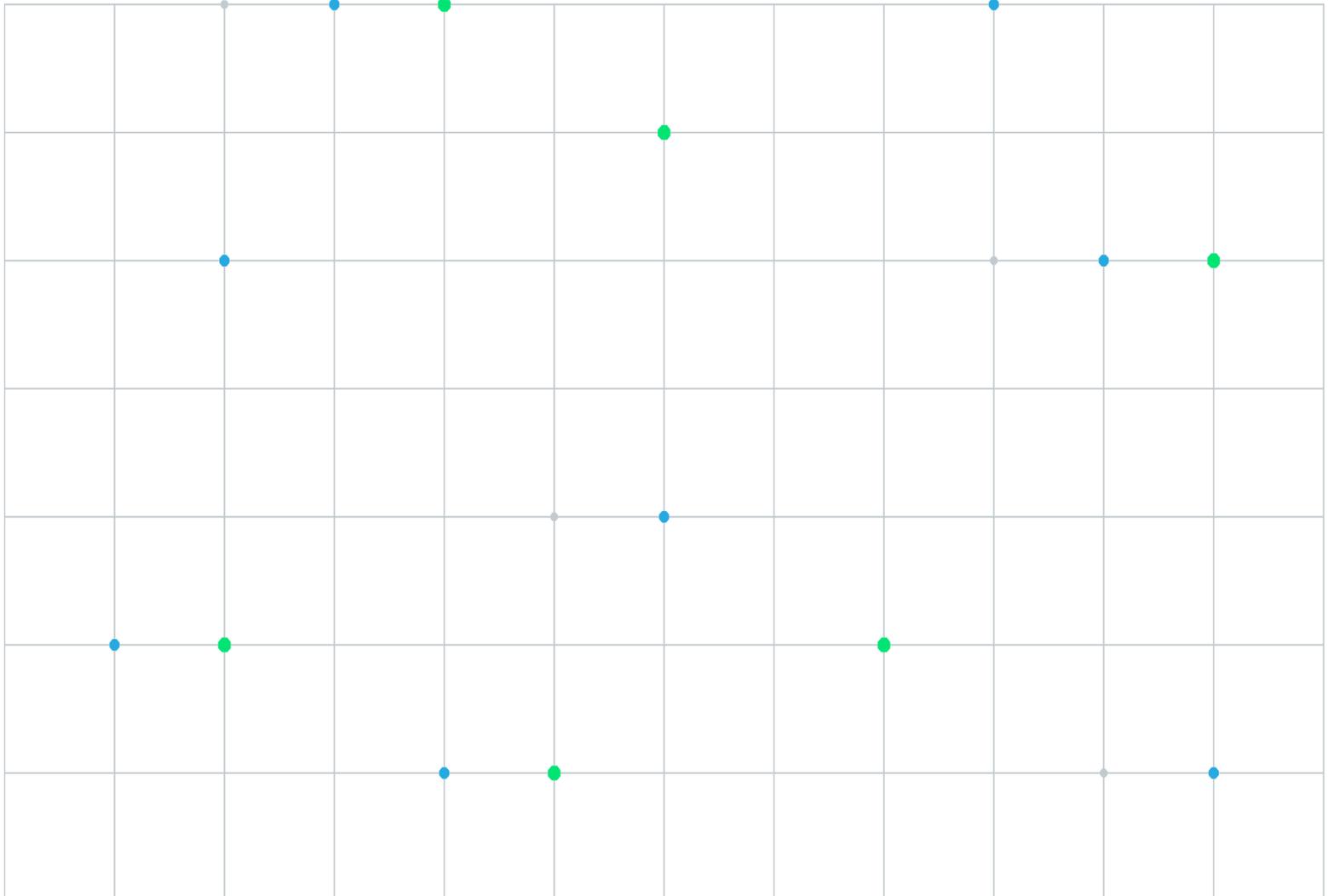


AutoCert+ EBS Conflated UDP Ultra User Manual

Monday, May 24, 2021



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Getting Started

The AutoCert+ tool is an automated testing tool for validating application functionality. It provides an easy-to-use web interface for walking through CME Group certification scenarios.

To facilitate the process of connecting a customer application, CME Group provides a dedicated certification environment to allow customers to test their systems before they complete certification.

This Help system accompanies the AutoCert+ EBS Conflated UDP Ultra test suite.

▶ **To run and navigate AutoCert+:**

1. Complete the steps detailed in the "[Process Summary - EBS New Release Testing Setup](#)" topic.
2. [Log into](#) the automated certification tool.
3. Review general AutoCert+ test suite [navigation](#) and [general interview](#) information.
4. Navigate to the AutoCert+ EBS Conflated UDP Ultratest suite.

The screenshot shows the 'Current Testing Configuration' form. It includes fields for Tester (GA), Company Name (GA), Market (EBS), Purpose (Market Data Conflated UDP Ultra), Application System, and Test Suite (EBS Conflated UDP Ultra). There is also a section for 'Test Suite Status' with indicators for 'Pre-Certification Interview' (Not Complete) and 'Test Suite Status' (Not Tested). An 'ASSIGN' button is visible next to the Identifier field.

- a. Select a **Company Name**.
 - b. For **Market**, select "EBS."
 - c. For **Purpose**, select "Market Data Conflated UDP Ultra."
 - d. Select an **Application System**.
 - e. For **Test Suite**, select "EBS Conflated UDP Ultra."
5. Select an **Identifier** and select "ASSIGN."
 6. Complete the [Interview](#) for this test suite.
 7. Complete applicable test cases.
 8. Complete the certification process from the [Post Certification](#) tab.

What's New

The list below illustrates the updates made to the AutoCert+ EBS Conflated UDP Ultra Help system.

Date	Topic	Description
Monday, May 24, 2021		Initial release.

Interview

The interview consists of a series of questions about your trading application. Based on your responses, certain tests are required and others are optional. You must complete the pre-certification interview before running the test cases.

Note: You cannot access test suites and test cases until the completion of the interview.

▶ **To complete the interview:**

Answer each question and select "Complete" when finished.



The screenshot shows a web interface for the interview. At the top, there are navigation tabs: "Interview" (selected), "Test Suite", "Test Case", "Post Certification", and "Help". Below the tabs, there are four questions, each with a title bar and a list of options:

- Which Market does your application support ?**
 - G10 FX Spot
 - Metals Spot
 - Emergent Markets FX Spot
 - Russian Ruble
 - Non-Deliverable Forwards (NDF)
- Will your system support Fixed Date NDF ?**
 - Yes
 - No
- Will your system support On-MTF NDF ?**
 - Yes
 - No
- Will your application support EBS Spectrum Market Data ?**
 - Yes
 - No

At the bottom left of the form, there is a "Complete" button.

Certification Tests

This section contains information on the certification tests.

Security Definition Message

This test verifies that your application can properly receive and process Security Definition (tag 35-MsgType=d) messages.

i See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

i **Note:** DO NOT select the **START TEST** button once the test is in progress.

Steps of the test: Security Definition Message

This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.

Purpose
The purpose of this test is to verify that your application can properly receive and process Security Definition Messages.

Contracts: [EURUSD - 751] **Select**

Category	IP	Port
Incremental Conflated Feed A	239.167.94.50	14750
Incremental Conflated Feed B	239.167.94.60	15750
Conflated Snapshot	239.167.94.71	14751
Instrument Replay Conflated	239.167.94.71	14751

Templates File

Category	Link
ACP Ultra New York Configuration File:	templates_Exceptionary.xml
ACP Ultra London Configuration File:	config.xml
ACP Ultra OIF SEF NDF Configuration File:	config.xml
ACP Ultra ON SEF NDF Configuration File:	config.xml

Description	Flag	Status
1 Confirm that your application successfully received and processed the Security Definition Message. Date format should be entered as: YYYYMMDD		Not Tested

Key: ○ not tested ● complete ● pending ● failed

REFRESH

▶ To run a Security Definition test:

1. Confirm that your application successfully received and processed the Security Definition (tag 35-MsgType=d) message. The date format should be entered as: YYYYMMDD.

Security Definition Message for NDF

This test verifies that your application can properly receive and process Security Definition (tag 35-MsgType=d) messages for NDF.

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.

The screenshot shows a software interface with tabs for 'Interview', 'Test Suite', 'Test Case', 'Post Certification', and 'Help'. The 'Test Case' tab is active, displaying the title 'Steps of the test: Security Definition Message for NDF'. Below the title is a warning: 'This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step1.' The 'Purpose' section states: 'The purpose of this test is to verify that your application can properly receive and process Security Definition Messages.' The 'Contracts' section has a dropdown menu labeled 'Select Contract - Channel' and a 'Select' button. Below this is a table with columns 'Description', 'Flag', and 'Status'. The table contains one row with the description 'Confirm that your application successfully received and processed the Security Definition Message for NDF. Date format should be entered as: YYYYMMDD', a flag icon, and the status 'Not Tested'. A 'REFRESH' button is located at the bottom left. A legend at the bottom right indicates: 'Key: @ not tested, ● complete, ● pending, ● failed'.

▶ To run a Security Definition Message for NDF test:

1. Confirm that your application successfully received and processed the Security Definition (tag 35-MsgType=d) message for NDF. The date format should be entered as: YYYYMMDD.

Security Definition Message for Fixed Date NDF

This test verifies that your application can properly receive and process Security Definition (tag 35-MsgType=d) messages for Fixed Date NDF.

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.

The screenshot shows a web-based test configuration interface. At the top, there are tabs for 'Interview', 'Test Suite', 'Test Case', 'Post Certification', and 'Help'. The main heading is 'Steps of the test: Security Definition Message for Fixed Date NDF'. Below this, there is a warning: 'This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step1.' The 'Purpose' section states: 'The purpose of this test is to verify that your application can properly receive and process Security Definition Messages.' There is a 'Contracts:' field with a dropdown menu showing 'Select Contract - Channel' and a 'Select' button. Below this is a table with columns 'Description', 'Flag', and 'Status'. The table contains one row with the description 'Confirm that your application successfully received and processed the Security Definition Message for Fixed Date NDF. Date format should be entered as: YYYYMM' and a status of 'Not Tested'. At the bottom left, there is a 'REFRESH' button. A key at the bottom right indicates: 'Key: ○ not tested ● complete ● pending ● failed'.

▶ To run a Security Definition Message for Fixed Date NDF test:

1. Confirm that your application successfully received and processed a Security Definition (tag 35-MsgType=d) message for Fixed Date NDF. Verify the values on the selected instrument Security Definition (tag 35-MsgType=d) message received. The date format should be entered as: YYYYMMDD.

Security Definition Message for On-MTF NDF

This test verifies that your application can properly receive and process Security Definition (tag 35-MessageType=d) messages for On-MTF NDF.

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.

The screenshot shows a software interface for configuring a test. At the top, there are tabs for 'Interview', 'Test Suite', 'Test Case', 'Post Configuration', and 'Help'. The main heading is 'Steps of the test: Security Definition Message for On-MTF NDF'. Below this, a warning message states: 'This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.' The 'Purpose' section contains the text: 'The purpose of this test is to verify that your application can properly receive and process Security Definition Messages.' The 'Contracts' section has a dropdown menu labeled 'Select Contract - Channel' and a 'Select' button. Below this is a table with columns 'Description', 'Flag', and 'Status'. The table contains one row with the description 'Confirm that your application successfully received and processed the Security Definition Message for On-MTF NDF. Date format should be entered as: YYYYMMDD' and a status of 'Not Tested'. A 'REFRESH' button is located at the bottom left. A legend at the bottom right indicates: 'Key: @ not tested, ● complete, ● pending, ● failed'.

▶ To run a Security Definition Message for On-MTF NDF test:

1. Confirm that your application successfully received and processed a Security Definition (tag 35-MessageType=d) message for On-MTF NDF. Verify the values on the selected instrument Security Definition (tag 35-MessageType=d) message received. The date format should be entered as: YYYYMMDD.

Security Definition Mid-Week Updates

This test verifies that your application can properly receive and process Security Definition (tag 35-MsgType=d) message updates during the week.

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.

The screenshot shows a web interface for configuring a test. At the top, there are tabs for 'Interview', 'Test Suite', 'Test Case', 'Pass Certification', and 'Help'. The main heading is 'Steps of the test: Security Definition Mid-Week updates'. Below this, there is a warning: 'This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step!'. The 'Purpose' section states: 'The purpose of this test is to verify that your application can properly receive and process Security Definition Messages updates during the week.' There is a 'Contracts:' field with a dropdown menu showing 'Select Contract - Channel' and a 'Select' button. Below this is a table with columns 'Description', 'Flag', and 'Status'. The table contains one row with the description 'Confirm that your application successfully received and processed the Security Definition Message updates. Date format should be entered as: YYYYMMDD' and a status of 'Not Tested'. At the bottom, there is a 'REFRESH' button and a legend: 'Key: ○ not tested ● complete ● pending ● failed'.

▶ To run a Security Definition Mid-Week Updates test:

1. Confirm that your application successfully received and processed the Security Definition (tag 35-MsgType=d) message. The date format should be entered as: YYYYMMDD.

Limits and Banding Message

The purpose of this test is to verify that your application can properly receive and process Market Data Incremental Refresh (tag 35-MsgType=X) - Limits and Banding messages.

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.

The screenshot shows a software interface for configuring a test. At the top, there are tabs for 'Interview', 'Test Suite', 'Test Case', 'Post Configuration', and 'Help'. The main heading is 'Steps of the test: Limits and Banding Message'. Below this, a warning states: 'This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.' The 'Purpose' section contains the text: 'The purpose of this test is to verify that your application can properly receive and process Limits and Banding messages.' The 'Contracts' section has a dropdown menu labeled 'Select Contract - Channel' and a 'Select' button. Below this is a table with columns 'Description', 'Flag', and 'Status'. The table contains one row: '1 A threshold limits are sent with MDEntryType=g. Please validate the following values.' with a 'Not Tested' status. A legend at the bottom indicates: 'Key: (grey) not tested (green) complete (yellow) pending (red) failed'. There is a 'REFRESH' button at the bottom left.

▶ To run the Limits and Banding Message test:

1. Threshold limits are sent with MDEntryType=g. Validate the tag values.

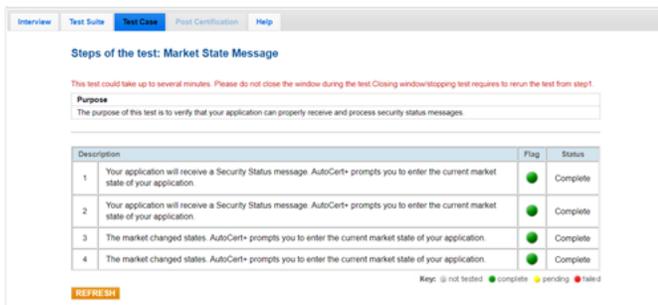
Market State Message

The purpose of this test is to verify that your application can properly receive and process security status messages..

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.



▶ To run the Market State Message test:

1. Enter the current market state from the security status message that your application received.
2. Enter the current market state from the security status message that your application received.
3. The market changed states. Enter the current market state from the security status message that your application received.
4. The market changed states. Enter the current market state from the security status message that your application received.

Trade Summary Message

The purpose of this test is to verify that your application can properly receive and process a Market Data Incremental Refresh (tag 35-MsgType=X) Trade Summary message.

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.

Steps of the test: Trade Summary Message

This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.

Purpose
The purpose of this test is to verify that your application can properly receive and process trade summary message.

Contracts:

Description	Flag	Status
1 Market data incremental refresh is sent with MDEntryType=2 (trade). Please validate the following values.		Not Tested

Key: not tested complete pending failed

See [CME Globex EBS Market - Market Data Message Specification](#).

▶ To run a Trade Summary Message test:

1. Enter the tag values from the Market Data Incremental Refresh (tag 35-MsgType=X) Trade Summary message with MDEntryType=2 (trade) message that your application received.

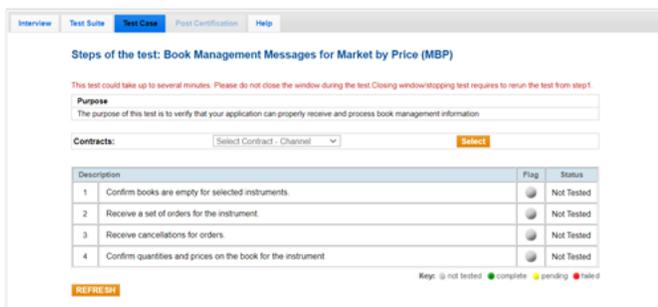
Book Management Messages for Market by Price (MBP)

This test verifies that your application can properly receive and process book management information.

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.



▶ To run a Book Management Messages for Market by Price (MBP) test:

1. Confirm that the books are empty for the selected instruments.
2. Receive a set of orders for the instrument.
3. Receive cancellations for orders.
4. Confirm the quantities and prices on the book for the selected instrument.

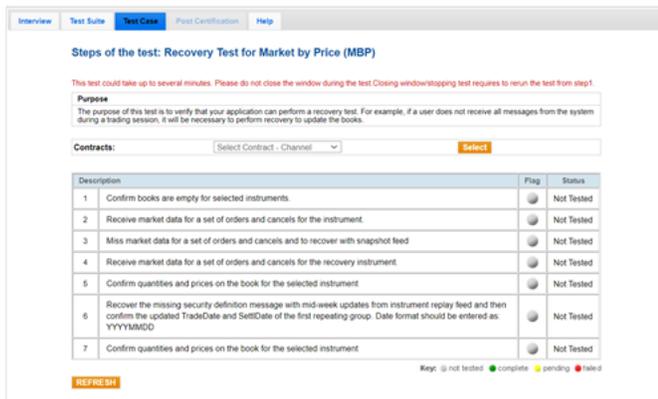
Recovery Test for Market by Price (MBP)

This test verifies that your application can perform a recovery test. For example, if a user does not receive all messages from the system during a trading session, it will be necessary to perform a recovery to update the books.

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.



▶ To run a Recovery Test for Market by Price (MBP) test:

1. Confirm that the books are empty for the selected instruments.
2. Receive market data for a set of orders and cancels for the instrument.
3. Miss market data for a set of orders and cancels and to recover with snapshot feed.
4. Receive market data for a set of orders and cancels for the recovery instrument.
5. Confirm the quantities and prices on the book for the selected instrument.
6. Recover the missing Security Definition ((tag 35-MessageType=d) message with mid-week updates from the instrument replay feed and then confirm the updated TradeDate and SettleDate of the first repeating group. The date format should be entered as: YYYYMMDD.
7. Confirm the quantities and prices on the book for the selected instrument.

Channel Reset for Market by Price (MBP)

This test verifies that your application can properly receive and process channel reset messages.

See [CME Globex EBS Market - Market Data Message Specification](#).

1. Select a **SenderComp** from the drop-down and select **ASSIGN** if a SenderComp is not already assigned.
2. From the **Contracts** drop-down, select the desired contract if the contract is not already locked.
3. Select the **START TEST** button.

Note: DO NOT select the **START TEST** button once the test is in progress.

Steps of the test: Channel Reset for Market by Price (MBP)

This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.

Purpose
The Purpose of this test is to verify that your application can properly receive and process channel reset messages.

Contracts:

Description	Flag	Status
1 Confirm books are empty for the selected instruments.	<input type="radio"/>	Not Tested
2 Receive market data for a set of orders.	<input type="radio"/>	Not Tested
3 Confirm quantities and prices on the book for the selected instrument.	<input type="radio"/>	Not Tested
4 Receive Channel Reset message.	<input type="radio"/>	Not Tested
5 Receive resent book.	<input type="radio"/>	Not Tested
6 Confirm quantities and prices for book and statistic messages for the selected instrument.	<input type="radio"/>	Not Tested

Key: not tested complete pending failed

► **To run a Channel Reset for Market by Price (MBP) test:**

1. Confirm books are empty for the selected instruments.
2. Receive market data for a set of orders.
3. Confirm the quantities and prices on the book for the selected instrument.
4. Receive a Market Data Incremental Refresh (tag 35-MsgType=X) - Channel Reset message.
5. Receive the resent book.
6. Confirm the quantities and prices on the book for the selected instrument.