



HKEX ACCESS MANAGEMENT PORTAL

Access Management User Guide

for Client Connect e-Services, FINI, ECP2.0 and Synapse



Who should read this Guide

This Guide describes the User Management and Access Right Management functions of the following HKEX systems:

- Client Connect eServices
- FINI
- Electronic Communication Platform 2.0 ('ECP2.0')
- Synapse

The Delegated Administrator ('DA') framework for these four systems (the "HKEX Platforms", each a "HKEX Platform") is managed by HKEX via a common Access Management Portal that provides one-stop convenience for external system users.

This Guide also covers password reset guidance for DAs and Business Users of the HKEX

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Versions

Version	Publication Date	Updates
1.5	11 October 2023 [Current]	Changes to the following sections: <ul style="list-style-type: none"> - 1. Introduction to Delegated Administrators, the descriptions of DA Maintenance form - 7. Appendix 1, 4. User roles for Synapse - 8. Appendix 2, Table 5, the list of function ID mapping for Synapse
1.4	8 August 2023	Changes to the following sections: <ul style="list-style-type: none"> - 3. User Maintenance, the steps of creating users. - 4. Team Maintenance, removal of team pre-fix 'ECM'
1.3	16 June 2023	Changes to the following sections: <ul style="list-style-type: none"> - 1. Introduction, the definition of Delegated Administrator and Access Credentials, the descriptions of DA Maintenance Form. - 9. Appendix 3, the procedure of 'Setup / reset your password'
1.2	23 March 2023	Changes to the following sections: <ul style="list-style-type: none"> - 1. Introduction, the descriptions of DA Maintenance form - 7. Appendix 1, 2. User roles for Electronic Communication Platform 2.0 ('ECP2.0') - 8. Appendix 2, Table 3, the list of function ID mapping for ECP2.0
1.1	20 January 2023	Changes to the following sections: <ul style="list-style-type: none"> - 7. Appendix 1, 2. User roles for Electronic Communication Platform 2.0 ('ECP2.0') - 8. Appendix 2, Table 3, the list of function ID mapping for ECP2.0
1.0	25 November 2022	First version published

1. INTRODUCTION TO DELEGATED ADMINISTRATORS

Delegated Administrator (“DA”) means an Authorized User assigned by a User of a HKEX Platform to administer and manage the access profile of such User’s Authorized Users in the HKEX Platform.

Access Credentials means any user name, identification number, password, security key, security token, PIN or other security code, method, technology or device used to verify authorization to access and use a HKEX Platform.

DAs are responsible for managing Business Users’ access rights to the HKEX Platforms on behalf of their own Companies, using the **Access Management Portal** available at

<https://connect.hkex.com.hk>

It is mandatory for Companies who wish to use any of the HKEX Platforms to assign **at least two DAs** acting separately as a maker and a checker to perform the user maintenance including adding, changing and deleting user profiles, unlocking users’ accounts and assigning user rights.

How to appoint, amend or remove a DA

There are two ways for a company to appoint a DA:

- 1) During the Company’s first-time registration to use any of the HKEX Platforms. First-time registrants will be invited to assign their DAs during the registration process; or
- 2) Existing users of the HKEX Platforms can submit a ‘DA Maintenance Form’ to appoint new DAs, change existing DAs’ particulars or remove existing DAs. The respective DA Maintenance Forms are available at:

For Client Connect eServices:

<https://www.hkex.com.hk/-/media/HKEX-Market/Services/Next-Generation-Post-Trade-Programme/GForm11.pdf>

For FINI:

[https://www.hkex.com.hk/-/media/HKEX-Market/Services/Next-Generation-Post-Trade-Programme/Fini/HKEX-FINI-Delegated-Administrator-Maintenance-Form-\(clean\).pdf](https://www.hkex.com.hk/-/media/HKEX-Market/Services/Next-Generation-Post-Trade-Programme/Fini/HKEX-FINI-Delegated-Administrator-Maintenance-Form-(clean).pdf)

For ECP2.0:

<https://www.hkex.com.hk/-/media/HKEX-Market/Services/Trading/Securities/Stamp-Duty-Reporting-and-Payment/ECP-and-Documentation/ECP-User-Guide/ECP2-Application-Form.pdf>

For Synapse:

https://www.hkex.com.hk/~/-/media/HKEX-Market/Mutual-Market/Stock-Connect/Reference-Materials/Synapse/Synapse_User_and_Designated_Service_Provider_Application_or_Change_of_Details_Form.pdf

Apart from submitting physical forms as stated above, an online form is also available (*target rollout date in November 2023*). The online form is accessible in the navigation menu of the Access Management Portal under **DA Maintenance**. The online form will cover the DA maintenance requests for Client Connect eServices, FINI and ECP2.0.



Rights and permissions of DAs

In general, DAs will have the right to perform the following External Administrator (‘EA’) functions:

- User management: Create / update / delete **Business Users** within their own Company.
- Assign **External User** ('EU') functions to their Business Users, which are specific to each HKEX Platform. This allows Business Users to access the relevant business functions in the respective HKEX Platform.
- Team management: Create / update / delete **User Teams** within their own Company (only for FINI).
- API profile management: Create / update / delete **API Profiles** (only for FINI).
- Other administrative functions according to the User Types that the DA is eligible to manage.

These EA functions, which are available only to DAs, can be accessed via the **MANAGE ACCESS RIGHTS** link on the navigation menu after successful login to the Access Management Portal:



Please refer to **Appendix 1** for a complete list of all available EA and EU user roles in the HKEX Platforms.

Please refer to **Appendix 2** for a complete list of all functions that DAs can perform and their ID mapping by User Types.

Reminders to DAs

Delegated Administrators, when creating or managing the profiles of any Authorized Users, acknowledge and agree that any person using the Access Credentials or otherwise accessing the users' profile (i) is acting on behalf of the Company, (ii) has the authority to act on its behalf, and that (iii) acts by such person are legally binding on and attributable to the Company.

The Company shall be fully liable and responsible for any access and the use of the Company by its Authorized Users (including without limitation any submission made by its Authorized Users on HKEX business applications). Breach of any provisions hereof by an Authorized User shall be regarded as a breach by the Company.

The default number of users (including DAs) for each company is 20. If additional users are required, please send your request to HKEX user administrators via email (CCDA_reg@hkex.com.hk)

2. VIEW COMPANY PROFILE

1. Log in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>) and click **MANAGE ACCESS RIGHTS**, go to **MANAGE**, then click **1 COMPANIES**.

The screenshot shows the HKEX Access Management Portal interface. At the top, there is a navigation bar with the HKEX logo and '香港交易所' on the left, and 'DASHBOARD' and 'MANAGE' in the center. Below the navigation bar, the 'Company List' page is visible. A dropdown menu is open under the 'MANAGE' button, listing 'USERS', 'TEAMS', 'AGENT PROFILES', 'MACHINE PROFILES', and 'COMPANIES'. The 'COMPANIES' option is highlighted with a green box and a circled '1'. Below the menu, a table lists company details:

BIC CODE	COMPAN	INTERNAL/ EXTERNAL	STATUS
XYZ001	xyz	External	Active

2. DA can view the details of the company he/she manages. There are four tabs:

- **2 Details** – Shows the basic information of the Company

The screenshot shows the 'Details' tab for a company profile. The company name is 'xyz'. Below the tabs, the following information is displayed:

BIC Code	XYZ001
Company Name	xyz
Chinese Name	
Internal/ External	External
Status	Active

- **3 Company Identity** – Shows the Participanship / Identity of the Company

The screenshot shows the 'Company Identity' tab for a company profile. The company name is 'xyz'. Below the tabs, the following information is displayed:

CODE	IDENTITY	STATUS
XYZ123	HKSCC Participant	Active

- **4 Users** – Displays the list of users of the company (User editing can also be performed here)

Company
xyz

Details	Company identity	4 Users	Admins
NAME ▾		EMPLOYEE TYPE ▾	STATUS ▾
ac xyz		Admin	Active
um xyz		Business	Active
am xyz		Admin	Active
ab xyz		Admin	Active

- **5 Admins** – Displays the list of DAs of the company

Company
xyz

Details	Company identity	Users	5 Admins	
NAME ▾	INTERNAL/ EXTERNAL ▾	EMPLOYEE TYPE ▾	COMPANY ▾	STATUS ▾
ab xyz	External	Admin	xyz	Active
am xyz	External	Admin	xyz	Active
ac xyz	External	Admin	xyz	Active

3. USER MAINTENANCE

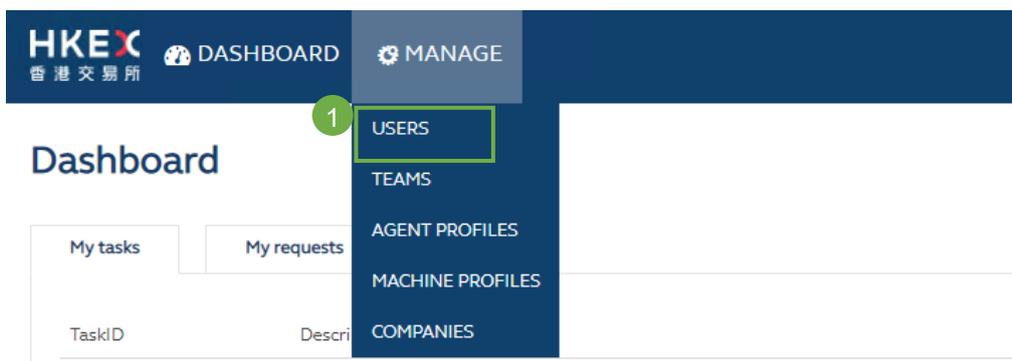
MAKER

DA (maker) can either manage business users via (a) the **USERS** menu as described below or (b) the Users tab of the **COMPANIES** menu.

Manage Users – View User List

Log in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>)

1. Click **MANAGE ACCESS RIGHTS**. Go to **MANAGE**, then click on **1 USERS**.



2. The DA (maker) can view the list of users for the Company he/she manages.

Users

+ CREATE USER DELETE SELECTED

Show filters ▾

<input type="checkbox"/> NAME ▾	INTERNAL / EXTERNAL ▾	EMPLOYEE TYPE ▾	COMPANY	STATUS ▾	
<input type="checkbox"/> um xyz	External	Business	xyz	Active	⋮
<input type="checkbox"/> am xyz	External	Admin	xyz	Active	
<input type="checkbox"/> uc xyz	External	Business	xyz	Active	⋮
<input type="checkbox"/> ab xyz	External	Admin	xyz	Active	
<input type="checkbox"/> ub xyz	External	Business	xyz	Active	⋮
<input type="checkbox"/> ac xyz	External	Admin	xyz	Active	

Manage Users – Create Users and Assign Functions to Users

1. The DA (maker) clicks on **1 + CREATE USER** to create users by entering the details of the new user.
 - DA (maker) can only enter the **2 Company** he/she manages.
 - The **3 Email** provided will be the new user's Login User ID.
 - Notifications can be sent to **4 Team Email** if available. (Applicable for Client Connect eServices)
 - By default, **5 User Status** is set as "Active". The user cannot access to any applications if User Status is set as "Inactive"
 - The Employee Type is defaulted to 'Business' and not editable by DA
 - The Internal/External is defaulted to 'External' and not editable by DA

Users

1 + CREATE USER DOWNLOAD LIST

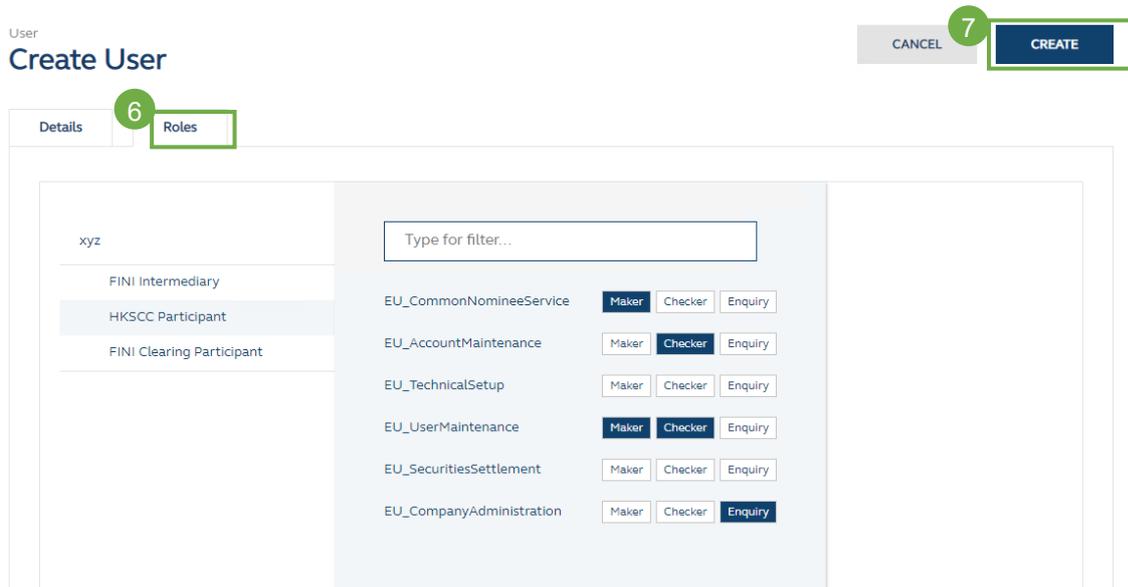
↓

User
Create User

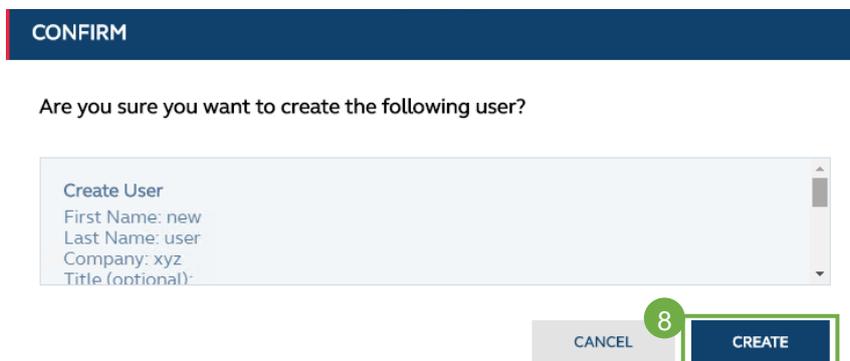
Details | Roles

First Name	<input type="text" value="new"/>
Last Name	<input type="text" value="user"/>
2 Company	<input type="text" value="xyz x"/>
Title (optional)	<input type="text"/>
3 Email	<input type="text" value="nu@xyz.com"/>
4 Team Email (optional)	<input type="text"/>
Contact Number	<input type="text" value="13245678"/>
Employee Type	<input type="checkbox"/> Admin <input checked="" type="checkbox"/> Business
Internal/External	<input type="radio"/> Internal <input checked="" type="radio"/> External
5 User Status	<input checked="" type="radio"/> Active <input type="radio"/> Inactive

- Once the company is entered, the **6 Roles** tab will appear based on the Participantship/User types that the DA (maker) is eligible to manage. This allows the DA (maker) to assign EU functions to the new user. The new user can be assigned as **Maker**, **Checker**, **both Maker and Checker** or **Enquiry** only. Click **7 CREATE** to proceed.



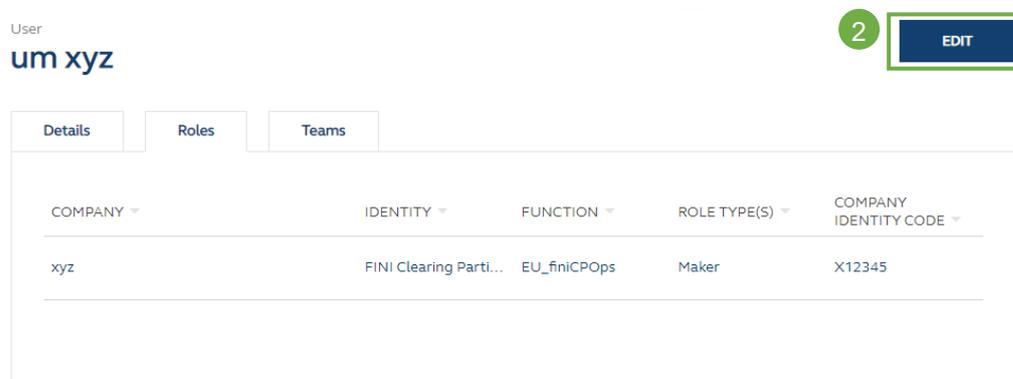
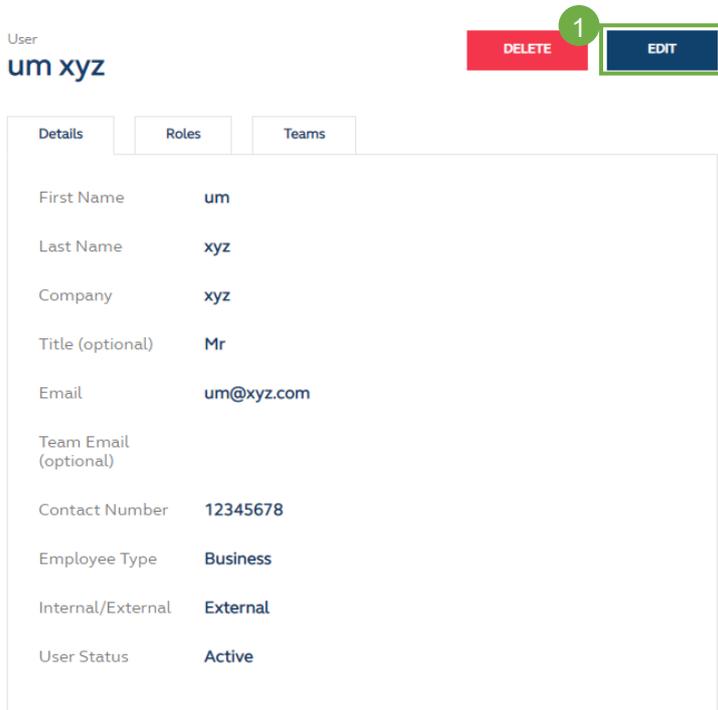
- Click **8 CREATE** to submit a request and this will go through the maker-checker process.



Note: A user can have both maker and checker access to the same function. If the user acts as the maker of a request, the same user is restricted from approving the same request. DAs should ensure that each function contains at least a pair of separate maker and checker when creating users. For example, DA1 and DA2 both have maker and checker rights. If DA1 submits a request, and only DA2 can approve/reject. If DA2 submits a request, then only DA1 can approve/reject.

Manage Users – Edit Users

1. In the user list, the DA (maker) can click on a specific user to edit.
2. Click **1 EDIT** on the **Details** tab to amend user details or **2 EDIT** the **Roles** tab to re-assign EU functions.



3. Click **3 SUBMIT** afterwards to submit the changes to go through the maker-checker process.

User
um xyz

CANCEL **3** SUBMIT

Details Roles Teams

First Name

Last Name

Company

Title (optional)

Email

Team Email (optional)

Contact Number

Employee Type Admin Business

Internal/External External Inactive

User Status Active Inactive

Edit Roles
um xyz

CANCEL **3** SUBMIT

xyz

FINI Intermediary

FINI Clearing Participant

Type for filter...

EU_finiCPOps

EU_finiCPEng

Please note that DA (maker) can add and remove functions simultaneously in one request.

Manage Users – Delete Users

1. The DA (maker) can check the box next to all users that require deletion. Only Business users can be selected. Admin users are managed by HKEX. Participants may submit DA maintenance form for deleting DA.
2. Click **1 DELETE SELECTED** to delete users.

Users

+ CREATE USER

1

DELETE SELECTED

Show filters ▾

<input type="checkbox"/> NAME ▾	INTERNAL / EXTERNAL ▾	EMPLOYEE TYPE ▾	COMPANY	STATUS ▾	
<input checked="" type="checkbox"/> um xyz	External	Business	xyz	Active	⋮
<input type="checkbox"/> am xyz	External	Admin	xyz	Active	
<input checked="" type="checkbox"/> uc xyz	External	Business	xyz	Active	⋮
<input type="checkbox"/> ab xyz	External	Admin	xyz	Active	
<input type="checkbox"/> new user	External	Business	xyz	Active	⋮
<input type="checkbox"/> ub xyz	External	Business	xyz	Active	⋮
<input type="checkbox"/> ac xyz	External	Admin	xyz	Active	

Manage Users – Unlock User Accounts

A user account will be locked after five unsuccessful login attempts within 30 minutes. Locked DA accounts can only be unlocked by HKEX*, while DAs can unlock their Business users' accounts.

* For unlocking a DA, please send account unlocking request to CCDA_unlock@hkex.com.hk. Once the account is unlocked, the DA will receive an email notification to reset password.

1. In the user list, DA (maker) selects the user with locked account to edit.
2. Click **1 Unlock Account** to send the request to DA (checker).
3. Once the request is approved, a notification email will be sent to the user.

um xyz

Details	Roles
User ID	um@xyz.com
First Name	um
Last Name	xyz
Company	xyz
Title (Optional)	
Email	um@xyz.com
Team Email (Optional)	
Contact Number	12345678
Employee Type	Business
Internal/External	External
User Status	Active

1 [Unlock Account](#)

4. TEAM MAINTENANCE (for FINI only)

A **Team** is a group of Users within the same Company. A Company can have multiple Teams and a User can be assigned to multiple Teams. Teams are used uniquely in FINI to identify groups of Users who can perform certain business functions for specific IPO cases. The assignment of a team to an IPO case is performed within the FINI system itself on an IPO-by-IPO basis. In short, Team is a mandatory setup for FINI user types below:

- Sponsor
- Legal Counsel
- Intermediary (i.e. Overall Coordinator, Distributor)

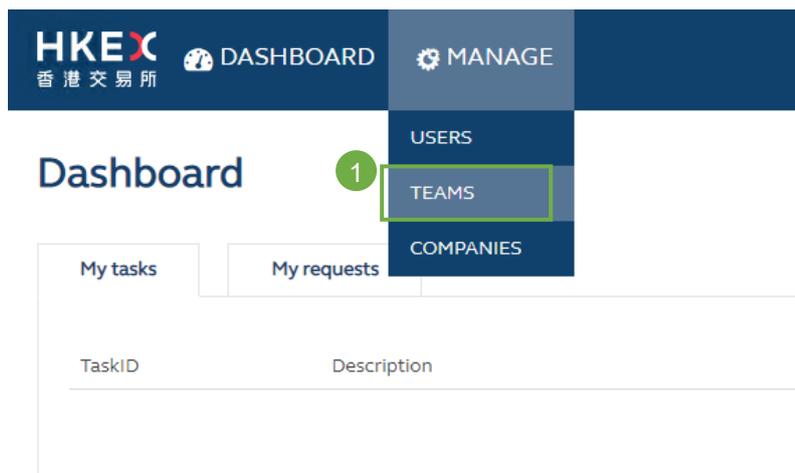
For details, please refer to the FINI User Guides, which can be found on FINI webpage (<https://www.hkex.com.hk/fini>).

MAKER

DA (maker) can manage teams via the **TEAMS** menu as described below.

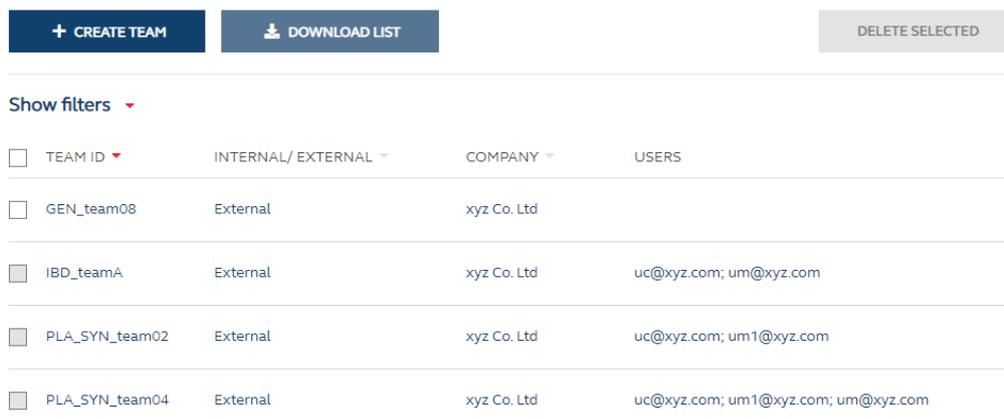
Manage Teams – View Team List

1. Log in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>) and click **MANAGE ACCESS RIGHTS**. Go to **MANAGE**, then click **1 TEAMS**.



2. The DA (maker) can view the list of Teams for the Company he/she manages.

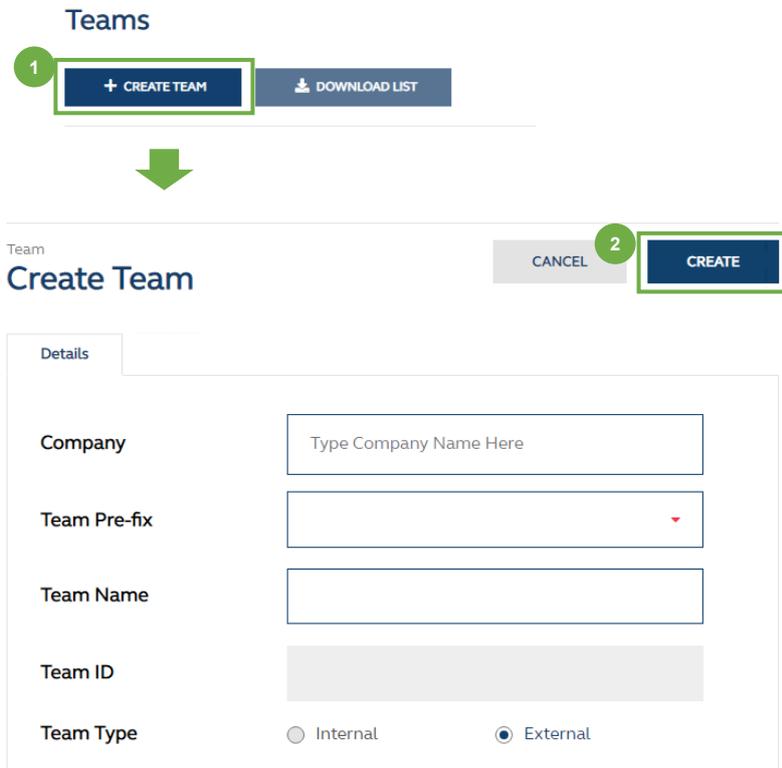
Teams



Manage Teams – Create Teams and assign team members

Operation Steps:

1. The DA (maker) clicks **1 + CREATE TEAM**, and fills in the details, then clicks **2 CREATE**.

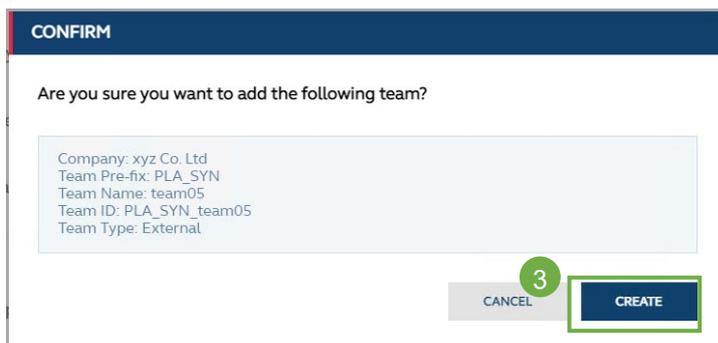


Company – DA (maker) may create team for the company(ies) he/she manages.
Team Pre-fix – select the pre-fix that represents the function of the team in FINI:

Team Pre-fix	Descriptions	Functions to be performed in FINI
IBD	Investment Banking Division	Designated sponsor or other sponsors / Underwriter
LEG	Legal	Legal advisor to the sponsor or the issuer
PLA_SYN	Syndicate	Overall coordinator / Distributor
GEN	Generic	Underwriter

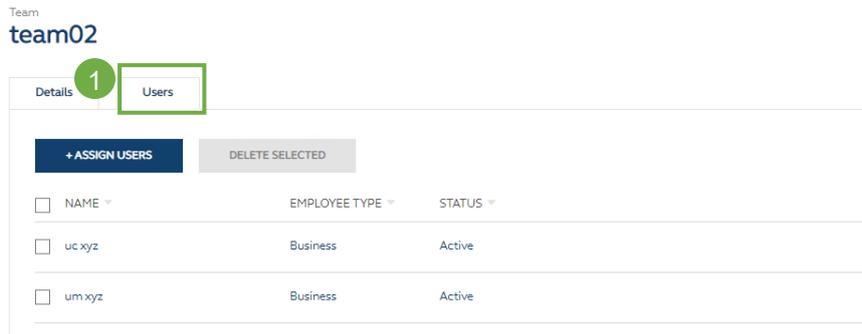
Team Name – discretionary team name assigned by DA (maker), max 20 characters.
Team ID – <Team Pre-fix> + <_> + <Team Name>, to be used by FINI for team selection for each IPO case. This is automatically generated by the system, and not editable by DA.
Team Type – It's defaulted to 'External', and not editable by DA.

2. In the confirmation dialogue, click **3 CREATE** to submit the request to DA (checker).



Manage Teams – Assign team members

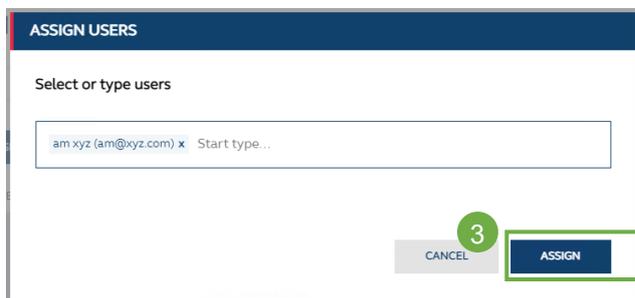
- From the list of Teams, DA (maker) clicks the Team to view team details, and then clicks the **1 Users** tab which shows the list of Team members.



- To assign new member(s), DA (maker) clicks **2 +ASSIGN USERS** and starts inputting the team members' user names or email address. The team members must be the existing FINI users within the same company of the team. Please refer to section 3 – User Maintenance for the detail steps of user creation.

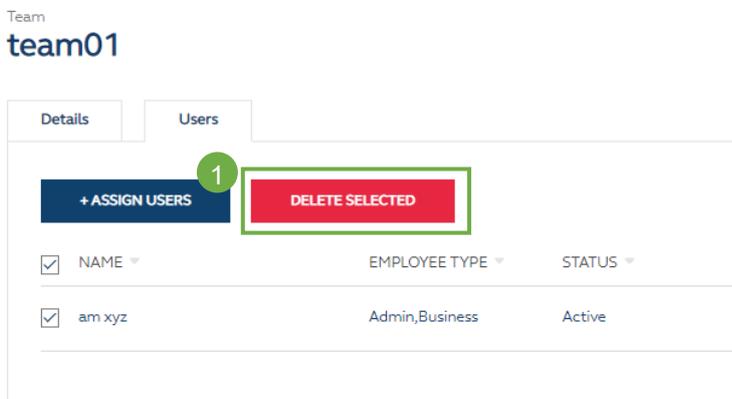


- Click **3 ASSIGN** when finished inputting and click **SUBMIT** in the confirmation dialogue to submit the request to DA (checker).

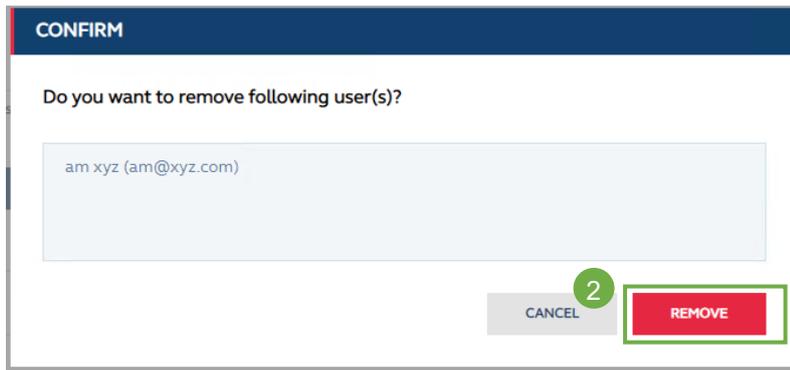


Manage Teams – Remove team members

- From the list of Teams, DA (maker) clicks the Team to view team details, and then clicks the **Users** tab which shows the list of Team members. Select the user(s) and click **1 DELETE SELECTED** to remove users.



- Click **2 REMOVE** on the confirmation dialogue to send the request to DA (checker).



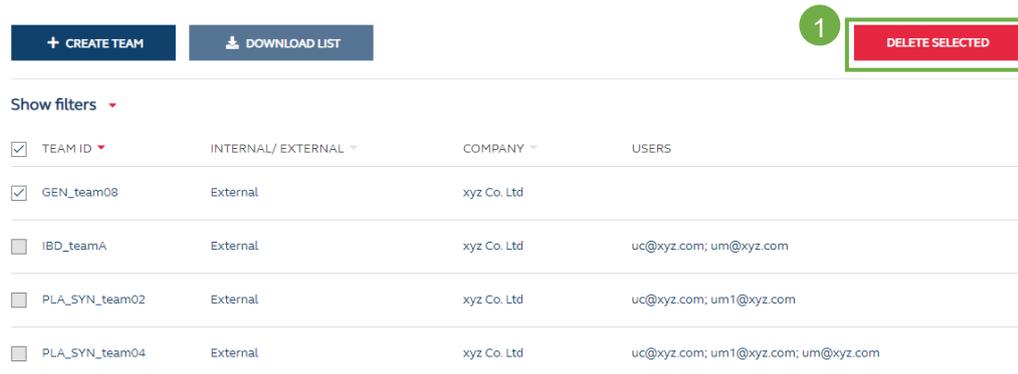
Manage Teams – Delete team

Reminder to Delegated Administrators:

A team can be deleted only if there is no member assigned to the team. DA must remove all the team members before deleting a team. DAs should ensure that the team is NOT assigned to any active IPO cases before deleting a team.

1. From the list of Teams, select the Team(s) that need to be deleted (a Team that has Team members assigned cannot be selected). Click **1 DELETE SELECTED**, and then click **DELETE** in the confirmation dialogue to submit the request to DA (checker).

Teams



2. Alternatively, DA (maker) may click the **2 '3-dot menu'** and click **3 Delete Team**, and then click **DELETE** in confirmation dialogue to submit the request to DA (checker).

Teams



Teams

+ CREATE TEAM

DOWNLOAD LIST

DELETE SELECTED

Show filters ▾

<input type="checkbox"/> TEAM ID ▾	INTERNAL/ EXTERNAL ▾	COMPANY ▾	USERS
<input type="checkbox"/> GEN_team08	External	xyz Co. Ltd	
<input type="checkbox"/> IBD_teamA	External	xyz Co. Ltd	uc@xyz.com; um@xyz.com
<input type="checkbox"/> PLA_SYN_team02	External	xyz Co. Ltd	uc@xyz.com; um1@xyz.com
<input type="checkbox"/> PLA_SYN_team04	External	xyz Co. Ltd	uc@xyz.com; um1@xyz.com; um@xyz.com

3

Delete Team

5. API PROFILE MAINTENANCE (for FINI only)

An **API Profile** is a 'non-human user' who will access FINI via API (Application Programming Interface). A valid API profile consists of two parts:

- i. Agent Profile – representing the Company
- ii. Machine Profile – representing an individual application that will use the HKEX API.

In order to use the API profile to access any HKEX API, DA will need to set up the Agent Profile and Machine Profile. The authentication process will require information from both of them.

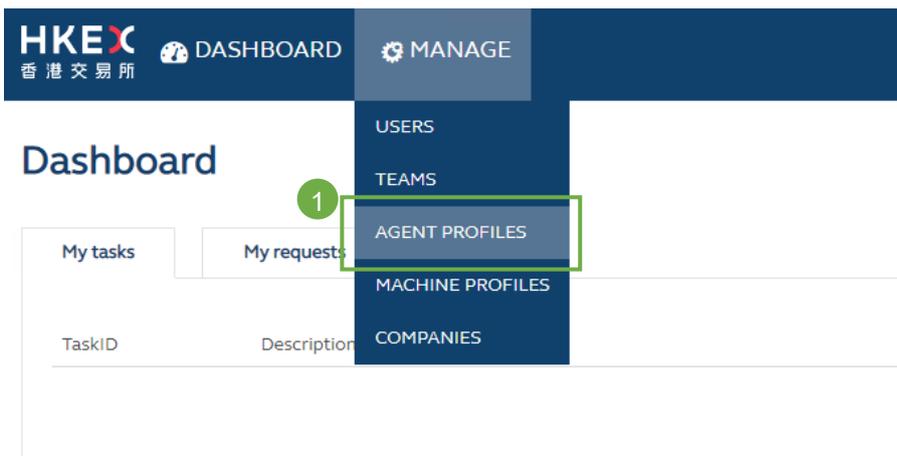
MAKER

DA (maker) can manage API Profiles via the **AGENT PROFILES** and **MACHINE PROFILES** menus as described below

Manage Agent profiles – View Agent Profile list

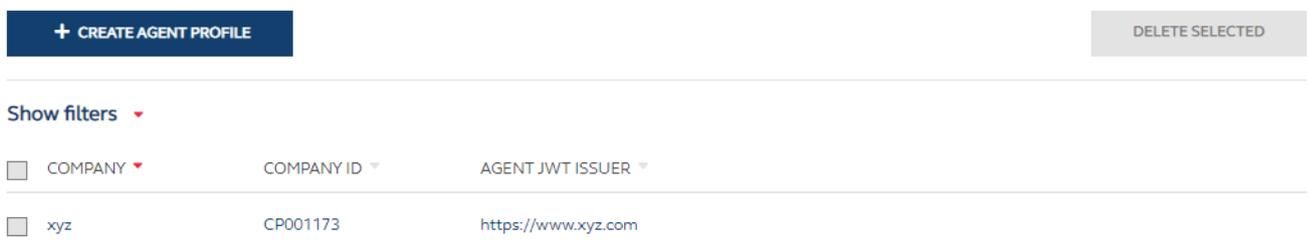
Operation Steps:

1. Login to HKEX access management platform (<https://connect.hkex.com.hk>) and click **MANAGE ACCESS RIGHTS**. Go to **MANAGE**, then click **1 AGENT PROFILES**.



2. The DA (maker) can view the list of Agent Profiles for the company he/she manages.

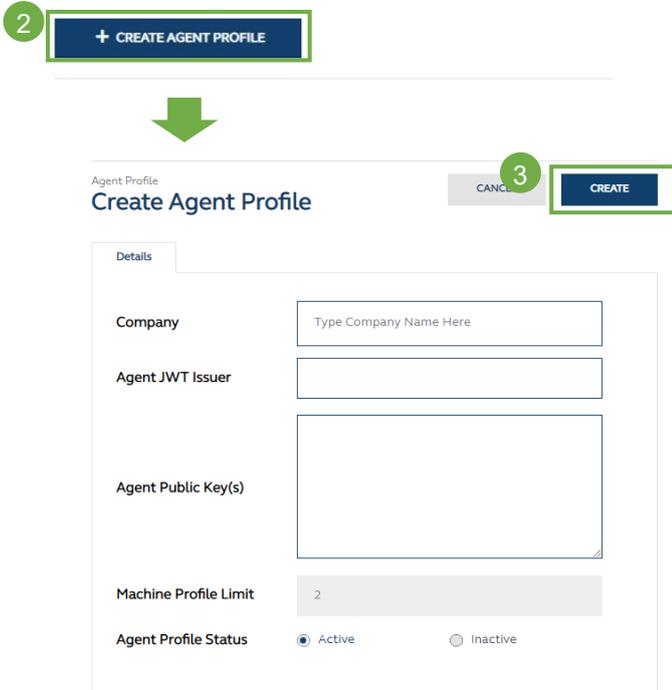
Agent Profiles



Manage Agent Profiles – Create Agent Profile

1. The DA (maker) clicks **2 + CREATE AGENT PROFILE** to create an Agent Profile by entering the details.
2. After filling in the information, DA (maker) can click **3 CREATE** and then click **SUBMIT** in the confirmation dialogue to submit the request to DA (checker).

Agent Profiles



Company – DA (maker) may type and select the Company he/she manages.

Agent JWT Issuer – The URL of the party that issues the JWT (JSON Web Token) for authentication.

Agent Public Key(s) – the public key for decrypting the JWT. It's in JWK (JSON web key) format and the following parameters are suggested for the JWK generation:

Parameter	Value
Key Type	RSA
Key Size	2048
Key Use	Signature
Algorithm	RS256
Key ID	SHA-256 hash value of JWK
Expiry Time	Key expiration time, in Epoch time format

An example of JWK public key is shown below:

```
{
  "keys":[
    {
      "kty": "RSA",
      "e": "AQAB",
      "use": "sig",
      "kid": "t_rgXJHoFzLCFm9ckD978ypwgVPST1uh4TUvgeWN9q4",
      "alg": "RS256",
      "n": "qBy5C119DWziXGkKOjpLchMXjx5-Y-OHAG83RERM81zi0...",
      "exp":1680264000
    }
  ]
}
```

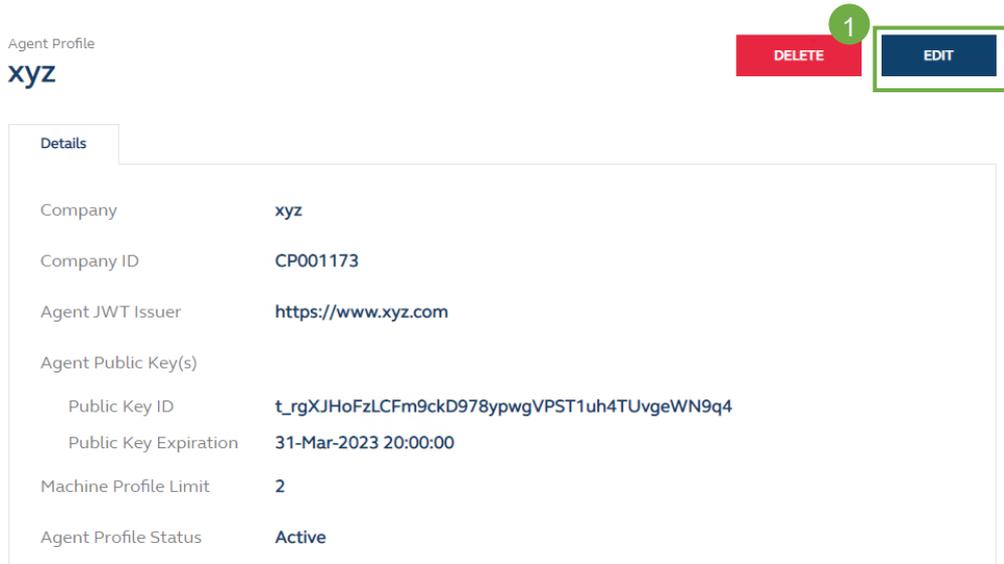
In order to allow key rotation, DA (maker) may input maximum two Agent Public Keys with different expiration dates.

Machine Profile Limit – The maximum number of Machine Profiles for the company. Not editable by DA.

Agent Profile Status – Defaulted to 'Active'. The API access for the Company is disabled if the status is Inactive. Not editable by DA.

Manage Agent Profiles – Edit Agent Profile

1. In the list of Agent Profiles, DA (maker) can click the Agent Profile to go to the Agent Profile detail page, and then click **1 EDIT** to start amending the details of the Agent Profile.

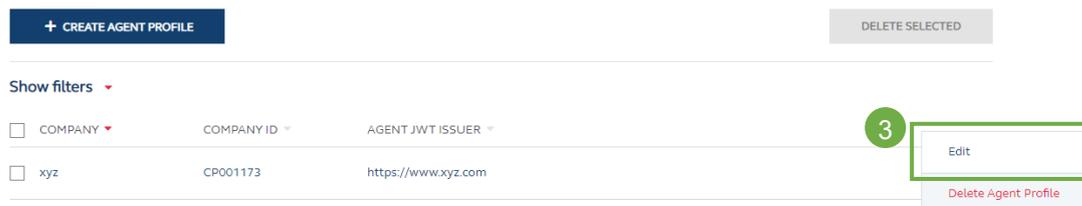


Alternatively, DA (maker) can click the **2 '3-dot menu'** and select **3 Edit** to go to the editing page.

Agent Profiles



Agent Profiles



- DA (maker) may update the Agent JWT Issuer and/or the Agent Public Key(s). Once the update is done, DA (maker) clicks **4 SUBMIT**.

Agent Profile
xyz

Details

Company: xyz

Company ID: CP001173

Agent JWT Issuer: https://www.xyz.com

Agent Public Key(s):

```
{
  "keys": [
    {
      "kty": "RSA",
      "e": "AQAB",
      "use": "sig",
      "kid": "t_rgaXJHoFzLCFm9ckD978ypwgVPST1uh4TLlvqeWN9n4"
    }
  ]
}
```

Machine Profile Limit: 2

Agent Profile Status: Active Inactive

CANCEL **4 SUBMIT**

- In the confirmation dialogue, click **5 SUBMIT** to send the request to DA (checker).

CONFIRM

Do you want to submit the following changes?

Agent JWT Issuer: https://www.xyz.com.hk

CANCEL **5 SUBMIT**

Manage Agent Profiles – Delete Agent Profile

- In the list of Agent Profiles, DA (maker) can select the Agent Profile and then click **1 DELETE SELECTED**.

Agent Profiles

+ CREATE AGENT PROFILE

Show filters ▾

COMPANY	COMPANY ID	AGENT JWT ISSUER
<input checked="" type="checkbox"/> xyz	CP001173	https://www.xyz.com

1 DELETE SELECTED

Alternatively, DA (maker) may click the **2 '3-dot menu'** and select **3 Delete Agent Profile** to perform the deletion.

Agent Profiles

+ CREATE AGENT PROFILE DELETE SELECTED

Show filters ▾

<input type="checkbox"/> COMPANY ▾	COMPANY ID ▾	AGENT JWT ISSUER ▾	
<input type="checkbox"/> xyz	CP001173	https://www.xyz.com	2 ⋮

Agent Profiles

+ CREATE AGENT PROFILE DELETE SELECTED

Show filters ▾

<input type="checkbox"/> COMPANY ▾	COMPANY ID ▾	AGENT JWT ISSUER ▾	
<input type="checkbox"/> xyz	CP001173	https://www.xyz.com	3 Edit Delete Agent Profile

- In the confirmation dialogue, click **4 DELETE** to send request to DA (checker).

CONFIRM

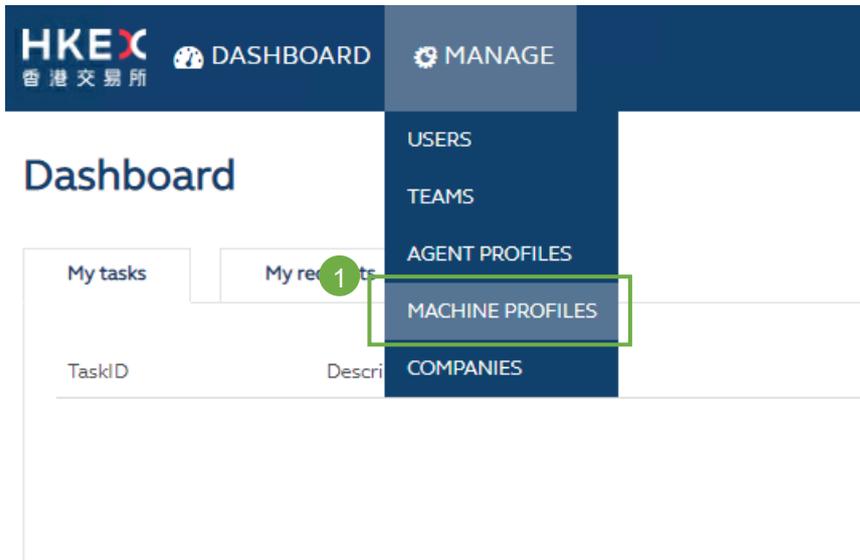
Are you sure you want to delete the following agent profile(s)?

xyz

4 CANCEL DELETE

Manage Machine Profiles – View Machine Profile list

1. Log in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>) and click **1** **MANAGE ACCESS RIGHTS**. Go to **MANAGE**, then click **MACHINE PROFILES**.



2. The DA can view the list of Machine Profiles for the Company he/she manages.

Machine Profiles

[+ CREATE MACHINE PROFILE](#)
[DOWNLOAD LIST](#)
[DELETE SELECTED](#)

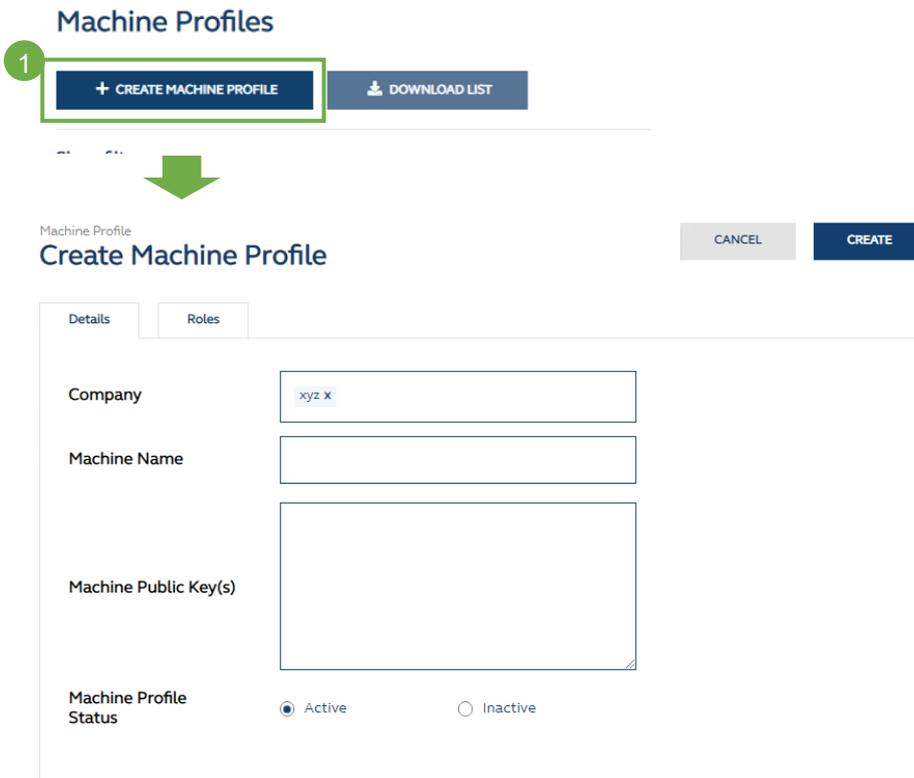
Show filters ▾

<input type="checkbox"/> COMPANY ▾	MACHINE NAME ▾	MACHINE PROFILE UUID
<input type="checkbox"/> xyz	server01	c8afd09e-a1fa-477a-9354-4d98ee35c56b

MACHINE PROFILE UUID is a system generated unqiue identifier.

Manage Machine Profiles – Create Machine Profile

1. In the Machine Profile list, the DA (maker) clicks **1 + CREATE MACHINE PROFILE** to create Machine Profile by entering the details.



Company – DA (maker) may type and select the company he/she manages.

Machine Name – The name of the machine profile. It should be unique within the same company.

Machine Public Key(s) – the public key for decrypting the JWT. It's in JWK (JSON web key) format and the following parameters are suggested for the JWK generation:

Parameter	Value
Key Type	RSA
Key Size	2048
Key Use	Signature
Algorithm	RS256
Key ID	SHA-256 hash value of JWK
Expiry Time	Key expiration time, in Epoch time format

An example of JWK public key is shown below:

```
{
  "keys": [
    {
      "kty": "RSA",
      "e": "AQAB",
      "use": "sig",
      "kid": "T77rW3AoDmcqM3eJaZeWcO26ypP7fUjTkfRFy9MjHI0",
      "alg": "RS256",
      "n": "oG07QyuGFUQa6fFXFSZFdLK7J0bo1427wH18_...",
      "exp": 1680264000
    }
  ]
}
```

Machine Profile Status – API Access for the machine profile is disabled if the status is Inactive.

After inputting the Company, the available API functions will be presented in the 'Roles' tab. DA (maker) can click the **2** **Role** tab to select the functions for the Machine profile. After filling in the Details and Roles, DA (maker) can click **3** **CREATE** to proceed.

Machine Profile

Create Machine Profile

CANCEL **3** CREATE

Details **2** Roles

xyz

- FINI Intermediary
- HKSCC Participant
- FINI Clearing Participant

Type for filter...

- EU_finiPOSubAPI
- EU_finiPORefDataAPI

2. DA (maker) can click **4** **CREATE** in the confirmation dialogue to send the request to DA (checker).

CONFIRM

Are you sure you want to create the following machine profile?

Company: xyz
 Machine Name: server02
 Machine Public Key(s) :
 Public Key ID: T77rW3AoDmcqM3eJaZeWcO26ypP7fUjTkfRFy9MjHi0
 Public Key Expiration: 31-Mar-2023 20:00:00

Machine Profile Status: Active
[xyz - FINI Clearing Participant Roles:](#)
 EU_finiPOSubAPI

CANCEL **4** CREATE

Manage Machine Profiles – Edit Machine Profile

1. In the list of Machine Profiles, DA (maker) can click the machine profile to go to the Machine Profile detail page, and then click **1 EDIT** to start amending the details of the Machine Profile.

Machine Profile **server01** DELETE **1 EDIT**

Details Roles

Machine Profile UUID: c8afd09e-a1fa-477a-9354-4d98ee35c56b

Company: xyz

Machine Name: server01

Machine Public Key(s)

Public Key ID: T77rW3AoDmcqM3eJaZeWcO26ypP7fUjTkFRFy9MjHiO

Public Key Expiration: 31-Mar-2023 20:00:00

Machine Profile Status: Active

Alternatively, DA (maker) can click the **2** 3-dot menu and select **3 Edit** to go to the editing page.

Machine Profiles

+ CREATE MACHINE PROFILE DOWNLOAD LIST DELETE SELECTED

Show filters

COMPANY	MACHINE NAME	MACHINE PROFILE UUID
xyz	Server01	919b0ec2-e9d1-47fa-8798-0ab18dc52971

2 [3-dot menu]

Machine Profiles

+ CREATE MACHINE PROFILE DOWNLOAD LIST DELETE SELECTED

Show filters

COMPANY	MACHINE NAME	MACHINE PROFILE UUID
xyz	Server01	919b0ec2-e9d1-47fa-8798-0ab18dc52971

3 [Edit, Delete Machine Profile]

- DA (maker) may update the Machine Public Key(s). Once the update is done, DA (maker) may click **4** **SUBMIT**.

Machine Profile
server01

CANCEL **4** **SUBMIT**

Details | Roles

Machine Profile UUID c8afd09e-a1fa-477a-9354-4d98ee35c56b

Company xyz

Machine Name server01

Machine Public Key(s)

```
{
  "keys": [
    {
      "kty": "RSA",
      "e": "AQAB",
      "use": "sig",
      "kid": "T77rW3AoDmcqM3eJaZeWcO26ypP7fUJT
      kFRFv9MiHi0"
```

Machine Profile Status Active Inactive

- DA (maker) may also update the functions of the Machine Profiles. DA (maker) may navigate to the **5** **Roles** tabs, and click **6** **EDIT** to start updating the API access of the Machine Profiles.

Machine Profile
Server01

6 **EDIT**

Details | **5** **Roles**

COMPANY ▾	IDENTITY ▾	FUNCTION ▾	COMPANY IDENTITY CODE ▾
xyz	FINI Clearing Participant	EU_finiiPORefDataAPI	X12345
xyz	FINI Clearing Participant	EU_finiiPOSubAPI	X12345

- Once updates is done, DA (maker) may click **7** **SUBMIT**.

Edit Roles
Server01

CANCEL **7** **SUBMIT**

xyz

- FINI Intermediary
- HKSCC Participant
- FINI Clearing Participant

Type for filter...

EU_finiiPORefDataAPI

EU_finiiPOSubAPI

Manage Machine Profiles – Delete Machine Profile

1. In the list of Machine Profiles, DA (maker) can select the Machine Profile and then click **1 DELETE SELECTED**.

Machine Profiles

The screenshot shows the 'Machine Profiles' interface. At the top, there are two buttons: '+ CREATE MACHINE PROFILE' and 'DOWNLOAD LIST'. On the right side, there is a red button labeled 'DELETE SELECTED' which is highlighted with a green border and a circled '1'. Below the buttons, there is a 'Show filters' dropdown. The main table has three columns: 'COMPANY', 'MACHINE NAME', and 'MACHINE PROFILE UUID'. One row is visible with the values 'xyz', 'server01', and 'c8afd09e-a1fa-477a-9354-4d98ee35c56b'.

2. Alternatively, DA (maker) may click the **2 '3-dot menu'** and select **3 Delete Machine Profile**.

The screenshot shows the 'Machine Profiles' interface with a search filter applied. At the top, there are buttons for '+ CREATE MACHINE PROFILE', 'DOWNLOAD LIST', and 'DELETE SELECTED'. Below, there is a 'Hide filters' section with a search box containing 'xyz'. The table below has columns for 'COMPANY', 'MACHINE NAME', and 'MACHINE PROFILE UUID'. One row is visible with values 'xyz', 'Server01', and '919b0ec2-e9d1-47fa-8798-0ab18dc52971'. A green box highlights the three-dot menu icon on the right side of the row, with a circled '2' next to it.

Machine Profiles

The screenshot shows the 'Machine Profiles' interface with the search filter 'xyz'. The table row for 'xyz', 'server01', and 'c8afd09e-a1fa-477a-9354-4d98ee35c56b' is highlighted. A dropdown menu is open on the right side of this row, showing options 'Edit' and 'Delete Machine Profile'. The 'Delete Machine Profile' option is highlighted with a green box and a circled '3'.

3. In the confirmation dialogue, click **4 DELETE** to send request to DA (checker).

The screenshot shows a 'CONFIRM' dialog box. The title bar is dark blue with the word 'CONFIRM' in white. The main content area has a question: 'Are you sure you want to delete the following machine profile(s)?'. Below the question is a text box containing 'server01 (xyz)'. At the bottom right, there are two buttons: 'CANCEL' and 'DELETE'. The 'DELETE' button is highlighted with a green box and a circled '4'.

6. MAKER / CHECKER PROCESS

For the functions relating to User Management (including unlocking user accounts), Team Management and API Profile Management, a Maker-Checker mechanism is applied. DA (maker) sends a request to DA (checker), and DA (checker) can approve or reject the request.

A DA can be assigned with both maker and checker roles, however, he/she will not be able to act as both maker and checker for the same request.

MAKER

Maker's request submission

DA (maker) will receive acknowledgement emails after submitting requests to DA (checker). Examples of acknowledgement emails are shown below:

Creation of a new user is submitted

Reference Number 453187
 Status Pending approval
 Notification Type For reference
 Requested by am xyz
 Message Nil

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Updates to an agent profile are submitted

Reference Number 451651
 Status Pending approval
 Notification Type For reference
 Requested by am xyz
 Message Nil

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CHECKER

Checker to approve request

1. DA (checker) will receive an email notification upon a maker's request. The **1 Notification Type** will show **For action** if checker's action required.

Creation of a new user is pending for approval

Reference Number 453187
 Status Pending approval
1 Notification Type **For action**
 Requested by am xyz
 Message Nil

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2. When a DA (checker) logs in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>) and clicks **MANAGE ACCESS RIGHTS**, the request will appear on **2 'My tasks'** tab of the dashboard.

Dashboard

2 My tasks My requests

TaskID	Description	Date	Status
453187	CREATE USER	23-May-2022	Pending

< 1 / 1 >

3. DA (checker) may hover over the entry and click **3 APPROVE** on the dashboard.

Dashboard

My tasks My requests

TaskID	Description	Date	Status
453187	CREATE USER		<div style="display: flex; justify-content: space-around; align-items: center;"> REJECT 3 APPROVE </div>

< 1 / 1 >

Alternatively, DA (checker) may click the record to view the request details, and click **4 APPROVE** to proceed.

Task

CREATE USER

REJECT

4

APPROVE

Task Status	Pending approval
First Name	um1
Last Name	xyz
Company	xyz
Title (optional)	Mr
Email	um1@xyz.com
Team Email (optional)	
Contact Number	12345678
Employee Type	Business
Internal/External	External
User Status	Active
Roles	<u>xyz - FINI Clearing Participant Roles:</u> EU_finiCPOps(Maker) EU_finiCPEng(Maker)
Request Date	23-May-2022

- DA (checker) may click **5 APPROVE** on the confirmation dialogue to complete the request. Entering comments in the comment box is optional.

CONFIRM

Are you sure you want to approve 453187 request?

Type your comments here

CANCEL

APPROVE

- An email notification will be sent to the DA (maker) for reference.

Creation of a new user has been approved

Reference Number 453187
 Status Approved
 Notification Type For reference
 Requested by ac xyz
 Message Nil

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Checker to reject request

Reminder to DAs:

A rejected request cannot be resubmitted, and the DA (Maker) needs to create a new request.

- DA (checker) will receive an email notification on maker's request. The ① **Notification Type** will show **For action** if checker's action required.

Updates to an agent profile are pending for approval

Reference Number 451651
 Status pending approval
 ① Notification Type **For action**
 Requested by am xyz
 Message Nil

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- When a DA (checker) logs in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>) and clicks **MANAGE ACCESS RIGHTS**, the request will appear on **2** 'My tasks' tab of the dashboard.

Dashboard

2

TaskID	Description	Date	Status
451651	EDIT AGENT PROFILE	23-May-2022	Pending

< 1 / 1 >

- DA (checker) may hover over the entry, and click **3** **REJECT** on the dashboard.

Dashboard

TaskID	Description	Date	Status
451651	EDIT AGENT PROFILE		

< 1 / 1 >

Alternatively, DA (checker) may click the record to view the request details, and click **4** **REJECT** to proceed.

Task

EDIT AGENT PROFILE

4

Task Status	Pending approval
Company	xyz
Agent JWT Issuer	https://www.xyz.com
Agent Public Key(s)	
Public Key ID	t_rgXJHoFzLCFm9ckD978ypwgVPST1uh4TUvgeWN9q4
Public Key Expiration	31-Mar-2023 20:00:00
Machine Profile Limit	2
Agent Profile Status	Active
Request Date	23-May-2022
<hr/>	
Changes	
Agent JWT Issuer	https://www.xyz.com.hk

- DA (checker) will **5** input comment (which is mandatory for a rejection action), and click **6 REJECT** on the confirmation dialogue to complete the request.

CONFIRM

Provide comment to reject the request:

5

Invalid request.

6

CANCEL REJECT

- An email notification will be sent to the maker for reference.

Updates to an agent profile have been rejected

Reference Number	451651
Status	Rejected
Notification Type	For reference
Requested by	ac xyz
Message	Invalid request.

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7. APPENDIX 1 – USER ROLE LIST

1. User roles for Client Connect eServices

Function ID	Descriptions	Maker	Checker
Functions for DA			
EA_UserAdmin	For user profile maintenance (e.g. add / delete / update / unlock users)	✓	✓
EA_SecuritiesClearing	Role assignment of HKSCC Participant Functions	✓	✓
EA_DerivativesClearing	Role assignment of Derivatives Clearing Functions	✓	✓
EA_DerivativesTrading	Role assignment of Derivatives Trading Functions	✓	✓
EA_HKSCCDB	Role assignment of Designated Bank Functions	✓	✓
EA_HKSCCCAP	Role assignment of Clearing Agency Participants	✓	✓
EA_MSPSA	Role assignment of Master SPSA Holders	✓	✓
EA_DNS	Role assignment of DNS Functions	✓	✓
EA_ETF	Role assignment of ETF Stakeholder Functions	✓	✓
EA_Registrar	Role assignment of Registrar Functions	✓	✓
EA_SecuritiesTrading	Role assignment of Securities Trading Functions	✓	✓
EA_Participantship	Role assignment of Participantship Functions	✓	✓
EA_MDConnectivity	Role assignment of Market Data Functions	✓	✓
EA_HKCCDepository	Role assignment of HKCC Approved Depository Functions	✓	✓
EA_SystemVendor	Role assignment of System Vendor Functions	✓	✓
EA_SettlementAgent	Role assignment of Settlement Agent Functions (for non-CP Settlement Agent)	✓	✓
EU_UserMaintenance	Services related to user maintenance	✓	✓

Function ID	Descriptions	Maker	Checker	Enquiry
Functions for Business User				
EU_CompanyAdministration	Services related to company administration	✓	✓	✓
EU_AccountMaintenance	Services related to account maintenance	✓	✓	✓
EU_DerivativesClearing	Derivatives Clearing services for Participants	✓	✓	✓
EU_DerivativesTrading	Derivatives Trading services for Participants	✓	✗	✓
EU_SecuritiesSettlement	Securities Settlement services for Participants	✓	✓	✓
EU_TechnicalSetup	Services related to technical setup	✓	✓	✓
EU_CommonNomineeService	Common Nominee Services for Participants	✓	✓	✓
EU_Depository	Depository services for Participants	✓	✓	✓
EU_MSPSA	Services for Master SPSA Holders	✓	✓	✓
EU_Registrar	Services for Share Registrars	✓	✓	✓
EU_ETF	Services for ETF Stakeholders	✓	✓	✓
EU_SecuritiesTrading	Services for SEHK Participants on Operations	✓	✗	✓
EU_Participantship	Services for SEHK Participants on Participantship Management	✓	✗	✓
EU_MDConnectivity	Services for HKEX-IS clients	✓	✗	✓
EU_SystemVendor	Services for System vendors	✓	✓	✓
EU_SystemVendor (Securities Trading)	Services for System vendors (Securities Trading)	✓	✗	✓
EU_SystemVendor (Derivatives Trading)	Services for System vendors (Derivatives Trading)	✓	✗	✓
EU_HKCCDepository	Services for HKCC Approved Depository	✓	✓	✓
EU_Dashboard	For accessing Resource Area only	✗	✗	✓

2. User roles for Electronic Communication Platform 2.0 ('ECP2.0')

Function ID	Descriptions	Maker	Checker
Functions for ECP DA			
EA_ECPM	Role assignment of ECP SEHK Participant Functions	✓	✓
EA_ECPF	Role assignment of ECP HKFE Participant Functions	✓	✓
EA_ECPS	Role assignment of ECP Options Exchange Participant of SEHK Functions	✓	✓
EA_ECPD	Role assignment of ECP Designated Specialist Functions	✓	✓
EA_ECPE	Role assignment of ECP ETP Issuer Functions	✓	✓
EA_ECPB	Role assignment of ECP Beneficial Identity in Large Open Position Reporting Functions	✓	✓
EA_ECPT	Role assignment of ECP Transaction Originator in Large Open Position Reporting Functions	✓	✓
EA_ECPG	Role assignment of ECP HKSCC General Clearing Participant Functions	✓	✓
EA_ECPC	Role assignment of ECP HKSCC Custodian Participant Functions	✓	✓
EA_ECPCE	Role assignment of ECP Relevant Regulated Intermediaries Functions	✓	✓
EA_ECPCSC	Role assignment of China Connect EP (CCEP) or Tradethrough EP (TTEP)	✓	✓

Function ID	Descriptions	Maker
Functions for Business User		
EU_ECPSD	For stamp duty relevant officers to submit SD-1, SD-4, SD-6 and SD-6A to the respective folders	✓
EU_ECPTO	For Trading Operations to 1) download Files/Notice and 2) submit Reports and Questionnaire	✓
EU_ECPMM	For Securities Market Maker to receive Market Making Obligation (MMO) reports	✓
EU_ECPDO	For operations in Derivatives Market (HKFE products)	✓
EU_ECPSO	For operations in Derivatives Market (stock options)	✓
EU_ECPDS	For Designated Specialist to receive MMO reports	✓
EU_ECPPF	For ETP Issuer to receive MMO reports	✓
EU_ECPLB	For users to submit LOP reporting for Beneficial Identity	✓
EU_ECPSB	For users to submit LOP reporting for Beneficial Identity for Stock Options	✓
EU_ECPLT	For users to submit LOP reporting for Transaction Originator	✓
EU_ECPST	For users to submit LOP reporting for Transaction Originator for Stock Options	✓
EU_ECPSI	For users to receive Morning SI Message for Northbound Trading	✓
EU_ECPSAG	For users to submit Self-Attestation of Compliance Questionnaire (General Clearing Participants)	✓
EU_ECPSAC	For users to submit Self-Attestation of Compliance Questionnaire (Custodian Participants)	✓
EU_ECPSFTP	For users to use ECP SFTP Service	✓
EU_ECPHKIDR	For operation in Hong Kong Investor ID Regime (HKIDR)	✓
EU_ECPNBCAN	For operations in Northbound Investor ID Model	✓

3. User roles for Fast Interface for New Issuance ('FINI')

Function ID	Descriptions	Maker	Checker	Enquiry
Functions for DA				

Function ID	Descriptions	Maker	Checker	Enquiry
EA_UserAdmin	For user profile maintenance (e.g. add / delete / update users and teams, unlock users)	✓	✓	✓
EA_APIAdmin	For API profile management (e.g. add / delete / update API profiles)	✓	✓	✓
EA_finiBank	Assignment of FINI functions relating to FINI Bank	✓	✓	✓
EA_finiCP	Assignment of FINI functions relating to HKSCC participants	✓	✓	✓
EA_finiIntermediary	Assignment of FINI functions relating to IPO intermediary	✓	✓	✓
EA_finiLegal	Assignment of FINI functions relating to Legal Counsel	✓	✓	✓
EA_finiShareReg	Assignment of FINI functions relating to Share Registrar	✓	✓	✓
EA_finiSponsor	Assignment of FINI functions relating to Sponsor	✓	✓	✓
EA_finiIPORefDataAPI	Assignment of FINI API access relating to IPO reference data	✓	✓	✓
EA_finiPOFundAPI	Assignment of FINI API access relating to Public Offer pre-funding	✓	✓	✓
EA_finiPOSubAPI	Assignment of FINI API access relating to Public Offer subscriptions	✓	✓	✓

Function ID	Descriptions	Maker	Checker	Enquiry
Functions for FINI Business User				
EU_finiBank	For the FINI operations performed by HKSCC designated bank	✓	✓	✓
EU_finiCPEnq	For the limited FINI functions relating to HKSCC Participants, including IPO Reference Data only.	✓	✓	✓
EU_finiCPOps	For all the FINI functions relating to the HKSCC Participants, including IPO Reference Data and EIPO Subscription.	✓	✓	✓
EU_finiIntermediary	For the FINI operations performed by IPO Intermediary	✓	✓	✓
EU_finiLegal	For the FINI operations performed by sponsor counsels or issuer counsels.	✓	✓	✓
EU_finiShareRegEnq	For limited FINI functions relating to the Share Registrars, including IPO Reference Data only.	✓	✓	✓
EU_finiShareRegOps	For all the FINI functions relating to the Share Registrars, including IPO Reference Data and EIPO Subscription.	✓	✓	✓
EU_finiSponsor	For the FINI operations performed by designated sponsor or other sponsor	✓	✓	✓

Function ID	Descriptions
Functions for FINI API Profiles	
EU_finiIPORefDataAPI	For the access to the APIs relating IPO reference data
EU_finiPOFundAPI	For the access to the APIs relating Public Offer Pre-funding confirmation.
EU_finiPOSubAPI	For the access to the APIs relating Public Offer subscription.

4. User roles for Synapse

Function ID	Descriptions	Maker	Checker	Enquiry
Functions for Synapse DA				
EA_UserAdmin	For user profile maintenance (e.g. add / delete / update / unlock users)	✓	✓	✓
EA_SynapseUserAdmin	Role assignment of Synapse Functions	✓	✓	✓

For each Function ID (other than EU_SYNUser), DAs should only assign the user with either maker or checker role, but not both. For users which require read-only access to Synapse only, the DA should assign them with Function ID EU_SYNUser with enquiry role only.

Function ID	Descriptions	Maker	Checker	Enquiry
Functions for Synapse Business User				
EU_DataManager	For the access to the data manager related functions	✓	✓	
EU_TransactionBalances	For the access to the transaction balance related functions	✓	✓	
EU_SYNUser	Read-only access			✓

8. APPENDIX 2 – LIST OF FUNCTION ID MAPPING BY USER TYPES

- Please refer to **Table 1** for all the functions DAs can perform.
- Please refer to **Table 2** for all other EA functions that will be assigned to DAs based on the eligible Participantship they are entitled to manage, as well as the EU functions that DAs can assign to their Business users.
- Please refer to **Table 3** for all other EA functions that will be assigned to **ECP** DAs based on the eligible user types they are entitled to manage, as well as the EU functions that ECP DAs can assign to their Business users.
- Please refer to **Table 4** for all other EA functions that will be assigned to **FINI** DAs based on the eligible user types they are entitled to manage, as well as the EU functions that FINI DAs can assign to their Business users.
- Please refer to **Table 5** for all other EA functions that will be assigned to **Synapse** DAs based on the eligible user types they are entitled to manage, as well as the EU functions that Synapse DAs can assign to their Business users. For each EU Function (other than EU_SYNUser), DA should only assign the user with either maker or checker role, but not both. For users which require read-only access to Synapse only, the DA should assign them with EU Function EU_SYNUser with enquiry role only.

Table 1

DA Functions	Remarks
Function ID: EA_UserAdmin	
1. Access Rights Management Dashboard	Eligible to all DAs.
2. Manage Users	
- View Users list	Eligible to all DAs. Maker-checker mechanism is provided.
- Create Users	
- Delete Users	
- Edit Users	
- Grant Access Groups to Users	
- Unlock User Accounts	
3. Manage Teams	Eligible to all DAs.
- View Team list	Eligible to all DAs. Maker-checker mechanism is provided.
- Create Teams	
- Delete Teams	
- Edit Teams (assign / remove team members)	
4. Access Company Profile	Eligible to all DAs.
- View Company Details	
- View Company Identity	
- View Company Users	
- View Company Admins	
Function ID: EA_APIAdmin	
5. Manage API Profiles	Eligible to the DAs who need to manage API profiles
- View Agent Profile list	Eligible to the DAs who need to manage API profiles. Maker-checker mechanism is provided.
- Create Agent Profiles	
- Delete Agent Profiles	
- Edit Agent Profile	
- View Machine Profile list	Eligible to the DAs who need to manage API profiles

DA Functions	Remarks
- Create Machine Profiles	Eligible to the DAs who need to manage API profiles. Maker-checker mechanism is provided.
- Delete Machine Profiles	
- Edit Machine Profile	
Function ID: Other EA functions (Please refer to Table 2)	
6. Manage Business user rights	Other EA functions are assigned based on Participantships that the DAs are entitled to manage. Eligible to all DAs. Maker-checker mechanism is provided.
- Assign rights to Business users for all eServices and physical forms usage	
Function ID: EU_UserMaintenance	
7. Access DA maintenance form	Eligible to all DAs.
8. Access user maintenance related eServices / forms	
- Smartcard Maintenance for User and DA (SCard 1)	Only eligible to HKSCC Participant, HKSCC Designated Bank, HKSCC Clearing Agency Participant, HKCC & SEOCH Participant. Maker-checker mechanism is provided.
- Order Smartcard Reader(s) (SCard 3)	
- Smartcard Maintenance for user (PG or Special Request) (SCard 2)	
- DCASS User Account Maintenance Request to HKCC/SEOCH (AC 2)	Only eligible to HKCC & SEOCH Participant.
- VaR Online Delegated Administrator Rights Application / Maintenance Form (DA1)	Only eligible to HKSCC Participant.
Function ID: EU_Dashboard	
9. Access the homepage of Access Management Portal	Eligible to all DAs

Table 2

Participantship/Identity	DA Function ID	Managing Business Function ID
HKSCC Participant	EA_SecuritiesClearing	EU_CompanyAdministration
		EU_AccountMaintenance
		EU_SecuritiesSettlement
		EU_TechnicalSetup
		EU_Participantship
		EU_Dashboard
	EA_DNS	EU_CommonNomineeService
		EU_Depository
EU_Dashboard		
HKSCC Designated Bank	EA_HKSCCDB	EU_CompanyAdministration
		EU_TechnicalSetup
		EU_Dashboard
HKCC Participant	EA_DerivativesClearing	EU_DerivativesClearing
		EU_CompanyAdministration
		EU_AccountMaintenance
		EU_TechnicalSetup
		EU_Participantship
SEOCH Participant	EA_DerivativesClearing	EU_DerivativesClearing
		EU_CompanyAdministration
		EU_AccountMaintenance
		EU_TechnicalSetup

Participanship/Identity	DA Function ID	Managing Business Function ID
		EU_Participanship
		EU_Dashboard
SEHK Participant	EA_SecuritiesTrading	EU_SecuritiesTrading
		EU_Dashboard
	EA_Participanship	EU_Participanship
		EU_Dashboard
HKFE Participant	EA_DerivativesTrading	EU DerivativesTrading
Options Trading Exchange Participant		EU_Dashboard
Master SPSA Holder	EA_MSPSA	EU_MSPSA
		EU_Dashboard
HKEX-IS Clients	EA_MDCConnectivity	EU_MDCConnectivity
		EU_Dashboard
Share Registrar	EA_Registrar	EU_Registrar
		EU_Dashboard
System Vendor	EA_SystemVendor	EU_SystemVendor
		EU_Dashboard

Table 3

User Type	Identity	ECP DA Function ID	Managing Business Function ID
SEHK Participant	ECP SEHK Participant	EA_ECPCM	EU_ECPSD
			EU_ECPTO
			EU_ECMMM
			EU_ECPSFTP
	ECP Relevant Regulated Intermediaries	EA_ECPCCE	EU_ECCHKIDR
			EU_ECPSFTP
HKFE Participant	ECP HKFE Participant	EA_ECPCF	EU_ECPCDO
			EU_ECPSFTP
Options Exchange Participant of SEHK	ECP Options Exchange Participant of SEHK	EA_ECPCS	EU_ECPCSO
			EU_ECPSFTP
Exchange Traded Products related user (ETP Issuer, Designated Specialist or Securities Market Maker)	ECP Designated Specialist	EA_ECPCD	EU_ECPCDS
			EU_ECPSFTP
	ECP ETP Issuer	EA_ECPCPE	EU_ECPCPF
			EU_ECPSFTP
Large Open Position Reporting User	ECP Beneficial Identity in Large Open Position Reporting	EA_ECPCB	EU_ECPCLB
			EU_ECPCSB
			EU_ECPSFTP
	ECP Transaction Originator in Large Open Position Reporting	EA_ECPCPT	EU_ECPCLT
			EU_ECPCST
			EU_ECPSFTP
HKSCC General Clearing Participant	ECP HKSCC General Clearing Participant	EA_ECPCG	EU_ECPCSI
			EU_ECPCSAG

User Type	Identity	ECP DA Function ID	Managing Business Function ID
			EU_ECPSFTP
HKSCC Custodian Participant	ECP HKSCC Custodian Participant	EA_ECPC	EU_ECPSAC
			EU_ECPSFTP
Relevant Licensed or Registered Person	ECP Relevant Regulated Intermediaries	EA_ECPCE	EU_ECPHKIDR
			EU_ECPSFTP
China Connect EP (CCEP) or Tradethrough EP (TTEP)	ECP China Connect EP (CCEP) or Tradethrough EP (TTEP)	EA_ECPCSC	EU_ECPNBCAN
			EU_ECPSFTP

Table 4

User Type / Identity	DA Function ID	Managing Business Function ID
FINI Bank	EA_finiBank	EU_finiBank
	EA_finiIPORefDataAPI	EU_finiIPORefDataAPI
	EA_finiPOFundAPI	EU_finiPOFundAPI
FINI Sponsor	EA_finiSponsor	EU_finiSponsor
	EA_finiIPORefDataAPI	EU_finiIPORefDataAPI
FINI HKSCC Participant	EA_finiCP	EU_finiCPOps
		EU_finiCPEng
	EA_finiIPORefDataAPI	EU_finiIPORefDataAPI
FINI Intermediary	EA_finiPOSubAPI	EU_finiPOSubAPI
	EA_finiIntermediary	EU_finiIntermediary
FINI Share Registrar	EA_finiIPORefDataAPI	EU_finiIPORefDataAPI
	EA_finiShareReg	EU_finiShareRegOps
		EU_finiShareRegEng
FINI Legal Counsel	EA_finiLegal	EU_finiLegal
	EA_finiIPORefDataAPI	EU_finiIPORefDataAPI

Table 5

User Type / Identity	DA Function ID	Managing Business Function ID
Synapse Asset Manager	EA_SynapseUserAdmin	EU_DataManager
		EU_TransactionBalances
		EU_SYNUser
Synapse Global Custodian	EA_SynapseUserAdmin	EU_DataManager
		EU_TransactionBalances
		EU_SYNUser
Synapse Local Custodian	EA_SynapseUserAdmin	EU_DataManager
		EU_TransactionBalances
		EU_SYNUser
Synapse Exchange Participant	EA_SynapseUserAdmin	EU_DataManager
		EU_TransactionBalances
		EU_SYNUser
Synapse Clearing Participant	EA_SynapseUserAdmin	EU_DataManager
		EU_TransactionBalances
		EU_SYNUser

User Type / Identity	DA Function ID	Managing Business Function ID
Synapse Asset Manager's Middle Office Outsourcing Operator	EA_SynapseUserAdmin	EU_DataManager
		EU_TransactionBalances
		EU_SYNUser
Synapse Exchange Participant's Middle Office Outsourcing Operator	EA_SynapseUserAdmin	EU_DataManager
		EU_TransactionBalances
		EU_SYNUser
Synapse Clearing Participant's Account Operator	EA_SynapseUserAdmin	EU_DataManager
		EU_TransactionBalances
		EU_SYNUser

9. APPENDIX 3 – PASSWORD AND AUTHENTICATION SETTING

Users (the Delegated Admin users and Business users of HKEX Platforms) must comply with the following password policies when setting their password.

- The password must contain 8-15 characters;
- The password must contain at least 1 upper case letter, 1 lower case letter, 1 number and 1 special character from !, @, #, \$, %, ^, &, *, (,).

Users are also required to change their password at least once every 90 days.

Set up / reset your password

The following procedures apply to (a) setting up a password upon first-time login, and (b) changing password without logging in (e.g. forgot password).

1. On the HKEX Access Management Portal login page, click **1** **Forgot/Reset your password?**

User Login

User ID/Email

Password

LOG IN

1 [Forgot/Reset your password? >](#)

2. Check the box **2** "I'm not a robot".

HKEX
香港交易所

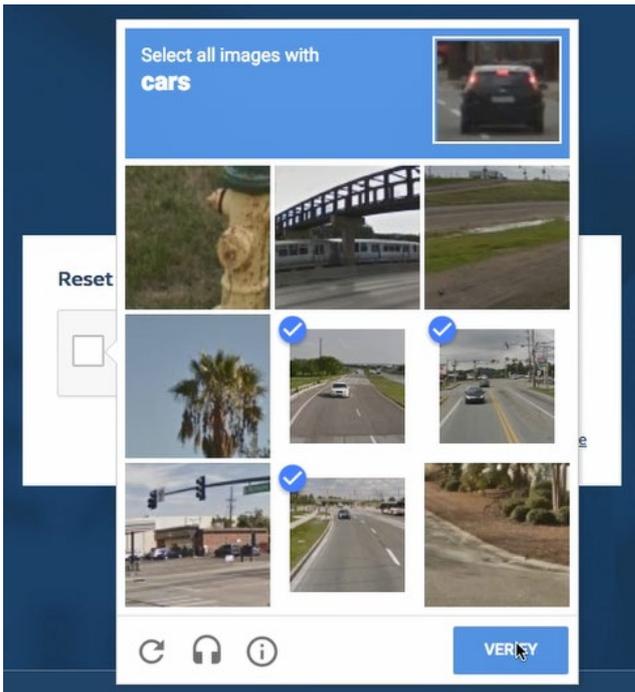
Reset Password

2 I'm not a robot

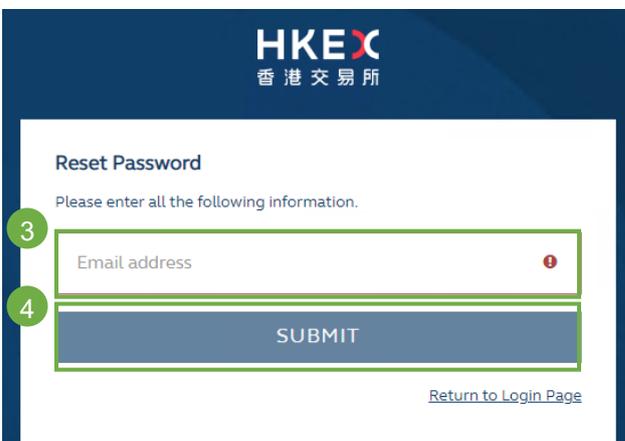
reCAPTCHA
Privacy - Terms

[Return to Login Page](#)

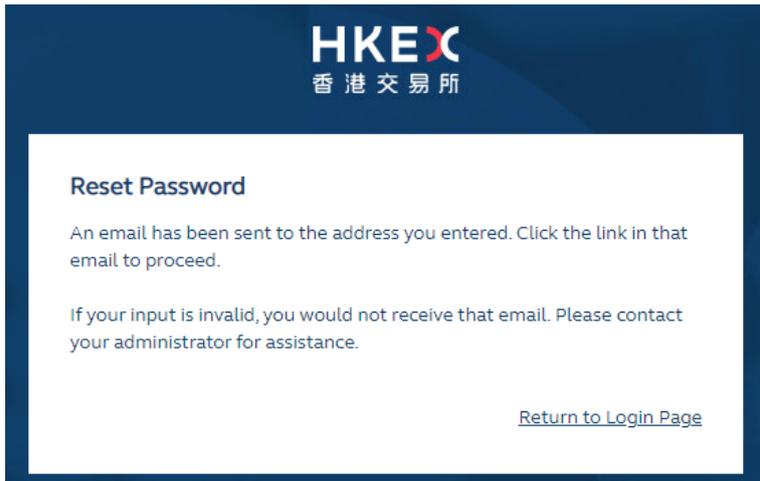
3. Follow the instruction to complete the Captcha.



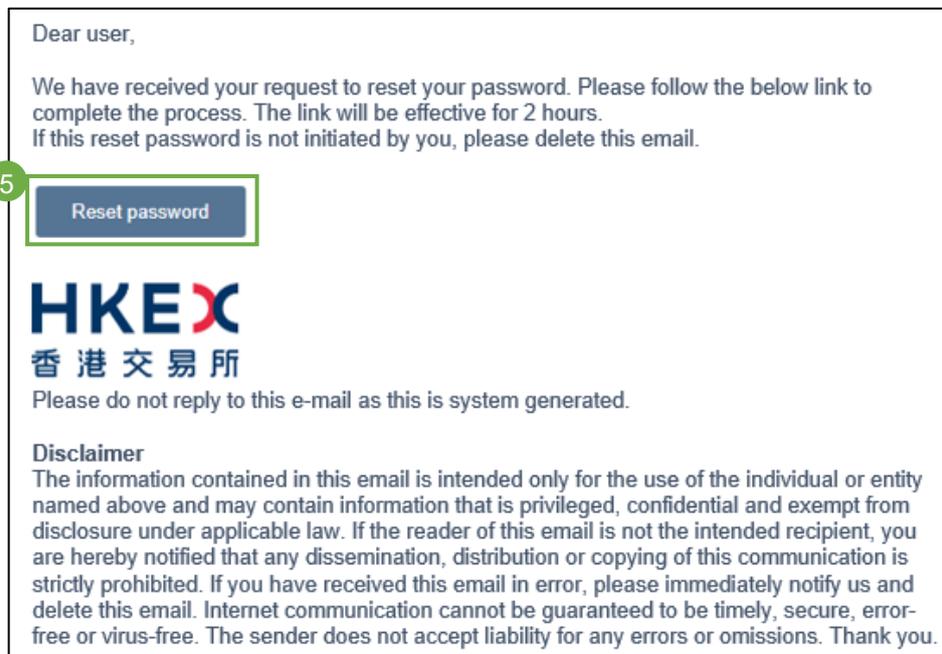
4. Input your **3** email address and press **4** SUBMIT.



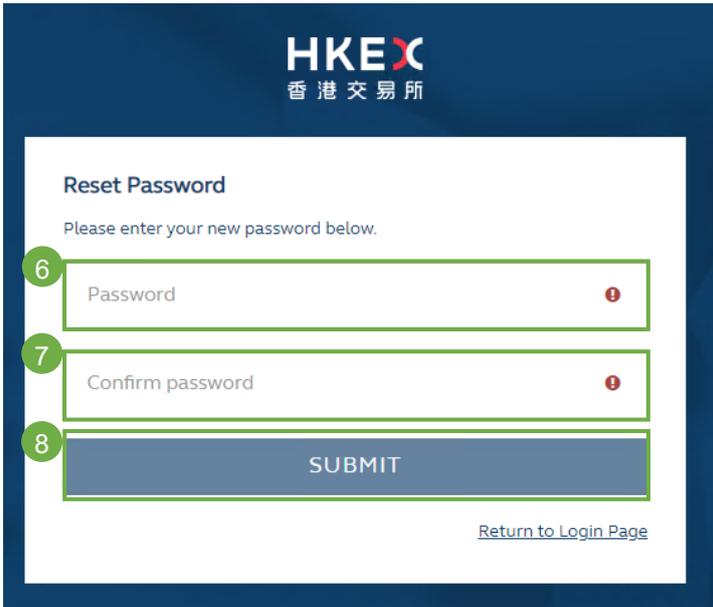
5. The below screen will appear after submission.



6. If the email address is valid, the user will receive an email with a link (**5** Reset password button) to reset the password. The reset link is valid for 2 hours.

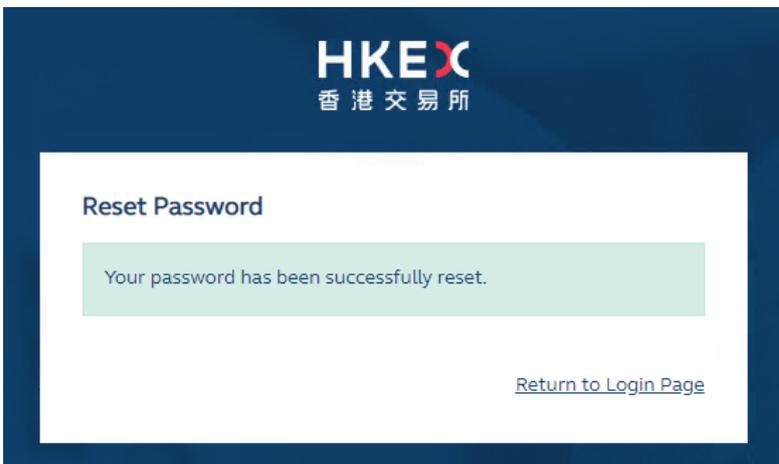


- Input the password (in both **6 Password** and **7 Confirm password**) and press **8 SUBMIT**.



The screenshot shows the HKEX (香港交易所) Reset Password page. At the top, the HKEX logo and name are displayed. Below the title "Reset Password", there is a prompt: "Please enter your new password below." The form contains three main elements: a "Password" input field (labeled 6), a "Confirm password" input field (labeled 7), and a "SUBMIT" button (labeled 8). Both input fields have a red exclamation mark icon on the right side, indicating a validation error. At the bottom right of the form, there is a link: [Return to Login Page](#).

- Once a new valid password is input, a message will appear confirming the password has been successfully reset.

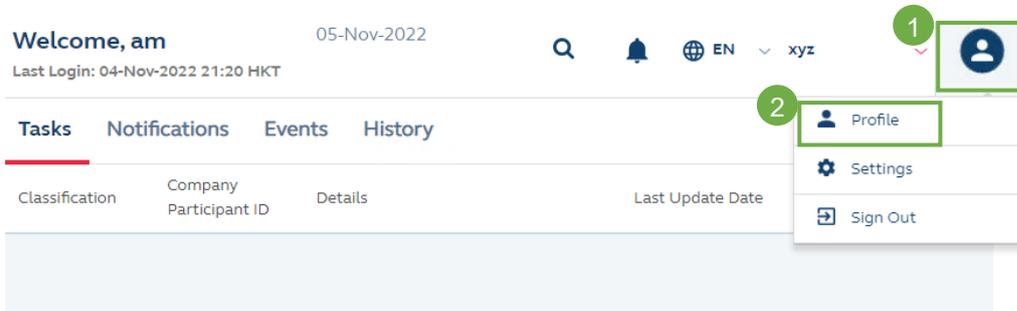


The screenshot shows the HKEX (香港交易所) Reset Password page after a successful password reset. The HKEX logo and name are at the top. Below the title "Reset Password", a green message box displays the text: "Your password has been successfully reset." At the bottom right, there is a link: [Return to Login Page](#).

Change your password

Users may, at any time, change their password by following the steps below:

1. Log in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>), click **1** user icon and select **2** Profile from the menu.



2. In the **My Profile** page, click **3** Change Password.

My Profile

User ID	ac@xyz.com
First Name	ac
Last Name	xyz
Company Names	xyz
Email	ac@xyz.com
Team Email (Optional)	
Contact Number	123456748

User Status	Active
Password	***** 3 Change Password
	Authentication Settings

- Input the new password (both in **4 New password** and **5 Confirm new password**), and click **6 Update**.

User profile

Password

New password **4**

Confirm new password **5**

6 Reset Update

A screenshot of a web form titled "User profile". It contains a "Password" section with two input fields: "New password" and "Confirm new password". Both fields are highlighted with a green box and a green circle containing the number 4 and 5 respectively. Below the fields are two buttons: "Reset" and "Update". The "Update" button is highlighted with a green box and a green circle containing the number 6.

- Input the **7 Current password** and click **8 Update**.

Confirm password

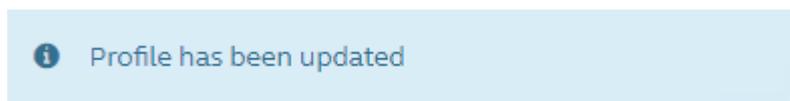
Please confirm your current password to continue.

Current password **7**

8 Update

A screenshot of a "Confirm password" dialog box. The dialog box has a title bar with "Confirm password" and a close button. The main text says "Please confirm your current password to continue." Below this is a label "Current password" followed by an input field. The input field is highlighted with a green box and a green circle containing the number 7. To the right of the input field is a red exclamation mark icon. Below the dialog box, the "Update" button from the previous screenshot is visible, highlighted with a green box and a green circle containing the number 8.

- The following message will be displayed upon successful password change.

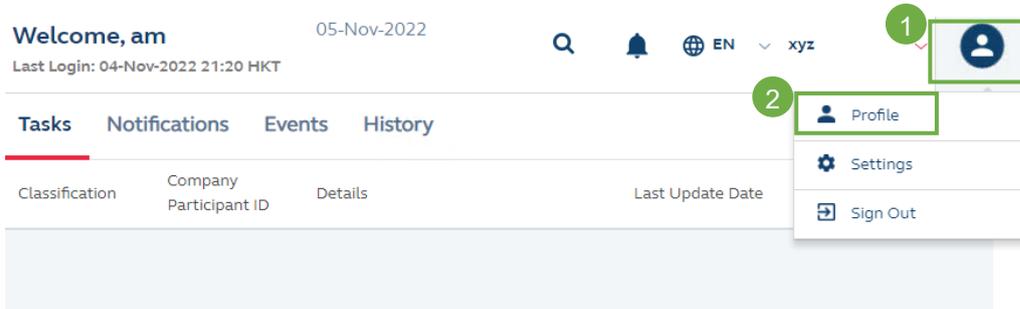


Change of One-time password ('OTP') channel

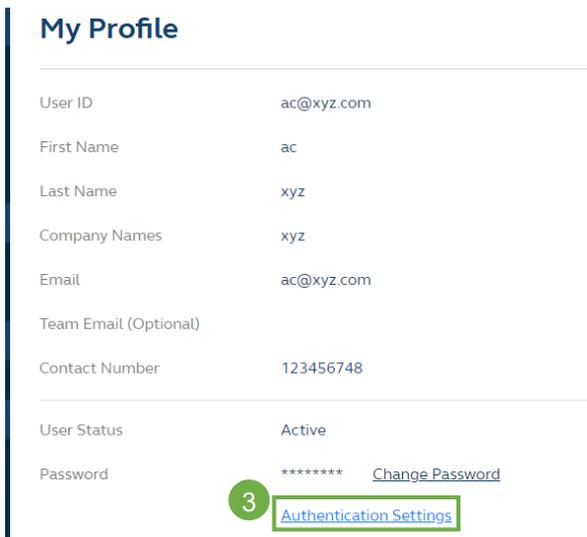
Users may, at any time, change their OTP channel following the steps below.

(a) Switch from email to mobile device

1. Log in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>), click **1** user icon and select **2** Profile from the menu.

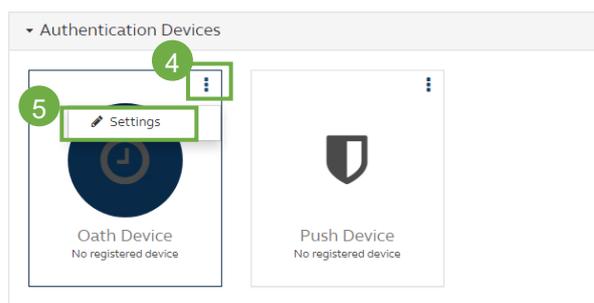


2. In the **My Profile** page, click **3** Authentication Settings.

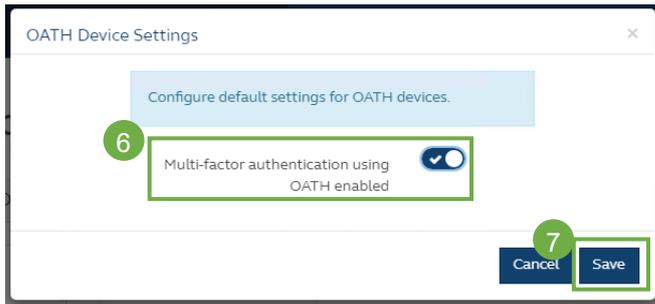


3. In the **Authentication settings** page, click the **4** three-dot menu of the Oath Device and select **5** Settings.

Authentication settings



- In the **Devices settings** page, toggle On the setting **6** 'Multi-factor authentication using OATH enabled' and click **7** **Save**.

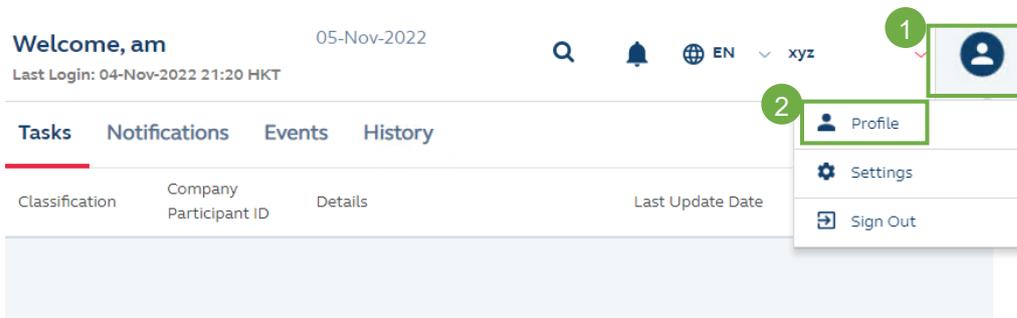


- At the next logon, user will be prompted to select the OTP channel. User may click **8** **REGISTER DEVICE** to register a mobile device.

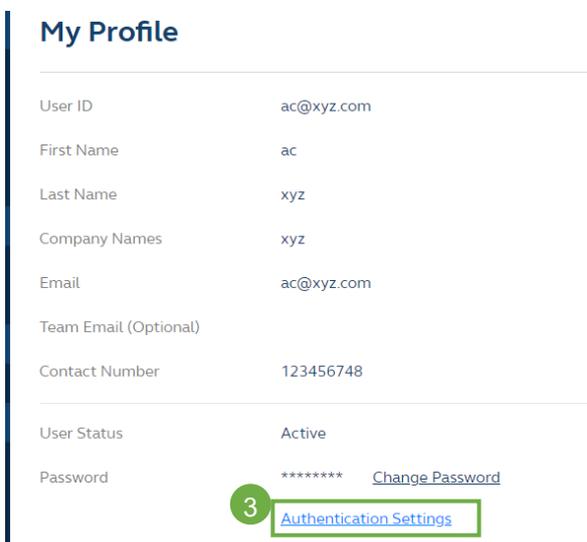


(b) Switch from mobile device to email

1. Log in to the HKEX Access Management Portal (<https://connect.hkex.com.hk>), click **1** user icon and select **2** Profile from the menu.

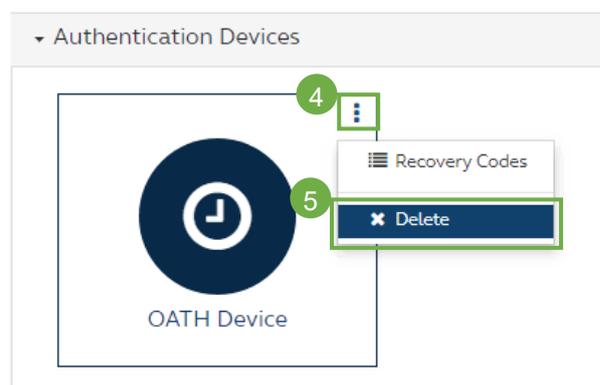


2. In the **My Profile** page, click **3** Authentication Settings.



3. In the Authentication settings page, click the **4** three-dot menu of Oath Device and click **5** Delete. It will remove the registered device record from the system.

Authentication settings



4. At the next logon, user will be prompted to select the OTP channel. User may click **6 SKIP THIS STEP** and the OTP will be sent via email.

ForgeRock Authenticator (OATH)



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