SOLA® Clearing System

SOLA Clearing EOD (End-of-Day) Reporting for CDCC Members

SCS-CD-017E
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Document History

VERSION	DATE	CHANGE DESCRIPTION
1.0	2008-07-22	Initial Version
1.1	2008-09-18	Second Delivery Version
1.2	2009-09-01	Modifications include: • Insertion of Corporate Action EOD Table • Insertion of Tags to various EOD Tables • Updating (Modification/Deletion) of specific Tags within various EOD Tables • Insertion of additional Report Query Samples
1.3	2009-10-20	Additional modificatuions to MZ01 report query
1.4	2010-06-21	Addition of various Tags for Symbology; as follows: Tables affected: • RptAssetInstruction • RptHalfAccountOperation • RptNotification • RptOneSideAccountOperation • RptPosition • RptPositionPerAge • RptProduct • RptSettlementInstruction • RptCorporateAction Field name Quantity (38) replaced by DecimalQuantity (46) in tables: RptAssetInstruction, RptHalfAccountOperation, and RptSettlementInstruction Query text modifications as follows: • Quantity (38) replaced by DecimalQuantity (46) Tag in table RptSettlementInstruction for Report MZ01. • LongDescription (953) replaced by NewSymbologyLongDescription (3186) in table RptOneSideAccountOperation for reports MT99 and MT51, and in table RptPosition for report MP51. **Note:** All modifications identified within the document by a ’Change Bar’ located in the left hand column of the report.

VERSION	DATE	CHANGE DESCRIPTION
1.5	2011-05-24	Addition of the following EOD reports in Chapter 2 EOD Table Summary: • MD70 - Fixed Income Net Settlement Delivery Status Report • MP70 - Fixed Income Forward REPO Position Activity Report • MP71 - Fixed Income Forward REPO Position Conversion Report • MP73 - Fixed Income Running REPO Open Position Report • MP79 - Daily Repo Rate and Mark to Market Report • MP75 - Fixed Income Forward Net Settlement Positions Report • MS70 - Fixed Income Net Settlement Position Activity Report • MS75 - Fixed Income End Of Day Settlement Instruction Report • MT70 - Fixed Income Novated Transactions Report • MT71 - Fixed Income CSD Information Report • MT73 - Fixed Income Trade Rejection Report • MT74 - Fixed Income Not-Novated Transactions Report Addition of four Data Store Extraction Sets (DSES) as follows: • Fixed Income - CDS Trade Entry • Net Settlement Position (NSP) • NSP Update History • Delivery Settlement Instruction Insertion/Modification/Deletion of Field Names indicated by ’change bars’ within the following DSESs: • CDS Trade Entry • Cumulative Fund • Settlement Instruction • Delivery Settlement Instruction • One Side Account Operation • Clearing Account • Member • Product • Fund Requirement Insertion/Modification/Deletion of various Enum List entries indicated by ’change bars’.

VERSION	DATE	CHANGE DESCRIPTION
1.6	2011-09-09	Modifications to following Data Store Extraction sets: • DeliverySettlementInstructions • Addition of Field Name 'ClearingStatus' • Settlement Instruction • Modification to description for 'MarkedToMarketCostRate' • Addition to ENUM value List for Delivery Settlement Status (Table26) • CDS Trade Entry • Addition of MemoTextLine1, MemoTextLine2 • NetSettlementPosition Remove ExternalReferenceId tag
1.7	2011-09-26	Modifications in this release: • Removal of 'ActiveStatusFlag' for reasons of non-validity • Updated ExternalId and Price in One Side Account Operation Table Introduction of Appendix C: Query Setup for Fixed Income Reporting
1.8	2011-12-12	Delivery Settlement Instruction. Update to: • Tag 6099 - Clearing Status (update respective enum list) Delivery Settlement Instruction: • Addition of new Tags: • 5757 - PitsoFulfillmentObjectNumber • 5756 - PitsoFulfillmentSessionNumber • 5755 - PitsoObjectNumber • 5754 - PitsoSessionNumber CDS Trade Entry: • Addition of new Tags: • 6099 - Clearing Status NSP Update History: • Addition of new Tags: • 6176 - ISIN

VERSION	DATE	CHANGE DESCRIPTION
1.9	2012-05-29	Modifications pertaining to Phase II. Addition of tags in the following tables: • CDS Trade Entry • CdsTradeEntryType (5809) • SolaSecurityType (461) • One Side Account Operation • SolaSecurityType (461) • member • DeliveryAgentLedgerAccountNumber (5579) • DeliveryAgentLedgerAccountType(5578) • Clearing Account • DeliveryAgentLedgerAccountNumber (5579) • DeliveryAgentLedgerAccountType(5578) • Settlement Instructions • ChangeReason (5810) • CurrencyCode (16) • OriginalObjectNo (1103) • OriginalSessionNo (1123)
1.9 (Cont)		• Delivery Settlement Instructions • CreateReason (5811) • DosoFulfillmentObjectNumber (5846) • DosoFulfillmentSessionNumber (5847) • DosoObjectNumber (5844) • DosoSessionNumber (5845) • OriginalObjectNo (1103) • OriginalSessionNo (1123) • PendingPartyAtFaultForSettlementObligation (5849) • PendingreasonCodeForSettlementObligation (4540) • TradeStatusForSettlementObligation (5848) • Modifications to tags in the following tables: • Delivery Settlement Instruction • BuyerAccountType (5020) • CDSBuyerAccountNumber (5378)Doso • CDSSellerAccountNumber (5379) • SellerAccountType (5008)

VERSION	DATE	CHANGE DESCRIPTION
1.10	2012-09-12	Correction to tags in the following tables: • CDS Trade Entry: • Changed Field Name 'CdsTradeEntryType' to 'NegotiationType' • Changed Field Name 'SecurityType' to 'CdsSecurityType' • Copied Description contents from 'SolaSecurityType' to 'CdsSecurityType' • Removed entire line for 'SolaSecurityType' • One Side Account Operation Removed entire line for 'SolaSecurityType'
1.11	2014-02-25	Modifications to existing tags. Note the following: • Inserted 'Obsolete and has been removed' to the description of the following tags: • 551, 1292, 1293, 1447, 1448, 1990, 3186, 6478 • Change of Description to the following tags: • 72, 827, 953, 975, 1082, 2144, 2256, 3127, 5791, 6185, • Modifications to Syntax in Appendix B 'Query Setup', and Appendix C 'Query Setup for Fixed Income Reporting' on following tags: 953, 3186, Replaced tag 6478 with 6481
1.12	2014-10-08	Addition of three tags in Product Table: • HaircutPercentage (1339) • HaircutPecentageEnabled (29) • CycleId (714)
1.13	2015-11-06	Addition of new fields (SwapTenor, SwapPaymentFrequency, SwapReset Frequency, SwapRate, SwapeffectiveDate, SwapInitialEffectiveDate) to Section 3, Table 22, Data Store Extraction Set- Product
1.14	2016-02-02	Addition of new field CombinedCommodity to Section 3, Table 22, Data Store Extraction Set- Product
1.15	2016-02-19	Addition of new Tag Code for Flag field, Section 2, Table 18 Data Store Extraction Set – One Side Account Operation & Section 3, Table 20 Data Store Extraction Set – Half Account Operation
1.16	2017-09-21	Section 3.1 – Asset Instruction updated Section 3.7 – Cumulated Fund updated Section 3.19 – Members updated Section 3.21 – Clearing Fund Requirement updated Section 4 (Formerly Appendix A) – Enums updated (Activity Name, AssetInstructionType, DeliveryType, FundType, PremiumType) Enums added (MemberFlag, RiskModel)

Table of Contents

Section 1 Introduction

The End-ofDay (EOD) file is a subset of SOLA® Clearing System daily production data based on a series of primary system tables and certain peripheral data. Each Member will receive the EOD file on a daily basis containing a subset of their own activities from the previous business day.

1.1 Purpose

The purpose of this document is to document the structure and content of the various EOD tables.

1.2 Audience

The primary audience for this document are Clearing Member Report Analysts who will be accessing the EOD file containing the raw data generated by the SOLA® Clearing System.

1.3 Scope

The scope of this document is to present a detailed breakdown of the structure and content of the EOD file. In addition the document lists the reports available in the Clearing member Report Set with references to the EOD tables from which they are generated.

1.4 EOD File Evolution

The EndOfDay File is designed to support backward compatibility as much as possible. It can include new tables, new fields, or new values in enumerations at any time. EOD File users should ensure that their systems support this contingency.

Section 2 End-of-Day (EOD) Table Summary

The following table depicts the relationship between pre-defined reports and the EOD Files that are required to produce the reports.

Note: To branch to any EOD file, select the required file in the heading row of this page only.

Table 1: Base Clearing Fund Requirement – Report/EOD File Matrix

End Of Day File >>>> Reports	**Asset Instruction**	**Bank Transfer**	**Base ClearingF und Requirement**	**Cds Trade Entry**	**Transaction Statistics**	**Cumulated Fund**	**Position**	**Position Per Age**	**NSP**	**NSP Update History**	**Notification**	**Settlement Instruction**	**CDS Settlement Instruction**	**Underlying Position**	**One Side Account Operation**	**Clearing Account**	**Half Account Operation**	**Member**	**Product**	**FundRequirement**	**Cumulated Daily Cash**	**Corporate Action**	**Combined Commodity**
MA01 – Deposit / Withdrawal Report	X						X																
MA71 – Clearing Fund Statement			X				X														X		
MD01 – Options Unsettled Delivery Report													X										
MD51 – Futures Unsettled Delivery Report													X										
MD70 - Fixed Income Net Settlement Delivery Status Report													X	X									
MI12 – U/I Primary Exchange																				X			

Table 1: Base Clearing Fund Requirement – Report/EOD File Matrix

End Of Day File >>>> Reports	Asset Instruction	Bank Transfer	Base ClearingF und Requirement	Cds Trade Entry	Transaction Statistics	Cumulated Fund	Position	Position Per Age	NSP	NSP Update History	Notification	Settlement Instruction	CDS Settlement Instruction	Underlying Position	One Side Account Operation	Clearing Account	Half Account Operation	Member	Product	FundRequirement	Cumulated Daily Cash	Corporate Action	Combined Commodity
MP01 – Options Open Positions								X															
MP02 – Sub-Account Options Open Positions								X															
MP11 – Expired Options Positions								X															
MP12 – Expired Futures Option Position Report								X															
MP21 – Contract Adjustment Report																							X
MP51 – Futures Open Positions								X															
MP56 – FIFO Position Report									X														
MP60 – FIFO Declaration vs. Open Position								X	X									X					
MP70 - Fixed Income Forward REPO Position Activity Report								X								X		X		X			

Table 1: Base Clearing Fund Requirement – Report/EOD File Matrix

END OF DAY FILE >>>> REPORTS	ASSET INSTRUCTION	BANK TRANSFER	BASE CLEARINGF UND REQUIREMENT	CDS TRADE ENTRY	TRANSACTION STATISTICS	CUMULATED FUND	POSITION	POSITION PER AGE	NSP	NSP UPDATE HISTORY	NOTIFICATION	SETTLEMENT INSTRUCTION	CDS SETTLEMENT INSTRUCTION	UNDERLYING POSITION	ONE SIDE ACCOUNT OPERATION	CLEARING ACCOUNT	HALF ACCOUNT OPERATION	MEMBER	PRODUCT	FUNDREQUIREMENT	CUMULATED DAILY CASH	CORPORATE ACTION	COMBINED COMMODITY
MP71 - Fixed Income Forward REPO Position Conversion Report								X										X		X			
MP73 - Fixed Income Running REPO Open Position Report								X												X			
MP75 - Fixed Income Forward Net Settlement Positions Report											X												
MP79 - Daily Repo Rate and Mark to Market Report													X										
MR05 – Converge Positions Limit Usage															X				X				
MR50 – Daily Capital Margin Monitoring Report							X												X				
MS01 – Daily Settlement Summary	X						X						X			X							
MS03 – Trading and Margin Summary							X						X										
MS05 – SPAN Bond Performance Report								X													X		

Table 1: Base Clearing Fund Requirement – Report/EOD File Matrix

End Of Day File >>>> Reports	Asset Instruction	Bank Transfer	Base ClearingFund Requirement	CDs Trade Entry	Transaction Statistics	Cumulated Fund	Position	Position Per Age	NSP	NSP Update History	Notification	Settlement Instruction	CDS Settlement Instruction	Underlying Position	One Side Account Operation	Clearing Account	Half Account Operation	Member	Product	FundRequirement	Cumulated Daily Cash	Corporate Action	Combined Commodity
MS07 – Intra-Day Margin Report							X													X			
MS08 – Daily Margin Positions Report							X	X					X										
MS70 - Fixed Income Net Settlement Position Activity Report											X	X											
MS75 - Fixed Income End Of Day Settlement Instruction Report													X	X									
MT01 – Options Daily Transactions																X							
MT02 – Options Exercise and Assignment													X			X							
MT03 – List of Options/Cash Adjustments																X		X					
MT05 – Options Consolidated Activity Report								X								X							
MT06 – Options Sub-Acct Consolidated Activity								X								X							

Table 1: Base Clearing Fund Requirement – Report/EOD File Matrix

END OF DAY FILE >>>> REPORTS	ASSET INSTRUCTION	BANK TRANSFER	BASE CLEARINGF UND REQUIREMENT	CDS TRADE ENTRY	TRANSACTION STATISTICS	CUMULATED FUND	POSITION	POSITION PER AGE	NSP	NSP UPDATE HISTORY	NOTIFICATION	SETTLEMENT INSTRUCTION	CDS SETTLEMENT INSTRUCTION	UNDERLYING POSITION	ONE SIDE ACCOUNT OPERATION	CLEARING ACCOUNT	HALF ACCOUNT OPERATION	MEMBER	PRODUCT	FUNDREQUIREMENT	CUMULATED DAILY CASH	CORPORATE ACTION	COMBINED COMMODITY
MT10 – Unconfirmed Items Report	X															X		X					
MT29 – Trades Rejection Modification Report										X													
MT40 – Broker Ranking by Account						X																	
MT51 – Final Futures Transactions Report																X				X			
MT52 – Futures Tender and Assignment (to be merged with MT56)													X										
MT53 – List of Futures/Cash Adjustments																X							
MT54 – Futures Trading Summary																X							
MT66 – Futures Sub-Acct Consolidated Activity								X								X							
MT70 - Fixed Income Novated Transactions Report				X												X				X			

Table 1: Base Clearing Fund Requirement – Report/EOD File Matrix

END OF DAY FILE >>>> REPORTS	ASSET INSTRUCTION	BANK TRANSFER	BASE CLEARINGFUND REQUIREMENT	CDS TRADE ENTRY	TRANSACTION STATISTICS	CUMULATED FUND	POSITION	POSITION PER AGE	NSP	NSP UPDATE HISTORY	NOTIFICATION	SETTLEMENT INSTRUCTION	CDS SETTLEMENT INSTRUCTION	UNDERLYING POSITION	ONE SIDE ACCOUNT OPERATION	CLEARING ACCOUNT	HALF ACCOUNT OPERATION	MEMBER	PRODUCT	FUNDREQUIREMENT	CUMULATED DAILY CASH	CORPORATE ACTION	COMBINED COMMODITY
MT71 - Fixed Income CSD Information Report				X																			
MT73 - Fixed Income Trade Rejection Report				X																			
MT74 - Fixed Income Not-Novated Transactions Report				X																			
MT92 – Options on Futures Exercise and Assignment Report																X							
MT99 – Detailed Futures Consolidated Activity Report								X								X							
MW01 – Converge – Trade Confirmation																X							
MX01 – Expiry Report																							
MX02 – List of Expiry Adjustments																X		X					
MX11 – Futures Options Expiry Report								X															

Table 1: Base Clearing Fund Requirement – Report/EOD File Matrix

End Of Day File >>>> Reports	Asset Instruction	Bank Transfer	Base ClearingF und Requirement	Cds Trade Entry	Transaction Statistics	Cumulated Fund	Position	Position Per Age	NSP	NSP Update History	Notification	Settlement Instruction	CDS Settlement Instruction	Underlying Position	One Side Account Operation	Clearing Account	Half Account Operation	Member	Product	FundRequirement	Cumulated Daily Cash	Corporate Action	Combined Commodity
MX12 – Futures Options Expiry Adjustments																X							
MX13 – Futures Options Expiry Difference Report								X															
MZ01 – Comma Delimited File Report													X										

Section 3 End-of-Day (EOD) Table Detail

3.1 Asset Instruction

The Asset Instruction table lists all Asset Operations (Deposits / Withdrawals) and aggregates these operations at a net level. Asset values are aggregated / cumulative per fund type in the table Cumulated Fund.

3.1.1 Table Structure

Record type "Net" is an aggregation/accumulation of deposits and withdrawals, which are then regrouped using the following criteria:

The Asset Instruction records are first regrouped by Fund Type:

- Margin
- Clearing
- OTC Premium
- Daily Capital Margin Monitoring (DCMM)
- Banking Holiday

The coverage type is the second level of grouping:

- Member
- Account Type
- Sub Account

The Product ISIN of the deposited asset is the third level of grouping.The fourth level is Covered Series if indicated.

3.1.2 Record Inclusion Rules

- All active deposit and withdrawal records are included in the EOD file.
- Deposit records, Net records with zero quantity (due to withdrawal), and Withdrawal records are purged from the Asset Instruction table a few days following the withdrawal confirmation.
- If the record types Deposit or Withdrawal are at a state equal to PendingConfirmation, these records will be available in the EOD file, however they will be purged the same day.

Table 2: Data Store Extraction Set — Asset Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType See **AccountType** Enum List.	The Type of Account in which the position covered by the asset in question is held.	1204	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
AssetInstructionType See **AssetInstructionType** Enum List.	Type of the asset instruction	970	String
AssetType See **AssetType** Enum List.	Type of asset deposited as collateral	709	String
BankIssuerDescription	Name of the bank issuer	1242	String
BankIssuerNameId	Name of the issuer of the asset on deposit	1215	String
BondIssuer	The legal entity that issued the bond	1294	String
CappedValue	Asset capped value. Only applicable to AssetType = Valued Security	6436	Float
CoverageType See **CoverageType** Enum List.	Indicates whether the deposited asset covers a specific class, series or underlying	1069	String
CoveredClassSymbol	Symbol of the class covered by the deposited asset	1446	String
CoveredContractSize	Contract size of the covered product	3158	Integer
CoveredExpiryDate	Expiry date of the covered product	3159	Date (YYYYMMDD)
CoveredQuantity	Covered Quantity	1272	Float

Table 2: Data Store Extraction Set — Asset Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
CoveredSeriesLongDescription	Long description of the covered series	3156	String
CoveredSeriesObjectNumber	Object Number of the series covered by the deposited asset. Creates unique ID when combined with CoveredSeriesSessionNumber. Link this ID with the primary key of the Product table.	1200	Integer **Foreign Key** when combined with CoveredSeriesSessionNumber
CoveredSeriesPremiumMultiplier	Premium multiplier of the covered series	3155	Float
CoveredSeriesSessionNumber	Session Number of the series covered by the deposited asset. Creates unique ID when combined with CoveredSeriesObjectNumber. Link this ID with the primary key of the Product table	1404	Integer **Foreign Key** when combined with CoveredSeriesObjectNumber
CoveredSeriesSymbol	Symbol of the series covered by the deposited asset	1201	String
CoveredStrikePrice	Strike price of the covered series	3157	Float
CoveredUnderlyingSelectedMarginPrice	Price used for margin calculation for the Covered Underlying	6381	Float
CoveredUnderlyingSymbol	Symbol of the underlying Interest covered by the asset in question	1203	String
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Asset Instruction record was created	70	Time (HHMMSS)

Table 2: Data Store Extraction Set — Asset Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
CreationTimeStamp	Date and time at which the Asset Instruction record was created	71	Date & Time (YYYYMMDDHHMMSS)
DataType	Data type, value is equal to AssetInstruction	1433	String
DecimalQuantity	Quantity	46	Float
DepositLocation See **DepositLocation** Enum List.	Location of the deposited asset	717	String
Depository	A financial institution approved as an 'Approved Depository' for the safekeeping of securities, certificates, underlying interests, etc.	6413	String
DepositoryDescription	Description of the Depository	6499	String
EngineObjectNumber	Unique identifier for the Asset Instruction record when combined with SessionNumber	1216	Integer **Primary Key** when combined with SessionNumber
ExchangeRateCurrencyCode	Currency to/from which CAD is being converted	514	String
ExternalReference	External Reference	1107	String
FundType See **FundType** Enum List.	Type of fund to which the asset is pledged	1070	String
HaircutPercentage	Percentage by which the actual value is reduced to create asset value for the purpose of margin requirements to account for possible declines in value that might occur.	1339	Float
HolderAccount	Account in which the deposited asset is held	1205	String **Foreign Key**

Table 2: Data Store Extraction Set — Asset Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
HolderMember	Member who holds the Position covered by the asset in question	1206	String **Foreign Key**
HolderSubAccount	The Sub-Account in which the Position covered by the asset in question is held	1605	String
HolderType See **HolderType** Enum List.	Level at which the asset is held	1207	String
InitialValue	Initial deposit value	1824	Float
Isin	The International Securities Identification Numbering (ISIN) system is an international standard set up by the International Organization for Standardization (ISO). It is used for numbering specific securities, such as stock, bonds, options and futures.	6176	String
LastActiveDate	Date when the record is scheduled to be purged. Only visible if the date is set in the future.	6185	Date (YYYYMMDD)
LetterExpiryDate	Expiry date of Letter of Credit, PutLetterofGuarantee, etc…	434	Date (YYYYMMDD)
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
MarketOperationNameId	Batch activity name in which an Asset Auto Withdrawal took place.	975	String
MaturityDate	Date upon which the deposited asset matures	6282	Date (YYYYMMDD)
NewSymbologyCoveredSeriesLongDescription	New Symbology Covered Series Long Description	3185	String
NewSymbologyLongDescription	New Symbology Long Description (Obsolete and has been removed).	3186	String
Note	Free form field for member notes	25	String

Table 2: Data Store Extraction Set — Asset Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
OriginalDepositQuantity	Quantity of the original deposit before any withdrawal	6463	Float
PendingDepositQuantity	Asset Quantity on deposit awaiting confirmation	6363	Float
PendingDepositValue	Value of the Asset Quantity on deposit awaiting confirmation	6364	Float
PendingWithdrawalQuantity	Asset Quantity on deposit awaiting withdrawal	6361	Float
PendingWithdrawalValue	Value of the Asset Quantity on deposit awaiting withdrawal	6362	Float
ProcessedClosingPrice	Closing price of a product pledged as an asset	1495	Float
ProcessedEODPreviousMarginPrice	Price used during the previous day's margin calculation	3097	Float
ProcessedSelectedMarginPrice	Price used for margin calculation	1501	Float
ProductObjectNumber	Object Number of the product that has been deposited as an asset. Creates unique ID when combined with ProductSessionNumber	1223	Integer **Foreign Key** when combined with ProductSessionNumber
ProductSessionNumber	Session Number of the product that has been deposited as an asset. Creates unique ID when combined with ProductObjectNumber	1224	Integer **Foreign Key** when combined with ProductObjectNumber
ProductSymbol	Symbol of the product pledged as an asset	1211	String
ProductType See ProductType Enum List.	Type of product pledged as an asset	773	String

Table 2: Data Store Extraction Set — Asset Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ReferenceForNetIdObjectNumber	Unique ID for the net Asset Instruction related to the current asset record when combined with the ReferenceForNetIdSessionNumber	6366	Integer **Foreign Key** when combined with ReferenceForNetIDSessionNumber
ReferenceForNetIdSessionNumber	Unique ID for the net Asset Instruction related to the current asset record for a specific asset type when combined with the ReferenceForNetIdObjectNumber	6365	Integer **Foreign Key** when combined with ReferenceForNetIDEngineObjectNumber
ReferenceIdEngineObjectNumber	Object Number of the Reference ID. Creates a unique identifier for the referenced Asset Instruction record when combined with the ReferenceIDSessionNumber	1121	Integer **Foreign Key** when combined with ReferenceIDSessionNumber
ReferenceIdSessionNumber	Session Number of the Reference ID. Creates a unique identifier for the referenced Asset Instruction record when combined with the ReferenceIDObjectNumber	1259	Integer **Foreign Key** when combined with ReferenceIDEngineObjectNumber
SessionNumber	Record unique identifier when combined with EngineObjectNumber	1119	Integer **Primary Key** when combined with EngineObjectNumber
Status See **AssetInstructionStatus** Enum List.	Status of the Asset Instruction	6311	String

Table 2: Data Store Extraction Set — Asset Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
StatusTimeStamp	Date and time at which the status of the Asset Instruction record was last updated	1313	Date & Time (YYYYMMDDHHMMSS)
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date the Asset Instruction record was last updated	73	Date (YYYYMMDD)
UpdateUserName	Update User Name, only present when at least 1 update has occured	2144	String
UpdateTime	Time at which the Asset Instruction record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Asset Instruction record was last updated	72	Date & Time (YYYYMMDDHHMMSS)
Value	Margin value of the asset	6373	Float
ReceiveMemberName	Receiver member name	6684	String **Foreign Key**
PendingPayoutQuantity	Pending payout quantity	6685	Float
PendingPayoutValue	Pending payout value	6686	Float
PendingReturnQuantity	Pending return quantity	6687	Float
PendingReturnValue	Pending return value	6688	Float

3.2 Bank Transfer

The Bank Transfer table includes all bank transfer records that were processed or initiated during the day the "end of day file" was created. The most common bank transfer reason is EOD settlement which represents the final daily cash settlement that could be derived from the Tables Fund summary and the accumulated daily cash.

3.2.1 Table Structure

Using the following criteria:

- There is one Record per Bank Transfer.
- The transfer reason identifies the originating process period.

3.2.2 Record Inclusion Rules

This includes all bank transfer records created, or updated on the EOD file date regardless of their status.

Not included are manual bank transfers, and bank transfer adjustments that CDCC Operations would have done directly without using the SOLA Clearing bank transfer functionality.

Table 3: Data Store Extraction Set — Bank Transfer

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountNumber	Account number	1	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
Amount	Dollar amount of Bank Transfer	1230	Float
BankAccount	Bank Account Number of the member sending or receiving the Bank Transfer payment	1100	String **Foreign Key**
BankCode	Bank Code - 3 digit identifier for the Bank	564	String

Table 3: Data Store Extraction Set — Bank Transfer

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
BankName	Name of the bank through which the EDI payments are made (use Royal Bank of Canada)	563	String
BankTransferObjectNumber	Object number of the Bank Transfer creates a unique Id when combined with BankTransferSessionNumber	1587	Integer
BankTransferSessionNumber	Session number of the Bank Transfer creates a unique Id when combined with BankTransferObjectNumber	1586	Integer
BankTransit	Bank Transit Number of the member sending or receiving the Bank Transfer payment	1182	String
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Bank Transfer record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Bank Transfer record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time at which the Bank Transfer record was created	71	Date & Time (YYYYMMDDHHMMSS)
CurrencyCode	Currency of the funds being transferred.	16	String
Description	Bank Transfer description	10003	String
EngineObjectNumber	Unique identifier of the Bank Transfer record when combined with SessionNumber	1216	Integer **Primary Key**
ExternalReferenceID	External Reference	1107	String

Table 3: Data Store Extraction Set — Bank Transfer

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
MarketOperationNameId	Identification of an activity processed during the batch	975	String
MemberNameID	System ID for the member associated with the Bank Transfer	4071	String **Foreign Key**
Reason See **BankTransferReason** Enum List.	Reason for Bank Transfer	1562	String
SessionNumber	Unique identifier of the Bank Transfer record when combined with EngineObjectNumber	1119	Integer **Primary Key**
Status See **BankTransferStatus** Enum List.	Bank transfer status	6311	String
StatusTimeStamp	Date and time at which the Bank Transfer Status was updated	1313	Date & Time (YYYYMMDDHHMMSS)
TransferDateTime	Date and time at which the Bank Transfer record was created	1991	Date & Time (YYYYMMDDHHMMSS)
TransferSide See **TransferSide** Enum List.	Identifies the member as either the receiving or relinquishing entity for the Bank Transfer	1314	String
Type See **BankTransferType** Enum List.	Transaction type of the Bank Transfer	970	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date the Bank Transfer record was last updated	73	Date (YYYYMMDD)

Table 3: Data Store Extraction Set — Bank Transfer

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
UpdateTime	Time at which the Bank Transfer record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Bank Transfer record was last updated	72	Date & Time (YYYYMMDDH HMMSS)

3.3 Base Clearing Fund Requirement

The Base Clearing Fund is a configured amount used during the clearing fund requirement calculation, and sets the minimum value.

3.3.1 Table Structure

A Base Clearing Fund requirement record is unique by product type and usage type.

- ProductType:
  - Option
  - Future
  - Fixed Income
  - Bill
  - Bond
  - BuySellBack
  - Repo
  - Real Return bond
- Usage type:
  - MX Listed
  - OTC (Over The Counter)

3.3.2 Record Inclusion Rules

Includes a minimum of one record.

Table 4: Data Store Extraction Set — Base Clearing Fund Requirement

Field Name	Description	Tag Code	Data Type
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
ConfigObjectNumber	Record unique identifier when combined with SessionNumber	1196	Integer **Primary Key** when combined with SessionNumber
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Base Clearing Fund Record was created	6143	String (YYYYMMDD)
CreationTime	Time at which the Base Clearing Fund Requirement record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time at which the Base Clearing Fund record was created	71	Date & Time (YYYYMMDDHHMMSS)
DataType	Data type, value equal ’BaseClearingFundRequirement’	1433	String
MemberNameID	System ID for the member associated with the Base Clearing Fund Requirement in question	4071	String
ProductType See **ProductType** Enum List.	Type of product pledged to the Clearing Fund	773	String

Table 4: Data Store Extraction Set — Base Clearing Fund Requirement

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SessionNumber	Record unique identifier when combined with ConfigObjectNumber	1119	Integer **Primary Key** when combined with ConfigObjectNumber
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date the Asset Instruction record was last updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Asset Instruction record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Base Clearing Fund Requirement record was last updated	72	Date & Time (YYYYMMDDHHMMSS)
UsageType See **UsageType** Enum List.	Defines how the associated product is used within the Clearing System	4064	String
Value	Value of the Base Clearing Fund Requirement	6373	Float

3.4 CDS Trade Entry

Trade Entry table lists all trade messages from a source (CDS) and identifies the fixed income trades with a status to indicate the state of the transaction:

- Messages status "Novated" is matched and cleared trade legs by the clearinghouse. The Match Number holds the shared reference number of the trade legs
- Messages status "Pending Novation" is trade leg message awaiting a match
- Messages status "Nack Invalid" is a rejection message accompanied by an error code (Processing Outcome Code) and an explanation (Processing Outcome Description)
- Message status "Nack Missing Leg" is an orphaned trade leg
- Message status "Nack Manual Cancel" is an orphaned trade leg DKed by the user

3.4.1 Table Structure

Trade messages with various statuses as described above.

3.4.2 Record Inclusion rule

All trade messages are included in the EoD file.

Table 5: Data Store Extraction Set — CDS Trade Entry

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccruedInterest	Accrued interest	5162	Float
ActivityName	The name of the activity when data extracted from SOLA Clearing Currently all EOD tables generated at "EndOfDayReportGeneration".	1064	String
BuyerAccountName	Clearing member number, account and sub-account	5345	String
BuyerAccountNumber	Buyer internal account number	5025	String **Foreign Key**
BuyerAccountType	Buyer account type GA = General Account SA = Segregated Account RA = RSP Account	5020	String
BuyerCUID	Clearing member dentification code at settlement agency	5341	String
BuyerExternalReferenceId	Cds Trade Identification Number	5343	String
BuyerLedger	Buyer ledger	5371	String
CdsBuyerAccountNumber	Cds buyer account number	5379	String
CdsSellerAccountNumber	Cds seller account number	5378	String
CdsSecurityType	Field which displays type of underlying security for the trade coming from CDS. Values can be: D = Debt	461	String

Table 5: Data Store Extraction Set — CDS Trade Entry

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
	E = Equity		
ChangeFieldID	Change field Id	5375	String
ClearingStatus	The current status of the Sent to CDS Settlement Instruction record at CDCC ’C ’ = Confirmed ’D ’ = Delete ’DK’ = Don’t Know	6099	String
ChangeReasonCode	Change reason code	5376	String
CreationBusinessDate	Business the transaction is created	1828	Date
CreationTimeStamp	Date and Time the record is created	71	String
DataType	Data Type, value equal to "CdsTradeEntry"	1433	String
ExternalId	Source external identification Number	1106	String
DecimalQuantity	Trade volume	46	Float
FromAccountType	Clearing account type	3069	String
FromCdsInternalAccount	Clearing member internal account number	5573	String
FromDeliveryAgentCode	Settlement CUID	5308	String
FromMemberNameId	Clearing member number	534	String
FromSubAccount	Clearing member sub-account	536	String
GrossAmount	Gross amount	5374	Float

Table 5: Data Store Extraction Set — CDS Trade Entry

Field Name	Description	Tag Code	Data Type
InterestPayment	Interest payment	5373	Float
ISIN	Product ISIN	6176	String **Foreign Key**
LockIndicator	Lock indicator code	5346	String
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
MatchReferenceSessionNumber	Match sequence number identifier combined with MatchRefernceObjectNumber	5585	Integer **Foreign Key**—When combined with MatchReferenceObjectNumber.
MatchReferenceObjectNumber	Match sequence number identifier combined with MatchRefernceSessionNumber	5586	Integer **Foreign Key**—When combined with MatchReferenceSessionNumber
MemoTextLine1	The **first** 70 characters of the Error Message for DK Trade Leg sent back to CDS	4538	String
MemoTextLine2	The **next** 70 characters of the Error Message for DK Trade Leg sent back to CDS	4532	String
ModifiedBySubmittedAcceptorInd	Modified by submitted acceptor indicator	5369	String
NegotiationType	Field which displays if an IDB was involved in the trade (Blind Repo). Values can be: B = Bilaterally negotiated I = facilitated by a IDB	5809	String

Table 5: Data Store Extraction Set — CDS Trade Entry

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
Price	Price	44	Float
Processing Outcome Code	Process result code. Removed once the issue is resolved.	5191	String
Processing Outcome Description	Description of trade processing result	5192	String
ProductObjectNumber	Unique identifier of the Product when combined with ProductSessionNumber	1223	Integer **Foreign Key**
ProductSessionNumber	Unique identifier of the Product when combined with ProductSessionNumber	1224	Integer **Foreign Key**
ProductType See **ProductType** Enum List.	See Product Type List	773	String
Quantity	Trade volume	38	Integer
ReferenceTradeSide	Buy or Sell	154	String
RepoTagNumber	Unique identifier of multiple Repo trade legs	4539	String
ResponseStatus See **ResponseStatus** Enum List.	Status consists of Rejected or Confirmed values	127	String
SecuritySubType	Security sub type from the MQ message of CDS	5372	String
SellerAccountName	Seller member number, account and sub-account	5344	String
SellerAccountNumber	Seller internal account number	5013	String **Foreign Key**

Table 5: Data Store Extraction Set — CDS Trade Entry

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SellerAccountType	Seller account type GA = General Account SA = Segregated Account RA = RSP Account	5008	String
SellerCUID	Seller settlement identification number	5340	String
SellerExternalReferenceId	External source refence identification number	5342	String
SellerLedger	Seller ledger	5370	String
SessionNumber	Session Number	1119	Integer **Primary Key**
SettlementAmount	Member cash amount obligation	6082	Float
SettlementCurrency	Currency settlement code	613	String
SettlementDate	Date of settlement	6275	Date
SettlementType	Values are: CNS, TFT	456	String
Status See **CdsTradeEntryStatus** Enum List.	Trade status values are Novated,	6311	String
ToAccountType	Clearing account type	3070	String
ToCdsInternalAccount	Member Internal Account	5574	String
ToDeliveryAgentCode	Settlement CUID	5309	String

Table 5: Data Store Extraction Set — CDS Trade Entry

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ToMemberNameId	Clearing member number	535	String
ToSubAccount	Clearing member sub-account	537	String
TradeClearingOrganization	Trade clearing organization	5377	String
TradeDate	Date trade is received	10015	Date
TradeIdentifier	CDS trade identification	601	String
TradeType	Type of trade : Client, ATS, DirectParticipant, IDB	501	String
UpdateBusinessDate	Date trade record is updated	1823	Date
UpdateTimeStamp	Update time stamp	72	String

3.5 Fund Summary

Provides the total asset value, and requirement value per fund type, aggregated at the member level. The columns Net represents the excess, or deficit that will be used during the daily net settlement process.

3.5.1 Table Structure

There is one Fund Summary record per Fund Type:

- Margin
- Clearing
- DCMM
- OTC Premium
- UnsettledItem
- BankingHoliday

3.5.2 Record Inclusion Rules

This table is reset on a daily basis and does not carry forth historical information.

Table 6: Data Store Extraction Set — Fund Summary

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing **Note:** Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
AssetValue	Value of the deposited asset with haircut applied	1229	Float
BankTransferObjectNumber	Creates unique system ID for the Bank Transfer record when combined with the BankTransferSessionNumber	1587	Integer

Table 6: Data Store Extraction Set — Fund Summary

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
BankTransferSessionNumber	Creates unique system ID for the Bank Transfer record when combined with the BankTransferObjectNumber	1586	Integer
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Fund Summary record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Fund Summary record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Fund Summary record was created	71	Date & Time (YYYYMMDDHHMMSS)
CurrencyCode	ISO Currency Code associated with the Fund Summary record	16	String
DataType	Data type, value equal 'FundSummary'	1433	String
Effective Date	Date upon which the Fund Summary record becomes active	827	Date (YYYYMMDD)
EngineObjectNumber Engine Object Number	Creates unique system ID when combined with the SessionNumber	1216	Integer ***Primary Key —*** when combined with the SessionNumber
FundCalculationReason See **FundCalculationReason** Enum List	The rationale for this fund calculation	1310	String
FundType See **FundType** Enum List.	Type of financial accounts in which collateral requirement and their corresponding collateral deposits are held at the Clearinghouse	1070	String ***Secondary Key***
MarketOperationNameId	Identification of an activity processed during the batch	975	String
MemberNameID	System ID for the member associated with the Fund Summary record	4071	String

Table 6: Data Store Extraction Set — Fund Summary

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
Net	Net Amount for the Fund Summary record; Asset Value – Requirement Amount = Net Amount	1315	Float
RequirementAmount	Dollar amount required from the member to cover their liabilities with the clearinghouse	1228	Float
SessionNumber	Session Number - creates unique ID when combined with EngineObjectNumber	1119	Integer ***Primary Key* —** when combined with EngineObjectNumber
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date the Asset Instruction record was last updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Asset Instruction record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Fund Summary record was last updated	72	Date & Time (YYYYMMDDHHMMSS)

3.6 Transaction Statistics

This table provides statistics on traded volume, number of trades, and total traded value.

Report **MT40 "Broker Ranking by Account"** is generated from this table. Currently, MT40 cannot be replicated with the EOD file, as it only includes information from your member accounts, where MT40 requires all CDCC member information.

3.6.1 Table Structure

- The sum of volume, number of trades, and total trade value grouped by:
- Sub-Account
- Instrument Class
- BuySellIndicator

3.6.2 Record Inclusion Rules

This table is reset on a daily basis and does not carry forth historical information.

Table 7: Data Store Extraction Set — Transaction Statistics

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType See **AccountType** Enum List.	Type of Clearing Account holding the positions created by the trades listed in the Transaction Statistics record	5077	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
ClearingAccountNameID	Name of the Clearing Account holding the positions created by the trades listed in the Transaction Statistics record	957	String **Primary Key**
CreationDate	Date upon which the Transaction Statistics record was created	6143	Date (YYYYMMDD)

Table 7: Data Store Extraction Set — Transaction Statistics

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
CreationTime	Time at which the Transaction Statistics record was created	70	Time (HHMMSS)
DataType	Data type, value equal ’TransactionStatistics’	1433	String
ExercisedValue	Exercised Value	6417	Float
FutureQuantityBought	Number of contracts bought	6472	Integer
FutureQuantitySold	Number of contracts sold	6473	Integer
MemberNameID	Unique identifier for the member associated with the Transaction Statistics record	4071	String
NumberOfBuyActivity	Value of the buy side trades listed in the Transaction Statistics record	1599	Integer
NumberOfExercise	Number of Exercise Operation	6415	Integer
NumberOfExercisedContract	Number of Contract Exercise	6416	Integer
NumberOfFutureBuyActivity	Number of contracts bought involved in a Trade or Account operation.	1898	Integer
NumberOfFutureSellActivity	The future number of sell activity for member	1899	Integer
NumberOfSellActivity	Value of the sell side trades listed in the Transaction Statistics record	1598	Integer
NumberOfTender	Number of Tender Operation	6418	Integer
NumberOfTenderedContract	Number of Tendered Contract	6419	Integer
QuantityBought	Number of buy side trades listed in the Transaction Statistics record	6272	Integer
QuantitySold	Number of sell side trades listed in the Transaction Statistics record	6271	Integer

Table 7: Data Store Extraction Set — Transaction Statistics

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SubAccount	Sub-Account	605	String
UpdateDate	Date upon which the Transaction Statistics record was updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Transaction Statistics record was updated	80	Time (HHMMSS)
ValueBought	Value of the buy side trades listed in the Transaction Statistics record	6274	Float
ValueSold	Value of the sell side trades listed in the Transaction Statistics record	6273	Float

3.7 Cumulated Fund

This table provides a summary by FundType of the current requirement amount, and the current asset value. It regroups the information from the AssetInstruction, and the Fund Requirement tables.

3.7.1 Table Structure

The Cumulated Level is the grouping structure:

- CumulatedLevel = SubAccount
  SUM AssetInstruction and FundRequirement
  By FundType and SubAccount
- CumulatedLevel = AccountType
  SUM AssetInstruction and FundRequirement
  By FundType and AccountType
- CumulatedLevel = Member
  SUM AssetInstruction and FundRequirement
  By FundType and Member

3.7.2 Record Inclusion Rules

This table is reset on a daily basis and does not carry forth historical information.

Table 8: Data Store Extraction Set — Cumulated Fund

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType See **AccountType** Enum List.	Categorization of the assets which hold quantities for trades are organized.	5077	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
AssetCashValue	Cash value covering the current fund.	1559	Float

Table 8: Data Store Extraction Set — Cumulated Fund

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AssetNonCashValue	Non cash value covering the current fund.	1560	Float
AssetValue	Asset value of the deposited asset with haircut applied	1229	Float
BatchStatus See **BatchStatus** Enum List.	Batch Status	440	String
ClearingAccountNameId	Clearing account unique ID (also called a sub-account, and can be held net or gross)	957	String **Foreign Key**
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Cumulated Fund record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Cumulated Fund record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Cumulated Fund record was created	71	Date & Time (YYYYMMDDHHMMSS)
CumulatedLevel See **CumulatedLevel** Enum List.	Level of account type at which the fund is cumulated	1566	String
CurrencyCode	ISO Currency Code associated with the Cumulated Fund Record	16	String
DataType	Data type, value equal 'CumulatedFund'	1433	String
EndOfDayRequirementAmount	Cash amount required by the Clearinghouse to cover the member's overnight margin requirements	2228	Float
EngineObjectNumber	Creates unique system ID when combined with the SessionNumber	1216	Integer **Primary Key**—when combined with the SessionNumber

Table 8: Data Store Extraction Set — Cumulated Fund

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
FundType See **FundType** Enum List.	Type of fund at the Clearinghouse	1070	String
MemberNameID	System ID for the member associated with the Cumulated Fund record	4071	String **Foreign Key**
NetSettlementRequirementAmount	Net settlement requirement amount	2226	Float
NonSegregatedAssetCashValue	Cash value of the asset held in non-segregated account in the Cumulated Fund record	1581	Float
NonSegregatedAssetNonCashValue	Value of the non cash assets of the non-segregated assets in the Cumulated Fund record	1583	Float
NonSegregatedAssetValue	Value of the asset in non-segregated account in the Cumulated Fund record	1579	Float
NonSegregatedRequirementAmount	Required amount for the non-segregated account value in the Cumulated Fund record	1577	Float
PreviousEndOfDayRequirementAmount	Previous end of day requirement amount	2227	Float
RequirementAmount	Dollar amount required from the member to cover their liabilities with the Clearinghouse	1228	Float
SegregatedAssetCashValue	Cash value of assets held in segregated account in the Cumulated Fund record	1580	Float
SegregatedAssetNonCashValue	Non cash value of the assets held in segregated accounts in the Cumulated Fund record	1582	Float
SegregatedAssetValue	Value of the assets held in segregated account in the Cumulated Fund record	1578	Float

Table 8: Data Store Extraction Set — Cumulated Fund

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SegregatedRequirementAmount	Required amount for segregated accounts	1576	Float
SessionNumber	Creates unique system ID when combined with the EngineObjectNumber	1119	Integer **Primary Key** when combined with the EngineObjectNumber
Status See **CumulatedFundStatus** Enum List.	Cumulated fund status	6311	String
SubAccount	Sub-Account	605	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateTimeStamp	Date and time at which the Cumulated Fund record was last updated	72	Date & Time (YYYYMMDDHHMMSS)
InventoryAssetsummary.Total	Total inventory asset summary	6701	Float
InventoryAssetsummary.Segregated	Segragated inventory asset summary	6702	Float
InventoryAssetsummary.NonSegregated	Non segregated inventory asset summary	6703	Float
InventoryAssetsummary.Propagated	Propagated inventory asset summary	6704	Float
InventoryAssetsummary.Capped	Capped inventory asset summary		Float
InventoryAssetsummary.NEtted	Netted inventory assets summary	6705	Float

3.8 Position

A Position Record represents a long, and/or short position, held by a sub account for a specific product/instrument.

3.8.1 Table Structure

A position record is defined by using the following grouping criteria:

1. Product
2. Member
3. Account Type
4. Sub Account

3.8.2 Record Structure / Usage

Unsettled Position

If a position is in the process of being exercised, then the Long or Short quantity will be reduced by the exercise, or assigned a quantity, and the field LongSetToBeSettled, or ShortToBeSettled quantity will increase by the exercise or the assigned quantity.

Position Transfer

If there is a pending position transfer request initiated by your firm, then the transfer quantity will be in a LongForTransfer or ShortForTransfer field. However this will not affect the current long or short quantity. The only time which the Long or Short quantity is affected, is when the position transfer is actually executed. The LongForTransfer and ShortForTransfer are used to block position transfers entry when the positions existing quantity was already used in a previously entered position transfer.

Mark-To-Market

Most future reports providing Mark-To-Market information, is using the Position Table. Note: the Mark-To-Market information available in the Position Table is based on the start of a day position rather than the current long or short quantity positions.

Position Change History

Using the start of day position and one side account operation to rebuild the position history for one day.

3.8.3 Record Inclusion Rules

Includes all active position records where the Long or Short quantity is not equal to zero, or if the LongSetToBeSettled or ShortToBeSettled quantity is not equal to zero.

Table 9: Data Store Extraction Set — Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType See **AccountType** Enum List.	Categorization of the positions accounts which hold quantities for trades are organized.	5077	String **Foreign Key**
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
AutoExerciseThreshold	If an option is "in the money" by a higher amount than the Automatic Exercise Threshold, the system will automatically exercise an option for the holder	618	Integer
CallPutCode See **CallPutCode** Enum List.	Call Put code	201	String
ClassSymbol	Class Symbol of the product making up the Position	6179	String
ClearingAccountNameId	Name ID of the Clearing Account in which the Position is held	957	String **Foreign Key**
ContractSize	The quantity of the underlying security that the holder of an option exercises the right to sell or buy	6164	Integer
ContractsSizeUnit See **ContractSizeUnit** Enum List.	Contract size unit	1124	String

Table 9: Data Store Extraction Set — Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
CoveredQuantity	Covered Quantity	1272	Float
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Position record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Position record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Position record was created	71	Date & Time (YYYYMMDDHHMMSS)
DataType	Data type, value equal 'Position'	1433	String
DateForSymbol	Date used in Symbol construction. It is the same as the expiry date except for Option on CGB.	1199	Date (YYYYMMDD)
DayCountConvention	Determines how interests accrues over time for a variety of investments	4082	Integer
DeliveryAgency See **DeliveryAgency** Enum List.	Delivery agency	539	String
DeliveryAgentCode	Delivery agent CUID code	1621	String
DeliveryType See **DeliveryType** Enum List.	Delivery type	624	String
DerivativeExpiryDate	Derivative expiry date	433	Date (YYYYMMDD)
Description	Position description	10003	String

Table 9: Data Store Extraction Set — Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
EngineObjectNumber	Creates unique ID for the product when combined with the SessionNumber.	1216	Integer **Primary Key** when combined with the SessionNumber.
ExchangeRateCurrencyCode	Exchange rate currency code	514	String
ExerciseStyle See **ExerciseStyle** Enum List.	Exercise style	730	String
ExpectedAutoExerciseQuantity	Expected Auto Exercise Quantity	6487	Integer
ExpectedLongManualExercise	Expected Long Manual Exercise	277	Float
ExpiryDayRule	Expiry Day Rule	1645	String
GroupDescription	Group Description	6369	String
InternalAccountNumber	Clearing member internal account number	5049	String
LongAutoExercise	Long auto exercise quantity	1276	Integer
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
LongForTransfer	Long for transfer	1084	Integer
LongManualExercise	Quantity that corresponds to the exercise intentions that have been entered by the option holder	1277	Integer
LongOverrideAutoExercise	Quantity that corresponds to the positions that the member has decided not to exercise although the system has considered them to be sufficiently 'in the money' to be auto-exercised	1278	Integer

Table 9: Data Store Extraction Set — Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
LongQuantity	Long quantity	196	Integer
LongSetToBeSettled	Long quantity to be settled	1076	Integer
LongStartOfDay	Long positions at the start of the day	1078	Integer
MemberNameID	System ID for the member associated with the Position	4071	String **Foreign Key**
NewSymbologyLongDescription	New Symbology Long Description (Obsolete and has been removed).	3186	String
NextBusinessDate	Next business date	1831	Date (YYYYMMDD)
OpenInterest	Open interest	5031	Integer
OverrideAutoExerciseFlag	This flag determines if the member has the right to override the auto-exercise process Yes No	1279	String
PenaltyWhenUnsettled	Penalty for late settlement	1304	Float
PositionLimit	Position limit	746	Integer
PremiumMultiplier	Premium multiplier	755	Float
PremiumSettlementNumberOfDay	Number of days allowed to pay the Premium	181	Integer
PremiumStyle See **PremiumStyle** Enum List.	Premium style	610	String
PremiumType	Premium type	609	String

Table 9: Data Store Extraction Set — Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
See **PremiumType** Enum List.			
PreviousBusinessDate	Previous business date	1832	Date (YYYYMMDD)
PrimaryExchange	Primary exchange	629	String
ProcessedClosingPrice	Closing price	1495	Float
ProcessedEODPreviousMarginPrice	Price used during the previous day's margin calculation	3097	Float
ProcessedPreviousMarginPrice	Previous Margin Price	1500	Float
ProcessedSelectedMarginPrice	Price used during the margin calculation	1501	Float
ProcessedSettlementPrice	Settlement Price	1498	Float
ProductClassDescription	Product Class Description	6414	String
ProductObjectNumber	Object Number of the product making up the Position in question. Creates unique ID for the product when combined with ProductSessionNumber	1223	Integer **Foreign Key** when combined with ProductSessionNumber
ProductPeriodicity	Product Periodicity	1644	String
ProductSessionNumber	Session Number of the product making up the Position in question. Creates unique ID for the product when combined with ProductObjectNumber	1224	Integer **Foreign Key** when combined with ProductObjectNumber
ProductSymbol	Product symbol	1211	String
ProductType	Product type	773	String

Table 9: Data Store Extraction Set — Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
See **ProductType** Enum List.			
ReferenceIndexPriceType See **ReferenceIndexPriceType** Enum List	Underlying price that will be used for settlement	1241	String
SessionNumber	Creates unique ID for the product when combined with the EngineObjectNumber.	1119	Integer **Primary Key** when combined with the EngineObjectNumber.
SettlementAmount	Settlement amount	6082	Float
SettlementCurrency	Settlement currency	613	String
SettlementNumberOfDay	Number of days allotted to finalize the settlement	615	Integer
SettlementPriceType See **SettlementPriceType** Enum List.	Type of Settlement Price used to price the Position. Use SelectedMarginPrice	6070	String
SettlementStyle	Settlement Style	1626	String
ShortForTransfer	Short for transfer	1085	Integer
ShortQuantity	Short quantity	197	Integer
ShortSetToBeSettled	Short quantity to be settled	1077	Integer
ShortStartOfDay	Short position at the start of day	1083	Integer
ShortTender	Short tender	1075	Integer
StartOfDayLastUpdateDate	Start of Day Last Update Date (Obsolete and has been removed).	6478	Date (YYYYMMDD)

Table 9: Data Store Extraction Set — Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
StartOfDayUpdateDate	Last date when the end of day position was different than the start of day position	6481	Date (YYYYMMDD)
Status See **PositionStatus** Enum List.	Clearing position status	6311	String
StrikePrice	Strike price	202	Float
SubAccount	Sub-Account	605	String **Foreign Key**
SubstitutionIndicator	Substitution Indicator	1627	String
TenderDate	Tender date	1575	Date (YYYYMMDD)
UnderlyingCurrencyCode	Underlying currency code	2243	String
UnderlyingExpiryDate	Expiry date of the underlying instrument contract	431	Date (YYYYMMDD)
UnderlyingPositionLimit	Underlying position limit	6289	Integer
UnderlyingPrimaryExchange	Primary exchange of the Underlying Interest	2245	String
UnderlyingSelectedMarginPrice	Underlying selected margin price	2244	Float
UnderlyingSymbol	Underlying Symbol	311	String
UnderlyingType See **ProductType** Enum List.	Defines the underlying Product Type	313	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)

Table 9: Data Store Extraction Set — Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
UpdateDate	Date the Position record was last updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Position record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Position record was last updated	72	Date & Time (YYYYMMDDHHMMSS)
UsageType See **UsageType** Enum List.	Defines how the associated product is used within the Clearing System	4064	String

3.9 Position per Age

This table contains only data for future contracts that are during their Declaration Period. Each record represents the quantity for a product, within a clearing account, and by effective date. The effective date reflects the trade entries corresponding to outstanding positions, and is used during the assignment process.

3.9.1 Table Structure

Records are built using the following grouping criteria:

- Position ID (Product, Member, AccountType, SubAccount)
- Effective Date

3.9.2 Record Structure / Usage

Note that this table does not include position information for all CDCC outstanding positions, it only covers your own member position(s). As a result of this, report MP56 cannot be produced using this table.

Link to Position Record – Join PositionPerAge record with Position record using the following mapping:

- PositionPerAge.PositionSessionNumber = Position.SessionNumber
- PositionPerAgePositionObjectNumber = Position.EngineObjectNumber

3.9.3 Record Inclusion Rules

Position Per Age records are re-calculated daily.

Records are kept until Future expiry dates are met.

Table 10: Data Store Extraction Set — Position Per Age

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType See **AccountType** Enum List.	Account type	5077	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
ClearingAccountNameId	Clearing account name Id	957	String
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Position per Age record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Position per Age record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Position per Age record was created	71	Date & Time (YYYYMMDDHHMMSS)
DataType	Data type, value equal to PositionPerAge	1433	String
DerivativeExpiryDate	Date upon which the Derivative Instrument will expire	433	Date (YYYYMMDD)
EffectiveDate	Declaration date for the Position per Age record	827	Date (YYYYMMDD)
EngineObjectNumber	Creates unique System ID when combined with the SessionNumber	1216	Integer **Primary Key** when combined with the SessionNumber
FirstDeclarationDate	Derivative Instrument - First Declaration Date	1532	Date (YYYYMMDD)
FirstTenderDate	Derivative Instrument - First Tender Date	1533	Date (YYYYMMDD)

Table 10: Data Store Extraction Set — Position Per Age

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
Long	Position Long Quantity	196	Integer
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
MemberNameID	System ID for the member associated with the Position per Age record	4071	String
NewSymbologyLongDescription	New Symbology Long Description (Obsolete and has been removed).	3186	String
PositionObjectNumber	Creates unique System ID for the Position when combined with the PositionSessionNumber	1086	String **Foreign Key**
PositionSessionNumber	Creates unique System ID for the Position when combined with the PositionObjectNumber	1254	Integer **Foreign Key**
ProductObjectNumber	Creates unique System ID for the product making up the Position when combined with the ProductSessionNumber	1223	Integer **Foreign Key** when combined with the ProductSessionNumber
ProductSessionNumber	Creates unique System ID for the product making up the Position when combined with the ProductObjectNumber	1224	Integer **Foreign Key** when combined with the Product Object Number
ProductType See **ProductType** Enum List.	Product Type	773	String
SessionNumber	Creates unique System ID when combined with the EngineObjectNumber	1119	Integer **Primary Key** when combined with the EngineObjectNumber
ShortQuantity	Position Short Quantity	197	Integer

Table 10: Data Store Extraction Set — Position Per Age

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
Status See **PositionPerAgeStatus** Enum List.	Clearing position status	6311	String
SubAccount	Sub Account in which the Position is held	605	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date the Notification record was last updated	73	Date (YYYYMMDD)
UpdateTimeStamp	Date and time at which the Position per Age record was last updated	72	Date & Time (YYYYMMDDHHMMSS)

3.10 Net Settlement Position (NSP)

The NSP table contains the net settlement obligations of the member in a designated account.

3.10.1 Table Structure

A record consists of a unique net settlement holding for an account comprising of (Member Number, Account, Sub.Account, ISIN and Settlement Date) for a forward position. Other NSP types are cumulative and comprise of (Member Number, Account, Sub.Account and ISIN).

The types of NSP are;

1. Net Forward Settlement Position stream: It represents for a specific settlement date the net Cash and Bond Obligation on a specific ISIN. This type of position once created will carry a cash value and an underlying quantity that is continuously altered by various settlement instruction transaction types. The Net Settlement Position will maintain the same identification number (NSP ID composed of (Session Number + Object Number)) until expiration when it transforms into a SetToBeSettled position.
2. SetToBeSettled Position stream: It represents for the net Cash and Bond Obligation on a specific ISIN that has been send to CDS for Settlement. It is populated by transforming the Net Forward Settlement Position and is reduced when settlement or failure of delivery occurs.
3. Failed Position stream: It represents for the net Cash and Bond Obligation on a specific ISIN that has been send to CDS for Settlement and has not settled before the End of Payment Exchange at CDS. It is populated when a failure of delivery occurs resulting in reduction of SetToBeSettled position.

Refer to Net Settlement Position Maintenance Rules for more detail.

Table 11: Data Store Extraction Set — Net Settlement Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType	Type of Clearing Account holding the Net Settlement Position	5077	String
ActivityName	The name of the activity when data extracted from SOLA Clearing Currently all EOD tables generated at "EndOfDayReportGeneration".	1064	String
ClearingAccountNameId	Name of the Clearing Account holding the Net Settlement Position	957	String
CreationBusinessDate	Date on which the transaction record was created	1828	Date (YYYYMMDD)
CreationTimeStamp	Date and Time of transaction creation	71	Date & Time (YYYYMMDDHHMMSS)
CurrencyCode	Settlement Currency of the Net Settlement Position	16	String
DataType	Data Type, value equal to 'NetSettlementPosition'	1433	String
DeliveryAgentCode	Delivery agency CUID	1621	String
EngineObjectNumber	Unique identifier when combined with SessionNumber	1216	Integer ***Primary Key***
ExternalId	Source Id of the transaction	1106	String
InternalAccountNumber	Settlement Internal Account Number	5049	String
LongCash	Long Cash Value	6454	Float
LongCashStartOfDay	Start of the day value of the long cash	6502	Float
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
LongQuantity	Long Physical Quantity	196	Integer

Table 11: Data Store Extraction Set — Net Settlement Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
LongStartOfDay	Start of the day long physical quantity	1078	Integer
MemberNameId	Clearing memeber name id	4071	String
ProcessedSelectedMarginPrice	Marginable price of NSP	1501	Float
ProductObjectNumber	Unique identifier linking when combined with ProductSessionNumber	1223	Integer
ProductSessionNumber	Unique identifier when combined with ProductObjectNumber	1224	Integer
ProductSymbol	Product Symbol	1211	String
ProductType See **ProductType** Enum List.	Product Type	773	String
SessionNumber	Unique identifier when combined with EngineObjectNumber	1119	Integer ***Primary Key***
SettlementDate	Date of settlement of the NSP	6275	Date
ShortCash	Short Cash Value	6455	Float
ShortCashStartOfDay	Start of the day short cash value	6503	Float
ShortQuantity	Short physical Quantity	197	Integer
ShortStartOfDay	Start of the day short physical quantity	1083	Integer
StartOfDayUpdateDate	Start Of Day Update Date	6481	Date
SubAccount	Clearing Sub-account	605	String

Table 11: Data Store Extraction Set — Net Settlement Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
Type See **NetSettlementPositionType** Enum List.	Net settlement position type	970	String
UpdateBusinessDate	Update date of the NSP record	1823	Date
UpdateTimeStamp	Update Time Stamp	72	String

Table 12: Net Settlement Position Maintenance Rules

Settlement Instruction Reason	Net Settlement Position		
	Forward	SetToBeSettled	Fail
Repo Interest,	Increase		
Start Leg Underlying Settlement	Increase		
Close Leg Underlying Settlement	Increase		
Rolled For Intra Day Netting	Increase (date)		
Rolled For Failing	Increase		
Bond Conversion to Cash At Maturity	Increase (Cash)		
Decrease(Physical)			
Intra Day Net Underlying Settlement			
Pending Settlement	Decrease	Increase	

Table 12: Net Settlement Position Maintenance Rules

Settlement Instruction Reason	Net Settlement Position		
	Forward	SetToBeSettled	Fail
Cancel		Decrease	Decrease
Failed		Decrease	Increase
Settled		Decrease	Decrease
EoD Net Underlying Settlement			
Pending Settlement	Decrease	Increase	
Cancel		Decrease	Decrease
Failed		Decrease	Increase
Settled		Decrease	Decrease
Coupon Transfer Back Us Style Repo	Increase		
Coupon Transfer Back Failed SI	Increase		
Underlying Settlement (i.e. For CGB)	Increase		

3.11 NSP Update History

The Net Settlement Position Update History table contains the Net Settlement Position fluctuations from Net Settlement Instruction.

3.11.1 Table Structure

NSPUpdateHistory record indicates the effect on the long and short positions based on whether it is a cash/physical and action type to increase/decrease the position. There can be multiple records associated with the same NSP.

3.11.2 Link to Settlement Instruction Table:

NSPUH.SettlementInstructionSourceObjectNumber = SettlenetInstruction.ObjectNumber

NSPUH.SettlementInstructionSourceSessionNumber = SettlenetInstruction.SessionNumber

3.11.3 Link to Net Settlement Position Table:

NSPUH.NetSettlementPositionObjectNumber = NetSettlenetPosition.ObjectNumber

NSPUH.NetSettlementPositionSessionNumber = NetSettlenetPosition.SessionNumber

Table 13: Data Store Extraction Set — NSP Update History

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ActivityName	The name of the activity when data extracted from SOLA Clearing Currently all EOD tables generated at "EndOfDayReportGeneration".	1064	String
AssignmentObjectNumber	Unique identifier of Account Operation when combined with Assignment Session Number	1251	Integer **Foreign Key** When combined with AssignmentSessionNumber
AssignmentSessionNumber	Unique identifier of Account Operation when combined with Assignment object Number	540	Integer **Foreign Key** When combined with AssignmenObjectNumber
CashPhysicalIndicator See **CashPhysicalIndicator** Enum List.	Indicator identifying the record "Cash" or "Physical"	5571	String
CreationBusinessDate	Creation Business Date	1828	Date (YYYYMMDD)
CreationTimeStamp	CreationTimeStamp	71	Date and Time (YYYYMMDDHHMMSS)
DataType	Data Type, value equal to 'NSPHistoryUpdate'	1433	String
DecimalQuantity	Decimal Quantity	46	Float
EngineObjectNumber	Engine object number, identifies the NSP update history record	1216	Integer **Primary Key**
FromToIndicator	FromToIndicator, From = Short and To = Long	56	String
IncreaseDecreaseIndicator	NSP action type identifier	5570	String

Table 13: Data Store Extraction Set — NSP Update History

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
See **IncreaseDecreaseIndicator** Enum List.			
ISIN	ISIN code of the Deliverable Security. The International Securities Identification Numbering (ISIN) system is an international standard set up by the International Organization for Standardization (ISO). It is used for numbering specific securities, such as stock, bonds, options and futures.	6176	String
LastActiveDate	Date when the record is scheduled to be purged. Only visible if the date is set in the future.	6185	Date
LongCash	Long Cash value of the NSP	6454	Float
LongQuantity	Long underlying interest quantity	196	Integer
MemberNameId	Clearing member number	4071	String
NetSettlementPositionObjectNumber	Unique identifier of the Net Settlement Position identification number when combined with NetSettlementPositionSessionNumber	1654	Integer **Foreign Key**
NetSettlementPositionSessionNumber	Unique identifier of the Net Settlement Position identification number when combined with NetSettlementPositionSessionNumber	1653	Integer **Foreign Key**
ProductType See **ProductType** Enum List.	Product Type	773	String
RepoTagNumber	Tag number of the trade from CDS	4539	String
SessionNumber	Session Number, identifies the NSP update history record	1119	Integer **Primary Key**

Table 13: Data Store Extraction Set — NSP Update History

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SettlementInstructionSourceObjectNumber	Unique identifier of the Settlement Instruction identification number when combined with SettlementInstructionSourceSessionNumber	1955	Integer **Foreign Key**
SettlementInstructionSourceSessionNumber	Unique identifier of the Settlement Instruction identification number when combined with SettlementInstructionSourceObjectNumber	1954	Integer **Foreign Key**
SettlementReason See **SettlementReason** Enum List.	Settlement instruction Reason (please see Net Settlement Position Maintenanace Rules Table)	1227	String
SettlementStatus See **SettlementInstructionStatus** Enum List.	Settlement instruction status	6279	String
ShortCash	Short Cash value obligation	6455	Float
ShortQuantity	Short underlying Quantity obligation	197	Integer
UpdateBusinessDate	Date of the update of the NSP history record	1823	Date (YYYYMMDD)
UpdateTimeStamp	Date and time of the update of the NSP history record	72	Date and Time (YYYYMMDDHHMMSS)

3.12 Notification

This table includes alerts sent by the system following an abnormal situation, i.e., when a trade is rejected, or when a trade occurs outside a price threshold. The field level highlights the level of urgency related to this notification.

Only report MT29 uses this table to identify an account operation 'flip' resulting when CDCC receives an instruction to close a position, and there is insufficient quantity to close.

3.12.1 Table Structure

One record per notification.

3.12.2 Usage and Tips

Link Notification

Notification can be related to various tables therefore, to link one record to another using the field ReferenceTable.

- Notification.ReferenceTable = Table Name
- Notification.ReferenceSessionNumber = Notification.ReferenceTable.SessionNumber
- Notification.ReferenceObjectNumber = Notification.ReferenceTable.ObjectNumber

3.12.3 Record Inclusion Rules

This table is reset on a daily basis and does not carry forth historical information.

Table 14: Data Store Extraction Set — Notification

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountOperationCreationDate	Date the account operation was created	2349	Date (YYYYMMDD)
AccountOperationCreationTime	Time the account operation was created	2350	Time (HHMMSS)
AccountType See **AccountType** Enum List.	Account type	5077	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
AllocationVolume	Allocation volume	504	Integer
CallPutCode See **CallPutCode** Enum List.	Call Put code	201	String
ClassSymbol	Class Symbol	6179	String
ClearingAccountNameId	Clearing account name Id	957	String **Foreign Key**
ClientAccountNumber	Client account number	1261	String
Comment	Notification message text	1175	String
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Notification record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Notification record was created	70	Time (HHMMSS)

Table 14: Data Store Extraction Set — Notification

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
CreationTimeStamp	Date and time the Notification record was created	71	Date & Time (YYYYMMDDHHMMSS)
DataType	Data type, value is equal to Notification	1433	String
DerivativeExpiryDate	Derivative expiry date	433	Date (YYYYMMDD)
Description	Notification description	10003	String
EngineObjectNumber	Creates unique ID for this record when combined with SessionNumber	1216	Integer **Primary Key** when combined with the SessionNumber
ExternalId	Unique Identifier for the originating trade from the MX	1106	String
FromToIndicator See **FromToIndicator** Enum List.	From To Indicator	56	String
HedgeSpeculatorIndicator See **HedgeSpeculatorIndicator** Enum List.	Side Info - Hedger or Speculator Indicator	527	String
ISIN	The International Securities Identification Numbering (ISIN) system is an international standard set up by the International Organization for Standardization (ISO). It is used for numbering specific securities, such as stock, bonds, options and futures.	6176	String
Level See **Level** Enum List.	Level of importance	268	String
LongShortIndicator See **LongShortIndicator** Enum List.	Long or Short Indicator	526	String

Table 14: Data Store Extraction Set — Notification

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
MaturityDate	Date upon which the deposited asset matures	6282	Date (YYYYMMDD)
MemberNameID	System ID for the member associated with the Notification record	4071	String **Foreign Key**
NameId	Clearing account name	969	String
NotificationType See **NotificationType** Enum List.	Type of notification	1125	String
OpenCloseIndicator See **OpenCloseIndicator** Enum List.	Open Close indicator	749	String
OppositeAccountType See **AccountType** Enum List	Opposite Account Type	2249	String
OppositeSubAccount	Opposite Sub-Account	2250	String
OppositeLongShortIndicator See **LongShortIndicator** Enum List	Opposite Long Short Indicator	2251	String
OppositeOpenCloseIndicator See **OpenCloseIndicator** Enum List	Opposite Open Close Indicator	2252	String
OppositeHedgerSpeculatorIndicator See **OppositeHedgerSpeculatorIndicator** Enum List	Opposite Hedger Speculator Indicator	2253	String
OppositeClearingMember	The Clearing Member on the opposite side of the Account Operation	655	String
OppositeClientAccountNumber	Opposite Client Account Number	2255	String

Table 14: Data Store Extraction Set — Notification

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
OppositeMember	Opposite Member	2248	String
OppositeTradingAccountType	ClrngAccountType	7820	String
OppositeTradingMember	ClrngMemberName	7819	String
OppositeTradingSubAccount	ClrngAccountSubAccount	7821	String
OriginalPositionDate	Date the Original Position was created. Only visible on the From side of the assignment.	3127	Date (YYYYMMDD)
Price	Price	44	Float
ProcessedSelectedMarginPrice	Price used during margin calculation	1501	Float
ProductSymbol	Product Symbol	1211	String
ProductType See **ProductType** Enum List	Product Type	773	String
Quantity	Quantity	38	Integer
ReferenceIssuer	External entity that created the business object for which the Notification was created	4512	String **Foreign Key**
ReferenceNameId	Member ID of the sending entity	4510	String **Foreign Key**
ReferenceObjectNumber	Object Number of the business object for which the Notification was generated	1121	Integer **Foreign Key**

Table 14: Data Store Extraction Set — Notification

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ReferenceSessionNumber	Session Number of the business object for which the Notification was generated	1259	Integer **Foreign Key**
ReferenceSource	Gateway that sent the business object for which the Notification was created	4513	String **Foreign Key**
ReferenceTable	Table associated with the business object for which the Notification was sent	4511	String
SessionNumber	Creates unique ID for this record when combined with EngineObjectNumber	1119	Integer **Primary Key** when combined with the EngineObjectNumber
Status See **Status** Enum List	Notification status	6311	String
StatusTimeStamp	Date and time of status update	1313	Date & Time (YYYYMMDDHHMMSS)
StrikePrice	Strike Price	202	Float
SubAccount	Sub-Account	605	String
TradingAccountType	ClrngAccountType	7829	String
TradingMember	ClrngMemberName	7828	String
TradingSubAccount	ClrngAccountSubAccount	7830	String
TransactionSource	Source of the transaction	2291	String **Foreign Key**

Table 14: Data Store Extraction Set — Notification

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
UnderlyingSymbol	Underlying symbol	311	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date the Notification record was last updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Notification record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Notification record was last updated	72	Date & Time (YYYYMMDDHHMMSS)

3.13 Settlement Instruction

This table includes the details of all Settlement Instruction records. A Settlement Instruction is generated any time there is cash, or a physical settlement resulting from a trade, an existing future position, a position transfer, an assignment, a cash adjustment, and billing fee. For detailed Settlement Instruction transaction types, see the enum list for **SettlementReason**.

3.13.1 Options and Futures

Table Structure

A record is one side of a two-sided settlement instruction record. The field FromToIndicator determines whether you are the receiver (To-Side), or the deliverer (From-Side), of the deliverable security.

The SettlementReason is the reason for the settlement instruction to be created. The following matrix illustrates the initial event triggering the Settlement Instruction record creation:

INITIAL EVENT	PRODUCT TYPE	SETTLEMENTREASON
Trade	Option	Premium
Trade	Future	Mark-To-Market
Allocation	Future	Mark-To-Market
Give-Up	Future	Mark-To-Market
Start Of Day Position	Future	Mark-To-Market
Assignment	Option	Underlying Settlement
Assignment	Future	Underlying Settlement
Monthly Clearing Fee	All	Billing
Manual Cash Adjustment	All	Cash Adjustment

INITIAL EVENT	PRODUCT TYPE	SETTLEMENTREASON
Asset withdrawal during the DailyNet SettlementProcess	All	Asset Auto Withdrawal

Status Settled

All cash settlement items are usually settled the day prior to the settlement date during the end of day net settlement process. Example: An option trade generates a settlement instruction (Premium) with a settlement date at T+1. In the EOD file the settlement instruction status will be at "Settled" on transaction date.

Underlying Settlement

There is a minimum of two underlying settlement records created per Assignment. One has the DeliveryRole = Cash represents payment of the underlying at strike price (the amount pay by the Long Call or Short Put). The other one has DeliveryRole = Underlying Settlement the settlement instruction is related to the actual underlying to be delivered. If the underlying is a Basket with multiple deliverables, there will be a settlement instruction for each one.

Identify all settlement instruction records related to the same assignment by using the AssignmentID (AssignmentObjectNumber and AssignmentSessionNumber) which will be the same for all settlement instruction records created for this specific Assignment.

Link to Position Table:

- SettlementInstruction.PositionObjectNumber = Position.ObjectNumber
- SettlementInstruction.PositionSessionNumber = Position.SessionNumber

Link to OneSideAccountOperation Table:

- SettlementInstruction.AssignmentObjectNumber = Assignment.ObjectNumber
- SettlementInstruction.AssignmentSessionNumber = Assignment.SessionNumber

Record Inclusion Rules

Includes all unsettled settlement instructions, and all settlement instructions for which the status changed to 'settled' on EOD file creation date.

3.13.2 Fixed Income

SOLA Clearing generates a settlement instruction not only from trades but from a variety of other activities pertaining to fixed income. The following is a list of defined settlement instructions transaction types.

Settlement Instruction Types

Repo Interest: Is a transaction type generated to cause the forward position to be increased by the specified amount.

Start Leg Underlying Settlement: Are settlement instruction types from a trade that increases the forward position underlying and cash value components.

Close Leg Underlying Settlement: Are settlement instructions from a trade that increases the forward position underlying and cash value components.

Rolled For Intra Day Netting: Is a settlement instruction generated intra day that causes the position to be rolled onto the next business day.

Rolled For Failing: Is a settlement instruction at end of day that causes the failed position to be rolled to the next business date.

Bond Conversion To Cash At Maturity: Is generated when a maturity is reached at the time a settlement fails and is rolled to the next business date. The clearing system updates the Net Settlement Position (NSP) by converting the matured Bond or Bill or Real Return Physical position by increasing the cash and reducing the physical.

Intra Day Net Underlying Settlement: Is a settlement instruction reason that is generated to request the settlement of a net position after an Intraday netting request. Its status can evolve as follows:

- Pending Settlement-SendToCSD: Transforms a forward position (decrease) into a set to be settled position (increase).
- Cancel: Causes the set to be settled position to be reduced and in extremely rare circumstance may also decrease the fail position due to receiving end of payment exchange from CDS after the cancel occurred.
- Failed: Is generated to transform the set to be settled position reducing its values into a fail position by increasing its values.
- Settled: Causes the set to be settled position to be reduced by the settled quantity and amount.

EoD Net Underlying Settlement: Is a settlement instruction reason generated to request the settlement of a net position at end of day, its status can evolve as follows:

- Pending Settlement – SendToCDS: Transforms the forward position (reduced) into a set to be settled position (increased) at end of day.
- Cancel: Causes the set to be settled position to be reduced and in extremely rare circumstance may also decrease the fail position due to receiving end of payment exchange from CDS after the cancel occurred.
- Failed: Is generated to transform the set to be settled position reducing its values into a fail position by increasing its values.
- Settled: Causes the set to be settled position to be reduced by the settled quantity and amount.

Coupon Transfer Back Us Style Repo: Causes the short position holder to pay the coupon to the short position who is the real owner of the bond.

Coupon Transfer Back Failed SI: A settlement instruction failure of a coupon transfer due on next business day that causes an increase in the forward position.

Underlying Settlement: This type of settlement instruction is generated by a future tender or an assignment causing an increase in the forward position.

Settlement Instructions and Net Settlement Position

Net settlement positions are maintained by settlement instructions and for every settlement instruction type and status the NSP is manipulated, see Net Settlement Position Maintenance Rules .

Link to Net Settlement Position is by:
SettlementInstruction.NetSettlementPositionObjectNumber = NetSettlementPosition.ObjectNumber
NetSettlementInstruction.NetSettlementPositionSessionNumber = NetSettlementPosition.SessionNumber

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
AccountOperationBuySellIndicator	Account operation buy sell indicator	5324	String
AccountOperationCreationDate	Date at which the Account Operation was created	2349	Date (YYYYMMDD)
AccountOperationCreationTime	Time at which the Account Operation was created	2350	Date (YYYYMMDD)
AccountOperationCreationTimeStamp	Account Operation Creation Time Stamp	3123	Date & Time (YYYYMMDDHHMMSS)
AccountOperationExternalId	Account operation external Id	5323	String
AccountOperationPrice	Account Operation Price	3124	Float
AccountOperationQuantity	Account Operation Quantity	3126	Integer
AccountOperationStatus	Account operation performed status	5174	String
AccountOperationType See **AccountOperationType** Enum List.	Settlement transaction type	3133	String
AccountType See **AccountType** Enum List.	Account Type	5077	String
AccruedInterest	Accrued Interest	5162	Float
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at "EndOfDayReportGeneration".	1064	String

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
AssignmentObjectNumber	Creates a uniques ID for the related Account Operation when combined with AssignmentSessionNumber	1251	**Foreign Key**—when combined with AssignmentSessionNuimber
AssignmentSessionNumber	Creates a unique ID for the related Account Operation when combined with the AssignmentObjectNumber	540	**Foreign Key** —when combined with the AssignmentObjectNumber
AssociatedCashIdObjectNumber	Creates a unique identifier when combined with AssociatedCashIdSessionNumber to link the physical and the cash	5566	**Foreign Key** —When combined with AssociatedCashIdSessionNumber
AssociatedCashIdSessionNumber	Creates a unique identifier when combined with AssociatedCashIdObjectNumber to link the physical and the cash	5567	**Foreign Key** —When combined with AssociatedCashIdObjectNumber
BondIsAcceptableForTrade	Bond Is Acceptable For Trade	1661	String
BondIssuer	Legal entity that issued the bond	1294	String
CallPutCode See **CallPutCode** Enum List.	Call / Put code	201	String
ChangeReason	Field displays the change reason of the SI without disrupting the original Settlement Reason (partial settlements)	5810	String
ClassSymbol	Class Symbol of the product associated with the Settlement Instruction	6179	String
ClearingAccountNameID	Clearing Account Name ID	957	String
ClearingMember	Clearing Member	656	String
ContractSize	Contract size	6164	Integer

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
CouponRate	Coupon Rate of the bond	984	Float
CreationBusinessDate	The Business Date when the Settlement Instruction record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Settlement Instruction record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Settlement Instruction record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Settlement Instruction record was created	71	Date & Time (YYYYMMDDHHMMSS)
CreditRating	Credit Rating	1634	String
CurrencyCode	Field displays the Settlement Currency (e.g. CAD, USD) added for Cash Trades.	16	String
DataType	Data type, value equal to SettlementInstruction	1433	String
DateForSymbol	Derivative Instrument - Date for Symbol	1199	Date (YYYYMMDD)
DecimalQuantity	Quantity	46	Float
DeliverableDescription	Deliverable description	6374	String
DeliverableISIN	ISIN code of the underlying deliverable	6199	String
DeliverableObjectNumber	Creates a unique ID for the deliverable product when combined with the DeliverableSessionNumber.	1252	Integer **Foreign Key** —When combined with DeliverableSessionNumber
DeliverableProductType	Deliverable product type	6298	String

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
See **DeliverableProductType** Enum List.			
DeliverableSessionNumber	Creates a unique ID for the deliverable product when combined with the DeliverableObjectNumber.	1253	Integer **Foreign Key** —When combined with DeliverableObjectNumber
DeliverableSettlementCurrency	Currency in which the deliverable product is to be settled	6297	String
DeliverableSymbol	Deliverable symbol	716	String
DeliveryAgency See **DeliveryAgency** Enum List.	Delivery agency	539	String
DeliveryRole See **DeliveryRole** Enum List.	Determines the responsibility of the member at settlement	6161	String
DeliveryType See **DeliveryType** Enum List.	Delivery type	624	String
DerivativeExpiryDate	Derivative Expiry Date	433	Date (YYYYMMDD)
Description	Settlement Instruction description	10003	String
EngineObjectNumber	Creates a unique ID for the Settlement Instruction when combined with the SessionNumber	1216	Integer **Primary Key** —when combined with the SessionNumber
ExternalDate	External Date	6375	Date (YYYYMMDD)

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
ExternalReferenceId	External Reference Id is created by the user when creating settlement instruction	1107	String
FromAccountType	From side account type	3069	String
FromClearingAccountNameId	Clearing member, account and sub-account	3071	String
FromCDSInternalAccount	From CDS internal account	5573	String
FromDeliveryAgentCode	From settlement delivery CUID	5308	String
FromMemberNameId	Clearing member number	534	String **Foreign Key**
FromToIndicator See **FromToIndicator** Enum List.	From To Indicator	56	String
GroupDescription	Group Description	6369	String
HalfAccountOperationObjectNumber	Creates a unique identifier when combined with HalfAccountOperationSessionNumber	1114	Integer **Foreign Key** —When combined with HalfAccountOperationSessionNumber
HalfAccountOperationSessionNumber	Creates a unique identifier when combined with HalfAccountOperationSessionNumber	1256	Integer **Foreign Key** —When combined with HalfAccountOperationObjectNumber

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
IncreasedNSPType See **NetSettlementPositionType** Enum List	Net Settlement Position Type	3191	String
IssueDate	Bond issue date	987	Date (YYYYMMDD)
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
LongStartOfDay	Long start of day	1078	Integer
MarkedToMarketCostRate	Corra Rate (the Canadian Overnight Repo Rate)	5172	Float
MaturityDate	Maturity date	6282	Date (YYYYMMDD)
MaxAllowedAsAsset	The maximum asset value of an individual bond that is allowed at the Clearinghouse	541	Integer
MaxConcentrationAsAsset	Maximum allowable percentage of total assets on deposit for a particular bond	542	Float
MemberNameID	System ID for the member associated with the Settlement Instruction	4071	String
NbCouponPerYear	Bond - Number of Coupon Per Year	1295	Integer
NbDaysPastSettlementDate	Number of days past Settlement Date	6501	Date (YYYYMMDD)
NetSettlementPositionObjectNumber	NetSettlementPositionId is a ClrngSystemId (which is a pair of SessionNumber (Integer) + ObjectNumber (Integer) used to link together a NetSettlementPosition to a SettlementInstruction.	1654	Integer **Foreign Key**—When combined with NetSettlementPositionSessionNumber

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
NetSettlementPositionSessionNumber	NetSettlementPositionId is a ClrngSystemId (which is a pair of SessionNumber (Integer) + ObjectNumber (Integer) used to link together a NetSettlementPosition to a SettlementInstruction.	1653	Integer **Foreign Key**—When combined with NetSettlementPositionObjectNumber
NettedIntoNetSettlementPositionObjectNumber	Creates Unique identifier of net settlement position when combined with NettedIntoNetSettlementPositionSession Number	1663	Integer **Foreign Key**—When combined with NettedIntoNetSettlementPositionSession Number
NettedIntoNetSettlementPositionSessionNumber	Creates Unique identifier of net settlement position when combined with NettedIntoNetSettlementPositionObjectNumber	1662	Integer **Foreign Key**—When combined with NettedIntoNetSettlementPositionObjectNumber
NotificationCode	Notification Code	68	String
OppositeMember	Opposite Member	2248	String
OriginalObjectNo	Numeric Identifier that will link the given record with its original CDS Settlement Instruction (partial settlements).	1103	Integer **Foreign Key**
OriginalSessionNo	Numeric Identifier that will link the given record with its original CDS Settlement Instruction (partial settlements)	1123	Integer **Foreign Key**
OutstandingAmount	Bond outstanding amount	3028	Float

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
PositionObjectNumber	Creates a unique ID for the Position when combined with the PositionSessionNumber	1086	Integer **Foreign Key**—when combined with the PositionSessionNumber
PositionSessionNumber	Creates a unique ID for the Position when combined with the PositionObjectNumber	1254	Integer **Foreign Key**—when combined with the PositionObjectNumber
Price	Price	44	Float
ProcessedPreviousMarginPrice	Processed previous daily price - previous margin price	1500	Float
ProcessedSettlementPrice	Settlement Price	1498	Float
ProductClassDescription	Product Class Description	6414	String
ProductType See **ProductType** Enum List.	Product type	773	String
RepoTagNumber	Trade Repo tag number	4539	String
SessionNumber	Creates a unique ID for the Settlement Instruction when combined with the EngineObjectNumber	1119	Integer **Primary Key**—when combined with the EngineObjectNumber
SettlementCurrency	Settlement currency	613	String **Foreign Key**
SettlementDate	Settlement date	6275	Date (YYYYMMDD)

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
SettlementInstructionObjectNumber	Creates unique identifier when combined with SettlementInstructionSessionNumber	1308	Integer **Foreign Key**—When combined with SettlementInstructionSessionNumber
SettlementInstructionSessionNumber	Creates unique identifier when combined with SettlementInstructionObjectNumber	1309	Integer **Foreign Key**—When combined with SettlementInstructionObjectNumber
SettlementInstructionSourceObjectNumber	Creates a unique identifier when combined with SettlementInstructionSourceSessionNumber	1955	Integer **Foreign Key**—When combined with SettlementInstructionSourceSessionNumber
SettlementInstructionSourceSessionNumber	Creates a unique identifier when combined with SettlementInstructionSourceObjectNumber	1954	Integer **Foreign Key**—When combined with SettlementInstructionSourceObjectNumber
SettlementNumberOfDay	Number of days between Exercise / Tender Date and Settlement Date	615	Integer
SettlementPrice	Settlement Price	5122	Float
SettlementReason See **SettlementReason** Enum List.	Rationale for the settlement instruction	1227	String
UserDescription	User Description of the Product Symbol. Formerly Short Description	954	String

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
ShortStartOfDay	Short start of day	1083	Integer
SplitSequenceNumber	Split Sequence Number of the settlement	9	Integer
Status See **SettlementInstructionStatus** Enum List.	Settlement Instruction status	6279	String
StatusTimeStamp	Date and Time at which the Settlement status was updated	1313	Date & Time (YYYYMMDDHHMMSS)
StrikePrice	Strike Price	202	Float
SubAccount	Sub-Account	605	String
ToAccountType	To side to account type	3070	String
ToCDSInternalAccount	To CDS internal account	5574	String
ToDeleveryAgentCode	To settlement delivery CUID	5309	String
ToMemberNameId	To clearing member number	535	String
TenderDate	Tender Date	1575	Date (YYYYMMDD)
TradeIdentifier	Trade identifier	601	String
TransactionSource	Transaction source	2291	String **Foreign Key**
Type	Settlement instruction type	970	String

Table 15: Data Store Extraction Set — Settlement Instruction

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
See **SettlementInstructionType** Enum List.			
UnderlyingSelectedMarginPrice	Underlying selected margin price	2244	Float
UnderlyingSymbol	Underlying symbol	311	String
UnderlyingType See **ProductType** Enum List.	Defines the underlying Product Type	313	String
UpdateBusinessDate	The Business Date when the Settlement Instruction record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date upon which the Settlement Instruction record was updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Settlement Instruction record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Settlement Instruction record was last updated	72	Date & Time (YYYYMMDDHHMMSS)

3.14 CDS Settlement Instruction

Delivery settlement instruction table details the various settlement delivery obligations. A delivery settlement is created when a forward position expires and sent to a settlement agency. A settlement confirmation received renderes the transaction as "Settled" while failure to receive a confirmation renders the the transaction as "Failed".

3.14.1 Table Structure

Each record contains delivery settlement obligation organized as buy and sell sides with CDCC as the opposite side to each.

3.14.2 Member Information

BuyAccountName and SellAccountName contain the clearing member number, account and sub-account accessed by substringing the information as follows:

- Substring(BuyAccountName, 1, 4) as MemberNumber
- Substring(BuyAccountName, 5, 1) as AccountType
- Substring(BuyAccountName, 6, 4) as SubAccount

3.14.3 Link to Net Settlement Position Table:

NetSettlementPosition.SessionNumber combined with NetSettlementPosition.ObjectNumber

3.14.4 Record Inclusion Rule

Include all records with status of "Settled" and "Failed".

Table 16: Data Store Extraction Set — CDS Settlement Instruction

FIELDNAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType	Clearing Account Type the delivery obligation belongs to	5077	String
ActivityName	The name of the activity when data extracted from SOLA Clearing Currently all EOD tables generated at "DepositoryEndOfPayementExchange".	1064	String
BuyerAccountName	Clearing Member, Account and Sub-account	5345	String
BuyerAccountNumber	Buyer account information	5025	String
BuyerAccountType	For the new ledger account management, this will map back to tag 5578 (Delivery Agent Ledger Account Type) from the assigned value in the Clearing Account Table or the default value from the Member table if the member is the buyer (or generic assigned default value).	5020	String
BuyerCUID	Buyer Settlement member identification	5341	String
BuyerExternalReferenceId	External source identification reference	5343	String
CdsBuyerAccountNumber	For the new ledger account management, this will map back to tag 5579 (Delivery Agent Ledger Account Number) from the assigned value in the Clearing Account Table or the default value from the Member table if the member is the buyer (or generic assigned default value).	5378	String
CdsSellerAccountNumber	For the new Ledger account management, this will map back to tag 5579 (Delivery Agent Ledger Account Number) from the assigned value in the Clearing Account Table or the default value from the Member table if the member is the seller (or generic assigned default value).	5379	String
CdsSettlementObjectNumber	Creates a unique identifier when combined with CdsSettlementSessionNumber to link to a Settlement Instruction	4529	Integer **Foreign Key** When combined with CdsSettlementSession Number

Table 16: Data Store Extraction Set — CDS Settlement Instruction

FIELDNAME	DESCRIPTION	TAG CODE	DATA TYPE
CdsSettlementSessionNumber	Creates a unique identifier when combined with CdsSettlementObjectNumber to link to a Settlement Instruction.	4531	Integer **Foreign Key** When combined with CdsSettlementObjectNumber
ClearingStatus	The current status of the Sent to CDS Settlement Instruction record at CDCC. 'C ' = Confirmed 'D ' = Delete 'DK' = Don't Know 'P ' = Pending 'S ' = Settled	6099	String
CreateReason	Will contain the initial requested action of the CDS Settlement Instruction record (partial settlements) Values may be: Sola CdsMaturity CdsPartial	5811	String
CreationBusinessDate	Business date record is created	1828	Date
CreationTimeStamp	Date and Time the record is created	71	String
DataType	Data Type, value equal to "CdsSettlementInstruction"	1433	String
DosoFulFillmentObjectNumber	DosoFulFillmentObjectNumber	5846	Integer
DosoFulFillmentSessionNumber	DosoFulFillmentSessionNumber	5847	Integer
DosoObjectNumber	DosoObjectNumber	5844	Integer
DosoSessionNumber	DosoSessionNumber	5845	Integer

Table 16: Data Store Extraction Set — CDS Settlement Instruction

FieldName	Description	Tag Code	Data Type
ExternalId	Identifier of a source transaction number	1106	String
GrossAmount	Gross amount	5374	Float
ISIN	Underlying Interest	6176	String
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
MarketOperationNameId	The operation name used	975	String
NetSettlementPositionObjectNumber	NSP identifier when combined with NetSettlementPositionSessionNumber that links to Net Settlement Position	1654	Integer **Foreign Key**—When combined with NetSettlementPositionSessionNumber
NetSettlementPositionSessionNumber	NSP identifier when combined with NetSettlementPositionObjectNumber that links to Net Settlement Position	1653	Integer **Foreign Key**—When combined with NetSettlementPosition ObjectNumber
OriginalObjectNo	Numeric Identifier that will link the given record with its original CDS Settlement Instruction (partial settlements).	1103	Integer
OriginalSessionNo	Numeric Identifier that will link the given record with its original CDS Settlement Instruction (partial settlements).	1123	Integer
PendingPartyAtFault	Member at fault, B= Buyer, S=Seller	4534	String
PendingPartyAtFaultForSettlement Obligation	Pending Party at Fault for Settlement Obligation For partial settlements	5849	String

Table 16: Data Store Extraction Set — CDS Settlement Instruction

FIELDNAME	DESCRIPTION	TAG CODE	DATA TYPE
PendingReasonCode	Reason code of pending transaction. S = Insufficient Security F = Insufficient funds C = Insufficient Collateral O = Seller	4533	String
PendingReasonCodeForSettlementObligation	Pending Reason Code for Settlement Obligation For partial settlements	4540	String
PitsoFulfillmentObjectNumber	Pitso Fulfillment Object Number (Required for linkage to the Point in Time Settlement Obligation reports)	5757	Integer **Foreign Key**—When combined with PitsoFulfillmentSessionNumber
PitsoFulfillmentSessionNumber	Pitso Fulfillment Session Number (Required for linkage to the Point in Time Settlement Obligation reports)	5756	Integer **Foreign Key**—When combined with PitsoFulfillmentObjectNumber
PitsoObjectNumber	Pitso Object Number (Required for linkage to the Point in Time Settlement Obligation reports)	5755	Integer **Foreign Key**—When combined with PitsoSessionNumber
PitsoSessionNumber	Pitso Session Number (Required for linkage to the Point in Time Settlement Obligation reports)	5754	Integer **Foreign Key**—When combined with PitsoObjectNumber
ProcessingOutcomeCode	Process result code. Removed once the issue is resolved.	5191	String

Table 16: Data Store Extraction Set — CDS Settlement Instruction

FIELDNAME	DESCRIPTION	TAG CODE	DATA TYPE
ProcessingOutcomeDescription	Description of result code	5192	String 140
ProductType See **ProductType** Enum List.	Product type	773	String
Quantity	Underlying Interest Physical quantity	38	Integer
ReferenceTradeSide	Buy or Sell reference	154	String
RequestAction See **RequestAction** Enum List.	Action request taken	4528	String
SellerAccountName	Membe number, account and sub-account	5344	String
SellerAccountNumber	Account number of selling member	5013	String
SellerAccountType	For the new Ledger account management, this will map back to tag 5578 (Delivery Agent Ledger Account Type) from the assigned value in the Clearing Account Table or the default value from the Member table if the member is the seller (or generic assigned default value).	5008	String
SellerCUID	Seller settlement identification number	5340	String
SellerExternalReferenceId	External source reference identification	5342	String
SessionNumber	Session Number	1119	Integer **Primary Key**
SettlementAmount	Cash settlement value	6082	Float
SettlementCurrency	Currency code	613	String
SettlementDate	Date of agrred upon settlement	6275	Date

Table 16: Data Store Extraction Set — CDS Settlement Instruction

FIELDNAME	DESCRIPTION	TAG CODE	DATA TYPE
SettlementInstructionSourceObjectNumber	Creates a unique identifier when combined with SettlementInstructionSourceSessionNumber that links to a Settlement instruction	1955	Integer **Foreign Key**—When combined with SettlementInstructionSourceSessionNumber
SettlementInstructionSourceSessionNumber	Creates a unique identifier when combined with SettlementInstructionSourceObjectNumber that links to a Settlement instruction	1954	Integer **Foreign Key**—When combined with SettlementInstructionSourceObjectNumber
SettlementType	Type of settlement TFT CNS SNS	456	String
Status See **DeliverySettlementStatus** Enum List.	Delivery settlement transaction status	6311	String
TradeDate	Transaction date	10015	Date
TradeIdentifier	Identification code as in CdsTradeId	601	String
TradeStatusForSettlementObligation	Trade Status for Settlement Obligation	5848	Trade Status forSettlement Obligation
TradeType See **TradeType** Enum List.	Type of trade	501	String
UpdateBusinessDate	Date Transaction is updated	1823	Date

Table 16: Data Store Extraction Set — CDS Settlement Instruction

FIELDNAME	DESCRIPTION	TAG CODE	DATA TYPE
UpdateTimeStamp	Update Timestamp	72	String

3.15 Underlying Position

This table groups positions per Underlying Symbol to determine the LongCallShortPut, and the ShortCallLongPut. The result of this grouping is validated against the maximum number of positions authorized for this underlying security.

3.15.1 Table Structure

There are two types of records depending on the account level (cumulative level).

- Position grouping when the AccountLevel = Member Level:
  - Member
  - UnderlyingSymbol
  - UsageType
- Position grouping when the AccountLevel = AccountType:
  - Member
  - AccountType
  - UnderlyingSymbol
  - UsageType

3.15.2 Record Inclusion Rules

This table is reset on a daily basis and does not carry forth historical information.

Table 17: Data Store Extraction Set — Underlying Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountLevel See **AccountLevel** Enum List.	Account level	1585	String
AccountType See **AccountType** Enum List.	Side Info - Account Type	5077	String **Foreign Key**
ActivityName See **ActivityName** Enum List	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at "EndOfDayReportGeneration".	1064	String
ClearingAccountNameId	Clearing Account Name ID	957	String **Foreign Key**
CreationBusinessDate	The Business Date when the Underlying Position record was created	1828	Date (YYYYMMDD)
CreationDate	Date upon which the Underlying Position record was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Underlying Position record was created	70	Time (HHMMSS)
EngineObjectNumber	Creates a unique ID when combined with the SessionNumber	1216	Integer **Primary Key**
SessionNumber	Creates a unique ID when combined with the ObjectNumber	1119	Integer **Primary Key**

Table 17: Data Store Extraction Set — Underlying Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
LimitIsReached	Position limit has been reached	1835	String
LimitUsingPendingIsReached	Position limit is reached if pending position quantities are included	1836	String
LongCallShortPut	Long Call Short Put	2258	Integer
LongCallShortPutPending	Pending Long Call / Short Put Quantity	1833	Integer
MemberNameID	System ID for the member associated with the Underlying Position	4071	String **Foreign Key**
PositionLimit	Position limit	746	Integer
PositionLimitFactor	Each Approved Participant (AP) has a Position Limit Factor of 1. Each Clearing Member has a Position Limit Factor equal to the number of their APs plus 1.	1195	Integer
ProductSymbol	Product symbol	1211	String **Foreign Key**
ShortCallLongPut	Short Call Long Put	2259	Integer
ShortCallLongPutPending	Pending Short Call / Long Put Quantity	1834	Integer
SubAccount	Sub-Account	605	String **Foreign Key**
UpdateBusinessDate	Business Date when the Underlying Position record was last modified	1823	Date (YYYYMMDD)

Table 17: Data Store Extraction Set — Underlying Position

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
UpdateDate	Date the Underlying Position record was last updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Underlying Position record was updated	80	Time (HHMMSS)
UsageType See **UsageType** Enum List.	Defines how the associated product is used within the Clearing System	4064	String **Foreign Key**

3.16 One Side Account Operation

Includes all SOLA® Clearing operations coming from the Exchange, or from the SOLA® Clearing interface. Most of the transaction related reports use this table as a source. Account Operations can be used to re-build the Position history. The majority of Account Operations generate numerous Settlement Instructions.

3.16.1 Table Structure

One Side Account Operation is one side of a two sided Account Operation. Each side is distinct by FromToIndicator, or by BuySellIndicator.

Some AccountOperationType's can generate subsequent Account Operations, while others are final. The following matrix illustrates all possible AccountOperationType flows:

Initial AccountOperation	Second Level	Third Level	Fourth Level
Trade	Allocation	AllocationCancel	
	GiveUp	GiveUpCancel	
	TradeCancel		
	TradeAdjustment	Trade TradeCancel Allocation AllocationCancel GiveUp GiveUpCancel	
	MemberTradeAdjustment	Trade TradeCancel Allocation AllocationCancel GiveUp GiveUpCancel	
PositionTransfer	N/A		
Assignment	N/A		
PositionAdjustment	N/A		
OTCTradeMatch	OTCTradeConfirmation		
	OTCTradeRejection		

INITIAL ACCOUNTOPERATION	SECOND LEVEL	THIRD LEVEL	FOURTH LEVEL
Transfer	PositionTransfer		
	AccountTransferCancel		
MergeMember	Transfer	PositionTransfer	
		AccountTransferCancel	PositionTransfer
	MergeMemberCancel		

3.16.2 Usage Tips

Allocation Volume—Use Allocation Volume to identify the final trade quantity destination. If the allocation volume is equal to 0 it means the account operation quantity was fully allocated to other account operations.

Identify Backdated Operation—Backdated operations can be identified when the ExternalDate (6375) is different than the CreationBusinessDate.

Link to Reference record—The child record can be linked to the originating record using the following join:

- OneSideAccountOperation.ReferenceObjectNumber (1121) = OneSideAccountOperation.EngineObjectNumber (1216)
- OneSideAccountOperation.ReferenceSessionNumber(1259) = OneSideAccountOperation.SessionNumber (1119)

The opposite side information is provided when your member is on the opposite side.

3.16.3 Record Inclusion Rules

Include all Account Operations created or updated during the day.

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountOperationReference	Account operation type of a related account operation	3125	String
AccountOperationStatus See **AccountOperationStatus** Enum List.	Status of the account operation	6311	String
AccountType See **AccountType** Enum List.	Account type	5077	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
AdjustedTradeObjectNumber	Creates unique identifier of an adjustment when combined with AdjustedTradeSessionNumber	5561	Integer
AdjustedTradeSessionNumber	Creates unique identifier of an adjustment when combined with AdjustedTradeObjectNumber	5562	Integer
AllocationVolume	Allocation volume	504	Integer
BuySellIndicator	Buy / Sell Indicator	2257	String
CallPutCode See **CallPutCode** Enum List.	Call Put code	201	String

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ClassSymbol	Class Symbol of the product associated with the One Side Account Operation	6179	String
ClearingAccountNameId	Clearing Account Name ID	957	String **Foreign Key**
ClearingMember	Clearing Member associated with the One Side Account Operation	656	String
ClientAccountNumber	Client account number	1261	String
CloseLegSettlementAmount	Settlement amount of repo close leg	7064	Float
CloseLegSettlementDate	Date of settlement Repo close leg	1636	Date (YYYYMMDD)
ContractSize	Number of share per contract	6164	Integer
CreationDate	Date upon which the Account Operation was created	6143	Date (YYYYMMDD)
CreationTime	Time at which the Account Operation was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time that the Account Operation was created	71	Date & Time (YYYYMMDDHHMMSS)
DateForSymbol	Date used in Symbol construction. It is the same as the expiry date except for Option on CGB.	1199	Date (YYYYMMDD)
DataType	Data type, value is equal to OneSideAccountOperation	1433	String
DeliveryAgency See **DeliveryAgency** Enum List.	Delivery agency	539	String

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
DeliveryAgentCode	Delivery agent CUID code	1621	String
DeliveryType See **DeliveryType** Enum List.	Delivery Type	624	String
DerivativeExpiryDate	Derivative Expiry Date	433	Date (YYYYMMDD)
EffectiveDate	Date upon which the Account Operation record became active. Only present for Account transfers and Positions transfers.	827	Date (YYYYMMDD)
EngineObjectNumber	Creates unique system ID for the One Side Account Operation when combined with the OneSideAccountOperationSessionNumber	1216	Integer **Primary Key**—when combined with the OneSideAccountOperationSessionNumber
SessionNumber	Creates unique system ID for the One Side Account Operation when combined with the OneSideAccountOperationObjectNumber	1119	Integer **Primary Key**—when combined with the OneSideAccountOperationObjectNumber
ExchangeRateCurrencyCode	Exchange rate currency code	514	String **Foreign Key**
ExerciseAssignmentCode	On Assignment, it indicates if exercise or assign	729	String
ExerciseStyle	Exercise Style	730	String
ExternalDate	External Date	6375	Date (YYYYMMDD)
ExternalDateTime	Date time the originating Account Operation record was created	1122	String (YYYYMMDDHHMMSS)

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ExternalEntityProfileId	External Entity ProfileId	979	String
ExternalId	MX Traded Derivatives – Unique Identifier of the originating trade of MX CCP Fixed Income Trades – Unique Identifier for the originating trade of CDS: **Repo Tag Number**	1106	String **Foreign Key**
ExternalReferenceId	Instrument external identification	1107	String **Foreign Key**
ExternalSymbol	External symbol associated with the One Side Account Operation	6146	String
ExternalTime	External Time	6376	Time (HHMMSS)
Flag	Lists flags that can be associated to the record. Possible values: - TransferFeesToRecipient	1873	String
FromHalfAccountOperationObjectNumber	HalfAccount unique ID when combined with FromHalfAccountSessionNumber. This ID can be used to link an account operation with its originating Half Account Operation.	1110	Integer **Foreign Key**
FromHalfAccountOperationSessionNumber	HalfAccount unique ID when combine with FromhalfAccountObjectNumber. This ID can be used to link an account operation with its originating half account operation.	1280	Integer
FromToIndicator See **FromToIndicator** Enum List.	From / To Indicator	56	String **Primary Key**
GroupDescription	Group description	6369	String
HedgeSpeculatorIndicator See **HedgeSpeculatorIndicator** Enum List.	Side Info - Hedge Speculator Indicator	527	String

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
InternalAccountNumber	Clearing member internal account number	5094	String
ISIN	The International Securities Identification Numbering (ISIN) system is an international standard set up by the International Organization for Standardization (ISO). It is used for numbering specific securities, such as stock, bonds, options and futures.	6176	String
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
LongShortIndicator See **LongShortIndicator** Enum List.	Long Short Indicator	526	String
MarkedToMarketAmount	Marked to Market amount	6258	Float
MarketOperationNameId	Identification of an activity processed during the batch	975	String
MemberNameID	System ID for the member associated with the One Side Account Operatino	4071	String
NbDays	Number of days (CloseLegSettlementDate -StartLegSettlementDate)	5292	Date (YYYYMMDD)
NewSymbologyLongDescription	New Symbology Long Description (Obsolete and has been removed).	3186	String
NotificationCode	Notification Code	68	String
NotificationDescription	Description of this notification related to this account operation	67	String
OpenCloseFlipIndicator	Open Close Flip Indicator	7566	String
OpenCloseIndicator See **OpenCloseIndicator** Enum List.	Open Close Indicator	749	String
OppositeAccountType See **AccountType** Enum List.	Opposite Account Type	2249	String

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
OppositeClearingMember	The Clearing Member on the opposite side of the Account Operation	655	String
OppositeClientAccountNumber	Opposite Client Account Number	2255	String
OppositeHedgerSpeculatorIndicator	Opposite Hedger Speculator Indicator	2253	String
OppositeLongShortIndicator.	Opposite Long Short Indicator	2251	String
OppositeOpenCloseIndicator	Opposite Open Close Indicator	2252	String
OppositeMember	Opposite Member	2248	String
OppositeOriginalPositionDate	Date the Original Position was created. Only visible on the From side of the assignment.	2256	Date (YYYYMMDD)
OppositeSubAccount	Opposite Sub-Account	2250	String
OppositeTradingAccountType	ClrngAccountType	7820	String
OppositeTradingMember	ClrngMemberName	7819	String
OppositeTradingSubAccount	ClrngAccountSubAccount	7821	String
OriginalObjectNumber	SOLA Clearing ID of the first Account Operation of the branch when combined with OriginalSessionNumber	1103	Integer **Foreign Key—**when combined with OriginalSessionNumber
OriginalPositionDate	Date the position was originally created. Only visible on the From side of the assignment.	3127	Date (YYYYMMDD)
OriginalPrice	Original trade price	309	Float

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
OriginalQuantity	Original trade quantity	308	Integer
OriginalSessionNumber	SOLA Clearing ID of the first Account Operation of the branch when combined with Original Object Number	1123	Integer **Foreign Key—**when combined with OriginalObjectNumber
PremiumAmount	Premium amount	6257	Float
PremiumMultiplier	Premium multiplier	755	Float
Price	MX Traded Derivatives – The trade price of the MX Trade/Allocation record CCP Fixed Income Trades – The Repo Rate calculated by the system after novation of the Trade.	44	Float
PrimaryExchange	Primary Exchange	629	String
ProcessedClosingPrice	Closing price	1495	Float
ProcessedEODPreviousMarginPrice	Price used during the previous day's margin calculation	3097	Float
ProcessedPreviousMarginPrice	Previous Margin Price	1500	Float
ProcessedSelectedMarginPrice	Price used during margin calculation	1501	Float
ProcessedSettlementPrice	Settlement Price	1498	Float
ProductClassDescription	Product Class Description	6414	String
ProductObjectNumber	Object Number of the product involved in the Account Operation. Creates unique ID for the product when combined with the ProductSessionNumber.	1223	Integer **Foreign Key—**when combined with the ProductSessionNumber

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ProductSessionNumber	Session Number of the product involved in the Account Operation. Creates unique ID for the product when combined with the ProductObjectNumber.	1224	Integer **Foreign Key—**when combined with the ProductObjectNumber
ProductSymbol	Symbol of the product involved in the Account Operation	1211	String **Foreign Key**
ProductType See **ProductType** Enum List.	Product type	773	String
Quantity	Quantity	38	Integer
ReferenceIndexPriceType See **ReferenceIndexPriceType** Enum List	Reference Index Price Type	1241	Float
ReferenceObjectNumber	Unique Accountoperation ID when combine with ReferenceSessionNumber.	1121	Integer **Foreign Key—**when combined with ReferenceSessionNumber
ReferenceSessionNumber	Creates unique ID for the upstream record when combined with ReferenceObjectNumber	1259	Integer **Foreign Key—**when combined with ReferenceObjectNumber
ReferenceTradeSide	Trade side of the One side Account Operation	154	String
SettlementCurrency	Settlement currency	613	String
SettlementDate	Settlement date	6275	Date (YYYYMMDD)

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
StartLegSettlementAmount	Settlement amount of Repo start leg	7063	Float
StartLegSettlementDate	Date of settlement of Repo start leg	1635	Date (YYYYMMDD)
StatusTimeStamp	Date and time of status update	1313	Date & Time (YYYYMMDDHHMMSS)
StrikePrice	Strike Price	202	Float
SubAccount	Sub-Account	605	String
ToHalfAccountOperationObjectNumber	HalfAccount unique ID when combined with ToHalfAccountSessionNumber. This ID can be used to link an account operation with its originating Half Account Operation.	1111	Integer **Foreign Key**
ToHalfAccountOperationSessionNumber	HalfAccount unique ID when combine with TohalfAccountObjectNumber. This ID can be used to link an account operation with its originating half account operation.	1281	Integer **Foreign Key**
TradingAccountNameId	Trading Account Name ID	1600	String **Foreign Key**
TradingAccountType	ClrngAccountType	7829	String
TradingMember	ClrngMemberName	7828	String
TradingSubAccount	ClrngAccountSubAccount	7830	String
TransactionSource	Transaction source	2291	String **Foreign Key**
Type	One Side Account Operation transaction type	970	String

Table 18: Data Store Extraction Set — One Side Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
See **AccountOperationType** Enum List.			
UnderlyingCurrencyCode	Underlying Currency Code	2243	String
UnderlyingExpiryDate	Expiry date of the underlying instrument	431	Date (YYYYMMDD)
UnderlyingSelectedMarginPrice	Selected margin price of the Underlying Product	2244	Float
UnderlyingSymbol	Underlying Symbol	311	String
UnderlyingType See **ProductType** Enum List.	Defines the underlying Product Type	313	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date upon which the One Side Account Operation record was updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the One Side Account Operation record was updated	80	Time (HHMMSS)
UsageType See **UsageType** Enum List.	Defines how the associated product is used within the Clearing System	4064	String

3.17 Clearing Account

This table lists all active Clearing Accounts defined in SOLA® Clearing and also includes the Clearing Account specific configuration.

3.17.1 Table Structure

One record per Clearing Account

3.17.2 Record Inclusion Rules

This table is reset on a daily basis and does not carry forward historical information.

Table 19: Data Store Extraction Set — Clearing Account

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountProfileNameId	Account Profile to which the Clearing Account is linked	955	String **Foreign Key**
AllowSegregation	Indicates if the Clearing Account is segregated Yes No	1186	String
ClearerAccountType See **AccountType** Enum List.	Clearer account type	1188	String
ClearerClearingAccountNameId	Clearer Clearing Account Name Id	1191	String
ClearerMemberNameId	Clearer Member Name Id	1190	String
ClearerSubAccount	Clearer Sub-Account	1189	String
CreationTimeStamp	Time at which the Clearing Account record was created	71	Date & Time (YYYYMMDDHHMMSS)

Table 19: Data Store Extraction Set — Clearing Account

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
DataType	Data type, value is equal to ClearingAccount	1433	String
DeliveryAgentCode	Settlement CUID	1621	String
DeliveryAgentLedgerAccountNumber	Will display the Ledger account number which was supplied from the novated CDS trade entry record. (added for Ledger account management)	5579	String
DeliveryAgentLedgerAccountType	Will display the Ledger account type which was supplied from the novated CDS trade entry record. (added for Ledger account management).	5578	String
Description	Clearing account description	10003	String
FirstActiveDate	Date upon which the Clearing Account record became active	4059	Date (YYYYMMDD)
InternalAccountNumber	Clearing member internal account	5049	String
LastActiveDate	Date when the record is scheduled to be purged. Only visible if the date is set in the future.	6185	Date (YYYYMMDD)
MemberNameID	System ID for the member associated with the Clearing Account	4071	String **Foreign Key**
NameId	Clearing account name	969	String **Primary Key**
OwnerId	Owner of the Clearing Account	958	String
SubAccount	Sub-Account	605	String
Type See **AccountType** Enum List.	Type of Clearing Account	5077	String

Table 19: Data Store Extraction Set — Clearing Account

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
UpdateTimeStamp	Date and time at which the Clearing Account record was last updated	72	Date & Time (YYYYMMDDHHMMSS)

3.18 Half Account Operation

This table lists most of the member clearing operations such as; PositionTransferRequest, Manual Exercise, OTC Half Trade, DeclarationOfLong, and PositionTender. In the current report, this table is used to identify all pending position transfer requests.

3.18.1 Table Structure

One Record per Half Account Operation.

3.18.2 Record Inclusion Rules

Includes all Half Accounts created, updated, or still pending on the day the EOD file was created.

Table 20: Data Store Extraction Set — Half Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountLevel See **AccountLevel** Enum List.	Account level	1585	String
AccountType See **AccountType** Enum List.	Side Info - Account Type	5077	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String

Table 20: Data Store Extraction Set — Half Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AllocationVolume	Side Info - Allocation Volume	504	Integer
CallPutCode	Call Put code	201	String
ClassSymbol	Product class symbol	6179	String
ClearingAccountNameId	Clearing account name Id	957	String **Foreign Key**
ClientAccountNumber	Client account number	1261	String
CloseLegSettlementAmount	The amount at which the close leg has settled at.	7064	Float
ContractSize	Number of units per contract	6164	Integer
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date the Half Account Operation record was created	6143	Date (YYYYMMDD)
CreationTime	Creation Time	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Half Account Operation record was created	71	Date & Time (YYYYMMDDHHMMSS)
DataType	Data type, value is equal to HalfAccountOperation	1433	String
DecimalQuantity	Quantity	46	Float
DefaultTradingAccountIdNameId	Trading account name Id	965	String **Foreign Key**
DeliveryAgency	Delivery Agency	539	String

Table 20: Data Store Extraction Set — Half Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
DerivativeExpiryDate	Expiry date of the Derivative Instrument	433	Date (YYYYMMDD)
EffectiveDate	Date upon which the Half Account Operation record became active. Only present for Account transfers and Positions transfers.	827	Date (YYYYMMDD)
EngineObjectNumber	Creates unique system ID when combined with the SessionNumber	1216	Integer **Primary Key—**when combined with the SessionNumber
ExerciseInstruction See **ExerciseInstruction** Enum List.	Exercise instruction	1262	String
ExerciseStyle	Exercise Style	730	
ExternalDateTime	External date and time	1122	String (YYYYMMDDHHMMSS)
ExternalId	Unique Identifier for the trade leg received from the MX	1106	String
ExternalReferenceId	Instrument external identification	1107	String
Flag	Lists flags that can be associated to the record. Possible values: - TransferFeesToRecipient - LicenceConfirmed	1873	String
HedgeSpeculatorIndicator See **HedgeSpeculatorIndicator** Enum List.	Side Info - Hedge Speculator Indicator	527	String
ISIN	The International Securities Identification Numbering (ISIN) system is an international standard set up by the International Organization for	6176	String

Table 20: Data Store Extraction Set — Half Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
	Standardization (ISO). It is used for numbering specific securities, such as stock, bonds, options, and futures.		
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
LongShortIndicator See **LongShortIndicator** Enum List.	Long Short Indicator	526	String
MarketOperationNameId	Market operation name Id	975	String
MemberNameID	System ID for the member associated with the Half Account Operation	4071	String
NewSymbologyLongDescription	New Symbology Long Description (Obsolete and has been removed).	3186	String
NotificationType See **NotificationType** Enum List.	Notification type	1125	String
OpenCloseIndicator See **OpenCloseIndicator** Enum List.	Open Close Indicator	749	String
OppositeAccountType	ClrngAccountType	2249	String
OppositeClientAccountNumber	ClrngClientAccountNumber	2255	String
OppositeMemberNameId	Member associated with the other half of the trade	968	String **Foreign Key**
OppositeSubAccount	ClrngAccountSubAccount	2250	String
OppositeTradingAccountType	ClrngAccountType	7820	String
OppositeTradingMember	ClrngMemberName	7819	String

Table 20: Data Store Extraction Set — Half Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
OppositeTradingSubAccount	ClrngAccountSubAccount	7821	String
OriginalPositionDate	Date the original Position was created. Only visible on the From side of the assignment.	3127	Date (YYYYMMDD)
Price	Price	44	Float
ProductObjectNumber	Object Number of the product associated with the Half Account Operation. Creates unique ID when combined with the ProductSessionNumber	1223	Integer **Foreign Key—**when combined with the ProductSessionNumber
ProductSessionNumber	Object Number of the product associated with the Half Account Operation. Creates unique ID when combined with the ProductObjectNumber	1224	Integer **Foreign Key—**when combined with the ProductObjectNumber
ProductSymbol	Product symbol	1211	String
ProductType	List Of Acceptable Product Type	773	String
ReferenceObjectNumber	Reference object number	1121	Integer **Foreign Key—**when combined with ReferenceSessionNumber
ReferenceSessionNumber	Reference session number	1259	Integer **Foreign Key—**when combined with ReferenceObjectNumber

Table 20: Data Store Extraction Set — Half Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SessionNumber	Creates unique system ID when combined with the EngineObjectNumber	1119	Integer **Primary Key**—when combined with the EngineObjectNumber
SettlementCurrency	Settlement Currency	613	String
SettlementDate	SettlementDate	6275	Date
StartLegSettlementAmount	The amount at which the start leg has settled at	7063	Float
Status See **HalfAccountOperationStatus** Enum List.	Half Account Operation status	6311	String
StatusTimeStamp	Date and time of status update	1313	Date & Time (YYYYMMDDHHMMSS)
StrikePrice	Strike Price	202	Float
SubAccount	Sub-Account	605	String
TenderProductObjectNumber	Object Number of the Tendered Product associated with the Half Account Operation. Creates unique ID when combined with the TenderedProductSessionNumber	1113	Integer **Foreign Key—** when combined with the TenderedProductSession Number
TenderProductSessionNumber	Session Number of the Tendered Product associated with the Half Account Operation. Creates unique ID when combined with the TenderedProductObjectNumber	1260	Integer **Foreign Key—**when combined with the TenderedProductObjectN umber

Table 20: Data Store Extraction Set — Half Account Operation

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
TenderProductSymbolDeliverable	Symbol of the tendered product	1112	String **Foreign Key**
TradingAccountType	ClrngAccountType	7829	String
TradingMember	ClrngMemberName	7828	String
TradingSubAccount	ClrngAccountSubAccount	7830	String
TransactionSource	Transaction source	2291	String **Foreign Key**
Type See **HalfAccountOperationType** Enum List.	Half Account Operation transaction type	970	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date the Asset Instruction record was last updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Asset Instruction record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Half Account Operation record was last updated	72	Date & Time (YYYYMMDDHHMMSS)
UsageType	Defines how the associated product is used within the Clearing System	4064	String

3.19 Member

This table provides basic and credential information for a Member defined in SOLA® Clearing.

3.19.1 Table Structure

This table contains one record.

3.19.2 Record Inclusion Rules

Always contains the latest information regarding member configuration, and does not carry forward historical information.

Table 21: Data Store Extraction Set — Member

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
AccountProfileNameId	Account profile linked to the member default clearing account	955	String **Foreign Key**
ActivationDate	Date upon which the member became active at the Clearinghouse	6385	Date (YYYYMMDD)
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
Address	Address of the Clearing Member	1180	String
AffiliationMemberNameId	For AP’s only - Clearing Member with whom the AP is affiliated	1144	String
CreationBusinessDate	The Business Date when the record was created	1828	Date ((YYYYMMDD)
CreationDate	Date upon which the Member record was created	6143	Date (YYYYMMDD)

Table 21: Data Store Extraction Set — Member

Field Name	**Description**	**Tag Code**	**Data Type Description** (Primary, Secondary, Foreign Keys)
CreationTime	Time at which the Member record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Member record was created	71	Date & Time (YYYYMMDDHHMMSS)
DataType	Data type, value is equal to Member	1433	String
DataServiceSubscriptionSet See **DataServiceSubscriptionSet** Enum List.	Data service subscription set	583	String
DefaultClearingAccountNameId	Name of the default Clearing Account to be used	1283	String **Foreign Key**
DefaultTradingAccountIdNameId	Trading Account used by default if none is specified by the member	965	String
DeliveryAgentLedgerAccountNumber	Will display the Ledger account number which was supplied from the novated CDS trade entry record (added for Ledger account management).	5579	String
DeliveryAgentLedgerAccountType	Will display the Ledger account type which was supplied from the novated CDS trade entry record (added for Ledger account management).	5578	String
Description	Member name	10003	String
FirstActiveDate	Date upon which the Member record was created	4059	Date (YYYYMMDD)
GoodStanding	Indicates whether the member is blocked from trading, allowable values: Yes No	1054	Integer

Table 21: Data Store Extraction Set — Member

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
InternalAccountNumber	Clearing member internal account	5049	String
ProductType See **ProductType** Enum List.	List of acceptable product types for the member	773	String
MarginCallThreshold	The minimal deficit margin threshold before creating a margin call.	1558	Float
MemberProfileId	Member profile linked to the Member record	956	String **Foreign Key**
NameId	System unique identifier for the Clearing Member	969	String **Primary Key**
NetAllowableAssetValue	Value of member's net allowable assets	2578	Float
OperationContactEmail	Operation contact email	1193	String
OperationContactName	Operation contact name	1057	String
OperationContactPhone	Operation contact phone	1056	String
OperationContactTitle	Operation contact title	1061	String
PhoneNumberAtExchange	Phone number at exchange	1055	String
PositionLimitFactor	Number of Approved Participants that the member can clear for	1195	Integer
PrincipalContactEmail	Principal contact email	1192	String

Table 21: Data Store Extraction Set — Member

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE DESCRIPTION (Primary, Secondary, Foreign Keys)
PrincipalContactName	Principal contact name	1059	String
PrincipalContactPhone	Principal Contact Phone	1058	String
PrincipalContactTitle	Principal contact title	1060	String
TranslationName1	Used for settlement at Settlement Agency -CDS CUID	1088	String
TranslationName2	Used for member EDI qualifier	1089	String
TranslationName3	Used for member EDI code	1090	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateTimeStamp	Date and time at which the Member was last updated	72	Date & Time (YYYYMMDDHHMMSS)
Risk Model	Defines a risk model	2331	RiskModel
Flags	Set of options to enable on LCM or RFM	1873	MemberFlag

3.20 Product

This table lists all products defined in SOLA® Clearing and covers many parameters related to Risk Calculation, and Settlement Configuration. The UsageType indicates whether the product is an MXListed, an OTC, an underlying of a derivative instrument, or if the product is an asset.

3.20.1 Table Structure

One record per product

Link Derivative Instrument with their Underlying Instrument using:

- Product.UnderlyingObjectNumber (1115) = Product.ConfigObjectNumber (1196)
- Product.SessionNumber (1174) = Product.SessionNumber (1119)

3.20.2 Record Inclusion Rules

Includes all the active products defined in SOLA® Clearing.

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ActivationDate	The day an instrument is activated in the system	6051	Date (YYYYMMDD)
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
AdjustedProductObjectNumber	Object Number of the Adjusted Product. Creates a unique ID for the Adjusted Product when combined with the AdjustedProductSessionNumber (Obsolete and has been removed).	1292	Integer **Foreign Key—**when combined with the AdjustedProductSessionNumber
AdjustedProductSessionNumber	Session Number of the Adjusted Product. Creates a unique ID for the Adjusted Product when combined with the AdjustedProductObjectNumber (Obsolete and has been removed).	1293	Integer **Foreign Key—**when combined with the AdjustedProductObjectNumber
BondIsAcceptableForTrade	Bond Is Acceptable For Trade	1661	String
CallPutCode See **CallPutCode** Enum List.	Call Put code	201	String
ClassSymbol	Product class symbol	6179	String
CloseLegSettlementDate	Close Leg Settlement Date	1636	Date
CombinedCommodity	CombinedCommodity defined for the Product	2338	String
ConfigObjectNumber	Creates a unique ID when combined with SessionNumber	1196	Integer **Primary Key—**when combined with SessionNumber

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ContractSize	Number of units per contract	6164	Integer
ContractSizeUnit See **ContractSizeUnit** Enum List.	Contract size unit	1124	String
CouponRate	Coupon rate of the bond	984	Float
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date the Product record was created	6143	Date (YYYYMMDD)
CreationTime	Time the Product record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Product record was created	71	Date & Time (YYYYMMDDHHMMSS)
CreditRating	Credit Rating	1634	String
CycleId	Risk Cycle used to group products together for Stress testing	714	String
DateForSymbol	Date used in Symbol construction. It is the same as the expiry date except for Option on CGB.	1199	Date (YYYYMMDD)
DeliveryAgency See **DeliveryAgency** Enum List.	Delivery agency	539	String
DeliveryType See **DeliveryType** Enum List.	Delivery type	624	String
Description	Product description	10003	String
ExchangeRateCurrencyCode	Exchange rate currency code	514	String

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ExerciseStyle See **ExerciseStyle** Enum List.	Exercise style	730	String
ExpiryDayRule	Expiry Day Rule	1645	String
DerivativeExpiryDate	Expiry date of the Derivative Instrument	433	Date (YYYYMMDD)
FirstDeclarationDate	Derivative Instrument - First Declaration Date	1532	Date (YYYYMMDD)
FirstTenderDate	Derivative Instrument - First Tender Date	1533	Date (YYYYMMDD)
GroupDescription	Group description	6369	String
HaircutPercentage	Percentage of Haircut to apply for Asset Deposits using this product	1339	Float
HaircutPercentageEnabled	Haircut defined for the product is enabled or disabled	29	String
Isin	The International Securities Identification Numbering (ISIN) system is an international standard set up by the International Organization for Standardization (ISO). It is used for numbering specific securities, such as stock, bonds, options, and futures.	6176	String
IsRepoUnderlying	Is Repo Underlying	1633	String
IssueDate	Bond - issue date	987	Date (YYYYMMDD)
Issuer	The legal entity that issued the bond	1294	String
LastDeclarationDate	Derivative Instrument - Last Declaration Date	1534	Date (YYYYMMDD)
LastTenderDate	Derivative Instrument - Last Tender Date	1535	Date (YYYYMMDD)
LastTradeDate	Date when product ceases to be tradable	1082	Date (YYYYMMDD)

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SystemDescription	System Description of the Product Symbol. Formerly Long Description	953	String
LongTerm See **LongTerm** Enum List.	Long Term Options Identifier	1246	String
MarginIntervalCurrentValue	Margin Interval Current Value	6464	Float
MarginIntervalPreviousValue	Margin Interval Previous Value	6465	Float
MarginIntervalStatus See **MarginIntervalStatus** Enum List.	Margin Interval Status	6466	String
Maturity	Interest Rate Maturity - Maturity	1354	Integer
MaturityDate	Maturity date	6282	Date (YYYYMMDD)
MaturityUnit See **MaturityUnit** Enum List.	Interest Rate Maturity - Maturity Unit	1355	String
MaxAllowedAsAsset	The maximum asset value of an individual bond allowed	541	Integer
MaxConcentrationAsAsset	Maximum allowable percentage of total assets on deposit for a particular bond	542	Float
Mnemonic	Equity Index ETF - Mnemonic (Product Name)	6085	String
Model See **Model** Enum List.	Model	1097	String
NbCouponPerYear	Bond - Nb. coupon per year	1295	Integer

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
NewProductObjectNumber	Object Number of the new product created via Corporate Action. Creates a unique ID for the Adjusted Product when combined with the AdjustedProductSessionNumber (Obsolete and has been removed).	1447	Integer **Foreign Key—**when combined with the AdjustedProductSession Number
NewProductSessionNumber	Session Number of the new product created via Corporate Action. Creates a unique ID for the New Product when combined with the AdjustedProductObjectNumber (Obsolete and has been removed).	1448	Integer **Foreign Key—**when combined with the AdjustedProductObjectN umber
NewProductSymbol	Derivative Instrument - New Product Symbol created via Corporate Action. (Obsolete and has been removed).	551	String
NewSymbologyLongDescription	New Symbology Long Description (Obsolete and has been removed).	3186	String
NotificationType See **NotificationType** Enum List.	Notification type	1125	String
OELCompliant	Equity Index ETF - OEL Compliant: Option Eligibility List Compliant Yes No	1299	String
OpenInterestTimeStamp	Open interest time stamp	6052	Date & Time (YYYYMMDDHHMMSS)
OutstandingAmount	Outstanding amount	3028	Float
PenaltyWhenUnsettled	Penalty for late settlement	1304	Float
PositionLimit	Maximum possible Position Quantity	746	Integer

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
PremiumMultiplier	Premium multiplier	755	Float
PremiumSettlementNumberOfDay	Number of days until premium settlement	181	Integer
PremiumStyle See **PremiumStyle** Enum List.	Premium style	610	String
PremiumType See **PremiumType** Enum List.	Premium type	609	String
PriceRange	Price range	6370	Float
PrimaryExchange	Primary exchange of the product in question	629	String
ProcessedAskPrice	Ask Price	1493	Float
ProcessedBidPrice	Bid price	1492	Float
ProcessedClosingPrice	Closing price	1495	Float
ProcessedEODPreviousMarginPrice	EOD previous margin price	3097	Float
ProcessedEODPreviousReferenceIndexPrice	Referenced Index Price used in last EOD calculations	6490	Float
ProcessedEODReferenceIndexPrice	Referenced Index Price used in EOD calculations	6493	Float
ProcessedEODSelectedMarginPrice	EOD selected margin price	3096	Float
ProcessedHighPrice	Daily Price - high price	1494	Float
ProcessedLowPrice	Daily Price -low price	1496	Float

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
ProcessedManualMarginPrice	Manual margin price	1504	Float
ProcessedOpeningPrice	Opening price	1497	Float
ProcessedPreviousMarginPrice	Previous margin price	1500	Float
ProcessedPriceReason	Reason for processing the daily prices	1506	String
ProcessedPriceStatus	Status of processed prices	1505	String
ProcessedPrimarySourcePrice	Primary source price	1502	Float
ProcessedReferenceIndexPrice	Reference index price	6387	Float
ProcessedSelectedMarginPrice	Selected margin price	1501	Float
ProcessedSettlementPrice	Settlement price	1498	Float
ProcessedSource	Source of daily processed prices	1491	String
ProcessedTheoreticalMarginPrice	Theoretical margin price	1503	Float
ProcessedYield	Yield	1499	Float
ProductClassDescription	Product Class Description	6414	String
ProductPeriodicity	Product Periodicity	1644	String
ProductState See **ProductState** Enum List.	State of Product	996	String
ProductType	Product type	773	String

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
See **ProductType** Enum List.			
Quantity	Open Interest - quantity	5031	Integer
QuantityRange	Minimum and Maximum quantities allowed for a given trade	6371	Integer
ReceivedPriceReason See **ReceivedPriceReason** Enum List.	Recevied Daily Price - price reason	1487	String
ReceivedPriceStatus See **ReceivedPriceStatus** Enum List.	Received Daily Price - price status	1486	String
ReceivedPrimarySourcePrice	Received Daily Price - primary source price	1483	Float
ReceivedSource See **ReceivedSource** Enum List.	Received Daily Price - source	1472	String
ReferenceIndexPriceType See **ReferenceIndexPriceType** Enum List	Reference index price	1241	Float
RunningRepoObjectNumber	Running Repo Object Number	1641	Integer
RunningRepoSessionNumber	Running Repo Session Number	1640	Integer
RunningRepoSymbol	Running Repo Symbol	1638	String
SessionNumber	Creates a unique ID when combined with ConfigObjectNumber	1119	Integer **Primary Key—**when combined with ConfigObjectNumber

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SettlementCurrency	Settlement currency	613	String
SettlementNumberOfDay	Number of days until settlement	615	Integer
SettlementPriceType	Price Type used in Settlement record	6070	String
SettlementStyle	Settlement Style	1626	String
UserDescription	User Description of the Product Symbol. Formerly Short Description	954	String
SpecificProductType	Specific Product Type	1625	String
StartLegSettlementDate	Start Leg Settlement Date	1635	Date
StrikePrice	Strike price	202	Float
SwapTenor	Tenor defined in years for Swap Future products	5673	Integer
SwapPaymentFrequency	Frequency for determining Payment dates in a Swap Future contract	5671	String
SwapResetFrequency	Frequency for determining Reset dates in a Swap Future contract	5672	String
SwapRate	Fixed Interest Rate defined for the given Swap Future contract	6616	Float
SwapEffectiveDate	Effective Date of a Swap Future contract	827	Date (YYYYMMDD)
SwapInitialEffectiveDate	Initial Effective Date of a Swap Future contract	5550	Date (YYYYMMDD)
Symbol	Product symbol	6146	String
SubstitutionIndicator	Substitution Indicator	1627	String

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
UnderlyingCurrencyCode	Currency code associated with the Underlying Interest	2243	String
UnderlyingExpiryDate	The expiry date of the underlying instruments contract	431	Date (YYYYMMDD)
UnderlyingInitialValuation	Underlying Initial Valuation	1637	Float
UnderlyingIsin	The underlying instruments International Securities Identification Number (ISIN)t	312	String
UnderlyingSystemDescription	System description of the Underlying Interest. Formerly Long Description	1953	String
UnderlyingObjectNumber	Object Number of the Underlying Interest	1115	Integer
UnderlyingOpeningPrice	Opening price for the Underlying Interest	6288	Float
UnderlyingPositionLimit	Position limit for the Underlying Interest	6289	Integer
UnderlyingPrimaryExchange	Primary exchange of the Underlying Interest	2245	String
UnderlyingSelectedMarginPrice	Selected margin price for the Underlying Interest	2244	Float
UnderlyingSessionNumber	Underlying session number	1174	Integer
UnderlyingSymbol	Underlying Symbol	311	String
UnderlyingType	Defines the underlying product type	313	String
UpdateBusinessDate	The Business Date when the record was last modified	1823	Date (YYYYMMDD)
UpdateTimeStamp	Date and time at which the Product record was last updated	72	Date & Time (YYYYMMDDHHMMSS)
UsageType	Defines how the associated product is used within the Clearing System	4064	String

Table 22: Data Store Extraction Set — Product

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
See **UsageType** Enum List.			

3.21 Fund Requirement

This table provides the SPAN Risk Calculation result. The table includes a summary by Clearing Account, and detailed result per Underlying Symbol.

3.21.1 Table Structure

There are two types of records identified by the value of field SpanRecordType:

AccountSummary: This is an aggregation of the risk result for all positions held by this Clearing Account.

CombinedCommodities: This is an aggregation of all positions held by a Clearing Account for a specific underlying.

There are multiples risk calculations processed during the normal day.

- The FundCalculationReason provides the name of the daily processes that trigger a risk calculation.
- The FundType field value determines how the risk result will be applied.

Active record: To determine if the Fund Requirement record is 'active' or not, validate if the EndDateTime is in the past 'not active', or in the future currently 'active' when the EOD files were generated.

3.21.2 Record Inclusion Rules

Includes all active fund requirement records and all records created the day the EOD file was generated.

Table 23: Data Store Extraction Set — Fund Requirement

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType See **AccountType** Enum List.	Account Type	5077	String
ActiveScenario	Active Scenario	2341	Float
AvailableNetOptionValue	Available Net Option Value	1570	Float
ClearingAccountNameId	Account Name Id	957	String **Foreign Key**
CombinedCommodities	Combined Commodities	2338	String
CreationBusinessDate	The Business Date when the FundRequirement record was created	1828	Date (YYYYMMDD)
CreationTime	Time when the record was created	70	Time (HHMMSS)
CreationTimeStamp	Date and time when the record was created	71	Date & Time (YYYYMMDDHHMMSS)
CurrencyCode	Currency Code	16	String
DataType	Data type, value is equal to FundRequirement	1433	String
DeliveryMonth	Delivery Month	4033	String
DeltaRemaining	Delta Remaining	2333	Float
DerivativeOpenTradeEquity	Derivative Open Trade Equity	3042	Float

Table 23: Data Store Extraction Set — Fund Requirement

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
EndDateTime	The date and time when the Fund Requirement record was no longer applied.	1990	String
EngineObjectNumber	Creates a Unique ID of the Fund Requirement record when combined with SessionNumber	1216	Integer **Primary Key—**when combined with SessionNumber
Exchange	Exchange	100	String
FundCalculationReason See **FundCalculationReason** Enum List.	Fund calculation reason	1310	String
FundType See **FundType** Enum List.	Type of fund at the Clearinghouse	1070	String
Group	Commodity Group	6331	String
HedgeSpec	The indicator in the order that designates the origin as for a speculative trade or hedge trade.	506	String
InterCommodityDelta	Inter Commodity Delta	2343	Float
InterCommoditySpreadCredit	Inter Commodity Spread Credit	2342	Float
IntraCommoditySpreadCharge	Intra Commodity Spread Charge	2344	Float
LongOptionValue	Long Option Value	2335	Float
MarketOperationNameId	Market Operation Name Id	975	String
MemberNameId	Member	4071	String **Foreign Key**

Table 23: Data Store Extraction Set — Fund Requirement

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
Minimum	Minimum	2334	Float
OpenTradeEquity	Open Trade Equity	2339	Float
PriceValuationRequirement	Price Valuation Requirement	5569	Float
PriceValuationAdjustment	Price Valuation Adjustment	2298	Float
RepoInterestMarkToMarket	Repo Interest Mark To Market for Fixed Income	3041	Float
RequirementAmount	Requirement Amount	1228	Float
RiskMaintenance	Risk Maintenance	2337	Float
ScanRiskMaintenance	Scan Risk Maintenance	2340	String
SessionNumber	Creates a Unique ID of the Fund Requirement record when combined with the EngineObjectNumber	1119	Integer **Primary Key—**when combined with the EngineObjectNumber
SettlementNumberOfDay	Number of day until the Fund Requirement is enforced.	615	Integer
ShortOptionValue	Short Option Value	2336	Float
SpanRecordType See **SpanRecordType** Enum List.	Span record type	672	String
StartDateTime	The date when the Fund Requirement is enforced.	1989	String
Status	Fund Requirement Status - See Ennum - ennum missing will be added	6311	String

Table 23: Data Store Extraction Set — Fund Requirement

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
SubAccount	Sub Account	605	String
UnderlyingSymbol	Underlying Symbol	311	String
UpdateBusinessDate	Business Date when the FundRequirement record was last modified	1823	Date (YYYYMMDD)
UpdateDate	Date upon which this record was updated	73	Date (YYYYMMDD)
ValueAtRisk	Value at risk	1569	Float

3.22 Cumulated Daily Cash

This table is a summary of settlement instructions where the settlement type is cash and is due to be settled the next day. The result provides an amount to collect from a member against the amount to pay a member. This information is then used during the End of Day Net Daily Cash Process.

3.22.1 Table Structure

The Cumulated Level is the grouping structure:

- CumulatedLevel = SubAccount
  SUM SettlementInstruction by SettlementInstructionReason and SubAccount
- CumulatedLevel = AccountType
  SUM SettlementInstruction by SettlementInstructionReason and AccountType
- CumulatedLevel = Member
  SUM SettlementInstruction by SettlementInstructionReason and AccountType

3.22.2 Record Inclusion Rules

This table is reset on a daily basis and does not carry forward historical information.

Table 24: Data Store Extraction Set — Cumulated Daily Cash

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType See **AccountType** Enum List.	Account type	5077	String
BankTransferObjectNumber	Creates a unique BankTransferID by combining BankTransferObjectNumber and BankTransferSessionNumber	1587	Integer **Foreign Key—**when combining BankTransferObjectNumber and BankTransferSessionNumber
BankTransferSessionNumber	Creates a unique BankTransferID by combining BankTransferSessionNumber and BankTransferObjectNumber	1586	Integer **Foreign Key—**when combining BankTransferSessionNumber and BankTransferObjectNumber
ClearingAccountNameId	ClearingAccountNameId	957	String
CollectFromMember	Amount to be collected from the Member	1225	Float
CreationBusinessDate	The Business Date when the CumulatedDailyCash record was created	1828	Date (YYYYMMDD)
CreationTimeStamp	Date and time when the record was created	71	Date & Time (YYYYMMDDHHMMSS)
CumulatedLevel See **CumulatedLevel** Enum List.	Specifies the data aggregation level	1566	String
CurrencyCode	Currency code	16	String
DataType	Data type, value is equal to CumulatedDailyCash	1433	String

Table 24: Data Store Extraction Set — Cumulated Daily Cash

FIELD NAME	DESCRIPTION	TAG CODE	DATA TYPE
EndDateTime	End date time (Obsolete and has been removed).	1990	String
EngineObjectNumber	Creates a Unique ID of this record when combined with SessionNumber	1216	Integer **Primary Key**—when combined with SessionNumber
MemberNameId	Unique identity for a member	4071	String **Foreign Key**
MessageType	MessageType: CumulatedDailyCash	35	String
PayToMember	Amount to be paid to the member	1226	Float
SessionNumber	Creates a Unique ID of this record when combined with the EngineObjectNumber	1119	Integer **Primary Key**—when combined with the EngineObjectNumber
SettlementReason See **SettlementReason** Enum List.	Settlement reason	1227	String
StartDateTime	Start date time	1989	String
UpdateBusinessDate	The Business Date when the CumulatedDailyCash record was last modified	1823	Date (YYYYMMDD)
UpdateTimeStamp	Date and time at which this record was last updated	72	Date & Time (YYYYMMDDHHMMSS)

3.23 Corporate Action

This table illustrates the effect of a Corporate Action on a derivative position by providing:

- Information on Ratio Applied during the Corporate Action
- The Position before and after the Corporate Action
- The old and new instrument description.

3.23.1 Table Structure

One record per position affected by a corporate action.

3.23.2 Record Inclusion Rules

This table can be empty, or include records from the day prior to the Corporate Action effective date.

Table 25: Data Store Extraction Set — Corporate Action

TAG NAME	DESCRIPTION	TAG CODE	DATA TYPE
AccountType See **AccountType** Enum List.	Account Type	5077	String
ActivityName See **ActivityName** Enum List.	The name of the daily activity when the data was extracted from SOLA Clearing. Currently all EOD tables are generated at “EndOfDayReportGeneration”.	1064	String
ClassMappingList	Class Mapping List	4067	String
ClassMappingSize	Class Mapping Size	4519	Integer
ClassSymbol	Product class symbol	6179	String
ClearingAccountNameId	Clearing Account Name Id	957	String
ContractSizeFactor	The multiplier applied to the originating contract size.	1373	Float

Table 25: Data Store Extraction Set — Corporate Action

TAG NAME	DESCRIPTION	TAG CODE	DATA TYPE
CorporateActionStatus See **CorporateActionStatus** Enum List.	Corporate Action Status.	1411	String
CorporateActionType See **CorporateActionType** Enum List.	Type of Corporate Action.	1369	String
CreationBusinessDate	The Business Date when the record was created	1828	Date (YYYYMMDD)
CreationDate	Date the Half Account Operation record was created	6143	Date (YYYYMMDD)
CreationTime	Creation Time	70	Time (HHMMSS)
CreationTimeStamp	Date and time the Half Account Operation record was created	71	Date & Time (YYYYMMDDHHMMSS)
Description	Corporate Action Description.	10003	String
EffectiveBusinessDate	Effective Business Date when corporate action is applied.	1827	Date
SystemDescription	Corporate Action System Description. Formerly Long Description	953	
LongQuantity	New Long quantity	196	Integer
MemberNameID	System ID for the member associated with the Corporate Action	4071	String
Name	Corporate Action Name	969	String
NewDeliverableList	New Deliverable List	6122	String
NewDeliverableSize	New Deliverable Size	6124	Integer

Table 25: Data Store Extraction Set — Corporate Action

TAG NAME	DESCRIPTION	TAG CODE	DATA TYPE
NewIsin	New Product ISIN	6133	String
NewLongDescription	New Product Long Description	8952	String
NewProductObjectNumber	New Product Object Number - Unique Product ID when combines with Session Number (Obsolete and has been removed).	1447	Integer
NewProductSessionNumber	New Product Session Number - Unique Product ID when combines with Session Number (Obsolete and has been removed).	1448	Integer
NewShortDescription	New Short Description	8953	String
NewSymbologyLongDescription	New Symbology Long Description (Obsolete and has been removed).	3186	String
NewSymbologyOldLongDescription	New Symbology Old Long Description	3187	String
NewUnderlyingSymbol	New Underlying Symbol	1371	String
NextBusinessDate	Next Business Date	1831	Date
OldClassSymbol	Old Class Symbol	6479	String
OldIsin	Old Product ISIN	6132	String
OldLongDescription	Old Long Description	951	String
OldLongQuantity	OldLongQuantity	195	Integer
OldShortDescription	Old Product Short Description	8954	String
OldShortQuantity	Short Quantity on the Old Product	320	Integer

Table 25: Data Store Extraction Set — Corporate Action

TAG NAME	DESCRIPTION	TAG CODE	DATA TYPE
OldUnderlyingSymbol	Old Underlying Symbol	1517	String
PositionConversionFactor	Position Conversion Factor	988	Float
UserDescription	User Description of the Product Symbol. Formerly Short Description	954	String
ShortQuantity	New Short quantity	197	Integer
SplitRatioFirstTerm	Split Ratio First Term	1365	String
SplitRatioSecondTerm	Split Ratio Second Term	1366	String
StatusTimeStamp	Date and time of status update	1313	Date & Time (YYYYMMDDHHMMSS)
StrikeMultiplyingFactor	Strike Multiplying Factor	1374	Float
StrikePriceRounding	Strike Price Rounding	1370	Float
SubAccount	SubAccount	605	String
UnderlyingPriceMultiplier	Underlying Price Multiplier	1372	Float
UpdateBusinessDate	Date the record was last updated	1823	Date
UpdateDate	Date the Asset Instruction record was last updated	73	Date (YYYYMMDD)
UpdateTime	Time at which the Asset Instruction record was updated	80	Time (HHMMSS)
UpdateTimeStamp	Date and time at which the Half Account Operation record was last updated	72	Date & Time (YYYYMMDDHHMMSS)

Section 4 ENUM Name Value Lists

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
AccountLevel	SubAccount MemberAccountType Member	
AccountOperationStatus	Created Confirmed PendingConfirmation Rejected Cancelled TemporaryCreated Rolledback Executed	
AccountOperationType	Allocation AllocationCancel Trade TradeCancel GiveUp GiveUpCancel Transfer Assignment TradeAdjustment MemberTradeAdjustment PositionAdjustment PositionTransfer	OTCTradeMatch OTCTradeConfirmation OTCTradeRejection MergeMember MergeMemberCancel AccountTransferCancel DemandTrade DemandTradeAdjustment DemandTradeCancel RepoDeferredDelivery RepoDeferredDeliveryCancel

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
AccountType	None Firm Client MultiPurpose NonClient NetClient Professional	
ActivityName	EndOfDayReportGeneration EndOfDayReportGenerationPriorExpiry IntraDayReportGeneration BatchEnd DepositoryEndOfPaymentExchange EndOfDayMarkToMarketCalculation IntraDayMarginableMarkToMarketCalculation IntraDayVariationMarginFundPromotion EndOfDayMarginableMarkToMarketCalculation CollateralExchangePayoutCalculation CollateralExchangeSameDayRecallCutoff	
AgreementType	GiveUp Transfer	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
AssetInstructionStatus	PendingConfirmation Confirmed Rejected Created Cancelled TemporaryCreated Rolledback PendingWithdrawalInProcess PendingWithdrawnFromMargin DepositOnDeposit TransferBack	
AssetInstructionType	Deposit Withdrawal Cancel Update Confirmation Rejection Transfer Net Inventory Payout Return Recall Buy-in	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
AssetType	BankerAcceptance CollateralSecurity Cash Escrow FutureMarginReceipts LetterOfCredit PutLetterOfGuarantee ValuedSecurities SpecificDeposit BulkDeposit	
BankTransferReason	EODSettlement IntraDayMarginCall ClearingFundSettlement OTCPremium Other ImmediateCashAdjustment	
BankTransferStatus	Pending Approved Rejected Cancelled Submitted BankReceived BankPending BankConfirmed BankRejected Created	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
BankTransferType	EndOfDay IntraDay Approval Refusal Cancel Submission BankReception BankPending BankConfirm BankReject	
BatchStatus	TemporaryUpdated Rolledback Updated	
BusinessAgreementStatus	Active Cancelled Suspended	
CallPutCode	Call Put	
CashPhysicalIndicator	Cash Physical	
CdsTradeEntryStatus	Nack_AfterMatched Nack_Invalid Nack_ManualCancel Nack_MissingLeg	NotProcessed Novated PendingMatching PendingNovation
ContractSizeUnit	Contract Dollar	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
CorporateActionStatus	PendingGeneration PendingExecution Executed Cancelled Rolledback	
CorporateActionType	SplitQtyAndStrikePriceChange SplitContractSizeAndStrikePriceChange Generic ReverseSplit SpinOff TakeOver Merge SpecialDividend UnderlyingChange RootSymbolChange	
CoverageType	None Class Underlying Series	
CumulatedFundStatus	Invalid Valid Manual Accepted Pending Validation	
CumulatedLevel	SubAccount MemberAccountType Member	
DataServiceSubscriptionSet	ADPPackedDailyTransaction ISMPackedDailyTransaction	

Table 26: Data Store Extraction Set — Enum Value Lists

Enum Name	Enum Values	
	List Start	(List Continuation)
	DataPhileAsciiDailyTransaction RolphNolanExtendedAsciiDailyTransaction AsciiDailyTransaction ExtendedAsciiDailyTransaction PackedEbcdicDailyTransaction ProductInfo	
DeliverableProductType	Option Equity Future Bond Swap Index ExchangeTradedFund ExchangeRate InterestRate Cash VirtualCash VirtualPhysical Basket	
DeliveryAgency	CDS Clearinghouse Intramember	
DeliveryRole	None Cash Underlying	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
DeliverySettlementStatus	Cancelled ConfirmDK CancelledAtMaturity Failed Rejected Settled InProgress	
DeliveryType	Cash Physical PositionCreation DailyRollOver SpecificTerm AddedToMargin	
DepositLocation	CDCCToronto CDCCMontreal CDS Bank DTC	
ExerciseInstruction	Decrease Increase Replace	
ExerciseStyle	American European	
FromToIndicator	From-Side To-Side	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
FundCalculationReason	IntraDayMargin ClearingFund EndOfDayMargin OTCPremium DCMM UnsettledItem StressMargin BankingHoliday	
FundType	Clearing Margin Difference Stress VariationMargin	
HalfAccountOperationStatus	OTCPendingClearerApproval OTCRejectedByClearer OTCApprovedByClearer OTCPendingPositionLimitExemption OTCPositionLimitExemptionDenied OTCPositionLimitExemptionGranted OTCPositionLimitOK OTCMatched OTCMatchedAndConfirmed OTCMatchedAndRejected Created Confirmed Rejected Cancelled TemporaryCreated Rolledback	Affirmed PendingAffirmation SplittedForPartialMatch

Table 26: Data Store Extraction Set — Enum Value Lists

Enum Name	Enum Values	
	List Start	(List Continuation)
HalfAccountOperationType	PositionTransferRequest PositionTransferConfirm PositionTransferReject PositionTransferCancel AutoExercise ManualExercise FutureTender FutureTenderUpdate FutureTenderCancel OverrideAutoExercise DeclarationOfLong DeclarationOfLongUpdate DeclarationOfLongCancel CashAdjustmentImmediate	CashAdjustmentEOD OTCHalfTrade OTCHalfTradeCancel OTCHalfTradeUpdate OTCHalfTradeApproval OTCHalfTradeRejection OTCHalfTradePositionLimitExemptionGrant OTCHalfTradePositionLimitExemptionDenial OverrideAutoExerciseRemove PositionCorrection RepoForwardToRunning RepoSubstitution RepoSubstitutionCancel RepoSubstitutionUpdate
HedgeSpeculatorIndicator	None Hedger Speculator	
HolderType	SubAccount MemberAccountType Member	
IncreaseDecreaseIndicator	Decrease Increase	
Level	Info Minor Major Critical	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
LongShortIndicator	Long Short	
LongTerm	False True	
MarginIntervalStatus	Created Updated NotUpdated	
MaturityUnit	Day Month Year	
MemberFlag	MarginValidationDisabled OvernightSettlementDisabled	
Model	DerivativeInstrument EquityIndexETF ExchangeRate Bond InterestRateMaturity	
NetSettlementPositionType	Failed Forward SetToBeSettled	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
NotificationType	ConfigException AssetException PriceException MarginException PositionException FileTransferException SettlementException OTCException CDSInvalidCommandReceivedNotice CDSRejectionNotice CDSSettlementInstructionNotice CDSTradeRejectionNotice	RiskDataException BankTransferNotice HalfAccountNotice ConfigNotice AutoAllocationNotice OnTheFlyCreation DefaultAccountUsed OTCMatched
OpenCloseIndicator	Open Close	
OppositeHedgerSpeculatorIndicator	None Hedger Speculator	
PositionPerAgeStatus	Inactive Active	
PositionStatus	TemporaryUpdated Rolledback Updated Expired	
PremiumStyle	Percentage Dollar	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
PremiumType	FullyPaid MarkedToMarket MarginableRepoInterestMarkToTest RepoInterestMarkToMarket	
ProductState	Inactive Created Pending Expired NonTradeable Tradeable	
ProductType	Option Equity Future Bond Swap Index ExchangeTradedFund ExchangeRate InterestRate Cash VirtualCash VirtualPhysical Basket	Bill BuySellBack GeneralCollateral RealReturnBond Repo
ReceivedPriceReason	IntraDay EndOfDay NetSettlementBatch	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
ReceivedPriceStatus	NotPriced WaitingPriceReception PendingValidation Valid InvalidConfig ManualAccepted InvalidMargin InvalidReferenceIndex InvalidMarginRefIndex	
ReceivedSource	None ManualEntry ExternalFeedProviderBloomberg PrimaryExchange PreviousMarginPrice TheoreticalUsingImpliedVolatility LastTradedPrice FrontMonthPrice CalculatedFromBasket TheoreticalForRepo	
ReferenceIndexPriceType	Bid Ask Closing Opening High Low Settlement MidMarket Theoretical	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
RequestAction	Delete NSPForwardCreation SICreation	
ResponseStatus	Confirmed InProgress Rejected	
RiskModel	Principal LimitedLossAllocation: Risk model for LCM RiskFree: Risk model for RFM NonParticipant: Risk model for non-clearing members	
SettlementInstructionStatus	PendingSettlement SentToCSD AcknowledgedByCSD NotAcknowledgedByCSD Settled Created	Cancelled CancelRequestRejected CancelRequestSent CancelRequested Failed Netted
SettlementInstructionType	IntraDay IntraDayUpdate IntraDayCancel EndOfDay EndOfDayCancel	RollIntraDay RollNextDay SplitDelivery
SettlementPriceType	Bid Ask Closing Opening High Low Settlement	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
	MidMarket	
SettlementReason	Billing Fee Premium Marked To Market Underlying Settlement Cash Adjustment Asset Auto Deposit Asset Auto Withdrawal Bond Conversion to Cash at Maturity Cash Market Settlement Coupon Transfer Back Failed SI Coupon Transfer Back US-Style Repo	EndOfDay Net Underlying Settlement IntraDay Net Underlying Settlement RealTime Underlying Settlement Repo Close Leg Underlying Settlement Repo Interest Repo Interest Marked To Market Repo Interest Marked To Market Cost Repo Interest Marked To Market Reversal Repo Start Leg Underlying Settlement Rolled For failing Rolled For intraday Netting
SpanRecordType	AccountSummary CombinedCommodities	
Status	Open Acknowledged Closed	

Table 26: Data Store Extraction Set — Enum Value Lists

ENUM NAME	ENUM VALUES	
	LIST START	(LIST CONTINUATION)
TradeType	ATS Client DirectParticipant IDB	
TransferSide	ToMember FromMember	
UsageType	MXListed OTC Asset Underlying Other Margin	

Appendix A Query Setup

This section describes how to set up a Query to produce specific reports. The sample reports outlined here are the following End-of-Day reports:

- MT99 – Detailed Futures Consolidated Activity
- MZ01 – Comma Delimited File
- MP51 – Futures Open Positions Report
- MT51 – Final Futures Daily Transaction Report

A.1 MT99 - Detailed Futures Consolidated Activity

This report lists all activities for all future products sorted by SubAccount.

Associated Table(s)

- Position
- OneSideAccountOperation

Report Layout

The intial section describes the report layout for headings, detail, and total lines. Information on data elements, their description and values, along with SOLA Clearing field names and tag codes will also be shown.

Header Lines

There are two header lines repeated at the start of every page, or when there is a change in SubAccount.The following tables describes the header lines in detail.

Table 27: Report Header Line 1

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
Firm	Member		NameID + Description	969 + 10003
Account	Position or, OneSideAccountOperation		"AccountType +Sub-Account	5077 + 605
Report Title	Label	Detailed Futures Consolidated Activity		
Report NameID	Label	RP-MT99		
Report Date	Date report was created	Use System Date		
Report Time	Time report was created	Use System Time		
Page Number	Page number			

Table 28: Report Header Line 2

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
Effective Date	DD MMM YY	Use System Date		827

Record Selection Criteria

Detail Lines

There are two record types used in producing this report.

- RecordType 1
- RecordType 2

They are layed out in detail in the Record Type 1 & 2 tables:

Inclusion Criteria - Record Type 1

Position.ActivityName(1064) = 'EndOfDayCleanup'

(Position.ProductType(773) = ’Future’ or Position.UnderlyingType = ’Future’ or Position.UnderlyingType = ’VirtualPhysical’)

Table 29: Record Type 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Series	Position	SystemDescription	953	
Last Activity	Position	StartOfDayUpdateDate	6481	
Long	Position	LongStartOfDay	1078	
Short	Position	ShortStartOfDay	1083	
Prv/Trd Price	Position	ProcessedEODPreviousMarginPrice	3097	
Settlement Price	Position	ProcessedSelectedMarginPrice	1501	

Table 29: Record Type 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Debit	Position	SettlementAmount	6082	"If (ProcessedEODPreviousMarginPrice (3097) > ProcessedSelectedMarginPrice (1501)) and (LongStartOfDay (1078) > ShortStartOfDay (1083)) Else if (ProcessedEODPreviousMarginPrice (3097) < ProcessedSelectedMarginPrice (1501)) and (LongStartOfDay (1078) < ShortStartOfDay (1083)) Else Null"
Credit	Position	SettlementAmount	6082	"If (ProcessedEODPreviousMarginPrice (3097) < ProcessedSelectedMarginPrice (1501)) and (LongStartOfDay (1078) > ShortStartOfDay (1083)) Else if (ProcessedEODPreviousMarginPrice (3097) > ProcessedSelectedMarginPrice (1501)) and (LongStartOfDay (1078) < ShortStartOfDay (1083)) Else Null"

Inclusion Criteria - Record Type 2

```
OneSideAccountOperation.CreationDate(6143) = Reporting Date

(OneSideAccountOperation.ProductType(773) = 'Future' or OneSideAccountOperation.UnderlyingType(313) =
'Future' or OneSideAccountOperation.UnderlyingType(313) = VirtualPhysical')

   and

      (

         (OneSideAccountOperation.Type(970) in ( 'Trade', 'Allocation', 'GiveUp') and
      OneSideAccountOperation.Status(6311) <> 'Cancelled')

         or

         (OneSideAccountOperation.Type(970) in ( 'TradeCancel', 'AllocationCancel', 'GiveUpCancel' ) and
      OneSideAccountOperation.ExternalDate(6375) <> {Reporting Date})

         or

         (OneSideAccountOperation.Type(970) in ( 'PositionAdjustment', 'PositionTransfer' ))

         or

         (OneSideAccountOperation.Type(970) in ( 'Assignment' ) and
      (OneSideAccountOperation.ProductType(773) <> 'Future' or OneSideAccountOperation.DeliveryType(624) =
      'Physical'))

      )

OneSideAccountOperation.Type(970) in ( 'Trade', 'Allocation', 'GiveUp'), 'Assignment',
'PositionAdjustment', 'PositionTransfer' )

OneSideAccountOperation.Status(6311) <> 'Cancelled'
```

Table 30: Record Type 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Series	OneSideAccountOperation	SystemDescription	953	

Last Activity	OneSideAccountOperation	Type	970	`If Type(970) in (Trade, Allocation, Give-Up) then Empty`
				`Else if ExternalDate <> CreationDate(6143) then ""Missed Trade""`
				`Else Type`

Open Position - Long	OneSideAccountOperation	Quantity	38	`If LongShortIndicator(526) = 'Long' then Quantity(38).`
				`Else null.`
				`Add plus sign if OpenCloseIndicator(749) = 'Open' (+)`
				`or add minus sign if OpenCloseIndicator(749) = 'Close' (-)`

Open Position - Short	OneSideAccountOperation	Quantity	38	`If LongShortIndicator(526) = 'Short' then Quantity(38).`
				`Else null.`
				`Add plus sign if OpenCloseIndicator(749) = 'Open' (+) or add minus sign if OpenCloseIndicator(749) = 'Close' (-)`

Mkt	OneSideAccountOperation	PrimaryExchange	629	

Table 30: Record Type 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
O/C	OneSideAccountOperation	OpenCloseIndicator	749	
Opp. Mbr	OneSideAccountOperation	OppositeMember	2248	
Contract	OneSideAccountOperation	BuySellIndicator	2257	"If Buy then ""BOT"" Else if Sell then ""SLD"""
Prv/Trd Price	OneSideAccountOperation	Price	3124	
Settlement Price	OneSideAccountOperation	ProcessedSelectedMargin Price	1501	
Gain/Loss/Premium - Debit	OneSideAccountOperation	MarkedToMarketAmount or PremiumAmount	6258 or 6257	"If BuySellIndicator (2257)= Buy and Price (3124)> ProcessedSelectedMarginPrice(1501) and ProductType(773)= Future then MarkedToMarketAmount(6258) Else if BuySellIndicator(2257)= Sell and Price(3124)< ProcessedSelectedMarginPrice (1501)and ProductType(773)= Future then MarkedToMarketAmount(6258) Else if BuySellIndicator(2257)= Buy and ProductType(773)= Option then PremiumAmount(6257) Else the field is empty."

Table 30: Record Type 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Gain/Loss/Premium - Credit	OneSideAccountOperation	MarkedToMarketAmount or PremiumAmount	6258 or 6257	If BuySellIndicator(2257)= Buy and Price(3124)< ProcessedSelectedMarginPrice(1501) and ProductType(773)= Future then MarkedToMarketAmount(6258) Else if BuySellIndicator(2257)= Sell and Price(3124)> ProcessedSelectedMarginPrice(1501)and ProductType(773)= Future then MarkedToMarketAmount(6258) Else if BuySellIndicator(2257)= Sell and ProductType(773)= Option then PremiumAmount(6257) Else the field is empty.
Trdr / REC#	OneSideAccountOperation	EngineObjectNumber	1216	
DTM Time / Sq#/Seq	OneSideAccountOperation	ExternalID	1106	If ExternalDate(6375) <> CreationDate then ExternalTime(6376) Else ExternalID(1106)

Total Line

There is also a report subtotal for 'New Position', and report grand totals produced. These are layed out in detail in the Record Type 3 table.

Table 31: Record Type 3

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
New Position	N/A	N/A	N/A	Label Value: "New Position"
Open Position - Long	N/A	N/A	N/A	SUM All Long Position, per product A
Open Position - Short	N/A	N/A	N/A	SUM All Short Position
Gain/Loss/Premium - Debit	N/A	N/A	N/A	SUM All Debit
Gain/Loss/Premium - Credit	N/A	N/A	N/A	SUM All Credit
Total Gain/Loss Premium	N/A	N/A	N/A	Difference of SUM All Credit and SUM All Debit - If net Credit display as Credit, if net Debit display as Debit.

A.2 MZ01 - Comma Delimited File

This report lists totals for Options Exercise and Assignment activity by Series. Options show credit and debit values.

In order to be compliant with the new symbology, the following MZ01 specification includes the expiry day which is different from the current production file which does not include the expiry day.

Record Selection Criteria

There are three record types used to create this report. They are:

- Record Type 1
- Record Type 2
- Record Type 3

Each of these record types uses the Settlement Instruction Table as source data. (DataType (1433) = 'SettlementInstructions').

Record Type 1

SettlementInstruction.CreationDate(6143) = Reportingdate (report date)

SettlementInstruction.AccountOperationType(3133) = Assignment

SettlementInstruction.ProductType(773) = Option

SettlementInstruction.UnderlyingType(313) is not equal to Basket

Grouped by AccountType(5077), SubAccount(605), DeliveryType(624), UnderlyingSymbol(311), ClassSymbol(6179),
DerivativeExpiryDate(433), StrikePrice(202), CallPutCode(201)

Table 32: Record_Type 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Firm	SettlementInstruction	MemberNameID	4071	
Account	SettlementInstruction	AccountType	5077	
Sub Account	SettlementInstruction	SubAccount	605	
Symbol	SettlementInstruction	ClassSymbol	6179	If ClassSymbol is Null Then UnderlyingSymbol (311) Else ClassSymbol
Expiry Day	SettlementInstruction	DerivativeExpiryDate	433	Extract Day from Date
Expiry Month	SettlementInstruction	DerivativeExpiryDate	433	Extract Month from Date
Expiry Year	SettlementInstruction	DerivativeExpiryDate	433	Extract Year from Date
Strike	SettlementInstruction	StrikePrice	202	Decimal have a length of 3 bytes and there is a decimal point. If there is no Decimal then the decimal point and the 3 bytes do not appear on the report.
Call/Put	SettlementInstruction	CallPutCode	201	
Currency	SettlementInstruction	SettlementCurrency	613	

Table 32: Record_Type 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES

Exercised Contract	SettlementInstruction	AccountOperationQuantity	3126	`Sum`
				`((If DeliveryRole(6161) = 'Cash' FromToIndicator(56) = To and CallPutCode (201)='Put')`
				`Or`
				`(DeliveryRole(6161) = 'Cash' FromToIndicator(56) = From and CallPutCode(201)= 'Call')`
				`Then AccountOperationQuantity(3126)`
				`Else empty)`

Assigned Contract	SettlementInstruction	AccountOperationQuantity	3126	`Sum`
				`((If DeliveryRole(6161) = 'Cash' and FromToIndicator(56) = 'From' and CallPutCode(201)='Put' )`
				`OR`
				`(DeliveryRole(6161) = 'Cash' FromToIndicator(56) = 'To' and CallPutCode(201)='Call')`
				`Then AccountOperationQuantity(3126)`
				`Else empty)`

Table 32: Record_Type 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES

Exercised Shares	SettlementInstruction	DecimalQuantity	46	`Sum(`
				`If DeliveryType(624) <> 'Cash' and DeliveryRole(6161) = ‘Underlying’ and ( ( FromToIndicator(56) = ‘To’ and CallPutCode(201) = 'Call' ) or ( FromToIndicator(56) = ‘From’ and CallPutCode(201)= 'Put' ) Then DecimalQuantity(46)`
				`Else empty`
				`)`

Assigned Shares	SettlementInstruction	DecimalQuantity	46	`Sum(`
				`If DeliveryType(624) <> 'Cash' and DeliveryRole(6161) = ‘Underlying’ and (  ( FromToIndicator(56) = ‘From’ and CallPutCode(201) = 'Call' ) or ( FromToIndicator(56) = ‘To’ and CallPutCode(201)= 'Put' ) ) Then DecimalQuantity(46)`
				`Else empty`
				`)`

Exercised Value	Calculated Field			`Sum(`
				`If DeliveryType(624) = 'Physical' Then`
				`If DeliveryRole(6161) = 'Cash' and ( ( FromToIndicator(56) = ‘To’ and CallPutCode(201)= 'Put' ) or ( FromToIndicator(56) = ‘From’ and CallPutCode(201) = 'Call' ) ) Then DecimalQuantity(46)`
				`Else`

Table 32: Record_Type 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
				`If DeliveryType(624) = 'Cash'(DeliveryRole(6161) = 'Underlying' And ((CallPutCode(201) = 'Call' And FromToIndicator(56) = 'To-Side') Or (CallPutCode(201) = 'Put' And FromToIndicator(56) = 'From-Side'))) or (DeliveryRole(6161) ='Cash' And ((CallPutCode(201) = 'Call' And FromToIndicator(56) = 'From-Side') Or (CallPutCode(201) = 'Put' And FromToIndicator(56) = 'To-Side'))) Then` `If FromToIndicator(56) = 'From-Side' Then` `0-DecimalQuantity(46)` `Else` `DecimalQuantity(46)` `)` `Else Empty` **Example:** When the DeliveryType = 'Cash' the cash delivery for the underlying leg is netted with the strike price cash delivery. "0-DecimalQuantity(46)" is a negative quantity applied during the netting process.

Assigned Value	Calculated Field			`Sum(`
				`If DeliveryType(624) = 'Physical' Then`
				`If DeliveryRole(6161) = 'Cash' and ( ( FromToIndicator(56) = ‘From’ and CallPutCode(201)= 'Put' ) or ( FromToIndicator(56) = ‘To’ and CallPutCode(201) = 'Call' ) ) Then`
				`DecimalQuantity(46)`

Table 32: Record_Type 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
				`Else` `If DeliveryType(624) = 'Cash'(DeliveryRole(6161) = 'Underlying' And ((CallPutCode(201) = 'Call' And FromToIndicator(56) = 'From-Side') Or (CallPutCode(201) = 'Put' And FromToIndicator(56) = 'To-Side'))) or (DeliveryRole(6161) = 'Cash' And ((CallPutCode(201) = 'Call' And FromToIndicator(56) = 'To-Side') Or (CallPutCode(201) = 'Put' And FromToIndicator(56) = 'From-Side'))) Then` `If FromToIndicator(56) = 'From-Side' Then` `DecimalQuantity(46)` `Else` `0-DecimalQuantity(46)` `)` `Else Empty` **Note:** When the DeliveryType = 'Cash' the cash delivery for the underlying leg is netted with the strike price cash delivery. "0-DecimalQuantity(46)" is a negative quantity applied during the netting process.

Record Type 2

SettlementInstruction.CreationDate(6143) = Reportingdate (report date)

SettlementInstruction.AccountOperationType(3133) = Assignment

SettlementInstruction.ProductType(773) = Option

SettlementInstruction.UnderlyingType(313) = Basket

Grouped by AccountType(5077), SubAccount(605), DeliveryType(624), UnderlyingSymbol(311), ClassSymbol(6179),
DerivativeExpiryDate(433), StrikePrice(202), CallPutCode(201)

- Record Type 2 is generated only when the Option has multiple deliverables (Basket), or when the deliverable was changed to Cash due to a Corporate Action.

Table 33: Record Type 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Firm	SettlementInstruction	MemberNameID	4071	
Account	SettlementInstruction	AccountType	5077	
Sub Account	SettlementInstruction	SubAccount	605	
Symbol	SettlementInstruction	ClassSymbol	6179	If ClassSymbol is Null Then UnderlyingSymbol (311) Else ClassSymbol
Expiry Day	SettlementInstruction	DerivativeExpiryDate	433	Extract Day from Date
Expiry Month	SettlementInstruction	DerivativeExpiryDate	433	Extract Month from Date
Expiry Year	SettlementInstruction	DerivativeExpiryDate	433	Extract Year from Date
Strike	SettlementInstruction	StrikePrice	202	Decimal have a length of 3 bytes and there is a decimal point. If there is no Decimal then the decimal point and the 3 bytes do not appear on the report.

Table 33: Record Type 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Call/Put	SettlementInstruction	CallPutCode	201	
Currency	SettlementInstruction	SettlementCurrency	613	

Exercised Contract	SettlementInstruction	AccountOperationQuantity	3126	`Sum`
				`((If DeliveryRole(6161) = 'Cash' FromToIndicator(56) = To and CallPutCode(201)='Put')`
				`Or`
				`(DeliveryRole(6161) = 'Cash' FromToIndicator(56) = From and CallPutCode(201)= 'Call')`
				`Then AccountOperationQuantity(3126)`
				`Else empty)`

Assigned Contract	SettlementInstruction	AccountOperationQuantity	3126	`Sum`
				`((If DeliveryRole(6161) = 'Cash' and FromToIndicator(56) = 'From' and CallPutCode(201)='Put' )`
				`OR`
				`(DeliveryRole(6161) = 'Cash' FromToIndicator(56) = 'To' and CallPutCode(201)='Call')`
				`Then AccountOperationQuantity(3126)`
				`Else empty)`

Table 33: Record Type 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Exercised Shares	SettlementInstruction	DecimalQuantity	46	Sum(If DeliverableProductType <> ‘Cash’ and DeliveryType(624) <> 'Cash' and DeliveryRole(6161) = ‘Underlying’ and ((FromToIndicator(56) = ‘To’ and CallPutCode(201) = 'Call') or (FromToIndicator(56) = ‘From’ and CallPutCode(201)= 'Put') Then DecimalQuantity(46) Else empty)
Assigned Shares	SettlementInstruction	DecimalQuantity	46	Sum(If DeliverableProductType <> ‘Cash’ and DeliveryType(624) <> 'Cash' and DeliveryRole(6161) = ‘Underlying’ and ((FromToIndicator(56) = ‘From’ and CallPutCode(201) = 'Call') or (FromToIndicator(56) = ‘To’ and CallPutCode(201)= 'Put')) Then DecimalQuantity(46) Else empty)

Table 33: Record Type 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Exercised Value	Calculated Field			"If DeliveryRole(6161) = 'Cash' and FromToIndicator(56) = To and CallPutCode(201) = 'Put' Then SUM DecimalQuantity(46) Else if DeliveryRole(6161) = 'Cash' and FromToIndicator(56) = From and CallPutCode(201) = 'Call' Then SUM DecimalQuantity(46) Else empty"
Assigned Value	Calculated Field			"If DeliveryRole(6161) = 'Cash' and FromToIndicator(56) = From and CallPutCode(201) = 'Put' Then SUM DecimalQuantity(46) Else if DeliveryRole(6161) = 'Cash' and FromToIndicator(56) = To and CallPutCode(201) = 'Call' Then SUM DecimalQuantity(46) Else empty"

Record Type 3

SettlementInstruction.CreationDate (6143) = Reportingdate (report date)

SettlementInstruction.AccountOperationType (3133) = Assignment

SettlementInstruction.ProductType (773) = Option

SettlementInstruction.DeliverableProductType (6298) = Cash

SettlementInstruction.UnderlyingType (313) = Basket

SettlementInstruction.DeliveryRole (6161) = 'Underlying'

Grouped by AccountType (5077), SubAccount (605), DeliveryType (624), UnderlyingSymbol (311), ClassSymbol (6179),
DerivativeExpiryDate (433), StrikePrice (202), CallPutCode (201)

Note: Record Type 3 is generated only when the Option has multiple deliverables (Basket), and one of the deliverables is Cash.

Note: If there is a Record Type 3, there must be a related Record Type 2 generated. As the Record Type 3 provides additional information that cannot be covered by record type 2.

Table 34: Record Type 3

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Firm	SettlementInstruction	MemberNameID	4071	
Account	SettlementInstruction	AccountType	5077	
Sub Account	SettlementInstruction	SubAccount	605	
Symbol	SettlementInstruction	ClassSymbol	6179	If ClassSymbol is Null Then UnderlyingSymbol (311) Else ClassSymbol
Expiry Day	SettlementInstruction	DerivativeExpiryDate	433	Extract Day from Date

Table 34: Record Type 3

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Expiry Month	SettlementInstruction	DerivativeExpiryDate	433	Extract Month from Date
Expiry Year	SettlementInstruction	DerivativeExpiryDate	433	Extract Year from Date
Strike	SettlementInstruction	StrikePrice	202	Decimal have a length of 3 bytes and there is a decimal point. If there is no Decimal then the decimal point and the 3 bytes do not appear on the report.
Call/Put	SettlementInstruction	CallPutCode	201	
Assigned Currency Delivery 1				Value = CD

Assigned Cash Delivery 1	SettlementInstruction	DecimalQuantity	46	`Sum(`
				`If DeliverableSettlementCurrency(613) = ‘CAD’ Then`
				`If ( DeliveryRole(6161) = ‘Underlying’ and ( ( FromToIndicator(56) = ‘From’ and CallPutCode(201) = 'Call' ) or ( FromToIndicator(56) = ‘To’ and CallPutCode(201)= 'Put' ) ) ) Then`
				`DecimalQuantity(46)`
				`Else empty`
				`)`

Assigned Currency Delivery 2				Value = US

Table 34: Record Type 3

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Assigned Cash Delivery 2	SettlementInstruction	DecimalQuantity	46	`Sum( If DeliverableSettlementCurrency(613) = ‘USD’ Then If ( DeliveryRole(6161) = ‘Underlying’ and ( ( FromToIndicator(56) = ‘From’ and CallPutCode(201) = 'Call' ) or ( FromToIndicator(56) = ‘To’ and CallPutCode(201)= 'Put' ) ) )Then DecimalQuantity(46) Else empty )`
Exercised Currency Delivery 1				Value = CD
Exercised Cash Delivery 1	SettlementInstruction	DecimalQuantity	46	`Sum( If DeliverableSettlementCurrency(613) = ‘CAD’ Then If ( DeliveryRole(6161) = ‘Underlying’ and ( ( FromToIndicator(56) = ‘To’ and CallPutCode(201) = 'Call' ) or ( FromToIndicator(56) = ‘From’ and CallPutCode(201)= 'Put' ) ) )Then DecimalQuantity(46) Else empty )`
Exercised Currency Delivery 2				Value = US

Table 34: Record Type 3

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES

Exercised Cash Delivery 2	SettlementInstruction	DecimalQuantity	46	`Sum(`
				`If DeliverableSettlementCurrency(613) = ‘USD’ Then`
				`If ( DeliveryRole(6161) = ‘Underlying’ and ( ( FromToIndicator(56) = ‘To’ and CallPutCode(201) = 'Call' ) or ( FromToIndicator(56) = ‘From’ and CallPutCode(201)= 'Put' ) ) )Then`
				`DecimalQuantity(46)`
				`Else empty`
				`)`

Query Sample

This Query sample is comprised of two parts. The first part covers record types 1 and 2. The second part following the ’union’ covers record type 3.

```
Record Type 1 and 2


Select MemberNameId(4071), AccountType(5077), SubAccount(605),

   Case When ClassSymbol(6179) Is Null Then UnderlyingSymbol(313) Else ClassSymbol(6179) End as
   ClassSymbol(6179), DerivativeExpiryDate(433), StrikePrice(202), CallPutCode(201), DeliveryType(624),
   SettlementCurrency(613), UnderlyingType(313), DeliverableProductType(6298),
   DeliverableSettlementCurrency(6297), ContractSize(6164),

   GroupType,

   Contracts.ExercisedContract as ExercisedContract,

   Contracts.AssignedContract as AssignedContract,

   Sum

   (

   Case When DeliveryType(624) = 'Physical' Then

          Case When DeliveryRole(6161) = 'Underlying' And ( ( FromToIndicator(56) = 'To-Side' And
          CallPutCode (201) = 'Call' ) Or ( FromToIndicator(56) = 'From-Side' And CallPutCode(201) = 'Put'
          ) ) Then DecimalQuantity(46) Else 0 End

   Else

   -- DeliveryType(624) = 'Cash'

   Case When ( CallPutCode(201) = 'Call' And FromToIndicator(56) = 'To-Side'   And DeliveryRole(6161) =
   'Underlying' )

   Or        ( CallPutCode(201) = 'Call' And FromToIndicator(56) = 'From-Side' And DeliveryRole(6161) =
   'Cash' )

   Or        ( CallPutCode(201) = 'Put'  And FromToIndicator(56) = 'From-Side' And DeliveryRole(6161) =
   'Underlying' )

   Or        ( CallPutCode(201) = 'Put'  And FromToIndicator(56) = 'To-Side'   And DeliveryRole(6161) =
   'Cash' ) Then
```

```
    Case When FromToIndicator(56) = 'From-Side' And UnderlyingType(313) <> 'Basket' Then

           0-DecimalQuantity(46)
    Else
           DecimalQuantity(46)
    End
    Else
           0
    End
End
) as ExercisedShares,
Sum
(
    Case When DeliveryType(624) = 'Physical' Then
           Case When DeliveryRole(6161) = 'Underlying' And ( ( FromToIndicator(56) = 'From-Side' And
           CallPutCode(201) = 'Call' ) Or ( FromToIndicator(56) = 'To-Side' And CallPutCode(201) = 'Put' )
           ) Then DecimalQuantity(46) Else 0 End
    Else
           -- DeliveryType(624) = 'Cash'
           Case When ( CallPutCode(201) = 'Call' And FromToIndicator(56) = 'From-Side' And
           DeliveryRole(6161) = 'Underlying' )
           Or        ( CallPutCode(201) = 'Call' And FromToIndicator(56) = 'To-Side'   And
           DeliveryRole(6161) = 'Cash' )
           Or        ( CallPutCode(201) = 'Put'  And FromToIndicator(56) = 'To-Side'   And
           DeliveryRole(6161) = 'Underlying' )
           Or        ( CallPutCode(201) = 'Put'  And FromToIndicator(56) = 'From-Side' And
           DeliveryRole(6161) = 'Cash' ) Then
           Case When FromToIndicator(56) = 'To-Side' And UnderlyingType(313) <> 'Basket' Then
```

```
            0-DecimalQuantity(46)
        Else
            DecimalQuantity(46)
        End
    Else
            0
    End
End
) as AssignedShares

FROM EodFile

Inner Join
(
    Select   MemberNameId(4071), AccountType(5077), SubAccount 605),
            ClassSymbol(6179), UnderlyingSymbol(313), DerivativeExpiryDate(433), StrikePrice(202),
            CallPutCode(201),
            DeliveryType(624), ContractSize(6164), SettlementCurrency(613),
            Sum
            (
            Case When DeliveryRole(6161) = 'Cash' And ( ( FromToIndicator(56) = 'To-Side' And
            CallPutCode(201) = 'Put' )
            Or ( FromToIndicator(56) = 'From-Side' And CallPutCode(201) = 'Call' ) ) Then
            AccountOperationQuantity(3126)
Else
            0
End
```

```
) as ExercisedContract,
Sum
(
    Case When DeliveryRole(6161) = 'Cash' And ( ( FromToIndicator(56) = 'From-Side' And CallPutCode(201) =
    'Put' )
            Or ( FromToIndicator(56) = 'To-Side' And CallPutCode(201) = 'Call' ) ) Then
            AccountOperationQuantity(3126)
    Else
            0
    End
    ) as AssignedContract
FROM EodFile
WHERE DataType(1433) = 'SettlementInstruction'
    AND MemberNameId(4071) = Your Member ID
    AND CreationDate(6143) >= Reporting Date
    AND AccountOperationType(3133) = 'Assignment'
    AND ProductType(773) = 'Option'
    AND DeliveryRole(6161) = 'Cash'
Group By MemberNameId(4071), AccountType(5077), SubAccount(605),
ClassSymbol(6179), UnderlyingSymbol(313), DerivativeExpiryDate(433), StrikePrice(202), CallPutCode(201),
    DeliveryType(624), ContractSize(6164), SettlementCurrency(613)
) Contracts
On  Contracts.MemberNameId(4071) = EodFile.MemberNameId(4071)
And Contracts.AccountType(5077) = EodFile.AccountType(5077)
And ( ( Contracts.SubAccount(605) Is Null And EodFile.SubAccount(605) Is Null ) Or
Contracts.SubAccount(605) = EodFile.SubAccount(605) )
```

```
And ( ( Contracts.ClassSymbol(6179) Is Null And EodFile.ClassSymbol(6179) Is Null ) Or
Contracts.ClassSymbol(6179) = EodFile.ClassSymbol(6179) )

And Contracts.UnderlyingSymbol(313) = EodFile.UnderlyingSymbol(313)

And Contracts.DerivativeExpiryDate(433) = EodFile.DerivativeExpiryDate(433)

And Contracts.StrikePrice(202) = EodFile.StrikePrice(202)

And Contracts.CallPutCode(201) = EodFile.CallPutCode(201)

And Contracts.DeliveryType(624) = EodFile.DeliveryType(624)

And Contracts.ContractSize(6164) = EodFile.ContractSize(6164)

And Contracts.SettlementCurrency(613) = EodFile.SettlementCurrency(613)




Inner Join

(

   Select Distinct UnderlyingSymbol(313), Max( Case When DeliveryType(624) = 'Cash' And
   UnderlyingType(313) <> 'Basket' Then 1 Else 0 End ) as GroupType

   FROM EodFile

   WHERE DataType(1433) = 'SettlementInstruction'

          AND MemberNameId(4071) = Your Member ID

          AND CreationDate(6143) >= Reporting Date

          AND AccountOperationType(3133) = 'Assignment'

          AND ProductType(773) = 'Option'

          Group By UnderlyingSymbol(313)

   ) GroupTypes

On GroupTypes.UnderlyingSymbol(313) = EodFile.UnderlyingSymbol(313)
```

```
WHERE DataType(1433) = 'SettlementInstruction'
AND MemberNameId(4071) = Your member id
AND CreationDate(6143) >= Reporting Date
AND AccountOperationType(3133) = 'Assignment'
AND ProductType(773) = 'Option'
AND ( DeliveryRole(6161) = 'Underlying' Or ( UnderlyingType(313) <> 'Basket' And DeliveryType(624) = 'Cash'
) )


Group By MemberNameId(4071), AccountType(5077), SubAccount(605), GroupType, DeliveryType(624),
CallPutCode(201), ClassSymbol(6179), UnderlyingSymbol(313), UnderlyingType(313),
    ContractSize(6164), DerivativeExpiryDate(433), StrikePrice(202), SettlementCurrency(613),
    DeliverableSettlementCurrency(6297), DeliverableProductType(6298),
    Contracts.ExercisedContract, Contracts.AssignedContract


UNION ALL



-- Record Type 3


Select   MemberNameId(4071), AccountType(5077), SubAccount(605),
    Case When ClassSymbol(6179) Is Null Then UnderlyingSymbol(313) Else ClassSymbol(6179) End as
    ClassSymbol(6179), DerivativeExpiryDate(433), StrikePrice(202), CallPutCode(201),
    DeliveryType(624), SettlementCurrency(613), UnderlyingType(313), DeliverableProductType(6298),
    DeliverableSettlementCurrency(6297), ContractSize(6164),
    0 as GroupType,
    Cast( NULL as Integer ) as ExercisedContract,
    Cast( NULL as Integer ) as AssignedContract,
    Sum
    (
```

```
    Case When DeliveryType(624) = 'Physical' Then

           Case When DeliveryRole(6161) = 'Underlying' And ( ( FromToIndicator(56) = 'To-Side' And
           CallPutCode(201) = 'Call' ) Or ( FromToIndicator(56) = 'From-Side' And CallPutCode(201) = 'Put' )
           ) Then DecimalQuantity(46) Else 0 End

           Else

           -- DeliveryType(624) = 'Cash'

           Case When ( CallPutCode(201) = 'Call' And FromToIndicator(56) = 'To-Side'   And DeliveryRole(6161)
           = 'Underlying' )

           Or        ( CallPutCode(201) = 'Call' And FromToIndicator(56) = 'From-Side' And DeliveryRole(6161)
           = 'Cash' )

           Or        ( CallPutCode(201) = 'Put'  And FromToIndicator(56) = 'From-Side' And DeliveryRole(6161)
           = 'Underlying' )

           Or        ( CallPutCode(201) = 'Put'  And FromToIndicator(56) = 'To-Side'   And DeliveryRole(6161)
           = 'Cash' ) Then

           Case When FromToIndicator(56) = 'From-Side' And UnderlyingType(313) <> 'Basket' Then

                  0-DecimalQuantity(46)

           Else

                  DecimalQuantity(46)

    End

    Else

                  0

           End

End

) as ExercisedShares,

Sum

(

Case When DeliveryType(624) = 'Physical' Then

           Case When DeliveryRole(6161) = 'Underlying' And ( ( FromToIndicator(56) = 'From-Side' And
           CallPutCode(201) = 'Call' ) Or ( FromToIndicator(56) = 'To-Side' And CallPutCode(201) = 'Put' ) )
           Then DecimalQuantity(46) Else 0 End

Else

           -- DeliveryType(624) = 'Cash'
```

```
Case When ( CallPutCode(201) = 'Call' And FromToIndicator(56) = 'From-Side' And DeliveryRole(6161) =
'Underlying' )
Or        ( CallPutCode(201) = 'Call' And FromToIndicator(56) = 'To-Side'   And DeliveryRole(6161) = 'Cash' )
Or        ( CallPutCode(201) = 'Put'  And FromToIndicator(56) = 'To-Side'   And DeliveryRole(6161) =
'Underlying' )
Or        ( CallPutCode(201) = 'Put'  And FromToIndicator(56) = 'From-Side' And DeliveryRole(6161) = 'Cash' )
Then
   Case When FromToIndicator(56) = 'To-Side' And UnderlyingType(313) <> 'Basket' Then
          0-DecimalQuantity(46)
   Else
          DecimalQuantity(46)
   End
Else
          0
   End
End
) as AssignedShares
FROM EodFile
WHERE DataType(1433) = 'SettlementInstruction'
   AND MemberNameId(4071) = Your member id
   AND CreationDate(6143) >= Reporting Date
   AND AccountOperationType(3133) = 'Assignment'
   AND ProductType(773) = 'Option'
   AND UnderlyingType(313) = 'Basket' AND DeliveryRole (6161) = 'Underlying'
   AND DeliverableProductType(6298) = 'Cash'
Group By MemberNameId(4071), AccountType(5077), SubAccount(605), DeliveryType(624), CallPutCode(201),
ClassSymbol(6179), UnderlyingSymbol(313), UnderlyingType(313),
       ContractSize(6164), DerivativeExpiryDate(433), StrikePrice(202), SettlementCurrency(613),
       DeliverableSettlementCurrency(6297), DeliverableProductType(6298)
```

A.3 MP51 - Futures Open Positions Report

This report lists all open positions on Futures sorted by ClassSymbol.

Associated Table(s)

- Position

Report Layout

The following section describes the report layout for headings, detail, and total lines. Information on data elements, their description and values, along with SOLA Clearing field names and tag codes will also be shown.

Report sample

```
Firm: <ID> <MEMBER NAME>                              Futures Open Positions Report    RP-MP51     29 JUN 09  19:13:06 Page     1
                                              Canadian Derivatives Clearing Corp.
                                                     For Start of Trading on: 30 JUN 09
Series               Last      ---------Client---------  ----------Firm----------  -----Multi Purpose------  --------Total----------
                    Activity         Long       Short          Long       Short          Long       Short          Long       Short

<PRODUCT-ID>        29JUN09        11,111      11,222        11,333      11,444        11,555      11,666        11,777      11,888

<CLASS> TOTAL                      22,111      22,222        22,333      22,444        22,555      22,666        22,777      22,888

FUTURES TOTAL                      33,111      33,222        33,333      33,444        33,555      33,666        33,777      33,888
FUTURES TOTAL                      44,111      44,222        44,333      44,444        44,555      44,666        44,777      44,888
OPTIONS TOTAL CALLS                55,111      55,222        55,333      55,444        55,555      55,666        55,777      55,888
OPTIONS TOTAL PUTS                 66,111      66,222        66,333      66,444        66,555      66,666        66,777      66,888
```

Header Lines

There are five header lines repeated at the start of every page. The following tables describes the header lines in detail.

Table 35: Report Header Line 1

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Firm		
Member ID	Member		Name	969
Member Name	Member		Description	10003
Report Title	Label	Futures Open Positions Report		
Report Name ID	Label	RP-MP51		
Report Date	Date report was created	Use System Date		
Report Time	Time report was created	Use System Time		
Page Number	Page number			

Table 36: Report Header Line 2

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Canadian Derivatives Clearing Corp.		

Table 37: Report Header Line 3

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	For Start of Trading on:		
Report Info for Date	Next Business Date	Next Business Date	NextBusinessDate	1831

Table 38: Report Header Line 4

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Series		
	Label	Last		
	Label	---------Client---------		
	Label	----------Firm----------		
	Label	-----Multi Purpose------		
	Label	--------Total----------		

Table 39: Report Header Line 5

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Activity		
	Label	Long		
	Label	Short		
	Label	Long		
	Label	Short		
	Label	Long		
	Label	Short		
	Label	Long		
	Label	Short		

Record Selection Criteria

```
Select AccountType,
          ClassSymbol, CallPutCode, DerivativeExpiryDate, StrikePrice,
          NewSymbologyLongDescription, ProductType,
          Max
          (
Case When LongStartOfDay <> LongQuantity or ShortStartOfDay <> ShortQuantity Then
                        Date
          Else
```

```
          StartOfDayLastUpdateDate End
          ) as StartOfDayLastUpdateDate,
          Sum( LongQuantity ) as LongQuantity, Sum( ShortQuantity ) as ShortQuantity
From EodFiles
Where Date = {Current Business Date}
   and DataType(1433) = 'Position'
   and ( ProductType(773) = 'Future' or UnderlyingType(313) = 'Future' or UnderlyingType(313) =
'VirtualPhysical' )
   and ( LongQuantity(196) <> 0 or ShortQuantity(197) <> 0 )
   and DerivativeExpiryDate(433) > {Current Business Date}
Group By ClassSymbol(6179), CallPutCode(201), DerivativeExpiryDate(433), StrikePrice(202), AccountType(5077),
SystemDescription(953), ProductType(773)
```

Detail Lines

There is one record type used in producing this report. It is grouped by ClassSymbol, CallPutCode, DerivativeExpiryDate & StrikePrice.

Table 40: Report Detail

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
	Position	ClassSymbol	6179	For Grouping
	Position	CallPutCode	201	For Grouping
	Position	DerivativeExpiryDate	433	For Grouping
	Position	StrikePrice	202	For Grouping
	Position	AccountType	5077	

Table 40: Report Detail

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
	Position	ProductType	773	
Series	Position	SystemDescription	953	
Last Activity	Position	StartOfDayUpdateDate	6481	
Client – Long	Position	LongQuantity	196	Sum Where AccountType = 'Client'
Client – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Client'
Firm – Long	Position	LongQuantity	196	Sum Where AccountType = 'Firm'
Firm – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Firm'
MultiPurpose – Long	Position	LongQuantity	196	Sum Where AccountType = 'MultiPurpose'
MultiPurpose – Short	Position	ShortQuantity	197	Sum Where AccountType = 'MultiPurpose'
Total – Long	Position	LongQuantity	196	Sum
Total – Short	Position	ShortQuantity	197	Sum

Group Footer Lines

There is one Group Footer having three Lines used in producing this report. It is grouped by ClassSymbol

Table 41: Group Footer Line - Total

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Series	Position	ClassSymbol	6179	For Grouping
	Position	ProductType	773	Where Product type = ’Future’
Client – Long	Position	LongQuantity	196	Sum Where AccountType = 'Client'
Client – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Client'
Firm – Long	Position	LongQuantity	196	Sum Where AccountType = 'Firm'
Firm – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Firm'
MultiPurpose – Long	Position	LongQuantity	196	Sum Where AccountType = 'MultiPurpose'
MultiPurpose – Short	Position	ShortQuantity	197	Sum Where AccountType = 'MultiPurpose'
Total – Long	Position	LongQuantity	196	Sum
Total – Short	Position	ShortQuantity	197	Sum

Table 42: Group Footer Line 2 - Calls

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Series	Position	ClassSymbol	6179	For Grouping
	Position	ProductType	773	Where Product type = 'Option'
	Position	CallPutCode	201	Where CallPutCode = 'Call'
Client – Long	Position	LongQuantity	196	Sum Where AccountType = 'Client'
Client – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Client'
Firm – Long	Position	LongQuantity	196	Sum Where AccountType = 'Firm'
Firm – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Firm'
MultiPurpose – Long	Position	LongQuantity	196	Sum Where AccountType = 'MultiPurpose'
MultiPurpose – Short	Position	ShortQuantity	197	Sum Where AccountType = 'MultiPurpose'
Total – Long	Position	LongQuantity	196	Sum
Total – Short	Position	ShortQuantity	197	Sum

Table 43: Group Footer Line 3 - Puts

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Series	Position	ClassSymbol	6179	For Grouping
	Position	ProductType	773	
	Position	CallPutCode	201	Where CallPutCode = 'Put'
Client – Long	Position	LongQuantity	196	Sum Where AccountType = 'Client'
Client – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Client'
Firm – Long	Position	LongQuantity	196	Sum Where AccountType = 'Firm'
Firm – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Firm'
MultiPurpose – Long	Position	LongQuantity	196	Sum Where AccountType = 'MultiPurpose'
MultiPurpose – Short	Position	ShortQuantity	197	Sum Where AccountType = 'MultiPurpose'
Total – Long	Position	LongQuantity	196	Sum
Total – Short	Position	ShortQuantity	197	Sum

Report Footer Lines

There are three Report Footer Lines used in producing this report.

Table 44: Report Footer Line 1- Futures Total

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
	Position	ProductType	773	Where ProductType = 'Future'
Client – Long	Position	LongQuantity	196	Sum Where AccountType = 'Client'
Client – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Client'
Firm – Long	Position	LongQuantity	196	Sum Where AccountType = 'Firm'
Firm – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Firm'
MultiPurpose – Long	Position	LongQuantity	196	Sum Where AccountType = 'MultiPurpose'
MultiPurpose – Short	Position	ShortQuantity	197	Sum Where AccountType = 'MultiPurpose'
Total – Long	Position	LongQuantity	196	Sum
Total – Short	Position	ShortQuantity	197	Sum

Table 45: Report Footer Line 2 - Options Total Calls

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
	Position	ProductType	773	Where ProductType = 'Option'
	Position	CallPutCode	201	Where CallPutCode = 'Call'
Client – Long	Position	LongQuantity	196	Sum Where AccountType = 'Client'
Client – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Client'
Firm – Long	Position	LongQuantity	196	Sum Where AccountType = 'Firm'
Firm – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Firm'
MultiPurpose – Long	Position	LongQuantity	196	Sum Where AccountType = 'MultiPurpose'
MultiPurpose – Short	Position	ShortQuantity	197	Sum Where AccountType = 'MultiPurpose'
Total – Long	Position	LongQuantity	196	Sum
Total – Short	Position	ShortQuantity	197	Sum

Table 46: Report Footer Line 3 - PUTS

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
	Position	ProductType	773	Where ProductType = 'Option'
	Position	CallPutCode	201	Where CallPutCode = 'Put'
Client – Long	Position	LongQuantity	196	Sum Where AccountType = 'Client'
Client – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Client'
Firm – Long	Position	LongQuantity	196	Sum Where AccountType = 'Firm'
Firm – Short	Position	ShortQuantity	197	Sum Where AccountType = 'Firm'
MultiPurpose – Long	Position	LongQuantity	196	Sum Where AccountType = 'MultiPurpose'
MultiPurpose – Short	Position	ShortQuantity	197	Sum Where AccountType = 'MultiPurpose'
Total – Long	Position	LongQuantity	196	Sum
Total – Short	Position	ShortQuantity	197	Sum

A.4 MT51 – Final Futures Daily Transaction Report

This report has two sections.

- The first section lists all transactions on:
- Futures grouped by ClassSymbol
- DerivativeExpiryDate
- StrikePrice
- CallPutCode

and sorted by

- AccountType
- SubAccount
- Price
- ExternalTime
- UpdatedTime
- ExternalId.
- The second section lists all Futures and their Price.

Associated Table(s)

- OneSideAccountOperation
- Product

Report Layout

The following section describes the report layout for headings, detail, and total lines. Information on data elements, their description and values, along with SOLA Clearing field names and tag codes will also be shown.

Report Sample

```
Firm: <ID> <MEMBER NAME>                    Final Futures Daily Transaction Report        RP-MT51     8 OCT 08   14:48:04 Page    1
                                                             Canadian Derivatives Clearing
                                                             Trade Date:  8 OCT 08
              ** UNLESS MARKED OTHERWISE ALL TRADES WILL BE PROCESSED AS CLIENT OPENING SPECULATOR **
    Series/   Match trd#/      Opp                     Nclt    Open/                                                  Premium
  Trade No.    Time Stamp      Mbr  Mkt     Account    Mrkr    Close     Bought    Sold       Price    Hedge       Debit         Credit
<PRODUCT>
  11111111      2222 333      4444   5      666666               7        8,888   9,999    AAA.AAA   BBBBB      CCCCCC         DDDDDD
                                                           TOTAL          8,888   9,999

                                  TOTAL NUMBER OF CONTRACTS BOUGHT        8,888
                                  TOTAL NUMBER OF CONTRACTS SOLD                  9,999
                                  TOTAL NUMBER OF BUY TRADES              8,888
                                  TOTAL NUMBER OF SELL TRADES                     9,999
                                  TOTAL PREMIUMS                                                                CCCCCC         DDDDDD
                                  NET PREMIUMS                                                                  CCCCCC         DDDDDD

*********************************************************************************************************************************
                        PLEASE AUTHORIZE AND RETURN TO CDCC BY 4:00 PM ET ON NEXT BUSINESS DAY
*********************************************************************************************************************************

  FUTURES SETTLEMENT PRICES AS RECEIVED ELECTRONICALLY (SUBJECT TO CHANGE)
<PRODUCT>               111.111
```

Report Header Lines

There are six header lines repeated at the start of every page. The following table describes the header lines in detail.

Table 47: Report Header Line 1

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Firm		
Member ID	Member		Name	969
Member Name	Member		Description	10003
Report Title	Label	Final Futures Daily Transaction Report		
Report Name ID	Label	RP-MT51		
Report Date	Date report was created	Use System Date		
Report Time	Time report was created	Use System Time		
Page Number	Page number			

Table 48: Report Header Line 2

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Canadian Derivatives Clearing		

Table 49: Report Header Line 3

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Trade Date:		
Trade Date	Current Business Date	Current Business Date		

Table 50: Report Header Line 4

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	** UNLESS MARKED OTHERWISE ALL TRADES WILL BE PROCESSED AS CLIENT OPENING SPECULATOR **		

Table 51: Report Header Line 5

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Series /		
	Label	Match trd# /		
	Label	Opp		
	Label	Nclt		
	Label	Open		
	Label	Premium		

Table 52: Report Header Line 6

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Trade No.		
	Label	Time Stamp		
	Label	Mbr		
	Label	Mkt		
	Label	Account		

Table 52: Report Header Line 6

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
	Label	Mrkr		
	Label	Close		
	Label	Bought		
	Label	Sold		
	Label	Price		
	Label	Hedge		
	Label	Debit		
	Label	Credit		

Record Selection Criteria - Section 1 - All Transaction on Futures

```
Select ClassSymbol, DerivativeExpiryDate, StrikePrice, CallPutCode, NewSymbologyLongDescription as Series,
          EngineObjectNumber, SessionNumber,
          AccountType, SubAccount,  BuySellIndicator,
          TransactionSource, OpenCloseIndicator, OppositeClearingMember,
          Cast( Quantity as integer ), Price,      PremiumAmount,
          ExternalId, ExternalTime, UpdateTime,
          HedgeSpeculatorIndicator
From EodFiles
Where Date = {BusinessDate}
   and DataType(1433) = 'OneSideAccountOperation'
   and ( ProductType(773) = 'Future' or UnderlyingType(313) in ( 'Future', 'VirtualPhysical' ) )
   and AllocationVolume(504) > 0
   and ( Type(970) <> 'Allocation' or BuySellIndicator(2257) = ReferenceTradeSide(154) )
   and Type(970) in ( 'GiveUp', 'Allocation' )
   and ExternalDate(6375) = CreationDate(6143)
   and Status(6311) <> 'Cancelled'
UNION ALL
Select ClassSymbol, DerivativeExpiryDate, StrikePrice, CallPutCode, NewSymbologyLongDescription as Series,
          Cast( Null as Integer ) as EngineObjectNumber, Cast( Null as Integer ) as SessionNumber,
          '' as AccountType, '' as SubAccount, '' as BuySellIndicator,
          '' as TransactionSource, '' as OpenCloseIndicator, '' as OppositeClearingMember,
          Cast( Null as Integer ) as Quantity, Cast( Null as Double ) as Price, Cast( Null as Double ) as
          PremiumAmount,
          '' as ExternalId, Cast( Null as Time ) as ExternalTime, Cast( Null as Time ) as UpdateTime,
          '' as HedgeSpeculatorIndicator
```

```
From EodFiles
Where Date = {BusinessDate}
    and DataType(1433) = 'OneSideAccountOperation'
    and ( ProductType(773) = 'Future' or UnderlyingType(313) in ( 'Future', 'VirtualPhysical' ) )
    and ( Type(970) <> 'Allocation' or BuySellIndicator(2257) = ReferenceTradeSide(154) )
    and Type(970) in ( 'GiveUp', 'Allocation' )
    and ExternalDate(6375) = CreationDate(6143)
    and Status(6311) <> 'Cancelled'
Group By ClassSymbol, DerivativeExpiryDate, StrikePrice, CallPutCode,    NewSymbologyLongDescription, Type, AllocationVolume, BuySellIndicator, ReferenceTradeSide
Having Sum( AllocationVolume ) = 0
```

Note: The Group By Clause is only applicable to the section following ’UNION ALL’. In addition the section following the ’UNION ALL’ doesn’t include trade or give-up information, only product information. This additional product information is not relevant to all members (ignore the query following the UNION ALL).

Group Header Lines

The first section is grouped by ClassSymbol(6179), DerivativeExpiryDate(433), StrikePrice(202) & CallPutCode(201).

Table 53: Group Header Line

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Series	OneSideAccountOperation	SystemDescription	953	

Detail Lines

There is one record type used in producing this report.

Table 54: Report Detail

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Trade No.	OneSideAccountOperation	EngineObjectNumber + SessionNumber	1216 + 1119	
Trd#	OneSideAccountOperation	ExternalId	1106	Right(ExternalId, 9)
Opp Mbr	OneSideAccountOperation	OppositeClearingMember	655	To show only if same as ClearingMember
Mkt	OneSideAccountOperation	TransactionsSource	2291	Left(TransactionSource,1)
Account	OneSideAccountOperation	AccountType + SubAccount	5077 + 605	
Open/Close	OneSideAccountOperation	OpenCloseIndicator	749	
Bought	OneSideAccountOperation	Quantity	38	Where BuySellIndicator(2257) = ’Buy’
Sold	OneSideAccountOperation	Quantity	38	Where BuySellIndicator(2257) = ’Sell’
Price	OneSideAccountOperation	Price	44	
Hedge	OneSideAccountOperation	HedgeSpeculatorIndicator	527	Display if HedgeSpeculatorIndicator = ’Hedger’ and CallPutCode is Null
Premium Debit	OneSideAccountOperation	PremiumAmount	6257	Where BuySellIndicator(2257) = ’Buy’
Premium Credit	OneSideAccountOperation	PremiumAmount	6257	Where BuySellIndicator(2257) = ’Sell’

Group Footer Lines

The first section is grouped by ClassSymbol(6179), DerivativeExpiryDate(433), StrikePrice(202) & CallPutCode(201) and is having a group footer.

Table 55: Group Footer Line 1 - Total

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Bought	OneSideAccountOperation	Quantity	38	Where BuySellIndicator(2257) = ’Buy’
Sold	OneSideAccountOperation	Quantity	38	Where BuySellIndicator(2257) = ’Sell’
Premium Debit	OneSideAccountOperation	PremiumAmount	6257	Where BuySellIndicator(2257) = ’Buy’
Premium Credit	OneSideAccountOperation	PremiumAmount	6257	Where BuySellIndicator(2257) = ’Sell’

Report Footer Lines

The first section has a Report Footer having six lines used in producing this report.

Table 56: Report Footer Line 1 - Total Number of Contracts Bought

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Bought	OneSideAccountOperation	Quantity	38	Sum Where BuySellIndicator(2257) = ’Buy’

Table 57: Report Footer Line 2 - Total Number of Contracts Sold

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Sold	OneSideAccountOperation	Quantity	38	Sum Where BuySellIndicator(2257) = 'Sell'

Table 58: Report Footer Line 3 - Total Number of Buy Trades

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Bought	OneSideAccountOperation	Quantity	38	Count Where BuySellIndicator(2257) = 'Buy'

Table 59: Report Footer Line 4 - Total Number of Sell Trades

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Sold	OneSideAccountOperation	Quantity	38	Count Where BuySellIndicator(2257) = 'Sell'

Table 60: Report Footer Line 5 - Total Premiums

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Premium Debit	OneSideAccountOperation	PremiumAmount	6257	Sum Where BuySellIndicator(2257) = 'Buy'
Premium Credit	OneSideAccountOperation	PremiumAmount	6257	Sum Where BuySellIndicator(2257) = 'Sell'

Table 61: Report Footer Line 6 - Net Premiums

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Premium Debit	OneSideAccountOperation	PremiumAmount	6257	Sum Where BuySellIndicator(2257) = 'Buy' – Sum Where BuySellIndicator(2257) = 'Sell' Display only if positive
Premium Credit	OneSideAccountOperation	PremiumAmount	6257	Sum Where BuySellIndicator(2257) = 'Sell' – Sum Where BuySellIndicator(2257) = 'Buy' Display only if positive

Record Selection Criteria - Section 2 - All Futures Price

```
SelectClassSymbol, DerivativeExpiryDate, StrikePrice, CallPutCode,
          NewSymbologyLongDescription as Futures, ProcessedSelectedMarginPrice
From EodFilesGlobal
Where Date = {BusinessDate}
   and DataType(1433) = 'Product'
   and ProductType(733) = 'Future'
   and DerivativeExpiryDate(433) > {BusinessDate}
Order By ClassSymbol, DerivativeExpiryDate, StrikePrice, CallPutCode
```

Detail Lines

There is one record type used in producing this second section. It is sorted by ClassSymbol, DerivativeExpiryDate & StrikePrice.

Table 62: Report Detail

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Series	OneSideAccountOperation	SystemDescription	953	
	OneSideAccountOperation	ProcessedSelectedMargin Price	1501	

Appendix B Query Setup for Fixed Income Reporting

This section describes how to set up a Query to produce specific reports.

The sample reports outlined here are the End-of-Day reports titled:

- MT71 – Fixed Income CSD Information Report
- MD70 – Fixed Income Net Settlement Delivery Status Report

B.1 MT71 – Fixed Income CSD Information Report

Fixed Income CSD (Central Securities Depository) Information Report is generated at the end-of-day and lists the member's SNS (Sola Netting System) novated Repo trades legs on the current business date.

Associated Table(s)

- CDS Trade Entry

Report Layout

Each Repo Trade Leg is recognized by the following information;

- CDS Trade ID
- Repo Tag Number
- Member Tag Number
- Sola Novated Trade ID

The 'No Trading Activity' message is printed if no activity is performed by the member.

The report groups the Trade Legs by Currency and Underlying Interest (ISIN). A further grouping is performed by:

- Submitted CUID
- Clearing Account
- Sub-account

- Settlement CUID
- Settlement Internal Account Number.

Header Lines

There are three header lines repeated at the start of every page. The following tables describes the header lines in detail.

Table 63: Report Header Line 1

Data Element	Table or Description	Value	SOLA Clearing Field Name	SOLA Clearing Tag #
Firm ID	Member identification number	String (4)	FromMemberNameId	534
Firm Name	Firm name	String (30)		
Report Name	Fixed Income CSD Information Report	String (46)		
Report Code	MT71- Report unique identifier	String (4)		
Date	System Date report was generated	Date (YYYYMMMDD)	CreationBusinessDate UpdateBusinessDate	1828 1823
Time	System Time report was generated	Time (HHMMSS)		
Page Number	Sequentially incrementable value	Integer (4)		

Table 64: Report Header Line 2

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
Currency Code	Settlement Currency (highest group level)	String (3)	SettlementCurrency	613
Clearinghouse	Name of the Clearinghouse	String (30)		

Table 65: Report Header Line 3

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
Novation Date	Calendar Business Date	Date (YYYYMMMDD)	CreationBusinessDate UpdateBusinessDate	1828 1823

Record Selection Criteria

Detail Lines

Table 66: Group Heading 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Underlying Interest	CDS Trade Entry	ISIN	6176	String (12)
Underlying Interest Description	CDS Trade Entry	SystemDescription	953	String (30)

Table 67: Group Heading 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
SUBMITTED ACCOUNT				
CUID	CDS Trade Entry	SellerCUID	5340	String (4)
SETTLEMENT ACCOUNT				
Acct/Sub.	CDS Trade Entry	FromAccountType FromSubAccount	3069 536	
CUID	CDS Trade Entry	FromDeliveryAgentCode	5308	
Internal Account No.	CDS Trade Entry	FromCdsInternalAccount	5573	

Table 68: Report Detail Line

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Internal Account No.	CDS Trade Entry	FromCdsInternalAccount	5573	
Repo Tag No.	CDS Trade Entry	RepoTagNumber	4539	
CDS Trade Id	CDS Trade Entry	TradeIdentifier	601	
Tag Number	CDS Trade Entry	SellerExternalReferenceId	5342	
Sola Id	CDS Trade Entry	MatchReferenceSession Number - MatchReference ObjectNumber	5586 - 5585	
CDS Trade Type	CDS Trade Entry	TradeIdentifier	601	
Trade Type	CDS Trade Entry	TradeType	501	
B/S	CDS Trade Entry	ProductType	773	'B' or 'S'
Opp. CUID	CDS Trade Entry	BuyerCUID	5341	
Trade Date	CDS Trade Entry	TradeDate	10015	
Settlement Date	CDS Trade Entry	SettlementDate	6275	
Quantity	CDS Trade Entry	Quantity	38	
Settlement Amount	CDS Trade Entry	SettlementAmount	6082	

Query Statements

```
Select  FromMemberNameId(534) as Firm,
          SettlementCurrency(613),ISIN(6176), SystemDescription(953), SellerCUID(5340) as SubmittedCUID,
          FromAccountType(3069) as SettlementAccountType, FromSubAccount(536) as SettlementSubAccount,
          FromDeliveryAgentCode(5308) as SettlementCUID,
          FromCdsInternalAccount(5573) as SettlementInternalAccountNumber,
          SellerAccountNumber(5013) as SubmittedAccountNumber, RepoTagNumber(4539),
          TradeIdentifier(601) as CdsTradeId, SellerExternalReferenceId(5342) as TagNumber,
          MatchReferenceSessionNumber(5586) as SolaSessionNumber, MatchReferenceObjectNumber(5585) as
          SolaObjectNumber,
          TradeType(501) as CdsTradeType, ProductType(773), 'S' as CDSBuyerSellerIndicator,
          BuyerCUID(5341) as CounterPartyCUID, TradeDate(10015), SettlementDate(6275), Quantity(38),
          SettlementAmount(6082)
From EodFiles
Where Date = {BusinessDate}
   And DataType(1433) = 'CdsTradeEntry'
   And Status(6311) = 'Novated'
   And ( CreationBusinessDate(1828) = {BusinessDate} Or UpdateBusinessDate(1823) = {BusinessDate} )
UNION ALL
Select  ToMemberNameId(535) as Firm,
          SettlementCurrency(613), ISIN(6176), SystemDescription(953),
          BuyerCUID(5341) as SubmittedCUID, ToAccountType(3070) as SettlementAccountType,
          ToSubAccount(537) as SettlementSubAccount, ToDeliveryAgentCode(5309) as SettlementCUID,
          ToCdsInternalAccount(5574) as SettlementInternalAccountNumber,
          BuyerAccountNumber(5025) as SubmittedAccountNumber, RepoTagNumber(4539),
          TradeIdentifier(601) as CdsTradeId, BuyerExternalReferenceId(5343) as TagNumber,
```

```
          MatchReferenceSessionNumber(5586) as SolaSessionNumber, MatchReferenceObjectNumber(5585) as
          SolaObjectNumber,
          TradeType(501) as CdsTradeType, ProductType(773), 'B' as CDSBuyerSellerIndicator,
          SellerCUID(5340) as CounterPartyCUID, TradeDate(10015), SettlementDate(6275), Quantity(38),
          SettlementAmount(6082)
From RptCdsTradeEntry
Where Date = {BusinessDate}
   And DataType(1433) = 'CdsTradeEntry'
   And Status(6311) = 'Novated'
   And ( CreationBusinessDate(1828) = {BusinessDate} Or UpdateBusinessDate(1823) = {BusinessDate} )
Order By Firm, SettlementCurrency, ISIN, SubmittedCUID, RepoTagNumber, TagNumber
```

B.2 MD70 – Fixed Income Net Settlement Delivery Status Report

This settlement report serves the purpose of conveying to the member the current status of each settlement obligation. The report will list all settled and failed transactions (even if rolled), which will become part of next day net settlement.

Associated Table(s)

- Settlement Instruction
- Delivery Settlement Instructions

Report Layout

The intial section describes the report layout for headings, detail, and total lines. Information on data elements, their description and values, along with SOLA Clearing field names and tag codes will also be shown.

Header Lines

There are three header lines repeated at the start of every page. The following tables describes the header lines in detail.

Table 69: Report Header Line 1

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
Firm ID	Member identification number	String (4)	FromMemberNameId	534
Firm Name	Firm name	String (30)		
Report Name	Fixed Income CSD Information Report	String (46)		
Report Code	MT71- Report unique identifier	String (4)		
Date	System Date report was generated	Date (YYYYMMMDD)	CreationBusinessDate UpdateBusinessDate	1828 1823
Time	System Time report was generated	Time (HHMMSS)		
Page Number	Sequentially incrementable value	Integer (4)		

Table 70: Report Header Line 2

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
Currency Code	Settlement Currency (highest group level)	String (3)	SettlementCurrency	613
Clearinghouse	Name of the Clearinghouse	String (30)		

Table 71: Report Header Line 3

DATA ELEMENT	TABLE OR DESCRIPTION	VALUE	SOLA CLEARING FIELD NAME	SOLA CLEARING TAG #
Settlement Date	Calendar Business Date	Date (YYYYMMMDD)	SettlementDate	6275

Table 72: Group Heading 1

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Inderlying Interest	Inderlying Interest ISIN	ISIN	6176	String (12)
Underlying Interest Description	Underlying Interest Description	SystemDescription	953	String (30)

Table 73: Group Heading 2

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
SETTLEMENT ACCOUNT				
Acct/Sub.	Settlement Instruction	FromAccountType FromSubAccount	3069 536	
CUID	Settlement Instruction	FromDeliveryAgentCode	5308	
Internal account No.	Settlement Instruction	FromCdsInternalAccount	5573	

Record Selection Criteria

Detail Lines

Table 74: Detail Line

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Status	Delivery Settlement Instruction	SettlementStatus	6279	
Settlement ID	Delivery Settlement Instruction	SettlementInstructionSourceSessionNumber + SettlementInstructionSourceObjectNumber	1954 + 1955	Sola generated unique settlement id to identify the delivery settlement instruction

Table 74: Detail Line

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Net Settlement Position ID	Delivery Settlement Instruction	NetSettlementPosition SessionNumber + NetSettlementPosition ObjectNumber	1653 + 1654	Net Settlement Position Id is the unique identifier of the net settlement position maintained through out the life of the position
CDS Trade Id	Delivery Settlement Instruction	TradeIdentifier	601	
Opp.CUID	Delivery Settlement Instruction	SellerCUID BuyerCUID	1540 1541	
Deliver -Net Quantity	Delivery Settlement Instruction	Quantity	38	
Deliver-Net Amount	Delivery Settlement Instruction	SettlementAmount	6082	
Receive -Net Quantity	Delivery Settlement Instruction	Quantity	38	
Receive-Net Amount	Delivery Settlement Instruction	SettlementAmount	6082	

Total Line

Table 75: Total Line

DATA ELEMENT	SOLA CLEARING TABLE NAME	SOLA CLEARING FIELD NAME	TAG #	NOTES
Total Settled				
Total Failed				

Query Statements

```
Select  MemberNameId,
            SettlementCurrency,
            SettlementDate,
            Isin, SystemDescription,
            AccountType, SubAccount,
            BuyerCUID, BuyerAccountNumber,
            SettlementStatus,
            CDSSI.SessionNumber, CDSSI.ConfigObjectNumber,
            SettlementInstructionSourceSessionNumber, SettlementInstructionSourceObjectNumber,
            NetSettlementPositionSessionNumber, NetSettlementPositionObjectNumber,
            TradeIdentifier,
            OppositeDeliveryAgentCode,
            DeliverNetQuantity, DeliverNetAmount,
            ReceiveNetQuantity, ReceiveNetAmount
From
```

```
(
Select  SubString( BuyerAccountName(5345), 1 , 4) as MemberNameId,
          SubString( BuyerAccountName(5345), 5 , 1) as AccountType,
          SubString( BuyerAccountName(5345), 6 , 4) as SubAccount,
          SettlementCurrency(613),
          SettlementDate(6275),
          Isin(6176), SystemDescription(953),
          BuyerCUID(5341), BuyerAccountNumber(5025),
          SessionNumber(1119), ConfigObjectNumber(1196),
          SettlementInstructionSourceSessionNumber(1955), SettlementInstructionSourceObjectNumber(1954),
          TradeIdentifier(601),
          SellerCUID(5340) as OppositeDeliveryAgentCode,
          Cast( Null as Integer ) as DeliverNetQuantity,
          SettlementAmount(6082) as DeliverNetAmount,
          Quantity(38) as ReceiveNetQuantity,
          Cast( Null as Double ) as ReceiveNetAmount
From EodFiles
Where Date = {BusinessDate}
   And DataType(1433) = 'CdsSettlementInstruction'
   And SettlementDate(6275) = {BusinessDate}
   And NetSettlementPositionSessionNumber(1653) = 0    -- It is a SettlementInstruction, not a NSP.Forward
   And BuyerAccountName(5345) Is Not Null
UNION ALL
Select  SubString( SellerAccountName(5344), 1 , 4) as MemberNameId,
          SubString( SellerAccountName(5344), 5 , 1) as AccountType,
          SubString( SellerAccountName(5344), 6 , 4) as SubAccount,
```

```
            SettlementCurrency(613),
            SettlementDate(6275),
            Isin(6176), SystemDescription(953),
            SellerCUID(5340), SellerAccountNumber(5013),
            SessionNumber(1119), ConfigObjectNumber(1196),
            SettlementInstructionSourceSessionNumber(1955), SettlementInstructionSourceObjectNumber(1954),
            TradeIdentifier(601),
            BuyerCUID(5341) as OppositeDeliveryAgentCode,
            Quantity(38) as DeliverNetQuantity,
            Cast( Null as Double ) as DeliverNetAmount,
            Cast( Null as Integer ) as ReceiveNetQuantity,
            SettlementAmount(6082) as ReceiveNetAmount
From EodFiles
Where Date = {BusinessDate}
    And DataType(1433) = 'CdsSettlementInstruction'
    And SettlementDate(6275) = {BusinessDate}
    And NetSettlementPositionSessionNumber(1653) = 0    -- It is a SettlementInstruction, not a NSP.Forward
    And SellerAccountName(5344) Is Not Null
) CDSSI
Join
(
Select  Distinct
            SessionNumber(1119), EngineObjectNumber(1216),
            SettlementStatus(6279),
            NetSettlementPositionSessionNumber(1653), NetSettlementPositionObjectNumber(1654)
From EodFiles
```

```
Where Date = {BusinessDate}
   And DataType(1433) = 'SettlementInstruction'
   And NetSettlementPositionSessionNumber(1653) <> 0
   And SettlementStatus(6279) In ( 'Settled', 'Failed' )
   And ( SettlementStatus(6279) <> 'Settled' Or ( CreationBusinessDate(1828) = {BusinessDate} Or
UpdateBusinessDate(1823) = {BusinessDate} ) )  -- Ignore data that should have been deleted if no Data
Retention
) SI
On  SI.SessionNumber      = CDSSI.SettlementInstructionSourceSessionNumber
And SI.EngineObjectNumber = CDSSI.SettlementInstructionSourceObjectNumber
Order By
          MemberNameId,
          SettlementCurrency,
          SettlementDate,
          Isin,
          AccountType, SubAccount,
          SettlementStatus,
          CDSSI.SessionNumber, CDSSI.ConfigObjectNumber
```

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