



PayPal Apple Pay 支付集成指南

- 用户按本指南操作后可使用 PayPal Apple Pay 收付款服务及相关功能, PayPal Apple Pay 收付款服务及相关功能属于 PayPal 全球服务 (定义如下)。用户需要首先在 PayPal 运营的中国网站 (Paypal.cn) 上接受 [PayPal 中国跨境支付服务用户协议](#) 并注册 PayPal 账户, 以进一步申请相关服务。PayPal 全球服务由我们合作的 PayPal 关联企业为您提供, 遵循并受到 “[PayPal 全球条款](#)” 的约束
- 本指南包含的全部产品交互示意图均为参考目的而展示, 用以阐释本指南之步骤引导。所有 PayPal 产品和服务均根据适用的 PayPal 用户协议、条款和政策按现状提供。

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## 1. 所需 SDK/API

集成此按钮所需的 SDK/API 如下:

- PayPal JS SDK: [PayPal JS SDK](#)
- Server SDK: [Server SDK](#) (Server SDK 目前支持的编程语言包括 PHP、Java、.Net、Python、Ruby 和 TypeScript)。
- API: [PayPal API](#)

## 2. 按钮效果展示

The image shows a checkout form with two main sections. The left section contains fields for 'Contact' (Phone Number, Email Address), 'Ship To' (Address Line 1, Address Line 2, Nation and City), 'Shipping Method' (Carrier: USPS, Price: 20.00), and 'Payment Method' (radio buttons for PayPal, Debit or Credit Card, Google Pay, and Apple Pay, with Apple Pay selected). The right section shows an 'Item' summary for 'Test Refresh default Product' with an amount of 1 and a single price of 100. It also lists 'Shipping' at 20 and a 'Total' of 120. A 'Buy with Apple Pay' button is visible at the bottom of the right section.

### 3. Apple Pay 支付按钮集成步骤

步骤 1：开通账户的 Apple Pay 功能，注册域名并下载关联文件  
具体请参见附录中的[详细步骤](#)。

#### 步骤 2：加载 PayPal JS

加载以下 PayPal JS 代码：

```
<script src="https://www.paypal.com/sdk/js?client-id=YOUR_CLIENT_ID&currency=USD&merchant-id=SUB_MERCHANT_ID&components=applepay"> </script>
```

查看 merchant id 和 client id 以及查看 Apple Pay 权限的步骤请参见附录。

#### 步骤 3：加载 Apple JS

加载以下 Apple JS 代码：

```
<script src="https://applepay.cdn-apple.com/jsapi/v1/apple-pay-sdk.js"></script>
```

## 步骤 4: 加载 Apple Pay 按钮

```
if (!window.ApplePaySession) {
  console.error('This device does not support Apple Pay');
}
if (!ApplePaySession.canMakePayments()) {
  console.error('This device is not capable of making Apple Pay payments');
}
const applepay = paypal.Applepay();
applepay.config()
  .then(applepayConfig => {
    if (applepayConfig.isEligible) {
      document.getElementById("applepay-container").innerHTML = '<apple-pay-button id="btn-appl" buttonstyle="black" type="buy" locale="en">';
    }
  })
  .catch(applepayConfigError => {
    console.error('Error while fetching Apple Pay configuration.');
```

## 步骤 5: 监听 Apple Pay 按钮点击事件

监听 Apple Pay 按钮的点击事件，例如 onClick 函数。

```
document.getElementById("btn-appl").addEventListener("click", onClick);
```

## 步骤 6: 创建 Apple Pay PaymentRequest

当点击 Apple Pay 按钮时，触发 onClick 函数，在该函数中创建 Apple Pay PaymentRequest。关于 Apple Pay PaymentRequest 的详细信息，请参考 [Apple Pay PaymentRequest 文档](#)。

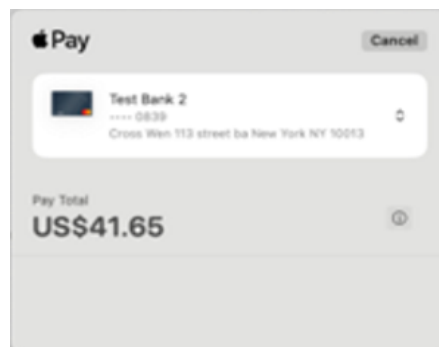
```
const paymentRequest = {
  countryCode: applepayConfig.countryCode,
  merchantCapabilities: applepayConfig.merchantCapabilities,
  supportedNetworks: applepayConfig.supportedNetworks,
  currencyCode: "USD",
  requiredShippingContactFields: ["name", "phone", "email", "postalAddress"],
  requiredBillingContactFields: ["postalAddress"],
  total: {
    label: "Demo",
    type: "final",
    amount: "100.00",
  }
};
const session = new ApplePaySession(4, paymentRequest);
```

## 步骤 7: 验证商户信息

```
session.onvalidatemerchant = (event) => {
  applepay.validateMerchant({
    validationUrl: event.validationURL,
    displayName: "My Store"
  })
  .then(validateResult => {
    session.completeMerchantValidation(validateResult.merchantSession);
  })
  .catch(validateError => {
    console.error(validateError);
    session.abort();
  });
};
```

## 步骤 8: 弹窗 Apple Pay 支付页面

创建 Apple Pay Sandbox 账号和测试卡, 请参考 [Apple Pay Sandbox 测试](#)。



## 步骤 9: 处理支付

点击 Apple Pay 支付页面上的 Pay 按钮后, 会触发 `onpaymentauthorized` 函数。

```
session.onpaymentauthorized = (event) => {
  console.log('Your billing address is:', event.payment.billingContact);
  console.log('Your shipping address is:', event.payment.shippingContact);
  fetch("/api/orders", {
    method: 'post',
    body: {}
  })
  .then(res => res.json())
  .then((createOrderData) => {
    var orderId = createOrderData.id;
    applepay.confirmOrder({
      orderId: orderId,
      token: event.payment.token,
      billingContact: event.payment.billingContact
    })
    .then(confirmResult => {
      session.completePayment(ApplePaySession.STATUS_SUCCESS);
      fetch("/api/orders/${orderId}/capture", {
        method: "post",
      })
      .then(res => res.json())
      .then(captureResult => {
        console.log(captureResult);
      })
      .catch(captureError => console.error(captureError));
    })
    .catch(confirmError => {
      if (confirmError) {
        console.error('Error confirming order with applepay token');
        console.error(confirmError);
        session.completePayment(ApplePaySession.STATUS_FAILURE);
      }
    });
  });
};
```

## 步骤 10: 在 `onpaymentauthorized` 函数里调用 PayPal API

### I. 获取访问令牌

调用获取访问令牌 API: [获取访问令牌](#)

### II. 创建订单

调用 Create Order API: [Create Order API](#)

必传项:

- 商品详情: 商品详情必填 `purchase_units.items[]`  
[https://developer.paypal.com/docs/api/orders/v2/#orders\\_create!path=purchase\\_units/items&t=request](https://developer.paypal.com/docs/api/orders/v2/#orders_create!path=purchase_units/items&t=request)
- 实体商品:
  - 商品种类选择实体商品 `purchase_units.items[].name.category=PHYSICAL_GOODS`



[https://developer.paypal.com/docs/api/orders/v2/#orders\\_create!path=purchase\\_units/items/category&t=request](https://developer.paypal.com/docs/api/orders/v2/#orders_create!path=purchase_units/items/category&t=request)

2. 地址必传 purchase\_units.shipping

[https://developer.paypal.com/docs/api/orders/v2/#orders\\_create!path=purchase\\_units/shipping&t=request](https://developer.paypal.com/docs/api/orders/v2/#orders_create!path=purchase_units/shipping&t=request)

- 非实体商品:

1. 商品种类选择非实体商品 purchase\_units.items[].name.

category= DIGITAL\_GOODS

[https://developer.paypal.com/docs/api/orders/v2/#orders\\_create!path=purchase\\_units/items/category&t=request](https://developer.paypal.com/docs/api/orders/v2/#orders_create!path=purchase_units/items/category&t=request)

2. 传 shipping\_preference = NO\_SHIPPING

[https://developer.paypal.com/docs/api/orders/v2/#orders\\_create!path=payment\\_source/paypal/experience\\_context/shipping\\_preference&t=request](https://developer.paypal.com/docs/api/orders/v2/#orders_create!path=payment_source/paypal/experience_context/shipping_preference&t=request)

### III. 确认订单

如果需要 3DS 验证, 在此步骤调用 Show Order Details API 获取订单详情: [Show Order Details API](#)。详细文档请参考: [强客户认证 \(SCA\)](#)

### IV. 捕获订单

调用 Capture Order API: [Capture Order API](#)

### 步骤 11: 处理支付结果

根据 Capture API 返回的信息判断交易是否成功, 然后跳转到成功/失败页面 (该页面为商家页面)。

## 步骤 12: 处理异步通知 Webhooks

如果 PayPal Capture API 首次返回的交易状态为 Pending, 根据 Webhooks 来更新最终交易状态。Webhooks 文档: [Webhooks](#)

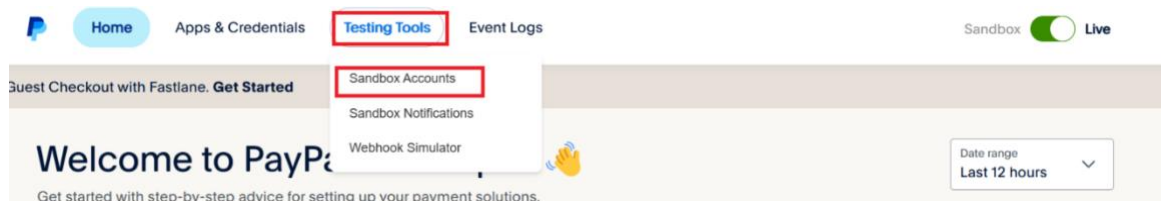
## 4. 参考文档

- Apple Pay 支付文档: [PayPal Apple Pay 支付文档](#)
- API 文档: [PayPal API 文档](#)
- Server SDK: [PayPal Server SDK](#)

## 5. 附录

### 创建 sandbox 商家 Business 账号步骤

1. 访问 [PayPal 开发者主页](#)
2. 点击右上角的 "Log In"
3. 使用真实的 PayPal 收款账号登录
4. 点击 "Testing Tools" 下的 "Sandbox Accounts"



5. 点击 "Create account"
6. 选择 "Business", 选择 "China" 后点击 "Create Account" (如果需要创建 Sandbox 买家账号, 在此步骤选择 "Personal", 国家选择非 China。)

## Create Sandbox Account

Choose your account type and country that will be used for live payments.

Account type:

- Personal**  
Buyer account
- Business**  
Merchant account

Country/Region:

Country or region  
China

Create Account

Do you want a more customized account? [Create](#)

## 修改 Sandbox 密码步骤


1. 访问 [PayPal 开发者主页](#)
2. 点击右上角的 "Log In"
3. 使用真实的 PayPal 收款账号登录
4. 点击 "Testing Tools" 下的 "Sandbox Accounts"
5. 找出需要更换密码的 Sandbox 账号，点击最右边的 "View/Edit"


<input type="checkbox"/>	<a href="#">sb-nq4oe15362897@business.example.com</a>	Business	C2	11/20/24, 9:09 AM	
<input type="checkbox"/>	<a href="#">sb-bv43xx33885946@personal.example.com</a>	Personal	US	11/8/24	<a href="#">View/Edit account</a>



6. 点击 "Change Password" 修改密码

sb-ovwza31914289@business.example.com

### Login Info

Sandbox URL <https://sandbox.paypal.com> 

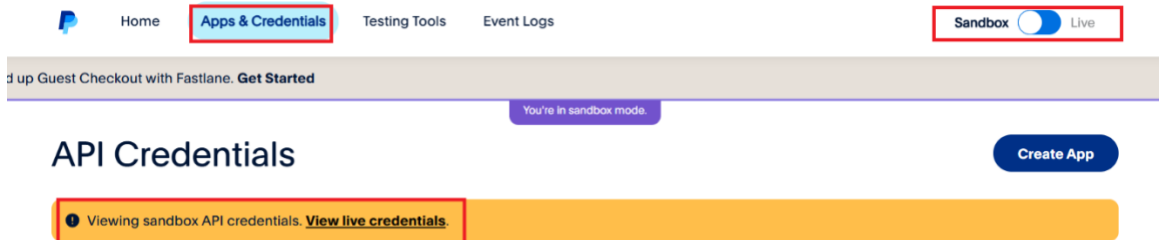
Email [sb-ovwza31914289@business.example.com](mailto:sb-ovwza31914289@business.example.com)  [Change email](#)

Password .....   [Change password](#)

7.

### 创建 REST APP 步骤

1. 访问 [PayPal 开发者主页](#)
2. 点击右上角的 "Log In"
3. 使用真实的 PayPal 收款账号登录
4. 点击 "App & Credentials" (注: 右上角可以切换 Sandbox/Live 环境下创建)



5. 点击 "Create App"
6. 输入 App 名称 (只要不重复, 可以随意命名), 选择上面刚刚创建的 Sandbox Business 账号

The screenshot shows the 'Create App' form in the PayPal Developer console. At the top, there is a text input field for 'App Name' with the value 'Standard'. Below this, the 'Type' section has two radio button options: 'Merchant' (selected) and 'Platform'. The 'Merchant' option is described as 'Accept payments as a merchant (seller)', and the 'Platform' option is described as 'Move payments to sellers as a platform (marketplace, crowdfunding, or e-commerce platform)'. Underneath, the 'Sandbox Account' section shows a dropdown menu with the selected account 'Sandbox Business Account' and the email 'sb-nq4oe15362897@business.example.com (...)'. A disclaimer states: 'By clicking the button below, you agree to [PayPal Developer Agreement](#) (US accounts only)'. At the bottom of the form is a large blue button labeled 'Create App'.

7. 点击 "Create App", 获取 clientid 和 secret

## Sandbox 账户开通 Apple Pay 权限

1. 在创建好的 App 页面, 找到 Features->Accept Payments
2. 勾选 Apple Pay

### Accept payments

- Advanced Credit and Debit Card Payments**  
PayPal payment buttons plus customized card fields.
- Apple Pay**  
Enable customers to pay with Apple Pay in iOS apps and Safari.
- Google Pay**  
Let customers pay using their Google accounts.

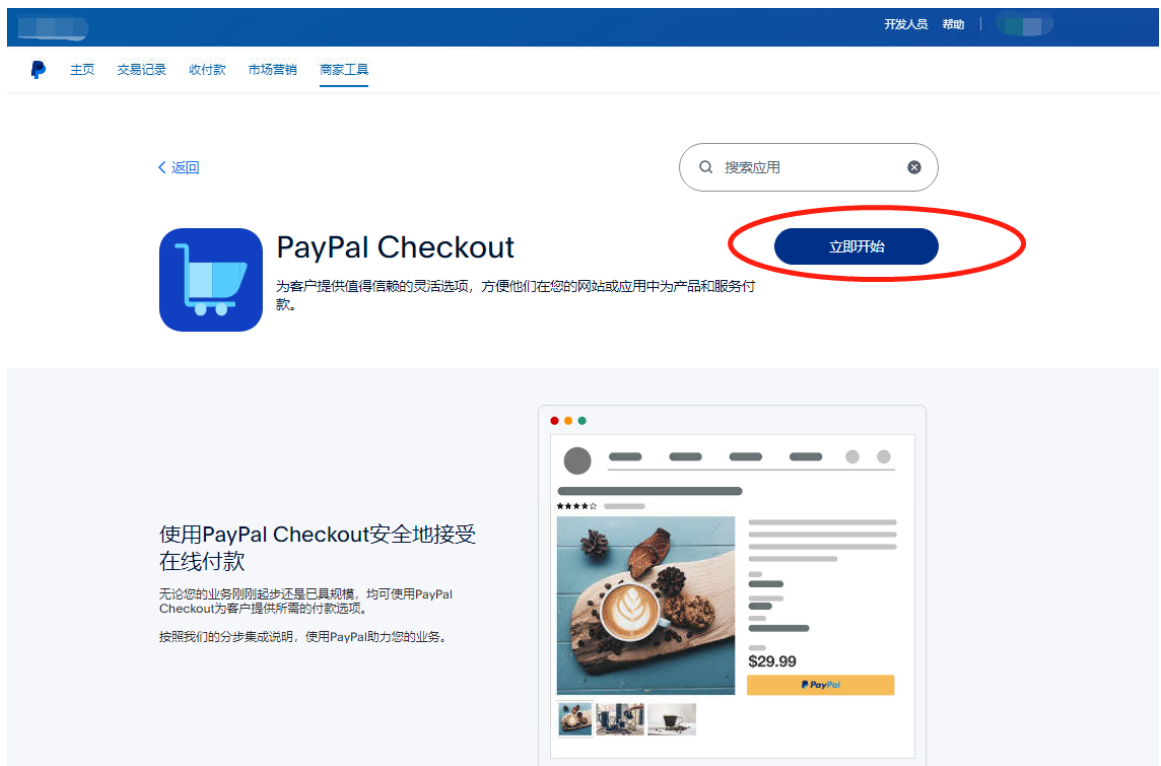
3. 点击 Save Changes

## Live 账户开通 Apple Pay 权限

1. 使用真实 PayPal 账号登录 [PayPal 主页](#)
2. 点击“商家工具”
3. 点击“PayPal Checkout”



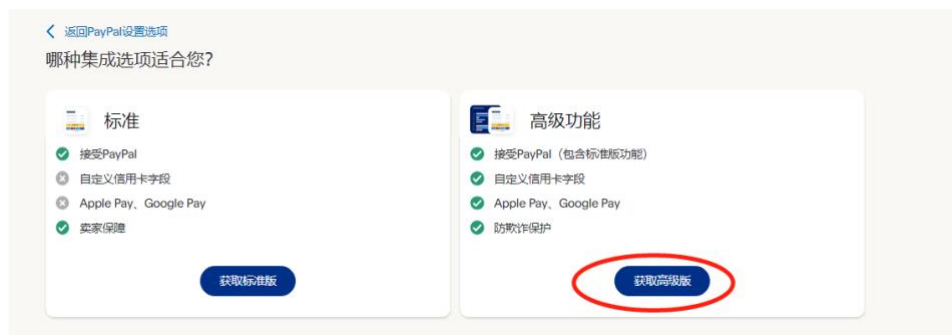
4. 点击“立即开始”



5. 点击有定制网站下面的“选择”



## 6. 点击“获取高级版”

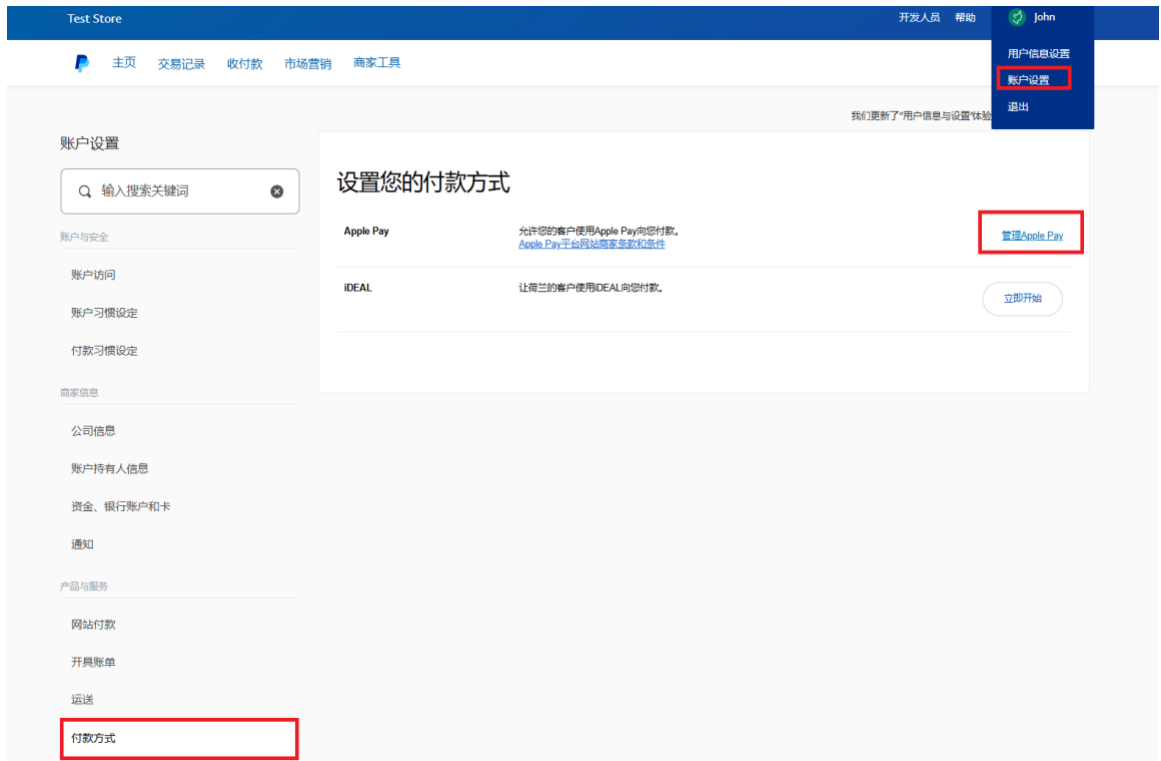


## 7. 输入信息后，“同意并提交”

## 8. 已获准使用 Apple Pay 的权限

## 注册 Domain 步骤:

1. Sandbox – 访问 [www.sandbox.paypal.com](http://www.sandbox.paypal.com), 使用收款的 sandbox 账号登录; Live - 访问 [www.paypal.com](http://www.paypal.com), 使用真实 PayPal 收款账号登录
2. 点击右上角“账号设置”, 点击左手边“付款方式”, 再点击“管理 Apple Pay”



3. 点击右上角“添加域名”
4. 输入 url，下载 association 文件，点击“注册域名”



5. 把下载的 association 文件放到指定的服务器目录下 [http://domain/.well-known/apple-developer-merchantid-domain-association](https://www.example.com/.well-known/apple-developer-merchantid-domain-association)