Holtek 2FA Authentication Manual

1. What is 2FA Authentication

Two-factor authentication (2FA), uses two different elements combined together to confirm a user's identity.

We use two-factor elements :

- Account + Password。
- One Time Password (OTP)。

The following documents are described in detail.

2. Why do you need 2FA Authentication

Because there are two things to achieve :

2.1. Ensure the security of the authentication mechanism：

If only the account + password is used for authentication, there will be several problem：

1、The password strength is weak and easy to crack。

2、If the password is stolen or recorded, the identity verification mechanism will be invalid。

After adopting Two-Factors Authentication, OTP is required, so the security of the identity verification mechanism can be greatly improved。

2.2. Compliance with Government Regulations：

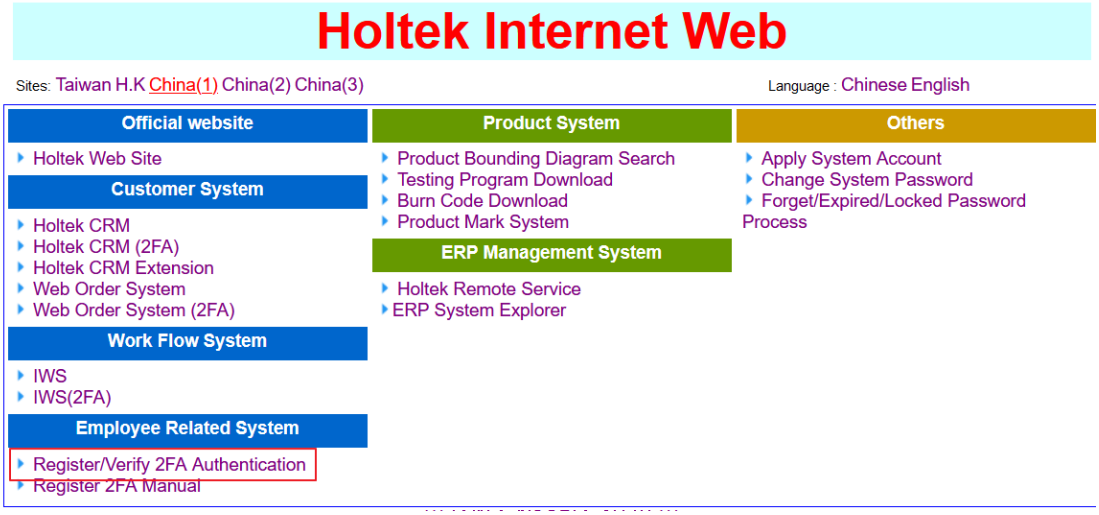
We implement **Two-Factor Authentication** to comply with the multi-factor authentication technology (MFA) mentioned in the Guidelines for Information Communications Security Control of OTC Companies。

Remarks: Guidelines for the security control of information communication of listed OTC companies: Article 21, the operation regulations for establishing user passcode management, such as: default password, password length, password complexity, password history record, minimum and maximum password validity limit, login failure lockout mechanism, and evaluate the adoption of multiple authentication technologies in the core information communication system.

3. HOLTEK 2FA Registration and Verification

3.1. HOLTEK 2FA Registration and Verification web page

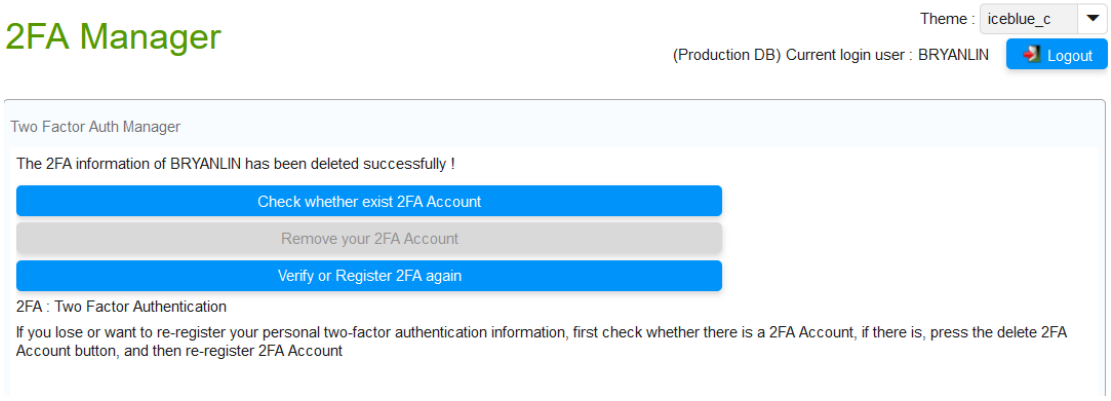
3.1.1. Open the English page of Holtek Internet Web (https://crm.holtek.com.tw/index_en.html), you can see the link URL circled in the red box as shown below, which is the register and verify website of Holtek 2FA Authentication.



3.1.2. Open the Holtek 2FA Authentication website, you can check, delete, and verify the two-factor information. If you apply for the first time, you can re-register the 2FA Authentication. If you lose or forget the Holtek 2FA Authentication verify code, you can delete the Holtek 2FA Authentication and register Holtek 2FA Authentication again.

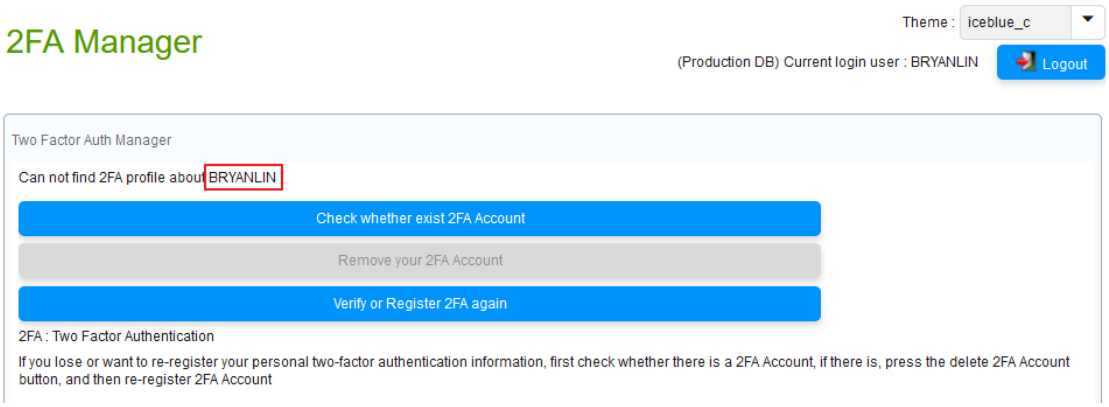
Holtek 2FA Authentication Setup URL

https://crm.holtek.com.tw/2famanager/?lang=en_US


2FA Manager
Theme : iceblue_c
(Production DB) Current login user : BRYANLIN
Logout
Two Factor Auth Manager
The 2FA information of BRYANLIN has been deleted successfully !
Check whether exist 2FA Account
Remove your 2FA Account
Verify or Register 2FA again
2FA : Two Factor Authentication
If you lose or want to re-register your personal two-factor authentication information, first check whether there is a 2FA Account, if there is, press the delete 2FA Account button, and then re-register 2FA Account

3.2. Register Holtek 2FA Authentication

3.2.1. Registering for the first time or re-registering Holtek 2FA Authentication : When you register for the first time or re-register for Holtek 2FA Authentication, you first need to log in with your Holtek account username/password. After logging in, you will find that you cannot find two-factor authentication on the Holtek 2FA Authentication website. At this time, you need to press the "**Verify or Register 2FA again**" button to register the authentication code again.

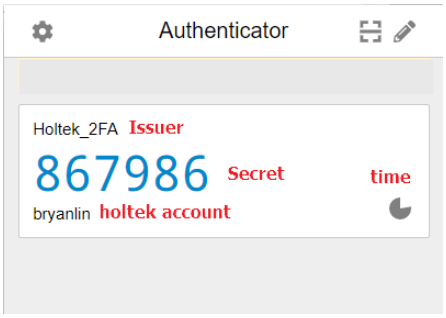


3.2.2. To re-register Holtek 2FA Authentication, you need to log in to Holtek Single Sign On (as shown below), and you need to enter your account username/password to log in.

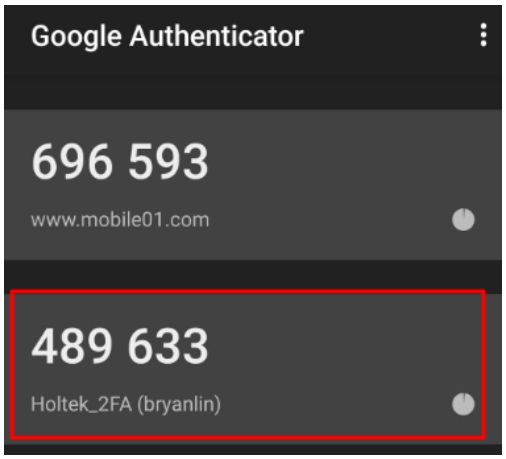
3.2.3. After you log in to Holtek Single Sign On, the following web page will appear. You can use your mobile phone authenticator app or browser plug-in authenticator app to scan with QR CODE, or enter the key yourself to create the authorization code information. After creating the authorization code information, please remember to press the **Register** button to complete the Holtek 2FA Authentication process.

3.2.4. After registration Holtek 2FA Authentication, you can open the mobile phone Authenticator APP or browser Authenticator plug-in function, and you can see the information related to 2FA registration.

Browser Holtek 2FA Authentication registration success screen :

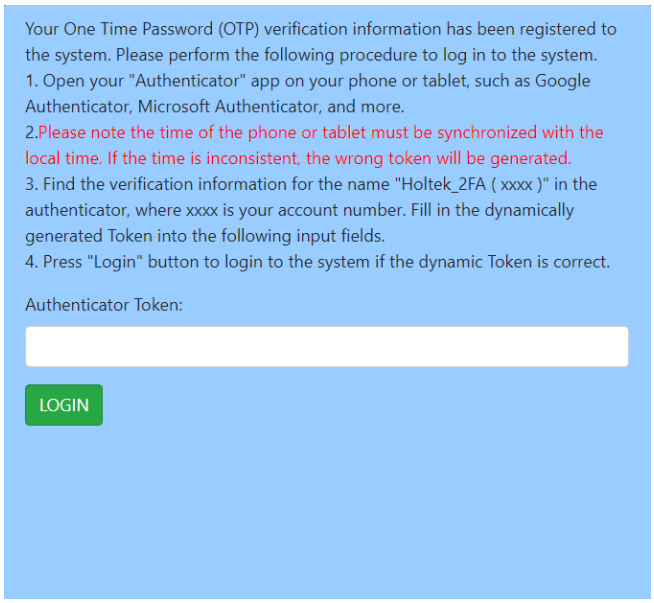


3.2.5. Mobile phone Google Authenticator APP registration success screen :

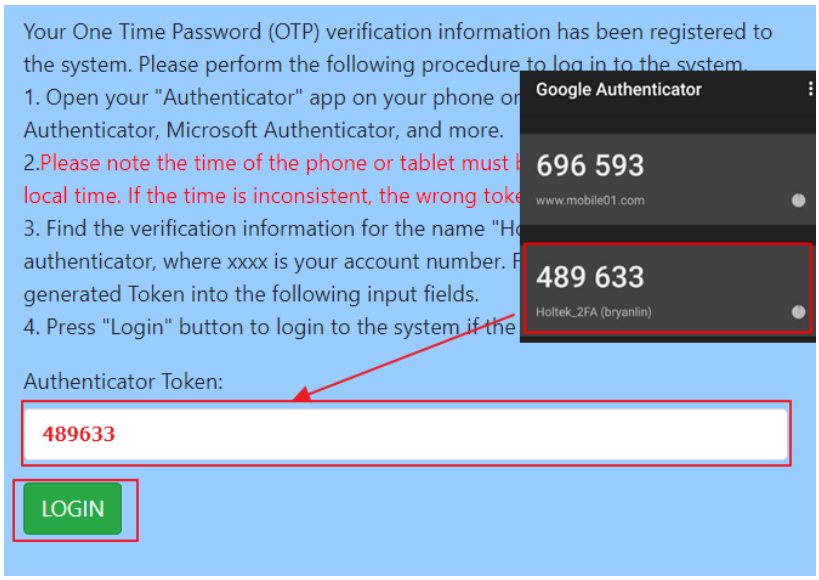

Google Authenticator
696 593
www.mobile01.com
489 633
Holtek_2FA (bryanlin)

3.3. Holtek 2FA Authentication for Holtek System

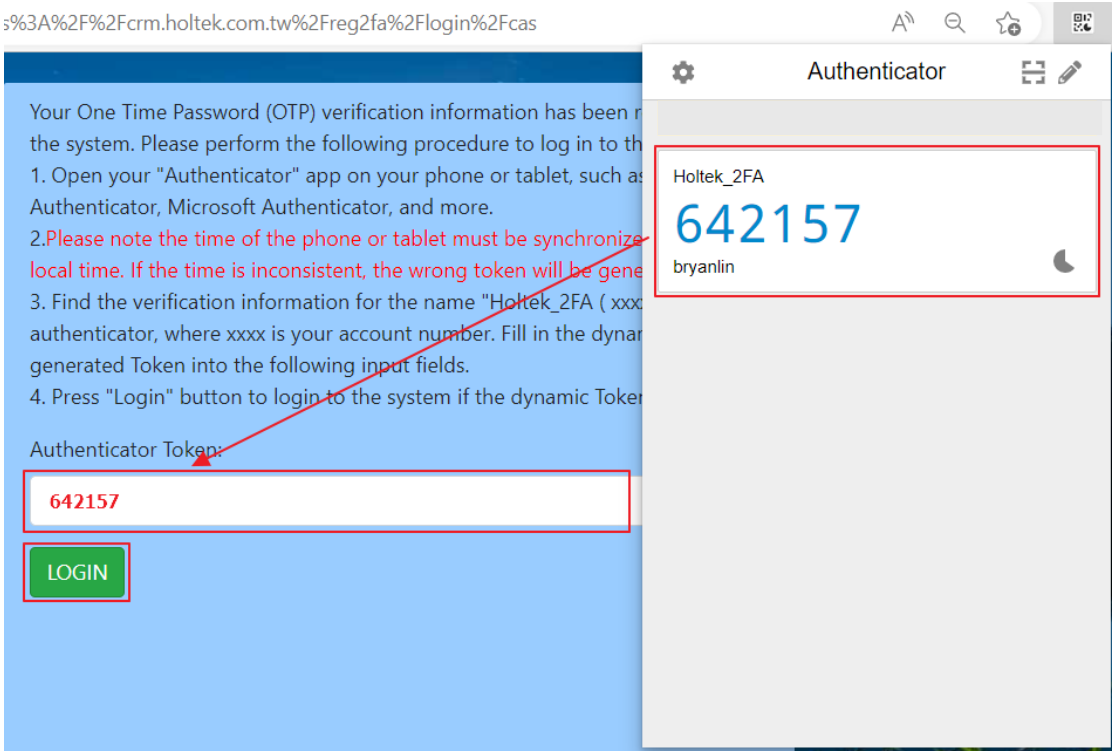
3.3.1. When you log in to the Holtek System, enter your account username/password to log in, if the system requires 2FA Authentication, the following web site will open :



3.3.2. At this time, you can pick up your mobile phone (if you have registered for Holtek 2FA Authentication), directly enter the verification code displayed on the mobile phone into the Authenticator Token field, and press "**Login**" button.



3.3.3. If you use a browser, you can click the icon of the Authenticator plug-in program on the upper right of the browser, and a small Authenticator window will appear. At this time, click the Holtek_2FA Authentication block to copy the verification code directly, and then Paste it in the Authenticator Token field, and click **Login** button. Of course, you can also choose to enter the verification code manually.



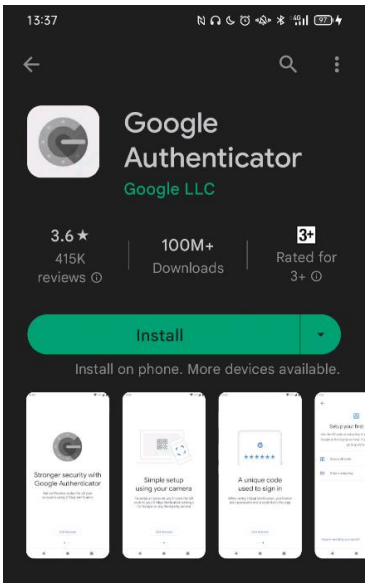
4. Mobile phone 2FA Authentication APP installation

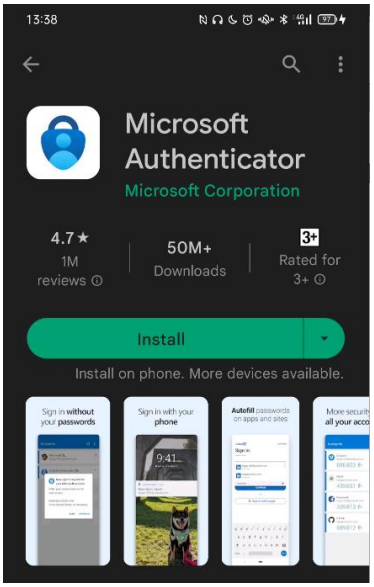
4.1. Install the Authenticator APP on your mobile phone

4.1.1. You can use Google Authenticator or Microsoft Authenticator, and download Google Authenticator APP or Microsoft Authenticator APP from Google Play on Android phones or App Store on iPhone phones.

4.1.2. Using an Android phone as an example, click on the Google Play Store (for China, you need to open it in the mobile phone's own brand application store), and search for Google Authenticator (for China mobile phone, please search for Microsoft Authenticator).

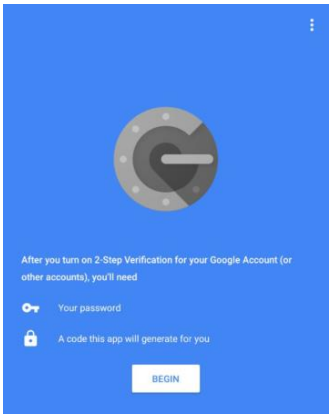
4.1.3. Google Authenticator (or Microsoft Authenticator) is searched for and installed on mobile phones。



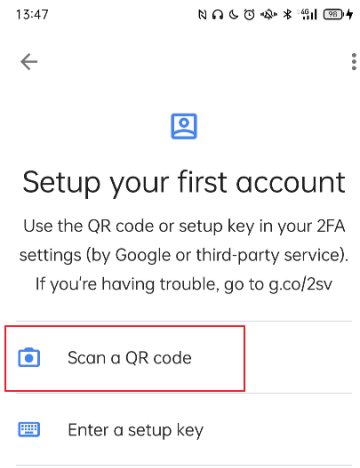


4.2. Google Authenticator Installation Example

4.2.1. After installation, click on Begin, on the first page :

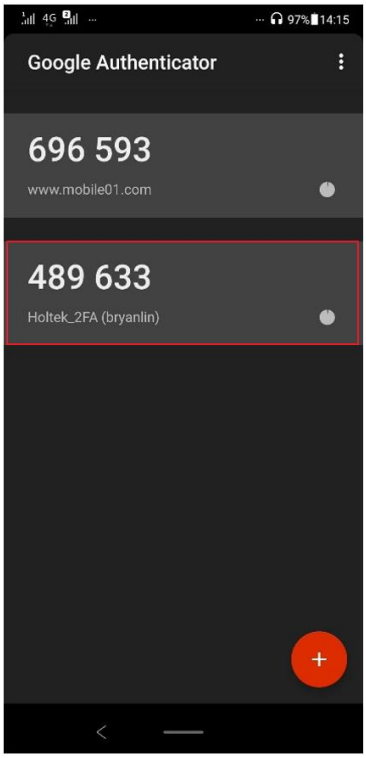


4.2.2. Now you can add the account. There are two ways to do it: scan the barcode or enter the key. The most convenient is scanning. In front of you will open up a camera. In the selected square you must enter the QR-code, which will be recognized automatically and the account will be added immediately:

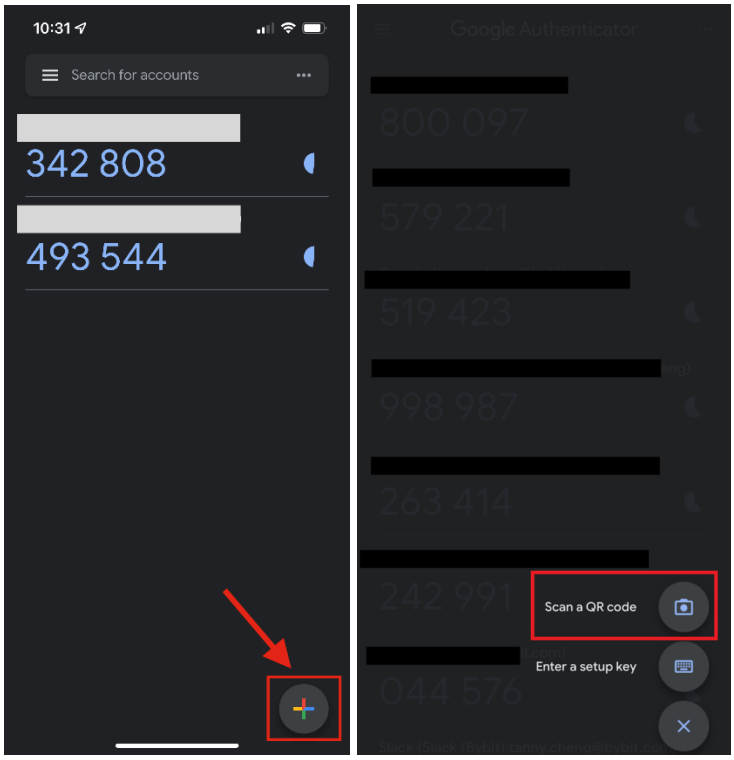


4.2.3. Scan the QR Code through the lens frame of the APP, and you will see the QR Code on the Holtek 2FA Authentication step screen (refer to Chapter 3: HOLTEK 2FA Registration and Verification).

4.2.4. After completing the QR Code and successfully adding an account :

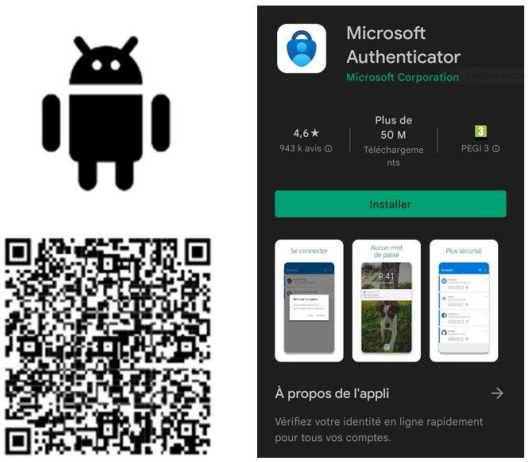


4.2.5. If you want to add other accounts later, you can press the + icon to add other accounts and verification codes。

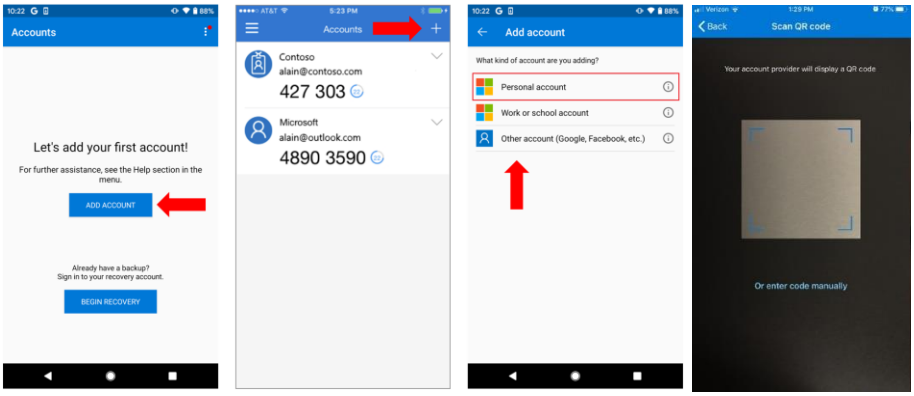

10:31
Search for accounts
342 808
493 544
Google Authenticator
800 097
579 221
519 423
998 987
263 414
242 991
044 576
Scan a QR code
Enter a setup key

4.3. Microsoft Authenticator Installation Example

4.3.1. In order to get a Verifiable Credential, you will need to download the latest version of the Microsoft Authenticator app on the Google Play Store or Apple App Store. ◦

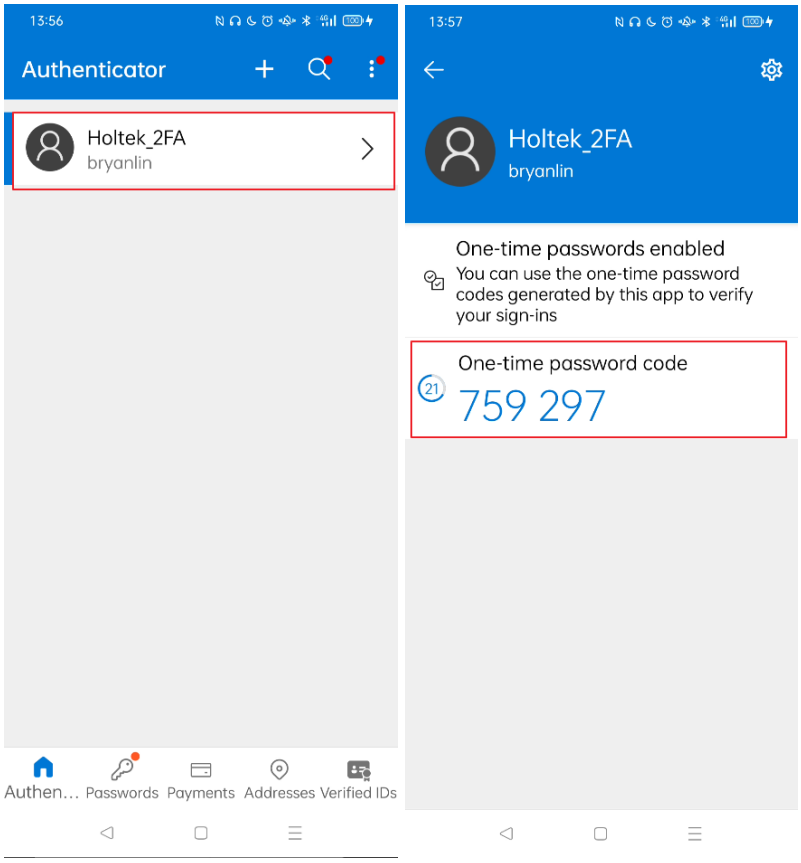


4.3.2. If you don't have any accounts configured, there will be a blue button on the middle of the page that says "**Add Account**", otherwise tap the plus (+) button in the top right. Then choose '**Personal account**' and scan the QR code.



4.3.3. On the Holtek 2FA Authentication step screen (refer to Chapter 3: HOLTEK 2FA Registration and Verification), you will see the QR Code, scan the QR Code and it will be added to the Microsoft Authenticator App code box, and you will log in to Holtek 2FA Authentication in the future You may be asked to enter a verification code, at this time, enter the six-digit code displayed on the Microsoft Authenticator App to

complete the verification.



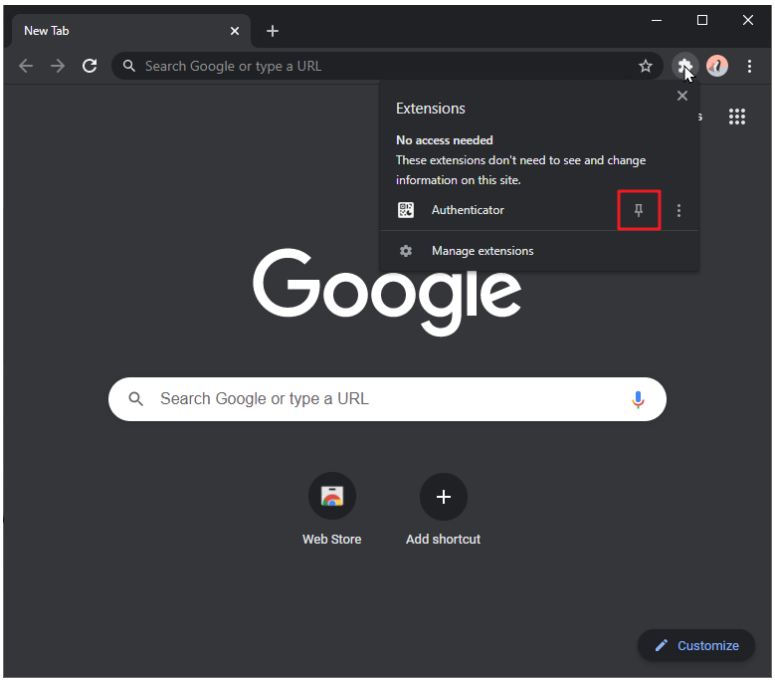
5. Browser 2FA Authenticator installation

5.1. Install the Authenticator plug-in in the browser

Currently Chrome, Firefox, Microsoft Edge, and Safari browsers support the 2FA Authenticator plug-in, the link is as follows: :

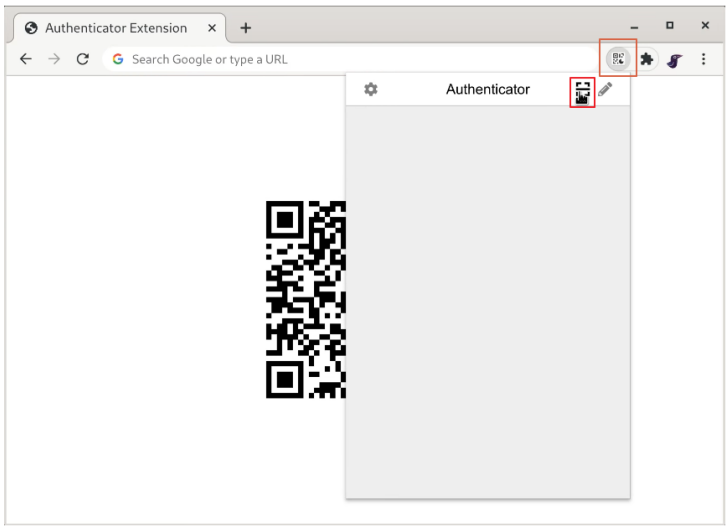
Browser	Plugin URL
Chrome	https://chrome.google.com/webstore/detail/authenticator/bhghoamapcdpbohphigoooaddinpkbai
Firefox	https://addons.mozilla.org/en-US/firefox/addon/auth-helper?src=external-github
Microsoft Edge	https://microsoftedge.microsoft.com/addons/detail/authenticator-2fa-client/ocglkepbibnalbgmbachknglpdipeoio
Safari	https://apps.apple.com/us/app/authen/id1602945200?mt=12

5.1.1. Operation method (taking Chrome as an example), the first time you install the Authenticator plug-in in Chrome, you should pin its icon to the toolbar.

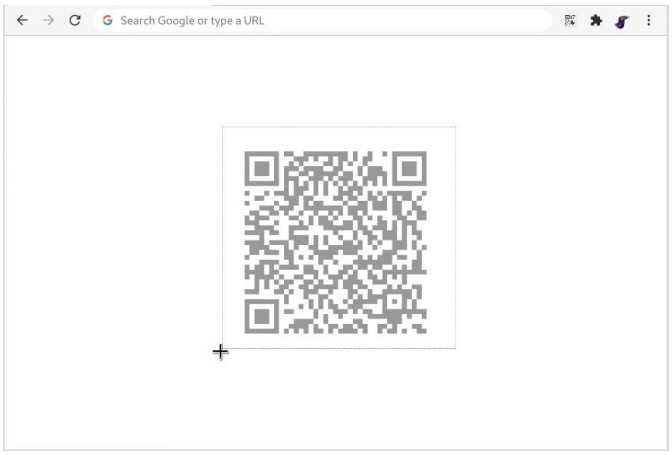


5.2. How to add QR CODE

5.2.1. After clicking the icon of the Authenticator plug-in in the browser, a small Authenticator window will pop up, and then click the scan icon in the upper right corner of the small window.

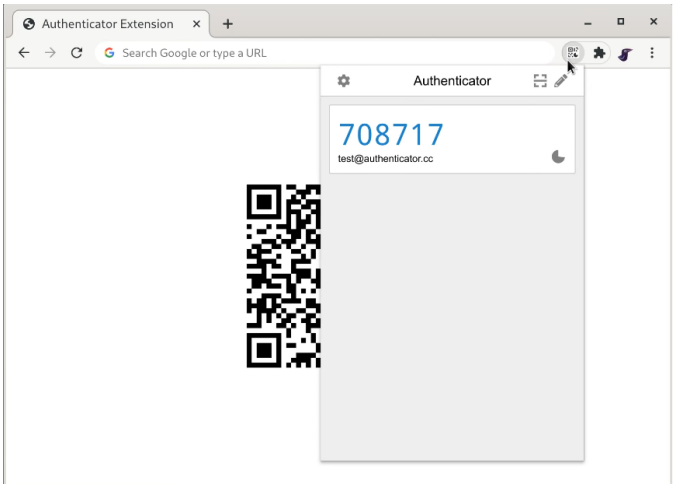


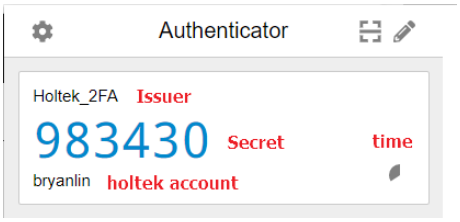
5.2.2. After pressing the scan icon, the + indicator will appear. At this time, you can drag and draw a square that completely covers the QR CODE. After capturing the QR CODE, you can add the verification code account in the small window of Authenticator .



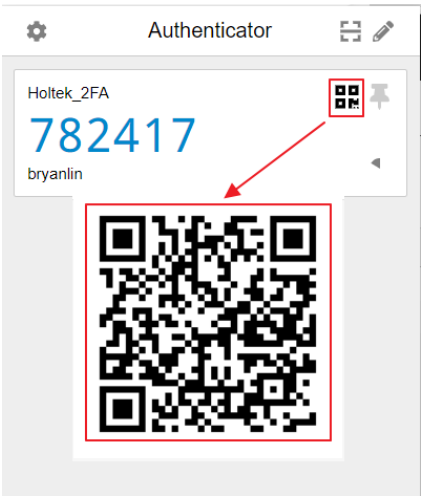
5.2.3. After adding a new verification code account, you will see a new block in the small Authenticator window, where the 6-digit number is your current one-time password,

and the circle in the lower right corner tells you how much time is left in the current password.



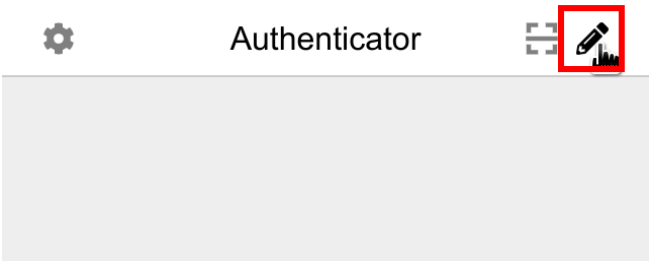


5.2.4. If you want to add this account to the mobile device APP application, you can press the small QR icon in the upper right corner of the block as shown in the red frame, and then the QR CODE of this account will be displayed, which is convenient for the mobile device APP to scan.

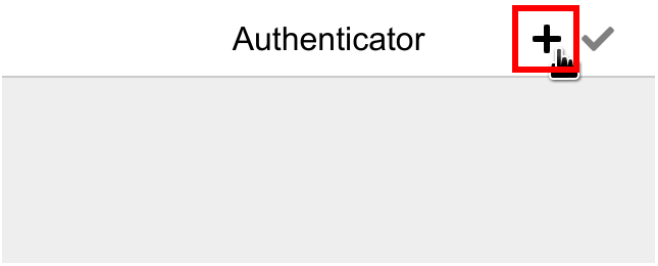


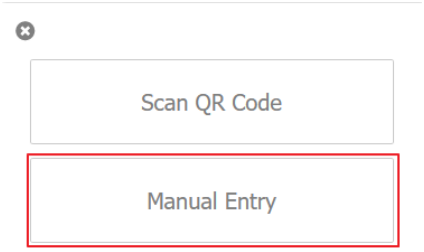
5.3. Add account manually

5.3.1. Click the icon for the Authenticator plug-in in your browser, then click the pencil icon in the upper right corner of the Authenticator window.

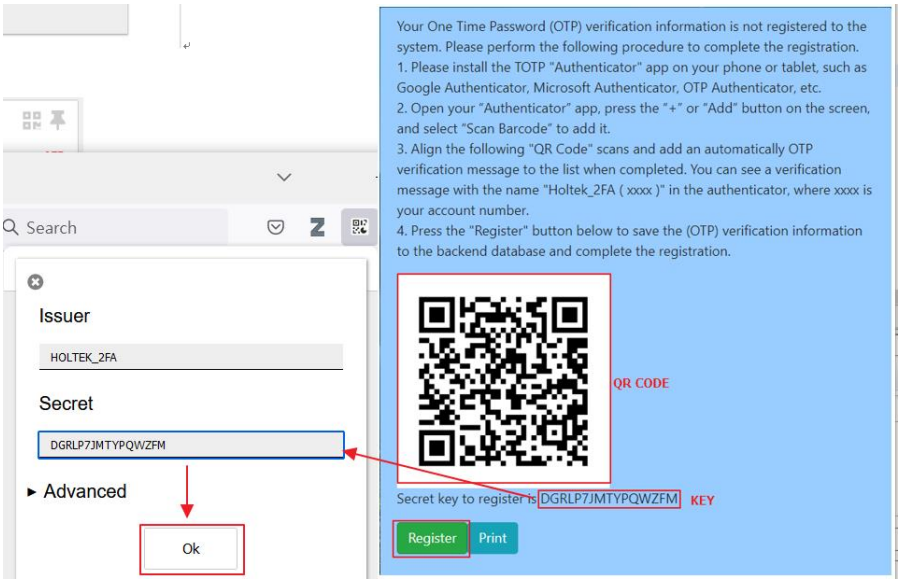


5.3.2. Press the plus button in the upper right corner of the window, and a small window will appear with two options, choose the option of "Manual Input".

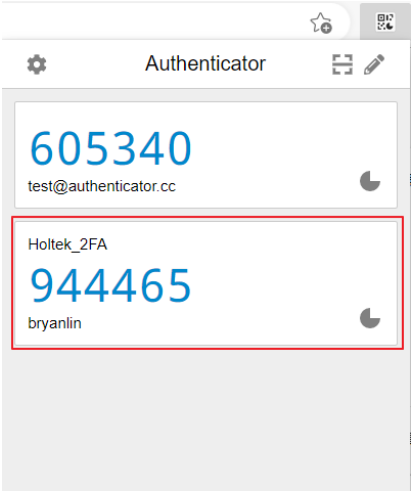




5.3.3. Enter the name of the website associated with this account in the "**Issued**" field, then enter the key provided to you by the verification page in the "**Secret**" field, and click "**OK**".



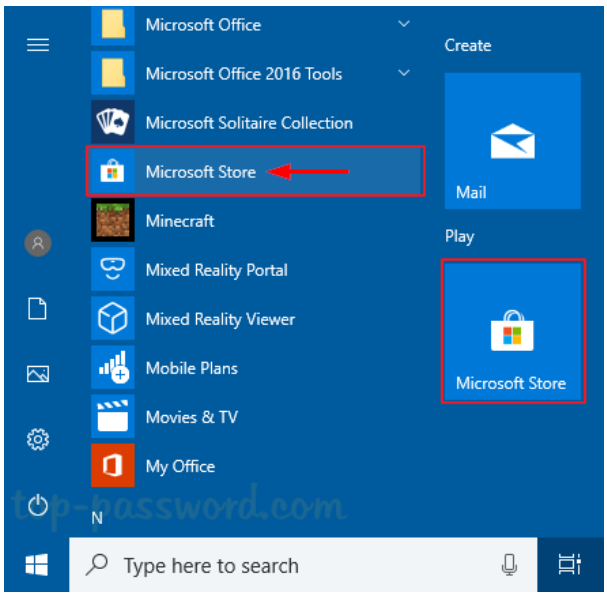
5.3.4. After adding the new account and secret code, you will see a newly added authorization block in the Authenticator window.



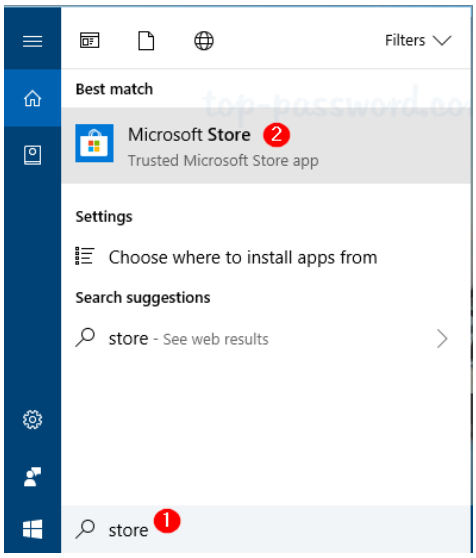
6. Authenticator for Windows PC

6.1. Microsoft Store (Windows 10、11)

6.1.1. If your computer operating system version is Windows 10 (including Windows 11), you can get it from Microsoft Store, select [Start], find Microsoft Store, click it to open the application.

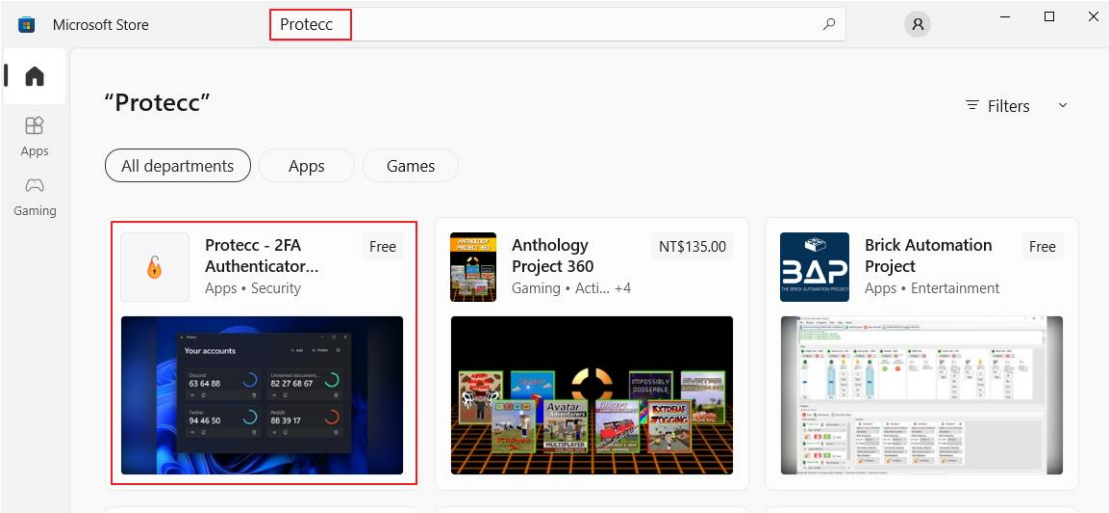


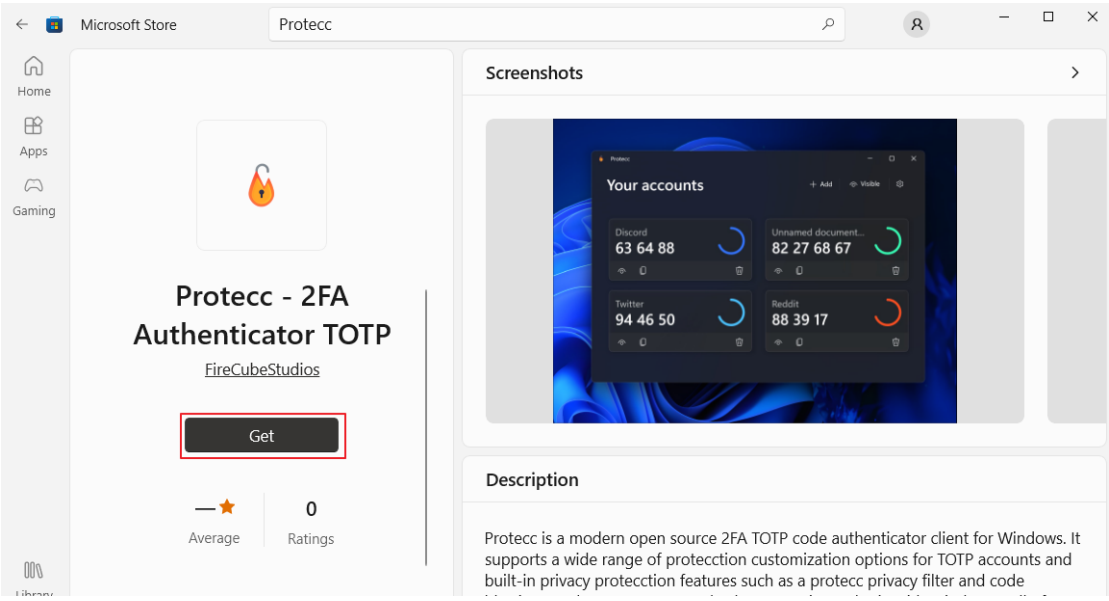
6.1.2. Or use search, enter "store", and the Microsoft Store option will appear, select it to open the application.



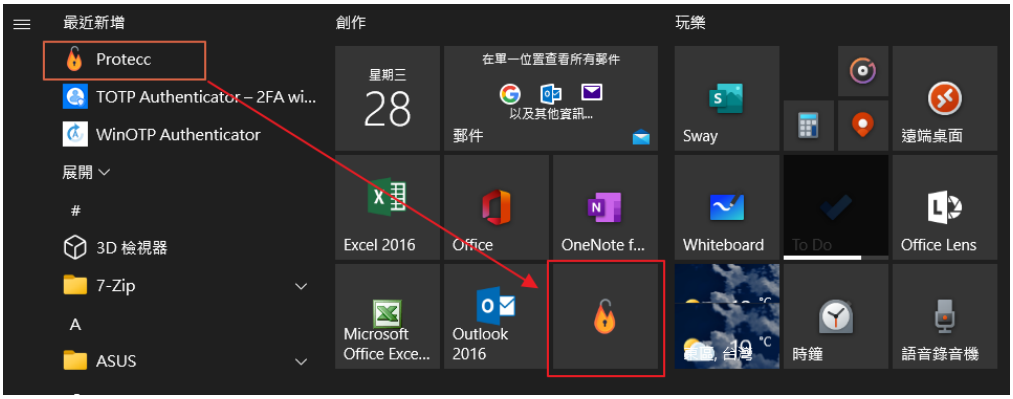
6.2. Protecc – 2FA Authenticator Installation (Windows 10, 11)

6.2.1. Open the Microsoft Store, enter the keyword "**Protecc**" in the search bar, and the **Protecc – 2FA Authenticator** application option will appear. Click the application, and another window will appear, click "**Get**" button to install it.



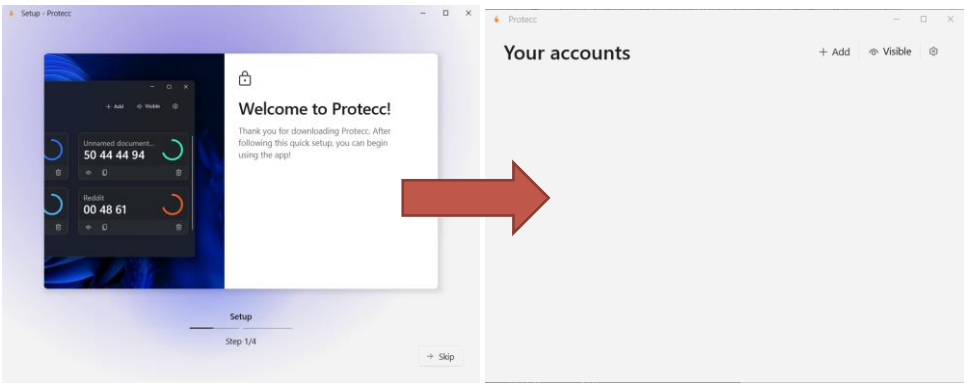


6.2.2. Then select "**Start**" on the Windows system desktop, and you will see the "**Protecc**" application in the menu.



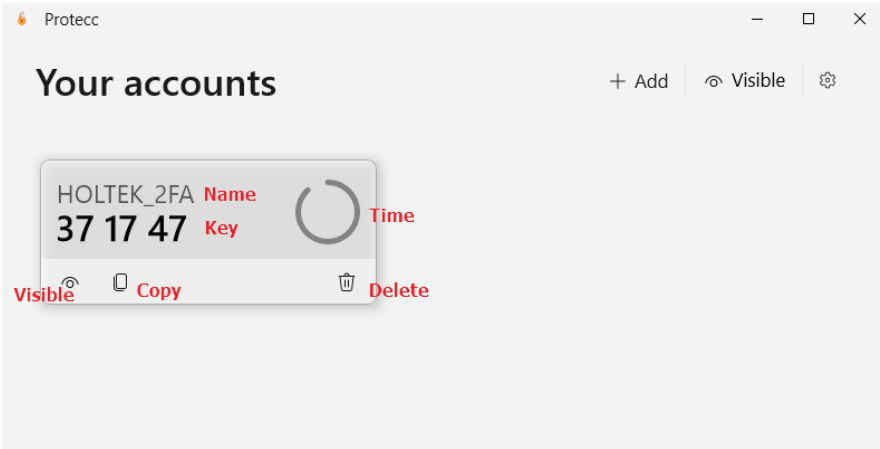
6.3. Protecc – 2FA Authenticator operation (Windows 10, 11)

6.3.1. Open the "**Protecc**" application, a small Window introduction window will appear first, you can skip it directly and go directly to the second small window.



6.3.2. First press the "**+Add**" box button on the upper right, a small option drop-down window will appear, select "**Enter Key**", and then a small window will appear, you need to enter Name and Key, Name is the source of Holtek 2FA Authentication issuer (EX: HOLTEK_2FA), Key is the key for Holtek 2FA Authentication. After inputting, press the Next button to go to the next step.

6.3.3. After pressing the Next button, a small box will appear, showing the Holtek 2FA authentication source and verification code. The small square has the icons of **Copy**, **Delete**, and **Visible**, which are convenient for operation. If you want to add another account, you can select the "**+Add**" square button on the upper right and repeat the previous step.



6.4. Windows 7 OS WinAuth Installation

6.4.1. Because the Windows 7 operating system cannot use the Microsoft Store, and the browsers (IE, Firefox, Chrome) on the Windows 7 operating system cannot be updated new version, and there is no plug-in program can be installed, please update to Windows 10 to facilitate the operation of 2FA Authentication.

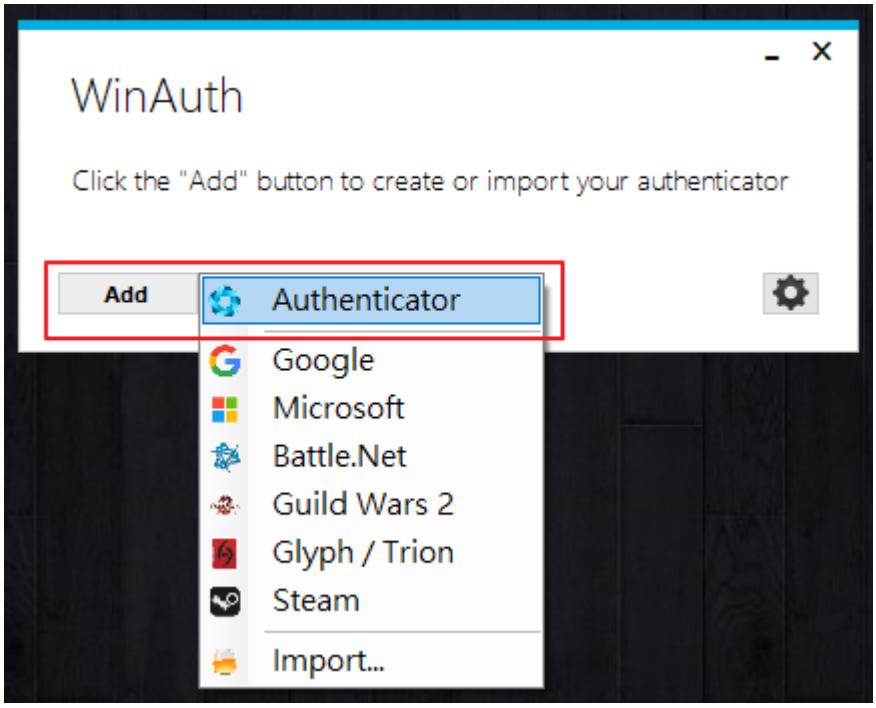
6.4.2. At present, the manual will provide the operation method of Windows 7 operating system 2FA Authentication, but it does not guarantee that it can be implemented safely, please use it at your own discretion.

6.4.3. First download the WinAuth-3.5.1.zip compressed file. After decompressing the zip compressed file, you will get the WinAuth.exe executable file.

Download URL :

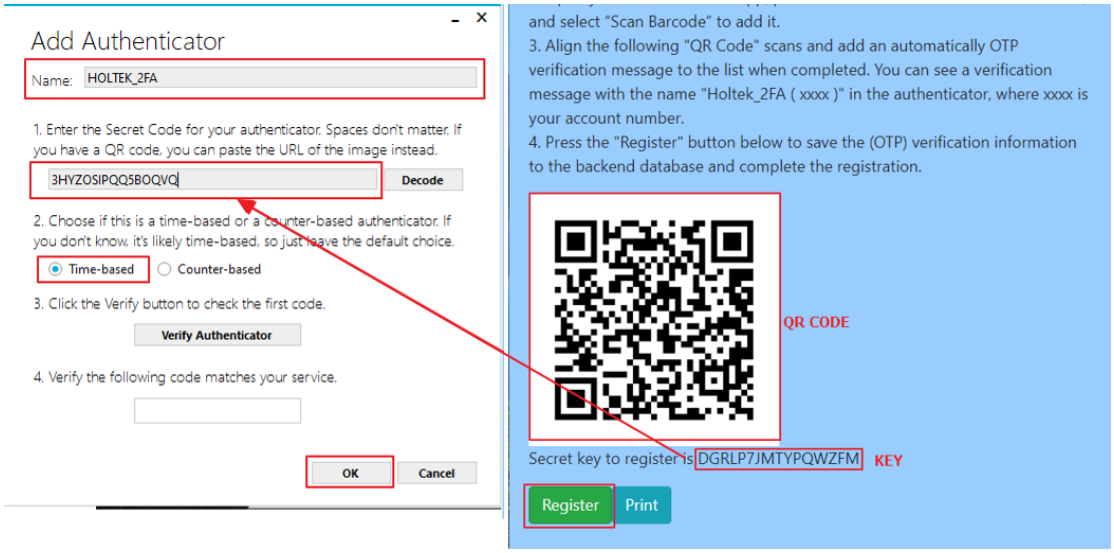
https://github.com/winauth/winauth/releases/download/3.5.1/WinAuth-3.5.1.zip

6.4.4. Open WinAuth.exe, the following window will appear, click the **Add** button, and then select **Authenticator** item.

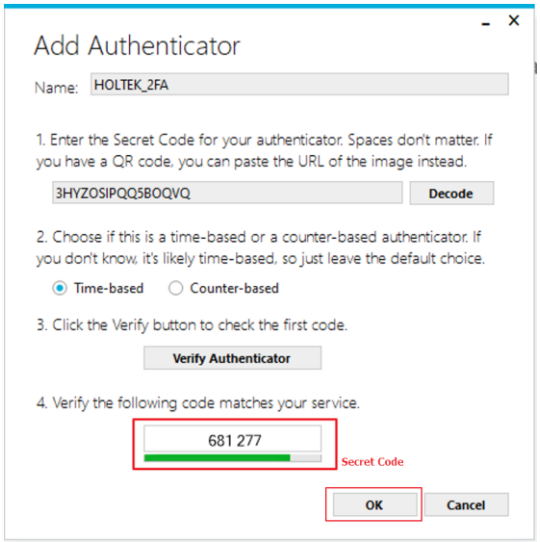


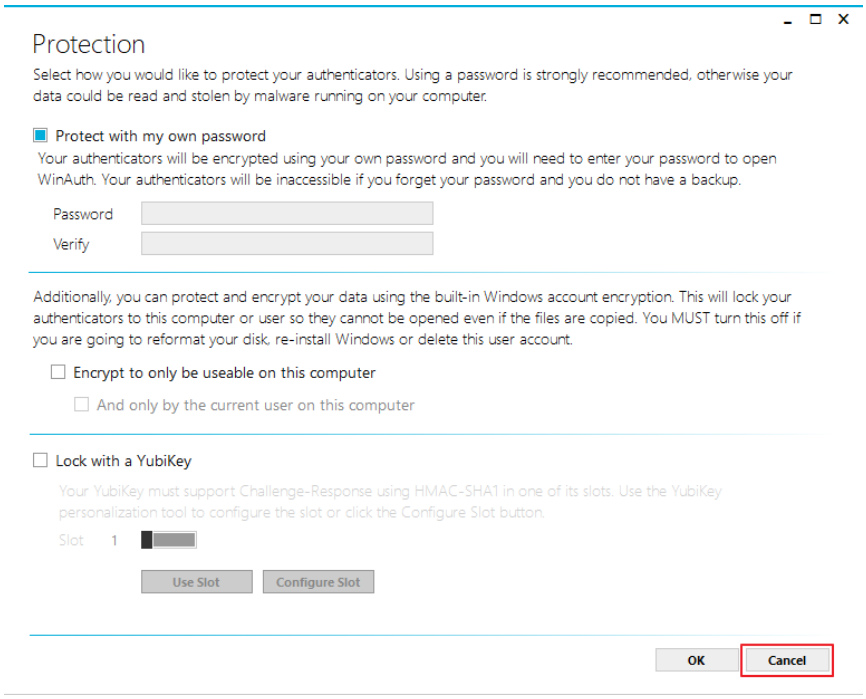
6.4.5. Enter Name and Secret Code, Name is the source of Holtek 2FA Authentication (EX:

HOLTEK_2FA), **Secret Code** is the key for Holtek 2FA Authentication, select **Time-based,** and press **OK**.

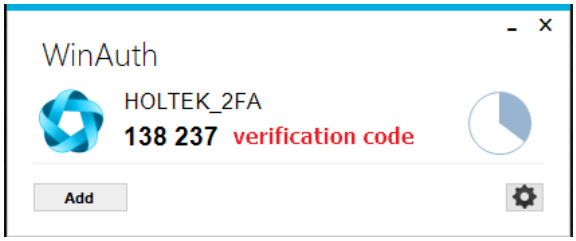


6.4.6. At this time, a verification code will appear in the lower box, and then press the **OK** button again, and the Protection window will appear. The Protection window is to protect the access of the verification code. If you do not want to set the verification code Protection, press the **Cancel** button to avoid this setting.

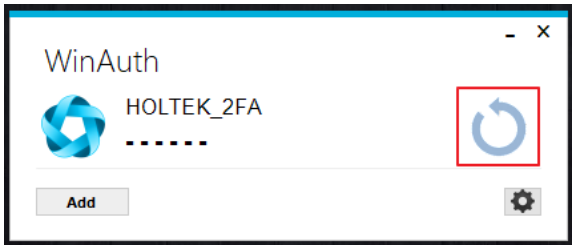




6.4.7. At this time, the Name and verification code just set will appear in the small window of WinAuth.



6.4.8. If the verification code does not appear, press the **circle icon** on the right to refresh verification code.

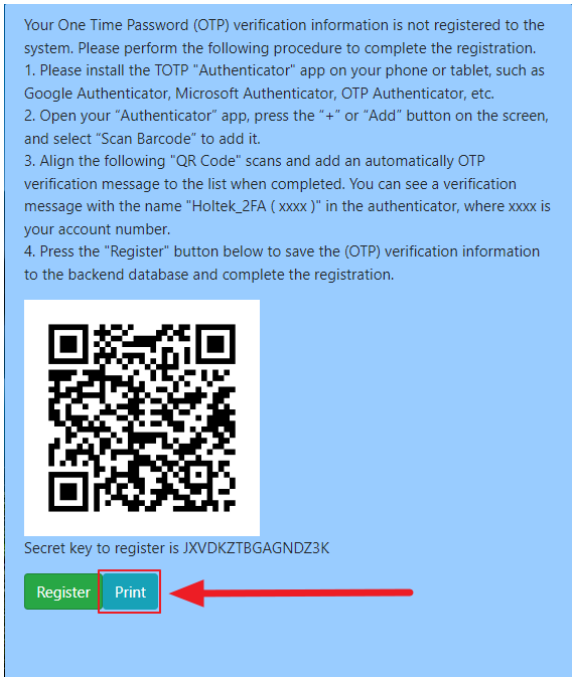


7. Multiple people share a registered account

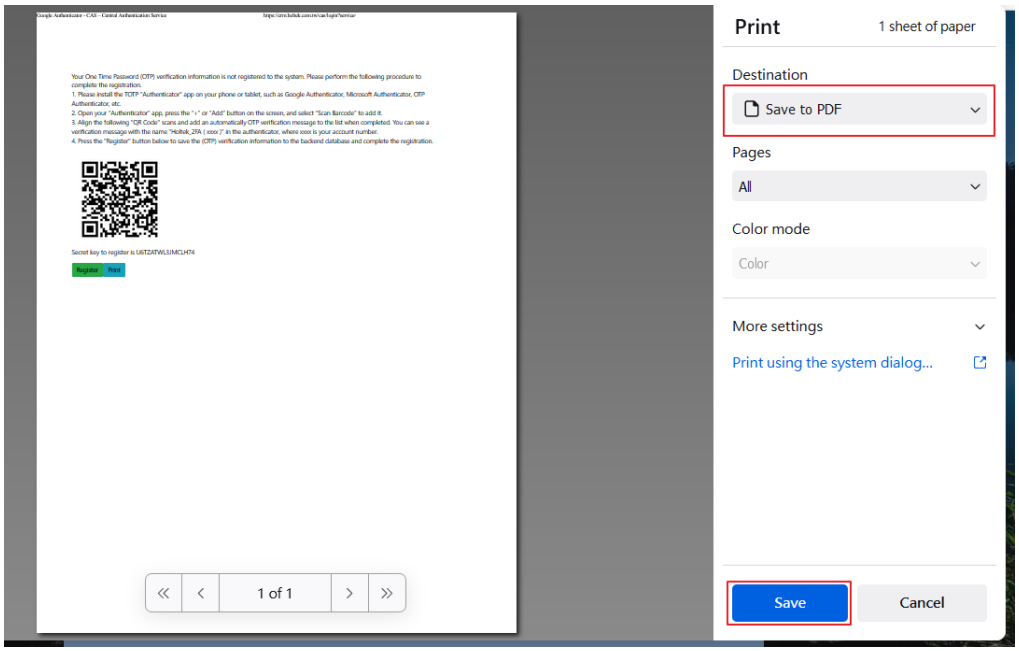
7.1. Holtek 2FA Authentication web page storage PDF file

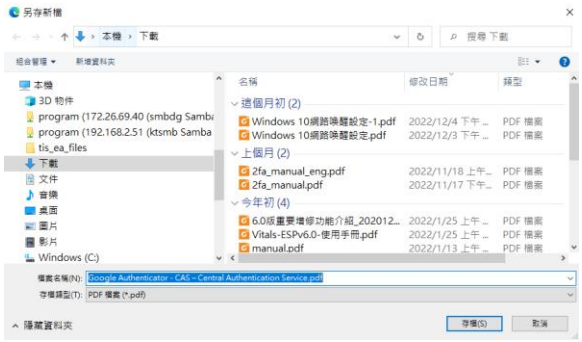
7.1.1. If you have a problem with multiple people sharing an account, when registering or applying for a Holtek 2FA Authentication verification code, there will be a QR Code icon and a key. You can save the QR icon and key as a PDF file. This PDF file can be scanned by multiple mobile phones and users. You can register the same set of verification codes**.**

7.1.2. First, register on the Holtek 2FA Authentication webpage, before registering (before pressing the Register button)，press the "**Print**" button first.



7.1.3. At this time, the printing function of the browser will be activated, and the printer will show the "**Save to PDF**" option, select this option, and then save it. Please remember to register after saving (press the Register button to register Holtek 2FA Authentication).





7.1.4. Open the saved PDF file, and the same screen as the HOLTEK 2FA Authentication web page will appear, which can provide verification code storage and multi-person registration.

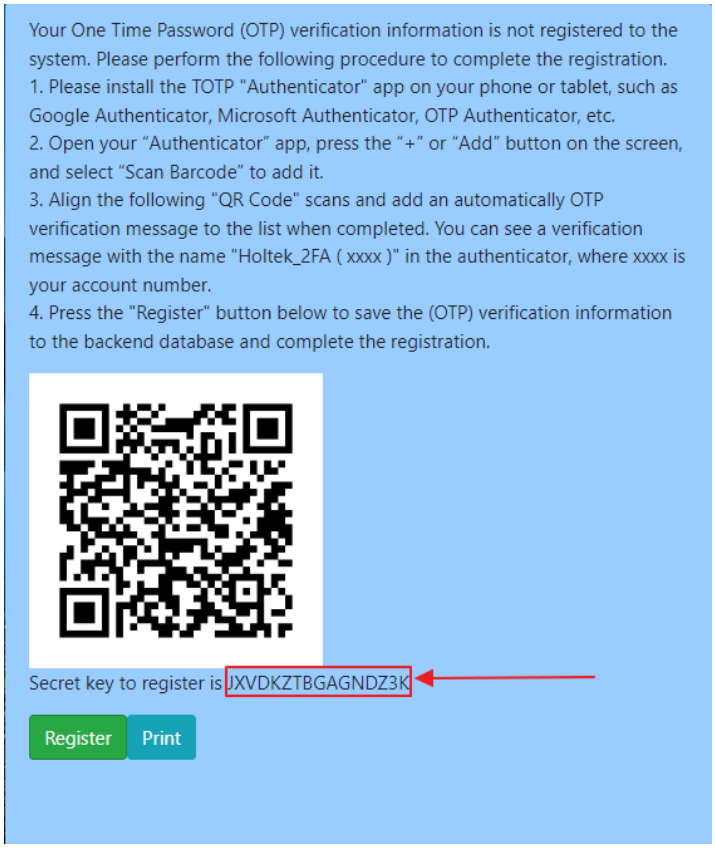
Your One Time Password (OTP) verification information is not registered to the system. Please perform the following procedure to complete the registration.
1. Please install the TOTP "Authenticator" app on your phone or tablet, such as Google Authenticator, Microsoft Authenticator, OTP Authenticator, etc.
2. Open your "Authenticator" app, press the "+" or "Add" button on the screen, and select "Scan Barcode" to add it.
3. Align the following "QR Code" scans and add an automatically OTP verification message to the list when completed. You can see a verification message with the name "Holtek_2FA (xxxx)" in the authenticator, where xxxx is your account number.
4. Press the "Register" button below to save the (OTP) verification information to the backend database and complete the registration.

Secret key to register is U6TZATWL3JMCLH74

Register Print

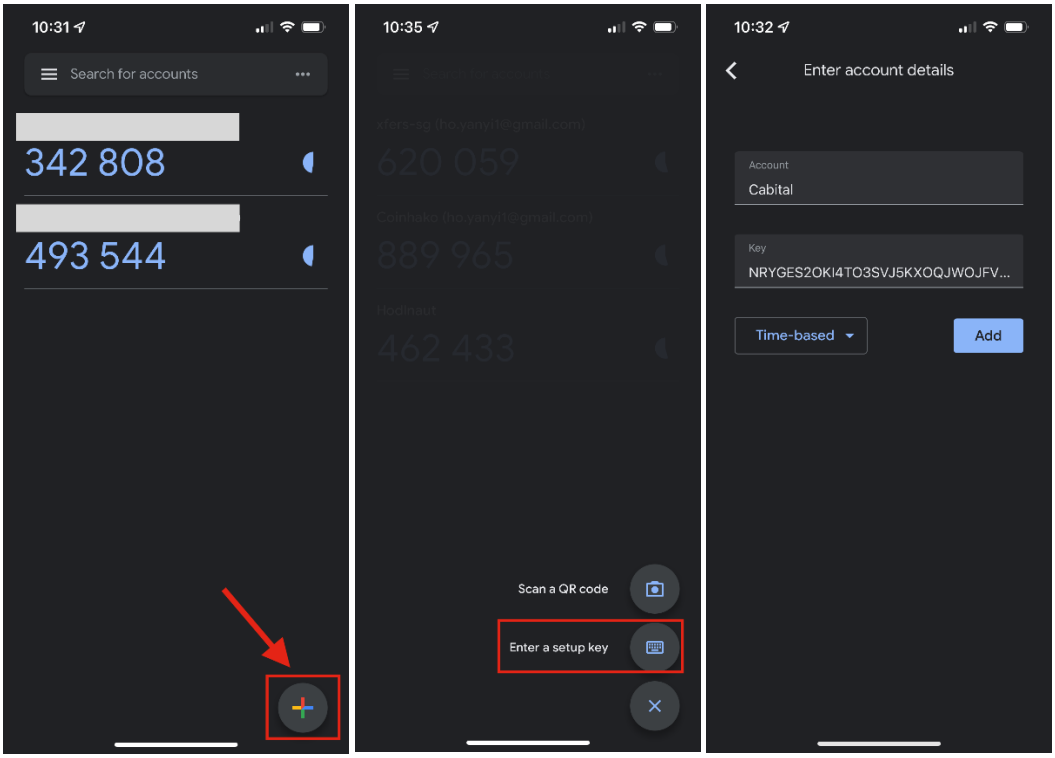
7.2. Verification Code Key Acquisition

7.2.1. When you register for Holtek 2FA Authentication, a registration screen will appear. In addition to the QR Code icon on the registration screen, the rightmost string of "**Secret key to register is xxxxx (key)**" under the QR icon is the verification code Key (as shown in the figure below), copy or record the key string, and provide a mobile APP or browser to manually register the same set of verification codes. The following will introduce how to register the key between the mobile phone and the browser.



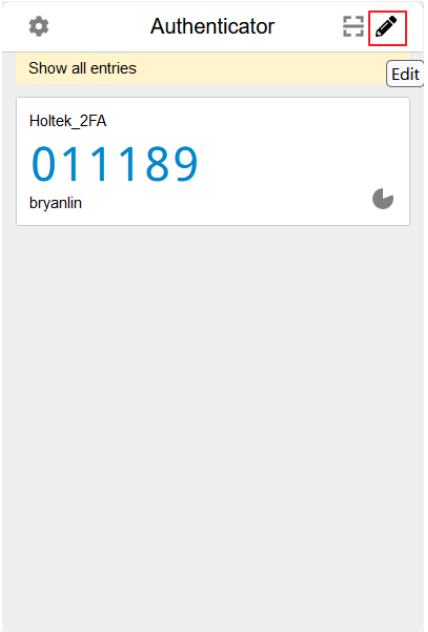
7.3. Mobile phone manual registration

7.3.1. Open the mobile Authenticator APP (EX : Google Authenticator), use the circular plus sign icon at the bottom right corner, and then you can manually enter the Account and key, the **Account** can be chosen by yourself, and the **key** type is "**Time-based**".

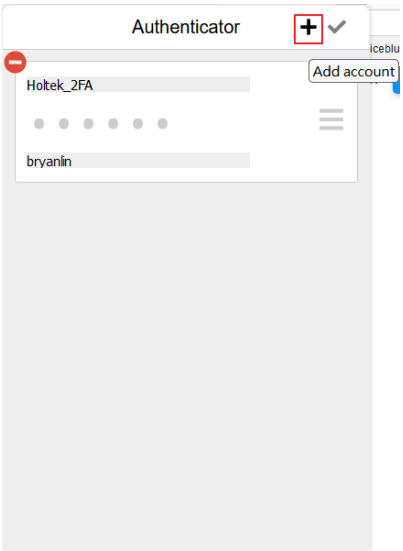


7.4. Browser Manual Registration

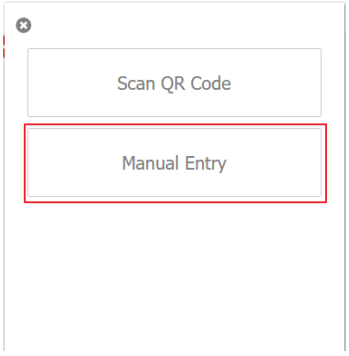
7.4.1. First click on the Authenticator plug-in icon in your browser ，Authenticator window will pop up, then click on the edit icon in the upper right corner of the window. 。



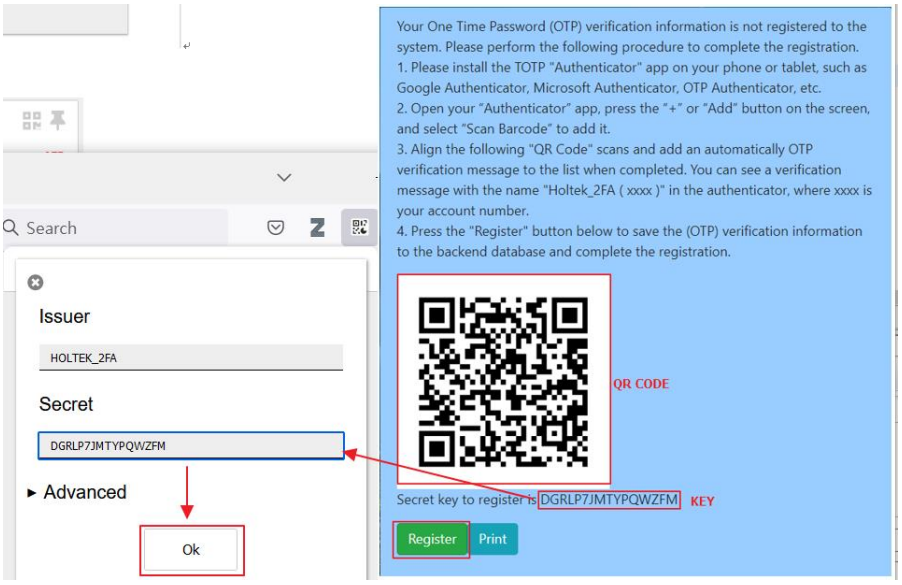
7.4.2. Then click on the "+" sign to add an account.



7.4.3. Select "**Manual Entry**".



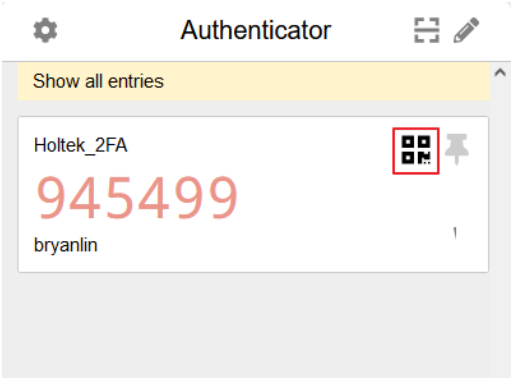
7.4.4. After entering the issuer, you can fill in the content of the issuer with a string for easy identification, such as HOLTEK_2FA, the key is the string on the right of "Secret key to register is xxxxx" that appears below the QR icon on the screen (as shown below), after entering then press the "**OK**" button.



7.5. Use the browser to provide mobile APP registration

7.5.1. If you have already registered with a browser, you can use the QR CODE of the Authenticator plug-in in the browser to present it to the mobile phone for scanning and verification.

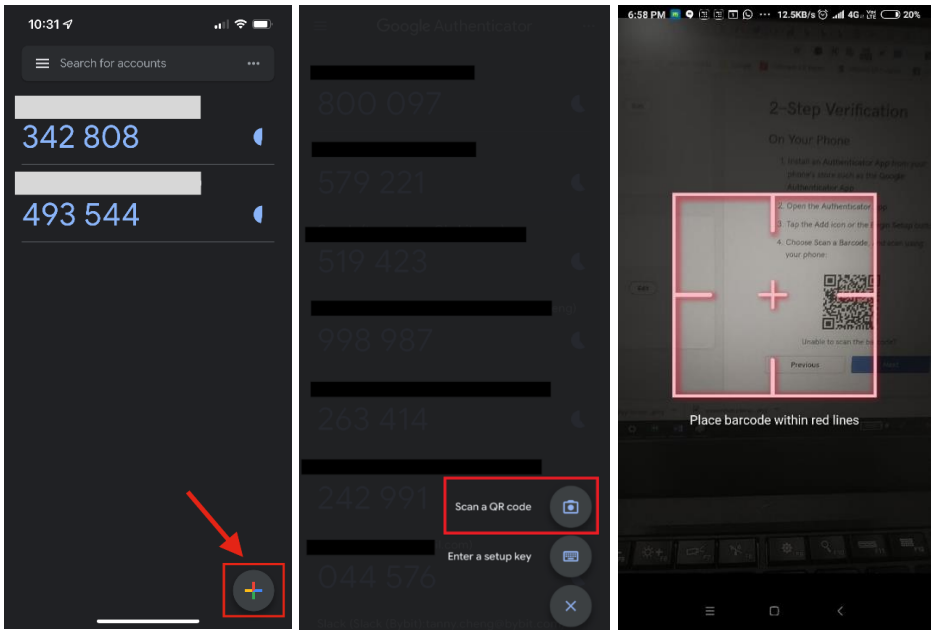
7.5.2. First select the block you have already registered with the small QR CODE icon above (the small red frame icon in the picture below)



7.5.3. At this time, a QR CODE icon will appear, just pick up the mobile APP and scan the QR CODE image code.

7.5.4. Take the Google Authenticator App as an example. After opening the APP, click the round 「+」 sign icon in the lower right corner, and then select the QR Code scanning function with the camera icon. After that, the scanning window will appear,

and scan the QR CODE icon that appeared in the previous step.



8. Authenticator installation problems in China

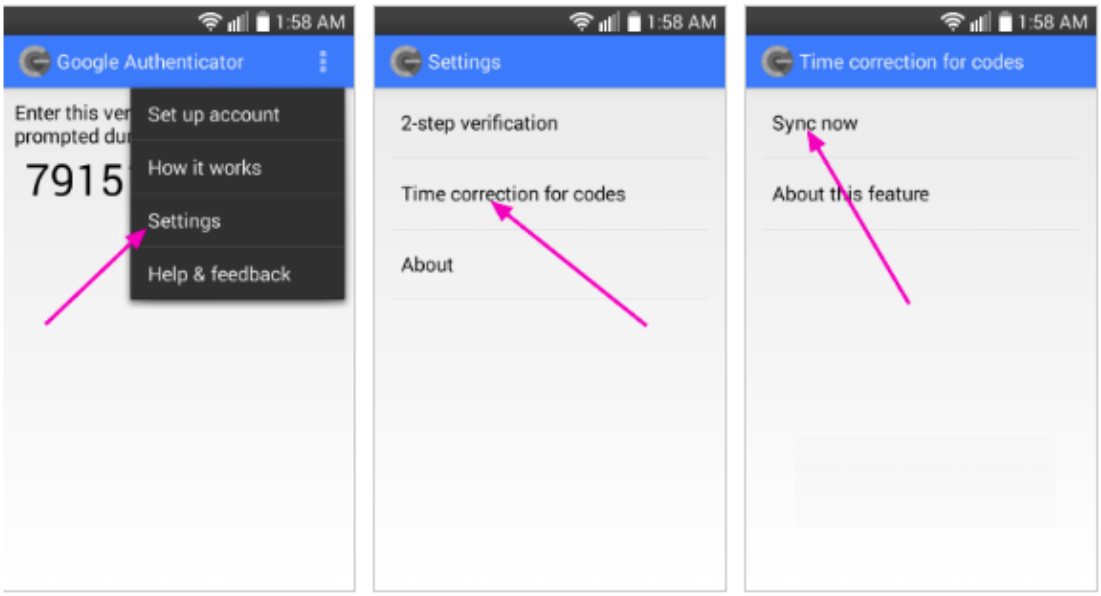
8.1. The mobile version of Authenticator can be downloaded directly from the app store for iPhones. Google Play is not available for Android phones in mainland China, so it is difficult to obtain Google Authenticator. You can use Microsoft Authenticator. If you want to download Microsoft Authenticator, you can download it in the mobile phone's own brand app store Such as Huawei, OPPO, Xiaomi app store) download, security is higher. Do not download and use tools involving the security of encrypted asset accounts from unknown sources.

8.2. Window 7 computer users may encounter the problem that the browser cannot install the Authenticator, please refer to Chapter 6.4 Window 7 OS WinAuth Installation.

9. Holtek 2FA Authentication failure reasons and solutions

9.1. The OTP verification code will be updated every 30 seconds, and the time calculation is calculated using the **Network Time Protocol NTP** (Network Time Protocol NTP is a network protocol for clock synchronization during data network latency), if your mobile phone/ If the time between the computer and the network is not synchronized, the wrong OTP verification code will be generated.

9.2. If you log in with a computer, please note that the computer time must be synchronized with the Network Time. Android phones must first go to the local settings to select "Auto Time Zone" (the operation of each mobile phone will be different, you need to refer to the operation manual of each mobile phone), and then go to "Settings" in Google Authenticator and Microsoft Authenticator App and click "**Verification Code Time" fix"**.



9.3. Since the OTP verification code is changed every 30 seconds, it is recommended that you wait for the latest verification code to appear, and then quickly fill in the verification code by copying and pasting it, otherwise there will be a problem that the verification code will expire.

9.4. If there is a problem with the OTP verification code, you can go to the Holtek 2FA Authentication webpage (https://crm.holtek.com.tw/2famanager/) to re-register the OTP verification code.