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Web API Specification for the

OTC Reporting Facility

File Downloads - ORF

Version 15.0
April, 29 2024

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Revision History

Version	Date	Changes Made
Version 1.0	February 10, 2014	• Original version of specification
Version 2.0	March 19, 2014	• Changes are described in Appendix A – Version 2.0 Summary of Changes
Version 3.0	April 22, 2014	• Add field length (14) for FINRA_OTC_ID. • Change field length from 11 to 15 bytes for: ADR_ORDNY_SHARE_RT; OLD ADR_ORDNY_SHARE_RT; and NEW ADR_ORDNY_SHARE_RT
Version 4.0	June 10, 2014	• CLASS_TX Description – Relates to Class or Series of Security • SUBJ_CRPRT_ACTN_CD – Values changed from Y/N to CA/CD • Appendix B - Included table of values for DAILY_LIST_RSN_CD
Version 5.0	September 9, 2014	• Added value definitions for Offering Type (OFRNG_TYPE_CD) • Added value definitions for Financial Status Indicator (FNNCL_STTS_CD) • Defined field as ratio for ADR to Ordinary Share Ratio (ADR_ORDNY_SHARE_RT) • Defined field as ratio for Forward Split Ratio (FRWRD_SPLIT_RT) and Reverse Split Ratio (RVRS_SPLIT_RT) • Added Daily List Reason Codes in Appendix B and Descriptions, RSFS: SCAFR; F1534 • Added Appendix C – Equity Master Security Code Descriptions (SCTRY_TYPE_CD) table
Version 6.0	October 16, 2014	• Added Daily List Reason Code FSCL (Financial Status Change Liquidation) • Modified Equity Master Security Type Code Description of Preferred Stock from PRES to PRFS • Added Corporate Actions statement related to the potential inclusion of fixed income data in the Daily List
Version 7.0	March 16, 2015 (effective June 1, 2015)	• Included additional Daily List Reason Codes/Descriptions specific to market change events
Version 8.0	May 8, 2015 (effective June 1, 2015)	• Added Next Day Dividend Query and Data File
Version 9.0	December 1, 2015 (effective February 1, 2016)	• Added Record ID field to the Daily List • Added Offering Type value of "Accredited Investors' to the Master File and Daily List • Modified format of following Daily List fields to 6v6:

Version	Date	Changes Made
		ADR Dividend Fee ADR Tax Relief Fee ADR Issuance Fee ADR Withholding Tax Stock Percentage
Version 9.0a	December 15, 2015 (effective April 4, 2016)	Data changes originally scheduled for February 1, 2016 moved to be effective on April 4, 2016 • Added Record ID field to the Daily List • Added Offering Type value of "Accredited Investors' to the Master File and Daily List • Modified format of following Daily List fields to 6v6: ADR Dividend Fee ADR Tax Relief Fee ADR Issuance Fee ADR Withholding Tax Stock Percentage
Version 10.0	September 20, 2017	Added IEX Market Center Changes in Appendix B
Version 11.0	November 30, 2017 (effective March 12, 2018)	Added Record Id to the Next Day Dividend file
Version 12.0	September 16, 2021	• Replaced references to the OATS rules with references to FINRA's CAT Compliance Rules. • Removed all references to OTCBB
Version12A	October 5, 2021	• "u" remains as Other OTC Security (redefinition will occur at a later time)
Version 13.0	April 14, 2022	• "u" redefined as OTC Equity
Version 14.0	September 23, 2022	• Added "ETN" Exchange Traded Note to Appendix C
Version 15.0	April 29, 2024	• Removed certificate references and added new M2M API information • New string URL – starts with apidownload

Introduction

The FINRA TRACE Reporting and Quotation Service is a system developed which consolidates the various fixed income and equity reporting facilities FINRA currently maintains (e.g., TRACE, ADF, OTC Equity Reporting, etc…) into a single platform. The secure web interface offers member firms enhanced reporting and data retrieval functionality.

The Download site for ORF supports clients via a Web Application Programming Interface (API) to download security master files, daily lists, and other files.

This document pertains specifically to ORF. This document outlines the parameters and values for each available ORF file. The data in each of these files is current as of the time of download.

Access to the Download API

Clients who wish to programmatically access the API must request a Refresh Token via the TRAQS Website with their OKTA profile login. This Refresh Token will be used to obtain an Access Token. This Access Token will use a "Bearer Token," which will allow clients to request the API files without having to collect credentials.

The Refresh Token is valid for 6 months. The Access Token expires every hour (3600 seconds). It is the client's responsibility to programmatically request a new Access Token when it expires using the Refresh Token.

To access TRAQS, a username, password, and NASDAQ Multi-Factor Authentication (MFA) is required. To establish a TRAQS username, please consult your Super Account Administrator (SAA) and use the Participant Data Management (PDM) system.

The data contained in the API files are maintained by FINRA Operations. For questions concerning the data, PDM, or to access the files, please contact FINRA Operations at (866) 776-0800 option 2 or FINRAOperations@finra.org. For technical questions or issues accessing the files, please contact FINRA Product Management at (866) 899-2107 or FINRAProductManagement@finra.org.

Access to the File Domain

Equity file downloads use the NASDAQ Web Security Framework (NWSF) for authentication (proper client authorization for access to particular files must be in place). In order to access the site and download files, a user needs to present a valid NWSF account/password and client certificate with access to the application.

The data contained in these files are maintained by FINRA Operations. For questions concerning the data, or to subscribe to receive these files, please contact FINRA Operations at (866) 776-0800 or FINRAOperations@finra.org. For technical questions or issues accessing the files, please contact FINRA Product Management at (866) 899-2107 or FINRAProductManagement@finra.org.

Acquiring the Refresh Token in TRAQS

1. Log into TRAQS and authenticate using MFA.
2. Click **API** from the **Main Menu**.
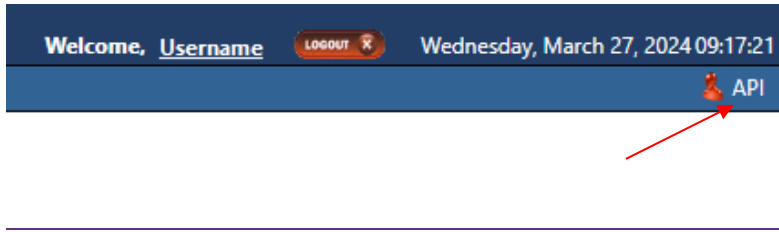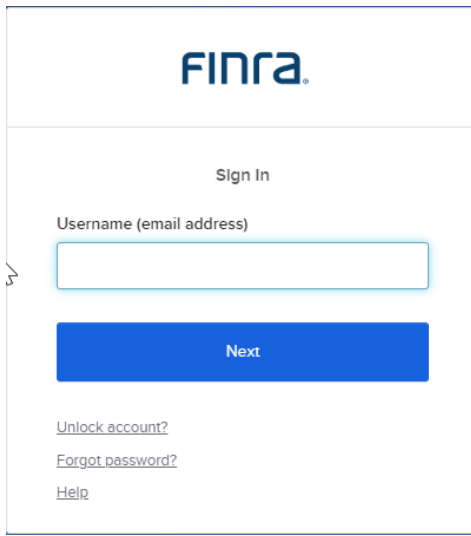
3. Click **Programmatic** from the **Download Menu** (this is where the Refresh Token is obtained).
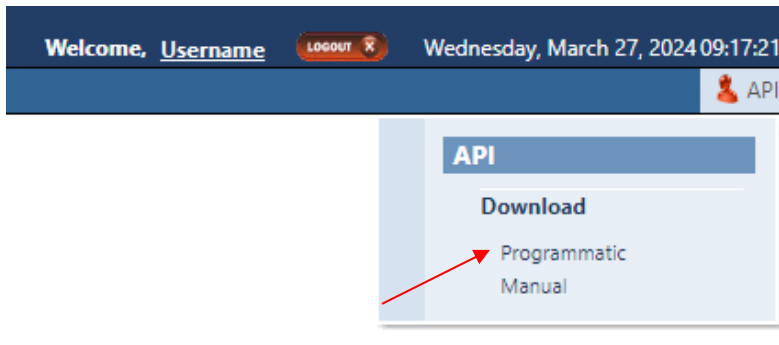
4. Click **Get Token** from the **API Download Programmatic screen**.
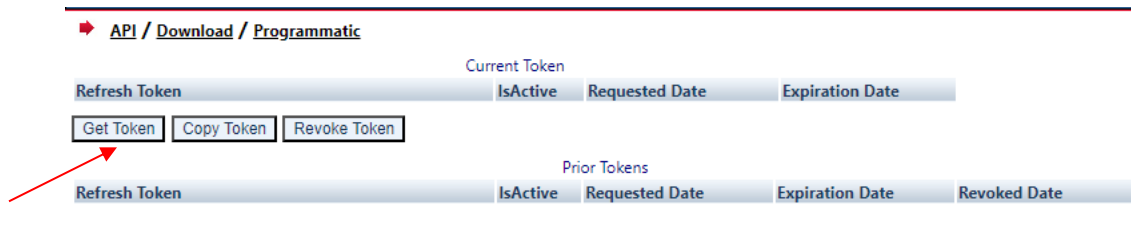
5. After requesting the Refresh Token, the system will ask you to **Authenticate** again. If successful, the user will be brought back to the API Download Programmatic screen and the Refresh Token information will be populated under the "Current Token" portion of the screen.

6. Click **Copy Token** and paste the **Refresh Token** into your script.

7. Add code to your script to request an **Access Token.**
8. Upon logging into the API domain from your application, your application will request a new Access Token from the TRAQS download server.
9. Your application will apply the new Access Token to the download API request call.
1.10. On success, the requested data will be returned to your application.

11. The user has the ability to Revoke the current Refresh Token at any time, by clicking **Revoke Token**. This will inactivate the current Refresh Token and it will move to the Prior Token portion of the screen.

➡ <u>API</u> / <u>Download</u> / <u>Programmatic</u>

Current Token

Refresh Token	IsActive	Requested Date	Expiration Date	
wZp4oheC4vimHopdVF8233BX3t8i9V18XGIhqRulkiw	True	3/27/2024 3:24:14 PM	6/25/2024 7:24:13 PM	

[Get Token] [Copy Token] [Revoke Token]

Prior Tokens

Refresh Token	IsActive	Requested Date	Expiration Date	Revoked Date

➡ <u>API</u> / <u>Download</u> / <u>Programmatic</u>

Current Token

Refresh Token	IsActive	Requested Date	Expiration Date	

[Get Token] [Copy Token] [Revoke Token]

Prior Tokens

Refresh Token	IsActive	Requested Date	Expiration Date	Revoked Date
wZp4oheC4vimHopdVF8233BX3t8i9V18XGIhqRulkiw	False	3/27/2024 3:24:14 PM	6/25/2024 7:24:13 PM	3/27/2024 3:41:17 PM

12. If the current Refresh Token is expired, click **Get Token** which will generate a new Refresh token and the expired Refresh Token will move to the Prior Token portion of the screen.

➡ <u>API</u> / <u>Download</u> / <u>Programmatic</u>

Current Token

Refresh Token	IsActive	Requested Date	Expiration Date	
r7W5gnX_FLzliq-HPAm06dcJvIBhXUWNzKFnJH31Rts	True	3/27/2024 3:51:26 PM	6/25/2024 7:51:26 PM	

[Get Token] [Copy Token] [Revoke Token]

Prior Tokens

Refresh Token	IsActive	Requested Date	Expiration Date	Revoked Date
wZp4oheC4vimHopdVF8233BX3t8i9V18XGIhqRulkiw	False	3/27/2024 3:24:14 PM	6/25/2024 7:24:13 PM	3/27/2024 3:41:17 PM

Note: Users will be notified via email 15 days prior to **Refresh Token** expiration. You cannot download the API files if the **Refresh Token** or **Access Token** are expired. Refresh Tokens that expire will need to be requested manually following step 3 above and updated in your script.

Requesting An Access Token

To programmatically request a new Access Token, clients will send a POST request to https://apidownload.finratraqs.org/refresh

In the body of the request, you will need to supply values to the following required parameters.

refreshtoken – refresh token request from the TRAQS website

username – the NWSF username was used to initially request the legacy API.

This will return the following sample JSON response:

```
{
    "token_type": "Bearer",
    "expires_in": 3600,
    "access_token":
"eyJraWQiOiIwVlRIdEFidXZFOUVzVkNkNGtYS3FIYXU5ZWJqbHRRbENSMXc4MGJPTTgwIiwiYWxnIjoiUlMyNTYifQ.e
yJ2ZXIiOjEsImp0aSI6IkFULklhY3FWeDFSOUs3dmVNWGhFU09iOEhNNHZEaGE1Q1Fma2pEQVlzOXM4R0kub2FyNnNFzd2
hxbGR0RzV4cUoweDYiLCJpc3MiOiJodHRwczovL21wcC10ZXN0Lm5hc2RhcS5jb20vb2F1dGgyL2RlZmF1bHQiLCJhdWQ
iOiJhcGk6Ly9kZWZhdWx0IiwiaWF0IjoxNzEyNTkyOTY5LCJleHAiOjE3MTI1OTY1NjksImNpZCI6IjBvYTV3bHA0ZXF4
c05PWlRqMHg3IiwidWlkIjoiMDB1cWwybXltZWhqQ250bnozMweDYiLCJzY3AiOlsib2ZmbGluZV9hY2Nlc3MiXSwiYXV0a
F90aW1lIjoxNzExMDc2NDM1LCJzdWIiOiJsdWlzLmJhbGxlbmFkbmFzZGFxLmNvbSIsInFjX3VzZXJuYW1lIjpbImJhbG
xlbmFsIiwibGJhbGxlbmEiLCJsYmFsbGVuYTEiLCJiYWxsZW5hbDEiLCJsdWlzYmFsIiwiYmFsbGx1aXMiLCJsdWJhbGw
iLCJiYWxsbmZzYyJdfQ.FuBh5F0gdLLUxeJbSkfXxpqVDuIjCEi22hn5P9_nexbEJjstAueWYe8T3mVoyGdmJa9-
jdMwsj_OodJeqk0E-4J9tpXZ1roc609K4lk5BM1wQDxlgZp2ToWbbYI-
VQYQ_49cZxFGX_6ih43TrsmQcA_lQoeYRrTzThET5NH_Q5RIQxKmkYiWXQRmXu0mhwjnc74jCjBY8t96tLoy-3OwDCP-
k_Fz7UNqCUIv1MtWqcp3zWgfhPsvswV4eRfj2iSgEwH_A4acpkxTSMWmauXbCeliMfFdnyrQR1sA055-9WH9pJ-
c2MsB4cpNRO9n0tC3SKWD5l6aFTgE1KiLnIvPKQ",
    "scope": "offline_access",
    "refresh_token": "Zr0_0q3fSmXJXhHNQWs7YBXyt-OFftUMIqywc8VIxHI"
}
```

The Access Token will be in the JSON response.

Corporate Actions

FINRA reviews and processes documents relating to announcements for company-related actions pursuant to Rule 10b-17SEC (SEA) for both **Equity and Fixed Income securities**. These documents include both equity and fixed income announcements of dividends or other distributions in cash or in kind, except an ordinary interest payment on debt security. In addition, Uniform Practice Code ("UPC"), section 11150 (a&b) prescribes the steps for the establishment of "Ex-Interest" for all transactions, except "cash", in bonds or similar evidences of indebtedness which are traded "flat". Therefore, Daily List information included as a result of a query may include both equity and fixed income data related to these corporate actions.

Next Day Dividends

Users may download next day dividend files which will detail issues which have a corporate action scheduled for the following day. The following rules detail how this query and responses to the query will work:

- The query for a next day dividend file will be limited to one day forward from the current day (T+1). Users cannot query for a day past T+1. For example, if the current day is 4/22 a search of 4/23 is permitted but not a search for 4/24. Stating the query without a specific day specified will return the next day's (T+1) dividend file.

- A query for a past date may be enacted. The user is allowed to go back in time to search a previous next day ex-date file. The file returned will be for the actual next day ex-date data.

- If the user elects to query for past day's data, then they must include the date they wish to retrieve. The query response will detail that day's "next day ex-date file" i.e. a back date query performed on 4/7 for a date of 4/1 is actually what would have been queried on 3/31 to receive 4/1 data.
  Usage of Record ID field in a Next Day Dividend File:

  Example for any record returned if there are other dividend records with the same Record ID:

  > New Dividend Record ID 111 published on 4/25/2017, with ex-date of 5/1/2017.
  > Ex date changed to 5/3/17, this change is published on 4/30.
  > Ex date changed to 5/5/17, this change is published on 5/1.

  > All records will now have Record ID of 111.

In the past, depending on the date searched, users could access dividend records that had subsequently been updated. Now, that file will only provide dividends where the **latest version** of the dividend has an ex-date matching the date in the API query string. For example, using the same scenario as above:

- On 5/1/2017, a firm pulls the Next Day Dividend File for the date of 5/1 – it will also NOT get a result for record ID 111, since as of 4/30, the record now has an Ex Date of 5/3.
- On 5/2/2017, the firm pulls the Next Day Dividend File for 5/3, they will NOT get a result for record ID 111, since that record now has an ex-date of 5/5.
- On 5/4/2017, the firm pulls the Next day Dividend File for 5/5 and WILL get the latest version of Record ID 111, with ex-date set to 5/5.

Protocol

FINRA's API download site provides access to files using standard HTTP Secure (https) protocol. It is a combination of the Hypertext Transfer protocol and the TLS protocol to provide encrypted communications and secure identification. The URL https://apidownload.finratraqs.org is the domain where the files reside. In order to access file reference data users should refer to the query strings detailed in this specification. Examples of actual download query strings are available in later sections of this specification.

File Availability – All Times are Approximate

File	When Available
Security Master	Real time starting at 7:00 a.m. ET and throughout the day until 8:00 p.m. ET
Security Daily List	Real time starting at 7:00 a.m. ET and throughout the day until 8:00 p.m. ET
Participant Master	Real time starting at 7:00 a.m. ET and throughout the day until 8:00 p.m. ET
Participant Daily List	Real time starting at 7:00 a.m. ET and throughout the day until 8:00 pm. ET
Participant Clearing Number Relationship	Real time starting at 7:00 a.m. ET and throughout the day until 8:00 p.m. ET
Participant Agreements	Real time starting at 7:00 a.m. ET and throughout the day until 8:00 p.m. ET
Explicit Fee Agreement	Real time starting at 7:00 a.m. ET and throughout the day until 8:00 p.m. ET
Next Day Dividend	Real time starting at 7:00 a.m. ET and throughout the day until 8:00 p.m. ET

NOTE: Users may attempt to access the files on non-business days; however, due to server maintenance which occurs on weekends and other non-business days it is possible the user will not have immediate success in access the data during these days.

URL Parameters

Parameter	Parameter Options
action	**DOWNLOAD** - provide the file. **DELTA** – provide the changes since the last time the user downloaded the file. Delta actions are supported for Security Daily List and Participant Daily List files. **NOT** for the Security Master, Participant List, US Agreements, Explicit Fee or Next Day Dividends files.
facility	**ORF**
files	**EQUITYMASTERAC** – Equity Security Master File Active issues **EQUITYMASTERIN** –Equity Security Master File Inactive issues **DAILYLIST** – Security Daily List for OTC Reporting Facility **PARTICIPANT** – Equity Participant Master File **PDAILYLIST**– Equity Participant Daily List **EQUITYCLEAR** – Equity Clearing Relationship File **EQUITYUSA** – Equity US Agreements File **EXPLICITFEE –** Explicit Fee Agreement File **NXTDAYDIV** – Next Day Dividend File

File	Query Parameters
Equity Security Master Active issues	action=DOWNLOAD&file=EQUITYMASTERAC&facility=ORF
Equity Security Master Inactive issues	action=DOWNLOAD&file=EQUITYMASTERIN&facility=ORF
Security Daily List	action=DOWNLOAD&file=DAILYLIST&facility=ORF
Security Daily List delta (see note 1)	action=DELTA&file=DAILYLIST&facility=ORF
Security Daily List for a specific day	action=DOWNLOAD&file=DAILYLIST&facility=ORF&day=11/17/2014
Equity Participant Master	action=DOWNLOAD&file=PARTICIPANT&facility=ORF
Equity Participant Daily List	action=DOWNLOAD&file=PDAILYLIST&facility=ORF
Equity Participant Daily List delta (see note 1)	action=DELTA&file=PDAILYLIST&facility=ORF
Equity Participant Daily List for a specific day	action=DOWNLOAD&file=PDAILYLIST&facility=ORF&day=11/17/2014
Equity Clearing Relationship	action=DOWNLOAD&file=EQUITYCLEAR&facility=ORF
Equity US Agreements	action=DOWNLOAD&file=EQUITYUSA&facility=ORF
Explicit Fee	action=DOWNLOAD&file=EQUITYEXPLICITFEE&facility=ORF

File	Query Parameters
Next Day Dividend with specific next day date included	action=DOWNLOAD&file=NXTDAYDIV&facility=ORF&day=5/11/2015

NOTE 1: All requests are categorized and recorded. When a DELTA request is made, the time of the previous request is used to determine the items that appear in the DELTA results. The time used for the previous request is the time of request minus two minutes. This ensures that no updates are missed but it can mean items from a previous request may appear in the next DELTA request. Systems should be coded with this in mind.

File Definitions - All Files are Pipe Delimited

ORF - Equity Security Master File (Active and Inactive)

Field Name (Header)	Description	Comments	Maximum Length
FINRA_OTC_ID	FINRA OTC Security ID Symbol	Security Id generated by FINRA RDMS System.	14
CUSIP_ID	CUSIP	This field will be blank for firms that do not have a CUSIP license in place.	9
SYM_CD	Security Symbol	Local exchange symbol.	14
SYM_SUF_CD	Symbol Suffix		7
SCRTY_DS	Security Description	Security Description/Name.	250
RND_LOT_QT	Round Lot Size	Min. number of shares that can be purchased without incurring a larger fee.	4
CPN_RT	Coupon Rate		6
DTC_ELGBL_FL	DTC Eligibility Flag	Indicates if security is eligible to be delivered through a computerized system established by DTCC.	1
SCRTY_TYPE_CD	Security Type	Security Type Description.	4
WIS_DSTRD_CD	When Issued Flag	Indicates if the security does not have a firm settlement. WI or WD.	2
STTS_CD	Status Code	Indicates if security is active, inactive, or terminated.	1
NACTV_DT	Inactive date and time	Format is YYYYMMDDHHMMSS	14
TEST_SCRTY_FL	Test Security Flag to indicate whether the security is used for testing. Default value will be 'N"		1
PRICE_CK_FL	Price Check Flag		1
SCRTY_EFCTV_TS	Security effective time stamp	Format is YYYYMMDDHHMMSS	14
SIP_SYM_ID	SIP Symbol		21
OTCBB_QUOTE_FL		Y or N	1
CLASS_TX	Class or Series of Security		2
OFRNG_TYPE_CD	Offering Type	A – 144A	1

Field Name (Header)	Description	Comments	Maximum Length
		S – Reg S B – 144A and Reg S N – No Restrictions I – Accredited Investors	
MTRTY_XPRTN_DT	Maturity/Expiration date	Format is YYYYMMDDHHMMSS	14
NSCC_ELGBL_FL	NSCC Clearing Eligible Flag		1
DSMTN_FL	Dissemination Flag		1
SUBJ_CRPRT_ACTN_CD	Subject to Corporate Action	CA – Corporate Action without a distribution CD – Corporate Action with a distribution	2
ADR_ORDNY_SHARE_RT	ADR to Ordinary Share Ratio	Ratio	15
BRKR_PRTCT_PRD_FL	Broker Protect Period Flag		1
PGYBK_ELGBL_FL	Piggyback Eligible Flag	The security has been quoted for at least 12 business days during the preceding 30 calendar days, with no more than four business days in succession without a quotation. • Y (Piggyback Eligible) • N (Not Piggyback Eligible)	1
REG_FEE_FL	Reg Fee Flag	N if Offering Type is144A or 144A and Reg S; Y if Offering Type is No Restrictions or Reg S	1
REG_SHO_FL	Reg SHO Flag		1
RULE_4320_FL	4320 Flag		1
OATS_RPTBL_FL	OATS Flag		1
FNNCL_STTS_CD	Financial Status Indicator	E - Delinquent Q – Bankrupt J - Delinquent and Bankrupt L - Liquidation H -Liquidation and Delinquent	1

Field Name (Header)	Description	Comments	Maximum Length
		M -Bankruptcy Reorganization (Emerged)	
LAST_UPDT_TS	Timestamp value when record was created	Format is YYYYMMDDHHMMSS	14

ORF – Security Daily List

Field Name (Header)	Description	Comments	Maximum Length
DAILY_LIST_TS	Daily List Date/Time	YYYYMMDDHHMMSS format.	14
DAILY_LIST_EVENT_CD	Daily List Event Type	Valid values are: SA - Security Addition SC – Security Change SD – Security Deletion DA – Dividend Addition DC – Dividend Change DD – Dividend Deletion/Cancellation *Note: for corporate actions where the security attribute changes and a distribution is announced (i.e., Forward Split, Reverse Split, Stock Dividend or Split, Reverse Split followed by Forward Split), the Change Type shall be Dividend Addition.*	2
OLD_SYM_CD	Old Symbol		14
NEW_SYM_CD	New Symbol		14
OLD_CUSIP_ID	Old CUSIP		9
NEW_CUSIP_ID	New CUSIP		9
OLD_SCRTY_DS	Old Security Description		250
NEW_SCRTY_DS	New Security Description		250
OLD_FNNCL_STTS_CD	Old Financial Status Indicator		1
NEW_FNNCL_STTS_CD	New Financial Status Indicator		1
OLD_OATS_RPTBL_FL	Old OATS Reportable Flag		1
NEW_OATS_RPTBL_FL	New OATS Reportable Flag		1
OLD_RND_LOT_QT	Old Unit of Trade		4

Field Name (Header)	Description	Comments	Maximum Length
NEW_RND_LOT_QT	New Unit of Trade		4
OLD_CLASS_TX	Old Class or Series of Security		2
NEW_CLASS_TX	New Class or Series of Security		2
OLD_ADR_ORDNY_SHARE_RT	Old ADR Ratio	Ratio	15
NEW_ADR_ORDNY_SHARE_RT	New ADR Ratio	Ratio	15
OLD_REG_FEE_FL	Old Reg Fee Flag		1
NEW_REG_FEE_FL	New Reg Fee Flag		1
OLD_MTRTY_XPRTN_DT	Old Maturity Date	YYYYMMDDHHMMSS format.	14
NEW_MTRTY_XPRTN_DT	New Maturity Date	YYYYMMDDHHMMSS format.	14
OLD_MKT_CTGRY_CD	Old Market Category Code	u – OTC Equity	1
NEW_MKT_CTGRY_CD	New Market Category Code	u – OTC Equity	1
OFRNG_TYPE_CD	Offering Type	A – 144A S – Reg S B – 144A and Reg S N – No Restrictions I – Accredited Investors	1
SUBJ_CRPRT_ACTN_CD	Subject to Corp Action	CA – Corporate Action without a distribution CD – Corporate Action with a distribution	2
DCLRN_DT	Declaration Date	YYYYMMDDHHMMSS format.	14
PYMNT_DT	Payment Date	YYYYMMDDHHMMSS format.	14
EX_DT	This is the "change effective date", i.e., the effective date of the change being announced on the Daily List or the Ex Date of the Dividend.	YYYYMMDDHHMMSS format.	14
REC_DT	Record Date	YYYYMMDDHHMMSS format.	14
FRWRD_SPLIT_RT	Forward Split Ratio	Ratio	10
RVRS_SPLIT_RT	Reverse Split Ratio	Ratio	10
STOCK_PT	Percentage	Decimal	12; 6 after the decimal

Field Name (Header)	Description	Comments	Maximum Length
CASH_AMT_TX	Cash Amount	Decimal	25
PYMNT_MTHD_CD	Payment Method		3
ADR_FEE_AM	ADR Dividend Fee	Decimal	12; 6 after the decimal
ADR_TAX_RLF_AM	ADR Tax Relief Fee	Decimal	12; 6 after the decimal
ADR_GROSS_RT	ADR Gross Rate	Decimal	18; 7 after the decimal
ADR_NET_RT	ADR Net Rate	Decimal	18; 7 after the decimal
ADR_ISSNC_FEE_AM	ADR Issuance Fee	Decimal	12; 6 after the decimal
ADR_WHLDG_TAX_PT	ADR Withholding Tax	Decimal	12; 6 after the decimal
QLFD_CD	Qualified Dividend Code		1
DAILY_LIST_RSN_CD	Change Reason Description	Refer to Appendix B for values and descriptions	5
CMMNT_TX	Comments		500
DVDND_MSTR_ID	Record ID	Will be a number that identifies a Dividend/Distribution announcement and allows the user to tie a change to the original announcement of an action. Only populated if the event type is DA, DD, or DC.	10

ORF - Equity Participant Master File

Field Name (Header)	Description	Comments	Maximum Length
MPID	Market Participant Identifier	FINRA identifier assigned to the participant.	6
DBA_NM	Firm Name		64

ORF - Equity Participant Daily List

Field Name (Header)	Description	Comments	Maximum Length
list_dt	Daily List Date	Format is MMDDYYYY	
effective_dt	Effective Date	Format is MMDDYYYY	
cd_description	Event Type	Valid values are: Participant Addition Participant Deletion Participant Change	
old_mpid	Market Participant Identifier		6
old_dba	Firm Name		64
new_mpid	New Market Participant Identifier		6
new_dba	New Firm Name		64
rf_cd	Reporting Facility	Value will always be ORF	

ORF - Equity Clearing Relationship File

Field Name (Header)	Description	Comments	Maximum Length
MPID	MPID of the Client	FINRA identifier assigned to the participant.	6
CLRG_ORG_NB	Clearing Number of Clearing Org used by the MPID		5
CLRG_FIRM_NM	Clearing Firm Name	Name of Clearing Firm Organization.	64
CLRG_EFCTV_DT	Clearing Relationship Effective Date	Format is YYYYMMDDHHMMSS	14
CLRG_XPRTN_DT	Clearing Relationship Expiration Date	Format is YYYYMMDDHHMMSS	14
PRMRY_CLRG_FL	Default Clearing Relationship flag	Value will be Y or N to state if the clearing number in this record is the default clearing number.	1

ORF - Equity US Agreements File

Field Name (Header)	Description	Comments	Maximum Length
MPID	MPID of the Client	FINRA identifier assigned to the participant.	6
AGRMT_EFCTV_DT	Effective Date for the agreement with the client	Format is YYYYMMDDHHMMSS	14
AGRMT_XPRTN_DT	End date for agreement with the client	Format is YYMMDDHHMMSS	12
UNFRM_SRVC_AGRMT_MP_ID	MPID of client with who agreement is based	FINRA identifier assigned to the participant.	6
US_GIVEUP_DROP_FL	Give Up firm receives drop copies of transaction messages	Y or N.	

ORF – Explicit Fee File

Field Name (Header)	Description	Comments	Maximum Length
MPID_1	MPID of the Client	FINRA identifier assigned to the participant.	6
CLRG_FIRM_NM_1	Clearing Firm Name for first MPID	Name of Clearing Firm Organization.	64
MPID_2	MPID of Client 2 in file	FINRA identifier assigned to the second participant.	6
CLRG_FIRM_NM_2	Clearing Firm Name for second MPID	Name of Clearing Firm Organization for second participant.	64
AGRMT_EFCTV_DT	Effective Date for the agreement with the client	Format is YYYYMMDDHHMMSS	14
AGRMT_XPRTN_DT	End date for agreement with the client	Format is YYMMDDHHMMSS	12

ORF - Next Day Dividend File

Field Name (Header)	Description	Comments	Maximum Length
DAILY_LIST_TS	Daily List Date/Time	YYYYMMDDHHMMSS format.	14
OLD_SYM_CD	Old Symbol		14
NEW_SYM_CD	New Symbol		14
OLD_CUSIP_ID	Old CUSIP		9
NEW_CUSIP_ID	New CUSIP		9
OLD_SCRTY_DS	Old Security Description		250
NEW_SCRTY_DS	New Security Description		250
OLD_MKT_CTGRY_CD	Old Market Category Code	u – OTC Equity	1
NEW_MKT_CTGRY_CD	New Market Category Code	u – OTC Equity	1
EX_DT	This is the "change effective date", i.e., the effective date of the change being announced on the Daily List or the Ex Date of the Dividend.	YYYYMMDDHHMMSS format.	14
FRWRD_SPLIT_RT	Forward Split Ratio	Ratio	10
RVRS_SPLIT_RT	Reverse Split Ratio	Ratio	10
STOCK_PT	Percentage	Decimal	12; 6 after the decimal
CASH_AMT_TX	Cash Amount	Decimal	25
QLFD_CD	Qualified Dividend Code		1
DAILY_LIST_RSN_CD	Change Reason Description	Refer to Appendix B for values and descriptions	5
CMMNT_TX	Comments		500
DVDND_MSTR_ID	Record ID	Will be a number that identifies a Dividend/Distribution announcement and allows the user to tie a change to the original announcement of an action.	10

Example Requests

Example 1 - Get the current Active Equity Security Master file

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=EQUITYMASTERAC&facility=ORF

Example 2 - Get the current Inactive Equity Security Master file

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=EQUITYMASTERIN&facility=ORF

Example 3 - Get the Security Daily List

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=DAILYLIST&facility=ORF

Example 4 - Get the Security Daily List Delta

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DELTA&file=DAILYLIST&facility=ORF

Example 5 - Get the Security Daily List for a Specific Day (11/17/2014)

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=DAILYLIST&facility=ORF&day=11/17/2014

Example 6 - Get the current Equity Participant Master file

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=PARTICIPANT&facility=ORF

Example 7 - Get the current Equity Participant Daily List

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=PDAILYLIST&facility=ORF

Example 8 - Get the current Equity Participant Daily List Delta

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DELTA&file=PDAILYLIST&facility=ORF

Example 9 - Get the current Equity Participant Daily List for a Specific Day (11/17/2014)

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=PDAILYLIST&facility=ORF&day=11/17/2014

Example 10 - Get the current Equity Clearing Relationship Master file

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=EQUITYCLEAR&facility=ORF

Example 11 - Get the current Equity US Agreements Master file

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=EQUITYUSA&facility=ORF

Example 12 - Get the current Explicit Fee file

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=EQUITYEXPLICITFEE&facility=ORF

Example 13 - Get the Next Day Dividend with Specific Next Day Date Included (5/11/2015)

https://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=NXTDAYDIV&facility=ORF&day=5/11/2015

Sample Results

Active Equity Security Master File Illustrating the Header and Footer

```
FINRA_OTC_ID|CUSIP_ID|SYM_CD|SYM_SUF_CD|SCRTY_DS|RND_LOT_QT|CPN_RT|DTC_ELGBL_FL|SCR
TY_TYPE_CD|WIS_DSTRD_CD|STTS_CD|NACTV_DT|TEST_SCRTY_FL|PRICE_CK_FL|SCRTY_EFCTV_TS|S
IP_SYM_ID|OTCBB_QUOTE_FL|CLASS_TX|OFRNG_TYPE_CD|MTRTY_XPRTN_DT|NSCC_ELGBL_FL|DSMTN_
FL|SUBJ_CRPRT_ACTN_CD|ADR_ORDNY_SHARE_RT|BRKR_PRTCT_PRD_FL|PGYBK_ELGBL_FL|REG_FEE_F
L|REG_SHO_FL|RULE_4320_FL|OATS_RPTBL_FL|FNNCL_STTS_CD|LAST_UPDT_TS
20040602||AAAG||AAA Century Group USA, Inc. Common
Stock|100||Y|COMS||A||N|Y|20110615000000|AAAG|N||N||Y|Y||||N|Y|N|Y|Y|N|201905151509
02
20036996||AAAIF||Alternative Investment Trust Units
(Austrailia)|100||N|UNOT||A||N|Y|20111129000000|AAAIF|N||N||Y|Y||||N|Y|N|Y|Y||20180
319215342
20032387||AAALF||Aareal Bank AG
AKT|100||N|ORDY||A||N|Y|20020627000000|AAALF|N||N||Y|Y||||N|Y|N|Y|Y||20141205220124
20110757||ZZHGF||Zhongan Online PC Ins Co Ltd. Ordinary Shares
(China)|100||Y|ORDY||A||N|Y|20171213000000|ZZHGF|N||N||Y|Y||||N|Y|N|Y|Y||2019012822
1035
20110735||ZZHGY||ZhongAn Online P & C Insurance Co., Ltd American Depositary
Receipts - Unsponsored
(China)|100||Y|ADRU||A||N|Y|20171206000000|ZZHGY|N||N||Y|Y||1:1||N|Y|N|Y|Y||2018031
9215342
20036625||ZZLL||ZZLL Information Technology, Inc. Common
Stock|100||Y|COMS||A||N|Y|20070919000000|ZZLL|N||N||Y|Y||||N|Y|Y|N|Y||2018052108340
5
20034373||ZZZOF||Zinc One Resources, Inc. Common
Shares|100||Y|CMSH||A||N|Y|20100723000000|ZZZOF|N||N||Y|Y||||N|Y|N|Y|Y||20180904234
602
Footer - Count: 00016706, Facility: ORF, File Created: 20240410124954
```

Equity Participant Master File Illustrating the Header and Footer

```
mpid|dba_nm
AALC|THRIVENT INVESTMENT MANAGEMENT INC.
ABEX|303 ALTERNATIVES, LLC
ABLE|NATIXIS SECURITIES AMERICAS LLC
ABRM|ABRAHAM & CO., INC.
ZDIB|ZIONS DIRECT, INC.
ZDNF|ZIONS DIRECT, INC.
ZERO|TRADEZERO AMERICA, INC.
ZIVI|ZIV INVESTMENT COMPANY
ZOUL|N.B. ZOULLAS SECURITIES, INC.
ZPFD|B. C. ZIEGLER AND COMPANY
ZZZZ|KSAN FOR MPP TESTING
Footer - Count: 00001159, Facility: ORF, File Created: 20240410125507
```

Equity Clearing Relationship Master File Illustrating the Header and Footer

```
MPID|CLRG_ORG_NB|CLRG_FIRM_NM|CLRG_EFCTV_DT|CLRG_XPRTN_DT|PRMRY_CLRG_FL
AABA|0158|APEX CLEARING CORPORATION|||Y
AABT|5231|Unknown - Not in DTCC File|||Y
AACC|0541|ABN AMRO CLEARING CHICAGO LLC/INSTITUTIONAL|||Y
ZZZZ|0122|TEST ACCOUNT FORWARD TO P & S DEPT|20220126000000||N
ZZZZ|9999|FNRA MKT OPS|20230119000000||Y
Footer - Count: 00005250, Facility: ORF, File Created: 20240410130333
```

Equity US Agreements Master File Illustrating the Header and Footer

```
MPID|AGRMT_EFCTV_DT|AGRMT_XPRTN_DT|UNFRM_SRVC_AGRMT_MP_ID|US_GIVEUP_DROP_FL
ABLE|19931220000000|20200929000000|ECUT|N
ABLE|19931220000000||FMCO|N
ABLE|19931220000000||FOMA|N
NTFG|20221206000000||NTFY|N
XCNC|20240327000000||GSCO|N
Footer - Count: 00016083, Facility: ORF, File Created: 20240410130522
```

Explicit Fee File Illustrating the Header and Footer

```
MPID_1|CLRG_FIRM_NM_1|MPID_2|CLRG_FIRM_NM_2|AGRMT_EFCTV_DT|AGRMT_XPRTN_DT
VERT|BNP PARIBAS SECURITIES CORP.|BMOC|BMO CAPITAL MARKETS CORP.|11/18/2015
12:00:00 AM|
CANT|CANTOR FITZGERALD & CO.|MAXM|PERSHING LLC|8/13/2014 12:00:00 AM|
CANT|CANTOR FITZGERALD & CO.|YAMN|PERSHING LLC|8/13/2014 12:00:00 AM|11/13/2018
12:00:00 AM
SSBS|STATE STREET GLOBAL MARKETS, LLC|BAYC|MERRILL LYNCH, PIERCE, FENNER & SMITH
INCORPORATED|7/28/2016 12:00:00 AM|
Footer - Count: 00000135, Facility: ORF, File Created: 20240410130636
```

Appendices

Appendix A – Version 2.0 Summary of Changes

Equity Security Master File

Previous Field Name	New Field Name	Previous Maximum Length	New Maximum Length
FINRA_EQTY_ID	FINRA_OTC_ID		
(FIELD ADDED)	SYM_SUF_CD		7
CPN_RT		28	6
WIS_DIS_CD	WIS_DSTRD_CD		
SUBJ_CRPRT_ACTN_FL	SUBJ_CRPRT_ACTN_CD	1	2
ORDNY_ADR_RT	ADR_ORDNY_SHARE_RT		
4320_FL	RULE_4320_FL		
(FIELD ADDED)	OATS_RPTBL_FL		1
(FIELD ADDED)	FNNCL_STTS_CD		1
TS	LAST_UPDT_TS		

Daily List File

Previous Field Name	New Field Name	Previous Maximum Length	New Maximum Length
DAILY_LIST_EFCTV_TS	DAILY_LIST_TS		
OLD_FNNCL_STTS_DS	OLD_FNNCL_STTS_CD	50	1
NEW_FNNCL_STTS_DS	NEW_FNNCL_STTS_CD	50	1
OLD_ORDNY_ADR_RT	OLD_ADR_ORDNY_SHARE_RT		
NEW_ORDNY_ADR_RT	NEW_ADR_ORDNY_SHARE_RT		
OLD_XPRTN_DT	OLD_MTRTY_XPRTN_DT		
NEW_XPRTN_DT	NEW_MTRTY_XPRTN_DT		
OFRNG_TYPE_DS	OFRNG_TYPE_CD	50	1
SUBJ_CRPRT_ACTN_DS	SUBJ_CRPRT_ACTN_CD	50	2
SPLIT_FCTR_RT	FRWRD_SPLIT_RT	11	10
(FIELD ADDED)	RVRS_SPLIT_RT		10
STOCK_PT		11	12 (chged to 12 in version 9)
CASH_DVDND_AM	CASH_AMT_TX	11	25
ADR_FEE_AM		11	12 (chged to 12 in version 9)
ADR_TAX_RLF_AM		11	12 (chged to 12 in version 9)
ADR_GRSS_RT	ADR_GROSS_RT	11	18
ADR_NET_RT		11	18
ADR_ISSNC_FEE_AM		11	12 (chged to 12 in version 9)
ADR_WTHLD_TAX_AM	ADR_WHLDG_TAX_PT	11	12 (chged to 12 in version 9)
QLFD_DVDND_DS	QLFD_CD	50	1

Previous Field Name	New Field Name	Previous Maximum Length	New Maximum Length
DAILY_LIST_RSN_DS	DAILY_LIST_RSN_CD	50	5
DVDND_TYPE_CD	(FIELD DELETED)	2	
DVDND_NON_ADR_FL	(FIELD DELETED)	1	
DVDND_ADR_FL	(FIELD DELETED)	1	

Added - Equity Participant Daily List Data Layout

Field Name (Header)	Description	Comments	Maximum Length
list_dt	Daily List Date	Format is MMDDYYYY	
effective_dt	Effective Date	Format is MMDDYYYY	
cd_description	Event Type	Valid values are: Participant Addition Participant Deletion Participant Change	
old_mpid	Market Participant Identifier		6
old_dba	Firm Name		64
new_mpid	New Market Participant Identifier		6
new_dba	New Firm Name		64
rf_cd	Reporting Facility	Value will always be ORF	

Appendix B – Daily List Reason Code Descriptions:

Daily List Reason Code DAILY_LIST_RSN_CD	Daily List Reason Code Description
12J	12(j)Registration Revoked by SEC
ADD	Addition
AMM	Acquisition/Merger/Amalgamation
BCD	Bankruptcy Case Dismissed
BCSHD	Bankruptcy Cash Distribution
BPESC	Bankruptcy Plan Effective/Shares Cancelled
BSD	Bankruptcy Plan Effective Shares Cancelled/Distribution
BSTKD	Bankruptcy Stock Distribution
CALLD	Called
CCD	Charter Cancelled/Dissolution
CDR	Cash Dividend Regular
CDRS	Cash Dividend Regular and Special
CDS	Cash Dividend Special
CNVRC	Conversion/Reclassification
CSDR	Cash and/or Stock Dividend Regular
CSDRS	Cash and/or Stock Dividend Regular and Special
CSDS	Cash and/or Stock Dividend Special
CSPCD	CUSIP Change
CSPSP	CUSIP Suspended
DCSHD	Default Interest (Cash) Distribution
DSTKD	Default Stock Distribution
EFB	Emerged from Bankruptcy
F6530	Failure to Comply with FINRA Rule 6530
FS	Forward Split
FSCCD	Forward Split/CUSIP Change
FSCE	Financial Status Change Delinquent = E
FSCJ	Financial Status Change Bankrupt and Delinquent = J
FSCL	Financial Status Change Liquidation = L
FSCLD	Financial Status Change Liquidation and Delinquent = H
FSCQ	Financial Status Change Bankruptcy = Q
IN	Ineligible
LFD	Liquidation/Final Distribution
MATCD	Maturity Date Change
MATEX	Matured/Expired
MCDBT	Market Center Change Delisted from BATS
MCDCE	Market Center Change Delisted from CBOE
MCDAX	Market Center Change Delisted from AMEX
MCDAR	Market Center Change Delisted from ARCA
MCDNQ	Market Center Change Delisted from NASDAQ
MCDNY	Market Center Change Delisted from NYSE
MCDIX	Market Center Change Delisted from IEX
MCLBT	Market Center Change Listed on BATS
MCLCE	Market Center Change Listed on CBOE

Daily List Reason Code DAILY_LIST_RSN_CD	Daily List Reason Code Description
MCLAX	Market Center Change Listed on AMEX
MCLAR	Market Center Change Listed on ARCA
MCLNQ	Market Center Change Listed on NASDAQ
MCLNY	Market Center Change Listed on NYSE
MCLIX	Market Center Change Listed on IEX
MCFOT	Market Center Change Moved from OTCE
MCFTR	Market Center Change Moved from TRACE
MCTOT	Market Center Change Moved to OTCE
MCTTR	Market Center Change Moved to TRACE
MCSPM	Market Center Change to Sub Product Move
NACTV	Inactive Security
NMCCD	Name/CUSIP Change
NMCHG	Name Change
NMSMC	Name/Symbol/CUSIP Change
NMSYM	Name/Symbol Change
O	Other
PRVTN	Company Going Private
RDMPT	Redemption
RNDUP	Round Lot Size Update
RSFS	Reverse Split followed by Forward Split
RSCCD	Reverse Split/CUSIP Change
RSFFS	Reverse Split followed by Forward Split/CUSIP Change
RSTMT	Reinstatement
SDPAS	Stock Dividend Payable in Another Security
SDR	Stock Dividend Regular
SDRS	Stock Dividend Regular and Special
SDS	Stock Dividend Special
SO	Spin-Off
SCAFR	Subject to Corporate Action Flag Removed
SCTUN	Sponsored to Unsponsored Conversion
SYMCD	Symbol Change
TERMD	ADR/GDR Program Terminated
TO	Tender Offer
F1534	Terminated Registration under the 34 Act
UNTSC	Unsponsored to Sponsored Conversion
US	Unit Separation
XCHG	Exchanged
XR	Ex Rights
XTRDH	Extended Trading Halt
XW	Ex Warrants

Appendix C – Equity Master Security Type Cd Descriptions:

Security Type Code SCTRY_TYPE_CD	Security Type Code Description
ADRS	American Depository Receipts – Sponsored
ADRU	American Depository Receipts – Unsponsored
ADSS	American Depository Shares – Sponsored
ADSU	American Depository Shares – Unsponsored
CERT	Trust Certificates
CMSH	Common Shares
COMS	Common Stock
DPRT	Depository Receipts
DPSH	Depository Shares
ETF	Exchange Traded Fund
ETN	Exchange Traded Note
FETF	Foreign Exchange Traded Fund
GBDR	Global Depository Receipts – Sponsored
GBDS	Global Depository Shares – Sponsored
GBRU	Global Depository Receipts – Unsponsored
GBSU	Global Depository Shares - Unsponsored
LQTR	Liquidating Trust
LTDP	DPP/Limited Partnership
MGFS	Managed Fund Shares
ORDY	Ordinary Fund Shares
OTHR	Other
PREF	Preference Shares
PRFS	Preferred Stock
REIT	REIT
RTCL	Rights Contingent Litigation
RTCU	Rights Currency
RTCV	Contingent Value Rights
RTOT	Rights
TRST	Shares of Beneficial Interest
UNOT	Unit
WRCL	Warrant Contingent Litigation
WRCU	Warrant Currency
WROT	Warrant

Programmatic Access Example(curl)

The following is a code excerpt to illustrate how to use the MPP Download site programmatically.

Example using the Equity Security Master (Active)

```
#!/bin/bash

URL_REFRESH=http://apidownload.finratraqs.org/refresh [apidownload.finratraqs.org]
URL_DOWNLOAD=http://apidownload.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD
&file=EQUITYMASTERAC&facility=ORF [apidownload.finratraqs.org]
USER_NAME="Finrausr"
FAILEDSTATUS="HTTP/1.1 401 Token is inactive or expired."
FAILEDREFRESHSTATUS="Refresh Token is invalid or has expired."

update_tokens(){
            # Get a new access_token
            # install jq command - sudo apt-get install jq
            tmp="$(mktemp)"
            curl -s -X POST --url "${URL_REFRESH}" \
                        --header "content-type: application/x-www-form-
urlencoded" \
                        --data
"username=${USER_NAME}&refreshtoken=${refresh_token}" > "${tmp}"

            read failedrefreshstatus < <(cat "${tmp}" | tr -d '\r')

            #check if refresh token is invalid
            if [ "${failedrefreshstatus}" = "${FAILEDREFRESHSTATUS}" ] ; then

                    echo "${failedrefreshstatus}"
                            echo ""
                            exit 1
            fi

            read refresh_token < <( cat "${tmp}" | jq .refresh_token | tr -d
'"' )
            read access_token < <( cat "${tmp}" | jq .access_token | tr -d '"' )
            #echo "${refresh_token}" > refresh_token.txt

            echo "Requested new access token cached"
            echo ""

            echo "${access_token}" > access_token.txt
            rm -f "${tmp}"
}

# The Refresh Token
read refresh_token < refresh_token.txt

echo "Your refresh token is ${refresh_token}"
echo ""

# The Access Token
access_token=""

if [ -f "access_token.txt" ]; then
```

```
                read access_token < access_token.txt
fi

echo "Your current access token: ${access_token}"
echo ""

if [ -z "${access_token}" ]; then
                echo "No cached access token; getting new access token!"
                echo ""

                update_tokens
                read access_token < access_token.txt

                echo "Your new access token: ${access_token}"
            echo ""
fi

tmp="$(mktemp)"

echo "Validating access token..."
echo ""

#get curl header status for token validity
httpstatus=$(curl -s -I --url "${URL_DOWNLOAD}" \
                --header "Authorization: Bearer ${access_token}" \
                | awk 'NR==1{print $0} END {print $0}' | tr -d '\r')

#echo "$httpstatus" > httpstatus.txt
#echo "$FAILEDSTATUS" > failedstatus.txt

#check if token is invalid
if [ "${httpstatus}" = "${FAILEDSTATUS}" ] ; then

                echo "Invalid/expired access token, requesting new access token!"
                echo ""

                update_tokens
                read access_token < access_token.txt

                echo "Your new access token: ${access_token}"
                echo ""
fi

echo "Request download with access token!"
echo ""

#download file (this uses option -OJ, getting the file name from the content-
disposition
#                              if file exists, this will fail.)
curl -s -OJ -X POST --url "${URL_DOWNLOAD}" \
    --header "Authorization: Bearer ${access_token}" \
    --data "username=${USER_NAME}"

ls -lrt

#cat "${tmp}"
rm -f "${tmp}"
```

Programmatic Access Example(C#, .Net)

The following is a code excerpt to illustrate how to use the MPP Download site programmatically. If you are going to access the site with an application the first step is to download the NWSF client certificate using your web browser. Install it in the browser then export the certificate from the browser, saving the certificate to a location on the machine as an X905 certificate (.cer).

Example using the active Equity Security Master:

```
string Action = "DOWNLOAD";
string file = "EQUITYMASTERAC";
string facility = "ORF";

string site =     "https:// download.finratraqs.org/DownloadHandler.ashx";
string query = string.Format("{0}?action={1}&file={2}&facility={3}", site,
                             Action, file, facility);

// Create request
HttpWebRequest webRequest = WebRequest.Create(query) as HttpWebRequest;

// Get cert and add to request
X509Certificate Cert =
     X509Certificate.CreateFromCertFile("C:\\MPP\\cert\\mpp_cert.cer");

webRequest.ClientCertificates.Add(Cert);
webRequest.Method = "GET";


// Add nwsf user/password to request

NetworkCredential nwCredentials = new NetworkCredential("user", "pwd");
webRequest.Credentials = nwCredentials;

// Make the request
HttpWebResponse Response = (HttpWebResponse)webRequest.GetResponse();

// Fiddle with the header in the response to get the file name

int pos = Response.Headers["Content-Disposition"].IndexOf("ORF");

string Filename = Response.Headers["Content-Disposition"].Substring(pos);

// Create a file to save it in ..
StreamWriter sw = new StreamWriter("C:\\MPP\\files\\" + Filename, false);

StreamReader sr = new StreamReader(Response.GetResponseStream(),
                             Encoding.Default);
int cnt;
char [] ReadBuf = new char[1024];

while ((cnt = sr.Read(ReadBuf, 0, 1024)) != 0)
{
  sw.Write(ReadBuf, 0, cnt);
}
sw.Close();
sr.Close();
```