

# **DUO Two-Factor Authentication (DUO 2FA) User Guide for O365 Applications Login**

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<b>Document History</b>		
<b>Version</b>	<b>Update Date</b>	<b>Changes</b>
1.0	2018-05	Initial version
1.1	2018-06	Added Section 1.3
1.2	2018-07	Added point 1.1.i and Section 1.2 Updated Section 1.3
1.3	2018-08	Updated Section 1.3 note 1 subject
1.4	2020-08	Updated Section 1.2 & 1.3, include “native mail client on Mac OS 10.14 or above” as supported client

## 1. About O365 Logon with Duo 2FA

### 1.1. Prerequisites

- i. Updated clients to a version which supports modern authentication.
- ii. Enrolled O365 user account & his/her mobile device via Self Service Portal (<https://duo.itsc.cuhk.edu.hk>).
- iii. An enrolled mobile device with 'Duo Mobile' app installed.

### 1.2. Supported Clients

OS	Office / Mail clients
Windows OS:	<ul style="list-style-type: none"><li>- Office 2016</li><li>- Office 2013 with modern authentication registry key updated</li></ul>
Mac OS:	<ul style="list-style-type: none"><li>- Native mail client on Mac OS 10.14 or above</li><li>- Outlook 2016 for Mac (to be downloaded from Apps store)</li></ul>
iOS:	<ul style="list-style-type: none"><li>- iOS 11 or above + native mail client (bundled in iOS)</li><li>- iOS 10 or above + Outlook App (to be downloaded from apps store)</li></ul>
Android OS:	<ul style="list-style-type: none"><li>- Android 6 or above + Outlook App (to be downloaded from apps store)</li></ul>

### 1.3. Behaviors Change

After you enrolled your account and device in Duo Self-Service Portal, the login behavior for supported clients will be changed as below:

- i. Redirected to CUHK login page;
- ii. Requires your login with your
  - Login ID (i.e. alias@cuhk.edu.hk)
  - OnePass Password (1st factor)
  - Duo push response / one-time passcode (2nd factor)

Details are described in below table.

And, **you have to follow the User Action to trigger the change** in order to use DUO 2FA for O365 login.

**Implementation Item: DUO 2FA for Staff & Students**

**Affected User: Enrolled Staff & Students**

	Web Browser	Office Client on Windows OS				Mac OS		Mobile (iOS)		Mobile (Android OS)	
	Outlook Web Access (OWA)	Office 2016	Office 2013 <u>with</u> Modern Authentication Registry Key Updated	Office 2013 <u>without</u> Modern Authentication Registry Key	Office 2010	Native mail client on MacOS 10.14 or above (bundled in Mac OS)	Outlook 2016 for Mac (to be downloaded from apps store)	iOS (11 or above) native mail client (bundled in iOS)	iOS (10 or above) Outlook App (to be downloaded from apps store)	Android (6.0 or above) native Gmail client (bundled in Android OS)	Android Outlook App (to be downloaded from apps store)
<b>Support Modern Authentication?</b>	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
<b>Behavior Change</b>	CUHK Login page + DUO login (DUO Push, passcode)	Redirect to CUHK Login page + DUO login (DUO Push, passcode)	Redirect to CUHK Login page + DUO login (DUO Push, passcode)	Can't login since DUO requires clients support modern authentication	Can't login since DUO requires clients support modern authentication	Redirect to CUHK Login page + DUO login (DUO Push, passcode)	Redirect to CUHK Login page + DUO login (DUO Push, passcode)	Redirect to CUHK Login page + DUO login (DUO Push, passcode)	Redirect to CUHK Login page + DUO login (DUO Push, passcode)	Can't login since DUO requires clients support modern authentication	Redirect to CUHK Login page + DUO login (DUO Push, passcode)
<b>User Action</b>	Nil	Clear Credential Manager <a href="#">[note 1]</a> in order to trigger DUO 2FA login	Clear Credential Manager <a href="#">[note 1]</a> in order to trigger DUO 2FA login	Update Modern Authentication Registry Key <a href="#">[note 3]</a>	Update to supported Office version	Recreate email account in order to trigger DUO 2FA login	Clear Keychain Access <a href="#">[note 2]</a> in order to trigger DUO 2FA login	Recreate email account in order to trigger DUO 2FA login	Recreate email account in order to trigger DUO 2FA login	Download and switch to use Outlook App	Recreate email account in order to trigger DUO 2FA login

**[Note 1: Steps to clear Credential Manager in Windows OS]**

1. Quit all Office applications.
2. Click Start > Control Panel > User Accounts > Credential Manager > Windows Credential. (Or, click Start > Control Panel > Credential Manager > Windows Credential)
  - a. Select each item whose type is **MicrosoftOffice16\_Data:ADAL:<GUID>**, and then press **Delete**. Repeat this step to delete all items for your account.
3. Close the Credential Manager window and restart the MS Outlook, it will redirect to CUHK Login page and request for DUO 2FA login.

**[Note 2: Steps to clear Keychain Access in Mac OS]**

1. Quit Outlook and all other Office applications.
2. Start Keychain Access by using one of the following methods:
  - a. Select the **Finder** application, click **Utilities** on the **Go** menu, and then double-click **Keychain Access**.
  - b. In **Spotlight Search**, type **Keychain Access**, and then double-click **Keychain Access** in the search results.
3. In the search field in Keychain Access, enter **Exchange**.
  - a. In the search results, select each item to view the **Account** that's listed at the top, and then press **Delete**. Repeat this step to delete all items for your Exchange account.
4. In the search field, enter **adal**.
  - a. Select all items whose type is **MicrosoftOffice15\_2\_Data:ADAL:<GUID>**, and then press **Delete**.
5. In the search field, enter **office**.
  - a. Select the items that are named **Microsoft Office Identities Cache 2** and **Microsoft Office Identities Settings 2**, and then press **Delete**.
6. Quit Keychain Access and restart the Outlook 2016 for Mac, it will redirect to CUHK Login page and request for DUO 2FA login.

**[Note 3: Steps to update Modern Authentication Registry Key for Office 2013]**

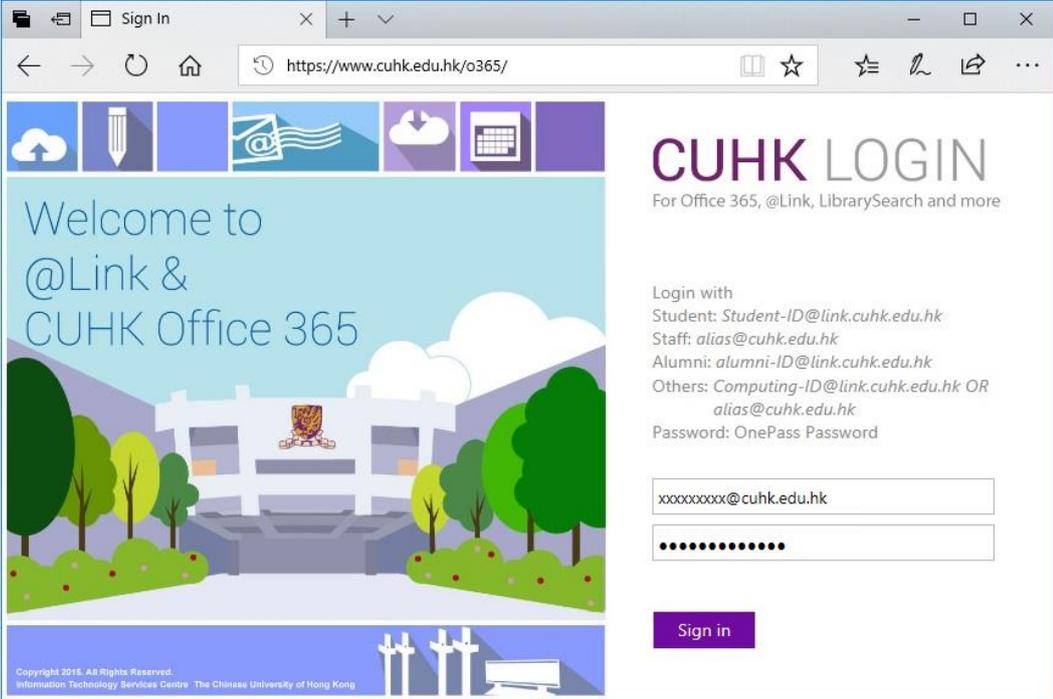
1. Please refer to [User Guide for O365 Services Login with Modern Authentication](#).

## 2. Login O365 applications with Duo 2FA

### Steps:

- i. Open the supported Office application or email client, it will be redirected to CUHK Login page.
- ii. Input your O365 credential in the fields for
  - **Login ID**, i.e. alias@cuhk.edu.hk and
  - **OnePass Password**, i.e. the 1<sup>st</sup> factor

then click **Sign in**.



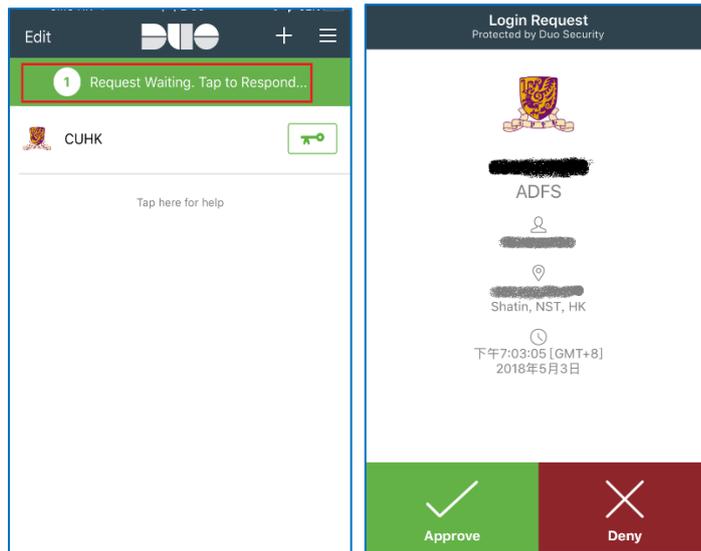
- iii. Then, you will be asked to provide the 2<sup>nd</sup> factor. Follow either one of the following step to continue.

- **Automatically send a Duo Push**

During the Device Enrolment in the Self-Service Portal, if you selected “Automatically send this device a Duo Push”, a Duo Push notification will be sent to your enrolled mobile automatically by default when you log in.

The image shows two screenshots related to Two Factor Authentication (2FA) at CUHK. The top screenshot is the 'My Settings & Devices' page from the ITS SC Information Technology Services Centre. It features a navigation bar with 'ABOUT 2FA', 'ENROLL DEVICES', 'BYPASS CODE', and 'LOG OUT'. A red note states: 'Note: If you don't want to provide mobile phone number, you may select 'Tablet' instead during device enrollment.' The main content area shows the user's profile with the CUHK crest, a selected 'iOS' device with a 'Device Options' button, and a '+ Add another device' link. Below this, there are dropdown menus for 'Default Device' (set to 'iOS') and 'When I log in:' (set to 'Automatically send this device a Duo Push', which is highlighted with a red box). The bottom screenshot shows a web browser window displaying the 'CUHK LOGIN' page. The page includes a welcome message for '@Link & CUHK Office 365' and a security notice: 'For security reasons, we require additional information to verify your account'. A Duo Security notification is overlaid on the right side of the browser, showing the device type as 'iOS' and buttons for 'Send Me a Push' and 'Enter a Passcode'. A blue bar at the bottom of the notification reads 'Pushed a login request to your device...' with a 'Cancel' button.

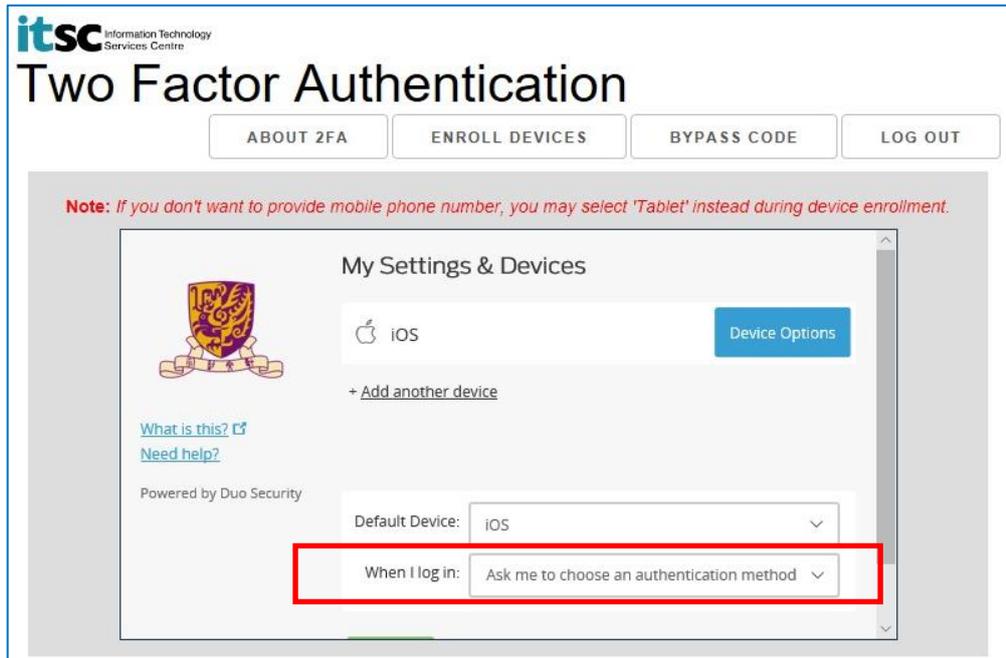
**Open the DUO Mobile App on your mobile device, then tap on the notification message, a Login Request with the information of requesting source is displayed.**



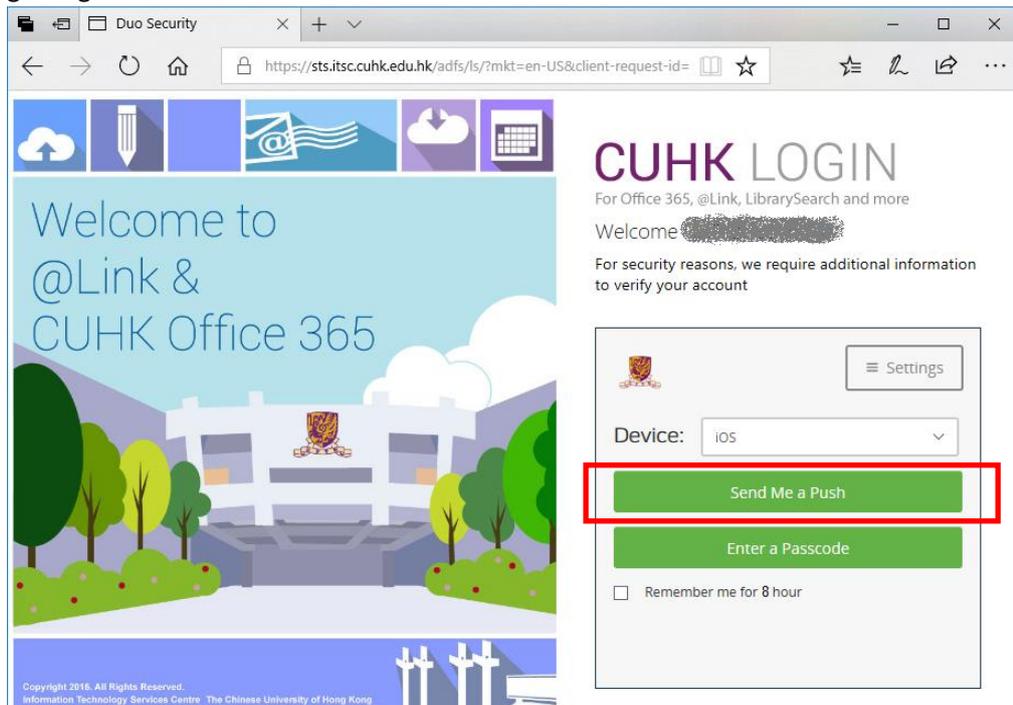
Tap **Approve**, the O365 applications should be login successfully.

- **Select 'Send Me a Push'**

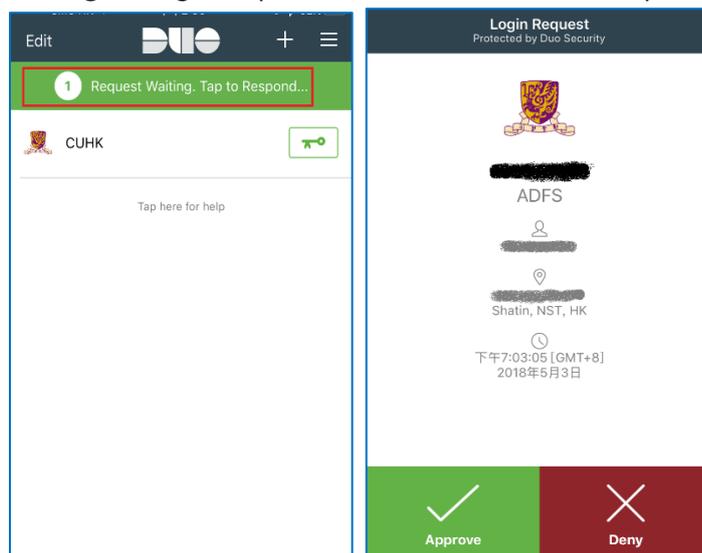
During the Device Enrolment in the Self-Service Portal, it will set "Ask me to choose an authentication method" by default when you log in.



So, when you login O365 applications, you can click **Send me a Push** button for getting a Duo Push notification.



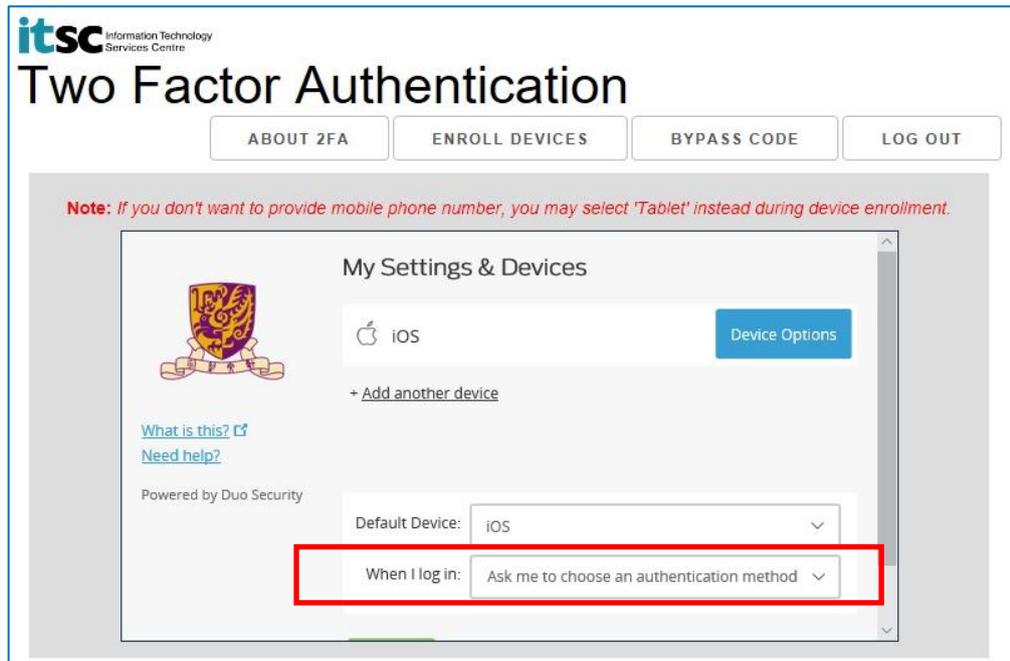
Open the **DUO Mobile App** on your mobile device, then **tap on the notification message**, a Login Request with the information of requesting source is displayed.



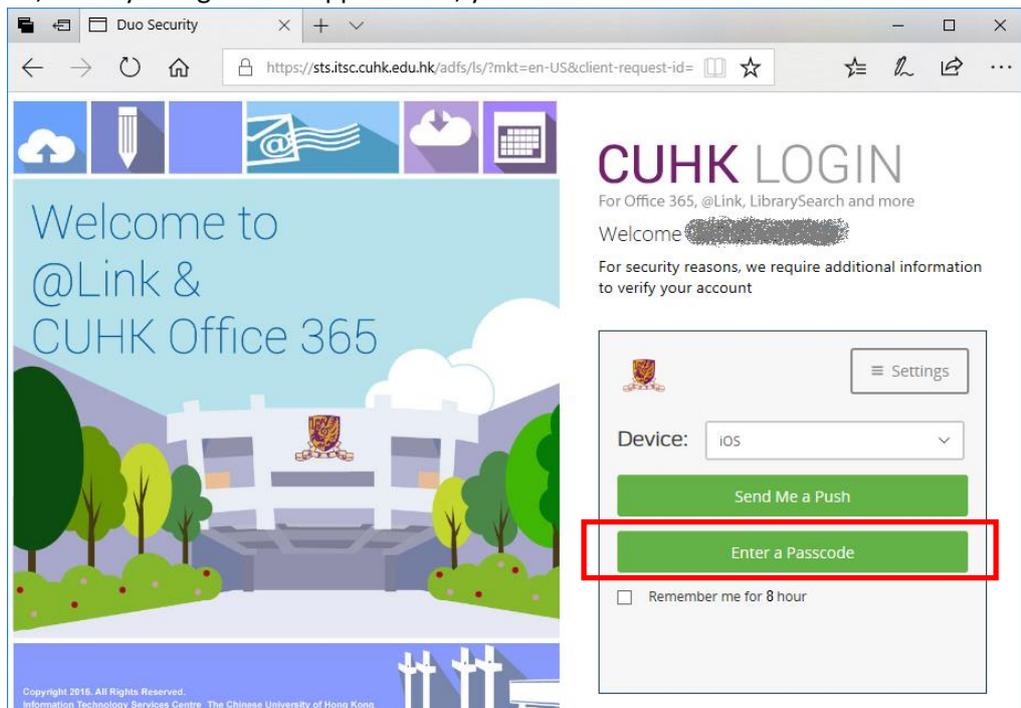
Tap **Approve**, the O365 applications should be login successfully.

- **Select 'Enter a Passcode'**

During the Device Enrolment in the Self-Service Portal, it will set “Ask me to choose an authentication method” by default when you log in.

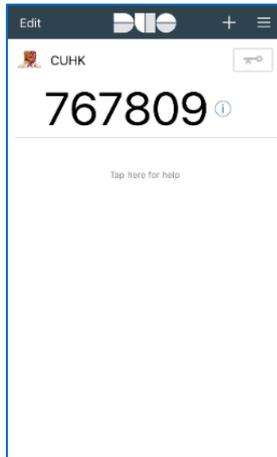


So, when you login O365 applications, you can click **Enter a Passcode** button.

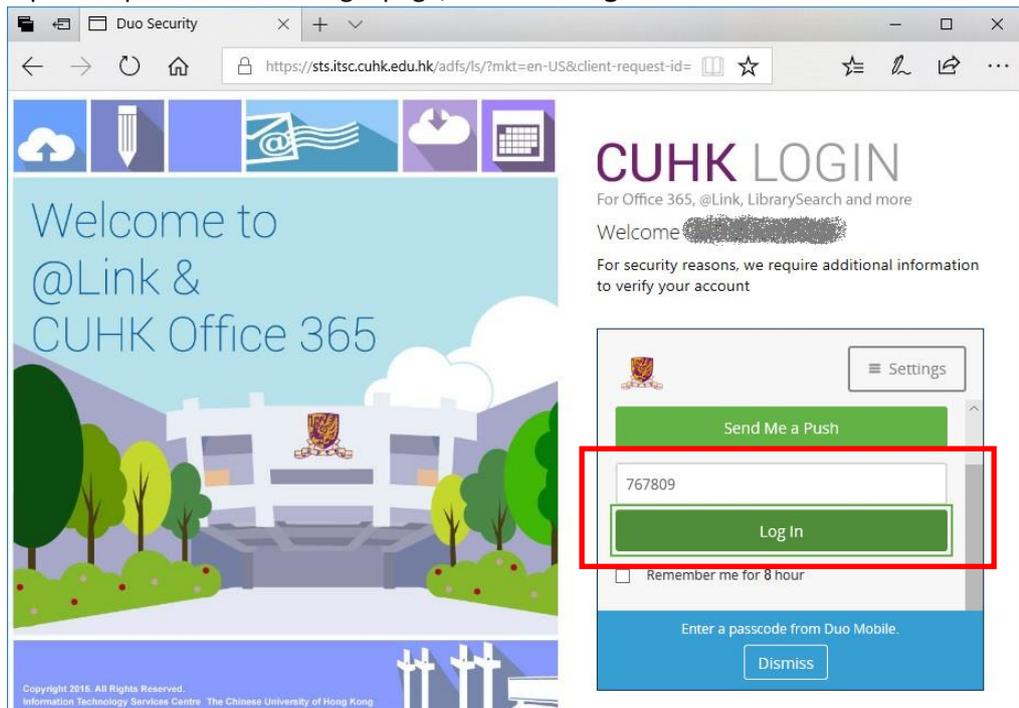


You can get the passcode from your Duo Mobile App.

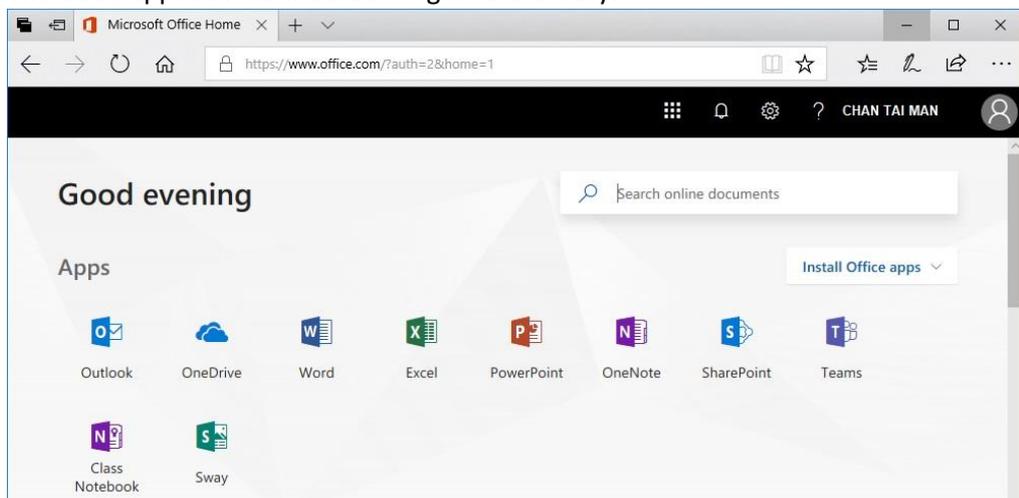
**Open the Duo Mobile App** on your mobile device, then **tap on the key icon**  next to your account, a one-time passcode is generated.



Input the passcode in the login page, then click **Log In** button.



The O365 applications should be login successfully.



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