NFN Batch Valuation Upload

CSV File Format Option

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Overview

As of **June 5, 2017**, Nasdaq will allow NFN pricing agents to upload valuation data files in comma delimited text (CSV) format. This document provides details on how to create the CSV file. User must have access to the NFN secured website to submit the file for processing.

Initially, Nasdaq will support the CSV file upload format via the <u>NFN secured web interface only</u>. NFN FTP clients should contact <u>Nasdaq NFN Operations</u> if they wish to request CSV file option to be added in a future release.

Date Format Changes

1. NFN Instrument Type and Instrument Code Release - March 2018

Based on clients' requests, Nasdaq will add new Instrument Type values for Collective Investment Trust (CIT), Managed Accounts, Separate Accounts and Hedge Fund on or about March 26, 2018. Firms that wish to use the new Instrument Types must use NFN 0050 message formats for data entry.

File Naming

The NFN CSV file must use one of the following naming conventions:

- [MPID]_[NFNVersion]_[MessageType]_[UploadDate].csv
- [MPID]_[NFNVersion]_[MessageType]_ [UploadDate] _[FileTime].csv

In the file name, each field must be separated by the underscore character "_". File must be saved with .CSV extension.

For the file name, the field definitions are as follows:

Field	Descriptio	n	Business Logic
MPID	Denotes Nasdaq Market Participant ID associated		MPID must be 4 alpha
	with NFN	oricing agent firm submitting file. This	characters.
	code is dis	played in NFN User Credentials section	
	on NFN we	ebsite landing page.	
NFNVersion	Denotes N	FN inbound message format used for	NFN version must be "0050" for
	the file co	ntents. Current version is "0050".	initial release. MessageType
			processing logic will be based
			on this code.
MessageType	Denotes the three character code associated with		MessageType must be one of
	the NFN message format in the file.		the allowed values for
			NFNVersion. Message header
	Message type is based on NFN version. For		processing logic will be based
	NFN0050, the allowable values are:		on this code.
	Code Message Format		
	MFU Standard Valuation for Mutual Funds,		
		UITs, Annuities, Structured Products,	

		and Alternative Investment Draducts	
		and Alternative Investment Products,	
		Nextshares, Collective Investment	
		Trust (CIT), Managed Accounts,	
		Separate Accounts, Hedge Funds, and	
		Demand Deposit Accounts	
	MMC	Standard Valuation for Money Market	
		Funds	
	DIV	Dividend Distribution for All	
		Instruments	
	DST	Capital Distribution for All	
		Instruments	
UploadDate	Denotes the file creation date in MMDDYYYY		UploadDate must be entered as
	format. Month should be two numeric characters		8 numeric characters.
	01 to 12. Day should be two numeric characters 01		
	to 31. Year should be four numeric characters.		
	Example:	January 25, 2017 would be entered as	
	01252017.		
UploadTime	Optional f	ield used for file differentiation for a	Optional field.
	given date	e. Denotes time that the upload file was	
	generated	l in HHMM format.	

Examples:

TEST_0050_MFU_01252017.csv

TEST_0050_MMC_01252017_1630.csv

File Contents

Each CSV file may contain only one NFN message type only. As noted above, the current NFN message types are:

Code	Description
MFU	Standard Valuation for Mutual Funds, UITs, Annuities, Structured Products, Alternative Investment Products, NextShares, Collective Investment Trust, Managed Accounts, Separate Accounts, Hedge Funds and Demand Deposit Accounts.
MMC	Standard Valuation for Money Market Funds
DIV	Dividend Distribution for All Instruments
DST	Capital Distribution for All Instruments

Within the CSV file, the header row is dictated by NFNVersion and MessageType in the field name. The header row must appear as the top row / line of CSV file. See below for values.

Actual payload content will appear in same field order as the header row. Each record will be separated by a carriage return.

MessageType = MFU

For valuation records for NFN money market funds, the MessageType code is "MFU". The header row must contain the same field names as outlined in the first column below. Please note that red highlighted fields are required.

Header Row Field Name	Description	Business logic
MessageType	"MFU" for valuation records	Required field.
		MessageType is defined
		code.
		MessageType matches
		NFN file name value.
FundID	NFN Symbol for instrument record	Required field.
		FundID is associated with
		live NFN instrument.
		MPID / User ID has access
		rights to NFN instrument.
Footnotes	NFN footnote code(s) are used to denote	Maximum of 10 footnote
	special price calculation situations.	codes per record.
	Allowable values are:	Footnote validation logic
		based on Fund Type.

Header Row Field Name	Descript	tion		Business logic
	Code	Definition	Fund Type	
	D	Capital gains distribution	All	
	F	Fund uses prior day prices to calculate NFN valuation values	All	
	Н	Deferred sales charge	UIT	
	I	Repurchase offer period for interval funds	Mutual Fund	
	N	No load fund	Mutual Fund	
	0	Primary offering	UIT	
	P	12(b)1 fee	Mutual Fund	
	R	Redemption fee	Mutual Fund	
	S	Stock split or dividend adjustment	All	
	W	NRO indicator	UIT	
	X	Cash dividend, special cash dividend or income distribution adjustment	All	
	Y	Secondary offering	UIT	
	С	Revaluation	AIP and Structured Product	
FundType		nracter instrument ty Allowable values are		Required field. FundType is defined code.

Header Row Field Name	Descript	tion	Business logic
	Code	Definition	FundType value is same as
	MF	Mutual Fund ¹	NFN instrument record.
	UT	Unit Investment Trust	
	AN	Annuity	
	SP	Structured Product	
	AP	Alternative Investment Product ²	
	EM	NextShares Exchange Traded Managed Fund	
	СТ	Collective Investment Trust	
	MA	Managed Accounts	
	SA	Separate Accounts	
	HF	Hedge Fund	
	DD	Demand Deposit Account	
ReportingType	One cha	racter code to indicate valuation	Required field.
	-	cy for instrument. Allowable values	ReportingType is defined
	are:	Definition	code.
	Code	Definition	
	R	Daily / End of Day Update	
	I	Intraday Update	
NAV	Net Asse	et Value (NAV) for instrument for	Required field.
	given da "NA".	ite. Field value must be numeric or	For numeric values, NAV is stated in standard format, with up to 6 decimal digits.
		ould be reported for all fund types JITs. NAV should be stated in	NAV range is 0.000001 to 999999.99999999999999999999999999999
	standard	d number format with imbedded	NAV may not be zero. If
	currency	point. Field is processed in stated y units (e.g., 1 = \$1). Maximum of 6 decimal digits.	NAV is not available or is outside stated range, field should be populated as "NA".

¹ Mutual Fund instrument type is used for Open-End Mutual Funds, Closed End Mutual Funds / ETFs, Interval Fund and Business Development Company (BDC) instruments.

² Alternative Investment Product instrument type is used for Managed Future Fund, Fund of Hedge Fund, Non-Traded REIT, Non-Traditional Hedge Fund, Commodity Pool Fund and Private Equity Offering.

Header Row Field Name	Description	Business logic
	If NAV is not available, field should be populated as "NA". Field should also be populated as "NA" for UITs.	NAV is subject to price parameter validation unless override field is populated. NAV is reported as "NA" for UITs.
NAVOverride	Populate field with "#" only if NFN price validation logic should be skipped for record. Standard validation logic compares NAV in file to prior NAV in NFN system; rejects if difference is more than defined %.	NAVOverride code must be # or blank.
OfferMarketPrice	Offer / Market Price for instrument for given date. Field value must be numeric or "NA". Offer / Market Price should be reported for all fund types. Offer / Market Price should be stated in standard number format with imbedded decimal point. Field is processed in stated currency units (e.g., 1 = \$1). Maximum number of 6 decimal digits. If Offer / Market Price is not available, field should be populated as "NA".	Required field. For numeric values, Offer / Market Price is stated in standard format, with up to 6 decimal digits. NAV range is 0.000001 to 999999.999999. Offer / Market Price may not be zero. If Offer / Market Price is not available or is outside stated range, field should be populated as "NA". Offer / Market Price is subject to price parameter validation unless override field is populated.
OfferMarketPriceOverride	Populate field with "#" only if NFN price validation logic should be skipped for record. Standard validation logic compares Offer / Market Price in file to prior Offer / Market Price in NFN system; rejects if difference is more than defined %.	OfferMarketPriceOverride code must be # or blank.
NAVRedemption	Redemption NAV for instrument for given date. Field value must be numeric or "NA". Redemption NAV should be reported for UITs. Redemption NAV should be stated in standard number format with imbedded decimal point. Field is processed in stated	Required field. For numeric values, Redemption NAV is stated in standard format, with up to 6 decimal digits. NAV range is 0.000001 to 999999.999999.

Header Row Field Name	Description	Business logic
	currency units (e.g., 1 = \$1). Maximum	Redemption NAV may not
	number of 6 decimal digits.	be zero. If Redemption
		NAV is not available or is
	If Redemption NAV is not available, field	outside stated range, field
	should be populated as "NA". Field should	should be populated as
	also be populated as "NA" for mutual	"NA".
	funds, NextShares, annuities, structured	Redemption NAV is
	products, AIPs, Collective Investment Trust	subject to price parameter
	(CIT), Managed Accounts, Separate	validation unless override
	Accounts, Hedge Fund and Demand	field is populated.
	Deposit Accounts	Redemption NAV is
		reported as "NA" for non- UITs.
NAVRedemptionOverride	Populate field with "#" only if NFN price	NAVRedemptionOverride
NA vice emption override	validation logic should be skipped for	code must be # or blank.
	record.	eode mase se " or sidnik.
	Tessi di	
	Standard validation logic compares	
	Redemption NAV in file to prior	
	Redemption NAV in NFN system; rejects if	
	difference is more than defined %.	
WrapPrice	Wrap Price is the price paid to purchase	For numeric values, Wrap
	units in a wrap account on given date.	Price is stated in standard
		format, with up to 6
	Wrap Price should be reported for UITs.	decimal digits.
	Wrap Price should be stated in standard	Wrap Price range is
	number format with imbedded decimal	0.000001 to
	point. Field is processed in stated currency	999999.999999.
	units (e.g., 1 = \$1). Maximum number of 6	Wrap Price may not be
	decimal digits.	zero. If Wrap Price is not
	If Wrap Price is not available, field should	available or is outside
	be populated as "NA". If not populated,	stated range, field should
	NFN system will process field as not	be populated as "NA".
	available and send "NA" to downstream	
	users.	
Assets	Total Net Assets for instrument for given	Required field.
	date. Field value must be numeric or "NA".	For numeric values, Assets
		is stated in standard
	Field is processed in standard currency	format (whole numbers
	units (whole number only) so 1 = \$1.	only).
		Assets range is 1 to
	If firm does not wish to report field, it must	999999999999999999999999999999999999999
	enter "NA".	If Assets value is less than
		100000, override field
		must be populated.

Header Row Field Name	Description	Business logic
AssetsOverride	If Asset value is less than 100,000, enter	AssetsOverride code must
	"#" in this field.	be # or blank.
YieldCurrent	Current yield for instrument for given date.	Current Yield must be
		numeric, "NA" or blank.
	Field is processed as a percentage so 0.01%	Current Yield range is -
	is entered as 0.01. This is a signed numeric	9999.9999 to 9999.9999.
	value up to 4 decimal digits.	
	If not populated, NFN system will process	
	field as not available and send "NA" to	
	downstream users.	
ELTR	Estimated Long Term Return (ELTR) for	ELTR must be numeric,
	instrument for given date.	"NA" or blank.
	, and the second	ELTR range is -9999.9999
	Field is processed as a percentage so 0.01%	to 9999.9999.
	is entered as 0.01. This is a signed	
	numeric value up to 4 decimal digits.	
	If not populated, NFN system will process	
	field as not available and send "NA" to downstream users.	
AccruedInterest	Interest accrued since the last interest	AccruedInterest must be
Accidedifferest	payment was made. Field value must be	numeric, "NA" or blank.
	numeric or "NA".	For numeric values,
		Accrued Interest is stated
	Accrued Interest should be stated in	in standard format, with
	standard number format with imbedded	up to 6 decimal digits.
	decimal point. Field is processed in stated	Accrued Interest range is
	currency units (e.g., 1 = \$1). Maximum	0.000001 to
	number of 6 decimal digits.	999999.999999.
	If Asserted Interest is not available field	Accrued Interest may not
	If Accrued Interest is not available, field should be populated as "NA". If not	be zero. If Accrued
	populated, NFN system will process field as	Interest is not available or is outside stated range,
	not available and send "NA" to	field should be populated
	downstream users.	as "NA".
DividendDaily	Daily Dividend Factor for instrument if it	DividendDaily must be
,	declares a daily dividend. Please note that	numeric, "NA" or blank.
	firms should make dividend adjustments	For numeric values, Daily
	for weekends and holidays as necessary.	Dividend Factor is stated
		in standard format, with
	Daily Dividend Factor should be stated in	up to 6 decimal digits.
	standard number format with imbedded	Daily Dividend Factor
	decimal point. Field is processed in stated	range is 0.000001 to
	currency units (e.g., 1 = \$1). Maximum	99.999999.
	number of 6 decimal digits.	

Header Row Field Name	Description	Business logic
		Daily Dividend Factor may
	If Daily Dividend Factor is not available,	not be zero. If Daily
	field should be populated as "NA". If not	Dividend Factor is not
	populated, NFN system will process field as	available or is outside
	not available and send "NA" to	stated range, field should
	downstream users.	be populated as "NA" or
		left blank.
DividendDailyAdjustment	Daily Dividend Adjustment Indicator should	DividendDailyAdjustment
	only be populated if Daily Dividend Factor	must be "Y", "N" or blank.
	field contains numeric value.	DividendDailyAdjustment
		field must be populated as
	If Daily Dividend Factor is populated, enter	"Y" or "N" if prior field is
	"Y" if calculation includes non-market day's	populated with numeric
	or "N" if factor is for given entry date only.	value.
EntryDate	Calendar date associated with NAV for	EntryDate must be stated
	given instrument. Date must be stated in	in M/D/YYYY format.
	M/D/YYYY format (no zero padding).	
		EntryDate must be current
	For MFU and MMC message formats, Entry	date or past calendar date.
	Date may be current day's date or prior	
	calendar date within the last 364 days.	
Currency	Three character ISO code for current unit	Field must be "USD" or
	for given instrument. For this field, Nasdaq	blank.
	will use ISO 4217 currency alphabetic	
	codes. "USD" = US Dollars.	
	If not populated, NFN system will populate	
	the value as assigned in the listing.	
CUSIP	Current CUSIP number assigned to	CUSIP must be 9
COSIF	instrument. Field must contain 9	alphanumeric characters.
	alphanumeric characters.	alphanument characters.
	aiphanamene enaracters.	
	NFN Instrument record (and NFN Directory	
	download file) shows the CUSIP as it was	
	reported to Nasdaq on the most recent	
	instrument application.	
	mod afficité application.	

MessageType = MMC

For valuation records for NFN money market funds, the MessageType code is "MMC". The header row must contain the same field names as outlined in the first column below. Please note that red highlighted fields are required.

Header Row Field Name	Descript		Business logic	
MessageType	"MMC"	for valuation records for	Required field.	
	money r	market funds.	MessageType is defined code.	
			MessageType matches NFN	
			file name value.	
FundID	NFN Syn	nbol for instrument record.	Required field.	
			FundID is associated with live	
			NFN money market fund.	
			MPID / User ID has access	
			rights to NFN instrument.	
Footnotes		tnote code(s) are used to	Maximum of 10 footnote	
		special price calculation	codes per record.	
		ns. For money market funds,	Footnote validation logic	
		wable values are:	based on Fund Type.	
	Code	Definition		
	Α	Fund's return may differ		
		due to capital gains or		
		losses		
	В	Sales or account charges		
		may impact yield		
	F	Fund uses price of day		
		prior to the day of		
		reporting		
	G	Redemption Gate In		
		Effect		
	L	Liquidity Fee In Effect		
		4		
	S	Stock split dividend		
		Conital Distribution		
	D	Capital Distribution		
	X	Cash dividend, special		
		cash dividend or income		
		distribution adjustment		
ReportingType		racter code to indicate	Required field.	
		n frequency for instrument.	ReportingType is defined code.	
I I	Allowable values are:			
	Code	Definition	code.	

Header Row Field Name	Description	Business logic
	R Daily / End of Day	
	Update	
	I Intraday Update	
	I intraday opdate	
AverageMaturity	Average maturity reported in	Required field.
	number of days. Field value must be numeric or "NA".	AverageMaturity must be
	be numeric of INA .	numeric or "NA".
	Minimum value = 1	If numeric, value must be
	Maximum value = 364	between 1 and 364.
	If not available, field should be reported as "NA".	
AverageLife	Average life in number of days.	Required field.
	Data should be calculated in	AverageLife must be numeric
	accordance with the SEC Money Market Reform Act.	or "NA".
	Market Reform Act.	If numeric, value must be
	Field value must be numeric or	between 1 and 364.
	"NA".	
	Minimum value = 1	
	Maximum value = 364	
	If not available, field should be	
	If not available, field should be reported as "NA".	
NAV	Net Asset Value (NAV) for	Required field.
	instrument for given date. Field	For numeric values, NAV is
	value must be numeric or "NA".	stated in standard format,
		with up to 6 decimal digits.
	NAV should be reported for all fund	NAV range is 0.000001 to
	types except UITs. NAV should be	999999.999999.
	stated in standard number format	NAV may not be zero. If NAV
	with imbedded decimal point. Field	is not available or is outside
	is processed in stated currency units (e.g., 1 = \$1). Maximum number of 6	stated range, field should be populated as "NA".
	decimal digits.	NAV is subject to price
	acciliai digits.	parameter validation unless
	If NAV is not available, field should	override field is populated.
	be populated as "NA".	populated.
NAVOverride	Populate field with "#" only if NFN	NAVOverride code must be #
	price validation logic should be	or blank.
	skipped for record.	
	Standard validation logic compares	
	NAV in file to prior NAV in NFN	
	system; rejects if difference is more	
	than defined %.	

Header Row Field Name	Description	Business logic
Yield7DayGross	Gross 7 Day Yield based on average	Required field.
	net income earned by the securities	yield7DayGross must be
	in the fund's portfolio during the	numeric or "NA".
	past 7 days. In accordance with the	yield7DayGross range is -
	SEC definition, Gross 7 day yield	9999.9999 to 9999.9999.
	should exclude capital changes and	Yield7DayGross is subject to
	income other than investment	price parameter validation
	income. In addition, Gross 7 day	unless override field is
	yield should not reflect a deduction	populated.
	of shareholders fees and fund	
	operating expenses.	
	Gross 7 Day Yield in numeric format	
	or as "NA".	
	Field is processed as a percentage	
	so 0.01% is entered as 0.01.	
	This is a signed numeric value up to	
	This is a signed numeric value up to 4 decimal digits.	
	4 decimal digits.	
	If field is not available, enter "NA".	
Yield7DayGrossOverride	Populate field with "#" only if NFN	Yield7DayGrossOverride code
	price validation logic should be	must be # or blank.
	skipped for record.	
	Standard validation logic compares	
	Gross 7 Day Yield in file to prior	
	Gross 7 Day Yield in NFN system;	
	rejects if difference is more than	
	defined %.	
Yield7DaySubsidized	The subsidized yield reflects the	Required field.
	yield calculation with expense limitation currently in effect.	yield7DaySubsidized must be
	initiation currently in effect.	numeric or "NA".
	Subsidized 7 Day Yield must be	yield7DaySubsidized range is -
	entered in numeric format or as	9999.9999 to 9999.9999.
	"NA".	yield7DaySubsidized is
		subject to price parameter validation unless override
	Field is processed as a percentage	field is populated.
	so 0.01% is entered as 0.01.	neia is populateu.
	This is a signed numeric value up to	
	4 decimal digits.	
	If field is not available, enter "NA".	

Header Row Field Name	Description	Business logic
Yield7DaySubsidizedOverride	Populate field with "#" only if NFN	yield7DaySubsidized Override
	price validation logic should be	code must be # or blank.
	skipped for record.	
	Standard validation logic compares	
	Subsidized 7 Day Yield in file to prior	
	Subsidized 7 Day Yield in NFN	
	system; rejects if difference is more	
	than defined %.	
Yield7DayAnnualizedEffective	Effective Annualized Seven Day Yield is the expected annualized	Yield7DayAnnualizedEffective
	yield assuming that any income	must be numeric, "NA" or
	earned was reinvested.	blank.
		If numeric,
	Effective Annualized Seven Day	Yield7DayAnnualizedEffective
	Yield should be entered in numeric	range is -9999.9999 to
	format or as "NA".	9999.9999.
	Field is processed as a perceptage	
	Field is processed as a percentage so 0.01% is entered as 0.01.	
	SO 0.01% is efficied as 0.01.	
	This is a signed numeric value up to	
	4 decimal digits.	
	4 decimal digits.	
	If field is not available, it should be	
	populated as "NA". If not populated,	
	NFN system will process field as not	
	available and send "NA" to	
	downstream users.	
Yield30Day	30 Day Yield is based on the SEC	Yield30Day must be numeric,
•	calculation methodology with	"NA" or blank.
	expense limitation currently in effect.	If numeric, Yield30Day range
	circui.	is -9999.9999 to 9999.9999.
	30 Day Yield should be entered in	
	numeric format or as "NA".	
	Field is processed as a percentage	
	so 0.01% is entered as 0.01.	
	This is a signed numeric value up to	
	4 decimal digits.	
	If find the man acceptable to the 199	
	If field is not available, it should be	
	populated as "NA". If not populated,	
	NFN system will process field as not	
	available and send "NA" to	
	downstream users.	

Header Row Field Name	Description	Business logic
Yield30DayDate	Calculation date for 30 day yield value.	Yield30DayDate must be date (M/D/YYYY), "NA" or blank.
	Field must be populated if 30 Day Yield field is numeric. Field must be "NA" or blank if no 30 day yield provided.	Date value must be provided if Yield30Day field is populated with numeric value.
	If provided, date must be stated in M/D/YYYY format.	Yield30DayDate must be actual calendar date.
	If field is not available, it should be populated as "NA". If not populated, NFN system will process field as not available and send "NA" to downstream users.	
DividendDaily	Daily Dividend Factor for instrument if it declares a daily dividend. Please note that firms should make dividend adjustments for weekends and holidays as necessary. Daily Dividend Factor should be stated in standard number format with imbedded decimal point. Field is processed in stated currency units (e.g., 1 = \$1). Maximum number of 6 decimal digits. If Daily Dividend Factor is not available, field should be populated as "NA". If not populated, NFN system will process field as not available and send "NA" to downstream users.	For numeric values, Daily Dividend Factor is stated in standard format, with up to 6 decimal digits. Daily Dividend Factor range is 0.000001 to 99.999999. Daily Dividend Factor may not be zero. If Daily Dividend Factor is not available or is outside stated range, field should be populated as "NA" or left blank.
Dividend Daily Adjustment	Daily Dividend Adjustment Indicator should only be populated if Daily Dividend Factor field contains numeric value. If Daily Dividend Factor is populated, enter "Y" if calculation	DividendDailyAdjustment must be "Y", "N" or blank. DividendDailyAdjustment field must be populated as "Y" or "N" if prior field is populated with numeric value.
Assets	includes non-market day's or "N" if factor is for given entry date only. Total Net Assets for instrument for	Required field.
	given date. Field value must be numeric or "NA".	For numeric values, Assets is stated in standard format (whole numbers only).

Header Row Field Name	Description	Business logic
	Field is processed in standard	Assets range is 1 to
	currency units (whole number only)	999999999999999999999999999999999999999
	so 1 = \$1.	If Assets value is less than
		100000, override field must
	If firm does not wish to report field,	be populated.
	it must enter "NA".	
AssetsOverride	If Asset value is less than 100,000,	AssetsOverride code must be
	enter "#" in this field.	# or blank.
DividendDaily	Daily Dividend Factor for instrument	For numeric values, Daily
	if it declares a daily dividend. Please	Dividend Factor is stated in
	note that firms should make	standard format, with up to 6
	dividend adjustments for weekends	decimal digits.
	and holidays as necessary.	Daily Dividend Factor range is
		0.000001 to 99.999999.
	Daily Dividend Factor should be	Daily Dividend Factor may not
	stated in standard number format	be zero. If Daily Dividend
	with imbedded decimal point. Field	Factor is not available or is
	is processed in stated currency units	outside stated range, field
	(e.g., 1 = \$1). Maximum number of 6	should be populated as "NA"
	decimal digits.	or left blank.
	If Daily Dividend Factor is not	
	available, field should be populated	
	as "NA". If not populated, NFN	
	system will process field as not	
	available and send "NA" to	
	downstream users.	
DividendDailyAdjustment	Daily Dividend Adjustment Indicator	Dividend Daily Adjustment
	should only be populated if Daily	must be "Y", "N" or blank.
	Dividend Factor field contains	Dividend Daily Adjustment
	numeric value.	field must be populated as
		"Y" or "N" if prior field is
	If Daily Dividend Factor is	populated with numeric
	populated, enter "Y" if calculation	value.
	includes non-market day's or "N" if	
	factor is for given entry date only.	
EntryDate	Calendar date associated with NAV	EntryDate must be stated in
	for given instrument. Date must be	M/D/YYYY format.
	stated in M/D/YYYY format (no zero	
	padding).	EntryDate must be current
		date or past calendar date.
	For MFU and MMC message	
	formats, Entry Date may be current	
	day's date or prior calendar date	
	within the last 364 days.	

Header Row Field Name	Description	Business logic
Currency	Three character ISO code for current unit for given instrument. For this field, Nasdaq will use ISO 4217 currency alphabetic codes. "USD" = US Dollars.	Field must be "USD" or blank.
	If not populated, NFN system will populate the value as assigned in the listing.	
CUSIP	Current CUSIP number assigned to instrument. Field must contain 9 alphanumeric characters.	CUSIP must be 9 alphanumeric characters.
	NFN Instrument record (and NFN Directory download file) shows the CUSIP as it was reported to Nasdaq on the most recent instrument application.	
CalculationTime	NAV calculation time associated with the money market fund record. Calculation time must be stated in HHMMSS military time format for the US Eastern Time zone.	CalculationTime must be numeric, "NA" or blank. If numeric, CalculationTime must be entered in six digits and be stated in HHMMSS format. First two characters
	 Examples: 11:00 a.m. Eastern Time should be reported as "110000". 10:00 a.m., Central Time should be reported as "110000". 4:00 p.m., Eastern Time should be reported as "1600000". 	(HH) must be between 00 and 23, second two characters (MM) must be between 00 and 59, and final two characters must be between 00 and 59.
	If Calculation Time is not available, field should be populated as "NA". If not populated, NFN system will process field as not available and send "NA" to downstream users.	

MessageType = DST

For capital distribution records for all asset classes, the MessageType code is "DST". The header row must contain the same field names as outlined in the first column below. Please note that red highlighted fields are required.

Header Row Field Name	Descript	tion	Business logic
MessageType	"DST" fo	or Capital Distributions records	Required field.
			MessageType is defined
	Note: On Ex-Date, firms should also include		code.
	-	e of "D" on valuation message to	MessageType matches
		NAV capital distribution adjustment.	NFN file name value.
FundID	NFN Syr	nbol for instrument record.	Required field.
			FundID is associated with
			live NFN money market
			fund.
			MPID / User ID has access
e de la	T	and a feet and the second of the	rights to NFN instrument.
FundType		rracter instrument type code for	Required field.
	Code	Allowable values are: Definition	FundType is defined code. FundType value is same
	Code	Definition	as NFN instrument
	MF	Mutual Fund	record.
			record.
	MM	Money Market Fund	
	UT	Unit Investment Trust	
	AN	Annuity	
	SP	Structured Product	
	AP	Alternative Investment Products	
	EM	NextShares Exchange Traded	
		Managed Fund	
	СТ	Collective Investment Trust	
	MA	Managed Accounts	
	SA	Separate Accounts	
	HF	Hedge Fund	
	DD	Demand Deposit Accounts	
GainShortTerm	Short Te	erm Capital Gain is the portion of	Required field.
	the tota	I capital gain that is taxed to the	GainShortTerm must be
	shareho	lder as ordinary income under U.S.	numeric or "NA".
	tax law.		

Header Row Field Name	Description	Business logic
	Short Term Capital Gain should be entered in standard numeric format or as "NA".	GainShortTerm range is 0.000001 to 999999.999999.
	Field is processed in currency units so 1 = \$1.	GainShortTerm is subject to price parameter validation unless override
	If not available, field must be populated as "NA".	field is populated. GainShortTerm cannot exceed current NAV in NFN system.
GainShortTermOverride	Populate field with "#" only if NFN price validation logic should be relaxed for record.	GainShortTermOverride code must be # or blank.
	Standard validation logic compares Short Term Capital Gain in file to current NAV in NFN system; rejects if difference is more than defined %.	
	NFN system does not allow firms to enter Short Term Capital Gains in excess of the current NAV amount even if override field is populated.	
GainLongTerm	Long Term Capital Gain is the portion of the total capital gain that is taxed to the shareholder at the long-term capital gains rate under U.S. tax law.	Required field. GainLongTerm must be numeric or "NA". GainLongTerm range is 0.000001 to
	Long Term Capital Gain should be entered in standard numeric format or as "NA".	999999.9999999999999999999999999999999
	Field is processed in currency units so 1 = \$1.	validation unless override field is populated. GainLongTerm cannot
	If not available, field must be populated as "NA".	exceed current NAV in NFN system.
GainLongTermOverride	Populate field with "#" only if NFN price validation logic should be relaxed for record.	GainLongTermOverride code must be # or blank.
	Standard validation logic compares Long Term Capital Gain in file to current NAV in NFN system; rejects if difference is more than defined %.	

Header Row Field Name	Description	Business logic
	NFN system does not allow firms to enter	
	Long Term Capital Gains in excess of the	
	current NAV amount even if override field is	
	populated.	
UnallocatedDistributions	Amount of unassigned term gains.	UnallocatedDistributions
		must be numeric, "NA" or
	Unallocated Distributions should be	blank.
	entered in standard numeric format or as	UnallocatedDistribution
	"NA".	range is 0.000001 to
		999999.999999.
	Field is processed in currency units so 1 =	
	\$1.	
	If not available, field must be populated as	
	"NA". If not populated, NFN system will	
	process field as not available and send "NA"	
	to downstream users.	
ROC	Amount of return of capital (ROC) to the	Required field.
	instrument shareholders.	ROC must be numeric or
		"NA".
	ROC should be entered in standard numeric	ROC range is 0.000001 to
	format or as "NA".	999999.999999.
		ROC is subject to price
	Field is processed in currency units so 1 =	parameter validation
	\$1.	unless override field is
	If not evallable field movet be provideted as	populated.
	If not available, field must be populated as "NA".	ROC cannot exceed
	NA .	current NAV in NFN
ROCOverride	Populate field with "#" only if NFN price	system. ROCOverride code must
ROCOVETTICE	validation logic should be relaxed for	be # or blank.
	record.	be # or blank.
	Tessia.	
	Standard validation logic compares ROC in	
	file to current NAV in NFN system; rejects if	
	difference is more than defined %.	
	NFN system does not allow firms to enter	
	ROC in excess of the current NAV amount	
	even if override field is populated.	
PaymentDate	Payment date for the distribution.	Required field.
		PaymentDate must be
	Field must be date in M/D/YYYY format (no	date (M/D/YYYY) or "NA".
	zero padding) or "NA".	PaymentDate must be
		actual calendar date.

Header Row Field Name	Description	Business logic
	Field must be an actual calendar date	
	within 364 days (past or future) of the	
	current day's date.	
	If you are included an arrivation of an arrivation of an	
	If not available, field must be populated as "NA".	
RecordDate	Record Date for the distribution;	Required field.
	shareholders of the instrument as of this	RecordDate must be date
	date would receive the distribution.	(M/D/YYYY) or "NA".
		RecordDate must be
	Field must be date in M/D/YYYY format (no	actual calendar date.
	zero padding) or "NA".	
	Field must be an actual calendar date	
	within 364 days (past or future) of the	
	current day's date.	
	If not available, field must be populated as	
	"NA".	
DateEx	Ex Date for the distribution.	Required field.
		DateEx must be date
	Date must be submitted in M/D/YYYY	(M/D/YYYY).
	format (no zero padding).	DateEx must be actual
	Field worth a supertural calculate	U.S. trading date.
	Field must be an actual calendar date	DateEx date may not be populated as "NA" or left
	within 364 days (past or future) of the current day's date.	blank.
	current day's date.	Didlik.
	Ex Date must be a U.S. trading date (no	
	weekends or U.S. market holidays).	
	, ,	
	Note: Because the NFN processing logic is	
	based on Ex-Date field, Nasdaq requires	
	that NFN pricing agent cancel and re-enter	
	the distribution record (rather than	
	correcting the record).	
ReinvestDate	Reinvestment date for the distribution.	Required field. ReinvestDate must be
	Field must be date in M/D/YYYY format (no	date (M/D/YYYY) or "NA".
	zero padding) or "NA".	ReinvestDate must be
	zero padanig/ or TWY.	actual calendar date.
	Field must be an actual calendar date	a state to the state of the sta
	within 364 days (past or future) of the	
	current day's date.	

Header Row Field Name	Description	on	Business logic
	If not available, field must be populated as "NA".		
Action	Distribution action for record. Allowable values are:		Required field. Action must be defined
	Code	Definition	value. Action value is not correct
	N	New entry	based on prior entries for the symbol and ex-date.
	С	Corrected entry	Initial entries must be marked as "N".
	X	Canceled distribution	Subsequent / duplicate messages must be
		ase enter the full record for and corrected entries.	marked as "C" or "X".
	symbol an	he NFN logic is based on the dex-date fields, Nasdaq highly	
	or Ex-Date	nds that firms enter a NFN Symbol e correction as two separate	
		cancellation for the original entry ventry with the corrected on.	
EntryDate	File upload date. Date must be stated in M/D/YYYY format (no zero padding).		EntryDate must be stated in M/D/YYYY format. EntryDate must be
	Date must	nd DIV message formats, Entry cequal to the current day's date is uploaded.	current date.
Currency	Three character ISO code for current unit for given instrument. For this field, Nasdaq will use ISO 4217 currency alphabetic codes. "USD" = US Dollars.		Field must be "USD" or blank.
		ulated, NFN system will populate ssigned in the listing.	
CUSIP	Current CUSIP number assigned to instrument. Field must contain 9 alphanumeric characters.		CUSIP must be 9 alphanumeric characters.
	download reported t	ument record (and NFN Directory file) shows the CUSIP as it was to Nasdaq on the most recent application.	

MessageType = DIV

For dividend, interest payments or other income distribution records, the MessageType code is "DIV". The header row must contain the same field names as outlined in the first column below. Please note that red highlighted fields are required.

Header Row Field Name	Descript		Business logic
MessageType	"DIV" for Dividend / Interest Distribution records. Note: On Ex-Date, firms should also include footnote of "D" on valuation message to denote NAV cash dividend or special cash		Required field. MessageType is defined code.
			MessageType matches NFN file name value.
	dividend	l adjustments.	
	footnote	ate, firms should also include e of "S" on valuation message to NAV stock dividend adjustments.	
FundID	NFN Symbol for instrument record.		Required field. FundID is associated with live NFN money market fund. MPID / User ID has access rights to NFN instrument.
FundType		racter instrument type code for	Required field.
	Code	Allowable values are: Definition	FundType is defined code. FundType value is same
	MF	Mutual Fund	as NFN instrument record.
	MM	Money Market Fund	
	UT	Unit Investment Trust	
	AN	Annuity	
	SP	Structured Product	
	AP	Alternative Investment Products	
	EM	NextShares Exchange Traded Managed Fund	
	СТ	Collective Investment Trust	
	MA	Managed Accounts	

Header Row Field Name	Description		Business logic
	SA	Separate Accounts	
	HF	Hedge Fund	
	DD	Demand Deposit Account	
CashDistributionType		ash distribution being reported.	Required field.
	Code	e values are: Definition	CashDistributionType must be defined value.
	Code	Jennicon .	If CashDistributionType
	D	Cash Dividend	is populated, CashDistributionTotal
	I	Interest / Income	must contain numeric
		Distribution	value.
	S	Special Cash Dividend	
	<space></space>	Not applicable, no cash	
		distribution being reported	
		(only stock dividend)	
CashDistributionTotal	Total am	ount of cash distribution.	Required field.
	_		CashDistributionTotal
	Total Cash Distribution should be entered in standard number format. Field is		must be numeric or "NA".
	processed in currency units so 1 = \$1.		CashDistributionTotal
			range is 0.000001 to
		ilable, field must be populated as	999999.9999999999999999999999999999999
	"NA".		CashDistributionTotal is subject to price
	Note: Firms may report the breakdown of		parameter validation
	cash dividends/interest distribution in the		unless override field is
	fields that follow.		populated. CashDistributionTotal
			cannot exceed current
			NAV in NFN system.
CashDistributionTotalOverrid	Populate field with "#" only if NFN price		CashDistributionTotal Override code must be
е	validation logic should be relaxed for record.		# or blank.
		validation logic compares Total ribution in file to current NAV in	
		em; rejects if difference is more	
	than defined %.		

Header Row Field Name	Description	Business logic
	NFN system does not allow firms to enter	
	Total Cash Distributions in excess of the	
	current NAV amount even if override field	
	is populated.	
CashDistributionNonQualifie d	Portion of the cash dividend or interest income that is taxed as ordinary income to the shareholder by the Internal Revenue Service (IRS). Non-Qualified Cash Distribution should be entered in standard number format. Field is processed in currency units so 1 = \$1.	CashDistributionNon Qualified must be numeric or "NA". CashDistributionNon Qualified range is 0.000001 to 999999.999999. CashDistributionNon
	If not available or not applicable, field must be populated as "NA".	Qualified cannot exceed CashDistributionTotal.
	If not populated, NFN system will process field as not available and send "NA" to downstream users.	
CashDistributionQualified	Portion of the cash dividend or interest that is taxed as a qualified dividend to shareholder by the IRS.	CashDistribution Qualified must be numeric or "NA". CashDistribution
	Qualified Cash Distribution should be entered in standard number format. Field is processed in currency units so 1 = \$1.	Qualified range is 0.000001 to 999999.999999. CashDistribution
	If not available or not applicable, field must be populated as "NA".	Qualified cannot exceed CashDistributionTotal.
	If not populated, NFN system will process field as not available and send "NA" to downstream users.	
CashDistributionTaxFree	Portion of the cash dividend or interest	CashDistributionTaxFre
	attributable to bonds that is not taxed to	e must be numeric or
	the shareholder by the IRS.	"NA". CashDistributionTaxFre
	Tax-Free Cash Distribution should be entered in standard number format. Field	e range is 0.000001 to 999999.99999999999999999999999999999
	is processed in currency units so 1 = \$1.	CashDistributionTaxFre e cannot exceed
	If not available or not applicable, field must be populated as "NA".	CashDistributionTotal.

Header Row Field Name	Description	Business logic
	If not populated, NFN system will process field as not available and send "NA" to downstream users.	
ForeignTaxCreditOrdinary	Portion of the cash dividend or interest from a foreign corporation that is not "qualified" by the IRS. Ordinary Foreign Tax Credit should be	ForeignTaxCredit Ordinary must be numeric or "NA". ForeignTaxCredit Ordinary range is
	entered in standard number format. Field is processed in currency units so 1 = \$1.	0.000001 to 999999.999999. ForeignTaxCredit
	If not available or not applicable, field must be populated as "NA".	Ordinary cannot exceed CashDistributionTotal.
	If not populated, NFN system will process field as not available and send "NA" to downstream users.	
ForeignTaxCreditQualified	Portion of the cash dividend or interest attributable to qualified foreign corporation as defined by the IRS.	ForeignTaxCredit Qualified must be numeric or "NA". ForeignTaxCredit
	Qualified Foreign Tax Credit should be entered in standard number format. Field is processed in currency units so 1 = \$1.	Qualified range is 0.000001 to 999999.999999. ForeignTaxCredit
	If not available or not applicable, field must be populated as "NA".	Qualified cannot exceed CashDistributionTotal.
	If not populated, NFN system will process field as not available and send "NA" to downstream users.	
DividendStock	Stock split/dividend ratio for instrument in record. This is the number of shares that the stockholder will have after distribution if he held 1 share on record date.	DividendStock must be numeric, "NA" or blank. DividendStock range is 0.000001 to 999999.999999.
	 Examples: 2-for-1 stock split should be reported as 2 1-for-2 reverse stock split should be reported as 0.5 10% stock dividend would be reported as 1.1 	DividendStock is subject to validation parameters intended to prevent fat fingering.
	If unavailable, please submit "NA".	

Header Row Field Name	Description	Business logic
	If not populated, NFN system will process	
	field as not available and send "NA" to	
	downstream users.	
DividendStockOverride	Leave field blank for standard NFN price	DividendStockOverride
	validation logic.	code must be # or
	Chandard validation lasis absolve to see if	blank.
	Standard validation logic checks to see if stock dividend falls into parameter	
	expected range.	
	expected range.	
	Enter # to override NFN price parameter	
	validation logic.	
PaymentDate	Payment date for the dividend or income	Required field.
-	distribution.	PaymentDate must be
		date (M/D/YYYY) or
	Field must be date in M/D/YYYY format	"NA".
	(no zero padding) or "NA".	PaymentDate must be
		actual calendar date.
	Field must be an actual calendar date	
	within 364 days (past or future) of the	
	current day's date.	
	If not available, field must be populated as	
	"NA".	
RecordDate	Record Date for the dividend or income	Required field.
	distribution; shareholders of the	RecordDate must be
	instrument as of this date would receive	date (M/D/YYYY) or
	the distribution.	"NA".
		RecordDate must be
	Field must be date in M/D/YYYY format	actual calendar date.
	(no zero padding) or "NA".	
	etala a alba a a alba la da	
	Field must be an actual calendar date	
	within 364 days (past or future) of the current day's date.	
	current day's date.	
	If not available, field must be populated as	
	"NA".	
DateEx	Ex Date for the dividend or income	Required field.
	distribution. This is the date that the NAV	DateEx must be date
	is adjusted for the distribution.	(M/D/YYYY).
		DateEx must be actual
	Date must be submitted in M/D/YYYY	U.S. trading date.
	format (no zero padding).	DateEx date may not
		be populated as "NA"
		or left blank.

Header Row Field Name	Description	on	Business logic
	Field must be an actual calendar date within 364 days (past or future) of the current day's date. Ex Date must be a U.S. trading date (no weekends or U.S. market holidays).		
	based on that NFN the distrib	cause the NFN processing logic is Ex-Date field, Nasdaq requires pricing agent cancel and re-enter oution record (rather than g the record).	
ReinvestDate	Reinvestn Field mus (no zero p	t be date in M/D/YYYY format padding) or "NA". t be an actual calendar date 4 days (past or future) of the	Required field. ReinvestDate must be date (M/D/YYYY) or "NA". ReinvestDate must be actual calendar date.
	If not available, field must be populated as "NA".		
Action	Distribution	on action for record. Allowable	Required field. Action must be defined value. Action value is not
	Code	Definition	
	N	New entry	correct based on prior entries for the symbol
	С	Corrected entry	and ex-date. Initial entries must be marked
	Х	Canceled distribution	as "N". Subsequent / duplicate messages
	Note: Please enter the full record for cancelled and corrected entries.		must be marked as "C" or "X".
	Because the NFN logic is based on the symbol and ex-date fields, Nasdaq highly recommends that firms enter a NFN Symbol or Ex-Date correction as two separate entries: a cancellation for the original entry plus a new entry with the corrected information.		

Header Row Field Name	Description	Business logic
EntryDate	File upload date. Date must be stated in M/D/YYYY format (no zero padding).	EntryDate must be stated in M/D/YYYY format.
	For DST and DIV message formats, Entry Date must equal to the current day's date when file is uploaded.	EntryDate must be current date.
Currency	Three character ISO code for current unit for given instrument. For this field, Nasdaq will use ISO 4217 currency alphabetic codes. "USD" = US Dollars. If not populated, NFN system will populate the value as assigned in the listing.	Field must be "USD" or blank.
CUSIP	Current CUSIP number assigned to instrument. Field must contain 9 alphanumeric characters. NFN Instrument record (and NFN Directory download file) shows the CUSIP as it was reported to Nasdaq on the most recent instrument application.	CUSIP must be 9 alphanumeric characters.

Sample Files

To facilitate CSV file creation process, Nasdaq offers a MS-Excel spreadsheet template document and sample data files.

The MS-Excel spreadsheet includes a separate tab for each message type. Below the header row, Nasdaq has included highlighted rows to demonstrate how to populate the file. These highlighted rows must be deleted from the file prior to CSV conversion.

MS-Excel Template for CSV File Creation

Sample data files are provided to show how the final CSV file should appear. For the sample, Nasdaq used the Market Participant ID of "TEST", file creation date and file upload date of 1/25/2017.

Mutual Fund (MFU) Sample: TEST_0050_MFU_01252017.csv

Money Market Fund (MMC) Sample: TEST_0050_MMC_01252017_1630.csv

Capital Distribution (DST) Sample: TEST 0050 DST 01252017.csv

Dividend (DIV) Sample: TEST_0050_DIV_01252017.csv

NFN System Parameters

The NFN standard system parameters for NFN price data entry are outlined below. Please note that Nasdaq reserves the right to modify system parameters on an as needed basis.

NFN System Validations	Definition	Value	Override Options
NFN System Open Time	The NFN Valuation Module open time. (All entries entered before this time will be rejected.)	8:00 a.m., ET	No.
NFN Close Time	The NFN Valuation Module close time. (All entries entered after this time will be rejected.)	8:00 p.m., ET	No. Firms should report data on T+1 basis if it misses the NFN system deadline.
NAV / Redemption Price	The net change percentage parameter for the NAV and Redemption NAV override prompts.	10.00%	Yes. Firm may enter # in override field to override this price validation.
Offer / Market Price	The net change percentage parameter for the offer / market price for override prompt.	10.00%	Yes. Firm may enter # in override field to override this price validation.
NAV vs. Offer/Market	The percent difference between NAV/Redemption NAV and Offer/Market fields for override prompt.	9.50%	No. This parameter is hard coded.
Total Net Assets	The minimum total net asset amount for override prompt.	\$100,000	Yes. Firm may enter Total Net Asset value as low as \$1 if # in override field.
NAV (Money Market Funds)	The net change percentage parameter for NAV override prompts for money market funds.	10.00%	Yes. Firm may enter # in override field to override this price validation.
Gross 7 Day Yield and Subsidized 7 Day Yield for Money Market Funds	The net change percentage for Subsidized Yield and Gross Yield override prompts.	10.00%	Yes. Firm may enter # in override field to override this price validation.
Total Cash Distribution	The percentage of NAV for override prompt.	10.00%	Yes. Firm may enter Total Cash Distribution between 10% and 100% of NAV if # in override field. However, NFN system prohibits firms from entering Total Cash Distribution in excess of NAV.
Stock Dividend Ratio - Lower Level	The minimum stock dividend ratio before override prompt.	0.1 One-for-ten reverse stock split ratio	Yes. Firms may enter stock dividend ratio as low as 0.000001 (One-for-one million reverse stock split ratio) if # in override field.
Stock Dividend Ratio - Higher Level	The maximum stock dividend ratio before override prompt.	100 100-for-one stock split ratio	Yes. Firms may enter stock dividend ratio as high as 999999 (999,999-for-1

NFN System Validations	Definition	Value	Override Options
			stock split ratio) if # in override field.
Short Term Capital Gains	The percentage of NAV/ Redemption Price for override prompt.	7.50%	Yes. Firm may enter Capital Gain Distribution between 7.5% and 100% of NAV if # in override field. However, NFN system prohibits firms from entering Total Cash Distribution in excess of NAV.
Long Term Capital Gains	The percentage of NAV / Redemption Price for override prompt.	7.50%	Yes. Firm may enter Capital Gain Distribution between 7.5% and 100% of NAV if # in override field. However, NFN system prohibits firms from entering Total Cash Distribution in excess of NAV.
Return of Capital (ROC)	The percentage of NAV / Redemption Price for override prompt.	7.50%	Yes. Firm may enter Capital Gain Distribution between 7.5% and 100% of NAV if # in override field. However, NFN system prohibits firms from entering Total Cash Distribution in excess of NAV.

File troubleshooting:

File format errors:

- Verify file header row matches CSV specification document. Field names and field order must be <u>exactly</u> the same as specification states.
- Verify file name is properly formatted and includes NFN format version "0050".
- Verify that file was saved in CSV (comma delimited) format.

Field level errors:

- Verify field format is correct.
 - Check for extra spaces in field values.
 - o Check date format is correct: M/D/YYYY. No leading zeros needed.
 - Check calculation time format is correct: HHMMSS. 8 characters with leading zero, no separators. If converting from MS-Excel, Calculation Time will need to be entered as a text field (rather than general or numeric field).
 - Check CUSIP to make sure that it is 9 characters. If converting from MS-Excel, CUSIP will
 need to be entered as a text field (rather than general or numeric field).
- Price parameter validations.