



Outline of Changes for VaR Margin Calculation Software Upgrade

December 2023
Japan Securities Clearing Corporation

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- **We are planning to make changes to the file layout of “VaR Parameter File” (VPF) effective from June 10, 2024,** in order to allow for more granular settings of VaR margin calculation parameters based on price fluctuations and other factors for each product.
 - ✓ It is a system-related update to prepare for the future, and there are no planned changes to the current parameter settings used in production operations at this time. When making parameter changes, we will consider the opinions of participants, etc.
- Along with the layout change of VPF, **we will also perform a version upgrade (version1.0 -> 2.0) of the corresponding “VaR Margin Calculation Software” (VMA).**
 - ✓ The VMA update will include **functional improvements.**
 - ✓ **To calculate VaR margin using VPF after the layout change, it will be necessary to use the updated version of VMA (version 2.0).**
 - ✓ Therefore, this version upgrade of VMA **applies to all VMA users, regardless of their usage mode (GUI/CLI/API).** (VPF in the new layout cannot be loaded by VMA version 1.0.)
- **All VMA users are asked to read through this document** as it provides the overview of changes to be made in consideration of the above project.

I. Outline of System Changes

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I. Outline of System Changes



1. Changes to VPF and VMA

- VPF and VMA will be changed as shown in the table below.
 - ✓ These changes have no impact on those who do not use VMA.
- The details of each specific change will be explained on the following pages. The specification documents related to these changes will be issued separately as soon as they are ready.

Change	Impact	Mandatory /Optional	Description
① VPF file layout change	-	- (No adaptation required)	• Change the granularity of setting margin calculation parameters in VPF.
② VMA software version upgrade	All VMA users (GUI/CLI/API)	Mandatory	• Replace VMA applications (GUI/CLI/API).
③ VMA functional improvement	VMA users <u>who wish to use additional functionality</u> (GUI/CLI/API)	Optional	• Improve the following functionalities: <ul style="list-style-type: none"> ✓ Add “error position skip mode” (API) ✓ Add “return base date of input files” (API) ✓ Add characters allowed in position files (GUI/CLI/API)
④ VMA supported OS and Java change	VMA users (CLI/API)	Optional	• Change OS and java versions.

2. Outline of Each Change ① VPF File Layout Change

- **The file layout of VPF will be modified** to enable the setting of margin calculation parameters (Number of Stress Scenarios, Confidence Level) in VPF at a more granular level, specifically at the Aggregation Group Level. Currently, VPF utilizes common setting values for all products.
 - ✓ Users need not edit VPF.
 - ✓ While the file layout change in VPF will allow for a more granular configuration of margin calculation parameters (Number of Stress Scenarios, Confidence Level), there will be no changes to the parameters (setting values) during this layout change.
(There will be no changes to margin due to the layout change.)
 - ✓ If there is a need to modify the actual setting values of these margin calculation parameters (Number of Stress Scenarios, Confidence Level) in the future, we will provide separate guidance at that time.
 - ✓ There will be no changes to Base IM Parameter File (BPF) and Add-on charge Parameter File (APF).
- The specification document for the new file layout of VPF is scheduled to be released by January 2024.

2. Outline of Each Change ② VMA Software Upgrade

- We will provide an updated version (v2.0) of VMA that is compatible with VPF in the new layout. **We request all VMA users to replace their current version with the updated version.**

- ✓ Regardless of the usage mode (GUI/CLI/API), margin calculation requires the updated version of VMA starting from June 10.
- ✓ Please note that the current version of VMA (v1.0) cannot load VPF in the new layout.

*We plan to provide the converted version of VPF, which was distributed for production before the layout change, so that margin calculation for past dates can be performed using the updated version of VMA.

	~ June 7, 2024 (Fri)	June 10, 2024 (Mon) ~
VMA (v1.0)	○	× (VMA1.0 cannot be used hereafter)
VMA (v2.0)	× (VPF in the new layout, which is compatible with VMA v2.0, is provided in a sequential manner.)	○

- The details regarding the distribution of VPF for past dates converted to the new layout, as well as the publication of updated version of VMA, are scheduled to be announced by January 2024.

2. Outline of Each Change ③ VMA Functional Improvement

- VMA functional improvement will be implemented as below for better usability.
- Usage of all new functionalities is optional.
- The table below shows availability of each functionality per usage mode.

Change	Usage Mode		
	API	CLI	GUI
<ul style="list-style-type: none"> ❑ Add “error position skip mode”. <ul style="list-style-type: none"> ❑ If the error position skip mode is specified, it allows to skip over any error records within position files (only the Position Information section) and continue with the processing. ❑ If the mode is not specified, the behavior will remain as it was before (i.e., processing will be canceled if there are any error records). 	○	N/A	N/A
<ul style="list-style-type: none"> ❑ Add “return base date of input files” API. <ul style="list-style-type: none"> ❑ An API that returns the base date of input files loaded into the memory is added. 	○	N/A	N/A
<ul style="list-style-type: none"> ❑ Add characters allowed in position files. <ul style="list-style-type: none"> ❑ The fields below in position files (csv) (for GUI/CLI) and position data (json) (for API) allow input of alphanumeric characters as well as <u>symbols including spaces</u>. <ul style="list-style-type: none"> • id (assigned to omnibus clients) • AccountID (combination of a 5-digit trading participant code and an account name for use by the Clearing System) 	○	○	○

2. Outline of Each Change ④ Supported OS and Java Change

- For VMA CLI/API versions, the supported versions will be changed as shown in the table below, based on the expired versions no longer supported and the newly added versions by Red Hat.
- There is no update related to VMA GUI version.
- To start the software, a supported Java needs to be installed on the operating system.

OS/Java	Version		GUI (reference)	CLI	API
OS	Windows Client Enterprise	Windows10 (64-bit version) (*1)	○	○	○
		Windows11	○	○	○
	Windows Server Standard	Windows Server 2016	×	○	○
		Windows Server 2019	×	○	○
		Windows Server 2022	×	○	○
	Red Hat Enterprise Linux7	7.7	×	○	○
		7.9	×	○	○
	Red Hat Enterprise Linux8	8.2	×	○→×	○→×
		8.4	×	○→×	○→×
		8.6	×	×	×
		8.8	×	×	×
	Red Hat Enterprise Linux9	9.0	×	×	×
		9.2	×	×	×
Java	JRE	8 (64-bit version) (*2)	○	○	○
		11	○	○	○
		17	○	○	○

(*1) Windows 10 Enterprise (32-bit) is not supported.

(*2) JRE 8 (32-bit version) is not supported.

(○: Supported, ×: Not supported)

II. Timeline, etc.



1. Whole Timeline

- Scheduled go-live date is June 10, 2024 (Mon).
- Timeline up to go-live is as outlined below:

	2023	2024					
	12	1	2	3	4	5	6
Milestone		★ VaR Margin Calculation Software Ver2.0 Publication					★ Go-live
Document Publication Timing	★Outline of Changes (this material)	★Overview of VaR Margin Calculation Software (Ver.2.0) and Set of Connection Specifications (Ver.2.0)					
(Reference) Other				JPX Prime 150 Index Futures and Weekly Contracts on Electricity Futures Go-Live ★March 18			

2. Document Disclosure and Software Publication Schedule

- Each document and software are published around January 2024.
- the software and specification documents will be posted on the JSCC Website.
- VaR Margin Calculation Software (API/CLI) will be placed on a dedicated page for API/CLI users.

#	Category	Document, etc.	Location	Publication Timing
1	VaR Margin Calculation Software Specification documents	Overview of VaR Margin Calculation Software version2.0	JSCC Website	Around January 2024
		VaR Margin Calculation Software Connection Specifications version2.0 (GUI/CLI/API) (*)	JSCC Website (For CLI and API, dedicated page)	
2	VaR Margin Calculation Software	VaR Margin Calculation Software version2.0 (GUI/CLI/API) (*)	JSCC Website (For CLI and API, dedicated page)	

(*) API version will be made available only to the users executed the VMA API utilization agreement.