



EPAY PAYMENT GATEWAY

INTEGRATION MANUAL

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1 Integration Overview of Google Pay™

1.1 Google Pay™ on Epay Payment Gateway

- Google Pay is available on Epay Payment Gateway, which enables fast, simple checkout on website, and gives customers convenient access to their saved cards to Google Accounts.
- Merchant redirects customers to Epay Payment Gateway for making payments, which handles the entire payment process and provides the final outcome back to Merchant system.

Note: All Merchants must adhere to the Google Pay APIs [Acceptable Use Policy](#) and accept the terms defined in the [Google Pay API Terms of Service](#).

1.2 SCA and PSD2

- Google Pay offers a tokenized solution, which will be preferred in order to assist customers in making transactions quickly and conveniently.
- If the tokenized solution is not utilized or the issuer declines the transaction for missing SCA. Epay will automatically proceed with the 3DS flow to facilitate the payment's success.

2 Integration Steps of Google Pay™


2.1 Payment flow

Google Pay supports payments on browser and mobile app. Customers who choose to make payments using Google Pay initiate the transaction by tapping or clicking the Google Pay button embedded in your platform. Customers who have already linked a card to their Google Account will be able to choose their preferred card right away. Those who have not will be given the option to link a new card.



Using a desktop browser

To pay with Google Pay, customers select it on your website's Epay Payment Gateway.

- 1 The customer then chooses their preferred Pay with GPay
- 2 The customer reviews and confirms the payment
- 3 Epay will send a IPN event (if enabled) indicating that the charge is complete



Hotline
1900 1819

Thông tin đơn hàng

[Hủy đơn hàng](#)

Nhà cung cấp
Điện lực Miền Bắc

Nội dung
Thanh toán tiền điện tháng 7/2024


Mã thanh toán
1721202054638467

Giá trị đơn hàng 53.000đ

Phí giao dịch 0đ

Tổng số tiền **1.500.000đ**


Hết hiệu lực thanh toán sau: **19:59**



Quét mã QRcode


Dùng ứng dụng Ví điện tử Epay hoặc ứng dụng Ngân hàng để quét mã thanh toán

[Danh sách Ngân hàng và Ví điện tử hỗ trợ](#)


Pay with 

HOẶC


Lựa chọn phương thức thanh toán



Thẻ ngân hàng nội địa




Tài khoản ngân hàng





Thẻ tín dụng & ghi nợ quốc tế

CÔNG TY CỔ PHẦN DỊCH VỤ EPAY



Tầng 10 tòa nhà 319 Bộ Quốc phòng, Số 63 Lê Văn Lương, Phường Trung Hòa, Quận Cầu Giấy, TP. Hà Nội, Việt Nam
Giấy phép hoạt động cung ứng Dịch Vụ Trung Gian Thanh Toán số 54/GP-NHNN ngày 24/05/2019







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Nhà cung cấp
Điện lực Miền Bắc

Nội dung
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Phí giao dịch 0đ

Tổng số tiền **1.500.000đ**

Hết hiệu lực thanh toán sau: **19:59**






Visa ••1224

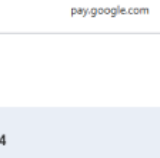
Total

53.000 đ

Tiếp tục




Thông tin thanh toán của bạn được mã hoá



Quét mã QRcode


Dùng ứng dụng Ví điện tử Epay hoặc ứng dụng Ngân hàng để quét mã thanh toán

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Pay with 

HOẶC


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Thẻ ngân hàng nội địa




Tài khoản ngân hàng




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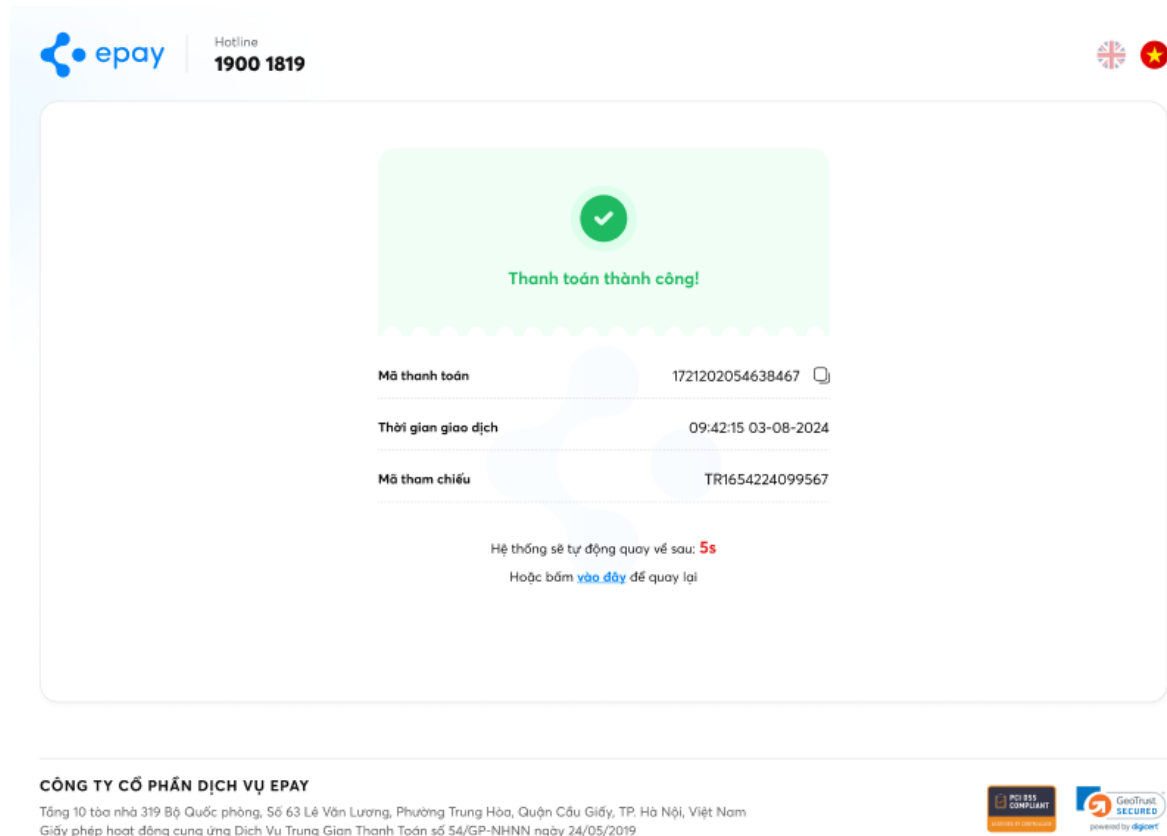
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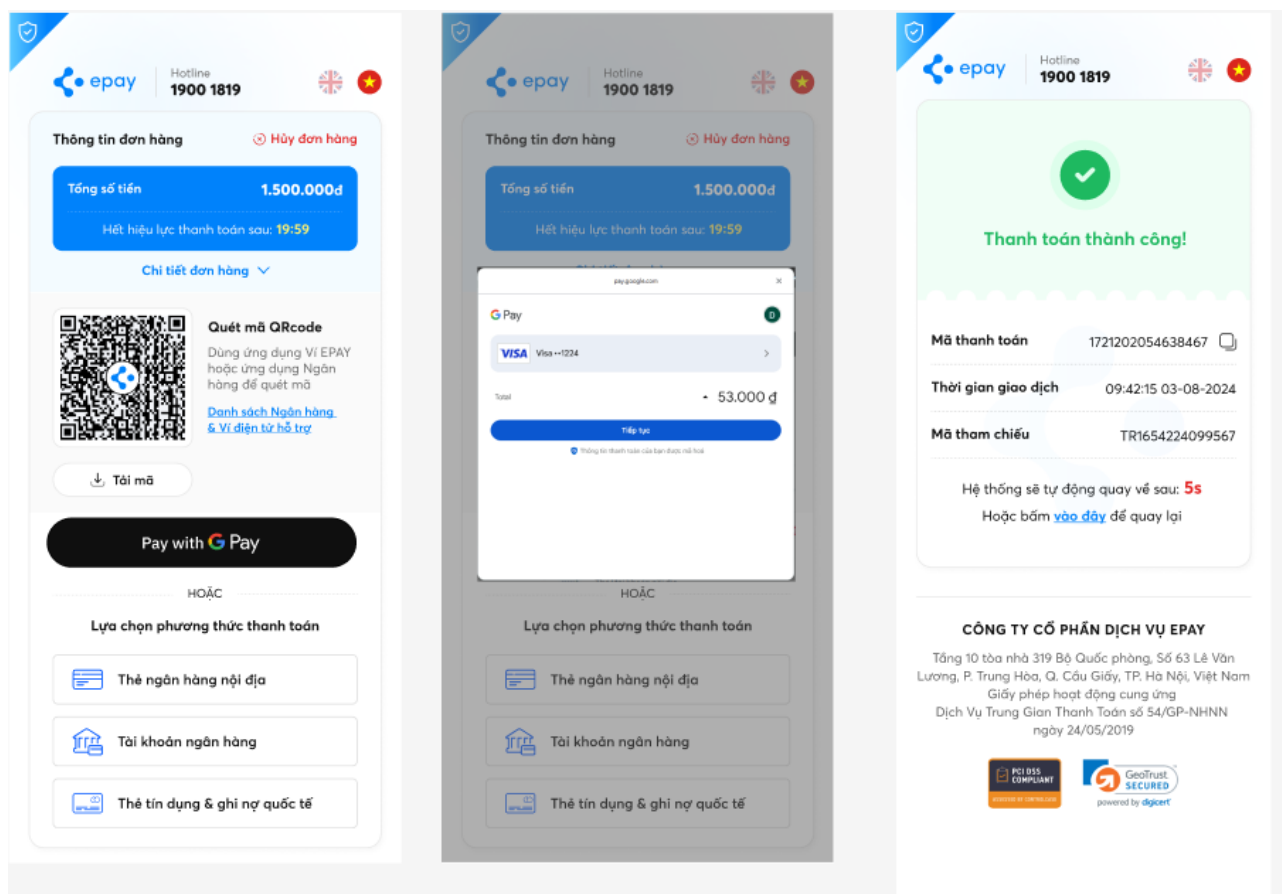
4



Using a mobile application

To start a Google Pay payment, the customer selects Google Pay as their preferred payment method on your mobile application.

- 1 The customer chooses the "Pay with GPay" option.
- 2 The customer reviews and confirms the payment.
- 3 Epay sends an IPN event (if enabled) to indicate that the charge has been completed.



2.2 Add Google Pay™ payment method

2.2.1 General

Epay offers many payment methods with different flavors allowing Merchant to choose, depending on each business case.

To initiate a payment, MerchantServer would call create payment link API with the payment_group parameter set to `google-pay` to redirect customer to Epay Payment Gateway, and then Google Pay will be available on devices that support it.

2.2.2 Supported Authorization Methods

The Epay Payment Gateway integration with Google Pay currently supports the following authorization methods:

- PAN_ONLY: Supported
- CRYPTOGRAM_3DS: Supported

These methods are supported consistently across all countries where Epay operates. Merchants do not need to make country-specific adjustments regarding authorization.

2.2.3 Supported Card Networks

Epay supports the following card networks for Google Pay transactions:

- VISA
- MasterCard
- JCB

- American Express

Note: The availability of each network may depend on the user's Google Pay setup and card issuer compatibility

2.3 Common Technical bulletin

2.3.1 Headers are required for each request

ID	Fields	Type	Description
1	merchantCode	String	Code that Epay declare for merchant
2	lang	String	Language (vi, en,..)
3	version	String	Version of API
4	clientIp	String	IP Of client

Fields are mandatory for each request

ID	Fields	Type	Description
1	merchantCode	String	Code that Epay declare for merchant
2	data	String	Data encrypted using the AES algorithm and decrypted using the secret key provided by EPAY
3	signature	String	RSA signature, created using a private key for signing and a public key for verification, has the following format: <data> + <secret key provided by EPAY>"

2.3.2 Security

Epay verify input and output data for each request using data encrypted using AES algorithm and the signature

API credential

API credential is a set of security identifiers, including username, password, provided by Epay, that allows Merchant to make authenticated requests via API.

Merchant using token from API **Generate Token** and then add it into header with format *Bearer Token + {TokenFromApi}* for each API request so Epay can

API credential is used in all Backend APIs.

2.4 Generate token

2.4.1 General API information and URLs

API

Architecture	REST API
--------------	----------

BaseURL	PRODUCTION: https://payment.epayservices.com.vn
Method	POST
URL	{baseUrl}/gw/api/paymentgateway/merchant/token
Content-Type	application/json
Charset	UTF-8

Request body before encrypted

ID	Fields	Type	Mandatory	Note
1	userName	String	Yes	username epay create for each merchant
2	password	String	Yes	password epay create for each merchant

Response body before encrypted

ID	Fields	Type	Mandatory	Note
1	token	String	Yes	Token
2	expiredIn	Integer	Yes	Time expired for each token

Error code:

Request example

Request	<pre>{ "userName": "ACV", "password": "123456", "merchantCode": "ACV", "timeRequest": 1693365494889, "messageType": "token" }</pre>
Response	<pre>{ "token": "eyJhbGciOiJIUzI1NiJ9.eyJpYXQiOiE3MTE3MDI4NjUsImV4cCI6MTcxMzE0Mjg2NX0.XA4zVu-3mnQ3AXfUreE_S3zXnrwDDUstHmTYTGOkgwM", "expiresIn": 1291, "transId": "TR1711703374343239", "merchantCode": "ACV", "timeResponse": 1711703374343, "errorCode": 0, "errorDesc": "Success", "messageType": "token_response" }</pre>

2.5 Create a payment link

2.5.1 General API information and URLs

API

Architecture	REST API
BaseURL	PRODUCTION: https://payment.epayservices.com.vn
Method	POST
URL	{baseUrl}/gw/api/paymentgateway/merchant/create_order
Content-Type	application/json
Charset	UTF-8

EpayServer would respond a redirect link in the **payment_url** field, Merchant uses this link to redirect customers to Epay Payment Gateway for payment.

Request body before encrypted

ID	Field	Type	Description
1	merchantPassword	String	Epay provides (hash with SHA256)
2	merchantCode	String	Merchant code
3	orderCode	String	Order code from merchant
4	paymentType	Int	1: Immediately 2: Temporary Detention
5	businessType	String	Specific business line code (default is 0000 for regular payments)
6	totalAmount	Long	Payment amount
7	orderAmount	Long	Order Amount
8	feeAmount	Long	Payment fee
9	orderDescription	String	Description for order
10	currency	String	Currency (default: VND)
11	returnUrl	String	Link to receive payment notification "Success/Failed"
12	cancelUrl	String	Link to receive payment notification "Payment canceled"
13	againUrl	String	Link to the Merchant page before switching to the EPAY page
14	timeLimit	Int	Time to allow payment; in minutes, default = 24 hours (1440 minutes)
15	totalGoods	Int	Total quantity of goods
16	detailGoods	DetailInfo[]	List of order goods
17	channelCode	String	Payment Channel: 01 - Website

			02 - Mobile App 03 - POS 04 - SmartPOS 05 - QR 06 - Kiosk 07 - Mini Kiosk 08 - SmartGate
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Response body before encrypted

ID	Field	Type	Mandatory	Description
1	paymentUrl	String	Yes	Epay checkout form
2	timeLimit	Int	Yes	Time to allow payment; in minutes, default = 24 hours (1440 minutes)

Request Example

Request	<pre>{ "channelCode": "01", "paymentMethod": "02", "typeCardAccount": "Account", "kioskId": "1234", "posSerial": "5C145502", "posRefId": "48897512", "posMerchantId": "1512271999999999", "posClientId": "1512", "posMerchantOutletId": "1512271999999999999999", "posTerminalId": "48897512", "agencyCode": "POST_PAID_PHONE", "agencyName": "Phone Sales", "provider": "Card Code Provider", "messageType": "create_order", "transId": "123", "timeRequest": 1681269327000, "merchantCode": "ACV", "merchantPassword": "123456", "orderCode": "123456789", "billCode": "{123456789", "customerCode": "0346134234", "paymentType": 1, "totalAmount": 100000, "orderAmount": 100000, "feeAmount": 0, "orderDescription": "Payment for ACV order No. 1680052260099", "currency": "VND", "returnUrl": "https://paymenthub-form-dev.epayservices.com.vn/clear/S.02.01.60.91.2023822.1692687299554?session=17cdfd18-cf09-4b8c-adb7-64edec680c4d-1dc61de4-4be0-42ab-adab-098362df2637&partnerCode=VNEID_PARTNER", "cancelUrl": "http://localhost:5678", "againUrl": "http://localhost:5678", "timeLimit": 15, }</pre>
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	<pre> "customerFullName": "Nguyen Van A", "customerEmail": "", "customerMobile": "", "customerAddress": "Hanoi", "customerIdNumber": "123", "businessType": "0000", "totalGoods": 1, "detailGoods": [{ "goodsCode": "EP00000", "goodsName": "Salted Egg Bull Horn Pastry", "goodsQuantity": 1, "goodsPrice": 100000, "goodUrl": "https://tse1.mm.bing.net/th?id=OIP.M- rflhzhfq0WYJRPpTY3tIAHaHa&pid=Api&P=0&w=300&h=300" }], "saveToken": true, "token": "9704003588610059", "isCardReader": true, "cardInfo": { "cardNumber": "9704000000000018", "cardName": "NGUYEN VAN A", "issuedDate": "0307" } } </pre>
Response	<pre> { "token": "eyJhbGciOiJIUzI1NiJ9.eyJpYXQiOiJlE3MTE3MDI4NjUsImV4cCI6MTcxMzE0Mjg2NX0.XA4zVu- 3mnQ3AXfUreE_S3zXnrwDDUStHmtYTGOkgwM", "expiresIn": 1291, "transId": "TR1711703374343239", "merchantCode": "ACV", "timeResponse": 1711703374343, "errorCode": 0, "errorDesc": "Success", "messageType": "token_response" } </pre>

2.5.2 Security Resources

a) Epay would provide Merchant:

Value	Applicable to
EpayPublicKey	API credential
Merhchant Username	Merchant credential.
Merchant Password	Merchant credential.

SecretKey	API credential.
Epay IP	IPN, Merchant need to whitelist Epay IPs for sandbox and production enviroment.

b) Merchant would provide Epay:

Value	Applicable to
Merchant domain name	Testing
Merchant static IP	IPN
Merchant public key	Data validation

2.5.3 Error code list

STT	Error Code	Error description
1	-1	Unknown error
2	0	Success
3	1	Invalid IP address
4	2	Invalid parameters – Invalid message
5	3	Invalid API version
6	4	Merchant code does not exist or is not activated
7	5	Invalid merchant password
8	6	Invalid currency
9	7	Unable to add order
10	8	Invalid order
11	9	Order already exists
12	10	Invalid payment amount
13	11	Transaction not found
14	12	Transaction cancelled by user
15	13	Order is being processed
16	14	Transaction failed
17	15	Timeout
18	16	Failed to connect to partner
19	20	Failed to connect to bank
20	25	Invalid transaction
21	26	Order has expired
22	27	Invalid data
23	37	Bank not supported
24	38	System under maintenance
25	40	Function under maintenance
26	44	Order already paid
27	45	Payment method not supported by system

STT	Error Code	Error description
28	46	Order not found
29	47	Refund amount exceeds original transaction amount
30	48	Transaction already refunded
31	49	Refund transaction not found
32	50	Transaction does not support refunds
33	51	Duplicate transaction code
34	52	Refund time exceeded
35	53	Invalid message type
36	60	Order not paid
37	61	Transaction not paid
38	62	Invalid token
39	63	Token not found
40	97	Payment error occurred. Please try again later. Amount will be refunded shortly.
41	98	System error
42	99	Undefined or unknown error
43	201	E-wallet account does not exist
44	202	E-wallet account is locked
45	204	E-wallet system under maintenance
46	205	Invalid OTP
47	206	E-wallet account not registered
48	208	Transaction failed
49	209	OTP expired
50	212	Order already paid
51	213	Exceeded e-wallet transaction limit per time
52	214	Transaction amount below minimum e-wallet limit
53	215	Exceeded e-wallet transaction limit per day
54	216	Exceeded e-wallet transaction limit per month
55	217	Transaction already exists in e-wallet system
56	219	Insufficient wallet balance
57	222	OTP confirmation required
58	225	Incorrect e-wallet password
59	228	E-wallet not linked to a bank
60	229	Invalid provider code
61	230	Invalid order
62	233	Too many incorrect e-wallet password attempts
63	234	Too many failed e-wallet login attempts
64	235	Identity verification not completed
65	236	Identity verification request rejected
66	237	Identity verification in progress
67	238	Identity verification in progress
68	239	Transaction pending
69	250	E-wallet token not found or invalid

STT	Error Code	Error description
70	251	Provider not allowed to use this payment method
71	253	E-wallet requires user to re-verify information
72	254	E-wallet requires user to change login password
73	255	Invalid signature in e-wallet refund transaction
74	256	Invalid IP address in e-wallet refund transaction
75	257	Invalid refund request message
76	258	Invalid provider code in refund transaction
77	259	Provider code in refund transaction not active
78	260	Incorrect password in refund transaction
79	261	Unknown error in e-wallet refund
80	262	Original transaction not found
81	263	Refund amount exceeds original transaction amount
82	264	Transaction already refunded in e-wallet
83	265	Original transaction failed in e-wallet
84	266	Refund time exceeded
85	267	Duplicate refund message code
86	268	Refund message code does not exist
87	269	Refund not supported by e-wallet
88	298	Invalid parameters
89	299	E-wallet system error
90	302	Invalid message
91	303	Incorrect transaction code
92	307	Previous transaction failed or already refunded
93	309	Exceeded bank card/account transaction limit per day
94	311	Incorrect partner information
95	312	Incorrect or insufficient amount
96	313	Transaction amount outside bank's limit
97	314	Missing Sign PubKey
98	315	Transaction code not found
99	316	Transaction failed
100	317	Insufficient balance on card/bank account
101	318	Invalid bank account status
102	319	Bank account not identified
103	320	Request message error
104	321	Initialization transaction error
105	322	Unable to identify customer bank branch
106	323	Incorrect OTP
107	324	Bank cannot determine transaction date
108	328	Transaction not paid
109	331	Payment transaction failed
110	332	Bank system error
111	333	Error connecting to bank
112	350	Bank system under maintenance

PAYMENT GATEWAY INTEGRATION

STT	Error Code	Error description
113	361	Bank card is locked or invalid
114	362	Incorrect card information
115	363	Only Vietcombank Connect 24 card accepted
116	364	Cannot determine customer information
117	365	Incorrect Merchant ID
118	367	Currency not supported by bank
119	368	Decryption error
120	369	Signature validation error
121	370	Invalid signature
122	371	SMS Banking not registered
123	372	Bank cannot send SMS OTP
124	373	Incorrect OTP
125	398	Signature validation issue
126	399	Unknown bank error
127	400	Bank card does not exist
128	401	Bank card is inactive
129	402	Invalid bank card
130	403	Invalid card issue date
131	404	Invalid card expiry date
132	410	Inactive bank account
133	411	Invalid bank account
134	412	Bank account not allowed to make payments
135	413	Bank account is locked
136	419	Invalid bank card/account
137	420	Customer name does not exist in bank
138	421	Card authentication failed
139	430	Internet Banking username does not exist
140	431	Invalid Internet Banking registration status
141	432	Initial Internet Banking password not changed
142	439	Customer not authorized to transact at the bank
143	440	Payment information changed
144	441	Transaction already performed
145	442	Invalid bank service package
146	450	Transaction amount below minimum card/account limit
147	451	Exceeded card/account transaction limit per time
148	452	Exceeded card/account transaction limit per day
149	453	Exceeded card/account transaction limit per month
150	454	Invalid payment amount