Nasdaq Fund Network (NFN)

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Agreements

What agreement do I need to sign to access the secured NFN website?

All NFN website users must be party to a Nasdaq agreement. The Nasdaq agreement required will vary depending on the NFN entitlement level needed.

Firm Type	Entitlement Level	Agreement / Form
Instrument Issuer / Sponsor	Ability to create, update and delete NFN instrument records	Initial firm set-up: NFN Access Agreement NFN Firm Set Up / Logon Request Form Additional logon request: NFN Firm Set Up / Logon Request Form
Fund Pricing Agent	Ability to enter net asset values (NAVs) and other price data for existing NFN instruments	 Initial firm set-up: NFN Access Agreement NFN Firm Set Up / Logon Request Form Additional logon request: NFN Firm Set Up / Logon Request Form
Market Data Vendor	Ability to view and download NFN reports (including NFN Daily List and full NFN Symbol Directory)	 Initial firm set-up: Nasdaq Global Data Agreement (GDA) Data Feed Request Form Additional logon request: Web-Based Data Logon Form

Please contact <u>Nasdaq Global Information Services</u> at +1 301 978 5307 (Option 2) if you have any questions about the GDA or market data vendor forms. Please contact <u>NFN Operations</u> at +1 301 978 5307 (Option 6) if you have any questions about the NFN Access Agreement or issuer / pricing agent forms.

NFN Instrument Applications

General

Can issuers submit NFN instrument applications online?

Yes. Nasdaq allows firms to submit new instrument applications and change request applications via the secured NFN website. To get NFN website access rights, a firm must submit a NFN Firm Set-Up / Logon Request Form to Nasdaq. Once the form is processed, Nasdaq Trading Services will contact the firm's

users via email with instructions on how to download the necessary security certificate for the NFN website.

Where can I locate the NFN website user guide?

For web service assistance please reach out to NFNOps@nasdaq.com.

What instrument types are supported on the NFN?

As of August 2018, Nasdaq will support the following instrument types on the NFN system:

Instrument Category	Instrument Types
Mutual Fund	Open End Fund
	Closed End Fund / Exchange Traded Fund
	Interval Fund
	Tender Offer Fund
Money Market Fund	Government Securities Fund
	Tax Exempt Securities Fund
	General Purpose Fund
Unit Investment Trust (UIT)	Equity UIT
	Debt UIT
Annuity	Variable Annuity
	Equity Indexed Annuity
Structured Product	Buffer/Barrier Enhanced Upside
	Commodity / FX
	Hybrid
	Principal Protected
	Rates Enhanced
	Single Stock
	Other
Alternative Investment Product (AIP)	Fund of Hedge Funds
	Managed Future Funds
	Commodity Pool Funds
	Non-Traded Real Estate Investment Trusts (REITs)
	Registered / Non-Traditional Hedge Funds
N (C) 5 1 7 1 1 N 15 1	Private Equity Offerings
NextShares Exchange Traded Managed Fund	NextShares
Collective Investment Trust	Collective Investment Trust
Managed Accounts	Separately Managed Accounts (SMA)
Managea Accounts	Unified Managed Accounts (UMA)
Separate Accounts	Separate Accounts
Hedge Fund	Hedge Fund
Demand Deposit Accounts	Demand Deposit Accounts

What are the minimum eligibility requirements for NFN instruments?

Nasdaq outlines its minimum eligibility requirements in the NFN Access Agreement. For details, please refer to the NFN Registration Standard.

What are the eligibility requirements for the NFN News Media List?

Currently, Nasdaq only supports the NFN News Media list option for mutual funds and money market funds. The qualifications for initial and continued NFN News Media eligibility are as follows:

Fund Type	Initial Eligibility Criteria	Maintenance Certification Criteria
News Media List –	Instrument Level:	Instrument Level:
Open End Mutual Funds and	SEC registration of the	SEC registration or UCITS
Money Markets	instrument or UCITS registration of the fund AND	registration of the fund AND
		\$15 million net assets OR
	\$25 million in net assets OR 1,000 shareholder accounts	750 shareholder accounts
News Media List –	Instrument Level:	Instrument Level:
Closed End Funds, Interval	SEC registration of the fund or	\$30 million in net assets
Funds, Tender Offer Fund	UCITS registration AND	
	\$60 million in net assets	

What is the difference between the NFN News Media List and NFN Supplemental List?

NFN Supplemental List instruments are covered by electronic media only. NFN News Media List instruments may be covered by print media as well as electronic media.

Please note that Nasdaq cannot guarantee that News Media List mutual funds and money market funds will appear in all U.S. newspapers. Newspaper editors reserve the right to limit the number of mutual funds and money market funds displayed in stock tables based on their business needs.

What are the NFN symbol assignment rules?

For NFN instruments, Nasdaq assigns 5 to 7 character symbols ending with the letter X. As outlined below, the assignment rules vary by NFN instrument category and instrument type.

Category / Type	Symbol Length	Symbol Assignment Rule(s)	Example
Mutual Fund – Open End	5 characters (4 variable, 1 fixed)	Symbols may start with any letter except X If multiple instruments based on same portfolio, symbols should relay share class information in 3 rd or 4 th character place. Symbols may not use letter X in 4 th character place. Symbols cannot conflict with any exchange reservations in the Intermarket Symbol Reservation Authority (ISRA) database.	ABCDX
Mutual Fund – Closed End	5 characters (3 variable, 2 fixed)	Symbols must start with the letter X	XABCX

Category / Type	Symbol Length	Symbol Assignment Rule(s)	Example
		Symbol middle characters should match listing exchange traded symbol if possible. Symbols may not use letter X in 4 th character place. Symbols cannot conflict with any exchange reservations in the ISRA database.	
Mutual Fund – Interval Fund or Tender Offer Fund	5 characters (4 variable, 1 fixed)	Symbols may start with any letter, including X. If multiple instruments based on same portfolio, symbols should relay share class information in 3 rd or 4 th character place. Symbols may not use letter X in 4 th character place. Symbols cannot conflict with any exchange reservations in the Intermarket Symbol Reservation Authority (ISRA) database.	ABCDX, XABCX
Money Market Fund	5 characters (3 variable, 2 fixed)	Symbols must end with double X. Symbols cannot conflict with any exchange reservations in the ISRA database.	ABCXX
Unit Investment Trust (UIT)*	6 characters (5 variable, 1 fixed)	Symbols may begin with any letter except Q, X and Z.	ABCDEX
Annuity	6 characters (4 variable, 2 fixed)	Symbols must begin with letter Q.	QABCDX
Alternative Investment Product (AIP)	6 characters (4 variable, 2 fixed)	Symbols must begin with letter Z.	ZABCDX
Structured Product	7 characters (5 variable, 2 fixed)	Symbols must end with double X.	ABCDEXX
NextShares	7 characters (5 variable, 2 fixed)	Symbols will consist of the 5-character Nasdaq NextShares trading symbol followed by the letters "NX".	ABCDCNX
Collective Investment Trust	6 characters (5 variable, 1 fixed)	Symbols may begin with any letter except Q, X and Z.	ABCDEX
Managed Accounts	6 characters (5 variable, 1 fixed)	Symbols may begin with any letter except Q, X and Z.	ABCDEX
Separate Accounts	6 characters (5 variable, 1 fixed)	Symbols may begin with any letter except Q, X and Z.	ABCDEX
Hedge Fund	6 characters	Symbols must begin with letter Z.	ZABCDX

^{*} As outlined in <u>Data News #2000-25</u>, Nasdaq changed its symbology format for UITs in April 2001. Due to a grandfather clause, the following UIT has a five character ticker: First Trust GNMA Reinvestment Income Trust (GRIT) Srs 79 (symbol: ZFGMX). There may also be a few UIT tickers that begin with "Q" that pre-date the NFN introduction of newer asset classes.

Category / Type	Symbol Length	Symbol Assignment Rule(s)	Example
	(4 variable, 2 fixed)		
Demand Deposit Accounts	5 characters (4 variable, 1 fixed)	Symbols may start with any letter except X	ABCDX

Adding Instruments

How do I request a new NFN symbol?

To request a symbol for a new instrument, please use the NFN New Application Form (<u>spreadsheet</u>, <u>secured web site</u>).

To request a new symbol for an existing instrument, please use the NFN Change Request Application Form (spreadsheet, secured web site).

Can investment companies reserve NFN symbols or symbol ranges?

No. Nasdag is unable to support symbol reservations for NFN instruments.

What documentation do I need to submit with the NFN new instrument application?

Investment companies must submit statutory prospectus and/or summary prospectus for NFN new instruments.

If firms wishing to secure a NFN symbol in advance, Nasdaq will accept a draft prospectus document at the time of the application. Firms must still, however, submit <u>final</u> prospectus to NFN Operations within two weeks of the NFN instrument go live date.

Please note that firms should denote on the NFN new instrument form if supporting documentation is public or confidential.

How far in advance should I submit a NFN new instrument application?

Nasdaq recommends that fund administrators / issuers submit the NFN application for a new instrument one to four weeks prior to expected instrument launch date.

Nasdaq will <u>not</u> process NFN new instrument applications submitted more than six months prior to the expected NFN go-live date.

How do I change the NFN effective date for a new instrument?

If a fund issuance is postponed, it is the investment company's responsibility to notify NFN Operations of the release date change <u>prior to</u> the original effective date. Firms may change the NFN effective date online via the <u>secure NFN website</u> or by emailing <u>NFN Operations</u>.

Firms should refer to the automatic email confirmation of NFN registration actions for the NFN effective date. Firms may also retrieve the full list of pending registration actions via the <u>secure NFN website</u>.

For the initial service year, Nasdaq invoices NFN registration fees based on the NFN effective date for the new instrument. If a firm fails to notify Nasdaq of an issuance date change, it will be invoiced for the annual fee.

Do I need to remit a NFN processing fee with my NFN application?

No, as of January 1, 2016 has removed all NFN application fees. For details, refer to NFN News #2015-4.

What is the average processing time for a NFN new instrument application?

Assuming that the NFN instrument application is submitted with the proper supporting documentation, Nasdaq's turnaround time for NFN application sent via spreadsheet application to MFNOps@nasdaq.com is five business days. For faster turnaround time, firms may use the secured NFN website for application submission.

Updating Instruments

Are firms required to notify Nasdaq when there is a change to NFN instruments?

Yes. Nasdaq <u>requires</u> that firms notify NFN Operations in a timely manner when the following security data elements change for a NFN instrument:

- Instrument Name
- Issuer Name (aka Fund Family Name or Trust Sponsor Name)
- CUSIP
- Pricing Agent
- Pricing Frequency
- Inception Date
- Termination Date
- Open To New Investor Status
- NFN Listing Contact
- NFN Billing Contact

Mutual funds and money market funds listed on the NFN News Media List are also required to notify Nasdaq if the instrument's total net assets and number of shareholder accounts fall below the maintenance eligibility criteria.

What other instrument changes should I report to Nasdaq?

In addition to the required data elements noted above, Nasdaq **recommends** that firms also notify NFN Operations if the following security data elements change for a NFN instrument:

- Minimum Initial Subscription Amount
- Minimum Incremental Subscription Amount

Nasdaq also encourages firms to use the NFN system to post prospectuses and other financial documents that they wish to be distributed to the market data community.

How do I notify Nasdaq of an NFN instrument change?

Firms should use the NFN Change Request Form (<u>spreadsheet</u>, <u>secured web site</u>) to update the NFN data elements outlined in the question above.

What documentation do I need to submit with NFN instrument change application?

Nasdaq requires that firms submit supporting documentation for name changes and NFN News Media List tier upgrades.

Data Element To Be Updated	Documentation Requirements
NFN Instrument Name	Official legal document issued by NFN issuer, such
NFN Issuer Name	as:
	 Statement of Additional Information (SAI)
	 Statement of Deletion
	 Prospectus
	Private Placement Memorandum
	For instrument name changes only:
	 CUSIP letter (only if S&P website has yet to be updated to reflect new instrument information)
NFN News Media List Tier Upgrade	Official legal document showing current financial
(from Supplemental List to News Media List)	information, such as:
	 Annual Report
	 Semi-Annual Report
	 Statement of Additional Information (SAI)
	System Printout

Please note that Nasdaq reserves the right to request supporting documentation for other change request actions for NFN data quality purposes.

Can Nasdaq enact changes to the NFN instrument record(s) on a same day basis?

No. Due to NFN Daily List process, Nasdaq requires a minimum of two business days advance notification for NFN instrument record updates, including CUSIP and NFN pricing agent changes.

Does Nasdaq charge a change processing fee for name/symbol change applications?

No. Nasdaq discontinued application processing fee for name/symbol changes on December 31, 2012.

Does Nasdaq automatically upgrade mutual funds and money market funds to the News Media List?

No. It is the investment company's responsibility to notify NFN Operations if it wishes to have a mutual fund or money market fund upgraded from the NFN Supplemental List to the NFN News Media List. To be upgraded, a firm must complete the NFN Change Request Form and submit financial documentation to prove it meets the NFN News Media List initial eligibility requirements. Please note that the News Media List tier is available only for mutual funds and money market funds.

Deleting Instruments

Are firms required to notify Nasdaq when NFN instrument ceases to exist?

Yes. Nasdaq **requires** that firms notify NFN Operations in a timely manner when a NFN instrument deleted.

As noted in the annual fee section of this document, Nasdaq will continue to bill NFN annual fees for an instrument as long as it is live in the NFN system.

How do I notify Nasdaq of an instrument deletion?

Firms should use the NFN Deletion Request Form (<u>spreadsheet</u>, <u>secured web site</u>) to inform Nasdaq of an instrument's deletion.

What documentation do I need to submit with NFN instrument deletion?

If the instrument is being deleted as the result of a merger, reorganization, or conversion, Nasdaq requires firms submit a Statement of Deletion issued by the board of directors or corporate senior management.

If the instrument is a Unit Investment Trust (UIT) with a set termination date, firms are not required to provide any supporting NFN documentation as long as the instrument is being removed on or after the stated termination date on the NFN instrument record.

If the instrument is only being deleted from the NFN system and will continue to exist, Nasdaq requires firms submit a letter signed by a corporate officer to confirm the NFN system termination dates.

Will Nasdag credit annual fees for deleted instruments?

If the instrument stopped pricing via the NFN system during the current calendar year, Nasdaq will <u>not</u> rebate NFN registration fees for the remaining months in the year.

If the instrument stopped pricing via the NFN system in the prior calendar year, however, Nasdaq will issue a credit for the current year's registration fees upon written request, within three calendar months of the invoice to be credited.

Will Nasdaq credit past year's fees for deleted instruments?

No. Nasdaq can only rebate fees for the current calendar year's NFN registration fees. As noted above, it is the firm's responsibility to notify Nasdaq of instrument changes for NFN instruments on a timely basis.

Can I get a list of non-pricing NFN fund symbols?

Yes. NFN pricing agents may determine the most recent data entry date for their funds by using the Non-Pricing Instrument Report or Today's Price History Report from the secured NFN website. NFN issuers may request a report for instruments via email to NFNOps@nasdag.com.

Fees

Annual Registration Fees

What is the NFN annual registration fee?

As of January 1, 2024, the annual registration fee structure is as follows:

Fund Type	Fund Code	Fee
Mutual Fund	Open-end	\$850
	Closed-end	
	Interval Fund	
	Tender Offer Fund	
Mutual Fund	529	\$700
UIT	Equity	\$900
	Debt	
Money Market		\$750
Annuity		
Structured Product		
Alternative Investment Product		
NextShares		
Hedge Fund		
Collective Investment Trust (CIT)		
Separate Account		
Demand Deposit Account		
Managed Account	SMAs	\$700
CIT		

For the purpose of the NFN registration fee, Nasdaq defines an NFN instrument as any mutual fund, money market fund, unit investment trust (UIT), annuity, alternative investment product (AIP), - structured product, NextShares, Collective Investment Trust, Managed Account, Separate Account, Hedge Fund, or Demand Deposit Account instrument with its own NFN ticker symbol.

When is the NFN annual registration fee invoiced?

For those instruments on the NFN system as of the first business day of the calendar year, Nasdaq will invoice for the full NFN annual registration fee on or about January 7th.

For newly added instruments, Nasdaq will issue a special invoice for the annual fees for the remainder of the current calendar year. The special invoice timing is based on the NFN effective date for the instrument as stated on the NFN new instrument application, so it is important that firms update NFN Operations if an issuance has been delayed.

What should I do if I see non-pricing instruments on my NFN invoice?

To remove non-pricing NFN instruments, a firm must:

Submit a completed <u>NFN Change Request / Deletion Form</u> for the non-pricing instruments to NFN Operations for processing, requesting a credit within the request

As noted above, it is the **issuer's responsibility** to notify NFN Operations when an instrument is no longer needed. Please note that Nasdaq will only process NFN credit requests received within three (3) months of the last NFN invoice date.

Can I request a credit for a live instrument in the NFN system?

No. Nasdaq will only issue a credit for a NFN instrument if firm remits an instrument deletion application, <u>and</u> the instrument did not price via the NFN system in the current calendar year. Credit requests must be received within three (3) months of the last NFN invoice date and can only be requested for the most recent invoice.

Can I request a credit if an instrument stops pricing via the NFN system intra-year?

No. Nasdaq is unable to issue a credit if the instrument was priced via the NFN system one or more days during the current calendar year.

What is Nasdaq's credit policy for postponed issuances?

Nasdaq does not issue fee credits for postponed issuances.

It is the issuer's responsibility to notify Nasdaq that an issuance is postponed <u>prior to</u> the effective date on the NFN new instrument application. Nasdaq sends out emails to the registration contact on the new instrument application to facilitate the process. Nasdaq also allows issuers to access to the NFN website at no charge so that they can review and update instrument records as needed.

Who should I contact if I have a NFN billing question?

All Nasdaq billing inquiries should be directed to the Nasdaq Finance Department at ndgbilling@nasdaq.com or + 1 800 955 3898.

Other NFN-Related Fees

Is there a charge to access the secured NFN website?

The answer depends on the NFN website user access rights.

- For NFN pricing agents and self-pricing issuers seeking to enter daily price data via the NFN website, Nasdaq charges a monthly access fee of \$100 per User ID.
- For NFN market data redistributors seeking access to the full NFN Daily List and NFN Directory product via the NFN website, please reach out to datasales@nasdaq.com for pricing.
- For NFN market data redistributors seeking access to the <u>Nasdaq Fund Network Data Service</u>
 <u>Web Service files</u> will be subject to the NFN Data Service Direct Access monthly, please reach
 out to <u>datasales@nasdaq.com</u> for pricing. In addition, NFN market data redistributors must pay
 applicable external distribution fees as outlined in the <u>Nasdaq Global Information Services price</u>
 list.
- For NFN issuers seeking to view or update instrument data via the NFN website, Nasdaq does not currently charge an access fee.

What forms do I need to complete to add, modify or delete a NFN website logon?

Depending on the firm access rights, it would sign one of the following Nasdaq web logon request forms.

- Web Logon Request Form for Issuers, Administrators and Pricing Agents is processed by NFN Operations.
- Web Based Logon Request Form for Market Data Redistributors is processed by <u>Nasdaq Global</u> <u>Data Operations</u>.

Can I request a list of all the NFN website users for my firm?

Yes. To request a list of the NFN User IDs associated with your firm, please contact NFN Operations via email at NFNOps@nasdag.com.

Price Data Entry

What options does Nasdaq offer for NFN valuation data entry?

Nasdaq currently supports the following NFN inbound interface options:

Inbound Interface Option	Description	Supporting Documents
NFN Secured Website	From the NFN secured website, users with a pricing agent token may enter valuation data via NFN Valuation Data Entry page(s) or via the Batch File Upload option. For the Batch File Upload, Nasdaq currently uses a fixed length message file format. In June 2016, Nasdaq will also introduce a CSV message file format.	Technical Interface Specifications: NFN Batch Upload File Format Fixed Length Message Specification NFN Batch Upload File Format CSV Specification Order Form: NFN Firm Set-Up/Website
NFN REST API	Firms wishing to automate their nightly NFN file posting with and API may code to the REST API specification.	Logon Request Form Technical Interface Specification: • REST API Order Form: • NFN Firm Set-Up/Website Logon Request Form
NFN Secured FTP	Firms wishing to automate the nightly NFN file posting process may code to the NFN FTP specification. The NFN FTP solution is based on the fixed length message format. Nasdaq systems retrieves and processes FTP files at a pre-defined schedule as outlined in the technical documentation.	 NFN FTP Specification Order Form: NFN Firm Set-Up/Website Logon Request Form

What are the NFN hours of operation?

The NFN system is open for valuation submission from 8:00 a.m., ET, to 8:00 p.m., ET, on U.S. equity trading days.

Please note that Nasdaq will reject NFN valuation data entered outside of stated operational hours and scheduled Saturday user acceptance tests.

Are firms required to report price data for NFN instruments on a daily basis?

While Nasdaq strongly recommends that firms report NAVs via NFN on a daily basis, it does not require them to do so.

At the time of NFN application, NFN issuers are asked to denote the expected NFN price frequency for each instrument. The allowable values are Daily (Default), Intraday, Weekly, Bi-Weekly, Monthly or Quarterly. Please note that the NFN price frequency is reflected in the NFN Daily List and NFN Symbol Directory files on the NFN website.

Can firms report price data on a T+1 basis?

Yes. The NFN system allows firms to report NAVs on T+1 basis in two ways.

- Regular price reporting on T+1 Basis: If a firm calculates its daily NAVs based on prior day's
 trading data, Nasdaq recommends that it report the price data with the "F" (Prior Day's Price)
 footnote code and the current day's entry date. This reporting option ensures that the NAV is
 reflected in the NFN Data Service end-of-day summary spins.
- Corrected price reporting on T+1 Basis: If a firm needs to report a price correction for a prior business day, Nasdaq recommends that it report the price data with the original NAV calculation date in the Entry Date field. This reporting option ensures that the T+1 data entry is properly flagged on NFN Data Service as a correction for vendor processing purposes.

Can firms report data for an instrument during a non-U.S. trading day?

The NFN system is <u>not</u> available for NAV reporting on U.S. market holidays. If needed, firms may report historical NAVs via the NFN system re-opens on the next U.S. trading day.

Can firms report price corrections via NFN system?

Yes. The NFN system is designed to support NAV price reporting for the life of the instrument. As of August 20, 2018, NFN has removed the 365 limit for historical pricing. As outlined in the NFN inbound specifications, firms should use the Entry Date field to indicate the business date associated with a given NAV entry.

Does Nasdaq still support the NFN 0040 data formats for data entry?

Nasdaq no longer supports the 0040 data format.

Where can I find Nasdaq validation parameters for NFN data entry?

Nasdaq has outlined its NFN validation parameters in the appendix section of the <u>NFN web batch file</u> <u>specification</u>, <u>NFN REST API Specification</u> and the <u>NFN FTP Specification</u>.

Can I sign up to get NFN News items via email?

Yes. Firms may sign up to receive NFN News items at https://www.nasdaqtrader.com/EASP/TraderEASP.aspx?id=NewsSignup.

Does NFN messaging support intraday pricing, floating NAVs and other data elements required in the SEC Money Market Reform Act?

Yes, Nasdaq supports intraday, floating NAVs via NFN 0050 inbound message formats. Please refer to NFN News #2016-1 for details.

Are NFN inbound interface users required to enter Dividend/Interest and Capital Distributions data for all NFN instruments?

Yes. Under the terms of the NFN Access Agreement, NFN pricing agents and fund families are expected to report Dividend/Interest and Capital Distribution data for all NFN instruments.

To facilitate this process, Nasdaq modified the NFN inbound and outbound message formats to support new fields for Daily Dividend Distributions as part of the June 13th, 2011 release. Nasdaq has also created new and expanded message formats for standard Dividend/Interest and Capital Distribution reporting that can be used by all NFN fund types.

What will happen if a NFN user inputs duplicate Dividend/Interest and Capital Distribution messages?

Because the dividend and distribution messages can be reported in advance, Nasdaq is requiring firms to enter the appropriate action code for each entry. Once a dividend or distribution message is reported, NFN inbound users must use the action code of "C" (Correction) if they wish to replace the existing record in the NFN database.

To that end, Nasdaq has added new error codes for dividend and distribution processing for NFN 0050. The error processing is keyed off of the symbol and ex-date. If a NFN pricing agent or fund family were to report two dividend (or distribution) records with the same symbol and ex date, NFN would reject the second message if it was marked with the action of "N" (new entry). If a NFN pricing agent or fund family were to report a dividend (or distribution) with the action of "C" (correction) or "X" (cancellation), NFN would reject the message if there were no original entry with the same ex-date.

When will Dividend/Interest and Capital Distribution messages be disseminated on NFN Data Service?

Nasdaq will send out real-time NFN Data Service updates as NFN pricing agents and fund families enter Dividend / Interest and Capital Distribution into the NFN system.

To ensure that NFN Data Service subscribers have a complete list of Dividend/Interest and Capital Distribution messages to be applied each day, Nasdaq also supports a pre-opening spin of previously entered Dividend/Interest and Capital Distribution messages on ex-date.

How can I obtain an Ex-Date file for Dividend/Interest and Capital Distributions for all NFN instruments?

For the market data community, Nasdaq generates a pre-opening spin of Dividend/Interest and Capital Distribution for NFN Data Service data feed subscribers. In this spin, Nasdaq rebroadcasts those Dividend/Interest and Distribution records in which the ex-date field is equal to the current day's date.

For NFN pricing agents and fund families, Nasdaq also adds a downloadable Ex Date report on the NFN valuation service website for Dividend/Interest and Capital Distribution data.

Testing

How can I test my NFN functionality?

Nasdaq offers the following testing options for NFN subscriber firms:

Testing Option	Interface Options	Description
Nasdaq Test Facility (NTF)	NFN Data Service	Dedicated test facility for Nasdaq Trading Service clients. Only NFN Data Service supported. Special connectivity / fees apply. For details, please refer to Nasdaq Test Facility page on the Nasdaq Trader website.
Saturday User Acceptance Test	All	One Saturday each month with limited support, Nasdaq opens its systems for client testing from 8:00 a.m. to 12:00 noon, Eastern Time (ET). Advance registration required. Production circuits / instruments used. For details, please see Saturday Test Policy page on the Nasdaq Trader website.
NFN Test Symbols	All	Nasdaq supports test ticker symbols on all NFN interfaces. To prevent symbol proliferation, Nasdaq limits firms to two test symbols per Instrument Type / Tier and Instrument Code combination. For details, please refer to

How can I request a NFN test symbol?

NFN pricing agents should complete the <u>NFN Test Symbol Request Form</u> and remit it via email to <u>NFNOps@nasdaq.com</u> for processing. Given that test symbols are included on the NFN Daily List, Nasdaq will take approximately two days to process new test symbol request forms.

Please note that the NFN Pricing Agent must have executed the NFN Access Agreement in place to be granted a test symbol.

How many test symbols can a NFN pricing agent firm request?

To prevent symbol proliferation, Nasdaq limits firms to two test symbols per Instrument Type / Tier and Instrument Code combination.

Can I re-use a test symbol for a production instrument?

No. Nasdaq <u>cannot</u> move a symbol from test mode to production mode.

Does Nasdaq conduct an annual disaster recovery test for the NFN system?

Yes, Nasdaq includes NFN in its test plans for the <u>Securities Industry and Financial Markets Association</u> (SIFMA) annual industry-wide business continuity test.