



Web API Specifications for the TRACE Corporate and Agency Debt File Downloads

Version 4.10

June 29, 2020

Revision History

| Version/Date | Changes Made |
|--|--|
| Version 1.0/November 17, 2011 | <ul style="list-style-type: none"> Original version of specification |
| Version 2.0/December 2, 2011 | <ul style="list-style-type: none"> File availability - Clarification on historical file availability stated as one rolling year Date examples in query string changed to reflect actual historical file availability |
| Version 3.0/January 23, 2012 | <ul style="list-style-type: none"> DEBT_TYPE_CD changed to eight byte maximum length DSMTN_FL changed to one byte maximum length Participant Daily List - list_dt format changed to MMDDYYYY format Participant Daily List - effective_dt format changed to MMDDYYYY format Participant Daily List - cd_description values changed to: Participant Addition Participant Deletion Participant Change |
| | Corporate Bonds/ELN and Agency Debt Closing Report Files <ul style="list-style-type: none"> Include Church Bonds (CHRC) as sub product type |
| Version 4.0 (In production July 30, 2012) | <ul style="list-style-type: none"> Include a Daily List Timestamp in all Daily List events |
| Version 4.1/February 1, 2013 | <ul style="list-style-type: none"> Changed TRAQS references to TRACE Modified Closing Report descriptions: Today's High Price changed to High Price Today's High Yield changed to High Yield Today's Low Price changed to Low Price Today's Low Yield changed to Low Yield Today's Closing Price changed to Closing Price Today's Closing Yield changed to Closing Yield |
| Version 4.2/April 25, 2014 (In production June 30, 2014) | <ul style="list-style-type: none"> Added 144A and New 144A Indicator in Corporate and Agency Debt Daily List format Added CLOSCORPELN 144A Closing Report summary query for Corporate Bonds/ELN's classified as 144A securities Added 144A Market Aggregate files |
| Version 4.3/January 23, 2015 (In production March 2, 2015) | <ul style="list-style-type: none"> DEBT_TYPE_CD field in Corporate and Agency Issue Master File to consist of a combination of the seniority and instrument types and text description. |

| | |
|---|--|
| Version 4.4/April 22, 2015 (In production June 1, 2015) | <ul style="list-style-type: none"> • Added US Agreements File |
| Version 4.5/June 8, 2015 (In production November 2, 2015) | <ul style="list-style-type: none"> • Added Market Sentiment File queries and data content layout formats • Restated first Market Breadth queries to be named “Market Breadth Market Close” and stated these will be available at 5:30 p.m. ET • Added 6:45 End of Day Market Breadth file queries |
| Version 4.6/November 16, 2016 | <ul style="list-style-type: none"> • Added Seniority Type Codes 1LN, 2LN |
| Version 4.7/December 15, 2016 | <ul style="list-style-type: none"> • Add Convertible Flag to Security Master and Daily List • Remove Fitch Rating heading and data from Most Active Media Print file • Include statement regarding changes to values and descriptions in the Appendices |
| Version 4.8/May 18, 2017 | <ul style="list-style-type: none"> • Added Seniority Type Code SBN |
| Version 4.9/October 22, 2018 | <ul style="list-style-type: none"> • Current day Indices no longer available after October 31, 2018. |
| <u>Version 4.10/June 29, 2020</u> | <ul style="list-style-type: none"> • <u>Updated Debt Type Code description</u> • <u>Redefined Appendix 1 Debt Type Code and affiliated description and added new values to the table</u> |

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 Corporate and Agency Debt supports clients via a Web Application Programming Interface (API) to download security master files, daily lists, and market aggregate information.

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

Access to the file domain

Corporate and Agency Debt 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.

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://download.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

***Indicates user must include a date in the query; historical information can be accessed on a rolling date basis up to one year from the date the files were published via the API.**

| File | When Available |
|-----------------------------|--|
| Corporate and Agency Master | Real time starting at 7:00 a.m. ET and throughout the day until 8:00 p.m. ET |
| Daily List | Real time starting at 8:00 a.m. ET and throughout the day until 8:00 p.m. ET |
| Daily List Delta | Real time starting at 8:00 a.m. ET and throughout the day until 8:00 p.m. ET |
| Participant | Real time starting at 8:00 a.m. ET and throughout the day until 8:00 p.m. ET |
| US Agreements | Real time starting at 8:00 a.m. ET and throughout the day until 8:00 p.m. ET |
| Daily List Participant | Real time starting at 8:00 a.m. ET and throughout the day until 8:00 pm. ET |
| Market Breadth* | Market Close Report at 5:30 p.m. End of day report at 6:45 p.m. ET |
| Most Actives* | End of day report at 5:30 p.m. ET |
| Indices* | End of day report at 5:30 p.m. ET |
| Index Components* | End of day report at 5:30 p.m. ET |

| | |
|-----------------------------|------------------------------------|
| Leading and Lagging* | End of day report at 5:30 p.m. ET |
| Top 10 Most Active Indices* | End of day report at 5:30 p.m. ET |
| Closing Report* | End of day report at 5:30 p.m. ET |
| Market Sentiment* | End of day report at 7:00 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 | <p>DOWNLOAD - provide the complete file. DELTA – provide the changes since the last time the user downloaded the file.</p> <p>Delta files are supported for Security Daily List and Participant Daily List but not for the Security Master, Participant List, US Agreements, or the end of day Market Aggregate or Market Sentiment files.</p> |
| Facility | TRACE |
| File | <p>CAMASTER – Security Master File for Corporate and Agency Debt DAILYLISTCA – Security Daily List for Corporate and Agency Debt PARTICIPANT – Participant List (current participants with active authorizations for the specified facility) PDAILYLIST – Participant Daily List (additions/deletions/changes to the Participant List of the specified facility) CAUSA – Corporate and Agency US Agreements CORPBONDSBR – Corporate Bond Market Breadth Market Close AGCYBONDSBR - Agency Bond Market Breadth Market Close CORP144ABONDSBR – Corporate Bond 144A Market Breadth Market Close CORPBONDSBREOD – Corporate Bond Market Breadth End of Day AGCYBONDSBREOD - Agency Bond Market Breadth End of Day CORP144ABONDSBREOD – Corporate Bond 144A Market Breadth End of Day CORPBONDSMS – Corporate Bond Market Sentiment AGCYBONDSMS - Agency Bond Market Sentiment CORP144ABONDSMS – Corporate Bond 144A Market Sentiment MAINVGR – Most Active Investment Grade (Media) MAINVGR144A – Most Active Investment Grade 144A (Media) MAHIYLD – Most Active High Yield (Media)</p> |

| Parameter | Parameter Options |
|-----------|---|
| | <p>MAHIYLD144A – Most Active High Yield 144A (Media)</p> <p>MACVT – Most Active Convertible (Media)</p> <p>MACVT144A – Most Active Convertible 144A (Media)</p> <p>MAINVGRPRT – Most Active Investment Grade (Print Media)</p> <p>MAINVGRPRT144A – Most Active Investment Grade 144A (Print Media)</p> <p>MAHIYLDPRT – Most Active High Yield (Print Media)</p> <p>MAHIYLDPRT144A – Most Active High Yield 144A (Print Media)</p> <p>MACVTPRT – Most Active Convertible (Print Media)</p> <p>MACVTPRT144A – Most Active Convertible 144A (Print Media)</p> <p>STATSINVGR – Indices Investment Grade</p> <p>STATSHIYLD – Indices High Yield</p> <p>COMPINVGR – Index Components Investment Grade</p> <p>COMPHIYLD – Index Components High Yield</p> <p>MOVINVGR – Leading and Lagging Movers Investment Grade</p> <p>MOVHIYLD - Leading and Lagging Movers High Yield</p> <p>MOSTINVGR – 10 Most Active Index Bonds Investment Grade</p> <p>MOSTHIYLD – 10 Most Active Index Bonds High Yield</p> <p>CLOSCORPELN – Closing Report for Corporate Bonds and ELN’s</p> <p>CLOSAGCY – Closing Report for Agency Bonds 144A and Non-144A</p> <p>CLOSCORPELN144A – Closing Report for Corporate Bonds and ELN’s that are classified as 144A securities</p> |
| day | A date, for example: 6/1/2011. Date is used for Daily List requests and <u>all of the end of day files</u> such as the Market Aggregates and Closing Reports. If no date is specified on a <u>daily list</u> request then the current day is assumed. |

| File | Query Parameters |
|---|---|
| Corporate and Agency Master | action= DOWNLOAD &file=CAMASTER&facility=TRACE |
| CORP Security Daily List | action=DOWNLOAD&file=DAILYLISTCA&facility=TRACE |
| CORP Security Daily List delta (See note 1) | action=DELTA&file=DAILYLISTCA&facility=TRACE |
| CORP Security Daily List for a specific day | action=DOWNLOAD&file=DAILYLISTCA&facility=TRACE&day=5/16/2012 |
| TRACE Participant List | action=DOWNLOAD&file=PARTICIPANT&facility=TRACE |
| TRACE Participant Daily List | action=DOWNLOAD&file=PDAILYLIST&facility=TRACE |

| File | Query Parameters |
|---|---|
| TRACE Participant Daily List delta (see note 1) | action=DELTA&file=PDAILYLIST&facility=TRACE |
| TRACE Corporate and Agency US Agreements | action=DOWNLOAD&file=CAUSA&facility=TRACE |

| | |
|---|---|
| Market Breadth Corporate Market Close | action=DOWNLOAD&file=CORPBONDSBR&facility=TRACE&day=02/10/2012 |
| Market Breadth Corporate End of Day | action=DOWNLOAD&file=CORPBONDSBREOD&facility=TRACE&day=02/10/2012 |
| Market Breadth Agency Market Close | action=DOWNLOAD&file=AGCYBONDSBR&facility=TRACE&day=02/10/2012 |
| Market Breadth Agency End of Day | action=DOWNLOAD&file=AGCYBONDSBREOD&facility=TRACE&day=02/10/2012 |
| Market Breadth 144A Market Close | action=DOWNLOAD&file=CORP144ABONDSBR&facility=TRACE&day=02/10/2012 |
| Market Breadth 144A End of Day | action=DOWNLOAD&file=CORP144ABONDSBREOD&facility=TRACE&day=02/10/2012 |
| Market Sentiment Corporate | action=DOWNLOAD&file=CORPBONDSMS&facility=TRACE&day=05/11/2015 |
| Market Sentiment Agency | action=DOWNLOAD&file=AGCYBONDSMS&facility=TRACE&day=05/11/2015 |
| Market Sentiment 144A | action=DOWNLOAD&file=CORP144ABONDSMS&facility=TRACE&day=05/11/2015 |
| Most Active Media Investment Grade | action=DOWNLOAD&file=MAINVGR&facility=TRACE&day=02/10/2012 |
| Most Active Media Investment Grade 144A | action=DOWNLOAD&file=MAINVGR144A&facility=TRACE&day=02/10/2012 |
| Most Active Media High Yield | action=DOWNLOAD&file=MAHIYLD&facility=TRACE&day=02/10/2012 |
| Most Active Media High Yield 144A | action=DOWNLOAD&file=MAHIYLD144A&facility=TRACE&day=02/10/2012 |
| Most Active Media Convertibles | action=DOWNLOAD&file=MACVT&facility=TRACE&day=02/10/2012 |
| Most Active Media Convertibles 144A | action=DOWNLOAD&file=MACVT144A&facility=TRACE&day=02/10/2012 |
| Most Active Print Media Investment Grade | action=DOWNLOAD&file=MAINVGRPRT&facility=TRACE&day=02/10/2012 |
| Most Active Print Media Investment Grade 144A | action=DOWNLOAD&file=MAINVGRPRT144A&facility=TRACE&day=02/10/2012 |
| Most Active Print Media High Yield | action=DOWNLOAD&file=MAHIYLDPRT&facility=TRACE&day=02/10/2012 |
| Most Active Print Media High Yield 144A | action=DOWNLOAD&file=MAHIYLDPRT144A&facility=TRACE&day=02/10/2012 |
| Most Active Print Media Convertibles | action=DOWNLOAD&file=MACVTPRT&facility=TRACE&day=02/10/2012 |
| Most Active Print Media Convertibles 144A | action=DOWNLOAD&file=MACVTPRT144A&facility=TRACE&day=02/10/2012 |

| | |
|-----------------------------------|---|
| Indices Investment Grade | action=DOWNLOAD&file=STATSINVGR&facility=TRACE&day=02/10/2012 |
| Indices High Yield | action=DOWNLOAD&file=STATSHIYLD&facility=TRACE&day=02/10/2012 |
| Index Components Investment Grade | action=DOWNLOAD&file=COMPINVGR&facility=TRACE&day=02/10/2012 |
| Index Components High Yield | action=DOWNLOAD&file=COMPHIYLD&facility=TRACE&day=02/10/2012 |

| | |
|--|--|
| Leading and Lagging Movers - Investment Grade | action=DOWNLOAD&file=MOVINVGR&facility=TRACE&day=02/10/2012 |
| Leading and Lagging Movers - High Yield | action=DOWNLOAD&file=MOVHIYLD&facility=TRACE&day=02/10/2012 |
| 10 Most Active Index Bonds Investment Grade | action=DOWNLOAD&file=MOSTINVGR&facility=TRACE&day=02/10/2012 |
| 10 Most Active Index Bonds High Yield | action=DOWNLOAD&file=MOSTHIYLD&facility=TRACE&day=02/10/2012 |
| Closing Report Corporate Bonds and ELN's | action=DOWNLOAD&file=CLOSCORPELN&facility=TRACE&day=02/10/2012 |
| Closing Report Agencies | action=DOWNLOAD&file=CLOSAGCY&facility=TRACE&day=02/10/2012 |
| Closing Report Corporate Bonds and ELN's classified as 144A securities | action=DOWNLOAD&file=CLOSCORPELN144A&facility=TRACE&day=02/10/2012 |

NOTE: 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 five 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
Corporate and Agency Debt Security Master Files

| Field Name (Header) | Description | Comments | Maximum Length |
|------------------------|-----------------------------|---|-----------------------|
| SYM_CD | FINRA assigned Symbol | | 14 |
| CUSIP_ID | CUSIP | This field will be blank for firms that do not have a CUSIP license in place. | 9 |
| BSYM_ID | Bloomberg Symbol | | 12 |
| SUB_PRDCT_TYPE | Sub-Product Type Code | Valid values are: CORP AGCY ELN CHRC | 5 |
| DEBT_TYPE_CD | Debt Type Code | The Debt Type Code and affiliated description will be a combination of the <u>Seniority/Bond Type (formerly Seniority Type) and Instrument/Security Seniority Type Codes and Instrument Type Codes</u> as listed in Appendix 1. Note: This field can include hyphenation between characters. | 8 |
| ISSUER_NM | Issuer Name | | 80 |
| SCRTY_DS | Security Description | | 80 |
| CPN_RT | Coupon Rate | Decimal format | 27 (19 after decimal) |
| CPN_TYPE_CD | Coupon Type Code | <i>Please see Appendix 2 for a list of Coupon Type Code / Descriptions</i> | 10 |
| TRD_RPT_EFCTV_DT | Trade Report Effective Date | YYYYMMDD format. | |
| MTRTY_DT | Maturity Date | YYYYMMDD format. | |
| GRADE | Grade | H – High Yield; I – Investment Grade | 1 |
| RESERVED2 | Filler | Blank field - reserved for future use. | |
| IND_144A | 144A Indicator | Y = Indicates a 144A security N = Not a 144A security | 1 |

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|-------------------------------------|---|----------------|
| DISSEM | Trade Report Disseminator Indicator | Y = Indicates trade reports will be disseminated N= Indicates trade reports will not be disseminated | 1 |
| CNVRB_FL | Convertible Flag | Y/N | 1 |

Corporate and Agency Debt Daily List (for Securities)

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|-----------------------|--|-----------------------|
| DAILY_LIST_DT | Daily List Date | YYYYMMDD format. | |
| DAILY_LIST_TIME | Daily List Time | HH:MM:SS | |
| DAILY_LIST_EVENT_CD | Daily List Event Type | Valid values are: SA <i>Security Add</i> SD <i>Security Delete</i> SC <i>Security Change</i> | 2 |
| DAILY_LIST_RSN_CD | Daily List Reason | Reason for the addition, deletion or change. This field may be blank. <i>Please see Appendix 3 for a list of Daily List Reason Codes / Descriptions</i> | 5 |
| CMMNT_TX | Event Comment | Free form text field entered by FINRA Operations. May be blank. | 30 |
| EFCTV_DT | Effective Date | Reflects effective date for the event affected in the record. | |
| PROD_TYPE | Product Type | Constant "CA". | |
| SYM_CD | FINRA Symbol | | 14 |
| CUSIP | | This field will be blank for firms that do not have a CUSIP license in place. | 9 |
| BSYM_ID | Bloomberg Symbol | | 12 |
| SCRTY_DS | Security Description | | 250 |
| ISSUER_NM | Issuer Name | | 255 |
| CPN_RT | Coupon Rate | Decimal format | 27 (19 after decimal) |
| MTRTY_DT | Maturity Date | YYYYMMDD format. | |

| Field Name (Header) | Description | Comments | Maximum Length |
|----------------------------|-----------------------------|---|-----------------------|
| IND_144A | 144A Indicator | Y = Indicates a 144A security N = Not a 144A security | 1 |
| DSMTN_FL | Dissemination Flag | | 1 |
| SUBPROD_TYPE | Sub-Product Type | Valid values are: CORP AGCY ELN CHRC Note: Changes to Sub-Product values will be administered by a Delete then Add Daily List event. | 5 |
| TRD_RPT_EFCTV_DT | Trade Report Effective Date | YYYYMMDD format. Will be blank on Delete Event Types. | |
| CNVRB_FL | Convertible Flag | Y/N | 1 |
| NEW_SYM_CD | New Symbol | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | 14 |
| NEW_CUSIP | New CUSIP | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | 9 |
| NEW_BSYM_ID | New Bloomberg Symbol | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | 12 |
| NEW_SCRTY_DS | New Security Description | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | 250 |
| NEW_ISSUER_NM | New Issuer | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | 255 |
| NEW_CPN_RT | New Coupon Rate | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | 27 (19 after decimal) |
| NEW_MTRTY_DT | New Maturity Date | Applicable to Change Event Types only. Will | |

| Field Name (Header) | Description | Comments | Maximum Length |
|----------------------|---------------------------------|--|----------------|
| | | be blank on Add and Delete Events. | |
| NEW_IND_144A | New 144A Indicator | Y = Indicates a 144A security N = Not a 144A security | 1 |
| NEW_DSMTN_FL | New Dissemination Flag | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | 1 |
| NEW_SUBPROD_TYPE | New Sub Product Type | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | 5 |
| NEW_TRD_RPT_EFCTV_DT | New Trade Report Effective Date | Applicable to Change Event Types only. Will be blank on Add and Delete Events. | |
| NEW_CNVRB_FL | New Convertible Flag | Y/N | 1 |

TRACE Participant List

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|-------------------------------|--|----------------|
| mpid | Market Participant Identifier | FINRA identifier assigned to the participant | 6 |
| dba_nm | Firm Name | | 64 |

TRACE Participant Daily List

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|-----------------------------------|---|----------------|
| list_dt | Daily List Date | MMDDYYYY format | |
| effective_dt | Effective Date | MMDDYYYY format | |
| 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 |

| Field Name (Header) | Description | Comments | Maximum Length |
|--------------------------------|--------------------|----------------------------|-----------------------|
| rf_cd | Reporting Facility | Value will always be TRACE | |

Market Breadth Files

| Field Name (Header) | Description | Comments | Maximum Length |
|------------------------|---|---|----------------|
| Value | Type of Bond | - All; Inv Grade; High Yield; Convertible | |
| Securities Traded | Total number of securities that traded for the day | | 10 |
| Advances | The total number of issues where the closing price for that day is higher than the prior closing price | | 10 |
| Declines | The total number of issues where the closing price for that day is lower than the prior closing price | | 10 |
| Unchanged | The total number of issues where the closing price for that day remains the same as the prior closing price | | 10 |
| 52 week high | The total number of issues where the closing price for that day is higher than a prior closing price within the past 52 business weeks (on a rolling basis) | | 10 |
| 52 week low | The total number of issues where the closing price for that day is lower than a prior closing price within the past 52 business weeks (on a rolling basis) | | 10 |
| Dollar Volume | Represents the current day's total traded par value (in millions) | | 10 |

Market Sentiment Files

| Field Name (Header) | Description | Comments | Maximum Length |
|------------------------|--|---|----------------|
| Value | Type of Bond and Statistic Category | Each Type of Bond (All Types, Inv Grade, High Yield, Convertible; Church; ELN, Fannie Mae, Freddie Mac, etc... will be displayed with statistical category of "Total Transactions", "Total Issues Traded", "Total Volume". Example: Inv Grade Total Transactions; Inv Grade Total Issues Traded; Inv Grade Total Volume: Inv Grade | |
| All Issues | | | |
| Customer Buy | | | |
| Customer Sell | | | |
| Affiliate Buy | | | |
| Affiliate Sell | | | |
| Inter-Dealer | | | |

Most Active Files – Media Data Version – Top 10

| Field Name (Header) | Description | Comments | Maximum Length |
|--------------------------------|--|-----------------|-----------------------|
| Symbol | Current TRACE bond symbol | | 14 |
| CUSIP_ID | CUSIP of the bond | | 9 |
| High Price | Highest traded price for the current day in the issue | | 12 |
| Low Price | Lowest traded price for the current day in the issue | | 12 |
| Last Price | The current day's closing price in the issue | | 12 |
| Change | The difference in the current day's closing price versus the prior closing price. N/A indicates no change in price | | 20 |
| Yield | The weighted average yield of the bond. "C" indicates yield is unavailable because of the issue's call criteria | | 14 |

Most Active Files – Media Print Version – Top 50

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|--|----------|----------------|
| Issuer Name | Issuer of the bond | | 80 |
| Symbol | Current TRACE bond symbol | | 14 |
| Coupon Rate | Current coupon rate of the bond | | 27 |
| Maturity Date | Maturity date (month and year) of the bond | | YYYYMMDD |
| Moody's/S&P | A bond's rating | | |
| High Price | Highest traded price for the current day in the issue | | 12 |
| Low Price | Lowest traded price for the current day in the issue | | 12 |
| Last Price | The current day's closing price in the issue | | 12 |
| Change | The difference in the current day's closing price versus the prior closing price. N/A indicates no change in price | | 20 |
| Yield | The weighted average yield of the bond. "C" indicates yield is unavailable because of the issue's call criteria | | 14 |

Overall Index Values Indices Files:

Note: As of November 1, 2018, the daily Indices are no longer produced. Historical data will continue to be provided. Data from 2/4/2011 through 10/31/2018 is available for query.

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|-----------------|--|----------------|
| Stat | Index Statistic | TR = Total Return PR = Price YL = Yield OA = OAS AS = AAS VO = Volume | 50 |

| Field Name (Header) | Description | Comments | Maximum Length |
|--------------------------------|----------------------------|-----------------|-----------------------|
| Value | Current Statistical Figure | | 10 |
| Change | Delta from previous day | | 10 |

Index Components Files

Note: As of November 1, 2018, the daily Indices are no longer produced. Historical data will continue to be provided. Data from 2/4/2011 through 10/31/2018 is available for query.

| Field Name (Header) | Description | Comments | Maximum Length |
|------------------------|---|--|----------------|
| Symbol | FINRA assigned Symbol | | 14 |
| CUSIP | CUSIP | This field will be blank for firms that do not have a CUSIP license in place | 9 |
| VWAP Price of Bond | Volume Weighted Average Price of the bond | | 10 |
| Delta Price of Bond | Represents the change in bond price from the previous day | | 10 |
| Bond Yield | | | 14 |
| Delta Yield | | | 14 |
| Bond % Weight in Index | | | 10 |

Leading and Lagging Movers Report Files

Note: As of November 1, 2018, the daily Indices are no longer produced. Historical data will continue to be provided. Data from 2/4/2011 through 10/31/2018 is available for query.

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|---|--|----------------|
| Symbol | FINRA assigned Symbol | | 14 |
| CUSIP | CUSIP | This field will be blank for firms that do not have a CUSIP license in place | 9 |
| VWAP price of Bond | Volume Weighted Average Price of the bond | | 10 |
| Delta Price of Bond | Represents the change in bond price from the previous day | | 10 |

Top 10 Most Active Index Bonds Report Files

Note: As of November 1, 2018, the daily Indices are no longer produced. Historical data will continue to be provided. Data from 2/4/2011 through 10/31/2018 is available for query.

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|-----------------------|--|----------------|
| Index Type | | | 30 |
| Symbol | FINRA assigned Symbol | | 14 |
| CUSIP | CUSIP | This field will be blank for firms that do not have a CUSIP license in place | 9 |
| Rank | | | 2 |

Corporate Bonds/ELN, Agency Debt, and Corporate Bonds/ELN's classified as 144A securities Closing Report Files

| Field Name (Header) | Description | Comments | Maximum Length |
|---------------------|------------------------------------|--|----------------|
| SYM_CD | FINRA assigned Symbol | | 14 |
| CUSIP_ID | CUSIP | This field will be blank for firms that do not have a CUSIP license in place | 9 |
| WI | When Issued | Yes or No | |
| BSYM_ID | Bloomberg Symbol | | 12 |
| SUB_PRODUCT | | CORP ELN AGCY CHRC | 5 |
| HIGH_PRICE | High Price | | 10 |
| HIGH_YLD | High Yield | Includes a field for the sign. The sign field can be blank or “_” | 14 |
| LOW_PRICE | Low Price | | 10 |
| LOW_YLD | Low Yield | Includes a field for the sign; the sign field can be blank or “_” | 14 |
| CLOSING_PRICE | Close Price | | 10 |
| CLOSING_YLD | Close Yield | Includes a field for the sign; the sign field can be blank or “_” | 14 |
| TRADE_DATE | Trade Date for the record's prices | Closing price date in mm/dd/yyyy format | |

Corporate and Agency 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. | |

Example Requests

Example 1 - Get the current TRACE Participant List

This request retrieves the current list of TRACE authorized Participants:

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=PARTICIPANT&facility=TRACE>

Example 2 - Get the TRACE Participant Daily List for 5/16/2011

This request retrieves the list of changes to TRACE authorized Participants published on 5/16/2012 (*note 5/16/2011 is used as an example. Any specific date may be used*):

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=PDAILYLIST&facility=TRACE&day=5/16/2011>

Example 3 - Get today's TRACE Participant Daily List (no day provided)

This request retrieves the current day's cumulative list of changes to TRACE authorized Participants:

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=PDAILYLIST&facility=TRACE>

Example 4 - Get changes to the TRACE Participant Daily List since the last download (no day provided)

This request retrieves the latest list of changes to TRACE authorized Participants since the last user download of the Participant List:

<https://download.finratraqs.org/DownloadHandler.ashx?action=DELTA&file=PDAILYLIST&facility=TRACE>

Example 5 - Get the current Corporate Bond Security Master file

This request retrieves the current list of all Corporate and Agency securities eligible for trade reporting:

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=CAMASTER&facility=TRACE>

Example 6 - Get today's CA Daily List (no day provided)

This request retrieves the current day's cumulative list of changes to all the Corporate and Agency Security Master data.

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=DAILYLISTCA&facility=TRACE>

Example 7 - Get the Market Breadth file

This request retrieves the current list of advanced/declined and unchanged issues for Corporate Bonds.

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=CORPBONDSBR&facility=TRACE&day=02/10/2012>

Example 8 - Get the Most Actives file - Media Version file

This request retrieves the current list of most active investment grade securities sent to the media.

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=MAINVGR&facility=TRACE&day=02/10/2012>

Example 9 - Get the Most Actives file - Print Media Version file

This request retrieves the current list of most active investment grade securities sent to the print media.

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=MAINVGRPRT&facility=TRACE&day=02/10/2012>

Example 10 - Get the Agency Closing Report file

This request retrieves the closing report for agency debt.

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=CLOSAGCY&facility=TRACE&day=02/10/2012>

Data Sample Results

Corporate and Agency Debt Security Master File illustrating the header and footer.

```
SYM_CD|CUSIP_ID|BSYM_ID|SUB_PRDCT_TYPE|DEBT_TYPE_CD|ISSUER_NM|SCRTY_DS|CPN_RT|CPN_TYPE_CD|TRD_RPT
_EFCTV_DT|MTRTY_DT|GRADE|RESERVED2|IND_144A|DISSEM|CNVRB_FL
|761157AA4||AGCY|BND|Resolution Fding|RESFC 8.125
10/15/19|8.125000000000000000|FXPV|20110516|20191015|||N|Y|Y
|761157AB2||AGCY|BND|Resolution Fding|RESFC 8.625
01/15/30|8.625000000000000000|FXPV|20110516|20300115|||N|Y|N
|761157AC0||AGCY|BND|Resolution Fding|RESFC 8.875
04/15/30|8.875000000000000000|FXPV|20110516|20300415|||N|Y|N
10/15/20|9.375000000000000000|FXPV|20110516|20201015|||N|Y|Y
|078167AZ6||CORP|SRDEB|Verizon Pennsylv|VZ 8.350 12/15/30
PUT|8.350000000000000000|FXPV|20110516|20301215|||N|Y|Y
|048825AW3||CORP|DEB|Atlantic Richfld|BP 9.000
04/01/21|9.000000000000000000|FXPV|20110516|20210401|||N|Y|Y
|048825AY9||CORP|DEB|Atlantic Richfld|BP 9.000
05/01/31|9.000000000000000000|FXPV|20110516|20310501|||N|Y|Y
Footer - Count: 00042003, Facility: TRACE, File Created: 20111116111940
```

Corporate and Agency Debt Daily List File illustrating the header and footer.

```
DAILY_LIST_DT|DAILY_LIST_EVENT_CD|DAILY_LIST_RSN_CD|CMMNT_TX|EFCTV_DT|PROD_TYPE|SYM_CD|CUSIP|BSYM
_ID|SCRTY_DS|ISSUER_NM|CPN_RT|MTRTY_DT|DSMTN_FL|SUBPROD_TYPE|TRD_RPT_EFCTV_DT|CNVRB_FL|NEW_SYM_CD
|NEW_CUSIP|NEW_BSYM_ID|NEW_SCRTY_DS|NEW_ISSUER_NM|NEW_CPN_RT|NEW_MTRTY_DT|NEW_DSMTN_FL|NEW_SUBPRO
D_TYPE|NEW_TRD_RPT_EFCTV_DT|NEW_CNVRB_FL|20111102|SA|BLK|Added by
Amit|20111102|CA|LSAKA3666251|00086NA06||This security is added by Amit to test Sub-product
Change AGCY to ABS on 11-2-2011|Lake Sakakawea Green Energy
Corporation|0.115500|20221130|Y|AGCY|20111102|Y|||||20111102|SD|||20111102|CA|LSAKA3666251|0
0086NA06||This security is added by Amit to test Sub-product Change AGCY to ABS on 11-2-
2011|Lake Sakakawea Green Energy
Corporation|0.115500|20221130|Y|AGCY|20111102|Y|||||20111102|SA|||20111102|CA|QUIM3666254|00
100X106||This security is added by Amit to test ABS to AGCY sub-product change on 11-2-
2011|Quimper Wind Green Energy Corporation|0.900000|20331103|N|AGCY|20111101|N|||||
Footer - Count: 00000003, Facility: TRACE, File Created: 20111116111005
```

TRACE Participant Daily List File illustrating the header and footer.

```
list_dt|effective_dt|cd_description|old_mpid|old_dba|new_mpid|new_dba|rf_cd
09/09/2010|09/09/2010|Participant Addition||HRBC|hurleyf test HRBC mppweb|OTCE
09/09/2010|09/09/2010|Participant Addition|ABNE|ABNE TEST|||TRACE
09/09/2010|09/09/2010|Participant Addition|ABNF|ABNF TEST|||TRACE
09/09/2010|09/09/2010|Participant Addition|ABNB|ABN AMRO CLEARING CHICAGO LLC|||TRACE
09/09/2010|09/09/2010|Participant Addition|ABNC|ABNC TEST|||TRACE
...
[snip]
...
09/09/2010|09/09/2010|Participant Deletion|AALC|THRIVENT INVESTMENT MANAGEMENT CO2|||TRACE
Footer - Count: 00000014, Facility:TRACE, File Created: 20100910120732
```

TRACE Participant List File illustrating the header and footer.

```
mpid|dba_nm
AAAA|TEST
ABLE|NATIXIS BLEICHROEDER INC.
ABNA|ABN AMRO SECURITIES (USA) LLC
ABNB|ABN AMRO CLEARING CHICAGO LLC
ABNC|ABNC TEST
ABND|ABND TEST
ABNE|ABNE TEST
ABNG|ABNG TEST
ABPI|PAVEK INVESTMENTS INC.
...
[snip]
...
QUAL|QUAYLE & CO. SECURITIES
ROCK|ROCKWELL GLOBAL CAPITAL LLC
SCHO|SCHOFF & BAXTER, INC.
TMBR|TIMBER HILL LLC
UBSS|UBS SECURITIES LLC
WONG|A B WONG CAPITAL LLC
WTCO|WILLIAMS TRADING LLC
Footer - Count: 00000089, Facility: TRACE, File Created: 20100910121322
```

Appendices

Note, all codes/descriptions in the following appendices are subject to updates as necessary; updates may be made as frequently as on a monthly basis. FINRA reserves the right to update these codes and descriptions without notice. Users are advised to periodically check this specification for these updates to ensure having the most recent data. Documentation version revisions will not be made based on any potential monthly changes to these tables.

Appendix 1 - Debt Type Codes and Descriptions

The Debt Type Code and affiliated description will be a combination of the Seniority/Bond Type and Instrument/Security Type Codes listed below.

Example: Senior Unsecured (Seniority/Bond Type) Note (Instrument/Security Type) will be reflected as S-NT.

Note 1: The Debt Type Code field can include hyphenation between characters.

Note 2: Note, because the updated debt code descriptions may not be available for a number of securities some securities will continue to use legacy debt type codes.

| Seniority/ <u>Bond</u> Type Code | Seniority/ <u>Bond</u> Type Description |
|----------------------------------|---|
| 1RM | First and Refunding Mortgage |
| JSC | Junior Secured or Junior Subordinated Secured |
| JSB | Junior Unsecured or Junior Subordinated Unsecured |
| SSC | Senior Secured |
| SBS | Senior Subordinated Secured |
| SBN | Senior Bail-In |
| BSC | Subordinated Secured |
| 1M | First Mortgage |
| 2M | Second Mortgage |
| 3M | Third Mortgage |
| 1LN | First Lien |
| 2LN | Second Lien |
| MZ | Mezzanine |
| RM | General & Refunding Mortgage |
| SC | Secured |
| SB | Senior Subordinated Unsecured |
| UN | Unsecured |
| M | Mortgage |
| S | Senior Unsecured |
| B | Subordinated Unsecured |

| | |
|------------|--------------|
| <u>OTH</u> | <u>Other</u> |
|------------|--------------|

| Instrument/<u>Security</u> Type Code | Instrument/<u>Security</u> Type Description |
|---|--|
| AA | Appropriation Antic Note |
| ABCP | Asset Backed Commercial Paper |
| ABS | Asset Backed Security |
| ABSA | Aircraft Asset Backed Security |
| LIBS | Life Insurance Backed Security or Insurance Revenue Backed S |
| ABSR | Railroad Asset Backed Security |
| ACS | Asset Covered Security (Covered Bond) |
| BA | Bond Anticipation Note |
| BAB | Build America Bond |
| BAS | Bankers Acceptance |
| BBR | Bankbrieven |
| BCD | Bono de Banco Central en Dolares pagaderos en Pesos |
| BCP | Bono de Banco Central en Pesos |
| BCU | Bono de Banco Central en Unidades de Fomento |
| BCX | Bono Banco Central En Dolares |
| BDAG | Agriculture Bond |
| BIBD | Biman Bond |
| JTBD | Jute Bond |
| BLT | Belgian Treasury |
| BL | Bill |
| BND | Bond |
| BNT | Bank Note |
| BOC | Italian BOC |
| BONO | Bono del Estado |
| BOP | Italian BOP |
| BOR | Italian BOR |
| BP28 | BPAG28 |
| BP91 | BPAG91 |
| BREM | BREMS |
| BSB | Bundesschatzbrief |
| BUBL | Unverzinsliche Schatzanweisung |
| BUND | Bundesanleihe |
| C1 | Certificate of Indebtedness |
| C2 | Certificate of Participation |
| C3 | Certificate of Obligation |

| | |
|------|--|
| C9 | Other Muni Certificate |
| CA | Combined Antic |
| CLUT | Callable Unit |
| CSEC | Capital Security |
| CAT | Insurance Linked Security |
| CD | Certificate of Deposit |
| CDEB | Spread Quoted Debenture |
| CDI | Certificate of Deposit - Institutional |
| CDO | Collateralized Debt Obligation |
| SCDO | Synthetic Collateralized Debt Obligation |
| CDR | Certificate of Deposit - Retail |
| CH | Cedulas Hipotecaria (Covered Bond) |
| CRCH | Church Bond |
| CLN | Credit Linked Note |
| CC | China Corporate Bond |
| CEB | China Enterprise Bond |
| CPPB | China Small & Medium Enterprises Private Placement Bond |
| CTR | Collateral Trust |
| COLT | Continuously Offered Long Term Security |
| CPD | Capital Debenture |
| CT | Cedulas Territorial (Covered Bond) |
| CTF | Certificate |
| CR | Custodial Receipt |
| COV | Covered Bond (Other) |
| VRDO | Corporate Variable Rate Demand Obligation |
| DA | Dutch Auction |
| DEB | Debenture |
| DPNT | Deposit Note |
| DPSH | Depository Preferred Share |
| DGB | Danish Govt Bond |
| DSNT | Discount Note |
| DRTH | Depository Receipt (Thailand) |
| DSL | Dutch State Loan |
| DT | Dutch Treasury |
| EC | Embedded Cap |
| EETC | Enhanced Equipment Trust Certificate |
| EQTR | Equipment Trust |
| EQUT | Equity Unit |
| ES | Embedded Swap |
| FA | Fund Anticipation Note |

| | |
|------|---|
| FAC | Facility Bond |
| FIS | Fixed Income Security |
| OF | Obligation Fonciere (Covered Bond) |
| FTA | Fondo de Titulizacion de Activos |
| FTH | Fondo de Titulizacion Hipotecaria |
| FN | Fundierte Namensschuldverschreibung (covered bond) |
| FUNG | Strip - Fungible - Interest and/or Principal |
| FS | Fundierte Schuldverschreibungen (Covered Bond) |
| FSJ | Fundierte Schuldverschreibung Jumbo (Covered Bond) |
| GA | Grant Anticipation Note |
| GAC | Guaranteed Annuity Contract |
| GDN | Global Depository Note |
| GNNT | General Term Note |
| GTS | Gilt Treasury Stock |
| HNP | Hypotheken-Namenspfandbrief (covered bond) |
| HPF | Hypothekenpfandbrief Jumbo (Covered Bond) |
| IGB | Irish Govt Bond |
| INBD | Income Bond |
| INNT | Income Note |
| IB | Infrastructure Bond |
| INHB | Inhaberschuldverschreibung |
| INT | Strip - Interest only |
| JL | Jumbo Landesschatzanweisung |
| JCB | Junior Covered bond (Denmark) |
| FJ | Flugzeugpfandbrief Jumbo (Covered Bond) |
| JLO | Jumbo Landesobligation |
| SJ | Schiffspfandbrief Jumbo (Covered Bond) |
| JULK | Julkisyhteisovakuudellinen (Covered Bond) |
| KO | Kassenobligation |
| KIIN | Kiinteistovakuudellinen (Covered Bond) |
| KOB | Kommunalbrief |
| LA | Loan Antic Note |
| LW | Landesschatzanweisung |
| LEBC | Letra del Banco Central |
| LFTA | Letra Financeira do Tesouro A |
| LH | Chile LH |

| | |
|------|--|
| LNST | Loan Stock |
| LOB | Lease Obligation Bond |
| LPN | Loan Participation Note |
| LSNT | Lease Note |
| LTHP | Lettres de Gage hypothecaires (Covered Bond) |
| LTMB | Lettres de Gage mobilières (Covered Bond) |
| LTPB | Lettres de Gage publiques (Covered Bond) |
| LDG | Lettre de Gages (Covered Bond) |
| MBS | Mortgage Backed Security |
| BPA | BPA |
| MXBP | Mexico BPA Semestral |
| BPAT | BPAT |
| N1 | Construction Loan Note |
| N2 | Collateralized Loan Note |
| N3 | Renewal & Renewable Note |
| N4 | Promissory Note |
| N9 | Other Note |
| NAME | Namenschuldverschreibung |
| NTBC | Nota del Banco Central |
| NPF | Namenspfandbrief (Covered Bond) |
| NT | Note |
| OAT | Obligation Assimilable du Tresor |
| OBG | Obbligazioni Bancaria Garantita (Covered Bond) |
| ODE | Obligacion del Estado |
| OH | Obrigacao Hipotecaria (Covered Bond) |
| ONP | Oeffentlicher Namenspfandbrief (covered bond) |
| OPA | Offerta Pubblica di Acquisto (Italian FI Takeover Bid) |
| OPF | Oeffentlicher Pfandbrief Jumbo (Covered Bond) |
| ORD | Orderschuldverschreibung |
| OSSB | Obrigacoes sobre o Sector Publico (Covered Bond) |
| OT | Obrigacao do Tesouro |
| PI | Commercial Paper |
| PI | Participation Interest |
| PTC | Pass Through Certificate |
| PDEB | Percentage Quoted Debenture |
| PA | Pfandbrief Anleihe (Covered Bond) |

| | |
|------|--|
| PF | Preferred Stock |
| FF | Flugzeugpfandbrief (Covered Bond) |
| H | Hypothekentpfandbrief (Covered Bond) |
| LO | Landesobligation |
| OP | Oeffentlicher Pfandbrief (Covered Bond) |
| S | Schiffspfandbrief (Covered Bond) |
| PIBS | Permanent Interest Bearing Share |
| PINT | Strip - Principal and Interest |
| BMP | Belgian Mortgage Pandbrieven (Covered Bond) |
| PNT | Equity Participation Note |
| PP | Participacion Preferente |
| PRC | Pagare Reajustable del Banco Central |
| PRIN | Strip - Principal only |
| STRP | Strip - Principal Only Uplift (Inflation Linked) |
| PVD | Privatized Debt |
| TYBD | Tokyo Pro Bond |
| QSC | Qualified School Construction Bond |
| RA | Rev Antic Note |
| R | Realkreditobligation |
| RFBD | Refund Bond |
| RLN | Restructured Loan |
| REAL | Realkreditobligation (Covered bond (Denmark pre-2008)) |
| RZE | Recovery Zone Economic Bond |
| SO | Sakerstallda Obligation (Covered Bond) |
| BW | Bundesschatzanweisung |
| SDO | Saerligt Daekkede Obligation (Covered Bond) |
| SDRO | Saerligt Daekkede Realkreditobligation (Covered Bond) |
| SFH | Obligations de Financement de l'Habitat (Covered Bond) |
| SLIM | Slimbo |
| SEC | Stock Exchange Certificate |
| SP | Structured Product |
| SBP | Strip Bond Package |
| I1 | Islamic Sukuk (Salam) |
| I2 | Islamic Sukuk (Bay' ad Dayn) |
| I13 | Islamic Sukuk (Bay' al 'ina - Buy back) |
| I3 | Islamic Sukuk (Bay' bi thaman ajil (BBA)) |
| I4 | Islamic Sukuk (Ijara) |

| | |
|-------------|---------------------------------------|
| I5 | Islamic Sukuk (Istisna') |
| I6 | Islamic Sukuk (Istithmar) |
| I7 | Islamic Sukuk (Mudaraba) |
| I8 | Islamic Sukuk (Murabaha) |
| I9 | Islamic Sukuk (Musharaka) |
| SUK | Islamic Sukuk (Other) |
| I10 | Islamic Sukuk (Wakala bil istithmar) |
| SUNT | Surplus Note |
| SVBD | Savings Bond |
| I11 | Islamic Sukuk (Hybrid) |
| TA | Tax Antic Note |
| TCR | Tax Credit |
| TCU | Unit of a Trust |
| TGNT | Toggle Note |
| TKPC | Stock Purchase Contract |
| TR | Trust |
| TRA | Treuhand-Anleihe |
| TCT | Trust Certificate |
| SPV | Preferred Security (Trust, SPV) |
| UA | Unknown Antic Type |
| UT | Unit |
| I12 | Letra de Tesoreria |
| VCP | Bond - Argentina Valor de Corto Plazo |
| WRLN | War Loan - United Kingdom |
| XA | Federal Aid Antic |
| ZA | Tax And Rev Antic Note |
| ZAI | Zaito Bond |
| <u>CBND</u> | <u>Corporate Debt Security</u> |
| <u>ENT</u> | <u>Equity Linked Note</u> |
| <u>VBND</u> | <u>Convertible Debt Security</u> |
| <u>ILS</u> | <u>Index Linked Security</u> |
| <u>OTH</u> | <u>Other</u> |

Appendix 2 - Coupon Type Codes and Descriptions

| Coupon Type Code | Coupon Type Description |
|------------------|---|
| FXAN | Fixed: Annuity |
| FXDI | Fixed: Discount |
| FXMF | Fixed: With Multiple Frequencies of Payment |
| FXPM | Fixed: Pay only at Maturity |
| FXPP | Fixed: Partly Paid |
| FXPV | Fixed: Plain Vanilla Fixed Coupon |
| FRBF | Floating: Bull/Reverse Floating Rate |
| FRFF | Floating: Fixed then Floating |
| FRFX | Floating: Floating then Fixed |
| FRFZ | Floating: Floating then Zero |
| FROT | Floating: Floating |
| FRPM | Floating: Pay at Maturity |
| FRPV | Floating: Fixed Margin over Index |
| FRRS | Floating: Floating then Resettable |
| FRVR | Floating: Floating then Variable |
| FRZF | Floating: Zero then Floating |
| FXRS | Fixed: Resettable Coupon |
| FXRV | Floating: Fixed then Reverse Float |
| VRFR | Floating: Variable then Float |
| VRDC | Variable: Deferred Coupon |
| ZCFX | Strip: Zero then Fixed |
| ZRFX | Variable: Zero then Fixed |
| ZRVR | Variable: Zero then Variable |
| FRSD | Floating: Step Down-Margin over Index |
| FRSU | Floating: Step Up-Margin over Index |
| VRGR | Variable: Step Up/Step Down |
| FXZC | Fixed: Zero Coupon |
| RGOT | Range: Range |
| RSFR | Floating: Resettable then Floating |
| STRP | Strip |
| TBPD | To Be Priced |
| <u>CNGT</u> | <u>Contingent</u> |
| <u>OTH</u> | <u>Other</u> |

Appendix 3 - Daily List Update Reason Codes and Descriptions

| Update Reason Code | Update Reason Description |
|---------------------------|---------------------------------------|
| <i>blank</i> | <i>No reason given</i> |
| MOT | Moved from OTCE |
| DNY | Delisted from NYSE |
| DAX | Delisted from AMEX |
| DAR | Delisted from ARCA |
| DNQ | Delisted from NASDAQ |
| DEX | Delisted from Exchange |
| ISV | Ineligible – Sovereign |
| ICD | Ineligible – CD |
| ICR | Ineligible – Currency |
| IMM | Ineligible – Money Market |
| ITR | Ineligible – Treasury |
| IAI | Ineligible – Accredited Investor |
| IRS | Ineligible – Other |
| BR | Bankruptcy |
| LIQ | Liquidation |
| CAL | Called |
| RED | Redeemed |
| EXC | Exchanged |
| CAN | Cancelled |
| A/M | Acquisition/Merger |
| MAT | Matured |
| LNQ | Listed on the NYSE |
| LAR | Listed on the NYSE ARCA |
| LAX | Listed on AMEX |
| LNQ | Listed on NASDAQ |
| LCB | Listed on CBOE |
| ROB | Reportable to the OTCBB |
| RON | Reportable on the OTC NBB |
| RMS | Reportable to the MSRB |
| 12J | 12(j) Registration Revoked by the SEC |
| RNC | Regulatory Non Compliance |
| OTH | Other * |

*where OTH is used, please refer to the Event Comments field in the file (CMMNT_TX) for additional information.

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 CA Security Master:

```
string Action = "DOWNLOAD";
string file = "CAMASTER";
string facility = "TRACE";

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("TRACE");

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);
}
```