



Web API Specifications for the TRACE Securitized Products File Downloads

Version 4.9

October 18, 2016

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Revision History

Version/Date	Changes Made
Version 1.1/April 20, 2011	<ul style="list-style-type: none"> Clarification regarding access to files in Protocol section Listed times for production access to files Effective Date populated for security additions as well as deletes and changes “MDYS_RTNG” field changed to “Reserved 3” Grade field will not contain data; it will be blank filled 144A field will be “Y” or “N” and not blank filled Appendix 1 - Amended Sub-Product Asset Codes
Version 1.2/June 23, 2011	<ul style="list-style-type: none"> Appendix 1 - Amended Sub-Product Asset Codes Maximum Field Lengths included in file tables
Version 2.0/ January 23, 2012	<ul style="list-style-type: none"> 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 <p style="text-align: center;">Sub Product Asset Code – Added SMBA</p>
Version 3.0/March 20, 2012	<ul style="list-style-type: none"> Include a Daily List Timestamp in all Daily List events Include BSYM (Bloomberg Symbol) in Master File Include BSYM and NEW BSYM in Daily List Files Include Tranche ID and New Tranche ID in Daily List Files •
Version 3.1/July 6, 2012	<ul style="list-style-type: none"> Modify Appendix 1 - TBA Sub Product Asset Codes and Descriptions
Version 3.2/September 4, 2012 (In production November 5, 2012)	<ul style="list-style-type: none"> Addition of Closing Price File for TBA Sub Product
Version 3.2 production date modified to November 12, 2012	
Version 3.3/December 21, 2012	<ul style="list-style-type: none"> Added TBA Coupon Code R (Fixed Rate Reverse)
Version 3.4/February 1, 2013	<ul style="list-style-type: none"> Changed TRAQS references to TRACE
Version 4.0/March 25, 2013 (In production July 22, 2013)	<ul style="list-style-type: none"> Added RDID Master File for MBS securities Added RDID Daily List File for MBS securities Amended Closing Price File to distinguish between MBS and non-MBS securities Amended MBS Security Master File Amended MBS Daily List File
Version 4.1/June 17, 2013 (In production July 22, 2013)	<ul style="list-style-type: none"> Added Appendix 8 to include cross referenced Agency values

	<ul style="list-style-type: none"> • Added Agency values N, T • Modified Amortization Type to be a one –byte field – associated values in Appendix 7 • Modified Mortgage Product values field to be a one byte field • Added Mortgage Product values H, # • Deleted Mortgage Product values B, D, L, N, P, U
Version 4.2/December 16, 2013 (In production February 10 , 2014)	<ul style="list-style-type: none"> • Added Agency value R to represent Ginnie 1 Serial Notes (Puerto Rico)
Version 4.3/December 29, 2014 (In production April 27, 2015)	<ul style="list-style-type: none"> • Include ABS closing prices in the CLOSSP file for ABS trades which were disseminated during the trading day • Added SP 144A trade closing report query (CLOSSP144A) to allow clients to receive closing prices for ABS 144A securities which have been disseminated during the trading day • Added ABSX sub product code for ABS non-disseminated securities • Added Master File query for ABSX sub product code securities • Added ABSX sub product code for Sub Product Asset Codes/Descriptions • Added ABSX sub product code to Coupon Type Code/Descriptions
Version 4.4/March 3, 2015 (In production June 1, 2015)	<ul style="list-style-type: none"> • Amended production date for the software release
Version 4.5/April 22, 2015 (In production June 1, 2015)	<ul style="list-style-type: none"> • Added US Agreements File
Version 4.6/April 7, 2016	<ul style="list-style-type: none"> • Added Sub-Product Asset codes
Version 4.7/May 25, 2016	<ul style="list-style-type: none"> • Added a Sub-Product Asset code
Version 4.8/August 3, 2016	<ul style="list-style-type: none"> • Added a Sub-Product Asset code
<u>Version 4.9/October 18, 2016</u>	<ul style="list-style-type: none"> • <u>Changes to support trades (where quantity >= \$1 Million) under the new CMO sub product. Added 4 new files 2 weekly and 2 monthly</u> • <u>Closing files will now include CMOs where quantity < \$1 million</u> • <u>Appendix 6 – added codes “D” and “U”.</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 Securitized Products 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 Securitized Products reference data. This document outlines the parameters and values for each available Securitized Products file. The data in each of these files is current as of the time of download.

Access to the File Domain

FINRA has implemented the various products it supports in phases; Securitized Products (SP)¹ was the first one to deliver reference data via an API. This document outlines the parameters and values for each available SP file. The data in each of these files is current as of the time of download.

SP 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 Security and RDID Masters, Daily Lists and Participant Lists are maintained by FINRA Operations. For questions concerning the data in these files, 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 string detailed on page 4 of this specification. Examples of actual download query strings are available on page 10 of this specification.

¹ As stated in Regulatory Notice 10-55 (October 2010), effective May 16, 2011, member firms will be required to report trades in asset-backed securities, mortgage-backed securities and other similar securities, collectively defined hereinafter as Securitized Products (SP), to TRACE.

File Availability – All Times are Approximate

File	Time
Start of day security master files; RDID master files	7:00 a.m. ET
Security master and daily list updates; RDID master and RDID daily list updates, US Agreement files	Beginning at 8:00 a.m. ET and continuing throughout the day – near real-time
Final possible security master, daily list updates, RDID master and RDID daily list updates, US Agreement files	8:00 p.m. ET

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.</p> <p>DELTA – provide the changes since the last time the user downloaded the file.</p> <p>Delta files are supported for Security Daily List, Participant Daily List, and RDID Daily List, but not for the Security Masters, RDID Master or Participant List or US Agreements.</p>
Facility	TRACE
File	<p>ABSMMASTER – ABS Security Master</p> <p>ABSXMASTER – ABS (Non-disseminated securities) Security Master</p> <p>CMOMASTER – CMO Security Master</p> <p>TBAMASTER – TBA Security Master</p> <p>MBS Security Master, available as subsets (based on the issuing Agency):</p> <p>MBSSMBA – MBS Security Master, Small Business Administration (SBA)</p> <p>MBSFHLM – MBS Security Master, Federal Home Loan Mortgage Corporation (Freddie Mac)</p> <p>MBSFNMA – MBS Security Master, Federal National Mortgage Association (Fannie Mae)</p> <p>MBSGNM1 – MBS Security Master, Government National Mortgage Association (Ginnie Mae 1)</p> <p>MBSGNM2 – MBS Security Master, Government National Mortgage Association (Ginnie Mae 2)</p> <p>MBSRDID – RDID Master File</p> <p>PARTICIPANT – Participant List (current participants with active authorizations for the specified facility)</p> <p>PDAILYLIST – Participant Daily List (additions/deletions/changes to the Participant List of the specified facility)</p> <p>DAILYLISTSP – Security Daily List for Securitized Products</p> <p>DAILYLISTSPRID – RDID Daily List</p> <p>CMOWKLY144A – Weekly cumulative file for CMO 144A securities where quantity \geq \$1 Million</p> <p>CMOWKLYNON144A – Weekly cumulative file for CMO Non-144A securities where quantity \geq \$1 Million</p> <p>CMOMTHLY144A – Monthly cumulative file for CMO 144A securities where quantity \geq \$1 Million</p> <p>CMOMTLHYNON144A – Monthly cumulative file for CMO Non-144A securities where quantity \geq \$1 Million</p> <p>CLOSSP – Closing Report File (including CMO trades where quantity $<$ \$1 Million)</p> <p>CLOSSP144A – Closing Report File for securities classified as ABS 144A securities (including CMO 144A trades where quantity $<$ \$1 Million)</p> <p>SPUSA – Securitized Products US Agreements</p>

Parameter	Parameter Options
day	A date, for example: 6/1/2011. Date is only used for Daily List, RDID Daily List, <u>CMO Weekly and CMO Monthly</u> , and Closing Report requests. If no date is specified on a daily list or closing report request then the current day is assumed.

File	Query Parameters
SP ABS Master	action= DOWNLOAD &file=ABSMASTER&facility=TRACE
SP ABSX Master	action= DOWNLOAD &file=ABSXMASTER&facility=TRACE
SP CMO Master	action= DOWNLOAD &file=CMOMASTER&facility=TRACE
SP TBA Master	action= DOWNLOAD &file=TBAMASTER&facility=TRACE
SP MBS Master – SBA	action= DOWNLOAD &file=MBSSMBA&facility=TRACE
SP MBS Master – Freddie Mac	action= DOWNLOAD &file=MBSFHLM&facility=TRACE
SP MBS Master – Fannie Mae	action= DOWNLOAD &file=MBSFNMA&facility=TRACE
SP MBS Master – Ginnie Mae 1	action= DOWNLOAD &file=MBSGNM1&facility=TRACE
SP MBS Master – Ginnie Mae 2	action= DOWNLOAD &file=MBSGNM2&facility=TRACE
SP MBS RDID Master	action= DOWNLOAD &file=MBSRDID&facility=TRACE
SP TRACE Participant List	action=DOWNLOAD&file=PARTICIPANT&facility=TRACE
SP TRACE Participant Daily List	action=DOWNLOAD&file=PDAILYLIST&facility=TRACE
SP TRACE Participant Daily List delta (see note 1)	action=DELTA&file=PDAILYLIST&facility=TRACE
SP TRACE Security Daily List	action=DOWNLOAD&file=DAILYLISTSP&facility=TRACE
SP TRACE Security Daily List delta (See note 1)	action=DELTA&file=DAILYLISTSP&facility=TRACE
SP TRACE Security Daily List for a specific day	action=DOWNLOAD&file=DAILYLISTSP&facility=TRACE&day=5/16/2011
SP MBS RDID Daily List delta (see note 1)	action=DELTA&file= DAILYLISTSPRDID&facility=TRACE
SP MBS RDID Daily List for a specific day	action=DOWNLOAD&file= DAILYLISTSPRDID&facility=TRACE&day=7/22/2013
<u>CMO Weekly 144A for a specific week</u>	<u>action=DOWNLOAD&file=CMOWKLY144A&facility =TRACE&week=8/26/2016</u>
<u>CMO Weekly Non-144A for a specific week</u>	<u>action=DOWNLOAD&file=CMOWKLNON144A&facility =TRACE&week=8/26/2016</u>
<u>CMO Monthly 144A for a specific month</u>	<u>action=DOWNLOAD&file=CMOMTHLY144A&facility =TRACE&month=8/2016</u>
<u>CMO Monthly Non-144A for a specific month</u>	<u>action=DOWNLOAD&file=CMOMTHLYNON144A&facility =TRACE&month=8/2016</u>
SP Closing Report	action=DOWNLOAD&file=CLOSSP&facility=TRACE
SP Closing Report for ABS Securities classified as 144A	action=DOWNLOAD&file=CLOSSP144A&facility=TRACE
SP TRACE	action=DOWNLOAD&file=SPUSA&facility=TRACE

File	Query Parameters
US Agreements	

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 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 files.

Securitized Products Security Master

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
POOL_NB	Pool Number	Used in MBS Master Files. Will be blank on ABS, ABSX, CMO and TBA Master Files.	6
MSTR DEAL ID	Master Deal ID	Used in ABS, ABSX, and CMO Master Files. Will be blank on MBS and TBA Master Files.	50
TRNCH_NB	Tranche ID	Used in ABS, ABSX, and CMO Master Files. Will be blank on MBS and TBA Master Files.	20
SUB_PRDCT_TYPE	Sub-Product Type Code	Valid values are: ABS <i>Asset-Backed Securities</i> ABSX <i>Asset Backed Securities (non-dissemination)</i> CMO <i>Collateralized Mortgage Obligations</i> MBS <i>Mortgage-Backed Securities</i> TBA <i>To Be Announced</i>	5
SCRTY_SBTP_CD	Sub-Product Asset Code	<i>Please see Appendix 1 for a list of Sub Product Asset Code / Descriptions</i>	5
ISSUER_NM	Issuer Name		80
SCRTY_DS	Security Description		80
CPN_RT	Coupon Rate	Decimal format	27 (19 after decimal)

Field Name (Header)	Description	Comments	Maximum Length
CPN_TYPE_CD	Coupon Type Code	<i>Please see Appendix 2 for a list of Coupon Type Code / Descriptions</i>	10
INTRS_TYPE_CD	Interest Type Code	Used in ABS, ABSX, and CMO Master Files. Will be blank on MBS and TBA Master Files. <i>Please see Appendix 3 for a list of Interest Type Code / Descriptions</i>	10
TRD_RPT_EFCTV_DT	Trade Report Effective Date	YYYYMMDD format.	
MTRTY_DT	Maturity Date	YYYYMMDD format. Used in ABS, ABSX, CMO and MBS Master Files. Will be blank on TBA Master Files.	
TBA_STLMT_CD	TBA Settlement Month	Two digit value representing the month. Used in TBA Master Files. Will be blank on ABS, ABSX, CMO and MBS Master Files. <i>Please see Appendix 4 for a list of TBA Settlement Codes / Months</i>	
GRADE	Grade	Will be blank filled	1
RESERVED3	Filler	Blank field - reserved for future use.	
IND_144A	144A Indicator	Y = Indicates a 144A security N = Not a 144A security	1
RESERVED2	Filler	Blank field - reserved for future use.	
DSMTN_SYM_ID	RDID	Used in MBS Master Files. Can have special characters. Will be blank on ABS, ABSX, CMO, and TBA Master Files.	25

Securitized Products TRACE Security Daily List

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 5 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 "SP".	
SYM_CD	FINRA Symbol		14
CUSIP		This field will be blank for firms that do not have a CUSIP license in place.	9
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. Valid for ABS, ABSX, CMO and MBS securities. Will be blank on TBA securities.	
TBA_STLMT_CD	TBA Settlement Month	Two digit value representing the month. Used in Sub-Product Type TBA if there is a change to Settlement Month. <i>Please see Appendix 4 for a list of TBA Settlement Codes / Months</i>	
BSYM_ID	Bloomberg Symbol		12
POOL_NB	Pool Number	Valid for MBS securities only. Will be blank on ABS, ABSX, CMO and TBA securities.	6
TRNCH_NB	Tranche ID	Used in ABS, ABSX, and CMO Master Files. Will be blank on MBS and	20

Field Name (Header)	Description	Comments	Maximum Length
		TBA Master Files.	
SUBPROD_TYPE	Sub-Product Type	Valid values are: ABS <i>Asset-Backed Securities</i> ABSX <i>Asset Backed Securities (non-dissemination)</i> CMO <i>Collateralized Mortgage Obligations</i> MBS <i>Mortgage-Backed Securities</i> TBA <i>To Be Announced</i> 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.	
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_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_TBA_STLMT_CD	New TBA Settlement Month	Applicable to Change Event Types only. Will be blank on Add and Delete Events.	
NEW_BSYM_ID	New Bloomberg Symbol	Applicable to Change Event Types only. Will be blank on Add and Delete Events.	12
NEW_POOL_NB	New Pool Number	Applicable to Change Event Types only. Will be blank on Add and Delete Events.	6
NEW_TRNCH_NB	New Tranche ID	Used in ABS, ABSX, and CMO Master Files. Will be blank on MBS and	20

Field Name (Header)	Description	Comments	Maximum Length
		TBA Master Files.	
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.	
DSMTN_SYM_ID	RDID	Used in MBS Files. Addition events only. Can include special characters. Will be blank on ABS, ABSX, CMO, and TBA Files.	25

Securitized Products 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

Securitized Products 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: PA Participant Addition PD Participant Deletion PC 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	

Securitized Products Closing Report

Field Name (Header)	Description	Comments	Maximum Length
SYM_CD	FINRA assigned Symbol	This field will be blank for MBS securities	14
CUSIP_ID	CUSIP	This field will be blank for firms that do not have a CUSIP license in place. This field will be blank for MBS securities.	9
BSYM_ID	Bloomberg Symbol	This field will be blank for MBS securities.	12
SUB_PRODUCT		TBA; ABS; CMO; MBS	5
HIGH_PRICE	High Price		10
LOW_PRICE	Low Price		10
CLOSING_PRICE	Closing Price		10
TRADE_DATE	Trade Date for the record's prices	Closing price date in mm/dd/yyyy format	
DSMTN_SYM_ID	Reference Data Identifier (MBS only)	This field will be only be populated for MBS securities. Can include special characters.	25

Securitized Products MBS RDID Master

Field Name (Header)	Description	Comments	Maximum Length
DSMTN_SYM_ID	RDID	Ticker for each MBS security. Can include special characters.	25
BASE_SYM_ID	Agency	Issuing Agency. Refer to Appendix 8 for details.	10
PRPTY_TYPE_CD	Mortgage Product	Type of underlying mortgage. Refer to Appendix 6 for details.	1
AMRTN_TYPE_CD_	Amortization Type	Refer to Appendix 7 for details.	1
CPN_RT	Coupon	Term coupon of the pool.	8
ORGNL_TERM_LM_	Original Maturity	Pool maturity in years.	6
WAC_RT	Weighted Average Coupon		8
WAM_LM	Weighted Average Maturity		8
WALA_LM	Weighted Average Loan Age		6
UPDTD_WGHTD_AVG_LOAN_AM	Average Loan Size		6
ORGNL_WGH	Loan to Value		6

Securitized Products MBS RDID Daily List

Field Name (Header)	Description	Comments	Maximum Length
DAILY_LIST_DT	Daily List Date	YYYYMMDD format.	
DAILY_LIST_TIME	Daily List Time	HH:MM:SS format.	
DAILY_LIST_EVENT_CD	Daily List Event Type	Valid values are: <i>RDID Add</i>	
DSMTN_SYM_ID	RDID	Ticker for each MBS security. Can include special characters.	25
BASE_SYM_ID	Agency	Issuing Agency. Refer to Appendix 8 for details.	10
PRPTY_TYPE_CD	Mortgage Product	Type of underlying mortgage. Refer to Appendix 6 for details.	1
AMRTN_TYPE_CD_	Amortization Type	Refer to Appendix 7 for details.	1
CPN_RT	Coupon	Term coupon of the pool.	8
ORGNL_TERM_LM_	Original Maturity	Pool maturity in years.	6
WAC_RT	Weighted Average Coupon		8
WAM_LM	Weighted Average Maturity		8

Field Name (Header)	Description	Comments	Maximum Length
WALA_LM	Weighted Average Loan Age		6
UPDTD_WGHTD_AVG_LOAN_AM	Average Loan Size		6
ORGNL_WGH	Loan to Value		6

Securitized Products TRACE US Agreements

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.	

CMO Weekly Cumulative 144A and Non-144A

Field Name (Header)	Description	Comments	Maximum Length
<u>CUSIP_ID</u>	<u>CUSIP</u>	<u>This field will be blank for firms that do not have a CUSIP license in place.</u>	<u>9</u>
<u>SYM_CD</u>	<u>FINRA assigned Symbol</u>		<u>14</u>
<u>BSYM_ID</u>	<u>Bloomberg Symbol</u>		<u>12</u>
<u>ISSUER_NM</u>	<u>Issuer Name</u>		<u>80</u>
<u>SCRTY_DS</u>	<u>Security Description</u>		<u>80</u>
<u>CPN_RT</u>	<u>Coupon Rate</u>	<u>Decimal format</u>	<u>27 (19 after decimal)</u>
<u>MTRTY_DT</u>	<u>Maturity Date</u>	<u>YYYYMMDD format</u>	
<u>NUM_TRADES</u>	<u>Number of Trades</u>		<u>5</u>
<u>TOTAL_QTY_OPB</u>	<u>Total Quantity (Original Principal Balance)</u>		<u>10 (Displayed in Millions)</u>
<u>HIGH_PRICE</u>	<u>High Price</u>		<u>3v6 (10 bytes)</u>
<u>LOW_PRICE</u>	<u>Low Price</u>		<u>3v6 (10 bytes)</u>
<u>MEDIAN_PX</u>	<u>Median Price</u>		<u>3v6 (10 bytes)</u>
<u>VWAP_PX</u>	<u>VWAP Price</u>		<u>3v6 (10 bytes)</u>
<u>PX_STAND_DEV</u>	<u>(Volume Weighted) Price Standard Deviation</u>		<u>3v6 (10 bytes)</u>

CMO Monthly Cumulative 144A and Non-144A

Field Name (Header)	Description	Comments	Maximum Length
<u>CUSIP_ID</u>	<u>CUSIP</u>	<u>This field will be blank for firms that do not have a CUSIP license in place.</u>	<u>9</u>
<u>SYM_CD</u>	<u>FINRA assigned Symbol</u>		<u>14</u>
<u>BSYM_ID</u>	<u>Bloomberg Symbol</u>		<u>12</u>
<u>ISSUER_NM</u>	<u>Issuer Name</u>		<u>80</u>
<u>SCRTY_DS</u>	<u>Security Description</u>		<u>80</u>
<u>CPN_RT</u>	<u>Coupon Rate</u>	<u>Decimal format</u>	<u>27 (19 after decimal)</u>
<u>MTRTY_DT</u>	<u>Maturity Date</u>	<u>YYYYMMDD format</u>	
<u>NUM_TRADES</u>	<u>Number of Trades</u>		<u>5</u>
<u>TOTAL_QTY_OPB</u>	<u>Total Quantity (Original Principal Balance)</u>		<u>10 (Displayed in Millions)</u>
<u>HIGH_PRICE</u>	<u>High Price</u>		<u>3v6 (10 bytes)</u>
<u>LOW_PRICE</u>	<u>Low Price</u>		<u>3v6 (10 bytes)</u>
<u>MEDIAN_PX</u>	<u>Median Price</u>		<u>3v6 (10 bytes)</u>
<u>VWAP_PX</u>	<u>VWAP Price</u>		<u>3v6 (10 bytes)</u>
<u>PX_STAND_DEV</u>	<u>(Volume Weighted) Price Standard Deviation</u>		<u>3v6 (10 bytes)</u>

Example Requests

Ex 1 - Get the current SP TRACE Participant List

This request retrieves the current list of TRACE authorized Participants:

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

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

This request retrieves the list of changes to TRACE authorized Participants published on 5/16/2011 (*note 5/6/2011 is used as an example. Any specific date may be used*):

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

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

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

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

Ex 4 - Get changes to the SP 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.finra.org/DownloadHandler.ashx?action=DELTA&file=PDAILYLIST&facility=TRACE>

Ex 5 - Get the current SP CMO Security Master File

This request retrieves the current list of all CMO Securities for Securitized Products:

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

Ex 6 - Get the current SP Fannie Mae Security Master File

This request retrieves the current list of all Fannie Mae MBS Securities:

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

Ex 7 - Get today's SP TRACE Security Daily List (no day provided)

This request retrieves the current day's cumulative list of changes to all the Securitized Products Security Masters (ABS, CMO, MBS and TBA data is contained in one file):

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

Ex 8 - Get the SP Closing Report (no day provided)

This request retrieves the closing prices for SP securities.

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

Ex 9 - Get the SP MBS RDID Master File

This request retrieves the RDID's for all MBS securities assigned an RDID.

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

Ex 10- Get the SP MBS RDID Daily List (no day provided)

This request retrieves the current day's cumulative list of RDID additions.

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

Ex 11 - Get the CMO Weekly Cumulative Non-144A for week ending 8/26/2016

This request retrieves the data published on 9/1/2016, generated for the week that ended on 8/26/2016, for non-144A CMO securities. *Note: 8/26/2016 is used as an example. Any specific date may be used, but the date must reflect the last Friday calendar date of the specified week:*

<https://download.finra.org/DownloadHandler.ashx?action=DOWNLOAD&file=CMOWKLYNON144A&facility=TRACE&week=8/26/2016>

Ex 12 - Get the CMO Weekly Cumulative 144A for week ending 8/26/2016

This request retrieves the data published on 9/1/2016, generated for the week that ended on 8/26/2016, for 144A CMO securities. *Note: 8/26/2016 is used as an example. Any specific date may be used, but the date must reflect the last Friday calendar date of the specified week:*

<https://download.finra.org/DownloadHandler.ashx?action=DOWNLOAD&file=CMOWKLY144A&facility=TRACE&week=8/26/2016>

Ex 13 - Get the CMO Monthly Cumulative Non-144A for month ending 8/31/2016

This request retrieves the data published on 9/7/2016, generated for the month that ended on 8/31/2016 for non-144A CMO securities. *Note: 8/2016 is used as an example: Any specific month may be used. Must use one digit month and four digit year 8/2016*

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=CMOMTHLYNON144A&facility=TRACE&month=8/2016>

Ex 14 - Get the CMO Monthly Cumulative 144A for month ending 8/31/2016

This request retrieves the data published on 9/7/2016, generated for the month that ended on 8/31/2016 for 144A CMO securities. *Note: 8/2016 is used as an example: Any specific month may be used. Must use one digit month and four digit year 8/2016*

<https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD&file=CMOMTHLY144A&facility=TRACE&month=8/2016>

Sample Results

SP TRACE Participant Daily List File from illustrating the header and footer.

```
list_dt|effective_dt|cd_description|old_mpid|old_dbal|new_mpid|new_dbal|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
```

SP TRACE Security Daily List File from illustrating the header and footer.

```
DAILY_LIST_DT|DAILY_LIST_TIME|DAILY_LIST_EVENT_CD|DAILY_LIST_RSN_CD|CMMNT_TX|EFCTV_DT|PROD_TYPE|SYM_CD|CUSIP|SCRTY_DS|ISSUER_NM|CPN_RT|MTRTY_DT|TBA_STLMT_CD|BYSM_ID|POOL_NB|TRNCH_NB|SUBPROD_TYPE|TRD_RPT_EFCTV_DT|NEW_SYM_CD|NEW_CUSIP|NEW_SCRTY_DS|NEW_ISSUER_NM|NEW_CPN_RT|NEW_MTRTY_DT|NEW_TBA_STLMT_CD|NEW_BSYM_ID|NEW_POOL_NB|NEW_TRNCH_NB|NEW_SUBPROD_TYPE|NEW_TRD_RPT_EFCTV_DT|DSMTN_SYM_ID
20120731|01:28:28|SD||Security EOD inactivated.|20120731|SP|CSHV3304436|12644NMY9|CSMC 109R20 A2 Fix
CSMC SERIES 2010-9R (A2) |CSMC MORTGAGE BACKED
TRUST|3.7500000000000000|20370127||BBG000VWZQ53||A2|CMO|20110516|||||||0|||||
20120731|01:28:28|SD||Security EOD inactivated.|20120731|SP|CSHV3304460|12644NPD2|CSMC 109R22 A1 Fix
CSMC SERIES 2010-9R (A1) |CSMC MORTGAGE BACKED
TRUST|3.7500000000000000|20370527||BBG000VWZYF5||A1|CMO|20110516|||||||0|||||
20120731|01:28:28|SD||Security EOD inactivated.|20120731|SP|CSHV3304459|12644NPM2|CSMC 109R22 A9 Fix
CSMC SERIES 2010-9R (A9) |CSMC MORTGAGE BACKED
TRUST|3.7500000000000000|20370527||BBG000VX00N6||A9|CMO|20110516|||||||0|||||
20120731|01:28:28|SD||Security EOD inactivated.|20120731|SP|CSHV3302633|22943YTW9|CSMC 093R26 262 Seq
Vari CSMC SERIES 2009-3R (262) |CSMC MORTGAGE BACKED
TRUST|2.9722300000000000|20350727||BBG000B6VZF5||262|CMO|20110516|||||||0|||||
20120731|01:28:28|SD|||
```

SP Security Master File from illustrating the header and footer.

```
SYM_CD|CUSIP_ID|BSYM_ID|POOL_NB|MSTR DEAL_ID|TRNCH_NB|SUB_PRDCT_TYPE|SCRITY_SBT_P_CD|ISSUER_NM|SCRITY_DS|CP  
N_RT|CPN_TYPE_CD|INTRS_TYPE_CD|TRD_RPT_EFCV_DT|MTRTY_DT|TBA_STLMT_CD|GRADE|RESERVED3|IND_144A|RESERVED2  
|DSMTN_SYM_ID  
FNMA2275168|31375MHG1|BBG000B6PJ59|338731|||MBS|POOL|FEDERAL NATIONAL MORTGAGE ASSOCIATION|FNMA CONV 30  
YR SF|6.50000000000000000000|L||20110516|20260301|||N||  
FNMA2309067|31378EN53|BBG000B8YV85|396512|||MBS|POOL|FEDERAL NATIONAL MORTGAGE ASSOCIATION|FNMA SF ARM;  
1YR CMT; EXTENDED FIXED INITIAL PERIOD; ANNUAL CHANGES THEREAFTER;  
|2.44900000000000000000|A||20110516|20370801|||N||  
FNMA2314579|31378MX88|BBG000B98GG6|403103|||MBS|POOL|FEDERAL NATIONAL MORTGAGE ASSOCIATION|FNMA CONV 20  
YR SF|7.00000000000000000000|L||20110516|20171101|||N||  
FNMA2326513|31374SY39|BBG000B9LJQ4|323030|||MBS|POOL|FEDERAL NATIONAL MORTGAGE ASSOCIATION|FNMA CONV 30  
YR SF|6.50000000000000000000|L||20110516|20280301|||N||  
FNMA2332733|31378VJQ4|BBG000S80B6|409871|||MBS|POOL|FEDERAL NATIONAL MORTGAGE ASSOCIATION|FNMA SF ARM;  
1YR CMT; EXTENDED FIXED INITIAL PERIOD; ANNUAL CHANGES THEREAFTER;  
|2.58800000000000000000|A||20110516|20280401|||N||  
FNMA2337773|31379MDU
```

SP 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
```

CMO Weekly Cumulative 144A/Non-144A File illustrating the header and footer.

Sample to be provided at a future date

CMO Monthly Cumulative 144A/Non-144A File illustrating the header and footer.

Sample to be provided at a future date

Appendices

Please note all codes/descriptions in the following appendices are subject to continual updates as necessary.

Appendix 1 - Sub-Product Asset Codes and Descriptions

Sub-Product Code	Sub Product Asset Code	Sub Product Asset Description
MBS	POOL GNM1 GNM2	Agency Pass-through Securities SBA pools Ginnie Mae 1 Ginnie Mae 2
TBA	GD NGD	For Good Delivery Not For Good Delivery
CMO	AGRI TRAN WHLN HLOC HOME AGNM CRSK HREM	CMO Agriculture MBS CMO Tranches CMO Whole Loan Home Equity Lines of Credit Home Equity Loans Net Interest Margin CMO Credit Risk Sharing Home Equity Conversion Mortgage REMIC

ABS	ALEA AFLP AUTO RECR BIKE SBA CARD STUD MANU AIRL BOAT BUSL CNSL CONT DPR TXLN EQIP EXIM NIM OTHR RVMG UTIL CTSR LOTT PNSN PSNL RENT RINS TMSH MHSG CBO CDO CFO CLO CMBS	Auto Lease Loans Auto Floor Plan/Wholesale Loans Auto Installment Loans Recreational Vehicle Loans Motorcycle Lease Small Business Administration Credit Card Receivables Student Loan Manufactured Housing Loan Aircraft Lease Marine Loans ABS Business Loans Consumer Loans ABS Container Backed Securities Diversified Payment Rights Tax Lien Equipment Backed Loan Export/Import Bank Loan Net Interest Margin Securities Asset Backed Tranches Reversed Mortgage Utility Standard Cost Securitizations Catastrophe ABS Lottery ticket ABS Pension Securitization Personal Loan ABS Rent ABS Reinsurance ABS Timeshare ABS Military Housing Collateralized Bond Obligation Collateralized Debt Obligation Collateralized Fund Obligation Collateralized Loan Obligation Commercial Mortgage Backed Security
ABSX	CBO CDO CFO CLO CMBS	Collateralized Bond Obligation Collateralized Debt Obligation Collateralized Fund Obligation Collateralized Loan Obligation Commercial Mortgage Backed Security

Appendix 2 - Coupon Type Codes and Descriptions

Sub Product	Coupon Type Code	Coupon Type Description
ABS	ARB	Ascending Rate
ABS	CFLT	Complex Floater
ABS	DRB	Descending Rate
ABS	FIX	Fixed
ABS	FLT	Floater
ABS	FLTFX	Floater to Fixed
ABS	FLTVAR	Floater to Variable
ABS	FLTWAC	Floater to WAC
ABS	FXFL	Fixed to Floater
ABS	FXVAR	Fixed to Variable
ABS	FXWAC	Fixed to WAC
ABS	INV	Inverse Floating Rate
ABS	STRFLT	Structured Floater
ABS	STRINV	Structured Inverse Floater
ABS	TFLT	Toggle Floater
ABS	TINV	Toggle Inverse
ABS	VAR	Variable
ABS	WGTSUB	Weighted Average of Subordinate
ABSX	ARB	Ascending Rate
ABSX	CFLT	Complex Floater
ABSX	DRB	Descending Rate
ABSX	FIX	Fixed
ABSX	FLT	Floater
ABSX	FLTFX	Floater to Fixed
ABSX	FLTVAR	Floater to Variable
ABSX	FLTWAC	Floater to WAC
ABSX	FXFL	Fixed to Floater
ABSX	FXVAR	Fixed to Variable
ABSX	FXWAC	Fixed to WAC
ABSX	INV	Inverse Floating Rate
ABSX	STRFLT	Structured Floater
ABSX	STRINV	Structured Inverse Floater
ABSX	TFLT	Toggle Floater
ABSX	TINV	Toggle Inverse
ABSX	VAR	Variable
ABSX	WGTSUB	Weighted Average of Subordinate
CMO	ARB	Ascending Rate
CMO	CFLT	Complex Floater
CMO	DRB	Descending Rate
CMO	FIX	Fixed
CMO	FLT	Floater
CMO	FLTFX	Floater to Fixed
CMO	FLTVAR	Floater to Variable
CMO	FLTWAC	Floater to WAC
CMO	FXFL	Fixed to Floater
CMO	FXVAR	Fixed to Variable
CMO	FXWAC	Fixed to WAC

CMO	INV	Inverse Floating Rate
CMO	STRFLT	Structured Floater
CMO	STRINV	Structured Inverse Floater
CMO	TFLT	Toggle Floater
CMO	TINV	Toggle Inverse
CMO	VAR	Variable
CMO	WGTSUB	Weighted Average of Subordinate
MBS	A	ARM
MBS	B	BALLOON
MBS	G	GPM
MBS	H	GEM
MBS	L	LEVEL PAY
MBS	T	TPM
MBS	W	BIWEEKLY
TBA	A	ARM
TBA	B	BALLOON
TBA	G	GPM
TBA	H	GEM
TBA	L	LEVEL PAY
TBA	R	FIXED RATE REVERSE
TBA	T	TPM
TBA	W	BIWEEKLY

Appendix 3 - Interest Type Codes and Descriptions

Interest Type Code	Interest Type Description
IOET	Ioette
IONTL	Interest Only Notional
PNTL	Partial Notional
PO	Principal Only
POHYB	Hybrid Principal Only
STPCLL	Step-Up on Call
STPCLWAC	Step-Up on Call Subject to WACCAP
STPDT	Step-Up on Date
STPDTWAC	Step-Up on Date Subject to WACCAP
STPRLY	Step-Up on Earliest Call or Date
STPRYWAC	Step-Up on Earliest Call or Date, Subject to WACCAP
WACCAP	WAC Cap

Appendix 4 - TBA Settlement Codes and Months

TBA Settlement Code	Month
01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

Appendix 5 - Daily List Update Reason Codes and Descriptions

Update Reason Code	Update Reason Description
blank	<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
LNY	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.

Appendix 6 – RDID Mortgage Product Values

Value	Description
C	Co-Op
H	Home Improvement Loans
M	Multi-Family
S	Single Family
#	SBA; unknown
<u>D</u>	<u>Project</u>
<u>U</u>	<u>Unknown</u>

Appendix 7 - Amortization Type Values

Value	Description
A	ARM
B	Balloon Mortgages
W	BiWeekly Mortgages
Y	Buydown Mortgages
D	Discount Mortgages
H	Growing-Equity Mortgages
G	Graduated-Payment Mortgages
L	Level-Payment Mortgages
T	Tiered-Payment Mortgages
R	Reverse Mortgages

Appendix 8 – Issuing Agency Values

Value	Description
G	GNM1
N	GNM2
F	FNMA
M	FMCC
S	SMBA
T	Test
R	Ginnie 1 – Serial Notes (Puerto Rico)

Programmatic Access (C#, .NET example)

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 TBA Security Master:

```
string Action = "DOWNLOAD";
string file = "TBAMASTER";
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);
}
```