	Yes
tdretadj	0	Adjusted Return	Yes

Items in the Query Items area appear in the order that they will appear in your query's output. To adjust the position of an item, select it and click the blue up and down arrows to move it up or down the list.

The other functions available are:

 Edit. Click this to edit an item's attributes.

 Remove the selected item from your query.

 Remove all items from the Query Items list.

Click the OK button to confirm the addition of the selected items to your query. Click cancel to exit the TrsQuery Data Items window without making any changes.

Import Data Item File...

Clicking this button allows you to import a list of data items into your query from a user-created text file. A data item file is a plain text file containing a list of TrsQuery data ItemIDs, one per line. For example, in Notepad or another text editor, create a file with the following four lines:

```
treasno
tname
tdbid
tdask
```

Save the file as trsimport.txt in your CRSPSift working directory. Now click the Import Data Item File... button and select trsimport.txt. The data items listed in the file will be added your query.

Export to File...

Use this option to output the Selected Data Items list to a text file containing each item's mnemonic ItemID. This text file may then be imported into other queries using the Import Data Item File... button.

DATA GROUPS

The Data Groups tab allows you to select clusters of related data items, saving you the time of selecting and adjusting a group's items individually.

The following data groups are available in TrsQuery. Groups correspond to the item groupings of the tree navigation structure in the TrsQuery Data Items window. Some data groups apply to individual treasury issues, while others apply to treasury series. The table indicates to which category a group applies.

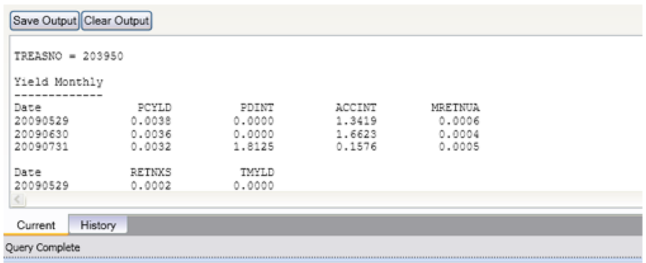
DATA GROUP	AGGREGATE SERIES	ISSUE
DAILY TREASURY ITEMS		
Index Daily	x	
Quote Daily		x
Yield Daily		x
Fixed Term		
Fixed Term Header	x	
Fixed Term Timeseries	x	
MONTHLY TREASURY ITEMS		
Fama Bond	x	
Fama-Bliss Discount	x	
Fama-Bliss Riskfree	x	
Index Monthly	x	
Quote Monthly		x
Term Struct	x	
Yield Monthly		x
RATES		
Rates Header	x	
Rates Timeseries	x	
TREASURY DESCRIPTIONS		
Daily Debt		x
Debt		x
Fixed Term	x	
Rates	x	
Treasury Index	x	
Treasury Issue		x
Treasury Master		x
Treasury Payments		x

OUTPUT OPTIONS

You can save the output of a TrsQuery in one of several formats. Click the Output tab to show the Output Options panel.

OUTPUT TO SCREEN

The default option is text-based output, formatted to fit the screen width specified in the Width control. 80 characters is the default output width. Screen output appears in the output area at the bottom of the TrsQuery window.

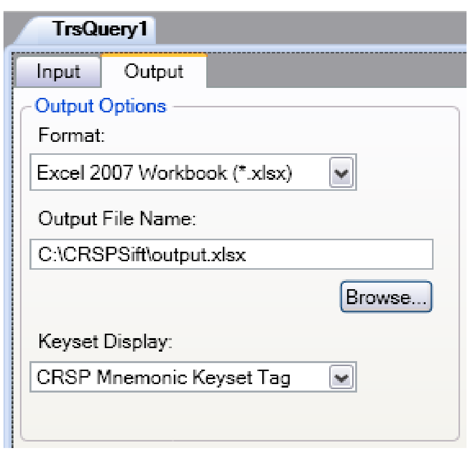


By default, the output of the last query execution is shown. The Save Output and Clear Output buttons at the top of the output area allow you to save output to a text file or to clear it away. Clicking the History tab shows you the output of every query execution since the query was opened.

When you switch to the query history view, the buttons above the output area change to Save History and Clear History. Save History allows you to capture the output of an entire session. You can select a new treasury, or different data or options related to the same treasury. Each time you click Execute the new output is saved in the history. Then, by clicking Save History, you can save all the output to one text file.

OUTPUT TO FILE

You can also save query output in a number of external file formats. When you choose a non-screen output format, the Output File Name field becomes active. In order to successfully execute the query, you must select a location to store the output file. Click the Browse button to select a location to save the file.



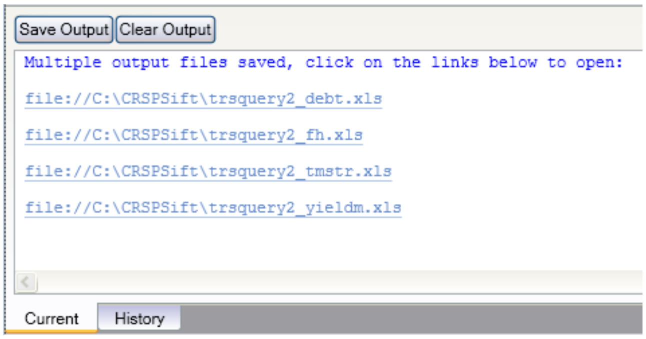
SUPPORTED FILE FORMATS

- **Pipe(|) Delimited, For Import** - pipe-deliimited ASCII text, suitable for importing into databases or software packages not directly supported by CRSPSift. This option generates a single output file.
- **Excel 2007 Workbook (*.xlsx)** - Excel version 2007
  NOTE: This Excel version has a row limit of 1,048,576 total rows. If a query generates more than that number of rows, the output will be truncated at the row limit.
- **MAT-files (*.mat)** - Matlab version 7
- **SAS Dataset (*.sas7bdat)** - SAS version 7

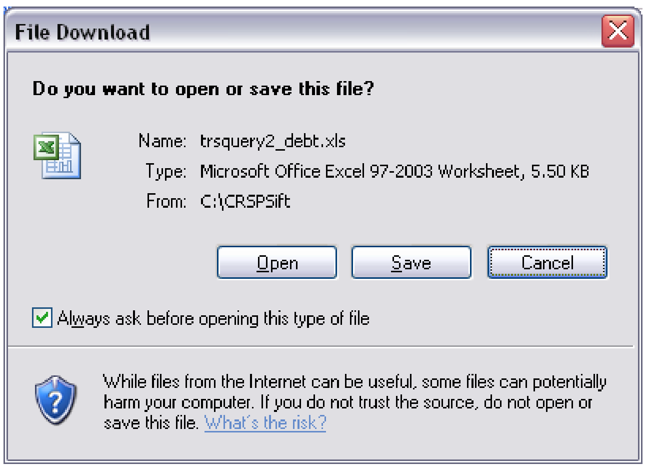
- **Stata File** (*.dta)
- **SPSS File** (*.sav)

VIEWING OUTPUT FILES

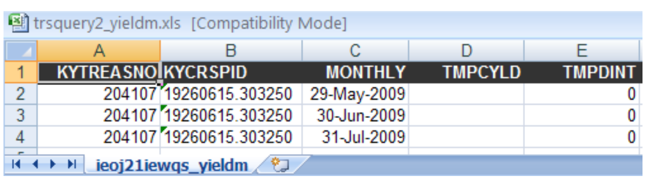
If you select a non-screen output format, TrsQuery will generate one or more output files, one for each unique output format produced by the query. When the query completes execution, the output area displays links to the output files generated. Each file will have the name specified in the Output File Name field, with the addition of an extension identifying the type of output it contains.



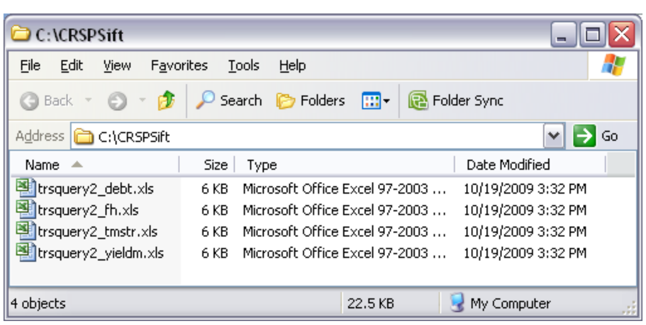
Clicking one of the output files links opens the File Download dialog box.



Click Open to open the output file in the appropriate application (Excel, in the example shown below).



Alternatively, you can click the View Output button, located in the CRSPSift toolbar, to view the output files generated by your query in Windows Explorer.



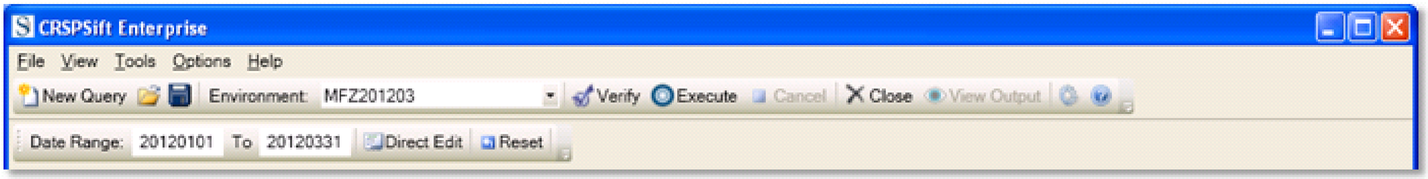
OUTPUT FILE SUFFIXES

The following table lists output file extensions for each type of treasury data.

DATA GROUP	OUTPUT FILE SUFFIX
Treasury Master	tmstr
Treasury Issue	treas
Treasury Index	tidx
Treasury Payments	tpaymt
Yield Daily	yieldd
Quote Daily	quoted
Index Daily	indexd
Yield Monthly	yieldm
Quote Monthly	quotem
Index Monthly	indexm
Fama-Bliss Discount	fbdisc
Fama-Bliss Riskfree	fbrfree
Term Struct	term
Fama Bond	fbond
Debt	debt
Daily Debt	ddebt
Fixed Term	fterm
Fixed Term Header	fh
Fixed Term Timeseries	ds
Rates	rate
Rates Header	rh
Rates Timeseries	rs

CHAPTER 8: MUTQUERY: US SURVIVOR-BIAS-FREE MUTUAL FUND DATABASE ACCESS

MutQuery is used to extract data from the CRSP US Survivor-Bias-Free Mutual Funds Database. Access is designed for Fund data, cross-referencing securities with funds, and for holdings company information. A subsequent release of Sift will also allow for getting to fund information through a security. Locate the MutQuery toolbar below the main CRSPSift toolbar.

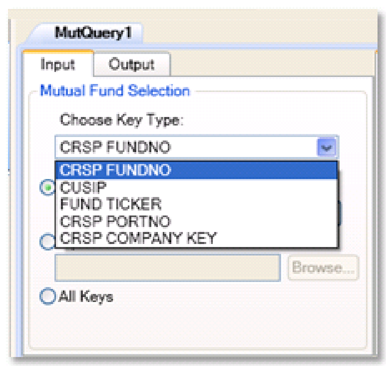


The menu bar for MutQuery is like that of most other Sift tools. The default date range is set for the most recent three months up through the end date of the database. Specify a date range by entering any one of the following formats: YYYYMMDD, YYYYMM, or YYYY. The following table provides examples of how to use the various formats.

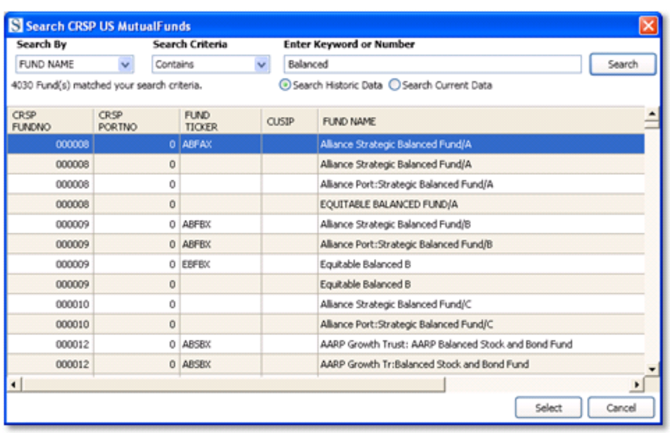
START	END	RESULT
199609	199612	all data from the beginning of September through December of 1996
1990	(empty)	all data in the year 1990
1994	19940615	all data from the beginning of 1994 until June 15, 1994
19961231	(empty)	data only on the date December 31, 1996

SECURITY SELECTION

From the Choose Selection Type drop-down menu in the Mutual Fund Selection area, specify the key, such as CRSP FUNDNO or CRSP COMPANY KEY, for use in your query. In the next version of Sift, the key type that you select will limit your data item selection to those items that are relevant to the key.



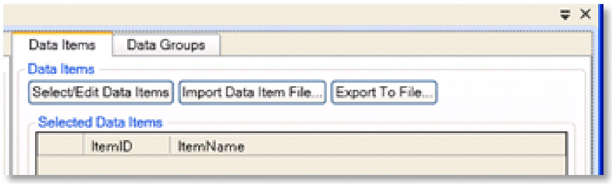
Next, identify the issue or issues of interest. If you know an identifier, you can enter it directly. If you do not know an identifier, click the Find… button to open the Search window. Searches for data in the Mutual Funds Database are limited to CRSP FUNDNO, CRSP PORTNO, and CRSP COMPANY KEY for use as primary key selections.



Use the search form to locate a particular fund, portfolio, or company in the database. Results of your search criteria appear in a table, initially sorted by key – FUNDNO for funds and portfolios, and CRSP COMPANY KEY for securities. If your search yields many matches, click the column labels to resort the table in the order most useful to you. When you have found the entity that you want, click its row in the table, and then click the Select button. The key of that entity will appear in the identifier field.

You may also choose to access all issues in the database, or issues you specify in an input file.To search all issues, click All Issues in the Mutual Fund Selection area. To use an input file, create a plain text file with an entry for each issue, one per row, using the active key of your choice. Select the key type that from the Active Key menu that corresponds to that used in your input file and click Input on File. Click the Browse… button to locate the file you created.

DATA ITEMS

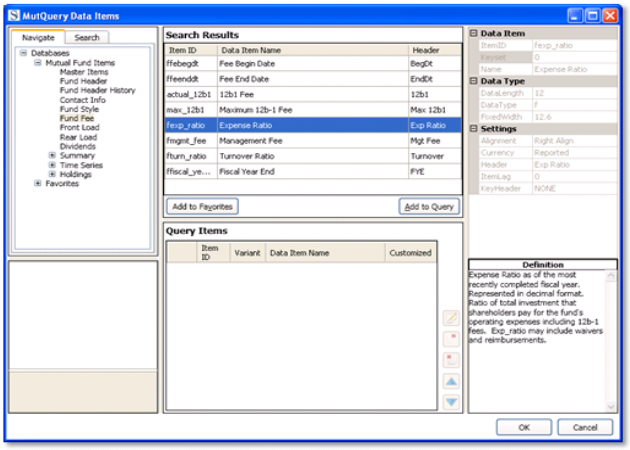


Data can be selected as either individual items going through the Data Items tab, or as preselected groups of logically categorized data by using the Data Groups tab.

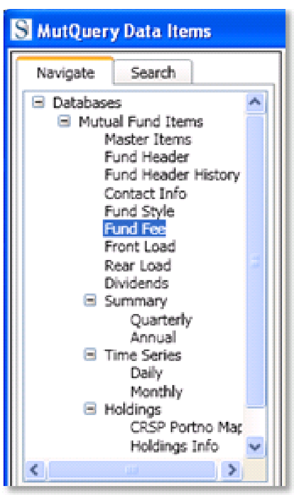
SELECT/EDIT DATA ITEMS

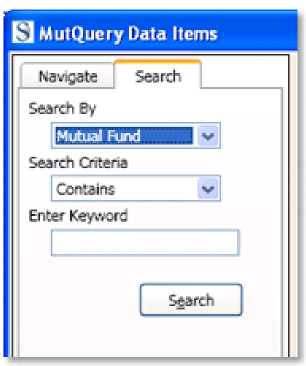
Clicking on the Select/Edit Data Items tab launches the interface for selecting individual items in MutQuery.

The MutQuery Data Items window is divided into several areas.

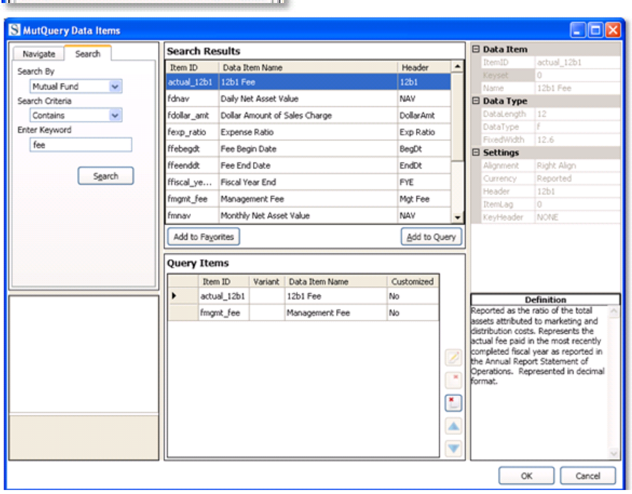


Items are divided into logical groups in the Navigate/Search area.





Clicking the name of a group causes its data items to appear in the Search Results area. Or, rather than browsing by category, click the Search tab. There you can enter a descriptive keyword (e.g., “fee”) to find items of interest. Browsing and searching result in data items appearing in the Search Results area of the window.



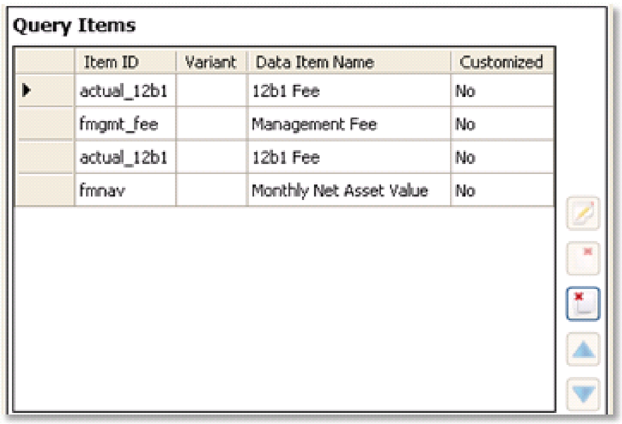
Note:

A future version of the Mutual Funds database will allow for context when selecting items. Depending on the access key that is selected – FUNDNO, PORTNO, or COMPANY KEY, only those categories of data items that are applicable to the key will be available for selection.

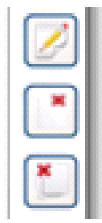
Important to note for this release, COMPANY KEY access is limited to the Company Info Category located under Holdings. Through PORTNO, access is available for Holdings detail data. FUNDNO allows access to all mutual funds items, summary data, time series, and Portno mappings.

When you highlight an item in the Search Results area, its attributes and a short text description appear in the window areas to the right.

Select each item you want in your query, and click the Add to Query button to add it to the Query Items area below the Search Results.



Items in the Query Items area appear in the order that they will appear in your query's output. To adjust the position of an item, select it and click the blue up and down arrows to move it up or down the list. The other buttons are:



Edit. Click this to edit an item's attributes.

Remove the selected item from your query.

Remove all items from the Query Items list.

Click the OK button to confirm the addition of the selected items to your query. Click cancel to exit the MutQuery Data Items window without making any changes.

Import Data Item File...

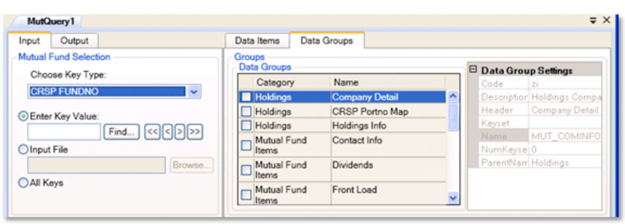
Clicking this button allows you to import a list of data items into your query from a text file.

Export to File...

Use this option to output the Selected Data Items list to a text file containing each item's mnemonic itemid. This text file may then be imported into other queries using the Import Data Item File... button.

DATA GROUPS

The Data Groups tab allows you to select clusters of related event and time series data items.



Available groups include:

Mutual Fund Data

- Contact Information – Management Company contact information
- Dividends – Distribution type and amount, reinvestment NAV history
- Front Load – Load amount, percentage, relevant date ranges
- Fund Fee – Fees and ratios history
- Fund Header – Descriptors and flags, Manager, Advisor
- Fund Header History – History of Descriptors and flags, Manager, Advisor
- Fund Style – Flags and classification codes
- Master Items – Identifier codes, date ranges for daily and monthly data

- Rear Load – Load type, dollar amount, withdrawal fees data
- Annual and Quarterly Summary – Snapshots of fund performance-related data, Fund makeup by percentage
- Daily and Monthly Time Series – Daily NAVs and returns, Monthly NAVs, TNA, returns
- CRSP Portno Map – Identifier mapping of portfolios associated with a fund with begin and end dates

Portfolio Data

- Holdings Detail – Listing of fund holdings, their ranks within the fund, market value, shares held, % of fund TNA

Company Data

- Company Information - Security identifiers, non-equity coupon rates and maturity dates

OUTPUT OPTIONS

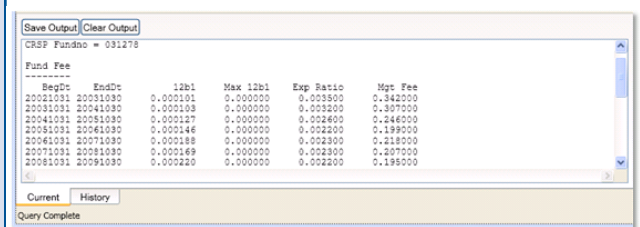
You can save the output of a MutQuery in one of several formats. Click the Output tab to show the Output Options panel.

OUTPUT TO SCREEN

The default option is text-based output, formatted to fit the screen width specified in the Width control. 80 characters is the default output width.

> *Helpful Hint:*
>
> *Many queries on the mutual funds database can result in large files. Consider output format when extracting data. The screen default is appropriate for individual funds. Excel 2007 will be acceptable for many queries, but any query that is extracting a large universe of funds over a long date range will quickly exceed Excel row limits. SAS is CRSP's recommended output format for large query results.*

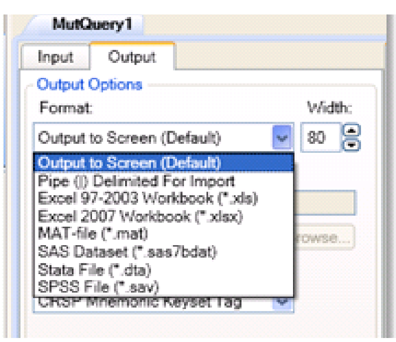
Screen output appears in the output area at the bottom of the MutQuery window.



By default, the output of the last query execution is shown in the Current tab. The Save Output and Clear Output buttons at the top of the output area allow you to save output to a text file or to clear it away. Clicking the History tab shows you the output of every query execution since the query was opened. When you switch to the query history view, the buttons above the output area change to Save History and Clear History. Save History allows you to capture the output of an entire session. You can select a new security, or different data or options related to the same security. Each time you click Execute the new output is saved in the History tab. By clicking Save History, you can save all the output to one text file.

OUTPUT TO FILE

You can also save query output in a number of external file formats. When you choose a non-screen output format, the Output File Name field becomes active. In order to successfully execute the query, you must select a location to store the output file. Click the Browse button to do so.



Notes about supported formats

Many queries on the mutual funds database result in large files. Consider output format when extracting data.

The screen default is appropriate for individual funds.

Pipe-delimited ASCII text is suitable for importing into databases or software packages not directly supported by CRSPSift. This option generates a single output file.

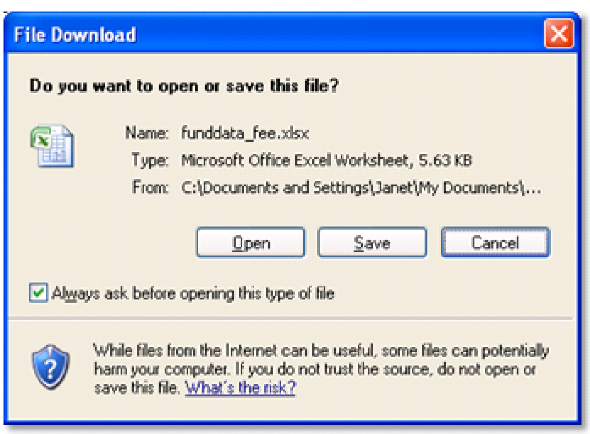
Excel 97-2003 (version 8) has a row limit of 65536 total rows. If a query generates more than that number of rows, the output will be truncated at the row limit.

Excel 2007 will be acceptable for many queries, but any query that is extracting a large universe of funds over a long date range will quickly exceed Excel row limits and will truncate the results. SAS is CRSP's recommended output format for large query results.

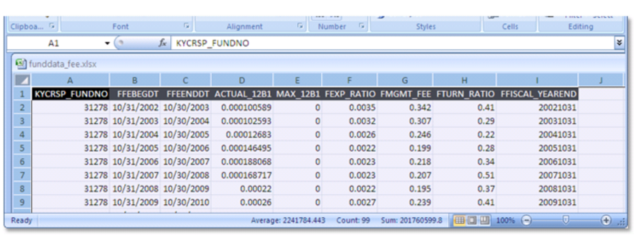
VIEWING OUTPUT FILES

With the exception of the Pipe Delimited option, if you select a non-screen output format, MutQuery will generate one or more output files, one for each unique data type layout. When the query completes execution, the hopper displays links to the files that were generated. Each file will have the name specified in the Output File Name field, with the addition of an extension identifying the type of output it contains.

Clicking one of the output files links opens the File Download dialog box.

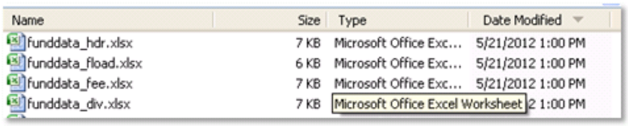


Click Open to open the output file in the appropriate application (Excel 2007, in the example shown below).



Alternatively, you can click the View Output button, located in the CRSPSift toolbar, to view the output files generated by your query.

If a query generated only one file, the target application will open the file directly, as shown above. If the query resulted in multiple output files, however, instead of opening the files, CRSPSift will open a Windows Explorer window showing the folder where you chose to save output.



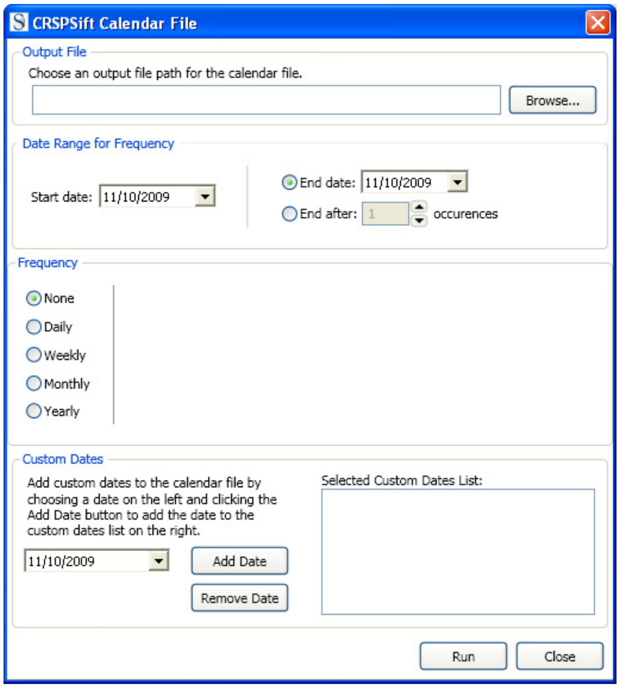
OUTPUT FILE SUFFIXES

The following table lists output file suffixes and the type of data they indicate is contained in a file.

DATA TYPE	SUFFIX
Master Items	mast
Header	hdr
Header History	hist
Contact Information	cntct
Fund Style	sty
Fund Fee	fee
Front Load	fload
Rear Load	rload
Dividends	div
Quarterly Summary	qtr_sm
Annual Summary	ann_sm
Daily Times Series	dly_ts
Monthly Time Series	mth_ts
CRSP Portno Map	portmap
Holdings Information	hld
Company Detail	cominfo

CALENDAR FILE WIZARD

When using TsQuery, you can define your own set of dates, or you can select one of several predefined calendars. To create a custom calendar with only those dates of interest to you, select “Calendar File…” from the Tools menu.

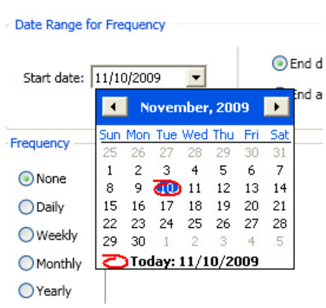


CALENDAR OUTPUT FILE

In the Calendar File window, first specify a location to save the file. Type a path into the Output File text box, or click Browse… to navigate to the desired directory.

DATE RANGE FOR FREQUENCY

Next, define the custom calendar’s frequency and the date range for the frequency. In the Date Range for Frequency area, click the start date menu and select a date from the popup calendar.



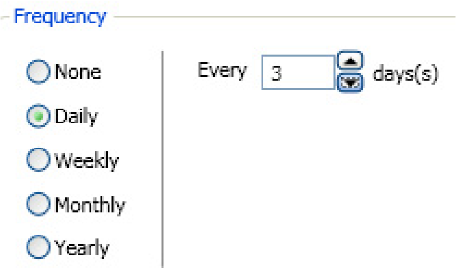
Then either specify an end date in the same manner, or choose to end after a certain number of occurrences. “Occurrences” refers to the frequency you define in the Frequency area below. For example, say you define a weekly frequency recurring on Wednesdays, and choose to end after twelve occurrences. The query report will include data only from the twelve Wednesdays subsequent to the start date you specified.

FREQUENCY

With the date range in place, define the frequency of dates your query will access. In the Frequency area, select a frequency from the list at the left. If your query will use only individual dates with no regular interval, select None. You can then select those dates in the Custom Dates area below the Frequency area. If your query’s calendar will have some regular frequency, select one of the other options: Daily, Weekly, Monthly, or Yearly. When you select one, controls appear to the right allowing you to customize the frequency. Customization options are as follows.

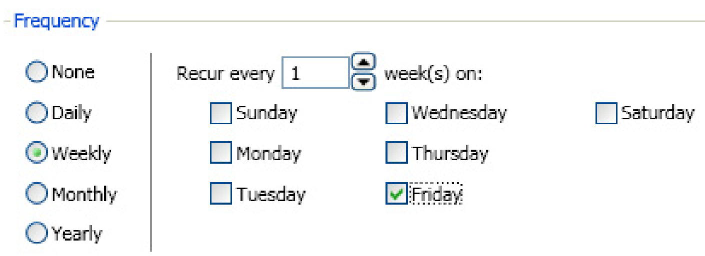
Daily

Specify the frequency of days in the calendar, e.g., every day, every five days, etc.



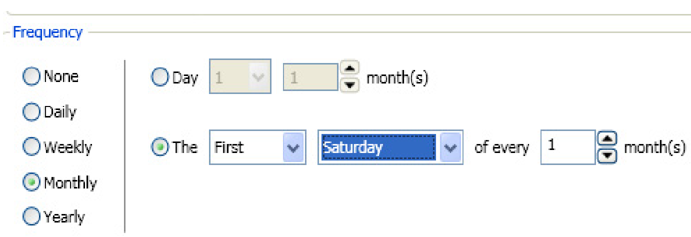
Weekly

Specify the frequency of weeks in your calendar, and select which days of the week will be included in a query report. For example, a calendar might include only the Monday and Friday of every third week between the start and end dates.



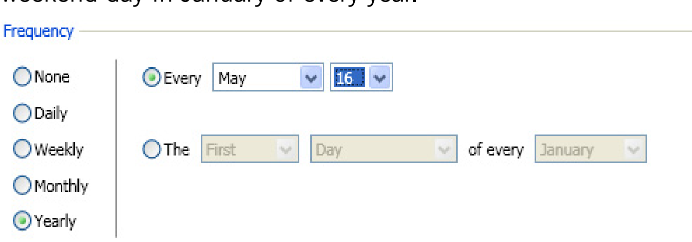
Monthly

A monthly frequency provides two options. One is to select the frequency of months and specify which day of the month to include, for instance, the tenth day of every other month. The other also allows you specify the frequency of months, the type of day to include (e.g., Weekday, Weekend Day, or Thursday), and when that day occurs in the month (e.g., Third or Last). For example, a calendar might specify the second weekend day of every month, or the last Thursday of every third month.



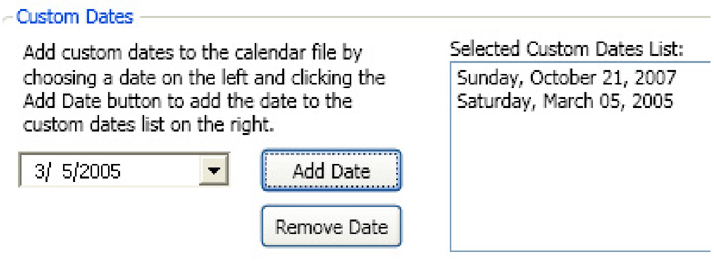
Yearly

The yearly frequency offers options similar to those of the monthly. A calendar might include March 3rd of every year, or the first weekend day in January of every year.



CUSTOM DATES

In addition to, or in place of, a specified frequency, a calendar can include specific custom dates. To add specific dates, click the menu on the left in the Custom Dates area. Use the popup calendar control to find and select a date, and then click the Add Date button to add it to the list on the right. To remove a date from the list, click the Remove Date button.



When you are finished defining a custom calendar, click the Run button at the bottom of the Calendar File window to create the file. If you would like to view the generated file, click the View File button in the dialog box that appears. If not, click the Done button. The calendar file is now saved in the location you specified. To use your custom calendar with TsQuery, click on the Calendar File radio button on the Date tab, browse to the location of your calendar file, and enter the full path and filename. Other date options on this tab are superseded by the Calendar File option. To dismiss the Calendar File window, click the Close button.

REFERENCE DATA

CRSP STOCK AND INDEX DATA

CRSPSift features built-in reference tables describing data codes and their values. References can be found under References in the Tools menu. When selected, tables appear as floating panels. These panels can be positioned to the side of the main CRSPSift window or docked to the window. See the Docking section below for more information.

The following reference tables are available in CRSPSift for CRSP Stock and Index data:

- Delisting Codes
- Distribution Codes
- Missing Return Codes
- NASD Index Code
- NASDAQ National Market Indicator
- NASDAQ Status Code
- North American Security Exchange and Index Codes
- Security Status and Valid Exchanges

The information in these tables can also be found in Chapter 5 of the **Data Description Guide: Data Coding Schemes**.

COMPUSTAT XPRESSFEED DATA

The following references are available in CRSPSift for CCM:

- Reference Codes
- Reference Numbers
- Currency & Exchange Rates
- Economic Indicators

Reference Codes and Reference Numbers explain codes found in program output. Currency & Exchange Rates and Economic Indicator data can be displayed within the reference panel or output to a variety of file formats, including Excel, SAS, and Matlab.

CCM Link References include tables identifying codes found in the tables generated by CRSP in the process of linking CRSP and Compustat company and security-level identifiers. All Reference tables associated with CCM require a valid data environment that includes a full CCM database.

CRSP TREASURIES DATA

The following reference tables are available in CRSPSift for CRSP Treasuries data:

- First Coupon Payment Date
- Name of Government Security
- Number of Interest Payments per Year
- Payment of Estate Tax Code
- Source Daily
- Source Monthly

CRSP MUTUAL FUNDS

CRSP Mutual Funds reference tables are available in CRSPSift for:

- Delisting Codes
- Lipper Asset Codes
- Rear Load Type
- Policy
- Wisenberger Objective Codes

Additional tables and reference information can be found in the Appendices at the end of the **CRSP US Survivor-Bias-Free Mutual Fund Database Guide**.

RESEARCH INDEX DATABASE

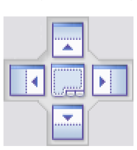
The following reference tables are available in CRSPSift for the Research Index Database:

- Holding Type
- Organization Type
- Price Source
- Primary Exchange
- Security Status
- Share Change Type
- Share Type
- Size Band Label
- Trading Status

DOCKING SUB-WINDOWS

Sub-windows in CRSPSift, such as the Batch Queries window and the new Stock and CCM References, can be “docked” within the main application window. To dock a window click and drag it by its title bar. For instance, the Stock Reference title bar:

As you drag the window, the following five icons appear:



The triangle on each outer icon indicates where in the CRSPSift window the window will be docked with respect to the query area, left, right, above, or below. Drag the window’s title bar over the desired icon to dock it in the desired location.

Dragging a window over the central icon will cause the window to appear as a tab in the queries area.

APPENDIX A: AVAILABLE CURRENCY CODES

The following is a list of the currency codes (and descriptions) available for all currency data ("/ky currency").

CURRENCY CODE	CURRENCY DESCRIPTION
AED	United Arab Dirham
AFA	Afghanistan Afghani
ALL	Albanian Lek
AMD	Armenian Dram
ANG	Neth. Antillian Guilder
AOA	ANGOLAN NEW KWANZA
AON	INACTIVE-ANGOLAN NEW KWANZA
AOR	INACTIVE-Angolan Kwanza Rejustado
ARA	INACTIVE-Argentine Austral
ARS	Argentine Peso
ATS	Austrian Schilling
AUD	Australian Dollar
AWG	ARUBAN GUILDERS
AZM	Azerbaijan Manat
AZN	AZERBAIJAN MANAT
BAM	BOSNIA & HERZEGOVINA CV MARK
BBD	Barbados Dollar
BDT	Bangladesh Taka
BEF	Belgian Franc
BEL	INACTIVE-Belgium Financial Franc
BGL	INACTIVE-Bulgarian Lev (Old)
BGN	Bulgarian Lev
BHD	Bahraini Dinar
BIF	Burundi Franc
BMD	Bermuda Dollar
BND	Brunei Dollar
BOB	Bolivian Boliviano
BOV	INACTIVE-Bolivia Mvdol
BRC	INACTIVE-Brazilian Cruzado
BRE	INACTIVE-Brazilian Cruzeiro
BRL	Brazilian Real
BRR	INACTIVE-Brazilian Cruzeiro Real
BSD	Bahamian Dollar
BTN	Bhutan Ngultrum
BWP	Botswana Pula
BYB	INACTIVE-BELARUS ROUBLE
BYR	Belarussian Ruble
BZD	Belize Dollar

CURRENCY CODE	CURRENCY DESCRIPTION
CAD	Canadian Dollar
CDF	CONGO (DEM REP) FRANC
CHF	Swiss Franc
CLF	Chilean Unidades De Fomento
CLP	Chilean Peso
CNY	Chinese Yuan Renminbi
COP	COLOMBIAN PESO
CRC	Costa Rica Colon
CUP	Cuban Peso
CVE	Cape Verde Escudo
CYP	Cyprus Pound
CZK	Czech Republic Koruna
DEM	German Deutsche Mark
DJF	Djibouti Franc
DKK	DANISH KRONE
DOP	Dominican Peso
DZD	Algerian Dinar
ECS	Ecuador Sucre
EEK	Estonian Kroon
EGP	Egyptian Pound
ESP	Spanish Peseta
ETB	Ethiopian Birr
EUR	EURO
FIM	Finnish Markka
FJD	Fiji Dollar
FKP	INACTIVE-FALKLAND ISLAND POUND
FRF	French Franc
GBP	POUNDS STERLING
GEL	GEORGIA LARI
GHC	Ghana Cedi
GHS	GHANA CEDI (NEW)
GIP	INACTIVE-GIBRALTER POUND
GMD	Gambia Dalasi
GNF	Guinea Franc
GRD	Greek Drachma
GTQ	Guatemala Quetzal
GWP	INACTIVE-GUINEA-BISSAU FRANC
GYD	Guyana Dollar
HKD	Hong Kong Dollar
HNL	Honduras Lempira
HRD	INACTIVE-Croatian Dinar
HRK	Croatian Kuna
HTG	Haiti Gourde
HUF	Hungarian Forint
IDR	Indonesian Rupiah

CURRENCY CODE	CURRENCY DESCRIPTION
IEP	Irish Pound
ILS	Israeli Shekel
INR	Indian Rupee
IQD	Iraqi Dinar
IRR	Iranian Rial
ISK	Icelandic Krona
ITL	Italian Lira
JMD	Jamaican Dollar
JOD	Jordanian Dinar
JPY	Japanese Yen
KES	Kenyan Shilling
KGS	KYRGYZSTAN SOM
KHR	Cambodian Riel
KMF	Comoro Franc
KPW	North Korean Won
KRW	South Korean Won
KWD	Kuwaiti Dinar
KYD	Cayman Islands Dollar
KZT	Kazakhstan Tenge
LAK	Laos Kip
LBP	Lebanese Pound
LKR	Sri Lankan Rupee
LRD	Liberian Dollar
LSL	Lesotho Loti
LTL	Lithuanian Litas
LUF	Luxembourg Franc
LVL	Latvian Lats
LYD	Libyan Dinar
MAD	Moroccan Dirham
MDL	Moldovan Leu
MGF	Malagasy Franc
MKD	Macedonian Denar
MMK	Myanmar Kyat
MNT	Mongolian Tugrik
MOP	MACAO PATACA
MRO	Mauritania Ouguiya
MTL	Maltese Lira
MUR	Mauritius Rupee
MVR	Maldives Rufiyaa
MWK	Malawi Kwacha
MXN	Mexican Nuevo Peso
MXP	INACTIVE-Mexican Peso
MYR	Malaysian Ringgit
MZM	MOZAMBIQUE METICALS
MZN	MOZAMBIQUE METICAL NEW

CURRENCY CODE	CURRENCY DESCRIPTION
NAD	Namibia Dollar
NGN	Nigerian Naira
NIC	INACTIVE-Nicaragua Cordoba
NIO	Nicaraguan Cordoba Oro
NLG	Netherlands Guilder
NOK	Norwegian Krone
NPR	Nepalese Rupee
NZD	New Zealand Dollar
OMR	Oman Rial
PAB	Panama Balboa
PEI	INACTIVE-Peruvian Inti
PEN	Peruvian Nuevo Sol
PGK	Papua New Guinea Kina
PHP	Philippine Peso
PKR	Pakistani Rupee
PLN	Polish New Zloty
PLZ	INACTIVE-Polish Zloty
PTE	Portuguese Escudo
PYG	Paraguay Guarani
QAR	Qatari Rial
ROL	INACTIVE-ROMANIAN LEU
RON	ROMANIAN LEU (NEW)
RSD	Serbian Dinar
RUB	Russian Ruble
RUR	INACTIVE-RUSSIAN ROUBLE (OLD)
RWF	Rwanda Franc
SAR	Saudi Riyal
SBD	Soloman Islands Dollar
SCR	Seychelles Rupee
SDD	Sudanese Dinar
SDP	INACTIVE-Sudanese Pound
SEK	Swedish Krona
SGD	Singapore Dollar
SHP	INACTIVE-ST. HELENA POUND
SIT	Slovenian Tolar
SKK	Slovak Koruna
SLL	Sierra Leone Leone
SOS	Somali Shilling
SRG	Surinam Guilder
STD	Sao Tome & Principe Dobra
SUR	INACTIVE-USSR Rouble
SVC	El Salvador Colon
SYP	Syrian Pound
SZL	Swaziland Lilangeni
THB	Thailand Baht

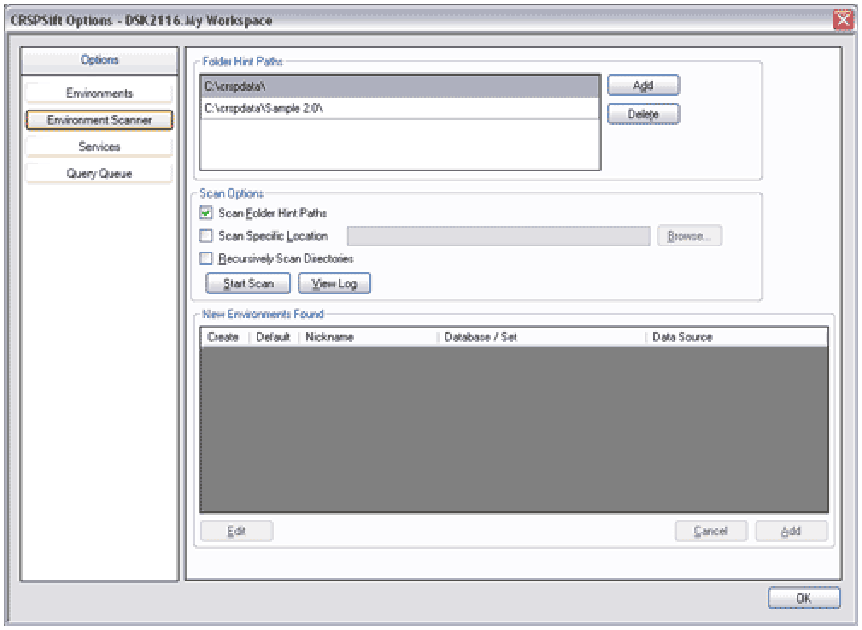
CURRENCY CODE	CURRENCY DESCRIPTION
TJR	INACTIVE-Tajik Ruble
TND	Tunisian Dinar
TOP	TONGA PA'ANGA
TRL	INACTIVE-Turkish Lira
TRY	Turkish Lira (NEW)
TTD	Trinidad & Tobago Dollar
TWD	New Taiwan Dollar
TZS	Tanzania Shilling
UAH	Ukraine Hryvnia
UAK	INACTIVE-Ukraine Karbovanet
UDT	INACTIVE-USD Per 1000 Brazilian Shares (IBES)
UGX	Uganda Shilling
UNK	INACTIVE-Unknown Currency
USD	U.S. Dollar
UYP	Uruguayan Peso
UYU	Uruguayan Peso (new)
UZS	Uzbekistan Sum
VEB	VENEZUELAN BOLIVAR
VEF	VENEZUELAN BOLIVAR FUERTE
VND	Vietnam Dong
VUV	Vanuatu Vatu
WST	Western Samoa Tala
XAF	CFA (BEAC) FRANC (CENTL AFR)
XCD	East Caribbean Dollar
XEU	INACTIVE-EUROPEAN COMPOSITE UNIT
XOF	CFA (BCEAO) FRANC (WEST AFR)
XPF	French Polynesia - C.F.P. Franc
YER	Yemeni Rial
YUD	INACTIVE-YUGOSLAVIAN NEW DINAR
YUN	SERBIA DINAR
ZAL	INACTIVE-South African Financial Rand
ZAR	South African Rand
ZMK	Zambian Kwacha
ZRN	INACTIVE-NEW ZAIRE
ZRZ	INACTIVE-Zaire
ZWD	ZIMBABWE DOLLAR

CRSPSIFT OPTIONS - ENVIRONMENT SCANNER

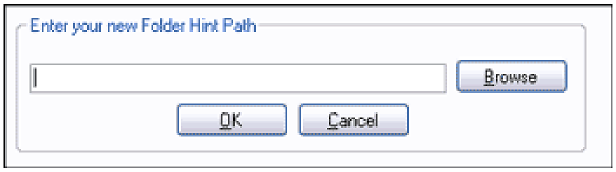
Use the Environment Scanner tool search your computer for CRSP databases and automatically combine them into valid environments.

FOLDER HINT PATHS

By default, the Environment Scanner looks for databases in a set of pre-defined locations, called Folder Hint Paths. The Folder Hint Paths provided with CRSPSift are C:\crspdata (the default install location for CRSP databases) and C:\crspdata\Sample 3.21 (the location of the sample datasets provided with the CRSPSift software). Each time CRSPSift launches, the Folder Hint Paths are search for newly installed databases. When new databases are found by the Scanner, any valid environments based on those databases are presented to you to select and add to CRSPSift.



If your databases are installed outside the default locations, you can add your own Folder Hint Paths to guide the Environment Scanner's search. Click the Add button next to the list of paths. Next click the Browse button and choose the directory where you would like the Scanner to search for databases. Click OK to add the directory to the list.



To delete a Folder Hint Path, select it from the list and click the Delete button.

SCAN OPTIONS

The Environment Scanner's Scan Options allow you to fine tune how its scan is performed. The default behavior for the Scanner is to search defined Folder Hint Paths, scanning the top level of those folders for valid databases.

If you would like to search a directory without adding it to the list of Folder Hint Paths, click the Scan Specific Location checkbox and then the Browse button to locate it.

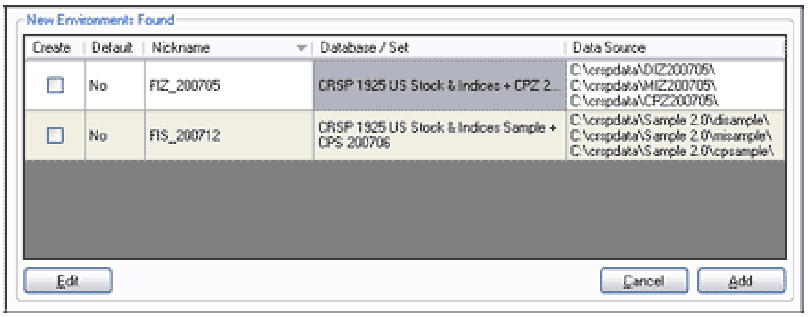
SCANNING

After setting the appropriate Scan Options, click the Start Scan button to activate the Environment Scanner. When the scan begins, the Start Scan button is replaced with the Cancel Scan button. Click this button at any time during the process to halt the scan.

The time it takes for a scan to complete depends on the number of directories scanned.

NEW ENVIRONMENTS FOUND

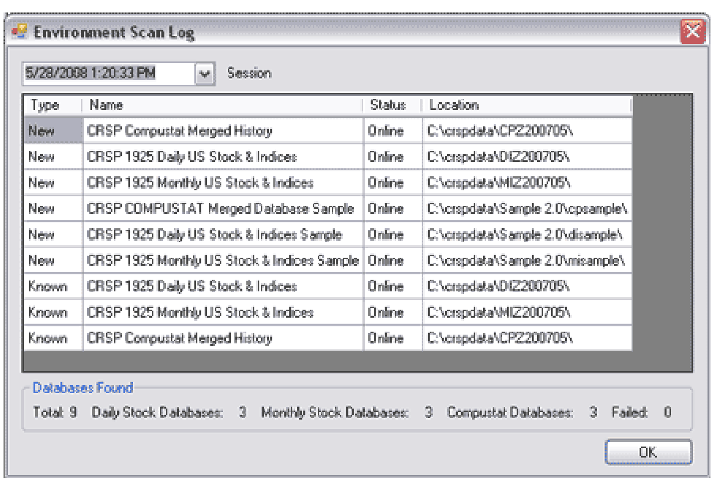
When the Environment Scanner completes its search, any new, valid environments it discovered are displayed in the New Environments Found table at the bottom of the screen. Each environment displays its attributes, such as its default nickname, full dataset name, and the folder paths of the databases it includes.



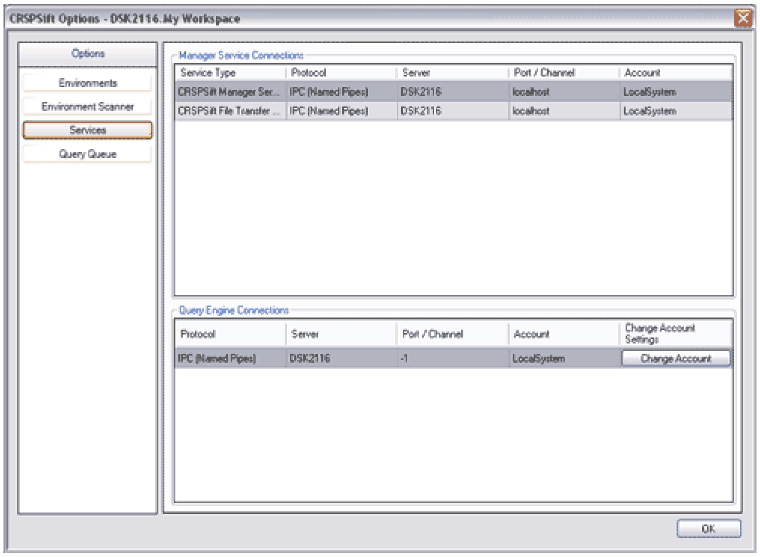
To add a discovered environments to CRSPSift, click the Create checkbox in its row. If you would like to modify the environment's settings before adding it, click the Edit button. See the discussion of CRSPSift Environments for details on how environment editing options. When you are satisfied with the environment, click the Add button. The new environment will now be available for use by CRSPSift query tools.

THE ENVIRONMENT SCAN LOG

To see a log of the databases found by the Environment Scanner, click the View Log button in the Scan Options area. The Environment Scan Log maintains a list of the databases discovered in each run of the Environment Scanner. The log of the most recent session is shown by default. To view a previous session, select a date and time from the Session drop-down menu.



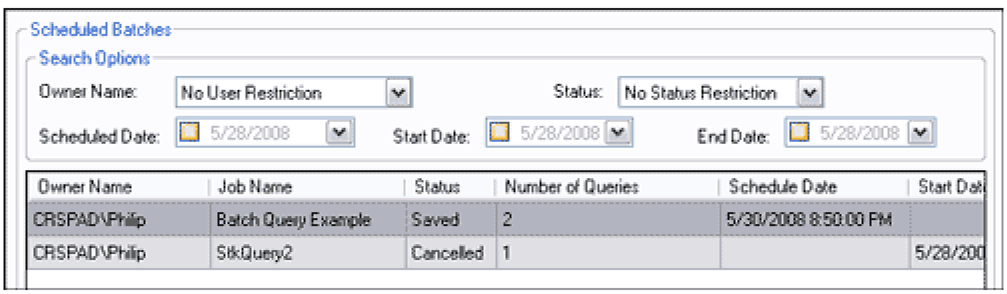
CRSPSIFT OPTIONS - SERVICES



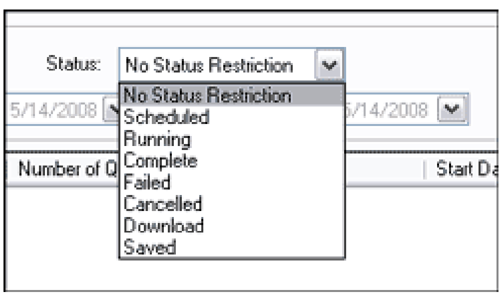
The Services Options screen displays technical information about various subsystems of the CRSPSift application, including Manager Service and Query Engine connections. The only editable feature is the Query Engine Connection Account.

CRSPSIFT OPTIONS - QUERY QUEUE

The Query Queue lists and displays details for all batch queries, as well as any open standalone queries that have been executed at least once during the current CRSPSift session.

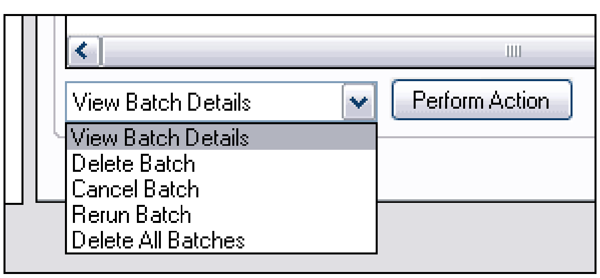


SEARCHING FOR BATCH QUERIES



Using the search options, you can filter the list to display only those queries that match certain criteria, including query owner name and query status, as well as the dates relating to when a query is scheduled to execute, when it started execution, and when execution ended.

MANAGING BATCH QUERIES



A drop-down menu at the bottom left of the Query Queue screen contains actions that you can perform on a batch query.