CME Clearing Collateral API Specifications
CSV Format

Effective Date: October 28, 2020

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OVERVIEW

Clearing Members utilize C21 Asset Management to view collateral inventory on deposit at CME Clearing used to meet Initial Margin("Performance Bond" or "PB") and Guaranty Fund("GF" or "SECR") requirements, and to input Deposit or Withdrawal requests for these assets. In addition to the website user interface, Clearing Members have the option to use a csv file-based API. The files are exchanged via Secure FTP ("SFTP") utilizing the CME firm facing SFTP server, where other Clearing files are exchanged daily.

To submit collateral Deposit and Withdrawal requests, the Clearing Member uploads a **Request File** to the **Incoming** directory on the SFTP server, and shortly thereafter receives a **Response File** published in the **Outgoing** directory. Each Clearing Member is given a SFTP credential and directories are created during the Clearing Membership Onboarding process.

Collateral Transaction Summary reports are produced daily and published in a Clearing Member's **Outgoing** directory. The **Collateral Transaction** file will list the status and details of all collateral transactions for the Clearing Member on the business day, whether submitted via the csv file-based API or utilizing the online web interface for C21 Asset Management.

Collateral Inventory reports are produced daily and published in a Clearing Member's **Outgoing** directory. The **Collateral Inventory** file will detail all settled collateral on deposit at CME received from the Clearing Member. Refer to Collateral On Deposit Report Specifications for further details.

Asset Application reports are produced at the completion of a CME settlement cycle and published in a Clearing Member's **Outgoing** directory. The **Asset Application** file details how assets on deposit are applied to a Clearing Member's PB requirements. Refer to CST550IM Report Specifications for further details.

Settlement Recap reports are produced at the completion of a CME settlement cycle and published in a Clearing Member's **Outgoing** directory. The **Settlement Recap** file details PB requirements, variation settlements, Combined Cash Flow movements, among other details. Refer to Settlement Recap Datafile specifications for further details.

In some cases, CME may permit a third party ("Collateral Service Provider" or "Custodian") to upload **Request Files** and to receive **Response Files** and other collateral reports that are part of the Collateral API on behalf of Clearing Members. For this setup, reach out to the Banking & Collateral team at +1 312-207-2594 or email ClearingHouseFinancial@cmegroup.com.

These specifications detail the **Request File** used to upload Deposit and/or Withdrawal requests to C21 Asset Management, the **Response File** published in reply to a **Request File**, and the **Collateral Transaction Summary** file.

File Naming Conventions

All files are exchanged via the Production SFTP server, the file naming conventions indicate whether the files are for Production or New Release (CME's testing environment). The filename must match exactly, or it will not be picked up for processing. If a Request file is submitted after cutoff, the Response file will have file extension '.resubmitnextday'

Collateral Transaction Request file naming conventions:

For files submitted by Clearing Members:

Colat.API.CME.nnn.##.csv	for Production environment
NR.Colat.API.CME.nnn.##.csv	for New Release testing environment

For files submitted by Custodians or Collateral Service Providers on behalf of a Clearing Member:

Colat.API.xxx.CME.nnn.##.csv	for Production environment
NR.Colat.API.xxx.CME.nnn.##.csv	for New Release testing environment

Placeholder	*Description*	*Allowable Values*	*Validation*
nnn	Clearing Member ID	0_9; A_Z	Must provide valid, 3-character alpha-numeric ID
##	File sequence number	'01'_'99'	Must provide 2 digits, any order; Cannot repeat same sequence in a business day
xxx	Custodian or Collateral Service Provider ID	A_Z	Must provide valid, 3-character alpha ID

Collateral Transaction Response file naming conventions:

For files submitted by Clearing Members:

Colat.API.Rpt.CME.nnn.##.yyyymmdd-hhmmss.csv	for Production environment
NR.Colat.API.Rpt.CME.nnn.##.yyyymmdd-hhmmss.csv	for New Release environment

For files submitted by Custodians or Collateral Service Providers on behalf of a Clearing Member:

Colat.API.Rpt.xxx.CME.nnn.##.yyyymmdd-hhmmss.csv	for Production environment
NR.Colat.API.Rpt.xxx.CME.nnn.##.yyyymmdd-hhmmss.csv	for New Release environment

Placeholder	*Description*	*Allowable Values*	*Validation*
nnn	Clearing Member ID	0_9; A_Z	Corresponds to upload request Clearing Member ID
##	File sequence number	'01'_'99'	Corresponds to upload request sequence number
xxx	Custodian or Collateral Service Provider ID	A_Z	Corresponds to upload request Custodian or Collateral Service Provider ID
yyyymmdd-hhmmss	Timestamp	0_9	Current system timestamp

Collateral Transaction Summary file naming conventions:

For all entity types:

Colat.TxnRpt.CME.nnn.ccc.yyyymmdd-hhmmss.csv for Production environment
NR.Colat.TxnRpt.CME.nnn.ccc.yyyymmdd-hhmmss.csv for New Release environment

Placeholder	***Description***	***Allowable Values***	***Validation***
nnn	Clearing Member ID	0_9; A_Z	Valid Clearing Member ID
ccc	Run cycle	A_Z	EOD - End-of-Day ITD - Intra-day PM - Evening Pre-EOD (17:00 CST)
yyyymmdd-hhmmss	Timestamp	0_9	Current system timestamp

File Formatting and Fields

*The first row of every file corresponds to the column headings below and will be validated upon uploading **Collateral Transaction Request** files. The column headings must be exactly as indicated below, or the **Collateral Transaction Request** file will fail. A **Response** file will be produced with Reason "Bulk Upload file must be a comma delimited file in the prescribed format".*

Validations below are performed prior to sending data to C21 Asset Management; further business rule validations are performed on the transaction such as determining whether the asset is an acceptable type of collateral, within specified limits, etc. See [CME Clearing Acceptable Collateral Policies]() for further details.

Collateral Transaction Request file fields:

Column Heading	*Description*	*Mandatory / Optional*	*Allowable Values*	*Validation*
Bus_Date	Current business date	Mandatory	mm/dd/yyyy	Must match the current business date
ReqID	Reference number associated with this transaction request row. This is provided by the Clearing Member, Custodian or Collateral Service Provider, and is copied in the Response file for tracking	Mandatory	0_9; A_Z; a_z	None
TxnTyp	Indicates if the transaction row is a deposit or withdrawal request	Mandatory	'DP' or 'WD'	None
Actn	Indicates the request is to add a transaction to the processing queue	Mandatory	'A'	None
CO	Clearing Organization	Mandatory	'CME'	None
CMF	Clearing Member Firm ID	Mandatory	0_9; A_Z	Must provide valid, 3-character alpha-numeric ID
AA	Asset Account ID	Mandatory	0_9; A_Z	Must provide valid, 3 to 5-character alpha-numeric ID
Fseg	Funds Segregation Class for the Asset Account ID This designation corresponds to CFTC Funds Segregation Classes: CSEG - Customer Segregated COTC - Customer Cleared Swaps NSEG - Non-Segregated	Mandatory	'CSEG'; 'COTC'; 'NSEG'	The AA must be setup for this Funds Segregation Class in CME systems. If Acct_Type = 'SECR', then Fseg = 'NSEG' is enforced
Acct_Type	Account Type indicates whether the collateral is for PB margin or GF(SECR) margin	Mandatory	'PB'; 'SECR'	If Bus_Func = 'SECR', then Acct_Type = 'SECR' is enforced If Bus_Func NOT = 'SECR',

				then Acct_Type = 'PB' is enforced
Bus_Func	Business Function indicates whether the collateral is for PB margin, CME/OCC Cross Margin, or GF(SECR) margin	Mandatory	'PB'; 'SECR'; 'XMOCC'	If Acct_Type = 'SECR', then Bus_Func = 'SECR' is enforced If Acct_Type = 'PB', then Bus_Func NOT = 'SECR' is enforced If Bus_Func = XMOCC, the AA must be setup for this in CME systems
Guar_Fund	Specify if the account is for the Interest Rate Swaps product class or Default (F&O) product class	Optional	'IRS'; 'DFLT'	If provided, must be the valid product class for the AA
Asset_Type	Indicates whether the request is for Cash or Non-Cash	Mandatory	'CASH'; 'SECURITY'	None
Asset_ID	This is the CUSIP, ISIN, or Ticker to identify the asset in CME systems	Mandatory	0_9; A_Z	If Asset_Type = 'CASH', then this field is left blank Must be a valid CUSIP, ISIN, or Ticker
ID_Type	Indicates the type of Asset_ID provided	Mandatory	'CUSIP'; 'ISIN'; 'TICKER'	Must be of the appropriate type matching provided Asset_ID If Asset_Type = 'CASH', then this field is left blank
Ccy	Currency of denomination of the asset	Mandatory	A_Z	Must be a valid 3-character ISO currency code
Instr_Code	Short code identifying the SSIs to be used to settle collateral at the custodian, not applicable for cash transactions. If no value is provided, transaction will use default SSIs. A default SSI must exist for the asset or the transaction will fail. Contact the Banking & Collateral Team for a list of short codes or default SSIs setup for a given account	Optional	0_9; A_Z	If provided, must be a valid 1 to 5-character short code. This will be quoted in the response file; the default short code will be provided in the response if Instr_Code is left blank
Par_Amt	Par amount, face value, number of shares for transaction	Mandatory	0_9; '.'	Must be positive value, decimals optional. Transaction increments must adhere to industry standards

Value_Date	May provide a future value date for non-USD transactions. If value date is not permitted or provided, system will default to next available value date. Always current day for USD	Optional	mm/dd/yyyy	If Ccy = 'USD', Value_Date = Bus_Date enforced.
Custodian	Custodian code in CME systems to identify the receiving CME custodian for a Deposit, or the delivering CME custodian for a Withdrawal	Mandatory	See Exhibit A	Must be a valid custodian code from Exhibit A and be a permissible custodian for the type of asset
Txn_Time	Deprecated, do not use in Collateral Transaction Request files	Optional		
Wire_Ref	Clearing Member, Custodian, or Collateral Service Provider may provide a wire reference to assist in tracing the wire with the Bank or Custodian	Mandatory*	0_9; A_Z	*CASH transactions must include a reference number. CME will not validate the field other than making sure it is alpha-numeric
All_None	Indicates whether to reject the entire file upon the failure of one transaction row, or to allow for a row to fail but continue to process remaining rows independently of each other	Mandatory	'Y'; 'N'	Every row must contain the same value within a single file If Txn_Instr_Code = 'CCON', then All_None = 'Y' enforced
Trade_Date	May provide a future trade date for non-USD securities transactions. If trade date is not permitted or provided, system will default to next available trade date	Optional	mm/dd/yyyy	If Ccy = 'USD', Trade_Date IS NULL enforced.
Lockup_Amt	Deprecated, do not use in Collateral Transaction Request files	Optional		
Txn_Instr_Code	Custodians may use a value of CCON. This means that the file is submitted as part of CME's Collateral Connect program, and hence each transaction should be evaluated as if the previous transactions have succeeded. Use together with Y in All_ None. A value of OTHER is used to indicate that a transaction	Optional	'CCON'; 'OTHER'	If Txn_Instr_Text provided, cannot be left blank

	instruction text is provided in Txn_Instr_Text			
Txn_Instr_Text	String of 50 characters of free format text may be provided	Optional	0_9; A_Z; a_z	Max length = 50 char

The following asset types are not supported in the **Collateral Transaction Request** files:

1. Letters of Credit
2. Gold Bullion and Gold Warrants
3. IEF2 – Money Market Funds
4. Prefunded Treasury Facility (PTF)

Collateral Transaction Response file fields

The response file will copy most fields from the Collateral Transaction Request file corresponding to the same sequence number and add some additional fields with post-processing info. The order of the common fields are NOT the same, please refer to the below. Mandatory or Optional in this context means a value is always provided, or a value is sometimes provided.

Column Heading	***Description***	***Mandatory / Optional***	***Allowable Values***	***Validation***
Bus_Date	Current business date	Mandatory	mm/dd/yyyy	Value copied
ReqID	Reference number associated with this transaction request row. This is provided by the Clearing Member, Custodian or Collateral Service Provider, and is copied in the Response file for tracking	Mandatory	0_9; A_Z; a_z	Value copied
TxnTyp	Indicates if the transaction row is a deposit or withdrawal request	Mandatory	'DP' or 'WD'	Value copied
Actn	Indicates the request is to add a transaction to the processing queue	Mandatory	'A'	Value copied
CO	Clearing Organization	Mandatory	'CME'	Value copied
CMF	Clearing Member Firm ID	Mandatory	0_9; A_Z	Value copied
AA	Asset Account ID	Mandatory	0_9; A_Z	Value copied
Fseg	Funds Segregation Class for the Asset Account ID This designation corresponds to CFTC Funds Segregation Classes: CSEG - Customer Segregated COTC - Customer Cleared Swaps NSEG - Non-Segregated	Mandatory	'CSEG'; 'COTC'; 'NSEG'	Value copied
Acct_Type	Account Type indicates whether the collateral is for PB margin or GF(SECR) margin	Mandatory	'PB'; 'SECR'	Value copied
Bus_Func	Business Function indicates whether the collateral is for PB margin, CME/OCC Cross Margin, or GF(SECR) margin	Mandatory	'PB'; 'SECR'; 'XMOCC'	Value copied
Guar_Fund	Specify if the account is for the Interest Rate Swaps product class or Default (F&O) product class	Optional	'IRS'; 'DFLT'	Value copied
Asset_Type	Indicates whether the request is for Cash or Non-Cash	Mandatory	'CASH'; 'SECURITY'	Value copied
Asset_ID	This is the CUSIP, ISIN, or	Mandatory	0_9; A_Z	Value copied

	Ticker to identify the asset in CME systems			
ID_Type	Indicates the type of Asset_ID provided	Mandatory	'CUSIP'; 'ISIN'; 'TICKER'	Value copied
Ccy	Currency of denomination of the asset	Mandatory	A_Z	Value copied
Instr_Code	Short code identifying the SSIs to be used to settle collateral at the custodian, not applicable for cash transactions. If no value is provided, transaction will use default SSIs. A default SSI must exist for the asset or the transaction will fail. Contact the Banking & Collateral Team for a list of short codes or default SSIs setup for an account	Mandatory	0_9; A_Z	Value copied if provided in Collateral Transaction Request, otherwise default short code
Par_Amt	Par amount, face value, number of shares for transaction	Mandatory	0_9; '.'	Value copied
Value_Date	May provide a future value date for non-USD transactions. If value date is not permitted or provided, system will default to next available value date. Always current day for USD	Mandatory	mm/dd/yyyy	Value copied if provided in Collateral Transaction Request, otherwise default value date assigned be system
Custodian	Custodian code in CME systems to identify the receiving CME custodian for a Deposit, or the delivering CME custodian for a Withdrawal	Mandatory	See Exhibit A	Value copied
Txn_Time	Deprecated, will always be blank	Optional		
Wire_Ref	Clearing Member, Custodian, or Collateral Service Provider may provide a wire reference to assist in tracing the wire with the Bank or Custodian	Optional	0_9; A_Z	Value copied
All_None	Indicates whether to reject the entire file upon the failure of one transaction row, or to allow for a row to fail but continue to process remaining rows independently of each other	Mandatory	'Y'; 'N'	Value copied

Rpt_ID	CME system report correlation	Mandatory	hyphenated hex string	Used by CME to trace transaction
Asset_Type_Dtl	CME system short code to identify the type of asset	Mandatory	See Asset Type Codes on Exhibit A	None
Outgoing_Ref	Deprecated, will always be blank	Optional		
PB_Amt	Performance Bond amount. This is the amount of value that can be used to meet margin (PB) requirements. This is the post-haircut market value calculated by CME in the native currency of the asset.	Mandatory	0_9; '.'; '-'	Will be negative for WD, preceded with '-'. Decimals may be present.
Status	Validation resulting from the Collateral Transaction Request file	Mandatory	'PENDING'; 'REJECTED'	None
Reason	If the transaction was rejected, an error message is given in this field	Optional	0_9; A_Z; a_z; '.'; '-'; ':'	None
Txn_ID	CME system transaction correlation	Mandatory	hyphenated hex string	Used by CME to trace transaction
Last_Update_Time	Timestamp when transaction was last updated	Mandatory	yyyymmdd-hh:mm:ss.sss	None
Last_Update_User_ID	User ID to last update the transaction	Mandatory	0_9; A_Z	Will be 'FTPCSV' upon initial creation
Create_User_ID	User ID to create the transaction	Mandatory	0_9; A_Z	Will be 'FTPCSV' upon initial creation
Trade_Date	May provide a future trade date for non-USD securities transactions. If trade date is not permitted or provided, system will default to next available trade date	Optional	mm/dd/yyyy	Value copied
Transaction_Source	Will always be 'FI'	Mandatory	'FI'	None
Lockup_Amt	Deprecated, will always be blank	Optional		
Txn_Instr_Code	Custodians may use a value of CCON. This means that the file is submitted as part of CME's Collateral Connect program, and hence each transaction should be evaluated as if the previous transactions have succeeded. Use together with Y in All_ None. A value of OTHER is used to indicate that a transaction	Optional	'CCON'; 'OTHER'	Value copied

	instruction text is provided in Txn_Instr_Text			
Txn_Instr_Text	String of 50 characters of free format text may be provided	Optional	0_9; A_Z; a_z	Value copied
Fund_Name	Provides the fund name for Money Market Fund (IEF2) Asset Types	Optional	A_Z	None

Collateral Transaction Summary file fields

*The Collateral Transaction Summary file contains the same fields and order as the Collateral Transaction Response file. The **Status** column on the Collateral Transaction Summary file can have the following additional values:*

Column Heading	***Description***	***Mandatory / Optional***	***Allowable Values***	***Validation***
Status	*Last updated status. Status codes other than 'PENDING' are final and will not change.*	*Mandatory*	*'PENDING'; 'REJECTED'; 'VERIFIED'; 'SYSTEM_GENERATED'*	*None*

Exhibit A

The following Asset Type Codes are used to identify different asset types in C21 Asset Management and will appear on reports.

Additionally, there are specific currency codes and Custodian limitations per asset type, described below.

Asset Type Code	***Description***	***Allowable CCY Codes***	***Allowable Custodian Values***	***Notes***
BILL	Foreign Sovereign Bills	AUD; CAD; EUR; GBP; JPY; MXN; SEK; SGD	CITIGB2L	
BOND	Foreign Sovereign Bonds	AUD; CAD; EUR; GBP; JPY; MXN; SEK; SGD	CITIGB2L	
CASH	Cash	AUD; CAD; CHF; CNH; CZK; DKK; EUR; GBP; HKD; HUF; JPY; MXN; NOK; NZD; PLN; SEK; SGD; USD; ZAR	*see Exhibit B*	
CBILL	Canadian Sovereign Bills	CAD	CITIUS33	
CBOND	Canadian Sovereign Bonds	CAD	CITIUS33	
CORP	US Corporate Bonds	USD	DTCYUS33	
ETF	Exchange Traded Funds	USD	DTCYUS33	
FFCB	Federal Farm Credit Bank Discount Securities	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	
FHLB	Federal Home Loan Bank Discount Securities	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	
FHLMC	Federal Home Loan Mortgage Corp Discount Securities	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	
FNMA	Federal National Mortgage Association Discount Securities	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	

GSEMB	Mortgage Backed Securities	USD	IRVTUS3N	Must be delivered with REPO tracking
GSEOTH	Coupon instruments issued by FFCB, FHLB, FHLMC, FNMA	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	
IBRD	Supranational Debt - International Bank for Reconstruction and Development	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	
IBRDDN	Supranational Debt - International Bank for Reconstruction and Development Discount Notes	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	
OPBILL	Ontario Provincial Bill	CAD	CITIUS33	
OPBOND	Ontario Provincial Bond	CAD	CITIUS33	
QPBILL	Quebec Provincial Bill	CAD	CITIUS33	
QPBOND	Quebec Provincial Bond	CAD	CITIUS33	
STOCK	Select S&P 500 Equity Shares (see monthly acceptability list on cmegroup.com)	USD	DTCYUS33	
TBILL	US Treasury Bills	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	If for BF = SECR, then use CITIUS33 for Base guaranty fund; use CITIUS33IRS for IRS guaranty fund
TBOND	US Treasury Bonds	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	If for BF = SECR, then use CITIUS33 for Base guaranty fund; use CITIUS33IRS for IRS guaranty fund
TFRN	US Treasury Floating Rate Notes	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	If for BF = SECR, then use CITIUS33 for Base guaranty fund; use CITIUS33IRS for IRS guaranty fund
TIPS	US Treasury Inflation Protected Securities	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	

TNOTE	US Treasury Notes	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	If for BF = SECR, then use CITIUS33 for Base guaranty fund; use CITIUS33IRS for IRS guaranty fund
TSTRIP	US Treasury Strips	USD	BBHCUS33; BNPAUS3NB2S; HATRUS44; IRVTUS3N; LBANUS41	

Custodian Key

BARCUS33	Barclays
BBHCUS33	Brown Brothers Harriman
BNPAUS3NB2S	BNP Paribas, NY
BOFAUS3N	Bank of America
BKCHUS33	Bank of China, NY
CHASUS33	JP Morgan Chase, US
CHASGB2L	JP Morgan Chase, London
CITIUS33	Citibank, US
CITIGB2L	Citibank, London
DTCYUS33	Depository Trust Co
HATRUS44	BMO Harris
LBANUS41	Lakeside Bank
IRVTUS3N	Bank of New York

Exhibit B

For Cash assets, Non-USD currencies are held at only one bank detailed below. For USD cash assets, the custodian value provided must match that of the Clearing Member's settlement bank, except in the case of Guaranty Fund ("GF") cash, where there is a specified value.

Allowable CCY Codes	Allowable Custodian Values	Notes
AUD	CHASGB2L	
CAD	CITIGB2L	
CHF	CHASGB2L	
CNH	CITIGB2L	
CZK	CITIGB2L	
DKK	CITIGB2L	
EUR	CITIGB2L	
GBP	CHASGB2L	
HKD	CHASGB2L	
HUF	CITIGB2L	
JPY	CHASGB2L	
MXN	CITIGB2L	
NOK	CHASGB2L	
NZD	CHASGB2L	
PLN	CITIGB2L	
SEK	CHASGB2L	
SGD	CHASGB2L	
USD	BOFAUS3N; BKCHUS33; IRVTUS3N; BARCUS33; HATRUS44; BBHCUS33; CITIUS33; CHASUS33; LBANUS41	Must use the custodian code corresponding to the settlement bank of the Clearing Member. If for BF = SECR, then use CITIUS33 for Base guaranty fund; use CITIUS33IRS for IRS guaranty fund
ZAR	CHASGB2L	