

# Scope Document

**Bulk Bill Payment**

**GrameenPhone**

**Version 1.4**



## Table of Contents

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Table of Contents .....	3
1 Introduction .....	5
1.1 Purpose .....	5
1.2 Scope .....	5
1.3 Audience .....	5
2 Bulk BillPayment Portal .....	6
2.1 Login Flow: .....	6
2.2 BillPayment Flow: .....	27
2.3 Password Management Flow: .....	33
2.4 Existing Flow Diagrams: .....	54
3 Technical Solution Requirement .....	57
3.1 Solution Overview .....	57
3.1.1 Tech stack to be used to deploy and run existing code .....	57
3.2 Deployment Specifications of existing module .....	57
3.2.1 DB Readiness .....	57
3.2.2 Application readiness .....	58
3.3 Project Specific Scope .....	58
3.3.1 Current Implementation .....	58
3.3.2 Graphical User Interface .....	58
3.3.3 Training .....	59
3.3.4 Documentation .....	59
3.3.5 Postman Collection .....	59
3.4 Testing and Acceptance .....	59
3.4.1 System Integration Testing .....	60
3.4.2 User Acceptance Procedure .....	60
3.5 Risks, Impact and Mitigation .....	60
3.6 Responsibility Matrix .....	60

3.7	Out of Scope .....	60
3.8	Code management .....	60
3.9	Project handover .....	61
3.10	Project Timelines.....	61
3.11	Support and maintenance.....	61
4	Document Change History .....	62

# 1 Introduction

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This document describes scope of work for Bulk BillPayment UI requirement for GrameenPhone

## 1.1 Purpose

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It is the scope of work document for the changes needed in current Bulk BillPayment module of Grameenphone to integrate with upgraded mobiquity PayX Solution. This will give flexibility to admin users to fetch bill details of account holders in bulk and then pay all pending bills in bulk.

## 1.2 Scope

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Grameenphone has already shared their code of existing Bulk BillPayment UI from old version and want same to be implemented in PayX solution provided by comviva in Phase B.

On existing feature, below are changes that need to be done:

- While fetching pending bill details of all bill account selected on UI : Change in existing integration logic and update to Mobiquity Integration API
- For Bill payment : Change in existing integration logic and update to Mobiquity Integration API
- Ambiguous payment handling scenarios(for enquiry and not reversal or refund) request will be routed to Mobiquity , for any dispute management
- Email and SMS handling should be there as per current setup : integration with Email server and SMSGW
- Login page to be created on WEB to enable user login with credentials. In old system, login page was from IDP. But in latest deployment Login feature should be created in Bulk UI itself.
- Password management (change and forgot password) feature has to be implemented on Bulk UI : Integration with Mobiquity for backend logic

Note : There are 2 UI for Bulk Bill Payment and Reporting. Current scope is just to give feature of Bulk Billpayment UI . Reporting UI requirements will be fulfilled from Pentaho which is part of Mobiquity solution.

## 1.3 Audience

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Comviva technical teams, partner teams

## 2 Bulk BillPayment Portal

Admin user would be able to access Bulk BillPayment portal. Each of them will have their specific userId and password

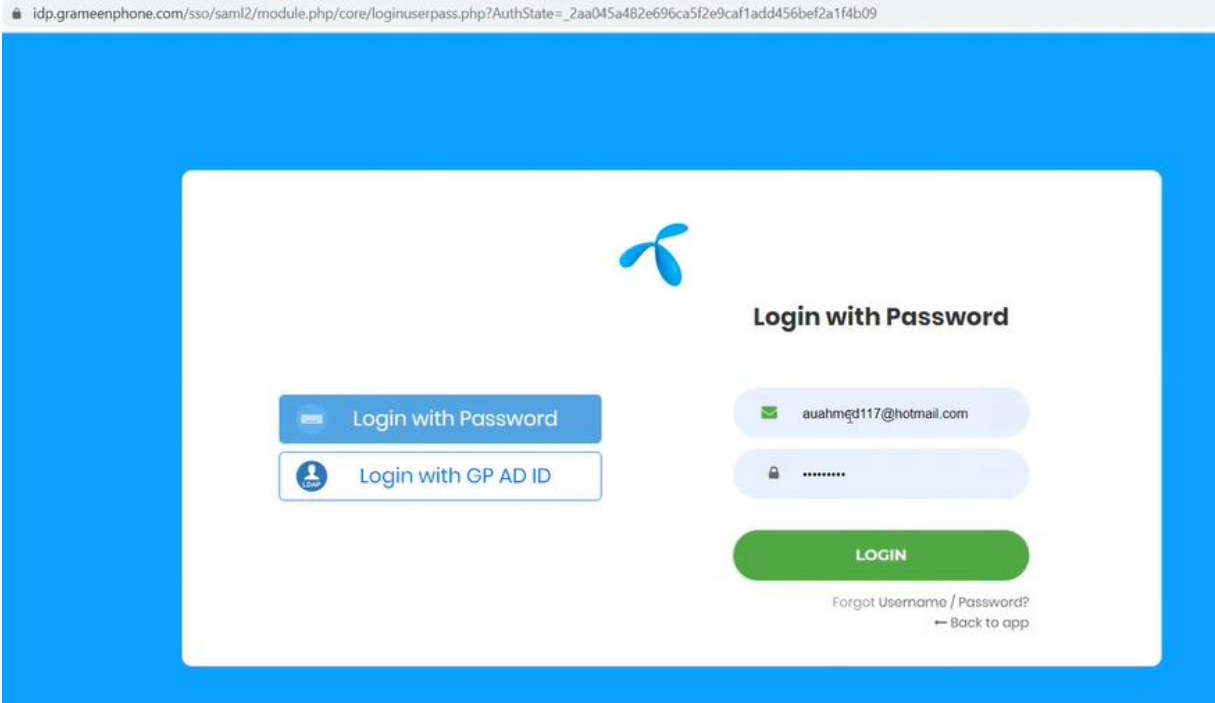
### 2.1 Login Flow:

#### Current Flow:

In old architecture, User authentication while Login is maintained by IDP. So whenever user is logging into the system, application routes user to login page of IDP. Where userid and password is asked from user.

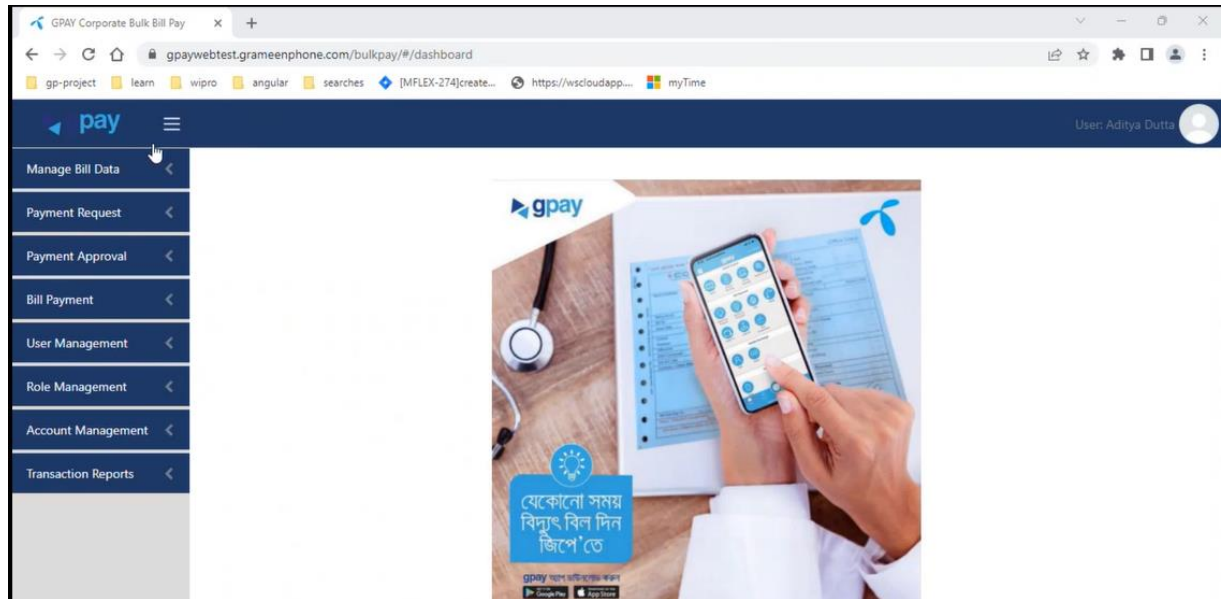
IDP validated credentials, on success it calls Billpay Dashboard page and give access to admin user.

#### Login Page of IDP :



The screenshot shows a web browser window with the URL `idp.grameenphone.com/sso/saml2/module.php/core/loginuserpass.php?AuthState=_2aa045a482e696ca5f2e9caf1add456bef2a1f4b09`. The page has a blue background and a white login box. Inside the box, there is a blue logo at the top center. Below the logo, there are two buttons: "Login with Password" and "Login with GP AD ID". To the right of these buttons, there are two input fields: one for the username (containing "auahmed117@hotmail.com") and one for the password (containing "\*\*\*\*\*"). Below the input fields is a green "LOGIN" button. At the bottom right of the login box, there are two links: "Forgot Username / Password?" and "Back to app".

BillPay Dashboard snapshot is below:



### New Flow:

Partner need to create this Login page into Bulk UI code itself. And w.r.t. authentication, hit is send to Mobiquity for user validation. Since there is no password storage in Bulk Bill mflex DB. Only userId and email id of users are stored. If user is verified by Mobiquity, then dashboard will be shown.

In order to support this approach, we must ensure that admin users who are present in mobiquity systems can only access bulk billpay dashboard. And they must need mobiquity login id and credentials only to login after registration in Bulk Billpay application. When any mobiquity user want access on Bulk Pay dashboard, then they have to get registered in BulkPay UI also with same login ID.

So login ID of user in mobiquity and BulkUI DB should match.

BulkUI application will send request to generate system token at time of login, once system token is fetched, login request will be sent with system token and login credentials and in return if user is valid in mobiquity system then userToken is sent in response to Login API along with refresh Token.

On receiving successful login, Bulk UI dashboard must be made visible to user.

### Expections from Partner:

- Create Login page
- Integrate with mobiquity to fetch system token and Login validation
- Basis mobiquity Login API response, route request to already existing Bulk dashboard in system.

## 2.1.1

## API Details:

## 2.1.1.1 Fetching System Token

### **Action: GET**

### **Endpoint: /ums/v1/user/auth/web/system-token**

### **Description**

This API is used by the DFS container to generate grant type credentials for the user to login/access mobile or web application. By default, one grant type (system token) is associated with the system. This API helps in creating multiple grant types based on requirement.

### **Request:**

```
curl --location 'https://mfsbaastest.grameenphone.com/mobiquitypay/oauth/token' \
--header 'Content-Type: application/x-www-form-urlencoded' \
--header 'Authorization: Basic Q29yZVdlYjphZGF5ZmNTV2NJ' \
--data-urlencode 'grant_type=client_credentials'
```

### **Response Body**

Code: 200

Get System Token for Web Application.

```
{
  "access_token": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcHVibG1jLTEifQ.eyJzY29wZSI6WyJHRVRfVFNFU19BTkRfQUNDt1VOVF9ERVRSUxTiwiU0VMRlNFVEFVVEhGQUUNUT1IiLCJGRVRSF9VU0VSX1FVRVNUU090IiwiaWF0IjoxNjQ0ODM3LCJhdXRob3JpdGl1cyI6WyJST0xFOX0NMSUVOVCJdLCJqdGkiOiJiYWVxZjY2NC01NjA1LTQ4NDItYTEyYy0zMDE0NWRjNjZlNGYiLCJjbGllbnRfaWQiOiJDb3JlV2ViIn0.EhFA55EfQUdTrUSz1YuPRBE11JmZjLARC1c_PAVOfPtFVcvH_Np_yluShLMsrH1JU71yAmi3gjIDka3-5bLq-o2JSLk_mc39Q1BsXaZGYxR2CMpbxDbKwrlNX8E1FF8RWPiW7Mk6xQI0rA6IJvD8y8JrFhvTyROhyuOzm1py3CG0ihM5kR4z_0Kna6ptzYJPVYbLzqVNQ9dFxxsEfQS0JQCZWMRbKEGuEOzbkCrmEGi1F7WTZ0SGm3speYqvRMv_Cd5xo37q0YnPyp3boGkjq8wlgG3dFAv73fnAHZSm2ZwXM-nO19WKZhQNmqLpj64TZKAVJBplQeLwdCU2d6cAQ",
  "token_type": "bearer",
  "expires_in": 299,
  "scope": "GET_USER_AND_ACCOUNT_DETAILS SELFSETAUTHFACTOR FETCH_USER_QUESTION TXN CORRECT ATMCASHOUT ATMCASHOUT_V4 ADMTXNREFID",
  "jti": "bab1f664-5605-4842-a12c-30145dc66e4f"
}
```

Fields	Type	Description	Example/Allowed Values
<b>LoginWithOTPResponseModel</b>	Login response model with token		
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, ar, fr
<b>lastLoginTime</b>	String	Time stamp of last login of the user.	2020-10-13T02:47:56
<b>message*</b>	String	The API response message that	OTP validation is required.



Fields	Type	Description	Example/Allowed Values								
		shows the type of information returned.  No Specific length	Please enter OTP to continue								
<b>serviceFlow</b>	String	A unique code that is internal to Comviva and identifies the business process flow associated to the API.	OTPLGIN								
<b>serviceRequestId*</b>	String	Whenever an API is called, Comviva generates a unique service request ID for the API request. This unique ID traverses' components in the business process flow. It is useful when the process flow is paused for the user input and needs to be resumed when user has provided the input.  Length-36 characters (System generated)	f491f6b1-aa9b-43de-93b0-c85eda706a2c								
<b>status*</b>	String	The status to show whether the API call is a success, failure, in progress, or paused.	SUCCEEDED, FAILED, INPROGRESS, or PAUSED								
<b>token</b>	String	<div>TokenData</div> <table> <tr> <th>Fields</th><th>Type</th><th>Description</th><th>Example</th></tr> <tr> <td><b>access_token*</b></td><td>String</td><td>Access token is used for token based authentication to allow an application to access an API. The application receives an Access Token after a user successfully authenticates and authorizes access. User can then pass this access token as a credential to perform any transactions in the application.</td><td>asdfqwrtwy</td></tr> </table>		Fields	Type	Description	Example	<b>access_token*</b>	String	Access token is used for token based authentication to allow an application to access an API. The application receives an Access Token after a user successfully authenticates and authorizes access. User can then pass this access token as a credential to perform any transactions in the application.	asdfqwrtwy
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Fields	Type	Description	Example/Allowed Values
			Access tokens are short-lived tokens.
		<b>expires_in</b>	Integer (\$int32) Validity period (in seconds) for accessing the token. 299
		<b>refresh_token</b>	String Once the access token expires, you can use the refresh token to get the new access token. Refresh tokens also expire but they are supposed to live much longer than the access token. Max Length- 256 characters asdfqwrtwy
<b>transactionId*</b>	String	The unique id generated by the Comviva platform for the transaction. Length-21 character	XX220316.0959.A15026
<b>txnStatus</b>	String	Defines the five different statuses of the transaction.  Not Applicable for Non-Financial APIs  TI – Transaction Initiated  TS – Transaction Succeeded  TF – Transaction Failure  TP – Transaction Paused  TA – Transaction Ambiguous	Success
<b>userId</b>	String	Unique ID generated by the system after successful user registration. Length-20 characters	US.k6GH1579603850092

## Sample Response Body

```
{
  "access_token": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcHVibGllLTEifQ.eyJzY29wZSI6WyJHRVRfVWVNFUL9BTkRfQUNDT1VOVF9ERVRBSUxTIiwuU0VMRlNFVEFVVEhGQUUNUT1IiLCJGRVRSF9VU0VSX1FVRVNUU0IiwiaWF0IjoxNjY2NTcwODAwLCJhdXRob3JpdGlscyI6WyJST0x0NMSUVOVCJdLCJqdGkiOiIyY2ExYzlhYS1kYWE5LTRlNDEtOGI2OS1hNWY4OTdjNmUxMzAiLCJjbGllbnRfaWQiOiJDY3JlV2ViIn0.RXzx1CT19gAma-PuFUzR8zzq2pK-ezjY71sLdN_lx7nEodc8jz58m6QKTfQXhX2k9SUv5uCkZhJxF-OU7ChOkkMCDq3YiZcTxqvNs31LjTyxOMiT_c2s0x9H2WvSCEUuOXF5c1RUfwuCYb1BASak4NfpAILvZZfaS7sUp4xjuwmz1CvGcL2rUAedxBsJBmHhYHPu4-9lGBEc9FLPXSKJz14fnX5wMBK37JbadIy4C-7C6XwRhYPyHG73RuPgnSG_-RbrlDkRoM9DS9h03V3Q35HesXXRTk7L5x5i9piMCWym3dQJat8yzAZVAch9SaVZ2URjVF4MNyr49cg6XRbjw",
  "token_type": "bearer",
  "expires_in": 179,
  "scope": "GET_USER_AND_ACCOUNT_DETAILS SELFSETAUTHFACTOR FETCH_USER_QUESTION TXN CORRECT ATMCASHOUT ATMCASHOUT_V4 ADMTXNREFID",
  "jti": "2calc9aa-daa9-4e41-8b69-a5f897c6e130"
}
```

## Error Codes

Error Code	Description
400	Bad request
500	Internal Server Error

## 2.1.1.2 Validating User Credential and Generate Token for Web

### Action: POST

### Endpoint: /ums/v3/user/auth/web/login

### Description

This API is used to validate user login credentials based on login policy and generates token to access web application.

### Request body

```
curl --location
'https://mfsbaastest.grameenphone.com/mobiquitypay/ums/v3/user/auth/web/login' \

--header 'Content-Type: application/json' \

--header 'Authorization: Bearer
eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcHVibGllLTEifQ.eyJzY29wZSI6WyJHRVRfVWVNFUL9BTkRfQUNDT1VOVF9ERVRBSUxTIiwuU0VMRlNFVEFVVEhGQUUNUT1IiLCJGRVRSF9VU0VSX1FVRVNUU0IiwiaWF0IjoxNjY2NTcwODAwLCJhdXRob3JpdGlscyI6WyJST0x0NMSUVOVCJdLCJqdGkiOiIyY2ExYzlhYS1kYWE5LTRlNDEtOGI2OS1hNWY4OTdjNmUxMzAiLCJjbGllbnRfaWQiOiJDY3JlV2ViIn0.RXzx1CT19gAma-PuFUzR8zzq2pK-ezjY71sLdN_lx7nEodc8jz58m6QKTfQXhX2k9SUv5uCkZhJxF-OU7ChOkkMCDq3YiZcTxqvNs31LjTyxOMiT_c2s0x9H2WvSCEUuOXF5c1RUfwuCYb1BASak4NfpAILvZZfaS7sUp4xjuwmz1CvGcL2rUAedxBsJBmHhYHPu4-9lGBEc9FLPXSKJz14fnX5wMBK37JbadIy4C-7C6XwRhYPyHG73RuPgnSG_-RbrlDkRoM9DS9h03V3Q35HesXXRTk7L5x5i9piMCWym3dQJat8yzAZVAch9SaVZ2URjVF4MNyr49cg6XRbjw'
```

29wZSI6WyJHRVRfVVNFU9BTkRfQUNDT1VOVF9ERVRBSUxTliwiU0VMRINFVEF  
VVEhGQUNUT1liLCJGRVRDSF9VU0VSX1FVRVNUSU9OIwiVFhOQ09SUkVdVCIslk  
FUTUNBU0hPVVQiLCJBVE1DQVNIT1VUX1Y0IiwiQURNVFhOUkVGSUQiXSwiZXhw  
IjoxNjk2OTk5MjAzLCJhdXRob3JpdGllcyI6WyJST0xFOX0NMSUVOVCJdLCJqdGkiOiJiM  
mU1YzY5MC05ODBhLTQyNjUtYmQ0Mi05MzNhNTkxNGQyOGIiLCJjbGllbnRfaWQiOi  
JDb3JlV2ViIn0.guCwI3T5L6MEtqVyuBKHjy12KEy01FvdK4JpYxO53GL2a3RUwwLjzM0  
89QNNS1pzqnlqoJZjjosNC54-  
Uqzn4QQxhvZe7Lcr41yaysFUkdOlkUgowv7bm0eiclxMgohfE5MZAC7l0sCL2YEc8ArRHL  
e6qOY8vcOf-fXN1qD4GI4RSo3EAPbNS2gmCwc7crm-  
F9vh2ctxqCTW28eBjpUtuY70ByXxR44trS7g7IleeNg5fzBb7hOrxvKGRIBq5fiVdK35ldXH  
VBjBSQdYpyqTADhd38Q1TVxU3M4H3McVrReNK76ODFNQaur\_KeHs2kDcN2S6MSqZ  
ozGZiTa6X6GQ' \

```
--data-raw '{
  "bearerCode": "WEB",
  "language": "en",
  "workspaceId": "ADMIN",
  "identifierType": "LOGINID",
  "identifierValue": "Aman01",
  "authenticationValue": "Com@1357",
  "isTokenRequired": "Y",
  "deviceInfo": {
    "appName": "mobilePay",
    "appVersion": "V X.9",
    "deviceId": "ffed2d4608c5191f5086b2f2cf160afd",
    "browser": "Google Chrome",
    "isPublicDevice": "N",
    "latitude": "",
    "longitude": "",
    "mac": "",
    "model": "Desktop - Windows 10",
```

```

"networkOperator": "",
"networkType": "",
"os": "",
"providerIpAddress": "136.226.255.14"
}
}'

```

Fields	Type	Description	Example/Allowed Values																				
<b>LoginCriteriaRequest</b>	String	Validate user login credential based on the criteria.																					
<b>AuthenticationValue*</b>	String	PIN/Password of the user  Default length of pin is 4  Min password length is 5 & Max password length is 10	2468																				
<b>bearerCode *</b>	String	Access bearer channel of user which includes Web, USSD, Core Web, Mobile App	Web, USSD, Core Web, Mobile App																				
<b>deviceInfo *</b>	DeviceDetailDTO  Description: Representing the device details from where request raised. <table border="1"> <thead> <tr> <th>Fields</th><th>Type</th><th>Description</th><th>Example/Allowed Values</th></tr> </thead> <tbody> <tr> <td><b>appName</b></td><td>String</td><td>Application name  Length-40 character</td><td>mobiquity</td></tr> <tr> <td><b>appVersion</b></td><td>String</td><td>Version of the app that the user accessing.  Length-20 character</td><td>10.2</td></tr> <tr> <td><b>browser</b></td><td>String</td><td>Browser compatibility of the application.  Max Length-50 character</td><td>Chrome</td></tr> <tr> <td><b>deviceId *</b></td><td>String</td><td>Unique ID of the device from which the user is</td><td>excs-233-daca-312</td></tr> </tbody> </table>			Fields	Type	Description	Example/Allowed Values	<b>appName</b>	String	Application name  Length-40 character	mobiquity	<b>appVersion</b>	String	Version of the app that the user accessing.  Length-20 character	10.2	<b>browser</b>	String	Browser compatibility of the application.  Max Length-50 character	Chrome	<b>deviceId *</b>	String	Unique ID of the device from which the user is	excs-233-daca-312
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<b>browser</b>	String	Browser compatibility of the application.  Max Length-50 character	Chrome																				
<b>deviceId *</b>	String	Unique ID of the device from which the user is	excs-233-daca-312																				

Fields	Type	Description	Example/Allowed Values
		accessing the app.  Max Length-50 character	
	<b>isPublicDevice *</b>	String Is the device public, Y/N	Y
	<b>latitude</b>	String Latitude geography of the device.  Max Length-30 character	12.971599
	<b>longitude</b>	String Longitude geography of the device.  Max Length-30 character	77.594566
	<b>mac</b>	String MAC address of the device.  Max Length-30 character	00:1B:44:11:3A:B7
	<b>model</b>	String Model number of the device.  Max Length-150 character	Oneplus10
	<b>networkOperator</b>	String Network operator of the device.  Max Length-30 character	Orange
	<b>networkType</b>	String Network type of the device which includes 3G, 4G, 5G, etc.  Max Length-30 character	4G
	<b>os</b>	String Operating system of the device.  Max Length-20 character	Android10
	<b>providerIpAddress</b>	String IP address of the service provider.	172.56.76.89

Fields	Type	Description	Example/Allowed Values
			Max Length-50 character
<b>identifierType *</b>	String	Access identifier type of the user/transactor	mobileNumber
<b>identifierValue</b>	String	Access identifier value associated with the identifier type selected.  Mobile Number:8-15  Email: Max length-40 characters  LOGINID-min length is 3 & max length is 20	777XXXXXX
<b>isTokenRequired *</b>	String	If token is required to access the app, select Y else select N	Y
<b>language *</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, ar, fr
<b>workspaceId *</b>	String	Workspace is the classification of all users at high level. All users are clubbed together under three workspaces SUBSCRIBER/BUSINESS/ADMIN	SUBSCRIBER/BUSINESS/ADMIN

## Sample Request

curl --location

'https://mfsbaastest.grameenphone.com/mobiquitypay/ums/v3/user/auth/web/login' \

```
--header 'Content-Type: application/json' \
```

```
--header 'Authorization: Bearer
```

eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcHVibGljLTEifQ.eyJzYy29wZSI6WyJHRVRfVFNFUl9BTkRfQU50VF9ERVRBSUxTliwiU0VMRINFVEFVVEhGQUNUT1IiLCJGRVRDSF9VU0VSX1FVRVNUSU90IiwiaWFhOQ09SUkVDVCIsIkFUTUNBU0hPVVQiLCJBVE1DQVNIT1VUX1Y0IiwiaWUiOiJURNVFhOUkVGSUQiXSwiZXhwIjojNjk2NTcwODAwLCJhdXRob3JpdGlscy16WyJST0xFX0NMSUVOVChdLCJqdGkiOiIlyY2ExYzhYS1kYWESLTRINDEtOGI2OS1hNWY4OTdjNmUxMzAiLCJjbGllbnRfaWQiOiJDdb3JlV2ViIn0.RXzx1CT19gAma-PuFuZR8zzq2pK-ezjY71sLdN\_lx7nEode8jz58m6QKTfqXHx2k9SUV5uCkZhJxF-OU7ChOkkMCdq3YiZcTxqvNs31ljTyxOMiT\_c2s0x9H2WvSCEUUoXFx5c1RUfwuCYblBAAsak4NfpAILvZZfaS7sUp4xjuwmz1CvGcL2rUAedxBsJBmHhYHPu4-9lGBEc9FLPXSKJz14fnX5wMBK37Jbadly4C-7C6XwRhYPyHG73RuPgnSG\_-RbrIdkRoM9DS9h03V3Q35HesXXRTk7L5x5i9piMCwyM3dQJat8yzAZVAch9SaVZ2URjVF4MNyr49cg6XRbjw' \

```
--data-raw
'{"bearerCode":"WEB","language":"en","workspaceId":"ADMIN","identifierType":"LOGINI
D","identifierValue":"System01","authenticationValue":"Com@1357","isTokenRequired":"Y
","deviceInfo":{"appName":"mobilePay","appVersion":"V
X.9","deviceId":"ffed2d4608c5191f5086b2f2cf160afd","browser":"Google
Chrome","isPublicDevice":"N","latitude":"","longitude":"","mac":"","model":"Desktop -
Windows
10","networkOperator":"","networkType":"","os":"","providerIpAddress":"136.226.255.14"}}
,
```

## **Response Body**

Code: 200

Validates credentials based on the login policy and generate token if request came from existing mapped device.

Fields	Type	Description	Example/Allowed Values
<b>LoginWithOTPResponseModel</b>	Login response model with token		
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, ar, fr
<b>lastLoginTime</b>	String	Time stamp of last login of the user.	2020-10-13T02:47:56
<b>message *</b>	String	The API response message that shows the type of information returned.	OTP validation is required. Please enter OTP to continue
<b>serviceFlow</b>	String	A unique code that is internal to Comviva and identifies the business process flow associated to the API.	OTPLGIN
<b>serviceRequestId *</b>	String	Whenever an API is called, Comviva generates a unique service request ID for the API request. This unique ID traverses' components in the business process flow. It is useful when the process flow is paused for the user input and needs to be resumed when user has provided the input.	f491f6b1-aa9b-43de-93b0-c85eda706a2c
<b>status *</b>	String	The status to show whether the API call is a success, failure, in progress, or paused.	SUCCEEDED, FAILED, INPROGRESS, or PAUSED
<b>token</b>	String	TokenData	



Fields	Type	Description		Example/Allowed Values	
		Fields	Type	Description	Example/Allowed Values
		<b>access_token</b> *	String	Access token is used for token based authentication to allow an application to access an API. The application receives an Access Token after a user successfully authenticates and authorizes access. User can then pass this access token as a credential to perform any transactions in the application. Access tokens are short-lived tokens.	asdfqwrtwy
		<b>expires_in</b>	Integer (\$int32)	Validity period (in seconds) for accessing the token.	299
		<b>refresh_token</b>	String	Once the access token expires, you can use the refresh token to get the new access token. Refresh tokens also expire but they are supposed to live much longer than the access token.	asdfqwrtwy

Fields	Type	Description	Example/Allowed Values
			Length-256 characters
<b>transactionId *</b>	String	<p>The unique id generated by the Comviva platform for the transaction.</p> <p>Length-20 character</p>	XX220316.0959.A15026
<b>txnStatus</b>	String	<p>Defines the five different statuses of the transaction.</p> <p>Not Applicable for Non-Financial APIs</p> <p>TI – Transaction Initiated</p> <p>TS – Transaction Succeeded</p> <p>TF – Transaction Failure</p> <p>TP – Transaction Paused</p> <p>TA – Transaction Ambiguous</p>	Transaction Success
<b>userId</b>	String	<p>Unique ID generated by the system after successful user registration.</p> <p>Length-20 character</p>	US.k6GH1579603850092

### Sample Response Body

Below is the response body when two factor authentication is disabled:

[illegible]



## Error Codes

Error Code	Description
400	Bad request
500	Internal Server Error

**Error scenario:**

Http error code: 400.

Error Code: Authen01- Invalid credentials.

**Response:**

```
{
  "txnStatus": "TF",
  "status": "FAILED",
  "language": "en",
  "mfsTenantId": "mfsPrimaryTenant",
  "errors": [
    {
      "code": "AUTH_06",
      "message": "Invalid login credentials. Please try again.",
      "componentName": "user-authentication"
    }
  ],
  "transactionTimeStamp": "2023-07-06T20:30:00",
  "errorCode": "Authen01",
  "traceId": "19422597-1711-4bc6-bcab-baf6734549a8",
  "step": "get.userid.service",
  "errorUserMsg": "Invalid credentials.",
  "httpErrorCode": "400"
}
```

### 2.1.1.3 Confirm OTP and Generate Token

---

**Action: POST**

**Endpoint : /ums/v3/user/auth/login-confirm**

## Description

This API is used to confirm **OTP** and mapped device information and then generate token. This is used when the user login authentication requires **OTP** to access Web Application.

## Request body

```
curl --location
```

```
'https://mfsbaastest.grameenphone.com/mobiquitypay/ums/v3/user/auth/web/login-confirm' \
--header 'Accept: application/json, text/plain, */*' \
--header 'Accept-Language: en-US,en;q=0.9,hi;q=0.8' \
--header 'Connection: keep-alive' \
--header 'Content-Type: application/json;charset=UTF-8' \
--header 'Cookie: unq=c4dPpSLPIgO9yPZM;
refresh_token=eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcHVibGlj
LTEifQ.yJzZXJ2aWNlUmVxdWVzdElkIjoiNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEtM
zVmZmM4ZWU5ZTIxIiwidXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
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5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5ZTIxIiwiaXV0aG9yaXphdGlvbGlByb2ZpbGVDb2RlIjojTmV0YWRTaW
5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjojU3lzdGVtMDEiLCJpZGVudGlmaWVvVHl
wZSI6IkkxPR0LOSUQiLCJjYXRlZD29yeUNvZGUiOiJOV0FETSIsInVzZXJJZCI6IiVTLjI5Mj
ExNjg5MTQ1NTc1NzQyIiwiaXNlcl9uYW1lIjojNjQzNjZmYWUtZTFiYy00YmU4LTg0YzEt
MzVmZmM4ZWU5
```

```

9WNCIsIkFETVRYTIJFRkIEIl0sImF0aSI6IjVmY2UxYzIwLTc2ZGMtNDYwOS04YzljLT
RmNTgxOWIyYjI4NyIsIm5hbWUiOiJTeXN0ZW0gQWRtaW4iLCJiZWFiZXJDb2RIIjoii
wiZXhwIjoxNjk3MTI0NjYwLCJqdGkiOiJYTgxM2U4My03YTBITQ0MTctODMyZC0zO
TFhNTA2OGFjZDUifQ.vHZkp9nDpybGdUnnlwnnv2x0XWcpYpr34ggGY0oC2P9voWEK
0Bqh59b4zcvrz2S-
ImycNL8RwesvTVsRWRLRs9QIVJcPdqp6b3zVH5AN3zNeOwsfGJsROY7m3VQZ-
8prfD_1GAC6cC--B6B1GnmScJ9dxaRDsYfOImXbQtieG-
sVGq2SRfWyRemJD2PBH3s4UZCgQDkTMDsImPvnKDKqmatHGwCjYWLJJK9ajG6G-
k1CLISkBXtUyaL29x16SJGBhRR6owoweQ54OY12wXccnUDOGQ0QFCaH32Ocfh6rE5v
M_HusBvP2o6ILuu-2ciAyCYGiMgQDkE5sMOLVOERiCw;
TS01e8828b=01f85cdc3cd65aade26503bb357b0fc85a8faa097255d642a34a905953db6030a1
5d9e297f47e18dea0ea8d6548b527164ba3d8426f964e35115b2f556c7b0230681e273b902423
e76e1f61c7374644fb29562bd0756dc0ec47fd9e4860f67109e14ee50b4927689e34f8b6c7a5e9
3bd9d2f84e091;
TS33367916027=085664378eab20005f6d552a0e3dcb6ab482c61a4463475d56d440134d92d1
7e2c4ff95db0e1c46708fb9cec231130007c72543bf19e84e4e91c371dad89deff56eeb5d037ea6
a02e0b398369e567544b5f10c16fc6c5651a3e6352f28ef26be;
TS01e8828b=01f85cdc3cff0747976a3b309e1e7297735cdc6cc36e3b6f955ff1e6cbeb69ded4b5
85246362c3f44bded9c9fc0812471342b42029;
TS33367916027=085664378eab2000517ad57c223838ab294f8bf5ed07f3dfe99ad6cbf024479
3433db33afaec416b085438d37b1130005ef5407a7073e9db4193aface6a2ece13b06a1342a44b
ad1429f720d7014b7dc125ab80cf95559e7efa777608bf8fc05' \
--header 'Nonce: d17f187090ede6ab' \
--header 'Origin: https://mfsbaastest.grameenphone.com' \
--header 'Referer: https://mfsbaastest.grameenphone.com/dfscontainer/app.html' \
--header 'Sec-Fetch-Dest: empty' \
--header 'Sec-Fetch-Mode: cors' \
--header 'Sec-Fetch-Site: same-origin' \
--header 'User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/117.0.0.0 Safari/537.36' \
--header 'sec-ch-ua: "Google Chrome";v="117", "Not;A=Brand";v="8",
"Chromium";v="117"' \
--header 'sec-ch-ua-mobile: ?0' \
--header 'sec-ch-ua-platform: "Windows"' \
--data '{"resumeServiceRequestId":"0a24aaa1-3e71-4468-a7a7-
e7bc8aef6d31","otp":"560727","serviceCode":"LOGIN_POLICY"}'

```

Fields	Type	Description	Example/Allowed Values
<b>loginValidateRequest</b>	API to validate <b>OTP</b> and generate token for device login.		
	Fields	Type	Description
	<b>otp</b> *	String	<b>OTP</b> received on registered mobile number.  Length-6 digit
	<b>resumeService</b>	String	Whenever an API is called,
			9ee59b43-46ac-

Fields	Type	Description	Example/Allowed Values
	<b>RequestId *</b>	Comviva generates a unique service request ID for the API request. This unique ID traverses' components in the business process flow. It is useful when the process flow is paused for the user input and needs to be resumed when user has provided the input.  Length-36 characters	4d75-b1c0-b1b10b187abd

### Sample Request Body

```
{ "resumeServiceRequestId": "0a24aaa1-3e71-4468-a7a7-e7bc8aef6d31", "otp": "560727", "serviceCode": "LOGIN_POLICY" }
```

### Response Body

Code: 200

Access token generated successfully.

Fields	Type	Description	Example/Allowed Values
<b>LoginWithOTPResponseModel</b>	Login response model with token		
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, ar, fr
<b>lastLoginTime</b>	String	Time stamp of last login of the user.	2020-10-13T02:47:56
<b>message *</b>	String	The API response message that shows the type of information returned.	<b>OTP</b> validation is required. Please enter <b>OTP</b> to continue
<b>serviceFlow</b>	String	A unique code that is internal to Comviva and identifies the business process flow associated to the API.	OTPLGIN
<b>serviceRequestId *</b>	String	Whenever an API is called, Comviva generates a unique service request ID for the API request. This unique ID traverses' components in the business process flow. It is useful when the process flow is paused for the user input and needs to be resumed when user has provided the input.  Length-36 characters	f491f6b1-aa9b-43de-93b0-c85eda706a2c
<b>status *</b>	String	The status to show whether the	SUCCEEDED, FAILED,

Fields	Type	Description	Example/Allowed Values		
		API call is a success, failure, in progress, or paused.	INPROGRESS, or PAUSED		
token	String	TokenData			
		Fields	Type	Description	Example/Allowed Values
		access_token*	String	Access token is used for token based authentication to allow an application to access an API. The application receives an Access Token after a user successfully authenticates and authorizes access. User can then pass this access token as a credential to perform any transactions in the application. Access tokens are short-lived tokens.	asdfqwrtwy
		expires_in	Integer (\$int32)	Validity period (in seconds) for accessing the token.	299
		refresh_token	String	Once the access token expires, you can use the refresh token to get the new access token. Refresh tokens also expire but they are supposed to live much	asdfqwrtwy

Fields	Type	Description	Example/Allowed Values
		<div>longer than the access token.</div> <div>Max Length-256 characters</div>	
<b>transactionId</b> *	String	<p>The unique id generated by the Comviva platform for the transaction.</p> <p>Length-20 characters</p>	XX220316.0959.A15026
<b>txnStatus</b>	String	<p>Defines the five different statuses of the transaction.</p> <p>Not Applicable for Non-Financial APIs</p> <p>TI – Transaction Initiated</p> <p>TS – Transaction Succeeded</p> <p>TF – Transaction Failure</p> <p>TP – Transaction Paused</p> <p>TA – Transaction Ambiguous</p>	Transaction Success
<b>userId</b>	String	<p>Unique ID generated by the system after successful user registration.</p> <p>Length-20 characters</p>	US.k6GH1579603850092

### Sample Response Body

```
{
  "serviceRequestId": "8dd2d378-21d2-4bf8-a363-f023792e15bb",
  "message": "Login Successfully",
  "transactionId": null,
  "txnStatus": null,
  "serviceFlow": "LOGIN_POLICY",
  "status": "SUCCEEDED",
  "language": "en",
  "token": {
    "access_token":
"eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktdHVibGljLTEifQ.eyJzZXJ2aWNlUmVxdWVzdElkIjoiaGY5NmRiYzQtZWRkMS00NWNiLWI2YjEtMmUwZyYtc2ZjQyZTBjIiwiaXNlcml9YWllIjoiaGY5NmRiYzQtZWRkMS00NWNiLWI2YjEtMmUwZyYtc2ZjQyZTBjIiwiaXV0aG9yaXphdGlvb1Byb2ZpbGVDb2RlIjoiaU3Vic0RlZmF1bHQiLCJpZGVudGlmaWVyVmFsdWUiOiIjNzc0Njg0ZmUzIiwiaWRlbnRpZmllclR5cGUiOiJ0b3R1RE4iLCJjYXRlZ29yeU9uZGU0IjTiTVUJTIiwidXNlcmlkIjoiaVVMuNTMwMTY3NTM5OTE5ODU5NCIsImRldmljZULkIjpudWxsLCJhdXRob3JpdGllcyI6WyJST0xFX1VTRVIiXSwiY2xpZW50X2lkIjoiaQ29yZVdlYiIsInNjb3BlIjpbIkdFVF9VU0VSX0FORF9BQ0NPVU5UX0RFVEFJTTFMiLCJTRUxGU0VUQVVU
```



```
SEZBQ1RPUIIsIkZFVENIX1VTRVJfUUVVFU1RJTO4iLCJUWE5DT1JSRUNUiIwiQVRNQ0FTSE9V  
VCIsIkFUTUNBU0hpVVRfvjQiLCJBRE1UWE5SRUZJRCJdLCJuYw1lIjoiU3Vic2NyaWJlcibiBI  
YWdlbmVzIiwiaWVhcmVyQ29kZSI6IldFQiiIsImV4cCI6MTY3NTkyMTU2NiwanRpIjoimzM5  
ODRmYTytNzZhYi00MmVmLTgyZDYtMTYlZWUwZDRlMmZlIn0.WFcZiMSapOAMdouIKj2bKkmU  
dtWST78bY71-  
gN8OIpfGIFmJXFJMx9AwwhEPtB6vsqJ5RQebVyn26OlMopD_IzRKdSxx4V5hfaFgx1kcIQocv  
lvgmGx14aW-  
QcUJxcqVoIU3hPddj0iZ1Hz0Tlab8czJ5edOkk0qIDTh8BvutwVKLAOYHl6dpKwxn6_PHSzF  
poH9qi9jb6fgEFXBdIKhDbj9CqPUU17iAvbEBD42wkJQyemqu4-  
9eETbsbugX5PVjo12_CyUdbLAgmGwwLEylFOQ2GTk6bPdfzG5ImhNRigv9P9kK5aeCdb2rM  
3qZcqQ2GI_FvLF1UQS0zDVhNKWnA",  
    "expires_in": 2999,  
    "refresh_token":  
"eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZI6Imp3cy1rZXktchVibGljLTEifQ.  
eyJzZXJ2aWNlUmVxdWVzdElkiJoioGY5NmRiYzQtZWRRKS00NWNIWI2YjEtbWUzYTc2ZjQy  
ZTBjIiwidXNlcl9uYW1lIjoioGY5NmRiYzQtZWRRKS00NWNIWI2YjEtbWUzYTc2ZjQyZTBj  
IiwiaWVhcmVzIiwiaWVhcmVyQ29kZSI6IldFQiiIsImV4cCI6MTY3NTk0ODU2NiwanRpIjoimzM5  
ODRmYTytNzZhYi00MmVmLTgyZDYtMTYlZWUwZDRlMmZlIn0.YrYcUPmNEjr78tegJ6nGt897SVFP1_MRz5as  
J-  
1Epj62SqV3djQ97fgivov5tvcSWxbDFNeT4cXINKHnIuI6rzUuu5G6q2E_fFI3DH4b4PIifv  
TJ58BQnvGLDL6XD14I3y4YQ3n4Cm4WkmMzRFtyDiyyvzSC2Yg31qx9bQLW4G7_w80A6vn0SY  
ZqFd2jePt7WQCTspceK952vp9OWg6JFzVMZA49YuounMBLGEBBwxQaMrnfGSbI4_ODBwrB2  
9buSOI4EG_SMroyrZMjkX-  
lqkVISXKZJjPdu3ZvULniY54wxjn2uUUeYr1MKlR7X6qXkE11r051BeCaPzCQzuKNg"  
},  
    "lastLoginTime": null,  
    "userId": "US.5301675399198594",  
    "sessionIdList": null  
}
```

## Error Codes

Error Code	Description
400	Bad request
500	Internal Server Error

**Error scenario:**

Http error code: 400.

Error Code: Generic06- Invalid input.

**Response:**

```
{
  "status": "FAILED",
  "errors": [
    {
      "code": "sfm.errors.invalid.resume.service.request.id",
      "message": "resume request id mandatory cannot have null or empty value",
      "componentName": "SFM"
    }
  ]
}
```

```
],  
  "errorCode": "Generic06",  
  "errorUserMsg": "Invalid input.",  
  "httpErrorCode": "400"  
}
```

## 2.2 BillPayment Flow:

---

### Current Flow:

- On UI (named as CBP / web-portal-application) : to fetch bill details of accounts and to pay pending bills in bulk, request is initiated from UI and it is stored in CBP DB for further processing. At this point request is just queued, no fetching or processing has take place.
- Second component scheduler will then pick these request from DB on timely basis and communicates with communicator component which will make hit to backend financial system(mobiquity) for Payment and third party system(Biller platform) for actual processing

### New Flow:

**Process flow will be similar to existing approach , but only change in integration.**

- On UI (named as CBP / web-portal-application) : to fetch bill details of accounts and to pay pending bills in bulk, request is initiated from UI and it is stored in CBP DB for further processing. At this point request is just queued, no fetching or processing has take place.
- Second component scheduler will then pick these request from DB on timely basis and communicates with communicator component which will make hit to backend financial system(mobiquity) to fetch bill details or Payment request instead of Biller Platform.

#### **Refer section 2.2.1.1 for API to fetch bill details**

- In fetch bill details it is simple API hit to mobiquity to fetch bill details instead of biller platform.
- For Payment also, communicator will send payment hit to just mobiquity. Not to biller. Mobiquity will in turn send hit to biller platform for any kind of third party integration. Communicator will not interact with biller platform.

#### **Refer section 2.2.1.2 for API to pay for Bill**

- While sending hit to mobiquity, CBP has to ensure a unique reference ID is created, stored in mflex DB corresponding to each bill request and is sent to mobiquity to manage for any disputes in future.
- Communicator will just wait for Mobiquity response of Payment API. Response handling is mentioned below:
  - If it is Failed, then payment is also marked failed in mflex DB.
  - If success/pending or fulfilment initiated : then it is assumed that request is properly posted in mobiquity and now to check status of payment etc. mobiquity DB/ reports has to be inspected. All mobiquity reports will show corresponding unique ID created by CBP so as to track the transaction in mobiquity.
  - If no response from mobiquity for payment request, then all such transactions will be enquired in mobiquity with unique reference ID created at time of payment.
  - If success/fail response of enquiry then status is cleared in mFlex DB.
  - But if no response of enquiry, for a predefined configurable retries, then those are left uncleared in mflex DB, and all such transactions can be checked in Mobiquity reports.

### Note :

Scheduler will pick only those records for enquiry for which they didn't get response back from mobiquity platform. No retry feature will be available in this scenario. If scheduler gets response back for payment API, then also any reference to the payments and third party response should be from mobiquity reports. It should not be checked from Bulk Billpay UI.

### Expectations from partner :

- Communicator code need to be updated so it can now integrate with new mobiquity platform with updated API specifications to fetch bill details and for payment. These will be routed to mobiquity instead of direct biller integration.
- Logic of unique ID creation to be sent in mobiquity payment APIs
- Mobiquity response handling and Ambiguous payments settlement logic (enquiry , **not refund**) need to be updated accordingly in BillPay code.
- Email and SMS handling should be there as per current setup : integration with Email server and SMSGW

## 2.2.1 API Details:

---

### 2.2.1.1 Fetch Bill Details:

---

#### Request

```
curl --location 'https://mfsbaastest.grameenphone.com/eig/' --header 'Content-Type: application/json' --data '{
  "utility": "DSCO",
  "consumer_id": "17021270",
  "serviceFlowId": "DUEBILL",
  "interfaceld": "DUEBILL",
  "serviceType": "DUEBILL",
  "params": {}}
```

#### Response

##### Case1: When multiple bills are pending

```
{
  "message": "OK",
  "code": 200,
  "utility": "DSCO",
  "account_no": "17021270",
  "bill_list": [
    {
      "bill_number": "012331291314",
      "due_date": "2023-08-14",
      "amount": 110.0,
      "service_charge": 0.0,
      "detail": {
        "accountNo": "31291311",
        "billNo": "012331291314",
        "billMonth": "07",
        "billYear": "2023",
        "totalKwh": "333",
        "amount": "100.0",
        "lpc": "10.0",
        "vat": "10.0",
        "issueDate": "14-07-2023",
        "dueDate": "14-08-2023",
        "paymentStatus": "UNPAID"
      }
    }
  ]
}
```

```

    }
  },
  {
    "bill_number": "022331291311",
    "due_date": "2023-03-16",
    "amount": 220.0,
    "service_charge": 0.0,
    "detail": {
      "accountNo": "31291311",
      "billNo": "022331291311",
      "billMonth": "2",
      "billYear": "2023",
      "totalKwh": "262",
      "amount": "200.0",
      "lpc": "20.0",
      "vat": "20.0",
      "issueDate": "15-02-2023",
      "dueDate": "16-03-2023",
      "paymentStatus": "UNPAID"
    }
  },
  {
    "bill_number": "032331291311",
    "due_date": "2023-04-12",
    "amount": 330.0,
    "service_charge": 0.0,
    "detail": {
      "accountNo": "31291311",
      "billNo": "032331291311",
      "billMonth": "3",
      "billYear": "2023",
      "totalKwh": "31",
      "amount": "300.0",
      "lpc": "30.0",
      "vat": "30.0",
      "issueDate": "14-03-2023",
      "dueDate": "12-04-2023",
      "paymentStatus": "UNPAID"
    }
  }
]
}

```

**Case2: When single bill is pending**

```
{
```

```
"message": "OK",
"code": 200,
"utility": "JGDCL",
"account_no": "1233",
"bill_list": [
  {
    "bill_number": "3265725864641415",
    "due_date": null,
    "amount": 430.0,
    "service_charge": 0.0,
    "detail": null
  }
]
```

**Case3: When no bills are pending**

```
{
  "message": "OK",
  "code": 200,
  "utility": "JGDCL",
  "account_no": "601130401",
  "bill_list": []
}
```

**Case4: When mandatory field consumer ID is missing**

```
{
  "message": "Consumer Id can not be empty",
  "code": 422
}
```

**Case5: Invalid Utility**

```
{
  "message": "This API is not applicable for the specific utility",
  "timestamp": 1695725748098,
  "status": 403
}
```

## 2.2.1.2 Pay Bill:

---

**Request:**

```
curl --location 'https://mfsbaastest.grameenphone.com/jigsaw/v1/order/billpay' \
--header 'Content-Type: application/json' \
```

--

header 'Cookie: TS01e8828b=01f85cdc3ce2ad19c9db2b641a0321ffb6c9395fca583a7d8c7e43  
cedf27dad0905692076d0cf99e3e2c7f0652635d24e268617b74' \

--data '

{

"bearerCode": "MOBILE",

"currency": 101,

"deviceInfo": {

"appVersion": 10.2,

"deviceId": 990000862471854,

"latitude": 12.971599,

"logitude": 77.594566,

"mac": "00:1B:44:11:3A:B7",

"model": "Oneplus10",

"networkOperator": "Orange",

"networkType": "4G",

"os": "Android10",

"providerIpAddress": "172.56.76.89"

},

"initiator": "sender",

"language": "en",

"partnerData": {"billAccountNumber": "12345", "billNumber": "12345", "surcharge": "surcharge  
1", "vat": "vat1", "other1": "other1", "other2": "other2", "billerName": "TTAS", "billerCode": "TTA  
S", "custMSISDN": "custMSISDN"},

"receiver": {

"idType": "mobileNumber",

"idValue": "01788886666",

```
"productId": 12
},
"remarks": "remarks",
"sender": {
  "idType": "mobileNumber",
  "idValue": "01755555555",
  "mpin": 1357,
  "paymentInstruments": [
    {
      "instrumentType": "WALLET",
      "amount": 1,
      "productId": 12
    }
  ],
  "userRole": "Channel"
},
"serviceFlowId": "BILLPAYOAP"
}'
```

**Response:****Successfully initiated payment:**

```
{
  "code": "process.fulfilment",
  "message": "Order is placed successfully",
  "orderId": "169647-825021-446643",
  "orderStatus": "PENDING",
  "serviceRequestId": "96c7bed5-e9bf-4f5e-96a4-3eaed32bddd3",
  "transactionTimeStamp": "2023-10-05T09:57:31"
}
```



#### Failed Response:

```
{
  "status": "FAILED",
  "language": "en",
  "mfsTenantId": "mfsPrimaryTenant",
  "errors": [
    {
      "code": "AUTH03",
      "message": "Provided Password Authentication is invalid. Remaining attempts: 3",
      "componentName": "user-authentication"
    }
  ],
  "transactionTimeStamp": "2023-10-05T09:58:43",
  "errorCode": "Authen01",
  "traceId": "79f0dc48-3ecb-441e-b70c-4adaab4d722c",
  "step": "validate.initiator:E.update.order.initiator.authentication.failed",
  "errorUserMsg": "Invalid credentials.",
  "orderId": "169647-832294-424111",
  "orderStatus": "FAILED",
  "orderState": "VALIDATION_FAILED",
  "httpErrorCode": "400"
}
```

## 2.3 Password Management Flow:

When any user forgets his password then user should have flexibility to get these reset via forget password feature on login page. Also once he login, then user can change his password on his own.

#### Current Flow:

In current platform, all password management is done at IDP page.

#### New Flow and Expectations from Partners:

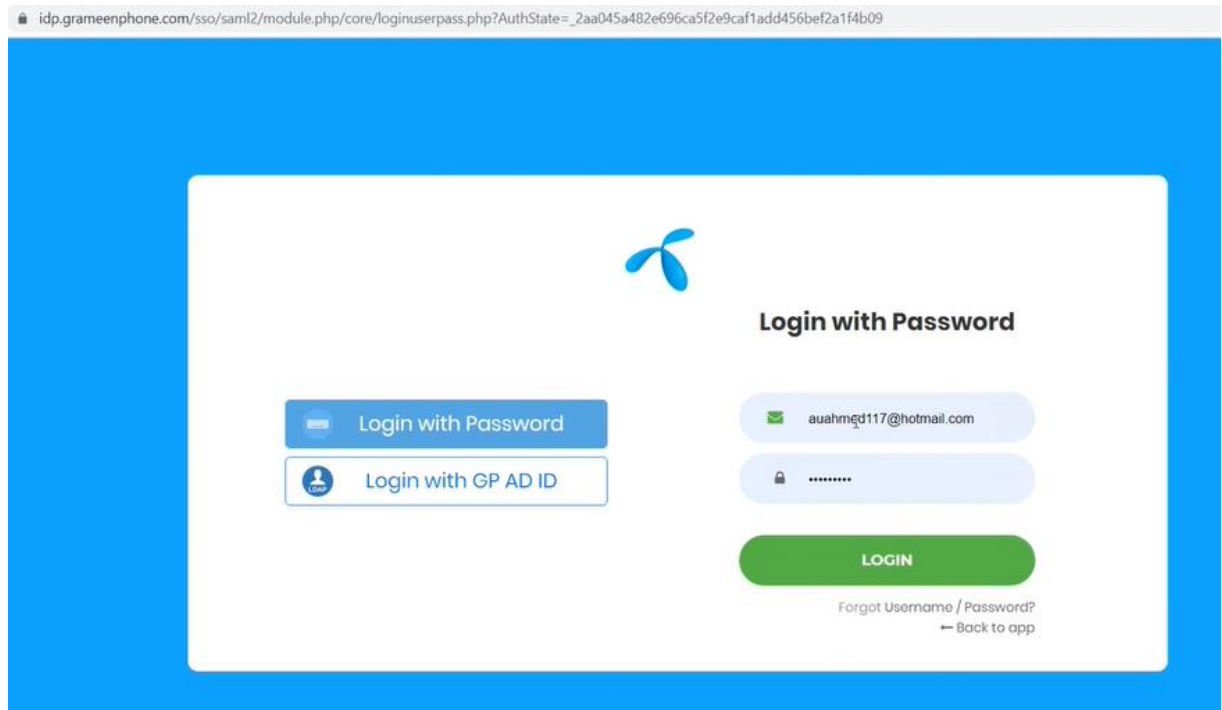
Password management to be incorporated on Bulk UI portal in 2 ways:

1. Give forgot password option on login page.
2. User himself once logged in, can be given with Change password option

All 2 APIs need to have direct integration with Mobiquity for forgot password and change password.

Mobiquity will share APIs to achieve same. Partner can design pages.

Forgot password option may come like below:



Change Own password or reset password pages are new.

## 2.3.1 API Details:

### 2.3.1.1 Change Authentication Factor

**Action:** POST

**Endpoint:** /ums/v2/user/auth/change-credential

**Description**

Self-initiated change authentication (Pin/Password). User can change his old password to new password without answering security questions. This API is usually called for changing the default password given by mobility system for the first login after successful user registration.

**Request body**

Fields	Type	Description	Example/Allowed Values
Authorization	String	Authorization Token to pass header	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9ImltpZCI6Imlp3cy1r
changeAuthenticationFactorModel	String	Change Authentication service body. Cannot be empty.	
ChangeAuthenticationFactorModel	String	Change Authentication Request Model	
requestedBy*	String	SELF for self request else unique ID of Requestor from	SELF

Fields	Type	Description	Example/Allowed Values
		Mobiquity System.	
<b>workspaceId*</b>	String	Workspace is the classification of all users at high level. All users are clubbed together under three workspaces SUBSCRIBER/BUSINESS/ADMIN	SUBSCRIBER/BUSINESS/ADMIN
<b>identifierType*</b>	String	Access identifier type of the user like MSISDN/EMAIL/LOGINID/OTHE RID to perform <a href="#">reset</a> .	MSISDN/EMAIL/LOGINID/OTHE RID
<b>identifierValue*</b>	String	Access identifier value associated with the identifier type selected.  Mobile Number:8-15  Email: Max length-40 characters  LOGINID-min length is 3 & max length is 20	7766990546
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, Fr, Ar
<b>oldauthenticationValue*</b>	String	Old authentication value (PIN/Password) Of the user.  Default length of pin is 4  Min password length is 5 & Max password length is 10  Pin/password also can be configured using security profile	4568
<b>newauthenticationValue*</b>	String	New authentication value (PIN/Password) Of the user.  Default length of pin is 4  Min password length is 5 & Max password length is 10 Pin/password also can be configured using security profile	1357
<b>confirmedauthenticationValue*</b>	String	Re-Enter new authentication value to confirm.	1357

Fields	Type	Description	Example/Allowed Values
		<p>Default length of pin is 4</p> <p>Min password length is 5 &amp; Max password length is 10</p> <p>Pin/password also can be configured using security profile</p>	

### Sample Request Body

[illegible]

```
--header 'Nonce: 490ded18falb019b' \

--header 'Origin: https://mfsbaastest.grameenphone.com' \

--header 'Referer:
  https://mfsbaastest.grameenphone.com/dfscontainer/app.html' \

--header 'Sec-Fetch-Dest: empty' \

--header 'Sec-Fetch-Mode: cors' \

--header 'Sec-Fetch-Site: same-origin' \

--header 'Signature:
  958a3a3bef29cd787973abd32fbbf4e716a5eebf763d6dead65ed4d1ff6c09b7' \

--header 'User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
  AppleWebKit/537.36 (KHTML, like Gecko) Chrome/117.0.0.0 Safari/537.36' \

--header 'sec-ch-ua: "Google Chrome";v="117", "Not;A=Brand";v="8",
  "Chromium";v="117"' \

--header 'sec-ch-ua-mobile: ?0' \

--header 'sec-ch-ua-platform: "Windows"' \

--data-raw '{

  "requestedBy": "SELF",

  "oldAuthenticationValue": "Com@8989",

  "newAuthenticationValue": "Com@4545",

  "confirmedAuthenticationValue": "Com@4545",

  "language": "en",

  "workspaceId": "ADMIN",

  "identifierType": "LOGINID",

  "identifierValue": "OTP01"

}'
```

## **Response Body**

```
{

  "serviceRequestId": "79143bb4-9be3-4315-8cd8-33ee63703911",
```

```

"message": "Authentication factor is successfully changed",

"serviceFlow": "CHANGEAUTHFACTOR",

"status": "SUCCEEDED",

"userId": "US.462873139693364",

"userName": null,

"workspaceId": "ADMIN",

"identifierType": "LOGINID",

"identifierValue": "OTP01",

"sessionIdList": [

    "dcbccb29-4aad-407d-a8b1-4738e53f478b"

]

}

```

Fields	Type	Description	Example/Allowed Values
<b>AuthenticationResponse</b>	String	User Authentication Response Model	
<b>identifierType*</b>	String	Access identifier type of the user like MSISDN/EMAIL/LOGINID/OTHERID to perform <a href="#">reset</a> .	MSISDN/EMAIL/LOGINID/OTHERID
<b>identifierValue*</b>	String	Access identifier value associated with the identifier type selected.  Mobile Number:8-15 characters  Email: Max length-40 characters  LOGINID-min length is 3 & max length is 20	7766990546
<b>message*</b>	String	The API response message that shows the type of information returned.  <i>No Specific length</i>	Your password is changed successfully.

Fields	Type	Description	Example/Allowed Values
serviceFlow	String	A unique code that is internal to Comviva and identifies the business process flow associated to the API.	CHANGEAUTHFACTOR/ RESETAUTHFACTOR/ RESETAUTHBYADMIN
serviceRequestId*	String	Whenever an API is called, Comviva generates a unique service request ID for the API request. This unique ID traverses' components in the business process flow. It is useful when the process flow is paused for the user input and needs to be resumed when user has provided the input.  Length-36 charachters	f491f6b1-aa9b-43de-93b0-c85eda706a2c
status*	String	The status to show whether the API call is a success, failure, in progress, or paused.	SUCCEEDED, FAILED, INPROGRESS, or PAUSED
workspaceId*	String	Workspace is the classification of all users at high level. All users are clubbed together under three workspaces SUBSCRIBER/BUSINESS/ADMIN	SUBSCRIBER/BUSINESS/ADMIN
userId*	String	Unique ID generated by the system after successful user registration.  Length-20(System generated)	US.k6GH1579603850092
userName	String	Name of the user.	Not set in response
language	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, Fr, Ar

### Sample Response Body

```
curl --location
'https://mfsbaastest.grameenphone.com/jigsaw/ums/v2/user/auth/change-
credential' \
--header 'Accept: application/json, text/plain, */*' \
--header 'Accept-Language: en-US,en;q=0.9,hi;q=0.8' \
--header 'Connection: keep-alive' \
--header 'Content-Type: application/json; charset=UTF-8' \
--header 'Cookie: unq=c4dPpSLPIgO9yPZM;
refresh_token=eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcHVi
GljLTEifQ.eyJzZXJ2ZWw1cXdlVWVzdElkIjoimzM5YWM4ZTgtNGI3MS00NmM4LWlwOTYtNzE0M
jMzNWZhZTNhIiwidXN1c2UyVWllIjoimzM5YWM4ZTgtNGI3MS00NmM4LWlwOTYtNzE0MjMzNWZh
ZTNhIiwiaXV0aG9vaXphdGlvb1BvY2ZpbG9VbDZrIjoimV0YWRtaW5EZWZhdWx0IiwiaWRLbnR
```

```
pZml1clZhbHVlIjoiQWlhbGJAXiIiwiaWRlbnRpbZml1clR5cGUiOiJMT0dJTkEiIiwiaWZlZmVudvcn
lDb2RlIjoiTldBRE0iLCJ1c2V5SWQ0iOiJVUy4zMzU2NTI0OTM0NjM4MzElIiwiaWZGV2aWNlSWQ0iO
m51bGwsImF1dGhvcml0aWVzIjpbIlJPTeVfVFNfUjJlcjJbGllbnRfaWQ0iOiJDb3JlV2ViIiwiaW
c2NvcGUiOi0iLCJ1c2V5SWQ0iOiJVUy4zMzU2NTI0OTM0NjM4MzElIiwiaWZGV2aWNlSWQ0iO
SIiwiaWZGV2aWNlSWQ0iOiJVUy4zMzU2NTI0OTM0NjM4MzElIiwiaWZGV2aWNlSWQ0iO
FTSE9VVF9WNCIsIkFETVRYTlJFRklEIl0sImF0aSI6IjVjViN2FlMWU4LWMxZTMtNDRjMS05MmFjL
WRjYzY2OTE4MmM4YiIsIm5hbWUiOiJBbWVfUEFtYW4iLCJiZWZyZXJDb2RlIjoiIiwiaWZlZmVudvcn
Njk3MjIxMDQ3LjCjQdGkiOiIzZDRjNWQ2OS02N2NiLTQzYzQtYjNhYy01MWI3MTQ1ZTA2MmYifQ.
RvvCz02WwzcYyU92deaf03D9kkVvkXs6sNGarN_H4ItQMdx12UHZrtuM4HgavZj5ybWudhnkx23
Ur-tkegluYo9600Fbc3on5JVyGvDCRF_n3IEzPzP_Xv1wQxpqYeGgp-xBIqsltej-
2lQsk565jV5fma9SIKYPKBbdjVRWrfZR64XkrxTfpG66xL3153xTzsQNpKSMJaX-
oqxL67vpfB9zmkbfnf49mEip9codyDOqyAnMF5ziF8oxxiC_HDh6QOF2Hitc6BX_ugdm0236BJNc
pYO352aPnlGhs5kAmfFehYtnklshIwtjtG1YHwpluczGawEZ254x_i5lT-u6lCA;
TS01e8828b=01f85cdc3c4193144a5196e34f94886729188b50dbcd9ec0d5d08bd86779182e
c116b1db77c6ddc5d76348eb13924f6240cdba354cd1deecf9f2ccac165cd22d4e81869d85
0cd9be48aa3275c1409b087a17ff8b5f4cb35d6eddc53ce38b63df121247f267ff06bcfe07
4a2dd498e13632799080;
TS33367916027=085664378eab2000fece8b7e6a08c8882c2e810760347737e490a304a7d35
74cf1c41f4082f0ad3008f1616e6c1130000450cd062c9ac8b5daedca2182a5c7012db2a7e4
32503b71294fa52c3223d20c6ae44ffa7dcdb4eb65611d3c32bb4b98;
TS01e8828b=01f85cdc3cb66a0320431ff33def6c6f15239030a5f4308df07469cb2c1159d1
61c56ad0de44cc0bc2af109d59d22822de5da01e3c;
TS33367916027=085664378eab2000429722169bda1acba71172edfb2be1771ab6943a3ea22
507d34364023cd87fb408edfa74ce113000fafde979033332c3b37bcf3f686fclb43e2625b1
96d9b583c860fc23197fabbb2e148ffb5bb827a709eb1b7280e36750' \
--header 'Nonce: 490ded18falb019b' \
--header 'Origin: https://mfsbaastest.grameenphone.com' \
--header 'Referer:
https://mfsbaastest.grameenphone.com/dfscontainer/app.html' \
--header 'Sec-Fetch-Dest: empty' \
--header 'Sec-Fetch-Mode: cors' \
--header 'Sec-Fetch-Site: same-origin' \
--header 'Signature:
958a3a3bef29cd787973abd32fbbf4e716a5eebf763d6dead65ed4d1ff6c09b7' \
--header 'User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/117.0.0.0 Safari/537.36' \
--header 'sec-ch-ua: "Google Chrome";v="117", "Not;A=Brand";v="8",
"Chromium";v="117"' \
--header 'sec-ch-ua-mobile: ?0' \
--header 'sec-ch-ua-platform: "Windows"' \
--data-raw '{
  "requestedBy": "SELF",
  "oldAuthenticationValue": "Com@8989",
  "newAuthenticationValue": "Com@4545",
  "confirmedAuthenticationValue": "Com@4545",
  "language": "en",
  "workspaceId": "ADMIN",
  "identifierType": "LOGINID",
  "identifierValue": "OTP01"
}'
```

## Error Codes

Error Code	Description
400	Bad request
500	Internal Server Error

## Error scenario:

Http error code: 400

Error Code: Generic04- Mandatory field can't be empty.



### **Response:**

```

{
  "txnStatus": "TF",
  "status": "FAILED",
  "language": "en",
  "mfsTenantId": "mfsPrimaryTenant",
  "errors": [
    {
      "code": "WORK02",
      "message": "Workspace is mandatory",
      "componentName": "user-authentication"
    }
  ],
  "transactionTimeStamp": "2023-03-30T01:23:13",
  "errorCode": "Generic04",
  "traceId": "352e62e0-7053-497d-8f2d-0ce13d1ac446",
  "step": "get.userid.service",
  "errorUserMsg": "Mandatory field can't be empty",
  "httpErrorCode": "400"
}

```

## 2.3.1.2 Forget Authentication API

This section will tell you all APIs to be called in sequence to reset login credentials

1. Initiate reset authentication via OTP
2. Validate OTP
3. Confirm new authentication values

### 2.3.1.2.1 Validate Self-Set Authentication Value with OTP

#### **Action: POST**

**Endpoint:** /v2/ums/user/auth/**self-set**-auth/initiate

#### **Description**

This API is used to initiate change authentication value (Pin/Password) with two factor authentication (OTP).

#### **Request body**

Fields	Type	Description	Example/Allowed Values
<b>Authorization</b>	String	Authorization Token to pass header	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Impr3cy1r
<b>adminResetAuthenticationFactorModel</b>	String	<b>Self</b> -initiated change authentication with otp service body. Cannot be empty.	
<b>SelfSetAuthenticationFactorWithOtpModel</b>	String	<b>Self-Set</b> Authentication with OTP Request Model	

Fields	Type	Description	Example/Allowed Values
<b>bearerCode *</b>	String	Access bearer channel from which the request is raised.	Web, USSD, Core Web, Mobile App
<b>identifierType *</b>	String	Access identifier type of the user like MSISDN/EMAIL/LOGINID/OTHERID to perform reset.	MSISDN/EMAIL/LOGINID/OTHERID
<b>identifierValue *</b>	String	Access identifier value associated with the identifier type selected.  Mobile Number:8-15  Email: Max length-40 characters  LOGINID-min length is 3 & max length is 20	7766990546
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, Fr, Ar
<b>workspaceId *</b>	String	Workspace is the classification of all users at high level. All users are clubbed together under three workspaces SUBSCRIBER/BUSINESS/ADMIN	SUBSCRIBER/BUSINESS/ADMIN

### Sample Request Body

```
curl --location
'https://mfsbaastest.grameenphone.com/mobiquitypay/v2/ums/user/auth/self-
set-auth/initiate' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer
eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcHVibGljLTEifQ.eyJz
Y29wZSI6WyJHRVRrVFNFUl9BTkRfQUNDt1VOVF9ERVRBSUxTIiwiaU0VMRlNFVEFVVEhGQU
NUT1IiLCJGRVRDSF9VU0VSX1FVRVNUU090IiwiaWF0IjoxNjM3MTkwMzI3LCJhdXRob3JpdG
llcyI6W
yJST0xX0NMSUVVVCJdLCJqdGkiOiI4NzZmMmUxMy1mZBhLTQxNTgtOWYyMi1hMWZhOGZk
YWY1
ZDQiLCJjbGllbnRfaWQiOiJDb3JlV2ViIn0.D4uTGHwmziIVbZgUPa85BR2wQzcU6DbcAc_o
Myj
wAUPOVxt4N2ti91EotTI6GpApAtwCXbIjhpPlk8HipPXq1me5Ui6zKu7kZAlkEUqZT8R5iE
kVth
PKxXKhHvH2XYOU3Iq9o1l08XGFM5L12Hc_wb5iUfn7Sl4IFro-8Kt4muun0L-ai4o8Eqh7-
ZKBAyKVdRQqKD_1M-
D7oYIJXlkRBUMjHwwAVJSf5kFybVvlpV8U6ldYrUqt_uyTbVf8PzGkm5GvQq4Mn1DaVvyJ
Z-
SmSNBLJQSGGoanYerpCUG73kp_boY1AHKVO7afHNL67mYu8Ck59S8l-ycv3XIgxLqh4g' \
--header 'Cookie:
TS01e8828b=01f85cdc3c457214bcde5852bf9c955be3074eb2238e8122302b6b9ebb50a15e
```

```
56d81e8a03cd979693acc4df7bb0b5dd63081d0822;
TS33367916027=085664378eab20002075bddbba8e81e1840f3ebc2f3cd2aea7bdf72cffe2
d381dd6ee61ce92fcf708e57e2907113000fd0d73614c37dfc97541eb8291406460f5dcb46f
08728a412e5d86bb95d6364d63eec9acad2e5ae8b2fd7c35f938da39' \
--data
'{"requestedBy":"SELF","workspaceId":"ADMIN","identifierType":"LOGINID","id
entifierValue":"OTP01","language":"en","bearerCode":"WEB","deviceInfo":{"ap
pName":"MobiquityPayChannel","appVersion":"10.03.0.01","deviceId":"17cf27d2
-871b-42d2-aa4c-2930bed0f5e6","isPublicDevice":"N","model":"Google
sdk_gphone_x86","os":"ANDROID"}} Response'
```

## Response Body

```
{
  "serviceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634",
  "mfsTenantId": "mfsPrimaryTenant",
  "language": "en",
  "serviceFlow": "SELFSETAUTHMFA",
  "transactionTimeStamp": "2023-10-13T15:42:03",
  "originalServiceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634",
  "code": "otp.validation.required",
  "message": "OTP validation is required. Please enter OTP to continue",
  "status": "PAUSED"
}
```

Fields	Type	Description	Example/Allowed Values
<b>SelfSetAuthenticationFactor WithOtpResponse</b>	String	<b>Self-Set</b> Authentication with OTP Response model.	
<b>Code</b>	String	Step code where the request is paused for user input.	otp.validation.required OR security.answer.required
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, Fr, Ar
<b>message*</b>	String	The API response message that shows the type of information returned.	OTP validation is required. Please enter "OTP" to continue OR "Answer" for security question is required. Please enter the correct answer to continue.
<b>mfsTenantId</b>	String	MFS Tenant ID of the user	mfsPrimaryTenant
<b>originalServiceRequestId *</b>	String	The Original Service Request ID  Length-36 characters	da371e6e-db02-472b-94c3-2ad2f79dfd09
<b>serviceFlow</b>	String	A unique code that is internal to Comviva and identifies the business	SELFSETAUTHMFA

Fields	Type	Description	Example/Allowed Values
		process flow associated to the API.	
<b>serviceRequestId*</b>	String	Whenever an API is called, Comviva generates a unique service request ID for the API request. This unique ID traverses' components in the business process flow. It is useful when the process flow is paused for the user input and needs to be resumed when user has provided the input.  Length-36 characters	f491f6b1-aa9b-43de-93b0-c85eda706a2c
<b>status*</b>	String	The status to show whether the API call is a success, failure, in progress, or paused.	SUCCEEDED, FAILED, INPROGRESS, or PAUSED
<b>transactionTimeStamp *</b>	String	The date and time of transaction in the format YYYY-MM-DD and HH:MM:SS respectively.	2023-01-31T15:49:45

### Sample Response Body

```
{
  "serviceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634",
  "mfsTenantId": "mfsPrimaryTenant",
  "language": "en",
  "serviceFlow": "SELFSETAUTHMFA",
  "transactionTimeStamp": "2023-10-13T15:42:03",
  "originalServiceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634",
  "code": "otp.validation.required",
  "message": "OTP validation is required. Please enter OTP to continue",
  "status": "PAUSED"
}
```

### Error Codes

Error Code	Description
400	Bad request
500	Internal Server Error

### Error scenario:

Http error code: 400.

Error Code: invalid.value- Unexpected value 'QR\_CODE\_TYPE\_DYNAMIC'.

### Response:

```
{ "traceId": null, "errorUserMsg": "Bad Request", "errors": [ { "code": "invalid.value", "message": "Unexpected value 'LOGINI'" } ], "step": null, "referenceId": null, "status": "FAILED", "httpErrorCode": "400" }
```

#### 2.3.1.2.2 Validate OTP for Self-Set Authentication Value

**Action: POST**

**Endpoint:** `/v2/ums/user/auth/self-set-auth/validate-otp`

### Description

This API is used to validate the OTP entered for self-initiated change authentication value (Pin/Password).

**Sample Request body :**

```
curl --location 'https://mfsbaastest.grameenphone.com/mobiquitypay/v2/ums/user/auth/self-set-auth/validate-otp' \
--header 'Accept: application/json, text/plain, */*' \
--header 'Accept-Language: en-US,en;q=0.9,hi;q=0.8' \
--header 'Connection: keep-alive' \
--header 'Content-Type: application/json;charset=UTF-8' \
--header 'Cookie: unq=c4dPpSLPIgO9yPZM;
refresh_token=eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcHVibGlj
LTEifQ.eyJzZXJ2aWNlUmVxdWVzdElkJoiMzM5YWM4ZTgtNGI3MS00NmM4LWIwOT
YtNzE0MjMzNWZhZTNhIiwidXNlci9uYW1lIjoiMzM5YWM4ZTgtNGI3MS00NmM4LWI
wOTYtNzE0MjMzNWZhZTNhIiwiaXV0aG9yaXphdGlvb1Byb2ZpbGVDb2RIIjoiTmV0Y
WRtaW5EZWZhdWx0IiwiaWRlbnRpZmllclZhbHVlIjoiQW1hbJAxIiwiaWRlbnRpZmllclR5
cGUiOiIjMT0dJTkleiwiY2F0ZWdvcnllb2RIIjoiTldBRE0iLCJ1c2VySWQ0IjoiJVUy4zMzU
2NTI0OTM0NjM4MzE1IiwiaXZGV2aWNlSWQ0Om51bGwsImF1dGhvcml0aWVzIjpbIJPTE
VfVVFNFUiJdLCJjbGllbnRfaWQiOiJDb3JlV2Viliwic2NvcGUiOlsiR0VUX1VTRVJfQU5E
X0FDQ09VTIRfREVUQUlMUyIsIlNFTEZTRVRBVVRIRkFDVE9SliwiRkVUQ0hfVVFNF
UI9RVUVTVEIPTiIsIlR5TknPUIJFQ1QiLCJBVE1DQVNIT1VUliwiQVRNQ0FTSE9VVF
9WNCIsIkFETVRYTlJFRkIEIiOsiImF0aSI6ImQ2NGRjMDU4LWM1MjgtNGYyNy1hMDI2
LTMzZGRjZGJjZDZkZCIsIm5hbWUiOiJBbWFuIEFtYW4iLCJiZWZyZXJDb2RIIjoiIiwiaX
hwIjoxNjk3MjE3NTg1LCJqdGkiOiJhbnA3MGM3Ni04ZDg2LTQ3MmUtYTUyOS03YW
MyMTJjYTUyNmYifQ.jPBIVRKMpMI2Z_-trAWWLxajZzDRh2KjCmsX-
kwVHKXr3DPOMN17G9VW1PiY2ZaEqR3Y2H6nRxIkFXz6MOoIl30UEqljuOpB6V9519c
NURFq06evqFwIasfs6jIzmxV7by1iNIHNR5m1KMMF42D8L9en8h0lAVf9Hb4VaX_I_GL2
GAnbUjyn7SM28njVx3Q9ZF6UDORlrAQVTbdW1uzimGXKLhoYtze_nupf-
w2ksToC0dOKsY5fKB7U9aO-
qjXnPBBXJlrmUvM25J9fPmyNCiP0YNGeCktyIbASOAwbV9HyEu1-
VOWnSKA1w06KeUIaS3bebf5maPzn88J1GgQ;
TS01e8828b=01f85cdc3ceaccb0e0dd4d85ebf7b7dddaea5ae0f3944a191229a40ce8bad051d54
1990c8462523f2db0fe252be3d31f3cdb37758fde55c4845375f9941e6e3d38e3141a71228d43f
32497bf609ae9f1c048bf4aeea2e051d3b0030cee573634d855d3616a3a9d7319297d1dd455fff7
d420a65643;
TS33367916027=085664378eab20003e46c7461c225006eba2cd3cb988d1c6eea59dd23027e6
27bc15326ac15e177f081689eb9c113000bbb3fc5fd604827c4e734e6887a45fbc9205a19d46fd
6b3959b0dbf2bc96af9228efe46927ad4ed0deddc47a7050ebbc;
TS01e8828b=01f85cdc3cc4c735ef2d04975ee799b43c280a5acda09245bf7e07a400768132bf9
9bd0fcf0fa6db3629c68a2c243e3fe394e2521d;
TS33367916027=085664378eab200030e7e937866eff56d79adfc2e3953b18afaa55d66c416cf3
```

```

87b180f4d11ac3a408364762be1130006bae8939e0d4fa429f87dfe7f9c417e75552f134113441
63a739081e1395ef08a0cfe5a4cf6325c271c6efd08467b62f' \
--header 'Nonce: b03c046cdf821a64' \
--header 'Origin: https://mfsbaastest.grameenphone.com' \
--header 'Referer: https://mfsbaastest.grameenphone.com/dfscontainer/app.html' \
--header 'Sec-Fetch-Dest: empty' \
--header 'Sec-Fetch-Mode: cors' \
--header 'Sec-Fetch-Site: same-origin' \
--header 'Signature:
7066ce421a0d842145c11be84e53dd5d3fdc8868c34d65d7dc8d36504fd6dba7' \
--header 'User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/117.0.0.0 Safari/537.36' \
--header 'sec-ch-ua: "Google Chrome";v="117", "Not;A=Brand";v="8",
"Chromium";v="117"' \
--header 'sec-ch-ua-mobile: ?0' \
--header 'sec-ch-ua-platform: "Windows"' \
--data '{
  "language": "en",
  "otp": "655336",
  "resumeServiceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634"
}'

```

### Request body :

Fields	Type	Description	Example/Allowed Values
<b>adminResetAuthenticationFactorModel</b>	String	Validate OTP for self-initiated change authentication with OTP service body. Cannot be empty.	
<b>ValidateOtpSelfSetAuthenticationFactorWithOtpModel</b>	String	Self Set Authentication with OTP Request Model	
<b>language *</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, Fr, Ar
<b>otp *</b>	String	OTP received on registered mobile number.  Length-6	213131
<b>resumeServiceRequestId *</b>	String	Whenever an API is called, Comviva generates a unique service request ID for the API request. This unique ID traverses' components in the business process flow. It is useful when the process flow is paused for the user	f491f6b1-aa9b-43de-93b0-c85eda706a2c

Fields	Type	Description	Example/Allowed Values
		input and needs to be resumed when user has provided the input.  Length-36 characters (System generated)	

### Sample Request Body

```
{
  "language": "en",
  "otp": "655336",
  "resumeServiceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634"
}
```

### Response Body

Code: 200

**Self-set** authentication with OTP response.

Fields	Type	Description	Example/Allowed Values
<b>ValidateOtpSelfSetAuthenticationFactorWithOtpResponse</b>	String	<b>Self-Set</b> Authentication with OTP Response model.	
<b>Code</b>	String	Step code where the request is paused for user input.	new.authentication.value.required
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, Fr, Ar
<b>message*</b>	String	The API response message that shows the type of information returned.	new authentication value is required. Please enter new & confirmation values to continue.
<b>mfsTenantId</b>	String	MFS Tenant ID of the user	mfsPrimaryTenant
<b>originalServiceRequestId*</b>	String	The Original Service Request ID  Length-36 characters	da371e6e-db02-472b-94c3-2ad2f79dfd09
<b>serviceFlow</b>	String	A unique code that is internal to Comviva and identifies the business process flow associated to the API.	SELFSETAUTHMFA
<b>serviceRequestId*</b>	String	Whenever an API is called, Comviva generates a unique service request ID for the API request. This unique	f491f6b1-aa9b-43de-93b0-c85eda706a2c

Fields	Type	Description	Example/Allowed Values
		ID traverses' components in the business process flow. It is useful when the process flow is paused for the user input and needs to be resumed when user has provided the input.  Length-36 characters	
<b>status*</b>	String	The status to show whether the API call is a success, failure, in progress, or paused.	SUCCEEDED, FAILED, INPROGRESS, or PAUSED
<b>transactionTimeStamp *</b>	String	The date and time of transaction in the format YYYY-MM-DD and HH:MM:SS respectively.	2023-01-31T15:49:45

### Sample Response Body

```
{
  "serviceRequestId": "a25e5e96-4f0e-4f89-af3d-1a6244f57441",
  "mfsTenantId": "mfsPrimaryTenant",
  "language": "en",
  "serviceFlow": "SELFSETAUTHMFA",
  "transactionTimeStamp": "2023-10-13T15:46:12",
  "originalServiceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634",
  "code": "new.auth.value.required",
  "message": "New authentication value is required. Please enter new and confirmation values to continue",
  "status": "PAUSED"
}
```

### Error Codes

Error Code	Description
400	Bad request
500	Internal Server Error

### Error scenario:

Http error code: 400.

Error Code: Generic05- No data found.

### Response:

```
{
  "status": "FAILED",
  "errors": [
    {
      "code": "sfm.errors.resume.service.request.id.not.found",
      "message": "resume request id not found",
      "componentName": "SFM"
    }
  ],
  "errorCode": "Generic05",
  "errorUserMsg": "No data found",
}
```



```
"httpErrorCode": "400"
}
```

### 2.3.1.2.3 Confirm Authentication Values after OTP Validation

**Action: POST**

**Endpoint: /v2/ums/user/auth/self-set-auth/confirm**

**Description**

This API is used to confirm new authentication value for self-initiated change authentication value (Pin/Password) after OTP validation.

**Request body :**

Fields	Type	Description	Example/Allowed Values
<b>adminResetAuthenticationFactorModel</b>	String	set authentication value for Self-set authentication with otp service body. Cannot be empty.	
<b>SetAuthenticationValueWithOtpModel</b>	String	Self-Set Authentication with OTP Request Model	
<b>confirmedAuthenticationValue*</b>	String	<p>Re-enter new password for confirmation.</p> <p>Default length of pin is 4</p> <p>Min password length is 5 &amp; Max password length is 10</p> <p>Pin/password also can be configured using security profile</p>	1234
<b>newAuthenticationValue*</b>	String	<p>Enter new password/PIN</p> <p>Can be configured using security profile</p> <p>Default length of pin is 4</p>	1234

Fields	Type	Description	Example/Allowed Values
		Min password length is 5 & Max password length is 10  Pin/password also can be configured using security profile	
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, Fr, Ar
<b>resumeServiceRequestId*</b>	String	System Generated Unique Id which determines the service flow  Length- 36 characters (System generated)	f491f6b1-aa9b-43de-93b0-c85eda706a2c

### Sample Request Body

```
curl --location
      'https://mfsbaastest.grameenphone.com/mobiquitypay/v2/ums/user/auth/self
      -set-auth/confirm' \

--header 'Accept: application/json, text/plain, */*' \

--header 'Accept-Language: en-US,en;q=0.9,hi;q=0.8' \

--header 'Connection: keep-alive' \

--header 'Content-Type: application/json; charset=UTF-8' \

--header 'Cookie: unq=c4dPpSLPIgO9yPZM;
      refresh_token=eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCIsImtpZCI6Imp3cy1rZXktcH
      VibG1jLTUifQ.eyJzZXJ2aWNlUmVxdWVzdElkIjoimzM5YWM4ZTgtNGI3MS00NmM4LWIwOTY
      tNzE0MjMzNWZhZTNhIiwidXNlcl9uYW1lIjoimzM5YWM4ZTgtNGI3MS00NmM4LWIwOTYtNzE
      0MjMzNWZhZTNhIiwiaXV0aG9yaXphdGlvb1Byb2ZpbGVDb2RlIjoimzM5YWRtaW5EZWZhZhdWx
      0IiwiaWRlbnRpbmllclZhbHVlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      EIiwiaXV0ZWdvcnlnb2RlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      1IiwiaXV0ZWdvcnlnb2RlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      faWQiOiJDb2RlIiwiaXV0ZWdvcnlnb2RlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      sIlNFTFZTRVRBbVVRIRkFDVE9SIiwiaXV0ZWdvcnlnb2RlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      iLCJBVE1DQVNIT1VUImV0ZWdvcnlnb2RlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      2NGRjMDU4LWw1MjMzNWZhZTNhIiwiaXV0ZWdvcnlnb2RlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      iLCJiZWZFYXJDb2RlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      2LTQ3MmUtYTYxOS03YWM4ZTgtNGI3MS00NmM4LWIwOTYtNzE0MjMzNWZhZTNhIiwiaXV0ZWdvcnlnb2RlIjoimzM5YWRlbnRpbmllclR5cGUoIjMT0dJTk1
      trAWWLxajZzDRh2KjCmsX-
      kwVHKXr3DPOMN17G9VW1PiY2ZaEqR3Y2H6nRxIkFXz6MOoI1l30UEqljuOpB6V9519cNURFq
```

```

06evqFwIasfs6jIzmxV7by1iNlHNR5m1KMMF42D8L9en8h0lAVf9Hb4VaX_I_GL2GAnbUjyn
7SM28njVx3Q9ZF6UDORlrAQVTbdWluzimGXKLhoYtzE_nupf-w2ksToC0dOKsY5fKB7U9aO-
qjXnPBBXJIrmUvM25J9fPmyNCiP0YNGeCktyIbASOAwIbV9HyEu1-
VOwnSKAlw06KeUIaS3bebf5maPzn88JlGgQ;
TS01e8828b=01f85cdc3ceaccb0e0dd4d85ebf7b7dddaea5ae0f3944a191229a40ce8bad
051d541990c8462523f2db0fe252be3d31f3cdb37758fde55c4845375f9941e6e3d38e31
41a71228d43f32497bf609ae9f1c048bf4aeea2e051d3b0030cee573634d855d3616a3a9
d7319297d1dd455fff7d420a65643;
TS33367916027=085664378eab2000d2ee20e60cf6c69918ee90b02feaa9f93e0e1ffc7b9
4c3ea9010a09a12655b26108fcaf43b211300097d606c789d778d91e619c5e775d098504
73bc9e887e877d6ba64d43ea0a5977896f8096ba5f5917dce41e3f45421521;
TS01e8828b=01f85cdc3cc4c735ef2d04975ee799b43c280a5acda09245bf7e07a400768
132bf99bd0fcf0fa6db3629c68a2c243e3fe394e2521d;
TS33367916027=085664378eab2000e2f861779ca922a47ea0f5d303868474fdb5400199
295ee2257cb0ba988681a308f3d4df8711300094fad75a80452f7924d9a853bbabc5e0f7
cebcf61d31f5fec0eb4349217b9d417c42b90b507173c5887a0750835a5c4a' \

--header 'Nonce: f086e5d8266d1303' \

--header 'Origin: https://mfsbaastest.grameenphone.com' \

--header 'Referer:
https://mfsbaastest.grameenphone.com/dfscontainer/app.html' \

--header 'Sec-Fetch-Dest: empty' \

--header 'Sec-Fetch-Mode: cors' \

--header 'Sec-Fetch-Site: same-origin' \

--header 'Signature:
5a86ee76514b9513d49dab829365cecdf9f5eabc7c91b026c1fc6fe34f430681' \

--header 'User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/117.0.0.0 Safari/537.36' \

--header 'sec-ch-ua: "Google Chrome";v="117", "Not;A=Brand";v="8",
"Chromium";v="117"' \

--header 'sec-ch-ua-mobile: ?0' \

--header 'sec-ch-ua-platform: "Windows"' \

--data-raw '{

  "confirmedAuthenticationValue": "Com@0822",

  "language": "en",

  "newAuthenticationValue": "Com@0822",

  "resumeServiceRequestId": "a25e5e96-4f0e-4f89-af3d-1a6244f57441"

}'

```

## Response Body

```
{
  "serviceRequestId": "c7c35c94-6f8a-4709-8667-7ac77bf728ed",
  "mfsTenantId": "mfsPrimaryTenant",
  "language": "en",
  "serviceFlow": "SELFSETAUTHMFA",
  "transactionTimeStamp": "2023-10-13T15:48:19",
  "originalServiceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634",
  "code": "AUTH_04",
  "message": "Authentication factor is successfully changed",
  "status": "SUCCEEDED"
}
```

Fields	Type	Description	Example/Allowed Values
<b>SetAuthenticationValue WithOtpResponse</b>	String	<a href="#">Self Set</a> Authentication with OTP Response model	
<b>language</b>	String	Preferred language of the user. By default, system supports 3 languages English/French/Arabic.	En, Fr, Ar
<b>message*</b>	String	The API response message that shows the type of information returned.	Authentication factor is successfully changed
<b>mfsTenantId</b>	String	MFS Tenant ID of the user	mfsPrimaryTenant
<b>originalServiceRequestId *</b>	String	The Original Service Request ID Length-36 characters	da371e6e-db02-472b-94c3-2ad2f79dfd09
<b>serviceFlow</b>	String	A unique code that is internal to Comviva and identifies the business process flow associated to the API.	SELFSETAUTHMFA
<b>serviceRequestId*</b>	String	Whenever an API is called, Comviva generates a unique service request	f491f6b1-aa9b-43de-93b0-c85eda706a2c

Fields	Type	Description	Example/Allowed Values
		ID for the API request. This unique ID traverses' components in the business process flow. It is useful when the process flow is paused for the user input and needs to be resumed when user has provided the input.  Length-36 characters	
<b>status*</b>	String	The status to show whether the API call is a success, failure, in progress, or paused.	SUCCEEDED, FAILED, INPROGRESS, or PAUSED
<b>transactionTimeStamp*</b>	String	The date and time of transaction in the format YYYY-MM-DD and HH:MM:SS respectively.	2023-01-31T15:49:45

### Sample Response Body

```
{
  "serviceRequestId": "c7c35c94-6f8a-4709-8667-7ac77bf728ed",
  "mfsTenantId": "mfsPrimaryTenant",
  "language": "en",
  "serviceFlow": "SELFSETAUTHMFA",
  "transactionTimeStamp": "2023-10-13T15:48:19",
  "originalServiceRequestId": "cfd43988-7adf-4168-bdcd-0523ce0a8634",
  "code": "AUTH_04",
  "message": "Authentication factor is successfully changed",
  "status": "SUCCEEDED"
}
```

### Error Codes

Error Code	Description
400	Bad request
500	Internal Server Error

### Error scenario:

Http error code: 400

Error Code: Generic05- No data found.

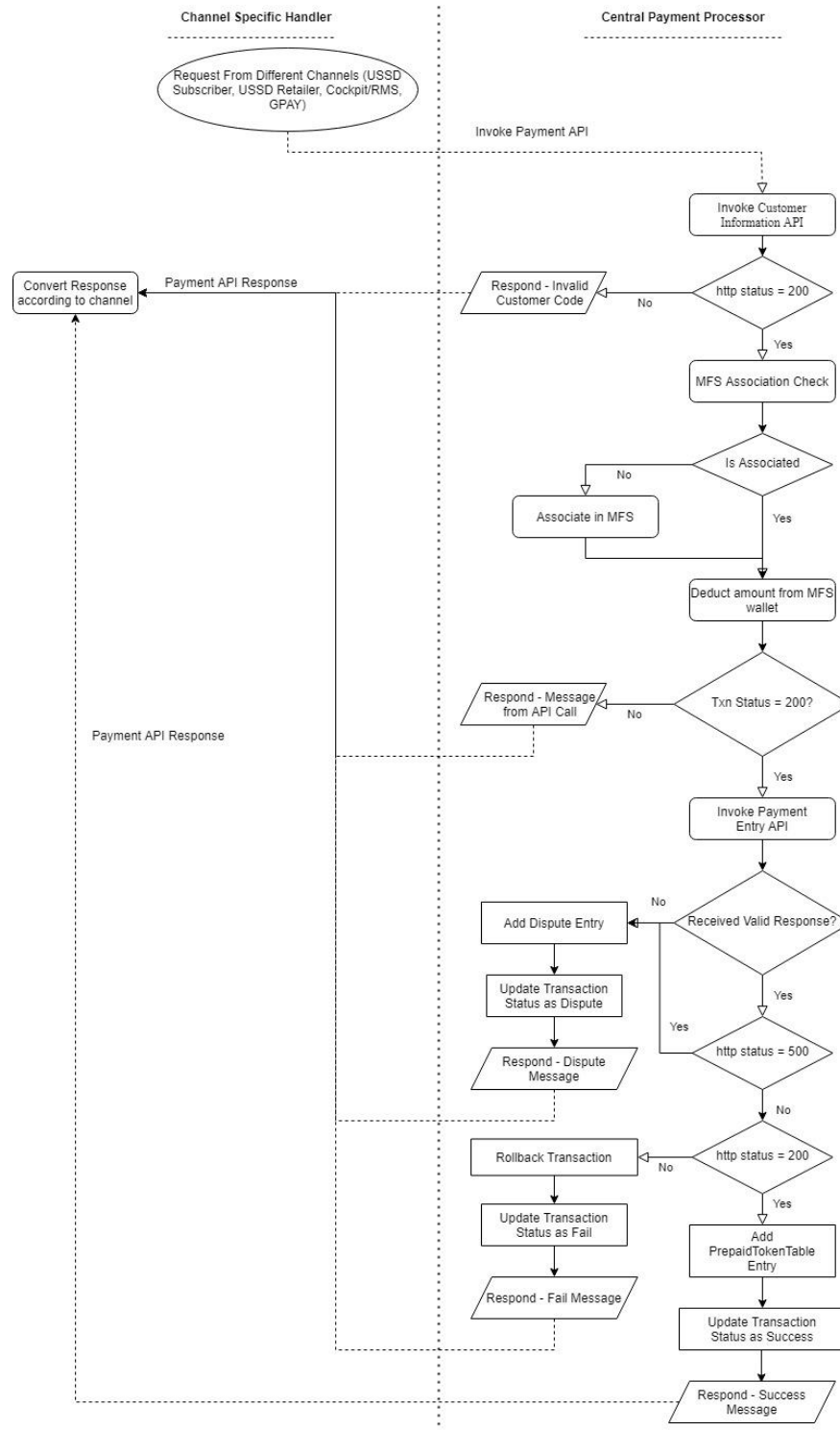
**Response:**

```
{
  "status": "FAILED",
  "errors": [
    {
      "code": "sfm.errors.resume.service.request.id.not.found",
      "message": "resume request id not found",
      "componentName": "SFM"
    }
  ],
  "errorCode": "Generic05",
  "errorUserMsg": "No data found",
  "httpErrorCode": "400"
}
```

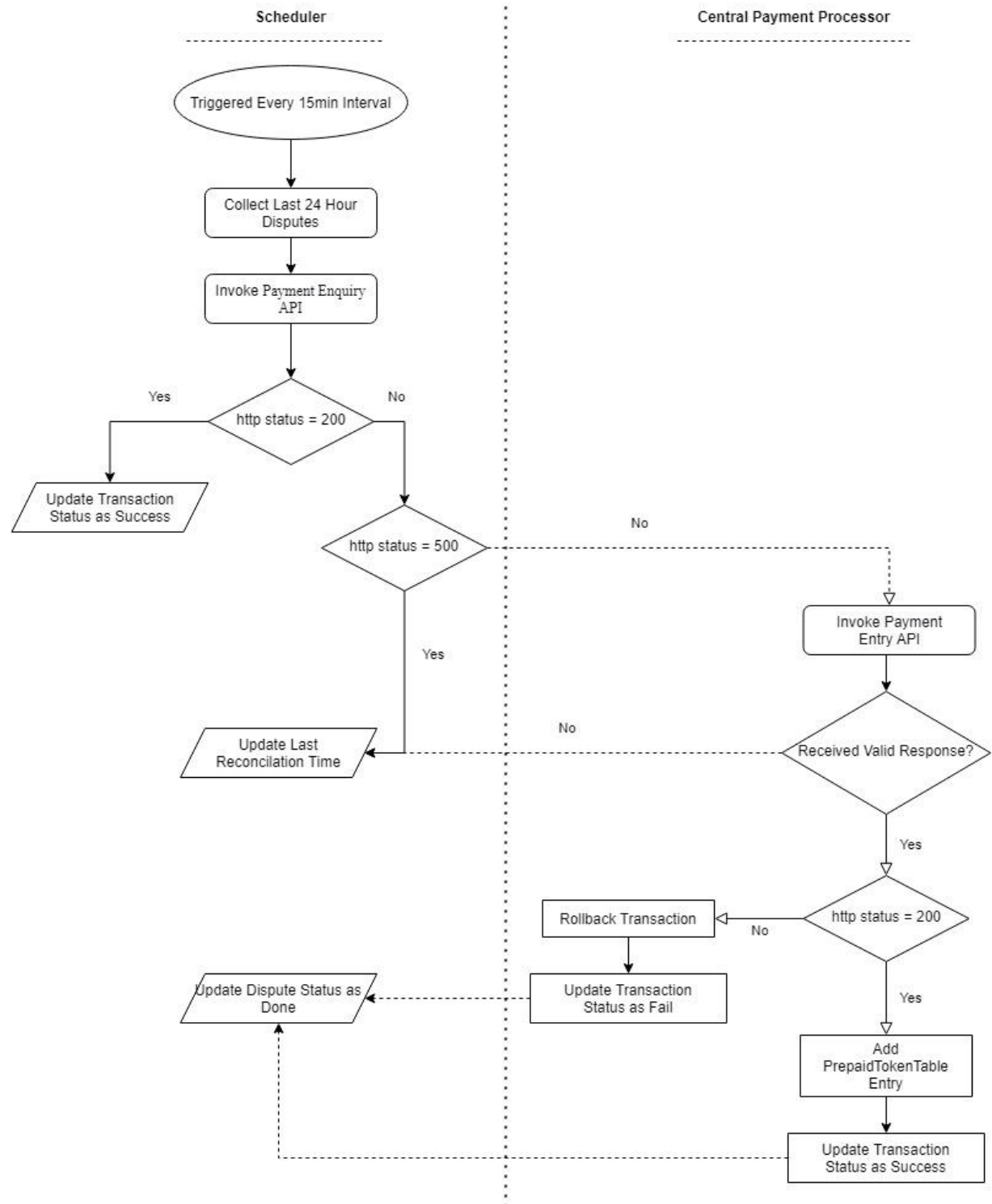
## 2.4 Existing Flow Diagrams:

---

Flow diagram of Billpayment Request



Call flow of scheduler : to pick bulk request(fetch bill and payment) initiated from UI



**Note:**

- All technical training session happened with Wipro will be shared with partner that will give detailed view of current implemented request flow .
- Postman collection of existing system APIs is also shared.
- Git code link of existing system will be shared by Comviva to partner



## 3 Technical Solution Requirement

---

### 3.1 Solution Overview

---

the solution must be created using open-source technologies widely accepted and used by the industry.

#### 3.1.1 Tech stack to be used to deploy and run existing code

---

Comviva suggest to use below listed technology stack for the development of the application:

Angular 9.1.1
npm 6.13.4
Node 12.16.1
tomcat 9 or above
Jdk 14
MySql

### 3.2 Deployment Specifications of existing module

---

The solution must be deployed with below steps in order.


#### 3.2.1 DB Readiness

---

- Install MySql in your local system.
- Install MySql Workbench in your local system.
- execute Below all the files in MySQL Workbench for setup database in your local system.


  
 mflex\_bulk\_bill.sql


  
 mflex\_core.sql


  
 mflex\_report.sql

Z

### 3.2.2

## Application readiness

---

- There are Four Modules which need to be deployed in same order
- 1. web application
- 2. async job
- 3. mfs-communication
- 4. gpay-C

Steps to deploy:

- ( Web Application – master)
  - Go in this folder
    1. cd src/ng
    2. open command prompt or git bash
    3. npm init -y
    4. npm install
    5. npm run dev
  - Now, open the project and do some changes in .properties (DB configuration, etc...)
  - run main class which have @SpringBootApplication annotations.
  - open any Browser and hit : <http://localhost:8080/>

## 3.3

## Project Specific Scope

---

### 3.3.1

## Current Implemenation

---

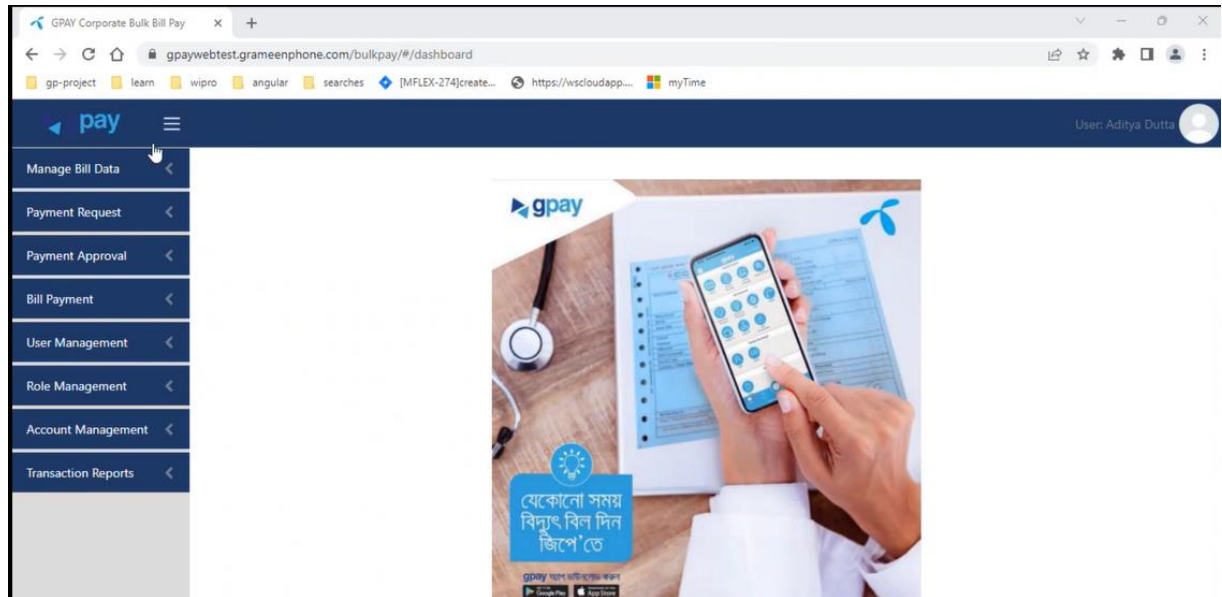
All technical hands-on recording will be shared with Parner

### 3.3.2

## Graphical User Interface

---

GUI should be as below:



Rest can be referred from Recordings:

### 3.3.3 Training



Once the application is delivered on site, the partner must conduct technical training to the Comviva development team and provide necessary information and code walk through for changes made in existing Code.

### 3.3.4 Documentation

Flow diagram has been attached above to explain process flow of Request

### 3.3.5 Postman Collection

Attached is postman collection is existing system APIs to integrate within system and with biller platform


  
 Communicator Desco-postpaid.po  
 copy.postman\_collestan\_collection.js

Note: Comviva will share it's API (Fetch bill, payment, ambiguous settlement)

## 3.4 Testing and Acceptance

### 3.4.1 System Integration Testing

---

Application must pass all the test cases defined by partner's internal QA. Comviva QA will audit the report and also may execute their own designed cases as per the functionalities if required, Partner must fix all issues raised by Comviva QA.

Note: Any bug identified during QA testing which is present in existing/new code must be fixed by Partner.

### 3.4.2 User Acceptance Procedure

---

Once the application is cleared by Comviva QA, it must be offered to customer for their testing and acceptance. User acceptance test cases must be shared by partner and passed in order to get user acceptance certificate. All UAT defects must be fixed by Partner.

## 3.5 Risks, Impact and Mitigation

---

Partner must identify and define all the risks and share its impact as well as mitigation plan.

## 3.6 Responsibility Matrix

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Partner must prepare and share responsibility matrix for various tasks required to be executed during the lifecycle of this project.

## 3.7 Out of Scope

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Third party (Biller )APIs integration would be out of scope for partner, though partner must define their own list of out of scope items and share with us.

All third party integrations will be under mobiquity scope. Partner has to just integrate with Mobiquity Payment APIs.

**Reporting UI shown in demo is out of scope of partner . Mobiquity will support all report related need through existing reports present in product.**

## 3.8 Code management

---

Partner must commit and update all the codes, designs, and documents into Comviva version control systems (GIT) and provide necessary access information for Comviva development team. Partner should adhere to all the Comviva software development guidelines and follow GDPR processes.

## 3.9 Project handover

---

Once the project is completed, partner must handover updated software to Comviva and conduct various workshops (technical, functional, non-functional etc.) for teams and provide them hands on experience and KT to enable them to take care of future change requests as well as bug fixes. This will be for changes done by Partner on top of existing code.

## 3.10 Project Timelines

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This project must be completed within the defines and agreed timelines. The project is expected to be completed within 30 days.

## 3.11 Support and maintenance

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- Partner will be responsible for UAT as well as production defects
- Partner must provide technical support and maintain the project upto 1 year after delivery.
- Partner must assign a dedicated team to develop and support this project
- Production defects must be fixed with in defined SLA.

## 4 Document Change History

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Version	Change Type (A/M/D)	Change Description	Prepared By	Reviewer	Approved by	Date
1.0	A	Initial version	Anshika Aggarwal	Pranay Agrawal	Kamal Kishor Arya	27-July-2023

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