Switch Interface Gateway User Guide

Oracle FLEXCUBE Universal Banking

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Switch Interface Gateway User Guide
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1. Preface

1.1 Introduction

This manual talks about the interface between Oracle FLEXCUBE and the Switch software system used in your bank**.** The maintenances required for the proper functioning of this interface, the interface workflow, validations, and processing for the interface have been documented in this manual.

1.2 Audience

This manual is intended for the following User/User Roles:

Role	Function
Back office data entry Clerks	Input functions for maintenance related to the interface
Back office Managers/ Officers	Authorization functions

1.3 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

1.4 Critical Patches

Oracle advices customers to get all their security and vulnerability information from the Oracle Critical Patch Update Advisory, which is available at Critical Patches, Security Alerts and Bulletins. All critical patches should be applied in a timely manner to ensure effective security, as strongly recommended by Oracle Software Security Assurance.

1.5 Abbreviations

Abbreviation	Description
System	Unless specified, it shall always refer to Oracle FLEXCUBE
CCY	Currency
SWITCH	Switch Software
BIN	Bank Identification Number
IMD	International Member Descriptor
OLTP	Online Transaction Processing
ATM	Automatic Teller Machine
POS	Point Of Sale
ISO	International Organization for Standardization
CMS	Card Management System
STAN	System Trace Audit Number
RRN	Retrieval Reference Number
Acquirer	Bank that deploys ATM/POS for acquiring transactions
Issuer	Bank that issues Cards to facilitate the Transactions
IC	Interest and Charges – Oracle FLEXCUBE module
EOC	End of Cycle
EOD	End of Day
SAF	Store and Forward
Msg	Message
MTI	Message Type Indicator
PAN	Primary Account Number
IVR	Interactive Voice Response

1.6 Organization

This manual is organized into the following chapters:

Chapter	Description
Chapter 1	*About this Manual* gives information on the intended audience. It also lists the various chapters covered in this User Manual.
Chapter 2	*Switch Interface Gateway* - helps in processing both Financial and Non-Financial Transactions.

Chapter 3	*Annexure A* – briefs the account of the Switch software domain and the components in a Cards Transactions Business network.
Chapter 4	*Function ID Glossary* has alphabetical listing of Function/Screen ID's used in the module with page references for quick navigation.

1.7 Related Documents

You may refer the following manuals for more information

- User Manual of the Switch System installed in your Bank (This User manual is not included in Oracle FLEXCUBE Manuals)
- ISO documentation on ISO8583 protocol (This manual is not included in Oracle FLEXCUBE User Manuals)

1.8 Glossary of Icons

This User Manual may refer to all or some of the following icons:

Icons	Function
	Exit
	Add row
	Delete row
	Option List

Refer the Procedures User Manual for further details about the icons.

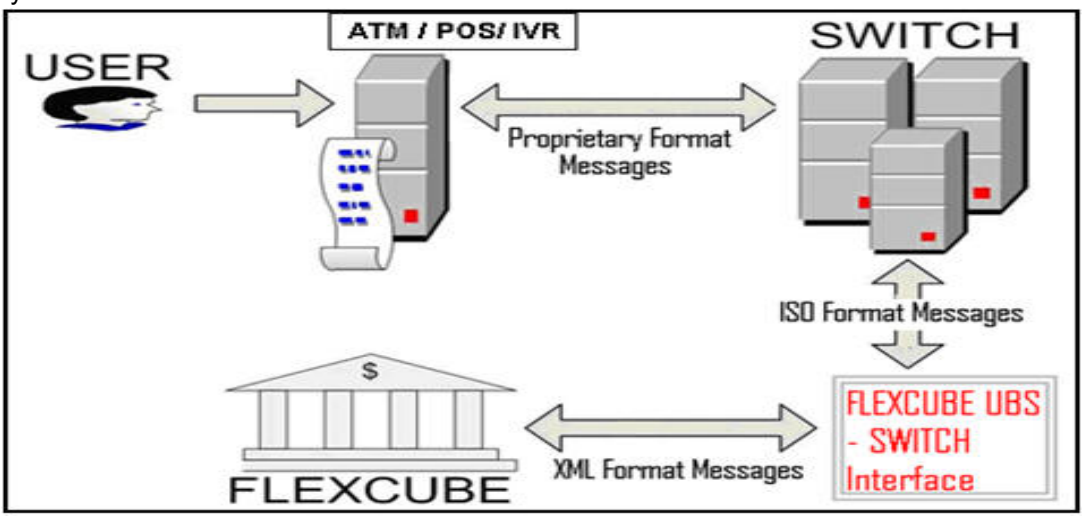
2. Switch Interface Gateway

Oracle FLEXCUBE Switch Interface helps in processing both Financial and Non-Financial Transactions. The interface helps in first validating each transaction request against the Oracle FLEXCUBE database and then posting the transactions into the system.

The interface with Switch software system supports Automatic Teller Machine (ATM) and Point Of Sale (POS) transactions originating from bank terminals or from Interchanges such as VISA or MasterCard. Switch Interface also supports Interactive Voice Response (IVR) transactions. The interface functionality includes the following:

- Interface with support for ISO 1987/1993/2003 protocols
- Authorization and posting of Switch/IVR transactions into Oracle FLEXCUBE

The following diagram illustrates the flow of messages via the Oracle FLEXCUBE – Switch system interface.



This chapter contains the following sections:

- Section 2.1, "Interface Functionalities"
- Section 2.2, "Gateway Maintenance for Switch Interface"
- Section 2.3, "Switch Interface Maintenance"
- Section 2.4, "Batch Processes"
- Section 2.5, "Cards Upload"
- Section 2.6, "Terminal ID Upload"

2.1 Interface Functionalities

This section contains the following topics:

- Section 2.1.1, "ATM Transactions"
- Section 2.1.2, "Point Of Sale Transactions "
- Section 2.1.3, "ATM/POS Notifications"
- Section 2.1.4, "IVR Transactions"

2.1.1 ATM Transactions

The following functionalities are with respect to ATM transactions. This section describes all Transactions required for Switch interface and expected accounting entries.

2.1.1.1 Cash Withdrawal

During a Cash Withdrawal transaction the product is determined and the preferences are checked for processing. Amount blocking or account posting is done depending upon the class of the message. Amount blocking will include all the charge components also (for Online and Issuer). The balance amount is recorded after amount posting is done.

Refer the Annexure chapter for the corresponding accounting entries.

2.1.1.2 Balance Enquiry

This facility produces a quote of the Account Balance for a given account. The following balances are provided:

- Ledger balance
- Available balance
- Unclear balance

You can select the 'Include OD limit' option when showing balance.

Refer the Annexure chapter for the corresponding accounting entries.

2.1.1.3 Mini Statement Enquiry

The interface facilitates the enquiry for Mini Statements. You can specify number of rows/the period for which the statement is to be generated.

The statement can have the following columns:

- Originating Branch Code
- Transaction Literal
- Transaction Amount Sign
- Transaction Amount
- Flag Dr/Cr
- Value Date
- Transmission Date
- Transaction Reference Number

The accounting entries are the same as those for Balance Enquiry

2.1.1.4 Deposit

The system can automatically select the product based on the check or cash deposit. In case of cash deposits the system checks whether immediate accounting or posting is required or whether it is to be only logged.

Refer the Annexure chapter for the corresponding accounting entries.

2.1.1.5 Funds Transfer

This facility is used when a customer initiates a Fund Transfer between his accounts or to another customer's account. The Switch system will send both Account numbers in ISO messages.

Account to account transfers can be initiated using the Virtual Account number as well. The virtual account number is recognized as the credit account number and the transaction currency is defaulted to the credit account currency. The system validates whether the virutal account number entered is in 'Closed' or 'Inactive' status and displays appropriate error messages. The physical account number is identified based on the Virtual Account Number and Transaction Currency combination. If a physical account number is not mapped then a default physical account number is generated.

Refer the Annexure chapter for the corresponding accounting entries.

2.1.1.6 Utility Payments

This facility helps in making payments into a Utility Provider's account.

Accounting entries are same as that of Fund Transfer.

2.1.1.7 Ad-Hoc Statement Generation Request

Here the customer requests a Statement through the ATM. This request is reaches the Switch interface at the bank where is passed to the Oracle FLEXCUBE system. Oracle FLEXCUBE system will generate Book Dated statements by default. The period for which the statement is required can be specified.

Accounting entries are same as that of Balance Enquiry.

2.1.1.8 Cheque Book Issue

The customer requests a Cheque Book via the ATM, thereby informing the bank. This request is sent to the Oracle FLEXCUBE system via the interface. The number for cheque leaves can be specified. The cheque numbers are automatically generated.

Accounting entries are same as those for Balance Enquiry.

Note

ATM transaction data will be handed-off to Mantas for the branch as per the Mantas maintenance. Transactions whose value date is same as the branch EOD date is extracted for Mantas hand off. Transactions whose status is other than 'Success or Reversed' will not be handed off to Mantas.

2.1.2 Point Of Sale Transactions

The following are the facilities provided for Point Of Sale (POS) Transactions.

2.1.2.1 POS Purchase

The customer initiates a normal purchase at Merchants POS Terminal. This purchase request reaches Oracle FLEXCUBE via the Switch interface. Based on the purchase a product is identified and the preferences are considered. Depending upon the message class, either

amount blocking or account posting is done. Amount blocking will include all the charge components. The account balance is recorded after the amounts are posted.

Refer the Annexure chapter for the corresponding accounting entries.

2.1.2.2 Cash Advance

For cash advances the Oracle FLEXCUBE product is derived at and the preferences are checked for processing. Depending upon the message class, either amount blocking or account posting is done. Amount blocking will include all the charge components. The account balance is recorded after the amounts are posted.

Accounting entries are same as that of POS purchase.

2.1.2.3 Refund

Accounting entries are similar to those of Cash Deposit.

2.1.2.4 Adjustments

The Adjustments facility corresponds to Partial Reversals in ATM, the difference being that Cr Adjustments are also possible.

Accounting entries are same as that of POS purchase.

2.1.2.5 Pre-auth-Completion

Pre-authorization completion involves to remove amount block. The DE126 is expected to carry the pre-authorization sequence number in position from 7 to 12.

Accounting entries are similar to those of POS purchase.

Note

Point of Sale (POS) transaction data will be handed-off to Mantas for the branch as per the Mantas maintenance. Transactions whose value date is same as the branch EOD date is extracted for mantas hand off. Transactions whose status is other than 'Success or Reversed' will not be handed off to Mantas.

2.1.3 ATM/POS Notifications

Oracle FLEXCUBE provides a facility to insert notification of transactions done through an ATM in the notification table. These notifications are sent for transactions which have a financial impact. These transactions includes transaction done in ATM of the same bank and ATM or POS transactions done in other banks as well. The following list of fields is sent in the notification for an ATM/POS transaction:

- Transaction Reference Number.
- Amount Block Reference Number.
- Transaction Code of Main Leg.
- Transaction Code Description of Main Leg.
- Transaction Product Code.
- Transaction Product Code Description.
- Debit Account Number.
- Debit Account Currency.
- Debit Amount.

- Credit Account Number.
- Credit Account Currency.
- Credit Amount.
- Date of the Transaction along with Time(Time Stamp).
- Value date of the Transaction.
- Transaction Narration.
- Location of the ATM where the transaction has been done.
- Terminal Id.
- RRN.
- Merchant ID (If the transaction is done through a POS).
- ATM/Debit Card Number (for ATM /POS).
- Current balance & Available Balance in the debit account at the time of notification in Account Currency.
- Current balance & Available Balance in the credit account at the time of notification in Account Currency.
- Acquirer Institution Id.
- Acquirer Institution Description.
- Forwarding Institution Id.
- Response Code.
- Message Type.
- Processing Code.
- File Process (Y or N)
- Merchant Name

Notifications are sent during the following events:

- On Amount block creation (if amount block created).
- On Account debit.

2.1.4 IVR Transactions

The following transactions are supported by IVR:

- Balance Enquiry
- Mini Statement Enquiry
- Ad-Hoc Statement Generation Request
- Cheque Book Issue
- Funds Transfer
- Utility Payments

Note

IVR transaction data will be handed-off to Mantas for the branch as per the Mantas maintenance. Transactions whose value date is same as the branch EOD date is extracted for Mantas hand off. Transactions whose status is other than ‘Success or Reversed’ will not be handed off to Mantas.

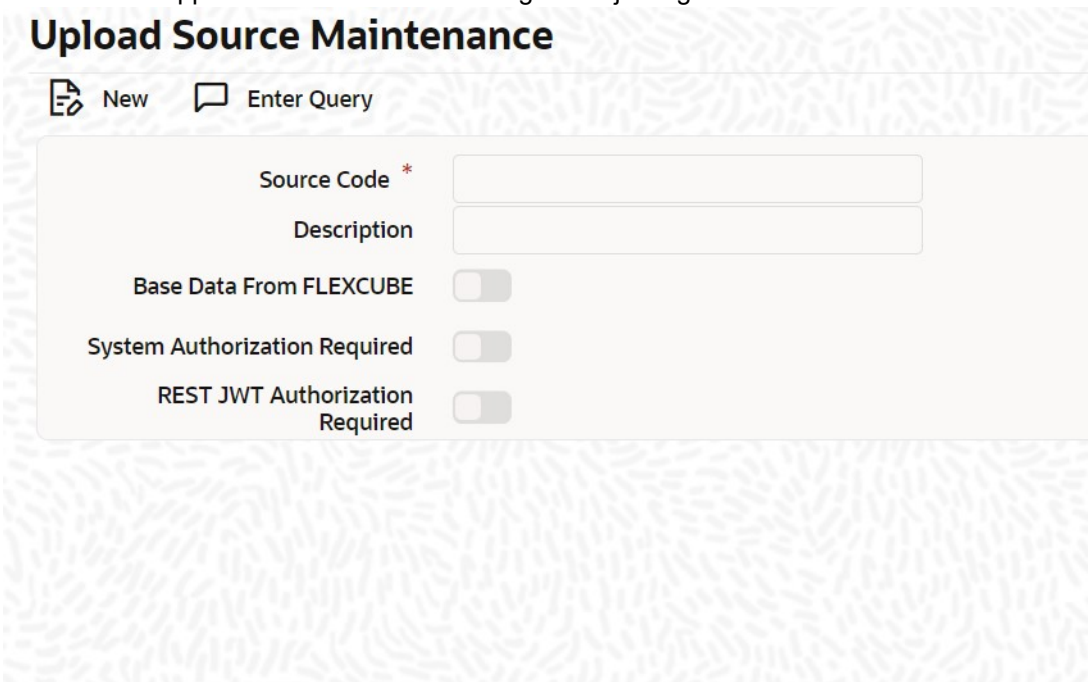
2.2 Gateway Maintenance for Switch Interface

The following are the interface gateway maintenances done for setting up the Switch Interface Gateway.

- Section 2.2.1, "Maintaining Upload Source"
- Section 2.2.2, "Maintaining FLEXSWITCH External System"
- Section 2.2.3, "Specifying External System Functions"
- Section 2.2.4, "Specifying Source Preferences"

2.2.1 Maintaining Upload Source

The Upload Source is maintained in the 'Upload Source Maintenance' screen. You can invoke the 'Upload Source Maintenance' screen by typing 'CODSORCE' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.

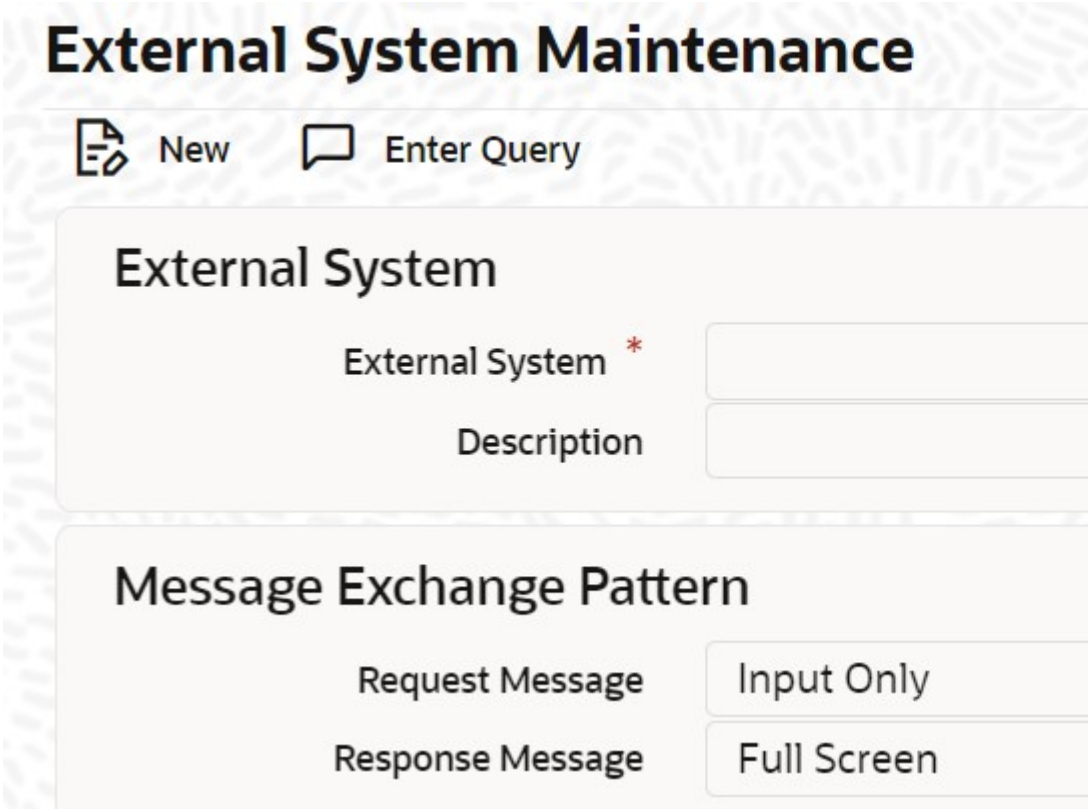


In the above screen the Source Code – FLEXSWITCH – and the brief description of the source are maintained.

2.2.2 Maintaining FLEXSWITCH External System

The FLEXSWITCH external system is maintained in the 'External System - Detailed' screen. Here you can maintain the Correlation pattern, Message pattern, and Queue names for the external system i.e. FLEXSWITCH.

You can invoke the 'External System - Detailed' screen by typing 'GWDETSYS' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



You must specify the following in the above screen.

External System and Description

Specify the External System as ‘FLEXSWITCH’. You may optionally give a brief description of the External System too.

Correlation Pattern - Request

Select and set ‘Correlation ID’ against this field.

Message Exchange Pattern – Request Message

Select ‘Input only’ from the adjoining drop-down list.

Message Exchange Pattern – Request Message

Select ‘Full screen’ from the adjoining drop-down list.

Default Response Queue

Specify the default response queue as ‘SW_MDB_QUEUE_RESPONSE’.

Dead Letter Queue

Specify the dead letter queue as ‘MDB_QEUEU_DLQ’.

XSD Validation Required

Select this checkbox if the request xml and response xml has to be validated against the XSD.

Register Response Queue Message Id

Select this checkbox to register the response queue message Id.

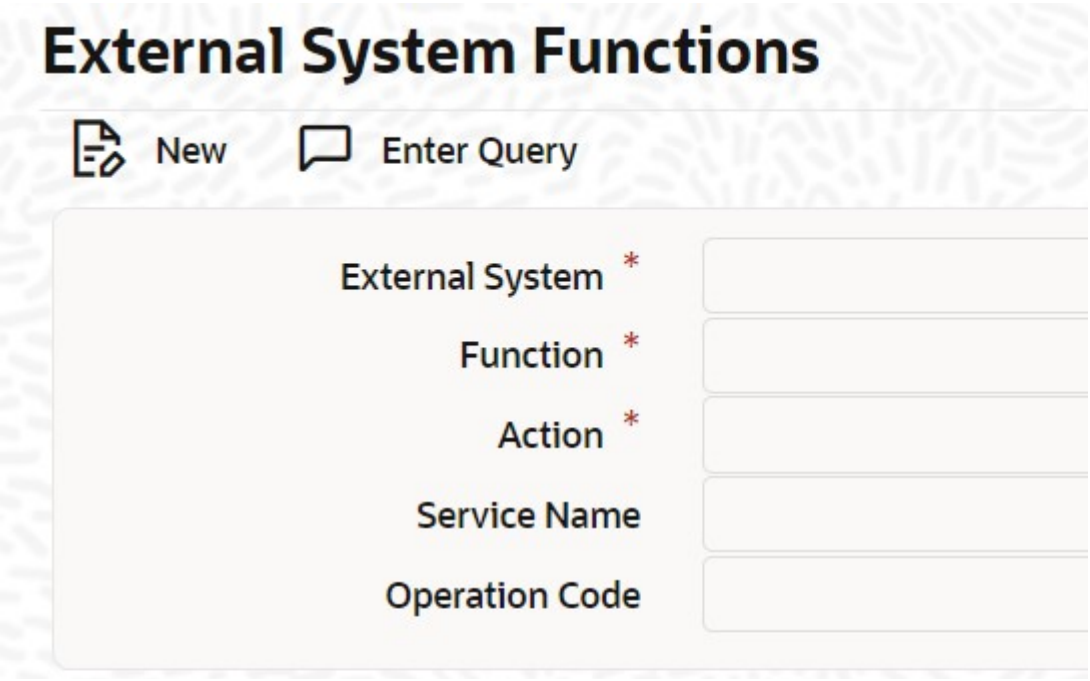
External System Queues

Give the External IN-QUEUE and RESPONSE-QUEUE for Switch.

2.2.3 Specifying External System Functions

You can specify the external system's functions in the 'External System Functions – Detailed' screen. Here you can maintain Function ID, Action, Service name and Operation code for the Switch Interface Gateway External system.

You can invoke the 'External System Functions – Detailed' screen by typing 'GWDETFUN' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



External System

Select the External system – FLEXSWITCH – from the list of options available.

Function

Select the Function id from list.

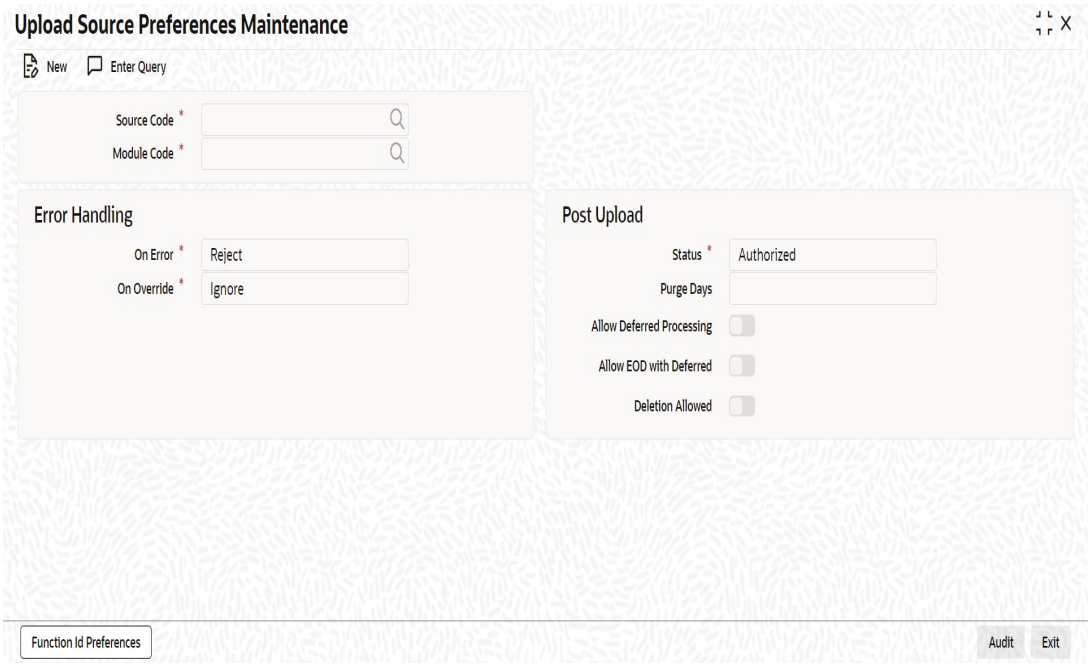
Once you have entered the above details the following fields are filled automatically:

- Action
- Service Name
- Operation Code

2.2.4 Specifying Source Preferences

You can set the preferences for the External system in the 'Upload Source Preferences Maintenance' screen.

You can invoke the 'Upload Source Preferences Maintenance' screen by typing 'CODUPLDM' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Source Code

Select Source Code - FLEXSWITCH - from the list.

Module Code

Select Module Code from the list of options.

On Override

Select ‘Ignore’ to ignore error handling overrides.

On Exception

Select ‘Reject’ to reject error handling exceptions.

Post Upload Status

Select ‘Authorized’ for the uploads to be automatically authorized on completion of the upload process.

Leave the following checkboxes cleared:

- Allow Deferred Processing
- Allow EOD with Deferred
- Allow Delete

2.3 Switch Interface Maintenance

You must perform the following maintenances for the Oracle FLEXCUBE – Switch system interface.

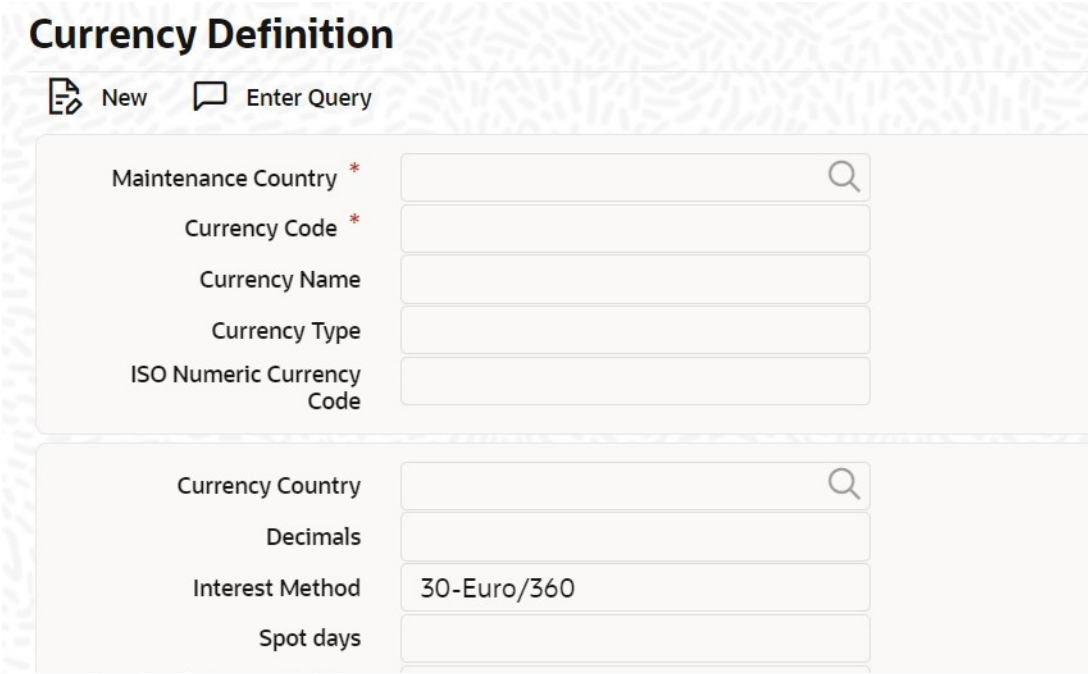
- Section 2.3.1, "Defining Currency for Currency Code Conversion"
- Section 2.3.2, "Maintaining Card Transaction Limits"
- Section 2.3.3, "ATM/Debit Card Mapping for Card Account Number Conversion"
- Section 2.3.4, "Card Accounts Detail"
- Section 2.3.5, "Card Customer Maintenance"
- Section 2.3.6, "Maintaining Channel Details"

- Section 2.3.7, "Maintaining Process Code Mapping Details"
- Section 2.3.8, "Maintaining Network Details"
- Section 2.3.9, "Maintaining Merchant Details"
- Section 2.3.10, "Maintaining Terminal Details"
- Section 2.3.11, "Maintaining Utility Provider Details"
- Section 2.3.12, "Maintaining Product Types for Product Derivation"
- Section 2.3.13, "Showing Amount Block Transactions in Account Statements"
- Section 2.3.14, "Modifying a Product Preferences Screen"
- Section 2.3.15, "Maintaining Charges for Non-financial Transactions"
- Section 2.3.16, "ARC Maintenance"
- Section 2.3.17, "Service Charges for Inter- branch Transactions"

2.3.1 Defining Currency for Currency Code Conversion

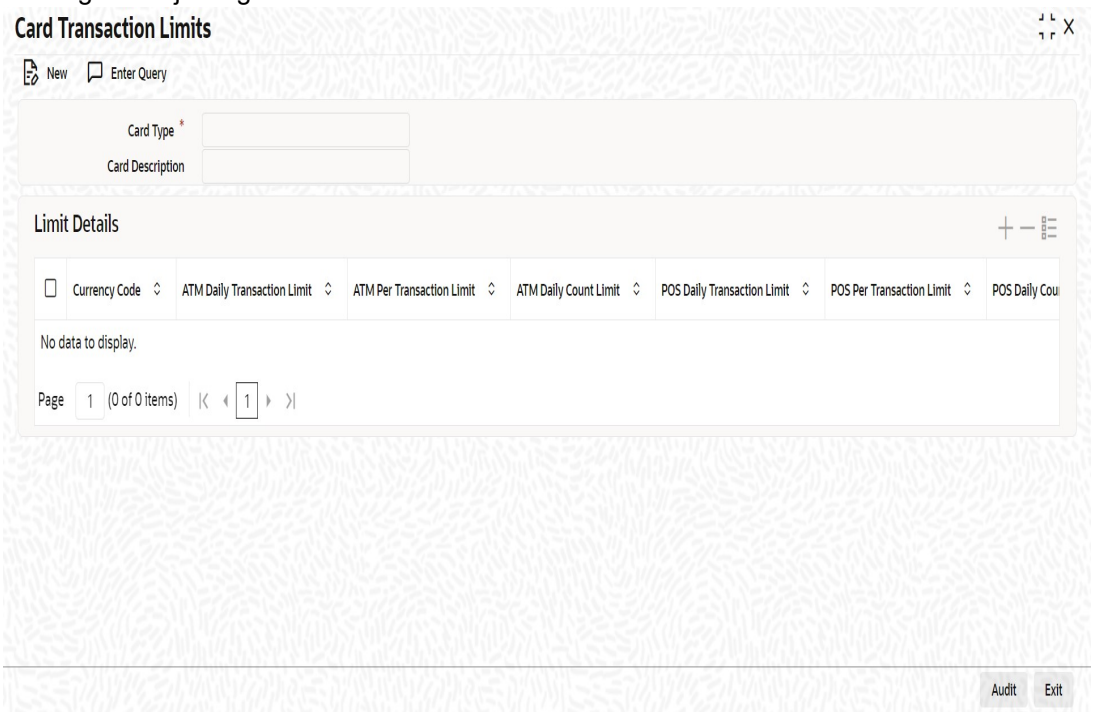
ISO numeric currency codes are converted into Oracle FLEXCUBE's alpha numeric currency code. The definition for the conversion is maintained against the 'ISO Numeric Currency Code' field in the Currency Definition screen as shown below.

You can invoke the 'Currency Definition' screen by typing 'CYDCDEFE' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



2.3.2 Maintaining Card Transaction Limits

You can maintain card and currency wise transaction limits here. You can invoke this screen by typing 'SWDCDTLM' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Specify the following:

Card Type

Specify the type of card.

Card Description

Give a brief description about the type of card.

Limit Details

Currency Code

Select the currency code from the adjoining option list.

ATM Daily Transaction Limit

Specify the daily transaction limit of the ATM.

ATM Per Transaction Limit

Specify the per transaction limit of the ATM. If the transaction limit is zero, then there is no limit validation.

ATM Daily Count Limit

Specify the daily count limit of the ATM.If the transaction limit is zero, then there is no limit validation.

POS Daily Limit

Specify the daily limit of POS. If the transaction limit is zero, then there is no limit validation.

POS Per Transaction Limit

Specify the per transaction limit of POS. If the transaction limit is zero, then there is no limit validation.

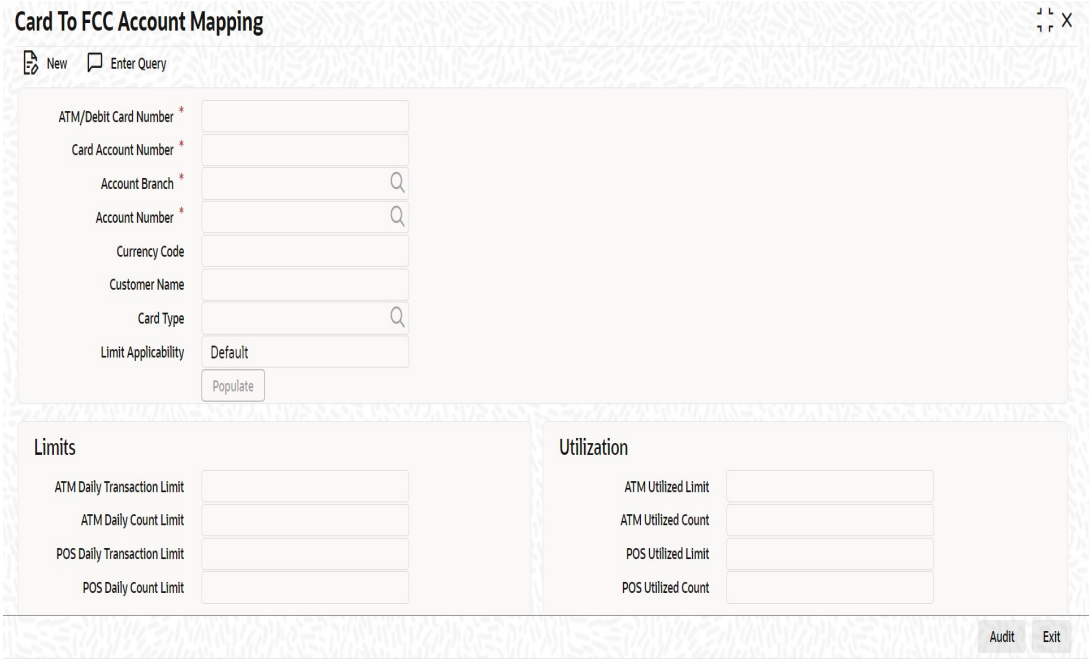
POS Daily Count Limit

Specify the daily count limit of POS. If the transaction limit is zero, then there is no limit validation.

2.3.3 ATM/Debit Card Mapping for Card Account Number Conversion

The interface facilitates conversion of ATM Card Number and Card Account Number to Oracle FLEXCUBE's alphanumeric account number. For this facility you must map the card account numbers to Oracle FLEXCUBE account numbers. This mapping can be done in the 'Debit Card Oracle FLEXCUBE Account Mapping' screen. Upload will be provided for this date tends to be in bulk and banks will prefer to maintain it using handoffs.

You can invoke the 'ATM/Debit Card FCC Account Mapping' screen by typing 'SWDCDMNT' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



You must maintain the following mandatory fields in the above screen.

Card Number and Card Account Number

Specify the card number and the card account number here. This must be a unique combination. The Card Account Number is mandatory only when the transaction account is the Card Account and not the account maintained in Oracle FLEXCUBE.

Branch

Specify the card issuer branch from the list of options available alongside.

Account Number

From the list of options available alongside, specify the Oracle FLEXCUBE account number for which the card has been issued.

Customer Name

The system displays the name of the customer.

Currency

The system displays the currency of the account.

Card Type

The system displays the card type based on the Account currency maintained in the 'Card Transaction Limits' maintenance screen.

Limit Applicability

Select the limit applicability from the adjoining drop-down list. The values available are:

- Default - On choosing Default, the system defaults the daily limit for ATM/POS maintained at Card Transaction limit level.
- Special - On choosing Special, system allows to enter the daily limits for ATM/POS manually.

Limits

ATM Daily Transaction Limit

Specify the daily transaction limit of the ATM.

ATM Daily Count Limit

Specify the daily count limit of the ATM.

POS Daily Transaction Limit

Specify the daily transaction limit of the POS.

POS Daily Count Limit

Specify the daily count limit of the POS.

Note

CASA account closure is validated if any active card mapping exists in the card to account mapping screen

Utilization

ATM Utilized Limit

System defaults the utilized limit when ATM Cash withdrawal transaction is posted.

ATM Utilized Count

System displays the utilized count when the ATM cash withdrawal transaction is posted

POS Utilized Limit

System displays the utilized count when the POS transaction is posted.

POS Utilized Count System displays the utilized count when the POS transaction is posted.

The above limits are updated for both ON-US and Remote ON-US transactions

When any of the ATM/POS transaction is reversed respective utilized limit/count will also be updated accordingly.

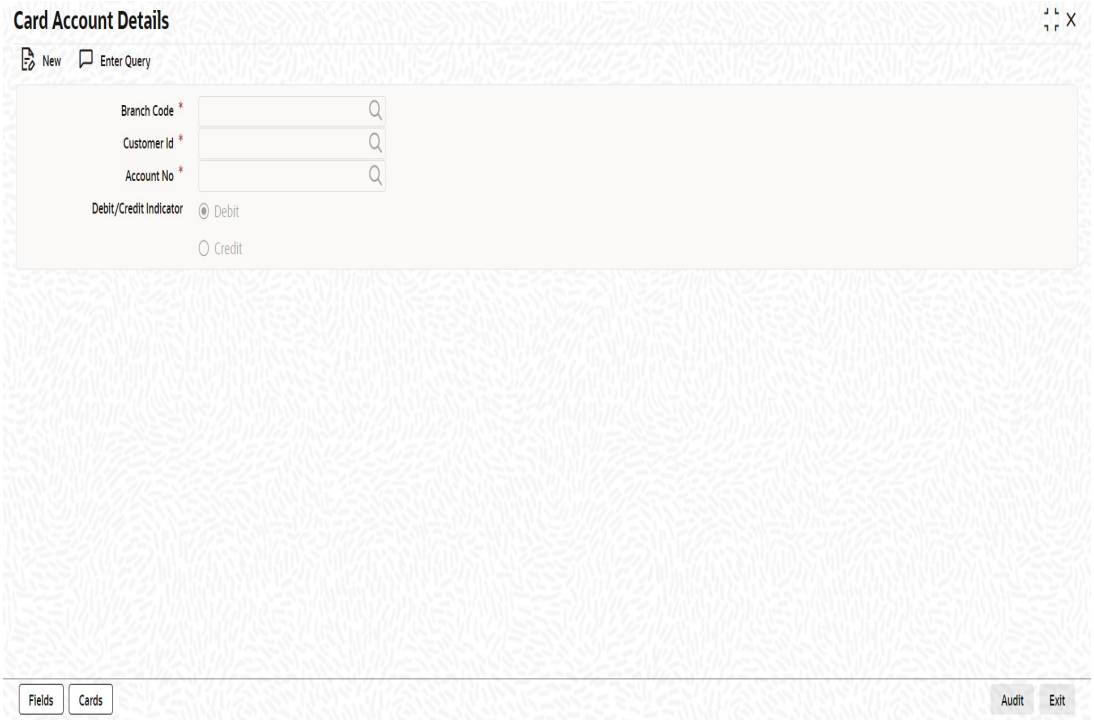
Note

If Daily transaction limit is lesser than the per transaction limit for both ATM/POS, then the system throws an appropriate error.

2.3.4 Card Accounts Detail

You can query your card accounts detail using the ‘Card Accounts Detail’ screen. You can invoke this screen by typing ‘SWDCARDA’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The ‘Card Accounts Detail’ screen is shown below:



Click the Enter Query button to enter the following query criteria.

Branch Code

Specify the branch code of the account.

Customer ID

Select the customer Id from the option list.

Customer Account Number

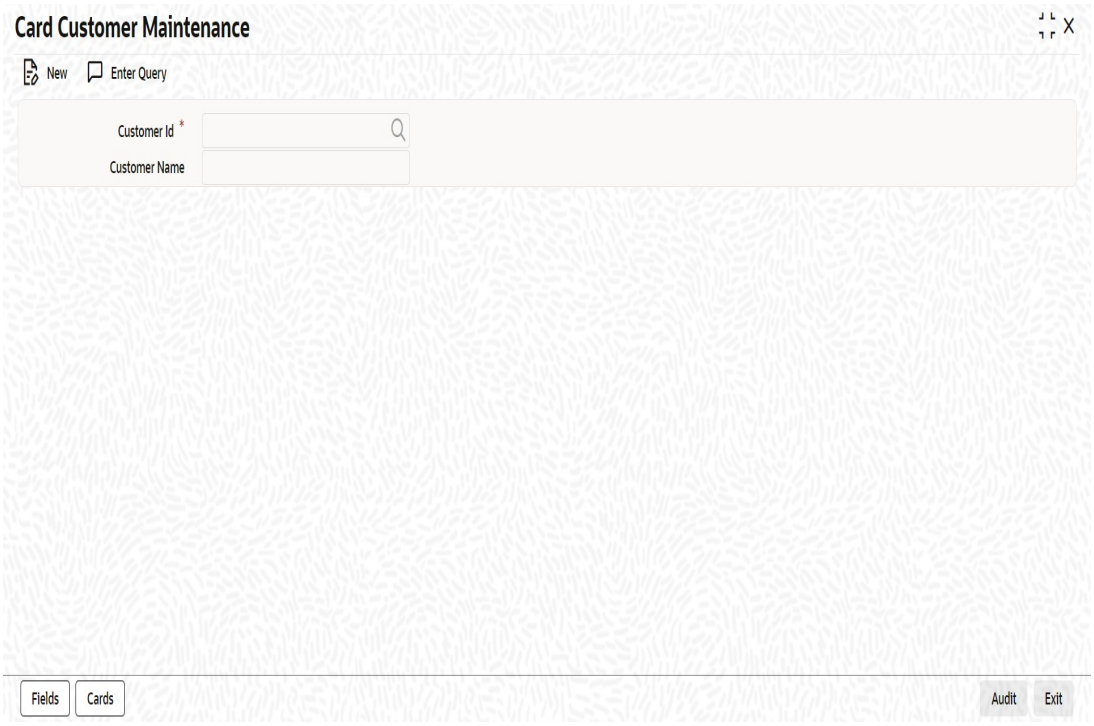
Specify the customer account number.

After entering the details, click the ’Save’ button.

2.3.5 Card Customer Maintenance

You can invoke the ‘Card Customer Maintenance’ screen by typing ‘SWDCUSTM’ in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The ‘Card Customer Maintenance’ screen is shown below:



Click the Enter Query button to enter the following query criteria.

Customer ID

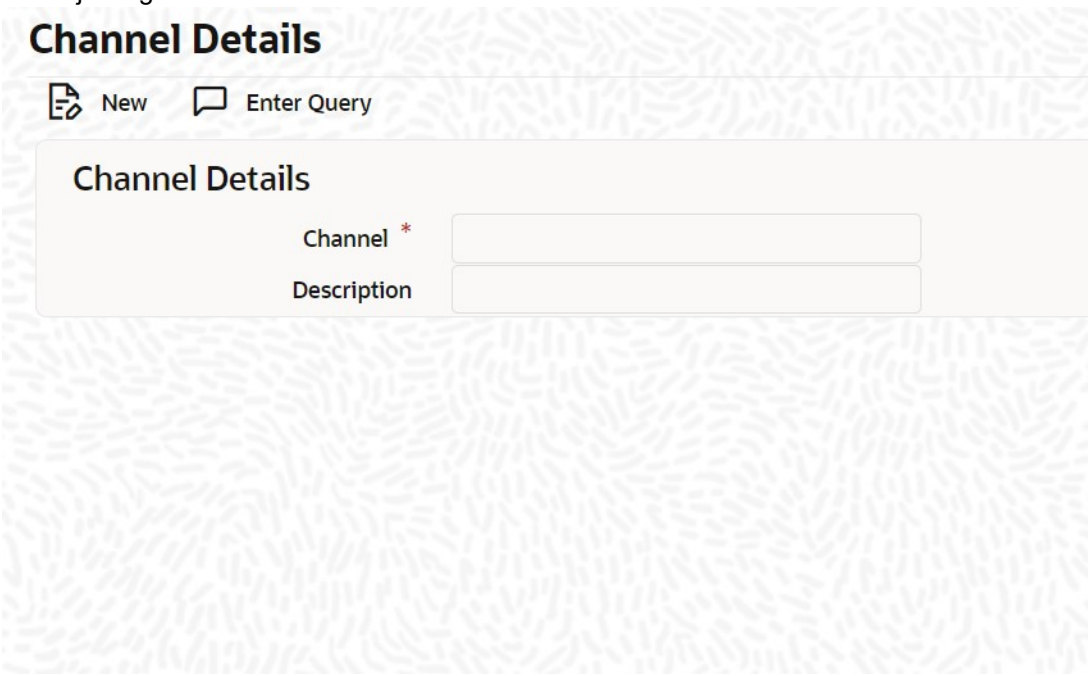
Select the customer ID from the option list. The option list displays all the customers maintained in the system.

Customer Name

On selecting the customer ID, the customer name gets displayed here. However, you are allowed to change the customer name.

2.3.6 Maintaining Channel Details

You can define channel names using ‘Channel Details’ screen. You can invoke this screen by typing ‘SWDCHNID’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Specify the following details here:

Channel

Specify the channels like ATM/IVR/POS and ALL. These channels are factory shipped.

Description

Enter a brief description about channels.

2.3.7 Maintaining Process Code Mapping Details

All transaction requests from the switch system are conveyed in ISO transaction codes. These are resolved into corresponding specific transactions in Oracle FLEXCUBE. For this you must maintain the ISO transaction code and its corresponding Oracle FLEXCUBE transaction literal in the ‘Process Code Mapping Details’ maintenance screen.

Create and maintain process code types for all Oracle FLEXCUBE literals in the ‘Process Code Mapping Details’ screen. You can invoke the ‘Process Code Mapping Details’ screen

by typing ‘SWDFCLTL’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Specify the following details here.

Oracle FLEXCUBE Literal

Select the Oracle FLEXCUBE literal from the drop-down list available alongside. This is a mandatory field. You can enter additional information in the editor that is displayed on clicking the adjoining icon.

Process Code Type

Specify the first two characters from the ISO process code here. It is a two-digit unique number. This is a mandatory field.

Channel

Specify a channel that should be used. The adjoining option list displays all valid channels maintained in the system. You can choose the appropriate one.

External Transaction Code

Specify the external transaction code here. This is an optional field.

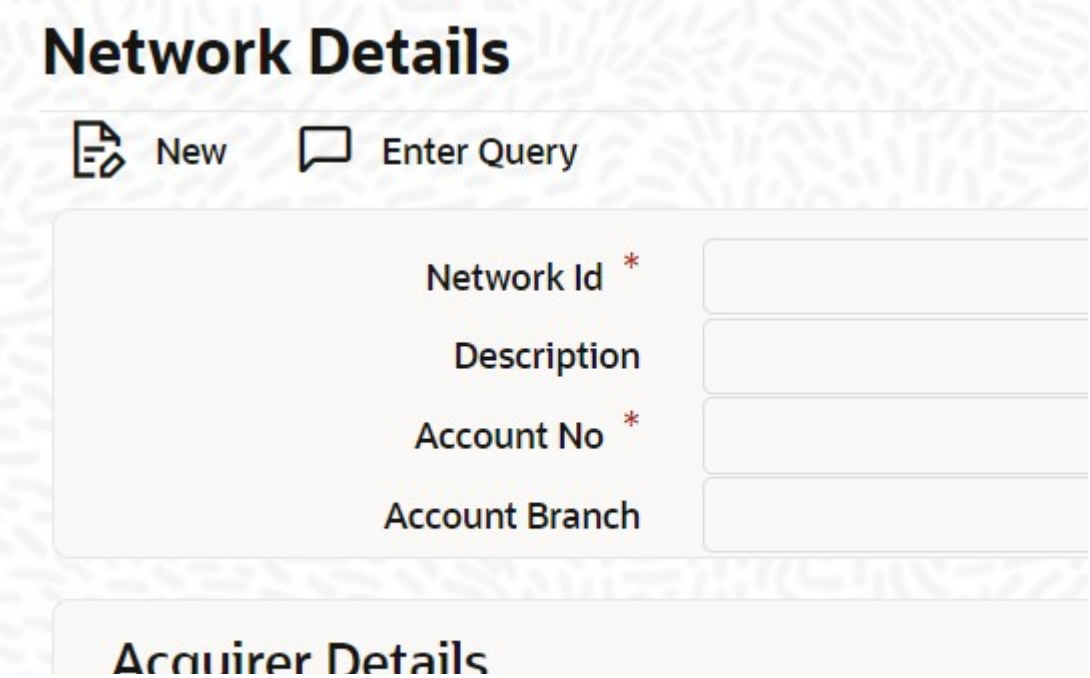
Description

Optionally you can specify a brief description of your maintenance here.

2.3.8 Maintaining Network Details

For every network interacting with the SWITCH system, you need to maintain the Network, Issuers and Acquirer details. This maintenance is done in the ‘Network Details’ screen as shown below.

You can invoke the ‘Network Details’ screen by typing ‘SWDNWDTL’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Network ID

Specify the Network Id of the card issuing agency here. This is a mandatory field.

Account Number and Account Branch

Specify the Account Number from the list of options available alongside each field. This account number – a Nostro account – belongs to the specify Network Id. This is used to post entries when the corresponding network is involved in the transaction. It is a mandatory field. Depending on the Account Number selected, the corresponding Account Branch is displayed.

Issuer and Acquirer Details

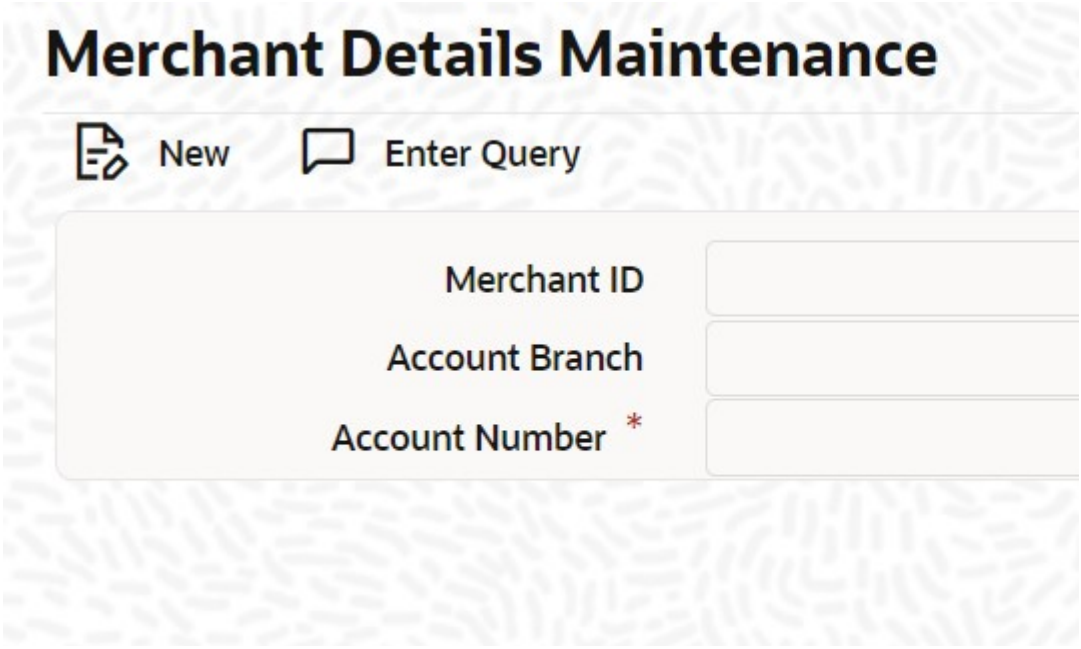
Acquirer is the Bank that owns the ATM and POS terminals and offer access to card holders from their own and also other banks. Issuer is the Bank that issues the Card to account holders and authorizes/posts transactions.

You must maintain the Issuer and Acquirer Banks for the network here. Specify the BIN (Bank Identification Number) alias IMD (International Member Descriptor) to identify the Acquirer and Issuer. You may also specify a description for each.

2.3.9 Maintaining Merchant Details

You may have various POS machines at different locations, each having their own Merchant Details. For facilitating POS transaction you must maintain the Merchant Details in the screen as shown below.

You can invoke the ‘Merchant Details’ screen by typing ‘SWDMRCDT’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Merchant Id

Specify the Merchant ID of the POS machine here. This is mandatory.

Account Branch

Specify the related branch of the Merchant's account here. This is mandatory.

Account Number

Specify the Merchant's account number here. This is mandatory. This will be the Oracle FLEXCUBE account to which postings will be done.

2.3.10 Maintaining Terminal Details

You must maintain Terminal Details such as the Originating branch, Cash GL and Terminal ID for each ATM or POS Terminal. This is done in the 'Terminal Details' screen as shown below.

You can invoke the 'Terminal Details' screen by typing 'SWDTRMID' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Terminal ID

Specify the unique terminal ID of the ATM machine/POS machine to uniquely identify then. This is mandatory.

Channel

Specify a channel that should be used. The adjoining option list displays all valid channels maintained in the system. You can choose the appropriate one.

Note

- If you select the channel as IVR, then you need to leave 'Intelligent Deposit' option unchecked.
- If you select the channel as IVR, then the options 'Cash General Ledger number' and 'Merchant ID' should be blank.

Originating Branch

Specify the Originating Branch from the list of options given alongside. It is either the issuer branch of the POS or the ATM branch, as the case may be.

Cash GL Account

This field is enabled and is mandatory for ATM type terminals only. Specify the Cash GL Account form the adjoining list of options.

Merchant ID

This field is enabled and is mandatory for POS type terminals only. Specify the Merchant ID here.

Terminal Address

Specify the address of the terminal here.

Intelligent Deposits

This checkbox is valid only for ATM terminals. Select this checkbox to indicate the ATM provides Intelligent Deposits facility. In the Intelligent Deposits facility, accounting entries are done as soon as the customer makes the Deposit.

2.3.11 Maintaining Utility Provider Details

Maintain the details of a utility provider in the 'Utility Provider Details' screen. You can invoke the 'Utility Provider Details' screen by typing 'SWDUTLPR' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Utility Provider Id

Specify the Utility Provider Id here.

Account Branch

Specify the related branch of the Merchant's account here. This is mandatory.

Account Number

Specify the Merchant's account number here. This is mandatory. This will be the Oracle FLEXCUBE account to which postings will be done.

Description

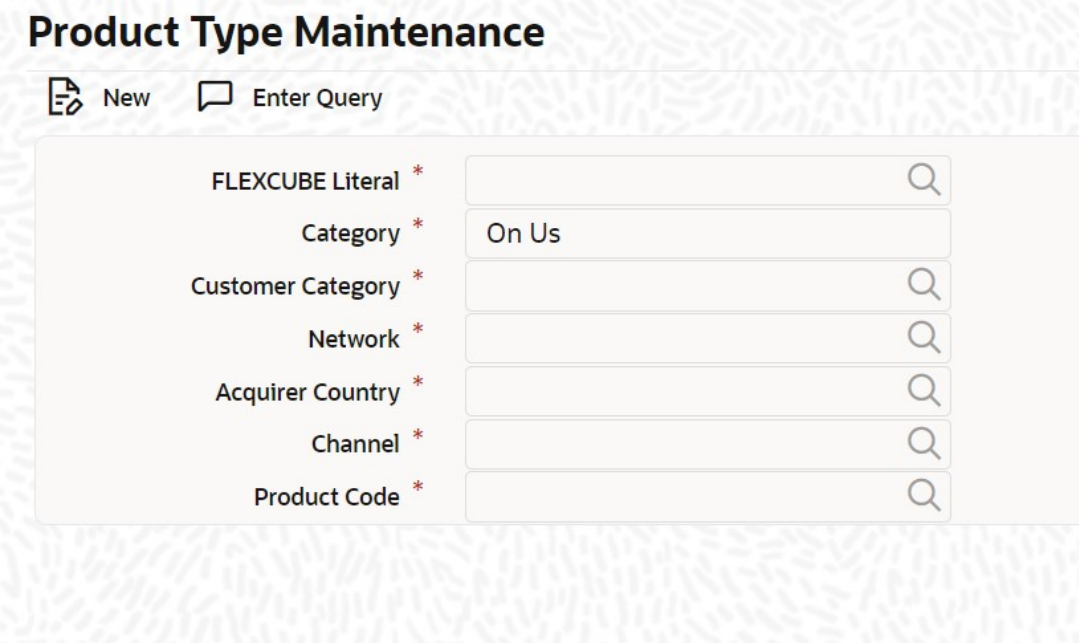
Optionally you can give a brief description of the utility provider here.

2.3.12 Maintaining Product Types for Product Derivation

Every transaction request from the switch system is assigned under a particular product type. This maintenance is done in the 'Product Type Maintenance' screen. Here, you can map products to Oracle FLEXCUBE literals.

For every transaction request the Oracle FLEXCUBE product is derived based on the Category, Oracle FLEXCUBE literal and the Customer Category.

You can invoke the 'Product Type Maintenance' screen by typing 'SWDPRDMP' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



You can specify the following details here.

Oracle FLEXCUBE Literal

Select a three digit literal from the list of options available alongside.

Category

Select the category of the transaction – On-Us, Off-Us or Remote-On-Us – from the list of options available alongside.

Customer Category

Select a customer category from the list of options available alongside.

Channel

Specify the channel that should be used for transaction. The adjoining option list displays all the channels maintained in the system.

Note

ATM, POS and IVR requests may come from the same port or from different ports based on the configuration done in the property file. If they are configured to arrive from different ports, then the channel is identified based on the port number. If they are configured to arrive from the same port then the channel is identified as ‘ALL’. It is also possible that some of the channels alone share a port.

Product Code

From the list of options available alongside, select the Oracle FLEXCUBE product code to be mapped to the specified literal.

Network

Select the network from the list of options available alongside.

Acquirer Country

Select the country of the acquirer from the list of options available alongside.

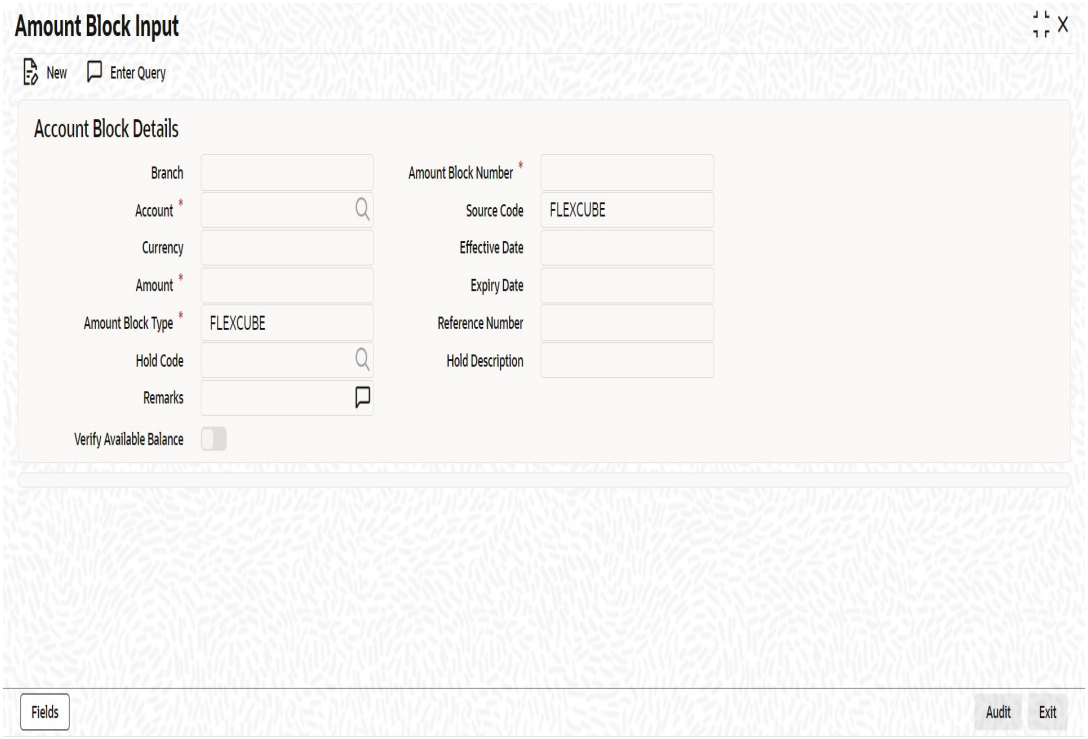
2.3.13 Showing Amount Block Transactions in Account Statements

You can have any field from the transaction log included in the Customer Account statement generation. Additionally you can also choose to include transactions that resulted in amount blocks.

You can invoke the 'Amount Block Input' screen by typing 'CADAMBLK in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button. Click the new button on the Application toolbar.

Note

The system performs the action level access rights validation only on 'Save' operation.



Account Number

Specify the Oracle FLEXCUBE account number for blocking the amount. This field is mandatory.

Amount Block Number

Amount block number is unique and is created after the amount block creation.

Amount

Specify the Amount blocked. This field is mandatory.

Expiry Date

Specify the expiry date of the Amount Block.

Effective Date

Specify the date from which the Amount block is effective.

Amount Block

This list shows Switch, Oracle FLEXCUBE, and Pre-Auth. If the amount block is done via Switch, then it must be selected here.

Remark

Optionally you may add your remarks here.

Source Code

The source from which the amount block has been initiated is displayed.

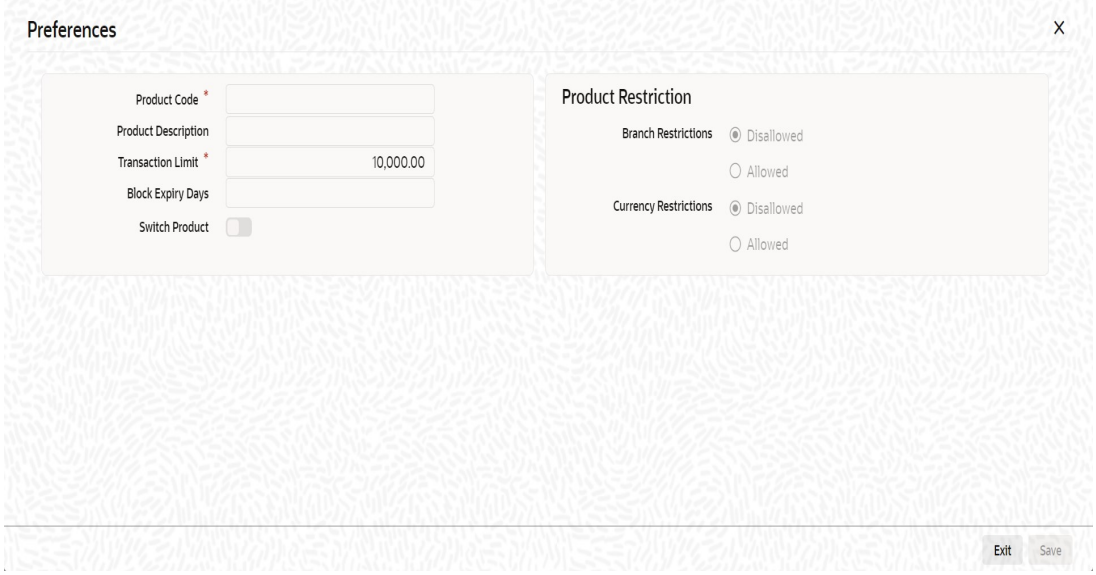
Verify Available Balance

Check this box to enable creation of amount block only when sufficient funds are available.

2.3.14 Modifying a Product Preferences Screen

During the implementation of the Switch interface system you can use the following facility to modify the 'Preferences' screen for a product.

You can invoke the 'Retail Teller Product Preferences' screen by typing 'DEDRTPRM' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



You may select the following checkboxes if you wish to have them in a product's 'Preferences' screen.

- Partial Reversals allowed
- Reversal Includes charges - Reversal should reverse charges
- Switch product

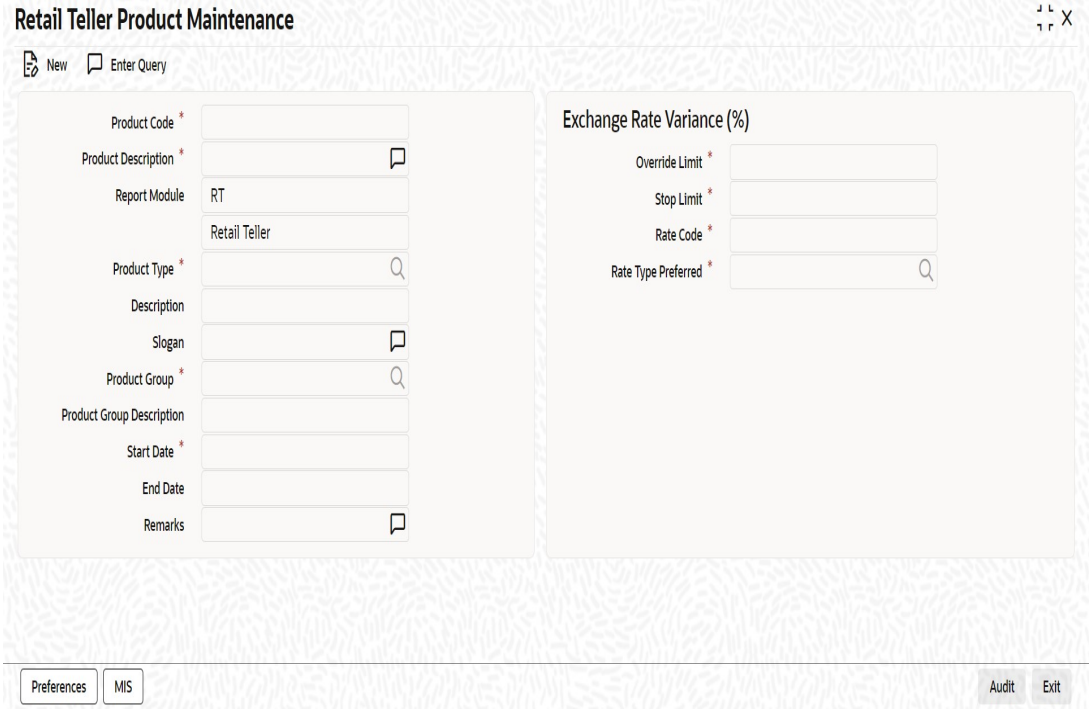
2.3.15 Maintaining Charges for Non-financial Transactions

You can have the following non financial transactions charged:

- Balance Enquiry
- Cheque Book request
- Mini statement request
- Ad-hoc statement request

You can facilitate the above service by first using the 'Retail Teller Product Maintenance' to maintain a Retail Teller product as shown below.

You can invoke the ‘Retail Teller Product Maintenance’ screen by typing ‘DEDRTPRM’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



You must next do the ARC Maintenance for the above product in the ‘ARC Maintenance’ screen as shown below. In the ARC Maintenance you can maintain the charges for the various non-financial transactions under the CHARGE 1-5 tabs. The transaction amounts will be zero and so the accounting entries will have only the charges.

2.3.16 ARC Maintenance

You can maintain the charges for the product type in the ARC Maintenance screen.You can invoke the 'ARC Maintenance’ screen by typing ‘IFDATMMN’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



The ARC maintenance is done for the product Cash Withdrawal (CHWL).You can maintain charges (under charge tabs CHARGE1 -5) for both financial and non-financial transactions.

CHARGE1 must be the Transaction Fee. The Description under 'CHARGE1' tab should be given as TXN_FEE. CHARGE2 must be the Transaction Processing Fee. The Description under the 'CHARGE2' tab should be given as TXN_PROCESS_FEE.

2.3.17 Service Charges for Inter- branch Transactions

In a transaction, if the account branch of the teller transaction is different from the transaction branch, then charges maintained by inter-branch product will be applied to the transaction.

If the IB checkbox is checked for a product, then the system will pick up and process the charge entries maintained at the IB product level.

During a transaction, If IB product is not maintained and if the transaction branch is different from account branch, then charges maintained in non-ib product will be applied to the transaction.

IB Transaction

Check this box if you want the system to pick up the product for inter-branch transactions.

You will notice the difference in the service charges processed for two transactions with same kind of product.

Refer the chapter 'Maintaining Account, Rate, and Charge Details' in the FCC_Host_Clearing user manual, for detailed explanation of the fields in this screen..

2.4 Batch Processes

The following batch processes are part of the Oracle FLEXCUBE – Switch Interface.

- Section 2.4.1, "Maintaining Batches for Batch Operations"
- Section 2.4.2, "Settlement Upload"
- Section 2.4.3, "Intra Day Batch"
- Section 2.4.4, "Viewing Transaction Monitor"

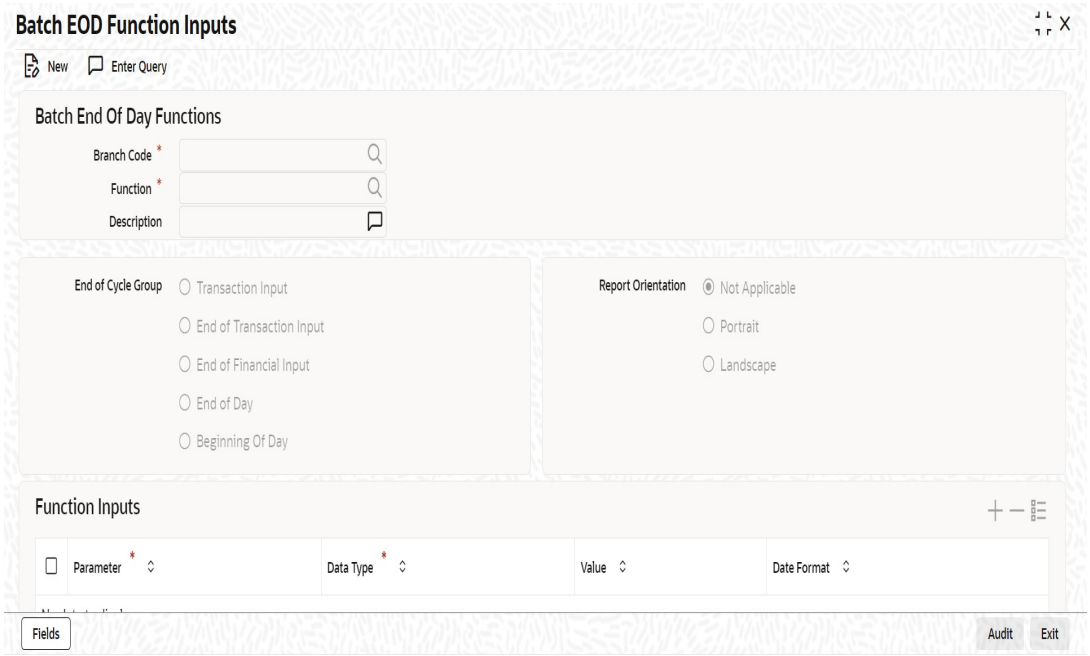
For more information on Batch Processes refer the corresponding Oracle FLEXCUBE user manual.

2.4.1 Maintaining Batches for Batch Operations

You can maintain the following batches for Batch Operations in the 'Batch EOD Function Inputs' screen:

- SWSWRECN – Switch Reconciliation Batch
- SWDPRCRT – Process Transaction Batch
- SWNETSET – Network Settlement Batch
- SWMERSET – Merchant Settlement Batch
- SWDPURGE – Adhoc Purge Batch
- SWDRETBT – Retry and Suspense Processing Batch.

You can invoke the 'Batch EOD Function Inputs' screen by typing 'BADEODFE' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



2.4.2 Settlement Upload

You can perform settlement uploads for the Switch, Network and Merchant categories from the 'Settlement Upload' screen. You can invoke the 'Settlement Upload' screen by typing

'SWDUPLST' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



You need to specify the following details.

Channel

Select the channel to be used while uploading settlement files into Oracle FLEXCUBE, from the adjoining drop-down list. The following values are available:

- ALL
- ATM
- POS
- IVR

Based on the channel specified, the system will pick up the appropriate Retail Teller product and ARC maintenance for settlement and reconciliation processing.

Category

The categories for which you can perform settlement upload are:

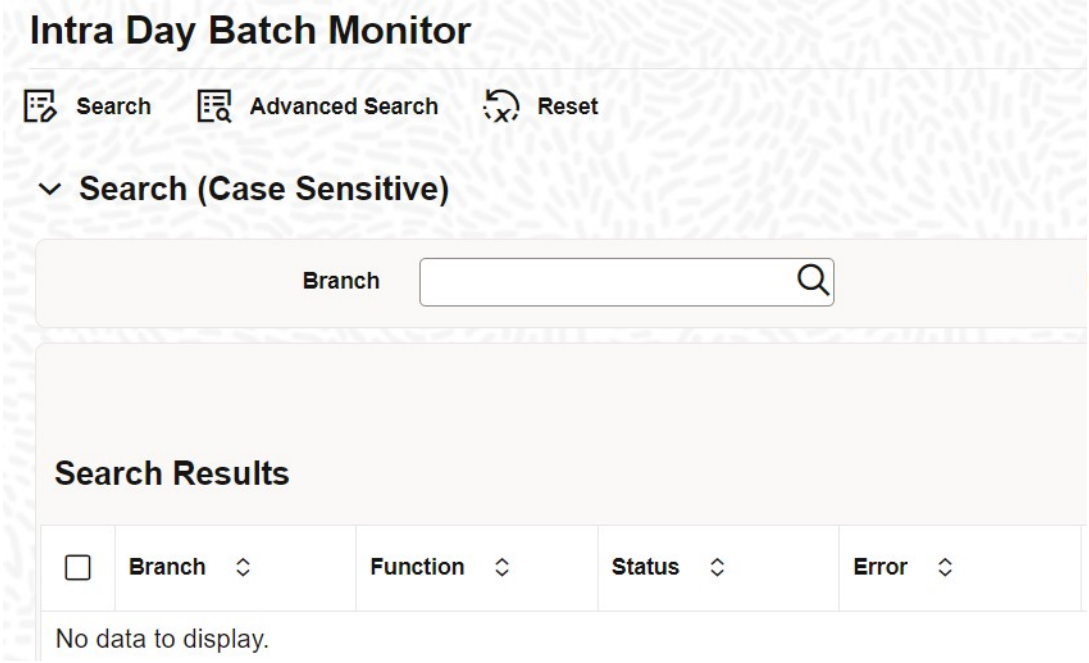
- Switch
- Network
- Merchant

In the above screen you can specify the Reconciliation File/Network file/Merchant upload file's name and path.

2.4.3 Intra Day Batch

You can monitor the status of successfully run SWSWRECN and SWNETSET functions in the 'Intra Day Batch Start Monitor' screen.

You can invoke the 'Intra Day Batch Start Monitor' screen by typing 'BASIDMTR' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



2.4.4 Viewing Transaction Monitor

You can view a summary of transaction status in the 'Switch Transaction Monitor' screen. You can invoke this screen by typing 'SWDTXQRY' in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



Here you can view the following details.

Transaction Log

You can view the number of transactions in the following statuses.

- WIP
- Success
- Repair

- Failed
- Total

Retry Log

You can view the retry log of transactions in the following statuses.

- Unprocessed
- Success
- Suspense
- Reversed
- Total

2.5 Cards Upload

You can upload card account mapping maintenance through the ‘Debit Card FCC Account Upload’ screen. You can invoke this screen by typing ‘SWDCDUPL’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



You can specify the following details.

File Name

Specify the name of the file that should be uploaded.

File Path

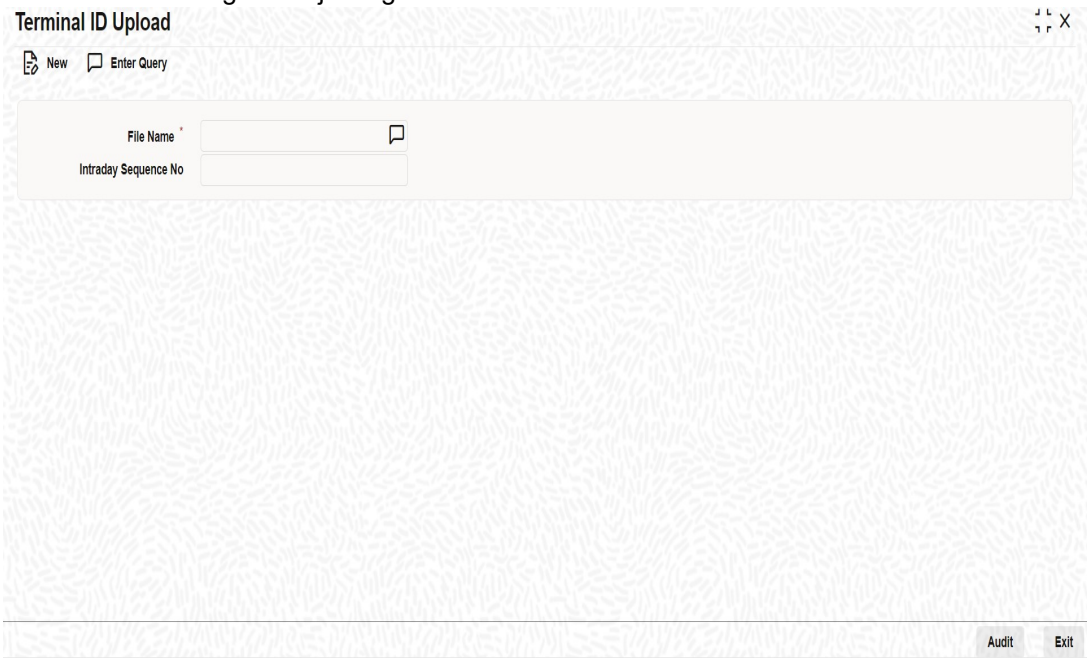
Specify the path from where the file should be picked up for uploading.

Intraday Sequence Number

The system generates a sequence number for the upload transaction and displays it here.

2.6 Terminal ID Upload

You can upload terminal ID maintenance through the ‘Terminal ID Upload’ screen. You can invoke this screen by typing ‘SWDTIDUP’ in the field at the top right corner of the Application tool bar and clicking the adjoining arrow button.



You can specify the following details.

File Name

Specify the name of the file that should be uploaded.

File Path

Specify the path from where the file should be picked up for uploading.

Intraday Sequence No

The system generates a sequence number for the upload transaction and displays it here.

3. Annexure A

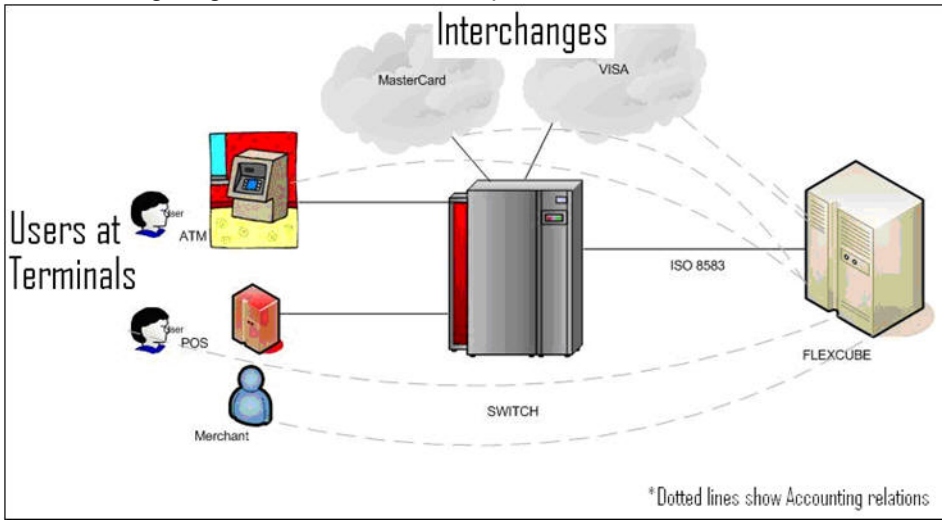
This chapter contains the following sections:

- Section 3.1, "Switch Software and Card Transactions Business"
- Section 3.2, "ISO8583 Protocol Overview"
- Section 3.3, "Switch Transaction Categories"
- Section 3.4, "Accounting Entries – ATM Transactions"
- Section 3.5, "Accounting Entries - POS Purchase"
- Section 3.6, "Balance Handoff File Formats"
- Section 3.7, "Network Settlement Message Format"
- Section 3.8, "Merchant Settlement File Format"
- Section 3.9, "Maintaining SWTB_PARAM Table"

3.1 Switch Software and Card Transactions Business

The following is a brief account of the Switch software domain and the components in a Cards Transactions Business network.

The following diagram illustrates the components in the switch network.



ATMs and POS Terminals are connected with the Switch Software system using proprietary message protocol depending on the upon the terminal device type. Switch software is also connected with 'Interchanges' like VISA and MasterCard.

A switch software system provides the following functionalities:

- Maintaining all ATM / POS / Interchange information
- Maintaining Card Number to Account Number Linkages
- Receiving Card Transactions from ATM / POS terminals and checking PIN and Card status
- Forwarding the Transactions to Host Banking Systems like Oracle FLEXCUBE after converting proprietary protocol into ISO8583 protocol
- Performing 'stand-in' authorization incase of Link to Host systems are down
- Refreshing Account balances from Banking Systems (to use Stand-in)

3.2 ISO8583 Protocol Overview

ISO8583 protocol is called the 'Financial Transaction Standard for Card originated messages and Interchange message specifications'. This protocol provides for the exchange of information between an 'Acquirer' and an 'Issuer' for card transactions. The terms 'Acquirer' and 'Issuer' are explained below.

Acquirer

An Acquirer is the Bank that deploys the self servicing devices like ATM /POS and may have a switch system software and Interchange connections.

Issuer

An Issuer is the Bank that issues cards to its customers. It has the database of accounts and is connected to the Switch system software. In the course of transactions via the switch system, Issuers respond to Acquirers with approval or rejection messages.

3.3 Switch Transaction Categories

The Switch system transaction flows can happen in three different ways. Each flow is termed as a Category of the transaction. The categories are from the Issuer bank's perspective. The following example explains the categories.

Consider that Oracle FLEXCUBE system is installed at YOUR BANK. Consider another bank, say HSBC, with which you can have card based transactions. Then the following are the categories depending upon which bank's Card or Terminal is involved.

Cards	ATM/POS Terminal	Category of Transaction
YOUR BANK Cards	YOUR BANK	On-Us
YOUR BANK Cards	HSBC	Remote-On-Us
HSBC Cards	YOUR BANK	Off-Us

3.4 Accounting Entries – ATM Transactions

The following are the various accounting entries for ATM Transactions.

- Section 3.4.1, "Accounting Entries for Cash Withdrawal Transactions"
- Section 3.4.2, "Accounting Entries for Balance Enquiry"
- Section 3.4.3, "Accounting Entries for Deposit"
- Section 3.4.4, "Accounting Entries for Funds Transfer"

3.4.1 Accounting Entries for Cash Withdrawal Transactions

ON US

DR CUSTOMER A/CBILL-AMT (converted to a/c ccy)

CRCASH GLTXN-AMT

DRCUSTOMER A/CTXN_FEE (converted to a/c ccy)

CRP&LGLTXN_FEE

DRCUSTOMER A/CTXN_PROCESS_FEE (converted to a/c ccy)

CRP&LGLTXN_PROCESS_FEE

DRCUSTOMER A/CFC_CHARGES (converted to a/c ccy)

CRP&LGLFC_CHARGES

Remote – ON US

DR CUSTOMER A/CBILL-AMT (converted to a/c ccy)

CRNETWORK SUSPENSE GLSETL_AMT

DRCUSTOMER A/CTXN_FEE (converted to a/c ccy)

CRNETWORK SUSPENSE GLTXN_FEE

DRCUSTOMER A/CTXN_PROCESS_FEE (converted to a/c ccy)

CRNETWORK SUSPENSE GLTXN_PROCESS_FEE

DRCUSTOMER A/CFC_CHARGES (converted to a/c ccy)

CRP&LGLFC_CHARGES

During Network Settlement

DRNETWORK SUSPENSE GL SETL_AMT

CRNETWORK NOSTRO A/CSETL_AMT (converted to a/c ccy)

DRNETWORK SUSPENSE GL TXN_FEE

CRNETWORK NOSTRO A/CTXN_FEE (converted to a/c ccy)

DRNETWORK SUSPENSE GL TXN_PROCESS_FEE

CRNETWORK NOSTRO A/CTXN_PROCESS_FEE (converted to a/c ccy)

OFF- US

DR NETWORK SUSPENSE GLSETL-AMT (converted to a/c ccy)

CRCASH GLTXN-AMT

DRNETWORK SUSPENSE GLTXN_FEE (converted to setl ccy)

CRP&L GLTXN_FEE

DRNETWORK SUSPENSE GLTXN_PROCESS_FEE (converted to a/c ccy)

CRP&L GLTXN_PROCESS_FEE

During Network Settlement

DRNETWORK NOSTRO A/CSETL_AMT (converted to a/c ccy)

CRNETWORK SUSPENSE GL SETL_AMT

DRNETWORK NOSTRO A/CTXN_FEE

CRNETWORK SUSPENSE GLTXN_FEE (converted to a/c ccy)

DRNETWORK NOSTRO A/CTXN_PROCESS_FEE (converted to a/c ccy)

CRNETWORK SUSPENSE GL TXN_PROCESS_FEE

3.4.2 Accounting Entries for Balance Enquiry

ON US

DRCUSTOMER A/CTXN_FEE (converted to a/c ccy)

CRP&LGLTXN_FEE

DRCUSTOMER A/CTXN_PROCESS_FEE (converted to a/c ccy)

CRP&LGLTXN_PROCESS_FEE

DRCUSTOMER A/CFC_CHARGES (converted to a/c ccy)

CRP&LGLFC_CHARGES

R-ONUS

DRCUSTOMER A/CTXN_FEE (converted to a/c ccy)

CRNETWORK SUSPENSE GLTXN_FEE

DRCUSTOMER A/CTXN_PROCESS_FEE (converted to a/c ccy)

CRNETWORK SUSPENSE GLTXN_PROCESS_FEE

DRCUSTOMER A/CFC_CHARGES (converted to a/c ccy)

CRP&LGLFC_CHARGES

During Network Settlement

DRNETWORK SUSPENSE GL TXN_FEE

CRNETWORK NOSTRO A/CTXN_FEE (converted to a/c ccy)

DRNETWORK SUSPENSE GL TXN_PROCESS_FEE

CRNETWORK NOSTRO A/CTXN_PROCESS_FEE (converted to a/c ccy)

OFF-US

DRNETWORK SUSPENSE GLTXN_FEE (converted to setl ccy)

CRP&LGLTXN_FEE

DRNETWORK SUSPENSE GLTXN_PROCESS_FEE (converted to a/c ccy)

CRP&L GLTXN_PROCESS_FEE

During Network Settlement

DRNETWORK NOSTRO A/CTXN_FEE

CRNETWORK SUSPENSE GLTXN_FEE (converted to a/c ccy)

DRNETWORK NOSTRO A/CTXN_PROCESS_FEE (converted to a/c ccy)

CRNETWORK SUSPENSE GL TXN_PROCESS_FEE

3.4.3 Accounting Entries for Deposit

ON US

DRCASH GLTXN-AMT

CR CUSTOMER A/CBILL-AMT (converted to a/c ccy)

DRCUSTOMER A/CTXN_FEE (converted to a/c ccy)

CRP&LGLTXN_FEE

DRCUSTOMER A/CTXN_PROCESS_FEE (converted to a/c ccy)

CRP&LGLTXN_PROCESS_FEE

DRCUSTOMER A/CFC_CHARGES (converted to a/c ccy)

CRP&LGLFC_CHARGES

3.4.4 Accounting Entries for Funds Transfer

ON US

DR FROM A/CBILL-AMT (converted to a/c ccy)

CRTO A/CTXN-AMT (converted to a/c ccy)

DRFROM A/CTXN_FEE (converted to a/c ccy)

CRP&LGLTXN_FEE

DRFROM A/CTXN_PROCESS_FEE (converted to a/c ccy)

CRP&LGLTXN_PROCESS_FEE

DRCUSTOMER A/CFC_CHARGES (converted to a/c ccy)

CRP&LGLFC_CHARGES

3.5 Accounting Entries - POS Purchase

ON US

DR CUSTOMER A/CBILL-AMT (converted to a/c ccy)

CRMERCHANT SUSPENSE GLTXN-AMT

DRCUSTOMER A/CTXN_FEE (converted to a/c ccy)

CRP&LGLTXN_FEE

DRCUSTOMER A/CTXN_PROCESS_FEE (in a/c ccy)

CRP&LGLTXN_PROCESS_FEE

DRCUSTOMER A/CFC_CHARGES (converted to a/c ccy)

CRP&LGLFC_CHARGES

During Merchant Settlement

DRMERCHANT SUSPENSE GL TXN_AMT– COMMISSION (a/c ccy)

CRMERCHANT A/CTXN_AMT– COMMISSION (a/c ccy)

DRMERCHANT SUSPENSE GL COMMISSION

CRP&LGLCOMMISSION

Remote – ON US

DR CUSTOMER A/CBILL-AMT (converted to a/c ccy)

CRNETWORK SUSPENSE GLSETL-AMT

DRCUSTOMER A/CTXN_FEE (converted to a/c ccy)

CRNETWORK SUSPENSE GLTXN_FEE

DRCUSTOMER A/CTXN_PROCESS_FEE (a/c ccy)

CRNETWORK SUSPENSE GLTXN_PROCESS_FEE

DRCUSTOMER A/CFC_CHARGES (a/c ccy)

CRP&LGLFC_CHARGES

During Network Settlement

DRNETWORK SUSPENSE GL SETL_AMT

CRNETWORK NOSTRO A/CSETL_AMT (converted to a/c ccy)

DRNETWORK SUSPENSE GL TXN_FEE

CRNETWORK NOSTRO A/CTXN_FEE (converted to a/c ccy)

DRNETWORK SUSPENSE GL TXN_PROCESS_FEE

CRNETWORK NOSTRO A/CTXN_PROCESS_FEE (a/c ccy)

OFF-US

DR NETWORK SUSPENSE GLSETL-AMT (converted to a/c ccy)

CRMERCHANT SUSPENSE GL TXN-AMT (converted to a/c ccy)

DRNETWORK SUSPENSE GLTXN_FEE (converted to setl ccy)

CRP&LGLTXN_FEE

DRNETWORK SUSPENSE GLTXN_PROCESS_FEE (a/c ccy)

CRP&L GLTXN_PROCESS_FEE

During Network Settlement

DRNETWORK NOSTRO A/CSETL_AMT

CRNETWORK SUSPENSE GL SETL_AMT

DRNETWORK SUSPENSE GL TXN_FEE

CRNETWORK NOSTRO A/CTXN_FEE (converted to a/c ccy)

DRNETWORK NOSTRO A/CTXN_PROCESS_FEE (a/c ccy)

CRNETWORK SUSPENSE GL TXN_PROCESS_FEE

During Merchant Settlement

DRMERCHANT SUSPENSE GLTXN_AMT – COMMISSION

CRMERCHANT A/C TXN_AMT – COMMISSION

DRMERCHANT SUSPENSE GL COMMISSION

CRP&LGLCOMMISSION

3.6 Balance Handoff File Formats

Oracle FLEXCUBE generates ASCII files ('|' separated) with the balances of all the accounts that are linked with Cards. The following table gives the general Balance Handoff File Format of Oracle FLEXCUBE. You may have a different format installed as per your requirements.

Header

Field Sequence #	Field Name
1	No. of Accounts
2	Check Digits
3	Time Stamp

Body

Field Sequence #	Field Name	Size (Characters)	Description
1	Branch code	3	Oracle FLEXCUBE branch code
2	Customer Account number	28	Account number
3	Account Currency	3	Account currency code - alpha
6	Available balance. This represents the amount available for withdrawal/ spending. Switch should stand-in based on this field.	22	Available balance from Oracle FLEXCUBE. Limit to be included should be definable.

Footer

Field sequence #	Field Name
1	No. of Accounts
2	Check Digits
3	Time Stamp

3.7 Network Settlement Message Format

The following table gives the format of the file accepted by Oracle FLEXCUBE for network settlements. Fields are separated by '|' pipe symbol and the amounts are with decimal included. The following table gives the general format in Oracle FLEXCUBE. You may have a different format installed as per your requirements.

Field Sequence Number	Field Name	Size	Mandatory (M) / Optional (O)	Remarks
1	Message type	n4	O	If it is optional, original or reversal is identified based on Transaction code
2	Card number	n19	M	
3	Branch code	n3	O	

Field Sequence Number	Field Name	Size	Mandatory (M) / Optional (O)	Remarks
4	Bank account number	ans 28	M	
5	Transaction Code	ans 10	M	05 - Sale, 06 - Refund, 07- Cash Wdl, 25 - Sale reversal, 26 - Refund reversal, 27 - Cash wdl reversal. Refer Transaction service derivation logic in earlier sections.
6	processing code	ans 6	O	This is used for information purpose
7	Transaction Amount	n 22	M	Refer Amount derivation logic
8	Transaction ccy	n 3	M	Refer Amount derivation logic
9	Settlement Amount	n 22	O	Refer Amount derivation logic
10	Settlement Currency	n 3	O	Refer Amount derivation logic
11	Billing Amount	n 22	O	Refer Amount derivation logic
12	Billing currency	n3	O	Refer Amount derivation logic
13	Transaction Date (Format YYYYMMDD)	s 8	M	Used for Transaction matching
14	Transaction Time	s 6	M	
15	STAN	an 12	M	Used for Transaction matching
16	Original STAN	An12	O	Used in reversals
17	Acquirer ID	asn 6	M	Used for Transaction matching
18	Terminal ID	ans 16	M	Used for Transaction matching
19	Card Acceptor ID	ans 20	O	
20	Merchant Id	ans 20	O	
21	Merchant Name	ans 40	M	Information purpose

Field Sequence Number	Field Name	Size	Mandatory (M) / Optional (O)	Remarks
22	Merchant City	ans 40	M	Information purpose
23	Merchant Country	asn 10	O	
24	Merchant Category code	n 4	M	
25	Retrieval reference number of transaction	an 12	M	
26	Authorization Code	ans 6	M	Used for Transaction matching
27	Authorization Reference	ans 20	O	Some other reference for matching
28	Response code	n4	O	if sent, only 00 is considered for processing
29	Domestic flag	S 1	O	D – Domestic I – International R – regional (Europe)
30	Settlement Account	Ans28	O	
31	Pre-Auth and Charge back Data	Ans 45	O	Applicable only in case of Reconciliation

3.8 Merchant Settlement File Format

The following table gives the format of the file accepted by Oracle FLEXCUBE for Merchant Settlements. Fields are separated by '|' pipe symbols. The following table gives the general format in Oracle FLEXCUBE. You may have a different format installed as per your requirements.

Field Sequence #	Field Name	Length	Mandatory / Optional	Description
1	Merchant ID	an 15	M	To be used to derive merchant a/c
2	Transaction code	2	M	To be used to derive the product
3	Processing code	6	O	ISO type processing code

Field Sequence #	Field Name	Length	Mandatory / Optional	Description
6	Event date	8	O	Batch processing date
7	Amount	22	M	Total amount settled to merchant
	Currency	3	M	
8	Tax Amount	22	O	reserved for future use
9	DrCr Flag	1	O	incase switch sends, use it
10	Commission Amount	22	O	To be detected
11	Commission Flag	1	O	commission flag incase sent
12	Commission currency code	3	O	commission currency code
13	Merchant current a/c	28	O	incase merchant ID is not having any maintenance at Oracle FLEXCUBE
14	Branch code	3	O	Merchant branch code
15	Bank code	10	O	Merchant bank code
16	User Info	30	O	Reserved for CSE

3.9 Maintaining SWTB_PARAM Table

The SWTB_PARAM is the single record table for SWIG initial parameters. The maintenances in this table are done during implementation of the Switch Interface Gateway system. This is for your information only.

FOLLOW_ON	Y
AMOUNT_BLOCK	Y
SETL_BEFORE_FILE	Y
LOG_TABLE_KEY	MSG_-TYPE~RRN
CHG_ON_BALENQ	N
CHG_ON_ADSTMT	N
CHG_ON_MISTMT	N
CHG_ON_CHQBK	N
NO_TXN_MISTMT	10

ISO_VERSION	0
NO_CHK_LEAVES	25
ACC_STMT_PERIOD	1
UTIL_PROV_ACC_SEND	Y
BLOCK_EXP_DAYS	30
MAX_RETRY_COUNT	5
FCC_ACC_FROM_SWITCH	N
ONLY_PAN_FROM_SWITCH	N

- If FOLLOW_ON= 'Y' then
  - for 200 MSG_TYPE Amount Block is done
  - for 220 MSG_TYPE Parent message will be checked
- If FOLLOW_ON= 'N' then for 200 and 220 MSG_TYPE it will check if AMOUNT_BLOCK= 'Y' then all 200 and 220 MSG will perform amount block.
- If SETL_BEFORE_FILE= 'Y' then all remote on-us and off-us transaction will perform Retail Teller transaction and accounting entries.
- If SETL_BEFORE_FILE= 'N' then all remote on-us and off-us transaction will do the Amount block and Retail Teller transaction will completed at the time of settlement file.
- LOG_TABLE_KEY is for making the primary key for ATM transaction.
- If CHG_ON_BALENQ ='Y' then for balance enquiry transaction, if charge is defined then it will be deducted from the customer account.
- If CHG_ON_ADSTMT= 'Y' then for adhoc statement transaction, if charge is defined then it will be deducted from customer account.
- If CHG_ON_MISTMT = 'Y' then for mini statement transaction, if charge is defined then it will be deducted from customer account.
- If CHG_ON_CHQBK='Y' then for cheque book request transaction, if charge is defined then it will be deducted from customer account.
- NO_TXN_MISTMT defines the number of latest transactions that should appear in a mini statement. (E.g. If NO_TXN_MISTMT=10 then in the mini statement the latest 10 transactions will be displayed).
- ISO_VERSION has only three type of value 0, 1 and 2.This gives the ISO 8583 message version.
  - 1987 = 0
  - 1993 = 1
  - 2003 = 2
- NO_CHK_LEAVES defines the number of pages that should be in one cheque book.
- ACC_STMT_PERIOD defines the duration of account statement period.(e.g. If ACC_STMT_PERIOD=1 then duration is 1 month).
- If UTIL_PROV_ACC_SEND='Y' means for utility payment we have to send the account number in 102 field. If UTIL_PROV_ACC_SEND='N' then Oracle FLEXCUBE will send the provider id not an account number.
- BLOCK_EXP_DAYS defines the number of days for amount block. (E.g. If BLOCK_EXP_DAYS =30 then after 30 days the amount block on the account expires). Block expiry days will also be used to calculate the purge date for switch transaction.

- MAX_RETRY_COUNT defines the number of times for Retail Teller transactions to try for a single transaction if it fails.
- If FCC_ACC_FROM_SWITCH='Y' then transaction account is same as Oracle FLEXCUBE account. If FCC_ACC_FROM_SWITCH='N' then transaction account is card account not Oracle FLEXCUBE account.
- If ONLY_PAN_FROM_SWITCH='Y' then transaction account is not mandatory in ISO request (i.e. No need to give card account or Oracle FLEXCUBE account in request).
- If ONLY_PAN_FROM_SWITCH='N' then in request transaction account is mandatory.

4. Function ID Glossary

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_TOC190005273 3-10
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