

# 綠界科技股份有限公司

Green World FinTech Service Co., Ltd.

## WooCommerce

### 綠界科技金流外掛套件安裝導引

ECPay Payment Plug-In Installation Guide

Version 1.1.180313

2018/03/13

## 目錄

1. 修改歷程 .....	1
2. 簡介 .....	1
3. 綠界科技 ApplePay 系統介接相關資訊 .....	2
4. WooCommerce 安裝準備事項 .....	4
5. 安裝導引 .....	5
5.1. 安裝外掛套件 .....	5
5.2. 設定付款方式 .....	6
5.3. 綠界科技定期定額 .....	8
5.4. Apple Pay 設定介面 .....	9
5.5. 前台結帳畫面 .....	10
5.6. 前台結帳畫面(定期定額).....	11
5.7. 前台結帳畫面(Apple Pay).....	12
6. 參考資料 .....	14
7. 附錄 .....	15
7.1. curl SSL 版本.....	15
7.2. 個人資料交換(.p12)轉換(linux 環境) .....	16
8. ApplePay 開發者前置準備說明.....	17
8.1 建立商務帳號 Create Merchant ID .....	17
8.2 建立交易憑証 Create Payment Processing Certificate .....	20
8.3 Add Domain (僅限 Apple Pay on the Web).....	26
8.4 Create Merchant Identity Certificate (僅限 Apple Pay on the Web) .....	31
8.5 建立沙盒測試帳號 .....	37
8.6 綁定測試卡號 .....	38
9. APPLE 開發者帳號申請說明 .....	40

## 1. 修改歷程

版本	修訂日期	修訂內容
1.0.0921	2016/09/21	新建 New Release。
1.0.10222	2017/03/10	增加支援電子發票自動開立功能
1.0.10406	2017/04/06	增加支援電子發票相容性驗證
1.0.10420	2017/04/20	增加 apple pay 付款選項
1.0.10526	2017/05/26	增加第 7 單元 Apple Pay 開發者前置準備說明
1.0.10601	2017/06/01	測試模式下記錄payment token資訊於訂單備註欄位
1.1.0801	2017/08/01	修正相容性至WooCommerce Version 3.1.1
1.1.0901	2017/09/01	增加綠界科技定期定額
1.1.0911	2017/09/11	信用卡取回後四碼，做為電子發票開立備註使用
1.1.1023	2017/10/23	修正相容性至 WooCommerce Version 3.2.0
1.1.1204	2017/12/04	安裝文件內容修正
1.1.180313	2018/03/13	1.增加感謝頁面 2.修正 return url

## 2. 簡介

綠界科技金流外掛套件(以下簡稱外掛套件)，提供合作特店以及個人會員使用開放原始碼商店系統時，無須自行處理複雜的檢核，直接透過安裝設定外掛套件，便可以較快速的方式介接綠界科技的金流系統。

### 3. 綠界科技 ApplePay 系統介接相關資訊

欄位說明	欄位內容
須具備條件如下	<ol style="list-style-type: none"> <li>1. 需成為綠界的特約商店 (申請時間約 10-15 天)</li> <li>2. <b>APPLE 僅接受銷售實體商品業者(非虛擬商品如遊戲點數)</b></li> <li>3. 商店必須有 <u>APPLE 的開發者帳號</u>(個人/公司) (公司帳號申請時間約一個月,APPLE 收年費為 USD100)</li> <li>4. APPLE PAY 的付款交易須自備 SSL 加密環境</li> <li>5. APPLE PAY 交易環境必須支援 Transport Layer Security (TLS) 1.2 , 包含消費者手機環境及廠商伺服器環境</li> </ol>
測試準備項目	<p>請在測試環境申請註冊會員  <a href="https://member-stage.ecpay.com.tw/MemberReg/MemberRegister?back=N">https://member-stage.ecpay.com.tw/MemberReg/MemberRegister?back=N</a>          完成後請提供下列資訊：</p> <ol style="list-style-type: none"> <li>1. 申請綠界測試環境會員編號</li> <li>2. 申請 APPLE PAY 的 MerchantID</li> <li>3. APPLE PAY 交易憑証的加密密碼(<b>必須設置密碼</b>)</li> <li>4. APPLE PAY 交易憑証(Apple Pay Payment Processing) (請匯出 P12 格式並壓縮 zip 檔)</li> <li>5. APPLE PAY 交易憑証的到期日</li> <li>6. 商店驗證事件取得 merchantSession 中的 PaymentToken 物件(須消費者付款指紋認證後才會取得，提供時無須經過 AES 加密的資料)</li> <li>7. 建立付款請求物件的交易金額</li> </ol> <p>將上述資料寄件至 <a href="mailto:techsupport@ecpay.com.tw">techsupport@ecpay.com.tw</a> 信箱，我們將由專人進行測試相關設定作業後，會通知廠商串接信用授權串接服務測試。</p>
廠商管理後台測試環境	<p><a href="https://vendor-stage.ecpay.com.tw">https://vendor-stage.ecpay.com.tw</a>          此網站可提供：</p> <ol style="list-style-type: none"> <li>1. 查詢 ecpay 訂單</li> <li>2. 測試環境金鑰取得資訊</li> </ol> <p>➔系統開發管理=&gt;系統介接設定取得以下金流介接 HashKey 及 HashIV 資訊</p>

※注意事項：

Apple Pay 台灣尚未開放平台商審核使用，申請串接時一個店家須申請一個 APPLE PAY 的 MerchantID 及憑證。

● 正式環境金鑰取得資訊：

請登入廠商後台(<https://vendor.ecpay.com.tw/>)=>系統開發管理=>系統介接設定取得以下金流介接 HashKey 及 HashIV 資訊

● 客戶環境支援資訊：

目前 Apple Pay 支援 iPhone 6 之後機種 (包含 iPhone SE)、iPad Air 2、iPad mini 3 與 iPad Pro 系列機種使用，另外也支援 Apple Watch 系列機種，以及 2012 年以後推出的 Mac 與 MacBook 系列機種使用，但僅有搭載 NFC 近場感應機能的 iPhone 與 Apple Watch 可透過零售通路刷卡機付款，包含 iPad 系列、Mac 系列機種僅能在 App 內，或是透過 Safari 瀏覽器在網頁服務中使用 Apple Pay 付款

## 4. WooCommerce 安裝準備事項

無論您使用 Windows、Linux 或任何伺服器，在安裝本外掛套件前，請先確定該伺服器是否支援 PHP 的 curl 模組。

### ※注意事項:

註 1：外掛套件僅支援 UTF8 語系版本的 PHP 商店系統。

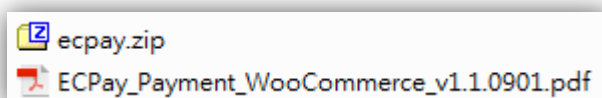
註 2：如果您使用的 PHP 是利用 AppServ 軟體架設在 Windows 的環境，請參考以下說明將 curl 模組掛上：

1. 在 WINDOWS 的目錄下找到 php.ini 這個檔。
2. 使用文字編輯器(UltraEdit、EmEdit 或其他)開啟 php.ini 檔案。
3. 找到 extension=php\_curl.dll 這一行，將前面的分號移除，並儲存檔案。
4. 重新啟動 Apache 伺服器。
5. 若仍然無法啟動 curl 模組，可以按照下面步驟嘗試修正
  - 在..\AppServ\php5\下找到 libeay32.dll 及 ssleay32.dll。
  - 在..\AppServ\php5\ext\下找到 php\_curl.dll。
  - 將上述三個檔案複製到%windir%/system32 下。
  - 重新啟動 Apache 伺服器即可。

## 5. 安裝導引

### 5.1. 安裝外掛套件

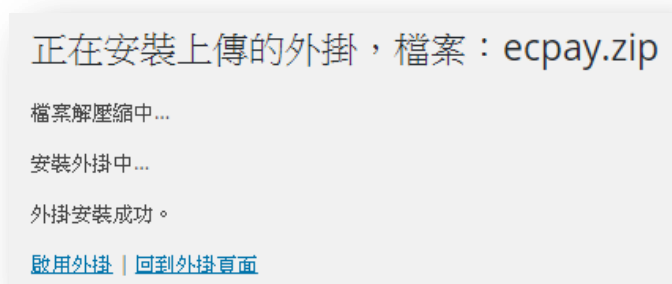
步驟一：解壓縮下載的套件檔後會有 1 個壓縮檔與 1 份安裝導引，如下圖：



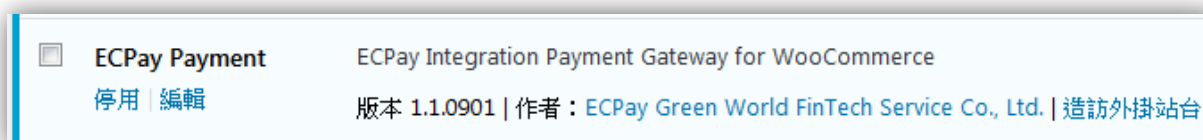
步驟二：進入 WordPress 後台→「外掛(Plugins)」→「安裝外掛(Add New)」→「上傳外掛(Upload Plugin)」→「選擇檔案」，選擇壓縮檔「ecpay.zip」，如下圖：



步驟三：按下「立即安裝(Install Now)」，便可以看見套件安裝成功，如下圖：



步驟四：按下「啟用外掛(Active Plugin)」，便可以看見套件啟用成功，如下圖：



## 5.2. 設定付款方式

步驟一：進入 WordPress 後台，「WooCommerce」→「設定(Settings)」→「結帳(Checkout)」→「綠界科技(EPay)」，就可以進入編輯畫面，如下圖：



步驟二：將啟用/停用(Enable/Disable)改為「啟用 (Enabled)」，將申請的資料填寫到「特店編號(Merchant ID)」、「金鑰(Hash Key)」與「向量(Hash IV)」欄位，並將「測試模式(Test Mode)」取消勾選，其他選項請依需求設定，再按下左下角的「儲存修改(Save changes)」儲存設定，如圖：





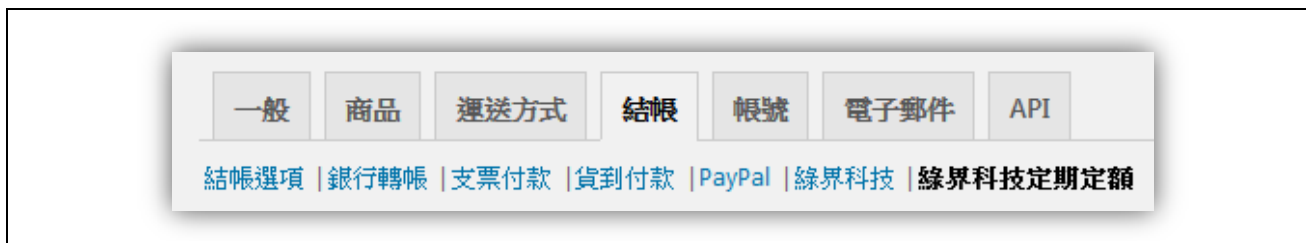
※注意事項:

註 1：本外掛套件提供測試模式的設定，用於連接到 ECPay 提供客戶的介接環境，請勿在正式營運的環境中開啟測試模式。

註 2：本外掛套件於 ECPay 廠商後台按下模擬付款按鈕後，是會變更訂單狀態為已付款的，請勿在正式營運的環境中點選模擬付款。

## 5.3. 綠界科技定期定額

步驟一：進入 WordPress 後台，「WooCommerce」→「設定(Settings)」→「結帳(Checkout)」→「綠界科技定期定額(ECPay Paid Automatically)」，就可以進入編輯畫面，如下圖：



步驟二：將啟用/停用(Enable/Disable)改為「啟用 (Enabled)」，其他選項請依需求設定，再按下左下角的「儲存修改(Save changes)」儲存設定，如下圖：



## 5.4.Apple Pay 設定介面

付款方式

ATM  
超商代碼  
超商條碼  
Apple Pay

Apple Pay設定

Apple Pay ☒ 啟動 測試憑證

key憑證路徑 /etc/httpd/ssl/ApplePay.key.pem

crt憑證路徑 /etc/httpd/ssl/ApplePay.crt.pem

憑證密碼 .....

註冊名稱 merchant.ECpay.ECC

儲存修改

### ※注意事項:

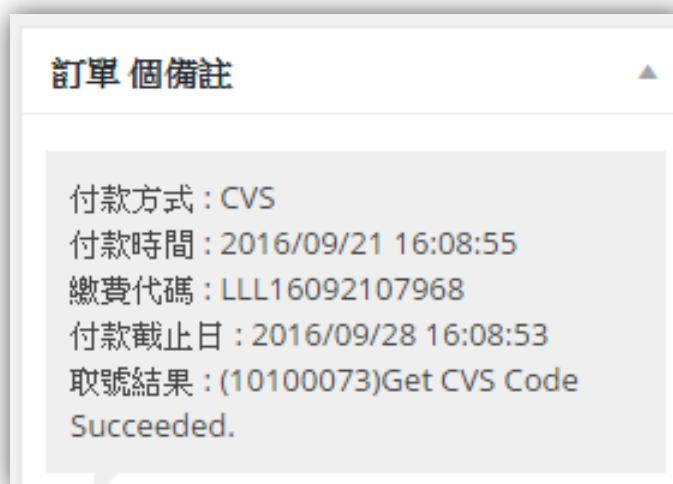
- 1.請先完成 Apple Pay 相關設定步驟，請參考 [ApplePay 開發者前置準備說明](#)
- 2.curl SSL Version 需要使用 openssl (附錄 6.1)
- 3.key 憑證路徑與 crt 憑證路徑請勿放在網頁公用區域，以防憑證遭竊取風險
4. key 與 crt 憑證是透過個人資訊交換 (.p12)，請使用 openssl 進行轉換 (附錄 6.2)

## 5.5. 前台結帳畫面

步驟一：進入購物車選擇結帳後，會顯示下拉選單選擇付款方式，如下圖：



步驟二：取號完成後，相關付款資訊也會記錄在訂單備註，如下圖，並於付款完成後更新訂單狀態：



## 5.6. 前台結帳畫面(定期定額)

步驟一：進入購物車選擇結帳後，會顯示下拉選單選擇付款方式，如下圖：



步驟二：取號完成後，相關付款資訊也會記錄在訂單備註，如下圖，並於付款完成後更新訂單狀態。



## 5.7. 前台結帳畫面(Apple Pay)

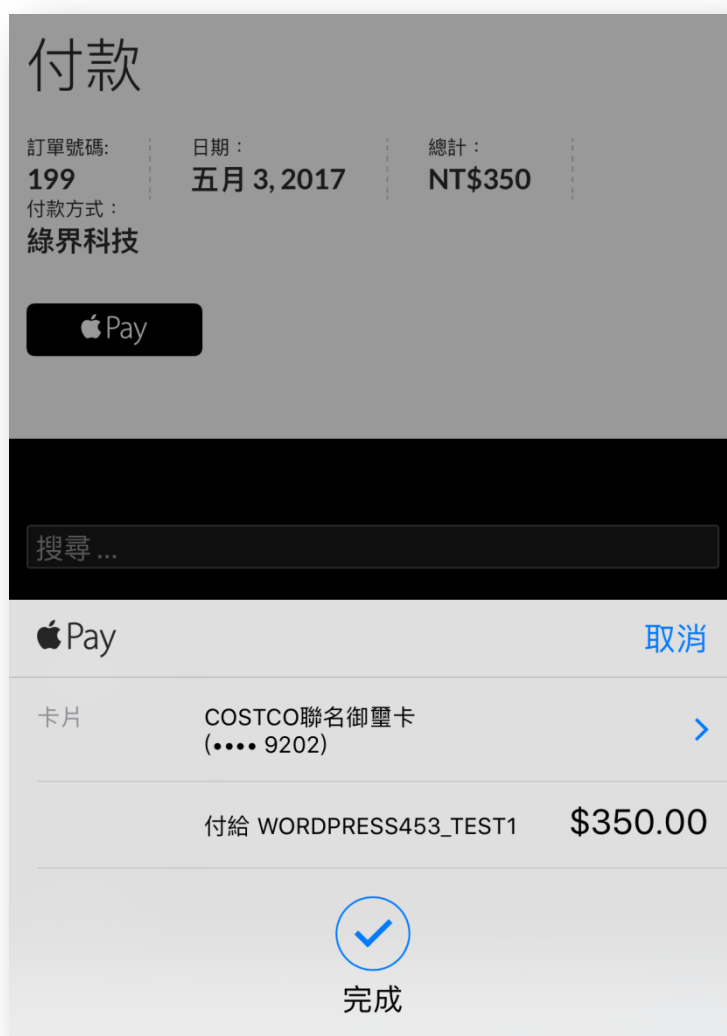
步驟一：進入購物車選擇結帳後，會顯示下拉選單選擇付款方式，如下圖：



步驟二：點擊下單購買按鈕，進入付款頁面，如下圖：



步驟三：點擊 Pay 按鈕，進行付款，如下圖：



步驟四：成功付款畫面，如下圖：



## 6. 參考資料

文件名稱	下載位址
ECPay 全功能全方位金流介接技術文件	<a href="#">下載</a>



## 7. 附錄

### 7.1. curl SSL 版本

SSL Version 要為 OpenSSL

#### curl

cURL support	enabled
cURL Information	7.19.7
Age	3
Features	
AsynchDNS	No
CharConv	No
Debug	No
GSS-Negotiate	No
IDN	No
IPv6	Yes
krb4	No
Largefile	Yes
libz	Yes
NTLM	Yes
SPNEGO	No
SSL	Yes
SSPI	No
Protocols	tftp, ftp, telnet, dict, http, file, https, ftps
Host	x86_64-unknown-linux-gnu
SSL Version	OpenSSL/1.0.1e
ZLib Version	1.2.3

## 7.2. 個人資料交換(.p12)轉換(linux 環境)

openssl pkcs12 -in ApplePayMerchantIdentity\_and\_privatekey.p12 -out ApplePay.crt.pem -clcerts -nokeys

```
[root@test7 ssl]# openssl pkcs12 -in ApplePayMerchantIdentity_and_privatekey.p12 -out ApplePay.crt.pem -clcerts -nokeys
Enter Import Password:
MAC verified OK
[root@test7 ssl]#
```

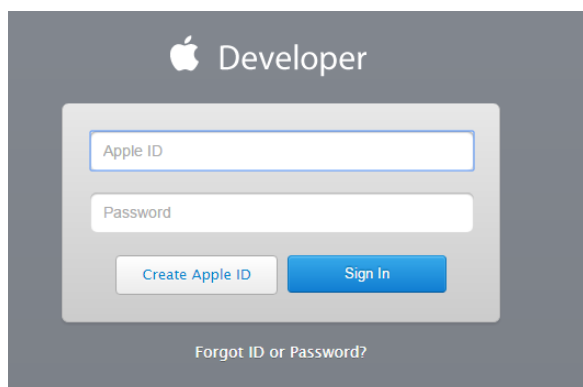
openssl pkcs12 -in ApplePayMerchantIdentity\_and\_privatekey.p12 -out ApplePay.key.pem -nocerts

```
[root@test7 ssl]# openssl pkcs12 -in ApplePayMerchantIdentity_and_privatekey.p12 -out ApplePay.key.pem -nocerts
Enter Import Password:
MAC verified OK
Enter PEM pass phrase:
[root@test7 ssl]#
```

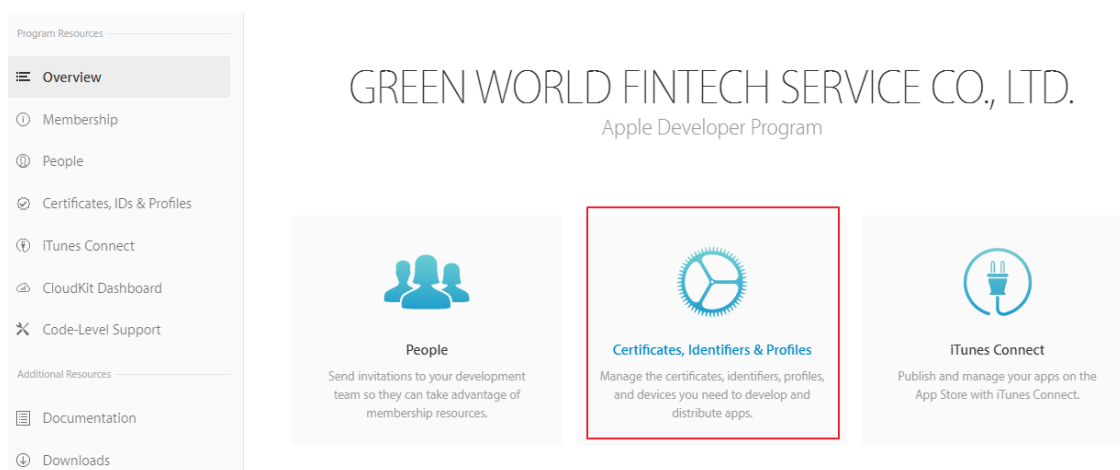
## 8. ApplePay 開發者前置準備說明

### 8.1 建立商務帳號 Create Merchant ID

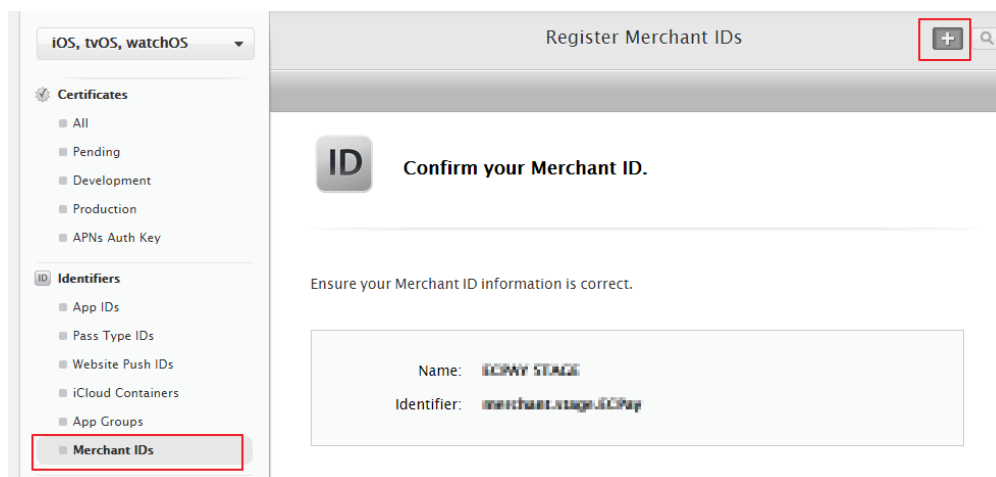
1. 請登入至您的 Apple 開發者帳戶



2. 選擇 “Certificates, Identifiers & Profiles.”



3. 選擇 “Merchant IDs”



## 4. 註冊商務資料

Register Merchant IDs

**ID** Registering a Merchant ID

Register your Merchant Identifiers (Merchant IDs) to enable your apps to process transactions for physical goods and services to be used outside of your apps. Generate a Apple Pay certificate for each registered Merchant ID to validate transactions initiated within your app.

**Merchant ID Description**

Description:   
You cannot use special characters such as @, &, \*, ', \*

**Identifier**

Enter a unique identifier for your Merchant ID, starting with the string 'merchant'.

ID:   
We recommend using a reverse-domain name style string (i.e., merchant.com.example.merchantname).

Cancel Continue

## 5. 確認註冊商務資料

Register Merchant IDs

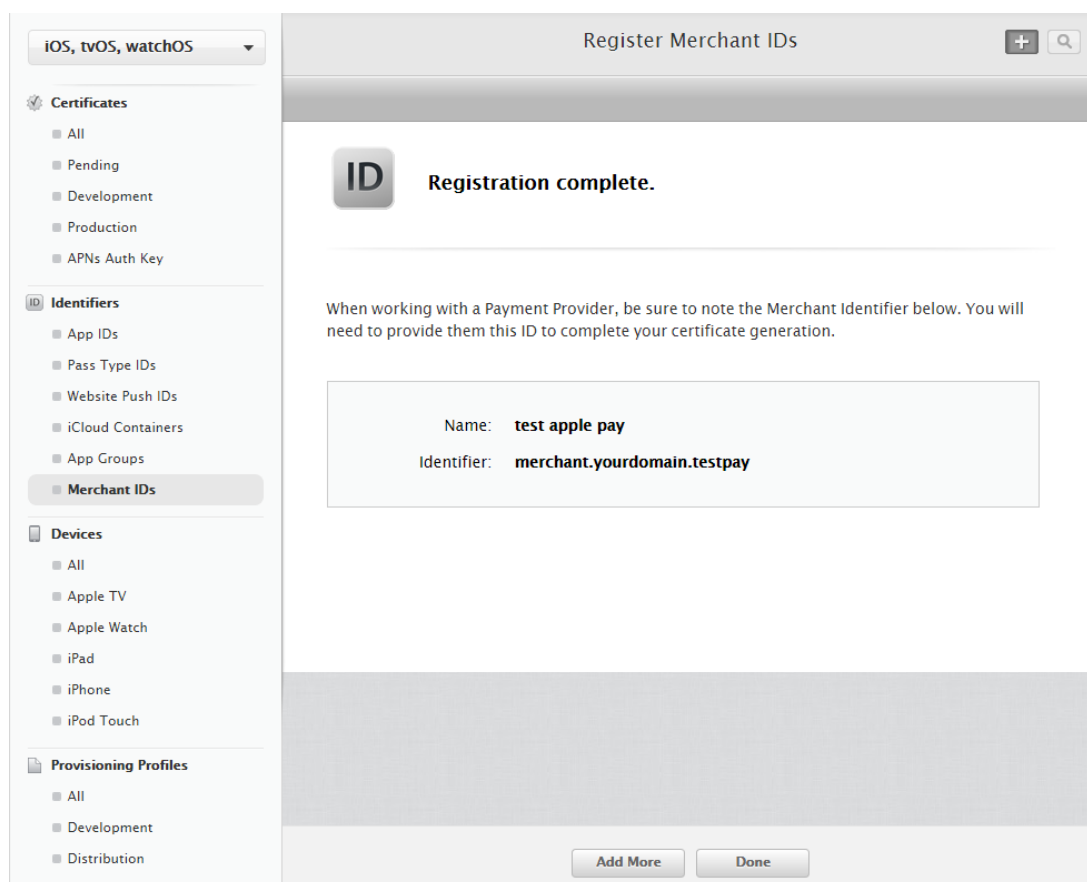
**ID** Confirm your Merchant ID.

Ensure your Merchant ID information is correct.

Name: **test apple pay**  
Identifier: **merchant.yourdomain.testpay**

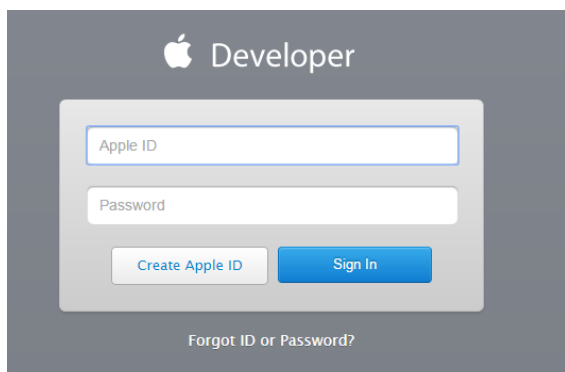
Cancel Back Register

## 6. 完成註冊商務資料

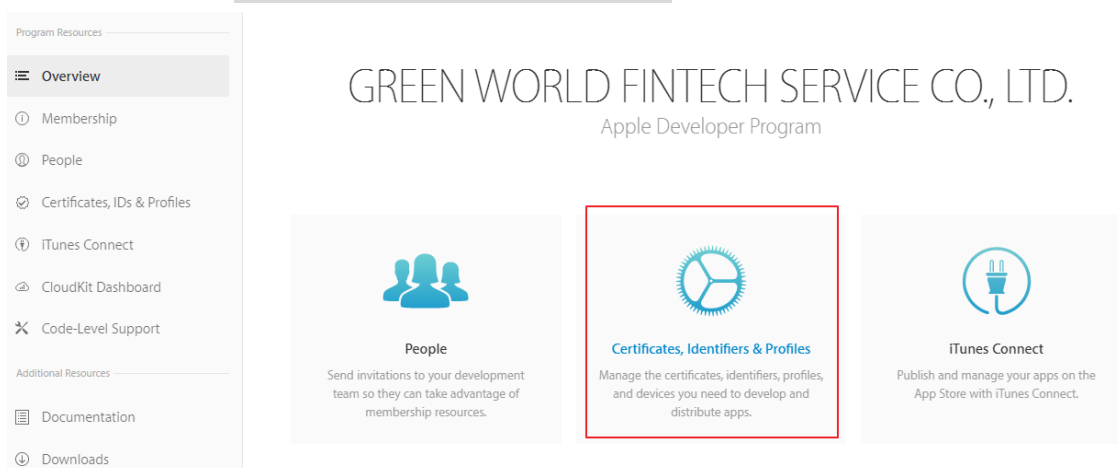


## 8.2 建立交易憑証 Create Payment Processing Certificate

1. 請登入至您的 Apple 開發者帳戶



2. 選擇 “Certificates, Identifiers & Profiles.”



3. 選擇功能選單 Identifiers 底下的 Merchant IDs




## 4. 選擇要新增憑証的 Merchant ID

Merchant IDs		+	Q
4 Merchant IDs total.			
Name	ID		
ECPay	merchant.ECPay		
ECPAY STAGE	merchant.stage.ECPay		
ECPayECC	merchant.ECpay.ECC		
test apple pay	merchant.yourdomain.testpay		

## 5. 按 Edit 按鈕

Merchant IDs		+	Q
4 Merchant IDs total.			
Name	ID		
ECPay	merchant.ECPay		
ECPAY STAGE	merchant.stage.ECPay		
ECPayECC	merchant.ECpay.ECC		
test apple pay	merchant.yourdomain.testpay		




Name: test apple pay  
ID: merchant.yourdomain.testpay

**Edit** Delete

## 6. 選擇 Payment Processing Certificate 裡的 Create Certificate 按鈕，建立商務交易憑証

Setup and configure services for this Merchant ID.

 ID: merchant.yourdomain.testpay  
Name:

To configure Apple Pay for this merchant ID, create a Payment Processing Certificate. Apple Pay requires this certificate to encrypt transaction data. Use the same certificate for Apple Pay in apps or on the web.

Payment Processing Certificate	
Create a payment processing certificate for this merchant ID.	<b>Create Certificate</b>

## 7. 回答問題按 Continue

Setup and configure services for this Merchant ID.



ID: merchant.yourdomain.testpay

Name: test apple pay

Will payments associated with this Merchant ID be processed exclusively in China?

☒ No

☐ Yes

Continue

## 8. 閱讀憑証請求檔建立相關資訊後,按 Continue

Select Type

Request

Generate

Download



### About Creating a Certificate Signing Request (CSR)

To generate a certificate for use with Apple Pay, you, an authorized representative, or a payment provider need a Certificate Signing Request (CSR) file.

**Obtain a CSR file from your Payment Provider.**

Contact your payment provider to obtain a properly formatted CSR for you to upload and create your certificate.

**Create a CSR file. (Optional)**

To create a CSR file without a payment provider, follow the instructions below to create one using Keychain Access. In the Applications folder on your Mac, open the Utilities folder and launch Keychain Access.

Within the Keychain Access drop down menu, select Keychain Access > Certificate Assistant > Request a Certificate from a Certificate Authority.

- In the Certificate Information window, enter the following information:
  - In the User Email Address field, enter your email address.
  - In the Common Name field, create a name for your private key (e.g., John Doe Dev Key).
  - The CA Email Address field should be left empty.
  - In the "Request is" group, select the "Saved to disk" option.
  - Select "Let me specify key pair information".
- Click Continue within Keychain Access and select the file location.
- Set the Key Pair Information to the following:
  - Algorithm: ECC
  - Key Size: 256 bits
- Click Continue within Keychain Access to complete the CSR generating process.

Cancel

Back

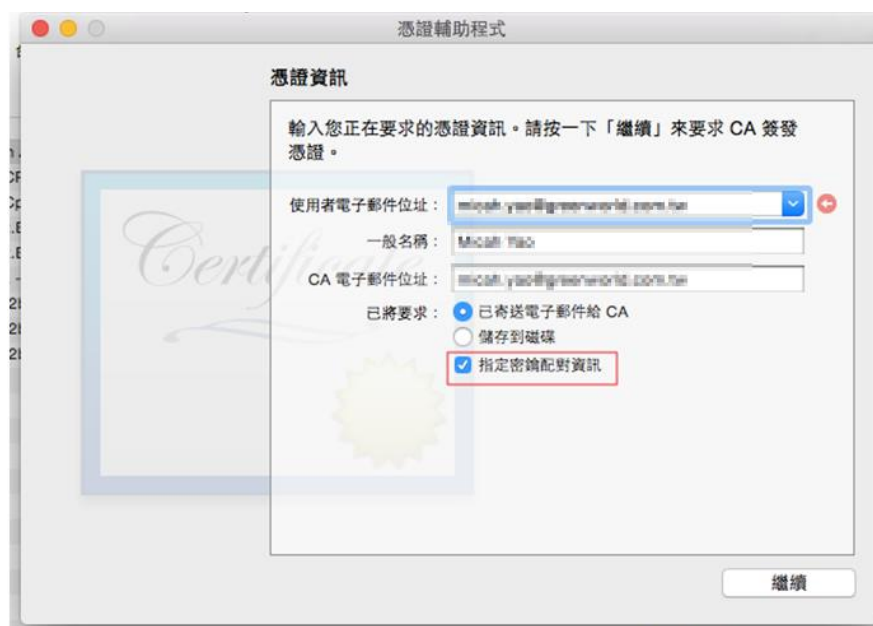
Continue



9. 請使用 mac 電腦建置憑証請求檔



10. 選擇憑証演算法及長度(演算法請選擇 ECC,長度請選擇 256)・並選擇儲存到磁碟






11. 將檔案直接儲存到硬碟後，取得憑証請求檔 CSR

12. 上傳憑証請求檔

Select Type Request **Generate** Download

**Generate your certificate.**

When your CSR file is created, a public and private key pair is automatically generated. Your private key is stored on your computer. On a Mac, it is stored in the login Keychain by default and can be viewed in the Keychain Access app under the "Keys" category. Your requested certificate is the public half of your key pair.

**Upload CSR file.**  
Select .certSigningRequest file saved on your Mac.

Choose File...

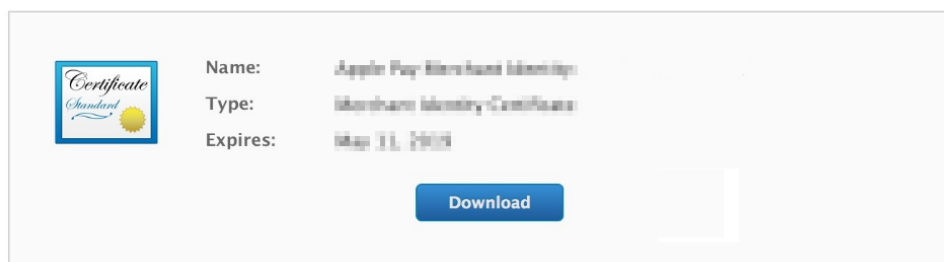
13. 點擊 Download 按鈕來下載憑證，將它安裝至 mac 電腦鑰匙圈存取



**Your certificate is ready.**

## Download, Install and Backup

Download your certificate to your Mac, then double click the .cer file to install in Keychain Access. Make sure to save a backup copy of your private and public keys somewhere secure.



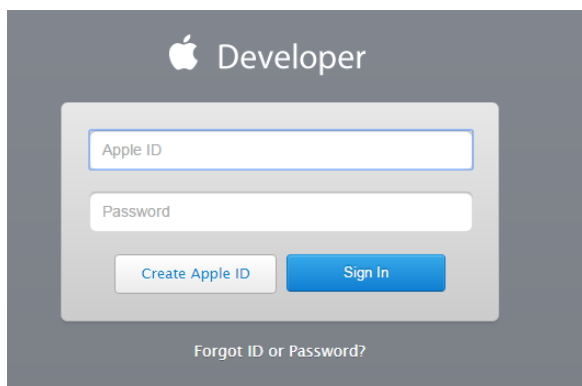
14. 選擇交易憑証，匯出檔案 p12 格式(必須設定憑證密碼)



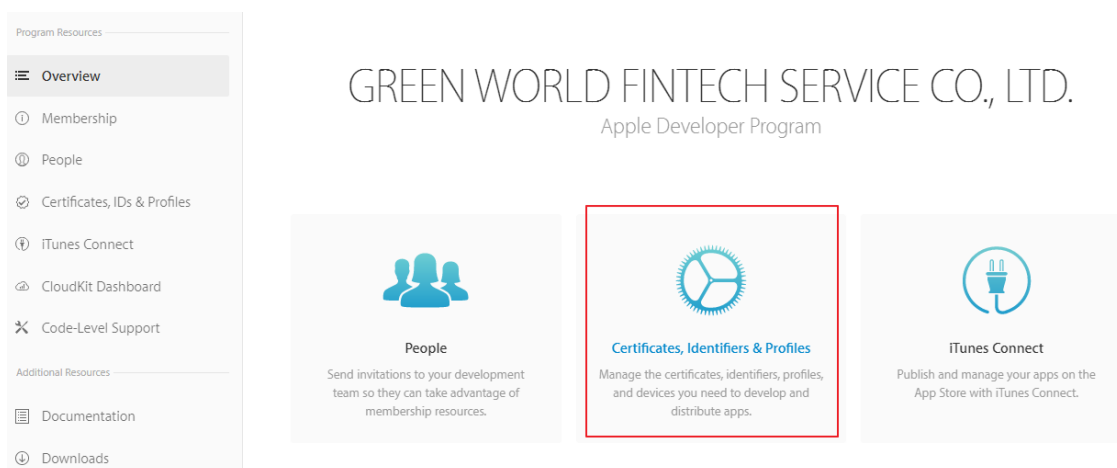
15. 把匯出後的憑證檔案 ( p12 格式 ) 及憑證密碼提供給綠界科技

## 8.3 Add Domain (僅限 Apple Pay on the Web)

1. 請登入至您的 Apple 開發者帳戶



2. 選擇 “Certificates, Identifiers & Profiles.”



3. 選擇功能選單 Identifiers 底下的 Merchant IDs




## 4. 選擇要設定 Domain 的 Merchant ID

Merchant IDs		+	Q
4 Merchant IDs total.			
Name	ID		
ECPay	merchant.ECPay		
ECPAY STAGE	merchant.stage.ECPay		
ECPayECC	merchant.ECpay.ECC		
test apple pay	merchant.yourdomain.testpay		

## 5. 按 Edit 按鈕

Merchant IDs		+	Q
4 Merchant IDs total.			
Name	ID		
ECPay	merchant.ECPay		
ECPAY STAGE	merchant.stage.ECPay		
ECPayECC	merchant.ECpay.ECC		
test apple pay	merchant.yourdomain.testpay		



Name: test apple pay

ID: merchant.yourdomain.testpay

Edit

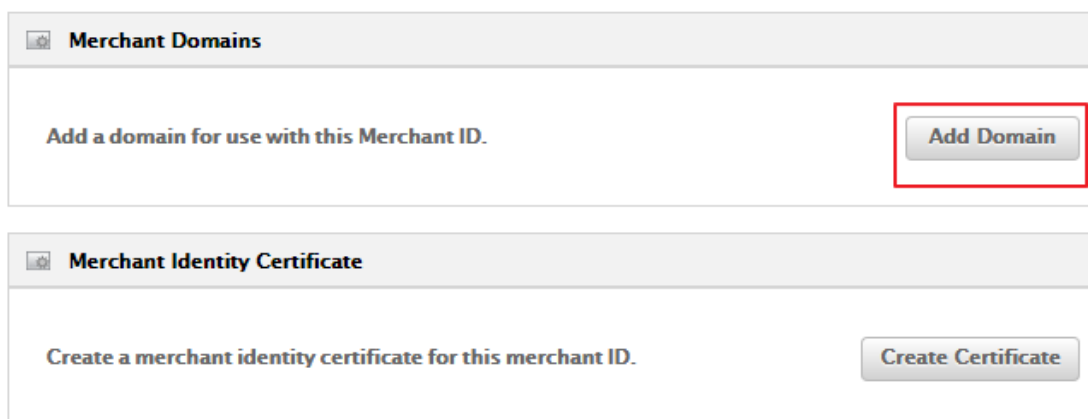
Delete

## 6. 選擇 Merchant Domains 中的 Add Domain 按鈕

### Apple Pay on the Web

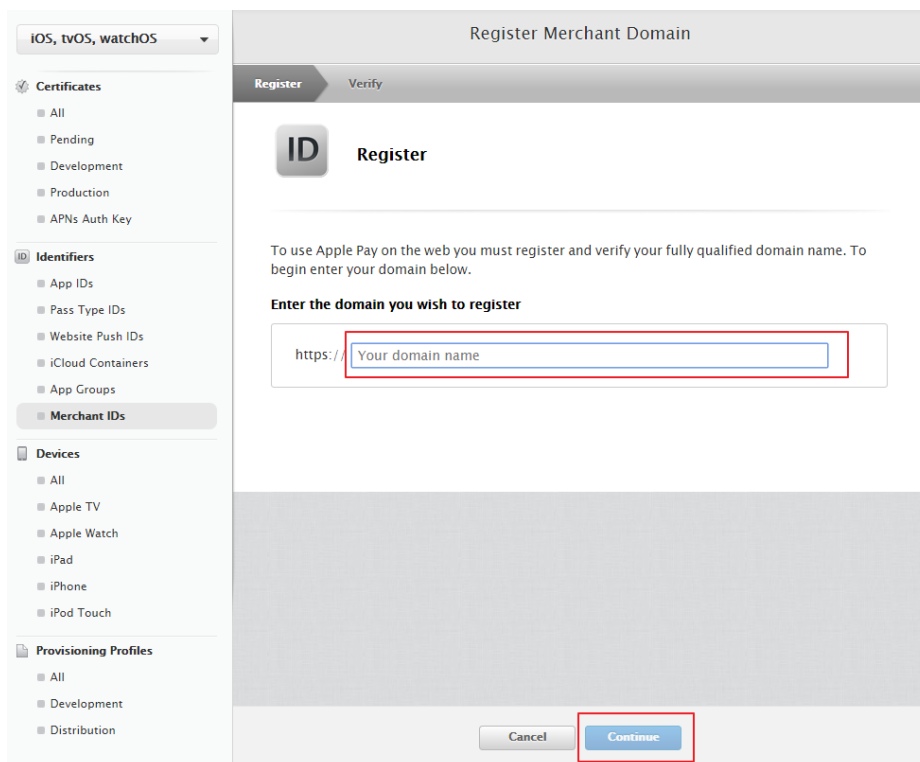
To configure Apple Pay on the web for this merchant ID, you must register and verify the domains that will process transactions. You must also create a Merchant Identity Certificate, which authenticates your web sessions with the Apple Pay servers.

Incorporation of Apple Pay into your website is subject to these [Acceptable Use Guidelines](#). Failure to comply with these guidelines may result in deactivation of Apple Pay transactions on your website.



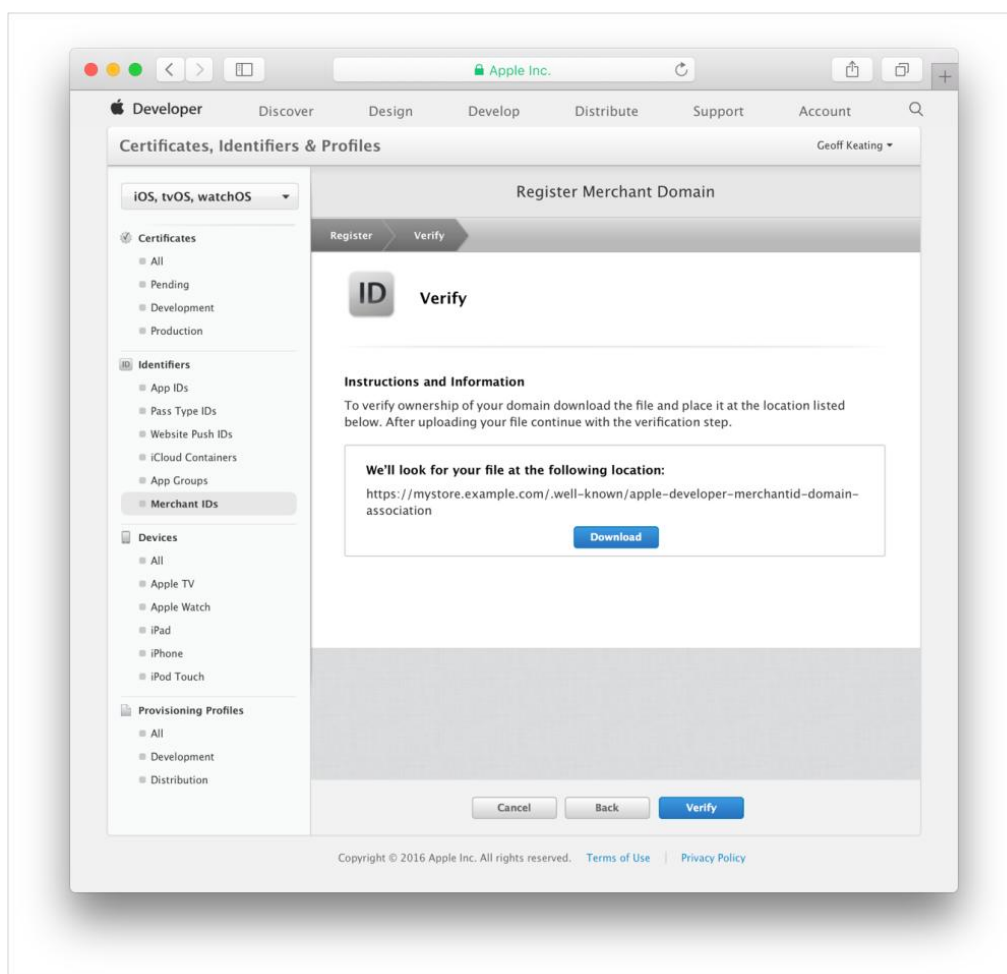
The screenshot shows two sections of the Apple Developer console. The first section, 'Merchant Domains', has a subtitle 'Add a domain for use with this Merchant ID.' and a button labeled 'Add Domain' which is highlighted with a red rectangular box. The second section, 'Merchant Identity Certificate', has a subtitle 'Create a merchant identity certificate for this merchant ID.' and a button labeled 'Create Certificate'.

## 7. 輸入要註冊的 domain name



The screenshot shows the 'Register Merchant Domain' dialog box. On the left is a sidebar with a tree view containing categories like Certificates, Identifiers, Devices, and Provisioning Profiles. The main area has a 'Register' tab selected. Below the 'ID Register' header, there is a text prompt: 'To use Apple Pay on the web you must register and verify your fully qualified domain name. To begin enter your domain below.' This is followed by the instruction 'Enter the domain you wish to register' and a text input field with the placeholder 'Your domain name'. The input field is highlighted with a red rectangular box. At the bottom of the dialog are 'Cancel' and 'Continue' buttons, with the 'Continue' button also highlighted by a red box.

## 8. 下載驗證檔案並放到指定位置，完成後點選 “Verify” 即可完成



**注意事項：**

1. 在 IIS 平台上要記得先行設定 MIME 類型，讓 IIS 認得「.well-known\acme-challenge」鏈結路徑或在 config 設定檔加入設定如下圖

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
  <system.webServer>
    <staticContent>
      <mimeTypeMap fileExtension="." mimeType="text/plain" />
    </staticContent>
  </system.webServer>
</configuration>
```

**2. 網域 SSL 憑証必須符合下列指的 Cipher suite list**

Your server must support the TLS 1.2 protocol and one of the cipher suites listed in Table 1.

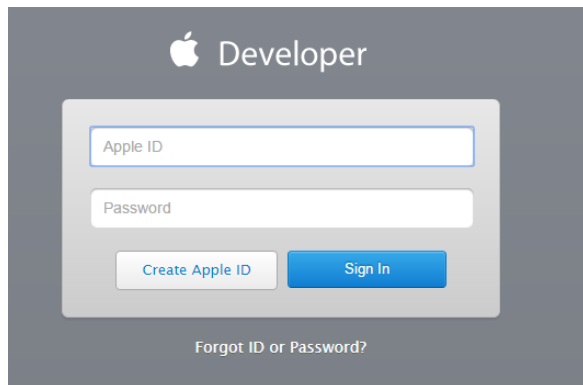
**Table 1** Supported cipher suites

Ciphersuite Value	Description
0xC02F	TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
0xC027	TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
0xC013	TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA
0x009E	TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
0x0067	TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
0x009C	TLS_RSA_WITH_AES_128_GCM_SHA256
0x003C	TLS_RSA_WITH_AES_128_CBC_SHA256

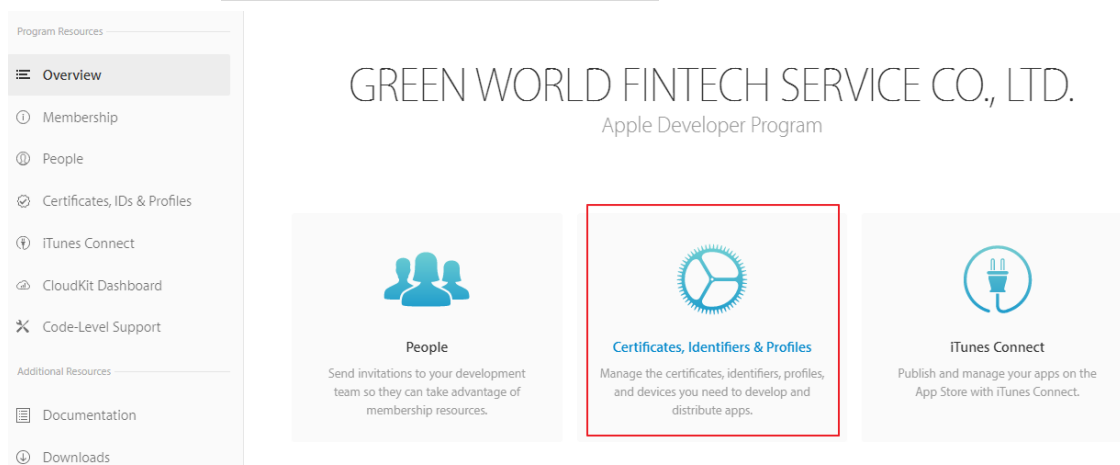


## 8.4 Create Merchant Identity Certificate (僅限 Apple Pay on the Web)

1. 請登入至您的 Apple 開發者帳戶



2. 選擇 “Certificates, Identifiers & Profiles.”



3. 選擇功能選單 Identifiers 底下的 Merchant IDs



## 4. 選擇 Merchant ID

Merchant IDs



+


Q

4 Merchant IDs total.

Name	ID
ECPay	merchant.ECPay
ECPAY STAGE	merchant.stage.ECPay
ECPayECC	merchant.ECpay.ECC
test apple pay	merchant.yourdomain.testpay



## 5. 按 Edit 按鈕

Merchant IDs		 	
4 Merchant IDs total.			
Name		ID	
ECPay		merchant.ECPay	
ECPAY STAGE		merchant.stage.ECPay	
ECPayECC		merchant.ECpay.ECC	
test apple pay		merchant.yourdomain.testpay	



Name: test apple pay

ID: merchant.yourdomain.testpay

## 6. 選擇 Merchant identity Certificate 中的 Create Certificate 按鈕

### Apple Pay on the Web

To configure Apple Pay on the web for this merchant ID, you must register and verify the domains that will process transactions. You must also create a Merchant Identity Certificate, which authenticates your web sessions with the Apple Pay servers.

Incorporation of Apple Pay into your website is subject to these [Acceptable Use Guidelines](#). Failure to comply with these guidelines may result in deactivation of Apple Pay transactions on your website.

The screenshot shows two sections of a web interface. The top section, titled 'Merchant Domains', contains the text 'Add a domain for use with this Merchant ID.' and an 'Add Domain' button. The bottom section, titled 'Merchant Identity Certificate', contains the text 'Create a merchant identity certificate for this merchant ID.' and a 'Create Certificate' button, which is highlighted with a red rectangular box.

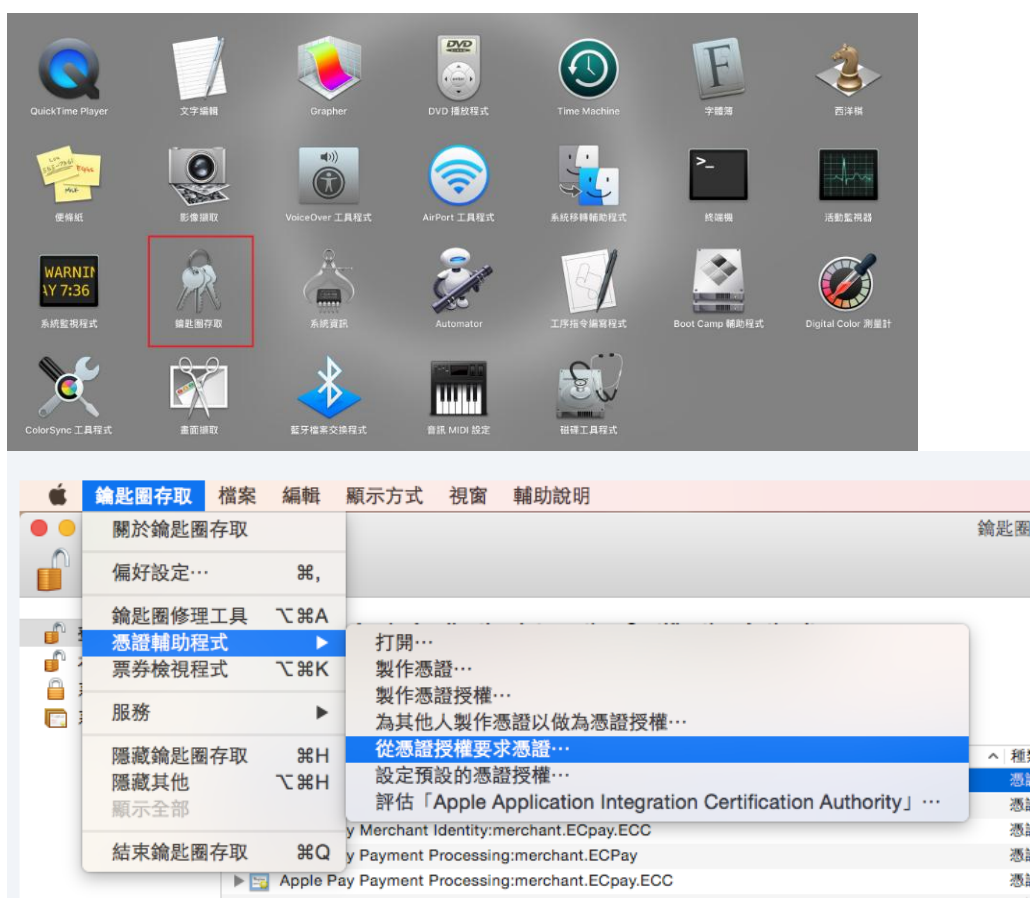
## 7. 閱讀憑証請求檔建立相關資訊後,按 Continue

The screenshot shows a progress bar at the top with four steps: 'Select Type', 'Request', 'Generate', and 'Download'. The 'Request' step is currently active. Below the progress bar is a section titled 'About Creating a Certificate Signing Request (CSR)' with a 'Certificate' icon. The text instructs the user to 'Create a CSR file.' and follow instructions to create a CSR using Keychain Access. It provides detailed steps for opening Keychain Access, navigating to the Certificate Assistant, and entering information in the Certificate Information window. A list of instructions is provided:

- In the Certificate Information window, enter the following information:
  - In the User Email Address field, enter your email address.
  - In the Common Name field, create a name for your private key (e.g., John Doe Dev Key).
  - The CA Email Address field should be left empty.
  - In the "Request is" group, select the "Saved to disk" option.
- Click Continue within Keychain Access to complete the CSR generating process.

At the bottom of the page, there are three buttons: 'Cancel', 'Back', and 'Continue'. The 'Continue' button is highlighted with a red rectangular box.

## 8. 請使用 mac 電腦建置憑証請求檔



## 9. 上傳憑証請求檔

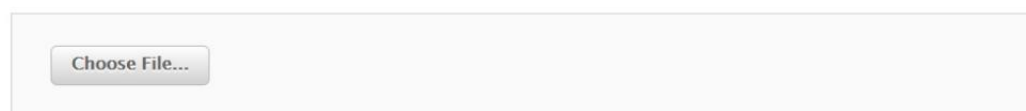


**Generate your certificate.**

When your CSR file is created, a public and private key pair is automatically generated. Your private key is stored on your computer. On a Mac, it is stored in the login Keychain by default and can be viewed in the Keychain Access app under the "Keys" category. Your requested certificate is the public half of your key pair.

**Upload CSR file.**

Select .certSigningRequest file saved on your Mac.



10. 點擊 Download 按鈕來下載憑證，將它安裝至 mac 電腦鑰匙圈存取



**Your certificate is ready.**

**Download, Install and Backup**

Download your certificate to your Mac, then double click the .cer file to install in Keychain Access. Make sure to save a backup copy of your private and public keys somewhere secure.



Name: [redacted]  
Type: [redacted]  
Expires: [redacted]

Download

**Documentation**

For more information on using and managing your certificates read:

 [App Distribution Guide](#)

Add Another

Done

11. 匯出您的金鑰，檔案格式選個人資訊交換 (.p12)，金鑰將會於驗證商家時使用



## 8.5 建立沙盒測試帳號

### 1. 用您的 Apple 開發者帳戶登入至 iTunes Connect



### 2. 選擇沙箱技術測試人員，後點選 + 按鈕

iTunes Connect 使用者和職能 ▾

iTunes Connect 使用者    TestFlight Beta 版測試人員    **沙箱技術測試人員**

測試人員 (1) **+**

填寫測試人員資料

< 沙箱技術測試人員

新增沙箱技術測試人員

[取消](#) [儲存](#)

沙箱技術測試人員可以於開發模式下測試您的 App 並於 App 內購買項目中進行非真實交易的購買。於 2016 年 6 月 13 日後加入的使用者可以使用 Apple Pay 進行交易測試。

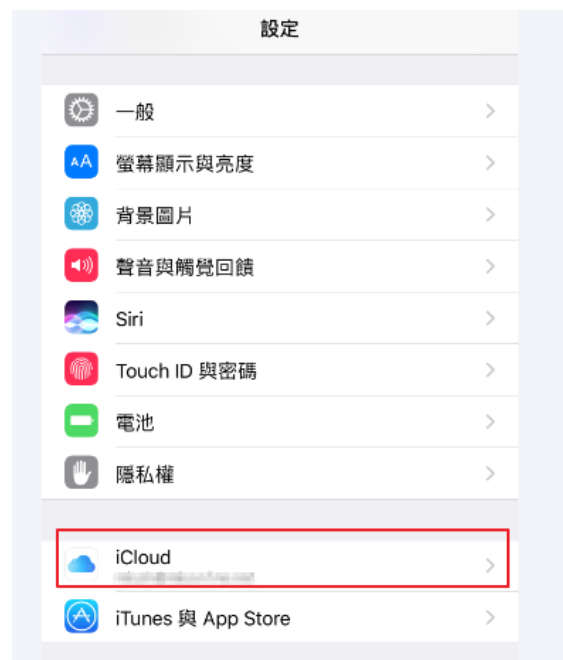
測試人員資訊

姓氏	名字
<input type="text"/>	<input type="text"/>
電子郵件	
<input type="text"/>	
密碼	確認密碼
<input type="text"/>	<input type="text"/>
安全提示問題	安全提示問題回答
<input type="text"/>	<input type="text"/>
出生日期	App Store 地區
月份 <input type="text"/> 日 <input type="text"/>	選擇 <input type="text"/>

### 3. 收取電子信箱驗證帳號，完成測試人員申請

## 8.6 綁定測試卡號

1. 登入你的裝置，在 iCloud 登入測試帳號



2. 更改裝置地區別為美國



3. 加入測試卡號

測試卡號網址: <https://developer.apple.com/support/apple-pay-sandbox/>

(限 **MasterCard** 及 **Visa** 信用卡)



## Adding a Test Card Number

To get started, add a test card to Wallet:

1. Make sure to sign out of iCloud and sign into your test device with your sandbox tester account.
2. Go to Wallet and tap Add Credit or Debit Card.
3. Using your test credential, follow the steps to add a new card using manual entry.
4. After your card has been added, you may begin testing.

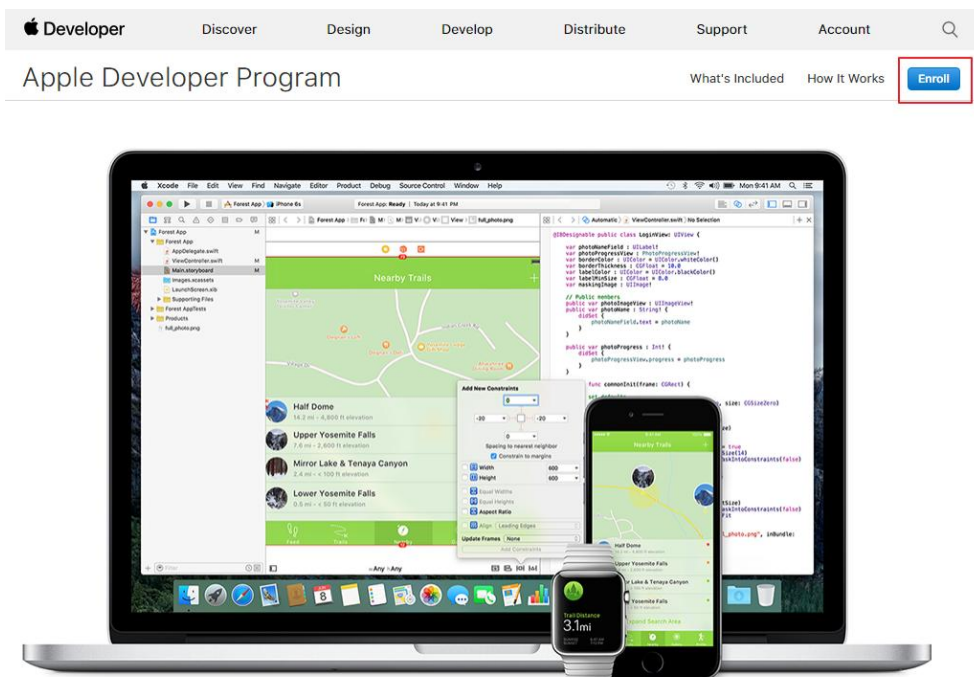
**Note:** To provision test cards on your device and use the sandbox, you will need to make sure that your device's region is set to a country that supports Apple Pay.

### 4. 設定->safari->檢查 apple pay 設定，請設定關閉



## 9. APPLE 開發者帳號申請說明

- 申請網址：<https://developer.apple.com/programs/ios/develop.html>
  - 申請費用：每年 \$99 美元
- i. 進入 Apple 開發者網站，點右側的 **Enroll** 按鈕。



- ii. 閱讀註冊相關注意事項，點選下方的 **Start Your Enrollment** 按鈕。

### Legal Entity Status

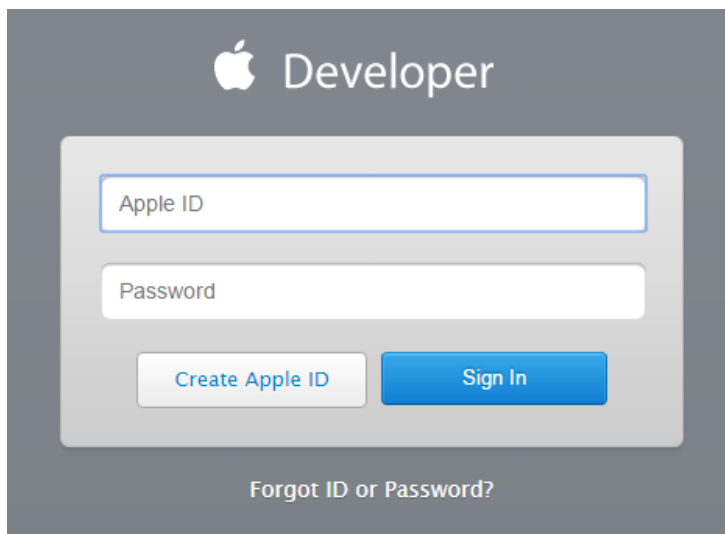
Your organization must be a legal entity so that it can enter into contracts with Apple. We do not accept DBAs, fictitious businesses, trade names, or branches.

### Legal Binding Authority

As the person enrolling your organization in the Apple Developer Program, you must have the legal authority to bind your organization to legal agreements. You must be the organization's owner/founder, executive team member, senior project lead, or have legal authority granted to you by a senior employee.

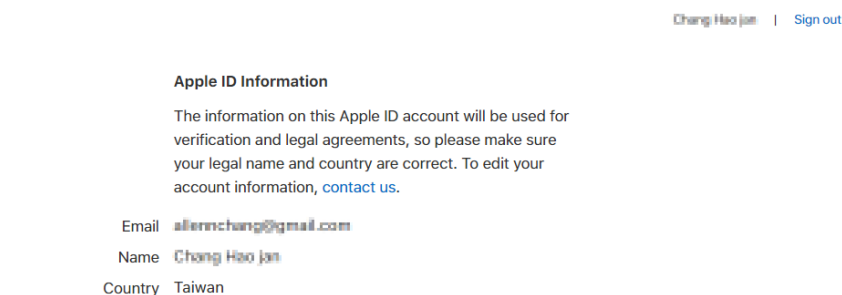
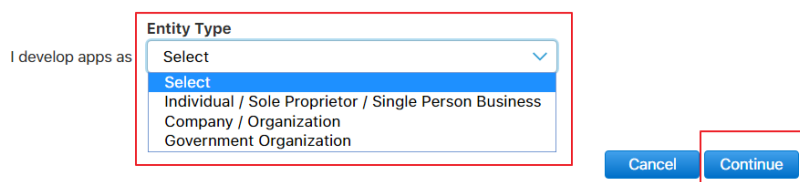
**Start Your Enrollment**

- iii. 登入你的 APPLE ID 若沒有請先註冊 <https://appleid.apple.com/>。

The image shows the Apple Developer login page. At the top, there is an Apple logo followed by the word "Developer". Below this, there is a login form with two input fields: "Apple ID" and "Password". Under the "Password" field, there are two buttons: "Create Apple ID" and "Sign In". At the bottom of the form, there is a link that says "Forgot ID or Password?".

- iv. 選擇註冊開發者帳號類型後，再按右下的 **Continue** 鈕

- 個人 請選擇 Individual / Sole Proprietor / Single Person Business
- 公司/組織 請選擇 Company / Organization
- 政府機構請選擇 Government Organization

The image shows the "Apple ID Information" page. At the top right, there is a user name "Chang Hao Jan" and a "Sign out" link. Below this, there is a section titled "Apple ID Information" with a paragraph of text: "The information on this Apple ID account will be used for verification and legal agreements, so please make sure your legal name and country are correct. To edit your account information, [contact us](#)." Below the text, there are three fields: "Email" with the value "allenchang@gmail.com", "Name" with the value "Chang Hao Jan", and "Country" with the value "Taiwan".The image shows a dialog box for selecting an "Entity Type". The dialog has a title "Entity Type" and a dropdown menu. The dropdown menu is open, showing the following options: "Select", "Individual / Sole Proprietor / Single Person Business", "Company / Organization", and "Government Organization". To the right of the dialog, there are two buttons: "Cancel" and "Continue".

v. 填寫申請資料後，並閱讀使用條款並打勾同意，再按右下的 **Continue** 鈕



By checking this box I confirm that I have read and agree to be bound by the Apple Developer Program License Agreement above. If I am agreeing on behalf of my company, I represent and warrant that I have legal authority to bind my company to the terms of such Agreement above. I also confirm that I am of the legal age of majority in the jurisdiction in which I reside (at least 18 years of age in many countries).


Cancel

Back

Continue

**注意事項：**申請公司/組織帳號須提供 D-U-N-S 編碼 ( 鄧白氏企業認證 )，鄧白氏企業認證申請作業約要 3-14 個工作天

➤ 個人註冊頁面資訊，請填入相關資訊後勾選同意條款，再按右下的 **Continue** 鈕

 | [Sign out](#)

**Contact Information**

The name on this Apple ID account will be used as your seller name, and for contracts and banking, if your app is selected for distribution by Apple. Make sure that it is your legal name and that your country is correct. To edit your account information, [contact us](#).

Legal Name

Phone   ext   
Country Code Phone Number Extension

Enter your home or business address in your local language.

Address Line 1

Address Line 2   
optional

Town / City

Postal Code   
optional

Country Taiwan

**Apple Developer Program License Agreement**

This is a legal agreement between you and Apple.

[Download PDF](#)

PLEASE READ THE FOLLOWING APPLE DEVELOPER PROGRAM LICENSE AGREEMENT TERMS AND CONDITIONS CAREFULLY BEFORE DOWNLOADING OR USING THE APPLE SOFTWARE OR APPLE SERVICES. THESE TERMS AND CONDITIONS CONSTITUTE A LEGAL AGREEMENT BETWEEN YOU AND APPLE.

**Apple Developer Program License Agreement****Purpose**

You would like to use the Apple Software (as defined below) to develop one or more Applications (as defined below) for Apple-branded products. Apple is willing to grant You a limited license to use the Apple Software and Services provided to You under this Program to develop and test Your Applications on the terms and conditions set forth in this Agreement.

Applications developed under this Agreement for iOS Products, Apple Watch, or Apple TV can be distributed in four ways: (1) through the App Store, if selected by Apple, (2) through the B2B Program area of the App Store, if selected by Apple, (3) on a limited basis for use on Registered Devices (as defined below), and (4) for beta testing through TestFlight. Applications developed for macOS can be distributed through the App Store, if selected by Apple, or separately distributed under this Agreement.

Applications that meet Apple's Documentation and Program Requirements may be submitted for consideration by Apple for distribution via the App Store, B2B Program,

☐ By checking this box I confirm that I have read and agree to be bound by the Apple Developer Program License Agreement above. If I am agreeing on behalf of my company, I represent and warrant that I have legal authority to bind my company to the terms of such Agreement above. I also confirm that I am of the legal age of majority in the jurisdiction in which I reside (at least 18 years of age in many countries).

[Cancel](#)[Back](#)[Continue](#)

- 確認年費及付費條款，點選 **Purchase**
- 登入 Apple ID，確認購物車項目並填寫付款資料，完成年費付款(不能用他人的信用卡代刷)
- 完成上述流程後，會在 24 小時內收到啟用認證信件，輸入序號並啟用，即完成開發者帳號註冊程序
  - 優點：申請速度快 ( 最快 1 天申請完成 )。
  - 缺點：在 App store 展示的是個人資訊，無法達到宣傳公司的效果。在開發者帳號里無法創建團隊。金融類 App 無法通過個人帳號上架 ( 必須是公司開發者 )

- 公司註冊頁面資訊請，填入相關資訊後再按右下的 **Continue** 鈕，待 APPLE 客服人員電話聯絡後，會開通開發者帳號，再進行付款作業

 | [Sign out](#)**Authority to Sign Legal Agreements**

Confirm that you have the authority to sign legal agreements on behalf of your organization.

- ☐ I am the owner/founder and have the authority to bind my organization to legal agreements.
- ☐ My organization has given me the authority to bind it to legal agreements.

**Verification Contact**

Enter the contact information of an employee at your organization who can verify your signature authority. Please use the English alphabet. Do not enter special characters.

First name	<input type="text" value="Given name"/>		
Last name	<input type="text" value="Family name"/>		
Job Title	<input type="text"/>		
Email	<input type="text"/>		
Phone	<input type="text" value="Country Code"/>	<input type="text" value="Phone Number"/>	<input type="text" value="ext"/>
	Country Code	Phone Number	Extension

**Organization Information**

Enter your organization information as it appears in your Dun & Bradstreet profile so that we can verify your organization's identity in the D&B database.



Please use the English alphabet. Do not enter special characters.

Legal Entity Name	<input type="text"/>		
	<small>Include the entity type, such as Inc., LLC, GmbH, etc.</small>		
D-U-N-S® Number	<input type="text"/>		
Website	<input type="text"/>		
Headquarters Phone	<input type="text" value="Country Code"/>	<input type="text" value="Phone Number"/>	<input type="text" value="ext"/>
	Country Code	Phone Number	Extension
Your Work Email	<input type="text"/>		

Please type the characters you see in the image below.



Letters are not case sensitive

 Vision Impaired  
 Try another

[Cancel](#)[Back](#)[Continue](#)

- 優點：APP 可展示公司資訊；可以創建自己的開發團隊，並添加成員至此帳號中。
- 缺點：申請前需要先註冊鄧白氏編碼，所以申請時間較長。