



Hosted Credit and Debit Card Forms Implementation Guide

Merchant implementation instructions to integrate to the Setcom's hosted credit and debit card forms. Covers: fraud screening, Verified by Visa, MasterCard SecureCode integration and card authorisation, settlement and refund.

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Summary of Revisions

Version	Date	Changed By	Changes Made
2.0.0	9 September 2010	HL van Staden	Original document is created.
2.0.1	20 October 2010	D Liu	Addition of Amex & Diners details.
2.0.2	02 November 2010	HL van Staden	Addition of URL variables to Return URL.
2.0.3	30 December 2010	D Liu	Replaced test credit card 4111...1111 with 4000...0010
2.0.4	17 Mar 2011	D Liu	Brandid change on page 13. American Express then Diners

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Overview

This document provides technical implementation instructions that will guide the merchant in integrating to the Setcom Hosted Credit and Debit Card Forms.

This document will cover the following.

1. Processing credit cards.
2. Processing debit cards.
3. Fraud screening.
4. Verified by Visa and MasterCard Secure Code integration.

The Setcom Hosted Credit and Debit Card Forms are used by merchants who do website sales, content providers, call centre payments and subscription runs.

Merchant Requirements

Merchants need to apply for an *E-Commerce Merchant Account* with one of the following banks.

- ABSA
- First National Bank
- Standard Bank of South Africa

Setcom will assist where possible with the application process. The application process usually takes between 2 and 6 weeks to complete.

Once the merchant account has been obtained, the merchant can process Visa and MasterCard transactions. In order to accept American Express and Diners cards, the merchant need to contact these card institutions directly to apply for additional merchant facilities. Contact details are:

- American Express Merchant Department: 011 359 0200
- Diners Merchant Department: 011 358 8400

Once the above institutions have issued you with merchant IDs, please submit them to both your bank and Setcom for loading.

Because Setcom collects all the buyer information securely from the hosted credit and debit card forms, the merchant does not need to buy a SSL certificate.

Merchant Admin Interface – Commerce Manager

A secure web interface called the **Setcom Commerce Manager** is available to merchants for reporting, monitoring and account configuration.

To access to the Setcom Commerce Manager please visit the below URL in your browser:

<https://manager.setcom.co.za/>

Always ensure you enter your login details on a secure URL starting with **https**.

Login details for the Setcom Commerce Manager will be issued to you once the Setcom Subscription Agreement has been completed and the merchant account has been loaded on the system. The initial login created will be the account administrator. The account administrator will be able to create additional user accounts and control access to what each new account can see and do.

Verified by Visa and MasterCard SecureCode

Setcom uses the Verified by Visa and MasterCard SecureCode programs as an added layer of protection and card holder authentication. References to **3D Secure** and the **3D Secure Programs** refer to the Verified by Visa and MasterCard SecureCode programs combined.

Both these programs apply to credit card processing only. Debit cards are not affected by these programs.

Debit card transactions are still however protected by the buyer PIN.

Credit Card Settlement

The Setcom system can mark a credit card funded transaction for settlement in two ways.

1. Automatic Settlement ON: Any approved credit card transaction will automatically be marked for settlement. Merchants will see the money of credit card funded transactions in their bank account within 1 to 2 business days after settlement.
2. Automatic Settlement OFF: If a credit card transaction is approved, the funds will not be automatically marked for settlement. Funds for the transaction will be reserved on the buyer's credit card for 7 days. The card holder will not be able to use the reserved funds on his credit card for 7 days after authorization. It is up to the merchant to perform a manual settlement request to the Setcom server for partial or full settlement of the funds. Merchants will see the money of credit card funded transactions in their bank account within 1 to 2 business days after settlement.

Merchants can use the Setcom Commerce Manager to manage funds and orders. The Commerce Manager allows the merchant to settle, refund and re-authorize orders.

Debit card funded transactions will always automatically be marked for settled. Debit card funded transactions will appear in your bank account 1 to 2 business days after settlement.

Credit Card Transaction Flow

1. The buyer visits the merchant website to purchases goods or services.
2. The buyer is redirected to the Setcom hosted credit and debit card pages.
3. Setcom collects the credit card details from the buyer using a SSL secured page, including the card number, expiration date and CVV.
4. If the 3D Secure program is not enabled on the merchant account (for example MOTO merchants) or the buyer is not enrolled in the 3D Secure program (for example Diners and American Express cards), Setcom will perform an authorization request to the bank and display the transaction receipt to the buyer.

5. If the 3D Secure program is enabled on the merchant account and the buyer is enrolled in the 3D Secure program, Setcom will redirect the buyer to a URL hosted by the issuing bank. The buyer can now securely complete authentication on the issuing bank's website without compromising his 3D Secure password.
6. After successful card holder authentication on the issuing bank's website, the buyer will be redirected back to the Setcom hosted pages.
7. Setcom will perform an authorisation request to the bank, and include the correct ECI, CAVV and XID parameters for 3D Secure.
8. Setcom will return the transaction result to the merchant via the merchant's confirmation and/or redirect URLs.

Debit Card Transaction Flow

1. The buyer visits the merchant website to purchases goods or services.
2. The buyer is redirected to the Setcom hosted credit and debit card pages.
3. Setcom collects the debit card details from the buyer using a SSL secured page, including the card number and expiration date (**no CVV or PIN is collected**) and the card holder's mobile number.
4. Setcom initiates a session with the card holder's mobile handset to collect the card CVV and PIN.
5. The buyer enters his card CVV and PIN using his mobile handset.
6. Setcom bundles this information with the already collected information and send an authorisation request to the bank.
7. Setcom updates the transaction status with the bank response.
8. Setcom displays the order receipt to the buyer.
9. Setcom will return the transaction result to the merchant via the merchant's confirmation and/or redirect URLs.

Hosted Pages

Setcom offers 4 basic versions of the hosted credit and debit card forms.

All forms described below are located on the following domain.

<https://secure.setcom.co.za/>

Buyers can be redirected to the hosted forms using a HTTPS form post or URL redirect.

Feature	CreditCard.cfm	CreditCard2.cfm	CCAmountOpen.cfm	CCOpen.cfm
Collect card details	Yes	Yes	Yes	Yes
Collect buyer details	No	Yes	Yes	No
Supports fraud screening	Yes ¹	Yes	Yes ²	Yes
Supports Secure 3D	Yes	Yes	Yes	Yes
Merchant specifies	Yes	Yes	No	No

transaction amount				
Buyer specifies transaction amount	No	No	Yes	Yes

¹ and ²: Fraud screening can only be fully supported on these forms when the buyer information is passed to Setcom in the buy button post.

Buy Button Field Names

The buy button field names are included below. For the CCAmountOpen.cfm and CCOpen.cfm page, the CC_Amount field can be omitted.

FIELD NAME	REQUIRED	MAX LENGTH	DESCRIPTION
CO_ID	Yes	50	Value issued to merchant by Setcom used to identify company on system.
OUTLET	Yes	50	Value issued to merchant by Setcom used to identify outlet on system.
Reference	Yes	250	Value generated by the merchant system to keep track of this transaction. This value will be passed back to the merchant in the transaction response. This value will appear on all merchant reports and will be used by the merchant for reconciliation purposes. Setcom strongly urges merchants to use a unique value per transaction for this field.
CC_Amount	Yes ³	Decimal(18,2)	Value of the transaction in decimal format, e.g. 19500.70
EmailAddress	No	250	Email address of card holder. Used for fraud screening purposes. We do not use this address to communicate with your buyers neither do we sell or share this information.
MobileNumber	Yes (for debit card)	12	This is the mobile number of the debit card holder. The RevoPIN will be sent to this mobile number for the transaction.
buyer_id	No	100	Unique ID created for this buyer on the merchant system.
ship_title	No	10	Title of the order recipient.
ship_first_name	No	500	First name of the order recipient.
ship_last_name	No	500	Last name of the order recipient.
ship_street1	No	500	Street address 1 of the order recipient.
ship_street2	No	500	Street address 1 of the order recipient.
ship_city	No	500	City or town of the order recipient.
ship_state	No	500	State or province of the order recipient.
ship_zip	No	500	Zip or postal code of the order recipient.
ship_country	No	2	ISO 3166 Country code of the order recipient, see Appendix A: ISO 3166 Country Codes.
ship_phone	No	500	Telephone number of the order recipient.
bill_title	No	10	Title of the buyer.

bill_first_name	No	500	First name of the buyer.
bill_last_name	No	500	Last name of the buyer.
bill_street1	No	500	Street address 1 of the buyer.
bill_street2	No	500	Street address 2 of the buyer.
bill_city	No	500	City or town of the buyer.
bill_state	No	500	State or province of the buyer.
bill_zip	No	500	Zip or postal code of the buyer.
bill_country	No	2	ISO 3166 Country code of the order billing address, see Appendix A: ISO 3166 Country Codes.
bill_phone	No	500	Telephone number of the buyer.

³ – The CC_Amount field is only required for the CreditCard.cfm and CreditCard2.cfm pages.

Sample Buy Buttons

Below are a variety of sample buy buttons used to illustrate the different options available.

Sample 1

The following button will submit the buyer to creditcard.cfm. The buyer and credit or debit card details will be collected on the form.

```
<FORM METHOD="POST" ACTION=https://secure.setcom.co.za/creditcard.cfm>
  <INPUT TYPE="HIDDEN" NAME="CO_ID" VALUE="testaccount" />
  <INPUT TYPE="HIDDEN" NAME="OUTLET" VALUE="testaccount" />
  <INPUT TYPE="HIDDEN" NAME="Reference" VALUE="PRO-001" />
  <INPUT TYPE="HIDDEN" NAME="CC_Amount" VALUE="10.00" />
  <INPUT TYPE="SUBMIT" VALUE=" Pay Now " />
</FORM>
```

Sample 2

The following button will submit the buyer to creditcard2.cfm. Only the credit or debit card details will be collected on the form.

```
<FORM METHOD="POST" ACTION=https://secure.setcom.co.za/creditcard2.cfm>
  <INPUT TYPE="HIDDEN" NAME="CO_ID" VALUE="testaccount" />
  <INPUT TYPE="HIDDEN" NAME="OUTLET" VALUE="testaccount" />
  <INPUT TYPE="HIDDEN" NAME="Reference" VALUE="PRO-002" />
  <INPUT TYPE="HIDDEN" NAME="CC_Amount" VALUE="1552.95" />
  <INPUT TYPE="SUBMIT" VALUE=" Pay Now " />
</FORM>
```

Sample 3

The following button will submit the buyer to creditcard2.cfm. Only the credit or debit card details will be collected on the form, but the merchant is passing the buyer information to the credit card in the back-end.

```
<FORM METHOD="POST" ACTION=https://secure.setcom.co.za/creditcard2.cfm>
  <INPUT TYPE="HIDDEN" NAME="CO_ID" VALUE="testaccount" />
  <INPUT TYPE="HIDDEN" NAME="OUTLET" VALUE="testaccount" />
  <INPUT TYPE="HIDDEN" NAME="Reference" VALUE="PRO-002" />
  <INPUT TYPE="HIDDEN" NAME="CC_Amount" VALUE="1552.95" />
```

```

<INPUT TYPE="HIDDEN" NAME="bill_title" VALUE="Mr" />
<INPUT TYPE="HIDDEN" NAME=" bill_first_name" VALUE="John" />
<INPUT TYPE="HIDDEN" NAME=" bill_last_name" VALUE="Doe" />
<INPUT TYPE="HIDDEN" NAME=" bill_street1" VALUE="10 Church Street" />
<INPUT TYPE="HIDDEN" NAME=" bill_street2" VALUE="Rivonia" />
<INPUT TYPE="HIDDEN" NAME=" bill_city" VALUE="Johannesburg" />
<INPUT TYPE="HIDDEN" NAME=" bill_state" VALUE="Gauteng" />
<INPUT TYPE="HIDDEN" NAME=" bill_zip" VALUE="2199" />
<INPUT TYPE="HIDDEN" NAME=" bill_country" VALUE="ZA" />
<INPUT TYPE="HIDDEN" NAME="ship_title" VALUE="Mr" />
<INPUT TYPE="HIDDEN" NAME="ship_first_name" VALUE="John" />
<INPUT TYPE="HIDDEN" NAME="ship_last_name" VALUE="Doe" />
<INPUT TYPE="HIDDEN" NAME="ship_street1" VALUE="10 Church Street" />
<INPUT TYPE="HIDDEN" NAME="ship_street2" VALUE="Rivonia" />
<INPUT TYPE="HIDDEN" NAME="ship_city" VALUE="Johannesburg" />
<INPUT TYPE="HIDDEN" NAME="ship_state" VALUE="Gauteng" />
<INPUT TYPE="HIDDEN" NAME="ship_zip" VALUE="2199" />
<INPUT TYPE="HIDDEN" NAME="ship_country" VALUE="ZA" />

<INPUT TYPE="SUBMIT" VALUE=" Pay Now " />
</FORM>

```

Sample 4

The following button will submit the buyer to `CCAmountOpen.cfm`. The buyer and credit or debit card details will be collected on the form. Note that the **CC_Amount** is not included in the message.

```

<FORM METHOD="POST" ACTION=https://secure.setcom.co.za/CCAmountOpen.cfm>
  <INPUT TYPE="HIDDEN" NAME="CO_ID" VALUE="testaccount" />
  <INPUT TYPE="HIDDEN" NAME="OUTLET" VALUE="testaccount" />
  <INPUT TYPE="HIDDEN" NAME="Reference" VALUE="PRO-002" />
  <INPUT TYPE="SUBMIT" VALUE=" Pay Now " />
</FORM>

```

Consistent

An additional consistent field can be included in the transaction request to ensure the request originated from the merchant and no fields were changed.

Before implementing the consistent field, Setcom will generate a new secret key for the merchant. This secret key must not be shared with anyone and must only be known to the merchant and Setcom.

The consistent field is generated by concatenating selected message request fields. A secret **consistent key**, known only to the merchant and Setcom, is then appended to newly created string. The combined string is then hashed and included in the transaction request message to Setcom.

Please note that the consistent key is never included in the transaction message in the clear.

After Setcom receives the transaction message request, Setcom will in turn build its own version of the consistent field, using the selected message request fields and the secret key from the Setcom database.

If the merchant submitted consistent value matches the Setcom generated consistent value, Setcom will process the transaction request. If the two consistent values do not match, Setcom will reject the transaction request.

Please ensure that your system uses unique merchant Reference values.

How to generate the *Consistent Field*

1. The following transaction request message fields need to be concatenated first.
 - a. CO_ID
 - b. OUTLET
 - c. Reference
 - d. CC_Amount
2. Once a string has been generated using the above fields, append the secret consistent key to the string.
3. Apply a MD5 hashing algorithm to the newly generated string. Remember to use UTF-8 encoding.
4. The newly generated hash will always be an all uppercase string.

Sample Consistent Values

Sample 1.

CO_ID: testaccount
 OUTLET: testaccount
 Reference: PRO_001
 CC_Amount: 10.00
 Consistent Key:
 ntVAb33o2mTf1oG6qa5H2GyhfiF3kiz3ywwovxJMK0VwWwDe0srWbauGWWOsW9s

Sample 2.

CO_ID: testaccount
 OUTLET: testaccount
 Reference: F1197C71FEFB61462E0
 CC_Amount: 199.95
 Consistent Key:
 9bcdJgxrF7oBThRSK0hN48mrJqwuAu4LgblyEcDcLxJUQOHPlrEc1pF7AbVzSLw

Sample 3.

CO_ID: TestAccount * *Note the capitalization*
 OUTLET: TestAccount * *Note the capitalization*
 Reference: E4-2232-EEE-934
 CC_Amount: 80 * *Setcom will use the field in the same format as sent by the merchant*
 Consistent Key:
 9bcdJgxrF7oBThRSK0hN48mrJqwuAu4LgblyEcDcLxJUQOHPlrEc1pF7AbVzSLw

Merchant Notification

The merchant can receive notification of approved and declined transactions via two interfaces.

1. Return URL
2. Confirmation URL

Both these URLs can be changed from the Setcom Commerce Manager. After an internal approval process the URLs will be changed on the live system.

Note: Setcom recommends that both of the notification methods are implemented in order to lower the risk of failure in regards to not having received notifications.

Return URL

Merchants can configure a URL where buyers will be redirected to after a successful payment. The merchant is responsible for displaying the order receipt to the buyer. Variables will be returned to the merchant's website as URL variables.

Message Fields

The following fields will be returned to the merchant on the Redirect URL.

Element	Field Name	Description
1	ordernumber	A unique Setcom Order ID created for the order.
2	amount	The transaction amount of the order in normal decimal format, e.g. 19995.50.
3	authnumber	Authorization number as returned from the bank.
4	reference	Value generated by the merchant system to keep track of this transaction. This value will appear on all merchant reports and will be used by the merchant for reconciliation purposes. Setcom strongly urges merchants to use a unique value per transaction for this field.
5	brandid	The brand ID of the source of funds, valid values are: <ul style="list-style-type: none"> • Visa • MasterCard • American Express • Diners

Confirmation URL

Merchants can configure a URL where order notifications will be posted to. This process does not redirect the buyer's browser and will still occur even when the buyer closes his browser window. Output generated on this URL will thus not be displayed to the buyer. Variables will be returned to the merchant's website as FORM variables.

Message Fields

The following fields will be returned to the merchant on both the Redirect and Confirmation URL.

Element	Field Name	Description
1	Outcome	The transaction outcome of the transaction. Valid responses are: <ol style="list-style-type: none"> 1. Approved 2. Declined 3. Error <p>Please ensure that this field is not checked with case sensitivity.</p>

		I.e.: "Approved" is the same as "APPROVED".
2	ErrorNumber	The decline or error code of the transaction if the outcome response element is not approved. A response code of 0 (zero) indicates an approved transaction.
3	OrderNumber	A unique Setcom Order ID created for the order.
4	Amount	The transaction amount of the order in normal decimal format, e.g. 19995.50.
5	Reference	Value generated by the merchant system to keep track of this transaction. This value will appear on all merchant reports and will be used by the merchant for reconciliation purposes. Setcom strongly urges merchants to use a unique value per transaction for this field.
6	BrandID	The brand ID of the source of funds, valid values are: 1 – Visa 2 – MasterCard 3 – Diners 4 – American Express

Polling Transaction Status

Poll status cause:

1. Timeout or break in communication between merchant and Setcom.
2. Non real-time transaction, where buyer has to complete an external process before the transaction can be approved/decline.

Merchants can poll the transaction status using the **card_order_query** method in the **Order Query Web Service**. The web service WSDL file is located at the below URL:

<https://secure.setcom.co.za/server/api.cfc?wsdl>

(If your programming language does not support web service implementations; please contact customer service to discuss different implementation options).

Ensure that you always connect to the secure URL (https). This will ensure the communication between the merchant and the Setcom server is encrypted.

When calling the **card_order_query** method the merchant needs to supply a XML request string to the method. The XML request string will contain the merchant's login details as well as a list of order reference numbers and amounts the merchant wants to query on the Setcom system.

A sample XML request string is included below.

```
<?xml version="1.0" encoding="UTF-8"?>
<card_order_query_request>
  <merchant>
    <co_id>testaccount</co_id>
    <outlet>testaccount</outlet>
    <uname>testaccount</uname>
```

```

        <pwd>testaccount</pwd>
    </merchant>
    <query>
        <order>
            <reference>REF-001-001</reference>
            <amount>10.00</amount>
        </order>
        <order>
            <reference>REF_001-002</reference>
            <amount>20.00</amount>
        </order>
        <order>
            <reference>REF_001-003</reference>
            <amount>30.00</amount>
        </order>
    </query>
</card_order_query_request>

```

XML Element	Required	Description
card_order_query_request	Yes	Root element of the XML request string.
merchant	Yes	Element containing the merchant login and account details.
co_id	Yes	Value issued to merchant by Setcom used to identify company on system.
outlet	Yes	Value issued to merchant by Setcom used to identify outlet on system.
uname	Yes	Outlet username of user who has access to merchant reporting.
pwd	Yes	Outlet password of user who has access to merchant reporting.
query	Yes	Element containing a record per order that is being queried.
order	Yes	Element containing the order details of the order being queried.
reference	Yes	The merchant reference number created and submitted by the merchant in the original Setcom remote API request.
amount	Yes	The transaction amount submitted the merchant in the original Setcom remote API request.

Remote Settlement and Refund

Setcom provides a remote interface that merchants can use to remotely process settlement and refund messages on already authorised orders.

Restrictions

1. A merchant can perform partial settlements, as long as the sum of all the partial settlements does not exceed the original authorisation amount.
2. A merchant can perform partial refunds, as long as the sum of all the partial refunds does not exceed the original authorisation amount.

3. An approved authorisation request will reserve the funds on the credit card for 7 days only.
Any settlement requests need to be done within 7 days of the original authorisation.
4. Refunds can only be processed for 6 months after the original settlement date.

Request Format

To perform a remote settlement or refund request the merchant has to perform a HTTPS post operation to the below URL.

<https://manager.setcom.co.za/captures2s.cfm>

The following fields are required to perform a remote settlement.

Field Name	Required	Description
CO_ID	Yes	Value issued to merchant by Setcom used to identify company on system.
OUTLET	Yes	Value issued to merchant by Setcom used to identify outlet on system.
OrderID	Yes	Unique Order ID generated by Setcom and returned to the merchant in the initial transaction response.
TnxType	Yes	Text value indicating transaction request action: <ol style="list-style-type: none"> 1. SHIP 2. REFUND 3. CANCEL Only orders that have not been settled can be cancelled. This just mrks the transaction as cancelled (unable to settle later) in the system.
Amount	Yes	The transaction request amount. If this is a partial settlement or refund, the amount needs to be smaller than the original authorisation amount. If the full amount needs to be settled, populate the full authorisation amount in decimal format excluding any currency symbol, e.g. 19999.99.
Username	Yes	Merchant username as issued to the merchant on signup. The merchant can create additional user account in the Commerce Manager.
Password	Yes	The password of the above username.

Response Format

The Setcom response will always be in the form of a 9 element comma separated list. Each element in the list contains the response variables as laid out in the below table.

Element	Field Name	Description
1	Outcome	String value representing the transaction response outcome . See the below section called "Response Outcome" for a more detailed explanation of what this field means.
2	Error Code	If the transaction request is not approved, this field will contain the error code. For approved transactions this field will simply contain the text APPROVED . Please ensure that this field is not checked with case sensitivity. I.e.: "Approved" is the same as "APPROVED".
3	Authorisation Number	If this transaction request is approved, this field will contain the bank authorisation number. For transactions not approved this field will contain the text "0" (zero).
4	Date	Transaction date as on the Setcom server in format dd-mmm-yy.

5	Time	Transaction time as on the Setcom server in format HH:mm tt.
6	Setcom Order ID	Unique Setcom ID created for this order. In some cases this field will return a 0 (zero) if no order could be created on the Setcom system, e.g. when the CO_ID or OUTLET values are invalid.
7	Transaction Key	Transaction key as generated by the bank. A uniq transaction key is generated per auth/settlement pair and per refund.
8	Transaction Type	This field will contain the below text depending on the transaction type submitted: <ol style="list-style-type: none"> 1. SHIP 2. REFUND 3. CANCEL
9	Amount	The transaction request amount in decimal format excluding any currency symbol, e.g. 19999.99.

Response Outcome

1 st Response Element	2 nd Element Will Contain...	Comment
APPROVED	Authorisation number	Bank authorisation number as returned by the bank on the authorisation request. Please ensure that this field is not checked with case sensitivity. I.e.: "Approved" is the same as "APPROVED".
DECLINED	Decline code	Decline code from bank; see Appendix B – Error and Decline Codes for an explanation of the decline code.
ERROR	Error code	Error code from Setcom or processor; see Appendix B – Error and Decline Codes for an explanation of the decline code.

A few sample response strings are included below for explanations purposes. The first sample is that of an approved settlement message. Note that element one contains the word **APPROVED** and the third element contains the bank authorisation number **123456**.

APPROVED, APPROVED,123456,2-Sep-2010,14:16 PM,10069707,STK123123123,SHIP,12.95

The sample string below depicts a typical error, that of an invalid OrderID parameter. Note that element one of the response string contains the word **ERROR** and the second element thus contains the error code, in this case **32057**, meaning Invalid Card Number.

ERROR,614,0,3-Feb-2010,14:17 PM,10069708,0,SHIP ,850.00

Open Source Modules

Setcom currently provides modules for the below open-source shopping cart systems.

1. osCommerce
2. Joomla / VirtuaMart
3. ZenCart

For more information regarding these modules and to download modules, please visit our **Getting Started** section on www.setcom.co.za

If a module for your shopping cart is not listed here, please send through a request to customer services (contact details are included at the bottom of this document or on www.setcom.co.za).

Testing

Live Mode vs. Test Mode

Setcom allows for an account to be placed into test mode which has the implication that **every** transaction will be Approved, regardless of the information passed. If in test mode, the authorization number will be "123456" and the bank transaction key will be "LoopBack". When in this mode, no real transactions will ever be processed.

It is **extremely important** that you make certain that your account is in **live mode** before you proceed going live. If this is not done and your account is in test mode when you go live, it will result in clients being able to process live transactions without paying you.

Please note that to both enter and to leave test mode it is required to have the contract holder make the request to support@setcom.com.

Test Account Details

To test please use the below details or contact support@setcom.com for a test account.

- CO_ID: testaccount
- OUTLET: testaccount
- Username: testaccount
- Password: testaccount

This is a public testing account so please refrain from using real credit or debit card details. For testing please use any of the below card numbers. These are test card numbers only, intended to be used by developers to test their implementation.

Credit Card

Visa			
Test Buyer VS1	4000 0000 0000 0010	11-2020	111
Test Buyer VS2	4444 3333 2222 1111	11-2020	111
Test Buyer VS3	4000 0000 0000 0002	11-2020	111
MasterCard			
Test Buyer MC1	5454 5454 5454 5454	12-2020	222
Test Buyer MC2	5566 5566 5566 5566	12-2020	222

Test Buyer MC3	5555 5555 5555 4444	12-2020	222
Diners			
Test Buyer DC1	3600 0000 0000 08	11-2020	Na
Test Buyer DC2	3020 4169 3226 43	11-2020	Na
Test Buyer DC3	3056 9309 0259 04	11-2020	Na
American Express			
Test Buyer AX1	3434 3434 3434 343	12-2020	1111
Test Buyer AX2	3411 1111 1111 111	12-2020	1111
Test Buyer AX3	3400 0000 0000 009	12-2020	1111

Debit Card

Visa			
Test Buyer DB VS1	4917 3000 0000 0008	11-2020	444
Test Buyer DB VS2	4917 3008 0000 0000	11-2020	444
MasterCard			
Test Buyer DB MC1	5641 8200 0000 005	12-2020	555

Transactions done in test mode will always return an authorisation number of **123456** and a transaction key of **LoopBack**.

Appendix A - Error Codes

Please contact customer services if you require this list in a machine readable format, e.g. CSV (comma-separated-values).

Error Code	Description
10000	Processing error
10101	One or more compulsory field(s) missing
10102	The merchant / outlet could not be found on the system
10103	Merchant requires consistent checking to be done
10104	Security failure occurred while performing consistent checking
10105	Payment method not accepted by outlet
10106	Merchant inactive
10107	File missing on server
10108	Missing variable
10109	Unknown error occurred
10110	Card blacklisted
10201	Transaction amount invalid
10202	Expiry month invalid
10203	Expiry year invalid
10204	PayPeriod invalid
10205	Transaction amount too small
10206	Email address invalid.
10207	Original transaction date of out of range
10301	Unable to retrieve order information
10302	Base table not found
10303	Column not found
10304	Syntax error or access violation
10305	Error in assignment
10306	Serialization error occurred
10307	General exception error occurred
10308	Communication link failure
10309	Datasource not found or no default driver specified
10310	Numeric value out of range
10311	Authorisation failure
10312	Call to the bank failed.
10313	Fully-qualified address and the socket has not been marked to allow address reuse.
10401	Invalid Gateway call
10402	Verification unavailable
10403	Error occurred while attempting verification.
10404	Signature validation error occurred
10405	Transaction not authenticated.
10406	The transaction requires the verification data to be included in the message.
10407	Unable to verify card holder.
16001	Invalid transaction type
16002	Invalid storename
16003	Card number or CVV blank/incorrect

16004	Transaction amount zero
16005	Card number in invalid format
16006	Card number in invalid format
16008	Invalid or missing config
16009	Invalid property assignment
16010	Unsupported transaction
16011	Terminal incorrectly loaded
16012	MerchantID incorrect
	Mandatory properties have not been set. Certain properties are mandatory for messages sent to the server. This error is raised when mandatory properties have not been set
16013	
16014	BIN table not found
16016	Refer to issuer
16017	Host down
16018	Invalid account
17001	Refer to card issuer
17002	Refer to card issuer
17003	Invalid merchant
17004	Pick-up card
17005	Do not honor
17006	Error
17007	Pick-up card - special condition
17008	Honor with identification
17009	Request in progress
17010	Approved - partial
17011	Approved - VIP
17012	Invalid transaction
17013	Invalid amount
17015	No such issuer
17016	Approved - update track 3
17017	Customer cancellation
17018	Customer dispute
17019	Re-enter transaction
17020	Invalid response
17021	No action taken
17022	Suspected malfunction
17023	Unacceptable transaction fee
17024	File update not supported
17025	Unable to locate record
17026	Duplicate record
17027	File update field edit error
17028	File update file locked
17029	File update failed
17030	Format error
17031	Bank not supported
17032	Completed partially

17033	Expired card - pick-up
17034	Suspected fraud - pick-up
17035	Contact acquirer - pick-up
17036	Restricted card - pick-up
17037	Call acquirer security - pick-up
17038	PIN tries exceeded - pick-up
17039	No credit account
17040	Function not supported
17041	Lost card - pick-up
17042	No universal account
17043	Stolen card - pick-up
17044	No investment account
17051	insufficient funds
17052	No check account
17053	No savings account
17054	Expired card
17055	Incorrect PIN
17056	No card record
17057	Transaction not permitted to cardholder
17058	Transaction not permitted on terminal
17059	Suspected fraud
17060	Contact acquirer
17061	Exceeds withdrawal limit
17062	Restricted card
17063	Security violation
17064	Original amount incorrect
17065	Exceeds withdrawal frequency
17066	Call acquirer security
17067	Hard capture
17068	Response received too late
17075	PIN tries exceeded
17077	Intervene - bank approval required
17078	Intervene - bank approval required for partial amount
17090	Cut-off in progress
17091	Issuer or switch inoperative
17092	Routing error
17093	Violation of law
17094	Duplicate transaction
17095	Reconcile error
17096	System malfunction
17097	Reserved for future Postilion use
17098	Exceeds cash limit
18057	Merchant ID is invalid or missing. Message rejected.
18057	Unable to locate Merchant Configuration Information Within System
30001	Unable to connect to Gateway
30006	Connection to the bank timed out

30006	Insufficient information was provided to approve this payment.
30033	Invalid Merchant
32001	Invalid card number or cvv
32002	Phone the bank
32003	Card blocked
32004	Invalid card or CVV number
32005	Card expired
32008	Card too new
32011	The transaction was declined by the bank.
32011	Transaction declined
32011	The transaction was declined by the bank.
32013	Phone the bank
32013	Phone the bank for manual authorisation.
32015	Insufficient Funds.
32019	Invalid amount.
32023	Invalid card number
32024	Invalid card number
32027	Invalid expiry date
32032	Invalid budget period
32047	Card has been reported lost
32048	Card has been reported stolen
32049	Card has been reported lost or stolen
32051.1	Unable to connect to the bank
32051.1	Unable to connect to upstream gateway.
32051.1	Unable to connect to the bank
32051.2	Unable to connect to the bank
32051.54	Unable to connect to the bank
32055	Invalid card type.
32057	Incorrect card number
32060	Invalid CVV entered
32062	Restricted card
32063	Connection to the bank timed out
32065	Exceeds withdrawal frequency limit
32068	No PBF (positive balance file)
33006	Unable to process transaction
33009	Duplicate transaction
33012	Invalid transaction
33015	No such issuer
33030	Format error
33031	Bank not supported by switch
33034	Suspected fraud, capture
33035	Card acceptor contact acquirer
33037	Card acceptor call acquirer security. Capture
33057	Transaction not permitted to cardholder
33058	Transaction not permitted to terminal
33062	Number times used

33082	No atalla box
33083	No account connected
33084	No PBF (positive balance file)
33085	PBF update error
33086	Invalid auth type
33088	PTLF (Pos transaction log file) error
33089	Invalid route service
33090	Cutoff is in progress
33092	Financial institution or intermediate network facility cannot be found for routing
33094	Duplicate transmission
33096	System malfunction - unable to process
330N0	Unable to authorize
330N2	Pre auth fail
330N3	Max online refund reached
330N4	Max offline refund reached
330N5	Max credit per refund
330N6	Max refund credit reached
330N7	Customer selected Neg reason
330N8	Over floor limit
330N9	Max number refund credit
330O0	Referral file failed
330O1	Neg file problem
330O2	Advance less than minimum
330O3	Referral file full
330O4	Over limit table
330O5	Pin required
330O6	Mod 10 check
330O7	Force post
330O9	Neg file problem
330P0	CAF (cardholder authorisation file) file problem
330P1	Over daily limit
330P2	CAF (cardholder authorisation positive file) not found
330P3	Advance less than minimum
330P4	Number of times used.
330P5	Delinquent
330P6	Over table limit
330P7	Advance less than minimum
330P8	Admin card needed
330P9	Enter less amount
330Q0	Invalid transaction date
330Q2	Invalid transaction code
330Q3	The merchant account is not configured to accept the payment brand.
330Q3	Advance less than minimum
330Q4	Number of times used
330Q5	Delinquent
330Q6	Over table limit

330Q7	Amount over maximum
330Q8	Admin card not found
330Q9	Admin card not allowed
330R0	Approved admin request / in window
330R1	Approved admin request / out of window
330R2	Approved admin request /any time
330R3	Chargeback / customer file updated
330R4	Chargeback / customer file updated / acquirer not
330R5	Chargeback / incorrect prefix number
330R6	Chargeback / incorrect response code
330R7	Admin transaction not supported
330R8	Card on national negative file
330S4	Ptlf is full
330S7	Accepted, incorrect destination
330S8	Admin file problem
330S9	Unable to validate PIN, security box is down
330T1	Invalid credit card advance increment
330T2	Invalid transaction date
330T3	Card not supported
330T3	Card not supported.
330T4	Amount over maximum
330T5	CAF status 0 or 9
330T6	Bad UAF (usage accumulation file)
330T7	Cash back > daily limit
330T8	Invalid credit card.
330T8	Invalid account or card number.
50841	Insufficient information was provided to approve this payment.
70016	DB file not found
91	Issuer or switch inoperative
B001	Unable to verify merchant
B002	Required field not defined
B003	Merchant not active
B004	Action not valid
B005	Duplicate username
B006	Password and confirm password does not match
B007	General exception error occurred
B008	No profile found for buyer username
B009	Duplicate profiles found for buyer username
B010	Incorrect fields passed for update
B011	30001 Timeout checked by Andre & Bronwyn
B012	32011-05 updated by Bronwyn
B013	32047-41 updated by Bronwyn
B014	Dollar 30006 Timeout updated
B015	Dollar Unknown error updated
Issuer	
Declined	Your bank has declined your transaction.

T8	Invalid account
WS00025	Member Instrument is loaded but not active.
WS55001	An error occurred and your request could not be completed.
WS55002	No records returned
601	A required field is missing in the transaction request. Invalid transaction type specified in transaction request. Valid values are SHIP,REFUND,CANCEL
602	
603	One or more of the transaction request fields contained invalid data.
604	Login failed. Please ensure that you using the correct username and password.
605	The company or outlet details are incorrect. Outstanding fees on Setcom account. Please contact customer services to your account activated.
606	Order information is incorrect, please ensure you are submitting the correct OrderID and amount.
607	
608	The order is in a pending state.
609	Please settle this order manually from the Setcom Commerce Manager. Invalid request amount, ensure the amount does not exceed the original authorisation amount.
610	
611	Error processing refund – error return from bank interface. The credit card has expired. Please obtain the new credit card expiry date and CVV from the buyer.
612	
613	Transaction stopped – invalid card data or order is too old.
614	Invalid OrderID parameter. Merchant account is not active. Please contact customer services to activate your account.
615	
616	Invalid order status for required action. Source of transaction not remote interface – only transactions originating from the remote interface can be auctioned remotely.
617	
618	The order has been cancelled already.
619	The order has been settled already.
620	The order has not been settled yet. The merchant account terminal configuration is invalid. Please contact customer services.
621	
622	The order has already been settled.

Contact Information

Please contact us on any of the details below.

Tel:	United Kingdom	+44 20 3051 6320
	United States of America	+1 (408) 850 6530
	South Africa	+27 (83) 913 0000

Fax:	United Kingdom	+44 20 7681 3303
	United States of America	+1 501 643 0401
	South Africa	086 615 1486

Email: support@setcom.co.za

Web: www.setcom.co.za