Secure Web Service 1.0 Specifications

Overview

NASDAQ Basic is a proprietary data product that provides a low cost alternative to the other Level 1 offerings. NASDAQ Basic provides Best Bid and Offer and Last Sale information for all U.S. exchange-listed securities based on liquidity within the NASDAQ market center, as well as trades reported to the FINRA/NASDAQ Trade Reporting Facility® (TRF™).

NASDAQ Basic provides the following key data elements for all U.S. exchange-listed equities:

- **NASDAQ Last Sale (NLS)** - Real-time tick-by-tick price and size information for orders executed within the NASDAQ market center as well as trades reported to the FINRA/NASDAQ TRF. Customers now have the option to upgrade to the NLS Plus data product at no additional charge. In addition to the elements offered by NLS, NLS Plus offers price and size information for orders executed within:
  - NASDAQ
  - FINRA/NASDAQ TRF
  - BX
  - PSX

  NLS Plus also provides consolidated volume information as part of each trade message.

- **NASDAQ BBO (QBBO)** – Real-time best bid and offer, with associated size, available within the NASDAQ market center.

The Basic Web Service is available to NASDAQ Basic subscribers only. In order to access this service, customers are required to provide NASDAQ OMX® with the IP Address used to access the Basic data via XML. Only authorized IP addresses will be allowed to access the web service.

The Basic Web Service is a real-time service providing a subset of data elements from the underlying NASDAQ Basic feeds (QBBO and NLS Plus). At this time, the web service does not provide history. In addition, the data will be returned in the XML format.

To order the web service, please contact your NASDAQ OMX Account Manager or call 301-978-5307.

Architecture

The Basic Web Service is available to NASDAQ Basic subscribers only. To access this service, approved customers are required to provide NASDAQ OMX with the IP Address(s) that will be accessing the BASIC data.

The following is an example call that can be used to retrieve the data:
Output Formats

NASDAQ Basic data output is provided in the XML format. In the future, NASDAQ OMX looks to add text formats to the service. Additionally, fields that do not contain are not populated (the associated XML tag will be empty).

Field Formats

The NASDAQ Basic Web Service is a real-time snapshot representing the best bid and offer from the NASDAQ market center, last sale information from the NASDAQ, BX and PSX market centers as well as trades reported to the FINRA/NASDAQ TRF related to the security identified in the web query.

Input Format:

The service takes in the following parameter (case sensitive):

- Symbol(s) - Format uses the NASDAQ OMX assigned instrument ID. NASDAQ OMX allows a maximum of 10 symbols in a given request, separated by commas.
  - ‘AAPL’
  - ‘AAPL, GE, MSFT, GOOG’

Example:

https://basicapp.nasdaqomx.com/BasicDataXML/getBasicData?symbolsCsvList=MSFT,CSCO

Output Format:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Description</th>
<th>Field Size/Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>bestAskPrice</td>
<td>Best Ask Price - Denotes the NASDAQ exchange’s best offer price – the lowest price for market sell order(s) in the NASDAQ system. Format: $$$$$$.dddd</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>bestAskQty</td>
<td>Best Ask Quantity - Denotes the aggregated number of shares available for display within the NASDAQ market center system at the NASDAQ Best Offer Price.</td>
<td>Numeric (9)</td>
</tr>
<tr>
<td>Data Field</td>
<td>Description</td>
<td>Field Size/Attribute</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>bestBidPrice</td>
<td>Best Bid Price - Denotes the NASDAQ best bid price – the highest price for market buy order(s) in the NASDAQ system. Format: $$$$$$..dddd</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>bestBidQty</td>
<td>Best Bid Quantity - Denotes the aggregated number of shares available for display within the NASDAQ market center system at the NASDAQ best bid Price.</td>
<td>Numeric (9)</td>
</tr>
<tr>
<td>close</td>
<td>Closing price of the day; this field will be empty until the Market Close. Format: $$$$$$..dddd</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>high</td>
<td>Highest price of the day. Note: High is processed as defined in the NLS Plus data feed specifications document. Format: $$$$$$..dddd</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>date</td>
<td>Date of the request; Format: YYYYMMDD</td>
<td>Alphanumeric (8)</td>
</tr>
<tr>
<td>time</td>
<td>Timestamp of the record; Format: HH:MM:SS.mmm</td>
<td>Alphanumeric (12)</td>
</tr>
<tr>
<td>symbol</td>
<td>NASDAQ-assigned indicator for issues (maximum of 10 separated by commas) for which the report is being generated.</td>
<td>Alphanumeric (8)</td>
</tr>
<tr>
<td>lastSale</td>
<td>Last Sale - Denotes the most recent round or mixed lot trade transaction reported by a market center with an eligible sale condition code for the regular U.S. market session. Note: Last Sale is processed as defined in the NLS Plus data feed specifications</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>Data Field</td>
<td>Description</td>
<td>Field Size/Attribute</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>low</td>
<td>Lowest price of the day. Low is processed as defined in the NLS Plus data feed specifications document. Format: $$$$$$.dddd</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>open</td>
<td>Opening price of the day. Format: $$$$$$.dddd</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>pcl</td>
<td>Previous Close - The Consolidated Adjusted Previous Close from the prior trading day (after dividend adjustments). Format: $$$$$$.dddd</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>vol</td>
<td>Consolidated Volume - Reflects the volume for the Issue Symbol as reported on the consolidated market data feed at the time that the trade message was generated.</td>
<td>Numeric (9)</td>
</tr>
<tr>
<td>pctChg</td>
<td>% Change = (Last Sale-Previous Close)/Previous Close</td>
<td>Numeric (11)</td>
</tr>
<tr>
<td>class</td>
<td>Security Class - Indicates the primary listing market for the issue. Allowable values are:</td>
<td>Alphanumeric (1)</td>
</tr>
<tr>
<td></td>
<td>Code</td>
<td>Value</td>
</tr>
<tr>
<td>Q</td>
<td>NASDAQ Listed Issue</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>NYSE Listed Issue</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>NYSE Amex Listed</td>
<td></td>
</tr>
<tr>
<td>Data Field</td>
<td>Description</td>
<td>Field Size/Attribute</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td></td>
<td>Issue</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>NYSE Arca Listed Issue</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>BATS Listed Issue</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>BX Listed Issue</td>
<td></td>
</tr>
<tr>
<td>tradingState</td>
<td>Trading State - Reflects the current trading state for the issue. The allowable values are:</td>
<td>Alphanumeric (1)</td>
</tr>
<tr>
<td>Code</td>
<td>Definition</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Halt / Pause in effect (Cross all U.S. equity exchanges)</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Halt / Pause in effect (NASDAQ OMX market only)</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>Quote only period in effect (NASDAQ OMX market only)</td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>Quote only period in effect (Cross all U.S. equity changes)</td>
<td></td>
</tr>
<tr>
<td>tradingStateReason</td>
<td>Trading State Reason - Reflects the current trading state for the issue. See Appendix A for allowable values.</td>
<td>Alphanumeric (4)</td>
</tr>
</tbody>
</table>

**Appendix A**

**Trading Action Reason Codes**

For NASDAQ-listed issues, NASDAQ acts as the primary market and has the authority to institute a trading halt or trading pause in an issue due to news dissemination or regulatory reasons. NASDAQ may also halt trading for operational reasons. NASDAQ will send out a trading
For informational purposes, NASDAQ also attempts to provide the reason for each trading action update. For bandwidth efficiency reasons, NASDAQ uses a 4-byte code for the reason on its outbound data feeds.

### REASON CODES FOR TRADING HALT ACTIONS

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Halt News Pending</td>
</tr>
<tr>
<td>T2</td>
<td>Halt News Disseminated</td>
</tr>
<tr>
<td>T5</td>
<td>Single Stock Trading Pause In Effect</td>
</tr>
<tr>
<td>T6</td>
<td>Regulatory Halt — Extraordinary Market Activity</td>
</tr>
<tr>
<td>T8</td>
<td>Halt ETF</td>
</tr>
<tr>
<td>T12</td>
<td>Trading Halted; For Information Requested by Listing Market</td>
</tr>
<tr>
<td>H4</td>
<td>Halt Non-Compliance</td>
</tr>
<tr>
<td>H9</td>
<td>Halt Filings Not Current</td>
</tr>
<tr>
<td>H10</td>
<td>Halt SEC Trading Suspension</td>
</tr>
<tr>
<td>H11</td>
<td>Halt Regulatory Concern</td>
</tr>
<tr>
<td>O1</td>
<td>Operations Halt; Contact Market Operations</td>
</tr>
<tr>
<td>IPO1</td>
<td>IPO Issue Not Yet Trading</td>
</tr>
<tr>
<td>M1</td>
<td>Corporate Action</td>
</tr>
<tr>
<td>M2</td>
<td>Quotation Not Available</td>
</tr>
<tr>
<td>V1</td>
<td>NASDAQ Volatility Guard Pause In Effect (NASDAQ Only Securities)</td>
</tr>
<tr>
<td></td>
<td>Reason Not Available</td>
</tr>
</tbody>
</table>

### REASON CODES FOR QUOTATION/TRADING RESUMPTION ACTIONS

<table>
<thead>
<tr>
<th>Code</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3</td>
<td>News and Resumption Times</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>T7</td>
<td>Single Stock Trading Pause / Quotation Only Period</td>
</tr>
<tr>
<td>R4</td>
<td>Qualifications Issues Reviewed/Resolved; Quotations/Trading to Resume</td>
</tr>
<tr>
<td>R9</td>
<td>Filing Requirements Satisfied/Resolved; Quotations/Trading To Resume</td>
</tr>
<tr>
<td>C3</td>
<td>Issuer News Not Forthcoming; Quotations/Trading To Resume</td>
</tr>
<tr>
<td>C4</td>
<td>Qualifications Halt ended; Maintenance Requirements Met; Resume</td>
</tr>
<tr>
<td>C9</td>
<td>Qualifications Halt Concluded; Filings Met; Quotes/Trades To Resume</td>
</tr>
<tr>
<td>C11</td>
<td>Trade Halt Concluded By Other Regulatory Auth.; Quotes/Trades Resume</td>
</tr>
<tr>
<td>R1</td>
<td>New Issue Available</td>
</tr>
<tr>
<td>R2</td>
<td>Issue Available</td>
</tr>
<tr>
<td>IPOQ</td>
<td>IPO Security Released for Quotation (NASDAQ Securities Only)</td>
</tr>
<tr>
<td>IPOE</td>
<td>IPO Security — Positioning Window Extension (NASDAQ Securities Only)</td>
</tr>
<tr>
<td>V2</td>
<td>NASDAQ Volatility Guard Pause / Quotation Only Period (NASDAQ Securities Only)</td>
</tr>
<tr>
<td>&lt;space&gt;</td>
<td>Reason Not Available</td>
</tr>
</tbody>
</table>