Protocol for WEB API

RFQ Application

Version 1.1.5

National Stock Exchange of India Ltd
Exchange Plaza, Plot No. C/1, G Block,
Bandra-Kurla Complex, Bandra (E),
Mumbai - 400 051

NSE Confidential

Revision History

Date	Change Description	Edited By	Version
15-May-21	Initial Version		1.0.0
21-Jun-21	Review and implementation observations		1.0.1
21-Nov-22	Changes for broker model		1.1.0
08-Dec-22	Broker model final API Price / Yield calculator APIs		1.1.1
14-Jan-23	Introduction Chapter : Added API error handling details. POST /rest/v1/login : New field "brokerEnablementType" in response POST /rest/v1/negotiation/terminate : New field "role" in request POST /rest/v1/deal/propose : new field "role" in request POST /rest/v1/isins/all : new field “type” in response API Description, field description and field mandatory attributes updated for following apis POST rest/v1/rfqmaster/add/isin POST /rest/v1/rfqmaster/all/isin POST /rest/v1/rfqmaster/add/open POST /rest/v1/rfqmaster/update/open POST /rest/v1/negotiation/add POST /rest/v1/negotiation/update POST /rest/v1/negotiation/withdrawquote POST /rest/v1/negotiation/accept POST /rest/v1/deal/propose POST /rest/v1/isins/all Added new API GET /rest/v1/market/timings in chapter "Other API" Changes in authentication mechanism for the call back apis. Removed Appendix A on password policy		1.1.2

09-Mar-23	Added “quoteTime” in RFQ response structure Added “proposedBySide” and “proposedTime” fields in Negotiation response structure. Altered field descriptions.		1.1.3
25-May-23	Increased number of decimal places from 6 to 10 in all fields for ‘Value in crores’ in following group of APIs Turnover Limits Management APIs Portfolio Limits Management APIs Issue Type Settings APIs RFQ Management APIs Negotiation APIs Deal Confirmation APIs		1.1.4
30-Apr-24	Changes for handling CDMDF RFQs. New **optional** field segment added in request and response structures for RFQ. Impacted APIs are as follows POST /rest/v1/rfqmaster/add/isin : Request & Response POST /rest/v1/rfqmaster/update/isin : Response POST /rest/v1/rfqmaster/all/isin : Response POST /rest/v1/rfqmaster/marketwatch/isin : Response POST/rest/v1/rfqmaster/withdraw : Response POST /v1/notification : Request POST /rest/v1/deal/propose: typo error in description request of ngId Changes in Trade Splits. Introduced Proposer Actual Participant Code,Counter Actual Participant Code. Also change in clientCode need to pass as **INST*** in case of INST. Impacted APIs are as follows POST /rest/v1/rfqmaster/add/isin POST /rest/v1/rfqmaster/add/open POST /rest/v1/negotiation/add		1.1.5

Table of Contents

Revision History.. 2
Introduction.. 6
General Instructions.. 6
Common Error Response... 7
Environment Details... 8
Enabling API... 8
Common API... 9
POST /rest/v1/login.. 9
GET /rest/v1/logout... 10
Participant Group Management API.. 11
POST /rest/v1/partgrp/add.. 11
POST /rest/v1/partgrp/update... 11
POST /rest/v1/partgrp/all.. 12
Turnover Limits Management API... 14
POST /rest/v1/partlimit/add.. 14
POST /rest/v1/partlimit/update... 16
POST /rest/v1/partlimit/all.. 16
Portfolio Limits Management API.. 19
POST /rest/v1/portfoliolimit/add.. 19
POST /rest/v1/portfoliolimit/update... 21
POST /rest/v1/portfoliolimit/all.. 22
Issue Type Settings API.. 25
POST /rest/v1/partisstyp/update.. 25
GET /rest/v1/partisstype/all.. 26
RFQ Management API.. 27
POST /rest/v1/rfqmaster/add/isin... 27
POST /rest/v1/rfqmaster/update/isin.. 31
POST /rest/v1/rfqmaster/all/isin... 33
POST /rest/v1/rfqmaster/marketwatch/isin.. 35
POST /rest/v1/rfqmaster/add/open.. 36

POST /rest/v1/rfqmaster/update/open.........39
POST /rest/v1/rfqmaster/all/open.........40
POST /rest/v1/rfqmaster/marketwatch/open.........42
POST/rest/v1/rfqmaster/withdraw.........43
Negotiation API.........46
POST /rest/v1/negotiation/add.........46
POST /rest/v1/negotiation/update.........51
POST /rest/v1/negotiation/withdrawquote.........53
POST /rest/v1/negotiation/terminate.........55
POST /rest/v1/negotiation/accept.........56
POST /rest/v1/negotiation/all.........59
Deal Confirmation API.........62
POST /rest/v1/deal/propose.........62
POST /rest/v1/deal/acceptreject.........64
POST /rest/v1/deal/tradesplit.........66
POST /rest/v1/deal/changeclient.........68
Other API.........77
GET /rest/v1/participants/all.........77
POST /rest/v1/isins/all.........77
POST /rest/v1/rfqmaster/calcprice.........79
POST /rest/v1/rfqmaster/calcyield.........80
GET /rest/v1/market/timings.........81
Callbacks API.........83
POST /v1/notification.........83
Appendix A - Code List.........86
Ratings.........86
Sectors.........86

Introduction

This document describes the Web API's to programmatically access and exchange data with RFQ Platform(HOST system).
The document outlines the messaging protocols and structures for developing such interface.

General Instructions

1. Following headers need to be provided in all API calls
    - **Content-Type**: This header should be provided in all requests with method as "POST". Header value should be "application/json".
    - **loginKey**: This header should be provided in all requests except API "POST /rest/v1/login". Header value should be the token value received in successful login response (see below).
2. Path parameters and query parameters in the URL's must be encoded using percent encoding. (Refer http://www.w3schools.com/tags/ref_urlencode.asp for details)
3. All request and response messages are in JSON (Javascript Object Notation) format. (Refer http://www.json.org/ for details).
4. Some of the key specifications related to JSON and standards followed for the API's are as follows
    - JSON is built on 2 structures. Map containing key value pairs and an ordered list of values.
    - A value could be boolean (true / false), number, decimal, String or a structure (List or Object).
    - Object or key value pair structure consists of keys which are strings and values of any of the above types. E.g. {"name":"Amit", "age":25}
    - List contains list of values. E.g. ["Amit", "Ajay", "Vikas"]
    - A Boolean has only 2 values true or false.
    - String values are enclosed in single quote or double quotes. e.g. "name", "Amit", "Pending"
    - Numbers and decimals are represented without any thousand - separator character. Decimal indicator is dot (".")
    - Numbers have an optional maximum number of digits. If not specified then it is defaulted to 18.
    - Decimals have 2 mandatory length parameters. The first length parameter indicates number of digits in the whole part (before decimal place) and the second length parameter indicates number of digits in the decimal part (after decimal place).
    - All dates, times and datetimes are represented as strings and in Indian standard time. Dates are formatted using format "dd-MMM-yyyy" (E.g. 01-

Jan-2018). Time are formatted as “hh24:mm:ss”. Date times are formatted as “dd-MMM-yyyy hh24:mm:ss” (E.g. 01-Jan-2016 15:30:00).

5. All URLs for API will be always in lower case.
6. All JSON field names will follow camel-hump style of naming. A field with multiple words would be concatenated without spaces. All characters will be in lower case. First characters of words other than the first word in the field name will be in upper case. For e.g. field for “Order Number” could be represented by field name “orderNumber”. Other examples are “firstName”, “lastName”.
7. In case of JSONs representing an object or a key-value pair, keys with null values could be omitted from the JSON.

Common Error Response

All API’s can throw errors in the form of a common error response JSON along with HTTP status code. HTTP Status codes are as follows

Status Code	Description
400	Indicates a validation / business logic error
401	Indicates that the login session is not established or has expired. In case 2 sessions are created using same login credentials, then the old session will be expired. Also if a session is inactive for a predefined amount of time then the session will be expired.
404	Resource does not exist
500	Any other application error. Such errors are to be reported to the support desk.

Common Error Response JSON

Field	Type	Description
code	Number	Http Status Code. See above
messages	Array	In case of errors pertaining to parsing of input JSONS, each element of the array will be a structure (see”Field Error Structure” below) In case of errors pertaining to rule validation failures, each element of the array will be a “String” (maximum length 100) depicting the error.

<u>Field Error Structure</u>

Field	Type	Description
field	String(100)	Input JSON field name.
msg	String(100)	Field validation error message.

In almost all APIs 2 levels of validations are performed. In first level the input JSON message is validated for structure. Every field is validated for datatype, length and any other constraints specified for that field. Typically all field level validation errors are accumulated and given in a single response containing field wise errors using the "Field Error Structure".

In the 2nd level of validation for the APIs various functional rules are verified and error is thrown immediately upon violation of the functional rule. Typically these errors are not progressive I.e. the API skips further validation and processing immediately after occurrence of first validation failure.

Sample Response

```
{
      "code":400,
      "messages":["Access Denied"]
}
```

```
{
    "code": 400,
    "messages": [
        {
            "msg": "Participants: No of items in the list should be greater than or equal to 1",
            "field": "participantList"
        }
    ]
}
```

Environment Details

Base URL for all APIs will be as follows

Testing Environment: https://bricsonlinereguat.nseindia.com/rfqnewv27

Live Environment: https://bricsonline.nseindia.com/rfq

Enabling API

To access the APIs, create an API enabled user in CBRICS system. Refer WEB_CBRICS_PROTOCOL_xxx.pdf for details.

Participants may optionally implement call back APIs for receiving RFQ notifications. Participants are required to provide a call back base URL to the exchange. The base URL can be different from one provided for CBRICS callbacks.

Common API

POST /rest/v1/login

This API authenticates the user and creates a session for the user in the Host System. The session is identified by an alphanumeric login key in the response.

Method	POST
Url	<baseurl>/rest/v1/login
Request	JSON
Response	JSON

Request JSON

Field	Type	Mandatory	Description
domain	String(10)	Yes	Participant/Entity Code
login	String(10)	Yes	Login Id
password	String(20)	Yes	Password.

Sample Request

```
{
	"domain": "PART1",
	"login": "PART1",
	"password": "a#12G34h4r5t"
}
```

Response JSON

Field	Type	Mandatory	Description
domain	String(10)	Yes	Participant Code. Value same as in input field “domain”
login	String(10)	Yes	Login Id. Same as input
status	String(1)	Yes	S = Success F=Failed. Only reason field will be appended in the response P=Password expired. Only reason field will be appended in the response. Password can be changed using CBRICS APIs or using CBRICS portal.
reason	String(100)	No	Login fail reason. FAIL Reasons : • Invalid Login Id/Password. • User has been disabled due to incorrect password attempts. • User has been disabled.
loginKey	String(50)	Conditional	Login Key. This key is to be set in “loginKey” header for all subsequent requests.

firstName	String(50)	Conditional	User first name
middleName	String(50)	Conditional	User middle name
lastName	String(50)	Conditional	User last name
lastLogin	Number	No	Last login date time (expressed as millis since epoch time i.e. 01-jan-1970)
serverTime	Number	Conditional	Server time at the time of login. (expressed as millis since epoch time i.e. 01-jan-1970)
broker	Boolean	Conditional	True – If participant is a broker False – If participant is not a broker
brokerEnablementType	String(1)	Conditional	Valid only if broker=true R = RFQ Broker O = OBPP Broker

Sample Response – Login Success

```
{
	"status":"S",
	"reason":null,
	"loginKey":"122f2f48a91c94808a93",
	"domain":"PART1",
	"login":"PART1",
	"firstName":"Amit"
	"middleName":null,
	"lastName":null,
	"lastLogin": 1525773311206,
	"serverTime":1461918333567,
	"broker":true,
	"brokerEnablementType":"O"
}
```

Sample Response – Login Failed

```
{
	"domain":"PART1",
	"login":"PART1",
	"status":"F",
	"reason":"Invalid Login Id/Password"
}
```

Sample Response – Password Expired

```
{
	"domain":"PART1",
	"login":"PART1",
	"status":"P",
	"reason":"Change Password"
}
```

GET /rest/v1/logout

This API closes the current session in the HOST system

Method	GET
Url	<baseurl>/rest/v1/logout
Request	NONE
Response	JSON

Response JSON

Field	Type	Mandatory	Description
status	String(1)	Yes	C = Closed

Sample Response

```
{
      "status": "C"
}
```

Participant Group Management API

POST /rest/v1/partgrp/add

This API allows creation of new participant group .

Method	POST
Url	<baseurl>/rest/v1/partgrp/add
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
name	String(100)	Yes	Participant group name
participantList	List<String(30)>	Yes	List of constituent participant codes. Minimum 1

Sample Request

```
{
	"name": "Mutual Funds",
	"participantList": [
		"MF001",
		"MF002"
	]
}
```

Response JSON

Map containing following fields in addition to all fields in Request JSON

Field	Type	Mandatory	Description
id	Number	Yes	Unique system generated id for participant group.

Sample Success Response

```
{
	"id": "1256",
	"name": "Mutual Funds",
	"participantList": [
		"MF001",
		"MF002"
	]
}
```

POST /rest/v1/partgrp/update

This API allows modifying participant group. API allows changing name of existing group. API also allows adding and removal of participants from constituent participant list

Method	POST
Url	<baseurl>/rest/v1/partgrp/update
Request	JSON
Response	JSON

Request JSON

Map. Structure same as Response JSON in POST /rest/v1/partgrp/add

Response JSON

Map. Structure same as Response JSON in POST /rest/v1/partgrp/add

POST /rest/v1/partgrp/all

This API returns a list of all participant groups created by logged in users participant.

Method	POST
Url	<baseurl>/rest/v1/partgrp/all
Request	JSON
Response	JSON

Request JSON

Map containing following fields. Fields are optional and are used to filter response

Field	Type	Mandatory	Description
id	Number	No	Filter to fetch a record corresponding to the id.
name	String(100)	No	Filter to fetch participant groups whose name contains the given value. Matching of text is case insensitive.

data.

Sample Request

```
{
      "name": "Mutual"
}
```

Sample Request

```
{
      "id": 1256
}
```

Sample Request

```
{
}
```

Response JSON

List of Map. Each Map represents a participant group. Structure of Map same as Response JSON in POST /rest/v1/partgrp/add

Sample Success Response


```
[
	{
		"id": "1256",
		"name": "Mutual Funds",
		"participantList": [
			"MF001",
			"MF002"
		]
	},
	{
		"id": "1276",
		"name": "HNIs",
		"participantList": [
			"PART001",
			"PART002"
		]
	}
]
```

Turnover Limits Management API

POST /rest/v1/partlimit/add

This API allows creation of new limit record .

Method	POST
Url	<baseurl>/rest/v1/partlimit/add
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
limitType	String(1)	Yes	Filter for limit type S = Self (limit to be applied on self) D = Dealer (limit to be applied on a particular user) C = Counter Party (limit on counter party) B = Broker (limit on a particular broker bidding on behalf of the participant). Valid if the participant is not broker. X = Client (limit on a particular client of the logged in broker. Valid if the participant is a broker.
global	String(1)	No	Flag to indicate if the limit record is global i.e. default for all counter parties or dealers (based on limittype) Y = Global null = Not global
counterPartyCode	String(30)	Conditional	Counter party code. Valid only if global is null. Mandatory only if limit type = Counter Party
loginId	String(30)	Conditional	Dealer login id. Valid only if global is null. Mandatory only if limit type = Dealer
brokerCode	String(30)	Conditional	Broker Code. Valid only if global is null. Mandatory only if limit type = Broker
clientCode	String(30)	Conditional	Client Code. Valid only if global is null. Mandatory only if limit type = Client

settlementType	String(1)	No	Settlement type for which the limit is defined 0 = T + 0 1 = T + 1 null = Across all settlement types
dayBuyLimitInfinity	String(1)	No	Flag to indicate buy limit is unlimited. Y = Unlimited null = Limited
dayBuyLimit	Decimal(10,10)	No	Day Buy Limit in crores. Valid only if dayBuyLimit = Limited (null)
daySellLimitInfinity	String(1)	No	Flag to indicate Sell limit is unlimited. Y = Unlimited null = Limited
daySellLimit	Decimal(10,10)	No	Day Sell Limit in crores. Valid only if dayBuyLimit = Limited (null)
dayGrossLimitInfinity	String(1)	No	Flag to indicate Gross limit is unlimited. Y = Unlimited null = Limited
dayGrossLimit	Decimal(10,10)	No	Day Gross Limit in crores. Valid only if dayBuyLimit = Limited (null)

Sample Request

```
{
	"limitType" : "S",
	"global" : null,
	"counterPartyCode" : null,
	"loginId" : null,
	"brokerCode" : null,
	"clientCode" : null,
	"settlementType" : 0,
	"dayBuyLimitInfinity" : "Y",
	"dayBuyLimit" : null,
	"daySellLimitInfinity" : null,
	"daySellLimit" : 100,
	"dayGrossLimitInfinity" : null,
	"dayGrossLimit" : null
}
```

Response JSON

Map containing following fields in addition to all fields in Request JSON

Field	Type	Mandatory	Description
id	Number	Yes	Unique system generated id for limit record.
buyUtilization	Decimal(10,10	No	Day buy limit utilization in crores.

	)		
sellUtilization	Decimal(10,10)	No	Day sell limit utilization in crores.
grossUtilization	Decimal(10,10)	No	Day gross limit utilization in crores.

Sample Success Response


```
{
	"id" : 101,
	"limitType" : "S",
	"global" : null,
	"counterPartyCode" : null,
	"loginId" : null,
	"brokerCode" : null,
	"clientCode" : null,
	"settlementType" : 0,
	"dayBuyLimitInfinity" : "Y",
	"dayBuyLimit" : null,
	"daySellLimitInfinity" : null,
	"daySellLimit" : 100,
	"dayGrossLimitInfinity" : null,
	"dayGrossLimit" : null,
	"buyUtilization" : 0,
	"sellUtilization" : 14.55,
	"grossUtilization" : 14.55
}
```


POST /rest/v1/partlimit/update

This API allows modifying limit.

Method	POST
Url	<baseurl>/rest/v1/partlimit/update
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
id	Number	Yes	Unique system generated id for limit record.
limitType	String(1)	Yes	Filter for limit type S = Self D = Dealer C = Counter Party
dayBuyLimitInfinity	String(1)	No	Flag to indicate buy limit is unlimited. Y = Unlimited null = Limited
dayBuyLimit	Decimal(10,10	No	Day Buy Limit in crores. Valid only

	)		if dayBuyLimit = Limited (null)
daySellLimitInfinity	String(1)	No	Flag to indicate Sell limit is unlimited. Y = Unlimited null = Limited
daySellLimit	Decimal(10,10)	No	Day Sell Limit in crores. Valid only if dayBuyLimit = Limited (null)
dayGrossLimitInfinity	String(1)	No	Flag to indicate Gross limit is unlimited. Y = Unlimited null = Limited
dayGrossLimit	Decimal(10,10)	No	Day Gross Limit in crores. Valid only if dayBuyLimit = Limited (null)

Response JSON

Map. Structure same as Response JSON in POST /rest/v1/partlimit/add

POST /rest/v1/partlimit/all

This API returns a list of all limit records created by logged in users participant.

Method	POST
Url	<baseurl>/rest/v1/partlimit/all
Request	JSON
Response	JSON

Request JSON

Map containing following fields. Fields are optional and are used to filter response data.

Field	Type	Mandatory	Description
id	Number	No	Filter to fetch record identified by id.
limitType	String(1)	No	Filter for limit type S = Self D = Dealer C = Counter Party B = Broker X = Client
counterPartyCode	String(30)	No	Filter for counter party code.
loginId	String(30)	No	Filter for dealer login id.
brokerCode	String(30)	No	Filter for broker code.
clientCode	String(30)	No	Filter for client code.

Sample Request

```
{
	"limitType": "D",
	"loginId": "USER001s"
}
```

Sample Request

```
{
	"id": 101
}
```

Response JSON

List of Map. Each Map represents a limit record. Structure of Map same as Response JSON in POST /rest/v1/partlimit/add

Sample Success Response

```
[
	{
		"id" : 101,
		"limitType" : "S",
		"global" : null,
		"counterPartyCode" : null,
		"loginId" : null,
		"brokerCode" : null,
		"clientCode" : null,
		"settlementType" : 0,
		"dayBuyLimitInfinity" : "Y",
		"dayBuyLimit" : null,
		"daySellLimitInfinity" : null,
		"daySellLimit" : 100,
		"dayGrossLimitInfinity" : null,
		"dayGrossLimit" : null,
		"buyUtilization" : 0,
		"sellUtilization" : 14.55,
		"grossUtilization" : 14.55
	},
	{
		"id" : 102,
		"limitType" : "C",
		"global" : null,
		"counterPartyCode" : "MF001",
		"loginId" : null,
		"brokerCode" : null,
		"clientCode" : null,
		"settlementType" : null,
		"dayBuyLimitInfinity" : "Y",
		"dayBuyLimit" : null,
		"daySellLimitInfinity" : null,
		"daySellLimit" : 100,
		"dayGrossLimitInfinity" : null,
		"dayGrossLimit" : null,
		"buyUtilization" : 0,
		"sellUtilization" : 4.55,
		"grossUtilization" : 4.55
	},
	{
		"id" : 103,
		"limitType" : "D",
```

```
            "global" : "Y",
            "counterPartyCode" : null,
            "loginId" : "USER001",
            "brokerCode" : null,
            "clientCode" : null,
            "settlementType" : 0,
            "dayBuyLimitInfinity" : "Y",
            "dayBuyLimit" : null,
            "daySellLimitInfinity" : null,
            "daySellLimit" : 100,
            "dayGrossLimitInfinity" : null,
            "dayGrossLimit" : null,
            "buyUtilization" : 0,
            "sellUtilization" : 24.55,
            "grossUtilization" : 24.55
      }
]
```

Portfolio Limits Management API

POST /rest/v1/portfoliolimit/add

This API allows creation of new portfolio limit record .

Method	POST
Url	<baseurl>/rest/v1/portfoliolimit/add
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
limitType	String(1)	Yes	Filter for limit type S = Isin I = Issuer
global	String(1)	No	Flag to indicate if the limit record is global i.e. default for all isins or issuers (based on limittype) Y = Global null = Not global
isin	String(12)	Conditional	ISIN. Valid only if global is null. Mandatory only if limit type = Isin
issuer	String(100)	Conditional	Issuer Name. Valid only if global is null. Mandatory only if limit type = Issuer
valueType	String(1)	No	Type of limit Q = Quantity V = Value
dayBuyLimitInfinity	String(1)	No	Valid only if valueType = Quantity Flag to indicate buy quantity limit is unlimited. Y = Unlimited null = Limited
dayBuyLimit	Number	No	Valid only if valueType = Quantity and dayBuyLimitInfinity = Limited (null) Day Buy Quantity Limit.
dayBuyValueLimitInfinity	String(1)	No	Valid only if valueType = Value Flag to indicate buy Value limit is unlimited. Y = Unlimited null = Limited
dayBuyValueLimit	Decimal(10,10	No	Valid only if valueType = Value and

	)		dayBuyValueLimitInfinity= Limited (null) Day Buy Value Limit in crores.
daySellLimitInfinity	String(1)	No	Valid only if valueType = Quantity Flag to indicate Sell quantity limit is unlimited. Y = Unlimited null = Limited
daySellLimit	Number	No	Valid only if valueType = Quantity and daySellLimitInfinity = Limited (null) Day Sell Quantity Limit.
daySellValueLimitInfinity	String(1)	No	Valid only if valueType = Value Flag to indicate Sell Value limit is unlimited. Y = Unlimited null = Limited
daySellValueLimit	Decimal(10,10)	No	Valid only if valueType = Value and daySellValueLimitInfinity = Limited (null) Day Sell Quantity Limit in crores.
basePrice	Decimal(3,4)	No	Valid only for limitType=Isin Base price to be used for determining price band using issue limit type settings (see below)
baseYield	Decimal(3,4)	No	Valid only for limitType=Isin Base yield to be used for determining price band using issue limit type settings (see below)

<u>Sample Request</u>


```
{
      "limitType" : "S",
      "global" : null,
      "isin" : "INE123456789",
      "issuer" : null,
      "valueType" : "Q",
      "dayBuyLimitInfinity" : "Y",
      "dayBuyLimit" : null,
      "dayBuyValueLimitInfinity" : null,
      "dayBuyValueLimit" : null,
      "daySellLimitInfinity" : null,
      "daySellLimit" : 0,
      "daySellValueLimitInfinity" : null,
      "daySellValueLimit" : null,
      "basePrice" : 102.1250,
      "baseYield" : 5.6655
}
```

Response JSON

Map containing following fields in addition to all fields in Request JSON

Field	Type	Mandatory	Description
id	Number	Yes	Unique system generated id for limit record.
buyUtilization	Number	No	Day buy quantity limit utilization.
sellUtilization	Number	No	Day sell quantity limit utilization.
buyValueUtilization	Decimal(10,10)	No	Day buy value limit utilization in crores.
sellValueUtilization	Decimal(10,10)	No	Day sell value limit utilization in crores.

Sample Success Response


```
{
      "id" : 301,
      "limitType" : "S",
      "global" : null,
      "isin" : "INE123456789",
      "issuer" : null,
      "valueType" : "Q",
      "dayBuyLimitInfinity" : "Y",
      "dayBuyLimit" : null,
      "dayBuyValueLimitInfinity" : null,
      "dayBuyValueLimit" : null,
      "daySellLimitInfinity" : null,
      "daySellLimit" : 0,
      "daySellValueLimitInfinity" : null,
      "daySellValueLimit" : null,
      "basePrice" : 102.1250,
      "baseYield" : 5.6655,
      "buyUtilization" : 0,
      "buyValueUtilization" : 0.00,
      "sellUtilization" : 0,
      "sellValueUtilization" : 0.00
}
```


POST /rest/v1/portfoliolimit/update

This API allows modifying limit.

Method	POST
Url	<baseurl>/rest/v1/portfoliolimit/update
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
limitType	String(1)	Yes	Filter for limit type

			S = Isin I = Issuer
global	String(1)	No	Flag to indicate if the limit record is global i.e. default for all isins or issuers (based on limittype) Y = Global null = Not global
valueType	String(1)	No	Type of limit Q = Quantity V = Value
dayBuyLimitInfinity	String(1)	No	Valid only if valueType = Quantity Flag to indicate buy quantity limit is unlimited. Y = Unlimited null = Limited
dayBuyLimit	Number	No	Valid only if valueType = Quantity and dayBuyLimitInfinity = Limited (null) Day Buy Quantity Limit.
dayBuyValueLimitInfinity	String(1)	No	Valid only if valueType = Value Flag to indicate buy Value limit is unlimited. Y = Unlimited null = Limited
dayBuyValueLimit	Decimal(10,10)	No	Valid only if valueType = Value and dayBuyValueLimitInfinity= Limited (null) Day Buy Value Limit in crores.
daySellLimitInfinity	String(1)	No	Valid only if valueType = Quantity Flag to indicate Sell quantity limit is unlimited. Y = Unlimited null = Limited
daySellLimit	Number	No	Valid only if valueType = Quantity and daySellLimitInfinity = Limited (null) Day Sell Quantity Limit.
daySellValueLimitInfinity	String(1)	No	Valid only if valueType = Value Flag to indicate Sell Value limit is unlimited. Y = Unlimited null = Limited
daySellValueLimit	Decimal(10,10)	No	Valid only if valueType = Value and daySellValueLimitInfinity = Limited (null)

			Day Sell Quantity Limit in crores.
basePrice	Decimal(3,4)	No	Valid only for limitType=Isin Base price to be used for determining price band using issue limit type settings (see below)
baseYield	Decimal(3,4)	No	Valid only for limitType=Isin Base yield to be used for determining price band using issue limit type settings (see below)

Response JSON

Map. Structure same as Response JSON in POST /rest/v1/portfoliolimit/add

POST /rest/v1/portfoliolimit/all

This API returns a list of all portfolio limit records created by logged in users participant.

Method	POST
Url	<baseurl>/rest/v1/portfoliolimit/all
Request	JSON
Response	JSON

Request JSON

Map containing following fields. Fields are optional and are used to filter response data.

Field	Type	Mandatory	Description
id	Number	No	Filter to fetch record identified by id.
limitType	String(1)	No	Filter for limit type S = ISIN I = Issuer
isin	String(12)	No	Filter for ISIN.
issuer	String(100)	No	Filter for issuer.

Sample Request

```
{
      "limitType": "S",
      "isin": "INE123456789"
}
```

Sample Request

```
{
      "id": 201
}
```

Response JSON

List of Map. Each Map represents a limit record. Structure same as Response JSON in POST /rest/v1/portfoliolimit/add

Sample Success Response


```
[
	{
		"id" : 301,
		"limitType" : "S",
		"global" : null,
		"isin" : "INE123456789",
		"issuer" : null,
		"valueType" : "Q",
		"dayBuyLimitInfinity" : "Y",
		"dayBuyLimit" : null,
		"dayBuyValueLimitInfinity" : null,
		"dayBuyValueLimit" : null,
		"daySellLimitInfinity" : null,
		"daySellLimit" : 0,
		"daySellValueLimitInfinity" : null,
		"daySellValueLimit" : null,
		"basePrice" : 102.1250,
		"baseYield" : 5.6655,
		"buyUtilization" : 0,
		"buyValueUtilization" : 0.00,
		"sellUtilization" : 0,
		"sellValueUtilization : 0.00
	},
	{
		"id" : 302,
		"limitType" : "I",
		"global" : "Y",
		"isin" : null,
		"issuer" : null,
		"valueType" : "V",
		"dayBuyLimitInfinity" : null,
		"dayBuyLimit" : null,
		"dayBuyValueLimitInfinity" : null,
		"dayBuyValueLimit" : null,
		"daySellLimitInfinity" : null,
		"daySellLimit" : null,
		"daySellValueLimitInfinity" : null,
		"daySellValueLimit" : 1000,
		"basePrice" : null,
		"baseYield" : null,
		"buyUtilization" : 0,
		"buyValueUtilization" : 0.00,
		"sellUtilization" : 0,
		"sellValueUtilization : 0.00
	}
]
```

Issue Type Settings API

POST /rest/v1/partisstyp/update

This API allows updation of issue type wise settings

Method	POST
Url	<baseurl>/rest/v1/partisstyp/add
Request	JSON
Response	JSON

Request JSON

Map containing following fields.

Field	Type	Mandatory	Description
issueCategory	String(10)	Yes	Issue Category CP CD CB = Bonds SD GS = Gsec / Tbill / SL
maxSingleTransactionValueLimit	Decimal(10,10)	Yes	Maximum Single Transaction Value Limit in crores.
maxStvViolationAction	String(1)	Yes	Action to be taken upon single transaction value limit breach W = Warn B = Block
yieldBandType	String(1)	Yes	Yield Band Type D = Delta Absolute P = Delta Percentage
yieldLowerBand	Decimal(3,4)	No	Yield Lower Band
yieldUpperBand	Decimal(3,4)	No	Yield Upper Band
yieldViolationAction	String(1)	Yes	Action to be taken upon yield band breach W = Warn B = Block
priceBandType	String(1)	Yes	Yield Band Type D = Delta Absolute P = Delta Percentage
priceLowerBand	Decimal(3,4)	No	Yield Lower Band
priceUpperBand	Decimal(3,4)	No	Yield Upper Band
priceViolationAction	String(1)	Yes	Action to be taken upon yield band breach W = Warn B = Block

Sample Request

```
{
	"issueCategory" : "CB",
	"maxSingleTransactionValueLimit" : 50.0,
	"maxStvViolationAction" : "W",
	"yieldBandType" : "D",
	"yieldLowerBand" : 0.05,
	"yieldUpperBand" : 0.05,
	"yieldViolationAction" : "B",
	"priceBandType" : "D",
	"priceLowerBand" : null,
	"priceUpperBand" : null,
	"priceViolationAction" : "B"
}
```

Response JSON

Map. Structure same Request Json.

GET /rest/v1/partisstype/all

This API returns a list of issue type wise settings for the participant corresponding to logged in user.

Method	GET
Url	<baseurl>/rest/v1/partisstype/all
Response	JSON

Response JSON

List of Map. Each Map represents a limit record. Structure same as Request JSON in POST /rest/v1/partisstype/update

Sample Success Response

```
[
	{
		"issueCategory" : "CB",
		"maxSingleTransactionValueLimit" : 50.0,
		"maxStvViolationAction" : "W",
		"yieldBandType" : "D",
		"yieldLowerBand" : 0.05,
		"yieldUpperBand" : 0.05,
		"yieldViolationAction" : "B",
		"priceBandType" : "D",
		"priceLowerBand" : null,
		"priceUpperBand" : null,
		"priceViolationAction" : "B"
	},
	{
		"issueCategory" : "CP",
		"maxSingleTransactionValueLimit" : 10.0,
		"maxStvViolationAction" : "W",
		"yieldBandType" : "D",
		"yieldLowerBand" : 0.05,
		"yieldUpperBand" : 0.05,
		"yieldViolationAction" : "B",
```

```
            "priceBandType" : "P",
            "priceLowerBand" : 1.25,
            "priceUpperBand" : 1.25,
            "priceViolationAction" : "B"
      }
]
```

RFQ Management API

POST /rest/v1/rfqmaster/add/isin

This API allows creation of new RFQ for a specific ISIN.

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/add/isin
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
segment	String(1)	No	Segment R = Normal RFQ (Default if not provided) C = CDMDF RFQ
isin	String(12)	Yes	ISIN
participantCode	String(30)	Yes	Always logged in user's participant code
dealType	String(1)	Yes	Deal Type D = Direct B = Brokered
clientCode	String(30)	Yes	Client code of the RFQ initiator. Should be same as participantCode in case of participants For brokers if dealType is direct then it should be same as the participantCode. If dealType is brokered then it should code of registered (institutional) participant or un registered (retail) participant. If dealType is brokered then clientCode value need to pass as **INST*** incase if the broker needs to proceed for INST and split the RFQ later (Deal Split provsion for multiple clientwise).
buySell	String(1)	Yes	B = Buy S = Sell X = Both
quoteType	String(1)	Yes	Y = Only Yield B = Both Price and Yield

settlementType	Number	Yes	0 = T+0 1 = T+1
value	Decimal(10,10)	Yes	RFQ Value in crores In case of buySell = Both, represents Buy RFQ Value
quantity	Number	No	RFQ Number of bonds In case of buySell = Both, represents Buy RFQ Quantity. If not provided system computes quantity using value and issue face value.
yieldType	String(3)	Yes	YTM / YTP / YTC In case of buySell = Both, represents Buy RFQ Yield type
yield	Decimal(3,4)	Yes	Yield In case of buySell = Both, represents Buy RFQ Yield
calcMethod	String(1)	Yes	Yield / Price calculation method M = Money Market O = Other In case of buySell = Both, represents Buy RFQ Calculation method
price	Decimal(3,4)	Conditional	Price In case of buySell = Both, represents Buy Price. Valid and Mandatory only if quoteType is “Both Price and Yield”
valueSell	Decimal(10,10)	Conditional	Sell RFQ Value in crores Valid and mandatory only if buySell = Both
quantitySell	Number	Conditional	Sell RFQ Number of bonds Valid only if buySell = Both If not provided system computes quantity using value and issue face value.
yieldTypeSell	String(3)	Conditional	Sell RFQ : YTM / YTP / YTC Valid and mandatory only if buySell = Both
yieldSell	Decimal(3,4)	Conditional	Sell RFQ Yield Valid and mandatory only if buySell = Both
calcMethodSell	String(1)	Conditional	Sell RFQ Yield / Price calculation method M = Money Market

			O = Other Valid and mandatory only if buySell = Both
priceSell	Decimal(3,4)	Conditional	Sell RFQ Price Valid only if buySell = Both Mandatory only if quoteType is "Both Price and Yield"
gtdFlag	String(1)	No	Flag to indicate RFQ is valid till end of trading hours. Y = Valid till day Null = valid till "endTime"
endTime	Time	Conditional	RFQ Expiry time Valid and Mandatory if gtdFlag = null Format : HH24:MM
quoteNegotiable	String(1)	No	Flag to indicate that RFQ quote is negotiable Y = Negotiable Null = Not negotiable
valueNegotiable	String(1)	No	Flag to indicate that RFQ value is negotiable Y = Negotiable Null = Not negotiable
minFillValue	Decimal(10,10)	No	Minimum quote value in crores Valid only if valueNegotiable = "Y"
valueStepSize	Decimal(10,10)	No	Quote value step size Valid only if valueNegotiable = "Y"
anonymous	String(1)	No	Flag to indicate that RFQ is anonymous Y = Anonymous Null = Not anonymous
access	Number	Yes	RFQ Access 1 = OTM (One to many) 2 = OTO (One to One) 3 = IST (Inter scheme transfer)
groupList	List<Number>	No	List of participant groups. See "Participant Group Management API" Valid only if access = "OTO"
participantList	List<String(30)>	No	List of participants. Valid only if access = "OTO"
category	String(30)	No	Sector Refer Appendix B for list of sectors
rating	String(10)	No	Rating Refer Appendix B for list of ratings

remarks	String(100)	No	Remarks

Sample Request


```
{
	"segment" : "R",
	"isin" : "INE020B08BH6",
	"participantCode" : "{{domain}}",
	"clientCode" : "BARCLAYS",
	"buySell" : "B",
	"quoteType" : "Y",
	"settlementType" : 1,
	"value" : 10,
	"quantity" : 100,
	"yieldType" : "YTM",
	"yield" : 4.67,
	"calcMethod" : "M",
	"price" : null,
	"valueSell" : null,
	"quantitySell" : null,
	"yieldTypeSell" : null,
	"yieldSell" : null,
	"calcMethodSell" : null,
	"priceSell" : null,
	"gtdFlag" : "Y",
	"endTime" : "20:45",
	"quoteNegotiable" : "Y",
	"valueNegotiable" : "Y",
	"minFillValue" : 1.00,
	"valueStepSize" : 1.00,
	"dealType" : "B",
	"anonymous" : null,
	"access" : 2,
	"groupList" : null,
	"participantList" : ["INDBANK"],
	"category" : "NBFC",
	"rating" : "AA",
	"remarks" : "Test remarks"
}
```


Response JSON

Array of Maps containing following fields in addition to fields in Request JSON. In case of RFQs with buySell = Both, the response array will contain 2 elements, representing the buy and sell RFQs. In case of RFQs with buySell = either Buy or Sell, the response array will contain only 1 element.

Field	Type	Mandatory	Description
number	String(15)	Yes	Unique system generated RFQ Number
segment	String(1)	Yes	Segment R = Normal RFQ C = CDMDF RFQ
isin	String(12)	Yes	Same as input
participantCode	String(30)	Yes	Same as input

dealType	String(1)	Yes	Same as input
clientCode	String(30)	Yes	Same as input
clientRegType	String(1)	Yes	I = Institution Client R = Retail Client
buySell	String(1)	Yes	B = Buy S = Sell
quoteType	String(1)	Yes	Same as input
settlementType	Number	Yes	Same as input
value	Decimal(10,10)	Yes	Same as input
quantity	Number	Yes	Same as input
yieldType	String(3)	Yes	Same as input
yield	Decimal(3,4)	Yes	Same as input
calcMethod	String(1)	Yes	Same as input
price	Decimal(3,4)	Conditional	Same as input
gtdFlag	String(1)	No	Same as input
endTime	Time	Yes	Same as input or market end time
quoteNegotiable	String(1)	No	Same as input
valueNegotiable	String(1)	No	Same as input
minFillValue	Decimal(10,10)	No	Same as input
valueStepSize	Decimal(10,10)	No	Same as input
anonymous	String(1)	No	Same as input
access	Number	No	Same as input
groupList	List<Number>	No	Same as input
participantList	List<String(30)>	No	Same as input
category	String(30)	No	Same as input
rating	String(10)	No	Same as input
remarks	String(100)	No	Same as input
date	Date	Yes	RFQ Date. Current Business Date.
quoteTime	Time	Yes	RFQ Initiation Time.
settlementDate	Date	Yes	Settlement Date corresponding to settlementType
status	String(1)	Yes	P = Pending W = Withdrawn T = Fully Traded
userLogin	String(30)	Yes	Login Id of the user who created the RFQ
tradedValue	Decimal(10,10)	Yes	Total trade value in crores where yield is confirmed
confirmedValue	Decimal(10,10	Yes	Total trade value in crores where

	)		consideration is confirmed

Sample Success Response


```
[
    {
        "segment": "R",
        "date": "09-Dec-2022",
        "quoteTime": "10:20:23",
        "access": "2",
        "rating": "AA",
        "quoteType": "Y",
        "tradedValue": 0,
        "participantList": [
            "INDBANK"
        ],
        "calcMethod": "M",
        "number": "R22120900000018",
        "gtdFlag": "Y",
        "price": null,
        "yield": 4.67,
        "yieldType": "YTM",
        "minFillValue": 1.00,
        "participantCode": "DFHI",
        "value": 10,
        "settlementType": 1,
        "buySell": "B",
        "clientRegType": "I",
        "quantity": 100,
        "groupList": null,
        "settlementDate": "10-Dec-2022",
        "dealType": "B",
        "valueNegotiable": "Y",
        "userLogin": "NSHARMA",
        "clientCode": "BARCLAYS",
        "confirmedValue": 0,
        "anonymous": null,
        "endTime": "23:50",
        "category": "NBFC",
        "isin": "INE020B08BH6",
        "quoteNegotiable": "Y",
        "valueStepSize": 1.00,
        "remarks": "Test remarks",
        "status": "P"
    }
]
```


POST /rest/v1/rfqmaster/update/isin

This API allows modifying a specific ISIN RFQ

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/update/isin
Request	JSON
Response	JSON

Request JSON

Map containing following fields.

Field	Type	Mandatory	Description
number	String(15)	Yes	Unique system generated RFQ Number
settlementType	Number	Yes	0 = T+0 1 = T+1
value	Decimal(10,10)	Yes	RFQ Value in crores
quantity	Number	No	RFQ Number of bonds If not provided system computes quantity using value and issue face value.
yieldType	String(3)	Yes	YTM / YTP / YTC
yield	Decimal(3,4)	Yes	Yield
calcMethod	String(1)	Yes	Yield / Price calculation method M = Money Market O = Other In case of quoteType = Both, represents Buy RFQ Calculation method
price	Decimal(3,4)	Conditional	Price Mandatory only if quoteType is “Only Price” or “Both Price and Yield”
gtdFlag	String(1)	No	Flag to indicate RFQ is valid till end of trading hours. Y = Valid till day Null = valid till “endTime”
endTime	Time	Conditional	RFQ Expiry time Mandatory if gtdFlag = null Format : HH24:MM
quoteNegotiable	String(1)	No	Flag to indicate that RFQ quote is negotiable Y = Negotiable Null = Not negotiable
valueNegotiable	String(1)	No	Flag to indicate that RFQ value is negotiable Y = Negotiable Null = Not negotiable
minFillValue	Decimal(10,10)	No	Minimum quote value in crores Valid only if valueNegotiable = “Y”
valueStepSize	Decimal(10,10)	No	Quote value step size in crores Valid only if valueNegotiable = “Y”
anonymous	String(1)	No	Flag to indicate that RFQ is anonymous

			Y = Anonymous Null = Not anonymous
access	Number	No	RFQ Access 1 = OTM (One to many) 2 = OTO (One to One) 3 = IST (Inter scheme transfer)
groupList	List<Number>	No	List of participant categories. See "Participant Group Management API" Valid only if access = "OTO"
participantList	List<String(30)>	No	List of participant groups Valid only if access = "OTO"
category	String(30)	No	Sector Refer Appendix B for list of sectors
rating	String(10)	No	Rating Refer Appendix B for list of ratings
remarks	String(100)	No	Remarks

Sample Request


```
{
    "number": "R22120900000018",
    "settlementType": 1,
    "value": 20,
    "quantity": 200,
    "yieldType": "YTM",
    "yield": 4.67,
    "calcMethod": "M",
    "price": null,
    "gtdFlag": "Y",
    "endTime": "23:50",
    "quoteNegotiable": "Y",
    "valueNegotiable": "Y",
    "minFillValue": 1.00,
    "valueStepSize": 1.00,
    "anonymous": null,
    "access": "2",
    "category": "NBFC",
    "rating": "AA",
    "remarks": "Test remarks",
    "groupList": null,
    "participantList": [
        "INDBANK"
    ]
}
```


Response JSON

Map. Structure same as Response JSON in POST /rest/v1/rfqmaster/add/isin

POST /rest/v1/rfqmaster/all/isin

This API allows fetching list of specific ISIN RFQs created by the logged in participant or its broker for given input filter condition.

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/all/isin
Request	JSON
Response	JSON

Request JSON

Map containing following fields. Fields are optional and are used to filter response data.

Field	Type	Mandatory	Description
number	String(15)	No	Filter to fetch RFQ master record identified by number.
date	Date	No	RFQ Date. Default is current date. Format : dd-MMM-yyyy
isin	String(12)	No	Filter for ISIN
participantCode	String(30)	No	Filter for initiator participant code
clientRegType	String(1)	No	Filter for Client type I = Institution (CBRICS Registered Participant) R = Retail (CBRICS Unregisetered participant introduced by a broker)
status	String(1)	No	Filter for status of RFQ P = Pending W = Withdrawn T = Fully Traded

Sample Request


```
{
      "date": "06-May-2022"
}
```


Sample Request


```
{
      "number": "R210204000000002"
}
```


Response JSON

List of Map. Each Map represents a RFQ record. Structure of Map same as Response JSON in POST /rest/v1/rfqmaster/add/isin


```
[
    {
        "segment": "R",
        "date": "09-Dec-2022",
        "quoteTime": "10:21:23",
        "access": "1",
        "rating": null,
        "quoteType": "Y",
```

```
        "tradedValue": 0.000000,
        "participantList": null,
        "calcMethod": "O",
        "number": "R22120900000014",
        "gtdFlag": "Y",
        "price": null,
        "yield": 5.0000,
        "yieldType": "YTM",
        "minFillValue": null,
        "participantCode": "DFHI",
        "value": 10.000000,
        "settlementType": 0,
        "buySell": "B",
        "clientRegType": "I",
        "quantity": 100,
        "groupList": null,
        "settlementDate": "09-Dec-2022",
        "dealType": "D",
        "valueNegotiable": "Y",
        "userLogin": "DFHI",
        "clientCode": "DFHI",
        "confirmedValue": 0.000000,
        "anonymous": null,
        "endTime": "22:00",
        "category": null,
        "isin": "INE020B08BH6",
        "quoteNegotiable": "Y",
        "valueStepSize": null,
        "remarks": null,
        "status": "P"
    },
    {
        "date": "09-Dec-2022",
        "quoteTime": "11:01:09",
        "access": "2",
        "rating": "AA",
        "quoteType": "Y",
        "tradedValue": 0.000000,
        "participantList": [
            "INDBANK"
        ],
        "calcMethod": "M",
        "number": "R22120900000015",
        "gtdFlag": "Y",
        "price": null,
        "yield": 4.6700,
        "yieldType": "YTM",
        "minFillValue": 1.000000,
        "participantCode": "DFHI",
        "value": 10.000000,
        "settlementType": 1,
        "buySell": "B",
        "clientRegType": "I",
        "quantity": 100,
        "groupList": [],
        "settlementDate": "10-Dec-2022",
        "dealType": "B",
        "valueNegotiable": "Y",
        "userLogin": "NSHARMA",
        "clientCode": "BARCLAYS",
        "confirmedValue": 0.000000,
```

```
        "anonymous": null,
        "endTime": "23:50",
        "category": "NBFC",
        "isin": "INE020B08BH6",
        "quoteNegotiable": "Y",
        "valueStepSize": 1.000000,
        "remarks": "Test remarks",
        "status": "P"
    }
]
```


POST /rest/v1/rfqmaster/marketwatch/isin

This API allows fetching specific ISIN RFQs visible to the market for today.

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/marketwatch/isin
Request	JSON
Response	JSON

Request JSON

Map containing following fields. Fields are optional and are used to filter response data.

Field	Type	Mandatory	Description
number	String(15)	No	Filter to fetch RFQ master record identified by number.
isin	String(12)	No	Filter for ISIN
participantCode	String(30)	No	Filter for initiator participant code
status	String(1)	No	P = Pending W = Withdrawn T = Fully Traded
buySell	String(1)	No	B = Buy S = Sell

Sample Request


```
{
      "number": "R210204000000002"
}
```


Response JSON

List of Map. Each Map represents a RFQ record. Structure of Map same as Response JSON in POST /rest/v1/rfqmaster/add/isin. Fields "participantList" and "groupList" will be excluded from the response.

Sample Response


```
[
      {
            "segment" : "R",
```

```
                "number" : "R21020400000002",
                "date" : "15-May-2021",
                "quoteTime": "10:21:23",
                "isin" : "INE123456789",
                "buySell" : "B",
                "quoteType" : "B",
                "settlementType" : 1,
                "settlementDate" : "16-May-2021",
                "value" : 10.50,
                "quantity" : 105,
                "yieldType" : "YTM",
                "yield" : 5.67,
                "calcMethod" : "M",
                "price" : 103.33,
                "gtdFlag" : null,
                "endTime" : "15:45",
                "quoteNegotiable" : "Y",
                "valueNegotiable" : "Y",
                "minFillValue" : 1.00,
                "valueStepSize" : 0.5,
                "dealType" : "D",
                "anonymous" : "Y",
                "access" : 2,
                "category" : "NBFC",
                "rating" : "AA",
                "remarks" : "Test remarks",
                "status" : "P",
                "clientCode" : "PART001",
                "participantCode" : "PART001",
                "tradedValue" : 0,
                "confirmedValue" : 0
        }
]
```


POST /rest/v1/rfqmaster/add/open

This API allows creation of new Open RFQ .

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/add/open
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
scriptDesc	String(200)	Yes	Open RFQ description
openIsinList	List<String(12)>	No	List of ISINs eligible for open RFQ. Maximum allowed 50.
participantCode	String(30)	Yes	Always logged in user's participant code
dealType	String(1)	Yes	Deal Type D = Direct

			B = Brokered
clientCode	String(30)	Yes	Participant code of the RFQ initiator. Should be same as participantCode in case of participants For brokers if dealType is direct then it should be same as the participantCode. If dealType is brokered then it should code of registered (institutional) participant or un registered (retail) participant. If dealType is brokered then clientCode value need to pass as **INST*** incase if the broker needs to proceed for INST and split the RFQ later (Deal Split provsion for multiple clientwise).
buySell	String(1)	Yes	B = Buy S = Sell X = Both
quoteType	String(1)	Yes	Y = Only Yield B = Both Price and Yield
value	Decimal(10,10)	Yes	RFQ Value in crores In case of buySell = Both, represents Buy RFQ Value
valueSell	Decimal(10,10)	Conditional	Sell RFQ Value in crores Valid and mandatory only if buySell = Both
gtdFlag	String(1)	No	Flag to indicate RFQ is valid till end of trading hours. Y = Valid till day Null = valid till "endTime"
endTime	Time	Conditional	RFQ Expiry time Valid and mandatory if gtdFlag = null Format : HH24:MM
minFillValue	Decimal(10,10)	No	Minimum quote value in crores
valueStepSize	Decimal(10,10)	No	Quote value step size in crores
anonymous	String(1)	No	Flag to indicate that RFQ is anonymous Y = Anonymous Null = Not anonymous

access	Number	Yes	RFQ Access 1 = OTM (One to many) 2 = OTO (One to One) 3 = IST (Inter scheme transfer)
groupList	List<Number>	No	List of participant categories. See "Participant Group Management API" Valid only if access = "OTO"
participantList	List<String(30)>	No	List of participant groups Valid only if access = "OTO"
category	String(30)	No	Sector Refer Appendix B for list of sectors
rating	String(10)	No	Rating Refer Appendix B for list of ratings
remarks	String(100)	No	Remarks

Sample Request

```
{
      "scriptDesc" : "AAA+ Sovereign bonds",
      "participantCode" : "PART001s",
      "clientCode" : "PART001s",
      "openIsinList": ["INE123456789","INE123456799"],
      "buySell" : "B",
      "quoteType" : "B",
      "value" : 10.50,
      "valueSell" : null,
      "gtdFlag" : "Y",
      "endTime" : null,
      "minFillValue" : null,
      "valueStepSize" : null,
      "dealType" : "D",
      "anonymous" : "Y",
      "access" : 2,
      "groupList" : ["3"],
      "participantList" : ["PART001"],
      "category" : "NBFC",
      "rating" : "AA",
      "remarks" : "Test remarks"
}
```

Response JSON

Map containing following fields.

Field	Type	Mandatory	Description
scriptDesc	String(200)	Yes	Same as input
openIsinList	List<String(12)>	No	Same as input
participantCode	String(30)	Yes	Same as input
dealType	String(1)	Yes	Same as input

clientCode	String(30)	Yes	Same as input
clientRegType	String(1)	Yes	I = Institution Client R = Retail Client
buySell	String(1)	Yes	B = Buy S = Sell
quoteType	String(1)	Yes	Same as input
value	Decimal(10,10)	Yes	Same as input
gtdFlag	String(1)	No	Same as input
endTime	Time	Conditional	Same as input
minFillValue	Decimal(10,10)	No	Same as input
valueStepSize	Decimal(10,10)	No	Same as input
anonymous	String(1)	No	Same as input
access	Number	No	Same as input
groupList	List<Number>	No	Same as input
participantList	List<String(30)>	No	Same as input
category	String(30)	No	Same as input
rating	String(10)	No	Same as input
remarks	String(100)	No	Same as input
number	String(15)	Yes	Unique system generated RFQ Number
date	Date	Yes	RFQ Date. Current Business Date.
quoteTime	Time	Yes	RFQ Initiation Time.
status	String(1)	Yes	P = Pending W = Withdrawn T = Fully Traded
userLogin	String(30)	Yes	Login Id of the user who created the RFQ
tradedValue	Decimal(10,10)	Yes	Total trade value in crores where yield is confirmed
confirmedValue	Decimal(10,10)	Yes	Total trade value in crores where consideration is confirmed

Sample Success Response


```
{
      "number" : "R21020400000003",
      "date" : "15-May-2021",
      "quoteTime" : "12:45",
      "scriptDesc" : "AAA+ Sovereign bonds",
      "openIsinList": ["INE123456789","INE123456799"],
      "buySell" : "B",
```

```
        "quoteType" : "B",
        "value" : 10.50,
        "gtdFlag" : "Y",
        "endTime" : null,
        "minFillValue" : null,
        "valueStepSize" : null,
        "dealType" : "D",
        "anonymous" : "Y",
        "access" : 2,
        "groupList" : ["3"],
        "participantList" : ["PART001"],
        "category" : "NBFC",
        "rating" : "AA",
        "remarks" : "Test remarks",
        "status" : "P",
        "clientCode" : "PART001",
        "participantCode" : "PART001",
        "userLogin" : "USER0091",
        "tradedValue" : 0,
        "confirmedValue" : 0
}
```


POST /rest/v1/rfqmaster/update/open

This API allows modifying an open RFQ

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/update/open
Request	JSON
Response	JSON

Request JSON

Map containing following fields.

Field	Type	Mandatory	Description
number	String(15)	Yes	Unique system generated RFQ Number
scriptDesc	String(200)	Yes	Open RFQ description
openIsinList	List<String(12)>	No	List of ISINs eligible for open RFQ
value	Decimal(10,10)	Yes	RFQ Value in crores In case of quoteType = Both, represents Buy RFQ Value
gtdFlag	String(1)	No	Flag to indicate RFQ is valid till end of trading hours. Y = Valid till day Null = valid till “endTime”
endTime	Time	Conditional	RFQ Expiry time Mandatory if gtdFlag = null Format : HH24:MM
minFillValue	Decimal(10,10	No	Minimum quote value in crores

	)		Valid only if valueNegotiable = “Y”
valueStepSize	Decimal(10,10)	No	Quote value step size in crores Valid only if valueNegotiable = “Y”
anonymous	String(1)	No	Flag to indicate that RFQ is anonymous Y = Anonymous Null = Not anonymous
access	Number	No	RFQ Access 1 = OTM (One to many) 2 = OTO (One to One) 3 = IST (Inter scheme transfer)
groupList	List<Number>	No	List of participant categories. See “Participant Group Management API” Valid only if access = “OTO”
participantList	List<String(30)>	No	List of participant groups Valid only if access = “OTO”
category	String(30)	No	Sector Refer Appendix B for list of sectors
rating	String(10)	No	Rating Refer Appendix B for list of ratings
remarks	String(100)	No	Remarks

Response JSON

Map. Structure same as Response JSON in POST /rest/v1/rfqmaster/add/open

POST /rest/v1/rfqmaster/all/open

This API allows fetching open RFQs

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/all/open
Request	JSON
Response	JSON

Request JSON

Map containing following fields. Fields are optional and are used to filter response data.

Field	Type	Mandatory	Description
number	String(15)	No	Filter to fetch RFQ master record identified by number.
date	Date	No	RFQ Date. Default is current date. Format : dd-MMM-yyyy
participantCode	String(30)	No	Filter for initiator participant code

Sample Request

```
{
        "date": "06-May-2021"
}
```

Sample Request

```
{
        "number": "R21020400000003"
}
```

Response JSON

List of Map. Each Map represents a RFQ record.


```
[
        {
                "number" : "R21020400000003",
                "scriptDesc" : "AAA+ Sovereign bonds",
                "openIsinList": ["INE123456789","INE123456799"],
                "buySell" : "B",
                "quoteType" : "B",
                "value" : 10.50,
                "valueSell" : null,
                "gtdFlag" : "Y",
                "endTime" : null,
                "minFillValue" : null,
                "valueStepSize" : null,
                "dealType" : "D",
                "anonymous" : "Y",
                "access" : 2,
                "groupList" : ["3"],
                "participantList" : ["PART001"],
                "category" : "NBFC",
                "rating" : "AA",
                "remarks" : "Test remarks",
                "status" : "P",
                "clientCode" : "PART001",
                "participantCode" : "PART001",
                "userLogin" : "USER0091",
                "tradedValue" : 0,
                "confirmedValue" : 0
        }
]
```


POST /rest/v1/rfqmaster/marketwatch/open

This API allows fetching Open RFQs visible to the market for today.

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/marketwatch/open
Request	JSON
Response	JSON

Request JSON

Map containing following fields. Fields are optional and are used to filter response data.

Field	Type	Mandatory	Description
number	String(15)	No	Filter to fetch RFQ master record identified by number.
participantCode	String(30)	No	Filter for initiator participant code
status	String(1)	No	P = Pending W = Withdrawn T = Fully Traded

Sample Request


```
{
      "number": "R210204000000003"
}
```


Response JSON

List of Map. Each Map represents a RFQ record.

Field	Type	Mandatory	Description
scriptDesc	String(200)	Yes	Same as input
openIsinList	List<String(12)>	No	Same as input
clientCode	String(30)	Yes	Same as input
participantCode	String(30)	Yes	Same as input
buySell	String(1)	Yes	B = Buy S = Sell
quoteType	String(1)	Yes	Same as input
value	Decimal(10,10)	Yes	Same as input
valueSell	Decimal(10,10)	Yes	Same as input
gtdFlag	String(1)	No	Same as input
endTime	Time	Conditional	Same as input
minFillValue	Decimal(10,10)	No	Same as input
valueStepSize	Decimal(10,10)	No	Same as input
dealType	String(1)	Yes	Same as input
anonymous	String(1)	No	Same as input
access	Number	No	Same as input
category	String(30)	No	Same as input
rating	String(10)	No	Same as input
remarks	String(100)	No	Same as input
number	String(15)	Yes	Unique system generated RFQ

			Number
date	Date	Yes	RFQ Date. Current Business Date.
status	String(1)	Yes	P = Pending W = Withdrawn T = Fully Traded
tradedValue	Decimal(10,10)	Yes	Total trade value in crores where yield is confirmed
confirmedValue	Decimal(10,10)	Yes	Total trade value in crores where consideration is confirmed

Sample Response


```
 [
      {
            "number" : "R21020400000003",
            "scriptDesc" : "AAA+ Sovereign bonds",
            "openIsinList": ["INE123456789","INE123456799"],
            "buySell" : "B",
            "quoteType" : "B",
            "value" : 10.50,
            "valueSell" : null,
            "gtdFlag" : "Y",
            "endTime" : null,
            "minFillValue" : null,
            "valueStepSize" : null,
            "dealType" : "D",
            "anonymous" : "Y",
            "access" : 2,
            "category" : "NBFC",
            "rating" : "AA",
            "remarks" : "Test remarks",
            "status" : "P",
            "clientCode" : "PART001",
            "participantCode" : "PART001",
            "tradedValue" : 0,
            "confirmedValue" : 0
      }
]
```


POST/rest/v1/rfqmaster/withdraw

This API withdraws one or more RFQs of type ISIN as well as Open

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/withdraw
Request	JSON
Response	JSON

Request JSON

List of Map. Each Map represents an RFQ and contains following fields

Field	Type	Mandatory	Description
number	String(15)	Yes	RFQ Number to be withdrawn

Sample Request

```
[
	{
		"number": "R21020400000002"
	},
	{
		"number": "R21020400000003"
	}
]
```


Response JSON

List of Map. Each Map represents a RFQ record. Structure of Map same as Response JSON in POST /rest/v1/rfqmaster/add/isin


```
[
	{
		"segment" : "R",
		"number" : "R21020400000002",
		"isin" : "INE123456789",
		"buySell" : "B",
		"quoteType" : "B",
		"settlementType" : 1,
		"value" : 10.50,
		"quantity" : 105,
		"yieldType" : "YTM",
		"yield" : 5.67,
		"calcMethod" : "M",
		"price" : 103.33,
		"valueSell" : null,
		"quantitySell" : null,
		"yieldTypeSell" : null,
		"yieldSell" : null,
		"calcMethodSell" : null,
		"priceSell" : null,
		"gtdFlag" : null,
		"endTime" : "15:45",
		"quoteNegotiable" : "Y",
		"valueNegotiable" : "Y",
		"minFillValue" : 1.00,
		"valueStepSize" : 0.5,
		"dealType" : "D",
		"anonymous" : "Y",
		"access" : 2,
		"groupList" : ["3"],
		"participantList" : ["PART001"],
		"category" : "NBFC",
		"rating" : "AA",
		"remarks" : "Test remarks",
		"status" : "W",
		"clientCode" : "PART001",
		"participantCode" : "PART001",
		"userLogin" : "USER0091",
		"tradedValue" : 0,
		"confirmedValue" : 0
	},
	{
		"number" : "R21020400000003",
		"scriptDesc" : "AAA+ Sovereign bonds",
		"openIsinList": ["INE123456789","INE123456799"],
		"buySell" : "B",
```

```
            "quoteType" : "B",
            "value" : 10.50,
            "valueSell" : null,
            "gtdFlag" : "Y",
            "endTime" : null,
            "minFillValue" : null,
            "valueStepSize" : null,
            "dealType" : "D",
            "anonymous" : "Y",
            "access" : 2,
            "groupList" : ["3"],
            "participantList" : ["PART001"],
            "category" : "NBFC",
            "rating" : "AA",
            "remarks" : "Test remarks",
            "status" : "W",
            "clientCode" : "PART001",
            "participantCode" : "PART001",
            "userLogin" : "USER0091",
            "tradedValue" : 0,
            "confirmedValue" : 0
      }
]
```

Negotiation API

POST /rest/v1/negotiation/add

This API allows creation of a new negotiation thread as responder of RFQ

Method	POST
Url	<baseurl>/rest/v1/negotiation/add
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
ngRfqNumber	String(15)	Yes	RFQ Number
isin	String(12)	Conditional	ISIN Mandatory if RFQ is of type Open
aeCode	String(30)	Yes	Always logged in user's participant code
dealType	String(1)	Yes	D = Direct B = Brokered
clientCode	String(30)	Yes	Responder client code. Should be same as aeCode in case of participants For brokers if dealType is direct then it should be same as the aeCode. If dealType is brokered then it should code of registered (institutional) participant or un registered (retail) participant. If dealType is brokered then clientCode value need to pass as **INST*** incase if the broker needs to proceed for INST and split the RFQ later (Deal Split provsion for multiple clientwise).
buySell	String(1)	No	Buy/Sell with respect to responder. (Opposite of RFQ Buy/Sell) B = Buy S = Sell
settlementType	Number	Yes	0 = T+0 1 = T+1
value	Decimal(10,10)	Yes	Quote Value in crores
quantity	Number	No	Quote Number of bonds

			If not provided system computes quantity using value and issue face value.
yieldType	String(3)	Yes	YTM / YTP / YTC
yield	Decimal(3,4)	Yes	Yield
calcMethod	String(1)	Yes	Yield / Price calculation method M = Money Market O = Other
price	Decimal(3,4)	Conditional	Price Valid and Mandatory only if RFQ quoteType is “Both Price and Yield”
gtdFlag	String(1)	No	Flag to indicate Negotiation is valid till end of trading hours. Y = Valid till day Null = valid till “endTime”
endTime	Time	Conditional	Quote Expiry time Mandatory if gtdFlag = null Format : HH24:MM
remarks	String(100)	No	Remarks

Sample Request


```
{
      "ngRfqNumber": "R221209000000021",
      "isin": "INE020B08BH6",
      "aeCode": "DFHI",
      "dealType" : "D",
      "clientCode": "DFHI",
      "buySell": "S",
      "settlementType": 0,
      "value": 1,
      "quantity": 10,
      "yieldType": "YTM",
      "yield": 4.6550,
      "calcMethod": "M",
      "price": 103.1250,
      "gtdFlag": "Y",
      "endTime": null,
      "remarks": null
}
```


Response JSON

Map containing following fields

Field	Type	Mandatory	Description
rfqNumber	String(15)	Yes	RFQ Number
id	String(15)	Yes	Negotiation Thread Id
date	Date	Yes	RFQ Date
isin	String(12)	Yes	ISIN
buySell	String(1)	Yes	Buy/Sell with respect to responder.

			(Opposite of RFQ Buy/Sell) B = Buy S = Sell
initSettlementType	Number	No	Initiator Quote Settlement Type 0 = T+0 1 = T+1
initSettlementDate	Date	No	Initiator Quote Settlement Date Format : DD-MMM-YYYY
initAeCode	String(30)	No	RFQ Initiator Participant Code
initDealType	String(1)	No	D = Direct B = Brokered
initClientCode	String(30)	No	RFQ Initiator Client Code
initClientRegType	String(1)	No	I = Institution Client R = Retail Client
initValue	Decimal(10,10)	No	Initiator Quote Value in crores
initQuantity	Number	No	Initiator Quote Number of bonds
initYieldType	String(3)	No	Initiator Quote YTM / YTP / YTC
initYield	Decimal(3,4)	No	Initiator Quote Yield
initCalcMethod	String(1)	No	Initiator Quote Yield / Price calculation method M = Money Market O = Other
initPrice	Decimal(3,4)	No	Initiator Quote Price Valid only if quoteType = Both Price and Yield
initAccruedInterest	Decimal(15,2)	No	Initiator Quote Accrued Interest
initConsideration	Decimal(15,2)	No	Initiator Quote Consideration
initQuoteTime	Time	No	Initiator Quote Time Format HH24:MM:SS
initGtdFlag	String(1)	No	Flag to indicate Initiator quote is valid till end of trading hours. Y = Valid till day Null = valid till “endTime”
initEndTime	Time	No	Initiator Quote Expiry time Mandatory if initGtdFlag = null Format : HH24:MM
initRemarks	String(100)	No	Initiator Remarks
initLoginId	String(30)	No	Initiator User Login
respSettlementType	Number	No	Responder Quote Settlement Type 0 = T+0 1 = T+1
respSettlementDate	Date	No	Responder Quote Settlement Date Format : DD-MMM-YYYY
respAeCode	String(30)	No	RFQ Responder Participant Code

respDealType	String(1)	No	D = Direct B = Brokered
respClientCode	String(30)	No	RFQ Responder Client Code
respClientRegType	String(1)	No	I = Institution Client R = Retail Client
respValue	Decimal(10,10)	No	Responder Quote Value in crores
respQuantity	Number	No	Responder Quote Number of bonds
respYieldType	String(3)	No	Responder Quote YTM / YTP / YTC
respYield	Decimal(3,4)	No	Responder Quote Yield
respCalcMethod	String(1)	No	Responder Quote Yield / Price calculation method M = Money Market O = Other
respPrice	Decimal(3,4)	No	Responder Quote Price Valid only if quoteType is "Both Price and Yield"
respAccruedInterest	Decimal(15,2)	No	Responder Quote Accrued Interest
respConsideration	Decimal(15,2)	No	Responder Quote Consideration
respQuoteTime	Time	No	Responder Quote Time Format HH24:MM:SS
respGtdFlag	String(1)	No	Flag to indicate Responder quote is valid till end of trading hours. Y = Valid till day Null = valid till "endTime"
respEndTime	Time	No	Responder Quote Expiry time Mandatory if respGtdFlag = null Format : HH24:MM
respRemarks	String(100)	No	Responder Remarks
respLoginId	String(30)	No	Responder User Login
status	String(1)	Yes	Negotiation thread status N = Negotiating R = Terminated A = Traded C = Consideration Confirmed E = Expired
tradeNumber	String(15)	No	Trade number. It is generated when status chages to "A" i.e Traded. The trade number gets populated as order number in CBRICS system.
acceptedSettlementType	Number	No	Accepted Quote Settlement Type 0 = T+0 1 = T+1

acceptedSettlement Date	Date	No	Accepted Quote Settlement Date Format : DD-MMM-YYYY
acceptedValue	Decimal(10,10)	No	Accepted Quote Value in crores
acceptedQuantity	Number	No	Accepted Quote Number of bonds
acceptedYieldType	String(3)	No	Accepted Quote YTM / YTP / YTC
acceptedYield	Decimal(3,4)	No	Accepted Quote Yield
acceptedCalcMethod	String(1)	No	Accepted Quote Yield / Price calculation method M = Money Market O = Other
acceptedPrice	Decimal(3,4)	No	Accepted Quote Price Valid only if quoteType is "Both Price and Yield"
acceptedPutCallDate	Date	No	Put / Call date used for yield computation.
acceptedAccruedInterest	Decimal(15,2)	No	Accepted Quote Accrued Interest
acceptedConsideration	Decimal(15,2)	No	Accepted Quote Consideration
acceptedQuoteTime	Time	No	Accepted Quote Time Format HH24:MM:SS
acceptedBySide	String(1)	No	Accepted by side I = Initiator R = Responder
acceptedByLoginId	String(30)	No	Accepted by user login
confirmStatus	String(2)	No	Consideration Confirmation Status PP = Proposer Checker Pending* PC = Submitted to Counter PR = Proposer Checker Rejected* CA = Counter Checker Pending* CC = Confirmed CR = Counter Rejected *:These status are relevant only if Maker checker is enabled in the deal confirmation leg of proposer or counter party.
proposedBySide	String(1)	No	Consideration proposed by side I = Initiator R = Responder
proposedTime	Time	No	Consideration propose time
confirmedPriceQuoteTime	Time	No	Consideration confirmation time Format : HH24:MM:SS
tradeSplits	List<TradeSpl	No	List of trade split

	it>		

Sample Response


```
{
    "date": "09-Dec-2022",
    "acceptedCalcMethod": null,
    "tradeNumber": null,
    "initQuoteTime": null,
    "initSettlementType": null,
    "respAeCode": "DFHI",
    "tradeSplits": null,
    "initSettlementDate": null,
    "initAccruedInterest": null,
    "acceptedValue": null,
    "confirmedPriceQuoteTime": null,
    "initGtdFlag": null,
    "initYield": null,
    "respAccruedInterest": null,
    "confirmStatus": null,
    "id": "N22120900000056",
    "initYieldType": null,
    "respPrice": null,
    "initLoginId": null,
    "respQuoteTime": "21:03:33",
    "respEndTime": "22:00",
    "acceptedBySide": null,
    "respCalcMethod": "M",
    "initAeCode": "INDBANK",
    "acceptedSettlementDate": null,
    "acceptedPrice": null,
    "respGtdFlag": "Y",
    "acceptedQuantity": null,
    "acceptedByLoginId": null,
    "acceptedAccruedInterest": null,
    "respConsideration": null,
    "initQuantity": null,
    "status": "N",
    "respSettlementDate": "09-Dec-2022",
    "respValue": 1,
    "respLoginId": "NSHARMA",
    "initPrice": null,
    "respYieldType": "YTM",
    "acceptedYieldType": null,
    "acceptedSettlementType": null,
    "acceptedConsideration": null,
    "respSettlementType": 0,
    "respRemarks": null,
    "initValue": null,
    "initCalcMethod": null,
    "buySell": "S",
    "acceptedQuoteTime": null,
    "initAuId": null,
    "rfqNumber": "R22120900000021",
    "acceptedPutCallDate": null,
    "acceptedYield": null,
    "respYield": 4.6550,
    "initConsideration": null,
    "initEndTime": null,
    "respQuantity": 10,
    "isin": "INE020B08BH6",
```

```
    "initRemarks": null
}
```

POST /rest/v1/negotiation/update

This API allows user to provide or revise or withdraw quote for a negotiation thread. This API can be used by both RFQ initiator as well as responder.

Method	POST
Url	<baseurl>/rest/v1/negotiation/update
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
ngId	String(15)	Yes	Negotiation Thread Id
role	String(1)	Yes	Side of the negotiation whose quote needs to be updated I = If initiator side of the RFQ R = if responder side of the RFQ
ngRfqNumber	String(15)	Yes	RFQ Number
aeCode	String(30)	Yes	Always logged in user's participant code
dealType	String(1)	Yes	D = Direct B = Brokered If role = initiator then should be same as in RFQ else it should be same as one specified at the time for negotiation/add
clientCode	String(30)	Yes	Participant code of the client. If role = initiator then should be same as in RFQ else it should be same as one specified at the time for negotiation/add
settlementType	Number	Yes	0 = T+0 1 = T+1
value	Decimal(10,10)	Yes	Quote Value in crores
quantity	Number	No	Quote Number of bonds If not provided system computes quantity using value and issue face value.
yieldType	String(3)	Yes	YTM / YTP / YTC
yield	Decimal(3,4)	Yes	Yield

calcMethod	String(1)	Yes	Yield / Price calculation method M = Money Market O = Other
price	Decimal(3,4)	Conditional	Price Valid and Mandatory only if RFQ quoteType is “Both Price and Yield”
gtdFlag	String(1)	No	Flag to indicate Negotiation is valid till end of trading hours. Y = Valid till day Null = valid till “endTime”
endTime	Time	Conditional	Quote Expiry time Mandatory if gtdFlag = null Format : HH24:MM
remarks	String(100)	No	Remarks

Response JSON

Map with structure same as Response JSON of POST /rest/v1/negotiation/add

Sample Response


```
{
    "date": "09-Dec-2022",
    "acceptedCalcMethod": null,
    "tradeNumber": null,
    "initQuoteTime": null,
    "initSettlementType": null,
    "respAeCode": "DFHI",
    "tradeSplits": null,
    "initSettlementDate": null,
    "initAccruedInterest": null,
    "acceptedValue": null,
    "confirmedPriceQuoteTime": null,
    "initGtdFlag": null,
    "initYield": null,
    "respAccruedInterest": null,
    "confirmStatus": null,
    "id": "N22120900000056",
    "initYieldType": null,
    "respPrice": null,
    "initLoginId": null,
    "respQuoteTime": "21:03:48",
    "respEndTime": "22:00",
    "acceptedBySide": null,
    "respCalcMethod": "M",
    "initAeCode": "INDBANK",
    "acceptedSettlementDate": null,
    "acceptedPrice": null,
    "respGtdFlag": "Y",
    "acceptedQuantity": null,
    "acceptedByLoginId": null,
    "acceptedAccruedInterest": null,
    "respConsideration": null,
    "initQuantity": null,
```

```
    "status": "N",
    "respSettlementDate": "09-Dec-2022",
    "respValue": 2,
    "respLoginId": "NSHARMA",
    "initPrice": null,
    "respYieldType": "YTM",
    "acceptedYieldType": null,
    "acceptedSettlementType": null,
    "acceptedConsideration": null,
    "respSettlementType": 0,
    "respRemarks": null,
    "initValue": null,
    "initCalcMethod": null,
    "buySell": "S",
    "acceptedQuoteTime": null,
    "initAuId": null,
    "rfqNumber": "R22120900000021",
    "acceptedPutCallDate": null,
    "acceptedYield": null,
    "respYield": 4.5550,
    "initConsideration": null,
    "initEndTime": null,
    "respQuantity": 20,
    "isin": "INE020B08BH6",
    "initRemarks": null
}
```


POST /rest/v1/negotiation/withdrawquote

This API allows user to withdraw his/her quotes of one or more negotiation threads. The API can be used by both Initiator as well as Responder of RFQ.

Method	POST
Url	<baseurl>/rest/v1/negotiation/withdrawquote
Request	JSON
Response	JSON

Sample Request


```
{
      "ngRfqNumber": "R22120900000021",
      "ngId": "N22120900000056",
      "role": "R",
      "isin": "INE020B08BH6",
      "aeCode": "DFHI",
      "dealType" : "D",
      "clientCode": "DFHI",
      "buySell": "S",
      "settlementType": 0,
      "value": 2,
      "quantity": 20,
      "yieldType": "YTM",
      "yield": 4.5550,
      "calcMethod": "M",
      "price": 103.1250,
      "gtdFlag": "Y",
      "endTime": null,
      "remarks": null
}
```

Request JSON

List of Map. Each map represents a negotiation thread and contains following fields

Field	Type	Mandatory	Description
rfqNumber	String(15)	Yes	RFQ Number
id	String(15)	Yes	Negotiation Thread Id
role	String(1)	Yes	Side of negotiation whose quote is being withdrawn I = If initiator of the RFQ R = if responder to the RFQ

Sample Request


```
[
      {
            "rfqNumber": "R22120900000021",
            "id" : "N22120900000056",
            "role" : "R"
      }
]
```


Response JSON

List of Map. Each map represents a negotiation thread with structure same as Response JSON of POST /rest/v1/negotiation/add

Sample Response


```
[
    {
        "date": "09-Dec-2022",
        "acceptedCalcMethod": null,
        "tradeNumber": null,
        "initQuoteTime": null,
        "initSettlementType": null,
        "respAeCode": "DFHI",
        "tradeSplits": null,
        "initSettlementDate": null,
        "initAccruedInterest": null,
        "acceptedValue": null,
        "confirmedPriceQuoteTime": null,
        "initGtdFlag": null,
        "initYield": null,
        "respAccruedInterest": null,
        "confirmStatus": null,
        "id": "N22120900000056",
        "initYieldType": null,
        "respPrice": null,
        "initLoginId": null,
        "respQuoteTime": "21:05:44",
        "respEndTime": null,
        "acceptedBySide": null,
        "respCalcMethod": null,
        "initAeCode": "INDBANK",
        "acceptedSettlementDate": null,
        "acceptedPrice": null,
```

```
        "respGtdFlag": null,
        "acceptedQuantity": null,
        "acceptedByLoginId": null,
        "acceptedAccruedInterest": null,
        "respConsideration": null,
        "initQuantity": null,
        "status": "N",
        "respSettlementDate": null,
        "respValue": null,
        "respLoginId": "NSHARMA",
        "initPrice": null,
        "respYieldType": null,
        "acceptedYieldType": null,
        "acceptedSettlementType": null,
        "acceptedConsideration": null,
        "respSettlementType": null,
        "respRemarks": null,
        "initValue": null,
        "initCalcMethod": null,
        "buySell": "S",
        "acceptedQuoteTime": null,
        "initAuId": null,
        "rfqNumber": "R22120900000021",
        "acceptedPutCallDate": null,
        "acceptedYield": null,
        "respYield": null,
        "initConsideration": null,
        "initEndTime": null,
        "respQuantity": null,
        "isin": "INE020B08BH6",
        "initRemarks": null
    }
]
```


POST /rest/v1/negotiation/terminate

This API allows user to terminate a negotiation thread. The API can be used by both Initiator as well as Responder of RFQ.

Method	POST
Url	<baseurl>/rest/v1/negotiation/terminate
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
rfqNumber	String(15)	Yes	RFQ Number
id	String(15)	Yes	Negotiation Thread Id
role	String(1)	Yes	Side of negotiation that is terminating the thread I = If initiator of the RFQ R = if responder to the RFQ

Sample Request


```
{
      "rfqNumber": "R22120900000021",
      "id" : "N22120900000056",
      "role" : "R"
}
```


Response JSON

Map representing a negotiation thread with structure same as Response JSON of POST /rest/v1/negotiation/add

Sample Response


```
{
    "date": "09-Dec-2022",
    "acceptedCalcMethod": null,
    "tradeNumber": null,
    "initQuoteTime": null,
    "initSettlementType": null,
    "respAeCode": "DFHI",
    "tradeSplits": null,
    "initSettlementDate": null,
    "initAccruedInterest": null,
    "acceptedValue": null,
    "confirmedPriceQuoteTime": null,
    "initGtdFlag": null,
    "initYield": null,
    "respAccruedInterest": null,
    "confirmStatus": null,
    "id": "N22120900000056",
    "initYieldType": null,
    "respPrice": null,
    "initLoginId": null,
    "respQuoteTime": "21:05:44",
    "respEndTime": null,
    "acceptedBySide": "R",
    "respCalcMethod": null,
    "initAeCode": "INDBANK",
    "acceptedSettlementDate": null,
    "acceptedPrice": null,
    "respGtdFlag": null,
    "acceptedQuantity": null,
    "acceptedByLoginId": "NSHARMA",
    "acceptedAccruedInterest": null,
    "respConsideration": null,
    "initQuantity": null,
    "status": "R",
    "respSettlementDate": null,
    "respValue": null,
    "respLoginId": "NSHARMA",
    "initPrice": null,
    "respYieldType": null,
    "acceptedYieldType": null,
    "acceptedSettlementType": null,
    "acceptedConsideration": null,
    "respSettlementType": null,
    "respRemarks": null,
```

```
    "initValue": null,
    "initCalcMethod": null,
    "buySell": "S",
    "acceptedQuoteTime": "21:06:21",
    "initAuId": null,
    "rfqNumber": "R22120900000021",
    "acceptedPutCallDate": null,
    "acceptedYield": null,
    "respYield": null,
    "initConsideration": null,
    "initEndTime": null,
    "respQuantity": null,
    "isin": "INE020B08BH6",
    "initRemarks": null
}
```


POST /rest/v1/negotiation/accept

This API allows user to accept counter party quote and can be used by both Initiator as well as Responder of RFQ. The API also allows responders to directly accept RFQ without initiating any quote.

Method	POST
Url	<baseurl>/rest/v1/negotiation/accept
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
rfqNumber	String(15)	Yes	RFQ Number
acceptedValue	Decimal(10,10)	Yes	Accepted Quote Value in crores
id	String(15)	No	Negotiation Thread Id. If null then indicates direct acceptance by responder.
acceptedSettlementDate	Date	No	Accepted Quote Settlement Date Format : DD-MMM-YYYY If provided should match the corresponding value in the RFQ for direct acceptance or the counter negotiation value.
acceptedYieldType	String(3)	No	Accepted Quote YTM / YTP / YTC If provided should match the corresponding value in the RFQ for direct acceptance or the counter negotiation value.
acceptedYield	Decimal(3,4)	No	Accepted Quote Yield

			If provided should match the corresponding value in the RFQ for direct acceptance or the counter negotiation value.
acceptedPrice	Decimal(3,4)	No	Accepted Quote Price If provided should match the corresponding value in the RFQ for direct acceptance or the counter negotiation value.
respDealType	String(1)	Conditional	D = Direct (default) B = Brokered Mandatory if direct acceptance I.e.”id” is null.
respClientCode	String(30)	Conditional	Client Code Mandatory if direct acceptance I.e.”id” is null.
role	String(1)	Conditional	Side whose quote is being accepted I = If RFQ initiators quote is accepted R = if responders quote is accepted Mandatory if not a direct acceptance I.e. “id” is specified

<u>Sample Request</u>


```
{
      "rfqNumber" : "R221209000000020",
      "acceptedValue" : 1,
      "respDealType" : "B",
      "respClientCode" : "BARCLAYS"
}
```

```
{
      "rfqNumber" : "R230114000000038",
      "acceptedValue" : 1,
      "id": "N230114000000037",
      "role" : "R"
}
```


Response JSON

List of Map. Each map represents a negotiation thread with structure same as Response JSON of POST /rest/v1/negotiation/add

<u>Sample Response</u>


```
{
    "date": "09-Dec-2022",
    "acceptedCalcMethod": "O",
    "tradeNumber": "221209990000055",
```

```
    "initQuoteTime": "21:52:42",
    "initSettlementType": 0,
    "respAeCode": "DFHI",
    "tradeSplits": null,
    "initSettlementDate": "09-Dec-2022",
    "initAccruedInterest": null,
    "acceptedValue": 1,
    "confirmedPriceQuoteTime": null,
    "initGtdFlag": null,
    "initYield": 6.0000,
    "respAccruedInterest": null,
    "confirmStatus": null,
    "id": "N22120900000054",
    "initYieldType": "YTM",
    "respPrice": null,
    "initLoginId": null,
    "respQuoteTime": null,
    "respEndTime": null,
    "acceptedBySide": "R",
    "respCalcMethod": null,
    "initAeCode": "INDBANK",
    "acceptedSettlementDate": "09-Dec-2022",
    "acceptedPrice": null,
    "respGtdFlag": null,
    "acceptedQuantity": 10,
    "acceptedByLoginId": "NSHARMA",
    "acceptedAccruedInterest": null,
    "respConsideration": null,
    "initQuantity": 10,
    "status": "A",
    "respSettlementDate": null,
    "respValue": null,
    "respLoginId": "NSHARMA",
    "initPrice": null,
    "respYieldType": null,
    "acceptedYieldType": "YTM",
    "acceptedSettlementType": 0,
    "acceptedConsideration": null,
    "respSettlementType": null,
    "respRemarks": null,
    "initValue": 1,
    "initCalcMethod": "O",
    "buySell": "S",
    "acceptedQuoteTime": "21:52:42",
    "initAuId": null,
    "rfqNumber": "R22120900000020",
    "acceptedPutCallDate": null,
    "acceptedYield": 6.0000,
    "respYield": null,
    "initConsideration": null,
    "initEndTime": null,
    "respQuantity": null,
    "isin": "INE020B08BH6",
    "initRemarks": null
}
```


POST /rest/v1/negotiation/all

This API returns list of all negotiations based on input filters. The API can be used by both Initiator as well as Responder of RFQ.

Method	POST
Url	<baseurl>/rest/v1/negotiation/all
Request	JSON
Response	JSON

Request JSON

Map for filtering response rows and contains following fields

Field	Type	Mandatory	Description
rfqNumber	String(15)	No	RFQ Number
id	String(15)	No	Negotiation Thread Id
date	Date	No	Default current date

Sample Request

```
{
      "rfqNumber": null,
      "id" : null
}
```

Response JSON

List of Map. Each map represents a negotiation thread with structure same as Response JSON of POST /rest/v1/negotiation/add

Sample Response

```
[
    {
        "date": "09-Dec-2022",
        "acceptedCalcMethod": null,
        "tradeNumber": null,
        "initQuoteTime": null,
        "initSettlementType": null,
        "respAeCode": "DFHI",
        "tradeSplits": null,
        "initSettlementDate": null,
        "initAccruedInterest": null,
        "acceptedValue": null,
        "confirmedPriceQuoteTime": null,
        "initGtdFlag": null,
        "initYield": null,
        "respAccruedInterest": null,
        "confirmStatus": null,
        "id": "N22120900000046",
        "initYieldType": null,
        "respPrice": null,
        "initLoginId": null,
        "respQuoteTime": "21:29:07",
        "respEndTime": "22:00",
        "acceptedBySide": null,
        "respCalcMethod": "M",
        "initAeCode": "INDBANK",
        "acceptedSettlementDate": null,
        "acceptedPrice": null,
```

```
        "respGtdFlag": "Y",
        "acceptedQuantity": null,
        "acceptedByLoginId": null,
        "acceptedAccruedInterest": null,
        "respConsideration": null,
        "initQuantity": null,
        "status": "N",
        "respSettlementDate": "09-Dec-2022",
        "respValue": 2.000000,
        "respLoginId": "NSHARMA",
        "initPrice": null,
        "respYieldType": "YTM",
        "acceptedYieldType": null,
        "acceptedSettlementType": null,
        "acceptedConsideration": null,
        "respSettlementType": 0,
        "respRemarks": null,
        "initValue": null,
        "initCalcMethod": null,
        "buySell": "S",
        "acceptedQuoteTime": null,
        "initAuId": null,
        "rfqNumber": "R22120900000020",
        "acceptedPutCallDate": null,
        "acceptedYield": null,
        "respYield": 4.5550,
        "initConsideration": null,
        "initEndTime": null,
        "respQuantity": 20,
        "isin": "INE020B08BH6",
        "initRemarks": null
    },
    {
        "date": "09-Dec-2022",
        "acceptedCalcMethod": null,
        "tradeNumber": null,
        "initQuoteTime": null,
        "initSettlementType": null,
        "respAeCode": "DFHI",
        "tradeSplits": null,
        "initSettlementDate": null,
        "initAccruedInterest": null,
        "acceptedValue": null,
        "confirmedPriceQuoteTime": null,
        "initGtdFlag": null,
        "initYield": null,
        "respAccruedInterest": null,
        "confirmStatus": null,
        "acceptedByAuId": null,
        "id": "N22120900000045",
        "initYieldType": null,
        "respPrice": null,
        "initLoginId": null,
        "respQuoteTime": "21:14:24",
        "respEndTime": "22:00",
        "acceptedBySide": "I",
        "respCalcMethod": "M",
        "initAeCode": "INDBANK",
        "acceptedSettlementDate": null,
        "acceptedPrice": null,
        "respGtdFlag": "Y",
```

```
        "acceptedQuantity": null,
        "acceptedByLoginId": "INDBANK",
        "acceptedAccruedInterest": null,
        "respConsideration": null,
        "initQuantity": null,
        "status": "R",
        "respSettlementDate": "09-Dec-2022",
        "respValue": 1.000000,
        "respLoginId": "NSHARMA",
        "initPrice": null,
        "respYieldType": "YTM",
        "acceptedYieldType": null,
        "acceptedSettlementType": null,
        "acceptedConsideration": null,
        "respSettlementType": 0,
        "respRemarks": null,
        "initValue": null,
        "initCalcMethod": null,
        "buySell": "S",
        "acceptedQuoteTime": "21:23:14",
        "initAuId": null,
        "rfqNumber": "R22120900000020",
        "acceptedPutCallDate": null,
        "acceptedYield": null,
        "respYield": 4.6550,
        "initConsideration": null,
        "initEndTime": null,
        "respQuantity": 10,
        "isin": "INE020B08BH6",
        "initRemarks": null
    }
]
```

Deal Confirmation API

POST /rest/v1/deal/propose

This API allows user to propose consideration for a negotiated deal. It can be used by both initiator as well as responder of an RFQ.

Method	POST
Url	<baseurl>/rest/v1/deal/propose
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
ngRfqNumber	String(15)	Yes	RFQ Number
ngId	String(15)	Yes	Negotiation Thread Id.
participantCode	String(30)	Yes	Always logged in user's participant code
dealType	String(1)	Yes	Final Deal Type D = Direct B = Brokered
clientCode	String(30)	Yes	Final Client code. Deal Type and Client code can be different from one specified in the RFQ or negotiation.
price	Decimal(3,4)	Yes	Proposed Price. Valid and mandatory if RFQ quote type is Only Yield
accruedInterest	Decimal(15,2)	Yes	Accrued Interest
consideration	Decimal(15,2)	Yes	Total consideration
calcMethod	String(1)	Yes	Yield / Price calculation method M = Money Market O = Other
putCallDate	Date	No	Put / Call date used for yield computation. Mandatory if confirmed yield type is either YTP or YTC. If yield type is YTM then maturity date can be provided optionally in case it is different from the maturity date provided in RFQ setup

remarks	String(100)	No	Remarks
tradeSplits	List<TradeSplit>	No	List of trade splits
role	String(1)	Yes	Side whose consideration is being proposed I = If for initiators R = if for responders

TradeSplit JSON

Field	Type	Mandatory	Description
val	Decimal(10,10)	Yes	Split value in crores.
qty	Number	Yes	Split quantity
accInt	Decimal(15,2)	Yes	Split Accrued Interest
cons	Decimal(15,2)	Yes	Split consideration
propCust	String(30)	No	Split custodian
couCust	String(30)	No	Counter party custodian. (To be provided only by counter party in API POST /rest/v1/deal/tradesplit
propActPartCode	String(30)	No	Proposer Actual Participant Code. (Deal split provision for multiple client-wise by Brokers. This need to be provided in API POST /rest/v1/deal/tradesplit)
couActPartCode	String(30)	No	Counter Actual Participant Code. (Deal split provision for multiple client-wise by Brokers. This need to be provided in API POST /rest/v1/deal/tradesplit)

Sample Request

```
{
	"ngRfqNumber": "R22120900000020",
	"ngId": "N22120900000055",
	"dealType" : "D",
	"calcMethod" : "O",
	"putCallDate" : "31-Dec-2023",
	"clientCode" : "DFHI",
	"price": 100,
	"accruedInterest": 1,
	"consideration": 10000001
}
```

Response JSON

Map with structure same as Response JSON of POST /rest/v1/negotiation/add

Sample Response


```
{
    "date": "09-Dec-2022",
    "acceptedCalcMethod": "O",
    "tradeNumber": "221209990000056",
    "initQuoteTime": "21:57:18",
    "initSettlementType": 0,
    "respAeCode": "DFHI",
    "tradeSplits": null,
    "initSettlementDate": "09-Dec-2022",
    "initAccruedInterest": null,
    "acceptedValue": 1.000000,
    "confirmedPriceQuoteTime": null,
    "initGtdFlag": null,
    "initYield": 6.0000,
    "respAccruedInterest": null,
    "confirmStatus": "PC",
    "id": "N22120900000055",
    "initYieldType": "YTM",
    "respPrice": null,
    "initLoginId": null,
    "respQuoteTime": null,
    "respEndTime": null,
    "acceptedBySide": "R",
    "respCalcMethod": null,
    "initAeCode": "INDBANK",
    "acceptedSettlementDate": "09-Dec-2022",
    "acceptedPrice": 100,
    "respGtdFlag": null,
    "acceptedQuantity": 10,
    "acceptedByLoginId": "NSHARMA",
    "acceptedAccruedInterest": 1,
    "respConsideration": null,
    "initQuantity": 10,
    "status": "A",
    "respSettlementDate": null,
    "respValue": null,
    "respLoginId": "NSHARMA",
    "initPrice": null,
    "respYieldType": null,
    "acceptedYieldType": "YTM",
    "acceptedSettlementType": 0,
    "acceptedConsideration": 10000001,
    "respSettlementType": null,
    "respRemarks": null,
    "initValue": 1.000000,
    "initCalcMethod": "O",
    "buySell": "S",
    "acceptedQuoteTime": "21:57:18",
    "initAuId": null,
    "rfqNumber": "R22120900000020",
    "acceptedPutCallDate": "31-Dec-2023",
    "acceptedYield": 6.0000,
    "respYield": null,
    "initConsideration": null,
    "initEndTime": null,
    "respQuantity": null,
    "isin": "INE020B08BH6",
    "initRemarks": null
```

```
}
```

POST /rest/v1/deal/acceptreject

This API allows user to accept or reject proposed consideration for a deal. It can be invoked by consideration proposer checker as well as counter party maker and checker users

Method	POST
Url	<baseurl>/rest/v1/deal/acceptreject
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
rfqNumber	String(15)	Yes	RFQ Number
id	String(15)	Yes	Negotiation Thread Id.
acceptedPrice	Decimal(3,4)	No	If provided then it should be same as one proposed.
acceptedPutCallDate	Date	No	If it is provided then it should be same as one proposed.
acceptedAccruedInterest	Decimal(15,2)	No	Accrued Interest. If provided should be same as proposed.
acceptedConsideration	Decimal(15,2)	No	Total consideration. If provided should be same as proposed.
confirmStatus	String(1)	Yes	Confirm status PC = Accept PR = Reject

Sample Request

```
{
      "rfqNumber": "R221209000000020",
      "id": "N221209000000048",
      "acceptedPrice": 111,
      "acceptedPutCallDate": null,
      "acceptedAccruedInterest": 1,
      "acceptedConsideration": 11100001.00,
      "confirmStatus": "PC"
}
```

Response JSON

Map with structure same as Response JSON of POST /rest/v1/negotiation/add

Sample Response

```
{
    "date": "09-Dec-2022",
```

```
    "acceptedCalcMethod": "O",
    "tradeNumber": "221209990000049",
    "initQuoteTime": "21:45:39",
    "initSettlementType": 0,
    "respAeCode": "DFHI",
    "tradeSplits": null,
    "initSettlementDate": "09-Dec-2022",
    "initAccruedInterest": null,
    "acceptedValue": 1.000000,
    "confirmedPriceQuoteTime": "21:21:16",
    "initGtdFlag": null,
    "initYield": 6.0000,
    "respAccruedInterest": null,
    "confirmStatus": "CC",
    "id": "N22120900000048",
    "initYieldType": "YTM",
    "respPrice": null,
    "initLoginId": null,
    "respQuoteTime": null,
    "respEndTime": null,
    "acceptedBySide": "R",
    "respCalcMethod": null,
    "initAeCode": "INDBANK",
    "acceptedSettlementDate": "09-Dec-2022",
    "acceptedPrice": 111.0000,
    "respGtdFlag": null,
    "acceptedQuantity": 10,
    "acceptedByLoginId": "DFHI",
    "acceptedAccruedInterest": 1.00,
    "respConsideration": null,
    "initQuantity": 10,
    "status": "C",
    "respSettlementDate": null,
    "respValue": null,
    "respLoginId": "DFHI",
    "initPrice": null,
    "respYieldType": null,
    "acceptedYieldType": "YTM",
    "acceptedSettlementType": 0,
    "acceptedConsideration": 11100001.00,
    "respSettlementType": null,
    "respRemarks": null,
    "initValue": 1.000000,
    "initCalcMethod": "O",
    "buySell": "S",
    "acceptedQuoteTime": "21:45:39",
    "initAuId": null,
    "rfqNumber": "R22120900000020",
    "acceptedPutCallDate": "07-Dec-2028",
    "acceptedYield": 6.0000,
    "respYield": null,
    "initConsideration": null,
    "initEndTime": null,
    "respQuantity": null,
    "isin": "INE020B08BH6",
    "initRemarks": null
}
```

POST /rest/v1/deal/tradesplit

This API allows counter participant in a deal consideration confirmation workflow to optionally provide trade splits.

Method	POST
Url	<baseurl>/rest/v1/deal/tradesplit
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
rfqNumber	String(15)	Yes	RFQ Number
id	String(15)	Yes	Negotiation Thread Id. If null then indicates direct acceptance by responder
tradeSplits	List<TradeSplit>	No	List of trade splits

Sample Request


```
{
	"rfqNumber": "R21051200000001",
	"id": "N21051200000001",
	"tradeSplits": [
		{
			"val": 5.0,
			"qty": 50,
			"accInt": 1234,
			"cons": 10101234,
			"propCust": "CUST001",
			"couCust": "CUST002"
		}
	]
}
```


Response JSON

Map with structure same as Response JSON of POST /rest/v1/negotiation/add

Sample Response


```
{
	"rfqNumber" : "R21051100000002",
	"id" : "N21051100000001",
	"date" : "07-May-2021",
	"isin" : "INE123456789",
	"buySell" : "S",
	"initSettlementType" : 0,
	"initSettlementDate" : "07-May-2021",
	"initClientCode" : "PART001",
	"initAeCode" : "PART001",
```

```
        "initValue" : null,
        "initQuantity" : null,
        "initYieldType" : null,
        "initYield" : null,
        "initCalcMethod" : null,
        "initPrice" : null,
        "initQuoteTime" : null,
        "initGtdFlag" : null,
        "initEndTime" : null,
        "initRemarks" : null,
        "initLoginId" : null,
        "respSettlementType" : 0,
        "respSettlementDate" : "07-May-2021",
        "respClientCode" : "MF001",
        "respAeCode" : "MF001",
        "respValue" : 10,
        "respQuantity" : 100,
        "respYieldType" : "YTM",
        "respYield" : 5.561,
        "respCalcMethod" : "M",
        "respPrice" : 103.131,
        "respPutCallDate" : null,
        "respQuoteTime" : "10:12:56",
        "respGtdFlag" : "Y",
        "respEndTime" : null,
        "respRemarks" : null,
        "respLoginId" : "USER001",
        "status" : "A",
        "tradeNumber" : "210428990000001",
        "acceptedSettlementType" : "0",
        "acceptedSettlementDate" : "11-May-2021",
        "acceptedValue" : 10,
        "acceptedQuantity" : 100,
        "acceptedYieldType" : "YTM",
        "acceptedYield" : 5.565,
        "acceptedCalcMethod" : "M",
        "acceptedPrice" : 103.135,
        "acceptedAccruedInterest": 1234,
        "acceptedConsideration": 102001234,
        "acceptedQuoteTime" : "11:45:45",
        "acceptedBySide" : "R",
        "acceptedByLoginId" : "USER002",
        "confirmStatus" : "PR",
        "confirmedPriceQuoteTime" : null,
        "tradeSplits": [
                {
                        "val": 5.0,
                        "qty": 50,
                        "accInt": 1234,
                        "cons": 10101234,
                        "propCust": "CUST001",
                        "couCust": "CUST002"
                }
        ]
}
```

POST /rest/v1/deal/changeclient

This API allows counter participant in a deal consideration confirmation workflow to optionally provide a different client code. This option is available only with participants who are registered as Brokers

Method	POST
Url	<baseurl>/rest/v1/deal/changeclient
Request	JSON
Response	JSON

Request JSON

Map containing following fields

Field	Type	Mandatory	Description
ngRfqNumber	String(15)	Yes	RFQ Number
ngId	String(15)	Yes	Negotiation Thread Id. If null then indicates direct acceptance by responder
dealType	String(1)	Yes	Deal Type D = Direct B = Brokered
clientCode	String(30)	Yes	Brokers can specify broker's participant code or code of any registered (institutional") or unregistered (retail) participants and it can be different than the original participantCode specified during RFQ setup or negotiation.
buySell	String(1)	Yes	B = for change buy client of deal S = for changing sell client of deal

Sample Request


```
{
      "ngRfqNumber": "R22120900000020",
      "ngId": "N22120900000053",
      "dealType": "B",
      "clientCode": "BARCLAYS",
      "buySell": "S"
}
```


Response JSON

Map with structure same as Response JSON of POST /rest/v1/negotiation/add

Sample Response


```
{
    "date": "09-Dec-2022",
    "acceptedCalcMethod": "O",
```

```
    "tradeNumber": "2212099900000054",
    "initQuoteTime": "21:52:20",
    "initSettlementType": 0,
    "respAeCode": "DFHI",
    "tradeSplits": null,
    "initSettlementDate": "09-Dec-2022",
    "initAccruedInterest": null,
    "acceptedValue": 1.000000,
    "confirmedPriceQuoteTime": null,
    "initGtdFlag": null,
    "initYield": 6.0000,
    "respClientCode": "BARCLAYS",
    "respAccruedInterest": null,
    "confirmStatus": "PC",
    "respClientRegType": "I",
    "id": "N22120900000053",
    "initYieldType": "YTM",
    "respPrice": null,
    "initLoginId": null,
    "respQuoteTime": null,
    "respEndTime": null,
    "acceptedBySide": "R",
    "respCalcMethod": null,
    "initAeCode": "INDBANK",
    "acceptedSettlementDate": "09-Dec-2022",
    "acceptedPrice": 111.0000,
    "respGtdFlag": null,
    "acceptedQuantity": 10,
    "acceptedByLoginId": "NSHARMA",
    "acceptedAccruedInterest": 12.00,
    "respConsideration": null,
    "initQuantity": 10,
    "respDealType": "B",
    "status": "A",
    "respSettlementDate": null,
    "respValue": null,
    "initClientRegType": "I",
    "respLoginId": "NSHARMA",
    "initPrice": null,
    "initClientCode": "INDBANK",
    "respYieldType": null,
    "acceptedYieldType": "YTM",
    "acceptedSettlementType": 0,
    "acceptedConsideration": 11100012.00,
    "respSettlementType": null,
    "respRemarks": null,
    "initValue": 1.000000,
    "initCalcMethod": "O",
    "buySell": "S",
    "acceptedQuoteTime": "21:52:20",
    "initAuId": null,
    "rfqNumber": "R22120900000020",
    "acceptedPutCallDate": "07-Dec-2028",
    "acceptedYield": 6.0000,
    "respYield": null,
    "initConsideration": null,
    "initEndTime": null,
    "respQuantity": null,
    "isin": "INE020B08BH6",
    "initDealType": "D",
    "initRemarks": null
```

```
}
```

Other API

GET /rest/v1/participants/all

This API returns list of participants in the system.

Method	GET
Url	<baseurl>/rest/v1/participants/all
Response	JSON

Response JSON

List of Map containing following fields. Each Map element represents a participant.

Field	Type	Mandatory	Description
code	String(30)	Yes	Participant code
name	String(250)	Yes	Participant name

Sample Success Response

```
[
	{
		"code": "MF001",
		"name": "Mutual fund no 1"
	},
	{
		"code": "MF002",
		"name": "Mutual fund no 1"
	},
	{
		"code": "PART001",
		"name": "Participant no 1"
	}
]
```

POST /rest/v1/isins/all

This API returns list of not matured bonds (maturity date >= current date) in the system for input filter conditions.

Method	POST
Url	<baseurl>/rest/v1/isins/all
Request	JSON
Response	JSON

Request JSON

Map containing filter

Field	Type	Mandatory	Description
symbol	String(12)	No	ISIN
description	String(200)	No	Issue Description. Wildcard search.
issuer	String(100)	No	Issuer Name. Wildcard search
filtIssueCategory	String(2)	No	Filter for issue category

			CB = Bond CP = CP CD = CD SD = SD GS = Gsec, Tbill & SL
filtMaturity	String(10)	No	Filter for issue maturity in years from current date 0^1 = Less than 1 year 1^3 = 1 to 3 years 3^5 = 3 to 5 years 5^7 = 5 to 7 years 7^10 = 7 to 10 years 10^ = greater than 10 years
filtCoupon	String(10)	No	Filter for coupon rate range 0^3 = 0 to 3% 3^5 = 3 to 5% 5^6 = 5 to 6% 6^7 = 6 to 7% 7^8 = 7 to 8% 8^9 = 8 to 9% 9^10 = 9 to 10% 10^ = greater than 10%

Sample Request

```
{
      "description":"NABARD",
      "filtMaturity":"5^7"
}
```

Response JSON

List of Map. Each Map element represents an issue record and contains following fields.

Field	Type	Mandatory	Description
symbol	String(12)	Yes	ISIN
description	String(200)	Yes	Issue Description. Wildcard search.
issuer	String(100)	Yes	Issuer Name. Wildcard search
maturityDate	Date	Yes	Maturity Date
couponRate	Decimal(3,4)	Yes	Coupon Rate
faceValue	Decimal(15, 2)	Yes	Face value
type	String(2)	Yes	Issue Type
issueCategory	String(2)	Yes	Filter for issue category CB = Bond CP = CP CD = CD

			SD = SD GS = Gsec, Tbill & SL
listed	String(1)	Yes	Y = Yes N = No

Sample Response


```
[
	{
		"symbol" : "INE123456789",
		"description" : "ABC",
		"issuer" : "XYZ issuer",
		"maturityDate" : "31-Dec-2024",
		"couponRate" : 5.50,
		"faceValue" : 100000,
		"issueCategory" : "CB",
		"listed" : "Y"
	},
	{
		"symbol" : "INE123456780",
		"description" : "ABC ef",
		"issuer" : "XYZ issuer",
		"maturityDate" : "31-Dec-2025",
		"couponRate" : 5.55,
		"faceValue" : 100000,
		"issueCategory" : "CB",
		"listed" : "Y"
	}
]
```


POST /rest/v1/rfqmaster/calcprice

This API calculates price from yield

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/calcprice
Request	JSON
Response	JSON

Request JSON

Map containing filter

Field	Type	Mandatory	Description
isin	String(12)	Yes	ISIN
settlementDate	Date	Yes	Settlement Date
yieldType	String(3)	Yes	YTM / YTP / YTC
yield	Decimal(3,4)	Yes	Yield
aiDcc	Number	Yes	Accrued Interest Day Count Convention. 1 = Actual/Actual 2 = 30/360 - European

			3 = 30/360 - American 4 = Actual/365

Sample Request

```
{
      "isin":"INE028A08232",
      "settlementDate":"10-Dec-2022",
      "yieldType":"YTP",
      "yield":4.55,
      "aiDcc":1
}
```

Response JSON

List of Map. Each Map element represents an issue record and contains following fields.

Field	Type	Mandatory	Description
calcMethod	String(1)	Yes	Yield / Price calculation method M = Money Market O = Other
accruedInterest	Decimal(15, 2)	Yes	Accrued Interest
price	Decimal(3,4)	Yes	Price
putCallDate	Date	Conditional	Only for yield type YTP/YTC

Sample Response

```
{
    "calcMethod": "M",
    "putCallDate": "31-Dec-2027",
    "price": 115.3200,
    "accruedInterest": 1234.56
}
```

POST /rest/v1/rfqmaster/calcyield

This API calculates price from yield

Method	POST
Url	<baseurl>/rest/v1/rfqmaster/calcyield
Request	JSON
Response	JSON

Request JSON

Map containing filter

Field	Type	Mandatory	Description
isin	String(12)	Yes	ISIN
settlementDate	Date	Yes	Settlement Date
yieldType	String(3)	Yes	YTM / YTP / YTC

price	Decimal(3,4)	Yes	Price
aiDcc	Number	Yes	Accrued Interest Day Count Convention. 1 = Actual/Actual 2 = 30/360 - European 3 = 30/360 - American 4 = Actual/365

Sample Request

```
{
      "isin":"INE028A08232",
      "settlementDate":"10-Dec-2022",
      "yieldType":"YTP",
      "price":103.4565,
      "aiDcc":1
}
```

Response JSON

List of Map. Each Map element represents an issue record and contains following fields.

Field	Type	Mandatory	Description
calcMethod	String(1)	Yes	Yield / Price calculation method M = Money Market O = Other
accruedInterest	Decimal(15, 2)	Yes	Accrued Interest
yield	Decimal(3,4)	Yes	Yield
putCallDate	Date	Conditional	Only for yield type YTP/YTC

Sample Response

```
{
    "calcMethod": "M",
    "putCallDate": "31-Dec-2027",
    "yield": 6.3200,
    "accruedInterest": 1234.56
}
```

GET /rest/v1/market/timings

This API returns issue type wise bidding timing windows for T0 and T1 settlement types

Method	GET
Url	<baseurl>/rest/v1/market/timings
Response	JSON

Response JSON

List of Map containing following fields. Each Map element represents a issue type timing record.

Field	Type	Mandatory	Description
type	String(2)	Yes	Issue Type
starttimeT0	Number	Yes	T0 Start time of day. Measured as millis from mid night.
starttimeT0	Number	Yes	T1 Start time of day.
yieldcutoffT0	Number	Yes	RFQ Initiation and negotiation cutoff time for T0.
yieldcutoffT0	Number	Yes	RFQ Initiation and negotiation cutoff time for T1.
pricecutoffT0	Number	Yes	Consideration confirmation cutoff time for T0.
pricecutoffT1	Number	Yes	Consideration confirmation cutoff time for T0.

Sample Success Response


```
[
    {
        "starttimeT1": 36000000,
        "type": "CD",
        "starttimeT0": 36000000,
        "pricecutoffT0": 77400000,
        "pricecutoffT1": 77400000,
        "yieldcutoffT0": 77400000,
        "yieldcutoffT1": 77400000
    },
    {
        "starttimeT1": 36000000,
        "type": "CP",
        "starttimeT0": 36000000,
        "pricecutoffT0": 77400000,
        "pricecutoffT1": 77400000,
        "yieldcutoffT0": 77400000,
        "yieldcutoffT1": 77400000
    },
    {
        "starttimeT1": 32400000,
        "type": "DEFAULT",
        "starttimeT0": 32400000,
        "pricecutoffT0": 80100000,
        "pricecutoffT1": 86100000,
        "yieldcutoffT0": 79200000,
        "yieldcutoffT1": 85800000
    }
]
```

Callbacks API

POST /v1/notification

This API is to be implemented by 3rd party application. Exchange system will notify RFQ and negotiation data by invoking POST method on the URL. The URL should be accessible over internet and should be on HTTPS.

Method	POST
Url	<clientbaseurl>/v1/notification
Request	JSON
Response	JSON

Authentication

3rd party applications wanting notifications using callback APIs should provide an https base url for the call back api. A signature would be computed by computing HmacSHA256 of the Request JSON payload and then encoding using HEX . This signature will be added in the header with key as "token".

Request JSON

Map containing rfq / negotiation / deal amend records data records.

Field	Type	Mandatory	Description
rfqList	List<RFQ Master>	No	List of RFQ master records. Structure of each map is same as Response JSON in POST /rest/v1/rfqmaster/add/isin
negotiationList	List<Negotiation>	No	List of negotiation records. Structure of each map is same as Response JSON of POST /rest/v1/negotiation/add
dealAmendList	List<DealAmendment>	No	List of deal amendment records. Structure of each map is same as Response JSON of API POST /rest/v1/dealamend/modifycancel

Sample Request

```
{
      "rfqList": [
            {
                  "segment" : "R",
                  "number" : "R21020400000002",
                  "isin" : "INE123456789",
                  "buySell" : "B",
                  "quoteType" : "B",
```

```
                  "settlementType" : 1,
                  "value" : 10.50,
                  "quantity" : 105,
                  "yieldType" : "YTM",
                  "yield" : 5.67,
                  "calcMethod" : "M",
                  "price" : 103.33,
                  "gtdFlag" : null,
                  "endTime" : "15:45",
                  "quoteNegotiable" : "Y",
                  "valueNegotiable" : "Y",
                  "minFillValue" : 1.00,
                  "valueStepSize" : 0.5,
                  "dealType" : "D",
                  "anonymous" : "Y",
                  "access" : 2,
                  "groupList" : ["3"],
                  "participantList" : ["PART001"],
                  "category" : "NBFC",
                  "rating" : "AA",
                  "remarks" : "Test remarks",
                  "status" : "P",
                  "participantCode" : "PART001",
                  "userLogin" : "USER0091",
                  "tradedValue" : 0,
                  "confirmedValue" : 0
            }
      ],
      "negotiationList": [
            {
                  "ngRfqNumber" : "R21051100000002",
                  "id" : "N21051100000001",
                  "date" : "07-May-2021",
                  "isin" : "INE123456789",
                  "buySell" : "S",
                  "initSettlementType" : 0,
                  "initSettlementDate" : "07-May-2021",
                  "initClientCode" : "PART001",
                  "initAeCode" : "PART001",
                  "initValue" : 10,
                  "initQuantity" : 100,
                  "initYieldType" : "YTM",
                  "initYield" : 5.567,
                  "initCalcMethod" : "M",
                  "initPrice" : 103.125,
                  "initQuoteTime" : "10:20:17",
                  "initGtdFlag" : "Y",
                  "initEndTime" : null,
                  "initRemarks" : null,
                  "initLoginId" : null,
                  "respSettlementType" : 0,
                  "respSettlementDate" : "07-May-2021",
                  "respClientCode" : "MF001",
                  "respAeCode" : "MF001",
                  "respValue" : 10,
                  "respQuantity" : 100,
                  "respYieldType" : "YTM",
                  "respYield" : 5.561,
                  "respCalcMethod" : "M",
                  "respPrice" : 103.131,
                  "respPutCallDate" : null,
```

```
                    "respQuoteTime" : "10:12:56",
                    "respGtdFlag" : "Y",
                    "respEndTime" : null,
                    "respRemarks" : null,
                    "respLoginId" : "USER001",
                    "status" : "N"
              }
        ]
}
```

Response Success JSON

Map containing following fields.

Field	Type	Mandatory	Description
code	Number	Yes	Always 200 Indicating success

Sample Response

```
{
      "code": 200
}
```

Appendix A - Code List

Ratings

Code	Description
AAA	AAA
AA+	AA+
AA	AA
AA-	AA-
A+	A+
A	A
A-	A-
BBB+	BBB+
BBB	BBB
BBB-	BBB-
BB+	BB+
BB	BB
BB-	BB-
B+	B+
B	B
B-	B-
C+	C+
C	C
C-	C-
UNRATED	UNRATED
OTHER	OTHER

Sectors

Code	Description
NBFC	NBFC
HFC	HFC
PSU Bank	PSU Bank
Private Bank	Private Bank
PSU	PSU
Manufacturing	Manufacturing
Sovereign	Sovereign
Public Financial Institutions	Public Financial Institutions
Others	Others

*** End of Document ***