

Version 5.0

March 27, 2017

Table of Contents

Revision History	1
Introduction	3
Access to the File Domain	3
Protocol	3
File Availability – All Times are Approximate	5
URL Parameters	6
File Definitions	9
Securitized Products Security Master	9
Securitized Products TRACE Security Daily List	11
Securitized Products TRACE Participant List	14
Securitized Products TRACE Participant Daily List	14
Securitized Products Closing Report	15
Securitized Products MBS RDID Master	16
Securitized Products MBS RDID Daily List	16
Securitized Products TRACE US Agreements	17
CMO Weekly Cumulative 144A and Non-144A	18
CMO Monthly Cumulative 144A and Non-144A	18
Example Requests	19
Ex 1 - Get the current SP TRACE Participant List	19
Ex 2 - Get the SP TRACE Participant Daily List for 5/16/2011	19
Ex 3 - Get today's SP TRACE Participant Daily List (no day provided)	19
Ex 4 - Get changes to the SP TRACE Participant Daily List since the last download (no day provided)	19
Ex 5 - Get the current SP CMO Security Master File	19
Ex 6 - Get the current SP Fannie Mae Security Master File	20
Ex 7 - Get today's SP TRACE Security Daily List (no day provided)	20
Ex 8 – Get the SP Closing Report (no day provided)	20
Ex 9 – Get the SP MBS RDID Master File	20
Ex 10- Get the SP MBS RDID Daily List (no day provided)	20
Ex 11 - Get the CMO Weekly Cumulative Non-144A for week ending 8/26/2016	20
Ex 12 - Get the CMO Weekly Cumulative 144A for week ending 8/26/2016	20
Ex 13 - Get the CMO Monthly Cumulative Non-144A for month ending 8/31/2016	21
Ex 14 - Get the CMO Monthly Cumulative 144A for month ending 8/31/2016	21
Sample Results	22

SP TRACE Participant Daily List File from illustrating the header and footer	22
SP TRACE Security Daily List File from illustrating the header and footer.	23
SP Security Master File from illustrating the header and footer.	24
SP TRACE Participant List File illustrating the header and footer.	25
CMO Weekly Cumulative 144A/Non-144A File illustrating the header and footer	26
CMO Monthly Cumulative 144A/Non-144A File illustrating the header and footer	27
Appendices	28
Appendix 1 - Sub-Product Asset Codes and Descriptions	28
Appendix 2 - Coupon Type Codes and Descriptions	30
Appendix 3 - Interest Type Codes and Descriptions	31
Appendix 4 - TBA Settlement Codes and Months	32
Appendix 5 - Daily List Update Reason Codes and Descriptions	33
Appendix 6 – RDID Mortgage Product Values	34
Appendix 7 - Amortization Type Values	34
Appendix 8 – Issuing Agency Values	34
Programmatic Access (C#, .NET example)	35

Revision History

Revision History			
Version/Date	Changes Made		
Version 1.1/April 20, 2011	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	Appendix 1 - Amended Sub-Product Asset Codes		
,	Maximum Field Lengths included in file tables		
Version 2.0/ January 23, 2012	Participant Daily List - list_dt format changed to		
, or	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		
	Sub Product Asset Code – Added SMBA		
Version 3.0/March 20, 2012	Include a Daily List Timestamp in all Daily List events		
,	Include BSYM (Bloomberg Symbol) in Master File		
	•		
	• Include Tranche ID and New Tranche ID in Daily List		
	Files		
Version 3.1/July 6, 2012	Modify Appendix 1 - TBA Sub Product Asset Codes		
v 6151011 3.1/July 0, 2012	mounty appendix a restriction and a restriction of the restriction of		
Various 2.2/Santamban 4.2012 (In mandustion	and Descriptions		
Version 3.2/September 4, 2012 (In production	Addition of Closing Price File for TBA Sub Product		
November 5, 2012) Varsion 3.2 production data modified to			
Version 3.2 production date modified to November 12, 2012			
Version 3.3/December 21, 2012	Added TDA Courses Code D (Eige 4 Days Decrees)		
•	Added TBA Coupon Code R (Fixed Rate Reverse) Oliver ATRA OF TRA OF		
Version 3.4/February 1, 2013	Changed TRAQS references to TRACE Add a DDD Market File for MDS association.		
Version 4.0/March 25, 2013 (In production July 22,	Added RDID Master File for MBS securities		
2013)	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,	Added Appendix 8 to include cross referenced Agency		
2013)	values		

Version 4.9b

Version 4.2/December 16, 2013 (In production February 10, 2014)	 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 Added Agency value R to represent Ginnie 1 Serial Notes (Puerto Rico)
Version 4.3/December 29, 2014 (In production April 27, 2015)	 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)	Amended production date for the software release
Version 4.5/April 22, 2015 (In production June 1, 2015)	Added US Agreements File
Version 4.6/April 7, 2016	Added Sub-Product Asset codes
Version 4.7/May 25, 2016	Added a Sub-Product Asset code
Version 4.8/August 3, 2016	Added a Sub-Product Asset code
Version 4.9/October 18, 2016	 Changes to support trades (where quantity >= \$1 Million) under the new CMO sub product. Added 4 new files 2 weekly and 2 monthly Closing files will now include CMOs where quantity < \$1 million Appendix 6 – added codes "D" and "U".
Version 4.9a/November 11, 2016	 Added First Settlement Date to Security Master Added First Settlement Date and New First Settlement Date Daily List
Version 4.9b/January 20, 2017	 Added CMO Weekly and Monthly File availability Updated CMO Weekly and Monthly file Example Requests Updated the Heading for CMO Weekly and Monthly file for Standard Price Deviation Updated CMO Weekly and Monthly Sample Results Updated Daily List and Security Master Sample

	Results
<u>Version 5.0/March 27, 2017</u>	 Added/Deleted Sub-Product Asset codes

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 <u>Securitized Products reference data</u>. 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

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.

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.

File Availability - All Times are Approximate

File	Time
Start of day security master files; RDID master	7:00 a.m. ET
files	
Security master and daily list updates; RDID master and RDID daily list updates, US	Beginning at 8:00 a.m. ET and continuing throughout the day – near real-time
Agreement files	
Final possible security master, daily list updates, RDID master and RDID daily list updates, US Agreement files	8:00 p.m. ET
Weekly cumulative file for CMO 144A securities, Weekly cumulative file for CMO Non-144A securities	Files are on a delay of 3 business days following the last business day of the week, and will be available the morning of the 4 th business day
Monthly cumulative file for CMO 144A securities, Monthly cumulative file for CMO Non-144A	Files are on a delay of 3 business days following the last business day of the month, and will be available the morning of the 4 th business day

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

URL Parameters

Parameter	Parameter Options		
action	DOWNLOAD - provide the complete file.		
	DELTA – provide the changes since the last time the user downloaded the file.		
	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.		
Facility	TRACE		
File	ABSMASTER – ABS Security Master		
	ABSXMASTER – ABS (Non-disseminated securities) Security Master		
	CMOMASTER – CMO Security Master		
	TBAMASTER – TBA Security Master		
	MBS Security Master, available as subsets (based on the issuing Agency):		
	MBSSMBA – MBS Security Master, Small Business Administration (SBA)		
	MBSFHLM - MBS Security Master, Federal Home Loan Mortgage		
	Corporation (Freddie Mac)		
	MBSFNMA – MBS Security Master, Federal National Mortgage Association (Fannie Mae)		
	MBSGNM1 – MBS Security Master, Government National Mortgage		
	Association (Ginnie Mae 1)		
	MBSGNM2 – MBS Security Master, Government National Mortgage		
	Association (Ginnie Mae 2)		
	MBSRDID – RDID Master File		
	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)		
	DAILYLISTSP – Security Daily List for Securitized Products		
	DAILYLISTSPRDID – RDID Daily List		
	CMOWKLY144A – Weekly cumulative file for CMO 144A securities where		
	quantity >= \$1 Million		
	CMOWKLYNON144A – Weekly cumulative file for CMO Non-144A securities		
	where quantity >= \$1 Million		
	CMOMTHLY144A – Monthly cumulative file for CMO 144A securities where		
	quantity >= \$1 Million CMOMTHLYNON144A – Monthly cumulative file for CMO Non-144A securities		
	where quantity >= \$1 Million		
	CLOSSP – Closing Report File (including CMO trades where quantity < \$1 Million)		
	CLOSSP144A – Closing Report File for securities classified as ABS 144A securities		
	(including CMO 144A trades where quantity < \$1 Million)		
	SPUSA – Securitized Products US Agreements		

Parameter	Parameter Options
Day	A date, for example: 6/1/2011. Date is only used for Daily List, RDID Daily List,
	CMO Weekly and CMO Monthly, 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 –	action= DOWNLOAD &file=MBSSMBA&facility=TRACE
SBA	action DOWNLOAD & Tic-MDSSMDA& facility - TRACE
SP MBS Master –	action= DOWNLOAD &file=MBSFHLM&facility=TRACE
Freddie Mac	wouldn't be writed to the street to the stre
SP MBS Master –	action= DOWNLOAD &file=MBSFNMA&facility=TRACE
Fannie Mae	·
SP MBS Master –	action= DOWNLOAD &file=MBSGNM1&facility=TRACE
Ginnie Mae 1	
SP MBS Master –	action= DOWNLOAD &file=MBSGNM2&facility=TRACE
Ginnie Mae 2	
SP MBS RDID Master	action= DOWNLOAD &file=MBSRDID&facility=TRACE
SP TRACE Participant List	action=DOWNLOAD&file=PARTICIPANT&facility=TRACE
SP TRACE Participant	action=DOWNLOAD&file=PDAILYLIST&facility=TRACE
Daily List	
SP TRACE Participant	action=DELTA&file=PDAILYLIST&facility=TRACE
Daily List delta	
(see note 1)	
SP TRACE Security	action=DOWNLOAD&file=DAILYLISTSP&facility=TRACE
Daily List	
SP TRACE Security	action=DELTA&file=DAILYLISTSP&facility=TRACE
Daily List delta	
(See note 1)	
SP TRACE Security	action=DOWNLOAD&file=DAILYLISTSP&facility=TRACE&day=5/16/2011
Daily List	
for a specific day	
SP MBS RDID	action=DELTA&file= DAILYLISTSPRDID&facility=TRACE
Daily List delta	
(see note 1)	CONTRACTOR OF THE PARTY TOTAL PROPERTY OF THE
SP MBS RDID	action=DOWNLOAD&file=DAILYLISTSPRDID&facility=TRACE&day=7/22/2013
Daily List	
for a specific day CMO Weekly 144A	action=DOWNLOAD&file=CMOWKLY144A&facility =TRACE&day=8/26/2016
for a specific week	action-downloadxine-civiowal i 144A&facility =1KACE&day=8/20/2010
CMO Weekly Non-144A	action=DOWNLOAD&file=CMOWKLYNON144A&facility
for a specific week	=TRACE&day=8/26/2016
CMO Monthly 144A	action=DOWNLOAD&file=CMOMTHLY144A&facility=TRACE&day=8/1/2016
for a specific month	action—DOWNLOAD&IIIC—CIVIOWITHETT 144A&IdCIIIIY—TRACE&udy—0/1/2010
CMO Monthly Non-144A	action=DOWNLOAD&file=CMOMTHLYNON144A&facility
for a specific month	=TRACE&day=8/1/2016
SP Closing Report	action=DOWNLOAD&file=CLOSSP&facility=TRACE
SP Closing Report	action=DOWNLOAD&file=CLOSSP144A&facility=TRACE
for ABS Securities	action—20 WINDOWNG—CLOSSI 177/ICIacinty—INACL
classified as 144A	
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 Asset-Backed Securities ABSX Asset Backed Securities (non-dissemination) CMO Collateralized Mortgage Obligations MBS Mortgage-Backed Securities TBA To Be Announced	5
SCRTY_SBTP_CD	Sub-Product Asset Code	Please see Appendix 1 for a list of Sub Product Asset Code / Descriptions	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	Please see Appendix 2 for a list of Coupon Type Code / Descriptions	10
INTRS_TYPE_CD	Interest Type Code	Used in ABS, ABSX, and CMO Master Files. Will be blank on MBS and TBA Master Files. Please see Appendix 3 for a list of Interest Type Code / Descriptions	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. Please see Appendix 4 for a list of TBA Settlement Codes / Months	
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
FIRST_STLMT_DT	First Settlement Date	YYYYMMDD format. Used in CMO Master Files. Will be blank on ABS, ABSX, TBA and MBS Master Files.	

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 Security Add SD Security Delete SC Security Change	2
DAILY_LIST_RSN_CD	Daily List Reason	Reason for the addition, deletion or change. This field may be blank. Please see Appendix 5 for a list of Daily List Reason Codes / Descriptions	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. Please see Appendix 4 for a list of TBA Settlement Codes / Months	
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 on ABS, ABSX, and CMO securities. Will be blank on MBS and	20

Field Name (Header)	Description	Comments	Maximum Length
		TBA securities.	
SUBPROD_TYPE	Sub-Product Type	Valid values are:	5
_		ABS Asset-Backed	
		Securities	
		ABSX Asset Backed	
		Securities (non-	
		dissemination)	
		CMO Collateralized	
		Mortgage	
		Obligations	
		MBS Mortgage-Backed	
		Securities	
		TBA To Be Announced	
		1 Die To Be Timouneed	
		Note: Changes to Sub- Product	
		values will be administered by a	
		Delete then Add Daily List	
		event.	
TRD_RPT_EFCTV_DT	Trade Report Effective	YYYYMMDD format. Will be	
	Date	blank on Delete Event Types.	
FIRST_STLMT_DT	First Settlement Date	YYYYMMDD format. Will be	
		blank on Delete Event Types	
		Used in CMO securities.	
		Will be blank on ABS, ABSX,	
		TBA and MBS securities.	
	N G 1 1	A II II CI F	14
NEW_SYM_CD	New Symbol	Applicable to Change Event	14
		Types only. Will be blank on	
		Add and Delete Events.	
NEW_CUSIP	New CUSIP	Applicable to Change Event	9
		Types only. Will be blank on	
		Add and Delete Events.	
NEW_SCRTY_DS	New Security	Applicable to Change Event	250
	Description	Types only. Will be blank on	
		Add and Delete Events.	
NEW_ISSUER_NM	New Issuer	Applicable to Change Event	255
		Types only. Will be blank on	
		Add and Delete Events.	
NEW_CPN_RT	New Coupon Rate	Applicable to Change Event	27 (19 after decimal)
		Types only. Will be blank on	
		Add and Delete Events.	
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	Applicable to Change Event	
	Month	Types only. Will be blank on	
		Add and Delete Events.	
NEW_BSYM_ID	New Bloomberg	Applicable to Change Event	12
	Symbol	Types only. Will be blank on	

Field Name (Header)	Description	Comments	Maximum Length
NEW_POOL_NB	New Pool Number	Applicable to Change Event	6
		Types only. Will be blank on	
		Add and Delete Events.	
NEW_TRNCH_NB	New Tranche ID	Used on ABS, ABSX, and	20
		CMO securities	
		Will be blank on MBS and	
		TBA securities	
NEW_SUBPROD_TYPE	New Sub Product	Applicable to Change Event	5
	Type	Types only. Will be blank on	
		Add and Delete Events.	
NEW_TRD_RPT_EFCTV_DT	New Trade Report	Applicable to Change Event	
	Effective Date	Types only. Will be blank on	
		Add and Delete Events.	
NEW_FIRST_STLMT_DT	New First Settlement	YYYYMMDD format. Will be	
	Date	blank on Delete Event Types	
DSMTN_SYM_ID	RDID	Used on MBS securities.	25
		Addition events only. Can	
		include special characters. Will	
		be blank on ABS, ABSX,	
		CMO, and TBA securities.	

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.	25
		Can include special characters.	
base_sym_id	Agency	Issuing Agency. Refer to	10
		Appendix 8 for details.	
prpty_type_cd	Mortgage Product	Type of underlying mortgage.	1
		Refer to Appendix 6 for	
		details.	
amrtn_type_cd_	Amortization Type	Refer to Appendix 7 for	1
		details.	
cpn_rt	Coupon	Term coupon of the pool.	8
orgnl_term_lm_	Original Maturity	Pool maturity in years.	6
wac_rt	Weighted Average		8
	Coupon		
wam_lm	Weighted Average		8
	Maturity		
wala_lm	Weighted Average Loan		6
	Age		
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: RDID Add	
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		6

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

CMO Weekly Cumulative 144A and Non-144A

Field Name (Header)	Description	Comments	Maximum Length
CUSIP_ID	CUSIP	This field will be blank for	9
		firms that do not have a	
		CUSIP license in place.	
SYM_CD	FINRA assigned Symbol		14
BSYM_ID	Bloomberg Symbol		12
ISSUER_NM	Issuer Name		80
SCRTY_DS	Security Description		80
CPN_RT	Coupon Rate	Decimal format	27 (19 after decimal)
MTRTY_DT	Maturity Date	YYYYMMDD format	
NUM_TRADES	Number of Trades	The values are:	5
		5-10, 11-25, 26+	
TOTAL_QTY_OPB	Total Quantity (Original		10 (Displayed in Millions)
	Principal Balance)		
HIGH_PRICE	High Price		3v6 (10 bytes)
LOW_PRICE	Low Price		3v6 (10 bytes)
MEDIAN_PX	Median Price		3v6 (10 bytes)
VWAP_PX	VWAP Price		3v6 (10 bytes)
PX_STAND_DEV_VW	Price Standard Deviation		3v6 (10 bytes)
	(Volume Weighted)		

CMO Monthly Cumulative 144A and Non-144A

Field Name (Header)	Description	Comments	Maximum Length
CUSIP_ID	CUSIP	This field will be blank for	9
		firms that do not have a	
		CUSIP license in place.	
SYM_CD	FINRA assigned Symbol		14
BSYM_ID	Bloomberg Symbol		12
ISSUER_NM	Issuer Name		80
SCRTY_DS	Security Description		80
CPN_RT	Coupon Rate	Decimal format	27 (19 after decimal)
MTRTY_DT	Maturity Date	YYYYMMDD format	
NUM_TRADES	Number of Trades	The values are:	5
		5-10, 11-25, 26+	
TOTAL_QTY_OPB	Total Quantity (Original		10 (Displayed in Millions)
	Principal Balance)		
HIGH_PRICE	High Price		3v6 (10 bytes)
LOW_PRICE	Low Price		3v6 (10 bytes)
MEDIAN_PX	Median Price		3v6 (10 bytes)
VWAP_PX	VWAP Price		3v6 (10 bytes)
PX_STAND_DEV_VW	Price Standard Deviation		3v6 (10 bytes)
	(Volume Weighted)		

Example Requests

Ex 1 - Get the current SP TRACE Participant List

This request retrieves the current list of TRACE authorized Participants:

 $\underline{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=PARTICIPANT\&facility=TRACE}$

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):

 $\frac{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=PDAILYLIST\&facility=TRACE\&day=5/16/2011$

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:

 $\underline{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=PDAILYLIST\&facility=TRACE$

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.finratraqs.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:

 $\frac{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=CMOMASTER\&facility=TRACE$

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

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

 $\frac{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=MBSFNMA\&facility=TRA}{CE}$

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):

 $\underline{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=DAILYLISTSP\&facility=TRACE$

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

This request retrieves the closing prices for SP securities.

https://download.finratraqs.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.

 $\underline{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=MBSRDID\&facility=TRAC}E$

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

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

 $\frac{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=DAILYLISTSPRDID\&facility=TRACE}{ty=TRACE}$

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 <u>calendar</u> date of the specified week:

 $\underline{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=CMOWKLYNON144A\&facility=TRACE\&day=8/26/2016}$

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:

 $\frac{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=CMOWKLY144A\&facility=TRACE\&day=8/26/2016$

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:* 8/1/2016 is used as an example: Any specific month may be used, but the date must reflect the first day <u>calendar</u> date of the specified month.

 $\underline{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=CMOMTHLYNON144A\&facility=TRACE\&day=8/1/2016}$

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:* 8/1/2016 is used as an example: Any specific month may be used, but the date must reflect the first day <u>calendar</u> date of the specified month.

 $\frac{https://download.finratraqs.org/DownloadHandler.ashx?action=DOWNLOAD\&file=CMOMTHLY144A\&facility=TRACE\&day=8/1/2016$

Sample Results

SP TRACE Participant Daily List File from 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|burleyf ·test ·HRBC ·mppweb|OTCE
09/09/2010|09/09/2010|Participant ·Addition|ABNE|ABNE ·TEST|||TRACE
09/09/2010|09/09/2010|Participant ·Addition|ABNE|ABNF ·TEST|||TRACE
09/09/2010|09/09/2010|Participant ·Addition|ABNE|ABNC ·TEST|||TRACE
09/09/2010|09/09/2010|Participant ·Addition|ABNC|ABNC ·TEST|||TRACE
...
[snip]
...
09/09/2010|09/09/2010|Participant ·Deletion|AAIC|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 BSYM ID P
OOL NB|TRNCH NB|SUBPROD TYPE|TRD RPT EFCTV DT|FIRST STLMT DT|NEW SYM CD|NEW CU
SIP 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 NEW F
IRST STLMT DT DSMTN SYM ID
20170118 | 11:02:12 | SA | BLK | | 20170118 | SP | SEQG44430 26 | 81746TBA2 | SEQMT 171 | 11 SEQUOIA
MORTGAGE TRUST 2017-1 (I1) | SEQUOIA MORTGAGE
TRUST | 0.00000000000000000000 | 20470225 | | | | | | | CMO | 20170118 | 20170131 | | | | | | | | | | | | | | |
20170118 | 11:08:27 | SA | BLK | | 20170117 | SP | SEQG44430 27 | 81746TBB0 | SEQMT 171 | 12 SEQUOIA
MORTGAGE TRUST 2017-1 (12) | SEQUOIA MORTGAGE
TRUST|0.0000000000000000000|20470225||||12|CMO|20170117|20170131|||||||||||
[snip]
20170118 | 10:19:54 | SC | | | 20170118 | SP | JPM3288961 | 073877AQ5 | BSABS 05SD1 IB Sub Seq Flt BEAR
STEARNS ASSET BACKED SECURITIES TRUST 2005-SD (IB) BEAR STEARNS ASSET BACKED SECS I
LLC|3.75611000000000000000|20430825||BBG0008F7XD3||IB|CMO|20110516|20050208|JPM328896
1 073877AQ5 BSABS 05SD1 IB Sub Seq Flt BEAR STEARNS ASSET BACKED SECURITIES TRUST 2005-SD
(IB) | BEAR STEARNS ASSET BACKED SECS I
LLC|3.75611000000000000000|20430825||BBG0008F7XD3||IB|CMO|20430820|20170413|
20170118 | 10:20:09 | SC | | | 20170118 | SP | JPM3288958 | 073877AF9 | BSABS 05SD1 IM3 Sub Seg Flt BEAR
STEARNS ASSET BACKED SECURITIES TRUST 2005-SD (IM3) BEAR STEARNS ASSET BACKED SECS I
LLC|1.57611000000000000000|20430825||BBG0008F7WR0||IM3|CMO|20110516|20050208|JPM328
8958 073877AF9 BSABS 05SD1 IM3 Sub Seq Flt BEAR STEARNS ASSET BACKED SECURITIES TRUST 2005-
SD (IM3) BEAR STEARNS ASSET BACKED SECS I
LLC|1.5761100000000000000|20430825||BBG0008F7WR0||IM3|CMO|20430820|20170120|
[snip]
20170118 | 11:10:12 | SD | OTH | inactivated | 20170118 | SP | WEFIF4153482 | U9700TAE7 | Class C Reg S
WFLD 2014-MONT (C) | Westfield Mortgage
20170118 | 11:11:28 | SD | IS | 20170118 | SP | WRBC41844 26 | U96282AF2 | Fit WFRBS 2014-C25 (F) | WFRBS
COMMERCIAL MORTGAGE
TRUST|0.00000000000000000000|20471115||||F|CMO|20141113|||||||||||
```

Version 5.0

Footer - Count: 00001556, Facility: TRACE, File Created: 20170118111412

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|SCRTY_SBTP_C D|ISSUER NM|SCRTY DS|CPN RT|CPN TYPE CD|INTRS TYPE CD|TRD RPT EFCTV DT|MTRTY DT|T BA STLMT CD|GRADE|RESERVED3|IND 144A|RESERVED2|DSMTN SYM ID|FIRST STLMT DT 30289YAA2|||2016-KF26|A|CMO||FREMF|FREMF 16KF26 A Sr Seq Flt FREMF 2016-KF26 Mortgage Trust | 1.1436700000000000000 | FLT | WACCAP | 20161219 | 20261025 | | | N | | | 20161223 30289YAG9|||2016-KF26|B|CMO||FREMF|FREMF16KF26 B Sub Seq Flt FREMF 2016-KF26 Mortgage Trust | 5.873670000000000000 | FLT | WACCAP | 20161219 | 20261025 | | | N | | | 20161223 30289YAJ3|||2016-KF26|C|CMO||FREMF|FREMF16KF26 C Sub Seg Flt FREMF 2016-KF26 Mortgage Trust | 11.37367000000000000000 | FLT | WACCAP | 20161219 | 20261125 | | | N | | | 20161223 |30289YAC8|||2016-KF26|XI|CMO||FREMF|FREMF16KF26 XI Sr Excess Vari FREMF 2016-KF26 Mortgage Trust | 0.593290000000000000 | VAR | IONTL | 20161219 | 20261125 | | | | N | | | 20161223 |30289YAE4|||2016-KF26|XP|CMO||FREMF|FREMF16KF26 XP Sr Vari FREMF 2016-KF26 Mortgage Trust | 0.000000000000000000 | VAR | | 20161219 | 20260725 | | | | N | | | 20161223 |30289YAL8|||2016-KF26|R|CMO||FREMF|FREMF16KF26 R Sub Resid Vari FREMF 2016-KF26 Mortgage Trust | 0.0000000000000000000 | VAR | | 20161219 | 20261125 | | | | N | | | 20161223 AAAT3638648 000292AB8 BBG0009ZFZ26 | 2007-2 A2 CMO WHLN AAA TR 2007-2 AAAT 072 A2 Sr AAAT3938718 000292AC6 BBG0009ZFZ44 | 2007-2 A3 CMO WHLN AAA TR 2007-2 AAAT 072 A3 Sr FIT AAA TRUST 2007-2 0.954210000 00 00 00 00 0 0 FLT 20121130 20460125 | | | Y | 20070 822 ABCD3845359|000743AB0|BBG0009T41Y2||ABCLO 2007-1A|SUB|CMO||ABCLO 2007-1 LTD|FIX ABCLO 2007-1A||||20120420|20210415||||Y|||

[snip]

ZUNI3515456|98981YAA0|BBG0007KPZF6||2006-OA1|A1|CMO|WHLN|ZUNI MTG LN TR 2006-OA1 ZUNI 06OA1 A1 Sr ZUNI MORTGAGELOAN TRUST 2006-OA1 | 2.5841400000000000000 | FLTWAC | | 2011 0516 | 20360825 | | | | N | | | 20060 629 ZUNI3515457|98981YAE2|BBG0007KR1H7||2006-OA1|B1|CMO|WHLN|ZUNI MTG LN TR 2006-OA1 ZUNI 06OA1 B1 Sub Vari ZUNI MORTGAGE LOAN TRUST 2006-OA1|2.7564200000000000000|VAR||20110516|20360825||||N|||20060629 Footer-Count: 00282074, Facility: TRACE, File Created: 20170118103502

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
UBSSIUBS · 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.

CUSIP_ID|SYM_CD|BSYM_ID|ISSUER_NM|SCRTY_DS|CPN_RT|MTRTY_DT|NUM_TRADES|TOTAL_QTY OPB|HIGH PRICE|LOW PRICE|MEDIAN PX|VWAP PX|PX STAND DEV VW 00764MGV3|AEGS3277518|BBG0009R7GY0|AEGIS ASSET BACKED SECSTR|AABST 054 IA4 Sr Seg Flt AEGIS ASSET BACKED SECURITIES TRUST 2005-4 | 1.12611000000000000000 | 20351025 | 11-25|37|120.400000|90.800000|110.200000|106.989574|7.831086 00764MGJ0 | AEGS3277522 | BBG0009R7FG2 | AEGIS ASSET BACKED SECS TR | AABST 054 M3 Mezz Seg Fit AEGIS ASSET BACKED SECURITIES TRUST 2005-4 | 1.256110000000000000000 | 20351025 | 26+ | 108 | 121.230000 | 90.800000 | 111.250000 | 106.712001 | 7.9 44195 04542BQA3|ASSK3277707|BBG0009TTB37|ASSET_BACKED FUNDING CORP|ABFC 05OPT1 M1 Mezz Seq 25|27|116.170000|91.520000|101.330000|104.136666|5.940669 073877AX0|JPM3288683|BBG0008PQ6Y6|BEAR STEARNS ASSET BACKED SECS | LLC|BSABS 051 M3 Sub Seg Flt BEAR STEARNS ASSET BACKED SECURITIES TRUST 2005-11 | 3.1561100000000000000 | 20350325 | 5-10|9|97.700000|90.100000|93.850000|93.865303|2.501470 073877CJ9|JPM3288689|BBG0009QMPS2|BEAR STEARNS ASSET BACKED SECS | LLC|BSABS 052 M6 Sub FIT BEAR STEARNS ASSET BACKED SECURITIES TRUST 2005-2 6.006110000 00 00 00 00 00 00 20 35 06 25 5-10 | 7 | 87.700000 | 81.100000 | 84.950000 | 84.831468 | 2.170197 [snip]

Footer - Count: 00000012, Facility: TRACE, File Created: 20170118154915

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

CUSIP_ID|SYM_CD|BSYM_ID|ISSUER_NM|SCRTY_DS|CPN_RT|MTRTY_DT|NUM_TRADES|TOTAL_QTY_
OPB|HIGH_PRICE|LOW_PRICE|MEDIAN_PX|VWAP_PX|PX_STAND_DEV_VW
00764MGA9|AEGS3277506|BBG0009QDHL7|AEGIS ASSET BACKED SECS TR|AABST 053 N1 Sub Seq Vari
AEGIS ASSET BACKED SECURITIES TRUST 2005-

3 | 4.750000000000000000000 | 20350825 | 26+ | 70 | 116.170000 | 30.000000 | 108.560000 | 97.981950 | 32.83 | 9526

00764MGB7|AEGS3277507|BBG0009QDHN5|AEGIS ASSET BACKED SECS TR|AABST 053 N2 Sub Seg Vari AEGIS ASSET BACKED SECURITIES TRUST 2005-

073877BE1|JPM3288685|BBG0008PQ818|BEAR STEARNS ASSET BACKED SECS | LLC|BSABS 051 BIO Sub Vari IONtl BEAR STEARNS ASSET BACKED SECURITIES TRUST 2005-

1 | 0.0000000000000000000000 | 20350325 | 5-10 | 9 | 97.070000 | 90.010000 | 93.535000 | 93.539597 | 2.312295 073877CL4 | JPM3288691 | BBG0009QMQ19 | BEAR STEARNS ASSET BACKED SECS | LLC | BSABS 052 BIO Sub Excess Vari BEAR STEARNS ASSET BACKED SECURITIES TRUST 2005-

2|0.0000000000000000000|20350625|5-10|7|87.070000|81.010000|84.545000|84.436166|1.992635
76110GX30|RESCU3494111|BBG0007VTM21|RESIDENTIAL ACCREDIT LNSING MTG PASST|RALI
02QS16 B1 Sub Fix RALI TRUST 2002-QS16|5.75000000000000000|20171025|11-

25 | 207 | 55.100000 | 4.320000 | 14.320000 | 20.535606 | 16.738990

[snip]

Footer - Count: 00000012, Facility: IRACE, File Created: 20170118155722

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

ABS	ALEA	Auto Lease Loans
1122	AFLP	Auto Floor Plan/Wholesale Loans
	AUTO	Auto Installment Loans
	RECR	Recreational Vehicle Loans
	BIKE	Motorcycle Lease
	SBA	Small Business Administration
	CARD	Credit Card Receivables
	STUD	Student Loan
	MANU	Manufactured Housing Loan
	AIRL	Aircraft Lease
	BOAT	Marine Loans
	BUSL	ABS Business Loans
	CNSL	Consumer Loans
	CONT	ABS Container Backed Securities
	DPR	Diversified Payment Rights
	TXLN	Tax Lien
	EQIP	Equipment Backed Loan
	EXIM	Export/Import Bank Loan
	NIM	Net Interest Margin Securities
	OTHR	Asset Backed Tranches
	RVMG	Reversed Mortgage
	UTIL	Utility Standard Cost Securitizations
	CTSR	Catastrophe ABS
	LOTT	Lottery ticket ABS
	PNSN	Pension Securitization
	PSNL	Personal Loan ABS
	RENT	Rent ABS
	RINS	Reinsurance ABS
	TMSH	Timeshare ABS
	MHSG	Military Housing
	CBO	Collateralized Bond Obligation
	CDO	Collateralized Debt Obligation
	CFO	Collateralized Fund Obligation
	CLO	Collateralized Loan Obligation
	CMBS	Commercial Mortgage Backed Security
ABSX	СВО	Collateralized Bond Obligation
	CDO	Collateralized Debt Obligation
	CFO	Collateralized Fund Obligation
	CLO	Collateralized Loan Obligation
	CMBS	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	
ABS	FIX	Descending Rate Fixed
	FLT	
ABS		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
CIVIO	IAWAC	I IACU IU 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	В	BALLOON
MBS	G	GPM
MBS	Н	GEM
MBS	L	LEVEL PAY
MBS	T	TPM
MBS	W	BIWEEKLY
TBA	A	ARM
TBA	В	BALLOON
TBA	G	GPM
TBA	Н	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
РОНҮВ	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	Month
Code	
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	No reason given
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	
С	Co-Op	
Н	Home Improvement	
	Loans	
M	Multi-Family	
S	Single Family	
#	SBA; unknown	
D	Project	
U	Unknown	

Appendix 7 - Amortization Type Values

Value	Description	
A	ARM	
В	Balloon Mortgages	
W	BiWeekly	
	Mortgages	
Y	Buydown	
	Mortgages	
D	Discount	
	Mortgages	
Н	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);
```