

HONG KONG EXCHANGES AND CLEARING LIMITED

Quick Reference

HKATS Risk Functions (PTRM)

Derivatives Trading, Market Division

Preface

Quick Reference for HKATS Risk Functions GUI (“PTRM GUI”) was created to provide Risk Limit Managers and Trading Units the necessary information for PTRM GUI operations in the case of an emergency situation requiring immediate action. This Quick Reference is also an overview highlighting the answers to frequently-asked questions received from the Participants ever since the launch of the PTRM GUI in April 2016.

Assuming that the readers of this document are reasonably familiar with the PTRM GUI operations, this document is designed to be as succinct as possible so that Participants’ Risk Limit Managers and Trading Units may use this as a desktop companion. New users of the PTRM GUI are recommended to reference the HKATS Risk Functions User’s Guide for a more comprehensive description on the GUI operations and behaviors.

The following scenarios will be highlighted:

- Part 1a: Your emergency contact on PTRM GUI matters
- Part 1b: To login PTRM GUI
- Part 2: To change risk limits immediately
- Part 3: To unblock a Pre-Trade Limit Group (PTLG) after a limit breach by an At-Trade risk check (Order Rate and Intraday Exposure Check)
- Part 4: To stop a PTLG from trading for the rest of the day/ for an extended period of time and to unblock it
- Part 5: Codes of Product Types commonly used for preparing the .csv file regarding uploading Maximum Order Size Limit setting

- *Derivatives Trading, Markets Division* -

Part 1a: Your Emergency Contact On PTRM GUI Matters

For all PTRM GUI related matters, please contact HKATS Hotline at (852) 2211 6360. Users must report to HKATS Hotline after the use of any Emergency Buttons.

Part 1b: To Login To The PTRM GUI

Risk Limit Managers and Trading Units are required to log into the PTRM GUIs through exchange-assigned gateways and ports. Every PTRM GUI login ID will have only one set of gateways and ports assigned. To access the primary PTRM gateway, simply type the URL below into the address bar of Internet Explorer installed in the PTRM GUI-dedicated PC:

https://pgenrgw**XXX**.hkex.com.hk:**YYYY**/grx

Where **XXX** = 001 or 002
 YYYY = 8090, 8091, 8092 or 8093

Please remember the gateway number (**XXX**) and port number (**YYYY**) assigned to your PTRM GUI login ID and login only with the prescribed gateway and port.

Highlights of useful references in HKATS Risk Functions User's Guide related to Part 1a and Part 1b	
Page No.	Description
P.9 – P.13	Login Procedures
P.88 – P.89	Section 5: Best Practice
P.90 – P.92	Contingency Measures

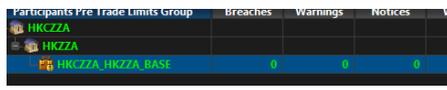
Remarks: Reference made to the page numbers above could change due to periodical updates by the Exchange

Part 2: To Change Risk Limits Immediately

You may be required to make changes on risk limits for a PTLG despite already having set the limits due to changes in your risk policies. All changes to existing risk limits are designed to be effective immediately. It is important for users to save the changes for their new risk limits after any manual modifications with the use of the save button  (located on the top right hand corner of the PTRM GUI).

Users are reminded to observe the following steps when modifying an existing risk limit:

1. Highlight the correct PTLG
2. Go to the correct risk limit field
3. Type your new risk limit into the risk limit field
4. Save any change(s) by clicking the Save Button and confirm your change(s)

Example - To change the Gross Futures Limit of the PTLG, HKCZZA_HKZZA_BASE, from 120,000,000 HKD into 200,000,000 HKD		
Step 1	Highlight "HKCZZA_HKZZA_BASE"	
Step 2	Go to "Gross Futures Limit" under the Intraday Exposure Check Tab	
Step 3	Input "200,000,000" to replace the existing Gross Futures Limit 120,000,000	
Caution: Make sure all the readings of the "Utilization %" counters are under 100% after you input a new limit. Saving changes over 100% will immediately block your PTLG (Similarly, setting the Order Rate Limit at 0 will immediately block your PTLG)		
Step 4	Click the "Save Button" and confirm your change	

Highlights of useful references in HKATS Risk Functions User's Guide related to Part 2	
Page No.	Description
P.46 - P.79	Section 3: Risk Limit Setting

Part 3: To Unblock A Pre-Trade Limit Group (PTLG) After A Limit Breach By An At-Trade Risk Check

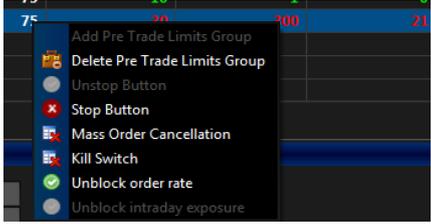
To unblock a PTLG that has been blocked by either one of the At-Trade risk checks:

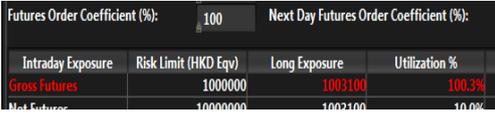
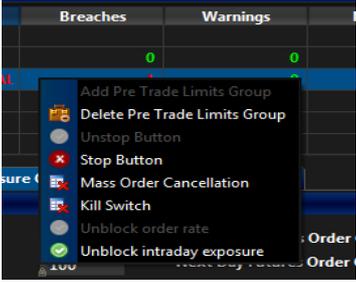
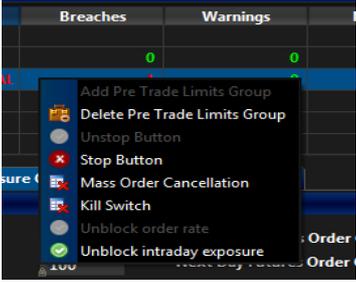
- Maximum Order Rate Check
- Maximum Intraday Exposure Check

For the purpose of resuming order inputs, users are reminded to observe the risk consumption reading of the respective risk counter (at the moment of unblock) is smaller than the corresponding risk limit breached.

General steps to unblock a PTLG after a breach on the limit of an At-Trade risk check:

1. Open the Emergency Button Menu to unblock by choosing either “Unblock order rate” or “Unblock intraday exposure” if the existing reading for the At-Trade risk counter is smaller than the original At-Trade limit.
2. Increase the original At-Trade limit to a level that is greater than the current reading of the At-Trade rate risk counter (Please refer to Part 1 on how to change risk limits immediately). Afterwards, right click the blocked PTLG and open the emergency Button Menu to unblock by choosing either “Unblock order rate” or “Unblock intraday exposure” if the existing reading for the At-Trade risk counter is greater than the original At-Trade risk limit.

Example 1 - To unblock after a breach has been caused by Order Rate Check		
Step 1	Check if the readings of the order rate risk counter of the blocked PTLG are smaller than the original limit. If yes, go to Step 3 directly	
Step 2	If not, modify the order rate limit to a level higher than the existing reading of the order rate risk counter	
Step 3	Open the Emergency Button Menu by right-clicking the blocked PTLG	
Step 4	Click the “Unblock order rate” Button to unblock	

Example 2 - To unblock after a breach has been caused by Intraday Exposure Check																						
Step 1	Check if the readings of the Intraday Exposure risk counter of the blocked PTLG are smaller than the original limit. If yes, go to Step 3 directly	 <table border="1"> <thead> <tr> <th>Intraday Exposure</th> <th>Risk Limit (HKD Eqv)</th> <th>Long Exposure</th> <th>Utilization %</th> </tr> </thead> <tbody> <tr> <td>Gross Futures</td> <td>1000000</td> <td>644850</td> <td>64.5%</td> </tr> <tr> <td>Net Futures</td> <td>1000000</td> <td>644850</td> <td>64.5%</td> </tr> </tbody> </table>	Intraday Exposure	Risk Limit (HKD Eqv)	Long Exposure	Utilization %	Gross Futures	1000000	644850	64.5%	Net Futures	1000000	644850	64.5%								
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Gross Futures	1000000	644850	64.5%																			
Net Futures	1000000	644850	64.5%																			
Step 2	If not, modify the intraday exposure limit to a level higher than the current reading of the order rate risk counter	 <table border="1"> <thead> <tr> <th colspan="2">Futures Order Coefficient (%):</th> <th colspan="2">Next Day Futures Order Coefficient (%):</th> </tr> </thead> <tbody> <tr> <td colspan="2">100</td> <td colspan="2">100</td> </tr> <tr> <th>Intraday Exposure</th> <th>Risk Limit (HKD Eqv)</th> <th>Long Exposure</th> <th>Utilization %</th> </tr> <tr> <td>Gross Futures</td> <td>1000000</td> <td>1003100</td> <td>100.3%</td> </tr> <tr> <td>Net Futures</td> <td>1000000</td> <td>1003100</td> <td>100.3%</td> </tr> </tbody> </table>	Futures Order Coefficient (%):		Next Day Futures Order Coefficient (%):		100		100		Intraday Exposure	Risk Limit (HKD Eqv)	Long Exposure	Utilization %	Gross Futures	1000000	1003100	100.3%	Net Futures	1000000	1003100	100.3%
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Note:

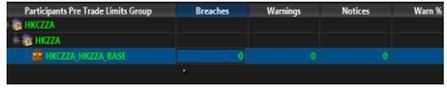
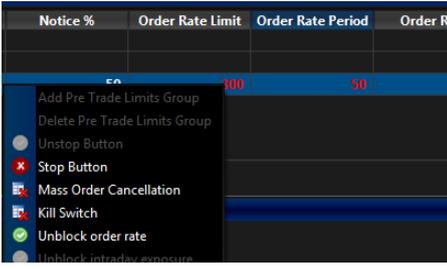
1. The reading of an order rate counter will decrease with time after a PTLG has been blocked and shall be reset to 0 with a modification to the order rate period
2. The reading of an intraday exposure risk counter will decrease upon an order cancellation by the respective PTLG depending on the “Order Coefficients” that have been set
3. The last reading of an intraday exposure risk counter can be bigger than corresponding intraday exposure risk limits upon a breach depending on the order size of the last order that led to the breach

Highlights of useful references in HKATS Risk Functions User’s Guide related to Part 3	
Page No.	Description
P.50	3.1.2 Unblock an Order Rate Breach
P.59	3.2.4 Unblock Intraday Exposure

Part 4: To Stop A PTLG From Trading For The Rest Of The Day/ For An Extended Period Of Time And To Unstop It

Users can press the Stop Button in the Emergency Button Menu to stop a PTLG from inputting any further orders. The Stop Button and Unstop Buttons can be used to halt and resume intraday trading from the PTLG, respectively.

A stopped PTLG will automatically be unstopped by the system on the next business day. If the user intends to stop a PTLG from trading for an extended period of time, he or she can set any one of the aforementioned AT-Trade risk limits at 0. This will block the respective PTLG immediately and will continue to do so at the start of every business day until user resumption.

Example: To stop a PTLG from trading for an extended period of time		
Step 1	Highlight the PTLG you want to stop from trading for an extended period	
Step 2	Set one of the following At-Trade risk limits to 0 and save the change to block the PTLG immediately: <ul style="list-style-type: none"> Order Rate Limit Gross Futures Limit Gross Options Limit Net Futures Limit Net Options Limit <p>We use Order Rate Limit as an example</p>	
Step 3	To unblock the PTLG, change the limit back to a reasonable figure then unblock by selecting either “Unblock Order Rate” or “Unblock Intraday Exposure” (depending on which limit was set at 0 before)	
Step 4	Click the “Unblock order rate” Button to unblock	

Highlights of useful references in HKATS Risk Functions User’s Guide related to Part 4	
Page No.	Description
P.79	3.6 OAPI Return Codes for HKATS Risk Functions Order Rejections
P.80 – P.87	Section 4: Emergency Buttons

Part 5: Codes Of Product Types For Preparing The .csv File Regarding Maximum Order Size Limit Setting By File Upload

Item	Product Type Name (Description if needed)	Product Type (Code for file upload)	Product Class (Code for file upload)
1	SI1 FUTURES (Brazil Index Futures)	SI1F	BOVFUT
2	SI2 FUTURES (India Index Futures)	SI2F	BSEFUT
3	SI3 FUTURES (South Africa Index Futures)	SI3F	SAFFUT
4	SI4 FUTURES (Russia Index Futures)	SI4F	MCXFUT
5	RCI FUTURES (CES 120 Index Futures)	RCIF	CHHFUT
6	DJI FUTURES (Dividend Futures)	DJIF	DHHFUT DHSFUT
7	HSI PUT OPTION (Hang Seng Index Options)	HSIP	HSIPUT
8	HSI CALL OPTION (Hang Seng Index Options)	HSIC	HSICALL
9	HSI FUTURES (Hang Seng Index Futures)	HSIF	HSIFUT
10	HHI PUT OPTIONS (H-Shares Index Options)	HHIP	HHIPUT MCHPUT
11	HHI CALL OPTIONS (H-Shares Index Options)	HHIC	HHICALL MCHCALL
12	HHI FUTURES (H-Shares Index Futures)	HHIF	HHIFUT MCHFUT
13	HIBOR FUTURES (Hibor Futures)	HIBF	HB1FUT HB3FUT H1SFUT H3SFUT
14	MHI PUT OPTIONS (Mini-Hang Seng Index Options)	MHIP	MHIPUT
15	MHI CALL OPTIONS (Mini-Hang Seng Index Options)	MHIC	MHICALL
16	MHI FUTURES (Mini-Hang Seng Index Futures)	MHIF	MHIFUT
17	PDT4 FUTURES (London Metal Mini Futures)	PT4F	LRAFUT LRCFUT LRNFUT LRPFUT LRSFUT

			LRZFUT
18	CNY FUTURES (USD/CNH Futures)	CNYF	CUSFUT
19	FI02 FUTURES (EUR, JPY, AUD / USD Futures)	FI2F	CEUFUT CJPFUT CAUFUT
20	FI05 FUTURES (CNH/USD Futures)	FI5F	UCNFUT
21	CNY PUT OPTIONS	CNYP	CUSPUT
22	CNY CALL OPTIONS	CNYC	CUSCALL
23	FXC FUTURES (Sector Index Futures)	FXCF	MOIFUT MBIFUT MPIFUT MCIFUT ITIFUT SSIFUT GTIFUT
24	VOL FUTURES (Volatility Index Futures)	VOLF	VHSFUT
25	STOCK FUTURES, DEC=2	SFU2	All Stock Futures
26	STOCK PUT OPTION	SOMP	All Stock Options Puts
27	STOCK CALL OPTOIN	SOMC	All Stock Options Calls
29	USD GOLD FUTURES	PT10F	GDUFUT
30	CNH GOLD FUTURES	PT9F	GDRFUT
31	IRON ORE FUTURES (MONTHLY CONTRACTS)	PT8F	FEMFUT
32	IRON ORE FUTURES (QUARTERLY CONTRACTS)	PT8F	FEQFUT
33	MSCI AxJ FUTURES	SI6F	MXJFUT

Note: The list will change according to the number of derivatives products provided in HKATS

Highlights of useful references in HKATS Risk Functions User's Guide related to Part 5	
Page No.	Description
P.69 – P.77	3.4 Managing Risk Limits/Parameters by File Upload
P.100 – P.112	Appendix E: Example Tradable Table for Maximum Order Size Limits