

# OTC Markets Real-Time Quote API Technical Specifications

Version 2.0  
May 2016

OTC Markets Group Inc.  
304 Hudson Street, 2<sup>nd</sup> Floor  
New York, NY 10013  
[www.otcmarkets.com](http://www.otcmarkets.com)

E: [issuers@otcmarkets.com](mailto:issuers@otcmarkets.com)  
P: 212.896.4420

Real-Time Level 2 Quotes show all broker-dealer bid and ask price and size quotes for a company's security. This data offers insight into the competition between broker-dealers and bid-ask spreads, providing investors with transparent pricing of securities.

Real-Time Level 2 Quotes appear on [otcmarkets.com](http://otcmarkets.com) for the securities of all OTCQX and OTCQB traded companies, and subscribing Pink companies. These companies also have the opportunity to display Real-Time Level 2 Quote data on their corporate IR website through an easily integrated API.

This is a technical specification document designed to help OTCQX, OTCQB, Real-Time Level 2 Quote subscribing companies integrate the API.

Access and entitlement to the APIs are set by OTC Markets Group's Issuer Services department. Details on product pricing and access may be found at:

<http://www.otcmarkets.com/companies-advisors/otc-intelligence/overview>

For implementation, technical help and support please contact OTC Markets Group Issuer Services:

E: [issuers@otcmarkets.com](mailto:issuers@otcmarkets.com)

P: 212.896.4420

1. Introduction .....	4
2. HTML Output .....	4
A. HTML Output Data Levels and Examples .....	5
i. OTC Toolkit .....	5
ii. Level 1 Data .....	5
iii. Level 2 Data .....	6
B. Applying Styles to HTML Output .....	6
i. Level 1 Data .....	7
ii. Level 2 Data .....	7
3. HTML Output Sample Code .....	8
A. Using PHP .....	8
B. Using JSP (Java) .....	8
C. Using ASP .....	9

## 1. Introduction

This document describes OTC Markets Group's Real-Time quote and trade application program interface (API). This feature is a JAVA service that allows client applications to access OTC Markets Group real-time market maker quote and trade data through a simple HTML - or XML - based interface by means of an HTTP call for the purposes of displaying the data on a website. The application can be accessed through any development environment that supports HTTP.

There are three distinct levels of data available through the API:

1. OTC Toolkit (Reference Price Data) – provides users with the real-time best bid and ask for the OTC security. Size data is not included.

2. Level 1 – provides users with real-time best bid, ask and respective size data.

Level 2 – provides users with access to all market maker quotes (bid, ask, size, MMID).

## 2. HTML Output

The quote and trade output is obtained when a client makes a call to a specified URL with specified inputs comprised of a series of 'field=value' pairs. Subscribers to this service receive the quote and trade data in HTML format.

The HTML format offers an easy way to integrate OTC Markets data into a website. The HTML output may be customized by specifying font type, font size, font color and background color (see 'Applying Styles to HTML Output' section below) via CSS styles. The amount of data displayed may also be customized using the 'type' attribute (see HTML Output Data Levels' below).

The following URL sample outputs an HTML file with Real-Time Level 2 market maker quote montage and trade information:

<https://www.otciq.com/otciq/showOutsideQuotes?securityId=XXXX&token=YYYYYY&format=html &type=complete>

Where the inputs are:

securityId	<ul style="list-style-type: none"> <li>- Required</li> <li>- Specifies the ID of the security whose information is sought (provided by OTC Markets)</li> </ul>
token	<ul style="list-style-type: none"> <li>- Required (except for OTC Toolkit level)</li> <li>- Specifies individual token by which the request is authenticated (provided by OTC Markets)</li> </ul>
format	<ul style="list-style-type: none"> <li>- Specifies the format of the returned data</li> <li>- Value must be 'HTML'</li> </ul>
type	<ul style="list-style-type: none"> <li>- Specifies the level of detail of returned data</li> <li>- Values may be 'TradeR', 'TradeInside' or Complete</li> </ul>
style	<ul style="list-style-type: none"> <li>- Specifies whether to display custom style or default one for the HTML output</li> <li>- Values may be 'own' or 'default'</li> </ul>

## 2 A. HTML Output Data Levels and Examples

Level 2 quote information and trade information is available through the HTML output option.

The Level 2 entitlement offers users access to the following fields: security symbol, company name, market maker id, bid price, bid size, ask price, ask size, quote update date/time, last sale price, change, percentage change, time of last sale, open, previous close, volume, daily range, and 52 week range. Bid/Ask prices and sizes are available for each broker-dealer quoting the stock.

**Note: Trade data is delayed 15 minutes while quote information is real-time.**

The level of detail for data output depends on the “type” parameter set in the called URL:

### 2 A i. [OTC Toolkit](#)

The OTC Toolkit displays the company symbol, OTC Market, and best bid/ask data. Size data is not included. OTC Toolkit data is defined by setting the type to ‘trader.’

**A token code is not required for OTC Toolkit data.**

**The default URL is:**

<https://www.otcicq.com/otcicq/showOutsideQuotes?format=html&securityId=YYYY&&type=trader>

OTC Toolkit Output:

<b>CSVI: OTCQX U.S. Premier</b>	<b>Bid: 29.00</b>	<b>Ask: 30.50</b>
Source: <a href="#">OTC Markets Group</a>   <a href="#">Terms</a>	Real-Time: 10:09:24 AM EDT	

### 2 A ii. [Level 1 Data](#)

Level 1 data displays Company name, OTC Market, Symbol, best bid/ask and size data, and trade data. Level 1 data is defined by setting the type to ‘tradeInside.’

**The default URL is:**

<https://www.otcicq.com/otcicq/showOutsideQuotes?format=html&securityId=YYYY&token=YYYY&type=tradeInside>

Level 1 Output:

<b>Computer Services, Inc.</b> [CSVI: OTCQX U.S. Premier]			
<b>29.00</b>	-0.85 (-2.85%)	10:09 AM	Delayed 15 minutes
<b>Open</b>	\$29.50	<b>Daily Range</b>	\$29.00-\$29.50
<b>Prev. Close</b>	\$29.85	<b>52 Week Range</b>	\$19.50-\$32.00
<b>Volume</b>	580		
<b>Quote Data</b> Realtime			
<b>Inside Quote</b>			
<b>Bid</b>	<b>Ask</b>	<b>Last Inside Change</b>	
\$29.00 x 500 shares	\$30.50 x 359 shares	07/07 11:28 AM EDT	
<small>The quotes displayed here are published by market makers on the OTC Markets Group Inc. electronic inter-dealer quotation and trading system for OTC securities. Please see <a href="#">Terms of Service</a> and <a href="#">Risk Warning</a> for more information.</small>			
<small>MMID - OTC Markets Group Inc. Inside quote   MMID - OTC Markets Group Inc. quote   cMMID - Closed quote   U - Unpriced quote   MMIDu - Unsolicited quote</small>			

## 2 A iii. [Level 2 Data](#)

Level 2 data displays Company Name, Symbol, detailed Trade Data and complete quote information (inside and full montage).

**Level 2 data is defined by setting the type to ‘complete.’**

**The default URL is:**

[https://www.otcig.com/otciq/showOutsideQuotes?format=html&securityId=XXXX&token=YYYY&t\\_ye=complete](https://www.otcig.com/otciq/showOutsideQuotes?format=html&securityId=XXXX&token=YYYY&t_ye=complete)

Complete Type Output:

<b>eGames, Inc.</b> [EGAM: OTC Pink Limited]							
<b>0.50</b> 0.03 (6.38%) 12:40 PM Delayed 15 minutes							
Open	\$0.46	Daily Range	\$0.45-\$0.50				
Prev. Close	\$0.47	52 Week Range	\$0.12-\$0.74				
Volume	22,700						
<b>Quote Data</b> Realtime							
Inside Quote							
Bid	Ask	Last Inside Change					
\$0.45 x 10000 shares	\$0.50 x 5000 shares	07/01 11:06 AM EDT					
Level II Quote Montage							
BID				ASK			
MMID	Bid Price	Bid Size	Date/Time	MMID	Ask Price	Ask Size	Date/Time
VFIN	0.45	10000	11:06	PERT	0.50	5000	06/30
UBSS	0.43	10000	09:30	VFIN	0.54	2500	10:43
AUTO	0.40	5000	10:37	AUTO	0.60	10700	10:37
KOSE	0.33	5000	06/29	UBSS	0.60	6000	09:30
NITE	0.30	13153	09:31	NITE	1.00	5775	09:32
PERT	0.26	5000	06/23	KOSE	1.01	500	06/29
FORT	0.03	5000	03/09	FORT	1.46	5000	03/09
ETMM	0.0001	5000	06/28	ETMM	100.80	100	06/28
MAXM	0.0001	5000	06/30	MAXM	U		08:06
<small>The quotes displayed here are published by market makers on the OTC Markets Group Inc. electronic inter-dealer quotation and trading system for OTC securities. Please see <a href="#">Terms of Service</a> and <a href="#">Risk Warning</a> for more information.</small>							
<small>MMID - OTC Markets Group Inc. Inside quote   MMID - OTC Markets Group Inc. quote   cMMID - Closed quote   U - Unpriced quote   MMIDu - Unsolicited quote</small>							

## 2 B. [Applying Styles to HTML Output](#)

The HTML output may be customized by applying custom CSS styles to match the look-and-feel of a website. Depending on the ‘type’ of output selected, font-size, font-color, background-color and borders may be customized. Style customization is not available for the Real-Time Reference Prices (OTC Toolkit) output.

To customize styles, set style=own in the called URL, e.g.:

[https://www.otcig.com/otciq/showOutsideQuotes?format=html&securityId=XXXX&token=YYYY&t\\_ye=complete&style=own](https://www.otcig.com/otciq/showOutsideQuotes?format=html&securityId=XXXX&token=YYYY&t_ye=complete&style=own) and then add the applicable styles to the css style sheet for the page in which the data will appear.

Important: Each ‘type’ has specific class names that apply to that type. The class name used in style customization must be exactly the same as the class names used within this document.

## 2 B i. Level 1 Data

Applicable class name: psTradeTable, psInsideTable, psHeaderBGColor, psCompanyName

Style used for example:

```
.psTradeTable {font-size: 12px; color: #000000;}
.psInsideTable { font-size:12px; color:#000000; width:400px; padding-top:10px; margin-left:5px;}
.psHeaderBGColor { background-color: #FFFFB7;}
.psCompanyName {font-weight: bold; font-size:24px; padding-left:3px; color:#007D3F;}
```

## 2 B ii. Level 2 Data

Applicable class name: psTradeTable, psInsideTable, psHeaderBGColor, psCompanyName, psMontageTable

**Computer Services, Inc.** [CSVI: OTCQX US Premier] Style used is .psCompanyName. The font size is 24 pixels, the font-weight is bold and the font color is dark green (#007D3F)

**36.25** -1.25 (-3.33%) Delayed 15 minutes: 10/19 4:27 PM EDT

Open \$37.00 Daily Range \$35.75-\$37.25  
 Prev. Close \$37.50 52 Week Range \$28.05-\$42.00 Trade data uses the psTradeTable class. In this sample the font-size is 12px and the color is black (#000000).  
 Volume 5,030

**Quote Data** Realtime: 10/19 4:27 PM EDT

**Inside Quote**

Bid	Ask	Last Inside Change
\$36.25 x 200 shares	\$36.75 x 200 shares	10/19 3:14 PM EDT

Inside Quote data uses the psInsideTable class. In this sample the font-size is 12px, the font color is black (#000000), the table width is 400 pixels, the top padding is 10 pixels and the left margin is 5 pixels.

**Level II Quote Montage**

BID				ASK			
MMID	Bid Price	Bid Size	Date/Time	MMID	Bid Price	Bid Size	Date/Time
HILL	36.25	200	15:14	NITE	36.75	200	14:19
NITE	35.25	200	14:19	HDLY	37.00	200	14:22
HDLY	35.25	200	14:22	HILL	37.50	200	15:14
HDSN	35.00	200	10/16	HDSN	41.25	200	10/16
DOMS	32.00	200	10/11	JEFF	51.00	200	08/30
JEFF	5.00	500	08/30	VNDM	U		08/29
VNDM	U		08/29	DOMS	U		10/11
ETRD	U		10/16	ETRD	U		10/16
AUTO	U		08:33	AUTO	U		08:33

Quote Montage data uses the psMontageTable class. In this sample the font-size is 12px, the font color is black (#000000), the table padding is 2 pixels and the width is 99%.

Header background color is set via the psHeaderBGColor class. In this sample the background color is #FFFFB7

The quotes displayed here are published by market makers on the Pink Sheets electronic inter-dealer quotation and trading system for OTC securities. Please see [Terms of Service](#) and [Risk Warning](#) for more information.

MMID - Pink Sheets Inside quote | MMID - Pink Sheets quote | @MMID - Closed quote | U - Unpriced quote | MMIDu - Unsolicited quote

Style used for example:

```
.psTradeTable {font-size: 12px; color: #000000;}
.psInsideTable {font-size: 12px; color:#000000; width:400px; padding-top:10px; margin-left:5px;}
.psMontageTable {font-size:12px; color:#000000; padding: 2px; width:99%;}
.psHeaderBGColor {background-color: #FFFFB7;}
.psCompanyName {font-weight: bold; font-size:24px; padding-left:3px; color:#007D3F;}
```

### 3. [HTML Output Sample Code](#)

To help with the implementation of the HTML output display, sample code is displayed below.

Note: This code requires server-side processing – it cannot simply be pasted into an html document.

#### 3 A. [Using PHP](#)

```
<?php
$handle =
fopen("https://www.otcig.com/otcig/showOutsideQuotes?securityId=XXXX&token=YYYYYY&format=html&type=complete", "rb");
$content = "";
do {
$data = fread($handle, 8192);
if (strlen($data) == 0) {
break;
}
$content .= $data;
} while (true);
fclose($handle);
echo $content;
?>
```

#### 3 B. [Using JSP \(Java\)](#)

```
<%
try
{
String urlString =
"https://www.otcig.com/otcig/showOutsideQuotes?securityId=XXXX&token=YYYYYY&format=html&type=complete";
java.net.URL url = new java.net.URL(urlString);
URLConnection urlConn = url.openConnection();
DataInputStream input = new DataInputStream(urlConn.getInputStream()); %>
<% // read in each character until end-of-stream is detected
for (int c = input.read(); c != -1; c = input.read() )
{
out.print( (char)c );
}
input.close();
}
catch( Exception e )
{
out.println( "<p><b>OTC Markets quote and trade data is currently not available</b></p>" );
e.printStackTrace();
} %>
```



### 3 C. Using ASP

<%

GotothisURL=<https://www.otciq.com/otciq/showOutsideQuotes?securityId=XXXX&token=YYYYYY&format=html&type=complete>

Set GetConnection = CreateObject("Microsoft.XMLHTTP")

GetConnection.Open "get", GotothisURL, False

on error resume next

GetConnection.Send

ResponsePage = GetConnection.responseText

NewR = replace (ResponsePage,

"javascript:location.reload()", "<http://www.YOURSITE.com/YOURPAGE.asp>")

Response.write (NewR )

Set GetConnection = Nothing

%>