

DUO Two-Factor Authentication (DUO 2FA) User Guide

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ITSC

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Document History		
Version	Update Date	Changes
1.0	2018-02-26	Initial version

1. About DUO 2FA

The traditional authentication method by just verifying the username and password is no more secure enough nowadays. In order to strengthen the access security, two-factor authentication (2FA) is introduced. 2FA is an enhance authentication mechanism which requires user to provide any 2 of below factors for identity verification:

- Something you know: e.g. password
- Something you have: e.g. token, one-time passcode
- Something you are: e.g. fingerprint, voice

DUO 2FA is a two-factor authentication solution which requires users to provide the 2nd factor, i.e. one-time passcode, from a designated device (e.g. your mobile device) when they are logging in to those 2FA integrated applications for identity verification before granting the access.

1.1. Applications Integrated with DUO 2FA

The following applications are integrated with DUO 2FA:

- Domain-joint Windows Desktop login
- CUHK VPN application
- O365 services
- Some AD Federation Service applications

1.2. How It Works

Steps:

You need to:

- i. **Enroll your O365 account and designated mobile device** (e.g. your mobile, tablet) via the Self-Service Portal.
- ii. **Install the DUO Mobile App** on above enrolled mobile device for linking to your account and for receiving DUO notification (i.e. DUO Push) or generate the one-time passcode for your login request.

Afterwards, when you are logging in to the above 2FA integrated applications, you will need to:

- i. login the application with your username and password;
- ii. then provide the 2nd factor to the application by either one of below:
 - a. **DUO Push response**, which is the authorization response to the DUO Push notification for the login request from the application, via your DUO Mobile App; or
 - b. **One-Time Passcode**, which is generated from your DUO Mobile App for inputting to the application.

Once the above verification is passed, your access to the application is granted.

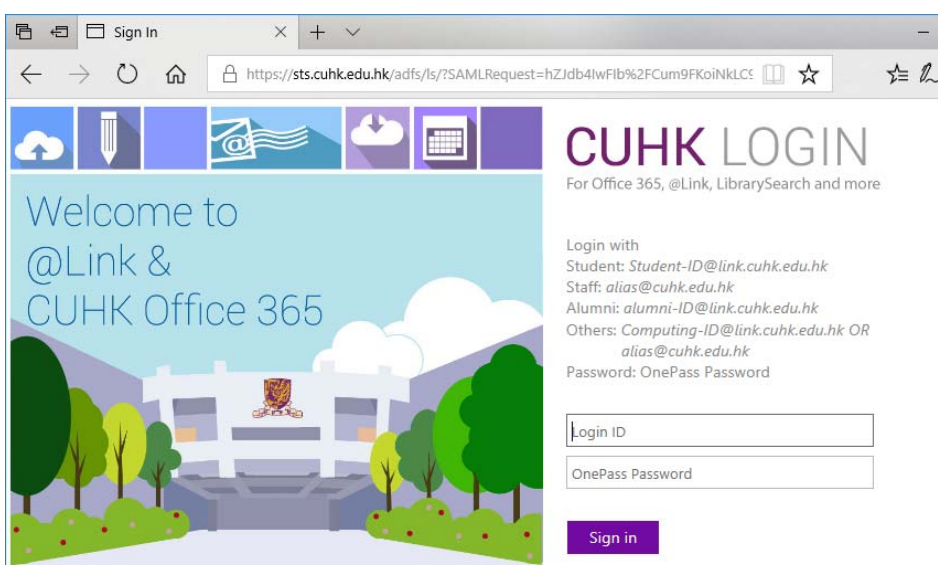
2. Enrollment, Installation and Configuration

2.1. Enrollment and Installation

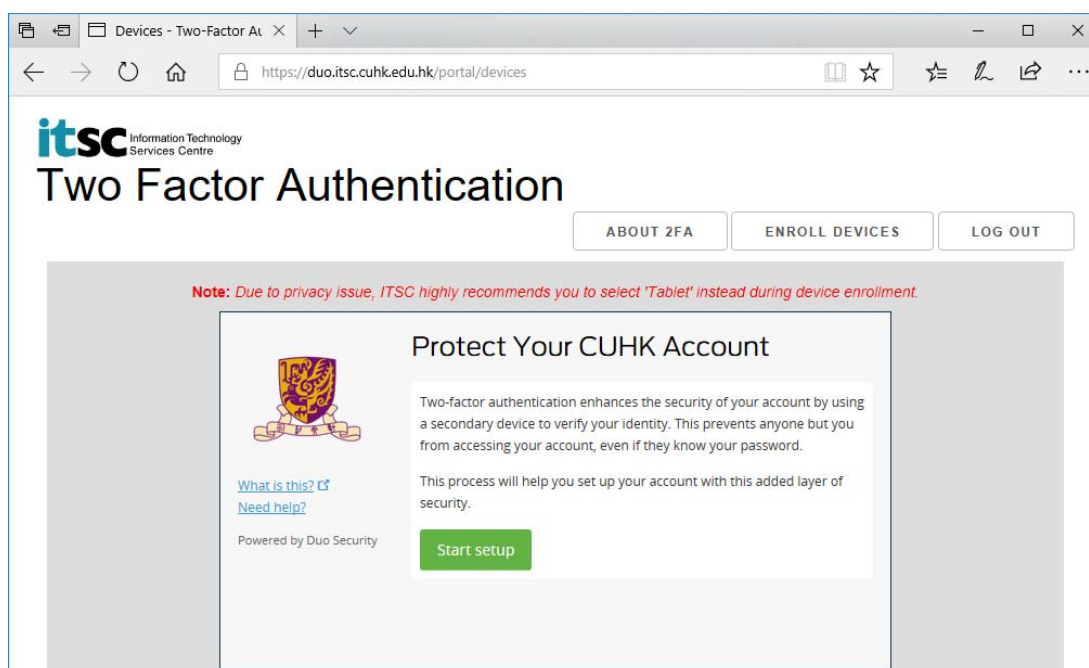
Before you can use the 2FA for application authentication, you need to **enroll your account & designated mobile device** in DUO Self-Service Portal, and **install the DUO Mobile App** on your designated mobile device for one-time passcode generation or Duo Push authorization.

Steps:

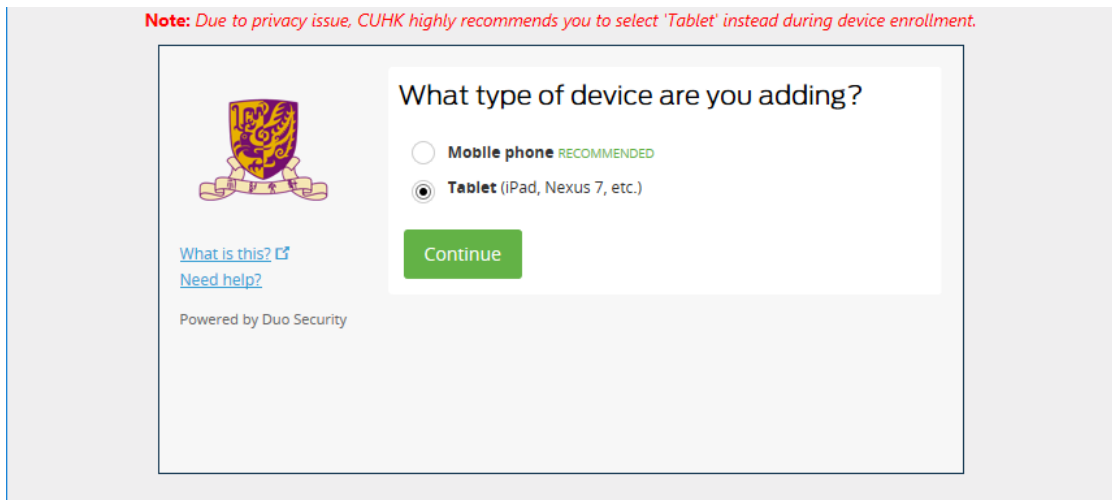
- i. Open a web browser, visit the Two-Factor Authentication (2FA) Self-Service User Portal at <https://duo.itsc.cuhk.edu.hk>.
- ii. Login with your O365 account.



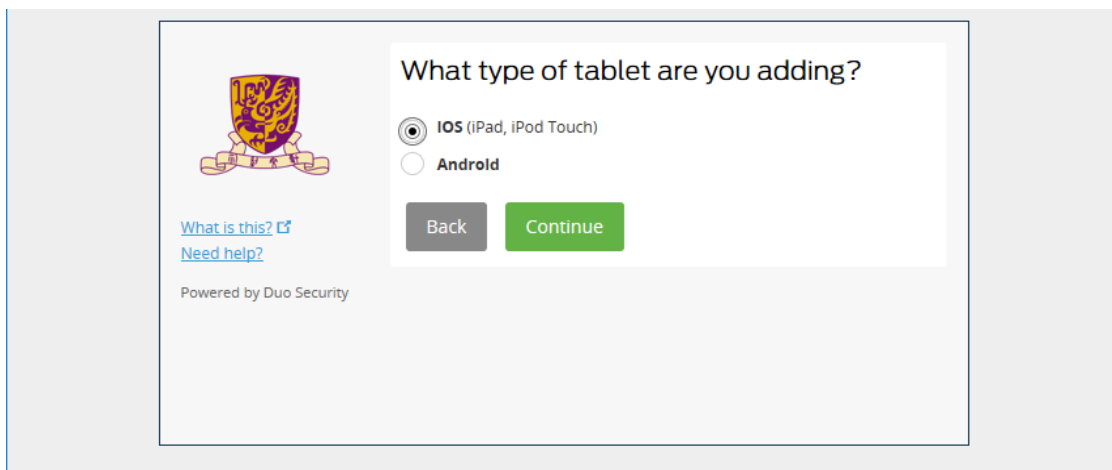
- iii. Once login the Self-Service User Portal, the enrolment process start. Click **Start setup**.





- iv. Select the type of your mobile device that you will use to install the DUO 2FA Mobile App. DUO recommends users to select Mobile phone, but this requires users to provide their phone number as well later. Due to privacy concerns, CUHK highly recommends you to select **Tablet**, then click **Continue**.



- v. Select the **type of your mobile device**, then click **Continue**.



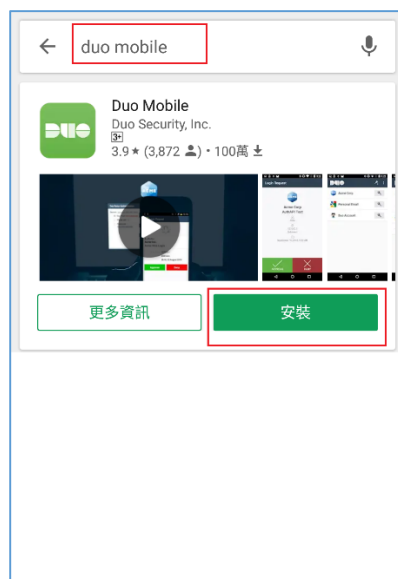
- vi. Follow the on-screen instructions to **install DUO Mobile App**  on your mobile device.
If you are using iOS device:

- Open the **App Store**  on your mobile, tap **search**  and search 'Duo Mobile'.
- Tap 'Get' and then 'install' to download and install the app.



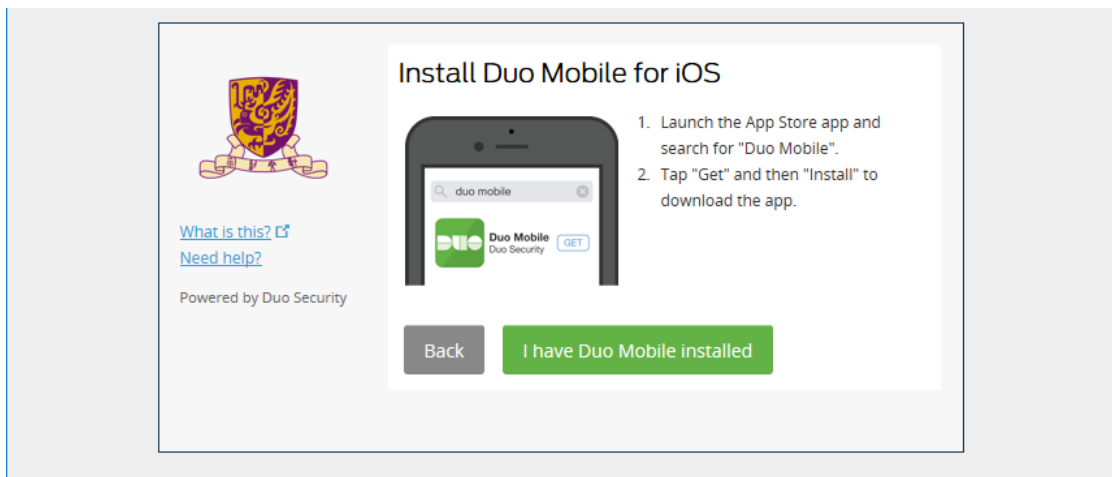
If you are using Android device:

- Open the **Google Play Store**  on your mobile, and search 'Duo Mobile'.
- Then tap 'install' to download and install the app.



Note: Please make sure to allow the Duo Mobile app to access the camera, otherwise, it would not be able to scan the activation code in next step.

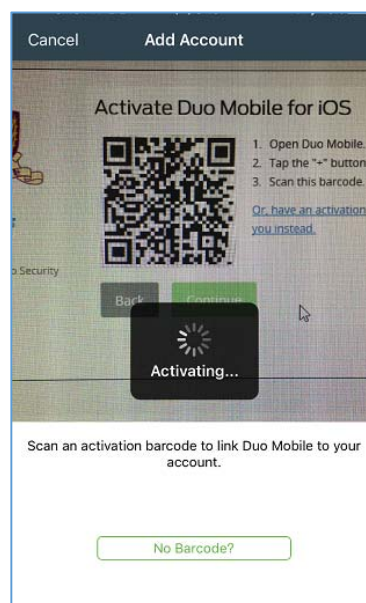
After the mobile app is installed, back to your computer, click **I have Duo Mobile installed**.



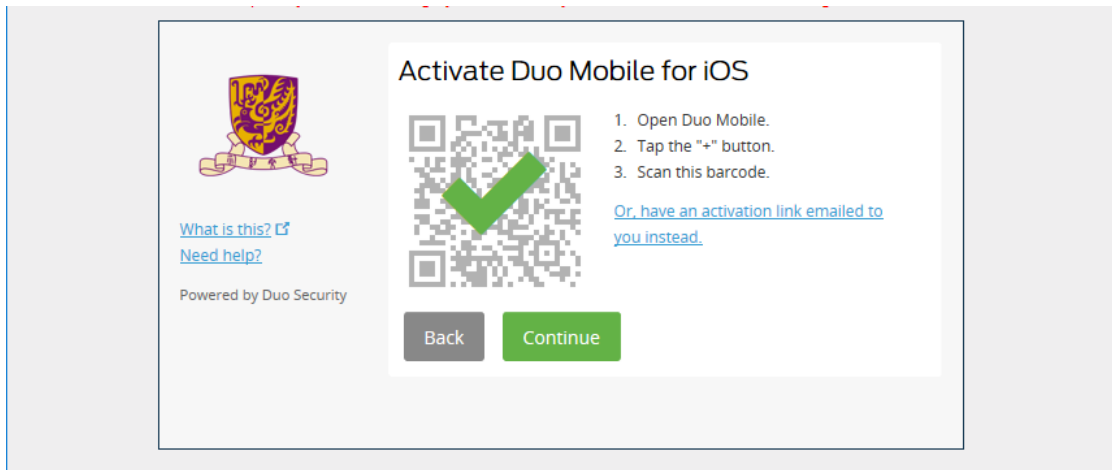
vii. Follow the on-screen instructions to **activate the Duo Mobile App on your mobile device**.



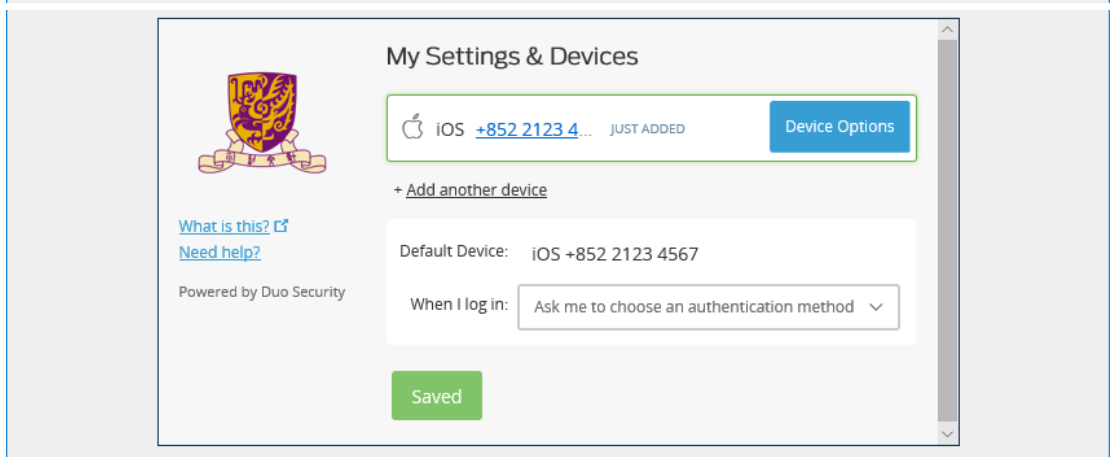
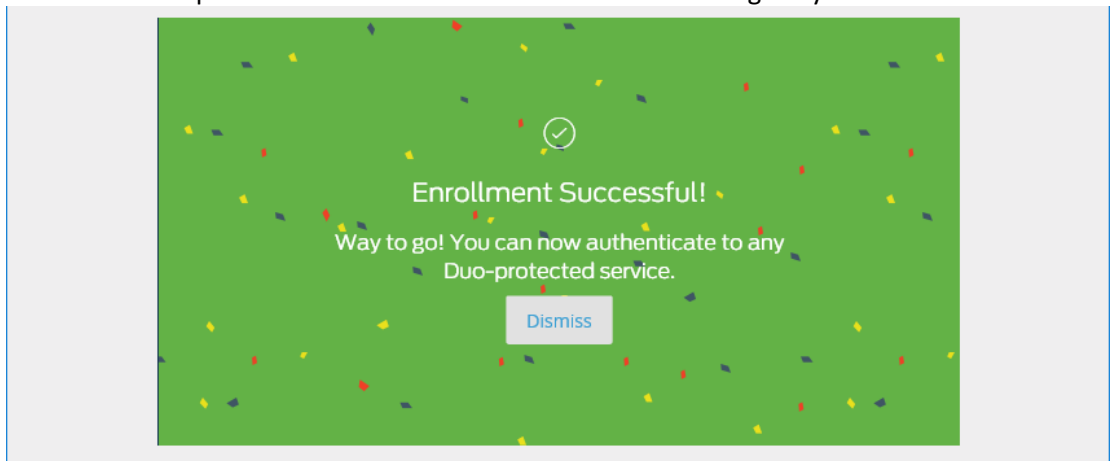
viii. **Open the DUO Mobile App** on your mobile device, then **tap the '+' button**, then scan the above code image. You should find your DUO Mobile App is activating and adding your account into the app.



- ix. Back to the web browser, once the activation is done, you should find a tick picture. Click **Continue** then.



- x. The enrollment process finish. Click **Dismiss** to view the settings of your enrolled device.



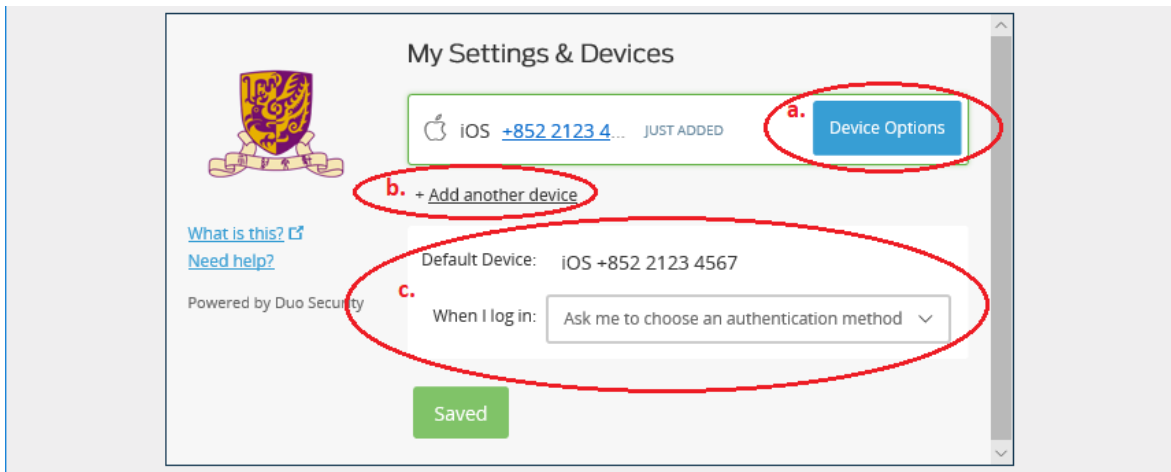
The 1st enrolled device would become the default device for you to use the Duo Mobile App.

2.2. Configuration

You can view or change the 2FA settings in the 2FA Self-Service User Portal (<https://duo.itsc.cuhk.edu.hk>). In 'My Settings & Devices' page, you can:

- a. Configure the Device Options;

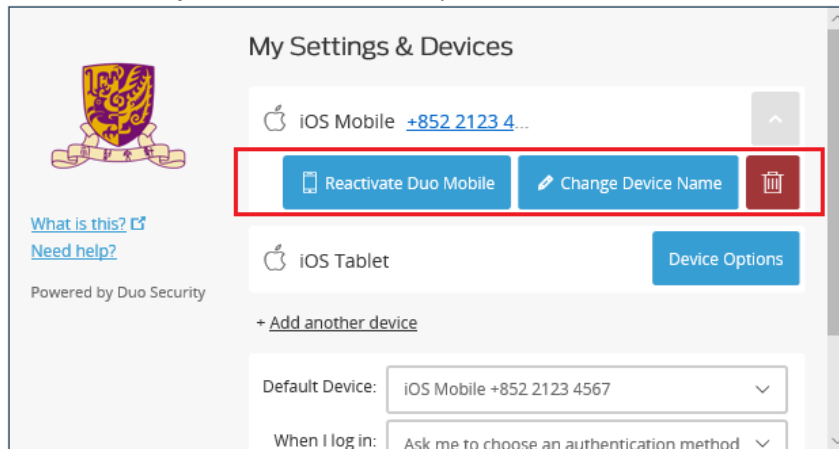
- b. Add another device under your account;
- c. Configure the default device and 2FA authentication method.



2.2.1. Device Options

Steps:

- i. Click **Device Options** of a device, 3 options are shown:



- **Reactivate Duo Mobile**: you can reactivate your Duo Mobile App on your mobile device in case your mobile device is changed.
- **Change Device Name**: you can change the name of your enrolled mobile device displaying on this page.
- **Delete icon**: this option would only be shown if you had enrolled for more than 1 mobile devices, it allows you to delete the selected device if it is no more needed.

2.2.2. Add another device

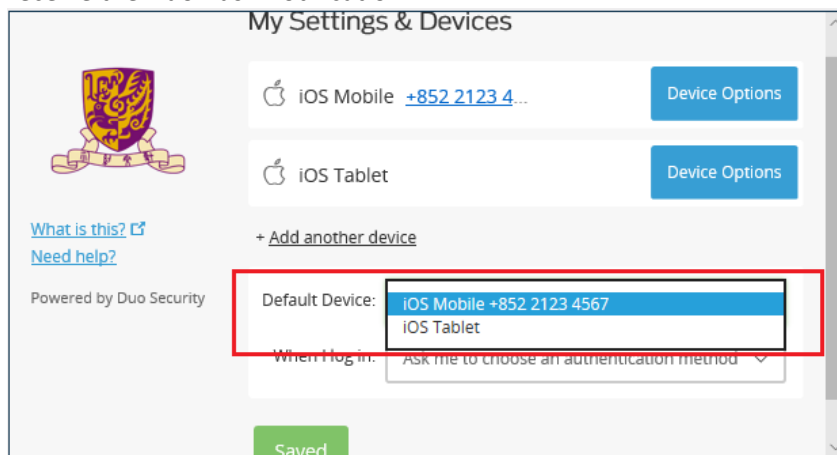
Steps:

- i. Click **Add another device**, it would restart the enrollment process. Repeat the steps from Section 2.1, Step iv to enroll another device.

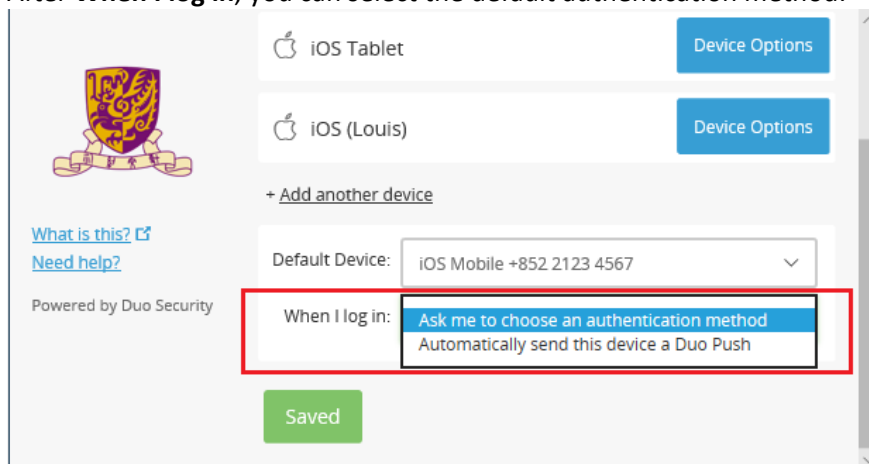
2.2.3. Default mobile device & Authentication method

Steps:

- i. After **Default Device**, a drop down list would be shown if you had enrolled for more than 1 mobile devices, you can select one of them as the default device that you want to receive the Duo Push notification.



- ii. After **When I log in**, you can select the default authentication method:



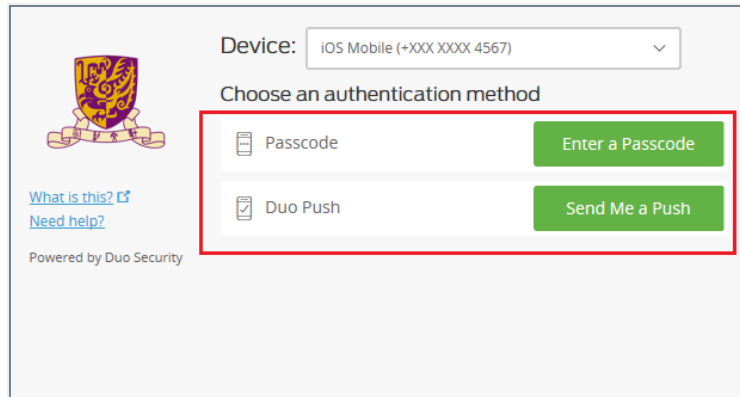
- **Ask me to choose an authentication method:** you will be asked to choose either one of the authentication methods, i.e. **Duo Push** or **Passcode**, every time when you login any DUO 2FA integrated application.
 - **Duo Push:** it is an automatically notification which would be pushed to your default device selected above.
 - **Passcode:** it is the one-time passcode that is generated by your Duo Mobile App and valid for a short period, e.g. 1 min.

(Note: The use of Passcode and Duo Push can be found in next section.)
- **Automatically send this device a Duo Push:** an automatic notification would be pushed to your default device selected above.

3. Use of Duo Push and Passcode

Below demonstrates the use of the 2 authentication methods, i.e. **Passcode** and **Duo Push**, for logging in the DUO integrated applications.

Take an example of logging in to the 2FA Self-Service Portal (*Note: different application may have different layout*). When you logging in to the portal, you will be asked to choose either one of the authentication method, **Enter a Passcode** or **Send Me a Push**.




3.1. Passcode

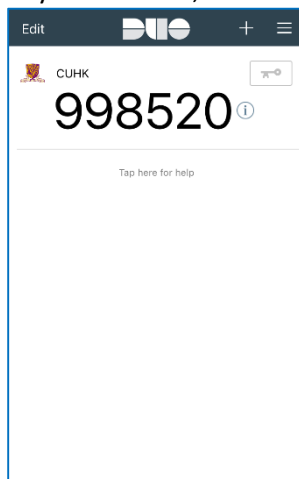
Steps for using Passcode:

(Note: Network connection on your mobile device is not a must)

- i. Click **Enter a Passcode**, you will be asked to enter a passcode which is generated from your Duo Mobile App.

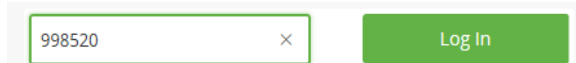


- ii. **Open the DUO Mobile App** on your mobile device, then **tap on the key icon**  next to your account, a one-time passcode is generated.



Please note that there is a time limit, e.g. 30 seconds, for using each one-time passcode. Once the passcode is expired, you need to tap the key again to generate a new one.

- iii. Back to the application, **enter the passcode** above and then **Log In** the application.



3.2. Duo Push

Steps for using Duo Push:

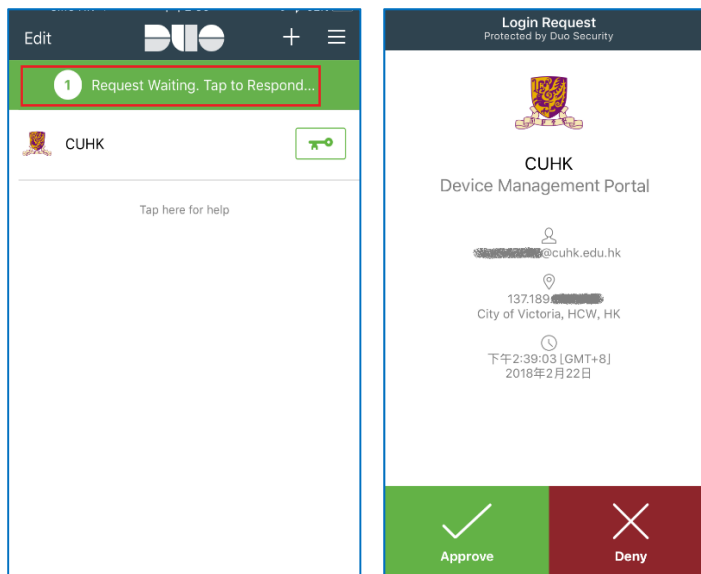
(Note: Network connection on your mobile device is required)

- i. Click Send Me a Push, a notification would be pushed to your device.

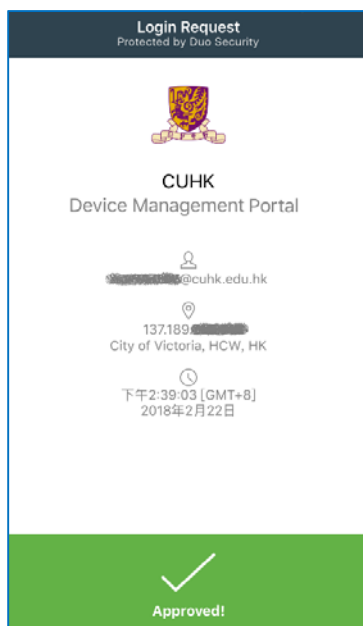


- ii. Open the DUO Mobile App on your mobile device, then tap on the notification message, a Login Request with the information of requesting source is displayed.

If the request is initiated by you, tap **Approve**. If it is unexpected, tap Deny.



- iii. Once the Approve is tapped, Login Request is **Approved**, and the application should be login automatically.



- END -