Nasdaq, Inc.

Nasdaq Global Index Watch (GIW)

Web Services API 3.4

Contents

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1 Overview

Global Index Watch

Nasdaq Global Index Watch (GIW) provides an in-depth view of 10,000+ Nasdaq Indexes. It is an indispensable tool for investment professionals who track Nasdaq Indexes or trade products linked to these indexes.

Nasdaq offers direct access to global index data via GIW. Available from many of the key data vendors and our easy-to-use web interface, GIW provides index weights and components, advanced notification of corporate actions, as well as daily and historical high, low, start-of-day and end-of-day index values for Nasdaq Indexes.

Nasdaq provides a variety of asset classes as well as index family entitlements. For further information about accessing Nasdaq Index weights, components, corporate actions, and historical data, please contact Nasdaq Index Sales.

For real-time index data, see Global Index Data Service or contact DataSales@nasdaq.com.

2 GIW Delivery Options

There are three delivery mechanisms for GIW data:

1. GIW Website: https://indexes.nasdaq.com
2. GIW Web Services API: detailed in this document
3. Global Index FlexFile Delivery (GIFFD) SFTP: detailed here.

3 Web Services API Introduction

Web Services delivers GIW data via an application programming interface (API) in predefined formats, which enables index data to be automated for retrieval into your systems for use and analysis. GIW Web Services provides an On-Demand view of what is available at the precise moment that the Web Services API is run. This specification document outlines these data formats. Web Services provides the most up-to-date weightings, historical and summary index values, as well as corporate actions for covered indexes.

3.1 Index Data Availability Times by Dataset

Global Index Watch – Web Services API		
Index Delivery Times by Dataset		
Dataset	End of Day (EOD) US Eastern Time	Start of Day (SOD) US Eastern Time
GIC-AE	12:15 PM	4:45 PM
GIC-AUS	2:15 AM	8:45 AM
GIC-BAL	9:15 AM	4:45 PM
GIC-DK	11:15 AM	4:45 PM
GIC-HOX	1:00 PM	NA
GIC-NFI	10:45 AM	12:30 AM
GIC-NOR	9:15 AM	4:45 PM

GIC-SEBFI	1:00 PM	7:40 PM
GIC-SE-OMXN	12:00 PM	4:45 PM
GIC-SNAP	10:15 AM	4:45 PM
GIC-US	6:00 PM	9:45 PM
GIC-USFI	5:45 PM	2:15 AM
SandP	7:00 PM	8:00 PM
Corporate Actions (CAUFF), Pro Forma (PRO), and Daily Pro Forma (DPRO) data is available by 12:00 AM ET.		

4 Architecture

Nasdaq has modified the authentication process for fetching files from the GIW Secure Web Services. Nasdaq is making this change to meet industry security standards. For a list of indexes available please visit the GIW index directory list on the GIW website.

Getting started: Public API platforms such as Postman can make it easy to build and test the GIW Web Services API.

URL:
(https://indexes.nasdaqomx.com/reports2/UFFWeighting.ashx?IndexSymbol=ABCD&Date=YYYY-MM-DD&Type=pipe&FileType=SOD)

Sample Authentication Call Using CURL:
curl -X POST '<URL>' -H 'Content-Type: application/x-www-form-urlencoded' --data-urlencode 'username=<username>' --data-urlencode 'password=<password>'

Example:
curl -X POST 'https://indexes.nasdaqomx.com/reports2/UFFWeighting.ashx?IndexSymbol=NDX&Date=2023-03-03&FileType=SOD&Type=PIPE' -H 'Content-Type: application/x-www-form-urlencoded' --data-urlencode 'username=xxx' --data-urlencode 'password=yyy'

Sample Code in Python[1]:

```
import requestsurl = "URL"payload='username=xxx&password=yyy'

headers = {

  'Content-Type': 'application/x-www-form-urlencoded'

}

response = requests.request("POST", url, headers=headers,
data=payload)print(response.text)
```

[1] NASDAQ PROVIDES SAMPLE CODE AS A COURTESY TO MAKE IT EASIER FOR USERS TO CONNECT TO NASDAQ GIW WEB SERVICES. THE CODE IS BEING PROVIDED "AS IS" WITH NO WARRANTIES WHETHER WRITTEN OR ORAL, EXPRESS OR IMPLIED, OR STATUTORY WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, ERROR FREE, COMPLETENESS, ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING, OR COURSE OF PERFORMANCE, OR WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE.

5 Output Formats

GIW data output can be provided in "pipe"(|) or "csv"(,) delimited, ASCII-text format. To reduce the download time, Nasdaq will not include extra spaces or leading/trailing zeros for any fields. Additionally, fields that contain no data will not be populated, data will be returned with two delimiters in a row.

6 Data Service Formats

As a subscriber to the GIW, clients can access the secure web services and receive access to the following information:

- Component Weighting Data
- Corporate Action Information for covered indexes
- Historical index values

7 Equity Data Services

The UFF data service is the premier weightings and corporate actions service and should be used for all index queries.

7.1 Equity-based indexes Weightings Service

In response to customer requests, Nasdaq has standardized its file formats for all of its equity-based indexes on GIW. The UFF is intended to provide a more robust offering that allows the delivery of index weightings content covering the global marketplace. Data recipients have requested this additional information in order for their systems to more accurately track the equity indexes and to map the data elements within their databases.

Input Format

The service takes in the following parameters:

- **IndexSymbol** – format uses the assigned instrument ID;
- **Date of Weightings File** - format yyyy-mm-dd
- **Type** – format provided as either **PIPE**(|) or **CSV**(,); default is PIPE
- **FileType** – values are either 'SOD' (for start of day requests), 'EOD' (for end of day requests), 'PRO' (for Pro Forma requests), or 'DPRO' (for Daily Pro Forma requests)[2]

Where XXXXXX = assigned instrument ID, ZZZZ = clients preferred return of data stream (pipe or csv) and WWW= whether the request is Start of Day or End of Day

https://indexes.nasdaqomx.com/reports2/UFFweighting.ashx?IndexSymbol=XXXX&Date=YYYY-MM-DD&Type=YYYY&FileType=ZZZZ

[2] DAILY PRO FORMA DATA IS AUTOMATICALLY UPDATED ONCE A DAY AROUND MIDNIGHT ET DURING WEEKDAYS AND IS PROVIDED ON AN "AS-IS" BASIS THROUGHOUT THE YEAR TO INDEX CLIENTS FOR INFORMATIONAL PURPOSES ONLY. DATA IS INDICATIVE OF THE CURRENTLY PROJECTED FUTURE INDEX BASKET FOR UP TO T+5 WEEKDAYS. AS NEW INFORMATION BECOMES AVAILABLE, DATA IS SUBJECT TO CHANGE. NEITHER NASDAQ, INC. NOR ANY OF ITS AFFILIATES (THE "CORPORATIONS") MAKES ANY EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE DAILY PRO FORMA DATA. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL THE CORPORATIONS HAVE ANY LIABILITY FOR ANY LOST PROFITS OR SPECIAL, INCIDENTAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES RELATED TO THE DAILY PRO FORMA DATA, EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

Header		
Data Field	**Description**	**Max Field Size / Attribution**
Parameter	Parameter of the query Example: NDX2013-11-11|EOD or NDX2013-11-15|PRO	Varchar (35) – Alphanumeric (including special characters)
File Type	Indicates the report type requested. Allowable values are: • 'EOD' – End of Day • 'SOD' – Start of Day • 'PRO' – Pro Forma • 'DPRO' – Daily Pro Forma	Varchar (4) – Alphanumeric
Weightings Content		
Data Field	**Description**	**Max Field Size / Attribution**
Symbol	Unique identifier of the index security assigned by its Exchange or other marketplace.	Varchar (18) – Alphanumeric (including special characters)
Closing Price	For EOD files, the last regular way trade or quote received from the Exchange for the index security. For Nasdaq securities it is the last sale price on Nasdaq which normally would be the Nasdaq Official Closing Price (NOCP). For SOD files, the previous day's Local Closing Price is adjusted for corporate actions (if any).	Varchar (53) – Numeric (including decimal point)
Market Value	Calculated value: Index Shares * Local Closing Price * FX Rate	Varchar (53) – Numeric
Index Shares	The number of shares representing an index security within the index.	Varchar (53) – Numeric (including decimal point)
Index Weight	Calculated Value: Market Value / Index Market Value	Varchar (15) – Numeric (including decimal point)
Company Name	The name of the issuer of the index security.	Varchar (100) – Alphanumeric (including special characters)
SEDOL	The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares. **Please Note:** SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access.	Varchar (12) – Alphanumeric
Exchange	The exchange from which the Local Closing Price of the index security is utilized. Nasdaq will support the ISO 10383 standard, an ISO standard for	Varchar (4) – Alphanumeric

	"Codes for exchanges and market identification" (MIC): it defines codes for stock markets. This standard is updated frequently and the latest published standard is available at the maintenance organization of ISO 10383.	
Currency	Local currency in which the underlying index security is traded on its Exchange, using ISO 4217.	Varchar (3) – Alphanumeric
FX Rate	Rate at which the Currency is converted into the Index Currency.	Varchar (23) – Numeric (including decimal point)
Free Float Factor	The adjustment applied to the Shares to represent availability of shares to investors. Note: This field is only populated for indexes that utilize this field for index calculation.	Varchar (12) – Numeric including decimal point
Country Code	Country code is variable and is determined by the index calculation methodologies follows the ISO 3166-1 standard. Nasdaq may use one of the following country code classifications: **Country of Domicile** - represents the country of domicile. **Country of Incorporation** - identifies the country in which the company is incorporated or legally registered. **NQGI Country Code** – identifies the country, as assigned by Nasdaq Global Indexes	Varchar (2) – Alpha
Industry Code	Industry classification or industry codes organize companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (4) - Numeric
Index Symbol	The identifier or ticker symbol representing the index	Varchar (18) – Alphanumeric (including special characters)
CUSIP	CUSIP is a unique nine-character alphanumeric code appearing on the face of each stock or bond certificate that is assigned to an index security by Standard & Poor's Corporation. **Please Note:** CUSIP information is fee liable and is populated as a service for our clients. It is the client's responsibility to have proper approval from CUSIP authority prior to use or storage if this data.	Varchar (9) – Alphanumeric (including special characters)

Third Party Assigned ID	**Please Note:** This value is not currently supported and will be implemented in the near future.	Varchar (20) – Numeric
ISIN	International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement. **Please Note:** ISIN information is fee liable and is populated as a service for our clients. It is the client's responsibility to have proper approval from ISIN authority prior to use or storage if this data.	Varchar (12) – Alphanumeric (including special characters)
Security Shares	Number of shares representing an index security prior to any capping or float adjustment, in accordance to each Index methodology.	Varchar (53) - Numeric
Capping Factor	Adjustment factor for capped indexes.	Varchar (53) – Numeric including decimal point
Security Dividend Market Value	Represents the index securities dividend market values Dividend Market Value = Cash dividend * index shares per security	Varchar (53) – Numeric (including decimal)
ICB Subsector Code	Industry classification or industry codes organize companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (8) Numeric
Footer		
Data Field	**Description**	**Max Field Size / Attribution**
Index Market Value	Calculated value: Aggregate Market Value of all Index Securities	Varchar (53) – Numeric (including decimal)
Total Index Shares	Calculated value: Aggregate Index Shares of all Index Securities	Varchar (53) – Numeric (including decimal)
Index Weight	Represents the summation of the market percentage of all component securities within the index.	Varchar (15) – Numeric (including decimal point)
Net Change	Represents the difference between the current tick value and the prior day's closing tick value for a given index.	Varchar (53) – Numeric (including decimal point)

	Calculated value: Prior day's closing index value – Current Index Value **Note:** This value will be 0 for Start of Day requests.	
High	The highest calculated value for an index during the trading day. **Note:** This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Low	The lowest calculated value for an index during the trading day. **Note:** This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Divisor	Calculated value: Index Market Value / Current Index Value The Divisor is a number that is adjusted periodically (due to component changes and corporate actions) to ensure continuity of an index.	Varchar (53) – Numeric (including decimal point)
Current Index Value	This field reflects the final calculated value for an instrument for the defined trade date. This value may be adjusted for corporate actions from prior days.	Varchar (53) – Numeric (including decimal point)
Index Dividend Point	Calculated value: Index Dividend Market Value / Divisor	Varchar (16) – Numeric (including decimal point)
Index Dividend Market Value	Calculated value: Aggregate dividend market value of all Index Securities	Varchar (53) – Numeric (including decimal)
Base Value	Index Value at inception.	Varchar (12) – Numeric (including decimal point)
Trade Date	Date of the report. YYYY-MM-DD (2011-02-17)	Varchar (10) – Alphanumeric (including special characters)
SOD/EOD	Data contained in the message represents the start-of-day or end-of-day data. Allowable values: • **SOD** – Start-of-day adjusted for overnight corporate actions • **EOD** – End-of-day positions for the given trade data	Varchar (3) – Alphanumeric
Index Symbol	The identifier or ticker symbol representing the index	Varchar (18) – Alphanumeric (including special characters)
Index Name	Index name as defined by the Market of Origin. Due to dependencies on Market	Varchar (100) – Alphanumeric (including special characters)

	of Origin naming protocols and field size limit, index name may be abbreviated.	
Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported using ISO 4217.	Varchar (3) – Alphanumeric
Index Family	**Please Note:** This value is not currently supported and will be implemented in the near future.	Varchar (56)
ISIN	**Please Note:** This value is not currently supported and will be implemented in the near future. International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.	Varchar (12) – Alphanumeric (including special characters)

7.2 Hedged Weighting Service

Web Services will support Hedged files for Nasdaq indexes

Input Format

The service takes in the following parameters:

- **IndexSymbol** – format uses the assigned instrument ID;
- **Date of Weightings File** - format yyyy-mm-dd
- **Type** – format provided as either **PIPE**(|) or **CSV**(,); default is pipe
- **FileType** – values are either 'SOD' (for start of day requests), 'EOD' (for end of day requests) or 'PRO' (for Pro Forma request)

Where XXXXXX = assigned instrument ID, ZZZZ = clients preferred return of data stream (pipe or csv) and WWW= whether the request is Start of Day or End of Day

https://indexes.nasdaqomx.com/reports2/CurrencyHedgeWeighting.ashx?IndexSymbol=XXXX&Date=YYYY-MM-DD&Type=pipe&FileType=EOD

Header		
Data Field	**Description**	**Max Field Size / Attribution**
Header	Hedged Index Symbol Date/ File Type Example: NDXCADH|YYYYMMDD|SOD	Varchar (65) – Alphanumeric
Weightings Content		
Data Field	**Description**	**Max Field Size / Attribution**

Trade Date	Current business day	YYYY/MM/DD
Trade Date Reference	The business day prior the last business day in the previous month.	YYYY/MM/DD
Trade Date Rebalance	The last business day in the previous month.	YYYY/MM/DD
Trade Date Effective	The first business day in the current month which the current weights are used in the calculations.	YYYY/MM/DD
Trade Date Future Reference	The business day prior the last business day in the current month.	YYYY/MM/DD
Trade Date Future Rebalance	The last business day in the current month.	YYYY/MM/DD
Trade Date Future Effective	The first business day in next month which the new weights will be effective in the calculation.	YYYY/MM/DD
Days Left	The number of calendar days from the current day (Trade Date (not counting)) until the last business day in current Month (Trade Date Future Rebalance).	Numeric (10)
Underlying Index Symbol	Unique identifier of the underlying index assigned by its Exchange or other marketplace.	Varchar (18) – Alphanumeric (including special characters)
Hedged Index Symbol	Unique identifier of the hedged index assigned by its Exchange or other marketplace.	Varchar (18) – Alphanumeric (including special characters)
Underlying Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported for the underlying index, using ISO 4217.	Varchar (3) – Alphanumeric
Constituent Currency	Unique constituent currency in the underlying index on current business day (local), using ISO 4217. **Please Note: One (1) row per unique constituent currency.**	Varchar (3) – Alphanumeric
Constituent Currency Future	Unique constituent currency in the underlying index effective on the first business day in next month (Trade Date Future Effective) (local), using ISO 4217. **Please Note: One (1) row per unique constituent currency. The number of records can vary as constituent currencies can be added or removed.** **This field will only be populated (SOD and EOD) on the last business day in current month.**	Varchar (3) – Alphanumeric

No Of Cons	Number of Constituents on current business day by security currency.	Varchar (5) – Numeric
No Of Cons Future	Number of Constituents by constituent currency effective on the first business day in next month (Trade Date Future Effective). **Please Note: This field will only be populated (SOD and EOD) on the last business day in current month.**	Varchar (5) – Numeric
Market Value	Constituent currency Market value on current business day in the underlying index currency. Calculated value: Market Value by constituent currency in underlying index currency.	Varchar (53) – Numeric (including decimal)
Market Value Reference	Constituent currency Market Value in the underlying index currency one business day prior (Trade Date Reference) the last business day (Trade Date Rebalance) in the previous month. This value will be constant from the first business day in the month until close on the last business day in the month). Calculated value: Market Value by constituent currency in underlying index currency which includes all actions effective as of SOD on the first business day in month (Trade Date Effective).	Varchar (53) – Numeric (including decimal)
Market Value Future	Constituent currency Market Value in the underlying index currency one business day prior (Trade Date Future Reference) the last business day (Trade Date Future Rebalance) in current month. Calculated value: Market Value by constituent currency in underlying index	Varchar (53) – Numeric (including decimal)

	currency which includes all actions effective as of SOD on the first business day in next month (Trade Date Future Effective). **Please Note: This field will only be populated (SOD and EOD) on the last business day in current month (Trade Date Future Rebalance).**	
Weight	Constituent currency weight on the current business day by security currency in the underlying index. Calculated Value: Constituent currency market value / Aggregate constituent currencies market value.	Varchar (15) – Numeric (including decimal point)
Weight Reference	Constituent currency weight one business day prior (Trade Date Reference) the last business day in the previous month (Trade Date Reference). Calculated value: Calculated Value: Constituent currency market value / Aggregate constituent currencies market value. **Please Note: This value will be constant from the first business day in the month until close on the last business day in the month).**	Varchar (15) – Numeric (including decimal point)
Weight Future	Constituent currency weight one business day (Trade Date Future Reference) prior the last business day (Trade Date Future Rebalance) in the current month. Calculated value: Calculated Value: Constituent currency market value / Aggregate constituent currencies market value. **Please Note: This field will only be populated (SOD and EOD) on the last business day in current month (Trade Date Future Rebalance).**	Varchar (15) – Numeric (including decimal point)

Hedge Ratio	The currency Hedge Ratio 1 = 100 % by default in the Nasdaq standard indices.	Varchar (5) – Numeric
FX Rate	The spot rate (Underlying Index currency into Constituent currency) on current business day (Trade Date). For SOD files, the spot rate at close on the previous business day,	Varchar (23) – Numeric (including decimal point)
FX Rate Rebalance	The spot rate at the close on the last business day in the previous month (Trade Date Rebalance).	Varchar (23) – Numeric (including decimal point)
FX Rate Reference	The spot rate at the close on the business day (Trade Date Reference) prior the last business day in the previous month (Trade Date Rebalance).	Varchar (23) – Numeric (including decimal point)
Forward Rate	The forward rate (Underlying Index currency into Constituent currency) on current business day. For SOD files, the forward rate at close on the previous business day.	Varchar (23) – Numeric (including decimal point)
Forward Rate Rebalance	The forward rate at the close on the last business day (Trade Date Rebalance) in the previous month.	Varchar (23) – Numeric (including decimal point)
Forward Rate Reference	The forward rate at the close on the business day (Trade Date Reference) prior the last business day in the previous month (Trade Date Rebalance).	Varchar (23) – Numeric (including decimal point)
FIR	The forward interpolated rate (Underlying Index currency into Constituent Currency) on current business day (Trade Date). For SOD files, the FIR will be recalculated from the EOD at the previous business day by taking into the day/days closer to the last business day in the current month.	Varchar (23) – Numeric (including decimal point)
FIR Previous	The forward interpolated rate at close on the previous business day.	Varchar (23) – Numeric (including decimal point)

7.3 Equities Corporate Actions Plus Data Service:

Corporate Actions Plus Data Service is the corporate actions information updated dynamically that is reflected on the Global Index Watch website. The corporate actions service includes the following data element in order to facilitate the global nature of these indexes: SEDOL

Important Note: Clients should use Corporate Actions Unified File Format (CAUFF) via GIW Web Services (API) or GIFFD (SFTP) in combination with corporate actions on the GIW website or the Corporate Actions Plus data service to capture available corporate actions data.

Please Note: SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access. If the user is NOT entitled to receive SEDOLs, the SEDOL field will be blank.

The service takes in the following parameters:

- **IndexSymbol** – format uses the assigned instrument ID;
- **Start Date** - format yyyy-mm-dd
- **EndDate** - format yyyy-mm-dd
- **Type** – format provided as either **PIPE**(|) or **CSV**(,); default is pipe

Where XXXXXX = Index symbol and ZZZZ = clients preferred return of data stream (pipe or csv)

https://indexes.nasdaqomx.com/reports2/corpActionsPlus.ashx?IndexSymbol=XXXXXX&StartDate=YYYY-MM-DD&EndDate=YYYY-MM-DD&Type=ZZZZ

Optional Input Format to return changes since last request

By including an optional input, in place of the start and end dates, the client can receive a return of just the changes since the last client update request (Delta Date).

- **IndexSymbol** – format uses the assigned instrument ID;
- **Delta Date** – format mm/dd/yyyy hh:mm:ss (time represented as 24 hour input)
- **Type** – format provided as either **PIPE**(|) or **CSV** (,); default is pipe

Where XXXXXX = Index symbol; mm/dd/yyyy hh:mm:ss = optional input of date and time of last record (Delta Date) pull and ZZZZ = clients preferred return of data stream (pipe or csv);

https://indexes.nasdaqomx.com/reports2/corpActionsPlus.ashx?IndexSymbol=XXXXXX&StartDate=YYYY-MM-DD&EndDate=YYYY-MM-DD&Type=ZZZZ

The data fields are as follows:

Header		
Data Field	**Description**	**Max Field Size / Attribution**
Parameter	Parameter of the query Example: QQQQ2010-03-12_2010-03-30	Varchar (40) – Alphanumeric (including special characters)
Output Stream		
Data Field	**Description**	**Max Field Length / Attribution**
ID	Assigned ID value in the Nasdaq GIW service	Varchar (9) – Numeric
Effective Date	Date the corporate action will take effect and may include a date later than the current date.	Field Length (8) – Numeric represented as (YYYYMMDD)
Current Symbol	The current identifier or ticker symbol of the index security.	Varchar (18) - Alphanumeric (including special characters)
New Symbol	The new identifier or ticker symbol of the index security.	Varchar (18) - Alphanumeric (including special characters)
Current SEDOL	The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares.	Varchar (12) - Alphanumeric

	Please Note: SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access.	
New SEDOL	The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares. **Please Note:** SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access.	Varchar (12) - Alphanumeric
Current Company Name	The current name of the issuer of the index security.	Varchar (50) - Alphanumeric (including special characters)
New Company Name	The new name of the issuer of the index security.	Varchar (50) - Alphanumeric (including special characters)
Current Index Shares	This field represents the current number of shares for an issue within a given index and is based on the specific index's Calculation Method.	Varchar (53) - Numeric (including decimal point)
New Index Shares	This field represents the new number of shares for an issue within a given index and is based on the specific index's Calculation Method.	Varchar (53) - Numeric (including decimal point)
Reason	This represents the reason for the corporate action. Allowable values currently defined: ○ Addition ○ Adjustment ○ Component Change ○ Deletion ○ Divisor Change ○ Index News ○ Name Change ○ Name and Symbol Change ○ Quarterly ○ Share Change ○ Special Corporate Action ○ Stock Split ○ Stock Dividend ○ Symbol Change ○ Update ○ SEDOL	Variable
Split Ratio	Represents the split ratio to take place on effective date	Variable – Alphanumeric represented as (#:# 0r ##:#) 2:1
Comments	Free form space available for comment	Variable – HTML or plain text
Last update date/time	This field represents the last time that the record was updated.	Varchar (19) - Alphanumeric represented as (MM/dd/yyyy HH:mm:ss)
Deleted Flag	This field represents if a record has been deleted from previous files.	Field Length (1) – Alphanumeric allowable values:

		Empty	consecutive delimiters (,, or ||)	
		Deleted	"D"	

7.4 Equities Corporate Actions Unified File Format (CAUFF) Service:

This service returns CAUFF (Corporate Actions Unified File Format) data, which is an enhanced daily service designed to communicate the treatment of current and future changes in the Nasdaq Equity Indexes in advance of their implementation. The same CAUFF information in a file format is also available via GIFFD (SFTP). While the field content is the same, CAUFF files via SFTP are delivered about half an hour later, and include historical files.

The CAUFF data service provides same-day and advance notification of Corporate Actions, Security Actions and Index actions, which have an impact to a security constituent within an index. Each day, the CAUFF data service will include the current day's actions plus any actions that have been posted in advance for up to 5 business days in the future. Nasdaq provides the advance action information as part of a daily forecast which calculates with best effort the future position of a security weight in the index. Forecast information can change nightly as the actions may occur, and each end of day closing price is used for the next forecast run. In exceptional circumstances, some events may be announced during market hours for the next day implementation. These exceptional circumstances are usually linked to late company disclosure of corporate events or unexpected changes to previously announced corporate events. Announcements made by Nasdaq during market hours will be communicated through the CAUFF data service on the next business day, as long as the Action is scheduled to be effective within the next 5 business days.

Important Note: Clients should use Corporate Actions Unified File Format (CAUFF) via GIW Web Services (API) or GIFFD (SFTP) in combination with corporate actions on the GIW website or the Corporate Actions Plus data service to capture available corporate actions data.

Please Note: SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access. If the user is NOT entitled to receive SEDOLs, the SEDOL field will be blank.

The service takes in the following parameters:

- **IndexSymbol** – format uses the assigned instrument ID;
- **Type** – format provided as either **PIPE**(|) or **CSV** (,); default is pipe

Where XXXXXX = Index symbol and ZZZZ = clients preferred return of data stream (pipe or csv)

Note: There is no date parameter. Users can pull the latest index CAUFF data starting at 12:00 AM ET for the current day until 10:30 PM ET on the same day. In other words, the only time that customers are *not* able to get data is between 10:30 PM and 11:59 AM ET.
Example: NDX CAUFF web services data for January 15, 2021 will be available between 12:00 January 15, 2021 until 10:30 PM ET on the same day. If users pull data before this time, they will receive data for the previous day if available, no data, or incomplete data.

https://indexes.nasdaqomx.com/reports2/CorpActionsUFF.ashx?IndexSymbol=XXXXXX&Type=ZZZZ

The data fields are as follows:

Header		
Data Field	**Description**	**Max Field Size / Attribution**
Parameter	Parameter of the query For example: NDX|2014-01-01 - for the single index report or NQGI|2014-01-01 - for the family report.	Varchar (35) – Alphanumeric (including special characters)
Data Field	**Description**	**Max Field Size / Attribution**
Effective Date	Indicative of when the corporate actions data is applicable. Also known as the "ex-date".	Field Length (8) – Numeric represented as (YYYYMMDD)
Last Modified Date	The date when the last change was made to this record.	Field Length (8) – Numeric represented as (YYYYMMDD)
Original Publication Date	The date the event first appears in the file.	Field Length (8) – Numeric represented as (YYYYMMDD)
Status	States whether the entry is Pending (PE), Completed (CO), Updated (UP) or Cancelled (CX). The action will move to Completed on the day of the ex-date. Table 7.5 –Event Status	Varchar (20) – Alphanumeric
Index Name	Defines the index name that this stock is related to.	Varchar (100) – Alphanumeric (including special characters)
Index Symbol	Defines the index code that this stock is related to.	Varchar (50) – Alphanumeric (including special characters)
Index Marker	1) Index Symbol assigned to the single index report 2) 2) Underlying Index codes associated to the NQGI family report	Varchar (100) – Alphanumeric – (including special characters)

Index Currency	The 3-character ISO currency code for the currency in which the index level data is being reported in.	Varchar (3) – Alphanumeric
Action Type	The Action Type represents the action and information to follow. Allowable values are: Index Action (IA), Corporate Action (CA) and Security Action (SA). Order of priority shown in Table 7.6	Varchar (3) – Alphanumeric
Action	Multiple actions on the same Security with same effective date, the ordering in the file will show the action with highest priority first and ends with the action with lowest priority. Order of priority shown on Table 7.7	Varchar (20) – Alphanumeric
Action Description	The action description - Table 7.7	Varchar (100) – Alphanumeric
Issue Add/Delete	Indicates whether the Constituent was an Addition or a Deletion during the Index Reconstitution.	Varchar (10)
Action ID	Assigned unique action identifier.	Varchar (50) – Alphanumeric
Issue Name	The name of the issue of the index security.	Varchar (50) – Alphanumeric
New Issue Name	The new name of the issue of the index security.	Varchar (50) – Alphanumeric
RIC	The Reuters Instrument Code is a unique identifier. **Please Note:** This field is currently not supported and will be implemented in the near future. Thus, the field is currently in the files but the values may be blank.	Varchar (7) – Alphanumeric
New RIC	The new Reuters Instrument Code is a unique identifier. **Please Note:** This field is currently not supported and will be implemented in the near future. Thus, the field is currently in the files but the values may be blank.	Varchar (7) – Alphanumeric

Bloomberg ID	Identifier assigned by Bloomberg, if available. Otherwise, the field will be blank. **Please Note:** This field is currently not supported and will be implemented in the near future. Thus, the field is currently in the files but the values may be blank.	Varchar (10) – Alphanumeric
New Bloomberg ID	New identifier assigned by Bloomberg, if available. Otherwise, the field will be blank. **Please Note:** This field is currently not supported and will be implemented in the near future. Thus, the field is currently in the files but the values may be blank.	Varchar (10) – Alphanumeric
Valor	Current SIX-TK Financial Valor number The field is currently NULL	(8) – Numeric
New Valor	New SIX-TK Financial Valor number. Should be NULL	(8) – Numeric
CUSIP	Constituent's 9-character CUSIP identifier, provided on a best effort basis.	Varchar (9) – Alphanumeric (including special characters)
New CUSIP	Constituent's new 9-character CUSIP identifier as of the effective date, provided on a best effort basis.	Varchar (9) – Alphanumeric (including special characters)
ISIN	The International Securities Identification Number (ISIN) uniquely identifies an index security. The ISIN code is a 12-character alphanumeric code that serves as a uniform identification code of an index security at trading and settlement. **Please note:** ISIN information is fee liable and is populated as a service for our clients. It is the client's responsibility to have proper approval from ISIN authority prior to use or storage if this data. **Please Note:** This field is currently not supported and will be implemented in the near future. Thus, the field is currently in the files but the values may be blank.	Varchar (12) – Alphanumeric

New ISIN	The new International Securities Identification Number (ISIN), which uniquely identifies an index security, as of the effective date. The ISIN code is a 12-character alphanumeric code that serves as a uniform identification code of an index security at trading and settlement. **Please note:** ISIN information is fee liable and is populated as a service for our clients. It is the client's responsibility to have proper approval from ISIN authority prior to use or storage if this data. **Please Note:** This field is currently not supported and will be implemented in the near future. Thus, the field	Varchar (12) – Alphanumeric
SEDOL	The Stock Exchange Daily Official List (SEDOL) is an identification code issued by the London Stock Exchange to identify stocks, indexes and shares. **Please Note:** SEDOL information is fee liable and is populated for those users entitled by LSE to receive the SEDOL information. It is the customer's responsibility to have proper approval from LSE prior to requesting SEDOL data access.	Varchar (7) – Alphanumeric
New SEDOL	The new Stock Exchange Daily Official List (SEDOL), which is an identification code issued by the London Stock Exchange to identify stocks, indexes and shares. **Please Note:** SEDOL information is fee liable and is populated for those users entitled by LSE to receive the SEDOL information. It is the customer's responsibility to have proper approval from LSE prior to requesting SEDOL data access.	Varchar (7) – Alphanumeric
Issue Symbol	The identifier of the index security assigned by its Exchange or other marketplace.	Varchar (50) – Alphanumeric (including special characters)
New Issue Symbol	The new identifier or ticker symbol of the index Issue.	Varchar (50) – Alphanumeric (including special characters)

Nasdaq Issue ID	The unique identifier assigned by Nasdaq related to the constituent Issue within the index.	Varchar (20) – Numeric
ICB Subsector Code	The four-digit industry classification code that categorizes companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (4) – Numeric
New ICB Subsector Code	The new four-digit industry classification code that categorizes companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (4) – Numeric
Exchange	The exchange from which the Local Closing Price of the index Issue is utilized. Nasdaq supports the ISO 10383.	Varchar (4) – Alphanumeric
New Exchange	The exchange from which the Local Closing Price of the index Issue is utilized. Nasdaq supports the ISO 10383 standard, an ISO standard for "Codes for exchanges and market identification" (MIC): it defines codes for stock markets. This standard is updated frequently and the latest published standard is available at the maintenance organization of ISO 10383.	Varchar (4) – Alphanumeric
Domicile Country Code	Domicile Country Code follows the ISO 3166-1 standard and represents the country of domicile, headquarter or principal executive offices.	Varchar (2) – Alphanumeric
New Domicile Country Code	Domicile Country Code follows the ISO 3166-1 standard and represents the country of domicile, headquarter or principal executive offices.	Varchar (2) – Alphanumeric
Country Of Incorporation Code	Incorporation Country Code follows the ISO 3166-1 standard and represents the country in which the company is incorporated or legally registered.	Varchar (2) – Alphanumeric
New Country Of Incorporation Code	Incorporation Country Code follows the ISO 3166-1 standard and represents the country in which the company is incorporated or legally registered.	Varchar (2) – Alphanumeric

Country Of Listing	Country code is determined by the index calculation methodologies and follows the ISO 3166-1 standard. Country of Listing- represents the country where the component Issue is primarily listed in.	Varchar (2) – Alphanumeric Check
Nasdaq Country Code	NQGI Country Code – follows the ISO 3166-1 standard and is assigned by Nasdaq based on a combination of Country of Domicile, Country of Incorporation and Country of Primary Listing. The detailed info on NQGI country assignment for index securities is available in section 3.2 of the NQGI methodology found here. **Please Note:** The field only applies to securities that are currently members of the NQGI Index Family.	Varchar (2) – Alphanumeric
New Nasdaq Country Code	The new NQGI Country Code follows the ISO 3166-1 standard and is assigned by Nasdaq based on a combination of Country of Domicile, Country of Incorporation and Country of Primary Listing. The detailed info on NQGI country assignment for index securities is available in section 3.2 of NQGI methodology here. **Please Note:** The field only applies to securities that are currently members of the NQGI Index Family.	Varchar (2) – Alphanumeric
Segment	Per the NQGI Index Methodology, Developed or Emerging	Alphanumeric (50)
New Segment	The new segment per the NQGI Index Methodology: Developed or Emerging	Alphanumeric (50)
Region	NQGI EMEA, Eurozone, BRIC, Asia Pacific, North America	Alphanumeric (50)
New Region	NQGI EMEA, Eurozone, BRIC, Asia Pacific, North America	Alphanumeric (50)

Size	Constituent's size. Represents if the stock is a Large, Mid, Small or Mid/Small cap stock within the methodology of the index. It is possible for a stock to be classified differently in one index vs. others. For example classified as Large in index A and classified as Mid in index B.	Varchar (4) – Alphanumeric
New Size	Constituent's New size. Represents if the stock is a Large, Mid, Small or Mid/Small cap stock within the methodology of the index. It is possible for a stock to be classified differently in one index vs. others.	Varchar (4) – Alphanumeric
Currency	Local currency in which the underlying index Issue is traded on its Exchange, using ISO 4217.	Varchar (3) – Alphanumeric
New Currency	New Currency.	Varchar (3) – Alphanumeric
FX Rate	Rate at which the Currency is converted to the Index Currency.	Varchar (23) – Numeric (including decimal point)
TSO	Represents the total shares outstanding for the issue.	Varchar (53) – Numeric (including decimal point)
NEW TSO	New total shares outstanding for the issue.	Varchar (53) – Numeric (including decimal point)
TSI	The total Issuer shares.	Varchar (53) – Numeric (including decimal point)
NEW TSI	New total Issuer shares	Varchar (53) – Numeric (including decimal point)
Index Shares	The number of shares of a security in the index. Based on the specific index's calculation and weighting method.	Varchar (53) – Numeric (including decimal point)
New Index Shares	New Index shares.	Varchar (53) – Numeric (including decimal point)
Free Float Factor	Represents the adjustment applied to the Shares to represent availability and investability of shares to investors.	Varchar (12) – Numeric (including decimal point)

New Free Float Factor	Represents the adjustment applied to the Shares to represent availability and investability of shares to investors.	Varchar (12) – Numeric (including decimal point)
AWF	Additional weight factor (AWF) used for certain index methodologies such as Smart Beta indexes. This field will have value 1 for methodologies not using AWF.	Varchar (25) –Numeric (including decimal point)
NEW AWF	The new Additional Weight Factor (AWF), which is used for certain index methodologies such as Smart Beta indexes. This field will have value 1 for methodologies not using AWF.	Numeric (25) – including decimal point
Correction factor	Price correction factor available for the Nordic equity indexes.	Numeric (25) – including decimal point
New Correction Factor	New Price correction factor available for the Nordic equity indexes.	Numeric (25) – including decimal point
Growth	The growth weight factor associated with the stock, as of the effective date. This factor will always be between 0 and 1 for style indices and 0 or 1 for pure style indices.	Numeric – Max. Length: 38; Max. Precision 14
Value	The value weight factor associated with the stock, as of the effective date. This factor will always be between 0 and 1 for style indices and 0 or 1 for pure style indices.	Numeric – Max. Length: 38; Max. Precision 14
Apply Cash Before Stock Flag	For stock splits with Special or Cash dividends, this field indicates when the cash adjustment will be applied before the stock adjustment.	Varchar (1) – Alphanumeric
Stock Factor QTY	A numeric factor by which a stock distribution will be applied.	Varchar (28) – Numeric (including decimal point)
Subscription Price	Subscription price for the rights offering.	Numeric – Max. Length: 38; Max. Precision 14

Rights Expiration Date	Last day to exercise rights.	Field Length (8) – Numeric represented as (YYYYMMDD)
Price Adjustment Amount	Rights adjusted for previous close used only for special cash dividend.	Varchar (28) – Numeric (including decimal point)
Close Price	Latest available price prior to the effective date used for the Issue at the close of the index (EOD). The price method can vary; for example, Last sale, Last official, Bid, Ask, VWAP, Fixed price can be used.	Varchar (53) – Numeric (including decimal point)
T1 Adjusted Close	Close Price and T1 Adjusted Close would be equal to each other unless there is a corporate action in accordance to the methodology, which would adjust that Closing Price to the different T1 Adjusted Close.	Varchar (53) – Numeric (including decimal point)
Ordinary Dividend Amount	Cash Dividend (Ordinary) Per Share in the Dividend Currency.	Varchar (53) – Numeric (including decimal point)
T1 Cash Adjusted Close	Close Price minus per share cash Dividend. If there is no ordinary cash amount, the field would be equal to the value in field 71.	Varchar (53) – Numeric (including decimal point)
Dividend Currency	The dividend currency code using ISO 4217. The 3-character ISO currency code for the currency the dividend is paid in.	Varchar (3) – Alphanumeric
Issue Dividend Market Value	Dividend amount (gross) as reported, as of the effective date. Dividend amount is converted to the index currency if dividend differs from the index currency.	Varchar (53) – Numeric (including decimal point)
Net Issue Dividend Market Value	Dividend amount (net – after subtracting taxes and franking) as of the effective date. Tax and franking rates used are as of the ex-date. Dividend amount is converted to the index currency if dividend differs from the index currency.	Varchar (53) – Numeric (including decimal point)
Tax Rate	Specific tax rate associated to the index.	Numeric – Max. Length: 38; Max. Precision 14

New Tax Rate	New tax rate.	Numeric – Max. Length: 38; Max. Precision 14
Spin Off Issue Symbol	The identifier or ticker symbol of the index spin off Issue. Provided on a best effort basis.	
Spin off Issue Name	The issue name of the index spin off Issue. Provided on a best effort basis.	
Spin Off Cash Value	Cash value of the spinoff transaction, expressed on a per share basis.	
Spin Off Per Share	Terms	
Comments	Free form space available for comments associated with the action.	Varchar(1000)
ICB Subsector Code 8	The eight-digit industry classification code that categorizes companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (8) – Numeric
New ICB Subsector Code 8	The new eight-digit industry classification code that categorizes companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (8) – Numeric

7.5 CAUFF Events/Status

Status		Description
PE	Pending	First status shown on the CAUFF
CX	Cancelled	When an event is cancelled
UP	Updated	Updated to reflect new value in a pending event
CO	Completed	The day of the effective date

7.6 Action Type

Action Type	
Code	**Description**
CA	Corporate Action
IA	Index Action
SA	Security Action
IM	Index Maintenance Action

7.7 Action Code/Description

Action Type	Action	Action Description	Priority
Security Action	LI	Listing	1
Security Action	DE	Delisting	2
Index Maintenance	CA	IM Constituent Activation based on Security IPOs with	3
Security Action	MM	Market Move (with MIC change)	4
Security Action	MC	Market Class Change (with MIC Change)	5
Security Action	MS	MarketSegment Change	6
Security Action	TC	TSO Change	7
Security Action	FF	FreeFloatFactor Change	8
Security Action	QS	Quote Status Change	9
Security Action	SC	Symbol Change	10
Security Action	NC	Name/CUSIP Change	11
Security Action	BT	BourseId/SEDOL/TradingCurrency Change	12
Security Action	VC	ValorId Change	13
Security Action	IC	ICBSubSector Change	14
Security Action	WW	WhenDistributed/WhenIssued Change	15
Security Action	IT	IssueType/SubIssueType Change	16
Security Action	IS	ISIN Change	17
Security Action	CC	CountryCode Change	18
Security Action	IN	IncorpCountryCode Change	19
Security Action	LIS	Listing of Spot Rate	20
Security Action	DIS	Delisting of Spot Rate	21
CorpAction	XC	Cash Dividend	22
CorpAction	CP	Stock Div. payable in another company	23
CorpAction	CS	Cash and Stock Dividend or Split	24
CorpAction	RS	Reverse Split	25
CorpAction	SO	Spin Off	26
CorpAction	XR	Ex-Rights	27
CorpAction	XS	Stock Dividend or Split	28
CorpAction	XW	Ex-Warrants	29
CorpAction	XX	Any Other Type	30
IndexAction	DA	Delete Action Request	31
IndexAction	AP	AddPopulation	32
IndexAction	MP	ModifyPopulation	33
IndexAction	DP	DeletePopulation	34

IndexAction	AFP	AddFinancialProduct	35
IndexAction	MFP	ModifyFinancialProduct	36
IndexAction	DFP	DeleteFinancialProduct	37
IndexAction	AFPO	AddFinancialProductOutput	38
IndexAction	MFPO	ModifyFinancialProductOutput	39
IndexAction	AWCO	Add WCO	40
IndexAction	MWCO	Modify WCO	41
IndexAction	DFPO	DeleteFinancialProductOutput	42
IndexAction	RRPC	Remove and Replace Population Constituent	43
IndexAction	APC	AddPopulationConstituent	44
IndexAction	DPC	DeletePopulationConstituent	45
IndexAction	API	AddPopulationInclude	46
IndexAction	DPI	DeletePopulationInclude	47
IndexAction	APE	AddPopulationExclude	48
IndexAction	DPE	DeletePopulationExclude	49
IndexAction	ADPC	Add/Delete Population Constituent	50
IndexAction	MPUT	Modify PriceUntilTraded for Constituent	51
IndexAction	MOP	Modify OverridePrice for Constituent	52
IndexAction	MNOS	Modify NumberOfShares for Constituent	53
IndexAction	MTSO	Modify TSO for Constituent	54
IndexAction	MFFF	Modify FreeFloatFactor for Constituent	55
IndexAction	MST	Modify State for Constituent	56
IndexAction	MTAC	Modify T1AdjustedClose for Constituent	57
IndexAction	IWCA	IW Corporate Action	58
IndexAction	RRPI	Remove and Replace Population Constituent by issuer	59
IndexAction	MPR	ModifyPopulationRebuildDate	60
IndexAction	MFPR	ModifyFinancialProductRebuildDate	61
IndexAction	REFP	ReweightFinancialProduct	62
IndexAction	RBFPO	RebaseFinancialProductOutput	63
IndexAction	CFP	Cap Financial Product	64
IndexAction	MDIV	Modify Divisor using SODIndexValue	65
Index Maintenance	RP	IM Reconstitute/Rebuild Population	66
Index Maintenance	RFP	IM Reconstitute/Rebuild Financial Product	67
Index Maintenance	PCFP	IM Perform Capping For Financial Product	68
Security Action	GC	GicCountryCode Change	69
Security Action	SF	Spin Off Security Add	70

IndexAction	MCSC	Market Cap Size Change	71
Index Maintenance	AUTOADPC		72
Security Action	RC	RIC Change	72
Security Action	TI	TSI Change	73
Security Action	LC	Listing Country Change	74
Security Action	BC	Bloomberg Id Change	75
Security Action	MSN	Market Segment Nordic Change	76
Security Action	PD	Pre Delisting request	77
Security Action	FTC	Force TSO	78
Security Action	FTI	Force TSI	79
Security Action	FFF	Force FreeFloat	80
Index Maintenance	RFPA	Reset fixed price action	81
CorpAction	FP	Fixed price action for T-1	82
IndexAction	AMTT	Add Modify Tax Table	83
IndexAction	DTT	Delete Tax Table	84
IndexAction	BUTT	Bulk Upload Tax Table	85
IndexAction	UTT	Upload Tax Table	86
IndexAction	RCFP	Recomposition setting for Financial Product	87
IndexAction	BUFP	Bulk Upload Financial Product for	88
IndexAction	UCRFP	Upload Financial Product for Capping/Recomposition	89
IndexAction	MTSI	Modify TSI for Constituent	90
IndexAction	PDPC	Pre Delete Population constituent	91
IndexAction	MFTSI	Modify Forced TSI for Constituent	92
IndexAction	MFFFF	Modify Forced FreeFloatFactor for Constituent	93
IndexAction	MFTSO	Modify Forced TSO for Constituent	94
IndexAction	SFP	Set Fixed Price Flag	95
IndexAction	MPM	Modify Price Method for Constituent	96
IndexAction	MCVWAP	Modify Closing VWAP for Constituent	97
IndexAction	MCVWIP	Modify Closing VWAP Interval for Constituent	98
IndexAction	MCBP	Modify Closing Bid Price for Constituent	99
IndexAction	MCAP	Modify Closing Ask Price for Constituent	100
IndexAction	BUHD	Bulk Upload HOX Data	101
IndexAction	UHD	Upload HOX Data	102
IndexAction	PHD	Publish HOX Data	103
Security Action	IIC	Issuer ID Change	104
Security Action	INC	Issuer Name Change	105

IndexAction	UNOS	Upload NumberOfShares	106
IndexAction	MCP	Modify Closing Price for Constituent	107
IndexAction	MSCP	Modify Spot Rate Closing Price for Constituent	108
IndexAction	RBRL	Rebalance Roll	109
IndexAction	AFPHRE	Add HRE	110
IndexAction	MFPHRE	Modify HRE	111
IndexAction	UFPHRE	Upload HRE	112
IndexAction	MFPOMF	ModifyOutputMortgageFactor	113
IndexAction	MDF	Modify Disruption Flag	114
IndexAction	URNOS	Upload Roll Number Of Shares	115
IndexAction	UFRS	Upload FutRollSchedule data	116
IndexAction	DFRS	Delete FutRollSchedule data	117
Index Maintenance Action	CD	IM Constituent Delete based on Security SpinOffFlag with Trades	119
Index Maintenance	MCSO	IM MultiCorp action for SpinOffs	120
IndexAction	GISF	Generate Intraday Spin Files for Constituent	121
IndexAction	USBI	Upload NumberOfShares by Index	122
IndexAction	MT1FPE	Modify T1AdjustedClose for ETF Constituent	123
Index Maintenance	AC	IM Index Basket Add Constituent	500
Index Maintenance	DC	IM Index Basket Delete Constituent	501
Index Maintenance	RC	IM Index Basket Recalculate Constituent	502
Index Maintenance	RRC	IM Index Basket Remove Replace Constituent	503
Index Maintenance	CAC	IM Index Basket Cap Constituent	504
Index Maintenance	RFPO	IM Recalculate FP Output	505
Index Maintenance	RCFPO	IM Reconstitute/Rebuild Index Output	506
IndexAction	SPD	Get Security Price Data	507
IndexAction	ITD	Get Index Tick Data	508
IndexAction	HR	Halt Rule	509
IndexAction	VPRL	View Population Rebuild List	510
Index Maintenance	REC	Recompose Constituent	511
IndexAction	UTTF	Upload TSO TSI FF	512
IndexAction	MCCP	Modify Constituent Closing price	605
IndexAction	ADCF	Add/Delete Cash Flow Message	606
IndexAction	ADFI	Add/Delete Fixed Income Quote	607
IndexAction	MHLT	Mass Halt	608

7.8 Equities Index Level History Service:

This service will return to the client data representing the historical daily summary information related to a specific index identified in the web query. This is the standard weightings data service format and unless defined in subsequent sections will be used for the majority of our index families.

Input Format

The service takes in the following parameters:

- **IndexSymbol** – format uses the assigned instrument ID;
- **Start Date** - format yyyy-mm-dd
- **EndDate** - format yyyy-mm-dd
- **Type** – format provided as either **PIPE**(|) or **CSV** (,); default is pipe
- **FileType** – values are either 'SOD' (for start of day requests) or 'EOD' (for end of day requests)

Where XXXXXX = Index symbol,ZZZZ = clients preferred return of data stream (pipe or csv) and WWW= whether the request is Start of Day or End of Day. Example: https://indexes.nasdaqomx.com/reports2/history.ashx?IndexSymbol=XXXXXX&StartDate=YYYY-MM-DD&EndDate=YYYY-MM-DD&Type=ZZZZ&FileType=WWW

Header		
Data Field	**Description**	**Max Field Size / Attribution**
Parameter	Parameter of the query Example: QQQQ2010-03-12_2010-03-30|EOD	Varchar (40) – Alphanumeric (including special characters)
Output Stream		
Data Field	**Description**	**Max Field Size / Attribution**
Trade Date	Represents the trade date for the index	Field Length (8) – Numeric represented as (YYYYMMDD)
Index Value	This field reflects the final calculated value for an instrument for the defined trade date. This value may be adjusted for corporate actions from prior days.	Varchar (12) - Numeric (including decimal point)
Net Change	This field reflects the difference between the current tick value and the prior day's closing tick value for a given instrument. Note: This value will be 0 for Start of Day requests.	Varchar (12) - Numeric (including decimal point)
High	This field reflects the highest calculated value for an instrument during the business day. Note: This value will be 0 for Start of Day requests.	Varchar (12) - Numeric (including decimal point)
Low	This field reflects the lowest calculated value for an instrument during the business day. Note: This value will be 0 for Start of Day requests.	Varchar (12) - Numeric (including decimal point)
Total Index Shares	Represents the summation of the index shares of all component securities within the index.	Varchar (53) – Numeric (including decimal)
Total Market Value	This field reflects the closing Market Value at the end of day trade reporting for the instrument identified in the message.	Varchar (53) - Numeric (including decimal)
Divisor	The Divisor is a number that is adjusted periodically (due to component changes and corporate actions)	Varchar (53) - Numeric (including decimal)

	to ensure continuity of an index. This value is used in the index calculations.	
Index Dividend Point	Index Dividend Point = Dividend Market Value/Divisor	Varchar (9) – Numeric 9
Dividend Market Value	Represents the summation of all index securities dividend market values Dividend Market Value = Cash dividend * index shares per security	Varchar (19) - Numeric
Base Value	Index Value at inception (as adjusted)	Varchar (12) - Numeric (including decimal point)

7.9 Hedged Index Level History Service

Input Format

The service takes in the following parameters:

- **IndexSymbol** – format uses the assigned instrument ID;
- **Start Date** - format yyyy-mm-dd
- **EndDate** - format yyyy-mm-dd
- **Type** – format provided as either **PIPE**(|) or **CSV** (,); default is pipe
- **FileType** – values are either 'SOD' (for start of day requests) or 'EOD' (for end of day requests)

Where XXXXXX = Index symbol,ZZZZ = clients preferred return of data stream (pipe or csv) and WWW= whether the request is Start of Day or End of Day. Example:

https://indexes.nasdaqomx.com/reports2/CurrencyHedgehistory.ashx?IndexSymbol=XXXXXX&Start Date=YYYY-MM-DD&EndDate=YYYY-MM-DD&Type=ZZZZ&FileType=WWW

Footer		
Data Field	**Description**	**Max Field Size / Attribution**
Trade Date	Current business day	YYYY/MM/DD
Trade Date Reference	The business day prior the last business day in the previous month.	YYYY/MM/DD
Trade Date Rebalance	The last business day in the previous month.	YYYY/MM/DD
Trade Date Effective	The first business day in the current month which the current weights are used in the calculations.	YYYY/MM/DD
Trade Date Future Reference	The business day prior the last business day in the current month.	YYYY/MM/DD
Trade Date Future Rebalance	The last business day in the current month.	YYYY/MM/DD
Trade Date Future Effective	The first business day in next month which the new weights will be effective in the calculation.	YYYY/MM/DD
Underlying Index Symbol	The identifier or ticker symbol representing the underlying index	Varchar (18) – Alphanumeric (including special characters)

Hedged Index Symbol	The identifier or ticker symbol representing the Hedged index	Varchar (18) – Alphanumeric (including special characters)
Underlying Index Name	Index name representing the underlying index as defined by the Market of Origin. Due to dependencies on Market of Origin naming protocols and field size limit, index name may be abbreviated.	Varchar (100) – Alphanumeric (including special characters)
Hedged Index Name	Index name representing the Hedged Index as defined by the Market of Origin. Due to dependencies on Market of Origin naming protocols and field size limit, index name may be abbreviated.	Varchar (100) – Alphanumeric (including special characters)
SOD/EOD	Data contained in the message represents the start-of-day or end-of-day data. Allowable values: SOD – Start-of-day adjusted for overnight corporate actions EOD – End-of-day positions for the given trade data	Varchar (3) – Alphanumeric
Underlying Index Type	Price Return = PR Total return = TR Gross Return = GR Net Return = NR	Varchar (3) – Alphanumeric
Underlying Index Value	The index value on current business day (Trade Date) for the underlying index. Calculated value: Index Market Value / Divisor	Varchar (20) – Numeric (including decimal point)
Underlying Index Value Rebalance	The Index value for the underlying index at the close on the last business day in the previous month (Trade Date Rebalance). Calculated value: Index Market Value / Divisor	Varchar (20) – Numeric (including decimal point)
Underlying Index Reference	The Index value for the underlying index at the close one day prior (Trade Date Reference) the last business day in the previous month (Trade Date Rebalance). Calculated value: Index Market Value / Divisor	Varchar (20) – Numeric (including decimal point)
Hedged Index Value	The Index value for the hedged index on current business day (Trade Date) Calculated value: Hedged Index Value (Trade Date Rebalance) * ((Underlying Index Value	Varchar (20) – Numeric (including decimal point)

	(Trade Date) / Underlying Index Value (Trade Date Rebalance) + Hedge Impact %))	
Hedged Index Value Rebalance	The Index value for the hedged index at the close on the last business day in the previous month (Trade Date Rebalance). Calculated value: Hedged Index Value (Trade Date Rebalance) * ((Underlying Index Value (Trade Date) / Underlying Index Value (Trade Date Rebalance) + Hedge Impact %))	Varchar (20) – Numeric (including decimal point)
Hedged Index Value Reference	The Index value for the hedged index at the close one day prior (Trade Date Reference) the last business day in the previous month (Trade Date Rebalance). Calculated value: Hedged Index Value (Trade Date Rebalance) * ((Underlying Index Value (Trade Date) / Underlying Index Value (Trade Date Rebalance) + Hedge Impact %))	Varchar (20) – Numeric (including decimal point)
Underlying Net Change	Represents the difference between the current tick value and the prior day's closing tick value for a given index. Calculated value: Current Index Value - Prior day's closing index value Please Note: This value will be 0 for Start of Day requests.	Varchar (12) – Numeric (including decimal point)
Hedged Net Change	Represents the difference between the current tick value and the prior day's closing tick value for a given index. Calculated value: Prior day's closing index value – Current Index Value - Prior day's closing index value Please Note: This value will be 0 for Start of Day requests.	Varchar (12) – Numeric (including decimal point)
Underlying High	The highest calculated value for the underlying index during the trading day.	Varchar (53) – Numeric (including decimal point)

	Please Note: This value will be 0 for Start of Day requests.	
Hedged High	The highest calculated value for the hedged index during the trading day. Please Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Underlying Low	The lowest calculated value for the underlying index during the trading day. Please Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Hedged Low	The lowest calculated value for the hedged index during the trading day. Please Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Underlying Index Market Value	Aggregate Market Value of all Index Securities on current business day (Trade Date) in the underlying index currency.	Varchar (53) – Numeric (including decimal)
Underlying Index Market Value Reference	Aggregate Market Value of all Index Securities one day prior (Trade Date Reference) the last business day in the previous month. (Trade Date Rebalance) in the underlying index currency.	Varchar (53) – Numeric (including decimal)
Underlying Index Market Value Future	Aggregate Market Value in the underlying index currency one business day prior (Trade Date Future Reference) the last business day (Trade Date Future Rebalance) in current month. Calculated value: Aggregate Market Value by all constituent currency in underlying index currency which includes all actions effective as of SOD on the first business day in next month (Trade Date Future Effective). Please Note: This field will only be populated (SOD and EOD) on the last business day in current month (Trade Date Future Rebalance).	Varchar (53) – Numeric (including decimal)
Adjustment Factor	Adjustment factor value used in the calculation of the Hedge Impact	Varchar (15) – Numeric (including decimal point)

	calculation for Monthly or Daily Hedged Index.	Ipub field
Hedge Impact %	Hedge impact value used in the calculation for Monthly and Daily Hedged index value. Note the differences in the calculation of an Hedge Impact % value depending either an Monthly or Daily Hedged index.	Varchar (15) – Numeric (including decimal point) Ipub field
Underlying Index Total Shares	Calculated value: Aggregate Index Shares of all Index Securities	Varchar (53) – Numeric (including decimal)
Underlying Index Weight	Represents the summation of the market percentage of all constituents within the underlying index.	Varchar (15) – Numeric (including decimal point)
Underlying Index No Of Cons	Represents the summation of the Number of Constituents within the underlying index.	Varchar (5) – Numeric
Underlying Index Divisor	Underlying index divisor. Calculated value: Index Market Value / Current Index Value The Divisor is a number that is adjusted periodically (due to component changes and corporate actions) to ensure continuity of an index.	Numeric (38) – Numeric (including decimal point)
Underlying Index Dividend Point	Underlying index dividend point. Calculated value: Index Dividend Market Value / Divisor	Varchar (16) – Numeric (including decimal point)
Underlying Index Dividend Market Value	Underlying index dividend market value in the underlying index currency. Calculated value: Aggregate dividend market value of all Index Securities	Varchar (53) – Numeric (including decimal)
Underlying Index Dividend Yield	Running Yield of an index Please Note: This value is not currently supported and will be implemented in the near future.	Numeric (25) including decimal point
Underlying Index Base Value	Underlying Index Value at inception (base date).	Varchar (12) – Numeric (including decimal point)

Underlying Index Base Date	Underlying index base date.	YYYY/MM/DD
Underlying Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported using ISO 4217.	Varchar (3) – Alphanumeric
Index Family	Family key provided to combine and help filter for Brand+ Series+ Strategy + Asset Type	Varchar (53)
Region	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Segment	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Size	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Underlying Index ISIN	Please Note: This value is not currently supported and will be implemented in the near future. International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.	Varchar (12) – Alphanumeric (including special characters)
Hedged ISIN	Please Note: This value is not currently supported and will be implemented in the near future. International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.	Varchar (12) – Alphanumeric (including special characters)
Underlying Index Bloomberg ID	Identifier assigned by Bloomberg. Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (20) – Numeric
Hedged Bloomberg ID	Identifier assigned by Bloomberg. Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (20) – Numeric

Underlying Index RIC Code	Reuters Unique Code Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Hedged RIC Code	Reuters Unique Code Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha

8 Fixed Income Data Services

8.1 Fixed Income Weightings Data Service

This service will return to the client a data stream representing the weightings and component information related to the specific fixed income indexes identified in the web query.

Input Format

The service takes in the following parameters:

- **IndexSymbol** – format uses the assigned instrument ID;
- **Date of Weightings File** - format yyyy-mm-dd
- **Type** – format provided as either **PIPE**(|) or **CSV**(,); default is pipe
- **FileType** – values are either 'SOD' (for start of day requests) or 'EOD' (for end of day requests)

Where XXXXXX = Index symbol, ZZZZ = clients preferred return of data stream (pipe or csv) and WWW= whether the request is Start of Day or End of Day

https://indexes.nasdaqomx.com/reports2/FIMAweighting.ashx?IndexSymbol=XXXXXX&Date=YYYY-MM-DD&Type=ZZZZ&FileType=WWW

Header			
Data Field	**Description**	**Max Field Size / Attribution**	**Notes**
Parameter	Parameter of the query Example: QQQQ2010-03-12|EOD Example: QQQQ2010-03-12|SOD Example: QQQQ2010-03-12|PRO	Varchar (40) – Alphanumeric (including special characters)	
File Type	Indicates the report type requested. Allowable values are: • 'EOD' – End of Day • 'SOD' –Start of Day • 'PRO' – Pro Forma	Varchar (3) – Alphanumeric	
Weightings Content			
Data Field	**Description**	**Max Field Size / Attribution**	**Notes**
Symbol	The identifier or ticker symbol of the index security.	Varchar (18) – Alphanumeric	

		(including special characters)	
ISIN	ISIN for the security. ISIN is an unambiguous international identification of assets in accordance with ISO Standard 6166. ISIN stands for International Securities Identification Number.	Varchar(12) – Alphanumeric	Blank for certain securities
CUSIP	CUSIP for the security. CUSIP is a unique nine-character alphanumeric code appearing on the face of each stock or bond certificate that is assigned to a security by Standard & Poor's Corporation. CUSIP numbers are the property of the American Bankers Association (ABA) and are administered by Standard & Poor's. Please Note: CUSIP information is fee liable and is populated as a service for our clients. It is the client's responsibility to have proper approval from CUSIP authority prior to use or storage if this data.	Varchar(9) – Alphanumeric	Blank for certain securities
Issue Name	The name of the issue of the index security.	Varchar (100) – Alphanumeric (including special characters)	
Country	Country code is variable and is determined by the index calculation methodologies follows the ISO 3166-1 standard. Nasdaq may use one of the following country code classifications: Country of Domicile - represents the country of domicile. Country of Incorporation - identifies the country in which the company is incorporated or legally registered.	Varchar (2) – Alpha	Will not be supported for the NOMXCR index family
Exchange	The exchange from which the Local Closing Price of the index security is utilized. Nasdaq will support the ISO 10383 standard (MIC), an ISO standard specifies a universal method of identifying exchanges, trading platforms and regulated or nonregulated markets as sources of prices and related information in order to facilitate automated processing. This standard is updated frequently and the latest published standard is available at the maintenance organization of ISO 10383.	Varchar (4) – Alphanumeric	Blank for certain securities
Coupon Adjustment	Coupon rate populated and used in the security and Index market value calculation when coupon adjustment is	Varchar(20) – Numeric (including decimal point)	Divide by 100

	applied in accordance with the index methodology. For OMRX on the day when coupon fall and is adjusted in index by adding the coupon to the market cap calculation. For Credit SEK indexes by adding coupon payment rate from the day when coupon fall until the last day in current month. If no coupon adjustment applied then the field is populated as blank.		
Bonds in Index	Number of index shares for the constituent within the index	Varchar(53) – Numeric(including decimal point)	
Previous Bonds in Index	Previous Number of index shares for the constituent within the index	Varchar(53) – Numeric(including decimal point)	
Yield to Maturity	Constituent yield to maturity expressed in annual terms. This is the interest rate used in discounting all of the future cash flows of a bond to arrive at its current price.	Varchar(20) – Numeric (including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes
Previous Yield to Maturity	Previous Day's Constituent yield to maturity expressed in annual terms.	Varchar(20) – Numeric (including decimal point	This value will only be supported for LaddeRite and BulletShares Indexes
Yield	Constituent Yield. Coupon rate divided by the current price of the bond Value populated for NOMXCR spread indexes in Yield field is the Valuation Spread value.	Varchar(20) – Numeric (including decimal point and special characters)	Not populated for floaters in NOMXCR
Previous Yield	Previous Days Constituent Yield. Value populated for NOMXCR spread indexes in Yield field is the Valuation Spread value.	Varchar(20) – Numeric (including decimal point and special characters)	Not populated for floaters in NOMXCR
Dirty Price	Constituent Yield corresponding gross price (clean price + accrued interest).	Varchar(18) – Numeric (including decimal point)	Price divided by 100
Previous Dirty Price	Start of day Constituent Yield corresponding gross price (clean price + accrued interest).	Varchar(18) – Numeric (including decimal point)	Price divided by 100
Clean Price	Constituent Yield corresponding clean price.	Varchar(18) – Numeric (including decimal point.	Price divided by 100
Previous Clean Price	Previous days Constituent Yield corresponding clean price.	Varchar(18) – (including decimal point)	Price divided by 100
Accrued Interest	Constituent Accrued Interest.	Varchar(20) – Numeric (including	

<table>
<tr><td></td><td></td><td>decimal point and special characters)</td><td></td></tr>
<tr><td>Duration</td><td>Constituent duration value calculated as Macaulay's duration.</td><td>Varchar(20) – Numeric (including decimal point)</td><td></td></tr>
<tr><td>Mod. Duration</td><td>Constituent modified duration value.</td><td>Varchar(20) – Numeric (including decimal point)</td><td></td></tr>
<tr><td>Convexity</td><td>Constituent convexity value.</td><td>Varchar(20) – Numeric (including decimal point)</td><td></td></tr>
<tr><td>Price Risk</td><td>Constituent price risk measure which can be defined as the number of percent a bond will lose when the yield rise one percent.</td><td>Varchar(20) – Numeric. (including decimal point)</td><td></td></tr>
<tr><td>Market Cap</td><td>Constituent market capitalization.</td><td>Varchar(53) – Numeric (including decimal point)</td><td></td></tr>
<tr><td>Previous Market Cap</td><td>Previous days Constituent market capitalization.</td><td>Varchar(53) – Numeric. (including decimal point)</td><td></td></tr>
<tr><td>Weight In Index</td><td>Constituent weight.</td><td>Varchar (15) – Numeric (including decimal point)</td><td></td></tr>
<tr><td>Industry Sector</td><td>Tiered Industry Sector Classification (always Government in this index).</td><td>Varchar(50) – Alphanumeric (including special characters)</td><td>This value is not currently supported and will be implemented in the near future.</td></tr>
<tr><td>Industry Group</td><td>Tiered Industry Group Classification (always Federal in this index).</td><td>Varchar(50) – Alphanumeric (including special characters)</td><td>This value is not currently supported and will be implemented in the near future.</td></tr>
<tr><td>Industry Sub Group</td><td>Tiered Industry Sub Group Classification.</td><td>Varchar(50) – Alphanumeric (including special characters)</td><td>This value is not currently supported and will be implemented in the near future.</td></tr>
<tr><td>Day Count</td><td>Day count convention used in calculating accrued interest and present value.

<table><tr><th>Code</th><th>Description</th><th>Notes</th></tr><tr><td>1</td><td>Act/Act</td><td></td></tr><tr><td>2</td><td>Act/365</td><td></td></tr><tr><td>3</td><td>Act/360</td><td></td></tr><tr><td>4</td><td>30/360</td><td>US</td></tr><tr><td>5</td><td>30/360</td><td>European</td></tr></table></td><td>Varchar(20) – Alphanumeric (including special characters)</td><td>Blank for NOMXCR</td></tr>
</table>

	6 ACT_PRE 7 TBILL1 8 TBILL2 9 30/365		
Coupon Frequency	Number of coupon payments per year. Propose values 1 = annual, 2 = semi-annual, 4 =Quarterly.	Varchar (1) – Numeric	Blank for NOMXCR
Coupon Rate	Coupon interest rate stated at the bond at issue.	Varchar(20) – Numeric (including decimal point	Blank for NOMXCR.
Coupon Amount	Current coupon amount. Annual Coupon rate divided by Frequency	Varchar(20) – Numeric (including decimal point	Divided by 100 Blank for NOMXCR
Coupon Type	Type of coupon payment (floating, fixed, zero, etc)		This value is not currently supported and will be implemented in the near future
Inflation Index Factor	Inflation index adjustment factor applied to coupon for inflation linked bonds	Varchar(20) – Numeric (including decimal point and special characters)	This value is not currently supported and will be implemented in the near future.
Maturity Date	Date the bond will be redeemed by issuer if it is not called before (if applicable term for the security).	Varchar (10) – YYYYMMDD - Alphanumeric (including special characters)	Blank for NOMXCR
Rating	Average of vendor ratings.		This value will only be supported for LaddeRite and BulletShares Indexes
Yield to Worst	Yield to worst for the underlying constituent.	Varchar(20) – Numeric(including decimal point and special character)	This value will only be supported for LaddeRite and BulletShares Indexes
Effective Duration	Effective Duration for the underlying constituent.	Varchar(20) – Numeric(including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes
Duration to Worst	Duration to Worst for the underlying constituent.	Varchar(20) – Numeric(including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes

Bonds Outstanding	Bonds issued and outstanding on the bond (adjusted for strips, QE programs, and Fed holdings) Should be Bond TSO, Not Available.	Varchar(53) – Numeric	This value is not currently supported and will be implemented in the near future.
Previous Bonds Outstanding	Previous Days Constituent Nominal Amount.	Varchar(53) – Numeric	This value is not currently supported and will be implemented in the near future
Nasdaq Issue ID	The Unique identifier assigned by Nasdaq related to the constituent Issue within the index.	VARCHAR (20) – Numeric	Internal Nasdaq ID subject to change
Footer			
Data Field	**Description**	**Max Field Size / Attribution**	**Notes**
Trade Date	Date of the report. YYYY-MM-DD (2011-02-17)	Varchar (10) – Alphanumeric (including special characters)	
Index Symbol	The identifier or ticker symbol representing the index.	Varchar (18) – Alphanumeric (including special characters)	
Index Name	Index Name.	Varchar (100) – Alphanumeric (including special characters)	
Index Currency	The currency in which the Index Market Value is reported using ISO 4217.	Varchar (3) – Alphanumeric	
Index Value	This field reflects the final calculated value for a price level index for the defined trade date. Field will be blank for SOD and PRO file types.	Varchar(53) – Numeric (including decimal point)	
High	The highest calculated value for an index during the trading day. Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)	
Low	The lowest calculated value for an index during the trading day. Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)	
Previous Index Value	This field reflects the previous days final calculated value for an index for the defined trade date.	Varchar(53) – Numeric (including decimal point)	
Divisor	Divisor for the Index, expressed in index base currency. The Divisor is a number that is adjusted periodically (due to component changes and corporate actions) to ensure continuity of an index. Field will be blank for SOD reports.	Varchar(53) – Numeric (including-decimal point)	

Previous Divisor	Previous Day's Divisor.	Varchar(53) Numeric(including decimal point)	
Index Market Value	Index market value for the current day. Field will be blank in SOD reports	Varchar(53) – Numeric	
Previous Index Market Value	Previous day's Index market value.	Varchar(53) – Numeric)	
Accrued Income	Aggregate of accrued interest across all index holdings.	Varchar(53) – Numeric	This value will only be supported for LaddeRite and BulletShares Indexes
Index Yield	Weighted average yield for the index.	Varchar(20) – Numeric (including decimal point and special characters)	
Index Previous Yield	Previous day's weighted average yield for the index.	Varchar(20) – Numeric (including decimal point and special characters)	
Index Weighted Avg Price	Weighted average price of index components.	Varchar(20) – Numeric(including decimal point)	This value is not currently supported and will be implemented in the near future.
Index Coupon	Weighted average coupon for the index.	Varchar(20) – Numeric (including decimal point))	Blank for NOMX CR
Index Yield to Maturity	Weighted average yield-to-maturity for index.	Varchar(20) – Numeric (including decimal point))	This value will only be supported for LaddeRite, Ryan and BulletShares Indexes
Index Yield to Worst	Weighted average yield-to-worst for index	Varchar(20) – Numeric (including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes
Index Price Risk	Weighted average Price Risk for the index.	Varchar(20) – Numeric (including decimal point)	
Index Duration	Weighted average duration value calculated as Macaulay's duration for the index.	Varchar(20) – Numeric (including decimal point))	
Index Mod. Duration	Weighted average modified duration value calculated as Modified duration for the index.	Varchar(20) – Numeric	

		(including decimal point)	
Index Duration to Worst	Weighted average duration to worst for index.	Varchar(20) – Numeric (including decimal point))	This value will only be supported for Ladderite and BulletShares Indexes
Index Effective Duration	Weighted average effective duration for index.	Varchar(20) – Numeric (including decimal point))	This value will only be supported for LaddeRite and BulletShares Indexes
Index Convexity	Weighted average Convexity for the index.	Varchar(20) – Numeric(including decimal point))	
Total Bonds In Index	Sum of Bonds in Index.	Varchar(53) – Numeric	
Previous Total Bonds In Index	Previous Sum of Bonds in Index.	Varchar(53) – Numeric	
Index Par Shares	The total number of shares of bonds (excluding the US Treasury constituent) within the index.	Varchar(20) – Numeric(including decimal point))	This value will only be supported for LaddeRite and BulletShares Indexes
Average Index Maturity	The average maturity of constituents within the index, expressed in numerical decimal format.	Varchar(20) – Numeric(including decimal point))	This value will only be supported for Ladderite, Ryan and BulletShares Indexes
Index Term to Maturity	Market Value Weighted Years to Maturity (Effective Maturity).	Varchar(20) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
Industry Sector	Tiered Industry Sector Classification.	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
Industry Group	Tiered Industry Group Classification. In the case of US Treasury Fixed Income indexes, this value will always be “Federal”.	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
No. of Constituents	Accumulated number of active Security Constituents for the Index.	Varchar(6) – Numeric	
Constituents Added	Number of constituents added since previous day.	Varchar(6) – Numeric	
Constituents Removed	Number of constituents removed since previous day.	Varchar(6) – Numeric	

Weight of ten largest components	Sum of index weights of the top ten largest components (by index weight).	Varchar (15) – Numeric (including decimal point and special character)	This value will only be supported for Ladderite and BulletShares Indexes
ISIN	ISIN for index. ISIN is an unambiguous international identification of assets in accordance with ISO Standard 6166. ISIN stands for International Securities Identification Number.	Varchar(12) – Alphanumeric	Blank for certain Indexes
Rating	Index Rating	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes

8.2 Fixed Income Events Service:

This service will return to the client a stream representing the corporate action (event) information related to the specific fixed income index identified in the web query. This service will also allow the client to enter a future date and if an advance event exists the stream will include this data with the effective date populated.

Input Format

The service takes in the following parameters:

- **IndexSymbol** – format uses the assigned instrument ID;
- **Start Date** - format yyyy-mm-dd
- **EndDate** - format yyyy-mm-dd
- **Type** – format provided as either pipe(|) or csv(,); default is pipe

Where XXXXXX = Index symbol and ZZZZ = clients preferred return of data stream (pipe or csv)

https://indexes.nasdaqomx.com/reports2/corpActionsPlus.ashx?IndexSymbol=XXXXXX&StartDate=YYYY-MM-DD&EndDate=YYYY-MM-DD&Type=ZZZZ

Optional Input Format to return changes since last request

By including an optional input, in place of the start and end dates, the client can receive a return of just the changes since the last client update request (Delta Date).

- **IndexSymbol** – format uses the assigned instrument ID;
- **Delta Date** – format mm/dd/yyyy hh:mm:ss (time represented as 24 hour input)
- **Type** – format provided as either **PIPE**(|) or **CSV**(,); default is pipe

Where XXXXXX = Index symbol; mm/dd/yyyy hh:mm:ss = optional input of date and time of last record (Delta Date) pull and ZZZZ = clients preferred return of data stream (pipe or csv);

https://indexes.nasdaqomx.com/reports2/corpActionsPlus.ashx?IndexSymbol=XXXXXX&StartDate=YYYY-MM-DD&EndDate=YYYY-MM-DD&Type=ZZZZ

Header

Data Field	Description	Max Field Size / Attribution
Parameter	Parameter of the query Example: QQQQ2010-03-12_2010-03-30	Varchar (40) – Alphanumeric (including special characters)
Output Stream		
Data Field	**Description**	**Max Field Length / Attribution**
ID	Assigned ID value in the Nasdaq GIW service	Varchar (9) - Numeric
Effective Date	Date the corporate action will take effect and may include a date later than the current date.	Field Length (8) – Numeric represented as (YYYYMMDD)
Current Symbol	The current identifier or ticker symbol of the index security.	Varchar (18) - Alphanumeric (including special characters)
New Symbol	The new identifier or ticker symbol of the index security.	Varchar (18) - Alphanumeric (including special characters)
Current SEDOL	The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares. **Please Note:** SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access.	Varchar (12) - Alphanumeric
New SEDOL	The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares. **Please Note:** SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access.	Varchar (12) - Alphanumeric
Current Company Name	The current name of the issuer of the index security.	Varchar (50) - Alphanumeric (including special characters)
New Company Name	The new name of the issuer of the index security.	Varchar (50) - Alphanumeric (including special characters)
Current Index Shares	This field represents the current number of shares for an issue within a given index and is based on the specific index's Calculation Method.	Varchar (53) - Numeric (including decimal point)
New Index Shares	This field represents the new number of shares for an issue within a given index and is based on the specific index's Calculation Method.	Varchar (53) - Numeric (including decimal point)
Reason	This represents the reason for the corporate action. Allowable values currently defined: ○ Addition ○ Adjustment ○ Component Change ○ Deletion ○ Divisor Change ○ Index News ○ Name Change	Variable

	○ Name and Symbol Change ○ Quarterly ○ Share Change ○ Special Corporate Action ○ Stock Split ○ Stock Dividend ○ Symbol Change ○ Update	
Split Ratio	Represents the split ratio to take place on effective date	Variable – Alphanumeric represented as (#:# 0r ##:#) 2:1
Comments	Free form space available for comment	Variable
Last update date/time	This field represents the last time that the record was updated.	Varchar (18) - Alphanumeric represented as (MM/dd/yyyy HH:mm:ss)
Deleted Flag	This field represents if a record has been deleted from previous files.	Field Length (1) – Alphanumeric allowable values: Empty: consecutive delimiters (,, or ||) Deleted: "D"

8.3 Fixed Income Index Level History Service:

This service will return to the client data representing the historical daily summary information related to a specific fixed income indexes identified in the web query.

Input Format

The service takes in the following parameters:

- IndexSymbol – format uses the assigned instrument ID;
- Start Date - format yyyy-mm-dd
- EndDate - format yyyy-mm-dd
- Type – format provided as either **PIPE**(|) or **CSV**(,); default is pipe
- FileType – values are either 'SOD' (for start of day requests) or 'EOD' (for end of day requests)

Where XXXXXX = Index symbol,ZZZZ = clients preferred return of data stream (pipe or csv) and WWW= whether the request is Start of Day or End of Day. Example: https://indexes.nasdaqomx.com/reports2/FIMAHistory.ashx?indexsymbol=XXXXXXX&startdate= YYYY-MM-DD&enddate= YYYY-MM-DD &FileType=EOD

Header			
Data Field	**Description**	**Max Field Size / Attribution**	**Notes**
Parameter	Parameter of the query Example: QQQQ2010-03-12_2011-03-12|EOD	Varchar (40) – Alphanumeric (including special characters)	
File Type	Indicates the report type requested. Allowable values are: 'EOD' – End of Day 'SOD' – Start of Day	Varchar (3) – Alphanumeric	
Output Stream			
Trade Date	Date of the report. YYYY-MM-DD (2011-02-17)	Varchar (10) – Alphanumeric (including special characters)	

Index Symbol	The identifier or ticker symbol representing the index.	Varchar (18) – Alphanumeric (including special characters)	
Index Name	Index Name.	Varchar (100) – Alphanumeric (including special characters)	
Index Currency	The currency in which the Index Market Value is reported using ISO 4217.	Varchar (3) – Alphanumeric	
Index Value	This field reflects the final calculated value for a price level index for the defined trade date. Field will be blank for SOD and PRO file types.	Varchar(53) – Numeric (including decimal point)	
High	The highest calculated value for an index during the trading day. Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)	
Low	The lowest calculated value for an index during the trading day. Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)	
Divisor	Divisor for the Index, expressed in index base currency. The Divisor is a number that is adjusted periodically (due to component changes and corporate actions) to ensure continuity of an index. Field will be blank for SOD reports.	Varchar(53) – Numeric (including-decimal point)	
Index Market Value	Index market value for the current day. Field will be blank in SOD reports	Varchar(53) –Numeric	
Accrued Income	Aggregate of accrued interest across all index holdings.	Varchar(53) – Numeric	This value will only be supported for LaddeRite and BulletShares Indexes
Index Yield	Weighted average yield for the index.	Varchar(20) – Numeric (including decimal point and special characters)	
Index Weighted Avg Price	Weighted average price of index components.	Varchar(20) – Numeric(including decimal point)	This value is not currently supported and will be implemented in the near future.
Index Coupon	Weighted average coupon for the index.	Varchar(20) –Numeric (including decimal point))	Blank for NOMX CR
Index Yield to Maturity	Weighted average yield-to-maturity for index.	Varchar(20) – Numeric (including decimal point))	This value will only be supported for LaddeRite, Ryan and BulletShares Indexes

Index Yield to Worst	Weighted average yield-to-worst for index	Varchar(20) –Numeric (including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes
Index Price Risk	Weighted average Price Risk for the index.	Varchar(20) – Numeric (including decimal point)	
Index Duration	Weighted average duration value calculated as Macaulay's duration for the index.	Varchar(20) –Numeric (including decimal point))	
Index Mod. Duration	Weighted average modified duration value calculated as Modified duration for the index.	Varchar(20) – Numeric (including decimal point)	
Index Duration to Worst	Weighted average duration to worst for index.	Varchar(20) –Numeric (including decimal point))	This value will only be supported for Ladderite and BulletShares Indexes
Index Effective Duration	Weighted average effective duration for index.	Varchar(20) –Numeric (including decimal point))	This value will only be supported for LaddeRite and BulletShares Indexes
Index Convexity	Weighted average Convexity for the index.	Varchar(20) – Numeric(including decimal point))	
Total Bonds In Index	Sum of Bonds in Index.	Varchar(53) – Numeric	
Index Par Shares	The total number of shares of bonds (excluding the US Treasury constituent) within the index.	Varchar(20) – Numeric(including decimal point))	This value will only be supported for LaddeRite and BulletShares Indexes
Average Index Maturity	The average maturity of constituents within the index, expressed in numerical decimal format.	Varchar(20) – Numeric(including decimal point))	This value will only be supported for Ladderite, Ryan and BulletShares Indexes
Index Term to Maturity	Market Value Weighted Years to Maturity (Effective Maturity).	Varchar(20) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
Industry Sector	Tiered Industry Sector Classification.	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
Industry Group	Tiered Industry Group Classification. In the case of US Treasury Fixed Income indexes, this value will always be “Federal”.	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
No. of Constituents	Accumulated number of active Security Constituents for the Index.	Varchar(6) – Numeric	
Weight of ten largest components	Sum of index weights of the top ten largest components (by index weight).	Varchar (15) – Numeric (including decimal point and special character)	This value will only be supported for Ladderite and BulletShares Indexes
ISIN	ISIN for index. ISIN is an unambiguous international identification of assets in accordance with ISO	Varchar(12) – Alphanumeric	Blank for certain Indexes

	Standard 6166. ISIN stands for International Securities Identification Number.		
Rating	Index Rating	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes

9 Support

- For inquiries regarding Nasdaq Index products, please contact Nasdaq Index Services.

Appendix A
Documentation Revision Control Log

April 13, 2009 – GIW WebService Version 0.10 (DRAFT)
- Released initial product specification, in draft format, to a few developers for comment.

May 15, 2009 – GIW WebService Version 1.0 (Final)
- Released initial product specification

March 2010 – GIW WebService Version 2.0
- Revised Weightings and History Data Service to include Start of Day and End of Day files
- Modified Authentication Protocol to conform with industry standards

April 2010 – GIW WebService Version 2.0
- Revised format of Parameter field in History Data Service
- Revised History Data Service to include Total Index Shares
- Revised Corporate Actions Data Service to include the parameter of the query call
- Revised format of As Of field in Weightings Data Service

October 2010 – GIW WebService Version 2.1
- Added enhanced version of Weightings and Corporate Actions web services: Weighting PLUS and Corporate Actions PLUS
- Added new Fixed Income web services: Weighting, Events and History web services

February 2011 – GIW WebService Version 2.2
- Added New Unified File Format for Weightings Data Service

October 2011 – GIW WebService Version 2.3
- Added new U.S. Treasury Fixed Income web services: Weighting and History web services.

January 2012 - GIW WebService Version 2.3
- Corrected date format throughout document from YYYYDDMM to YYYYMMDD where appropriate.

March 2012 - GIW WebService Version 2.3a
- Modified document to reflect the retirement of Weightings and Weightings Plus services.

- Minor documentation change to reflect the correct byte size related to Index Family field in UFF. This is not currently supported and will be implemented at a future date.

Index Family	**Please Note:** This value is not currently supported and will be implemented in the near future.	Varchar (56)

April 2012 - GIW WebService Version 2.4

- Modified document to reflect the addition of a Unified File Format for Commodity based indexes related to the weighting services.

June 2012 - GIW WebService Version 2.5

- Modified document to reflect the affected retirement of the Weightings Plus service.
- Revised the retirement date for legacy weightings service to July 2012.

June 2012 - GIW WebService Version 2.6

- Minor documentation change to reflect the correct definition for "Current Index Value" within the document.

Current Index Value	This field reflects the final calculated value for an instrument for the defined trade date. This value may be adjusted for corporate actions from prior days.	Varchar (53) – Numeric (including decimal point)

March 2013 - GIW WebService Version 3.0

- Modified document throughout to reflect the currently supported services.

September 2013 - GIW WebService Version 3.0a

- Modified Section 3 Architecture.

November 2013 - GIW WebService Version 3.0b

- Modified Equity UFF to support ProForma files. Add 'PRO' as a type option.

October 2015

- Modified section 6 to include 6.2 Hedged Weighting and 6.5 Hedged History

April 2016 – GIW WebsService Version 3.0c

- Modified Equity 7.1 Fixed Income Weightings Data Service
- Modified Equity 7.3 Fixed Income Index Level History Service

May 2019 – GIW WebsService Version 3.0d

- Added new field ICB Subsector Code to Equity-based indexes Weightings Service

April 2021 – GIW Web Services Version 3.1

- Added section 7.4 - Corporate Actions Unified File Format (CAUFF) Data Service

June 2021 – GIW Web Services Version 3.2

- Added the parameters, link, and clarification on timing on Section 7.4 – Corporate Actions Unified File Format (CAUFF) Data Service
- Clarified that the Corporate Actions Plus Data Service Comments field can include HTML or plain text

- Added an important note: Clients should use Corporate Actions Unified File Format (CAUFF) via GIW Web Services (API) or GIFFD (SFTP) in combination with corporate actions on the GIW website or the Corporate Actions Plus data service to capture available corporate actions data.

March 2023 – GIW Web Services Version 3.3

- Updated the sample call code using CURL and Python code on the Architecture section
- Updated timing for GIC-USFI
- Removed the Commodities section after terminating the commodities index family

July 2023 – GIW Web Services Version 3.4

- Added the new feature: Daily Pro Forma “DPRO” on the Equity Weightings section