

BlockDebitCard API GATEWAY DOC

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## **1.1 Design Document Purpose**

The purpose of this document is to provide a detailed specification of the **BlockDebitCard** 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 BlockDebitCard API is exposed within BlockDebitCard Product.
- 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 mentioned in the below section.

## **3. 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 "JWTokenValue" field. The Token can be generated by subscribing to **TOKEN API**.

## 4.1 TOKEN API

**Overview:** To retrieve access token.

#### **METHOD**: GET

#### > Mandatory HTTP Headers:

- X-IBM-Client-Id: xxxxxxxxxxxxxxxx
- X-IBM-Client-Secret: xxxxxxxxxxxxxxxxxxxx

SIT URL: <u>https://apiuat.ujjivansfb.in/ujjivan/development/v1/tokens</u>

## 5. BlockDebitCard API Details

> Overview:



Service is designed to block the given debit card. The API Gateway makes a backend ESB call which in turn connects to provider system **FSS** of service name **CardBlock.** 

```
> METHOD: POST
```

```
> API URL:
```

UAT : https://apiuat.ujjivansfb.in/ujjivan/development/v1/cardBlock/blockDebitCard PROD : To be done

```
> 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": "",
"JWTokenValue": ""
}
```

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.
- JWTokenValue : 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/<br>0/C | Data Type | Size | Description  | Validation<br>Rules |
|--|-----------|-----------|------|--|---------------------|
| blockDebitCardReq<br>/body / reqHdr          | Comp      | lex       |      |  |                     |
| reqHdr/consumerCont<br>ext/applicationId     | М         | String    | 3    | Application id from which request<br>originated. Example IB, MB,HHD, BRN                       |                     |
| reqHdr/<br>serviceContext/<br>uniqueMsgId    | М         | Stirng    |      | Unique request message id for each<br>message generated from consumer<br>for tracking purpose. |                     |
| reqHdr/<br>serviceContext/<br>reqMsgDateTime | м         | DateTime  |      | Request time stamp in the format CCYY-MM-DDThh:mm:ss.sss                                       |                     |
| reqHdr/<br>serviceContext/                   | М         | String    |      | ServiceName to be provided.  |                     |



| serviceName                                  |     |         |    |   |  |
|--|-----|---------|----|---|--|
| reqHdr/<br>serviceContext/<br>serviceVersion | 0   | String  |    | Service version to be provided. It's value is 1.  |  |
| reqHdr/<br>providerContext/<br>providerId    | O/F | String  | 3  | Provide application Id from where data expecting  |  |
| reqHdr/ userContext/<br>appUserID            | M   | String  | 20 | AppUserId will be provided which is<br>created unique to user. Client need to<br>pass this value each and every<br>request. |  |
| reqHdr/ userContext/<br>appPassword          | М   | String  | 64 | AppPassword will be provided which<br>is specific to user. Client need to pass<br>this value each and every request.        |  |
| blockDebitCardReq<br>/body                   | М   | Complex |    |   |  |
| body/ cardNumber                             | М   | String  | 16 | Card Number   |  |
| body/ requestType                            | М   | String  | 2  | СВ  |  |
| body/ channel                                | м   | String  | 5  | IB-Internet Banking,<br>MB-Mobile, CRM-CRM,<br>TAB-Tablet, IVR-Interactive Voice<br>Response                                |  |
| body/ date                                   | М   | date    |    | Current date(YYYY-MM-DD)  |  |
| body/ time                                   | М   | Time    |    | Currnet time(hh24:mm:ss)  |  |

# RESPONSE PAYLOAD STRUCTURE

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

The sample response structure is as below,

```
{
    "ResponseOfEncrytptedValue": "<encrytped 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:

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| Response  |         |          |    |  |   |
|---|---------|----------|----|--|---|
| blockDebitCardRes<br>/resHdr                              | Complex |          |    |  |   |
| resHdr/consumerCon<br>text/applicationId                  | М       | String   | 3  | Value will be echoed from request message                          |   |
| resHdr/<br>serviceContext/<br>uniqueMsgld                 | М       | Stirng   |    | Value will be echoed from request message                          |   |
| resHdr/<br>serviceContext/<br>reqMsgDateTime              | 0       | DateTime |    | Value will be echoed from request message                          |   |
| resHdr/<br>serviceContext/<br>serviceName                 | М       | String   |    | Value will be echoed from request message                          |   |
| reqHdr/<br>serviceContext/<br>serviceVersion              | 0       | String   |    | Value will be echoed from request message                          |   |
| resHdr/<br>providerContext/<br>providerId                 | М       | String   | 3  | Provider System Id from where data is sending                      |   |
| resHdr/<br>providerContext/<br>responseMsgDateTim<br>e    | 0       | DateTime |    | Response message date and time stamp.                              |   |
| resHdr/responseStat<br>us/status                          | М       | String   |    | Response status from ESB   |   |
|   |         |          |    | Status 0 = Successful, 1 = Failure                                 | -   |
| resHdr/responseStat<br>us/ esbResDateTime                 | М       | DateTime |    | Response date time stamp from ESB                                  |   |
| blockDebitCardRes/<br>body                                | м       | Complex  |    |  |   |
| body/cardNumber   | м       | String   | 16 | Card Number  |   |
| body/ status  | М       | String   | 10 | Status of the Request  |   |
| blockDebitCardRes<br>/body/errorInfo/<br>errorSource      | 0       | String   |    | If Status = 1, value will be populated<br>with error system source | Will be<br>populated in<br>case of<br>exceptions<br>thrown by ESB |
| blockDebitCardRes<br>/body/errorInfo/<br>errorCode        | С       | String   |    | If Status = 1, value will be populated<br>with error code          |   |
| blockDebitCardRes<br>/body/errorInfo/<br>errorDescription | C       | String   |    | If Status = 1, value will be populated<br>with error description   |   |



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| blockDebitCardRes<br>/body/errorInfo/<br>errorType | 0   | String | 1 | If Status = 1, value will be populated<br>with error Type |  |
|--|-----|--------|---|---|--|
| resHdr/<br>additionalDetails/<br>details1          | O/F | String |   | Future Use  |  |
| resHdr/<br>additionalDetails/<br>details1          | O/F | String |   | Future Use  |  |
| resHdr/<br>additionalDetails/<br>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.                            |

-----END OF DOCUMENT-----