RTGS Incoming Interface Specification Low Level Design Document

**EIDIKO SYSTEMS INTEGRATORS**



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| EIDIKO |  |  |

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**Approval**

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**Revision History**

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# Introduction

## General Description

This Interface Design document outlines the integration requirements for the RTGS Incoming Payments***(Request and Response)***interface used as banking operations. It summarizes the business processes, which use this interface. It also covers error handling and exception scenarios.

# Purpose

The purpose of this document is to capture events that trigger the interface, main steps within the interface and the integration architecture. This document is intended for use by the developers of the applications identified, the integration development team, and by the test organizations responsible for the testing of these applications.

# Scope

## In Scope

This document focuseson outlining the interface design for the RTGS Incoming Payments***(Request and Response)***interface. Central to this document are the following:

* Overview of the business process that drives the need for the interface
* Proposed integration approach
* Trigger events and business dependencies on this interface
* Sequence /Flow Chart diagram of the interface
* Data mapping between the source and the target
* Error handling and exception scenarios
* Validation and backup requirements

# Channels Involved

The following table lists RTGSIncoming Payments channels

|  |  |
| --- | --- |
| **Item #** | **Channel Name** |
| 1 | Batch-ZEPPS |

# Interface Dependencies

## External Dependencies

The following table lists interface specific External requirements.

|  |  |
| --- | --- |
| **Item #** | **External Requirements** |
| 1 | MS SQL Database - 2017 |
| 2 | Core Banking System (Temenos-T24) |
| 3 | FTP |
| 4 | Zim Shared Switch |

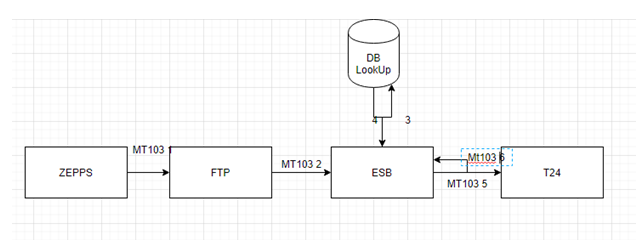
## Internal Dependencies

The following table lists interface specific internal requirements.

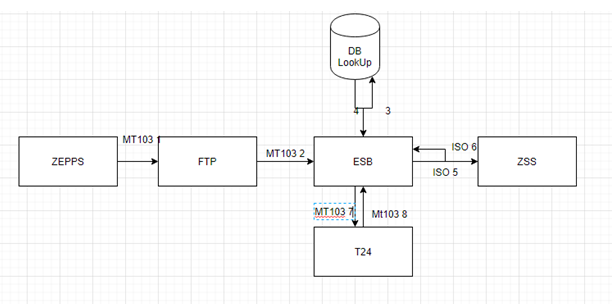
|  |  |
| --- | --- |
| **Item #** | **Internal Requirements** |
| 1 | ISO8583\_Lib (Shared Library) |
| 2 | StewardBankCommonEsql (Shared Library) |
| 3 | DB Logging App (Audit Logging) |
| 4 | MT103 (DFDL - Shared Library) |
| 5 | RtgsIncomingDBReprocessApp(To Reprocess the files in case of Database or server down) |
| 6 | StewardBankExceptionHandler (Subflow) |

# Business Process Summary

## Process Overview



### Figure: 1 Process flow for RTGS Incoming T24 Account Payments



### Figure: 1 Process flow for RTGS Incoming ZSS Account Payments

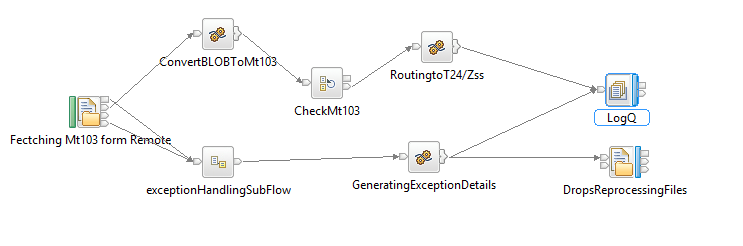
### RTGS Incoming Payment Steps

|  |  |
| --- | --- |
| **S. No** | **Activities** |
| 1 | ESB receives the request MT103 files from FTP as BLOB. |
| 2 | After receiving the MT103 files from FTP into ESB we validates them through Message Model (MT103) . |
| 3 | According to the Credit account number from input request received,we check with ISAVE\_CARD\_MAPPING table from database to check whether they are ZSS accounts or T24 accounts. |
| 4 | The account numbers that are present in the ISAVE table & also starting with ‘2’ are ZSS accounts, other than this are T24 accounts. |
| 5 | The responses from ZSS or T24, success or failure status are updated in SB\_ISAVE\_PAYNET\_RTGS\_TRACKING table. |
| 6 | On Unsuccessful calls of ZSS or T24 Request and Response will be placed in the ERROR\_LOG\_SB\_REQ to log the request in Database (ERR\_AUDIT\_LOGGING) and also is there is any parsing or functional failure then those files are stored Failure directory in ESB server if any files failed due to Database/Server down then those files are reprocessed. |

# ESB Implementation Process Flow

## RTGS Incoming Payment Successful Request Flow

### Process Diagram



### Figure:3 RTGS Incoming Flow

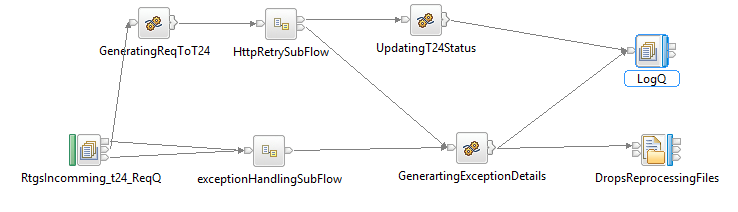
### Process Flow Steps

|  |  |
| --- | --- |
| **S. No** | **Activities** |
| 1. | ESB receives the request Mt103 files from FTP as BLOB and then convert to MT103 by validating with Mt103 Message Model . |
| 2. | Router Application based on ISAVE/ZSS or T24 accounts checking from ISAVE\_CARD\_MAPPING table the data is sent corresponding ZSS or T24 flows through queues such as RTGS\_INCOMING\_SB\_T24\_REQ or RTGS\_INCOMING\_SB\_ZSS\_REQ. |
| 3. | On successful parsing of the Mt103 data into Message Model the further process is progressed |
| 4. | On Unsuccessful parsing of the Mt103 data into DFDL, it will be placed in the ERROR\_LOG\_SB\_REQ to log the request in Database (ERR\_AUDIT\_LOGGING). |

### ISAVE\_CARD\_MAPPING Details

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Item #** | **DB Field Name** | **Field Description** | **Data Type** | **Length** | **Mandatory(Yes/No)** | **Comments** |
| 1 | PAN | Pan card number | Varchar | 19 | Y | The Pan card number. |
| 2 | SEQ\_NR | Sequence number | Varchar | 03 | N | The Sequence number. |
| 3 | MSISDN | MSISDN Number | Varchar | 14 | N | The MSISDN Number. |
| 4 | ACCOUNT\_ID | Credit Account Number | Varchar | 28 | Y | The Credit Account Number. |
| 5 | ACCOUNT\_TYPE | Type of Account | Varchar | 02 | N | The type of account for Account number. |
| 6 | ACCOUNT\_PRODUCT | Product of Account | Varchar | 20 | N | The Product of account for Account number. |
| 7 | FCA\_ACCOUNT | FCA account number | Varchar | 28 | N | The FCA account number |
| 8 | DATE\_UPDATED | Date Field | Varchar | 20 | Y | The first Updated table date. |
| 9 | LAST\_UPDATED\_USEER | Last Updated Date Field | Varchar | 20 | Y | The latest Updated table date. |

## Rtgs Incoming Payments Message Flow For T24Accounts



### Figure: 4 RTGS Incoming T24 Call

### Process Flow Steps

|  |  |
| --- | --- |
| **S. No** | **Activities** |
| 1. | After receiving the data from Route application through RTGS\_INCOMING\_SB\_T24\_REQ queue it trigs the RtgsIncoming Payments T24Call Flow. |
| 2. | The Mt103 data is mapped to T24 API URL pathParameters as info provided by the T24. After framing the T24 URL request we hit the HTTP Subflow. |
| 3. | There are two scenarios in framing a T24 Request (URL ):   1. If the Input request has both Credit Account number and the word 'RRF' which is present in Mt103 - 72 field. If both present in Input request then will to RtgsIncoming Payments 'URL'. 2. If the Input request does not has credit Account number then will send request to RtgsReturns 'URL' . |
| 4. | After Framing the Request T24 URL,then the information is logged in SB\_ISAVE\_PAYNET\_RTGS\_TRACKING in Database along with the Transaction type . |
| 5. | If the T24 call is successful, then JSON response is generated. The successful response (200) of the service is validated by using HTTP-Status-Code in ESB payload & the header status as success, other than is an unsuccessful response. |
| 6. | T24 Response is logged in SB\_ISAVE\_PAYNET\_RTGS\_TRACKING in Database. And the T24\_Status in SB\_ISAVE\_PAYNET\_RTGS\_TRACKING table is updated as Success. |
| 6. | On Unsuccessful call T24 Response will be placed in SB\_ISAVE\_PAYNET\_RTGS\_TRACKING table and the status updated as failure. If transactions failed due Database/Server down then those files are reprocessed. |

## Retry Process workflow

### Process Flow Diagram

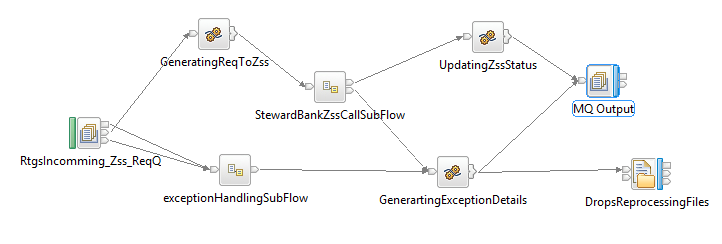


**Figure: 4 HTTP Retry for RTGS Incoming Payments T24 Flow**

### Process Flow steps

|  |  |
| --- | --- |
| **S. No** | **Activities** |
| 1 | HTTP Retry call is used to call the backend service for multiple times |
| 2 | On Successful call of backend service, response will be generated and send back to Business Application For further process |
| 3 | On Unsuccessful call of backend service it Retry for 3 times and sends error message to Business Application for further Process |

## RTGS Incomimg Payments ZSSCall Msg Flow For Zss Accounts



### Figure: 5 RTGSIncoming Payments ZSS Flow

### Process Flow steps:

|  |  |
| --- | --- |
| **S. No** | **Activities** |
| 1. | After receiving the data from Route application through RTGS\_INCOMING\_SB\_ZSS\_REQ queue it trigs the Rtgs Incoming Payments ZSS Call App. |
| 2. | Framing the ZSS request (0200) by using CommonEsql Procedures we do field to field mapping from Mt103 fields to ISO8583 fields. As mapping info provided by Steward Team. |
| 3. | The processing code is 210020, as all the mapped fields of data sent in Request to make ZSS call. |
| 4. | After Framing the ZSS Request (0200) is logged in SB\_ISAVE\_PAYNET\_RTGS\_TRACKING table in Database. |
| 5. | If the ZSS call is successful, then ISO8583 (0210) response is generated. The successful response of the service is validated by using the ISO8583 field responseCode\_039 as ‘00’ other than is an unsuccessful response. |
| 6. | ZSS Response in ISO8583 Format is logged in SB\_ISAVE\_PAYNET\_RTGS\_TRACKING table in Database. And the ZSS\_Status in SB\_ISAVE\_PAYNET\_RTGS\_TRACKING table is updated as Success. |
| 9 | On Unsuccessful call T24 Response will be placed in the SB\_ISAVE\_PAYNET\_RTGS\_TRACKING table and Zss\_Status updated as Failure. If transactions failed due Database/Server down then those files are reprocessed. |

## SB\_ISAVE\_PAYNET\_RTGS\_TRACKING Table Details

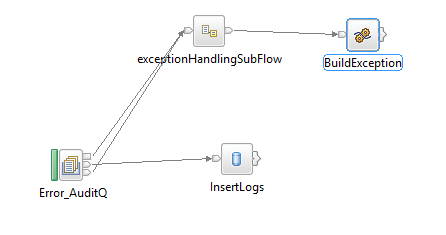
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Item #** | **DB Field Name** | **Field Description** | **Data Type** | **Length** | **Mandatory(Yes/No)** | **Comments** |
| 1 | PAYNET\_GUID | Unique ID number. | Varchar | 50 | Y | An Unique identifier. |
| 2 | PAYNET\_STAN\_NUM | STAN Number | Varchar | 50 | N | The Session number from Block 1 in Mt103 file. |
| 3 | PAYNET\_STANDATE | STAN Date | Varchar | 50 | N | Current Date |
| 4 | PAYNET\_RRN\_REF | Retrieval Reference Number | Varchar | 50 | N | The Sequence number from Block 1 in Mt103 file. |
| 5 | PAYNET\_ISO\_REQUEST\_MSG | ZSS Request Message | Varchar | 4000 | N | The ZSS Request Message after Framing from Mt103 to ISO8583. |
| 6 | PAYNET\_RESPONSE\_CODE | Response Code Number | Varchar | 20 | Y | The Response Code from ZSS or T24 response. |
| 7 | PAYNET\_MT103\_FILENAME | Mt103 File Name | Varchar | 250 | N | The input Mt103 File Name. |
| 8 | PAYNET\_Mt103\_FIELDS | Mt103 Field Names | Varchar | 1000 | N | The fields in Mt103 data. |
| 9 | PAYNET\_MT103\_AMOUNT | Amount | Varchar | 50 | Y | Amount field in Mt103 \_32A field. |
| 10 | PAYNET\_MT103\_DTACCOUNT | Debit Account Number | Varchar | 20 | Y | Debit Account Number field in Mt103 \_field 50 . |
| 11 | PAYNET\_MT103\_CRACCOUNT | Credit Account Number | Varchar | 20 | Y | Credit Account Number field in Mt103 \_Field59data. |
| 12 | PAYNET\_MT103\_DTDATE | Date field in Mt103 | Varchar | 50 | N | Date field in Mt103 \_Field 32A first 6 digits. |
| 14 | PAYNET\_ZSS\_RESPONSE | ZSS Response Message | Varchar | 4000 | Y | The ISO8583 Response after ZSS call. |
| 15 | PAYNET\_ZSS\_STATUS | ZSS Status | Varchar | 10 | Y | Success or Failure status. |
| 16 | PAYNET\_T24\_RESPONSE | T24 Response Message | Varchar | 4000 | Y | The JSON Response after ZSS call. |
| 17 | PAYNET\_T24\_STATUS | T24 Status | Varchar | 10 | Y | Success or Failure status. |
| 18 | PAYNET\_MT103\_STATUS | CSV Status | Varchar | 10 | Y | Success or Failure status when file gets picked. |
| 19 | PAYNET\_DATECREATED | Creation Date | TIMESTAMP | (6) | Y | Created date of the record. |
| 20 | PAYNET\_DATEUPDATED | Updated Date | TIMESTAMP | (6) | Y | Updated date of the record. |
| 21 | PAYNET\_TRANSACTIONTYPE | Taxable | Varchar | 50 | Y | Whether the Transaction in RTGSIncoming/Returns . |

## ERROR\_AUDIT Process Flow

### Process Flow Diagram



**Figure: 7 Exception Subflow**



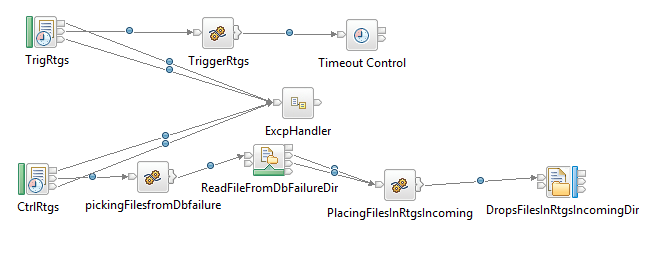
**Figure: 8 Error\_Audit\_Logging Flow**

### Process Flow Steps

|  |  |
| --- | --- |
| **S. No** | **Activities** |
|  | The ERROR\_AUDIT\_Q locks the input Request. |
|  | After the query is executed the record is inserted into the Data Base. |
|  | Final Response is inserted into the DataBase and then Response is logged into the ERR\_LOG\_SB\_REQ. |

## RTGSIncoming DB Reprocess Application

### Process Flow

****

### Process Flow Steps

|  |  |
| --- | --- |
| **S. No** | **Activities** |
|  | Unprocessed files because of Server/Database down are stored in DBFailure folder in ESB Server |
|  | Daily Evening 5 PM, Application trigs and place the unprocessed files in RTGSIncoming Application Location. Those files are reprocessed. |

# Interface Definitions

## Request Message Definition

### MT103 Request Message Structure /Schema

**Request Type:** Message Model (DFDL)

**Request Format:** MT103

**Request MT103 Sample File:**

{1:F01STBLZWHXAXXX2069700773}{2:O1031434200305COBZZWHAAXXX78060642442003051437N}{3:{103:ZET}{113:PROP}{115:CBZBP20065A0508020200305143014}}{4:

:20:029FTIB200650184

:23B:CRED

:32A:200305ZWL2500,

:33B:ZWL5000,

:50K:/23550950010

ZIMBIRU SECONDARY SCHOOL P O BOX BW

1120 BORROWDALE HARARE

:52A:COBZZWHA

:53A:COBZZWHA

:54A:STBLZWHX

:56A:COBZZWHA

:57A:STBLZWHX

:59:/1000000163

JOHNSON G GABARINOCHEKA harare harare

:71A:OUR

:72:/REC/CTP /RRF/JOHNSON G GABARINOCHEK

-}{5:{CHK:65D52019DAEC}}{S:{SAC:}{FAC:}{COP:P}}

### T24 URL Request Message Structure / Schema

**Request METHOD:** ‘POST’

**Request Format:** application/json

**Request URL for RTGSIncoming Payments T24 URL:**

http://IPAddress:Port/stwbc/api/v1.0.0/stwb/payment/rtgsIncoming/{debitCurrency}/{creditAccountId}/{orderingCustomerName}/{paymentCurrency}/{transactionAmount}/{executionDate}/{narrative}/{invoiceReference}/{endToEndReference}

**Request URL for RTGSIncoming Returns T24 URL:**

http://IPAddress:Port/stwbc/api/v1.0.0/stwb/payments/incoming/rtgs/returns/1000000163//{orderingCustomerName}/{paymentCurrency}/{transactionAmount}/{executionDate}/{narrative}/{invoiceReference}

## Response Message Definition

**Response Type:** JSON

### RTGSIncoming T24 Response Message Details

|  |
| --- |
| {  "header":  {"transactionStatus":"Live",  "audit":{"T24\_time":398,"parse\_time":1,  "responseParse\_time":1,  "requestParse\_time":4,  "versionNumber":"1"},  "id":"PI202320TRCRTX16",  "status":"success"  },  "body":  {"chargeBearer":"SHA",  "narratives":  [{"narrative":"029FTIB200650184"}],  "debitCurrency":"ZWL",  "invoiceReferences":[  {"invoiceReference":"NOTPROVIDED"}],  "transactionAmount":5000,  "endToEndReference":"REC CTP RRF JOHNSON G GABARINOCHEK",  "executionDate":"20200819",  "debitAccountId":"ZWL1409200010001",  "orderingCustomerName":"ZIMBIRU SECONDARY SCHOOL P O BOX BW",  "creditAccountId":"1000000047",  "paymentCurrency":"ZWL",  "paymentOrderProductId":"INC.RTGS"  }  } |

### RTGSIncoming T24 Response Message Table Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item #** | **Tag Name/ Field Name** | **Data Type** | **Mandatory(Yes/No)** | **Comments** |
| 1 | header | String | Y | Header tag |
| 2 | transactionStatus | String | Y | Transaction Status |
| 3 | audit | String | Y | Audit time |
| 4 | T24\_time | String | Y | T24 Time. |
| 5 | parse\_time | String | Y | Parsing time. |
| 6 | responseParse\_time | String | Y | Response Parse Time |
| 7 | requestParse\_time | String | Y | Request Parse Time |
| 8 | versionNumber | String | Y | Version Number |
| 9 | id |  | Y | Id Number |
| 10 | status | String | Y | Status |
| 11 | body | String | Y | Body tag. |
| 12 | chargeBearer | String | Y | Charge Bearer |
| 13 | narratives | String | Y | narratives |
| 14 | debitCurrency \* | String | Y | Currency |
| 15 | invoiceReference | String | Y | Invoice References |
| 16 | transactionAmount |  | Y | Amount |
| 17 | endToEndReference | String | Y | End To End Reference number. |
| 18 | executionDate | String | Y | Date |
| 19 | debitAccountId | String | Y | Debit Account |
| 20 | orderingCustomerName | String | Y | CustomerName |
| 21 | creditAccountId | String | Y | Credit Account |
| 22 | paymentCurrency | String | Y | Currency |
| 23 | paymentOrderProductId | String | Y | Payment Order Product Id |

### RTGSReturns T24 Response Messages Details

**Response Type:** JSON

|  |
| --- |
| {"header":  {"transactionStatus":"Held",  "audit":  {"T24\_time":237,  "parse\_time":1,  "responseParse\_time":1,  "requestParse\_time":3},  "id":"PI2022803N0KRHLV",  "status":"success"  },  "body":  {"narratives":  [{"narrative":"029FTIB200650184"}],  "debitCurrency":"ZWL",  "invoiceReferences":[{"invoiceReference":"NOTPROVIDED"}],  "transactionAmount":3000,  "executionDate":"20140819",  "orderingCustomerName":"ZIMBIRU SECONDARY SCHOOL P O BOX BW",  "paymentCurrency":"ZWL",  "paymentOrderProductId":"RET.RTGS"  }  } |
|  |

### RTGS Returns T24 Response Message Table Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item #** | **Tag Name/ Field Name** | **Data Type** | **Mandatory(Yes/No)** | **Comments** |
| 1 | header | String | Y | Header Tag. |
| 2 | transactionStatus | String | Y | Transaction Status |
| 3 | audit | Decimal | Y | Audit Times |
| 4 | T24\_time | String | Y | T24 time |
| 5 | parse\_time | String | Y | Parse time |
| 6 | responseParse\_time | String | Y | Response Parse time |
| 7 | requestParse\_time | String | Y | Request Parse time |
| 8 | versionNumber | String | Y | Version Number |
| 9 | id |  | Y | Id Number |
| 10 | status | String | Y | Status |
| 11 | body | String | Y | Body Tag. |
| 12 | narratives | String | Y | Narratives |
| 13 | debitCurrency | String | Y | Currency |
| 14 | invoiceReferences | String | Y | Invoice References |
| 15 | transactionAmount | String | Y | Amount |
| 16 | endToEndReference | String | Y | End To End Reference |
| 17 | executionDate | String | Y | Date |
| 18 | debitAccountId | String | Y | Debit Account |
| 19 | orderingCustomerName | String | Y | Ordering Customer Name |
| 20 | paymentCurrency | String | Y | Currency |
| 21 | paymentOrderProductId | String | Y | Payment Order Product Id |

## RTGSIncoming Payments ZSS Request Structure / Schema

**Request Type:** DFDL

**Request Format:** ISO 8583 Message Structure

### Request Message Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | DFDL Element | Data Type | Mandatory | Length of the Field |
|  | PrimaryAccountNumber\_002 | n-LL | O | **Upto 19** |
| 2 | P ProcessingCode\_003 | String | M | 6 |
| 3 | AmountTransaction\_004 | Decimal | M | 12 |
| 4 | AmountSettlement\_005 | Decimal | O | 12 |
| 5 | AmountCardHolderBilling\_006 | Decimal | O | 12 |
| 6 | TransmissionDatetime\_007 | dateTiemNoYear | M | 10 |
| 7 | AmountCardHolderBillingFee\_008 | Decimal | O | 8 |
| 8 | ConversionRateSettlement\_009 | String | O | 8 |
| 9 | ConversionRateCardholderBilling\_010 | String | O | 8 |
| 10 | SystemsTraceAuditNumber\_011 | String | O | 6 |
| 11 | TimeLocalTransaction\_012 | String | M | **6** |
| 12 | DateLocalTransaction\_013 | monthDay | M | 4 |
| 13 | DateExpiration\_014 | yearMonth | M | 4 |
| 14 | DateSettlement\_015 | monthDay | O | 4 |
| 15 | DateConversion\_016 | monthDay | O | 4 |
| 16 | DateCapture\_017 | monthDay | O | 4 |
| 17 | MerchantType\_018 | String | M | 4 |
| 18 | AcquiringInstitutionCountryCode\_019 | String | O | 3 |
| 19 | PANExtendedCountryCode\_020 | String | O | 3 |
| 20 | ForwardingInstitutionCountryCode\_021 | String | O | 3 |
| 21 | PointOfServiceEntryMode\_022 | String | M | 3 |
| 22 | CardSequenceNumber\_023 | String | O | 3 |
| 23 | NetworkInternationalIdentifier\_024 | String | O | 3 |
| 24 | PointOfServiceConditionCode\_025 | String | M | 2 |
| 25 | PointOfServiceCaptureCode\_026 | String | M | 2 |
| 26 | AuthorizingIdentificationResponseLength\_027 | String | O | 1 |
| 27 | AmountTransactionFee\_028 | String | M | 9 |
| 28 | AmountSettlementFee\_029 | String | O | 9 |
| 29 | AmountTransactionProcessingFee\_030 | String | M | 9 |
| 30 | AmountSettlementProcessingFee\_031 | String | O | 9 |
| 31 | AcquiringInstitutionIdentificationCode\_032 | LL | M | 1-99 |
| 32 | ForwardingInstitutionIdentificationCode\_033 | LL | M | 1-99 |
| 33 | PrimaryAccountNumberExtended\_034 | LL | O | 1-99 |
| 34 | Track2Data\_035 | LL | O | 1-99 |
| 35 | Track3Data\_036 | LLL | O | 1-999 |
| 36 | RetrievalReferenceNumber\_037 | String | M | 12 |
| 37 | AuthorizationIdentificationResponse\_038 | String | O | 6 |
| 38 | ResponseCode\_039 | String | O | 2 |
| 39 | ServiceRestrictionCode\_040 | String | O | 3 |
| 40 | CardAcceptorTerminalIdentification\_041 | String | M | 8 |
| 41 | CardAcceptorIdentificationCode\_042 | String | M | 15 |
| 42 | CardAcceptorNameLocation\_043 | String | M | 40 |
| 43 | AdditionalResponseData\_044 | LL | O | 1-99 |
| 44 | Track1Data\_045 | LL | O | 1-99 |
| 45 | AdditionalDataISO\_046 | LLL | O | 1-999 |
| 46 | AdditionalDataNational\_047 | LLL | O | 1-999 |
| 47 | AdditionalDataPrivate\_048 | LLL | O | 1-999 |
| 48 | CurrencyCodeTransaction\_049 | String | M | 3 |
| 49 | CurrencyCodeSettlement\_050 | String | O | 3 |
| 50 | CurrencyCodeCardholderBilling\_051 | String | O | 3 |
| 51 | PersonalIdentificationNumberData\_052 | String | O | 8 |
| 52 | SecurityRelatedControlInformation\_053 | String | O | 16 |
| 53 | AdditionalAmounts\_054 | LLL | O | 1-999 |
| 54 | ReservedISO\_055 | LLL | O | 1-999 |
| 55 | ReservedISO\_056 | LLL | O | 1-999 |
| 56 | ReservedNational\_057 | LLL | O | 1-999 |
| 57 | ReservedNational\_058 | LLL | O | 1-999 |
| 58 | ReservedNational\_059 | LLL | O | 1-999 |
| 59 | AdviceReasonCode\_060 | LLL | O | 1-999 |
| 60 | ReservedPrivate\_061 | LLL | O | 1-999 |
| 61 | ReservedPrivate\_062 | LLL | O | 1-999 |
| 62 | ReservedPrivate\_063 | LLL | O | 1-999 |
| 63 | MessageAuthenticationCode\_064 | hexBinary | O | 8 |
| 64 | TertiaryBitmap\_065 | hexBinary | O | 8 |
| 65 | SettlementCode\_066 | String | O | 1 |
| 66 | ExtendedPaymentCode\_067 | String | O | 2 |
| 67 | ReceivingInstitutionCountryCode\_068 | String | O | 3 |
| 68 | SettlementInstitutionCountryCode\_069 | String | O | 3 |
| 69 | NetworkManagementInformationCode\_070 | String | O | 3 |
| 70 | MessageNumber\_071 | String | O | 4 |
| 71 | MessageNumberLast\_072 | String | O | 4 |
| 72 | DateAction\_073 | date | O | 6 |
| 73 | CreditsNumber\_074 | String | O | 10 |
| 74 | CreditsReversalNumber\_075 | String | O | 10 |
| 75 | DebitsNumber\_076 | String | O | 10 |
| 76 | DebitsReversalNumber\_077 | String | O | 10 |
| 77 | TransferNumber\_078 | String | O | 10 |
| 78 | TransferReversalNumber\_079 | String | O | 10 |
| 79 | InquiriesNumber\_080 | String | O | 10 |
| 80 | AuthorizationsNumber\_081 | String | O | 10 |
| 81 | CreditsProcessingFeeAmount\_082 | String | O | 12 |
| 82 | CreditsTransactionFeeAmount\_083 | String | O | 12 |
| 83 | DebitsProcessingFeeAmount\_084 | String | O | 12 |
| 84 | DebitsTransactionFeeAmount\_085 | String | O | 12 |
| 85 | CreditsAmount\_086 | String | O | 16 |
| 86 | CreditsReversalAmount\_087 | String | O | 16 |
| 87 | DebitsAmount\_088 | String | O | 16 |
| 88 | DebitsReversalAmount\_089 | String | O | 16 |
| 89 | OriginalDataElements\_090 | String | O | 42 |
| 90 | FileUpdateCode\_091 | String | O | 1 |
| 91 | FileSecurityCode\_092 | String | O | 2 |
| 92 | ResponseIndicator\_093 | String | O | 5 |
| 93 | ServiceIndicator\_094 | String | O | 7 |
| 94 | ReplacementAmounts\_095 | String | O | 42 |
| 95 | MessageSecurityCode\_096 | String | O | 8 |
| 96 | AmountNetSettlement\_097 | String | O | 16 |
| 97 | Payee\_098 | String | O | 25 |
| 98 | SettlementInstitutionIdentificationCode\_099 | LL | O | 1-99 |
| 99 | ReceivingInstitutionIdentificationCode\_100 | LL | M | 1-99 |
| 100 | FileName\_101 | LL | O | 1-99 |
| 101 | AccountIdentification1\_102 | LL | O | 1-99 |
| 102 | AccountIdentification2\_103 | LL | M | 1-99 |
| 103 | TransactionDescription\_104 | LL | O | 1-99 |
| 104 | ReservedISO\_105 | LLL | O | 1-999 |
| 105 | ReservedISO\_106 | LLL | O | 1-999 |
| 106 | ReservedISO\_107 | LLL | O | 1-999 |
| 107 | ReservedISO\_108 | LLL | O | 1-999 |
| 108 | ReservedISO\_109 | LLL | O | 1-999 |
| 109 | ReservedISO\_110 | LLL | O | 1-999 |
| 110 | ReservedISO\_111 | LLL | O | 1-999 |
| 111 | ReservedNational\_112 | LLL | O | 1-999 |
| 112 | ReservedNational\_113 | LLL | O | 1-999 |
| 113 | ReservedNational\_114 | LLL | O | 1-999 |
| 114 | ReservedNational\_115 | LLL | O | 1-999 |
| 115 | ReservedNational\_116 | LLL | O | 1-999 |
| 116 | ReservedNational\_117 | LLL | O | 1-999 |
| 117 | ReservedNational\_118 | LLL | O | 1-999 |
| 118 | ReservedNational\_119 | LLL | O | 1-999 |
| 119 | ReservedPrivate\_120 | LLL | O | 1-999 |
| 120 | ReservedPrivate\_121 | LLL | O | 1-999 |
| 121 | ReservedPrivate\_122 | LLL | O | 1-999 |
| 122 | ReservedPrivate\_123 | LLL | M | 1-999 |
| 123 | ReservedPrivate\_124 | LLL | O | 1-999 |
| 124 | ReservedPrivate\_125 | LLL | O | 1-999 |
| 125 | ReservedPrivate\_126 | LLL | O | 1-999 |
| 126 | ReservedPrivate\_127 | String | M | 6 |
| 127 | Postilion\_Bitmaps\_Group\_127\_1 |  | O |  |
| 128 | SwitchKeyPostilionPrivate\_127\_2 | LL | M | 1-99 |
| 129 | RoutingInformationPostilionPrivate\_127\_3 | String | O | 48 |
| 130 | POSDataPostilionPrivate\_127\_4 | String | O | 22 |
| 131 | ServiceStationDataPostilionPrivate\_127\_5 | String | O | 73 |
| 132 | AuthorizationProfilePostilionPrivate\_127\_6 | String | O | 2 |
| 133 | CheckDataPostilionPrivate\_127\_7 | LL | O | 1-99 |
| 134 | RetentionDataPostilionPrivate\_127\_8 | LLL | O | 1-999 |
| 135 | AdditionalNodeDataPostilionPrivate\_127\_9 | LLL | O | 1-999 |
| 136 | CVVPostilionPrivate\_127\_10 | String | O | 3 |
| 137 | OriginalKeyPostilionPrivate\_127\_11 | LL | O | 1-99 |
| 138 | OriginalKeyPostilionPrivate\_127\_12 | LL | O | 1-99 |
| 139 | PosGeographicDataPostilionPrivate\_127\_13 | String | O | 17 |
| 140 | SponsorBankPostilionPrivate\_127\_14 | String | O | 8 |
| 141 | AddressVerificationDataPostilionPrivate\_127\_15 | LL | O | 1-99 |
| 142 | AddressVerificationResultPostilionPrivate\_127\_16 | String | O | 1 |
| 143 | CardHolderInformationPostilionPrivate\_127\_17 | LL | O | 1-99 |
| 144 | ValidationDataPostilionPrivate\_127\_18 | LL | O | 1-99 |
| 145 | BankDetailsPostilionPrivate\_127\_19 | String | M | 31 |
| 146 | OriginatorAuthorizerDatePostilionPrivate\_127\_20 | String | O | 8 |
| 147 | RecordIdentificationPostilionPrivate\_127\_21 | LL | O | 1-99 |
| 148 | StructuredDataPostilionPrivate\_127\_22 | LLLLL | O | 1-99999 |
| 149 | PayeeNameAddressPostilionPrivate\_127\_23 | String | O | 253 |
| 150 | PayerAccountPostilionPrivate\_127\_24 | LL | O | 1-99 |
| 151 | ICCDataPostilionPrivate\_127\_25 | LLLL | O | 1-9999 |
| 152 | ICCData\_Bitmaps\_Group\_127\_25\_1 |  | O |  |
| 153 | AmountAuthorizedPostilionPrivate\_127\_25\_2 | String | O | 12 |
| 154 | AmountOtherPostilionPrivate\_127\_25\_3 | String | O | 12 |
| 155 | ApplicationIdentifierPostilionPrivate\_127\_25\_4 | LL | O | 1-99 |
| 156 | ApplicationInterchangeProfilePostilionPrivate\_127\_25\_5 | String | O | 4 |
| 157 | ApplicationTransactionCounterPostilionPrivate\_127\_25\_6 | String | O | 4 |
| 158 | ApplicationUsageControlPostilionPrivate\_127\_25\_7 | String | O | 4 |
| 159 | AuthorizationResponseCodePostilionPrivate\_127\_25\_8 | String | O | 2 |
| 160 | CardAuthReliabilityIndicatiorPostilionPrivate\_127\_25\_9 | String | O | 1 |
| 161 | CardAuthResultsCodePostilionPrivate\_127\_25\_10 | String | O | 1 |
| 162 | ChipConditionCodePostilionPrivate\_127\_25\_11 | String | O | 1 |
| 163 | CryptogramPostilionPrivate\_127\_25\_12 | String | O | 16 |
| 164 | CryptogramInformationDataPostilionPrivate\_127\_25\_13 | String | O | 2 |
| 165 | CvmListPostilionPrivate\_127\_25\_14 | LLL | O | 1-999 |
| 166 | CvmResultsPostilionPrivate\_127\_25\_15 | String | O | 6 |
| 167 | InterfaceDeviceSerialNumberPostilionPrivate\_127\_25\_16 | String | O | 8 |
| 168 | IssuerActionCodePostilionPrivate\_127\_25\_17 | String | O | 11 |
| 169 | IssuerApplicationDataPostilionPrivate\_127\_25\_18 | LL | O | 1-99 |
| 170 | IssuerScriptResultsPostilionPrivate\_127\_25\_19 | LLL | O | 1-999 |
| 171 | TerminalApplicationVersionNumberPostilionPrivate\_127\_25\_20 | String | O | 4 |
| 172 | TerminalCapabilitiesPostilionPrivate\_127\_25\_21 | String | O | 6 |
| 173 | TerminalCountryCodePostilionPrivate\_127\_25\_22 | String | O | 3 |
| 174 | TerminalTypePostilionPrivate\_127\_25\_23 | String | O | 2 |
| 175 | TerminalVerificationResultPostilionPrivate\_127\_25\_24 | String | O | 10 |
| 176 | TerminalCategoryCodePostilionPrivate\_127\_25\_25 | String | O | 1 |
| 177 | TransactionCurrencyCodePostilionPrivate\_127\_25\_26 | String | O | 3 |
| 178 | TransactionDatePostilionPrivate\_127\_25\_27 | String | O | 6 |
| 179 | TransactionSequenceCounterPostilionPrivate\_127\_25\_28 | L | O | 1-9 |
| 180 | TransactionTypePostilionPrivate\_127\_25\_29 | String | O | 2 |
| 181 | UnpredictableNumberResultPostilionPrivate\_127\_25\_30 | String | O | 8 |
| 182 | IssuerAuthDataPostilionPrivate\_127\_25\_31 | LL | O | 1-99 |
| 183 | IssuerScriptTemplate1PostilionPrivate\_127\_25\_32 | LLLL | O | 1-9999 |
| 184 | IssuerScriptTemplate2PostilionPrivate\_127\_25\_33 | LLLL | O | 1-9999 |
| 185 | OriginalNodePostilionPrivate\_127\_26 | LL | O | 1-99 |
| 186 | CardVerificationResultPostilionPrivate\_127\_27 | String | O | 1 |
| 187 | AmericanExpressCardIdentifierPostilionPrivate\_127\_28 | String | O | 4 |
| 188 | SecureData3DPostilionPrivate\_127\_29 | hexBinary | O | 40 |
| 189 | SecureData3DResultPostilionPrivate\_127\_30 | String | O | 1 |
| 190 | IssuerNetworkIDPostilionPrivate\_127\_31 | LL | O | 1-99 |
| 191 | UCAFDataPostilionPrivate\_127\_32 | LL | O | 1-99 |
| 192 | ExtendedTransactionTypePostilionPrivate\_127\_33 | String | M | 4 |
| 193 | AccountTypeQualifierPostilionPrivate\_127\_34 | String | O | 2 |
| 194 | AcquirerNetworkIDPostilionPrivate\_127\_35 | LL | O | 1-99 |
| 195 | CustomerIDPostilionPrivate\_127\_36 | LL | O | 1-99 |
| 196 | ExtendedResponseCodePostilionPrivate\_127\_37 | String | O | 4 |
| 197 | AdditionalPOSDataCodePostilionPrivate\_127\_38 | LL | O | 1-99 |
| 198 | OriginalResponseCodePostilionPrivate\_127\_39 | String | O | 2 |
| 199 | MessageAuthenticationCode\_128 | hexBinary | O | 8 |

### Response Message Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | DFDL Element | Data Type | Mandatory | Length of the Field |
|  | PrimaryAccountNumber\_002 | n-LL | O | **Upto 19** |
| 2 | P ProcessingCode\_003 | String | M | 6 |
| 3 | AmountTransaction\_004 | Decimal | M | 12 |
| 4 | AmountSettlement\_005 | Decimal | O | 12 |
| 5 | AmountCardHolderBilling\_006 | Decimal | O | 12 |
| 6 | TransmissionDatetime\_007 | dateTiemNoYear | M | 10 |
| 7 | AmountCardHolderBillingFee\_008 | Decimal | O | 8 |
| 8 | ConversionRateSettlement\_009 | String | O | 8 |
| 9 | ConversionRateCardholderBilling\_010 | String | O | 8 |
| 10 | SystemsTraceAuditNumber\_011 | String | M | 6 |
| 11 | TimeLocalTransaction\_012 | String | M | **6** |
| 12 | DateLocalTransaction\_013 | monthDay | M | 4 |
| 13 | DateExpiration\_014 | yearMonth | O | 4 |
| 14 | DateSettlement\_015 | monthDay | M | 4 |
| 15 | DateConversion\_016 | monthDay | O | 4 |
| 16 | DateCapture\_017 | monthDay | O | 4 |
| 17 | MerchantType\_018 | String | M | 4 |
| 18 | AcquiringInstitutionCountryCode\_019 | String | O | 3 |
| 19 | PANExtendedCountryCode\_020 | String | O | 3 |
| 20 | ForwardingInstitutionCountryCode\_021 | String | O | 3 |
| 21 | PointOfServiceEntryMode\_022 | String | M | 3 |
| 22 | CardSequenceNumber\_023 | String | O | 3 |
| 23 | NetworkInternationalIdentifier\_024 | String | O | 3 |
| 24 | PointOfServiceConditionCode\_025 | String | M | 2 |
| 25 | PointOfServiceCaptureCode\_026 | String | O | 2 |
| 26 | AuthorizingIdentificationResponseLength\_027 | String | O | 1 |
| 27 | AmountTransactionFee\_028 | String | M | 9 |
| 28 | AmountSettlementFee\_029 | String | O | 9 |
| 29 | AmountTransactionProcessingFee\_030 | String | M | 9 |
| 30 | AmountSettlementProcessingFee\_031 | String | O | 9 |
| 31 | AcquiringInstitutionIdentificationCode\_032 | LL | M | 1-99 |
| 32 | ForwardingInstitutionIdentificationCode\_033 | LL | M | 1-99 |
| 33 | PrimaryAccountNumberExtended\_034 | LL | O | 1-99 |
| 34 | Track2Data\_035 | LL | O | 1-99 |
| 35 | Track3Data\_036 | LLL | O | 1-999 |
| 36 | RetrievalReferenceNumber\_037 | String | M | 12 |
| 37 | AuthorizationIdentificationResponse\_038 | String | M | 6 |
| 38 | ResponseCode\_039 | String | M | 2 |
| 39 | ServiceRestrictionCode\_040 | String | O | 3 |
| 40 | CardAcceptorTerminalIdentification\_041 | String | M | 8 |
| 41 | CardAcceptorIdentificationCode\_042 | String | M | 15 |
| 42 | CardAcceptorNameLocation\_043 | String | M | 40 |
| 43 | AdditionalResponseData\_044 | LL | O | 1-99 |
| 44 | Track1Data\_045 | LL | O | 1-99 |
| 45 | AdditionalDataISO\_046 | LLL | O | 1-999 |
| 46 | AdditionalDataNational\_047 | LLL | O | 1-999 |
| 47 | AdditionalDataPrivate\_048 | LLL | O | 1-999 |
| 48 | CurrencyCodeTransaction\_049 | String | M | 3 |
| 49 | CurrencyCodeSettlement\_050 | String | O | 3 |
| 50 | CurrencyCodeCardholderBilling\_051 | String | O | 3 |
| 51 | PersonalIdentificationNumberData\_052 | String | O | 8 |
| 52 | SecurityRelatedControlInformation\_053 | String | O | 16 |
| 53 | AdditionalAmounts\_054 | LLL | M | 1-999 |
| 54 | ReservedISO\_055 | LLL | O | 1-999 |
| 55 | ReservedISO\_056 | LLL | O | 1-999 |
| 56 | ReservedNational\_057 | LLL | O | 1-999 |
| 57 | ReservedNational\_058 | LLL | O | 1-999 |
| 58 | ReservedNational\_059 | LLL | M | 1-999 |
| 59 | AdviceReasonCode\_060 | LLL | O | 1-999 |
| 60 | ReservedPrivate\_061 | LLL | O | 1-999 |
| 61 | ReservedPrivate\_062 | LLL | O | 1-999 |
| 62 | ReservedPrivate\_063 | LLL | O | 1-999 |
| 63 | MessageAuthenticationCode\_064 | hexBinary | O | 8 |
| 64 | TertiaryBitmap\_065 | hexBinary | O | 8 |
| 65 | SettlementCode\_066 | String | O | 1 |
| 66 | ExtendedPaymentCode\_067 | String | O | 2 |
| 67 | ReceivingInstitutionCountryCode\_068 | String | O | 3 |
| 68 | SettlementInstitutionCountryCode\_069 | String | O | 3 |
| 69 | NetworkManagementInformationCode\_070 | String | O | 3 |
| 70 | MessageNumber\_071 | String | O | 4 |
| 71 | MessageNumberLast\_072 | String | O | 4 |
| 72 | DateAction\_073 | date | O | 6 |
| 73 | CreditsNumber\_074 | String | O | 10 |
| 74 | CreditsReversalNumber\_075 | String | O | 10 |
| 75 | DebitsNumber\_076 | String | O | 10 |
| 76 | DebitsReversalNumber\_077 | String | O | 10 |
| 77 | TransferNumber\_078 | String | O | 10 |
| 78 | TransferReversalNumber\_079 | String | O | 10 |
| 79 | InquiriesNumber\_080 | String | O | 10 |
| 80 | AuthorizationsNumber\_081 | String | O | 10 |
| 81 | CreditsProcessingFeeAmount\_082 | String | O | 12 |
| 82 | CreditsTransactionFeeAmount\_083 | String | O | 12 |
| 83 | DebitsProcessingFeeAmount\_084 | String | O | 12 |
| 84 | DebitsTransactionFeeAmount\_085 | String | O | 12 |
| 85 | CreditsAmount\_086 | String | O | 16 |
| 86 | CreditsReversalAmount\_087 | String | O | 16 |
| 87 | DebitsAmount\_088 | String | O | 16 |
| 88 | DebitsReversalAmount\_089 | String | O | 16 |
| 89 | OriginalDataElements\_090 | String | O | 42 |
| 90 | FileUpdateCode\_091 | String | O | 1 |
| 91 | FileSecurityCode\_092 | String | O | 2 |
| 92 | ResponseIndicator\_093 | String | O | 5 |
| 93 | ServiceIndicator\_094 | String | O | 7 |
| 94 | ReplacementAmounts\_095 | String | O | 42 |
| 95 | MessageSecurityCode\_096 | String | O | 8 |
| 96 | AmountNetSettlement\_097 | String | O | 16 |
| 97 | Payee\_098 | String | O | 25 |
| 98 | SettlementInstitutionIdentificationCode\_099 | LL | O | 1-99 |
| 99 | ReceivingInstitutionIdentificationCode\_100 | LL | M | 1-99 |
| 100 | FileName\_101 | LL | O | 1-99 |
| 101 | AccountIdentification1\_102 | LL | O | 1-99 |
| 102 | AccountIdentification2\_103 | LL | M | 1-99 |
| 103 | TransactionDescription\_104 | LL | O | 1-99 |
| 104 | ReservedISO\_105 | LLL | O | 1-999 |
| 105 | ReservedISO\_106 | LLL | O | 1-999 |
| 106 | ReservedISO\_107 | LLL | O | 1-999 |
| 107 | ReservedISO\_108 | LLL | O | 1-999 |
| 108 | ReservedISO\_109 | LLL | O | 1-999 |
| 109 | ReservedISO\_110 | LLL | O | 1-999 |
| 110 | ReservedISO\_111 | LLL | O | 1-999 |
| 111 | ReservedNational\_112 | LLL | O | 1-999 |
| 112 | ReservedNational\_113 | LLL | O | 1-999 |
| 113 | ReservedNational\_114 | LLL | O | 1-999 |
| 114 | ReservedNational\_115 | LLL | O | 1-999 |
| 115 | ReservedNational\_116 | LLL | O | 1-999 |
| 116 | ReservedNational\_117 | LLL | O | 1-999 |
| 117 | ReservedNational\_118 | LLL | O | 1-999 |
| 118 | ReservedNational\_119 | LLL | O | 1-999 |
| 119 | ReservedPrivate\_120 | LLL | O | 1-999 |
| 120 | ReservedPrivate\_121 | LLL | O | 1-999 |
| 121 | ReservedPrivate\_122 | LLL | O | 1-999 |
| 122 | ReservedPrivate\_123 | LLL | M | 1-999 |
| 123 | ReservedPrivate\_124 | LLL | O | 1-999 |
| 124 | ReservedPrivate\_125 | LLL | O | 1-999 |
| 125 | ReservedPrivate\_126 | LLL | O | 1-999 |
| 126 | ReservedPrivate\_127 | String | M | 6 |
| 127 | Postilion\_Bitmaps\_Group\_127\_1 |  | O |  |
| 128 | SwitchKeyPostilionPrivate\_127\_2 | LL | O | 1-99 |
| 129 | RoutingInformationPostilionPrivate\_127\_3 | String | M | 48 |
| 130 | POSDataPostilionPrivate\_127\_4 | String | O | 22 |
| 131 | ServiceStationDataPostilionPrivate\_127\_5 | String | O | 73 |
| 132 | AuthorizationProfilePostilionPrivate\_127\_6 | String | M | 2 |
| 133 | CheckDataPostilionPrivate\_127\_7 | LL | O | 1-99 |
| 134 | RetentionDataPostilionPrivate\_127\_8 | LLL | O | 1-999 |
| 135 | AdditionalNodeDataPostilionPrivate\_127\_9 | LLL | O | 1-999 |
| 136 | CVVPostilionPrivate\_127\_10 | String | O | 3 |
| 137 | OriginalKeyPostilionPrivate\_127\_11 | LL | O | 1-99 |
| 138 | OriginalKeyPostilionPrivate\_127\_12 | LL | O | 1-99 |
| 139 | PosGeographicDataPostilionPrivate\_127\_13 | String | O | 17 |
| 140 | SponsorBankPostilionPrivate\_127\_14 | String | O | 8 |
| 141 | AddressVerificationDataPostilionPrivate\_127\_15 | LL | O | 1-99 |
| 142 | AddressVerificationResultPostilionPrivate\_127\_16 | String | O | 1 |
| 143 | CardHolderInformationPostilionPrivate\_127\_17 | LL | O | 1-99 |
| 144 | ValidationDataPostilionPrivate\_127\_18 | LL | O | 1-99 |
| 145 | BankDetailsPostilionPrivate\_127\_19 | String | O | 31 |
| 146 | OriginatorAuthorizerDatePostilionPrivate\_127\_20 | String | M | 8 |
| 147 | RecordIdentificationPostilionPrivate\_127\_21 | LL | O | 1-99 |
| 148 | StructuredDataPostilionPrivate\_127\_22 | LLLLL | M | 1-99999 |
| 149 | PayeeNameAddressPostilionPrivate\_127\_23 | String | O | 253 |
| 150 | PayerAccountPostilionPrivate\_127\_24 | LL | O | 1-99 |
| 151 | ICCDataPostilionPrivate\_127\_25 | LLLL | O | 1-9999 |
| 152 | ICCData\_Bitmaps\_Group\_127\_25\_1 |  | O |  |
| 153 | AmountAuthorizedPostilionPrivate\_127\_25\_2 | String | O | 12 |
| 154 | AmountOtherPostilionPrivate\_127\_25\_3 | String | O | 12 |
| 155 | ApplicationIdentifierPostilionPrivate\_127\_25\_4 | LL | O | 1-99 |
| 156 | ApplicationInterchangeProfilePostilionPrivate\_127\_25\_5 | String | O | 4 |
| 157 | ApplicationTransactionCounterPostilionPrivate\_127\_25\_6 | String | O | 4 |
| 158 | ApplicationUsageControlPostilionPrivate\_127\_25\_7 | String | O | 4 |
| 159 | AuthorizationResponseCodePostilionPrivate\_127\_25\_8 | String | O | 2 |
| 160 | CardAuthReliabilityIndicatiorPostilionPrivate\_127\_25\_9 | String | O | 1 |
| 161 | CardAuthResultsCodePostilionPrivate\_127\_25\_10 | String | O | 1 |
| 162 | ChipConditionCodePostilionPrivate\_127\_25\_11 | String | O | 1 |
| 163 | CryptogramPostilionPrivate\_127\_25\_12 | String | O | 16 |
| 164 | CryptogramInformationDataPostilionPrivate\_127\_25\_13 | String | O | 2 |
| 165 | CvmListPostilionPrivate\_127\_25\_14 | LLL | O | 1-999 |
| 166 | CvmResultsPostilionPrivate\_127\_25\_15 | String | O | 6 |
| 167 | InterfaceDeviceSerialNumberPostilionPrivate\_127\_25\_16 | String | O | 8 |
| 168 | IssuerActionCodePostilionPrivate\_127\_25\_17 | String | O | 11 |
| 169 | IssuerApplicationDataPostilionPrivate\_127\_25\_18 | LL | O | 1-99 |
| 170 | IssuerScriptResultsPostilionPrivate\_127\_25\_19 | LLL | O | 1-999 |
| 171 | TerminalApplicationVersionNumberPostilionPrivate\_127\_25\_20 | String | O | 4 |
| 172 | TerminalCapabilitiesPostilionPrivate\_127\_25\_21 | String | O | 6 |
| 173 | TerminalCountryCodePostilionPrivate\_127\_25\_22 | String | O | 3 |
| 174 | TerminalTypePostilionPrivate\_127\_25\_23 | String | O | 2 |
| 175 | TerminalVerificationResultPostilionPrivate\_127\_25\_24 | String | O | 10 |
| 176 | TerminalCategoryCodePostilionPrivate\_127\_25\_25 | String | O | 1 |
| 177 | TransactionCurrencyCodePostilionPrivate\_127\_25\_26 | String | O | 3 |
| 178 | TransactionDatePostilionPrivate\_127\_25\_27 | String | O | 6 |
| 179 | TransactionSequenceCounterPostilionPrivate\_127\_25\_28 | L | O | 1-9 |
| 180 | TransactionTypePostilionPrivate\_127\_25\_29 | String | O | 2 |
| 181 | UnpredictableNumberResultPostilionPrivate\_127\_25\_30 | String | O | 8 |
| 182 | IssuerAuthDataPostilionPrivate\_127\_25\_31 | LL | O | 1-99 |
| 183 | IssuerScriptTemplate1PostilionPrivate\_127\_25\_32 | LLLL | O | 1-9999 |
| 184 | IssuerScriptTemplate2PostilionPrivate\_127\_25\_33 | LLLL | O | 1-9999 |
| 185 | OriginalNodePostilionPrivate\_127\_26 | LL | O | 1-99 |
| 186 | CardVerificationResultPostilionPrivate\_127\_27 | String | O | 1 |
| 187 | AmericanExpressCardIdentifierPostilionPrivate\_127\_28 | String | O | 4 |
| 188 | SecureData3DPostilionPrivate\_127\_29 | hexBinary | O | 40 |
| 189 | SecureData3DResultPostilionPrivate\_127\_30 | String | O | 1 |
| 190 | IssuerNetworkIDPostilionPrivate\_127\_31 | LL | O | 1-99 |
| 191 | UCAFDataPostilionPrivate\_127\_32 | LL | O | 1-99 |
| 192 | ExtendedTransactionTypePostilionPrivate\_127\_33 | String | O | 4 |
| 193 | AccountTypeQualifierPostilionPrivate\_127\_34 | String | O | 2 |
| 194 | AcquirerNetworkIDPostilionPrivate\_127\_35 | LL | O | 1-99 |
| 195 | CustomerIDPostilionPrivate\_127\_36 | LL | O | 1-99 |
| 196 | ExtendedResponseCodePostilionPrivate\_127\_37 | String | O | 4 |
| 197 | AdditionalPOSDataCodePostilionPrivate\_127\_38 | LL | O | 1-99 |
| 198 | OriginalResponseCodePostilionPrivate\_127\_39 | String | O | 2 |
| 199 | MessageAuthenticationCode\_128 | hexBinary | O | 8 |
|  |  |  |  |  |

# Database Error Response Codes

## List of Response codes

001 = "Fatal Exception";

002 = "Recoverable Exception";

003 = "Configuration Exception";

004 = "Security Exception";

005 = "Parser Exception";

006 = "Conversion Exception";

007 = "Data Base Exception";

008 = "User Exception";

009 = "Cast Exception";

010 = "Message Exception";

011 = "SQL Exception";

012 = "Socket Exception";

013 = "Socket Timeout Exception";

014 = "Unknown Exception";

015 = "Failure";

# Queue Details

## List of Queues

|  |  |  |  |
| --- | --- | --- | --- |
| **Queue Objects** | **Script** | | |
| Queues | Name | Purpose | Script Combined |
| RTGS\_INCOMING\_SB\_T24\_REQ | Receives the Messages from RtgsIncoming application if the Credit Account exists in T24 . | <Final Script Will be placed, after complete Unit Testing> |
| RTGS\_INCOMING\_SB\_ZSS\_REQ | Receives the Messages from RtgsIncoming application if the Credit Account exists in ZSS. |
| RTGS\_INCOMING\_SB\_Q | Sends Response to this Queue. (both T24 and ZSS) |
|  | ERR\_LOG\_SB\_REQ | This queue is used to DB Log the error/unsuccessful transactions into the database. |  |
|  | SB\_EXCQ | The common flow ‘StewardBankExceptionHandling’ uses this queue to store the exception details. |  |

# Logging Mechanism

## Insert into Error\_Audit\_Table

**Table Name: ERROR\_AUDIT\_TABLE**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Item #** | **DB Field Name** | **Field Description** | **Data Type** | **Length** | **Mandatory(Yes/No)** | **Comments** |
| 1 | MSGID | MessageID | Varchar | 50 | Y | From input request |
| 2 | LOGGING\_TIME | Application Name | Timestamp | 50 | Y | Time of the logging |
| 3 | MESSAGE | Message Type(Request/Response) | Clob | 50 | Y | Request of the Message |
| 4 | MESSAGETYPE | Message Type | Varchar | 50 | Y | Type of message either Request or Response |
| 5 | APPNAME | Application Name | Varchar | 4000 | Y | Name of the Application |
| 6 | BROKER | Broker Name | Varchar | - | Y | Name of the Broker |
| 7 | ERRORDESCRIPTION | Exception | Clob | 4000 | Y | Exception Information |
| 8 | TIME\_LOCAL\_TRANSACTION | Transaction Time | Varchar | 20 | Y | Time of the Transaction |
| 9 | DATE\_LOCAL\_TRANSACTION | Transaction Date | Varchar | 20 | Y | Date of the Transaction |
| 9 | RETRIEVAL\_REFERENCE\_NUMBER | Retrieval Reference Number | Varchar | 20 | Y | Retrieval Reference Number |
| 10 | BORKER\_ERROR\_CODE | Broker Error Code | Varchar |  | Y | Error code generate by Broker |
| 11 | USER\_DEFINE\_ERROR\_CODE | User Defined Error Code | Varchar |  | Y | User Defined Code |

## File Based Logging

### Log4j

As part of auditing the request we have to use Log4j mechanism in the application to log the request in the file.

File Path: To be specified, while deploying the application