Table of Contents

Introduction 2

Purpose of SRS 2

Scope of the Project 2

General Description 3

Assumptions, Dependencies and Risks:- 3

Solution Architecture 3

3.1 Detailed system flow 4

Introduction

|  |
| --- |
| Purpose of SRS |
| This Systems Requirements Specifications (SRS) specifies requirements for addressing Prepaid Erecharge through IVR.  The intended audience for this document is:   1. Development Work streams 2. Business 3. Vendor |

|  |  |  |
| --- | --- | --- |
| Scope of the Project | |  |
| * RCOM CDMA/RCOM GSM/RTL GSM,HSD,Datacard,FWP,3G Dongle….Prepaid * The current scope enables E-Recharge through IVR only * In case of HSD, Datacard & 3G Dongle SMS confirmation of E-Recharge success on alternate MDN will be catered through a separate **BR** | |  |
|  | | |
|  |  | |
|  |  | |
|  |  | |
|  | | |
| BR Description: Prepaid Erecharge through IVR. | | |

|  |
| --- |
|  |
|  |

General Description

Currently Customers are dependent on eRecharge dealers for recharging their Prepaid account. The functionality will enable Customers to recharge at their convenience through IVR.

And the same is as Detailed below.

|  |
| --- |
| Assumptions, Dependencies and Risks:- |
| 1. Bill Desk will provide Java API for credit/debit card payment. This API will be responsible for doing all encryption and transaction handling between PACE and Bill Desk API.  2. ERecharge transaction made through IVR will be visible through Self-service channel i.e Last  5 transaction details, where source system will be IVR for such cases. PACE will show last 5 transaction details, for which the source can be "PACE/IVR". Addition of new column "SOURCE" will be provided.  3. The subscriber must have the OTP before initiating the call on IVR.  4. Error handling will be taken care by PACE ops.  5. Bill desk will support both payments through Credit card and Debit card.   * Postpaid Bill payment from PACE to downstream system i.e Billing remains intact. * Prepaid Pack buying and Plan purchase from PACE to downstream system remains intact. * Configuration of Pack and Plan will be required at IVR. And the same needs to be available at PACE. * For PBP (Postpaid)bill payment minimum capping is required at IVR. |

Solution Architecture

|  |
| --- |
|  |
|  |

Async Response Success/Fail of Transaction

ER request for Success Cases

|  |
| --- |
| 3.1 Detailed system flow   1. **Existing Customer services** no’s will be available for customer to call up for recharging on IVR.   Note- \*333, 198 for mobile  \*355 for HSD,3G Dongle & Data Card   1. At appropriate location (to be defined by business) within IVR flow, IVR will offer option to customer for E-Recharge to be done on the same MDN from which customer has called or else prompt the Customer to enter the MDN on which the E-recharge needs to be done. 2. After Entering the MDN, IVR will prompt the customer whether he wants to recharge through Debit card/Credit card and accordingly customer will provide the details of the Card which is as follows:- 3. Credit Card No **(15/16 digit)** 4. CVV No **(3 digit)** 5. Expiry date **( 6 digit mmyyyy format)** 6. Amount to be recharged **(Minimum & Maximum value will be defined at IVR)** 7. OTP.   Note- IVR will check the ER Amount (i.e. minimum & maximum value). These values will be configurable at IVR.   1. IVR will encrypt the above information along with requester MDN (A) and beneficiary MDN (B) and send the request to PACE over http post.   Ref section 3.2-------------------- for IVR-PACE API.   1. PACE will decrypt the received request from IVR and generate a numeric Transaction ID against the request. 2. PACE will do the following validation:-   a) Whether the MDN B is valid or not. As per existing.  b) Whether the ERecharge denomination is valid or not.   1. In case of ERecharge denomination fails PACE will fetch the lowest highest denomination than entered value and highest lower denomination than entered value **(same category example- Top Up)** and send the same to IVR along with Trans ID & Failure response. IVR will play the necessary information to customer based upon the Error Code received from PACE. **Interaction between IVR and PACE will be closed in case MDN and denomination validation fails. PACE should keep the log of failure cases as well.** 2. If the customer is a valid customer then PACE will store the following transaction details:- 3. Requester MDN (A) 4. Beneficiary MDN (B) 5. Transaction Date 6. Trans Id (Generated by PACE) 7. Request Type i.e ER 8. Request Sub Type i.e ETRC 9. Amount 10. After storing the above details, PACE will call the Bill Desk API with following details and Bill desk will give the sync response for the same :-  * Credit card/Debit card No * Amount * Card Type * CVV No * Expiry Date * OTP * Transaction Date  1. Bill desk will give a Sync response to PACE . PACE will generate a receipt no and store the same in its internal table. PACE will send **Sync response** to IVR. Based upon which IVR will play the necessary information to the Subscriber. Note- PACE will **not** send the receipt no in Sync response to IVR. 2. Bill Desk will process the request to payment gateway and will provide Async response to PACE regarding Success OR Failure of transaction done on the customer’s account. 3. For all Successful transaction from Bill Desk, PACE will initiate ERecharge request as per existing process. 4. After completion of downstream process, PACE will send Success/Failure (as per ER status) to Bill Desk. 5. Bill Desk will confirm the receipt by Sync response.   *Note- Incase of ER failure, reversal of the denomination will happen via Bill Desk, however no message will sent to the customer for the same.*    **For BR-----------------------NEW BR**  Prepaid Features:- Plan & Pack Buying   1. **Existing Customer services** no’s will be available for customer to call up for recharging/Purchase Plan/ Purchase Pack on IVR.   Note- \*333 for mobile  \*355 for HSD,3G Dongle & Data Card  …….for offnet (Awaited from Business)  198 access number…..Confirmation required from Business..  \*IVR call flow is awaited from Business.   1. IVR will offer option to customer for Erecharge, Pack Buying OR Plan Buying. Customer will choose the right key. In case the customer chooses the option of purchasing Pack OR plan, IVR will play the configured Pack/Plan based upon configuration. 2. Post which IVR will also offer option to execute the same on MDN from which customer has called or else prompt the Customer to enter the MDN on which the Plan or Pack buying is required. 3. After Entering the MDN, IVR will prompt the customer whether he wants to make the payment through Debit card/Credit card and accordingly customer will provide the details of the Card which is as follows:- 4. Credit Card No **(15/16 digit)** 5. CVV No **(3 digit)** 6. Expiry date **( 6 digit mmyyyy format)** 7. Amount 8. OTP.   \*Note- IVR will check the Plan Name OR Pack Name. Plan/Pack will also be configurable at IVR.   1. IVR will encrypt the above information along with requester MDN (A) and beneficiary MDN (B) and send the request to PACE over http post.   Ref section 3.2-------------------- for IVR-PACE API.   1. PACE will decrypt the received request from IVR and generate a numeric Transaction ID against the request. 2. PACE will do the following validation:-   a) Whether the MDN B is valid or not. As per existing.  b) Whether the Plan OR Pack is valid or not.   1. In case of Plan Name OR Pack Name is not available at PACE will send Transaction ID along with Failure response to IVR. IVR will play the necessary information to customer based upon the Error Code received from PACE. **Interaction between IVR and PACE will be closed in case MDN and PACK Name/Plan Name validation fails. PACE should keep the log of failure cases as well.** 2. If the customer is a valid customer then PACE will store the following transaction details:- 3. Requester MDN (A) 4. Beneficiary MDN (B) 5. Transaction Date 6. Trans Id (Generated by PACE) 7. Request Type i.e ER 8. Request Sub Type i.e ETRC/PLAN /PACK 9. Amount 10. After storing the above details, PACE will call the Bill Desk API with following details and Bill desk will give the sync response for the same.  * Credit card/Debit card No * Amount-----------------ER Amount/Pack Amount/Plan Amount * Card Type * CVV No * Expiry Date * OTP * Transaction Date  1. Bill desk will give a Sync response to PACE. PACE will generate a receipt no and store the same in its internal table. PACE will send **Sync response** to IVR. Based upon which IVR will play the necessary information to the Subscriber. Note- PACE will **not** send the receipt no in Sync response to IVR. 2. Bill Desk will process the request to payment gateway and will provide Async response to PACE regarding Success OR Failure of transaction done on the customer’s account. 3. For all Successful transaction from Bill Desk, PACE will initiate ER/Pack Buying/Plan Buying request as per existing process. 4. After completion of downstream process, PACE will send Success/Failure (as per ER/Pack Buying/Plan Buying status) to Bill Desk. 5. Bill Desk will confirm the receipt by Sync response.   *Note- Incase of ER/PACK/PLAN failure, reversal will happen via Bill Desk, however no message will sent to the customer for the same.*  **Postpaid Feature:- Post Paid Bill Payment PBP**   1. **Existing Customer services** no’s will be available for customer to call up for recharging/Purchase Plan/ Purchase Pack/**PBP** on IVR.    1. Note- \*333 for mobile       1. \*355 for HSD,3G Dongle & Data Card       2. …….for offnet (Awaited from Business)       3. 198 access number…..Confirmation required from Business..    2. \*IVR call flow is awaited from Business. 2. IVR will offer option to customer for Erecharge, Pack Buying OR Plan Buying OR PBP. Customer will choose the right key. In case the customer chooses the option of PBP. IVR   will offer option to execute the same on MDN from which customer has called or else  prompt the Customer to enter the MDN on which PBP is required.   1. After entering the MDN IVR will fetch the Bill details as per existing frame work and Play the Bill Amount along with due date. IVR will prompt the customer to pay for the Bill amount OR any other amount. (IVR will have a minimum capping). 2. In case the customer chooses a value below minimum capping for Bill Payment IVR will prompt the customer for the minimum acceptable value. 3. In case the customer chooses to pay the complete Bill Amount IVR will execute the further process. For cases where the customer chooses to pay other than Bill Amount IVR will execute further for same post checking the minimum capping. 4. Post which IVR will prompt the customer whether he wants to make the payment through Debit card/Credit card and accordingly customer will provide the details of the Card which is as follows:- 5. Credit Card No **(15/16 digit)** 6. CVV No **(3 digit)** 7. Expiry date **( 6 digit mmyyyy format)** 8. Amount **(Minimum value will be defined at IVR)** 9. OTP. 10. IVR will encrypt the above information along with requester MDN (A) and beneficiary MDN (B) and send the request to PACE over http post.     1. Ref section 3.2-------------------- for IVR-PACE API. 11. PACE will decrypt the received request from IVR and generate a numeric Transaction ID against the request. 12. PACE will do the following validation:-     1. a) Whether the MDN B is valid or not. As per existing.      1. For all failure cases PACE will send Transaction ID along with Failure response to IVR. IVR will play the necessary information to customer based upon the Error Code received from PACE. **Interaction between IVR and PACE will be closed in case MDN validation fails. PACE should keep the log of failure cases as well.** 2. If the customer is a valid customer then PACE will store the following transaction details:- 3. Requester MDN (A) 4. Beneficiary MDN (B) 5. Transaction Date 6. Trans Id (Generated by PACE) 7. Request Type i.e ER 8. Request Sub Type i.e ETRC/PLAN /PACK/PBP 9. Amount 10. After storing the above details, PACE will call the Bill Desk API with following details and Bill desk will give the sync response for the same. 11. Credit card/Debit card No 12. Amount---------ER Amount/Pack Amount/Plan Amount/PBP amount 13. Card Type 14. CVV No 15. Expiry Date 16. OTP 17. Transaction Date 18. Bill desk will give a Sync response to PACE . PACE will generate a receipt no and store the same in its internal table. PACE will send **Sync response** to IVR. Based upon which IVR will play the necessary information to the Subscriber. Note- PACE will **not** send the receipt no in Sync response to IVR. 19. Bill Desk will process the request to payment gateway and will provide Async response to PACE regarding Success OR Failure of transaction done on the customer’s account. 20. For all Successful transaction from Bill Desk, PACE will initiate ER/Pack Buying/Plan Buying/PBP request as per existing process. 21. After completion of downstream process, PACE will send Success/Failure (as per ER/Pack Buying/Plan Buying/PBP status) to Bill Desk. 22. Bill Desk will confirm the receipt by Sync response.     1. *Note- Incase of ER/PACK/PLA/PBP failure, reversal will happen via Bill Desk, however no message will sent to the customer for the same.* |
|  |
|  |
| **3.2 External Interface Specifications**  IVR-PACE Interface  **Request XML**  http://97.253.34.186:59200/servlet/ImplBackendOnlineIVRRequestServlet?msg=<?xml version='1.0' encoding='UTF-8'?>  <ERECHARGE>--------------------  <SESSIONID>11</SESSIONID>  <SOURCE\_ID>IVR</SOURCE\_ID>  <STRMDN>9346666050</STRMDN>  <USERMDN>9346666050</USERMDN>  <TOPUP>TOPUP</TOPUP>---------------<TOPUP/PACK/PLAN/PBP>  <CCTYPE>V</CCTYPE>  <CCNO>4629867050216006</CCNO>  <CVVNO>210</CVVNO>  **<EXPDATE>062016</EXPDATE>**  <OTP>1234</OTP>  <AMOUNT>1</AMOUNT>------------------------Amount of PACK/PLAN/PBP  </ERECHARGE>  please find the enclosed document of XML\_Details    **Response:**  <ERECHARGE>  **<SESSIONID>string</SESSIONID>**  **<AMOUNT>string</AMOUNT>**  **<PAYMENTID>NA</PAYMENTID>**  **<ERRCODE>-1</ERRCODE>**  **<MESSAGE>message</MESSAGE>**  **<MINVAL>0</MINVAL>**  **<MAXVAL>10</MAXVAL>**  </ERECHARGE>  **Credit Card Identification Logic:-**  Credit cards can be identified as below:  PACE-Bill Desk Interface |
|  |

**3.3 User Interface**

|  |
| --- |
|  |
|  |

**3.4 System Sizing Assumptions**

|  |
| --- |
|  |

**3.5 Performance Requirements**

|  |
| --- |
|  |

**3.6 Attributes**

**Availability**

**Security:-**

1. It is as per the existing application security.
2. The API between IVR-PACE will have encryption of all Credit card and Debit card details as per agreed algorithm. **Neither IVR nor PACE will store or print the credit card OR Debit card details i.e as follows:-**

**a) Credit card no.**

**b) CVV**

**c) OTP**

3. The API provided by Bill Desk will be responsible for encryption and security between PACE

& Bill Desk