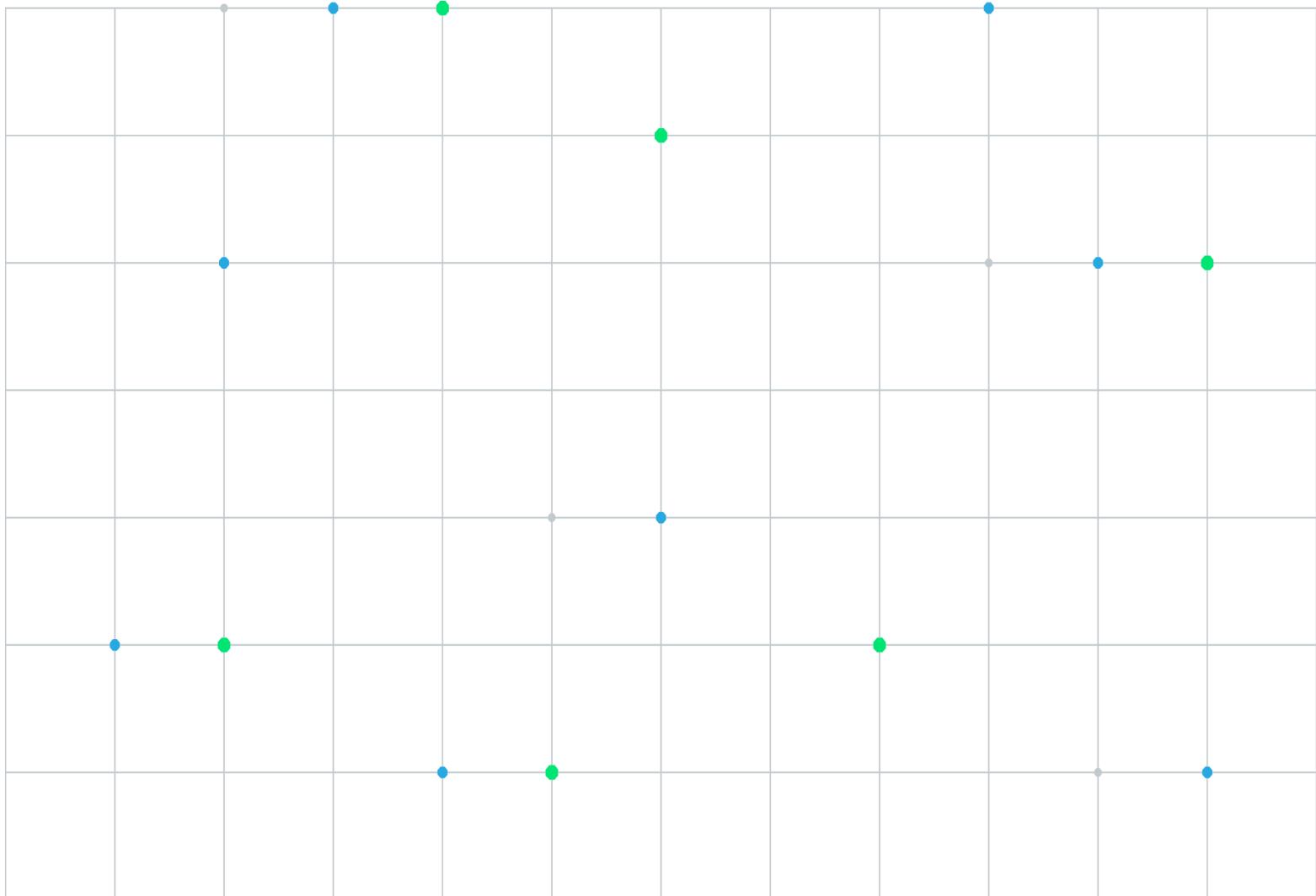


AutoCert+ Risk Management Interface (RMI) API User Manual

20 October 2022



Neither futures trading nor swaps trading are suitable for all investors, and each involves the risk of loss. Swaps trading should only be undertaken by investors who are Eligible Contract Participants (ECPs) within the meaning of Section 1a(18) of the Commodity Exchange Act. Futures and swaps each are leveraged investments and, because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for either a futures or swaps position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles and only a portion of those funds should be devoted to any one trade because traders cannot expect to profit on every trade. All examples discussed are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience.

CME Group, the Globe Logo and CME are trademarks of Chicago Mercantile Exchange Inc. CBOT is a trademark of the Board of Trade of the City of Chicago, Inc. NYMEX is a trademark of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc. All other trademarks are the property of their respective owners.

The information within this manual has been compiled by CME Group for general purposes only. CME Group assumes no responsibility for any errors or omissions. Additionally, all examples in this manual are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience. All matters pertaining to rules and specifications herein are made subject to and are superseded by official CME, CBOT and NYMEX rules. Current rules should be consulted in all cases concerning contract specifications.

Copyright © 2026 CME Group Inc. All rights reserved.

Table of Contents

Getting Started	4
What's New	5
RMI API Interview	6
Session Based/Order Routing/Product Reference Tests	7
RMI API Session-Based Connectivity	8
1. Session-Based Connectivity	8
RMI API Order Routing Permissioning	9
2. Order Routing Permissioning	9
Order Routing Permissioning (Session-less)	10
RMI API Product Reference Requests	11
Product Reference Requests	11
Product Reference Requests (Session-less)	12
Prevent / Reject / Order Mass Action Tests	13
RMI API Current Prevent Instructions	14
Current Prevent Instructions	14
Current Prevent Instructions (Session-less)	15
RMI API Rejection Scenario	16
Rejection Scenario	16
Rejection Scenario (Session-less)	17
RMI API Order Mass Action Request	18
Order Mass Action Request	18
Order Mass Action Request (Session-less)	18

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 to CME Globex, CME Group provides a dedicated certification environment to allow customers to test their systems before they complete certification.

The AutoCert+ Risk Management Interface (RMI) API tests focus on verifying that client systems can connect to the RMI API using session-based and session-less connectivity.

Note: RMI API testing includes two sets of test cases. One is for client systems that support session-based connectivity, and the other applies to client systems that support session-less connectivity.

To run and navigate AutoCert+:

1. [Log into](#) the automated certification tool.
2. Review general AutoCert+ test suite [navigation](#) and [general interview](#) information.
3. Navigate to the AutoCert+ Risk Management Interface (RMI) API test suite.

Current Testing Configuration					
Tester:	Tom Tester		Type:	Semi-Automated Trading System	
Company Profile:	Trading Firm	Market:	Category:	Prop System	
Market:	Futures & Options	Purpose:	1603:	System1	
Purpose:	RMI	Application System:	1604:	1	
Application System:	System1		1605:	System3	
Test Suite:	RMI API				
NOTE: This test suite utilizes the NEWRELEASE environment.					
Sendercomp:	BDL12JA	UNASSIGN	Test Suite Status: Pre-Certification Interview: Complete Test Suite Status: In Progress		

- Select a **Company Name**.
- For Market, select **Futures & Options**.
- For Purpose, select **RMI**.
- Select an **Application System**.

Use the refresh (C) button to update the list to include recently created Application Systems.

- For Test Suite, select **RMI API**.
- Complete the [Interview](#) for this test suite.
- Complete applicable test cases.
- Complete the [Post Certification](#) questionnaire.

What's New

The list below illustrates the updates made to the AutoCert+ Risk Management Interface (RMI) API Help system.

Date	Topic	Description
Oct 20, 2022	Format	Website and PDF format changes only.
April 16, 2014	All	Updated links and edited to meet Help standards.
July 20, 2012	All Order Mass Action Request Order Mass Action Request (Session-less)	Updated all existing content. Formatted according to new ACP Help system standards. Included new test cases.
February 2, 2012	All	Original draft.

RMI API Interview

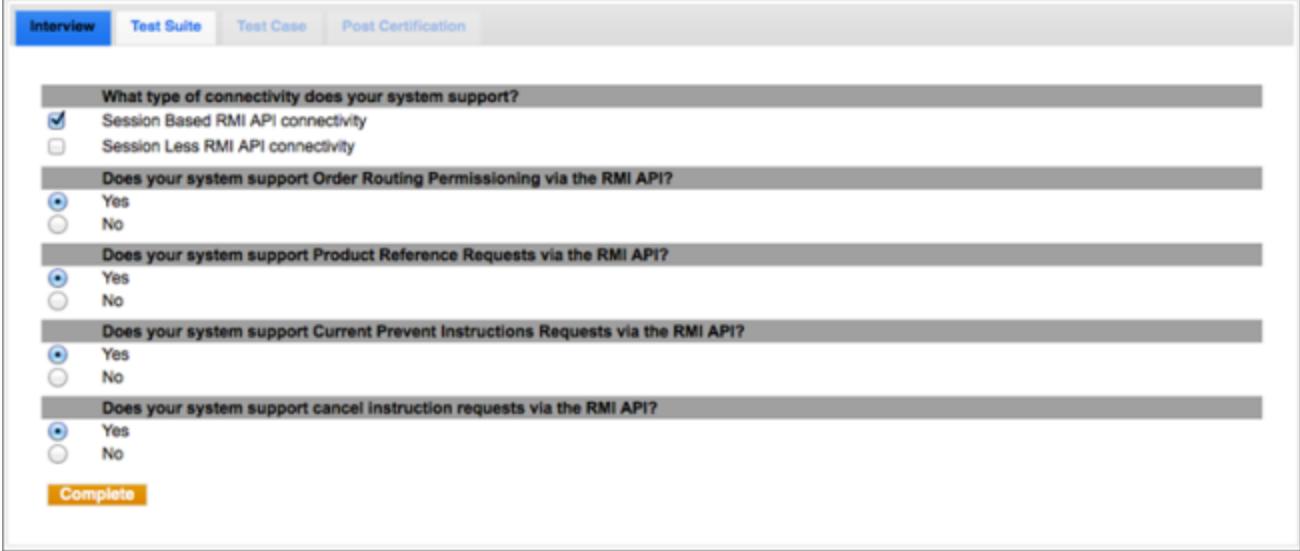
The interview consists of a series of questions about your application. Based on your responses, certain tests are required and others are optional. You must complete the pre-certification interview before running the test cases.

To complete the interview, select **Yes** or **No** to the questions regarding whether or not your system supports Order Routing Permissioning, Product Reference Requests, Current Prevent Instructions Requests, and Cancel Instruction Requests.

In addition, you must determine if your system supports session-based or session-less RMI API connectivity.

 **Note:** Session-based tests require a client system to perform Logon and Logout functions.

After answering the Interview questions, click the **Complete** button.



The screenshot shows a user interface for an 'Interview' session. At the top, there are four tabs: 'Interview' (which is selected and highlighted in blue), 'Test Suite', 'Test Case', and 'Post Certification'. Below the tabs, there are five questions, each with a radio button for 'Yes' and a radio button for 'No'. The questions are as follows:

- What type of connectivity does your system support?**
Session Based RMI API connectivity (checked)
- Does your system support Order Routing Permissioning via the RMI API?**
Yes
- Does your system support Product Reference Requests via the RMI API?**
Yes
- Does your system support Current Prevent Instructions Requests via the RMI API?**
Yes
- Does your system support cancel instruction requests via the RMI API?**
Yes

At the bottom of the interview section, there is a prominent orange 'Complete' button.

Session Based/Order Routing/Product Reference Tests

RMI API Session-Based Connectivity

1. Session-Based Connectivity

This test verifies that you can connect to the RMI API using session based connectivity, and that your system maintains the correct request number.

This test is mandatory if the [interview](#) response is:

- What types of connectivity does your system support: **Session-based RMI API connectivity**

► To test session-based connectivity:

Click **START TEST** to begin.

For the RMI API Session-Based Connectivity test, submit and receive the following messages:

1. Submit [User Request - Logon](#)

Note: Submit the Logon message over the RMI API.

2. Receive [User Request - Logon Confirmation](#)
3. Submit [Logout](#)
4. Receive User Request - Logout Confirmation

RMI API Order Routing Permissioning

2. Order Routing Permissioning

This test verifies that clearing members (CMs) are able to route the entitlement definition request over the RMI API, and checks the capability of those CMs to block and unblock the order entry for a trading firm.

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-based RMI API connectivity**
- Does your system support order routing permissioning via the RMI API: **Yes**

The screenshot shows the 'Test Case' tab selected in the navigation bar. The main content area is titled 'Steps of the test: RMI API Order Routing Permissioning - Session Based'. It includes a note about the test taking several minutes and not closing the window. A 'Purpose' section describes the test's goal of verifying CMs can route entitlement requests. A 'Note' box instructs users to press 'START TEST' to start or restart the test. Below is a table of 8 steps, all marked as 'not tested' (grey circles):

Description	Status
1 Over an RMI API connection, submit a User Request - Logon message. [Ensure SID in the message is same as the assigned SenderComp ID]	●
2 Receive and process a User Response - Logon Confirmation message	●
3 Submit a Party Entitlement Definition Request to prevent order entry	●
4 Receive and process the Party Entitlement Definition Request Acknowledgement	●
5 Submit a Party Entitlement Definition Request to allow order entry	●
6 Receive and process the Party Entitlement Definition Request Acknowledgement	●
7 Submit a Logout message	●
8 Receive and process a User Response - Logout Confirmation message	●

Key: ● not tested ● complete ● pending ● failed

REFRESH

► To test order routing permissioning:

Click **START TEST** to begin.

For the RMI API Session-Based Connectivity test, submit and receive the following messages:

1. Submit [User Request - Logon](#)



Note: In the message, ensure SID is the same as the assigned SenderCompID.

2. Receive [User Request - Logon Confirmation](#)
3. Submit [Party Entitlement Definition Request](#) to prevent order entry
4. Receive [Party Entitlement Definition Request Acknowledgement](#)
5. Submit [Party Entitlement Definition Request](#) to allow order entry
6. Receive [Party Entitlement Definition Request Acknowledgement](#)

7. Submit [Logout](#)
8. Receive [User Request - Logout Confirmation](#)

Order Routing Permissioning (Session-less)

This test verifies that clearing members (CMs) are able to route the entitlement definition request over the RMI API, and checks the capability of those CMs to block and unblock the order entry for a trading firm.

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-less RMI API connectivity**
- Does your system support order routing permissioning via the RMI API: **Yes**

Description	Status
1 Over an RMI API connection, submit a Party Entitlement Definition Request to prevent order entry [Ensure SID in the message is same as the assigned SenderComp ID]	not tested
2 Receive and process the Party Entitlement Definition Request Acknowledgement	not tested
3 Submit a Party Entitlement Definition Request to allow order entry	not tested
4 Receive and process the Party Entitlement Definition Request Acknowledgement	not tested

► To test session-less order routing permissioning:

Click **START TEST** to begin.

For the RMI API Session-Less Connectivity test, submit and receive the following messages:

1. Submit [Party Entitlement Definition Request](#) to prevent order entry
2. Receive [Party Entitlement Definition Request Acknowledgement](#)
3. Submit [Party Entitlement Definition Request](#) to allow order entry
4. Receive [Party Entitlement Definition Request Acknowledgement](#)

RMI API Product Reference Requests

Product Reference Requests

This test verifies that a client system can request the RMI API to get product references. These references can be made with respect to the following:

- All product groups
- CME product groups (products grouped by exchange)
- CME futures (product groups within the specific exchange by security type)

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-based RMI API connectivity**
- Does your system support order routing permissioning via the RMI API: **Yes**

Interview
Test Suite
Test Case
Post Certification
Help

Steps of the test: RMI API Product Reference Requests - Session Based

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 the client system can request the RMI API to get the product references. The references can be made with respect to all product groups, product groups by exchange and product groups within the specific exchange by security type.

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

START TEST

Description	Status
1 Over an RMI API connection, submit a User Request - Logon message. [Ensure SID in the message is same as the assigned SenderComp ID]	
2 Receive and process a User Response - Logon Confirmation message	
3 Submit a Security List Request message for all product groups	
4 Receive and process the Security List message	
5 Submit a Security List Request message for CME product groups	
6 Receive and process the Security List message	
7 Submit a Security List Request message for CME futures	
8 Receive and process the Security List message	
9 Submit a Logout message	
10 Receive and process a User Response - Logout Confirmation message	

Key: ● not tested ● complete ● pending ● failed

► To test product reference requests:

Click **START TEST** to begin.

For the RMI API Session-Based Connectivity test, submit and receive the following messages:

1. Submit [User Request - Logon](#)
2. Receive [User Request - Logon Confirmation](#)
3. In steps 3-7, submit [Security List Requests](#) then receive corresponding [Security List responses](#) for all product groups, CME product groups, and CME futures, respectively.

4. Submit [Logout](#)
5. Receive [User Request - Logout Confirmation](#)

Product Reference Requests (Session-less)

This test verifies that a client system can request the RMI API to get product references. These references can be made with respect to the following:

- All product groups
- CME product groups (products grouped by exchange)
- CME futures (product groups within the specific exchange by security type)

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-based RMI API connectivity**
- Does your system support order routing permissioning via the RMI API: **Yes**

[Interview](#)
[Test Suite](#)
Test Case
[Post Certification](#)
[Help](#)

Steps of the test: RMI API Product Reference Requests - Session Less

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 the client system can request the RMI API to get the product references. The references can be made with respect to all product groups, product groups by exchange and product groups within the specific exchange by security type.

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

START TEST

Description	Status
1 Over an RMI API connection, submit a Security List Request message for all product groups [Ensure SID in the message is same as the assigned SenderComp ID]	●
2 Receive and process the Security List message	●
3 Submit a Security List Request message for CME product groups	●
4 Receive and process the Security List message	●
5 Submit a Security List Request message for CME futures	●
6 Receive and process the Security List message	●

Key: ● not tested ● complete ● pending ● failed

[REFRESH](#)

► To test session-less product reference requests:

Click **START TEST** to begin.

- In steps 1-6, submit [Security List Requests](#) then receive corresponding [Security List responses](#) for all product groups, CME product groups, and CME futures, respectively.

Prevent / Reject / Order Mass Action Tests

RMI API Current Prevent Instructions

Current Prevent Instructions

This test determines which customer accounts are currently blocked from trading.

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-based RMI API connectivity**
- Does your system support order routing permissioning via the RMI API: **Yes**

The screenshot shows the 'Test Case' tab selected in the navigation bar. The main content area is titled 'Steps of the test: RMI API Current Prevent Instructions - Session Based'. A note at the top 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 step1.' Below this is a 'Purpose' section with the text: 'The purpose of this test is to determine which of their customer accounts is currently blocked from trading at that particular point of time.' A note in the center says: 'Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.' To the right of this note is a large orange 'START TEST' button. Below these sections is a table with 8 rows, each representing a step in the test. The table has two columns: 'Description' and 'Status'. The 'Description' column lists the steps, and the 'Status' column shows a grey circle for each row. At the bottom of the table is a legend: 'Key: ⚡ not tested ⚡ complete ⚡ pending ⚡ failed'. A 'REFRESH' button is located at the bottom left of the table area.

Description		Status
1	Over an RMI API connection, submit a User Request - Logon message. [Ensure SID in the message is same as the assigned SenderComp ID]	⚡
2	Receive and process a User Response - Logon Confirmation message	⚡
3	Submit a Party Entitlement Definition Request to prevent order entry	⚡
4	Receive and process the Party Entitlement Definition Request Acknowledgement	⚡
5	Submit a Party Entitlements Request to determine current prevent instructions	⚡
6	Receive and process the Party Entitlements Report	⚡
7	Submit a Logout message	⚡
8	Receive and process a User Response - Logout Confirmation message	⚡

► To test current prevent instructions:

Click **START TEST** to begin.

For the RMI API Session-Based Connectivity test, submit and receive the following messages:

1. Submit [User Request - Logon](#)
2. Receive [User Request - Logon Confirmation](#)
3. Submit [Party Entitlement Definition Request](#) to prevent order entry
4. Receive [Party Entitlement Definition Request Acknowledgement](#)
5. Submit [Party Entitlement Definition Request](#) to determine prevent instructions
6. Receive [Party Entitlements Report](#)
7. Submit [Logout](#)
8. Receive User Request - Logout Confirmation

Current Prevent Instructions (Session-less)

This test determines which customer accounts are currently blocked from trading.

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-less RMI API connectivity**
- Does your system support order routing permissioning via the RMI API: **Yes**

Interview Test Suite **Test Case** Post Certification Help

Steps of the test: RMI API Current Prevent Instructions - Session Less

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 determine which of their customer accounts is currently blocked from trading at that particular point of time.

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test. **START TEST**

Description	Status
1 Over an RMI API connection, submit a Party Entitlement Definition Request to prevent order entry [Ensure SID in the message is same as the assigned SenderComp ID]	●
2 Receive and process the Party Entitlement Definition Request Acknowledgement	●
3 Submit a Party Entitlements Request to determine current prevent instructions	●
4 Receive and process the Party Entitlements Report	●

Key: ● not tested ● complete ● pending ● failed

REFRESH

► **To test session-less current prevent instructions:**

Click **START TEST** to begin.

For the RMI API Session-Less Connectivity test, submit and receive the following messages:

1. Submit [Party Entitlement Definition Request](#)
2. Receive [Party Entitlement Definition Request Acknowledgement](#)
3. Submit [Party Entitlement Definition Request](#) to determine prevent instructions
4. Receive [Party Entitlements Report](#)

RMI API Rejection Scenario

Rejection Scenario

This test verifies that for instances when a client system does not send messages in proper format, the API generates a business reject message. In addition, the test verifies that a client system can process the business reject message.

This test is mandatory if the [interview](#) response is:

- What types of connectivity does your system support: **Session-less RMI API connectivity**

Steps of the test: RMI API Rejection Scenario - Session Based

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.

Purpose

The purpose of this test is to verify that, when the client system does not send messages in proper format, the API generates the business reject message. Also, the client systems should be able to process the business reject message.

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

START TEST

Description	Status
1 Over an RMI API connection, submit a User Request - Logon message. [Ensure SID in the message is same as the assigned SenderComp ID]	●
2 Receive and process a User Response - Logon Confirmation message	●
3 Submit a Party Entitlement Definition Request to prevent order entry	●
4 Receive and process the Business Message Reject	●
5 Submit a Party Entitlement Definition Request to prevent order entry	●
6 Receive and process the Party Entitlement Definition Request Acknowledgement	●
7 Submit a Logout message	●
8 Receive and process a User Response - Logout Confirmation message	●

Key: ● not tested ● complete ● pending ● failed

REFRESH

To run a rejection scenario test:

Click **START TEST** to begin.

For the RMI API Session-Based Connectivity test, receive and submit the following messages:

1. Submit [User Request - Logon](#)
2. Receive [User Request - Logon Confirmation](#)
3. Submit [Party Entitlement Definition Request](#) to prevent order entry
4. Receive [Business Message Reject](#)
5. Submit [Party Entitlement Definition Request](#) to prevent order entry
6. Receive [Party Entitlement Definition Request Acknowledgement](#)
7. Submit [Logout](#)
8. Receive [User Request - Logout Confirmation](#)

Rejection Scenario (Session-less)

This test verifies that for instances when a client system does not send messages in proper format, the API generates a business reject message. In addition, the test verifies that a client system can process the business reject message.

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-less RMI API connectivity**

Steps of the test: RMI API Rejection Scenario - Session Less

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, when the client system does not send messages in proper format, the API generates the business reject message. Also, the client systems should be able to process the business reject message.

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

START TEST

Description		Status
1	Over an RMI API connection, submit a Party Entitlement Definition Request to prevent order entry [Ensure SID in the message is same as the assigned SenderComp ID]	●
2	Receive and process the Business Message Reject	●
3	Submit a Party Entitlement Definition Request to prevent order entry	●
4	Receive and process the Party Entitlement Definition Request Acknowledgement	●

Key: ● not tested ● complete ● pending ● failed

REFRESH

► To run a session-less rejection scenario test:

Click **START TEST** to begin.

For the RMI API Session-Less Connectivity test, receive and submit the following messages:

1. Submit [Party Entitlement Definition Request](#) to prevent order entry
2. Receive [Business Message Reject](#)
3. Submit [Party Entitlement Definition Request](#) to prevent order entry
4. Receive [Party Entitlements Definition Request Acknowledgement](#)

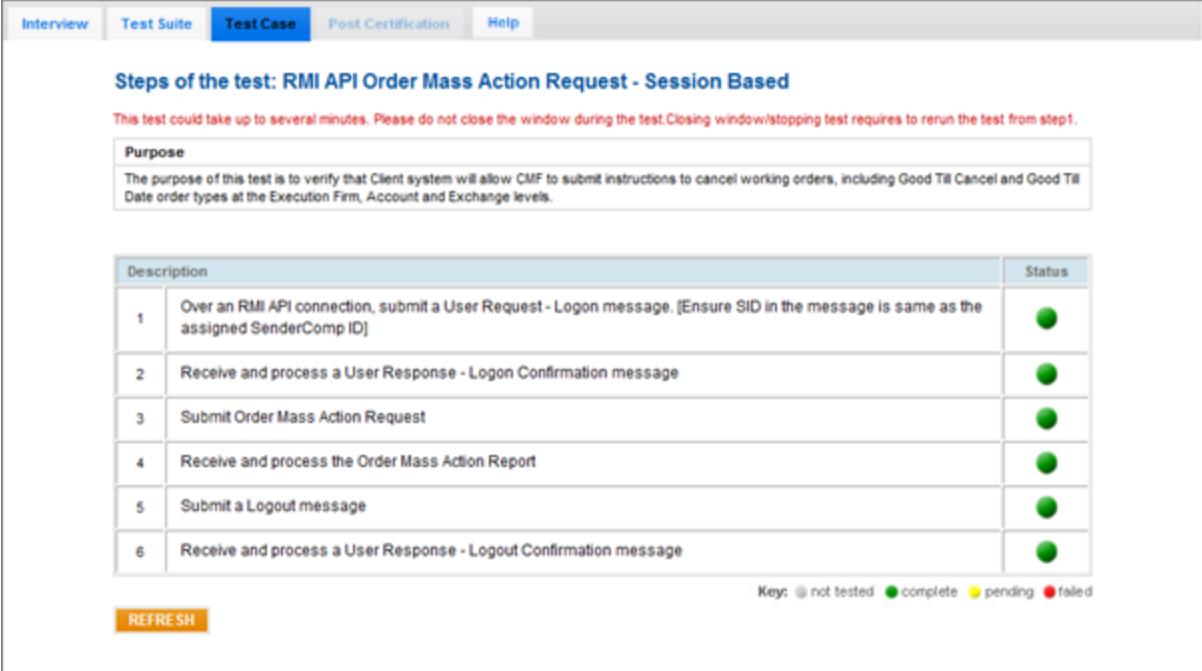
RMI API Order Mass Action Request

Order Mass Action Request

This test verifies that a client system allows a Clearing Member Firm (CMF) to submit instructions to cancel working orders, including Good Till Cancel and Good Till Date order types at the Execution Firm, Account and Exchange levels.

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-based RMI API connectivity**
- Does your system support order routing permissioning via the RMI API: **Yes**



The screenshot shows the 'Test Case' tab selected in the navigation bar. The main content area is titled 'Steps of the test: RMI API Order Mass Action Request - Session Based'. It includes a note: '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.' Below this is a 'Purpose' section with the text: 'The purpose of this test is to verify that Client system will allow CMF to submit instructions to cancel working orders, including Good Till Cancel and Good Till Date order types at the Execution Firm, Account and Exchange levels.' A table lists the test steps with their descriptions and status (all marked as complete with green dots):

Description	Status
1 Over an RMI API connection, submit a User Request - Logon message. [Ensure SID in the message is same as the assigned SenderComp ID]	●
2 Receive and process a User Response - Logon Confirmation message	●
3 Submit Order Mass Action Request	●
4 Receive and process the Order Mass Action Report	●
5 Submit a Logout message	●
6 Receive and process a User Response - Logout Confirmation message	●

Key: ⚡ not tested ● complete ⚡ pending ⚡ failed

REFRESH

► To run an order mass action request test:

Click **START TEST** to begin.

For the RMI API Session-Based Connectivity test, submit and receive the following messages:

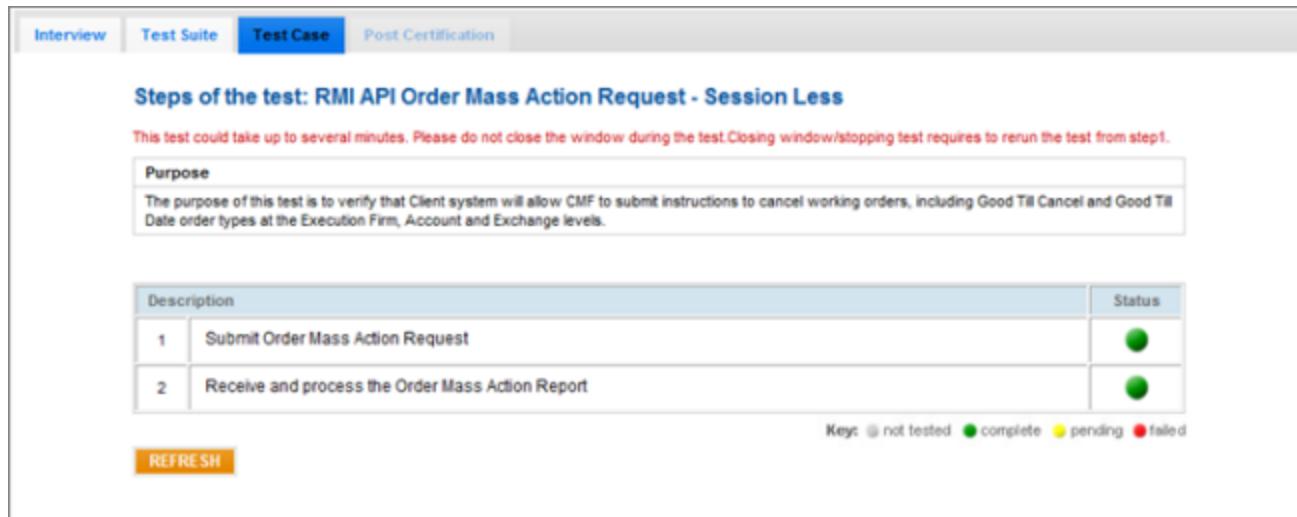
1. Submit [User Request - Logon](#)
2. Receive [User Request - Logon Confirmation](#)
3. Submit [Order Mass Action Request](#)
4. Receive [Order Mass Action Report](#)
5. Submit [Logout](#)
6. Receive [User Request - Logout Confirmation](#)

Order Mass Action Request (Session-less)

This test verifies that a client system allows a Clearing Member Firm (CMF) to submit instructions to cancel working orders, including Good Till Cancel and Good Till Date order types at the Execution Firm, Account and Exchange levels.

This test is mandatory if the [interview](#) responses are:

- What types of connectivity does your system support: **Session-less RMI API connectivity**
- Does your system support order routing permissioning via the RMI API: **Yes**



Steps of the test: RMI API Order Mass Action Request - Session Less

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 Client system will allow CMF to submit instructions to cancel working orders, including Good Till Cancel and Good Till Date order types at the Execution Firm, Account and Exchange levels.

Description	Status
1 Submit Order Mass Action Request	●
2 Receive and process the Order Mass Action Report	●

Keys: ● not tested ● complete ● pending ● failed

REFRESH

► **To run a session-less order mass action request test:**

Click **START TEST** to begin.

For the RMI API Session-Less Connectivity test, submit and receive the following messages:

1. Submit [Order Mass Action Request](#)
2. Receive [Order Mass Action Report](#)