CCAvenue Mobile Integration Guide

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TABLE OF CONTENTS

INTRODUCTION

The purpose of this integration document is to provide a step-by-step guide for merchant to integrate with CCAvenue on mobile platform.

STEPS TO INTEGRATE

Server side integration

1) Initiate payment:

Merchant need to build a REST api to send following parameters to mobile application.

Note: you can do this step at the time of order id generation once customer has reached final payment page i.e order amount is finalized.

```
{
  "order_id": 3881885,
  "access_code": "AVHQ89GL40BJ77QHJB",
  "redirect_url": "www.amazonaws.com/payment/redirect.php",
  "cancel_url": "www.amazonaws.com/payment/cancel.php",
  "enc_val":
      "bbfd519ee11e197c2dd55ecd695e85ffb02ca3e4f0f3691c0f74d5d5fbed06ae8a5a17d
09d77ebc895133d61e208a841ffee1075ca7e75ed9f337a6d6df4138adf4cdd9de4a0f4dc98440
7d59db8213c4c41e91e9dc66560bba4437c4ac6892baa73114bc668fd8431b388512685d3ea"
}
```

Parameter Name	Description	Type (length)
order_id	This ID is used by merchants to identify the order. Ensure that you send a unique id with each request. CCAvenue will not check the uniqueness of this order id. As it generates a unique payment reference number for each order which is sent by the merchant.	Alphanumeric (30) Characters allowed: Alphabet (A-Z), (a-z),Numbers,-(hyphen),/ (slash), ,_ (underscore)
access_code	Access Code is a unique identifier generated by CCAvenue for each server domain or IP, which is whitelisted with CCAvenue. And allows only the particular IP/Domain to process transactions.	Alphanumeric (18)
enc_val	This value is generated by merchant at their server using working key. Follow below steps to generate enc_val.	
Redirect Url	CCAvenue will post the status of the order along with the parameters to this URL	Alphanumeric (100) Characters allowed: Alphabet (A-Z), (a-z), Numbers, / (slash),_ (underscore)

Cancel Url	CCAvenue will redirect the customer to this URL if the customer cancels the transaction on the billing page.	Alphanumeric (100) Characters allowed: Alphabet (A-Z), (a-z), Numbers, / (slash),_ (underscore)

Generate enc_val:

Merchant need to encrypt set of parameters using encryption tool provided by CCAvenue

- **Plain text:**

merchant_id=245717&order_id=9445851&redirect_url=http://amazonaws.com/payment/ccav_resp.php&cancel_url=http://amazonaws.com/payment/ccav_resp.php&amount=1.00&language=EN&currency=INR&payment_option=OPTDBCRD&card_type=DBCRD&card_name=&card_number=41111111111111111&expiry_month=03&expiry_year=2022&cvv_number=826

- **Encrypted text:**

43fe52b0bfb011b1e1022910e9c121ab2e6d8ed775c30c34157b94ae0422b64326828bbfd519ee11e197c2dd55ecd695e85ffb02ca3e4f0f3691c0f74d5d5fbed06ae8a5a17d09d77ebc895133d61e208a841ffee1075ca7e75ed9f337a6d6df4138adf4cdd9de4a0f4dc984407d59db8213c4c41e91e9dc66560bba4437c4ac6892baa73114bc668fd8431b388512685d3ea

Merchant must encrypt the following parameters for processing an order.

Parameter Name	Description	Type (length)
Merchant Id	Merchant Id is a unique identifier generated by CCAvenue for each activated merchant.	Numeric
Order Id	This ID is used by merchants to identify the order. Ensure that you send a unique id with each request. CCAvenue will not check the uniqueness of this order id. As it generates a unique payment reference number for each order which is sent by the merchant.	Alphanumeric (30) Characters allowed: Alphabet (A-Z), (a-z),Numbers,-(hyphen),/ (slash), ,_ (underscore)
Redirect Url	CCAvenue will post the status of the order along with the parameters to this URL	Alphanumeric (100) Characters allowed: Alphabet (A-Z), (a-z), Numbers, / (slash),_ (underscore)
Cancel Url	CCAvenue will redirect the customer to this URL if the customer cancels the transaction on the billing page.	Alphanumeric (100) Characters allowed: Alphabet (A-Z), (a-z), Numbers, / (slash),_ (underscore)
Amount	Order amount	Numeric (12, 2)
Currency	Currency in which you want to process the transaction. AED - Arab Emirates dirham USD - United States Dollar SAR - Saudi Arabia Riyal	Alphabets (3)

	INR – Indian Rupee SGD – Singapore Dollar GBP – Pound Sterling EUR – Euro, official currency of Eurozone	
language	CCAvenue billing page is multi-lingual. Currently we are displaying the page in English (Code - EN).	Alphabet(5)
payment_option	Payment option selected by the customer OPTCRDC - Credit Card OPTDBCRD - Debit Card OPTNBK - Net Banking OPTCASHC - Cash Card OPTMOBP - Mobile Payments	Alphabets (10)
card_type	Type of card used by the customer. CRDC - Credit Card DBCRD - Debit Card NBK - Net Banking CASHC - Cash Card MOBP - Mobile Payments	Alphabets (10)
card_name	Name of the card used by the customer. This list will be provided by CCAvenue.	Alphabets(100) **Characters allowed:** Alphabet (A-Z), (a-z).
data_accept	Resend the parameter value received at the time of fetching the payment options. **Expected values –** Y or N	Alphabets(1)
card_number	Card number entered by the customer.	Numeric
expiry_month	Card expiry month	Numeric
expiry_year	Card expiry year	Numeric
cvv_number	Card CVV number	Numeric
issuing_bank	Card issuing bank name	Alphabets(100) **Characters allowed:** Alphabet (A-Z), (a-z).
mobile_no	Mobile no (Only in case of Mobile payments.)	Numeric

Note: Merchant parameters (payment_option, card_type, card_name, data_accept, card_number, expiry_month, expiry_year, cvv_number, issuing_bank, mobile_no) are required only in case of **Seamless merchants**.

Merchant can encrypt the following parameters in addition to the required parameters if required.

Parameter Name	Description	Type (length)
billing_name	Name of the customer	Alphabets (60) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
billing_address	Customer's billing address	Alphanumeric (150) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen) Space in between words.
billing_city	Customer's billing city	Alphabets (30) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
billing_state	Customer's billing state	Alphabets (30) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
billing_zip	Customer's billing zip code	Alphanumeric (15) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers
billing_country	Customer's billing country	Alphabets (50) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
billing_tel	Customer's phone number	Numeric (20)

billing_email	Customer's email address	Alphanumeric (70) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers @ (at), dot,_ (underscore)
delivery_name	Recipient's name	Alphabets (60) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
delivery_address	Shipping address	Alphanumeric (150) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen) Space in between words.
delivery_city	Shipping city	Alphabets (30) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
delivery_state	Shipping state	Alphabets (30) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
delivery_zip	Shipping zip code	Alphanumeric (15) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers
delivery_country	Shipping country	Alphabets (50) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
delivery_tel	Shipping phone number	Numeric (20)

merchant_param 1	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen)
merchant_param 2	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen)
merchant_param 3	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen)
merchant_param 4	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen)
merchant_param 5	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen)
promo_code	This parameter is used for sending the code of the promotion you have created in the CCAvenue MARs by which you may offer specific discounts to customers using specific payment options.	Alphanumeric (20) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers

tid	This parameter is used for sending the unique identifier to identify uniqueness of the order. This is an optional parameter. Value for this parameter can be generated using the piece of code given in the integration kit. ***The uniqueness of TID is valid for 24 hours only.***	Numeric(17) **Characters allowed:** Only numbers

2) Response Handler:

Merchant need to host response handlers (Callback URL) on their server to show and update payment status. Once payment get completed CCAvenue will send encrypted response to this url (Redirect Url or Cancel Url) as POST request with variable name **"encResp"**. Now merchant need to decrypt this response using working key, then verify and update the order values (like id, amount, status, currency).

After completion of all this steps merchant can show their status page (like Success, Failure, Thank You,etc.).

Note: Amount and currency verification against order_id is mandatory at merchant server

CCAvenue PG will return following parameters:

Parameter Name	Description	Type (length)
order_id	This ID is used by merchants to identify the order. Ensure that you send a unique id with each request. **CCAvenue will not check the uniqueness of this order id.** As it generates a unique payment reference number for each order which is sent by the merchant Kindly ensure this value received in response is validated before providing services.	Alphanumeric (30) **Characters allowed:** Alphabet (A-Z), (a-z), Numbers, # (hash), /(slash, - (hyphen)
tracking_id	Unique payment reference number generated by CCAvenue for each order.	Numeric (12)
bank_ref_no	Reference number generated by the bank for the transaction.	Alphanumeric
order_status	Status of the order. Success Failure Aborted Invalid Timeout	Alphabets (15)
failure_message	Reason for failure.	Alphanumeric

payment_mode	The payment mode used by customer IVRS EMI Credit Card Net banking Debit Card Cash Card UPI Wallet	Alphabets
card_name	Specifies the type of credit card, debit card, netbanking etc .	Alphanumeric
status_code	The status code for this transaction	Numeric (3)
status_message	The status message for this transaction.	Alphanumeric (150)
currency	Currency code in which the transaction was processed. INR – Indian Rupee USD – United States Dollar SGD – Singapore Dollar GBP – Pound Sterling EUR – Euro, official currency of Eurozone Kindly ensure this value received in response is validated before providing services.	Alphabets (3)
Amount	Order amount Kindly ensure this value received in response is validated before providing services.	Numeric (12, 2)
billing_name	Name of the customer	Alphabets (60) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
billing_address	Customer's billing address	Alphanumeric (150) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, -(hyphen) Space in between words.

billing_city	Customer's billing city	Alphabets (30) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
billing_state	Customer's billing state	Alphabets (30) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
billing_zip	Customer's billing zip code	Alphanumeric (15) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers
billing_country	Customer's billing country	Alphabets (50) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
billing_tel	Customer's phone number	Numeric (20)
billing_email	Customer's email address	Alphanumeric (70) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers @ (at), dot,_ (underscore)
delivery_name	Recipient's name	Alphabets (60) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
delivery_address	Shipping address	Alphanumeric (150) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen) Space in between words.

delivery_city	Shipping city	Alphabets (30) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
delivery_state	Shipping state	Alphabets (30) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
delivery_zip	Shipping zip code	Alphanumeric (15) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers
delivery_country	Shipping country	Alphabets (50) **Characters allowed:** Alphabet (A-Z), (a-z). Space in between words.
delivery_tel	Shipping phone number	Numeric (22)
merchant_param 1	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, -(hyphen)
merchant_param 2	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, -(hyphen)
merchant_param 3	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, -(hyphen)

merchant_param 4	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen)
merchant_param 5	This parameter can be used for sending additional information about the transaction. PG will send this parameter in the reconciliation report.	Alphanumeric (100) **Characters allowed:** Alphabet (A-Z), (a-z). Numbers # (hash), Comma, circular brackets, /(slash), dot, - (hyphen)
vault	This parameter can be used if merchant availing the vault option. On using vault functionality if card details are saved at CCAvenue end value returned will be Y. If card details are not saved at CCAvenue end the value returned for this parameter will be N	Character(1) **Characters allowed:** Y or N
offer_type	This parameter can be used for sending additional information if customer has used any discount or promotion while completing the transaction. If customer is using discount-coupon, value of this parameter would be discount. If customer is using promo-code, value of this parameter would be promotion.	Alphabets (9)
offer_code	This parameter can be used for sending additional information about the discount coupon and Promo code used while completing the transaction. If customer has used Discount the value sent would be Y or N accordingly. If customer has used Promotion the value sent would be Promo code	Alphanumeric (30)
discount_value	This parameter can be used for sending additional information about the discounted amount.	Numeric (12,2)
si_status	Status of the standing instruction request "0" denotes success. "1" denotes failure. This parameter is applicable for only for SI transactions.	Numeric
si_sub_ref_no	This is reference number created by CCAvenue	Alphanumeric (15)

	for each new subscription on the CCAvenue system. This is the number that must be sent with each new "on demand" charge to identify the customer.	
si_mer_ref_no	This is the unique identifier send by the merchant in the request. E.G. For insurance – Policy number. It can also be a customer reference number.	Alphanumeric (30)
si_error_desc	Reason for failure to setup SI.	Alphanumeric (150)
si_created	SI is created or not (Optional in case of SI only) Value: Y - SI created N - SI not created	Character (1)
si_ref_no	SI Reference Number (Optional in case of SI only)	Alphanumeric (15)
retry	This parameter can be used if merchant availing the retry option. If the transaction is processed through retry attempt returned value will be Y. If the transaction is not processed through retry attempt returned value will be n.	Character(1) **Characters allowed:** Y or N
response_code	This parameter contains the code for each bank response message.	Numeric
bene_account	NEFT client code + tracking id (Optional in case of NEFT only)	Alphanumeric (35)
bene_name	NEFT client code (Optional in case of NEFT only)	Alphanumeric (20)
bene_ifsc	Beneficiary IFSC code (Optional in case of NEFT only)	Alphanumeric (20)
bene_bank	Beneficiary Bank code (Optional in case of NEFT only)	Alphanumeric (50)
bene_branch	Beneficiary Bank Branch (Optional in case of NEFT only)	Alphanumeric (255)
inv_mer_reference_no	Merchant reference number of invoice (Optional in case of invoice transaction only)	Alphanumeric (100)
trans_date	Transaction Completion Date	DateTime **dd/MM/yyyy HH:mm:ss**
mer_amount	In case of charge to customer model this	Numeric (12, 2)

	amount is paid to the merchant.	
sub_account_id	This parameter returns the Sub Account ID sent by merchant while initiating the transaction.	Alphanumeric (20)
eci_value	ECI value as received from 3 D secure.	Numeric (2)
billing_notes	This parameter returns the billing notes entered by customer on the billing page.	Alphanumeric (150) Only letters, numbers, dot, &, circular brackets, slash, comma and hyphen are allowed.
bin_country	This parameter returns the entered Credit or Debit cards BIN country.	Alphanumeric(255)
customer_card_id	The identifier against which the card information is stored or retrieved. This is used in case of Vault transactions.	Numeric (12,2)
bin_supported	We support domestic and international cards. We can configure this in Merchant Settings as 'Domestic', 'International' or 'Both' to specify the supported BINs. Merchants have the ability to override this setting at runtime by passing a request parameter viz. D – Domestic I – International B - Both	Alphabet (1)
trans_fee	Transaction fee applicable for the transaction.	numeric(12,2)
service_tax	Service Tax on fees chargeable to customers (Optional)	Numeric (12,2)

Mobile integration

1) Initiate payment request:

Application will send initiate payment request to merchant server to get all payment parameters from server (server side step1).

2) Start Payment in Webview:

Once mobile application received all above values (shown in server side step1 in JSON format), you have to simply call webview with url below:

https://secure.ccavenue.com/transaction.do?command=initiateTransaction&encRequest=**enc_val received in step1**&access_code=**access_code received in step1**

3) Finish Payment :

Now in Webview you have to check wheather webview reached to final page i.e redirect or cancel url (page_finished method)

Once webview is reached to either of redirect or cancel url, you have to close webview as payment get completed.

4) Payment Status :

Merchant can get payment status from their database or from CCAvenue using status api provided by CCAvenue.

Note: Working key shared by CCAvenue is a private key. Merchant need to keep this key secure will recommend to use this key on merchant server only and do not share with anyone. Merchant need to perform all encryption or decryption using this key at server only.