Change of Authentication Arrangement for Terminal Access to CCASS/ CCMS

Launch of Two-Factor Authentication Preparation Briefing

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- 03 | Implementation Approach of 2FA
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1. Background - Overview

To enhance security assurance, Two-Factor Authentication (2FA) is introduced to replace the existing smartcard and smartcard reader authentication.

		By Smartcard (TODAY)	By 2FA (Mid-2023 Tentatively)	HKSCC CPs and DBs who access to
User ID		8 character code	8 character code (same as existing)	CCASS through <u>Participant Gateway (PG)</u> will not be impacted, and should remain accessing to CCASS via smartcard.
Authentication Method		 Smartcard & smartcard reader Smartcard PIN 	 Regular password OTP obtained from mobile application / email 	
User	CCASS/ CCMS Delegated Administrator (DA)	User profile maintenance by HKEX	 User profile maintenance by HKEX Can be assigned with business users group function (to be available in later stage) 	
Maintenance	CCASS/ CCMS User (User)	User profile maintenance by DA (except account creation by HKEX)	User profile maintenance by DA User account creation by DA	

The changes will only be applied on the authentication method of Terminal access to CCASS/ CCMS, including Security Management Functions (DMS) and Overnight Report Distribution (ONRD) function, while the terminal functions and operations remain unchanged.



2FA Operations





- DAs



eService SCard 1 will only be available for Smartcard Password Reset upon the launch of 2FA, CPs and DBs should submit eService DA 3 for any other DA maintenance by then.

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For details of the procedure, please refer to Appendix 1.

- Users



- Users



- Users Migration



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:16

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3. Implementation Approach of 2FA



3. Implementation Approach of 2FA

https://www.ccass.com

The following is a high level implementation approach for transition from smartcard to 2FA:





Upon the launch of 2FA, users and DAs should initialize 2FA immediately.



User ID remains unchanged

		HKSCC CPs	HKSCC DBs	HKCC CPs	SEOCH CPs
	User ID for DAs (to be assigned by HKEX)	Participant ID + X/Y/Z + 1-9, e.g. B01234X1	Participant ID + X/Y/Z + 1-9, e.g. BNK999X1	HK + Participant ID + 1/2/3/4 + X/Y/Z + 1-9, e.g. HKABC1X1	HK + Participant ID + X/Y/Z + 1/2/3/4 + 1-9, e.g. HKABC2X1
Modified	User ID for Users (existing users were assigned by HKEX, new users to be assigned by DAs upon the launch of 2FA)	Participant ID + 2 custom alphanumeric, e.g. B0123401	Participant ID + 2 custom alphanumeric, e.g. BNK99901	HK + Customer Code + 1/2/3/4 + 2 custom alphanumeric, e.g. HKABC101	HK + Customer Code + 1/2/3/4 + 2 custom alphanumeric, e.g. HKABC201

To be elaborated in the later slides

Step by step procedure to be shared in the following slides





1. Set up password:



1. Set up password (cont'd):



1. Set up password (cont'd):







2. Set up OTP Channel:



Day 1 Launch of 2FA

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2a. Set up OTP Channel (Mobile App):





2a. Set up OTP Channel (Mobile App):





Day 1 Launch of 2FA

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2b. Set up OTP Channel (Email):



reserves the right to take actions against offender

Day 1 Launch of 2FA of Smartcard

3. On-going logon with 2FA:



Day 1 Launch of 2FA

3. On-going logon with 2FA (Cont'd):



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After smartcard decommissioned







Important Information



4. Important Information

1. Retaining your Smartcard and Smartcard reader

If you are PG users, you should retain your smartcard and smartcard reader. CPs and DBs should not dispose their smartcards and smartcard readers until the decommissioning of smartcard.

2. Backup Centre

Upon the launch of 2FA, CPs and DBs can only use 2FA to login CCASS/ CCMS at Backup Centre.

What's Next?



5. What's Next?

 More Information regarding the change of authentication method are available on HKEX website, please visit the website regularly for the latest information.

Information Package for the launch of 2FA and the updated Terminal User Guide will be available in HKEX website in May 2023.

Enquiries and Support

6. Enquiries and Support

For any enquiries about the change of authentication arrangement of Terminal access to CCASS/ CCMS, please contact CCASS/ DCASS Hotline or Email indicated below:

൧ഄൣ൨	Terminal	CCASS	CCMS		
ĩ		2979 7111	2979 7222		
	Hotline	During normal office h	urs from 09:00 to 18:00		
		(Mondays to Fridays, e	excluding public holidays)		
	Email	ClearingPS@hkex.com.hk	ClearingPSD@hkex.com.hk		

Checklist

7. Checklist

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	Cł	necklist for CPs and DBs to prepare for the launch of 2FA:	$\mathbf{\nabla}$
	1	Register the designated email for all users and DAs for the regular password setup	
	2	Check CCASS/ CCMS Terminal bookmarked URL	
		Perform connectivity verification for new CCASS/ CCMS 2FA servers	
	3	-Reference to circulars dated 3 April 2023 (HKSCC: CD/OES/CCASS/013/2023,	
		HKCC: <u>CD/OEC/HKCC/092/2023</u> and SEOCH: <u>CD/OEC/SEOCH/093/2023</u>)	
	4	Inform all users and DAs in your company for the change of authentication arrangement	
	5	Study the Information Package for Launch of 2FA and the updated CCASS/ CCMS terminal user guides (available in May 2023)	
	6	Understand the first time login procedure for 2FA	
	7	If the user is current Client Connect/ VaR Online user, same ForgeRock Authenticator app will be used for OTP generation.	

Q & A Session

Appendices

The following table has summarized the type of account maintenance and the corresponding action required under 2FA:

Password should be changed at least every 90 days. Once the password is expired, user or DA will be required to change password after inputting his/ her User ID and the expired password at the login page.

Self-served by Change Password function

а

b Self-served by Forgot/ Reset Password function

Self-served by Forgot/ Reset Password function (cont'd)

b

For DAs: submit eService DA 3 by Client Connect user

To be Performed by Client Connect Maker and Checker

С

For users: Unlock/ Reset OTP Device Registration by DA

c

For users: Unlock/ Reset OTP Device Registration by DA (cont'd)

С

Self-served Authentication Settings function

d

d Self-served Authentication Settings function (cont'd)

8. Appendix 2 – Procedure of Email Registration for Users and DAs

Upon the launch of 2FA, users are required to setup their regular password to initiate the 2FA. An OTP email will be sent to users designated email address for authentication. Therefore, it is important for users to register their designated email addresses in advance.

- 1. Register designated email address for CCASS/ CCMS users
 - CCASS/ CCMS DAs who perform the user profile maintenance functions shall register the designated email address of

their users in DI	MS			_	
	Change User Profile - Detail				
	This is an end-user profile User ID User Status Surname Other names	B0123401 (e) ENABLED (c) GISABLED (TAI MAN (CHAN			The updated user profile shall be effective shortly upon the
	Email	abc@abc.com.hk			completion of maker-checker
	Enable from	01-Jan-03	DD-MMM-YY		
	Disable after		DD-MMM-YY		process.
	Clearing House Options	Cash 🗸			· · · · · · · · · · · · · · · · · · ·

- 2. Register designated email address for CCASS/ CCMS DAs
 - Client Connect user with access right "EU_UserMaintenance" shall register the designated email address of the CCASS/ CCMS DAs by submitting eService DA3 <CCASS/ CCMS Delegated Administrator Application/ Maintenance</p>

Form> in Client Connect through HKEX Access Management Portal

DETAILS OF REQUESTS		(Charles and the second secon
DETAILS OF CHANGE REQUEST		HKEX will process eService request
User ID	Email Address	by batch, and will start processing of
Type your answer here	No Change	eServices submitted before 28 April
+ REQUEST		2023 during late-Apr – May 2023.

CPs and DBs must register the designated email addresses of their CCASS/ CCMS users and DAs before <u>28 April 2023 (Friday)</u> to initialize 2FA for accessing to CCASS/ CCMS at the launch of 2FA. ₄₆

8. Appendix 2 – Procedure of Email Registration for Users and DAs (Cont'd)

User ID can be found in DMS:

• through "User Profile Listing" Function

8. Appendix 2 – Procedure of Email Registration for Users and DAs (Cont'd)

User ID can be found in DMS:

• through "Enquire User Profile" Function

	To b	e performed by DA			
		2		-	
1 After logging into DMS			User Profile Print	Site Map Logout Change Password	DUPE 01 26-Apr-23 18:11:03
HKEX ® # c l m			Enquire User Profile - Prompt		
Haintain User Profile Change User Profile III Sile Ma	p Logout Change Password	User ID : 801234X1 27-Apr-23 11:38:32	User ID	Submit	
View Listings Enguine User Profile			Search by Us Search Filter *	er ID O User Name	
Click <maintain user<br="">Profile>, then click <enqui< td=""><td>³⁰</td><td></td><td></td><td>List Refresh</td><td></td></enqui<></maintain>	³⁰			List Refresh	
User Profile>				Click <list></list>	
3	The User ID and the corr Enquire User Profile - List Search by User ID Search filter	esponding User Name	will be displayed		
	User ID User Name	Rema	rks		
	B0123401 TESTUSER01 TESTUSER B0123402 TESTUSER TESTUSER B0123403 TEST TESTUSER	R			
	B01234X1 TESTER TESTER B012 B01234X2 TESTER TESTER B012	I6C2 Deleg I6C3 Deleg	ated Administrator ated Administrator		

8. Appendix 2 – Procedure of Email Registration for Users and DAs

8. Appendix 2 – Procedure of Email Registration for Users and DAs (Cont'd)

Email Registration for Users (Cont'd)

To be performed by DA Checker				
On	the same p	age		
Chang	ge User Profile - Confirma	tion		
This is a	an end-user profile			
User ID		B0124601		
User St	atus	ENABLED		
User na	ime	TAI MAN CHAN		
Email		abc@abc.com.hk		
Enable 1	from	01-Jan-03		
Disable	after			
Clearing	g House Options	Cash		
Trans	saction limit (HKD)			
Default	t i i i i i i i i i i i i i i i i i i i	9,999,999,999,999.99		
DI			DI Requirement	
ISI			Recall Request	
Cash C	Compensation Indicator		ATI	
Cash P	Prepayment		SI	
Selecte	d User Groups	Added User Groups	Deleted User Groups	
11 12 1 24 51 5 DV DX O P PD SA SM	13 14 15 16 17 18 19 20 21 22 52 54 55 A AA AB AC AD C C E F F1 H I 12 13 J K L M N NU PM Q R RA RB RD RU RX RY ST WA WB WC WD WE WF WC	23 I D NV RZ	Enter <checker id=""> and <authorization code="">, ther</authorization></checker>	
Checker	r ID	B01246X2	click <confirm></confirm>	
Authoris	sation Code	••••••		
		Confirm Back	t	
		1		
	Confirm	ation message will	he	
	displayed c	on the bottom of the	page	
THE ABOVE USER PROFILE IS CHANGED SUCCESSFULLY				

8. Appendix 2 – Procedure of Email Registration for Users and DAs (Cont'd)

8. Appendix 2 – Procedure of Email Registration for Users and DAs (Cont'd)

Email Registration

for DA	s (Cont'd)	
5	Enter User ID and the designated email address of DA Image: Contract records Image: Contract reconds Image: Contrac	CONTACT INFORMATION CONTACT INFORMATION Memory of Contact Person AAA Email Address AA@bank.com.hk Telephone Number 29797111 CONTACT PERSON
7	Home / DA 3 CCASS/ CCMS DELEGATED ADMINISTRATOR APPLICATION/ MAINTER Reference Number:	SAVE PREVIEW ENANCE FORM Status: X Expand

8. Appendix 2 – Procedure of Email Registration for Users and DAs (Cont'd)

9. Appendix 2 – Procedure of Email Registration for Users and DAs (Cont'd)

Email Registration To be performed by Client Connect Checker for DAs (Cont'd) 9 Access to HKEX Access Management Portal A system generated email notification with the eService Reference Number will be sent to checker's email upon submission of maker's request. Click <Tasks>, then click the DA 3 - CCASS/ CCMS Delegated Administrator Application/ Maintenance Form (DA3_00013361 from B01234 appropriate reference number From HKEX Client Connect <noreply_connect@hkex.com.hk> 1 Date Today 10:43 HKEX Client Connect Events History Tasks fications Company For action: the eService is Ready to Send to HKEX Details Last Update Date Job Status Participant ID DA3 00013361 Reference Number Mizuho Bank, Ltd. DA3_00013361 - CCASS/ CCMS Delegated Ready to Send to User Maintenance CC 07-Feb-2023 **BNK109** Administrator Application/ Maintenance For Ready to Send to HKEX Workflow Status Notification Type For action C Cheung, ABC Company Checker of ABC Company To view the record, please visit the HKEX Client Connect and search the Reference Number (DA3_00013361) 10 Click <Claim> Horse CLAIN DA 3 CCASS/ CCMS DELEGATED ADMINISTRATOR APPLICATION/ MAINTENANCE FORM Reference Humber: DA3_00013361 Status: 01-(viii-202) 10-0 HOLT Ready to Send to HKEX * 1 X Expend COMPANY INFORMATION

8. Appendix 2 – Procedure of Email Registration for Users and DAs

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