

VaR Margin Calculation Software

Attachment to Connection Specifications



will be effective from June 2024

Version 2.0

Japan Securities Clearing Corporation

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Revision History

#	Date of Revision	Version	Section	Description of Revision
1	June 24, 2022	Draft		First release
2	Nov 1, 2022	1.0	1-2. VPF Format Details	Changed "1(HSRRATIO)" to "1(HSRATIO)"
3			3-2. APF Format Details	Revised number to be populated from positive decimap to decimal
4			3-2. APF Format Details	Updated typo (only for Japanese)
5			4-1.Position Data csv Outline 4-3. Position Data json Outline	Added the case where margin result is not output
6			4-2. Position Data csv Details	Updated NakedLongQuantity and NakedShortQuantity are preferred if NetPosition is 0
7			4-3. Position Data json Outline 5-3. Calc Result json Outline	Added the JSON schema is provided.
8			5-2. Calc Result csv Details	Changed the silo name for ODEX
9	Mar 17, 2023	1.1	1-2.VPF Format Details	Updated "Number of Param" attribute
10			2-2.BPF Format Details 3-2.APF Format Details 4-2. Position Data csv Details	Updated conditions to use Contract Month code of Futures in "Underlying Period Code"
11			4-1. Position Data csv Outline 4-3. Position Data json Outline	Referred to Application Specification where details of characters allowed for use are located
12			2-2.BPF Format Details 3-2.APF Format Details 4-2. Position Data csv Details	Product name change Nikkei 225 Weekly Options → Nikkei 225 Mini Options
13	Oct 31, 2023	1.2	2-1. Outline of BPF Format	Added the description of file compression during BPF delivery Added the description of handling after the suspension of RN Prime Index Futures trading
14			2-2. BPF Format Details	Added the description of Contract Period Code for electricity futures (weekly) is in the format of 'YYYYMMW'
15	Jan 30, 2024	2.0	1-2. VPF Format Details	Added "Level" and "Aggregate Group" items to Record Type 0.
16			4-2. Position Data csv Details	For the following two items in the data section (Position), the characters that can be entered have been changed from one-byte alphanumeric characters only to one-byte alphanumeric symbols (including spaces) id AccountID
17			4-2. Position Data csv Details	Updated the description for the following three items in a position file NetPosition NakedLongQuantity NakedShortQuantity
18			4-3. Position Data json Outline	Added "OpenAPI" in "2. Data Structure"
19			4-4. Position Data json Details	For the following two items in the position, the characters that can be entered have been changed from one-byte alphanumeric characters only to one-byte alphanumeric symbols (including spaces) id AccountID

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1. VPF Format

1-1. Outline of VPF Format

1. File Outline

- The file name is as follows.
VaRParameter_yyyymmdd_hhmm.csv
The "yyymmdd" part of the file name takes the date of file output.
The following numerical numbers are set in "hhmm" part of the file name according to the margin type.

Margin Type	Number to be set
Intraday Margin	1100
Emergency Margin	1300
EOD Margin	1600

2. File Format

- Data is in CSV format.
- The delimiter is a comma.
- The header is not included.
- A line with "#" at its head is regarded as a comment. "#" is followed by item names.
- The following applies to the character code.
Encoding: UTF-8 without BOM
Newline code: CRLF

3. Record Structure

- This file consists of multiple types of records. The number at the head of a record row indicates its type.
- All types of records are lined up and output in the same file.
- Record types are shown in the table below. The layout differs from type to type.
- Layout and item details are described in "1-2. VPF Format Details".

Record Type	Description	Explanation
Record type 0	VAR	VaR calculation-related setup such as confidence interval
Record type 1	HSRATIO	HS-VaR Aggregation Group offset parameter
Record type 2	ASRATIO	AS-VaR Aggregation Group offset parameter

1-2. VPF Format Details

No	Record Type	Item (Name in Japanese)	Item (Name in English)	Attribute	Description	Example
1	0(VAR)	レコードID	Record ID	string	Record type	0
2	0(VAR)	レコード名	Record Name	string	Description of record type	VAR
3	0(VAR)	階層Level	Level	string	Aggregation Group layer	L02
4	0(VAR)	集計グループ	Aggregation Group	string	Aggregation Group name	ENG_FU
5	0(VAR)	信頼区間	Confidence Level	double	Confidence interval used for HS-VaR calculation (positive decimal) (in %) For example, if the confidence interval is 99.75 %, enter 99.75.	99.75
6	0(VAR)	ストレスシナリオ数	Stress Scenario Number	int	The number of stress scenarios used for VaR calculation	4
7	1(HSRRATIO)	レコードID	Record ID	string	Record type	1
8	1(HSRRATIO)	レコード名	Record Name	string	Description of record type "HSRATIO": HS-VaR	HSRATIO
9	1(HSRRATIO)	階層Level	Level	string	Aggregation Group layer	L02
10	1(HSRRATIO)	集計グループ	Aggregation Group	string	Aggregation Group name	ENG_FU
11	1(HSRRATIO)	親集計グループ	Parent Aggregation Group	string	Parent Aggregation Group of Aggregation Group	ENG
12	1(HSRRATIO)	タイプ	Type	string	"OFFSET_LIMIT": Aggregation Group with Children With the a and b parameters of offset-limiting expression "MAX(Y-(Y-X)a, X, bY)" "GROUP": Aggregation Group without Children	OFFSET_LIMIT
13	1(HSRRATIO)	パラメータ数	Number of Param	string	The number of parameters set for Aggregation Group In the case of OFFSET_LIMIT: 2 In the case of GROUP: 0	2
14	1(HSRRATIO)	パラメータ名1	Param Name 01	string		a
15	1(HSRRATIO)	パラメータ値1	Param Value 01	double	Decimal between 0 and 1	0.6
16	1(HSRRATIO)	パラメータ名2	Param Name 02	string		b
17	1(HSRRATIO)	パラメータ値2	Param Value 02	double	Decimal between 0 and 1	0.4
18	2(ASRATIO)	レコードID	Record ID	string	Record type	2
19	2(ASRATIO)	レコード名	Record Name	string	Description of record type "ASRATIO": AS-VaR	ASRATIO
20	2(ASRATIO)	階層Level	Level	string	Aggregation Group layer	L02
21	2(ASRATIO)	集計グループ	Aggregation Group	string	Aggregation Group name	ENG_FU
22	2(ASRATIO)	親集計グループ	Parent Aggregation Group	string	Parent Aggregation Group of Aggregation Group	ENG
23	2(ASRATIO)	タイプ	Type	string	"OFFSET_LIMIT": Aggregation Group with Children With the a and b parameters of offset-limiting expression "MAX(Y-(Y-X)a, X, bY)" "GROUP": Aggregation Group without Children	OFFSET_LIMIT
24	2(ASRATIO)	パラメータ数	Number of Param	int	The number of parameters set for Aggregation Group In the case of OFFSET_LIMIT: 2 In the case of GROUP: 0	2
25	2(ASRATIO)	パラメータ名1	Param Name 01	string		a
26	2(ASRATIO)	パラメータ値1	Param Value 01	double	Decimal between 0 and 1	0.6
27	2(ASRATIO)	パラメータ名2	Param Name 02	string		b
28	2(ASRATIO)	パラメータ値2	Param Value 02	double	Decimal between 0 and 1	0.4

2. BPF Format

2-1. Outline of BPF Format

1. File Outline

- BPF is generated as 6 CSV format files. Each file holds data of a different product type.
- The table below shows the names and contents of the output files.

File Name	File Contents	Note
BPF_JGB_yyyymmdd_hhmm.csv	File for JGB Futures and OP calculation	
BPF_IDX_yyyymmdd_hhmm.csv	File for Index Futures and OP calculation	Excl. Flex instruments (Futures/Option) and RN Prime Index Futures
BPF_SSO_yyyymmdd_hhmm.csv	File for Securities OP calculation	Excl. Flex Option instruments
BPF_COM_yyyymmdd_hhmm.csv	File for Commodity Futures and OP calc.	Incl. Commodity Futures/Option instruments listed at OSE or TOCOM
BPF_SPE_yyyymmdd_hhmm.csv	File for specific instruments calculation	Incl. Flex instruments (Futures/Option) and RN Prime Index Futures
BPF_ODEX_yyyymmdd_hhmm.csv	File for ODEX Futures calculation	Incl. Futures/Option instruments listed at ODEX

The "yyymmdd" part of the file name takes the date of file output.

The following numerical numbers are set in "hhmm" part of the file name according to the margin type.

Records regarding the ceased trading of RN Prime Index Futures will be recorded for the time being.

Margin Type	Number to be set
Intraday Margin	1100
Emergency Margin	1300
EOD Margin	1600
Margin for Next Day	1800

2. File Format

- Data is in CSV format.
- The delimiter is a comma.
- The header is not included.
- A line with "#" at its head is regarded as a comment. "#" is followed by item names.
- The following applies to the character code.

Encoding: UTF-8 without BOM

Newline code: CRLF
- The files will be compressed into ZIP format and delivered.

3. Record Structure

- This file consists of multiple types of records. The number at the head of a record row indicates its type.
- All types of records are lined up and output in the same file.
- Record types are shown in the table below. The layout differs from type to type.
- Layout and item details are described in "2-2. BPF Format Details".

Record Type	Description	Explanation
Record type 0	DATE	Base date of the file
Record type 1	INSTRUMENT	Margin calculation method of the instrument (HS-VaR or AS-VaR)
Record type 2	PRICE	Settlement Price, etc. of each instrument
Record type 3	HSPL	UnitPnL of each instrument for HS-VaR
Record type 4	BPL	BPL of each Aggregation Group for AS-VaR
Record type 5	ADJUSTMULTIPLIER	Adjustment Multiplier of each instrument for AS-VaR
Record type 6	SFR	SFR of each product group for AS-VaR
Record type 7	ASPL	UnitPnL of each instrument for AS-VaR

2-2. BPF Format Details

No	Record Type	Item (Name in Japanese)	Item (Name in English)	Attribute	Description	Example
1	0(DATE)	レコードID	Record ID	string	Record type	0
2	0(DATE)	レコード名	Record Name	string	Description of record type	DATE
3	0(DATE)	日付	Date	string	In YYYYMMDD format	20210128
4	0(DATE)	ファイルタイプ	File Type	string	File provision timing "S": EOD calculation (Settlement Price) "I": Intraday margin calculation (Price at intraday margin) "E": Emergency margin calculation (Price at emergency margin) "N": Margin for next day (for Next Day)	S
5	1(INSTRUMENT)	レコードID	Record ID	string	Record type	1
6	1(INSTRUMENT)	レコード名	Record Name	string	Description of record type	INSTRUMENT
7	1(INSTRUMENT)	銘柄コード	Instrument Code	string	Identification code for Futures and Options Transactions (9-digit code)	136609020
8	1(INSTRUMENT)	商品グループコード	Product Group Code	string	"See "Commodity Codes for BPF and APF".	NK225
9	1(INSTRUMENT)	商品コード	Product Code	string	"See "Commodity Codes for BPF and APF".	NK225E
10	1(INSTRUMENT)	商品タイプ	Contract Type	string	"FUT": Futures "OOF": Option on Futures "OOP": Option on Physical	OOP
11	1(INSTRUMENT)	プット/コール	Put/Call Type	string	"P": Put "C": Call Leave blank for Futures.	C
12	1(INSTRUMENT)	限月コード	Contract Period Code	string	Input Contract Month code YYYYMM for Futures and Option, YYYYMMDD for Flex Futures and Flex Option, and YYYYMMW for Nikkei 225 Mini Option and Electricity Futures (Weekly).	202012
13	1(INSTRUMENT)	原資産限月コード	Underlying Period Code	string	Input OP Contract Month code YYYYMM (YYYYMMDD for Flex Option, YYYYMMW for Nikkei 225 Mini Option, Contract Month code of the Futures product for Option on JGB Futures or Options on Gold Futures). Leave blank for Futures.	202012
14	1(INSTRUMENT)	権利行使価格	Strike Price	string	Option strike price with 4 decimal places Leave blank for Futures.	22000.0000
15	1(INSTRUMENT)	取引単位	Contract Size	string	Contract size of the instrument	1000
16	1(INSTRUMENT)	集計グループ	Aggregation Group	string	Aggregation scope Example: "IDX": Index group, "JGB": Government bond group, "ENG_EL": Electricity Futures group in energy sector, etc.	IDX
17	1(INSTRUMENT)	計算方式フラグ	Calculation Method Flag	string	"H": HS-VaR "A": AS-VaR	H
18	2(PRICE)	レコードID	Record ID	string	Record type	2
19	2(PRICE)	レコード名	Record Name	string	Description of record type	PRICE
20	2(PRICE)	銘柄コード	Instrument Code	string	Identification code for Futures and Options Transactions (9-digit code)	999999999
21	2(PRICE)	価格	Price	double	Price (both integer and decimal possible)	150.12
22	3(HSPL)	レコードID	Record ID	string	Record type	3
23	3(HSPL)	レコード名	Record Name	string	Description of record type "HSPL": HS-VaR	HSPL
24	3(HSPL)	銘柄コード	Instrument Code	string	Identification code for Futures and Options Transactions (9-digit code)	999999999
25	3(HSPL)	シナリオID	Scenario ID	string	Unit PnL scenario ID	20210610
26	3(HSPL)	シナリオ種類	Scenario Type	string	"H": Historical scenario "S": Stress scenario	H
27	3(HSPL)	シナリオ損益	Unit PnL	long	Scenario PnL per unit quantity (integer)	150
28	4(BPL)	レコードID	Record ID	string	Record type	4
29	4(BPL)	レコード名	Record Name	string	Description of record type	BPL
30	4(BPL)	階層Level	Level	string	Aggregation Group layer	L01
31	4(BPL)	集計グループ	Aggregation Group	string	Aggregation scope Example: "IDX": Index group, "JGB": Government bond group, etc.	IDX
32	4(BPL)	BasePL	BPL	long	BasePL of a typical instrument of the Aggregation Group (integer: 0 or greater)	99999
33	5(ADJUSTMULTIPLIER)	レコードID	Record ID	string	Record type	5
34	5(ADJUSTMULTIPLIER)	レコード名	Record Name	string	Description of record type	ADJUSTMULTIPLIER
35	5(ADJUSTMULTIPLIER)	銘柄コード	Instrument Code	string	Identification code for Futures and Options Transactions (9-digit code)	999999999
36	5(ADJUSTMULTIPLIER)	Level1集計グループ	Level1 Aggregation Group	string	Level 1 layer Aggregation Group	ENG
37	5(ADJUSTMULTIPLIER)	Level1用建玉調整係数	Level1 Adjustment Multiplier	double	Multiplier to adjust a Level 1 layer instrument position to a typical instrument position (positive decimal)	0.5
38	5(ADJUSTMULTIPLIER)	Level2集計グループ	Level2 Aggregation Group	string	Level 2 layer Aggregation Group	ENG_EL
39	5(ADJUSTMULTIPLIER)	Level2用建玉調整係数	Level2 Adjustment Multiplier	double	Multiplier to adjust a Level 2 layer instrument position to a typical instrument position (positive decimal)	0.5
40	5(ADJUSTMULTIPLIER)	Level3集計グループ	Level3 Aggregation Group	string	Level 3 layer Aggregation Group	ENG_EL_TE
41	5(ADJUSTMULTIPLIER)	Level3用建玉調整係数	Level3 Adjustment Multiplier	double	Multiplier to adjust a Level 3 layer instrument position to a typical instrument position (positive decimal)	1
42	5(ADJUSTMULTIPLIER)	Level4集計グループ	Level4 Aggregation Group	string	Level 4 layer Aggregation Group	ENG_EL_TE_TEBL
43	5(ADJUSTMULTIPLIER)	Level4用建玉調整係数	Level4 Adjustment Multiplier	double	Multiplier to adjust a Level 4 layer instrument position to a typical instrument position (positive decimal)	1
44	5(ADJUSTMULTIPLIER)	Level5集計グループ	Level5 Aggregation Group	string	(reserved for possible future use)	
45	5(ADJUSTMULTIPLIER)	Level5用建玉調整係数	Level5 Adjustment Multiplier	double	(reserved for possible future use)	
46	6(SFR)	レコードID	Record ID	string	Record type	6
47	6(SFR)	レコード名	Record Name	string	Description of record type	SFR
48	6(SFR)	商品グループコード	Product Group Code	string	Product Group code	TWPL
49	6(SFR)	スプレッド変動リスク	Spread Fluctuation Risk	long	Spread fluctuation risk of Product Group (integer: 0 or greater)	9999
50	7(ASPL)	レコードID	Record ID	string	Record type	7
51	7(ASPL)	レコード名	Record Name	string	Description of record type "ASPL": AS-VaR	ASPL
52	7(ASPL)	銘柄コード	Instrument Code	string	Identification code for Futures and Options Transactions (9-digit code)	999999999
53	7(ASPL)	シナリオID	Scenario ID	string	Unit PnL scenario ID	#01
54	7(ASPL)	シナリオ損益	Unit PnL	long	Scenario PnL per unit quantity (integer)	11314
55	7(ASPL)	シナリオデルタ	Scenario Delta	double	Scenario delta (decimal)	0.8

3. APF Format

3-1. Outline of APF Format

1. File Outline

- The file name is as follows.
APF_yyyymmdd_hhmm.csv
The "yyymmdd" part of the file name takes the date of file output.
The following numerical numbers are set in "hhmm" part of the file name according to the margin type.

Margin Type	Number to be set
Intraday Margin	1100
Emergency Margin	1300
EOD Margin	1600

2. File Format

- Data is in CSV format.
- The delimiter is a comma.
- The header is not included.
- A line with "#" at its head is regarded as a comment. "#" is followed by item names.
- The following applies to the character code.
Encoding: UTF-8 without BOM
Newline code: CRLF

3. Record Structure

- This file consists of multiple types of records. The number at the head of a record row indicates its type.
- All types of records are lined up and output in the same file.
- Record types are shown in the table below. The layout differs from type to type.
- Layout and item details are described in "3-2. APF Format Details".

Record Type	Description	Explanation
Record Type 0	Date	Base date of the file
Record Type 1	BPL	BPL information of each Aggregation Group
Record Type 2	Threshold	Base quantity of Futures concentration, OP concentration and liquidity of each Aggregation Group
Record Type 3	Ratio	Offset parameter of Aggregation Group
Record Type 4	AdjustmentMultiplier	Aggregation Group and its Adjustment Multiplier set for each instrument

3-2. APF Format Details

No	Record Type	Item (Name in Japanese)	Item (Name in English)	Attribute	Description	Example
1	0(Date)	レコードID	Record ID	string	Record type	0
2	0(Date)	レコード名	Record Name	string	Description of record type	DATE
3	0(Date)	日付	Date	string	In YYYYMMDD format	20210128
4	1(BPL)	レコードID	Record ID	string	Record type	1
5	1(BPL)	レコード名	Record Name	string	Description of record type	BPL
6	1(BPL)	階層Level	Level	string	Aggregation Group layer	L03
7	1(BPL)	集計グループ	Aggregation Group	string	Aggregation scope Example: "IDX": Index group, "JGB": Government bond group, etc.	ENG_EL_TE_TEPL
8	1(BPL)	BasePL	BPL	long	BasePL of a typical instrument of the Aggregation Group (integer: 0 or greater)	6000
9	2(Threshold)	レコードID	Record ID	string	Record type	2
10	2(Threshold)	レコード名	Record Name	string	Description of record type	THRESHOL
11	2(Threshold)	階層Level	Level	string	Aggregation Group layer	L02
12	2(Threshold)	集計グループ	Aggregation Group	string	Aggregation scope Example: "IDX": Index group, "JGB": Government bond group, etc.	ENG_EL_TE_TEPL
13	2(Threshold)	基準額コード	Threshold Code	string	"LIQ": Liquidity "FCON": Futures concentration "OCON": OP concentration	LIQ
14	2(Threshold)	基準額	Threshold	long	Base quantity (quantity processible in one day) x holding period	31000
15	2(Threshold)	システム値	System Value	string	Value for system-internal use	10
16	3(Ratio)	レコードID	Record ID	string		3
17	3(Ratio)	レコード名	Record Name	string	Description of record type	RATIO
18	3(Ratio)	階層Level	Level	string	Aggregation Group layer	L02
19	3(Ratio)	集計グループ	Aggregation Group	string	Aggregation Group name	ENG_FU
20	3(Ratio)	親集計グループ	Parent Aggregation Group	string	Aggregation Group of Parent Aggregation Group	ENG
21	3(Ratio)	タイプ	Type	string	"OFFSET_LIMIT": Aggregation Group with Children With the a and b parameters of offset-limiting expression "MAX(Y-(Y-X)a, X, bY)" "GROUP": Aggregation Group without Children	OFFSET_LIMIT
22	3(Ratio)	パラメータ数	Number of Param	int	The number of parameters set for Aggregation Group In the case of OFFSET_LIMIT: 2 In the case of GROUP: 0	2
23	3(Ratio)	パラメータ名1	Param Name 01	string		a
24	3(Ratio)	パラメータ値1	Param Value 01	double	Decimal between 0 and 1	0.6
25	3(Ratio)	パラメータ名2	Param Name 02	string		b
26	3(Ratio)	パラメータ値2	Param Value 02	double	Decimal between 0 and 1	0.4
27	4(AdjustmentMultiplier)	レコードID	Record ID	string	Record type	4
28	4(AdjustmentMultiplier)	レコード名	Record Name	string	Description of record type "ADJUSTMULTIPLIER": Position adjustment multiplier	ADJUSTMULTIPLIER
29	4(AdjustmentMultiplier)	商品グループコード	Product Group Code	string	See "Commodity Codes for BPF and APF".	TEBL
30	4(AdjustmentMultiplier)	商品コード	Product Code	string	See "Commodity Codes for BPF and APF".	TEBLF
31	4(AdjustmentMultiplier)	商品タイプ	Contract Type	string	"FUT": Futures "OOF": Option on Futures "OOP": Option on Physical	FUT
32	4(AdjustmentMultiplier)	プット/コール	Put/Call Type	string	"P": Put "C": Call Leave blank for Futures.	
33	4(AdjustmentMultiplier)	限月コード	Contract Period Code	string	Input Contract Month code YYYYMM for Futures and Option, YYYYMMDD for Flex Futures and Flex Option, and YYYYMMW for Nikkei 225 Mini Option.	202112
34	4(AdjustmentMultiplier)	原資産限月コード	Underlying Period Code	string	Input OP Contract Month code YYYYMM (YYYYMMDD for Flex Option, YYYYMMW for Nikkei 225 Mini Option, Contract Month code of the Futures product for Option on JGB Futures or Options on Gold Futures). Leave blank for Futures.	
35	4(AdjustmentMultiplier)	権利行使価格	Strike Price	string	Option strike price with 4 decimal places Leave blank for Futures.	
36	4(AdjustmentMultiplier)	銘柄コード	Instrument Code	string	Identification code for Futures and Options Transactions (9-digit code)	1661200B3
37	4(AdjustmentMultiplier)	Level1集計グループ	Level1 Aggregation Group	string	Level 1 layer Aggregation Group	ENG
38	4(AdjustmentMultiplier)	Level1用建玉調整係数	Level1 Adjustment Multiplier	double	Multiplier to adjust a Level 1 layer instrument position to a typical instrument position (decimal)	0.85
39	4(AdjustmentMultiplier)	Level2集計グループ	Level2 Aggregation Group	string	Level 2 layer Aggregation Group	ENG_EL
40	4(AdjustmentMultiplier)	Level2用建玉調整係数	Level2 Adjustment Multiplier	double	Multiplier to adjust a Level 2 layer instrument position to a typical instrument position (decimal)	0.9
41	4(AdjustmentMultiplier)	Level3集計グループ	Level3 Aggregation Group	string	Level 3 layer Aggregation Group	ENG_EL_TE
42	4(AdjustmentMultiplier)	Level3用建玉調整係数	Level3 Adjustment Multiplier	double	Multiplier to adjust a Level 3 layer instrument position to a typical instrument position (decimal)	1
43	4(AdjustmentMultiplier)	Level4集計グループ	Level4 Aggregation Group	string	Level 4 layer Aggregation Group	ENG_EL_TE_TEBL
44	4(AdjustmentMultiplier)	Level4用建玉調整係数	Level4 Adjustment Multiplier	double	Multiplier to adjust a Level 4 layer instrument position to a typical instrument position (decimal)	1
45	4(AdjustmentMultiplier)	Level5集計グループ	Level5 Aggregation Group	string	Level 5 layer Aggregation Group	
46	4(AdjustmentMultiplier)	Level5用建玉調整係数	Level5 Adjustment Multiplier	double	Multiplier to adjust a Level 5 layer instrument position to a typical instrument position (decimal)	

4. Position Data Format

4-1. Outline of Position Data File (csv) Format

1. File Outline

- The file name can be decided at your discretion.

2. File Format

- This file consists of a header part and a data part.
- Data is in CSV format.
- The delimiter is a comma.
- One-line record showing the names of columns at the head is required for each of the header and data parts.
- The following applies to the character code.
 - Encoding: UTF-8 without BOM
 - Newline code: CRLF
- A line break is also required at the end of the last line of the file.

3. Record Structure

- One record in the data part indicates an instrument position of account information.
- Keys to account information are "ClearingFirmID" and "AccountID" (in the case of an omnibus account, "id" in addition).
- The key to instrument information is "JSCCInstrumentCode". When it is left blank, "ProductCode", "ProductType", "ContractPeriodCode", "PutCallIndicator", "Strike" and "UnderlyingPeriodCode" are the keys.
- Layout and item details are described in "4-2. Details of Position Data File (csv) Format".

4. Points to Note

- A net position and a gross position cannot be included in one record.
If included in one record, margin calculation is performed only for the net position of this particular instrument of the account. The quantity of the gross position is regarded as 0 (zero).
- If a file contains net position records and gross position records specifying the same account and instrument information, margin calculation is performed only for the total net positions of these records with regard to this particular instrument of the account. The quantity of the gross long position and that of the gross short position are regarded as 0 (zero).
- Should there be net and gross positions of the same instrument held by one account, it is recommended that separate account information be set and a separate record be entered for each position type.
- Margin result is not output for the silo where NetPosition, NakedLongQuantity and NakedShorQuantity are set to null or 0 for all positions per account.
- Refer to the "Note" section of the relevant Application Specification for details of characters allowed for use in the position data file.
Some items are provided with format requirements. When applicable, enter the item in the specified format.

4-2. Details of Position Data File (csv) Format

Category	No	Item (Name in Japanese)	Item (Name in English)	Mandatory/Optional	Conditional	Max digit	Attribute	Description	(Example 1)	(Example 2)
Header Part (Info)	1	リクエストID	RequestID	Optional	-	100	string	No input required. Can be used as an input field for user-defined ID, etc. as needed		AA1111
	2	バージョン	Version	Optional	-	10	string	No input required. Can be used as an input field for software version information, etc. as needed		1.0
	3	送信時刻	SentTime	Optional	-	24	string	No input required. Can be used as an input field for time sent, etc. as needed YYYY-MM-DDTHH:MM:SS SSSZ		2021-12-08T17:43:09.422Z
	4	日付	BusinessDate	Mandatory	-	10	string	Input margin calculation base date in "YYYY-MM-DD" format.	2021-12-08	2021-12-08
	5	サイクルコード	CycleCode	Optional	-	5	string	No input required. Can be used as an input field for margin calculation timing (ITD, EMG, EOD), etc. as needed	EOD	EOD
	6	処理番号	RunNumber	Optional	-	3	string	No input required. Can be used as an input field for process numbering, etc. as needed		3
	7	時刻	Time	Optional	-	8	string	No input required. Can be used as an input field for the time of JSCC parameter file generation, etc. in "HH-MM:SS" format as needed		17:43:09
Data Part (Position)	8	オムニバス顧客ID	id	Conditional Mandatory	Input mandatory when omnibus clients exist	100	string	ID set for customer identification at software users' discretion Input half-width alphanumeric characters only.	A1	A1
	9	通貨	Currency	Mandatory	-	3	string	Currency to be cleared in Only JPY can be specified	JPY	JPY
	10	カスタマーアカウントタイプ	CustomerAccountType	Optional	-	15	string	No input required. Can be used as an input field for account type (MEMBER, HEDGER), etc. as needed		HEDGE
	11	オムニバス種別	OmnibusIndicator	Optional	-	3	string	No input required. Can be used as an input field for the distinction of whether or not an omnibus account (YES, No), etc. as needed		YES
	12	親ポートフォリオID	ParentPortfolioID	Optional	-	100	string	No input required. Can be used as an input field for a memo, comments, etc. as needed.		
	13	メモ	Memo	Optional	-	100	string	No input required. Can be used as an input field for a memo, comments, etc. as needed.		
	14	清算参加者コード	ClearingFirmID	Mandatory	-	100	string	Input field for 5-digit clearing member code In the case of use by a non-clearing member, the code can be set at the discretion of the library user. Input half-width alphanumeric characters only.	99999	99999
	15	取引参加者コード & アカウントコード	AccountID	Mandatory	-	100	string	Input the combination of a 5-digit trading participant code and an account name for use by the Clearing System (e.g., when the member code is 99999 and the account name is CLIENT, input "99999CLIENT"). In the case of use by a non-clearing member, the code can be set at the discretion of the library user. Input half-width alphanumeric characters only.	99999CLIENT	99999CLIENT
	16	アカウント名	AccountName	Optional	-	100	string	No input required. Can be used as an input field for account attribute, etc. as needed.		DomesticClientAccount
	17	オリジンタイプ	OriginType	Optional	-	10	string	No input required. Can be used as an input field for account attribute (CUSTOMER, HOUSE), etc. as needed.		CUSTOMER
	18	ファンド区別タイプ	FundSegregationType	Optional	-	10	string	No input required. Can be used as an input field for a memo, comments, etc. as needed.		
	19	カスタマーアカウントタイプ2	CustomerAccountType2	Optional	-	15	string	No input required. Can be used as an input field for a memo, comments, etc. as needed.		
	20	ネットポジション数	NetPosition	Conditional Mandatory	Input mandatory for a net position	10	long(can be negative)	If the calculation is based on net positions , input the number of positions (long position quantity - short position quantity). If "0" is input, the calculation is triggered as a gross position and No. 21 and 22 are applied.	1	1
	21	グロス用ロングポジション数	NakedLongQuantity	Conditional Mandatory	Input mandatory when a gross long position exists	10	long(cannot be negative)	If the calculation is based on net position , no input required. When the member's position reporting to JSCC is incomplete and the total amount of margin requirements in the account should correspond with the amount calculated by Clearing System (i.e. when the unreported result of gross margin calculation by Clearing System should be considered), input the number of the said unreported long positions. If there is input data except 0 in No. 20, No.20 data takes precedence. If No. 20 is "0" or empty, this quantity is applied for the calculation. If a positive integer is put in No. 20, this item is skipped for calculation.		
	22	グロス用ショートポジション数	NakedShortQuantity	Conditional Mandatory	Input mandatory when a gross short position exists	10	long(cannot be negative)	If the calculation is base on net positon , no input required. When the member's position reporting to JSCC is incomplete and the total amount of margin requirements in the account should correspond with the amount calculated by Clearing System (i.e. when the unreported result of gross margin calculation by Clearing System should be considered), input the number of the said unreported short positions. If there is input data except 0 in No. 20, the said data takes precedence. If No. 20 is "0" or empty, this quantity is applied for the calculation. If a positive integer is put in No. 20, this item is skipped for calculation.		
	23	清算機関ID	ClearingOrganizationId	Optional	-	5	string	No input required. Can be used as an input field for Clearing House code (JSCC), etc. as needed		JSCC
	24	取引所ID	ExchangeID	Optional	-	5	string	No input required. Can be used as an input field for Exchange code (OSE, TOCOM, ODEX), etc. as needed		OSE
	25	商品コード	ProductCode	Conditional Mandatory	Input of either Nos. 25 to 30 or No. 31 mandatory	10	string	If there is no data in No. 31, input is required. If data is entered in No. 31, No.31 data takes precedence. See "Commodity Codes for BPF and APF".		
	26	商品タイプ	ProductType	Conditional Mandatory		3	string	If there is no data in No. 31, input is required. If data is entered in No. 31, No. 31 data takes precedence. Enter the following information when inputting. "FUT": Futures "OOF": Option on Futures "OOP": Option on Physical		
	27	限月コード	ContractPeriodCode	Conditional Mandatory		8	string	If there is no data in No. 31, input is required. If data is entered in No. 31, No.31 data takes precedence. Enter Contract Month code YYYYMM for Futures and Option, YYYYMMDD for Flex Futures and Flex Option, and YYYYMMMW for Nikkei 225 Mini Option and Electricity Futures (Weekly) when inputting.		
	28	プット/コール	PutCallIndicator	Conditional Mandatory		1	string	If there is no data in No. 31, input is required. If data is entered in No. 31, No.31 data takes precedence. Enter the following information when inputting. "P": Put "C": Call Leave blank for Futures.		
	29	権利行使価格	Strike	Conditional Mandatory		10	string	If there is no data in No. 31, input is required. If data is entered in No. 31, No. 31 data takes precedence. Enter Option strike price with 4 decimal places when inputting. Leave blank for Futures.		
	30	原資産限月コード	UnderlyingPeriodCode	Conditional Mandatory		8	string	If there is no data in No. 31, input is required. If data is entered in No. 31, No. 31 data takes precedence. Enter OP Contract Month code YYYYMM (YYYYMMDD for Flex Option, YYYYMMMW for Nikkei 225 Mini Option, Contract Month code of the Futures product for Option on JGB Futures or Options on Gold Futures) when inputting. Leave blank for Futures.		
	31	銘柄コード	JSCCInstrumentCode	Conditional Mandatory		9	string	Enter a 9-digit identification code for Futures and Options Transactions. Input required when Nos. 25 to 30 are left blank. When both Nos. 25 to 30 and No. 31 have data, No. 31 data takes precedence.	169120019	169120019

Note: When optional fields No. 8 onwards are used for data input, make sure that account information is consistent throughout and so is instrument information. When inconsistent information is entered, it may not be integrated into an output file, or an unexpected margin requirement calculation result may be output.

Inappropriate case

Example 1.

An input record with "OSE" in No. 24 and another with "TOCOM" in No. 24 exist, with both having "169120019" (Nikkei 225 mini Futures of contract month December 2024 listed at OSE) in No. 31.

Example 2.

An input record with "YES" in No.11 and another with "NO" in No. 11 exist, with both having "99999CLIENT" (Client account of member code 99999) in No. 15.

4-3. Outline of Position Data (json) Format

1. Data Format

- Data is in JSON format.
- The following applies to the character code.
Encoding: UTF-8 without BOM

2. Data Structure

- Position information per account and per instrument is included in an object and an array of objects is input.
- Keys to account information are "ClearingFirmID" and "AccountID" (in the case of an omnibus account, "id" in addition).
- The key to instrument information is "JSCCInstrumentCode". When it is left blank, "ProductCode", "ProductType", "ContractPeriodCode", "PutCallIndicator", "Strike" and "UnderlyingPeriodCode" are the keys.

- Layout and item details are described in "4-4. Details of Position Data (json) Format".
- JSON schema(vma-jsonschema.json) is provided for the validation.
- [OpenAPI\(vma_openapi.json\)](#) is provided for format check.

3. Points to Note

- A net position and a gross position cannot be included in one object.
If included in one object, margin calculation is performed only for the net position of this particular instrument of the account. The quantity of the gross position is regarded as 0 (zero).
- If an array contains net position objects and gross position objects specifying the same account and instrument information, margin calculation is performed only for the total net positions of the entire data with regard to this particular instrument of the account. The quantity of the gross long position and that of the gross short position are regarded as 0 (zero).
- Should there be net and gross positions of the same instrument held by one account, it is recommended that separate account information be set and a separate object be entered for each position type.
- Margin result is not output for the silo where NetPosition, NakedLongQuantity and NakedShorQuantity are set to null or 0 for all positions per account.
- Refer to the "Note" section of the relevant Application Specification for details of characters allowed for use in the position data file.
Some items are provided with format requirements. When applicable, enter the item in the specified format.

4-4. Details of Position Data (json) Format

No	Item	Item (Name in Japanese)	Mandatory/Optional	Conditional	Max digit	Attribute	Input Validation	(Example 1)	(Example 2)
1	positionData					object			
2	calcInfo					object			
3	RequestID	リクエストID	Optional	-	100	string			AA1111
4	Version	バージョン	Optional	-	10	string			1
5	SentTime	送信時刻	Optional	-	24	string			2021-12-08T17:43:09.422Z
6	BusinessDate	日付	Mandatory	-	10	string	Input Margin Calculation Base Date in "YYYY-MM-DD" format.	2021-12-08	2021-12-08
7	CycleCode	サイクルコード	Optional	-	5	string		EOD	EOD
8	RunNumber	処理番号	Optional	-	3	string			0:00:00
9	Time	時刻	Optional	-	8	string			17:43:09
10	position					array			
11	id	オムニバス顧客ID	Conditional Mandatory	Input mandatory when omnibus clients exist	100	string	Input half-width alphanumeric characters only.	A1	A1
12	Currency	通貨	Mandatory	-	3	string	Only JPY can be specified.	JPY	JPY
13	CustomerAccountType	カスタマーアカウントタイプ	Optional	-	15	string			HEDGE
14	OmnibusIndicator	オムニバス種別	Optional	-	3	string			YES
15	ParentPortfolioID	親ポートフォリオID	Optional	-	100	string			
16	Memo	メモ	Optional	-	100	string			
17	ClearingFirmID	清算参加者コード	Mandatory	-	100	string	Input half-width alphanumeric characters only.	99999	99999
18	AccountID	取引参加者コード&アカウントコード	Mandatory	-	100	string	Input half-width alphanumeric characters only.	99999CLIENT	99999CLIENT
19	AccountName	アカウント名	Optional	-	100	string			DomesticClientAccount
20	OriginType	オリジンタイプ	Optional	-	10	string			CUSTOMER
21	FundSegregationType	ファンド区別タイプ	Optional	-	10	string			
22	CustomerAccountType2	カスタマーアカウントタイプ2	Optional	-	15	string			
23	NetPosition	ネットポジション数	Conditional Mandatory	Input mandatory for a net position	10	long(can be negative)		1	1
24	NakedLongQuantity	グロス用ロングポジション数	Conditional Mandatory	Input mandatory when a gross long position exists	10	long(cannot be negative)			
25	NakedShortQuantity	グロス用ショートポジション数	Conditional Mandatory	Input mandatory when a gross short position exists	10	long(cannot be negative)			
26	ClearingOrganizationId	清算機関ID	Optional	-	5	string			JSCC
27	ExchangeID	取引所ID	Optional	-	5	string			OSE
28	ProductCode	商品コード	Conditional Mandatory	Input of either Nos. 28 to 33 or No. 34 mandatory	10	string			
29	ProductType	商品タイプ	Conditional Mandatory		3	string			
30	ContractPeriodCode	限月コード	Conditional Mandatory		8	string			
31	PutCallIndicator	プット/コール	Conditional Mandatory		1	string			
32	Strike	権利行使価格	Conditional Mandatory		20	string			
33	UnderlyingPeriodCode	原資産限月コード	Conditional Mandatory		8	string			
34	JSCCInstrumentCode	銘柄コード	Conditional Mandatory		9	string		169120019	169120019

Note: When optional fields No. 11 onwards are used for data input, make sure that account information is consistent throughout and so is instrument information. When inconsistent information is entered, it may not be integrated into an output file, or an unexpected margin requirement calculation result may be output.

Inappropriate case

Example 1.

An input record with "OSE" in No. 27 and another with "TOCOM" in No. 27 exist, with both having "169120019" (Nikkei 225 mini Futures of contract month December 2024 listed at OSE) in No. 34.

Example 2.

An input record with "YES" in No.14 and another with "NO" in No. 14 exist, with both having "99999CLIENT" (Client account of member code 99999) in No. 18.

5. Margin Calculation Result Format

5-1. Outline of Margin Calculation Result File (csv) Format

1. File Outline

- The default file name is as follows.
MarginResult_yyyymmddhhmmss_uid.csv
The "yyymmdd" part of the file name takes the date of file output. The "uid" part is provided with a 4-digit random ID.
- The file name can be specified by users.
- When multiple files are output in a short period of time (within 1 second), file name duplication may occur.
Users who wish to absolutely avoid such duplication are urged to specify file names.

2. File Format

- This file consists of a header part and a data part.
- Data is in CSV format.
- The delimiter is a comma.
- One-line record showing the name of a column is output for each of the header and data parts.
- The following applies to the character code.
Encoding: UTF-8 without BOM
Newline code: CRLF

3. Record Structure

- The margin calculation result consists of multiple records.
- Records consist of "ClearingFirmID" and "AccountID" (in the case of an omnibus account, "id" in addition) in the input file (position data) of VaR margin calculation software and silo information as keys. The margin calculation result is shown for each record.
- Layout and item details are described in "5-2. Details of Margin Calculation Result File (csv) Format".

5-2. Details of Margin Calculation Result File (csv) Format

Category	No	Item (Name in Japanese)	Item (Name in English)	Max digit	Attribute	Description	(Example 1)	(Example 2)
Header Part (Info)	1	リクエストID	RequestID	100	string	When entered in the position file by users, the input data is output.		AA1111
	2	バージョン	Version	10	string	When entered in the position file by users, the input data is output.		1.0
	3	送信時刻	SentTime	24	string	When entered in the position file by users, the input data is output.		2021-12-08T17:43:09.422Z
	4	日付	BusinessDate	10	string	Margin calculation base date YYYY-MM-DD	2021-12-08	2021-12-08
	5	サイクルコード	CycleCode	5	string	When entered in the position file by users, the input data is output.	EOD	EOD
	6	処理番号	RunNumber	3	string	When entered in the position file by users, the input data is output.		3
	7	時刻	Time	8	string	When entered in the position file by users, the input data is output.		17:43:09
Data Part (Margin)	8	オムニバス顧客ID	id	100	string	When entered in the position file by users, the input data is output.	A1	A1
	9	通貨	Currency	3	string	Currency to be cleared in	JPY	JPY
	10	カスタマーアカウントタイプ	CustomerAccountType	15	string	When entered in the position file by users, the input data is output.		HEDGE
	11	オムニバス種別	OmnibusIndicator	3	string	When entered in the position file by users, the input data is output.		YES
	12	親ポートフォリオID	ParentPortfolioID	100	string	When entered in the position file by users, the input data is output.		
	13	メモ	Memo	100	string	When entered in the position file by users, the input data is output.		
	14	清算参加者コード	ClearingFirmID	100	string	Clearing Member code In the case of use by a non-clearing member, a code set at the discretion of the library user.	99999	99999
	15	取引参加者コード&アカウントコード	AccountID	100	string	Combination of a 5-digit clearing member code and an account name for use by the Clearing System In the case of use by a non-clearing member, a code set at the discretion of the library user	99999CLIENT	99999CLIENT
	16	アカウント名	AccountName	100	string	When entered in the position file by users, the input data is output.		DomesticClientAccount
	17	オリジンタイプ	OriginType	10	string	When entered in the position file by users, the input data is output.		CUSTOMER
	18	ファンド区別タイプ	FundSegregationType	10	string	When entered in the position file by users, the input data is output.		
	19	カスタマーアカウントタイプ2	CustomerAccountType2	15	string	When entered in the position file by users, the input data is output.		
	20	サイロ	Silo	5	string	"JGB": JGB Futures Clearing Qualification "IDX": Index Futures Clearing Qualification. "PME": Precious Metal Futures Clearing Qualification "RUB": Rubber Futures Clearing Qualification "AGR": Agricultural Futures Clearing Qualification "PTL": OSE Petroleum Futures Clearing Qualification "ENG": Energy Futures Clearing Qualification "ODE": Dojima Agricultural Futures Clearing Qualification	IDX	IDX
	21	VaR証拠金額	VaRMargin	15	long	Margin requirement amount calculated by the VaR method Integer of 0 or greater	648132680	648132680
	22	証拠金割増額	Add_onCharge	15	long	Margin add-on amount in accordance with the risk level (level of held positions) (LCRM) 0 (zero) is set in the case of an add-on amount for gross positions. Integer of 0 or greater	6326641	6326641
	23	証拠金所要額	MarginRequirement	15	long	Sum of VaRMargin and Add_onCharge Integer of 0 or greater	654459321	654459321
	24	(参考) VaR証拠金額[符号付]	Ref_VaRMarginWithSign	15	long	Margin requirement amount calculated by the VaR method (even in negative, the value should not be 0-floored) Integer (incl. 0 and negative integer)	660785962	660785962
	25	(参考) ネット・オプション価値	Ref_NetOptionValue	15	long	Value = total value of Call option - total value of Put option Integer (incl. 0 and negative integer)	-654459321	-654459321
	26	VaRリスク額	VaRRisk	15	long	Value = VaRMarginWithSign + NetOptionValue Integer (incl. 0 and negative integer)	6326641	6326641

5-3. Outline of Margin Calculation Result (json) Format

1. Data Format

- Data is in JSON format.
- The following applies to the character code.
Encoding: UTF-8 without BOM

2. Data Structure

- The margin calculation result consists of multiple objects and is output as an array of the objects.
- Objects consist of "ClearingFirmID" and "AccountID" (in the case of an omnibus account, "id" in addition) in the input (position data) of VaR margin calculation software and silo information as keys. The margin calculation result is shown for each object.
- Layout and item details are described in "5-4. Details of Margin Calculation Result (json) Format".
- JSON schema is provided for the validation.

5-4. Details of Margin Calculation Result (json) Format

No	Item	Item (Name in Japanese)	Max digit	Attribute	(Example 1)	(Example 2)
1	retData			object		
2	calcInfo			object		
3	RequestID	リクエストID	100	string		AA1111
4	Version	バージョン	10	string		1
5	SentTime	送信時刻	24	string		2021-12-08T17:43:09.422Z
6	BusinessDate	日付	10	string	2021-12-08	2021-12-08
7	CycleCode	サイクルコード	5	string	EOD	EOD
8	RunNumber	処理番号	3	string		0:00:00
9	Time	時刻	8	string		17:43:09
10	margin			array		
11	id	オムニバス顧客ID	100	string	A1	A1
12	Currency	通貨	3	string	JPY	JPY
13	CustomerAccountType	カスタマーアカウントタイプ	15	string		HEDGE
14	OmnibusIndicator	オムニバス種別	3	string		YES
15	ParentPortfolioID	親ポートフォリオID	100	string		
16	Memo	メモ	100	string		
17	ClearingFirmID	清算参加者コード	100	string	99999	99999
18	AccountID	取引参加者コード&アカウントコード	100	string	99999CLIENT	99999CLIENT
19	AccountName	アカウント名	100	string		DomesticClientAccount
20	OriginType	オリジンタイプ	10	string		CUSTOMER
21	FundSegregationType	ファンド区別タイプ	10	string		
22	CustomerAccountType2	カスタマーアカウントタイプ2	15	string		
23	Silo	サイロ	5	string	IDX	IDX
24	VaRMargin	VaR証拠金額	15	long	648132680	648132680
25	Add_onCharge	証拠金割増額	15	long	6326641	6326641
26	MarginRequirement	証拠金所要額	15	long	654459321	654459321
27	Ref_VaRMarginWithSign	(参考) VaR証拠金額[符号付]	15	long	660785962	660785962
28	Ref_NetOptionValue	(参考) ネット・オプション価値	15	long	-654459321	-654459321
29	VaRRisk	VaR リスク額	15	long	6326641	6326641

Note: Items such as Request ID are output as they are input by users in position data.