



CRSP (Center for Research in Security Prices)

Management Information & Resource Centre

Cranfield University Library Service

February 2018



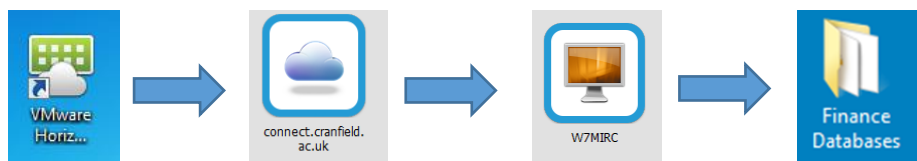
CRSP is MIRC's most in-depth and detailed source of historical North American company and index price data.

Contents:

What is CRSP?	2
Searching CRSP	2
Step 1: Define your securities / entities.....	3
Step 2: Define data items.....	4
Step 3: Define the date range.....	4
Step 4: Define your results layout.....	5
Importing data to CRSP	6
Appendix: Preparing a data file for import to CRSP	8
What is a CUSIP?.....	8
Converting CUSIPs from SDC Platinum (6-digit) to CRSP (8-digit).....	8

Accessing CRSP:

CRSP is available via the VMware Horizon service



What is CRSP?

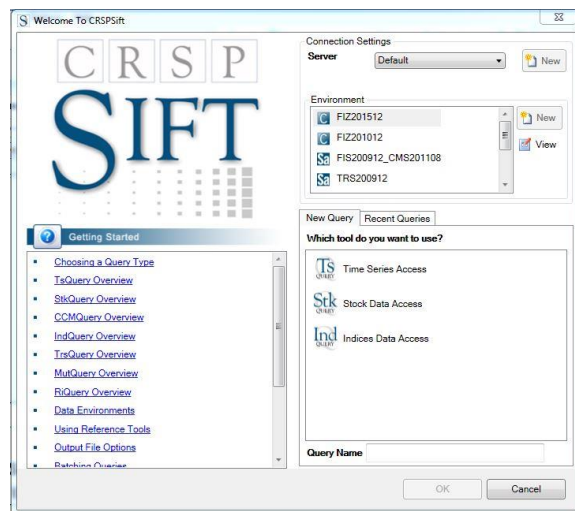
CRSP is the Center for Research in Security Prices service, which provides access to historical data (back to 1926) on US Stock and Indices. It contains day-end and month-end prices on all listed NYSE, Amex, and NASDAQ common stocks along with basic market indices.

Searching CRSP

From the CRSP Welcome screen, see below, you first need to select the dataset you wish to use and the type of query you want to run, then click 'OK'.

- Datasets:
- Select from the 'Environment' menu at the top right.
 - The current year is normally highlighted
 - Scroll down for more options.

- Queries:
- Select from the options displayed.
 - Most searches use the 'Time Series Access' option.

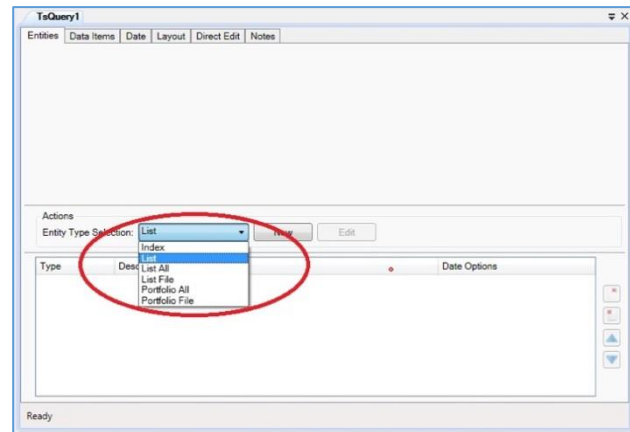


Once you have set this up, you have four further steps to complete to run your search, displayed as tabs across the top of the dialogue box.

1. Define securities / entities
2. Define the data items you want
3. Choose the date range
4. Specify the layout and a file for your results.

Step 1. Define your securities / entities:

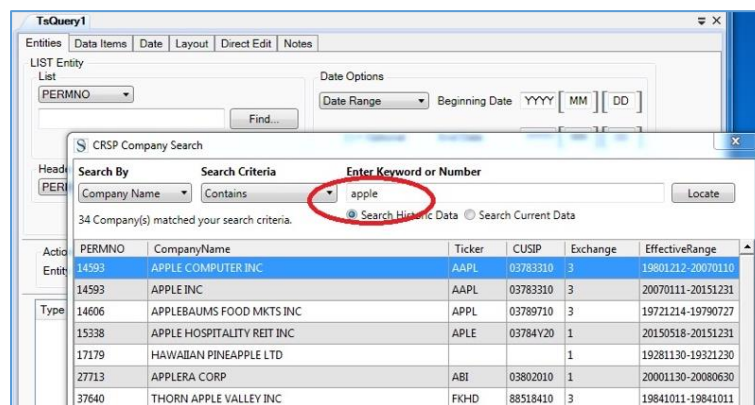
- **'List'** – to search for a single entity (company)
- **'List All'** – to search for all the companies in the database grouped according to exchange, SIC codes etc.
- **'List File'** – to search on a file of companies retrieved from another database and saved as a .txt file (see p. 6 onwards for details).



Select your option and click 'New'.

Searching for information about one or more companies:

- Choose 'List' and 'New'.
- Click on 'Find' to search for a company.
- Enter a company name and click 'Locate'. Select your company or companies from the options provided. (If you want to select more than one company, hold down CTRL as you select).

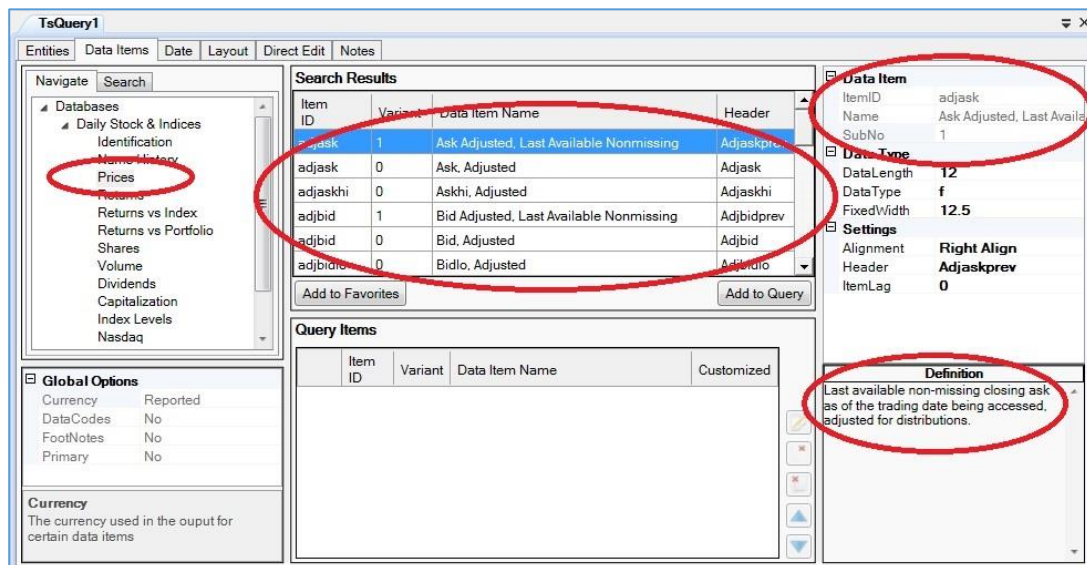


- Click on 'Select' at the bottom of the screen. The identifier(s) you have chosen, in this case the PERMNO* for the companies selected, is – or are – then pulled into the entity box next to the 'Find' button. (*The PERMNO is a unique identifier assigned to each company by CRSP).
- To use these in your search click 'Add' in the Actions section.

Step 2. Define the data items you want:

Once you have finalised your companies or entities in Step 1 above, you need to select the data items you require for them, e.g. prices, returns, shares, etc.

- i. Begin by clicking on the 'Data Items' tab. You can choose from both daily and monthly stock and indices items. There is also a favourites tab to which you can add items that you use regularly.



- ii. Select the data type you require in the 'Navigate' box.
- iii. Available data items are then displayed in the 'Search Results' box. Item definitions are available at the bottom right hand corner of the screen.
- iv. In the box at the top right, it is possible to edit the name under Data Item to a more meaningful description. *Do not change data type length or width.*
- v. Select the items you require then click 'Add to Query'.

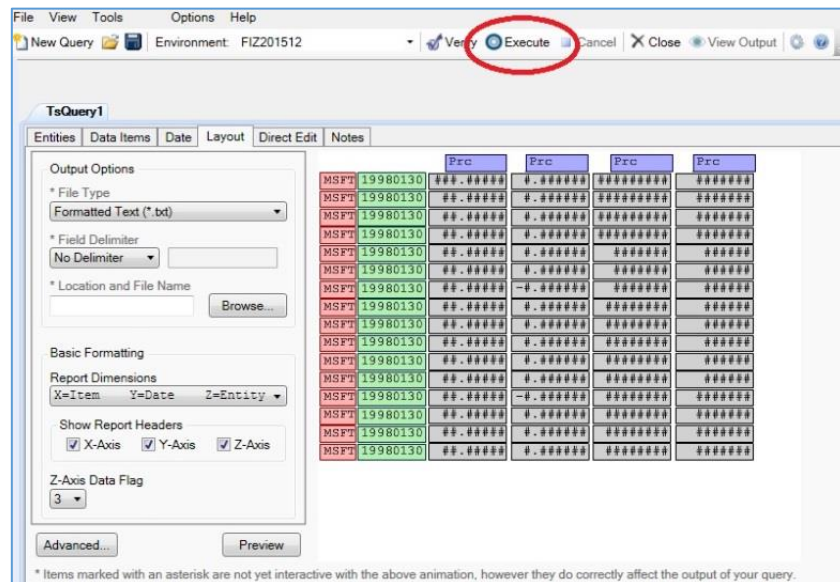
Step 3. Choose the date range:

Once you have selected and added your data items, you then need to define the period for which you want to retrieve data. Do this on the 'Date' tab.

- i. First, select data frequency via the 'Calendar Name' option.
- ii. From the Date Range, choose between fixed or relative and enter your dates.

Step 4. Specify the layout for your results:

Finally, you need to choose how you wish to display and save your data. To do this, click on the 'Layout' tab.



- i. First choose a file type, e.g. *.txt, *.xls, *.xlsx, *.mat, etc. via the dropdown menu.
- ii. Then enter a filename and location for where you want the results file to save.
- iii. Make any edits you require to the output format for the data by changing the report dimensions.
- iv. The 'Preview' button at the bottom of the screen will allow you to test your search.
- v. When you are happy with everything, click on 'Execute' (at the top) to run the search.
- vi. Once the search has run, click on the 'View Output' button (at the top) to view the results.
- vii. Note that if 'View Output' appears greyed out after the search has executed, the search may have run but the file might be too large to export. (The .txt file format is the best option for large quantities of results).

**** If there are any problems running your search, please check with a member of MIRC staff. Occasionally we will need to contact the CRSP support team for further help. If we need to do this, we will need the details stored under the 'Direct Edit' tab. ****

Importing data to CRSP

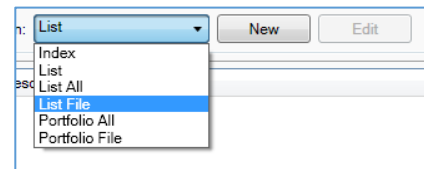
A useful function of CRSP is that it enables you to run searches against an imported data file obtained from another finance database. For details on how to prepare an import file, please see the Appendix on page 8.

When importing, remember:

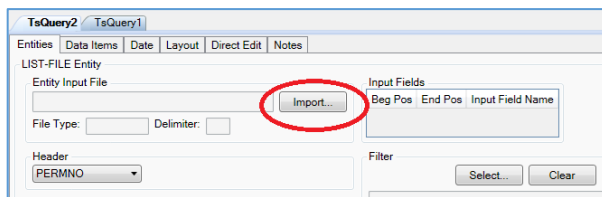
- CUSIPs must be at least 8 digits long
- Dates (if required) must be in the pre-defined format - YYYYMMDD.
- File format must be **.txt**.

To run a search with an imported set of CUSIPs and IPO dates, use the same 4 step process described on pages 3 – 5 but for **Step 1**, you need to follow the instructions below:

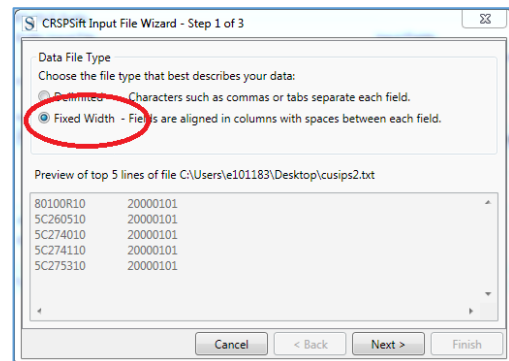
Under Entity Type Selection, select 'List File' and click on 'New'.



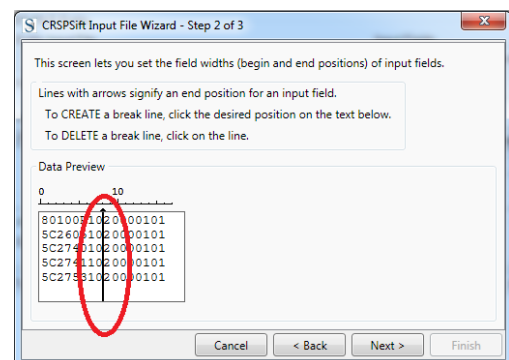
- i. Click 'Import' and select the relevant text file from your drives.



- ii. When the Input File Wizard appears, in step 1, select 'Fixed Width' and click 'Next'.

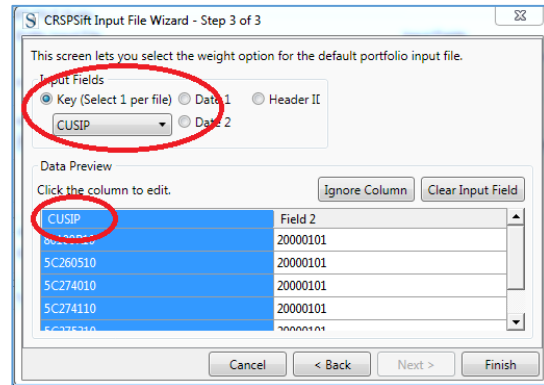


- iii. Step 2 of the Wizard asks you to mark the end position for your first column of data. Use your mouse to click and insert a 'break line' at the end of the first column, between the CUSIP and the announcement date (if required).

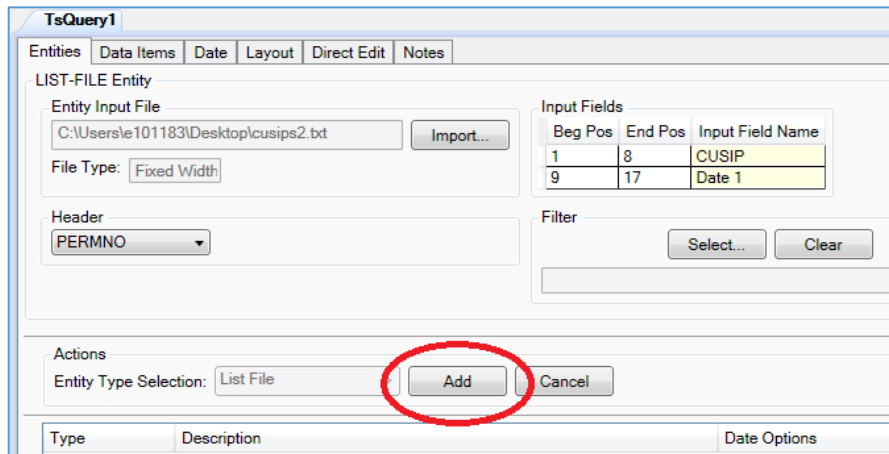


iv. In step 3 of the Wizard, you need to define the fields in your import file. To do this:

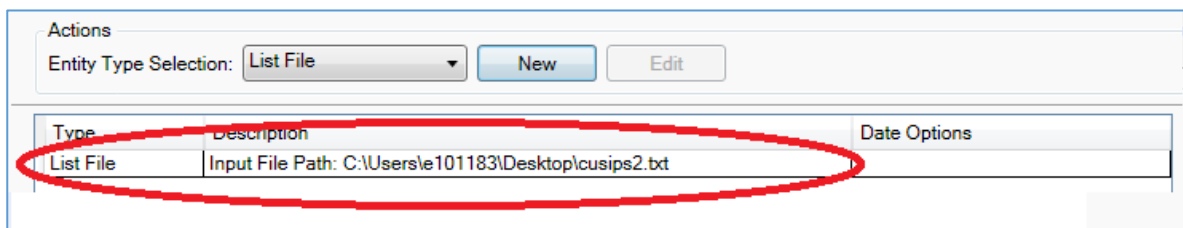
- Highlight the first column in the 'Data Preview'
- Under 'Input Fields', select 'Key'
- Select 'CUSIP' from the dropdown menu below.
- Now, select the second column in the 'Data Preview'.
- Under 'Input Fields', select 'Date 1'
- Click on 'Finish'.



v. You will now be taken back to your original Query screen. Here, click on 'Add' to import the file as a set of search terms.



vi. Your 'Input File Path' will be displayed at the bottom of the screen.



Congratulations! You have now defined your set to search (Step 1). Now follow the other steps listed in *Searching CRSP* on pages 2 – 5 to define the data items you want information on (Step 2), date range (Step 3) and retrieve your results (Step 4).

Appendix: Preparing a data file for import to CRSP

A useful function of CRSP is that it enables you to run searches against a file of data obtained from another finance database. In other words, you can run a search in another resource such as SDC Platinum, to find a list of companies that fit your search criteria, and then import that list directly into CRSP to run further searches against it.

To do this successfully, instead of importing the company names as search-terms, you need to use their CUSIP numbers. These CUSIPs will need to be at least 8-digits long. You may retrieve data from CRSP for a number of companies by importing a file of their CUSIP numbers. By importing them altogether in one file, you avoid having to input each company code individually.

What is a CUSIP?

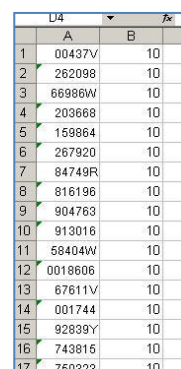
A CUSIP is an alphanumeric code, a unique identifier assigned to North American equities. CUSIPs may be 6-digit (company specific), 8-digit (issue specific), or a 9-digit (includes check digit). Most databases use the 6- or 9-digit CUSIP. CRSP uses the 8- or 9-digit versions.

Converting CUSIPs from SDC Platinum (6-digit) to CRSP (8-digit)

The most common source of CUSIPs used in CRSP is SDC Platinum. To make SDC Platinum CUSIPs readable in CRSP you will need to retrieve the 6-digit CUSIPs available for your companies from a search on SDC and then convert them to 8-digit CUSIPs that can be used in CRSP.

To this, you need to:

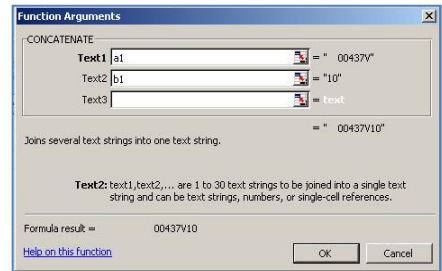
1. Download the 6-digit CUSIPs for your selected companies by including them in a custom report in SDC. Make sure you also download the IPO announcement date for each company as you will need this for the import stage.
2. Copy the column of CUSIP numbers from your report and paste it into a new column in Excel. Format the numbers as **text**, otherwise Excel will drop any initial zeroes that you will need to make the CUSIP number accurate.
3. You now have a column of numbers that all need to have '10' added to them to make them readable in CRSP. The 10 points to the original offering (NCUSIP in CRSP). To add this in:
 - a. Enter the number 10 in the column of your spreadsheet to the right of each CUSIP and copy it down the column (see right).



	A	B
1	00437V	10
2	262098	10
3	66986W	10
4	203668	10
5	159864	10
6	267920	10
7	84749R	10
8	816196	10
9	904763	10
10	913016	10
11	58404W	10
12	0018606	10
13	67611V	10
14	001744	10
15	92839Y	10
16	743815	10
17	750323	10

b. You now need to join the columns together using the 'Concatenate' function.

- Select the first cell in the next column and click the 'Insert Function' button on the Excel 'Formulas' tab.
- When the Insert Function box appears, type in 'concatenate' and click 'Go'. The box shown here on the right will appear.
- Type 'a1' in the first box and 'b1' in the second box and click OK. This will join the two columns together.
- Then move the cursor over the cell edge until you see the black '+' sign and double click. This will auto-fill the formula for both columns.



	A	B	C	D
1	00437V	10	00437V10	
2	262098	10	26209810	
3	66986W	10	66986W10	
4	203668	10	20366810	
5	159864	10	15986410	
6	267920	10	26792010	
7	84749R	10	84749R10	
8	816196	10	81619610	
9	904763	10	90476310	
10	913016	10	91301610	
11	58404W	10	58404W10	
12	0018606	10	001860610	
13	67611V	10	67611V10	
14	001744	10	00174410	
15	92839Y	10	92839Y10	
16	743815	10	74381510	
17	750323	10	75032310	

4. Select the new column of numbers (column C in our example) and copy it into Notepad (or similar). Save this as a new **text** file (.txt). Include your column of IPO announcement dates back into the text file if you wish to search CRSP using these as well.

The file is now ready to import into the CRSP database as a list of search terms (see page 7).

Contacting us

Management Information and Resource Centre (MIRC)



+44 (0) 1234 754440



mirc@cranfield.ac.uk



som.cranfield.ac.uk/som/mirc