



API FOR TWO – FACTOR AUTHENTICATION SUBSCRIPTION WEBSERVICE

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API Web Service for 2FA

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Introduction

Two Factor Authentication Subscription are to be sent to MFI/MFD/RIA clients for all specific Purchase details. Clients are to verify the details using a One Time Password sent for authentication to the mobile and email ID of the client. The Exchange shall provide a webservice for Members to allow the clients to connect to the 2FA portal for clients to verify their Orders and Nomination using the OTP.

Overview

Members can consume the Exchange webservice to open the 2FA page Transactions Authentication details for the Client to enter the OTP and confirm his transactions.

The Exchange shall send the webpage link to be opened in the member website or mobile app.

Technology

This will be using JSON based message structures to send and receive data to the Exchange.

Members shall send API requests to the Exchange.

URL and all pending data sent to member on request.

Members to open the link sent by Exchange in their App/ Website.

On successful confirmation link to be redirected to Loopback URL with the Client verified data.

Message Flow

1. Client enter the orders for himself.
2. Member/Vendor invokes the 2FA Authentication API to fetch the BSE 2FA webpage for authenticating the Orders changes.
3. Member gets the URL and a list of all pending Orders for which 2FA is to be completed.
4. This BSE Page is displayed in his Website or Mobile APP.
5. Client navigates to the various orders and has to enter the OTP on the authentication page to confirm the order.
6. Once the OTP is confirmed, then the order is sent for further processing.
7. Client clicks on Sumit button.
8. The member gets the list of purchased orders and verified in the POST data submitted to the post URL.

TRANSACTION MESSAGE STRUCTURE

URL : https://bsestarmfdemo.bseindia.com/BSEMFWEBAPI/api/_2FA_AuthenticationController/_2FA_Authentication/w

Structure for 2FA Authentication API

Request Parameter

Body

Parameters	Type	Length	Remarks
loginId	varchar	20	Mandatory
Password	varchar	20	Mandatory
Membercode	varchar	20	Mandatory
Clientcode	varchar	10	Mandatory
primaryholder	varchar	1	Mandatory (1/2/3)
loopbackURL	varchar	1000	Non-Mandatory (For Future use only)
Internalrefno	varchar	20	Mandatory
allowloopBack	varchar	1	Non-Mandatory (For Future use only) If Y an Additional variable will be sent as redirection in the Loopback URL ?Status=SUCCESS/FAILURE/PENDING

Note :- Please note that presently loopback URL will not have any re-direction. It will be Server-To-Server Post data for Status.

Response Parameter

Parameters	Type	Length	Remarks
ResponseCode	varchar	3	100- success
			101- failure
ResponseString	varchar		WebPage in HTML format Or Verbose Message (Error)
internalrefno	Varchar	20	

Post Data to be Submitted to the Response Parameter

Parameters	Type	Length	Remarks
Response String			WebPage in HTML format <i>Or</i> Verbose Message (Error)
Status Code	Varchar	3	100- success
			101- failure
Internal Reference No	Varchar	20	
Orders	JSON Array		List of Orders
OrderNo	Key Array		
Order Value	Key Object Pair		Order Number
Type	JSON Object		
Type Value	JSON Object		Type of Order
Status	JSON Object		
	JSON Object		1 st Digit - Primary Holder 2 nd Digit – Secondary Holder 3 rd Digit – Third Holder 0/1 – Holder Approved Yes or No E.g. 100 – Only Primary Holder has authenticated. 111 – All Three Holders have authenticated. 101 – Only Primary Holder and Third Holder has authenticated. 110 – Primary Holder and Second Holder has authenticated.

			<p>011 – Only secondary Holder and Third Holder has authenticated.</p> <p>001 – Only Third has authenticated.</p>
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Sample Code

Request :

```
{
  "loginId" : "XXXXXX",
  "password" : "XXXXXX",
  "membercode" : "XXXX",
  "clientcode" : "456fefe",
  "primaryholder" : "1",
  "loopbackURL" : "",
  "internalrefno" : "123456987",
  "allowloopBack" : "",
}
```

Response :

```
{
  "responsestring": "HTML",
  "statuscode": "100",
  "internalrefno": "123456987"
}
```

Post Data to Post URL on Client Journey Completion

```
{
  "statuscode": "100",
  "internalrefno": "123456987",
  "Orders": [
    {
      "orderno": "8739152",
      "Type": "Purchase",
      "status": "111"
    }
  ]
}
```

Note:- This will contain the Orders that the Client has verified in his journey.