



---

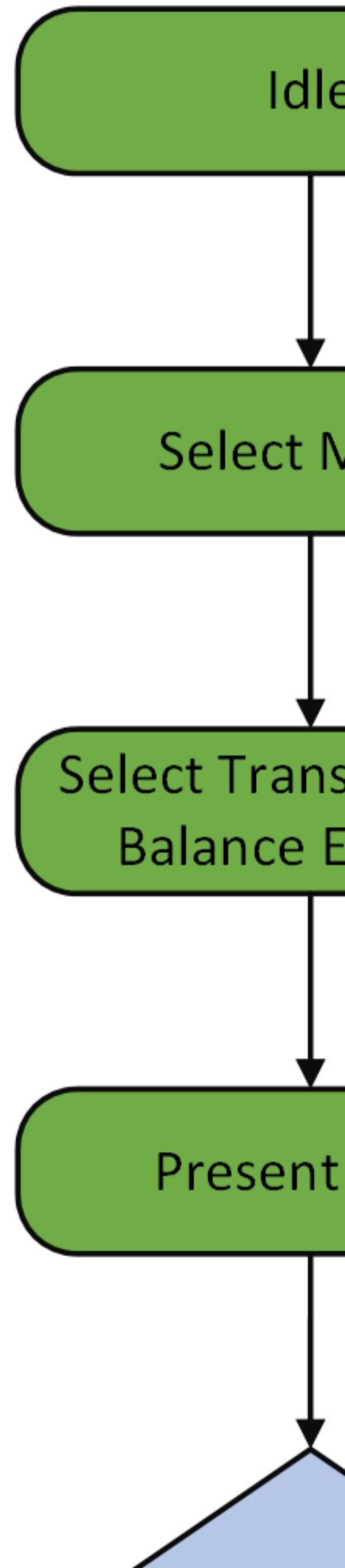
<https://verifone.cloud/docs/in-person-payments/global-payment-application-gpa/verifone-global-payment-application-10>

Updated: 16-Jan-2024

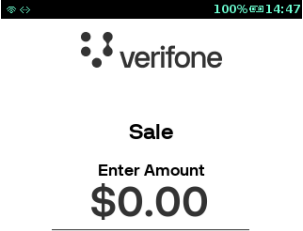
## **Balance Enquiry**

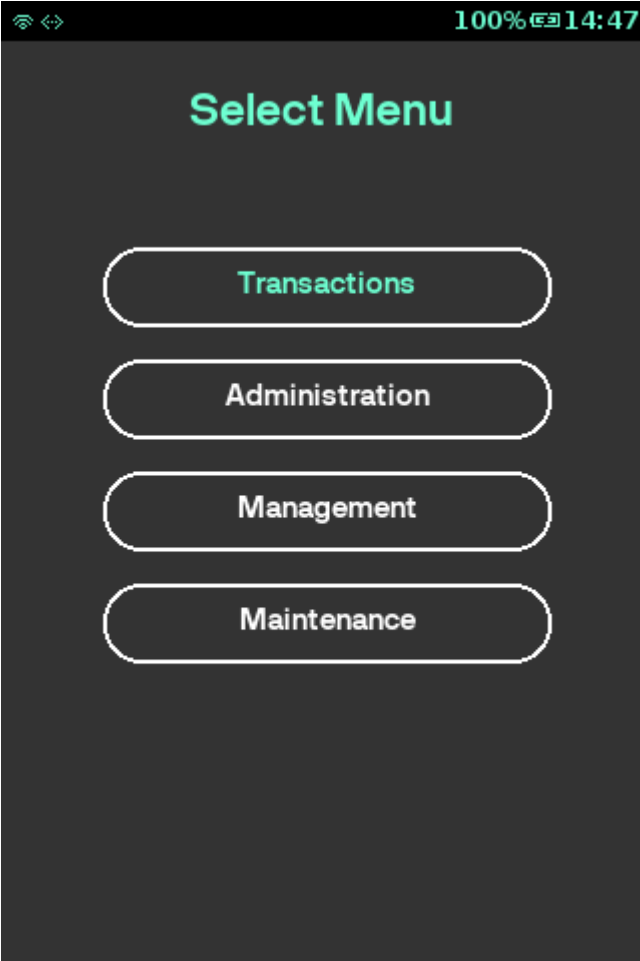
The Balance Enquiry transaction is performed to check the Balance of any given card.

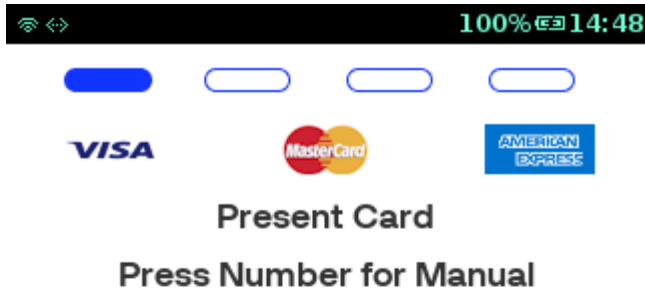


## **Activity**



# Sequence

Step	Screen	User Action	Te
1.0		Select menu button from the idle screen	Menu allows user to navigate transactions.

1.1		Select Transactions Menu and select <i>Balance Enquiry</i> .	<ul style="list-style-type: none"><li>Terminal Displays <i>Balance Enquiry</i> Tr</li><li>On selection of <i>Bal</i></li></ul>
-----	--	--	--

Step	Screen	User Action	Test Case
1.2	 <p>Present Card</p> <p>Press Number for Manual</p> 	<p>Insert chip card or swipe card or key-in card number or tap card.</p>	<ul style="list-style-type: none"> <li>• Merchant is prompted to enter card number.</li> <li>• For keyed-in/Manual entry, merchant is prompted to enter card number.</li> <li>• For swipe and valid card, merchant is prompted to enter card number, else to step 2.8.</li> <li>• For insertion/tap and valid card, merchant is prompted to enter card number, else to step 2.7.</li> <li>• On user timeout, prompt is displayed for user timeout period.</li> <li>• If user timeout period &gt; USER_ENTRY_TIMEOUT, merchant is prompted to enter card number.</li> <li>• For  key-in card number, merchant is prompted to enter card number.</li> </ul>



Enter Card Number

0000 0000 0000 0000 000

1.3

Enter the PAN number.

- Merchant is prompted to enter the card number.
- If the card number is not a valid card number, the merchant is prompted to enter the card number.

Cancel

Next



Enter Expiry

MM/YY

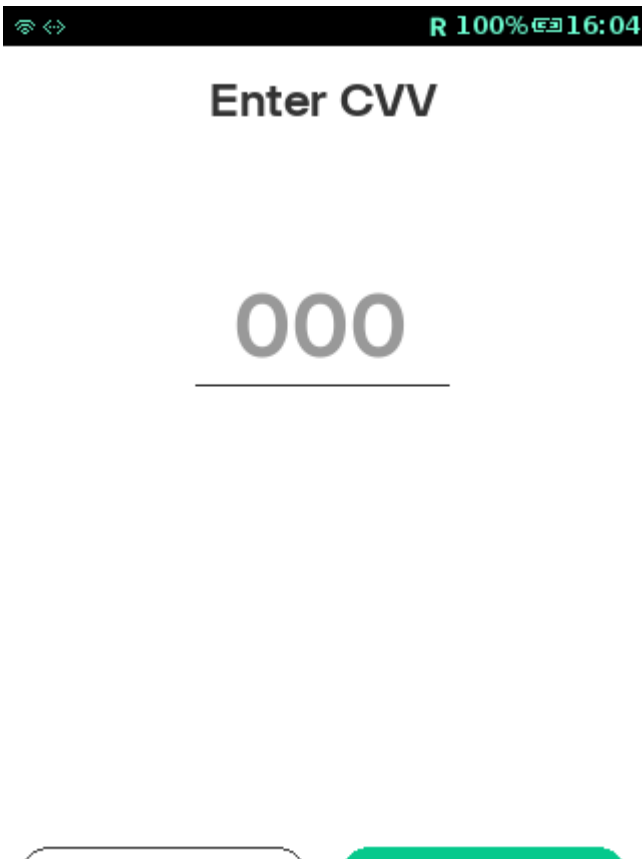



1.4

Enter Expiry Date.

- Terminal prompts t
- The expiry date che
- CONFIG.CARD.E
- feature is enabled.
- The provided date i
- month and year ran
- If expiry date is val
- proceed to step 1.5
- If expiry date valid

Cancel

Next

Step	Screen	User Action	Test Case
1.5		Enter CVV number or press  key to bypass.	<ul style="list-style-type: none"> <li>• If CVV number is correct</li> <li>• If  key is pressed</li> <li>• If  key is pressed</li> <li>• If user timeout happens</li> </ul>
1.7			

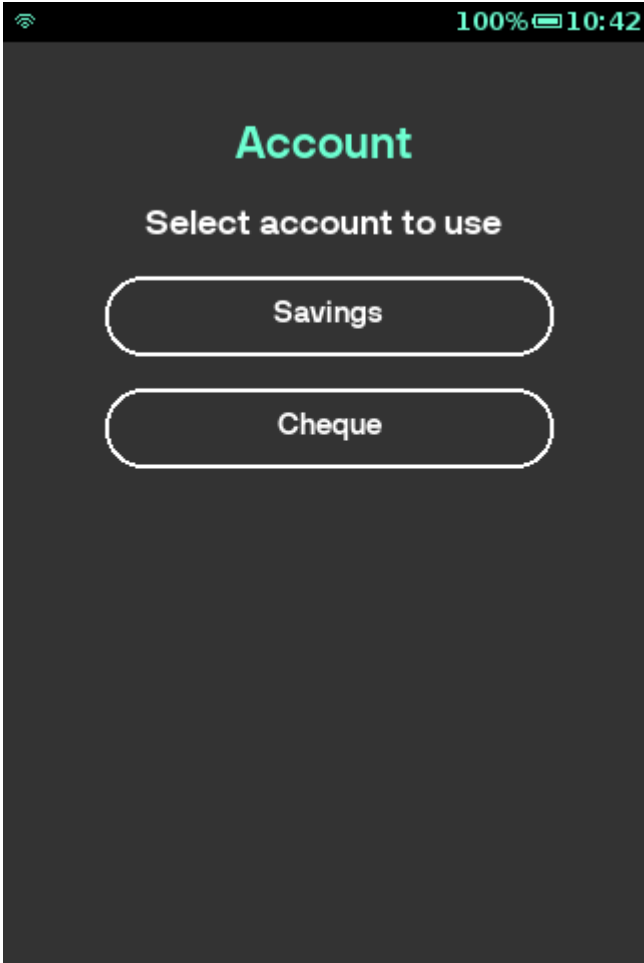
Step

Screen

User Action

Test Case

1.6



Select account type among savings/current/credit options.

On selection, Proceed to s





Card Present Mode

Card Present

Mail Order

Phone Order

1.7

Select card persent mode among  
card\_present/mail\_order/phone\_order On selection, Proceed to s  
options.

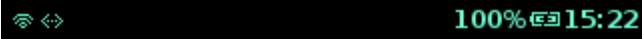
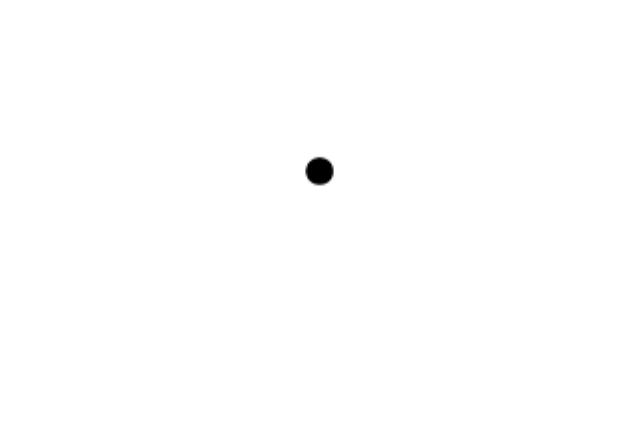


1.8

None.

Application initiates processing for step 1.8.

Please Wait  
Processing Now

Step	Screen	User Action	Test Case
			<ul style="list-style-type: none"><li>• On successful connection, the host transmits and receives data from the connected screen.</li><li>• For host approval, send the Balance Amount as a parameter.</li></ul>
1.9		None.	<p>TERMINAL- &gt;BALANCE_ENQUIRY</p> <ul style="list-style-type: none"><li>• Behaviour based on the parameter.</li></ul> <ol style="list-style-type: none"><li>1. If value is 0 - No Response</li><li>2. If value is 1 - Always proceed to step 2.1)</li><li>3. If value is 2 - Promptly respond (proceed to step 2.2)</li></ol> <ul style="list-style-type: none"><li>• For unsuccessful connection, display "communication failed"</li><li>• For host declined, Terminate the test.</li></ul>



2.0

Approved

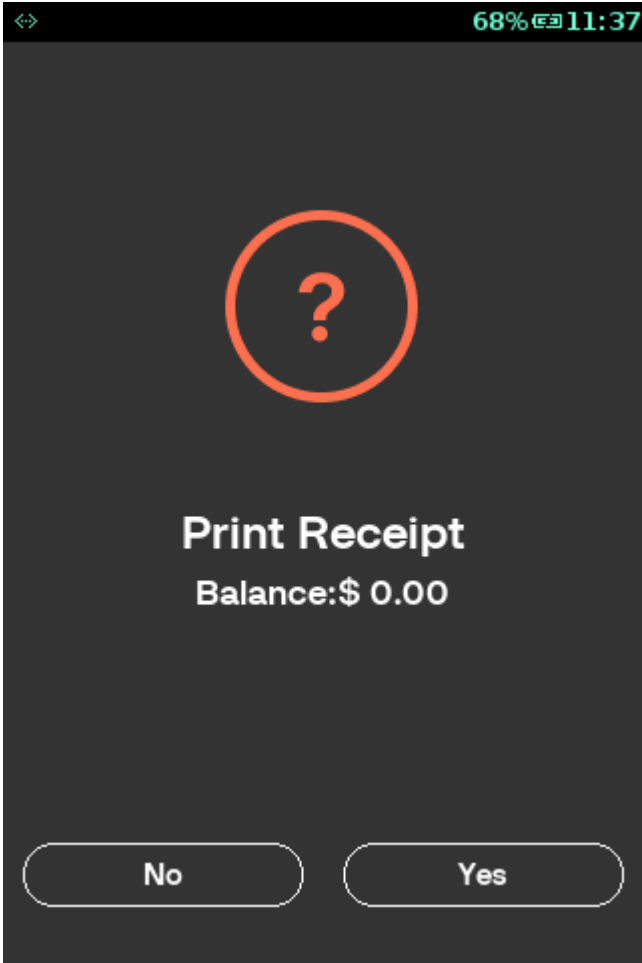
Balance:\$ 0.00

None.

- For Approved trans Available Balance

Ok

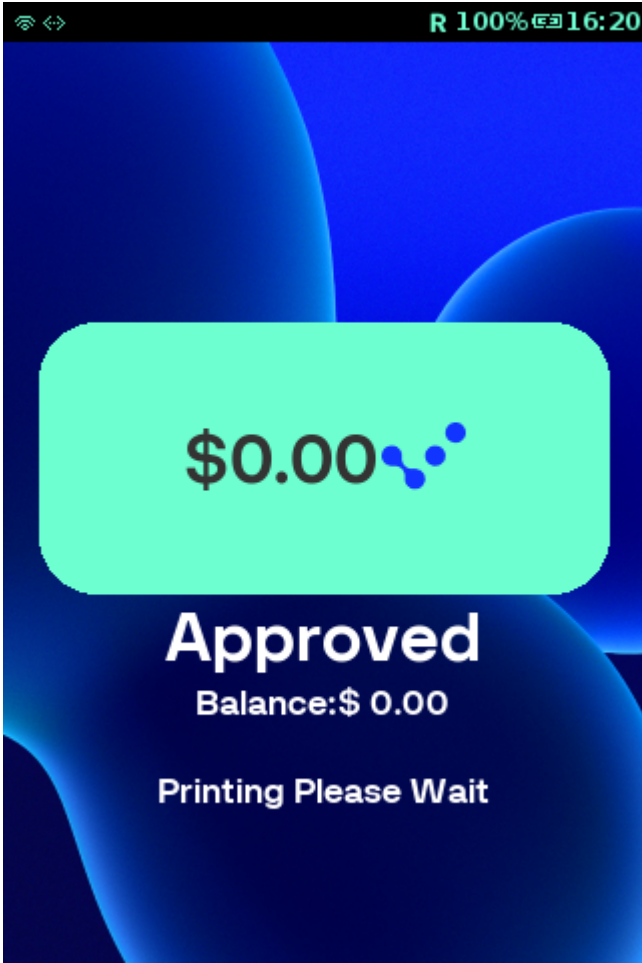
2.1



Select Yes or No to print the Merchant Copy

- For Approved transactions, the 'Print Receipt' option alone is sufficient.
- If yes is selected, then proceed to step 2.2.
- If No is selected, then proceed to step 2.3.

2.2



None.

- Display to inform user that receipt is printing.
- Same Screen is displayed for 5 seconds. Amount also.



2.3

Customer Copy

Selects yes or no to print the customer copy.

- If yes is selected then proceed to step 2.4
- If merchant doesn't select yes, then proceed to step 2.4

No

Yes



Please Remove Card



2.4


Remove chip card from terminal. If the Card is not removed in 10 seconds an audible beep informs the merchant to remove the card.

After finishing the transaction, the card is present/inserted in the terminal. The merchant must remove the chip card before

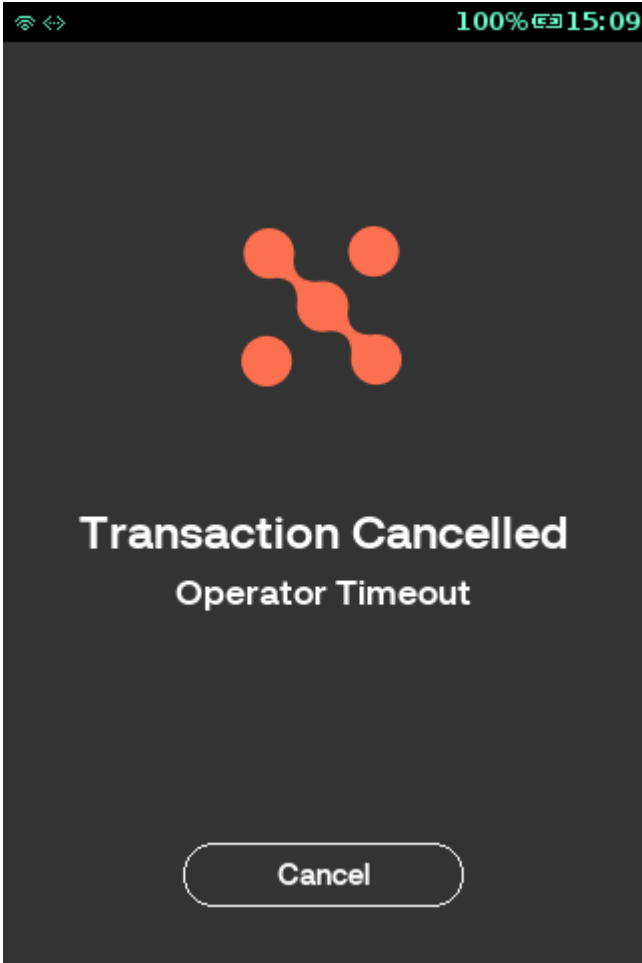



2.5

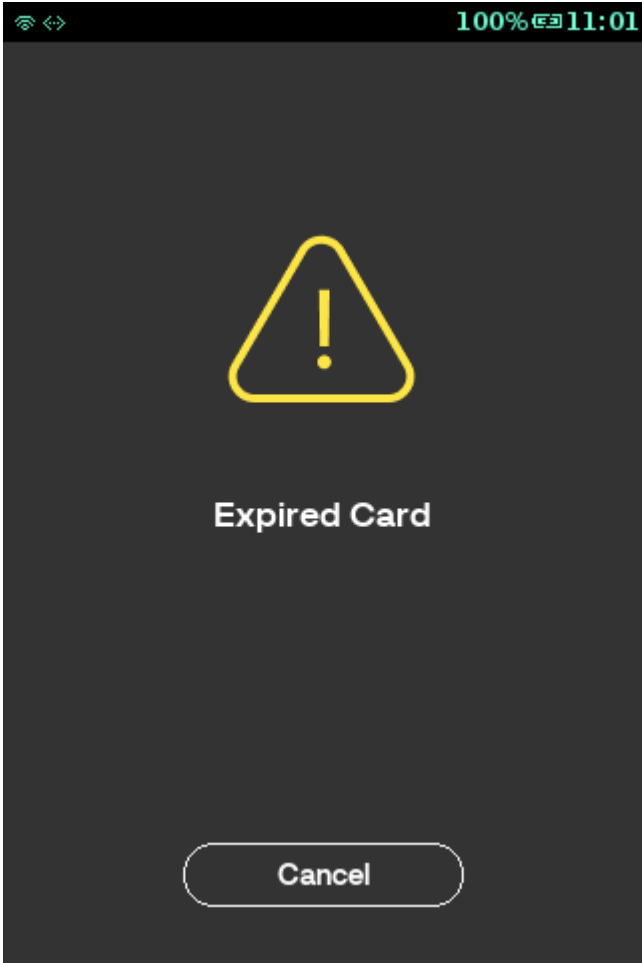

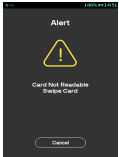



Press  key or user timeout. Goes back to to main men

2.6



Press  key or user timeout. Goes back to main menu

Step	Screen	User Action	Te
2.7		Press  key or user timeout. Goes back to step 1.1.	
2.8		Press  key or user timeout. Goes back to main menu	

## Business Rules

### 1. Enable Balance Enquiry Feature:

Balance Enquiry feature is configurable (enable / disable). Balance Enquiry Menu option gets displayed if the configuration `BALANCE_ENQUIRY_ENABLED` under Acquirer Features Table is enabled.

### 2. Card Technologies:

The card technologies are enabled/disabled based on the feature configurations. The feature flags are mentioned as below.

**TERMINAL->MANUAL\_ENTRY\_ENABLED**

**EMV\_TERM\_CONFIG->EMV\_ENABLED**

**EMV\_TERM\_CONFIG->CONTACTLESS\_ENABLED**

**CARD->LUHN\_CHECK\_ENABLED**

### 3. Manual Card Entry Prompt:

Manual card entry is configurable (enable / disable) The user is prompted to enter PAN manually on selecting the numeric key on “Present Card” screen.

The PAN number and its length is validated against the configuration. The configuration parameter is mentioned below.

**CARD->MAX\_PAN\_DIGIT** (value : 19)

**CARD->MIN\_PAN\_DIGIT** (value :12)

A prompt is displayed to capture the manual card entry details from the merchant. The below options can be configured for this screen based on the merchant’s requirement. If more than two options are configured a screen is presented to select the mode or the user is presented with a screen for Expiry and CVV details.

Screen prompted for selecting Card Present Mode



#### Card Present Mode

Three vertically stacked, rounded rectangular buttons with a blue border and a light gray background. The top button contains the text 'Card Present', the middle button contains 'Mail Order', and the bottom button contains 'Phone Order'.

Following are the supported prompts for Manual Card Entry mode:

- **Card Present**
- **Mail Order**
- **Phone Order**
- **ECS**
- **ECN**
- **RCUR**
- **Unspecified**

After selecting the desired option, user will be prompted to enter Expiry and Card Verification Value (CVV) details for the card.

The prompt for the Card Verification Value (CVV) is based on the config parameter CVV\_PROMPT\_MODE under the card table:

- Do not Prompt Card Verification Value (CVV) Always
- Prompt Always
- Prompt only when Card is not present

The Card Verification Value (CVV) details can always be skipped. If the CVV\_BYPASS\_REASON\_ENABLED is enabled in card features table, the application captures the reason for the Card Verification Value (CVV) skip. Card Verification Value (CVV) will be prompted in 4DBC prompt if the configuration FOURDBC\_PROMPT\_MODE under card table is enabled.

Below are the options shown to the user to select the reason for Card Verification Value (CVV) skipping.

- Not Provided
- Not Readable
- Not On Card

## **4. Non-Manual Card Entry Options:**

The card details in - Europay, MasterCard and Visa (EMV) Transaction: will be retrieved from the chip card.

- Magnetic Stripe Card (MSR) Transaction: will be retrieved on card swipe. The account types are displayed based on the feature configuration. The feature flags are mentioned as below.

**CARD->SAVINGS\_ENABLED**

**CARD->CHEQUE\_ENABLED**

**CARD->CREDIT\_ENABLED**

- Contactless Transaction: will be retrieved upon card tap.

## **5. Balance Enquiry Allowed:**

Balance inquiry transaction is allowed for the card presented and determine whether to continue the balance inquiry transaction or display “Not Allowed” alert in the terminal. Balance Enquiry transaction is allowed if the BALANCE\_ENQUIRY\_ENABLED under card features table is enabled.

## 6. Select and Load Acquirer:

Application data dictionary parameters influencing the business rule

Config	Rule
CONFIG_CARD_ACQUIRER_INDEX	Based on the selected card index, application loads the corresponding acquirer index. Which shall be used to load appropriate acquirer plugin. If the acquirer index is 0 and configuration has multiple acquire then user shall be prompted for the acquire selection, otherwise, first acquire is selected.
CONFIG_ACQUIRER_PASSIVE	Select the Active Acquirer to display, Discard Passive Type with value set to either 1 or Y

On successful acquire selection transaction data container would be updated with the following properties

- AcquirerID
- TerminalID
- MerchantID
- StanNo
- AcquirerIndex
- TxnNII
- AcquirerBatchNumber
- HostName

## 7. Host Connect:

Application uses the selected acquirer and invoke Application Programming Interface (API) **initAcquirer** so that the connection with the host can be established. On successful host connection is made the balance enquiry transaction is continued otherwise, transaction would be declined.

## 8. Receipt Printing:

Merchant copy is printed based on the configuration parameter. Customer copy printing can be cancelled by the user. The Parameter is BALANCE\_ENQUIRY\_PRINT\_RECEIPT\_OPTION under Terminal table.



# Configuration

Table Name	Configuration Field Name	Description	Type	Default Value	Min (Length)
Acquirer Feature Table	BALANCE_ENQUIRY_ENABLED	Allow Balance Enquiry.	Boolean	N	N/A
Terminal Table	MANUAL_ENTRY_ENABLED	Allow manual card entry.	Boolean	Y	N/A

Table Name	Configuration Field Name	Description	Type	Default Value	Min (Length)
Terminal Table	BALANCE_ENQUIRY_PRINT_RECEIPT_OPTION	Indicates what is to be done, after Balance Enquiry	Enumeration	0	N/A
		Print Always-1			
		Do not Print Receipt-0			
Terminal Table	USER_ENTRY_TIMEOUT	Prompt For user input to print receipt-2	Numeric	30	-1
		This field decides timeout in (secs) used in all user entry screen, if -1 means infinite.			
EMV Contactless Scheme Configuration Table	CONTACTLESS_ENABLED	The parameter is used to enable/disable CTLS; Y=Enable N=Disable.	Boolean	Y	N/A
EMV Contactless Scheme Configuration Table	EMV_ENABLED	Want to enable/disable EMV Y=Enable N=Disable.	Boolean	Y	N/A
Card Feature Table	CASH_ENABLED	Allow cash transaction.	Boolean	Y	N/A
Card Feature Table	LUHN_CHECK_ENABLED	Allow Luhn Check validation.	Boolean	Y	N/A
Card Feature Table	CVV_BYPASS_REASON_ENABLED	Allow CVV bypass reason selection.	Boolean	Y	N/A
Card Feature Table	EXPIRY_DATE_CHECK_ENABLED	Allow Expiry date validation.	Boolean	Y	N/A



Table Name	Configuration Field Name	Description	Type	Default Value	Min (Length)
Card Table	CVV_PROMPT_MODE	Indicates whether CVV entry is allowed during transaction	Enumeration	1	N/A
		Prompt always-1			
		Do not prompt-0			
Card Table	FOURDBC_PROMPT_MODE	Prompt when card not present-2	Enumeration	0	N/A
		Indicates whether FOURDBC prompt for CVV capture is allowed during transaction			
		Do not prompt-0			
Card Table	SAVINGS_ENABLED	Prompt-1	Boolean	0	N/A
		Allow Savings account.			
Card Table	CHEQUE_ENABLED	Allow Cheque transaction.	Boolean	0	N/A
Card Table	CREDIT_ENABLED	Allow Credit account.	Boolean	1	N/A
Card Table	MIN_PAN_DIGIT	Indicates the minimum length for the PAN in this range.	Numeric	12	0
Card Table	MAX_PAN_DIGIT	Indicates the maximum length for the PAN in this range.	Numeric	19	0