Nasdaq BookViewer 3.0 User Guide

Nasdaq BookViewer® 3.0 offers a real-time view of the order depth using the most recent Nasdaq TotalView product for Nasdaq and other exchange-listed securities including:

- The top buy and sell orders for all issues
- Security-level order statistics, price charts and trade data displays

BookViewer provides a real-time, automatically updating view of order data. BookViewer is currently available on the Nasdaq Workstation® and through the DataStore website. In order to view BookViewer, your computer must have Adobe Flash Player version 10 or higher installed. BookViewer window displays data for orders entered for a given security.

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1. **Symbol field, GO** — Users enter symbol in the Symbol field. Click the GO button to refresh the screen with the information for the stock symbol above.

2. **Pause/Play** - Click the Pause/Play button to either pause or play the information activity for the stock symbol above. When the data is paused, the text “PAUSED!” will appear at the top of the window.
3. **Last Match**
   - Last Match (Price) — Reflects the execution price from the most recently matched orders on for the particular security on the Nasdaq stock market. Please note that trades matched on other venues are not included in the calculation. The display will show “N/A” if there are no matches for the current trading day.
   - Last Match (Time) — Reflects the time stamp in the Last Match Price.

4. **Current Stock** — Identifies the stock being displayed. Please note that BookViewer is designed to display data for one security at a time.

5. **Today’s Activity**
   - **Today’s Activity (Orders)** — Reflects the cumulative number of displayable orders for the security during the current trading day. Any order that was displayable at any point in time will be added to this number and it will rarely reflect the total number of orders outstanding at the current time. This number does not include non-display orders (such as immediate-or-cancel or on-open/on-close orders).
   - **Today’s Activity (Volume)** — Reflects the total number of shares matched during the current day. This volume counts each change of beneficial ownership once. For example, if participant "A" sells 100 shares to participant "B", the BookViewer volume will increase by 100 shares.

6. **Filter** — Filter the book by MPID, Volume and the Price for either the Buy Side or Sell Side. Select ‘Go’ to apply the filter; Select ‘Clear’ to clear the filter.

7. **Aggregate By**
   - Price: Select this box to view all shares aggregated at each price level.
   - MPID: Select this box to view all shares on the book aggregated at an MPID and price level.

8. **Limit** – By default, the first 30 rows on the Buy and Sell Side show. Selected ‘Limit’ dropdown displays options: ‘30’, ‘60’, ‘90’, and ‘120’.

9. **Buy Orders and Sell Orders** — BookViewer automatically displays up to the first 30 individual open visible buy and sell orders, that are available for instant matching. Buy orders are on the left, and sell orders are on the right. Orders are presorted according to execution priority (price and time) so orders higher on the list will be executed before orders lower on the list. Hidden orders are not displayed. The background colors help to visually group equally priced orders at the first four prices. To see additional orders, users should increase the Limit (see #8).

10. **Shares** — Reflects the number of shares per order, available for matching. The displayed amount may be less than the original number of shares entered if the order was partially executed or partially canceled.

11. **Market Value (MV)** — Market Value represents the total value of the bid or offer.
   - Market Value = # of Shares Traded x Current Price
12. **Price (Buy/Ask)** — Reflects the limit price for each order.

13. **Export** — Export the order book to Excel.


15. **Status Bar** — If there is an issue with BookViewer 3.0, a red message will appear at the top of the application window. As pictured below:
II. BookViewer Frequently Asked Questions (FAQs)

What is BookViewer?
Powered by Nasdaq TotalView-ITCH 5.0, BookViewer is the standard-setting data product for the serious trader, allowing users to view all of the buy and sell orders in Nasdaq for securities listed on the Nasdaq, BATS, NYSE, NYSE Arca and NYSE MKT exchanges.

Does BookViewer provide real-time data?
Yes, BookViewer provides a real-time representation of Nasdaq’s limit order book.

What do the colors in BookViewer mean?
The colors help to visually group orders at the same price on each side of the market.

To what granularity is size reflected on BookViewer?
BookViewer shows display size for each order in actual shares (not round lots).

What does ‘Total Shares’ at the bottom of the buy and sell columns mean?
By default BookViewer only shows the top 30 buy orders and the top 30 sell orders for each stock. ‘Total Shares’ at the bottom of the buy and sell columns mean the current total number of (buy/sell) shares on the book. Users can display more orders by selecting from the ‘Limit’ dropdown selection. ‘Limit’ displays options include: ‘30’, ‘60’, ‘90’, and ‘120’.

Why am I experiencing problems with the BookViewer?
There are some common reasons why individuals might have problems running BookViewer. Please refer to the BookViewer Troubleshooting section below.
III. BookViewer Troubleshooting
Below are common reasons why you might be experiencing problems running BookViewer:

You are trying to send more than four requests in a 15-second period.
Microsoft Internet Explorer limits an applet to a maximum of four simultaneous connections. If you try to query more than four stocks in a 15-second period, your browser may not let the newest connection go through until the oldest connection has expired.

Other system requirements for BookViewer.
Ensure you have the following:
1. Latest version of Flash Player.
2. A Broadband connection (BookViewer does not work with dial-up).
3. Disabled Firewalls.
4. Enabled ‘Accept Cookies from Third-party’:
   a. Open Internet Explorer
   b. Click Tools menu and select Options
   c. Select Privacy tab
   d. Click Advanced button

To Launch BookViewer:
2. Click on ‘My Account’
3. Select the ‘Launch’ button under BookViewer
4. Always launch BookViewer from ‘My Account’. The application will open in a new window. It is best to close the DataStore browser and run each application individually after launching.

Note: Some users experience a lost connection when logging on to BookViewer. This could be due to problems with the computer’s virus protection software or firewall where it does not allow the streaming of data from Nasdaq.

You went through all the checks, and BookViewer still doesn’t work.
Please send your questions with a complete description of the problem to datastore@Nasdaq.com. Please be sure to include the operating system, browser name and version.