



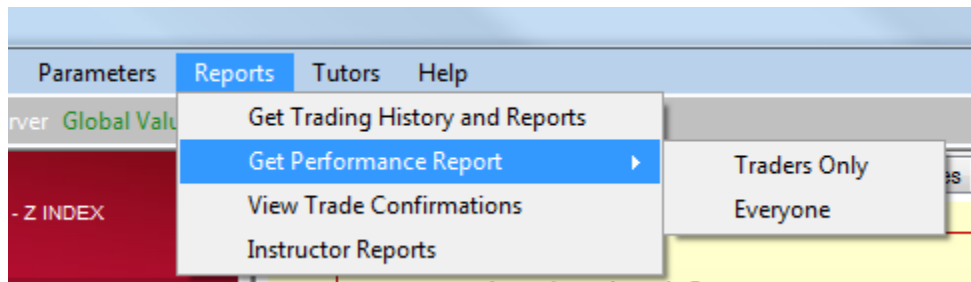
## FTS Real Time Client: Student Performance

Instructors receive a “moderator” account for each section, and using that account, they can monitor the current market values as well as the historical performance of all the students in the section. The historical analysis also calculates a performance report and ranks students according to different performance measures.

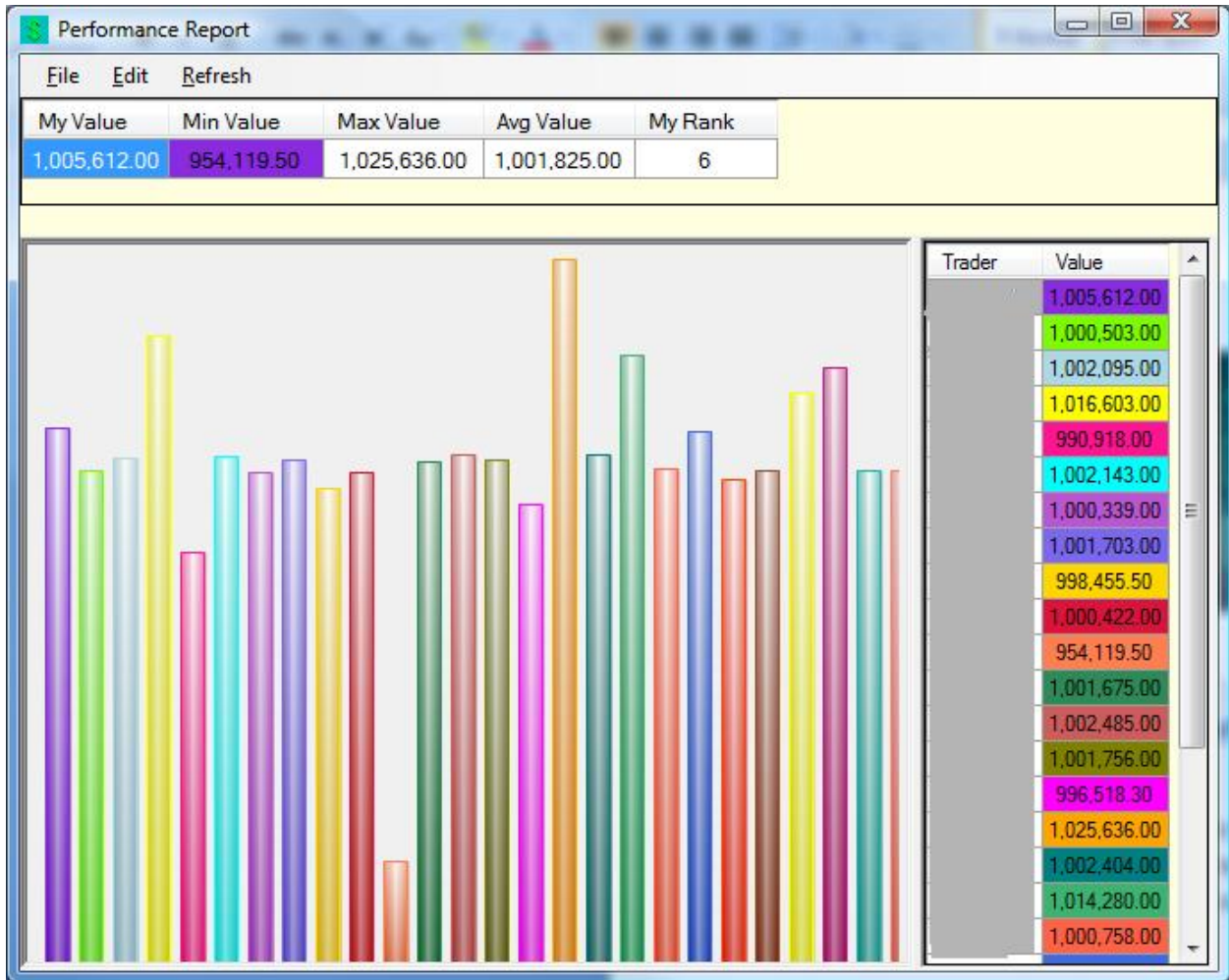
There are also additional reports that we can send you by request; these are listed at the end of this document.

### Current Market Values

A chart of current market values is obtained from the Reports menu, and is available to both students and moderators:



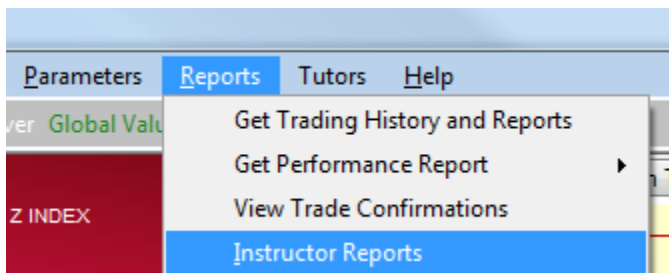
“Traders only” excludes moderators (so you account and those of teaching assistants). Once you select the report you want, you get a chart such as the following, where we have grayed out the student trading names since this is a chart taken from an actual class:



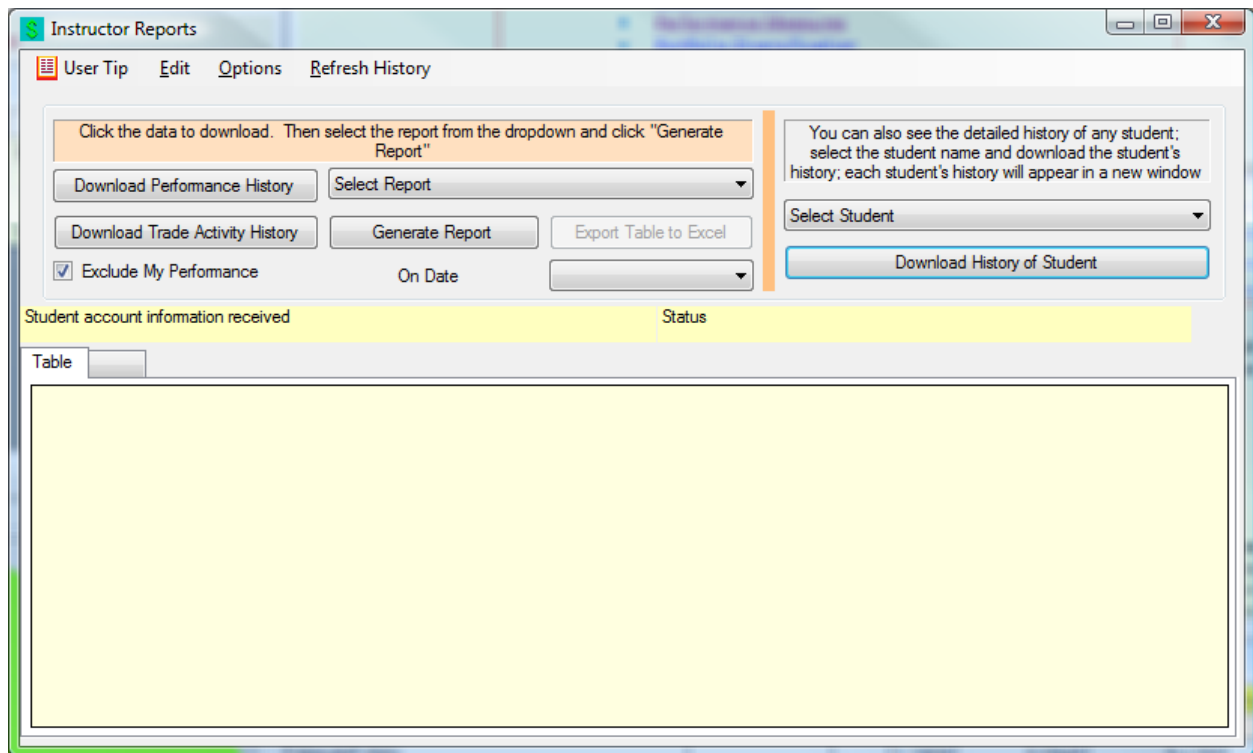
When students see this performance chart, they do not see the student names.

### Performance History

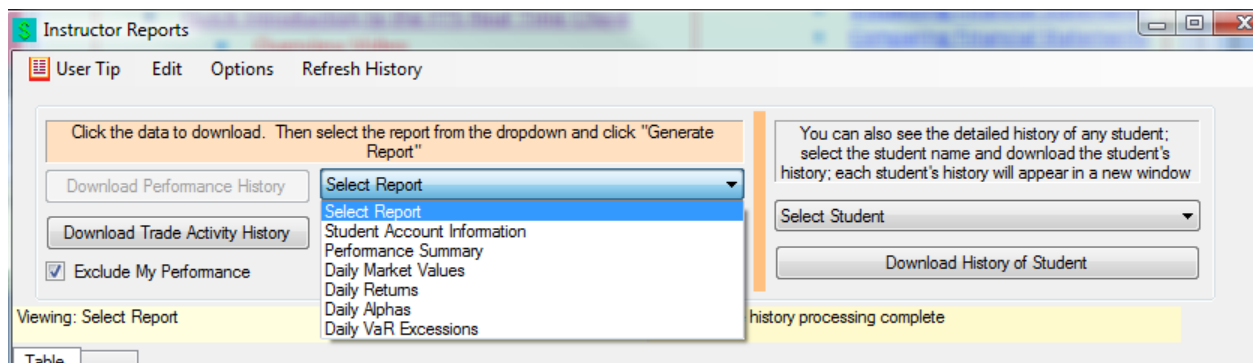
Historical performance is obtained from the Instructor Reports menu:



The instructor reports window looks like the following:



Once you click "Download Performance History," you will be able to generate the following reports:



Student account information shows you the trading name and password of every student in your section.

Performance summary calculates historical performance measures, as shown in this table, where again we have grayed out the student names:

Click the data to download. Then select the report from the dropdown and click "Generate Report"

You can also see the detailed history of any student; select the student name and download the student's history; each student's history will appear in a new window

Viewing: Performance Summary Market value history processing complete

	Market Value	Sharpe Ratio	Avg Return	Volatility	Alpha	Tracking Error	Information Ratio	Daily VAR %	Rank (Sharpe Ratio)	Rank (Ratio)
	1460.93	0.15405	0.00087	0.00535	0.00000	N/A	N/A	0.00883		
	1000490	-1.32943	0.00001	0.00003	-0.00086	0.00535	-0.16088	0.00005	22	
	1002082	0.00580	0.00005	0.00041	-0.00082	0.00528	-0.15575	0.00068	10	
	1016600	0.18389	0.00040	0.00193	-0.00047	0.00491	-0.09566	0.00319	2	
	990907.4	-0.19438	-0.00022	0.00139	-0.00109	0.00549	-0.19936	0.00229	18	
	1002130	0.01032	0.00005	0.00034	-0.00082	0.00538	-0.15250	0.00056	8	
	1000327	-0.21942	0.00001	0.00018	-0.00086	0.00533	-0.16234	0.00030	19	
	1001690	-0.00193	0.00004	0.00234	-0.00083	0.00559	-0.14839	0.00386	11	
	998445.2	-0.12685	-0.00004	0.00068	-0.00091	0.00510	-0.17866	0.00112	16	
	1000409	-0.03488	0.00001	0.00109	-0.00086	0.00500	-0.17234	0.00179	14	
	954107.2	-0.35706	-0.00114	0.00333	-0.00201	0.00566	-0.35548	0.00549	21	
	1001662	-0.00409	0.00004	0.00162	-0.00083	0.00469	-0.17726	0.00267	12	
	1002478	0.00680	0.00006	0.00207	-0.00081	0.00490	-0.16527	0.00342	9	

The first line is the performance of the benchmark; for US denominated cases, it is the S&P500 index. For other countries, it is an appropriate equity index.

The following measures are calculated for each student and for the benchmark. Details of the calculation are in the "Performance Measures" topic of the teaching guide; that description also has a link to an Excel spreadsheet that lets student calculate the measures themselves.

- Sharpe Ratio
- Average Return
- Volatility
- Alpha
- Information Ratio
- Daily Value at Risk (VaR)
- Treynor Ratio (not in the screen shown above, you have to scroll over to the right)

In addition, the ranking of each student according to each measure is also shown.

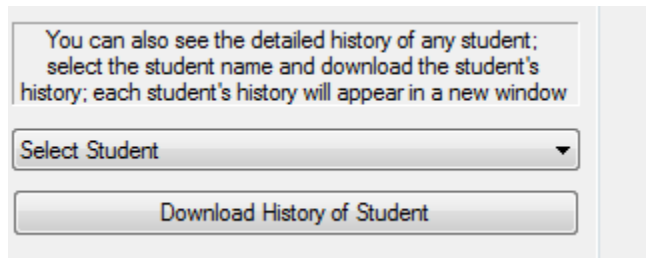
### Performance on a Date

Just above the table and below the Generate Report button, you will see "On Date" and a dropdown with the dates from the beginning (i.e. when the accounts were created or reset) to today. You can select the date on which you want the performance history. This is useful in several ways:

- You could do a periodic grading, for example, weekly. In this case, what matters to the students is consistency in their performance week-to-week rather than just the performance at the end of the semester.
- You can have a final date at which you will grade the performance, but let the students continue trading after that date. This is particularly useful if you forget to tell us to halt trading on a specific date!

### Individual Student History

You can download and analyze the complete history of any student:



The screenshot shows a user interface for downloading student history. At the top, there is a text box with the instruction: "You can also see the detailed history of any student; select the student name and download the student's history; each student's history will appear in a new window". Below this text is a dropdown menu labeled "Select Student" with a downward arrow. At the bottom of the interface is a button labeled "Download History of Student".

Student trading names appear in the dropdown and once you select a student, you can download their history. Once you do, you get exactly the same window as the student gets when they download their own history and can generate any of the reports the student can. These are described in more detail in the sections of the teaching guide, e.g. the Quick Introduction to the FTS Real Time Client and specially the write up on Performance Measures.

### Additional Reports

If you request, we can send you the following additional reports:

- A table showing you every trade and the profitability of every trade for each student
  - This is the same report as the "P&L Report" that students can generate, except that we send you the report for all students in your section
  - Account access: how many times a student logged in to their account.
    - Note that you can generate a trade activity report (who traded on what day and how many securities) as described previously.