

# RMI API Cancel Functionality

The RMI API allows CMFs to programmatically cancel working orders, including Good Till Cancel (GTC) and Good Till Date (GTD) order types.

RMI API Cancel functionality allows a CMF to submit instructions to cancel orders at the following levels:

- Account + Execution Firm + Exchange
- Account + Execution Firm + All Exchanges supported by Clearing Firm



- **Cancel instructions are submitted through the RMI API only.**
- **Cancels cannot be submitted through the API at the Product group level (e.g. GE) or Product Type (future or option) level.**

## Contents

- [Testing and Certification Requirements](#)
- [RMI API Cancel Functionality](#)
  - [Logical System Flow](#)
  - [Order Mass Action Request Submission](#)
- [Message Flow](#)
  - [Cancel Request Accepted](#)
  - [Cancel Request Rejected](#)
- [Message Specification](#)
  - [Standard Header from Client System to RMI API](#)
  - [Standard Header from RMI API to Client System](#)
  - [Order Mass Action Request \(tag 35-MsgType=CA\)](#)
  - [Order Mass Action Report \(tag 35-MsgType=BZ\)](#)
  - [Business Level Reject \(tag 35-MsgType=j\)](#)
  - [Sample Messages](#)

## Testing and Certification Requirements

RMI API certification via Autocert+ is mandatory for Clearing Firms who wish to use the API. The Risk Management Interface for cancel functionality is available for testing in New Release.

For technical development support, please contact:

### Certification Support for Electronic Trading (CSET)

312.930.2322  
[cset@cmegroup.com](mailto:cset@cmegroup.com)

For all other inquiries, please contact:

### Global Account Management (GAM)

312.634.8700 (Chicago)  
44 203 379 3754 (London)  
65 6593 5574 (Asia)  
[globalaccountmanagement@cmegroup.com](mailto:globalaccountmanagement@cmegroup.com)

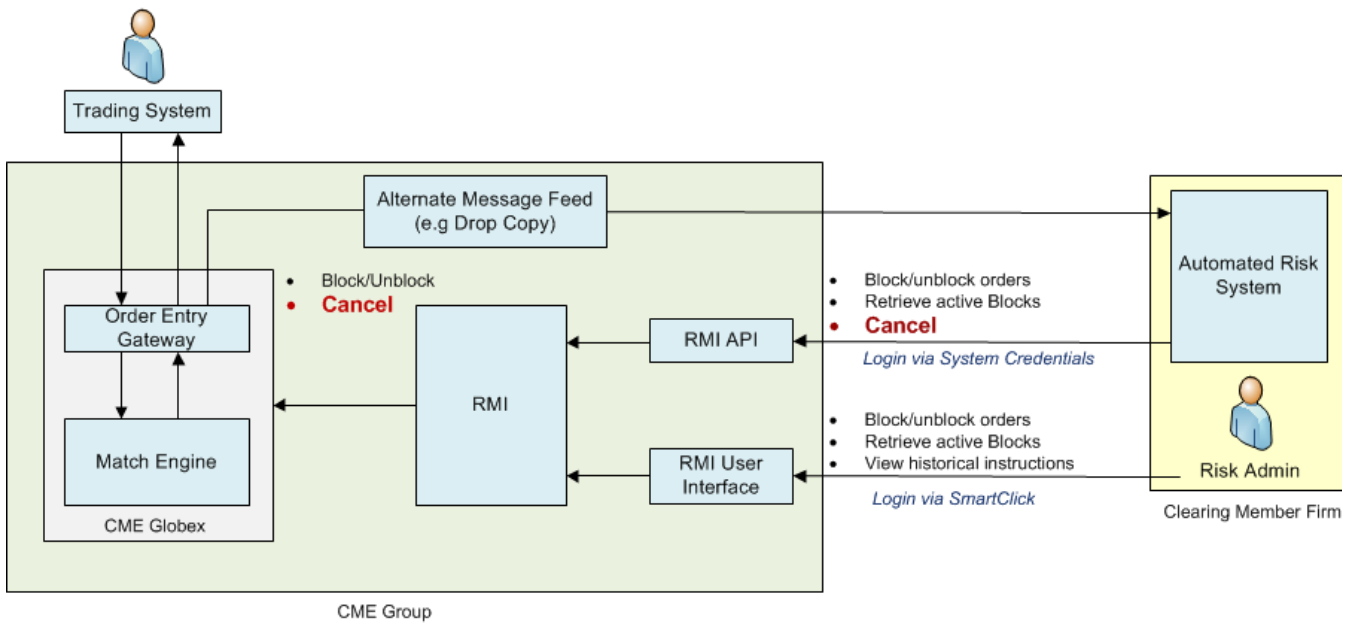
## RMI API Cancel Functionality

This topic describes the message level details for implementation of RMI API cancel functionality. For RMI API functionality, the client system must be able to process the following message types:

- Order Mass Action Request (tag 35-MsgType=CA)
- Order Mass Action Report (tag 35-MsgType=BZ)
- Business Level Reject (tag 35-MsgType=j)

### Logical System Flow

The diagram shows how the Clearing Member Firm (CMF) Risk Admin can use the RMI to cancel orders in addition to existing RMI functionality.



### Order Mass Action Request Submission

Orders can be cancelled at three levels according to the following parameters defined in the Order Mass Action Request message:

- Executing Firm
- Account Number
- Exchange (can be submitted for a given Exchange or all Exchanges)

Cancellation Level	Required	Description	FIX Tag
1 <sup>st</sup> qualifier	Y	Execution Firm	tag 49-SenderCompID (bytes 4-6)
2 <sup>nd</sup> qualifier	Y	Account Number	tag 448-PartyID
3 <sup>rd</sup> qualifier	N	Exchange (required if cancel is not for all exchanges)	tag 207-SecurityExchange



For Order Cancel, The Account value submitted in tag 448-PartyID in the Order Mass Action Request **must** match that submitted by the execution firm, **including** case sensitivity.

**Example:**

- Clearing Firm submits cancel to the RMI API for Account=AbCdE.
- Resting order for Executing Firm with Account=AbCdE is cancelled.
- Resting order for Executing Firm with Account=abcde is **NOT** cancelled and continues working in the market.

For current RMI API Block/Unblock functionality, this value is **not** case sensitive.

Risk Administrators must also specify a Client Order ID (tag 11-ClOrdID) on each request, which is used to uniquely identify the response for correlation with the request.



Orders cannot be cancelled by TraderID, tag49-SenderCompID, or tag 50-SenderSubID values.

[top](#)

### Message Flow

CMFs can cancel working orders by submitting an Order Mass Action Request message to the RMI API, which will cancel the order(s) specified in the request. Risk administrators can submit one cancel instruction per Order Mass Action Request message.

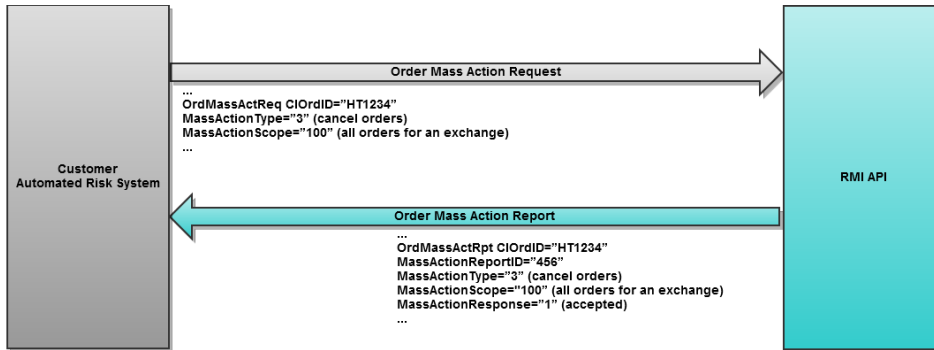
- RMI API acknowledges an accepted Order Mass Action Request (tag 35-MessageType=CA) message with an Order Mass Action Report (tag 35-MessageType=BZ) message.
- RMI API rejects an Order Mass Action Request message with a Business Level Reject (tag 35-MessageType=J) message.
- If the message contains more than one cancel instruction, RMI API rejects the order.



RMI API acknowledges acceptance of the Order Mass Action Request (tag 35-MessageType=CA) only. To obtain the iLink Execution Report (tag 35-MessageType=8) message for the canceled order, the CMF Risk Administrator must leverage the [Drop Copy](#) service.

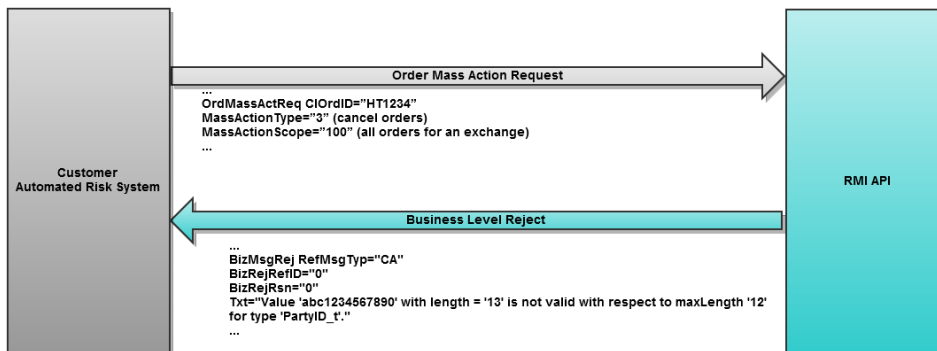
#### Cancel Request Accepted

This diagram shows the message flow for an accepted Order Mass Action Request message.



#### Cancel Request Rejected

This diagram shows the message flow for a rejected Order Mass Action Request message.



[top](#)

### Message Specification

These messages support RMI API Cancel functionality only. See the complete RMI API message layout in the [RMI API Message Specification](#).

The symbol indicates a repeating group.

#### Standard Header from Client System to RMI API

Tag	Field Name	Req	FIXML Element	Data Type	Max Length	Description
	Component <StandardHeader>		Hdr			
49	SenderCompID	Y	SID	String	7	Sender Company Identifier. Value will be provided by CME.
56	TargetCompID	Y	TID	String	7	Target Company Identifier. Supported Value: CME
57	TargetSubID	Y	TSub	String	5	Target Sub Identifier. Supported Value: RMAPI

#### Standard Header from RMI API to Client System

Tag	Field Name	Req	FIXML Element	Data Type	Max Length	Description
-----	------------	-----	---------------	-----------	------------	-------------


	Component <StandardHeader>		Hdr			
49	SenderCompID	Y	SID	String	7	Sender Company Identifier. Supported Value: CME
50	SenderSubID	Y	SSub	String	5	Sender Sub Identifier. Supported Value:RMAPI
56	TargetCompID	Y	TID	String	7	Target Company Identifier. Value will be provided by CME.

Order Mass Action Request (tag 35-MessageType=CA)

Tag	Field Name	Req	FIXML Element	Data Type	Max Length	Description
35	OrderMassActionRequest	Y	OrdMassActReq	String	2	MessageType=CA
11	ClOrdID	Y	ClOrdID	String	16	Identifier of Order Mass Action Request. It is recommended that customers send unique identifiers but uniqueness is not enforced by the API.
1373	MassActionType	Y	MassActionType	Int	1	Specifies the type of action requested.  Supported Values: 3 - Cancel Orders
1374	MassActionScope	Y	MassActionScope	Int	3	Specifies scope of Order Mass Action Request.  Supported Values: 100 – All orders for an exchange. 101 – All orders for all exchanges.
60	TransactTime	Y	TxnTm	UTCTimestamp	23	Timestamp when the business transaction represented by the message occurred. UTC Timestamps are sent in number of nanoseconds since Unix epoch synced to a master clock to microsecond accuracy.
	Component <Parties>	Y	Pty			
448	PartyID	Y	ID	String	12	Specific value for a specified Party Role.
452	PartyRole	Y	R	Int	2	Indicates the party the request is being made for.  Supported Values: 1 – Trading Member Firm. 24 – Customer Account.  Each incoming Order Mass Action Request can only have one account and one firm.
	End Component </Parties>					
	Component <Instrument>	Conditional	Instrmt			
207	SecurityExchange	Conditional	Exch	String	4	Needed to specify the product exchange for which all open orders will be cancelled. Required only when Mass Action Scope=100.
	End Component </Instrument>					

Order Mass Action Report (tag 35-MessageType=BZ)

Tag	Field Name	Req	FIXML Element	Data Type	Max Length	Description
35	OrderMassActionReport	Y	OrdMassActRpt	String	2	MessageType=BZ
11	ClOrdID	Y	ClOrdID	String	16	Pancake flip of the ClientOrder ID provided on the incoming Order Mass Action Request message.

1369	MassActionReportID	Y	MassActionReportID	String	20	Unique ID of Order Mass Action Report as assigned by RMI API.
1373	MassActionType	Y	MassActionType	Int	3	Specifies the type of action requested. This is a pancake flip of the incoming value provided on the Order Mass Action Request message.
1374	MassActionScope	Y	MassActionScope	Int	3	Specifies the scope of the Action – this is a pancake flip of the incoming value provided on the Order Mass Action Request message.
1375	MassActionResponse	Y	MassActionResponse	Int	1	Specifies the action taken by RMI API when it receives the Order Mass Action Request. Supported Values: 1 – Accepted.
1376	MassActionRejectReason	Conditional	MassActionRejectReason	Int	3	Reason Order Mass Action Request was rejected. Required if Mass Action Response=0. Supported Values: 99 – Other
58	Text	Optional	Txt	String	250	Text further explaining the Party Entitlement Definition Request Result.
	Component <Parties>	Y	Pty			
448	PartyID	Y	ID	String	12	Specific value for a specified Party Role.   The account reflects a capitalized value regardless of the inbound value.
452	PartyRole	Y	R	Int	2	Indicates the party the request is being made for. Supported Values: 1 – Trading Member Firm 24 – Customer Account
	End Component </Parties>					
	Component <Instrument>	Y	Instrmt			
207	SecurityExchange	Y	Exch	String	4	Specifies the exchange requested for which orders are to be cancelled. This is a flip of the incoming value unless it is missing or null in which case it will not be sent.
	End Component </Instrument>					

Business Level Reject (tag 35-MessageType=j)

Tag	Field Name	Req	FIXML Element	Data Type	Max Length	Description
35	BusinessMessageReject	Y	BizMsgRej	String	1	MessageType=j
372	RefMessageType	Y	RefMsgTyp	String	2	The MessageType (35) of the FIXML message being rejected.
379	BusinessRejectRefID	Y	BizRejRefID	Int	16	The value of the business-level "ID" field on the message being referenced.

380	BusinessRejectReason	Y	BizRejRsn	Int	1	Code to identify reason for a business reject message. Supported Values: 0 – Other 1 – Unknown ID 2 – Unknown Security Group 3 – Unsupported message type 4 – Application not available 5 – Conditionally required field is missing 6 – Not Authorized 100 – Request accepted but unable to construct response 101 – Request timed out 102 – Invalid Exchange 103 – Only one customer account allowed 104 – Only one executing firm allowed 105 – Only one security exchange allowed 106 – Mismatch between mass action scope and security exchange
58	Text	Optional	Txt	String	250	Reason for rejection.

[top](#)

Sample Messages

#### Order Mass Action Request

```
<?xml version="1.0" encoding="utf-8"?>
<FIXML v="FIX.5.0SP2" xv="130" s="2010-11-16" cv="CME.1000" xmlns="http://www.fixprotocol.org/FIXML-5-0-SP2">
  <OrdMassActReq ClOrdID="HT1234" MassActionType="3" MassActionScope="100" TxnTm="2012-04-
10T12:00:00.253">
    <Hdr SID="CMF" TID="CME" TSub="RMAPI"/>
    <Pty ID="330" R="1"/>
    <Pty ID="123456" R="24"/>
    <Instrmt Exch="XCME"/>
  </OrdMassActReq>
</FIXML>
```

### Order Mass Action Report

```
<?xml version="1.0" encoding="utf-8"?>
<FIXML v="FIX.5.0SP2" xv="130" s="2010-11-16" cv="CME.1000" xmlns="http://www.fixprotocol.org/FIXML-5-0-SP2">
  <OrdMassActRpt ClOrdID="HT1234" MassActionReportID="456" MassActionType="3" MassActionScope="100"
    MassActionResponse="1" >
    <Hdr SID="CME" SSub="RMAPI" TID="CMF"/>
    <Pty ID="330" R="1"/>
    <Pty ID="123456" R="24"/>
    <Instrmt Exch="XCME"/>
  </OrdMassActRpt>
</FIXML>
```

### Business Level Reject

```
<FIXML v="FIX.5.0SP2" xv="130" cv="CME.1000" s="2010-11-16" xmlns="http://www.fixprotocol.org/FIXML-5-0-SP2">
  <BizMsgRej RefMsgTyp="CA" BizRejRefID="0" BizRejRsn="0" Txt="Value 'abc1234567890' with length = '13' is not facet-valid with respect to
    maxLength '12' for type 'PartyID_t'.">
    <Hdr SID="CME" TID="CMC" SSub="RMAPI"/>
  </BizMsgRej>
</FIXML>
```



All risk management services are offered by CME Group on a best-efforts basis. Clearing Member Firm (CMF) Risk Administrators only have access to the Execution Firms and Exchanges that they guarantee. Any attempt to take action on an Executing Firm and Exchange assigned to a different CMF will be rejected.

[top](#)