• **What is Google Pay™?**

Google Pay™ is a digital wallet and online payment system developed by Google.

• **Advantages**

Transactions using Google Pay™ as a payment method are typically fast and require minimal manual data entry.

Google Pay™ uses multiple layers of security, including tokenization, biometric authentication, and encryption, to protect your payment information. This makes it a secure way to pay for shoppers.

Merchants can tap into a network of millions of Google users.

Easily connecting Google Pay to the merchant's website or mobile app.

• **How it works**
1. The consumer chooses the service or goods at the merchant’s website or application.
   a. The consumer chooses Google Pay™ button for pay.
   b. After pressing the button, the form for choosing a card will appear on a device with Google Pay™.
2. Merchant uses Google Pay API to get the payment data.
3. Merchant receives the payment data from Google.
4. a. Merchant sends the encrypted payment data in the request, specified with acquirer fields to UNIBANK TXPG acquiring service.
   b. UNIBANK TXPG decrypts the data, charges the amount from the client's card.
5. Merchant receives the status of payment from UNIBANK TXPG.
6. Merchant displays the status of payment to consumer.

**Direct Integration**

Before you can start using the Google Pay API you should meet the following requirements shown in documentations below:

**General**

- [Google Pay for Payments](#)
- [Google Pay Terms of Service](#)
- [Google Pay and Wallet Console](#)
- [Google Pay Acceptable Use Policy](#)

**Web**

- [Google Pay Documentation for Website](#)
- [Google Pay branding guidelines for Website](#)
- [Google Pay Tutorial for Website](#)
- [Google Pay integration checklist for Website](#)

**Android**

- [Google Pay Documentation for Android](#)
- [Google Pay branding guidelines for Android](#)
- [Google Pay Tutorial for Android](#)
- [Google Pay integration checklist for Android](#)
Perform the following steps to get started with the Google Pay API shown in detail by the link of Google Pay Overview Documentations

for Web:  [Google Pay Documentation for Website](#)
for Android:  [Google Pay Documentation for Android](#)

1. **Review and adhere to Google Pay API**  [Google Pay Terms of Service](#) and  [Google Pay Acceptable Use Policy](#)
2. **Review and adhere to Google Pay**  [Google Pay branding guidelines for Website](#) or  [Google Pay branding guidelines for Android](#)
3. **Complete the**  [Google Pay Tutorial for Website](#) or  [Google Pay Tutorial for Android](#) and  [Google Pay integration checklist for Website](#) or  [Google Pay integration checklist for Android](#)
4. **Request production access web** or  **request production access android** to the Google Pay API via the  [Google Pay and Wallet Console](#)
5. **Enter a Business Profile** to identify your business with Google. You can enter information such as a business logo, name, support phone numbers or websites.
6. **Add your integration type.**
7. **Upload screenshots of your payment flow** as proof you have followed the brand guidelines.
8. **Once approved** Google Pay will assign you a **merchantId**, which will be displayed under your account’s Public merchant profile setting.
Use **Google Pay API** to get payment data. Example code for displaying a button.

```javascript
const baseRequest = {
    apiVersion: 2,
    apiVersionMinor: 0
};

const allowedCardNetworks = ['MASTERCARD', 'VISA'];

const allowedCardAuthMethods = ['PAN_ONLY', 'CRYPTOGRAM_3DS'];

const tokenizationSpecification = {
    type: 'PAYMENT_GATEWAY',
    parameters: {
        'gateway': 'unibankcheckout',
        'gatewayMerchantId': 'your_merchant_id'
    }
};

const baseCardPaymentMethod = {
    type: 'CARD',
    parameters: {
        allowedAuthMethods: allowedCardAuthMethods,
        allowedCardNetworks: allowedCardNetworks
    }
};

const cardPaymentMethod = Object.assign({}, baseCardPaymentMethod, {
    tokenizationSpecification
});

let paymentsClient = null;

function getGoogleIsReadyToPayRequest() {
    return Object.assign({}, baseRequest, {
        allowedPaymentMethods: [baseCardPaymentMethod]
    });
}

function getGooglePaymentDataRequest() {
    const paymentDataRequest = Object.assign({}, baseRequest);
    paymentDataRequest.allowedPaymentMethods = [cardPaymentMethod];
    paymentDataRequest.transactionInfo = getGoogleTransactionInfo();
    paymentDataRequest.merchantInfo = {
        merchantId: '12345678901234567890',
        merchantName: 'Example Merchant'
    };
    return paymentDataRequest;
}

function getGooglePaymentsClient() {
    if (paymentsClient === null) {
        paymentsClient = new google.payments.api.PaymentsClient({
            environment: 'PRODUCTION'
        });
    }
    return paymentsClient;
}

function onGooglePayLoaded() {
    const paymentsClient = getGooglePaymentsClient();
    paymentsClient.isReadyToPay(getGoogleIsReadyToPayRequest())
        .then(function(response) {
            if (response.result) {
                addGooglePayButton();
            }
        })
        .catch(function(err) {
            console.error('Error:', err);
        });
```
```javascript
const paymentsClient = getGooglePaymentsClient();
const button = paymentsClient.createButton({onClick: onGooglePaymentButtonClicked});
document.getElementById('container').appendChild(button);

function getGoogleTransactionInfo() {
  return {
    countryCode: 'US',
    currencyCode: 'USD',
    totalPriceStatus: 'FINAL',
    // set to cart total
    totalPrice: '1.00'
  };
}

function prefetchGooglePaymentData() {
  const paymentDataRequest = getGooglePaymentDataRequest();
  paymentDataRequest.transactionInfo = {
    totalPriceStatus: 'NOT_CURRENTLY_KNOWN',
    currencyCode: 'USD'
  };
  const paymentsClient = getGooglePaymentsClient();
  paymentsClient.prefetchPaymentData(paymentDataRequest);
}

function onGooglePaymentButtonClicked() {
  const paymentDataRequest = getGooglePaymentDataRequest();
  paymentDataRequest.transactionInfo = getGoogleTransactionInfo();
  const paymentsClient = getGooglePaymentsClient();
  paymentsClient.loadPaymentData(paymentDataRequest).
  .then(function(paymentData) {
    processPayment(paymentData);
  })
  .catch(function(err) {
    console.error(err);
  });
}
```

**allowedAuthMethods** - Unibank can process both `PAN_ONLY` and `CRYPTOGRAM_3DS` authentication methods.

**allowedCardNetworks** - specify the card networks that you wish to allow. If the customer has cards in their wallet that are not in the 'allowed' list then those cards will be greyed-out/disabled in their wallet.

**merchantId** - found in the Google Pay Business Console under your account's Public merchant profile setting. Please note that this is only required in Google Pay's production environment; while testing, this field can be set to a dummy value or omitted.

**gateway** - a unique property that identifies Unibank as the processor; all encryption keys are associated with this ID. This field must be set to: `unibankcheckout`

**gatewayMerchantId** - a property that uniquely identifies the merchant. For Unibank merchants this field must be set to the specified ID given to you by your Unibank manager.
Merchant and Acquirer connection details

1. Create Order Request
2. Send Response for Order
3. Pressing Google Pay Button
4. Send the empty GooglePayBlock
5, 6. Agree and Select the card
7. Send the order data
8. Pass the payment
9. Send Set Source token with the filled GooglePayBlock and receive response
10. Send Execute Transaction Action
11. Receive the status of Payment
12. Display the status of payment
1. The merchant creates an order by sending a request for the Create Order action to TXPG.

**Method:** POST

**URL:** https://unigw-txpg-tst.unibank.lan:8000/order

**Header Authorization Basic:**

```json
'auth': {
    'username': 'TerminalSys/vendorpay',
    'password': '1234',
}
```

**Content-Type:** application/json

**Body:**

```json
"order": {
    "typeRid": "vendorPay",
    "amount": "10.00",
    "currency": "AZN",
    "description": "vendorPay",
    "language": "az"
}
```

Take into: In **production** environment will be the different credentials and different value for **URL**.

**URL:** https://unigw-txpg.unibank.lan:8000/order
2. TXPG creates an order and sends a response to the merchant containing the order ID and other data.

```json
{
  "order": {
    "id": 1234,
    "hppUrl": "https://checkout.tst.unibank.az/flex",
    "password": "p2smxvblf5rl",
    "accessToken": "val-k4pfBYJj0nE1ZOofDiy7ER77xLrKlcBKMelGZkCnLA",
    "status": "Preparing",
    "cvv2AuthStatus": "Required",
    "secret": "747409"
  }
}
```

Take into: In production environment will be the different value for hppUrl.

"hppUrl": "https://checkout.unibank.az/flex"

3. The consumer decides to pay for the order using the Google Pay service by selecting the respective payment method.
4. The merchant sends a request for the Set Source Token action with the empty GooglePayBlock parameter to TXPG.
5. Once the response from TXPG is received, the order data is displayed in the consumer browser, on the web site of the online store and the consumer is requested to confirm the financial order parameters. The consumer agrees to pay.
6. The dialog box of the Google Pay service is displayed to the consumer to sign into the Google account and select the card and shipping address.
   Please take into account that billing address is not available for our merchants.
7. The merchant sends a request with the order data and selected card to Google Pay.
8. When interacting in the Gateway mode, the Google Pay server encrypts the payment token with the public key and passes it to the merchant. In the Direct mode Google Pay encrypts the payment token with the public key received from the merchant and then passes the payment token to the merchant.
9. The merchant sends the payment data to TXPG in the request for the Set Source Token action, in the GooglePayBlock parameter. TXPG decrypts the payment data using a private key. The authentication policy analyzes the available order data, and, as a result, it may be required to perform 3-D Secure authentication by the 3DS v2.x protocol.

   a. In the Direct mode the payment token is decrypted on the merchant server using the private key stored at the merchant. The decrypted payment data is passed from the merchant to TXPG BES in the request for the Set Source Token action, in the PanBlock parameter.
   b. When working with Google Pay in the Direct mode, the merchant server should be in compliance with the PCI DSS requirements.

10. After the response from TXPG is received, the merchant sends a request for the Execute Order Transaction action to TXPG to authorize the financial transaction via the transaction interface to the PMO.

11. Depending on the financial transaction result, TXPG assigns the respective status to the order - Fully paid / Transaction declined.

12. The order information is displayed to the consumer on the web site of the online store or in the mobile application.
Abbreviations

TXPG - TranzWare/TranzAxis e-Commerce Payment Gateway (Acquirer Service)
3DS - 3-D Secure
API - Application Programming
MCC - Merchant Category Code
typeRid - transaction order by type (static)
amount - amount value
currency - currency short name
language - order language
description - order description
rid - unique transaction id on merchant side (optional)

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