

API Document for NSE EIPO Query Server

Created	19-May-2017
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Current Version	1.0.3
Current Version Date	18-Oct-2021

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Business Owner		

Revision History

Date	Change Description	Edited By	Version
19-May-2017	Initial Version		1.0.0
09-June-2017	UAT and production URLs changed		1.0.1
31-July-2017	Added bid counts in demand and catwise APIs		1.0.2
18-Oct-2021	Added Appendix B – Base URL		1.0.3

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Introduction

This document describes the REST API's to programmatically to query data from the NSE EIPO Query Server (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:** Header value should be “application/json”
 - **Authorization:** Value should contain the authorization method and credentials. Currently only “Basic” method is supported, in which case the value should be “Basic {{credentials}}”. {{credentials}} is base64 encoded text of {{membercode}}^{{loginid}}:{{password}}. The {{membercode}}, {{loginid}} and {{password}} will be provided separately. For example for member “M001”, loginid “USER1” and password “Pass@123” the header value should be “Basic TTAwMV5VU0VSMTpQYXNzQDEyMw==”
2. Path parameters and query parameters in the URL’s must be encoded using percentage 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 (“.”)
 - All dates, times and datetimes are represented as strings and in Indian standard time. Dates are formatted using format “dd-MM-yyyy”. Time are formatted as “hh24:mm:ss”. Date times are formatted as “dd-MM-yyyy hh24:mm:ss”.

APIs

Summary

API	Description
GET /mktdata/v1/demand/{{symbol}}	Gets absolute and cumulative demand at various price points
GET /mktdata/v1/catwise/{{symbol}}	Gets client category, sub category wise total demand.

API Reference

GET /mktdata/v1/demand/{{symbol}}

This API returns the absolute as well as cumulative demand at various price points for the input symbol

Method	POST
URL	<baseurl>/mktdata/v1/demand/{{symbol}}
Request	Path Parameters
Response	JSON

Request Path Parameters

Field	Type	Description
symbol	String(12)	Issue Symbol

Sample URL with Path Parameters

<https://www.nseindiaipo.com/eipo/mktdata/v1/demand/TESTSYM01>

Response JSON

Field	Type	Description
symbol	String(12)	Symbol
status	String(10)	success / failed
reason	String(100)	reason
demand	List of Objects	List of Demand objects

Demand Object JSON Structure

Field	Type	Description
cutOffIndicator	Boolean	Cut off Indicator true – Price point is for cut off false- Price point is other than cut off Not applicable for DEBT issues
series	String(2)	Series (only applicable for DEBT issues)
price	Decimal	Mandatory and valid only if “cutOffIndicator” = false.
absoluteQuantity	Number	Absolute demand quantity at the given price point
cumulativeQuantity	Number	Cumulative demand quantity at the given price point Not applicable for DEBT issues
absoluteBidCount	Number	Absolute number of bids at the given price point
cumulativeBidCount	Number	Cumulative number of bids at the given price point

		Not applicable for DEBT issues
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Sample Response

```
{
  "symbol": "TESTSYM01",
  "status": "success",
  "demand": [
    {
      "cutOffIndicator": true,
      "absoluteQuantity": 100,
      "cumulativeQuantity": 100,
      "absoluteBidCount": 1,
      "cumulativeBidCount": 1
    },
    {
      "cutOffIndicator": false,
      "price": 121.00,
      "absoluteQuantity": 200,
      "cumulativeQuantity": 300,
      "absoluteBidCount": 2,
      "cumulativeBidCount": 3
    },
    {
      "cutOffIndicator": false,
      "price": 120.00,
      "absoluteQuantity": 300,
      "cumulativeQuantity": 600,
      "absoluteBidCount": 3,
      "cumulativeBidCount": 6
    }
  ]
}
```

GET /mktdata/v1/catwise/{{symbol}}

This API returns client category, sub category wise total demand

Method	POST
URL	<baseurl>/mktdata/v1/catwise/{{symbol}}
Request	Path Parameters
Response	JSON

Request Path Parameters

Field	Type	Description
symbol	String(12)	Issue Symbol

Sample URL with Path Parameters

<https://www.nseindiaipo.com/eipo/mktdata/v1/catwise/TESTSYM01>

Response JSON

Field	Type	Description
symbol	String(12)	Symbol
status	String(10)	success / failed
reason	String(100)	reason
demand	List of Objects	List of Demand objects

Demand Object JSON Structure

Field	Type	Description
category	String(12)	Category code.
subcategory	String(5)	Sub Category code.
quantity	Number	Total demand quantity for the given category and subcategory
bidCount	Number	Total bid count for the given category and subcategory

Sample Response

```
{
  "symbol": "TESTSYM01",
  "status": "success",
  "demand": [
    {
      "category": "QIB",
      "subCategory": "IC",
      "quantity": 100,
      "bidCount": 1
    },
    {
      "category": "QIB",
      "subCategory": "FII",
      "quantity": 200,
      "bidCount": 2
    },
    {
      "category": "QIB",
      "subCategory": "MF",
      "quantity": 250,
      "bidCount": 3
    },
    {
      "category": "NIB",
      "subCategory": "MF",
      "quantity": 250,
      "bidCount": 3
    },
    {
      "category": "NIB",
      "subCategory": "CO",
      "quantity": 250,
      "bidCount": 3
    },
    {
      "category": "NIB",
      "subCategory": "IND",
      "quantity": 20,
      "bidCount": 1
    },
    {
      "category": "RETAIL",
      "subCategory": "IND",
      "quantity": 500,
      "bidCount": 5
    }
  ]
}
```

Appendix B – Base URL

The <baseurl> in the urls might be changed and shall be communicated separately in case of any changes.

Base URL	Old	New
Production	www.nseindiaipo.com/eipo	eipo.nseindia.com/eipo
UAT	www.eipouat.com/eipo	uat-ipo.nseindia.com/eipo