HISTORICAL DATA
ORDERS AND TRADE LAYOUT

Version: 1.12
Date: 06 June 2024

NSE DATA & ANALYTICS LIMITED
EXCHANGE PLAZA,
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Revision History

Version	Description	Date
1.0	Technical specification document issued for Capital Market and Futures & Options	24 Dec, 2007
1.1	Currency Derivatives segment added	24 Aug, 2008
1.2	Change in trade size of trade number in FAO segment.	07 Sep, 2020
1.3	Split file nomenclature for FAO segment added	25 Sep, 2020
1.4	Trigger file details for all segments added	26 Nov, 2020
1.5	Addition of two new streams for FAO Trades and Orders files each	02 Mar, 2021
1.6	Addition of two new streams for FAO Trades and Orders files each	08 Oct, 2021
1.7	Addition of Limit Price Indicator flag in Orders files for FAO and CD Segment	16 Dec, 2021
1.8	Addition of two new streams for FAO Trades and Orders files each	13 Jan, 2022
1.9	Addition of three new streams for FAO Trades and Orders files each	21 Mar, 2022
1.10	FAQ	27 Jul, 2022
1.11	Following points added: 1. Commodity Derivatives segment 2. Revision in remarks column for Limit Price Indicator in FAO Order 3. Revision in remarks column for Limit Price Indicator in CD Order 4. Limit Price Indicator interpretation explanation added in FAQ section	15 Dec, 2023
1.12	Following point modified: 1. Trade number changed from 16 to 17 digit in CM Trades	06 June 2024

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1.0 CAPITAL MARKET (CM) AND INDEX

1.1 CM ORDERS

Message Layout						
Name	Cash Market Orders Data (Research Data)					
Frequency	For every trade (All Ticks)					
Record length	Fixed					
Record Delimiter	LF					
Field No	**Name of the Field**	**Field Description**	**Type Alphabetic Numeric Alphanumeric**	**Length - No of Bytes**	**Valid Range of Values**	**Other Comments**
1	Record Indicator	Regular Market or PreOpen	Alphabetic	2	"RM", "PO"	RM = Regular Market PO=Pre-Open
2	Segment	Segment	Alphabetic	4	"CASH"	
3	Order Number	Order Number	Numeric	16		
4	Transaction Time (Jiffies)	Time when transaction occurred	Numeric	14		65536 Jiffies = 1sec. Jiffies are counted from 1 Jan 1980
5	Buy / Sell Indicator	Order Type	Alphabetic	1	B, S	B = Buy S = Sell
6	Activity Type	Transaction Type	Numeric	1	1,3,4	1 - Order Entry 3 - Order Cancel 4 - Order Mod
7	Symbol	Security Symbol	Alphabetic	10		The values in this field will be padded with leading spaces when < 10 chars. E.g. Symbol ABC will be "bbbbbbbABC"
8	Series	Series	Alphanumeric	2		Different series such as EQ, BE, BL, DR etc.
9	Volume Disclosed	Disclosed Qty	Numeric	8	Non-Negative	The value in this filed is 0 for Non-DQ orders and it will be padded with leading zeros when < 8 places,. E.g. 1234 will be "00001234"

10	Volume Original	Order Qty	Numeric	8	Non-Zero, Non-Negative	The value in this filed be padded with leading zeros when < 8 places,. E.g. 1234 will be "00001234"
11	Limit Price	Order Price	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. The value in this field will be padded with leading zeros when < 8 places. E.g. 123.45 will be "0000012345"
12	Trigger Price	Price at which Stop Loss order is to be triggered	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. The value in this field is 0 for Non-Stop Loss orders. The value in this field will be padded with leading zeros when < 8 places. E.g. 123.45 will be "0000012345"
13	Market Order Flag	Market/ Limit Order Indicator	Alphabetic	1	'Y','N'	Y = Market Order N = Limit Order
14	Stop Loss Flag	Stop Loss Indicator	Alphabetic	1	'Y','N'	Y = Stop Loss Order N = Regular Lot Order
15	IO Flag	IOC Indicator	Alphabetic	1	'Y','N'	Y = Immediate or Cancel N = Non IOC
16	Algo Indicator	Flag indicating source of Terminal generating Order	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
17	Client Identity Flag	Flag indicating beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
Total Length				**87**		

1.2 CM TRADES

Message Layout						
Name	Cash Market Trades Data (Research Data)					
Frequency	For every trade (All Ticks)					
Record length	Fixed					
Record Delimiter	LF					
Field No	**Name of the Field**	**Field Description**	**Type Alphabetic Numeric Alphanumeric**	**Length - No of Bytes**	**Valid Range of Values**	**Other Comments**
1	Record Indicator	Regular Market or PreOpen	Alphabetic	2	"RM", "PO"	RM = Regular Market PO=Pre Open
2	Segment	Segment	Alphabetic	4	"CASH"	
3	Trade Number	Transaction Number	Numeric	17		
4	Trade Time (Jiffies)	Time when transaction occurred	Numeric	14		65536 Jiffies = 1sec. Jiffies are counted from 1 Jan 1980
5	Symbol	Security Symbol	Alphabetic	10		The values in this field will be padded with leading spaces when < 10 chars. E.g. Symbol ABC will be "bbbbbbbABC"
6	Series	Series	Alphanumeric	2		Different series such as EQ, BE, BL, DR etc.
7	Trade Price	Transaction Price	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. The value in this field will be padded with leading zeros when < 8 places. E.g. 123.45 will be "0000012345"

8	Trade Quantity	Transaction Qty	Numeric	8	Non-Zero, Non-Negative	The value in this field will be padded with leading zeros when < 8 places,. E.g. 1234 will be "00001234"
9	Buy Order Number	Buy Order Number of Transaction	Numeric	16		
10	Buy Algo Indicator	Flag indicating source of Buy Terminal	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
11	Buy Client Identity Flag	Flag indicating Buy Side beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
12	Sell Order Number	Buy Order Number of Transaction	Numeric	16		
13	Sell Algo Indicator	Flag indicating source of Sell Terminal	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
14	Sell Client Identity Flag	Flag indicating Sell Side beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
Total Length				**100**		

1.3 INDEX DATA

Message Layout						
Name	Equity Market Index Data (Research Data)					
Frequency	For every trade (All Ticks)					
Record length	Fixed					
Record Delimiter	LF					
Field No	**Name of the Field**	**Field Description**	**Type Alphabetic Numeric Alphanumeric**	**Length - No of Bytes**	**Valid Range of Values**	**Other Comments**
1	Record Indicator	Record Indicator	Alphabetic	2	"IX"	
2	Segment	Segment	Alphabetic	4	"CASH"	
3	Date of Transaction	Date when Index was computed	Numeric	8		YYYYMMDD
4	Transaction Time	Time when transaction occurred	Alphanumeric	8		Transaction time is in HH:MM:SS format
5	Value of Nifty 50 Index	Value of Nifty 50 Index	Numeric	8		The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. The value in this field will be padded with leading zeros when < 8 places. E.g. 5245.05 will be "00524505"
6	Value of Nifty Next 50	Value of Nifty Next 50 Index	Numeric	8		The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. The value in this field will be padded with leading zeros when < 8 places. E.g. 10013.55 will be "01001355"
Total Length				**24**		

2.0 FUTURES AND OPTIONS (FAO)

2.1 FAO ORDERS

Message Layout						
Name	Equity Derivatives Market Orders Data (Research Data)					
Frequency	For every trade (All Ticks)					
Record length	Fixed					
Record Delimiter	LF					
Field No	**Name of the Field**	**Field Description**	**Type Alphabetic Numeric Alphanumeric**	**Length - No of Bytes**	**Valid Range of Values**	**Other Comments**
1	Record Indicator	Regular Market Order	Alphabetic	2	"RM"	Regular Market Order
2	Segment	Segment	Alphabetic	4	"FAOb"	Equity Derivatives
3	Order Number	Order Number	Numeric	16		
4	Transaction Time (Jiffies)	Time when transaction occurred	Numeric	14		65536 Jiffies = 1sec. Jiffies are counted from 1 Jan 1980
5	Buy / Sell Indicator	Order Type	Alphabetic	1	'B','S'	B = Buy S = Sell
6	Activity Type	Transaction Type	Numeric	1	1, 3, 4	1 - Order Entry 3 - Order Cancel 4 - Order Mod
7	Symbol	Underlying Symbol	Alphabetic	10		The values in this field will be padded with leading spaces when < 10 chars. E.g. Symbol ABC will be "bbbbbbbABC"
8	Instrument	Derivative Instrument Type	Alphabetic	6	FUTIDX OPTIDX FUTSTK OPTSTK	FUTIDX = Index Futures OPTIDX = Index Options FUTSTK = Stock Futures OPTSTK = Stock Options

9	Expiry Date	Expiry Date of Derivative Contract	Alphanumeric	9		This field is of the format ddMMMyyyy e.g. "28JUN2012"
10	Strike Price	Strike Price of Underlying for Option contract	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. It will be 0 for Future Contracts and will be padded with leading zeros when < 8 places. E.g. 101.50 will be "00010150"
11	Option Type	Option Type of Derivative Contract	Alphabetic	2	CA PA CE PE FF	CA = Call American PA = Put American CE = Call European PE = Put European FF = Futures Contract
12	Volume Disclosed	Disclosed Qty	Numeric	8	Non-Negative	The value in this field is 0 for Non-DQ orders and it will be padded with leading zeros when < 8 places, This represents no of shares for both options and futures. It does not represent No of Contracts E.g. 1234 will be "00001234"
13	Volume Original	Order Qty	Numeric	8	Non-Zero, Non-Negative	The value in this filed be padded with leading zeros when < 8 places. This represents no of shares for both options and futures. It does not represent No of Contracts E.g. 1234 will be "00001234"

14	Limit Price	Order Price	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. For spread orders, it is the spread value between 2 contracts' LTP and can therefore be 0. It will be padded with leading zeros when < 8 places. E.g. 123.45 will be "0000012345".
15	Trigger Price	Price at which Stop Loss order is to be triggered	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. The value in this field is 0 for Non-Stop Loss orders. The value in this field will be padded with leading zeros when < 8 places. E.g. 123.45 will be "0000012345"
16	MKT Flag	Market/Limit Order Indicator	Alphabetic	1	'Y','N'	Y = Market Order N = Limit Order
17	On Stop Flag	Stop Loss Indicator	Alphabetic	1	'Y','N'	Y = Stop Loss Order N = Regular Lot Order
18	IO Flag	IOC Indicator	Alphabetic	1	'Y','N'	Y = Immediate or Cancel N = Non IOC
19	Spread / Combination Type	Spread/Combinational Order Indicator	Alphabetic	1	'S', '2', '3', '*'	S = Spread Order 2 = 2 Leg Order 3 = 3 Leg Order * = Non-Spread Order

20	Algo Indicator	Flag indicating source of Terminal generating Order	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
21	Client Identity Flag	Flag indicating beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
22	Limit Price Indicator	Flag to indicate positive/negative limit price	Alphabetic	1	'Y', 'N', blank, any other value	N = Negative Y or blank or any other value = Positive
Total Length				**112**		

2.2 FAO TRADES

Message Layout						
Name	Equity Derivatives Market Trades Data (Research Data)					
Frequency	For every trade (All Ticks)					
Record length	Fixed					
Record Delimiter	LF					
Field No	**Name of the Field**	**Field Description**	**Type Alphabetic Numeric Alphanumeric**	**Length - No of Bytes**	**Valid Range of Values**	**Other Comments**
1	Record Indicator	Regular Market Trade	Alphabetic	2	"RM"	Regular Market Trade
2	Segment	Segment	Alphabetic	4	"FAOb"	Equity Derivatives
3	Trade Number	Transaction Number	Numeric	17		Trade ID size till 04 September 2020 was 16 bytes and the trade structure total size was 123 bytes, from 7 September 2020 it is 17 bytes, and the trade structure total size is 124 bytes.
4	Trade Time (Jiffies)	Time when transaction occurred	Numeric	14		65536 Jiffies = 1sec. Jiffies are counted from 1 Jan 1980
5	Symbol	Underlying Symbol	Alphabetic	10		The values in this field will be padded with leading spaces when < 10 chars. E.g. Symbol ABC will be "bbbbbbbABC"
6	Instrument	Derivative Instrument Type	Alphabetic	6	FUTIDX OPTIDX FUTSTK OPTSTK	FUTIDX = Index Futures OPTIDX = Index Options FUTSTK = Stock Futures OPTSTK = Stock Options

7	Expiry Date	Expiry Date of Derivative Contract	Numeric	9		This field is of the format ddMMMyyyy e.g. "28JUN2012"
8	Strike Price	Strike Price of Option contract	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. It will be 0 for Future Contracts and will be padded with leading zeros when < 8 places. E.g. 101.50 will be "00010150"
9	Option Type	Option Type of Derivative Contract	Alphabetic	2	CA PA CE PE FF	CA = Call American PA = Put American CE = Call European PE = Put European FF = Futures Contract
10	Trade Price	Transaction Price	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 2 digits will indicate values after decimal point. The value in this field will be padded with leading zeros when < 8 places. E.g. 123.45 will be "0000012345"
11	Trade Quantity	Transaction Qty	Numeric	8	Non-Zero, Non-Negative	The value in this field will be padded with leading zeros when < 8 places. Represents no of shares. E.g. 1234 will be "00001234"
12	Buy Order Number	Buy Order Number of Transaction	Numeric	16		
13	Buy Algo Indicator	Flag indicating source of Buy Terminal	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR

14	Buy Client Identity Flag	Flag indicating Buy Side beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
15	Sell Order Number	Buy Order Number of Transaction	Numeric	16		
16	Sell Algo Indicator	Flag indicating source of Sell Terminal	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
17	Sell Client Identity Flag	Flag indicating Sell Side beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
Total Length				**124**		

NOTE: Due to the high volatility of the market and increase in trading volume in FAO segment, the size of current single compressed file is approximately in the range of several GBs (50 - 90 GBs). In order to reduce the download time of the single file, the existing single file of Order and Trade files have been split into multiple files and their nomenclature are given below:

Orders Files	**Trade Files:**
1. FAO_Orders_DDMMYYYY_01.DAT.gz 2. FAO_Orders_DDMMYYYY_02.DAT.gz . . 11. FAO_Orders_DDMMYYYY_11.DAT.gz . . N. FAO_Orders_DDMMYYYY_nn.DAT.gz n* ---Number of streams in sequential order	1. FAO_Trades_DDMMYYYY_01.DAT.gz 2. FAO_Trades_DDMMYYYY_02.DAT.gz . . 11. FAO_Trades_DDMMYYYY_11.DAT.gz . . N. FAO_Trades_DDMMYYYY_nn.DAT.gz

Note: Number of streams will increase in sequentially on timely basis.

- Please note that none of the contracts will be overlapping in the any of the files. The file size of each file will be different.

3.0 CURRENCY DERIVATIVES (CD)

3.1 CD ORDERS

Message Layout						
Name	Currency Derivatives Market Orders Data (Research Data)					
Frequency	For every trade (All Ticks)					
Record length	Fixed					
Record Delimiter	LF					
Field No	**Name of the Field**	**Field Description**	**Type Alphabetic Numeric Alphanumeric**	**Length - No of Bytes**	**Valid Range of Values**	**Other Comments**
1	Record Indicator	Regular Market Order	Alphabetic	2	"RM"	Regular Market Order
2	Segment	Segment	Alphabetic	4	"CDSb"	Currency Derivatives
3	Order Number	Order Number	Numeric	16		
4	Transaction Time (Jiffies)	Time when transaction occurred	Numeric	14		65536 Jiffies = 1sec. Jiffies are counted from 1 Jan 1980
5	Buy / Sell Indicator	Order Type	Alphabetic	1	'B','S'	B = Buy S = Sell
6	Activity Type	Transaction Type	Numeric	1	1, 3, 4	1 - Order Entry 3 - Order Cancel 4 - Order Mod
7	Symbol	Underlying Symbol	Alphabetic	10		The values in this field will be padded with leading spaces when < 10 chars. E.g. Symbol ABC will be "bbbbbbbABC"
8	Instrument	Derivative Instrument Type	Alphabetic	6	FUTCUR OPTCUR	FUTCUR = Currency Futures, OPTCUR = Currency Options
9	Expiry Date	Expiry Date of Derivative Contract	Alphanumeric	9		This field is of the format ddMMMyyyy e.g. "28JUN2012"

10	Strike Price	Strike Price of Option contract	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. It will be 0 for Future Contracts and will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
11	Option Type	Option Type of Derivative Contract	Alphabetic	2	CA PA CE PE FF	CA = Call American PA = Put American CE = Call European PE = Put European FF = Futures Contract
12	Volume Disclosed	Disclosed Qty (In Lots)	Numeric	8	Non-Negative	The value in this filed is 0 for Non-DQ orders and it will be padded with leading zeros when < 8 places. Represents no of Contracts. E.g. 1234 will be "00001234"
13	Volume Original	Order Qty (In Lots)	Numeric	8	Non-Zero, Non-Negative	The value in this filed be padded with leading zeros when < 8 places. Represents no of Contracts. E.g. 1234 will be "00001234"
14	Limit Price	Order Price	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. For spread orders, it is the spread value between 2 contracts' LTP and can therefore be 0. It will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456".

15	Trigger Price	Price at which Stop Loss order is to be triggered	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 4 digit will indicate values after decimal point. The value in this field is 0 for Non-Stop Loss orders. The value in this field will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
16	MKT Flag	Market/Limit Order Indicator	Alphabetic	1	'Y','N'	Y = Market Order N = Limit Order
17	On Stop Flag	Stop Loss Indicator	Alphabetic	1	'Y','N'	Y = Stop Loss Order N = Regular Lot Order
18	FOK Flag	FOK/IOC Indicator	Alphabetic	1	'Y','N'	Y = Fill Or Kill / Immediate Or Cancel N = Non IOC
19	Spread / Comb Type	Spread/Combinational Order Indicator	Alphabetic	1	'S', '2', '3', '*'	S = Spread Order 2 = 2 Leg Order 3 = 3 Leg Order * = Non-Spread Order
20	Algo Indicator	Flag indicating source of Terminal generating Order	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
21	Client Identity Flag	Flag indicating beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
22	Limit Price Indicator	Flag to indicate positive and negative limit price	Alphabetic	1	'Y', 'N', blank, any other value	N = Negative Y or blank or any other value = Positive
Total Length				**112**		

3.2 CD TRADES

Message Layout	
Name	Currency Derivatives Market Trades Data (Research Data)
Frequency	For every trade (All Ticks)
Record length	Fixed
Record Delimiter	LF

Field No	Name of the Field	Field Description	Type Alphabetic Numeric Alphanumeric	Length - No of Bytes	Valid Range of Values	Other Comments
1	Record Indicator	Regular Market Trade	Alphabetic	2	"RM"	Regular Market Trade
2	Segment	Segment	Alphabetic	4	"CDSb"	Currency Derivatives
3	Trade Number	Transaction Number	Numeric	16		
4	Trade Time (Jiffies)	Time when transaction occurred	Numeric	14		65536 Jiffies = 1sec. Jiffies are counted from 1 Jan 1980
5	Symbol	Underlying Symbol	Alphabetic	10		The values in this field will be padded with leading spaces when < 10 chars. E.g. Symbol ABC will be "bbbbbbbABC"
6	Instrument	Derivative Instrument Type	Alphabetic	6	FUTCUR OPTCUR	FUTCUR = Currency Futures OPTCUR = Currency Options
7	Expiry Date	Expiry Date of Derivative Contract	Alphanumeric	9		This field is of the format ddMMMyyyy e.g. "28JUN2012"

8	Strike Price	Strike Price of Option contract	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. It will be 0 for Future Contracts and will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
9	Option Type	Option Type of Derivative Contract	Alphabetic	2	CA PA CE PE FF	CA = Call American PA = Put American CE = Call European PE = Put European FF = Futures Contract
10	Trade Price	Transaction Price	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. The value in this field will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
11	Trade Quantity	Transaction Qty (In Lots)	Numeric	8	Non-Zero, Non-Negative	The value in this field will be padded with leading zeros when < 8 places,. E.g. 1234 will be "00001234"
12	Buy Order Number	Buy Order Number of Transaction	Numeric	16		
13	Buy Algo Indicator	Flag indicating source of Buy Terminal	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR

14	Buy Client Identity Flag	Flag indicating Buy Side beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
15	Sell Order Number	Buy Order Number of Transaction	Numeric	16		
16	Sell Algo Indicator	Flag indicating source of Sell Terminal	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
17	Sell Client Identity Flag	Flag indicating Sell Side beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
Total Length				**123**		

4. COMMODITY DERIVATIVES (COM)

4.1 COM ORDERS

Message Layout	
Application	Research Data
Name	Commodity Derivatives Orders Data
Frequency	For every order
Record length	Fixed
Record Delimiter	LF

Field No	Name of the Field	Field Description	Type Alphabetic Numeric Alphanumeric	Length - No of Bytes	Valid Range of Values	Other Comments
1	Record Indicator	Regular Market Order	Alphabetic	2	"RM"	Regular Market Order
2	Segment	Segment	Alphabetic	4	"COMb"	Commodity Derivatives
3	Order Number	Order Number	Numeric	16		
4	Transaction Time (Jiffies)	Time when transaction occurred	Numeric	14		65536 Jiffies = 1sec. Jiffies are counted from 1 Jan 1980
5	Buy / Sell Indicator	Order Type	Alphabetic	1	'B','S'	B = Buy S = Sell
6	Activity Type	Transaction Type	Numeric	1	1, 3, 4	1 - Order Entry 3 - Order Cancel 4 - Order Mod
7	Symbol	Underlying Symbol	Alphabetic	10		The values in this field will be padded with leading spaces when < 10 chars. E.g. Symbol ABC will be "bbbbbbbABC"
8	Instrument	Instrument Type	Alphabetic	6	FUTBLN FUTENR FUTAGR FUTBAS OPTBLN OPTBAS	FUTBLN = Future Bullion FUTENR = Future Energy FUTAGR = Future Agri FUTBAS = Future Base Metal OPTBLN = Options Base Metal OPTBAS = Options Bullion

9	Expiry Date	Expiry Date of a Contract	Alphanumeric	9		This field is of the format ddMMMyyyy e.g. "05Dec2018"
10	Strike Price	Strike Price of Option contract	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. It will be 0 for Future Contracts and will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
11	Option Type	Option Type of Derivative Contract	Alphabetic	2	CA PA CE PE FF	CA = Call American PA = Put American CE = Call European PE = Put European FF = Futures Contract
12	Volume Disclosed	Disclosed Qty (In Lots)	Numeric	8	Non-Negative	The value in this filed is 0 for Non-DQ orders and it will be padded with leading zeros when < 8 places. Represents no of Contracts. E.g. 1234 will be "00001234"
13	Volume Original	Order Qty (In Lots)	Numeric	8	Non-Zero, Non-Negative	The value in this filed be padded with leading zeros when < 8 places. Represents no of Contracts. E.g. 1234 will be "00001234"

14	Limit Price	Order Price	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. For spread orders, it is the spread value between 2 contracts' LTP and can therefore be 0. It will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
15	Trigger Price	Price at which Stop Loss order is to be triggered	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. The value in this field is 0 for Non-Stop Loss orders. The value in this field will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
16	MKT Flag	Market/ Limit Order Indicator	Alphabetic	1	'Y','N'	Y = Market Order N = Limit Order
17	On Stop Flag	Stop Loss Indicator	Alphabetic	1	'Y','N'	Y = Stop Loss Order N = Regular Lot Order
18	FOK Flag	FOK/ IOC Indicator	Alphabetic	1	'Y','N'	Y = Fill or Kill / Immediate Or Cancel N = Non IOC
19	Spread / Comb Type	Spread/Combinational Order Indicator	Alphabetic	1	'S', '2', '3', '*'	S = Spread Order 2 = 2 Leg Order 3 = 3 Leg Order * = Non-Spread Order
20	Algo Indicator	Flag indicating source of Terminal generating Order	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
21	Client Identity Flag	Flag indicating beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
Total Length				**111**		

4.2 COM TRADES

Message Layout						
Application	Research Data					
Name	Commodity Derivatives Trades Data					
Frequency	For every trade					
Record length	Fixed					
Record Delimiter	LF					
Field No	**Name of the Field**	**Field Description**	**Type Alphabetic Numeric Alphanumeric**	**Length - No of Bytes**	**Valid Range of Values**	**Other Comments**
1	Record Indicator	Regular Market Trade	Alphabetic	2	"RM"	Regular Market Trade
2	Segment	Segment	Alphabetic	4	"COMb"	Commodity Derivatives
3	Trade Number	Transaction Number	Numeric	16		
4	Trade Time (Jiffies)	Time when transaction occurred	Numeric	14		65536 Jiffies = 1sec. Jiffies are counted from 1 Jan 1980
5	Symbol	Underlying Symbol	Alphabetic	10		The values in this field will be padded with leading spaces when < 10 chars. E.g. Symbol ABC will be "bbbbbbbABC"
6	Instrument	Derivative Instrument Type	Alphabetic	6	FUTBLN FUTENR FUTAGR FUTBAS OPTBLN OPTBAS	FUTBLN = Future Bullion FUTENR = Future Energy FUTAGR = Future Agri FUTBAS = Future Base Metal OPTBLN = Options Bullion OPTBAS = Options Base Metal
7	Expiry Date	Expiry Date of Derivative Contract	Alphanumeric	9		This field is of the format ddMMMyyyy e.g. "05Dec2018"

8	Strike Price	Strike Price of Option contract	Numeric	8	Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. It will be 0 for Future Contracts and will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
9	Option Type	Option Type of Derivative Contract	Alphabetic	2	CA PA CE PE FF	CA = Call American PA = Put American CE = Call European PE = Put European FF = Futures Contract
10	Trade Price	Transaction Price	Numeric	8	Non-Zero, Non-Negative	The value in this field will be in paise wherein the right most 4 digits will indicate values after decimal point. The value in this field will be padded with leading zeros when < 8 places. E.g. 12.3456 will be "00123456"
11	Trade Quantity	Transaction Qty (In Lots)	Numeric	8	Non-Zero, Non-Negative	The value in this field will be padded with leading zeros when < 8 places,. E.g. 1234 will be "00001234"
12	Buy Order Number	Buy Order Number of Transaction	Numeric	16		
13	Buy Algo Indicator	Flag indicating source of Buy Terminal	Numeric	1	0, 1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
14	Buy Client Identity Flag	Flag indicating Buy Side beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
15	Sell Order Number	Buy Order Number of Transaction	Numeric	16		

16	Sell Algo Indicator	Flag indicating source of Sell Terminal	Numeric	1	0,1, 2, 3	0 - Algo 1 - Non-Algo 2 - Algo thru SOR 3 - Non-Algo thru SOR
17	Sell Client Identity Flag	Flag indicating Sell Side beneficiary	Numeric	1	1,2,3	1 - Custodian 2 - Proprietary 3 - Client
Total Length				**123**		

5.0 TRIGGER FILE DETAILS

To verify the downloaded files at client's end, trigger files have been added for each Order and Trade file for all segments. Please find following layout and segment wise trigger file distribution.

Message Layout			
Frequency	**For every file**		
Field No	**Name of the Field**	**Field Description**	**Other Comments**
1	MD5 sum	To verify data integrity using MD5 algorithm	MD5SUM= 32 Alphanumeric characters Global filename: SEG_FileType_DDMMYYYY.DAT.gz.trg Example: FAO_Trades_20112020_02.DAT.gz.trg Tigger content: a50a1646ae6dc59c66d3be3e15b9e1cf FAO_Trades_20112020_02.DAT.gz
2	Size of the file in bytes	To verify size of file in bytes.	Global filename: SEG_FileType_DDMMYYYY.DAT.gz.trg Example: FAO_Orders_20112020_02.DAT.gz.trg Tigger content: 10172205 size in bytes for file FAO_Orders_20112020_02.DAT.gz

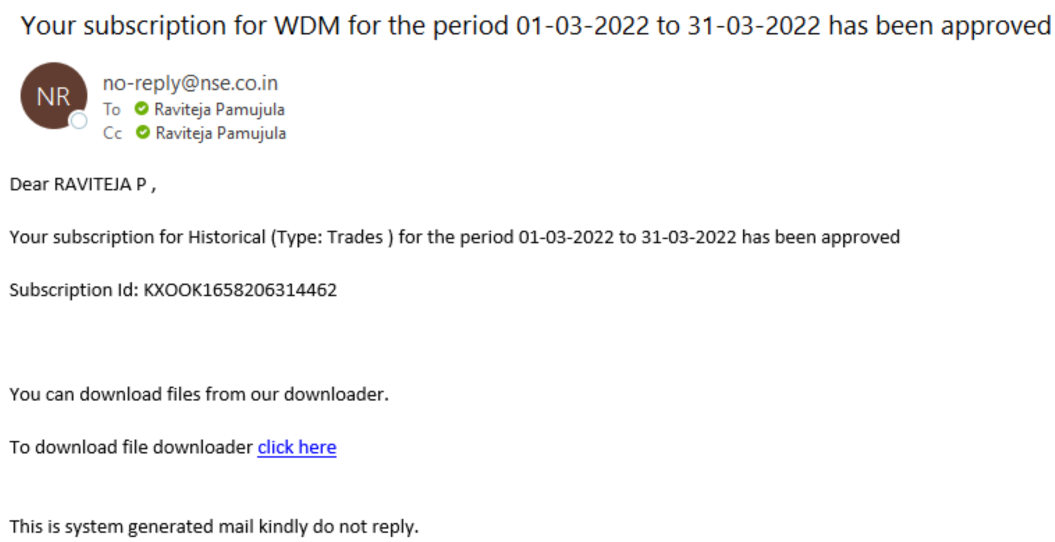
. **Segment Wise Trigger File Distribution:**

Segment	File name	Trigger file name
CM	CASH_Orders_DDMMYYYY.DAT.gz	CASH_Orders_DDMMYYYY.DAT.gz.trg
	CASH_Trades_DDMMYYYY.DAT.gz	CASH_Trades_DDMMYYYY.DAT.gz.trg
	CASH_Index_DDMMYYYY.DAT.gz	CASH_Index_DDMMYYYY.DAT.gz.trg
CD	CDS_Orders_DDMMYYYY.DAT.gz	CDS_Orders_DDMMYYYY.DAT.gz.trg
	CDS_Trades_DDMMYYYY.DAT.gz	CDS_Trades_DDMMYYYY.DAT.gz.trg
FAO	FAO_Orders_DDMMYYYY_nn.DAT.gz	FAO_Orders_DDMMYYYY_nn.DAT.gz.trg
	FAO_Trades_DDMMYYYY_nn.DAT.gz	FAO_Trades_DDMMYYYY_nn.DAT.gz.trg

6.0 FAQ

1) How to download the data?

Once the subscription request approved by NSE Team, user will receive mail like below with subscription id and link to data downloader.


Your subscription for WDM for the period 01-03-2022 to 31-03-2022 has been approved

NR no-reply@nse.co.in
To Raviteja Pamujula
Cc Raviteja Pamujula

Dear RAVITEJA P ,

Your subscription for Historical (Type: Trades) for the period 01-03-2022 to 31-03-2022 has been approved

Subscription Id: KXOOK1658206314462

You can download files from our downloader.

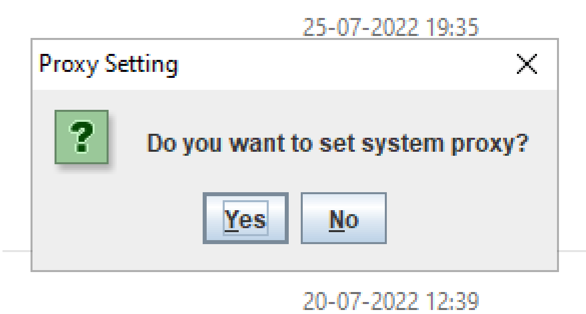
To download file downloader click here

This is system generated mail kindly do not reply.

To download to downloader client user must click on click here link.

2) How to set System Proxy in downloader client?

After opening downloader client user will get window like below



Select Yes if user accessing internet through LAN (Wired connection).

Select No if user is accessing internet through WLAN/WIFI (Wireless connection).

3) How to Check number files of and total downloadable size for a subscription?

After successful user authentication one file will generate in user system in location same as downloader client in below format

downloader_Subscriptionid _size.txt

ex: downloader_KXOOK1658206314462_size.txt

Sample content:

26-07-2022 20:00:030 PM : List of all the files

WDM_CIRCULARS_032022.gz file size is 1534899 in Bytes which is equal to 1.46 MB

WDM_MASTERS_032022.gz file size is 5029 in Bytes which is equal to 4.91 KB

WDM_TRADES_032022.gz file size is 10880 in Bytes which is equal to 10.62 KB

Total number of files count is 3

Total size of all the files is 1550808 in Bytes which is equal to 1.48 MB

4) How to check correctness of downloaded files?

For daily data user can make use of trg files for the files from 01 Dec 2020. Kindly refer section 6 for more details about trg files. For remaining data, Kindly check previous question.

5) How to interpret Blank or other values found in "Limit Price Indicator" Column?

If Blank or any other values are observed other than '**Y**' and '**N**' in the Limit Price Indicator field, in such cases kindly consider the same as **'Y'** which is positive value indicator.

7.0 SUPPORT INFORMATION

Name	Email	Contact Number
Business & Technical Support	marketdata@nse.co.in	91-22-26598385