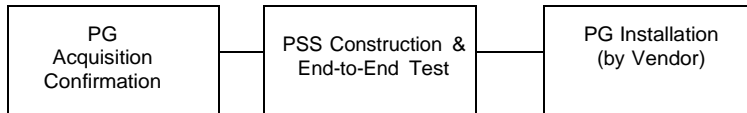


1. Introduction

Following the registration for CCASS/3 Participant Gateway (PG), this is to further confirm the configuration details with participants.

2. PG Acquisition Confirmation / Installation Arrangement

The PG acquisition confirmation / installation processes are organised into the following 3 steps:



- **PG Acquisition Confirmation** is for participants who choose to use PG to confirm the detailed configurations (e.g. number of PG servers required, location).
- **PSS Construction & End-to-End Test** is for participants to develop their system based on PG message specifications. A PG simulator will be supplied to facilitate unit testing of participant's supplied system (PSS). After satisfactory simulator test, PSS should be connected to CCASS testing environment to conduct an end-to-end test on selected CCASS functions via PG. HKEX will organize PG end-to-end test in two to three sessions annually, inline with CCASS enhancement releases. Participants should contact HKEX for the availability of PG end-to-end test session. The free end-to-end test session lasts for four weeks.
- **PG Installation** may commence after the completion of the end-to-end test. Participant should procure the necessary hardware, software themselves and also arrange with accredited service vendor to complete PG installation. HKEX would provide the below documents to accredited service vendors for PG installation: (1) Windows Installation & Hardening procedure; (2) PG Server Applications Installation & Verification procedure. For installation scope outside of these, Participant should negotiate with the vendor.

3. How to Complete the PG Acquisition Confirmation Reply

This PG Acquisition Confirmation Reply will serve as a confirmation of the PG configuration details by the participant.

The Confirmation Reply is composed of two Parts as below.

Part I - General Information : To provide information such as contact person details for hardware and network installation.

Part II – PG Detailed Configuration : To provide PG configuration option to be acquired by the participant. Information to be provided includes number of PG to be installed, address for PG installation, etc.

For participants who would like to install more than one set of PG, i.e. in difference location, separate form (PG Acquisition Confirmation Reply) is required for each set of PG.

4. List of Documents to be Returned to HKEX

Participants who are interested in subscribing PG should return the following documents duly signed by the authorised signatories to “Clearing Administration & Services, Cash & Derivatives Clearing Operations, Hong Kong Securities Clearing Company Limited (“HKSCC”) at 30/F, One Exchange Square, 8 Connaught Place, Central, Hong Kong.

- PG Acquisition Confirmation Reply
- CCASS / CCMS SDNet Line Service Notification Form for HKSCC / HKCC / SEOCH Participants / HKSCC Designated Banks (optional)
- Standard Terms and Conditions for Participant Gateway
- Order Form for Smartcard Reader(s)
- Smartcard User Profile List (After PG End-To-End Test)

For general enquiries, please contact the CCASS hotline at 2979-7111. For technical enquiries, please contact Fault Reporting Centre at 2211-6606.

5. One-time Charges

I. PG Server

For hardware and software of PG Server, Participant should arrange to procure them (by referencing Section 7. PG Hardware and Software Requirement) from their vendor of choice.

For commissioning of PG Server, Participant should arrange with accredited service vendor to complete PG installation. HKEX would provide the below documents to accredited service vendors for PG installation: (1) Windows Installation & Hardening procedure; (2) PG Server Applications Installation & Verification procedure. For installation scope outside of these, Participant should negotiate with the vendor.

The follow items will be provided by HKEX and the charges are as follows:

<i>Item</i>	<i>Charges</i>	<i>Remarks</i>
Supply or replacement of each smartcard	HK\$ 250	Fee debited upon delivery of smartcard
Supply or replacement of each smartcard reader	HK\$ 300	Fee debited upon delivery of smartcard reader

II. Communication Line setup/upgrade One-time Charges

Participant may share the existing CCASS/3 SDNet/2 router with C3T. The details for installing separate C3T SDNet/2 Router & Line for PG can be found in the Hong Kong Exchanges and Clearing Limited web site: “Market Operations > Clearing > Securities Clearing > Securities and Derivatives Network (SDNet/2) – CCASS / CCMS” (URL: <http://www.hkex.com.hk/eng/market/clr/secclr/sdnet2.htm>). The minimum bandwidth is 1M.

Participant should notify HKEX of the installation/upgrade of their SDNet/2 Router & Line by submitting the “CCASS / CCMS SDNet Line Service Notification Form for HKSCC / HKCC / SEOCH Participants / HKSCC Designated Banks” under PG Acquisition Documents.

6. Operating Charges

I. Usage fee for each PG

- HK\$ 53,000 per annum.

II. Testing fees of PG

- HK\$ 1,500 per day for testing on Monday to Friday from 10:00am to 5:30pm.
- HK\$ 5,000 per day for testing on Saturday from 9:30am to 4:00pm.
- HK\$ 2,500 per half day for testing on Saturday from 9:30am to 12:30pm.
- The testing fee is only applicable to those participants who request for additional testing to the free sessions offered by HKSCC.
- Fee will be debited upon completion of testing period.

III. CCASS/3 Line Rental

If separate CCASS/3 SDNet/2 Router & Line is used for PG, the capped monthly rental charges can be found in "the Hong Kong Exchanges and Clearing Limited web site: "Market Operations > Clearing > Securities Clearing > Securities and Derivatives Network (SDNet/2) – CCASS / CCMS" (URL: <http://www.hkex.com.hk/eng/market/clr/secclr/sdnet2.htm>).

IV. PG Hardware and Software Annual Maintenance Fee

Participants should procure maintenance and support service for hardware and software they procured for PG Server from their vendor of choice.

V. Software patch management / upgrade

Patch management / upgrade of Windows and Antivirus software maybe initiated by HKEX and participants maybe charged of the cost incurred.

7. PG Hardware and Software Requirement

(The machine specification detailed below is for reference only. Participant should test the target production machine in end to end test.)

PG Server

<u>Description</u>	<u>Unit</u>
HP ML350pT08 or compatible	1
8GB RAM	1
300 GB Hard Drive SCSI	2
Network Interface Card	2
AC Power Supply Kit	2
Software:	
Windows 2012 Server Std with CAL	1
Symantec Antivirus	1

8. Summary on the Steps to be taken for Acquisition of PG

Step	Name of Documents/Tasks	Lead-time
1	<p>Complete the PG Acquisition Documents and submit to: Clearing Administration & Services, Cash & Derivatives Clearing Operations, Hong Kong Securities Clearing Company Limited (“HKSCC”) at 30/F, One Exchange Square, 8 Connaught Place, Central, Hong Kong. No fee has to pay upon submission of PG Acquisition Documents.</p> <p>Note: HKSCC will send the engrossment of Standard Terms and Conditions for Participant Gateway when you have indicated your interest in using PG. Interested party please call 2211-6279 for details. For general enquiries, please contact the CCASS hotline at 2979-7111.</p> <p>Note: If Applicant opts to share the Development/Production Link with other CCASS Participants, no need to submit the CCASS / CCMS SDNet Line Service Notification Form for HKSCC / HKCC / SEOCH Participants / HKSCC Designated Banks. For details of sharing Participant Gateway with other participants, please refer to Rule 704 of General Rules of CCASS.</p> <p>HKSCC will acknowledge receipt of the PG Acquisition Documents.</p>	1 week
2	<p>Upon receipt of the executed application documents, a PG simulator will be provided by HKSCC free of charge to facilitate unit testing of participant’s supplied system (PSS).</p>	Normally it will take 2 to 3 months to develop and unit test the PSS depending on the complexity of PSS
3	<p>Installation of Development Link: testing line must be applied 6 weeks before the end-to-end test start.</p> <p>Applicant has to pay for the smartcard(s) and smartcard reader(s) ordered. The minimum subscription period for Development Link is 3 months. For the details of Development Link, please refer to Securities and Derivatives Network (SDNet/2) – CCASS / CCMS</p> <p>For CCASS Participants, the relevant charges will be debited to the billing account in Money Ledger.</p>	6 weeks
4	<p>End-to-End Test: PSS should be connected to CCASS testing environment to conduct an End-to-End Test on selected CCASS functions via PG.</p> <p>Applicants are required to record down the execution details/result for submission to HKEX verification. The execution results should be substantiated with objective evidences. For details of End-to-End test, please refer to End-to-End Test Guide.</p>	Subject to availability of test environment
5	<p>Participant to order PG Server and install production link for production.</p>	6-8 weeks (for reference)