

Revision History

Version	Date	Description of Changes
1.0	January 2005	Initial Version
2.0	June 2005	Added Discrepancy error code and error code review and response section added
2.5	November 2005	Added Dealer Data Quality - Summary Report
2.6	June 2006	Added Dealer Data Quality Detail Report
2.7	August 2007	Updated expanded hours for RTRS Web
2.8	November 2007	Added Dealer Data Quality – Summary of Correspondent's Trades Report
2.9	August 2008	Updated extended deadline for Dealer Data Quality - Summary Report enhancement
3.0	November 2012	Added Regulatory Dollar Price field for Inter-Dealer trades; Added date range field for Discrepancy Error Report and Destination Code Report; Updated RTRS Fields Appendix
3.1	April 2013	Removed detailed instructions for the former Form RTRS application.
3.2	August 2015	Updated the Resources and Support section to reflect the change in hours of operation for Email Support.
3.3	June 2016	Updated to reflect the user navigation changes to the MSRB.org homepage, MSRB Gateway Login and Main Menu pages.
		Updated to reflect changes to data reporting requirements (see MSRB Notices 2015-07 and 2016-09):
3.4	July 2016	 Expanded the application of the existing list offering price and takedown indicator to include distribution participant dealers and takedown transactions that are not at a discount from the list offering price.

Version	Date	Description of Changes
		 Eliminated the requirement for dealers to report yield on customer trade reports and, instead, enabling MSRB to calculate and disseminate yield on customer trades. Established a new indicator for customer trades involving non-transaction-based compensation arrangements. Established a new indicator for inter-dealer transactions executed with or using the services of an alternative trading system (ATS).
3.5	May 2018	Updated to reflect changes to RTRS Web interface.
3.6	November 2018	Updated to provide information on the new Price Variance Alert History feature.
3.7	June 2021	Updated to reflect NASDAQ Subscriber Services contact information.
3.8	November 2022	Updated to reflect UI/UX changes to the MSRB.org homepage, updated links as appropriate for the revised MSRB.org website.
3.9	October 2025	Updated links and content to match with UI

Resources and Support

Contact MSRB MSRB Support

Phone: 202-838-1330

Email: MSRBsupport@msrb.org.

Live support: 7:30 a.m. – 6:30 p.m. ET. E-mail support: 7:00 a.m. – 7:00 p.m. ET.

MSRB Corporate Office

Municipal Securities Rulemaking Board

1300 I Street NW, Suite 1000

Washington, DC 20005 Phone: 202-838-1500

MSRB Website: www.msrb.org EMMA Website: emma.msrb.org

Core Operational Hours

7:00 a.m. to 7:00 p.m. ET on business days*

*Excludes weekends and holidays identified on the Systems Holiday Schedule and planned or unplanned outages as communicated on the MSRB Systems Status webpage.

RTRS System Hours

The RTRS "Business Day," on which dealers are required by Rule G-14 to submit trade reports within 15 minutes of execution, begins at 7:30 a.m. and ends at 6:30 p.m. ET. However, RTRS accepts and disseminates any trade reports received between the RTRS "window" hours of 6:00 a.m. and 9:00 p.m. ET. Trade reports submitted to RTRS after 9:00 p.m. will not be processed by RTRS but will be pended for processing and dissemination at 6:00 a.m. the next business day.¹

The open message will be the first message sent and it will be published at approximately 6:00 a.m. each business day. Unmasked trades and other MSRB updates to trade messages will be published shortly after the open message is published and no earlier than 6:00 a.m. RTRS begins publishing real-time trade reports each business day no later than 7:00 a.m. or as soon after that time as real-time trade messages are reported by dealers. The real-time feed continues to publish until all inbound messages and MSRB modifications have been processed for the day, which will be no earlier than 9 p.m. (All times are Eastern Time.)

Comprehensive Trade Files and Replay Files are normally available 24 hours a day, seven days a week. However, due to maintenance activities, files may be unavailable outside of core operational hours.

Related MSRB Rules and Resources

- Rule G-14
- Rule G-14 Interpretive Guidance
- Rule G-14 Compliance Resources

¹ Facility For Real-Time Transaction Reporting and Price Dissemination (The "Real-Time Transaction Reporting System" or "RTRS")

https://msrb.org/Rules-and-Interpretations/MSRB-Rules/Informational/IF-1

Overview

About MSRB

MSRB protects investors, state and local governments and other municipal entities, and the public interest by promoting a fair and efficient municipal securities market. MSRB fulfills this mission by regulating the municipal securities firms, banks and municipal advisors that engage in municipal securities and advisory activities. To further protect market participants, MSRB provides market transparency through its Electronic Municipal Market Access (EMMA®) website, the free, official repository for information on all municipal bonds. MSRB also serves as an objective resource on the municipal market and provides extensive education and outreach to market stakeholders. MSRB is a self-regulatory organization governed by a board of directors that has a majority of public members, in addition to representatives of regulated entities. MSRB is overseen by the Securities and Exchange Commission and Congress.



This symbol appears within this manual to call out important information or directions.

This resource is for informational purposes only and should be considered in conjunction with the applicable MSRB rules and any related interpretations. The complete text of all MSRB rules and interpretations is available at https://msrb.org/Rules-and-Interpretations/MSRB-Rules.

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All products or brand names mentioned in this manual are trademarks or registered marks of their respective holders.

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Introduction

The purpose of MSRB's Real-time Transaction Reporting System (RTRS) is to increase price transparency in the municipal securities market and enhance the surveillance database and audit trail used by enforcement agencies.

RTRS Web is a reporting mechanism for submitting, modifying and canceling customer transactions and inter-dealer regulatory-only (IDRO) transactions, as well as for modifications to regulatory data on inter-dealer transactions. This document explains how to use RTRS Web to fulfill MSRB transaction reporting requirements.

Transactions in Securities Subject to Mandatory Transaction Reporting

Inter-dealer transactions eligible for clearance and settlement through a registered clearing agency must be reported through the Real-Time Trade Matching (RTTM) environment (see MSRB Rule G-12 (f)² for further details). Reporting inter-dealer transactions through RTTM satisfies the MSRB Rule G-14 reporting requirement for inter-dealer transactions. Any customer transaction in a security eligible for CUSIP number assignment by CUSIP Global Services must be reported to MSRB. IDRO transactions must be reported to MSRB by a clearing firm (see MSRB Rule G-14 RTRS Procedures³ for further details). Inter-dealer, customer and IDRO transactions are subject to the 15-minute reporting requirement (as of January 31, 2005⁴), with exceptions as noted in MSRB Rule G-14.

MSRB Rule G-14 on Transaction Reporting requires that every dealer obtain an executing broker symbol, if one has not already been assigned, from National Association of Securities Dealers Automated Quotations (NASDAQ). NASDAQ will assign executing broker symbols to all dealers including bank dealers. NASDAQ Subscriber Services can be reached at 212-231-5180, option 3. When calling NASDAQ Subscriber Services for an executing broker symbol, dealers should state that they need the symbol for use in reporting transactions in municipal securities to MSRB. If dealers experience difficulties in obtaining executing broker symbols, then they can send an e-mail to subscriber@NASDAQ.com.

https://msrb.org/Rules-and-Interpretations/MSRB-Rules/General/Rule-G-12

² Uniform Practice, MSRB Rule G-12 (f),

³ Reports of Sales or Purchases, MSRB Rule G-14,

https://msrb.org/Rules-and-Interpretations/MSRB-Rules/General/Rule-G-14

⁴ Real-time Transaction Reporting: Rule G-14, MSRB Notice 2005-02 (January 10th, 2005) https://msrb.org/Real-Time-Transaction-Reporting-Rule-G-14

Part 1: Access to RTRS Web

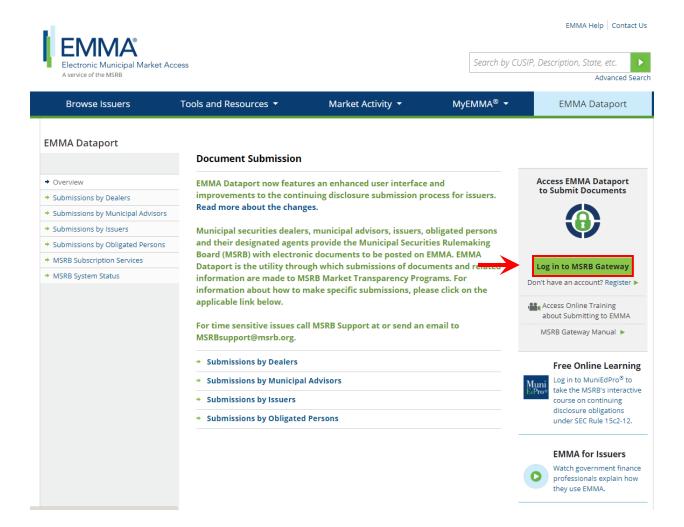
Logging in to EMMA Dataport to access RTRS Web can be done from the EMMA homepage or www.msrb.org.

Log in from the EMMA Home Page

From the EMMA homepage at https://emma.msrb.org, click the EMMA Dataport tab.

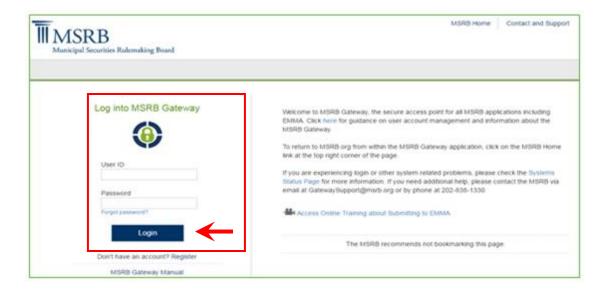


Then click the **Log in to MSRB Gateway** button.

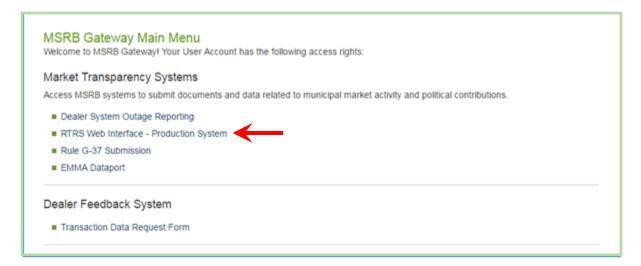


Log in to MSRB Gateway

From the MSRB Gateway landing page, enter your User ID and Password, and click Login.



From the MSRB Gateway Main Menu click the RTRS Web Interface link under Market Transparency Systems section.





If the RTRS Web Interface link does not appear, expand the Account and Organization Management option and click on View Account Administrators and contact one of the listed individuals to request access to RTRS Web.

Permissions

RTRS Web determines your user permissions according to the privileges granted by your firm's Account Administrator. Users associated with the same firm may have different privileges, as assigned by the firm's Account Administrator:

Permission	Description
RTRS Web	View, modify, submit, and cancel transactions. Includes the ability to run RTRS Web reports.
RTRS Web View Only	View transactions and the compliance status and error codes assigned to each transaction. Includes the ability to run RTRS Web reports.

Access to Report, View and/or Update Trades

Trade access is determined in RTRS Web by the following:

- Type of firm with which a User ID is associated: a dealer or service bureau; and
- Type of transaction being accessed: an inter-dealer, customer or IDRO transaction.

For any transaction, the submitter of the transaction may be different than the actual dealer who effected the transaction. Dealers have access to any trade they submitted or effected. Certain non-dealer agents (Service Bureaus) are able to see only the trades that they submitted on behalf of dealers. Only clearing brokers can report or update IDRO trades.

All dealers have an ongoing obligation to report trade information promptly, accurately and completely. The dealer may employ an agent for the purpose of submitting transaction information; however, the primary responsibility for the timely and accurate submission remains with the dealer that effected the transaction.

A dealer that submits inter-dealer municipal securities transactions for comparison, either for itself or on behalf of another dealer, has specific responsibility to ensure that transaction reporting requirements are met with respect to those aspects of the comparison process that are under the submitter's control.5

⁵ Reports of Sales or Purchases, https://msrb.org/Rules-and-Interpretations/MSRB-Rules/General/Rule-G-14

Part 2: Navigating RTRS Web

Key functions of RTRS Web include submitting transactions, viewing and modifying recent transactions, and searching for transactions. After a trade submission, RTRS Web provides detailed information regarding your transaction submission, any compliance errors that may have occurred, your current transaction reporting status, as well as your transaction reporting history.

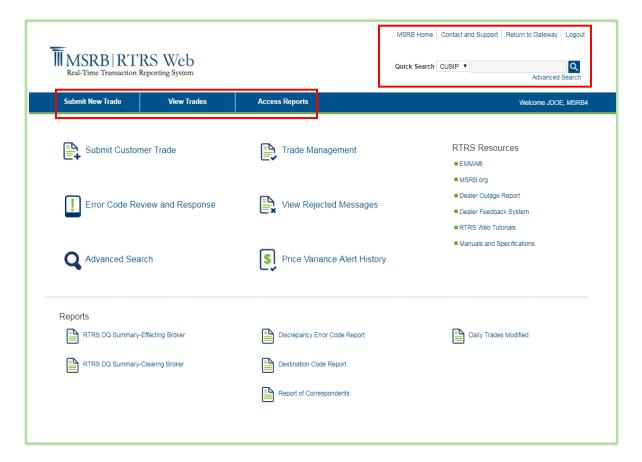
This section describes how to navigate the RTRS Web interface.



Hover over links and headers to view a short description, if available.

Main Navigation

The menu bar is static on all RTRS Web pages, so that the primary functions of the system can be easily accessed from any webpage.



Menu Bar Links	Functions	
RTRS Web	Used to navigate to the RTRS Web homepage	
Masthead		
Submit New	New Customer Trade – Report a new customer	
Trades	transaction	
	New IDRO Trade – Report a new IDRO transaction	
View Trades	 Trade Management – View your recent transaction activity, along with regulatory status and error code information Error Code Review and Response – View your recent transaction activity by error code or error code category, along with status and error code information Rejected Messages – View messages that were rejected by RTRS 	
Access Reports	View various reports for transactions reported by and for your firm.	
	your mm.	

The Masthead links at the top right side of the RTRS Web home page are also static throughout RTRS Web.

Masthead Links	Functions
MSRB Home	Used to navigate to the MSRB.org home page
Contact and	Used to navigate to the page where users can contact MSRB
Support	for questions and clarification
Return to	Used to navigate to the MSRB Gateway Main Menu
Gateway	
Log Out	Used to log out of RTRS Web
Quick Search	Input desired information to locate transaction information quickly
Advanced Search	Execute a detailed search of your reported transactions to
	narrow search results

Homepage Links

The middle section of the homepage of RTRS Web homepage provides shortcuts to common activities.

Homepage Links	Function
Submit Customer trade	Report a new customer transaction
Trade Management	Navigate to the Trade Management screen
Error Code Review and	View and search for transactions with error
Response	codes
View Rejected Messages	View unapplied message activity from the
	prior month up to the current business day
Advanced Search	Access to input desired information to locate
	transaction information quickly
Submit IDRO trade	Report a new IDRO transaction
Price Variance Alert History	View history of Price Variance Alerts that were
	sent to your firm
Reports	View reports for transactions reported by and
	for your firm

The RTRS Resources links that are accessible on the right side of the RTRS Web homepage provide ease of navigation and access to information to assist with the use of RTRS Web and submission of trade data.

Click System Status to view the current status of RTRS and other MSRB systems as well as the MSRB system holiday schedule.

Search Results

After using the Search box in the upper right of RTRS Web, the criteria entered for the search is retained at the top of the results page, while the number of transactions returned is displayed at the bottom. To sort the data, click the column heading of the data element once for ascending order and twice for descending.

To view the complete information on a specific transaction, click on the XREF for that transaction to navigate to the Trade Information screen. For the most current information, use the **Refresh Activity** link at the top of the results page.

The result of your search criteria is limited to 100 pages and 10,000 transactions. RTRS Web search result pages can display 100 transactions on a page. Use the Next Page and Previous Page buttons to scroll through the results.

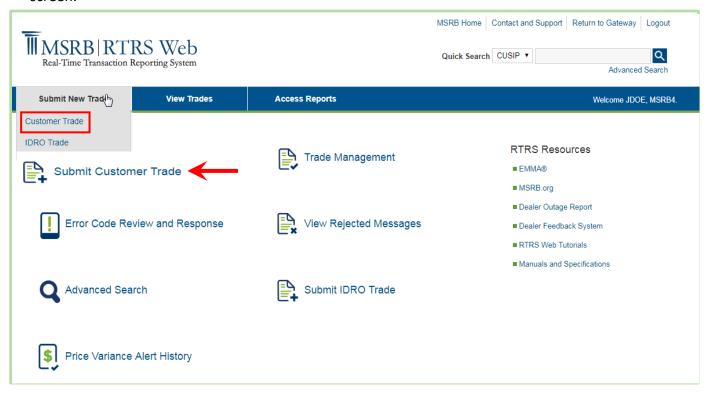
Status Symbols

The below status symbols identify the status (regulatory or otherwise) of the transaction.

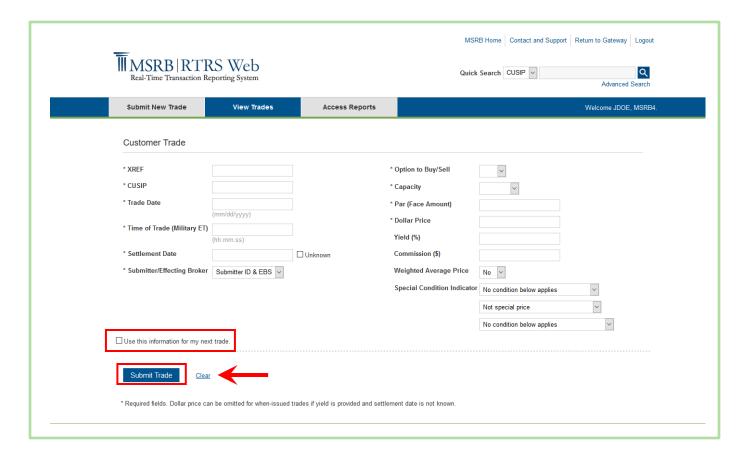
Message	Icon
Satisfactory	0
Unsatisfactory	0
Questionable	?
Canceled	8
Reversed	(-)
Trade Reversal	②
Message Status Pending	•
Message Rejected	0

Part 3: Enter a New Customer Transaction

To enter a new customer transaction, select Customer Trade from the Submit New Trades drop-down menu or click on the link Submit Customer Trade from the shortcut link on the screen.



Once you select either option, a blank New Customer Trade screen appears. At a minimum, update all of the required fields indicated by asterisks. Data requirements may be different for each type of trade. See MSRB Rule G-14 for requirements on submitting a customer trade. A list of data elements and their data entry validations, categorized by transaction type - customer, IDRO or inter-dealer are provided in the Appendix.



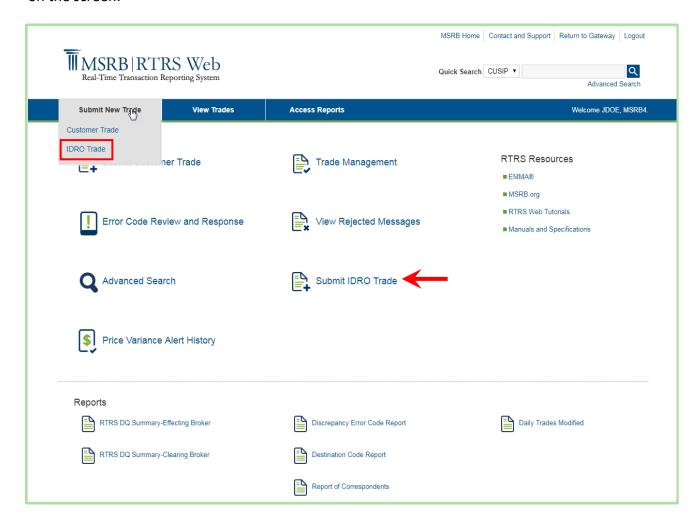
If during your entry, you want to clear the screen and start over, click the **Clear** link.

To facilitate quick and easy transaction submission when you have more than one trade to enter with similar data, check the **Use this information for my next trade** box on the bottom left of the screen prior to submitting your trade. Your data will be saved and automatically copied to the next transaction page. You will be required to enter a new External Dealer Control Number (XREF), as this must be unique to each transaction.

Once you have completed your entry, click the **Submit Trade** button to submit your transaction. Once data entry validation checks are passed, a confirmation pop-up with your unique message submission number will be displayed.

Part 4: Enter a New IDRO Transaction

To enter a new IDRO transaction, either select **Submit New Trades** from the menu bar and then **IDRO Trade** from the drop-down or select the link **Submit IDRO Trade** from the short-cut link on the screen.



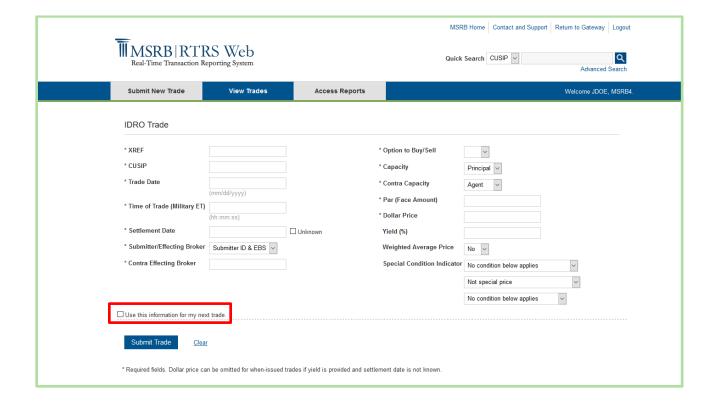
Once you select one of the IDRO options, a blank IDRO Trade screen appears. At a minimum, you must complete all required fields as indicated by asterisks. Data requirements may be different for each type of trade. See MSRB Rule G-14 for required data elements for submission of an IDRO trade. A list of data elements and their data entry validations, categorized by transaction type – customer, IDRO or inter-dealer are provided in the Appendix.

If during your entry, you want to clear the screen and start over, click the **Clear** link.

To facilitate quick and easy transaction submission when you have more than one trade to enter with similar data, check the **Use this information for my next trade** box on the bottom left of the screen prior to submitting your trade. Your data will be saved and automatically

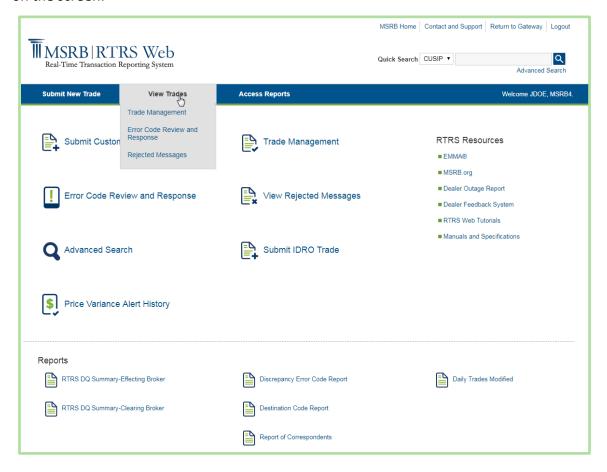
copied to the next transaction page; you are required to enter a new External Dealer Control Number (XREF) as this must be unique to each transaction.

Once you have completed your entry, click the **Submit Trade** button to submit your transaction. RTRS Web first affirms that you have passed the data entry validation checks and if so, displays a confirmation pop up with your unique message submission number.

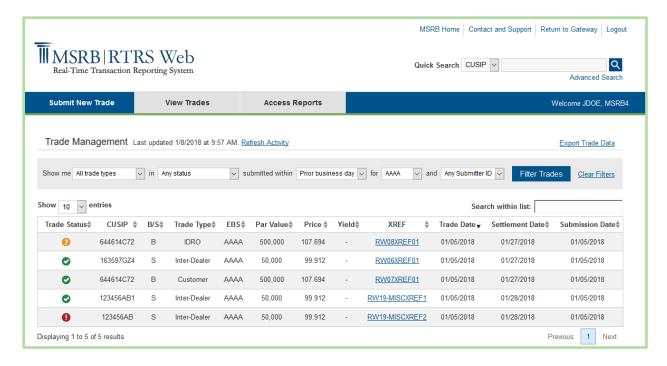


Part 5: Trade Management

The Trade Management screen allows you to view your trading activity and compliance results. To reach the Trade Management screen, either select **View Trades** from the menu bar and then **Trade Management** from the drop-down or select **Trade Management** from the shortcut link on the screen.



Filters are located at the top of the screen to facilitate easy selection and viewing of your transactions. The filters have been pre-defined for the most common search criteria. You may, however, always use the Quick Search feature to access transactions outside of these pre-defined filter criteria.



The filters that have been pre-defined for managing your transactions are as follows:

- Transaction types
- Status
- Submission Date Time Frames

- Effecting Broker Symbol (EBS)
- Submitter ID

Select the desired filter criteria, then click the **Filter Trades** button to view a list of transactions that match your criteria. The Trade Management page provides some of the basic information about your transaction including:

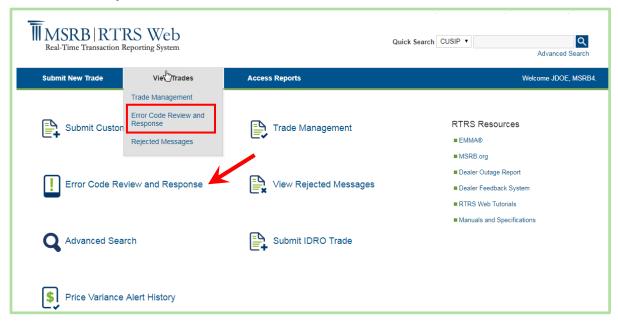
- Regulatory Trade Status Icon
- CUSIP
- B/S
- Trade Type
- EBS
- Par Value
- Price
- Yield (For when- issued trades only)
- XREF
- Trade Date
- Settlement Date
- Submission Date

Refer to the Appendix for additional information about the fields and the validation logic.

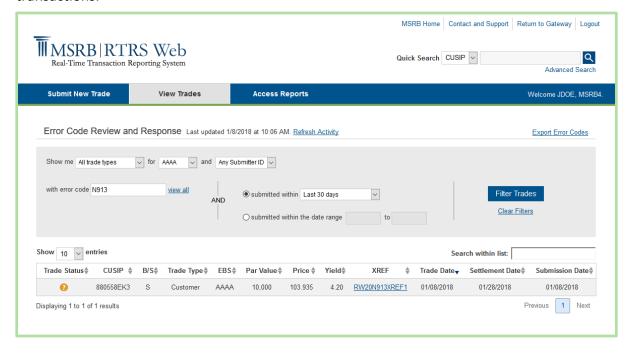
Part 6: Error Code Review and Response

The Error Code Review and Response screen functions similarly to the Trade Management screen, except that you can filter trade activity and compliance results by error code.

To reach the Error Code Review and Response screen, either select **View Trades** from the menu bar and then **Error Code Review and Response** from the drop-down or select **Error Code Review and Response** from the shortcut link on the screen.



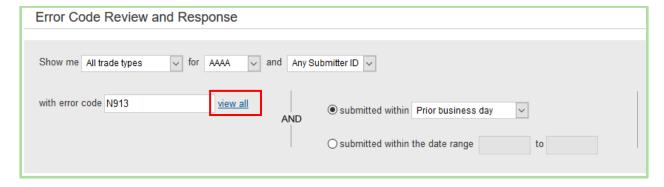
Filters are located at the top of the screen to facilitate easy search and viewing of your transactions.



The filters that have been pre-defined for reviewing and responding to your transactions are as follows:

- Trade Types
- Submitter ID
- Submission Date Time Frames
- Effecting Broker Symbol (EBS)
- Error Code
- Submission Date Range

Click the **view all** link next to the error code field in the filter bar to filter transactions by a specific error code.



Select the desired filter criteria then click the **Filter Trades** button to view a list of transactions that match your criteria.

The Error Code Review and Response page provides some of the basic information about your transaction including:

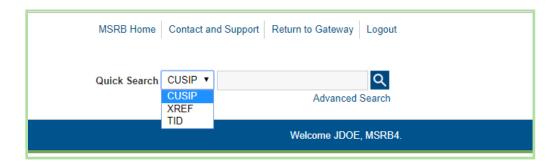
- Trade Status Icon
- B/S (Buy or Sell)
- EBS
- Price
- XREF
- Settlement Date

- CUSIP
- Transaction or Trade Type
- Par Value
- Yield
- Trade Date
- Submission Date

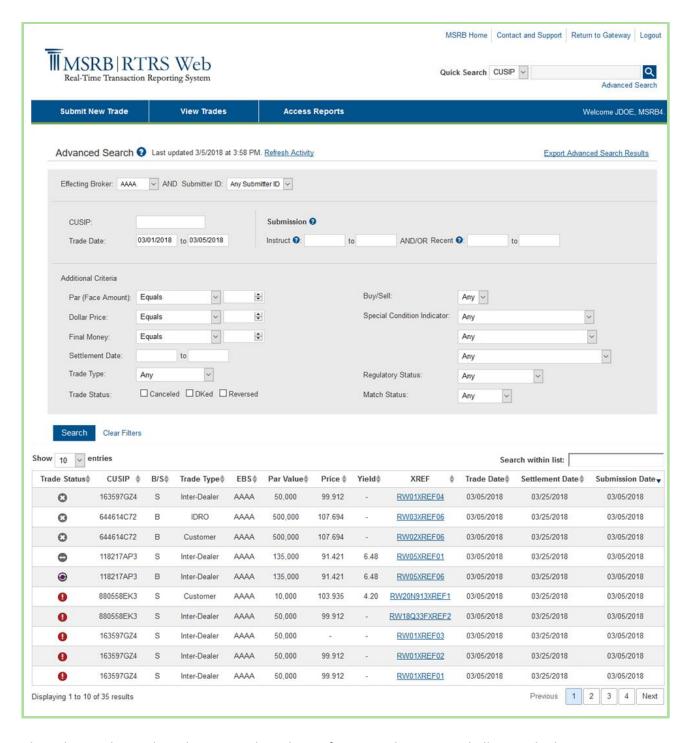
Refer to the Appendix for additional information about the fields and the validation logic.

Part 7: Search for a Transaction

There are two ways to search for a trade in RTRS Web: 1) Quick Search or 2) Advanced Search, both of which are located at the top of every RTRS Web screen.



You can use the Quick Search option to search for a transaction by CUSIP, XREF or TID. You can use the Advanced Search option to search for a transaction by more specific criteria. Although you may enter or leave some criteria blank, either the CUSIP, trade date, instruct submission date or recent submission date is always required.



The Advanced Search in the screenshot above, for example, returned all inter-dealer transactions with Effecting Broker "AAAA" that were bought between trade dates 03/01/2018 and 03/05/2018.

The criteria for searching transactions are below:

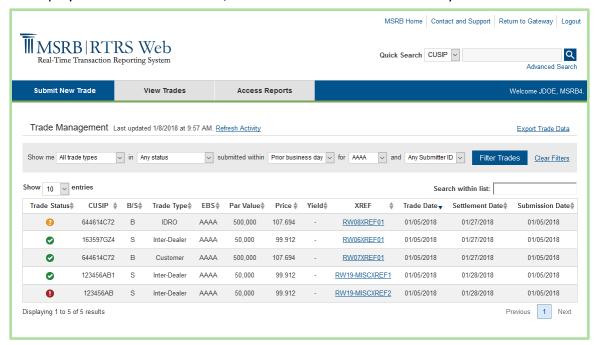
- **Effecting Broker**
- Submitter ID
- CUSIP
- Trade Date
- Instruct Submission Date
- Recent Submission Date
- Par (Face Amount)
- **Dollar Price**
- Final Money

- Settlement Date
- Buy/Sell
- **Special Conditional Trade**
- Trade Type
- Regulatory Status
- Trade Status (Canceled, DKed or Reversed)
- **Match Status**

Refer to the Appendix for additional information about the fields and the validation logic.

Part 8: View an Existing Transaction

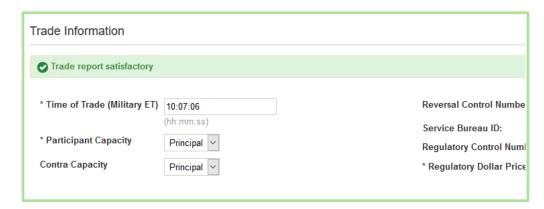
Select a transaction from the Trade Management or Error Code Review and Response screens. To display the transaction details, click the XREF on the transaction you wish to view.



You are directed to the Trade Information screen. The Trade Information screen displays the transaction details for that trade. It also provides the regulatory status (i.e. satisfactory, questionable or unsatisfactory) and any compliance issues with the transaction as found by MSRB.

The overall status of the transaction can be found in the top of the page, just below the Trade Information label. Each transaction displays the status symbol and the regulatory notice for the transaction where any error code received by the transaction is displayed.

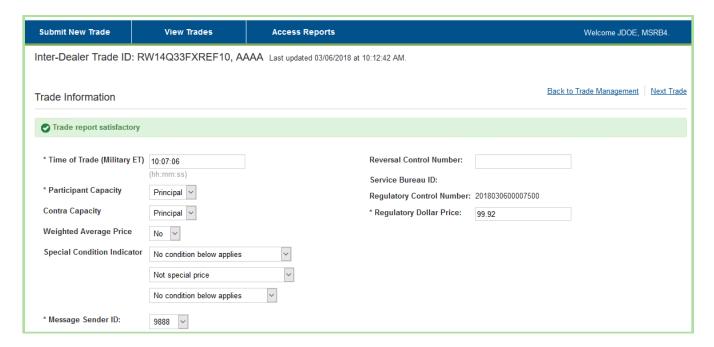
Inter-Dealer Trade ID: RW14Q33FXREF10, AAAA Last updated 03/06/2018 at 10:12:42 AM.



The Trade Information screen provides the most current view of the transaction, as reported by the dealer according to MSRB.

For inter-dealer transactions, the Transaction Information tab is separated into two sections: Regulatory Reporting Information and Comparison Information.

The upper section applies to regulatory-only reporting data.



The Regulatory Reporting Information section provides some of the basic information about your transaction including:

- Time of Trade
- Participant Capacity
- Contra Capacity
- Weighted Average Price
- Special Condition Indicator

- Message Sender ID
- Reversal Control Number
- Service Bureau ID
- Regulatory Control Number
- Regulatory Dollar Price

The lower section applies to comparison data that is used both for clearing and settlement, as well as for regulatory reporting.



The Comparison Information section provides some of the basic information about your transaction including:

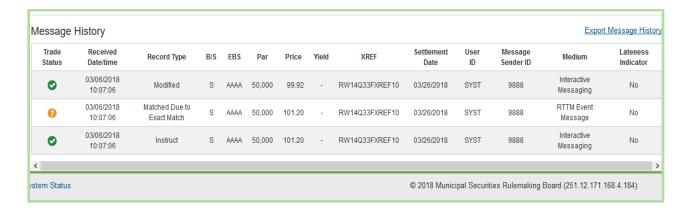
- XREF
- Previous XREF
- Clearing ID
- Trade Reporting Indicator
- QSR/Target QSR
- Issue Type
- Buy/Sell
- Contra
- Trade Date
- Settlement Date
- CUSIP
- RTTM ID
- RTTM Match ID
- Memo/Pending
- DK Status
- Par (Face Value)

- Dollar Price or Yield for whenissued trades.
- Accrued Interest
- Final Money
- Yield
- Concession
- Settlement Type Indicator
- Extended Settlement
- Reversal Indicator
- Market of Execution
- Sender Reference Number
- Lateness Indicator
- Instruct Received Date/Time
- Effecting Broker
- Contra Effecting Broker

Refer to the <u>Specifications for Real-Time Reporting of Municipal Securities Transactions</u> on MSRB.org for additional information regarding the inter-dealer fields listed above.

Part 9: View Message History

To see a history of all the messages relating to the current transaction you have in view, Scroll down to the bottom of the page. You will be able to view a list of messages that are associated with the transaction sorted by the time the message was received in descending order. The most recent message at the top of the list corresponds with the most current information viewable on the Trade Information screen.



The transaction fields displayed for message history are listed below:

- Trade Status
- Received Date and Time
- Record Type
- B/S (Buy or Sell)
- EBS
- Par Value
- Price

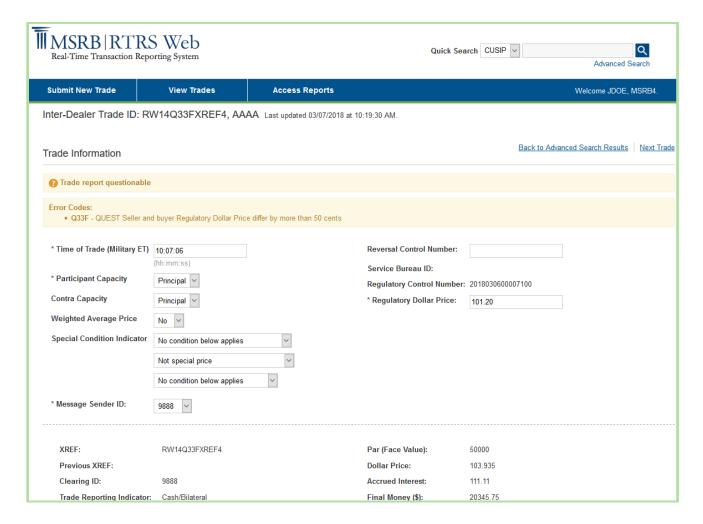
- Yield
- XREF
- Settlement Date
- User ID
- Message Sender ID
- Message Medium
- Lateness Indicator

Refer to the Appendix for additional information about the fields and the validation logic.

Part 10: Modifying an Existing Transaction

Select a transaction to modify from the Price Variance Alert History, Trade Management or Error Code Review and Response search options. To display the transaction, click on the XREF of the transaction desired and you will be directed to the Trade Information screen.

As a user with RTRS Web update permission, you will be able to modify the transaction. The transaction is presented in edit mode with the modify trade button displayed at the bottom. As a user with RTRS Web view only rights, you are not able to modify the transaction, but you can view the transaction.



You may modify any of the data elements that are not set to view-only. View-only data elements are presented in light gray type, whereas modifiable elements are in black type. Certain fields have limited access based on the type of transaction, either an inter-dealer, customer, or IDRO.

Once you have cleared the edits, click the modify trade button to submit your changes. RTRS Web first affirms that you have passed the data entry validation checks and if so, displays a confirmation pop-up with your unique message submission number. If you have failed one or more of the data entry checks, the data fields that have failed, along with the reason appear on the screen. To resubmit, correct the errors and click the **modify trade** button.

If you choose not to correct the errors, you may navigate back to the Trade Management screen and continue with no modifications being made to the transaction. Modifications are only made if you receive the confirmation pop-up.

Part 11: Cancel an Existing Transaction

Select a transaction on any of the following: Search features, Trade Management or Error Code Review and Response screens. To display the transaction, click on the XREF of the transaction desired and you will be directed to the Trade Information screen.

As a user with RTRS Web update permission rights, you will be able to cancel transactions. With the transaction in edit mode, the cancel trade button is displayed. As a user with the RTRS Web view only permission right, you are not able to cancel the transaction, but you can view the transaction.

Lateness Indicator:	No	Service Bureau ID:
Instruct Received Date/Time	e: 03/06/2018 10:07:06	Sender Reference Number: RW02-CUST-05
Trade Reporting Indicator:	Cash/Bilateral	Regulatory Control Number: 2018030600001500
Market of Execution:	OTMU	Previous XREF:

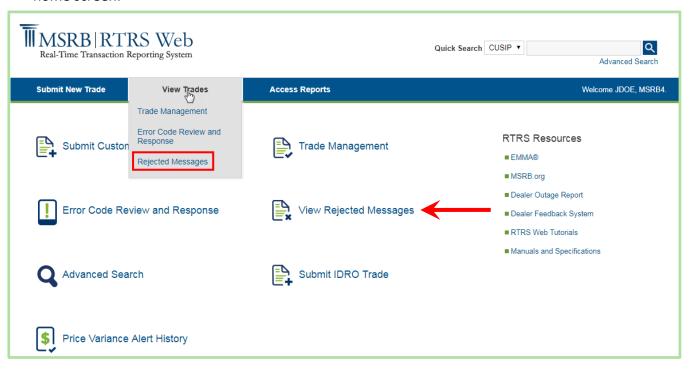
Note that only customer and IDRO transactions may be canceled via RTRS Web. Inter-dealer transactions may only be canceled via FICC.

Once you have determined the transaction you would like to cancel, click the cancel trade button to submit your request. RTRS Web requires that you affirm that you want to cancel the transaction. Click the **OK** button on the pop-up screen to cancel your transaction. RTRS Web will then display a confirmation pop up with your unique message submission number. A transaction is only canceled if the confirmation screen appears.

If you click **Cancel** on the confirmation pop up screen, you are directed to the Transaction Information screen.

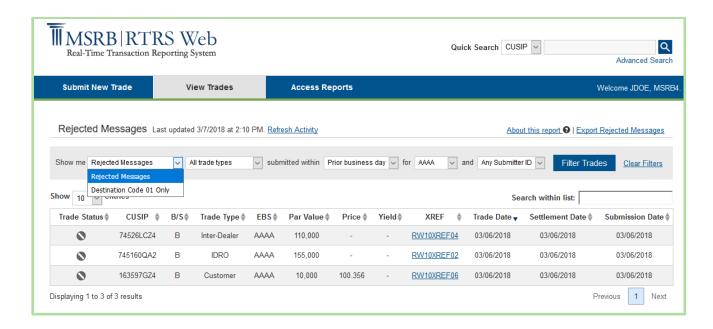
Part 12: Rejected Messages

The Rejected Messages screen allows you to view rejected message activity from the prior month up to the current business day. To reach the Rejected Messages screen, either select Rejected Messages from the View Trades drop-down or select View Rejected Messages on the home screen.



Unapplied messages include messages that were submitted by or on behalf of the user's firm and rejected by the RTRS system and therefore not applied to any current transaction report within RTRS.

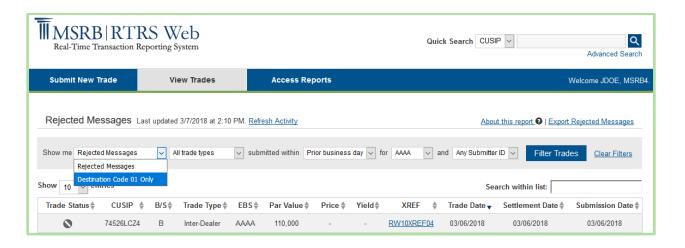
For a customer transaction, if a modify message for a customer transaction report is received, but the instruct message cannot be found based on the control numbers provided, that modify message will be rejected by RTRS and the modify message will appear on the Rejected Messages screen.



For an inter-dealer transaction, if a match of a comparison-only submission or "step out" trade occurs it is considered a **Destination Code 01 Only** trade. RTTM will forward to RTRS a match record for the step-out submission, and if the match record cannot be applied to any previously received instruct, because the instruct message was sent to RTTM only, that match record will be stored as Destination Code 01 only.

For further information about step out submissions, see MSRB Notice 2005-22.6

For a list of reasons that a transaction message could be rejected, refer to the <u>Specifications for</u> Real-time Reporting of Municipal Securities Transactions.



⁶ "Notice on Comparison of Inter-dealer Deliveries That Do Not Represent Inter-dealer Transactions – "Step Out" Deliveries: Rules G-12(f) and G-14," MSRB Notice 2005-22 (April 1st, 2005), http://www.msrb.org/Rules-and-Interpretations/Regulatory-Notices/2005/2005-22.aspx?n=1.

The filters for searching rejected and destination code 01 only messages are as follows:

- Type of message
- Trade types
- Submission Date Time Frames
- Effecting Broker Symbol (EBS)
- Submitter ID

Once you have chosen filter criteria, click the Filter Trades button to view a list of messages that match the criteria.

The Rejected Messages screen provides the following information about the transaction message:

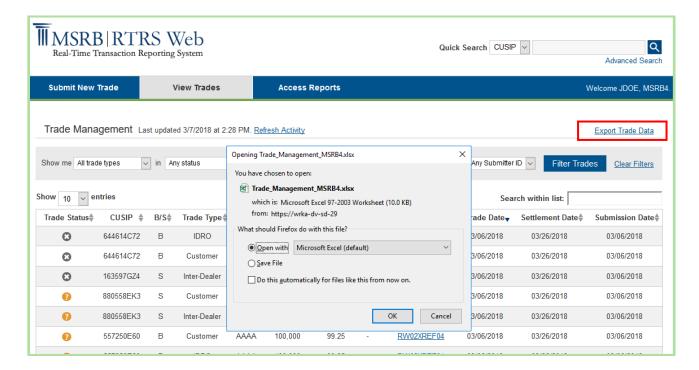
- Trade Status
- CUSIP
- B/S (Buy or Sell)
- Trade Type
- EBS
- Par Value
- Price
- Yield
- **XREF**
- Trade Date
- Settlement Date
- **Submission Date**

Refer to the Appendix for additional information about the fields and the validation logic.

Part 13: Export Data

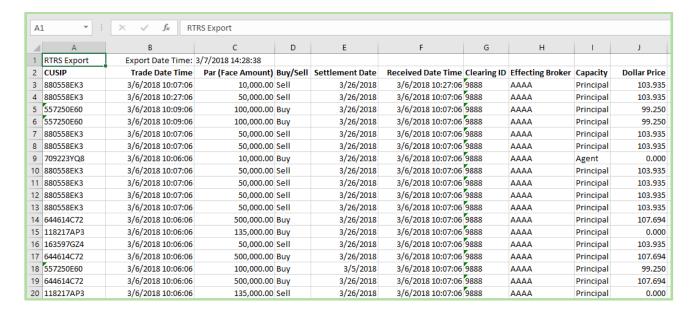
Search results can be exported from Trade Management, Error Code Review and Response pages or Quick Search features in RTRS Web.

To export a list of trades, use the filter criteria at top of the page to return desired list of trades, and click **Export Trade Data** from the top of the page above the results. Next, click **Save** and input the desired file name and file location then click **Save** again.



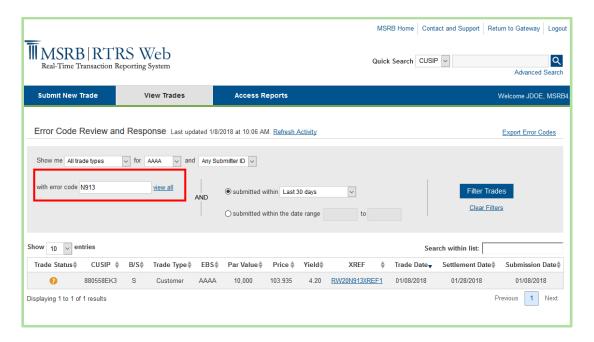


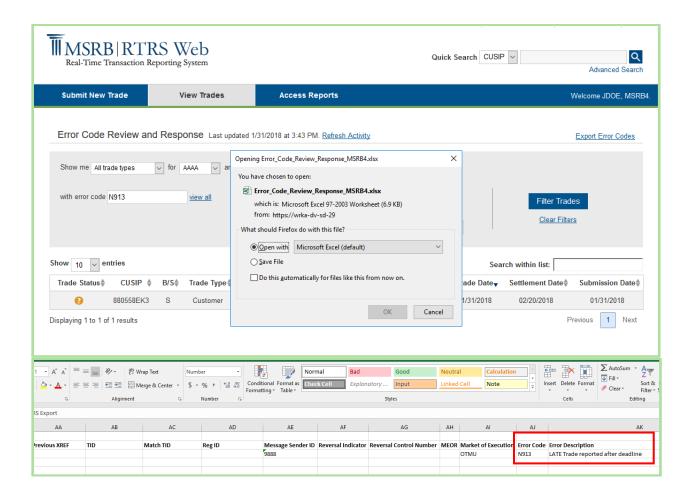
When you export a list of trades from the Trade Management screen, you receive a file with one line for each transaction in the list. The export does not include error code information.



Exports are in .xlsx format and can be opened in Microsoft Excel or any similar program.

When you export a list of trades from the Error Code Review and Response screen, you receive a file with a line item for each error code per transaction in the list. In the example below, the error code is **N913** – Late trade reported after deadline was chosen.





Part 14: Print Data

You may print data from the Report of Correspondents page only. On this screen, there is a small printer icon in the top right corner of the screen.

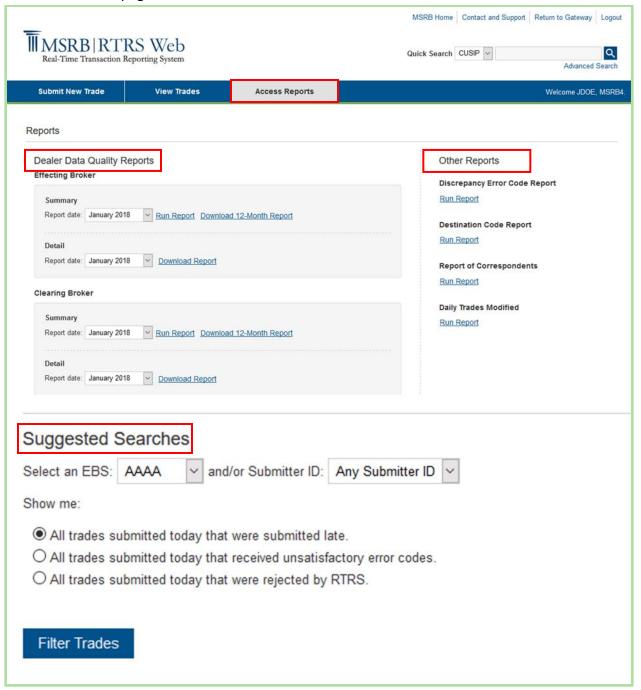
Only the data elements displayed on the screen are printed, not the underlying data of the transaction. All Result Set Views print only the records shown. For example, if 1-50 out of 100 records are displayed, only the first 50 shown will print.



Part 15: Reports

The Reports section of RTRS Web provides functionality based on transactions submitted by and for your firm.

To access the reports, select Reports from the menu bar or select Reports from the short-cut links on the homepage.



There are three categories of reports available: RTRS Data Quality Report, Other Reports and Suggested Searches.

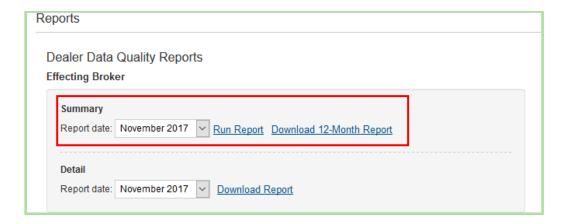
RTRS Data Quality Reports

RTRS Data Quality Reports are available on or about the first business day after the 15th of each month, covering transactions reported during the preceding month and including changes made to those trades for the 15 days following the last day of the month. Each monthly report contains data for the firm for the requested period, data for the firm for the prior period and data for the industry for the requested period. For instructions on how to use the reports, see the Users Guides to Dealer Data Quality Reports.⁷

RTRS Dealer Data Quality – Effecting Broker Summary Report

The RTRS Dealer Data Quality – Effecting Broker Summary Report describes a firm's transaction reporting data with regards to status, match rate, lateness and timeliness of reporting, and number of changes to reported data. The Effecting Broker Summary Report displays statistics about inter-dealer trades affected by a correspondent dealer, regardless of which dealer cleared the trades, and statistics about customer trades effected by the correspondent.

The Summary Report can be viewed in a one-month version. To obtain the one-month report, select the month desired from the drop-down and click **run report**. To obtain the twelve-month report, click on the **Download 12-Month Report** link.

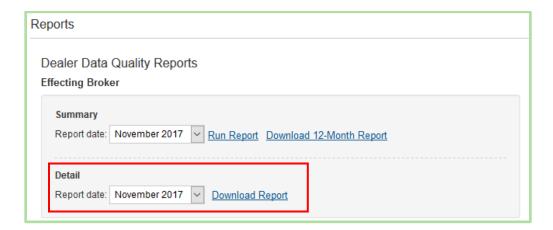


⁷ Users Guides to Dealer Data Quality Reports https://www.msrb.org/sites/default/files/RTRS-Dealer-Data-Quality-Detail-Report-Guide.pdf

RTRS Dealer Data Quality – Effecting Broker Detail Report

The RTRS Dealer Data Quality – Effecting Broker Detail Report identifies specific trades that are counted in each category of the Dealer Data Quality – Summary report. The report provides a list of trades that are included in each of the categories in the Summary report. The report also provides details on trades that received unsatisfactory error codes and trades that were reported with Special Condition Indicators.

To view the report, select the desired month, click **download report** and save the file to your computer.



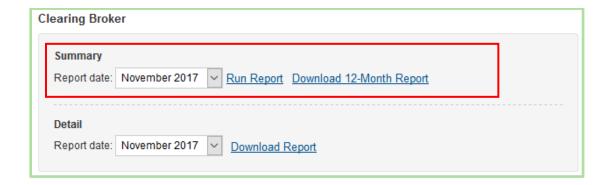


The report is provided in Microsoft Excel format. You can then open the report in Microsoft Excel or any program that can open .xlsx files.

RTRS Dealer Data Quality - Clearing Broker Summary Report

The RTRS Dealer Data Quality – Clearing Broker Summary Report describes a firm's transaction reporting data with regards to status (satisfactory/questionable or unsatisfactory, match rate, lateness and timeliness of reporting, and number of changes to reported data.

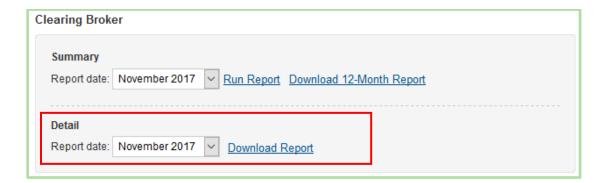
The Clearing Broker Summary Report displays statistics about trades cleared by the dealer. The Summary Report can be viewed in a one month or 12-month version. To obtain the one-month report, select the month desired from the drop-down and click **run report**. To obtain the 12-month report, click **Download 12-month report**.



RTRS Dealer Data Quality – Clearing Broker Detail Report

The RTRS Dealer Data Quality – Clearing Broker Detail Report identifies specific trades that are counted in each category of the Dealer Data Quality – Summary report. The report provides a list of trades that are included in each of the categories in the Summary report. The report also provides details on trades that received unsatisfactory error codes and trades that were reported with Special Condition Indicators.

To view the report, select the desired month, click **download report** and save the file to your computer.



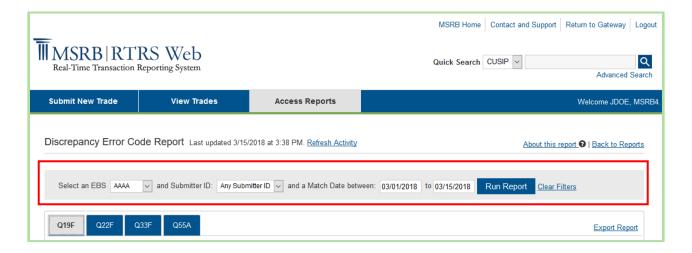
Other Reports

Discrepancy Error Code Report

The Discrepancy Error Code Report provides a list of inter-dealer transactions where the information submitted by your firm differs from the information submitted by the contra-side firm, resulting in a Q19F, Q22F, Q33F or Q55A error code. For a listing and description of the error codes, refer to the <u>Specifications for Real-time Reporting of Municipal Securities</u> Transactions.

The Discrepancy Error Code Report is generated on a real-time basis, meaning you can generate a report to show all trades for a specified time-period that received a Q19F, Q22F, Q33F or Q44F error code.

To begin, select an EBS or a Submitter ID from the filter bar. Next, select a date range using the Match Date between calendars and click **run report**.





If you have modified or reversed a transaction after the time and date of match, this updated information does not appear in the report.

The Discrepancy Error Code Report contains four tabs – one for each of the error codes included. Use the links at the top of the page and after each section title to navigate up and down to the desired section of the report. Because different fields are relevant for each tab, the headings vary between the four tabs. The four tabs are as follows:

Q19F: Accrued Interest Different on Buyer and Seller Sides

This section lists inter-dealer trades where the accrued interest submitted by your firm differs from the accrued interest submitted by the contra-party. Data shown in column A (Your Accrued Interest) should match data shown in column B (Contra Accrued Interest).

Q22F: Seller and Buyer times of trade differ by more than 15 minutes

This section lists inter-dealer trades where the time of trade submitted by your firm differs from the time of trade submitted by the contra-party by more than 15 minutes. Data shown in column A (Your Time of Trade) should match data shown in column B (Contra Time of Trade).

Q33F: Regulatory dollar price you indicated is not the same value as the regulatory dollar price on the matching side

This section lists inter-dealer trades where the regulatory dollar price submitted by your firm differs from the regulatory dollar price submitted by the contra-party. Data shown in column A (Your Submission Information) should match data shown in column B (Other Side Submission Information – Contra Effecting Broker).

Q55A: Seller and buyer alternative trading system special condition indicator differ

This section lists trades where the Alternative Trading System (ATS) indicator submitted by your firm differs from the ATS indicator submitted by the contra-party.

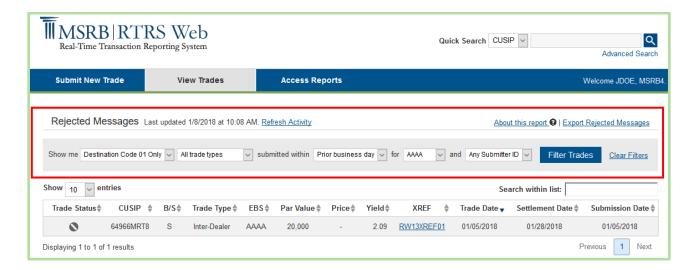
Destination Code Report

The Destination Code Report provides a list of inter-dealer transactions where both your firm and the contra-party firm submitted to RTTM Only (DEST01), in addition to trades where there was a destination code discrepancy (RTTM Only (DEST01) versus RTTM and RTRS (DEST01/02)) between your firm and the contra-party firm. For further information on destination code mismatches, refer to MSRB Notice 2005-22.8

The Destination Code Report is generated on a real-time basis, meaning you can generate a report to show all trades matched on the current date up to the time the report is generated.

^{8 &}quot;Notice on Comparison of Inter-dealer Deliveries That Do Not Represent Inter-dealer Transactions – "Step Out" Deliveries: Rules G-12(f) and G-14," MSRB Notice 2005-22 (April 1st, 2005), http://www.msrb.org/Rules-and-Interpretations/Regulatory-Notices/2005/2005-22.aspx?n=1.

To generate this report, select from the **Show me** drop-down, Destination Code 01 only, select an EBS or a Submitter ID and a time period from the filter bar at the top then click **Filter Trades.**



The results include the data available at the time and date of match. If you have modified or reversed a transaction after the time and date of match, this updated information does not appear in the report.

Report of Correspondents

The Report of Correspondents is intended for use by NSCC participant firms and non-participant firms that submit for other dealers. The report provides a list of effecting broker symbols and firm names that have indicated that they submit transactions through the requested Submitter ID.

The Report of Correspondents is generated on a real-time basis. This means that all firms that have, prior to the time of request, indicated to MSRB that they submit transactions through the requested Submitter ID are included on the report.

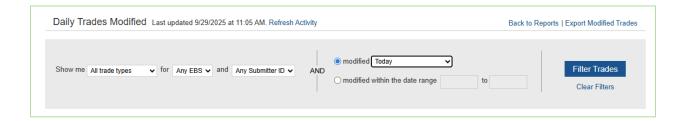
To generate this report, click on the **Report of Correspondents** link and you will be directed to the page.



Daily Trades Modified

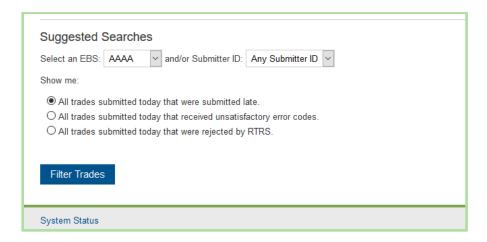
The Daily Trades Modified report displays all trade activities that have been modified by either your firm or the clearing firm. To access this report, you can either select Daily Trades Modified from the home screen, or select Access Reports, and navigate to the Other Reports section.

To generate this report, from the **Show me** drop-down menu, select the trade type(s) you wish to filter. Choose an EBS or Submitter ID and specify the time period or date range during which the trades were modified using the filter bar at the top of the page. Click Filter Trades to display the filtered results.



Suggested Searches

Suggested Searches provides quick and easy access to the Trade Management, Error Code Review and Response or Unapplied Message screens on recent trade activity.



All trades submitted today that were submitted late

Selecting this option provides the Error Code Review and Response screen with filters set for the selected EBS and/or Submitter ID, current business day, and the N913-Late Trade Submitted after Deadline error code. This filter shows all late trades submitted for the current business day.

All trades submitted today that received unsatisfactory error codes

Selecting this option provides the Trade Management screen with filters set for the selected EBS and/or Submitter ID, current business day, and unsatisfactory status. This filter shows all unsatisfactory trades submitted for the current business day.

All trades submitted today that were rejected by RTRS

Selecting this option provides rejected messages with filters set for the selected EBS and/or Submitter ID, and current business day. This filter shows all rejected trades submitted for the current business day.

Exporting Reports

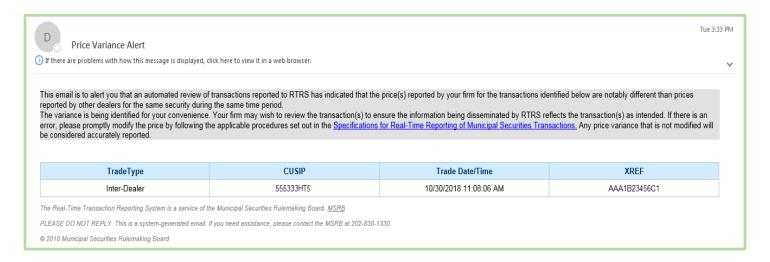
Reports can be viewed on the RTRS Web screen and exported to Microsoft Excel. The reports can also be printed as displayed on-screen or from the export files. The Microsoft Excel files provide data in the format made available to FINRA examiners. Although the actual data provided in the on-screen and Microsoft Excel file formats is the same, the Microsoft Excel format displays the data slightly different from the format displayed on the RTRS Web screen.

Where applicable, 12-month reports are only available in a Microsoft Excel file and cannot be displayed online. When downloading the file, do not change the name of the file prior to saving.

Part 16: Price Variance Alert History

The Price Variance Alert History page allows you to view all alerts that MSRB sent to your firm by email. A Price Variance Alert email is generated when a price reported to the RTRS system is notably different from one or more prices reported by other dealers for the same security within the same time period.

Sample Price Variance Alert email:

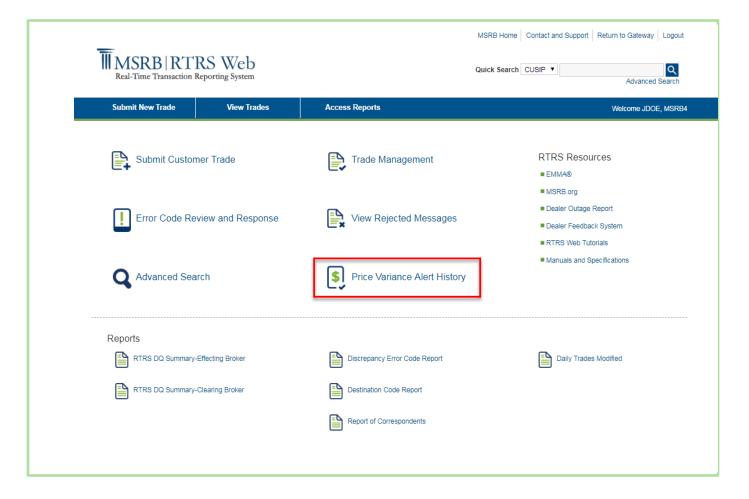


The Price Variance Alert History page accommodates users who may not have received the Price Variance Alert emails or who wish to review the email history in one place. The alerts displayed were sent to your firm only and will not reflect subsequent updates.

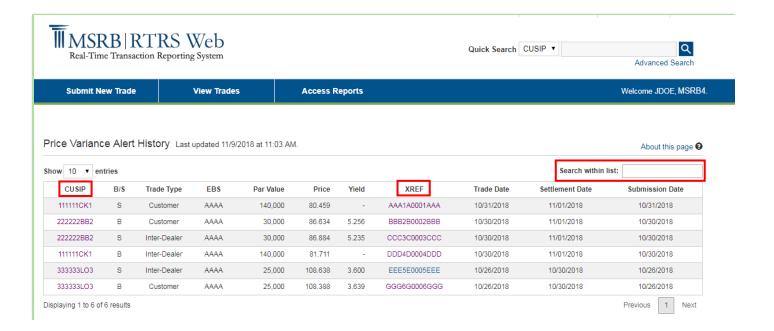


If, as a result of reviewing a trade report that was identified in a Price Variance Alert email, you determine that the reported price is incorrect, you should modify the applicable price. If you do not modify the prices of the trades sent to you, they will be considered accurate.

When you log into RTRS web, you will be able to view your Price Variance Alert History by clicking on Price Variance Alert History.



Once you access the Price Variance Alert History page, you will be able to view a list of alerts that were sent to you for up to four years. Taking action, such as modifying the price of those trades, (which cannot be done from this page) will **NOT** remove them from your alert history.



You can search through your alert history via the **Search within list** option; you can search for any value under any of the fields displayed on the page. Like the **Trade Management** page, you can also navigate to the **Trade Information** page by clicking on one of the **XREF** values listed on your alert history. In addition to the **XREF** link, clicking on any of the **CUSIP** values listed on this page will open a secondary page on *MSRB's EMMA Portal* with details for the selected security.

Refer to the Appendix for additional information about the fields and validation logic.

Appendix: RTRS Fields

The following is an alphabetical list of transaction fields with the corresponding transaction type and validation logic for entry and modification via RTRS Web.

Field Name	Transaction Type	Validation Logic
Buy/Sell (B/S)	Customer and IDRO	Select transactions for which you are the buyer, the seller, or select the Any option to disregard this value in your search.
Buy/Sell Indicator	Customer and IDRO	Enter Buy or Sell for customer and IDRO transactions.
Canceled, DKed or Reversed	Customer and IDRO	Regulatory status of transactions that were canceled or reversed. Select DK to search for inter-dealer transactions that have been marked by RTTM as DKed. Select Canceled to search for inter-dealer, customer, or IDRO transactions that have been canceled. Select Reversed to search for inter-dealer transactions that have been reversed. Use the Canceled, DKed or Reversed option to search for transactions that have been marked as any of the above. Select the Any option to disregard this value in your search.
Capacity/Contra- Capacity or Participant Capacity	Customer and IDRO	Select Agent or Principal .
Commission	Customer and IDRO	Total dollar amount of commission.
Contra Effecting Broker	IDRO and Inter-dealer	Effecting broker symbol for the counterpart of the effecting dealer on the transaction.
		Select from a list of effecting broker symbols registered

Field Name	Transaction Type	Validation Logic
		with MSRB for your firm, or from a list of effecting broker symbols that your firm submits for.
CUSIP	Customer and IDRO	Enter the 9-digit CUSIP of the transaction you want to search for. A partial CUSIP may be used for searching, e.g., 123456, will return all CUSIPs beginning with the characters 123456.
Customer Trades	Customer	Indicates trades between dealers and customers.
Dollar Price	All	Dollar price is required on all regular way customer and IDRO transaction for which it can be calculated. Either dollar price or yield is required for when-issued trades.
		Enter the dollar price as less than, greater than, or equal to the value on the transaction you want to select.
		For inter-dealer transactions, enter the price at which the trade is effected.
Effecting Broker Symbol (EBS)	All	Effecting broker symbol for the effecting dealer on the transaction.
		Select from a list of effecting broker symbols registered with MSRB for your firm, or from a list of effecting broker symbols that your firm submits for.
Error Code	All	Input an error code to display all transactions that have received the inputted error code.
Error Code Category	All	Select an error code category to display all transactions that have received an error from the selected category.
Final Money	Inter-dealer	Enter the final money as less than, greater than or equal to the value on the transaction you want to select.

Field Name	Transaction Type	Validation Logic
Inter-dealer Regulator-only (IDRO) Trades	IDRO	Indicates a trade when an introducing broker effects a trade for a customer against the principal position of its clearing broker.
Inter-dealer Trades	Inter-dealer	Indicates trades between dealers.
Lateness Indicator	Inter-dealer	Indicates whether or not the message was received by MSRB late.
Matched	Inter-dealer	Shows transactions reported to MSRB that have been matched to the contra-side by RTTM.
Memo or Pending	All	Select Memo to search for transactions that have been placed by RTTM in memo status. Select Pending to search for transactions that have been placed by RTTM in pending status. Use the Memo or Pending option to search for transactions that have been placed in either status. Select the Any option to disregard this value in your search.
Message Medium	All	RTRS Web, RTTM Web, Interactive Messaging, RTTM Event Message
Message Sender ID	Inter-dealer	If the user is the submitter of the transaction, select the user's Submitter ID. If a user has more than one Submitter ID, then the user must choose which submitter to use for this transaction. If the user is the effecting dealer of the transaction and did not submit on their own behalf, then select the user's EBS. If a user has more than one EBS, the user must choose which EBS to use for this transaction.

Field Name	Transaction Type	Validation Logic
Par Value (Face Value)	All	The amount of principal that must be paid at maturity. The par value is also referred to as the "face amount" of a security.
		Enter the par value as less than, greater than, or equal to the value on the transaction you want to select. Par must reflect face amount, not units for all transactions.
Price	All	The amount to be paid for a bond, usually expressed as a percentage of par value.
Questionable	Inter-dealer	Regulatory status of transactions that received questionable error codes, meaning that the transaction needs to be reviewed and edited if necessary.
Regulatory Price Dollar	Inter-dealer	Mandatory for trades submitted with final money as well as for trades effected on the basis of dollar price when settlement date is not known and submitted without final money. Omit when issued trades effected on the basis of yield when settlement date is not known and submitted without final money.
Regulatory Status	All	Select Satisfactory , Unsatisfactory , or Questionable to search on those specific regulatory states, or select the Any option to disregard this value in your search.
Satisfactory	All	Regulatory status of transactions that did not receive any error codes, meaning that the transaction was received by RTRS and met the regulatory requirements.
Sender Message Number	All	SEME from the message.
Settlement Date	All	Enter the settlement date as less than, greater than, or equal to the date on the transaction you want to

Field Name	Transaction Type	Validation Logic
		select. This field must be a valid date and greater than the Trade date.
		For inter-dealer transactions, this field indicates the settlement date of transaction or initial settlement date of offering.
Special Condition Indicator – Part A	All	Part A indicates if the transaction has an exception to the standard 15-minute reporting rule.
		Select No condition applies, EOD-LOP/TD (End of Day – List Offering Price), EOD-Variable Rate/Auction Rate/CP (Commercial Paper), EOD-Ineligible on trade date or EOD-Resubmission of RTTM cancel.
Special Condition Indicator – Part B	All	Part B indicates if the transaction has a special condition that affects the Price. Select not special price, traded flat, or away from market price (other reason).
Special Condition Indicator-Part C	Customer	Select No condition applies or Non-transaction-based compensation arrangements (NTBC) if the customer trade did not include a mark-up, mark-down or commission.
	Inter-dealer and IDRO	Select Alternative Trading System (ATS) if the interdealer trade was executed with or using the services of an alternative trading system with Form ATS on file with the SEC. A list of ATSs with Form ATS on file with the SEC is available on the SEC's website at www.sec.gov/foia/docs/atslist.htm .
Special/Conditional Trade	All	Select the transactions that were tagged with a specific value or select the Any option to disregard this value in your search.
Status	All	Includes regulatory status and match status.

Field Name	Transaction Type	Validation Logic
Submission Date Time Frames	All	Includes pre-defined time frames to filter your transactions. Note that specific date range searches are available from the Advanced Search screen.
Submission Date/Range	All	Input a specific date or date range to display all transactions submitted within the inputted date range.
Submitted	All	Regulatory status that indicated the total number of transactions submitted within the time period. This does not include any transaction reports that were rejected by MSRB.
Submitter ID	All	Select from a list of Submitter IDs registered with MSRB for your firm.
Time of Trade	All	For all transactions, the time is entered in military eastern time and must be a valid time using the format: hh:mm:ss. The time of transaction may not be modified to be greater than the time of transaction submitted on the original instruct message. For example, if the Trade Date and Time is submitted originally as 01/01/2004 at 00:13:00, the time may be modified to be earlier than 00:13:00 on that day but not later.
Trade Date	Customer and IDRO	This field must be a valid date, must not be in the future and must be within a 90-day period from the current day.
Transaction/Trade Type	All	Select the values of Customer , Inter-dealer , or IDRO to search on those specific transaction types, or select the Any option to disregard this value in your search. Display only inter-dealer transactions, only customer transactions, only IDRO transactions, or all transaction types.

Field Name	Transaction Type	Validation Logic
Transactions Submitted in the Prior Week	Transactions Submitted in the Prior Week	Reflects any transaction where the instruct message for that transaction was received by RTRS in the 7 days prior to the current day (non-inclusive).
Transactions Submitted Today	Transactions Submitted Today	Reflects any transaction where the instruct message for that transaction was received by RTRS within the current day.
Unmatched	Inter-dealer	Shows transactions reported to MSRB that have not been matched to the contra-side by RTTM.
Unsatisfactory	Customer	Regulatory status of transactions that received unsatisfactory error codes, meaning that the transaction did not meet reporting requirements in some manner.
User ID	All	Included if message was transacted via the RTRS Web or RTTM Web.
Weighted Average Price	All	Select Yes or No for all customer transactions.
XREF	Customer and IDRO	External Dealer Control Number is a 16-character control number for Customer and IDRO transactions.
Yield	All	This field is only used for "when issued" trades effected on the basis of yield submitted without final money. Leave this field blank for transactions effected on the basis of dollar price.