



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

Version 4.2

April 25, 2014

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

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 SSL/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
Daily List Participant	Real time starting at 8:00 a.m. ET and throughout the day until 8:00 pm. ET
Market Breadth*	End of day report at 5:30 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

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 or the end of day Market Aggregate 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) CORPBONDSBR – Corporate Bond Market Breadth AGCYBONDSBR - Agency Bond Market Breadth CORP144ABONDSBR – Corporate Bond 144A Market Breadth MAINVGR – Most Active Investment Grade (Media) MAINVGR144A – Most Active Investment Grade 144A (Media) MAHIYLD – Most Active High Yield (Media) MAHIYLD144A – Most Active High Yield 144A (Media) MACVT – Most Active Convertible (Media) MACVT144A – Most Active Convertible 144A (Media) MAINVGRPRT – Most Active Investment Grade (Print Media) MAINVGRPRT144A – Most Active Investment Grade 144A (Print Media) MAHIYDPRT – Most Active High Yield (Print Media) MAHIYDPRT144A – Most Active High Yield 144A (Print Media) MACVTPRT – Most Active Convertible (Print Media) MACVTPRT144A – Most Active Convertible 144A (Print Media) STATSINVGR – Indices Investment Grade STATSHIYLD – Indices High Yield COMPINVGR – Index Components Investment Grade COMPHIYLD – Index Components High Yield MOVINVGR – Leading and Lagging Movers Investment Grade MOVHIYLD - Leading and Lagging Movers High Yield MOSTINVGR – 10 Most Active Index Bonds Investment Grade MOSTHIYLD – 10 Most Active Index Bonds High Yield</p>

Parameter	Parameter Options
	CLOSCORPELN – Closing Report for Corporate Bonds and ELN’s CLOSAGCY – Closing Report for Agency Bonds CLOSCORPELN144A – Closing Report for Corporate Bonds and ELN’s that are classified as 144A securities
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
TRACE Participant Daily List delta (see note 1)	action=DELTA&file=PDAILYLIST&facility=TRACE
Market Breadth Corporate	action=DOWNLOAD&file=CORPBONDSBR&facility=TRACE&day=02/10/2012
Market Breadth Agency	action=DOWNLOAD&file=AGCYBONDSBR&facility=TRACE&day=02/10/2012
Market Breadth 144A	action=DOWNLOAD&file= CORP144ABONDSBR &facility=TRACE&day=02/10/2012
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

File	Query Parameters
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=MAHIYLPRT&facility=TRACE&day=02/10/2012
Most Active Print Media High Yield 144A	action=DOWNLOAD&file=MAHIYLPRT144A&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	<i>Please see Appendix 1 for a list of Debt Type Code / Descriptions</i>	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
DISSEM	Trade Report Disseminator Indicator	Y = Indicates trade reports will be disseminated N= Indicates trade reports will not be disseminated	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.	
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	5

Field Name (Header)	Description	Comments	Maximum Length
TRD_RPT_EFCTV_DT	Trade Report Effective Date	YYYYMMDD format. Will be blank on Delete Event Types.	
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 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.	

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
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

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/FITCH	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

Field Name (Header)	Description	Comments	Maximum Length
Stat	Index Statistic	TR = Total Return PR = Price YL = Yield OA = OAS AS = AAS VO = Volume	50
Value	Current Statistical Figure		10
Change	Delta from previous day		10

Index Components Files

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

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

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	

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 High Yield Indices statistics file

This request retrieves the overall high yield index values.

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

Example 11 - Get the High Yield Index Components file

This request retrieves the components of the high yield index.

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

Example 12 - Get the Investment Grade Leading and Lagging Movers file

This request retrieves the investment grade leading and lagging index movers.

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

Example 13 - Get the 10 Most Active High Yield Indices file

This request retrieves the 10 most active high yield index bonds.

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

Example 14 - 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
|761157AA4||AGCY|BND|Resolution Fding|RESFC 8.125
10/15/19|8.125000000000000000|FXPV|20110516|20191015|||N|Y
|761157AB2||AGCY|BND|Resolution Fding|RESFC 8.625
01/15/30|8.625000000000000000|FXPV|20110516|20300115|||N|Y
|761157AC0||AGCY|BND|Resolution Fding|RESFC 8.875
04/15/30|8.875000000000000000|FXPV|20110516|20300415|||N|Y
|761157AD8||AGCY|BND|Resolution Fding|RESFC 8.875
07/15/20|8.875000000000000000|FXPV|20110516|20200715|||N|Y
|761157AE6||AGCY|BND|Resolution Fding|RESFC 9.375
10/15/20|9.375000000000000000|FXPV|20110516|20201015|||N|Y
|078167AZ6||CORP|SRDEB|Verizon Pennsylv|VZ 8.350 12/15/30
PUT|8.350000000000000000|FXPV|20110516|20301215|||N|Y
|048825AW3||CORP|DEB|Atlantic Richfld|BP 9.000
04/01/21|9.000000000000000000|FXPV|20110516|20210401|||N|Y
|048825AY9||CORP|DEB|Atlantic Richfld|BP 9.000
05/01/31|9.000000000000000000|FXPV|20110516|20310501|||N|Y
|669812BQ1||CORP|DEB|Nova Scotia Pwr|NSI 9.400 04/01/21
DFSd|9.400000000000000000|FXPV|20110516|20210401|||N|Y
|761157AG1||AGCY|BND|Resolution Fding|RESFC 8.625
01/15/21|8.625000000000000000|FXPV|20110516|20210115|||N|Y
|502487AA9||CORP|UNNT|Caja de Ahor y|CAIXA 0.446 01/23/12
FRN|0.44556000000000000000|FRSU|20110516|20120123|||N|Y
|39136MAA4||CORP|DEB|Great West Lf Cp|GWO 6.625
11/15/34|6.625000000000000000|FXPV|20110516|20341115|||N|Y
|749941AG5||CORP|SUBNT|RF Micro Devices|RFMD 0.750 04/15/12
CVT|0.75000000000000000000|FXPV|20110516|20120415|||N|Y
|749941AJ9||CORP|SUBNT|RF Micro Devices|RFMD 1.000 04/15/14
CVT|1.00000000000000000000|FXPV|20110516|20140415|||N|Y
|83568GAA2||CORP|SRNT|SonoSite|SONO 3.750 07/15/14
CVT|3.75000000000000000000|FXPV|20110516|20140715|||N|Y
|825870AA6||CORP|SRNT|Sidetur Finance|SIDFN 10.000 04/20/16
'11|10.00000000000000000000|FXPV|20110516|20160420|||N|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|NEW_SYM_CD|NEW_CUSI
P|NEW_BSYM_ID|NEW_SCRTY_DS|NEW_ISSUER_NM|NEW_CPN_RT|NEW_MTRTY_DT|NEW_DSMTN_FL|NEW_SUBPROD_TYPE|NE
W_TRD_RPT_EFCTV_DT20111102|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|||||||20111102|SD|||20111102|CA|LSAKA3666251|000
86NA06||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|||||||20111102|SA|||20111102|CA|QUIM3666254|0010
0X106||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|||||||
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.

Appendix 1 - Debt Type Codes and Descriptions

Debt Type Code	Debt Type Description
1STMTG	First Mortgage Bond
1STMTGNT	First Mortgage Note
1STRFMTG	First & Refunding Mortgage Bond
2NDMTG	Second Mortgage Bond
3RDMTG	Third Mortgage Bond
AA	Appropriation Antic Note
BDAGR	Agriculture Bond
BND	Bond
BNT	Bank Note
C1	Certificate of Indebtedness
C2	Certificate of Participation
C3	Certificate of Obligation
CA	Combined Antic
CALLUNIT	Callable Unit
CAPSEC	Capital Security
CAT	Insurance Linked Security
CDEB	Spread Quoted Debenture
CLN	Credit Linked Note
COLLTR	Collateral Trust
COLTS	Continuously Offered Long Term Security
CUSTRCPT	Custodial Receipts
CVDBND	Covered Bond (Other)
CVRDO	Corporate Variable Rate Demand Obligation
DEB	Debenture
DEPNT	Deposit Note
DEPSH	Depository Preferred Share
DISNT	Discount Note
EC	Embedded Cap
EQUIPTR	Equipment Trust
EQUNIT	Equity Unit
ES	Embedded Swap
FA	Fund Anticipation Notes
FIS	Fixed Income Security
GDN	Global Depository Note
GENNT	General Term Note
IDX	Index Linked Security
INCBND	Income Bond

INCNT	Income Note
INT	Interest only
JRNT	Junior Note
JRSEC	Junior Secured
JRSUBDEB	Junior Subordinated Debenture
JRSUBNT	Junior Subordinated Note
LPN	Loan Participation Note
N1	Construction Loan Note
NT	Note
PASSTHRU	Pass Through Certificate
PDEB	Percentage Quoted Debenture
PINT	Principal and Interest
PRIN	Principal only
RA	Rev Antic Note
REFBND	Refund Bond
SECBND	Secured Bond
SECFAC	Secured Facility Bond
SECNT	Secured Note
SR	Senior
SRBNT	Senior Bank Note
SRDEB	Senior Debenture
SRNT	Senior Note
SRSEC	Senior Secured
SRSUBDEB	Senior Subordinated Debenture
SRSUBNT	Senior Subordinated Note
SRSUBSEC	Senior Subordinated Secured
STPROD	Structured Product
STRPACK	Strip Bond Package
SUBBNT	Subordinated Bank Note
SUBCPD	Subordinated Capital Debenture
SUBDEB	Subordinated Debenture
SUBNT	Subordinated Note
TCU	Unit of a Trust
TGNT	Toggle Note
TR	Trust
TRCTF	Trust Certificate
TRPFDSEC	Preferred Security (Trust, SPV)
UA	Unknown Antic Type
UNIT	Unit
UNNT	Unsecured Note

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
FRVR	Floating: Floating then Variable
FRZF	Floating: Zero then Floating
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
STRP	Strip
TBPD	To Be Priced

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);
}
```