



ExternalFundTransfer_IMPS API GATEWAY DOC

Table of Contents

1. INTRODUCTION	2
2. API CONNECT COMPONENTS	3
3. STEPS TO ACCESS & SUBSCRIBE IN PORTAL	3
4. API AUTHENTICATION	3
5. ExternalFundTransfer_IMPS API Details	3

1.1 Design Document Purpose

The purpose of this document is to provide a detailed specification of the **ExternalFundTransfer_IMPS** in sufficient depth to:

- Enable the component to be built and tested.
- Ensure that it can be enhanced, supported and maintained by other areas of the organization after initial implementation.

1.2 Design Reviews

The service design will be reviewed within Middleware team and security testing team as needed. Once finalized, design resource will provide an overview to other teams such as front end application development team and various project resources.

2. API CONNECT COMPONENTS

- API Connect is used to expose the service to front end applications.
- Within API Connect, there are multiple Products. The **ExternalFundTransfer_IMPS** API is exposed within **ExternalFundTransfer_IMPS** Products.
- Service Consumers must subscribe to the API. A unique application Identification (client-id) and a secret will be generated.
- The assigned Client-id must be supplied in the header for each API.
- URLs for invoking the services can be found in API Connect Developer portal and also mentioned in the below section.

3. STEPS TO ACCESS & SUBSCRIBE IN PORTAL

Refer Subscription User manual shared during initial on board.

4. API AUTHENTICATION

JWT Access token to be passed in JSON wrapper as string value in "JWTTokenValue" field. The Token can be generated by subscribing to **TOKEN API**.

4.1 TOKEN API

- **Overview:** To retrieve access token.
- **Request Type:** GET
- **Mandatory HTTP Headers:**
 - X-IBM-Client-Id: xxxxxxxxxxxxxxxx
 - X-IBM-Client-Secret: xxxxxxxxxxxxxxxx
- **SIT URL:** <https://apiuat.ujjivansfb.in/ujjivan/development/v1/tokens>

5. ExternalFundTransfer_IMPS API Details

- **Overview:**

Service is designed to transfer funds to external accounts using IMPS. The API Gateway makes a backend ESB call which in turn connects to provider system **CRM** of service name **FSSNet_mPAY**

➤ **Request Type:** POST

➤ **API URL:**

UAT:

https://apiuat.ujjivansfb.in/ujjivan/development/v1/xternFundTransIMPS/externalFundTransfer_IMPS

➤ **Mandatory HTTP Headers:**

■ X-IBM-Client-Id: xxxxxxxxxxxxxxxx

➤ **Accept:** application/json

➤ **Content-type:** application/json

➤ **REQUEST PAYLOAD:**

At API Gateway the request has to be passed as JSON wrapper. The sample payload is as below,

```
{
  "RequestEncryptedValue": "",
  "TransactionId": "",
  "JWTTokenValue": ""
}
```

The individual fields of the Standard JSON Request Payload are described below-

- **RequestEncryptedValue** : This will contain the encrypted value of original REST-JSON request sample.
- **TransactionId** : External partners need to set a transaction ID to uniquely identify every request, in order to retrieve it from an audit trail at a later date.
- **JWTTokenValue** : This value can be obtained by invoking Bank's token generator service.

(For more details on request encryption Refer UjjivanSFB_API_Integration_TechnicalProcess_document)

➤ **Actual REST-JSON Input Parameter:**

Element Name	M/O/C	Data Type	Size	Description	Validation Rules
externalFundTransfer_IMPSReq / reqHdr		Complex			
reqHdr/consumerContext/applicationId	M	String	3	Application id from which request originated. Example IB, MB,HHD, BRN	
reqHdr/serviceContext/uniqueMsgId	M	String		Unique request message id for each message generated from consumer for tracking purpose.	
reqHdr/serviceContext/reqMsgDateTime	M	DateTime		Request time stamp in the format CCYY-MM-DDThh:mm:ss.sss	
reqHdr/serviceContext/serviceName	M	String		ServiceName to be provided.	

reqHdr/ serviceContext/ serviceVersion	O	String		Service version to be provided. It's value is 1.	
reqHdr/ providerContext/ providerId	O/F	String	3	Provide application Id from where data expecting	
reqHdr/ userContext/ appUserID	M	String	20	AppUserId will be provided which is created unique to user. Client need to pass this value each and every request.	
reqHdr/ userContext/ appPassword	M	String	64	AppPassword will be provided which is specific to user. Client need to pass this value each and every request.	
externalFundTransfer_ IMPSReq/body	M	Complex			
body/ remitterMobileNumber	M	Number	10	Remitter Mobile Number	
body/ remitterAccountNumber	M	Number	16	Remitter Account Number	
body/ remitterName	M	String	80	Remitter Name	
body/ beneficiaryName	O	String	80	Beneficiary Name	
body/ beneficiaryMobileNumber	C/M	Number	10	Beneficiary Mobile Number	Mandatory for MMID call.
body/beneficiaryMMID	C/M	Number	7	Beneficiary MMID	
body/ beneficiaryAccountNumber	C/M	String	35	Beneficiary Account Number	Mandatory for IFSC call.
body/ beneficiaryAccountType	C/M	Number	2	Beneficiary Account Type	
body/beneficiaryIFSC	C/M	String	11	Beneficiary IFSC code	
body/beneficiaryAadhar	C/M	String	16	Beneficiary Aadhar number	Mandatory for P2U call
body/amount	M	Number	12	Amount	
body/bankId	M	Number	6	Bank Id	Default to 508991
body/ transactionId	M	Number	12	Transaction Id. Should be unique id with length 12	
body/ sourceId	M	String	10	sourceId IB, MB, HHD	
body/ remarks	O	String	50	Remarks	

➤ **RESPONSE PAYLOAD STRUCTURE**

A standard JSON wrapper containing encrypted response will be obtained. The encrypted response is of AES/CBC/256 mode with Initialization vector concatenated at the start of original JSON response.

The sample response structure is as below,

```
{
  "ResponseOfEncryptedValue": "<encrypted value>",
  "TransactionId": "162193467244544"
}
```

Using the static key shared by Ujjivan Bank, decryption of the value in tag ResponseEncryptedValue should be performed with AES/CBC/256/IV

TransactionId: This field will contain the transaction ID which was passed in request.

(For more details on response encryption Refer UjjivanSFB_API_Integration_TechnicalProcess_document)

➤ **ACTUAL OUTPUT PARAMETERS:**

Response					
externalFundTransfer_IMPSRes / resHdr	Complex				
resHdr/consumerContext/applicationId	M	String	3	Value will be echoed from request message	
resHdr/serviceContext/uniqueMsgId	M	String		Value will be echoed from request message	
resHdr/serviceContext/reqMsgDateTime	O	DateTime		Value will be echoed from request message	
resHdr/serviceContext/serviceName	M	String		Value will be echoed from request message	
reqHdr/serviceContext/serviceVersion	O	String		Value will be echoed from request message	
resHdr/providerContext/providerId	M	String	3	Provider System Id from where data is sending	
resHdr/providerContext/responseMsgDateTime	O	DateTime		Response message date and time stamp.	
resHdr/responseStatus/status	M	String		Response status from ESB	
				Status 0 = Successful, 1 = Failure	
externalFundTransfer_IMPSRes /body	M	Complex			
body / transactionId	M	Number	12		

body/ responseDescription	M	String	200		
body/ responseCode	M	Number	2		
externalFundTransfe r_IMPSRes /body/errorInfo	O, Repe ating	Complex			Will be populated in case of any business exception from back end
externalFundTransfe r_IMPSRes /body/errorInfo/ errorSource	O	String		If Status = 1, value will be populated with error system source	Will be populated in case of exceptions thrown by ESB
externalFundTransfe r_IMPSRes /body/errorInfo/ errorCode	C	String		If Status = 1, value will be populated with error code	
externalFundTransfe r_IMPSRes /body/errorInfo/ errorDescription	C	String		If Status = 1, value will be populated with error description	
externalFundTransfe r_IMPSRes /body/errorInfo/ errorType	O	String	1	If Status = 1, value will be populated with error Type	
resHdr/ additionalDetails/ details1	O/F	String		Future Use	
resHdr/ additionalDetails/ details1	O/F	String		Future Use	
resHdr/ additionalDetails/ details1	O/F	String		Future Use	

➤ Error Handling

HTTP Status Code	HTTP Message	More Information
401	Unauthorized	Access token missing or validation
400	Bad Request	The parameters are invalid or missing.
503	Service Unavailable	The parameters were valid but the request failed.
200	Refer section 5 for more details	

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