Nasdaq Global Index FlexFile Delivery (GIFFD)

SFTP Delivery Service

Technical Specification Version 3.1

February 2025

Contents

1 *Overview*

Global Index FlexFile Delivery (GIFFD)

The Nasdaq Global Index FlexFile Delivery (GIFFD) is a flexible and efficient delivery service for index components and weights, advance corporate action and extensive additional data for Nasdaq indexes. This premium service provides access to new products with more comprehensive data fields within the files. It also allows clients to customize their daily index files available upon request through an easy-to-download SFTP platform.

GIFFD provides

- ✓ More daily reports than GIW
- ✓ More efficient delivery
- ✓ New products with superior content
  - Unified File Format (UFF) Weighting (EOD, SOD and Pro forma)
  - Comprehensive Corporate Action file (Advance Notification)
- ✓ Buildable custom and standard product formats available upon request
- ✓ Consolidated index values within one file by entitlement

2 Access to the GIFFD Service

New clients seeking access to the GIFFD service can reach out to IndexServices@nasdaq.com.
The full list of indexes is available via the Index Directory. Select the relevant Index Family on the right-hand side to filter. To search for a specific index, enter the index ticker or index name in the search box at the top right and click on the suggested index in the drop-down.

2.1 GIFFD Log In (Manual Browser Access only)

To log into GIFFD, go to: https://ftp.indexes.nasdaqomx.com
To request login information, reach out to IndexServices@nasdaq.com.
The username and password will be emailed directly to the user.
Please Note: The Manual Browser Access is intended to serve individual, ad-hoc queries as opposed to bulk downloads. For automated or bulk downloads, please use the below:

2.2 GIFFD - SFTP Folder Structure

Host: sftp://ftp.indexes.nasdaqomx.com
Username: <enter username>
Password: <enter password>
Port: 22

2.3 GIFFD - SFTP Folder Structure

- Year (YYYY)
- Month Day (MMDD)
- TOKENID
- File Type

For example: ftp.indexes.nasdaqomx.com/#/username/YYYY/MMDD/TOKENID/filetype/

2.4 GIFFD – File Name Structure

- Date: YYYYMMDD
- Product Symbol: Index Symbol, Token ID or Custom Name
- File Code: Refer to the Description column on section 4 – Products Available
- Report Type: Start of Day (SOD) or End of Day (EOD)
- Version: Starts at 01 and the number will increase if the file is restated

File structure example: YYYYMMDD_ProductSymbol_FileCodeReportType_Version.txt

File name example: 20200721_IW03_WSOD_02.txt

2.5 GIFFD Security Enhancements

In 2024, Nasdaq implemented additional security enhancements. Clients must provide an IP address range to IndexServices@nasdaq.com. Nasdaq must whitelist the address range for clients to access GIFFD files.

3 Delivery Times

Index file delivery is grouped by Datasets and file types, specifically Start of Day (SOD) and End of Day (EOD) files.

Each index is calculated and produced on a Dataset. A full list of indexes and their Datasets can be found and downloaded from the Nasdaq Index Directory. To filter through a specific Index Family, click on the desired Index Family option on the right hand side of the webpage. Then, click "Export All" to export into Excel and search for the index needed. This will show the corresponding Dataset the index falls into. This Dataset can be cross-referenced against the table below to obtain information regarding the approximate delivery time.

Example: An index with a Dataset of "GIC-AE" will have End of Day (EOD) files delivered at 1:30 PM US EST and Start of Day (SOD) files delivered at 5:30 PM US EST. Note that all Corporate Action (CAUFF) and Pro forma Files (PRO) are delivered at 12:30 AM US EST regardless of the index Dataset.

3.1 Delivery Timetable

Global Index FlexFile Delivery (GIFFD) SFTP		
Index Delivery Times by Dataset		
Dataset	End of Day (EOD) US Eastern Time	Start of Day (SOD) US Eastern Time
GIC-AE	1:30 PM	5:30 PM
GIC-AUS	2:30 AM	9:15 AM
GIC-BAL	10:00 AM	8:00 PM
GIC-DK	11:30 AM	8:00 PM
GIC-HOX	1:45 PM	8:00 PM
GIC-NFI	11:00 AM	1:45 AM
GIC-NOR	12:15 PM	8:00 PM
GIC-SEBFI	1:45 PM	8:00 PM
GIC-SE-OMXN	12:00 PM	8:00 PM
GIC-SNAP	10:30 AM	8:00 PM
GIC-US	7:00 PM	11:00 PM
GIC-USFI	5:00 PM	2:30 AM
SandP	8:45 PM	10:30 PM
Corporate Action (CAUFF) and Pro forma Files (PRO) are delivered at 12:30 AM US Eastern Time		

4 *Products available*

- **Equity Indexes**

File Code	Description	File Name Structure
***WEIGHT* Folder**		
WSOD	Start of Day Weighting	YYYYMMDD_ProductSymbol_WSOD_Version.txt
WEOD	End of Day Weighting	YYYYMMDD_ProductSymbol_WEOD_Version.txt
***HISTORY* Folder**		
HSOD	Start of Day History	YYYYMMDD_ProductSymbol_HSOD_Version.txt
HEOD	End of Day History	YYYYMMDD_ProductSymbol_HEOD_Version.txt
***VALUATION* Folder**		
VSOD	Start of Day Values	YYYYMMDD_ProductSymbol_VSOD_Version.txt
VEOD	End of Day Values	YYYYMMDD_ProductSymbol_VEOD_Version.txt
***HEDGEWEIGHT* Folder**		
WCHSOD	Start of Day Currency-Hedged Weighting	YYYYMMDD_ProductSymbol_WCHSOD_Version.txt
WCHEOD	End of Day Currency-Hedged Weighting	YYYYMMDD_ProductSymbol_WCHEOD_Version.txt
***HEDGEHISTORY* Folder**		
HCHSOD	Start of Day Currency-Hedged History	YYYYMMDD_ProductSymbol_HCHSOD_Version.txt
HCHEOD	End of Day Currency-Hedged History	YYYYMMDD_ProductSymbol_HCHEOD_Version.txt
***HEDGEVALUATION* Folder**		
VCHSOD	Start of Day Currency-Hedged Values	YYYYMMDD_ProductSymbol_VCHSOD_Version.txt
VCHEOD	End of Day Currency-Hedged Values	YYYYMMDD_ProductSymbol_VCHEOD_Version.txt
***CAUFF* Folder**		
CAUFF	T+5 Corporate Actions	YYYYMMDD_ProductSymbol_CAUFF_Version.txt
***PROFORMA* Folder**		
PRO	Pro Forma (only published for select Indexes in accordance with each index's rebalance/reconstitution schedule)	YYYYMMDD_ProductSymbol_PRO_Version.txt
***DPROFORMA* Folder**		
DPRO	Daily Pro Forma (only published for select Indexes)	YYYYMMDD_ProductSymbol_DPRO_Version.txt

- **Fixed Income Indexes**

File Code	Description	File Name Structure
***FIWEIGHT* Folder**		
WFISOD	Fixed Income Start of Day Weighting	YYYYMMDD_ProductSymbol_WFISOD_Version.txt
WFIEOD	Fixed Income End of Day Weighting	YYYYMMDD_ProductSymbol_WFIEOD_Version.txt
***FIWEIGHT2* Folder**		
WFI2SOD	Fixed Income 2 Start of Day Weighting	YYYYMMDD_ProductSymbol_WFI2SOD_Version.txt
WFI2EOD	Fixed Income 2 End of Day Weighting	YYYYMMDD_ProductSymbol_WFI2EOD_Version.txt
***FIHISTORY* Folder**		
HFISOD	Fixed Income Start of Day History	YYYYMMDD_ProductSymbol_HFISOD_Version.txt
HFIEOD	Fixed Income End of Day History	YYYYMMDD_ProductSymbol_HFIEOD_Version.txt
***FIVALUATION* Folder**		
VFISOD	Fixed Income Start of Day Valuation	YYYYMMDD_ProductSymbol_VFISOD_Version.txt
VFIEOD	Fixed Income End of Day Valuation	YYYYMMDD_ProductSymbol_VFIEOD_Version.txt
***FIVALUATION2* Folder**		
VFI2SOD	Fixed Income Start of Day Valuation 2	YYYYMMDD_ProductSymbol_VFI2SOD_Version.txt
VFI2EOD	Fixed Income End of Day Valuation 2	YYYYMMDD_ProductSymbol_VFI2EOD_Version.txt
***FIPROFORMA* Folder**		
PROFI	Fixed Income Pro Forma (only published for select Indexes in accordance with each index's rebalance/reconstitution schedule)	YYYYMMDD_ProductSymbol_PROFI_Version.txt

5 *Restatements and Reissues*

A file format of 01.txt represents the first version of a file. If there is a reissue or restatement, additional file versions will be created and the version will be stated in the file name, such as ending with 02.txt or 03.txt. The SFTP directory will store all versions of the restated files, resulting in full transparency on any files delivered to the SFTP site, which can be fully audited.

***Important Note**:* The latest file version should be retrieved.

For example: 2nd version = 02.txt; 3rd version = 03.txt (latest).

6 *Output Format*

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

7 *Product Specification – Field Definitions*

7.1 Unified File Format (UFF) Weighting Data

- **Start of Day Equity Weighting**
  YYYYMMDD_ProductSymbol_**WSOD**_Version.txt

- **End of Day Equity Weighting**
  YYYYMMDD_ ProductSymbol_**WEOD**_Version.txt

Field Definitions:

Header		
Data Field	**Description**	**Max Field Size / Attribution**
Header	Product Symbol | Date | File Type For example: NDX|YYYYMMDD|SOD	Varchar (65) – 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 price 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
Index Weight	Calculated Value: Market Value / Index Market Value	Varchar (15) – Numeric (including decimal
Company Name	The name of the issuer of the index security.	Varchar (100) – Alphanumeric (including special characters)
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	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 "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
Bloomberg Exchange	Blank – awaiting license.	Varchar (18) – Alphanumeric
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 to the index currency.	Varchar (23) – Numeric (including decimal point)
Free Float Factor	The adjustment applied to the total shares to represent availability of shares to investors.	Varchar (12) – Numeric including decimal point
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
Incorporation Country Code	Incorporation Country Code follows the ISO 3166-1 standard and represents the country in which the company is incorporated or legally registered.	Varchar (5) – Alphanumeric
NQGI Country Code	The Nasdaq Global Index Family (NQGI) Country Code follows the ISO 3166-1 standard and is assigned by Nasdaq based on the combination of Country of Domicile, Country of Incorporation and Country of Primary Listing. The detailed information regarding NQGI country classification for index securities is available in section 3.2 of NQGI methodology. The methodology can be accessed here. **Please Note:** The field only applies to securities that are currently members of the NQGI Index Family.	Varchar (5) – Alphanumeric
Region	Per the NQGI methodology: North America, Latin America, Asia Pacific (APAC), Europe and Middle East Africa. **Please Note:** The field only applies to securities that are currently members of the NQGI Index Family.	Varchar (25) – Alphanumeric
Segment	Per the NQGI index Methodology: Developed or Emerging markets. **Please Note:** This field is only populated for NQGI indexes and NQGI components methodology.	Varchar (25) – Alphanumeric
Size	Large, Mid or Small size classification as defined in the NQGI Methodology based on market capitalization.	Varchar (25) – Alphanumeric
Industry Code	A 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

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 the Standard & Poor's Corporation.	Varchar (9) – Alphanumeric (including special characters)
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 (20) – Numeric
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.	Varchar (12) – Alphanumeric (including special characters)
RIC Code	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 (25) – Alphanumeric
Nasdaq Issue ID	The unique identifier assigned by Nasdaq related to the constituent Issue within the index.	Varchar (20) – Numeric
Security Shares	Number of shares representing an index security prior to any capping or float adjustment, in accordance to each index methodology. **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 (53) – Numeric

TSO	Represents the total shares outstanding (TSO) for the issue. **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 (53) –Numeric (including decimal point)
TSI	The total Issuer shares. **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 (53) – Numeric (including decimal point)
Capping Factor	Adjustment factor for capped indexes. **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 (53) – Numeric (including decimal point)
AWF Factor	Additional weight factor (AWF) used for certain index methodologies such as Smart Beta indexes. **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.	Numeric (25) – including decimal point
CORR-FACTOR (Taken from OMX Files)	Taken from OMX file.	Numeric (25) – including decimal point
Security Dividend Market Value	Represents the index securities dividend market values. Dividend Market Value = Cash dividend * index shares per security. **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 (53) – Numeric (including decimal)
Dividend Yield	The dividend-price ratio calculated by dividing the dividend per share by the price of the share. **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.	Numeric (25) – including decimal point

Growth	The growth weight factor. **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.	Numeric (25) – including decimal point
Value	The value weight factor. **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.	Numeric (25) – including decimal point
Valor	Unique to SixTk NULL when Blank	Varchar(20) – Alphanumeric (including special characters)
NON-STD-INDEX-PRICE-TYPE	Indicates if there is a price type other than the standard price for this index that is used specifically for this constituent in this index.	Varchar (25) – Alphanumeric
ICB Subsector Code	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

- **Pro forma (Rebalance or Reconstitution) Equity Weighting**
  YYYYMMDD_ProductSymbol_**PRO**_Version.txt

Header		
Data Field	**Description**	**Max Field Size / Attribution**
Header	Index Symbol | Date | File Type For example: NDX|YYYYMMDD|SOD	Varchar (65) – Alphanumeric (including special characters)
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 price 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 (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 (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 "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
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 to 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.	Varchar (12) – Numeric including decimal point
Country	Country code is variable and is determined by the index calculation methodologies follow the ISO 3166-1 standard. Nasdaq may use one of the following country code classifications: Country of Domicile - represents the country of domicile headquartered or principal executive offices. Country of Incorporation - identifies the country in which the company is incorporated or legally registered. 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

Industry Code	A 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
Index Symbol	The identifier or ticker symbol representing the index.	Varchar (18) – Alphanumeric (including special
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 of this data.	Varchar (9) – Alphanumeric (including special characters)
Third-Party Assigned ID	**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 (20)– Numeric
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.	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	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

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. Calculated value: Prior day's closing index value – Current Index Value **Please Note:** This value will be 0 for Start of Day files.	Varchar (53) – Numeric (including decimal point)
High	The highest calculated value for an index during the trading day. **Please Note:** This value will be 0 for Start of Day files.	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 is adjusted for corporate actions from prior days, if applicable.	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 of Origin naming protocols and field size limit, the index name may be abbreviated.	Varchar (100) – Alphanumeric (including special characters)
Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported in using ISO 4217.	Varchar (3) – Alphanumeric
Index Family	**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 (56)
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 (including special characters)

- **Start of Day Currency Hedged Equity Weighting**
  YYYYMMDD_ProductSymbol_**WCHSOD**_Version.txt
- **End of Day Currency Hedged Equity Weighting**
  YYYYMMDD_ProductSymbol_**WCHEOD**_Version.txt

Field Definitions:

Header		
Data Field	**Description**	**Max Field Size / Attribution**
Header	Product Symbol | Date | File Type For example: NDX|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 to 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 for 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, not counting the current day (Trade Date) 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:** There is 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 of next month (Trade Date Future Effective) using ISO 4217. **Please Note:** There is 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 in the SOD and EOD files.	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 the next month (Trade Date Future Effective).	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 the current 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 the current 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 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)
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: Constituent currency market value / Aggregate constituent currencies market value.	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: Constituent currency market value / Aggregate constituent currencies market value. **Please Note:** This field will only be populated in the SOD and EOD files on the last business day in the 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 is the 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 the 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 the current business day (Trade Date). For SOD files, the FIR will be recalculated from the EOD price at the previous business day by taking into account 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)

7.2 Unified File Format (UFF) Index Values Data

- **Start of Day Index Values**
  YYYYMMDD_ProductSymbol_**VSOD**_Version.txt

- **End of Day Index Values**
  YYYYMMDD_ProductSymbol_**VEOD**_Version.txt

- **End of Day Historical Index Values**
  YYYYMMDD_ProductSymbol_**HEOD**_Version.txt

Data Field	Description	Max Field Size / Attribution
Trade Date	YYYY/MM/DD	Numeric (10)
Product 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 of Origin naming protocols and field size limit, the 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 are: • **SOD –** Start-of-day adjusted for overnight corporate actions • **EOD –** End-of-day positions for the given trade data	Varchar (3) – Alphanumeric
Index Type	There are three versions of index calculation: Price Return (PR), Total Return (TR) and Notional Net Total Return (NR). PR indexes only take into account the underlying securities' prices; TR indexes include dividends; NR indexes include dividends minus a 30% hypothetical tax rate.	Varchar (3) – Alphanumeric
Current Index Value	Calculated value: Index Market Value / Divisor	Varchar (20) – 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. Calculated value: Current Index Value - Prior day's closing index value – **Note:** This value will be 0 in the Start of Day files.	Varchar (12) – Numeric (including decimal point)
High	The highest calculated value for an index during the trading day. **Note:** This value will be 0 in the Start of Day files.	Varchar (53) – Numeric (including decimal point)
Low	The lowest calculated value for an index during the trading day. **Note:** This value will be 0 in the Start of Day files.	Varchar (53) – Numeric (including decimal point)
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)
No Of Cons	Number of Constituents within the index.	Varchar (5) – Numeric
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)

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)
Dividend Yield	The dividend-price ratio calculated by dividing the dividend per share by the price of the share. **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.	Numeric (25) including decimal point
Base Value	Index Value at inception.	Varchar (12) – Numeric (including
Base Date	The Index inception date (YYYY/MM/DD)	Numeric (10)
Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported in using ISO 4217.	Varchar (3) – Alphanumeric
Index Family	**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 (53)
Region	**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 (25) – Alpha
Segment	**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 (25) – Alpha
Size	**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 (25) – Alpha

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 (including special characters)
Bloomberg ID	Identifier assigned by Bloomberg. **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 (20) – Numeric
RIC Code	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 (25) – Alpha

- **Start of Day Currency Hedged Index Values**
  YYYYMMDD_ProductSymbol_**VCHSOD**_Version.txt

- **End of Day Currency Hedged Index Values**
  YYYYMMDD_ProductSymbol_**VCHEOD**_Version.txt

- **Start of Day Historical Currency Hedged Index Values**
  YYYYMMDD_ProductSymbol_**HCHSOD**_Version.txt

- **End of Day Historical Currency Hedged Index Values**
  YYYYMMDD_ProductSymbol_**HCHEOD**_Version.txt

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 the 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
Hedged Index Symbol	The identifier or ticker symbol representing the Hedged index.	Varchar (18) – Alphanumeric (including special
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, the 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, the 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 data adjusted for overnight corporate actions • **EOD** – End-of-day positions for the given trade data	Varchar (3) – Alphanumeric

Underlying Index Type	There are three versions of index calculation: Price Return (PR), Total Return (TR) and Notional Net Total Return (NR). PR indexes only take into account the underlying securities' prices; TR indexes include dividends; NR indexes include dividends minus a 30% hypothetical tax rate.	Varchar (3) – Alphanumeric
Underlying Index Value	The index value on the 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 end-of-day 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 end-of day 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 the current business day (Trade Date) 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 Rebalance	The Index value for the hedged index at the end-of-day 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 end-of-day 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 end-of-day tick value for a given index. Calculated value: Current Index Value - Prior day's closing index value **Please Note:** This value will be 0 in the Start of Day files.	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 in the Start of Day files.	Varchar (12) – Numeric (including decimal point)
Underlying High	The highest calculated value for the underlying index during the trading day. **Please Note:** This value will be 0 in the Start of Day files.	Varchar (53) – Numeric (including decimal point)
Hedged High	The highest calculated value for the hedged index during the trading day. **Please Note:** This value will be 0 in the Start of Day files.	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 in the Start of Day files.	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 in the Start of Day files.	Varchar (53) – Numeric (including decimal point)
Underlying Index Market Value	Aggregate Market Value of all Index Securities on the 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 the current month. Calculated value: Aggregate Market Value by all constituent currency in the underlying index currency which includes all actions effective as of SOD on the first business day in the next month (Trade Date Future Effective). **Please Note:** This field will only be populated in the SOD and EOD files on the last business day in the current month (Trade Date Future Rebalance).	Varchar (53) – Numeric (including decimal)
Adjustment Factor	Adjustment factor value used in the calculation of the Hedge Impact calculation for Monthly or Daily Hedged Index.	Varchar (15) – Numeric (including decimal point)

Hedge Impact %	Hedge impact value used in the calculation for Monthly and Daily Hedged index value. Note the differences in the calculation of the Hedge Impact % value depend on either a Monthly or Daily Hedged index.	Varchar (15) – Numeric (including decimal point)
Underlying Index Total Shares	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 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.	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 in using ISO 4217.	Varchar (3) – Alphanumeric
Index Family	Family key provided to combine and help filter for Brand, Series, Strategy or Asset Type.	Varchar (53)
Region	**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 (25) – Alpha
Segment	**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 (25) – Alpha
Size	**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 (25) – Alpha
Underlying Index 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 (including special characters)

Hedged 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 (including special characters)
Underlying Index Bloomberg ID	Identifier assigned by Bloomberg. **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 (20) – Numeric
Hedged Bloomberg ID	Identifier assigned by Bloomberg. **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 (20) – Numeric
Underlying Index RIC Code	The Reuters Instrument Code is a unique identifier code. **Please Note:** This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Hedged RIC Code	The Reuters Instrument Code is a unique identifier code. **Please Note:** This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha

8 *Fixed Income Files*

6.1 Fixed Income Weighting Files

- **Start of Day Weighting**
  YYYYMMDD_ProductSymbol_**WFISOD**_Version.txt

- **End of Day Weighting**
  YYYYMMDD_ProductSymbol_**WFIEOD**_Version.txt

The Fixed Income Weighting files are only intended for indexes and custom products, not for token-level entitlement summary files since these do not include a column for the Index Symbol. For token-level weighting files, please refer to the Fixed Income Weighting 2 Entitlement Summary files in the following section

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	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.	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 the Standard & Poor's Corporation. CUSIP numbers are the property of the American Bankers Association (ABA) and are administered by the 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 of 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 applied in accordance with the index methodology. For OMRX on the day when the coupon is paid and is adjusted in the 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 the current month. If no coupon adjustment is applied, the field is populated as blank.	Varchar(20) – Numeric (including decimal point)	

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 and populated for NOMXCR spread indexes in the 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 the 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 to the gross price (clean price + accrued interest).	Varchar(18) – Numeric (including decimal point)	Divided by 100
Previous Dirty Price	Start of day Constituent Yield corresponding to the gross price (clean price + accrued interest).	Varchar(18) – Numeric (including decimal point)	Divided by 100
Clean Price	Constituent Yield corresponding to the clean price.	Varchar(18) – Numeric (including decimal point.	Divided by 100
Previous Clean Price	Previous day's Constituent Yield corresponding to the clean price.	Varchar(18) – (including decimal point)	Divided by 100

Accrued Interest	Constituent Accrued Interest.	Varchar(20) – Numeric (including decimal point and special characters)	
Duration	Constituent duration value calculated as Macaulay's duration.	Varchar(20) – Numeric (including decimal point)	
Mod. Duration	Constituent modified duration value.	Varchar(20) – Numeric (including decimal point)	
Convexity	Constituent convexity value.	Varchar(20) – Numeric (including decimal point)	
Price Risk	Constituent price risk measure which can be defined as the number of percent a bond will lose when the yield rise one percent.	Varchar(20) – Numeric. (including decimal point)	
Market Cap	Constituent market capitalization.	Varchar(53) – Numeric (including decimal point)	
Previous Market Cap	Previous day's Constituent market capitalization.	Varchar(53) – Numeric. (including decimal point)	
Weight In Index	Constituent weight.	Varchar (15) – Numeric (including decimal point)	
Industry Sector	Tiered Industry Sector Classification (always Government in this index).	Varchar(50) – Alphanumeric (including special characters)	This value is not currently supported and will be implemented in the near future.
Industry Group	Tiered Industry Group Classification (always Federal in this index).	Varchar(50) – Alphanumeric (including special characters)	This value is not currently supported and will be implemented in the near future.

<table>
<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.</td><td>Varchar(20) – Alphanumeric (including special characters)</td><td>Blank for NOMXCR</td></tr>
<tr><td></td><td>
<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>
<tr><td>6</td><td>ACT_PR E</td><td></td></tr>
<tr><td>7</td><td>TBILL1</td><td></td></tr>
<tr><td>8</td><td>TBILL2</td><td></td></tr>
<tr><td>9</td><td>30/365</td><td></td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>Coupon Freque-ncy</td><td>Number of coupon payments per year. Propose values 1 = annual, 2 = semi-annual, 3 = quarterly.</td><td>Varchar (1) – Numeric</td><td>Blank for NOMXCR</td></tr>
<tr><td>Coupon Rate</td><td>Coupon interest rate stated for the bond at issue.</td><td>Varchar(20) – Numeric (including decimal point</td><td>Blank for NOMXCR.</td></tr>
<tr><td>Coupon Amount</td><td>Current coupon amount. Annual Coupon rate divided by Frequency.</td><td>Varchar(20) – Numeric (including decimal point</td><td>Blank for NOMXCR</td></tr>
</table>

Coupon Type	Type of coupon payment A - Fixed B - Zero Coupon C - Payment-in-Kind (PIK) D - Stepped E - Floating F - Interest-at-Maturity G - Stepped Payment-in- Kind H - Variable Payment-in- Kind I - Stepped Interest-at- Maturity J - Variable Interest-at- Maturity K - Credit Sensitive L - Short-Term Discount Rate M - Fixed rate of interest based on index-linked principal value N - Other situation		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 exists 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).	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 future
Nasdaq Issue ID	The Unique identifier assigned by Nasdaq related to the constituent Issue within the index.	Varchar (20) – Numeric	Internal Nasdaq ID and can be subject to change

6.2 Fixed Income Weighting 2 Entitlement Summary Files

- **Start of Day Weighting**
  YYYYMMDD_TOKENID_**WFI2SOD**_Version.txt

- **End of Day Weighting**
  YYYYMMDD_TOKENID_**WFI2EOD**_Version.txt

Fixed Income Weighting 2 Entitlement Summary files are offered at the token level only. These files include all the fields in the Fixed Income Weighting files above in section 6.1, along with eight (8) additional fields at the end of the files. These additional fields include the Index Symbol, which is necessary to process token-level summary files. All fields are included below.

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	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.	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 the Standard & Poor's Corporation. CUSIP numbers are the property of the American Bankers Association (ABA) and are administered by the 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 of 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 applied in accordance with the index methodology. For OMRX on the day when the coupon is paid and is adjusted in the 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 the current month. If no coupon adjustment is applied, the field is populated as blank.	Varchar(20) – Numeric (including decimal point)	

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
Yield	Constituent Yield. Coupon rate divided by the current price of the bond value and populated for NOMXCR spread indexes in the 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 the 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 to the gross price (clean price + accrued interest).	Varchar(18) – Numeric (including decimal point)	Divided by 100
Previous Dirty Price	Start of day Constituent Yield corresponding to the gross price (clean price + accrued interest).	Varchar(18) – Numeric (including decimal point)	Divided by 100
Clean Price	Constituent Yield corresponding to the clean price.	Varchar(18) – Numeric (including decimal point.	Divided by 100
Previous Clean Price	Previous day's Constituent Yield corresponding to the clean price.	Varchar(18) – (including decimal point)	Divided by 100

Accrued Interest	Constituent Accrued Interest.	Varchar(20) – Numeric (including decimal point and special characters)	
Duration	Constituent duration value calculated as Macaulay's duration.	Varchar(20) – Numeric (including decimal point)	
Mod. Duration	Constituent modified duration value.	Varchar(20) – Numeric (including decimal point)	
Convexity	Constituent convexity value.	Varchar(20) – Numeric (including decimal point)	
Price Risk	Constituent price risk measure which can be defined as the number of percent a bond will lose when the yield rise one percent.	Varchar(20) – Numeric. (including decimal point)	
Market Cap	Constituent market capitalization.	Varchar(53) – Numeric (including decimal point)	
Previous Market Cap	Previous day's Constituent market capitalization.	Varchar(53) – Numeric. (including decimal point)	
Weight In Index	Constituent weight.	Varchar (15) – Numeric (including decimal point)	
Industry Sector	Tiered Industry Sector Classification (always Government in this index).	Varchar(50) – Alphanumeric (including special characters)	This value is not currently supported and will be implemente
Industry Group	Tiered Industry Group Classification (always Federal in this index).	Varchar(50) – Alphanumeric (including special characters)	This value is not currently supported and will be implemente

<table>
<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 implemente</td></tr>
<tr><td>Day Count</td><td>Day count convention used in calculating accrued interest and present value.</td><td>Varchar(20) – Alphanumeric (including special characters)</td><td>Blank for NOMXCR</td></tr>
<tr><td></td><td>
<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>
<tr><td>6</td><td>ACT_PR E</td><td></td></tr>
<tr><td>7</td><td>TBILL1</td><td></td></tr>
<tr><td>8</td><td>TBILL2</td><td></td></tr>
<tr><td>9</td><td>30/365</td><td></td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>Coupon Frequency</td><td>Number of coupon payments per year. Propose values 1 = annual, 2 = semi-annual, 3 = quarterly.</td><td>Varchar (1) – Numeric</td><td>Blank for NOMXCR</td></tr>
<tr><td>Coupon Rate</td><td>Coupon interest rate stated for the bond at issue.</td><td>Varchar(20) – Numeric (including decimal point</td><td>Blank for NOMXCR.</td></tr>
<tr><td>Coupon Amount</td><td>Current coupon amount. Annual Coupon rate divided by Frequency.</td><td>Varchar(20) – Numeric (including decimal point</td><td>Blank for NOMXCR</td></tr>
</table>

Coupon Type	Type of coupon payment A - Fixed B - Zero Coupon C - Payment-in-Kind (PIK) D - Stepped E - Floating F - Interest-at-Maturity G - Stepped Payment-in- Kind H - Variable Payment-in- Kind I - Stepped Interest-at- Maturity J - Variable Interest-at- Maturity K - Credit Sensitive L - Short-Term Discount Rate M - Fixed rate of interest based on index-linked principal value N - Other situation		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 implemente
Maturity Date	Date the bond will be redeemed by issuer if it is not called before (if applicable term exists 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
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
Effective Duration	Effective Duration for the underlying constituent.	Varchar(20) – Numeric (including decimal point)	This value will only be supported for LaddeRite and

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
Bonds Outstanding	Bonds issued and outstanding on the bond (adjusted for strips, QE programs, and Fed holdings).	Varchar(53) – Numeric	This value is not currently supported and will be implemente d in the near future.
Previous Bonds Outstanding	Previous Days Constituent Nominal Amount.	Varchar(53) – Numeric	This value is not currently supported and will be implemente d in the future
Nasdaq Issue ID	The Unique identifier assigned by Nasdaq related to the constituent Issue within the index.	Varchar (20) – Numeric	Internal Nasdaq ID and can be subject to change
Call Date	The date on which the bond can be redeemed prior to maturity.	Varchar (10) – Alphanumeric (including special characters)	This field might appear blank
Call Price	The price at which the issuer can redeem the bond. This price is set when the security is issued. The call price is also known as redemption price.	Numeric (28) – including decimal point	This field might appear blank
Coupon Date 1	The first coupon date. This is when a bond makes its first coupon payment to bondholders.	Varchar (10) – Alphanumeric (including special characters)	This field might appear blank

Coupon Date 2	The last coupon date. This is when a bond makes the last coupon payment to bondholders.	Varchar (10) – Alphanumeric (including special characters)	This field might appear blank
Issuer Name	The name of the bond issuer – the legal entity that developed, registered and sold the bond.	Varchar (50) – Alphanumeric (including special	
Par Value	The face value of the bond.	Numeric (28) – including decimal point	
Incorporation Country 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	This field might appear blank
Index Symbol	The identifier or ticker symbol representing the index.	Varchar (18) – Alphanumeric (including special characters)	

6.3 Fixed Income Index Values File

- **Start of Day Index Value File**
  YYYYMMDD_ProductSymbol_**VFISOD**_Version.txt

- **End of Day Index Value File**
  YYYYMMDD_ProductSymbol_**VFIEOD**_Version.txt

- **End of Day Index History File**
  YYYYMMDD_ProductSymbol_**HFIEOD**_Version.txt

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)	
Product 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 in 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. This field will be blank in the SOD and PRO file	Varchar(53) – Numeric (including decimal point)	
High	The highest calculated value for an index during the trading day. Note: This value will be 0 in the Start of Day	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 files.	Varchar (53) – Numeric (including decimal point)	
Previous Index Value	This field reflects the previous day's final calculated value for an index in the defined trade	Varchar(53) – Numeric (including decimal	
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. This	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. This 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	
Index Previous Yield	Previous day's weighted average yield for the index.	Varchar(20) – Numeric (including decimal point and special	
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 the 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 the 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	
Index Duration	Weighted average duration value calculated as Macaulay's duration for the index.	Varchar(20) – Numeric (including decimal	

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 the 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 the 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 the index.	Varchar(53) – Numeric	
Previous Total Bonds In Index	Previous Sum of Bonds in the 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 the 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 the previous day.	Varchar(6) – Numeric	
Constituents Removed	Number of constituents removed since the 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	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.	Varchar(12) – Alphanumeric	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. 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.
Rating	Index rating.	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes

9 Corporate Actions/Events Data service (CAUFF)

9.1 Summary

The Nasdaq UFF (Unified File Format) Corporate Actions/Events Data service (CAUFF) is an enhanced daily file designed to communicate the treatment of current and future changes in the Nasdaq Equity Indexes in advance of their implementation.

The CAUFF file 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 file 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 File on the next business day, as long as the Action is scheduled to be effective within the next 5 business days.

9.2 Product Specification CAUFF Fields Definitions

- **Corporate Action file Unified File Format (CAUFF)**
  YYYYMMDD_ProductSymbol_**CAUFF**_Version.txt
- **Equity indexes only**

Field Definitions:

Header			
No	**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)
Corporate Actions UFF Content			
	Data Field	**Description**	**Max Field Size / Attribution**
1	Effective Date	Indicative of when the corporate actions data is applicable. Also known as the "ex-date".	Field Length (8) – Numeric represented as (YYYYMMDD)
2	Last Modified Date	The date when the last change was made to this record.	Field Length (8) – Numeric represented as (YYYYMMDD)
3	Original Publication Date	The date the event first appears in the file.	Field Length (8) – Numeric represented as (YYYYMMDD)
4	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 6.6 –Event Status	Varchar (20) – Alphanumeric
5	Index Name	Defines the index name that this stock is related to.	Varchar (100) – Alphanumeric (including special characters)
6	Index Symbol	Defines the index code that this stock is related to.	Varchar (50) – Alphanumeric (including special characters)
7	Index Marker	1) Index Symbol assigned to the single index report	Varchar (100) –

		2) Underlying Index codes associated to the NQGI family report	Alphanumeric – (including special characters)
8	Index Currency	The 3-character ISO currency code for the currency in which the index level data is being reported in.	Varchar (3) – Alphanumeric
9	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 7.7	Varchar (3) – Alphanumeric
10	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 7.8	Varchar (20) – Alphanumeric
11	Action Description	The action description - Table 7.8	Varchar (100) – Alphanumeric
12	Issue Add/Delete	Indicates whether the Constituent was an Addition or a Deletion during the Index Reconstitution.	Varchar (10)
13	Action ID	Assigned unique action identifier.	Varchar (50) – Alphanumeric
14	Issue Name	The name of the issue of the index security.	Varchar (50) – Alphanumeric
15	New Issue Name	The new name of the issue of the index security.	Varchar (50) – Alphanumeric
16	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
17	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

18	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
19	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
20	Valor	Current SIX-TK Financial Valor number The field is currently NULL	(8) – Numeric
21	New Valor	New SIX-TK Financial Valor number. Should be NULL	(8) – Numeric
22	CUSIP	Constituent's 9-character CUSIP identifier, provided on a best effort basis.	Varchar (9) – Alphanumeric (including special characters)
23	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)
24	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.	Varchar (12) – Alphanumeric

25	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.	Varchar (12) – Alphanumeric
26	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
27	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
28	Issue Symbol	The identifier of the index security assigned by its Exchange or other marketplace.	Varchar (50) – Alphanumeric (including special characters)
29	New Issue Symbol	The new identifier or ticker symbol of the index Issue.	Varchar (50) – Alphanumeric (including special characters)

30	Nasdaq Issue ID	The unique identifier assigned by Nasdaq related to the constituent Issue within the index.	Varchar (20) – Numeric
31	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
32	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
33	Exchange	The exchange from which the Local Closing Price of the index Issue is utilized. Nasdaq supports the ISO 10383.	Varchar (4) – Alphanumeric
34	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
35	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
36	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
37	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
38	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

39	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
40	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
41	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
42	Segment	Per the NQGI Index Methodology, Developed or Emerging	Alphanumeric (50)
43	New Segment	The new segment per the NQGI Index Methodology: Developed or Emerging	Alphanumeric (50)
44	Region	NQGI EMEA, Eurozone, BRIC, Asia Pacific, North America	Alphanumeric (50)
45	New Region	NQGI EMEA, Eurozone, BRIC, Asia Pacific, North America	Alphanumeric (50)

46	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
47	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
48	Currency	Local currency in which the underlying index Issue is traded on its Exchange, using ISO 4217.	Varchar (3) – Alphanumeric
49	New Currency	New Currency.	Varchar (3) – Alphanumeric
50	FX Rate	Rate at which the Currency is converted to the Index Currency.	Varchar (23) – Numeric (including decimal point)
51	TSO	Represents the total shares outstanding for the issue.	Varchar (53) – Numeric (including decimal point)
52	NEW TSO	New total shares outstanding for the issue.	Varchar (53) – Numeric (including decimal point)
53	TSI	The total Issuer shares.	Varchar (53) – Numeric (including decimal point)
54	NEW TSI	New total Issuer shares	Varchar (53) – Numeric (including decimal point)
55	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)
56	New Index Shares	New Index shares.	Varchar (53) – Numeric (including decimal point)
57	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)

58	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)
59	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)
60	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
61	Correction factor	Price correction factor available for the Nordic equity indexes.	Numeric (25) – including decimal point
62	New Correction Factor	New Price correction factor available for the Nordic equity indexes.	Numeric (25) – including decimal point
63	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
64	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
65	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
66	Stock Factor QTY	A numeric factor by which a stock distribution will be applied.	Varchar (28) – Numeric (including decimal point)
67	Subscription Price	Subscription price for the rights offering.	Numeric – Max. Length: 38; Max. Precision 14

68	Rights Expiration Date	Last day to exercise rights.	Field Length (8) – Numeric represented as (YYYYMMDD)
69	Price Adjustment Amount	Rights adjusted for previous close used only for special cash dividend.	Varchar (28) – Numeric (including decimal point)
70	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)
71	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)
72	Ordinary Dividend Amount	Cash Dividend (Ordinary) Per Share in the Dividend Currency.	Varchar (53) – Numeric (including decimal point)
73	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)
74	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
75	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)
76	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)
77	Tax Rate	Specific tax rate associated to the index.	Numeric – Max. Length: 38; Max. Precision 14

78	New Tax Rate	New tax rate.	Numeric – Max. Length: 38; Max. Precision 14
79	Spin Off Issue Symbol	The identifier or ticker symbol of the index spin off Issue. Provided on a best effort basis.	
80	Spin off Issue Name	The issue name of the index spin off Issue. Provided on a best effort basis.	
81	Spin Off Cash Value	Cash value of the spinoff transaction, expressed on a per share basis.	
82	Spin Off Per Share	Terms	
83	Comments	Free form space available for comments associated with the action.	Varchar(1000)
84	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
85	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

9.3 Blank Fields

Depending on the status of the event, certain fields can be blank in the CAUFF file.
In some other cases, if a security is being added to a Nasdaq Index its "current" fields can be blank, and its "new" fields will be populated. For additions, if the identifiers of the new security are not available at the time the event, it will also be blank. Thus, certain fields included may not always be populated depending on the circumstances.

Current Blank fields

Data Field	Description	Max Field Size / Attribution	Description
RIC	The Reuters Instrument Code is a unique identifier.	Varchar (7) – Alphanumeric	Awaiting licensee agreement
New RIC	Constituent's new Reuters Instrument Code as of the EFFECTIVE DATE, provided on a best effort basis. The RIC code must contain exactly one period (".") and the second part must be 1 to 3 characters. The field is currently NULL	Varchar (7) – Alphanumeric	Awaiting licensee agreement
Bloomberg ID	Bloomberg ticker, provided on best effort basis. Bloomberg ticker may contain exactly one space (" "). The first part must be 1 to 8 characters and the second part must be 1 to 2 characters.	Varchar (10) – Alphanumeric	Awaiting licensee agreement
New Bloomberg ID	Bloomberg ticker, provided on best effort basis. Bloomberg ticker may contain exactly one space (" "). The first part must be 1 to 8 characters and the second part must be 1 to 2 characters.	Varchar (10) – Alphanumeric	Awaiting licensee agreement
Valor	Current SIX-TK Financial Valor number. The field is currently NULL	(8) – Numeric	Awaiting licensee
New Valor	New SIX-TK Financial Valor number. The field is currently NULL.	(8) – Numeric	Awaiting licensee agreement

AWF	Additional Weight Factor (AWF) may be used for certain index methodologies such as Smart Beta methodology types. This field will have a value of 1 for methodologies not using AWF.	Numeric (25) including decimal point	Awaiting New release
NEW AWF	Additional Weight Factor (AWF) may be used for certain index methodologies, such as Smart Beta methodology types. This field will have a value of 1 for methodologies not using AWF.	Numeric (25) including decimal point	Awaiting New release
Correction factor	Price correction factor available for the Nordic equity indexes.	Numeric (25) including decimal point	Awaiting Nordic release November 2014
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	Awaiting New release
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	Awaiting New release
Segment	NQGI index Methodology (Developed or Emerging)	Alphanumeric (50)	Awaiting New
Region	NQGI EMEA, Eurozone, BRIC, Asia Pacific, North America	Alphanumeric (50)	Awaiting New

9.4 Footer

EOF (End of File) will appear immediately following the data rows and can be used as an end-of-file indicator.

9.5 Ordering

The CAUFF shows index and security events for a given index or group of indexes. Certain parameters impact the ordering and display of the information contained in the files. Please note that all sorting is in ascending order unless otherwise specified in the below tables.

9.6 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

9.7 Action Type

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

9.8 Action Code/Description

Action Type	Action Code	Action Description	Priority
Security Action	LI	Listing	1
Security Action	DE	Delisting	2
Index Maintenance	CA	IM Constituent Activation based on Security IPOs with Trades	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

Action Type	Action Code	Action Description	Priority
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

Action Type	Action Code	Action Description	Priority
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

Action Type	Action Code	Action Description	Priority
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 Capping/Recomposition	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	CD	IM Constituent Delete based on Security SpinOffFlag with	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

Action Type	Action Code	Action Description	Priority
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

10 GIFFD SFTP Connectivity Guide

Users may choose to script or automate the process of downloading files from the SFTP servers. Nasdaq's policy is to give all our customers equal access to our SFTP servers. To conserve resources and for fair access, we have implemented a limitation of how many concurrent connections that we allow for each user. This prevents some users from instituting aggressive scripts or automation that consume more of the resources of the servers and block others from being able to complete their scripts/automation.

If the scripts/automation you are developing is capable of handling more than one connection at a time, it is possible to run out of available connections. In these cases, the server will return an error (HTTP status code of 421) and will terminate that specific connection.

We suggest adding some type of timer based retry logic. If you get an error of this type, have the scripts/automation pause for a few moments (30 seconds or a minute) and then try again. Repeat this process until you get a good connection and can download the files that you are looking for.

Most of the files on our SFTP server are very small and downloading them only takes a few seconds. By pausing, the script will allow for current connections to complete and close, allowing for new connections.

Nasdaq's has high security standards. Thus, be mindful of tool's ability to update cryptographic algorithms when deciding to use a tool. These algorithms may change unexpectedly if they become outdated or insecure.

11 Contact Us

If you need assistance, our 24-Hour Global Index Client Services team is ready to assist you: IndexServices@nasdaq.com

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12 Appendix A

Documentation Revision Control Log

October 1, 2014 – GIFFD Draft Version 1.0

- Released Draft product specification, for pilot release

December 12, 2014 – GIFFD Version 1.0

- Updated in line with Nordic Equity release

October 1, 2015 - GIFFD Version 1.0

- Updated to include Hedged File reports

April 1, 2016 – GIFFD Version 1.0

- Updated to include Fixed income Indexes
- Added Fixed Income delivery times

September 1, 2016 – GIFFD Version 2.0

- Updated to include BulletShares & LadderRite

July 1, 2018 – GIFFD Version 2.1

- Updated to remove TOKENID from file names
- Updated to add new GIFFD directory folder

February 11, 2019 – GIFFD Version 2.2

- Updated table 7.8 – CAUFF Action Code/Description

May 22, 2019 – GIFFD Version 2.3

- Added new field – ICB Subsector Code

December 5, 2019 – GIFFD Version 2.4

- Added two new fields to the Corporate Action Unified File Format (CAUFF) files to reflect the updated 8-character ICB code and the 8-character new ICB code from corporate actions (fields 84 and 85)
- Updated to reflect an increase in length of the field *Index Name* from 50 to 100 characters in the Corporate Action Unified File Format (CAUFF) files (field number 5)
- Minor language revisions for clarity and consistency

July 31, 2020 – GIFFD Version 2.5

- Added section 2.4 – File Name Structure. This structure is used throughout the document.
- Updated section 4 – Products Available to correctly include the History folders
- Added section 6.2 – Fixed Income Weighting 2 Entitlement Summary Files
- Added section 6.3 – Fixed Income Index Values File

August 22, 2022 – GIFFD Version 2.6

- Added a GIFFD SFTP Connectivity Guide on Section 8

December 20, 2024 – GIFFD Version 3.0

- Added the new Daily Pro Forma offering
- Included the new security enhancements requirement for IP address range

February 6, 2025 – GIFFD Version 3.0

- Minor hyperlink cleanup