

Thomson Reuters IR XML – Historical Quotes & Investment Calculator

A. Description

The Historical Quotes XML file is used to request historical stock quote information. For example, if an investor wanted to know what your stock traded at three years ago, the historical quote XML file would be used. For most securities, Thomson Reuters offers data back to January 1, 1970.

B. XML File

The XML file containing the information is available at:

<http://xml.corporate-ir.net/irxmlclient.asp?compid=#####&reqtype=histquote&reqdate=<mm/dd/yyyy>&symb=<TickerSymbol>>

Query String parameters

The '**compid**' query parameter represents the company ID, which will be assigned to your company by Thomson Reuters. If you are unaware of your compid, please contact your Thomson Reuters Account Manager.

The '**reqdate**' query parameter represents the date of the stock quote information desired. This is in the format of <MM/DD/YYYY>. Therefore, if you wish to see information from January 3, 2006, the value of the query parameter would be '01/03/2006'.

The '**symb**' query parameter represents the ticker symbol of your company's security. Therefore, if you work at Thomson Reuters, the value of the query parameter would be 'TRI'.

For example, the URL to get historical stock quote information about a company with compid of '132066', from January 3, 2006, the URL would be:

<http://xml.corporate-ir.net/irxmlclient.asp?compid=132066&reqtype=histquote&reqdate=01/03/2006&symb=TRI>

Where our sample company's ticker symbol is TRI.

Page 3 contains the elements and their descriptions. Page 4 shows some sample XML files.

Structure

If you wish to obtain information about the structure of this XML feed, you can access either the Data Type Definition (DTD) or the Schema by using the appropriate URL below with your **compid**:

<http://xml.corporate-ir.net/irxmlclient.asp?compid=#####&reqtype=histquote&reqdate=<MM/DD/YYYY>&symb=<ticker>&display=schema>

<http://xml.corporate-ir.net/irxmlclient.asp?compid=#####&reqtype=histquote&reqdate=<MM/DD/YYYY>&symb=<ticker>&display=.dtd>

C. Investment Calculations and General Workflow

The investment calculations are highly dependent upon the Historical Quote XML and, in some implementations, Chart XML features. The Chart XML is used to generate a chart from the investment date to today.

Most implementations use forms to input investment information. For Amount Invested, this is usually defaulted to 10000. For number of shares purchased, this is usually left blank, and if any value is entered, the investment calculator will use those number of shares to calculate the investment amount, so the investment amount is usually ignored.

Investment Formula

Information Desired	Formula
Amount Invested	Num Shares purchased = Amount Invested / Purchase Price (nominal)
Number of Shares purchased	
Purchase Price (Nominal)	= Historical closing price * Split Adjustment Factor
Shares Owned Today (split adjusted)	= Number of shares purchased * Split Adjustment Factor
Investment Value Today	= Shares owned today * current stock price
Percent Change	= ((Investment Value Today – Amount Invested) / Amount Invested) * 100
Actual Price	= Last Trade * Split Adjustment Factor

D. Disclaimers

The following disclaimer feed is required on each page displaying quote data:

<http://xml.corporate-ir.net/irxmlclient.asp?compid=#####&reqtype=disclaimers>

Data is typically provided by MarketWatch (id="6"). Please refer to the document "manual_Disclaimers.doc".

E. XML Usage and Cache Recommendation

We require our clients to cache our XML to reduce traffic between our servers speeding access times to enhance the user experience. Due to the nature of the Internet and HTTP, it is faster to serve up a dynamic XML driven web page when the XML is stored locally on your data servers instead of across the Internet on another server. Although we maintain nearly a 100% uptime, we also encourage our clients to put in place error checking and fail safes in case the XML feed is not available.

Recommended cache time: 1-2 minutes (during trading hours for the QUOTES data, HISTQUOTE can be access on the fly since we do not anticipate high usage to the form)

HistQuote Elements & Attributes

Element	Attribute	Description	Values
IRXML		The root element of the XML.	
	CorpMasterID	This is the same as your Compid.	
HistoricalQuotes		This element contains the HistoricalQuote elements and is a child of IRXML.	
	Ticker	This is the ticker symbol for which the information applies.	
	Date	This is the date of requested information.	
HistoricalQuote		This element contains the informational elements and is a child of HistoricalQuotes .	
Comment		Child of HistoricalQuote . If the date request is not a trading day or the symbol is invalid, an error message will return	
Last		Child of HistoricalQuote . Closing price of security	
High		Child of HistoricalQuote . Highest price of the security during the trading session	
Low		Child of HistoricalQuote . Lowest price of the security during the trading session	
Bid		Child of HistoricalQuote . The current price someone is willing to buy the stock at	
Ask		Child of HistoricalQuote . The current price at which someone is willing to sell the stock	
Open		Child of HistoricalQuote . The price of the security when the market opened	
Volume		Child of HistoricalQuote . The number of shares traded since the previous close	
AdjustmentFactor		Child of HistoricalQuote . Factor to determine how many shares of stock person owns	
RollingEarnings		Child of HistoricalQuote . Rolling earnings per share	
ShortInterest		Child of HistoricalQuote . The number of shares of the stock that have been shorted, but not yet repurchased.	
SharesOutstanding		Child of HistoricalQuote . The total number of shares outstanding of the security	

Sample HistoricalQuote XML

There are two possible XML files that may be returned depending whether there is information for the date requested. In this example, the ticker "TRI" was used.

Historical Lookup success:

<http://xml.corporate-ir.net/irxmlclient.asp?compid=132066&reqtype=histquote&reqdate=01/03/2006&symb=TRI>

```
<?xml version="1.0" standalone="no"?>
<IRXML CorpMasterID="132066">
  <HistoricalQuotes Ticker="TRI" Date="1/3/2006">
    <HistoricalQuote>
      <Bid>34.62</Bid>
      <Ask>34.63</Ask>
      <High>34.71</High>
      <Low>34.01</Low>
      <Volume>39500</Volume>
      <Open>34.2</Open>
      <SharesOutstanding>650686000</SharesOutstanding>
      <Last>34.63</Last>
      <AdjustmentFactor>1</AdjustmentFactor>
      <RollingEarnings>1.42</RollingEarnings>
      <ShortInterest>748006</ShortInterest>
    </HistoricalQuote>
  </HistoricalQuotes>
</IRXML>
```

Historical Lookup failure: (request date was not a trading day)

<http://xml.corporate-ir.net/irxmlclient.asp?compid=132066&reqtype=histquote&reqdate=01/01/2006&symb=TRI>

```
<?xml version="1.0" standalone="no"?>
<IRXML CorpMasterID="132066">
  <HistoricalQuotes Ticker="TRI" Date="1/1/2006">
    <HistoricalQuote>
      <Comment>No Data Returned</Comment>
    </HistoricalQuote>
  </HistoricalQuotes>
</IRXML>
```

Historical Lookup failure: (invalid ticker symbol)

<http://xml.corporate-ir.net/irxmlclient.asp?compid=132066&reqtype=histquote&reqdate=01/03/2006&symb=TRIX>

```
<?xml version="1.0" standalone="no"?>
<IRXML CorpMasterID="132066">
  <HistoricalQuotes Ticker="TRIX" Date="1/3/2006">
    <HistoricalQuote>
      <Comment>No Data Returned</Comment>
    </HistoricalQuote>
  </HistoricalQuotes>
</IRXML>
```

Investment Calculations

Creating an Investment Calculator from one, individual XML interface is not currently feasible with IRXML, however, it may be developed by combining **both Quote and Historical Price data**. Using the interfaces for each of the aforementioned, you are able to obtain (1) the closing price for a security on any historical date, as well as (2) the current trading price of the stock. Therefore:

Investment Date - Provided by user

Amount Invested - Provided by user*

Number of shares purchased - Provided by user*

**Only one of the above will be provided. The other may be calculated, using the following formula:*

Amount Invested = shares purchased * purchase price

Purchase Price - returned from the Historical Quote API for the requested date, in current day's terms. Therefore, the value returned must be multiplied by the [split] Adjustment Factor which is also provided in the API.

Split Adjustment Factor = returned from Historical Quote API.

Shares Owned Today = shares purchased * adjustment factor

Investment Value Today = shares owned today * current price

Percent Change = ((investment value today – amount invested) / amount invested) * 100