



NSE – Masters Data CM, F&O, CD and COM Segments

Version: 1.7
Date: 08 December 2025

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Revision History

Name	Description	Date
Version 1.0	New Specification Issued	27 November 2014
Version 1.1	Addition of SFTP Information	11 December 2020
Version 1.2	Addition Spread Combination Files Details for F&O and CD segment	18 December 2020
Version 1.3	Warning percent field changed to settlement type in security.txt file for CM segment	06 January 2022
Version 1.4	1. Adding COM segment 2. Token field data type changed from short to long in security file in CM segment	25 August 2023
Version 1.5	Addition of market type information and FAQs section	01 July 2024
Version 1.6	1. Renaming Checksum field to Settlement Indicator in FO contract.txt 2. Added new value for Permitted To Trade in CM security.txt	25 March 2025
Version 1.7	Addition of flags in ST_SECURITY_ELIGIBILITY_PER_MARKET in File Name: contract.txt in F&O segment	08 December 2025

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NSE – Masters Data

1. Introduction

NSE Data & Analytics Ltd. offers real-time data and historical data products from NSEIL to a diverse range of clients. This includes 5 real-time products and 2 historical data products:

Real Time data products

1. Real Time Data
2. Snapshot Data
3. Corporate Data
4. Analytical Products data
5. Indicative NAV Data

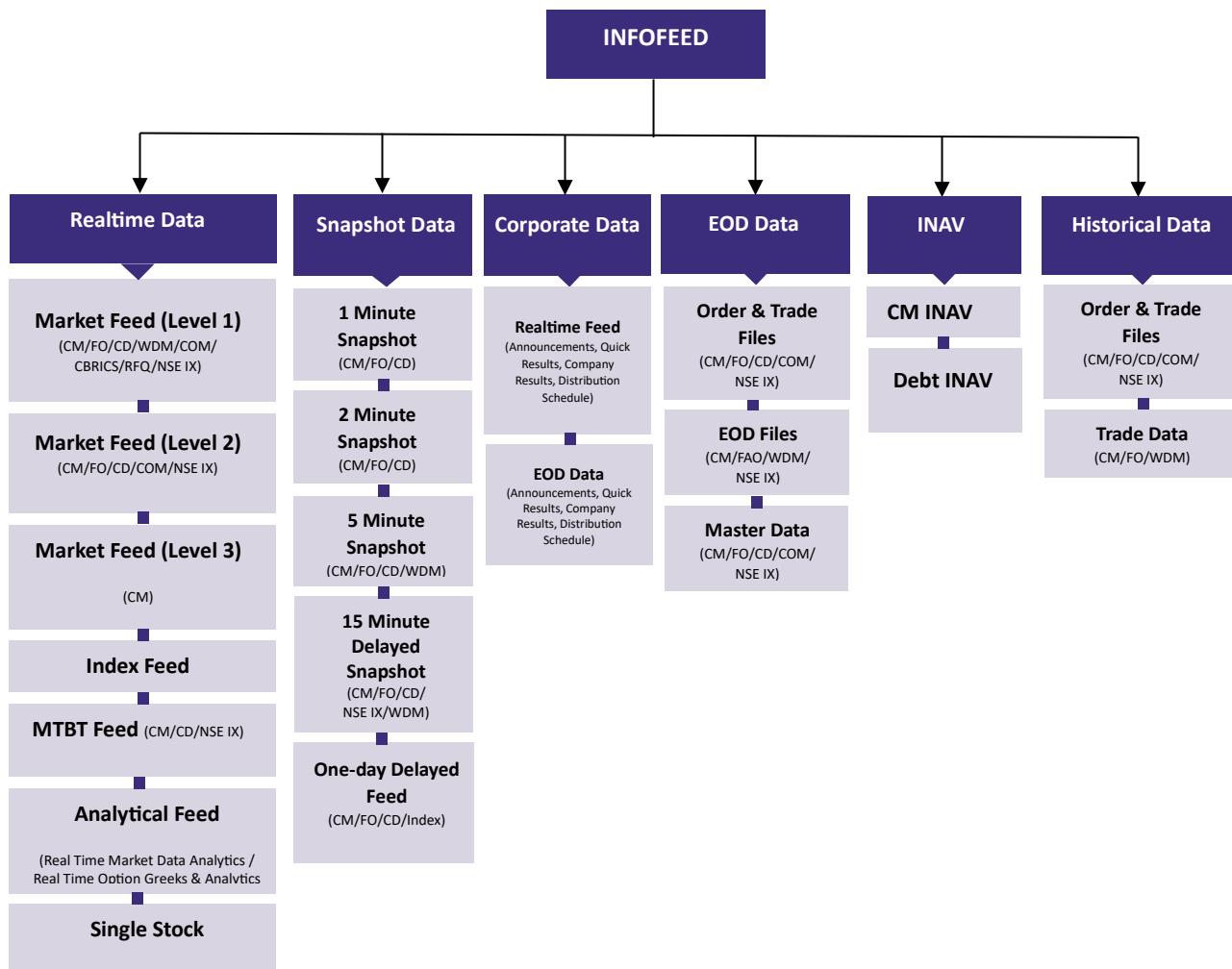
Historical data products

1. End of Day Data
2. Historical Data

The data products are provided through delivery modes mentioned below:

- **Real-time Data:** The information is transmitted as a packet broadcast, facilitating ongoing distribution through data feeds via point-to-point leased line.
- **Snapshot, End-of-Day, and Historical Data:** The data is delivered as downloadable files over the internet using the SFTP protocol.

All these data categories are integrated within the Infofeed platform, ensuring comprehensive coverage and streamlined access.



This document explains about the NSE – Masters Data Product. Through this product, Security/Contract Master files are available after EOD.

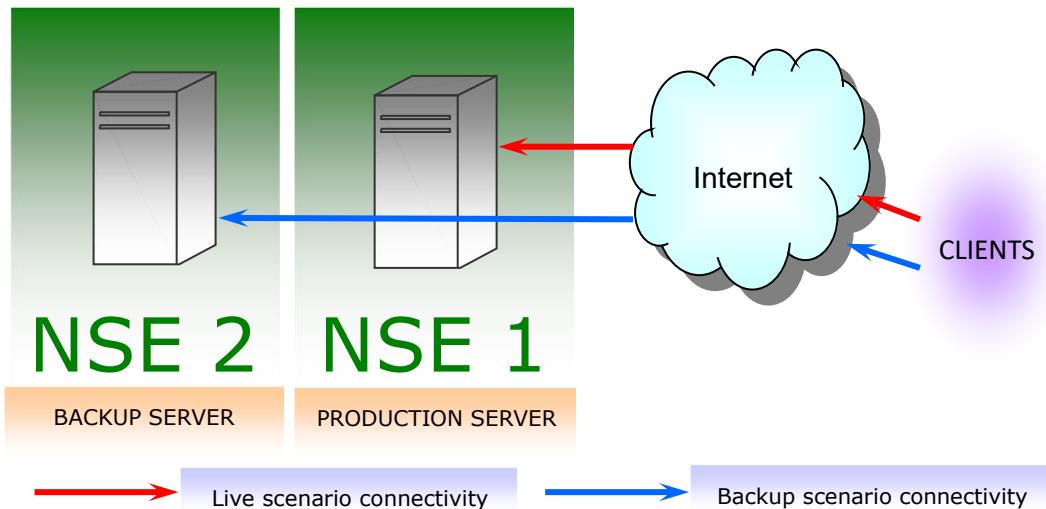
The servers which cater to the vendors are available through the Internet in active-active configuration. All clients should connect to these servers through the internet and use SFTP protocol to download the files. The files on this server are generated at EOD.

To gain access, clients must submit their server's public key and static public IP address. Upon verification, credentials are issued and remain valid for the duration specified in the service agreement.

2. Connection Details

In NSE premises these two servers are available in active-active configuration. If one server stops responding, the vendors are expected to switch over to the other server and vice-versa.

2.1 Structural Diagram



2.2 Data Types Used

Data Type	Size in Bytes	Signed/ Unsigned
CHAR	1	Signed
SHORT	2	Signed
LONG	4	Signed
DOUBLE	8	Signed and Floating Point
BIT	1 bit	NA

2.3 Units

Time	All time fields are number of seconds from midnight January 1, 1980, unless specified otherwise.
Currency	<p>Currency is INR (Indian Rupees).</p> <p>The prices are in Paise.</p> <p>For obtaining the prices in Rupees, divisors are as follows:</p> <p>CM: All price fields must be divided by 100.</p> <p>FO: All price fields must be divided by 100.</p> <p>CD: All price fields must be divided by 10000000.</p>

3. Security/Contract Masters

The files have a header record at the beginning of the file followed by the detailed records. All the fields in both the header and detail records are separated by pipe (|). The fields are not of fixed width. Any two fields are separated by a ' | ' symbol.

3.1 Capital Market Segment

This file contains all the securities which are being traded daily. The securities will be available for various market type depending on the eligibility.

3.1.1 File Name: security.txt

The security.txt files are compressed with .gz extension and need to be uncompressed using any decompression tool.

Field Name	Data Type	Value	Brief Description
HEADER RECORD			
Market String	CHAR [6]	'NEATCM'	Market string
Version Number	CHAR [7]	Alphanumeric	Version number (VV.RR.SS)
Date	LONG	Numeric	Unix timestamp in number of seconds elapsed since midnight 01-Jan-1980
DATA RECORDS			
Token	LONG	Numeric	Token number of the security being updated. This is unique for a particular symbol-series combination.
Symbol	CHAR [10]	Alphanumeric	This field should contain the symbol of security.
Series	CHAR [2]	Alphanumeric	This field should contain a series of a security.
Instrument Type	SHORT	Numeric	This field contains the instrument type of security. It can be one of the following: 0 – Equities 1 – Preference Shares 2 – Debentures 3 – Warrants 4 – Miscellaneous

Issued Capital	DOUBLE	Numeric	Issue size of the security.
Permitted To Trade	SHORT	Numeric	0 – Listed but not permitted to trade 1 – Permitted to trade 2 – BSE listed (BSE exclusive security will be available, however trading on the same will be allowed only in case of outage at BSE)
Credit Rating	CHAR [17]	Alphanumeric	Credit rating of the security.
Security Eligibility Per Market	ST_SECURITY_ELIGIBILITY_PER_MARKET [6]	Structure	Refer the table given below <u>ST_SECURITY_ELIGIBILITY_PER_MARKET</u> and <u>FAQ</u>
Board Lot Quantity	LONG	Numeric	Regular lot size.
Tick Size	LONG	Numeric	Tick size or Min spread size.
Name	CHAR [25]	Alphanumeric	Security name.
Issue Rate	SHORT	Numeric	Price of the issue.
Issue Start Date	LONG	Numeric	Date of issue of security.
Issue IP Date	LONG	Numeric	Interest Payment Date
Maturity Date	LONG	Numeric	Maturity Date.
Freeze Percent	SHORT	Numeric	Freeze percent. This field indicates the volume freeze percentage with respect to issued capital. This field must be interpreted as freeze percent /10000. E.g.: 41 in this field must be interpreted as 0.0041 %
Listing Date	LONG	Numeric	Date of listing.
Expulsion Date	LONG	Numeric	Date of expulsion.
Re-Admission Date	LONG	Numeric	Date of readmission.

Ex-Date	LONG	Numeric	Last date of trading before any corporate action.
Record Date	LONG	Numeric	Date of record changed.
No Delivery Date Start	LONG	Numeric	Date from when physical delivery of share certificates is stopped for book closure.
No Delivery Date End	LONG	Numeric	No delivery end date.
Participant In Mkt Index	CHAR [1]	Alphanumeric	'1' – Security is present in NIFTY Index. '0' – Security is not present in NIFTY Index.
AON	CHAR [1]	Alphanumeric	'1' – AON is allowed. '0' – AON is not allowed
MF	CHAR [1]	Alphanumeric	'1' – MF is allowed. '0' – MF is not allowed
Settlement Type	SHORT	Numeric	Settlement type 0 or 1 0 = T+0 will be the settlement Period for that security 1 = T+1 will be the settlement Period for that security
Book Closure Start Date	LONG	Numeric	Date at which the record books in the company for shareholder names starts.
Book Closure End Date	LONG	Numeric	Date at which the record books in the company for shareholder names ends.
Dividend	CHAR [1]	Alphanumeric	'1' – Dividend '0' – No Dividend
Rights	CHAR [1]	Alphanumeric	'1' – Rights '0' – No Rights
Bonus	CHAR [1]	Alphanumeric	'1' – Rights '0' – No Rights
Interest	CHAR [1]	Alphanumeric	'1' – Interest '0' – No Interest
AGM	CHAR [1]	Alphanumeric	'1' – AGM '0' – No AGM

EGM	CHAR [1]	Alphanumeric	'1' – EGM '0' – No EGM
MM Spread	LONG	Numeric	This is the spread value per security.
MM Min Qty	LONG	Numeric	This field contains the Minimum quantity for the security, Used by Market maker user for market maker order.
SSEC	SHORT	Numeric	1 – Normal Market security. 2 – IPO Session is being held security. 3 – Relist Session is being held security. 4 – Call Auction2 market security. 5 – Call Auction1 market security. This is used as identifier for different market securities
Remarks	CHAR [25]	Alphanumeric	Remarks
Local DB Update Date Time	LONG	Numeric	This is the local database update datetime.
Delete Flag	CHAR [1]	Alphanumeric	This indicates the status of the security, whether the security is deleted or not. 'N' – Active 'Y' – Deleted
Face Value	LONG	Numeric	This field contains face value of the security
ISIN Number	CHAR [12]	Alphanumeric	This field contains the ISIN Number of security.

ST_SECURITY_ELIGIBILITY_PER_MARKET

Field Name	Data Type	Value	Brief Description
ST_SECURITY_ELIGIBILITY_PER_MARKET			
Eligibility	CHAR [1]	Character	'1' - Allowed to trade '0' - Not allowed to trade
Security Status	CHAR [1]	Character	'1' - Preopen (Only for Normal market) '2' - Open '3' - Suspended '4' - Preopen extended '5' - Stock Open With Market '6' - Price Discovery (Only for securities eligible in pre-open)

3.2 Futures & Options Market Segment

3.2.1 File Name: contract.txt

The contract.txt files are compressed with .gz extension and need to be uncompressed using any decompression tool.

Field Name	Data Type	Value	Brief Description
HEADER RECORD			
Market String	CHAR [6]	'NEATFO'	Market string
Version Number	CHAR [5]	Alphanumeric	Version number (VV.RR.SS)
DATA RECORDS			
Token	LONG	Numeric	Token number of the security being updated. This is unique for a particular symbol-series combination.
Asset Token	LONG	Numeric	Token Number of the asset
Instrument Name	CHAR [6]	Alphanumeric	Instrument Name
Symbol	CHAR [10]	Alphanumeric	This field should contain the symbol of security.
Series	CHAR [2]	Alphanumeric	This field should contain the series of security.
Expiry Date	LONG	Numeric	Expiry date in number of seconds elapsed from midnight 01-Jan-1980
Strike Price	LONG	Numeric	Strike Price
Option Type	CHAR [2]	Alphanumeric	Option Type
Category	CHAR [1]	Alphanumeric	<p>The market hours on which the contract is available to trade.</p> <p>The following will be the values.</p> <p>'1' = Represents Regular market hours.</p> <p>'2' = Represents Extended market hours.</p>
CA Level	SHORT	Numeric	Corporate Action level of the security
Reserved Identifier	CHAR [1]	Alphanumeric	'1' – Unreserved Contract '0' – Reserved Contract

Permitted To Trade	SHORT	Numeric	'0' - Listed but not permitted to trade '1' – Permitted to trade
Issue Rate	SHORT	Numeric	Price of the issue
Contract Eligibility Per Market	ST_CONTRACT_ELIGIBILITY_PER_MARKET [4]	Structure	Refer to the table given below ST CONTRACT ELIGIBILITY PER MARKET and FAQ
Issue Start Date	LONG	Numeric	Date of issue of the security
Interest Payment Date	LONG	Numeric	Interest Payment Date
Issue Maturity Date	LONG	Numeric	Maturity Date
Margin Percentage	LONG	Numeric	It is Initial margin percent to be collected on a contract
Minimum Lot Quantity	LONG	Numeric	It is minimum lot of the order which can be placed
Board Lot Quantity	LONG	Numeric	Regular lot size
Tick Size	LONG	Numeric	Tick size or Min spread size
Issued Capital	DOUBLE	Numeric	Issue size of the security
Freeze Quantity	LONG	Numeric	Freeze quantity
Warning Quantity	LONG	Numeric	Warning quantity
Listing Date	LONG	Numeric	Date of listing
Expulsion Date	LONG	Numeric	Date of expulsion
Readmission Date	LONG	Numeric	Date of readmission
Record Date	LONG	Numeric	Date of record changed
No Delivery Start Date	LONG	Numeric	Date from when physical delivery of share certificates is stopped for book closure
No Delivery End Date	LONG	Numeric	No delivery end date
Low Price Range	LONG	Numeric	Minimum price at which order can be placed without causing a price freeze

High Price Range	LONG	Numeric	Maximum price at which order can be placed without causing a price freeze
ExDate	LONG	Numeric	Last date of trading before any corporate action
Book Closure Start Date	LONG	Numeric	Date at which the record books in the company for shareholder names starts
Book Closure End Date	LONG	Numeric	Date at which the record books in the company for shareholder names ends
Local LDB Update Date Time	LONG	Numeric	This is the local database update datetime
Exercise Start Date	LONG	Numeric	This is the starting date for Exercise
Exercise End Date	LONG	Numeric	This is the last date for Exercise
Ticker Selection	SHORT	Numeric	Ticker Selection
Old Token Number	LONG	Numeric	Not used
Credit Rating	CHAR [12]	Alphanumeric	Credit rating of the security
Name	CHAR [25]	Alphanumeric	Security name
EGMAGM	CHAR [1]	Alphanumeric	'0'- No EGM/AGM '1'- EGM '2'- AGM '3'- Both EGM and AGM
Interest Dividend	CHAR [1]	Alphanumeric	'0'- No Interest/Dividend '1'- Interest '2'- Dividend
Rights Bonus	CHAR [1]	Alphanumeric	'0'- No Rights/Bonus '1'- Rights '2'- Bonus '3'- Both Rights and Bonus
MFAON	CHAR [1]	Alphanumeric	'0' - MF/AON not allowed '1' - MF allowed '2' - AON allowed '3' - MF and AON allowed
Remarks	CHAR [24]	Alphanumeric	Remarks

ExStyle	CHAR [1]	Alphanumeric	'A' - American style Exercise allowed. 'E' - European style Exercise allowed.
ExAllowed	CHAR [1]	Alphanumeric	Exercise is allowed on this contract if this Flag is set to true
ExRejectionAllowed	CHAR [1]	Alphanumeric	Exercise rejection is allowed on this contract if this bit is set to true
PIAllowed	CHAR [1]	Alphanumeric	Position liquidation is allowed on this contract if this flag is set to true
Settlement Indicator	CHAR [1]	Alphanumeric	Indicates whether the contract is cash settled or physical settled. C = Cash Settled P= Physical Settled
Is Corporate Adjusted	CHAR [1]	Alphanumeric	This field shows whether this Contract is Corporate Adjusted
Symbol For Asset	CHAR [10]	Alphanumeric	ID of the Instrument for the underlying asset of this contract
Instrument Of Asset	CHAR [6]	Alphanumeric	Underlying asset type
Base Price	LONG	Numeric	Base price of the security
Delete Flag	CHAR [1]	Alphanumeric	This indicates the status of the security, whether the security is deleted or not. 'N' – Active 'Y' – Deleted

ST_CONTRACT_ELIGIBILITY_PER_MARKET

Field Name	Data Type	Value	Brief Description
ST_CONTRACT_ELIGIBILITY_PER_MARKET			
Eligibility	CHAR [1]	Character	'1' - Allowed to trade '0' - Not allowed to trade
Contract Status	CHAR [1]	Character	'1' = Preopen (Only for Normal market) '2' = Open '3' = Suspended '4' = Preopen extended '5' = Stock Open with Market '6' = Price Discovery (Only for contracts eligible in pre-open)

3.2.2 File Name: spd_contract.txt

Field	Type	Max Field Length	Brief Description
HEADER RECORDS			
Segment Indicator	CHAR	6	
Version number	CHAR	5	Version number (VV.RR.SS)
DATA RECORDS			
Token 1	NUMBER	6	Token number of leg 1 contract of the spread combination
Token 2	NUMBER	6	Token number of leg 2 contract of the spread combination
Instrument Name 1	CHAR	6	Security Information 1 - This will contain instrument name, symbol, series, strike price, option type and corporate action level of leg 1 contract
Symbol 1	CHAR	10	
Series 1	CHAR	2	
Expiry Date 1	NUMBER	10	
Strike Price 1	NUMBER	10	
Option Type 1	CHAR	2	
CA Level 1	NUMBER	7	
Instrument Name 2	CHAR	6	

Symbol 2	CHAR	10	Security Information 2: This will contain instrument name, symbol, series, strike price, option type and corporate action level of leg 2 contract
Series 2	CHAR	2	
Expiry Date 2	NUMBER	10	
Strike Price 2	NUMBER	10	
Option Type 2	CHAR	2	
CA Level 2	NUMBER	7	
Reference Price	NUMBER	10	Settlement price of leg 1 contract will be the base for calculating price difference ranges
Day Low Price Diff Range	NUMBER	10	Day low price difference range for the combination. It may be changed intraday. Note: The value can be a positive number/ negative number or zero.
Day High Price Diff Range	NUMBER	10	Day high price difference range for the combination. It may be changed intraday. Note: The value can be a positive number or zero.
Op Low Price Diff Range	NUMBER	10	Minimum price difference at which the spread order could be placed without being rejected by the system. It may be changed intraday and can be flexed to the day Low price difference. Note: The value can be a positive number/ negative number or zero.
Op High Price Diff Range	NUMBER	10	Maximum price difference at which the spread order could be placed without being rejected by the system It may be changed intraday and can be flexed to the day high price difference. Note: The value can be a positive number or zero.

Board Lot Quantity 1	NUMBER	9	Board lot quantity of leg 1 contract
Minimum Lot Quantity 1	NUMBER	9	Min lot quantity of leg 1 contract
Tick Size 1	NUMBER	9	Tick size of leg 1 contract
Board Lot Quantity 2	NUMBER	9	Board lot quantity of leg 2 contract
Minimum Lot Quantity 2	NUMBER	9	Min lot quantity of leg 2 contract
Tick Size 2	NUMBER	9	Tick size of leg 2 contract
Eligibility	CHAR	1	The flag will be set to 1 if the combination is allowed to trade.
Delete Flag	CHAR	1	This will contain one of the following values to denote whether the spread combination is deleted or not. 'Y' - Active 'N' -Deleted

3.3 Currency Derivatives Market Segment

3.3.1 File Name: cd_contract.txt

Field Name	Data Type	Value	Brief Description
HEADER RECORD			
Market String	CHAR [6]	'NEATCD'	Market string
Version Number	CHAR [5]	Alphanumeric	Version number (VV.RR.SS)
DATA RECORDS			
Token	LONG	Numeric	Token number of the security being updated. This is unique for a particular symbol-series combination.
Asset Token	LONG	Numeric	Token Number of the asset
Instrument Name	CHAR [6]	Alphanumeric	Instrument Name
Symbol	CHAR [10]	Alphanumeric	This field should contain the symbol of security.
Series	CHAR [2]	Alphanumeric	This field should contain a series of a security.
Reserved	CHAR [1]	Alphanumeric	Not Used
Expiry Date	LONG	Numeric	Expiry date in number of seconds elapsed from midnight 01-Jan-1980
Strike Price	LONG	Numeric	Strike Price
Option Type	CHAR [2]	Alphanumeric	Option Type
Precision	CHAR [1]	Alphanumeric	Precision
CA Level	SHORT	Numeric	Corporate Action level of the security
Reserved	CHAR [1]	Alphanumeric	Not Used
Permitted To Trade	SHORT	Numeric	0 - Listed but not permitted to trade 1 - Permitted to trade
Issue Rate	SHORT	Numeric	Price of the issue

Security Eligibility Per Market	ST_SECURITY_ELIGIBILITY_PER_MARKET [4]	Structure	Refer to the table given below ST_SECURITY_ELIGIBILITY_PER_MARKET and FAQ
Issue Start Date	LONG	Numeric	Date of issue of the security
Interest Payment Date	LONG	Numeric	Interest Payment Date
Issue Maturity Date	LONG	Numeric	Maturity Date
Margin Percentage	LONG	Numeric	It is Initial margin percent to be collected on a contract
Minimum Lot Quantity	LONG	Numeric	It is minimum lot of the order which can be placed
Board Lot Quantity	LONG	Numeric	Regular lot size
Tick Size	LONG	Numeric	Tick size or Min spread size
Issued Capital	DOUBLE	Numeric	Issue size of the security
Freeze Quantity	LONG	Numeric	Freeze quantity
Warning Quantity	LONG	Numeric	Warning quantity
Listing Date	LONG	Numeric	Date of listing
Expulsion Date	LONG	Numeric	Date of expulsion
Readmission Date	LONG	Numeric	Date of readmission
Record Date	LONG	Numeric	Date of record changed
No Delivery Start Date	LONG	Numeric	Date from when physical delivery of share certificates is stopped for book closure
No Delivery End Date	LONG	Numeric	No delivery end date
Low Price Range	LONG	Numeric	Minimum price at which order can be placed without causing a price freeze
High Price Range	LONG	Numeric	Maximum price at which order can be placed without causing a price freeze

ExDate	LONG	Numeric	Last date of trading before any corporate action
Book Closure Start Date	LONG	Numeric	Date at which the record books in the company for shareholder names starts
Book Closure End Date	LONG	Numeric	Date at which the record books in the company for shareholder names ends
Local LDB Update Date Time	LONG	Numeric	This is the local database update datetime
Exercise Start Date	LONG	Numeric	This is the starting date for Exercise
Exercise End Date	LONG	Numeric	This is the last date for Exercise
Ticker Selection	SHORT	Numeric	Ticker Selection
Multiplier	LONG	Numeric	Contain multiplier for the particular contract
Credit Rating	CHAR [12]	Alphanumeric	Credit rating of the security
Name	CHAR [26]	Alphanumeric	Security name
EGM/AGM	CHAR [1]	Alphanumeric	'0'- No EGM/AGM '1'- EGM '2'- AGM '3'- Both EGM and AGM
Interest Dividend	CHAR [1]	Alphanumeric	'0'- No Interest/Dividend '1'- Interest '2'- Dividend
Rights Bonus	CHAR [1]	Alphanumeric	'0'- No Rights/Bonus '1'- Rights '2'- Bonus '3'- Both Rights and Bonus
MFAON	CHAR [1]	Alphanumeric	'0' - MF/AON not allowed '1' - MF allowed '2' - AON allowed '3' - MF and AON allowed
Remarks	CHAR [24]	Alphanumeric	Remarks

ExStyle	CHAR [1]	Alphanumeric	'A' - American style Exercise allowed. 'E' - European style Exercise allowed.
ExAllowed	CHAR [1]	Alphanumeric	Exercise is allowed on this contract if this Flag is set to true
ExRejectionAllowed	CHAR [1]	Alphanumeric	Exercise rejection is allowed on this contract if this bit is set to true
PIAllowed	CHAR [1]	Alphanumeric	Position liquidation is allowed on this contract if this flag is set to true
CheckSum	CHAR [1]	Alphanumeric	Not Used
Is Corporate Adjusted	CHAR [1]	Alphanumeric	This field shows whether this Contract is Corporate Adjusted
Symbol For Asset	CHAR [10]	Alphanumeric	ID of the Instrument for the underlying asset of this contract
Instrument Of Asset	CHAR [6]	Alphanumeric	Underlying asset type
Base Price	LONG	Numeric	Base price of the security
Delete Flag	CHAR [1]	Alphanumeric	This indicates the status of the security, whether the security is deleted or not. 'N' - Active 'Y' - Deleted

ST_SECURITY_ELIGIBILITY_PER_MARKET

Field Name	Data Type	Value	Brief Description
ST_SECURITY_ELIGIBILITY_PER_MARKET			
Eligibility	CHAR [1]	Character	'1' - Allowed to trade '0' - Not allowed to trade
Security Status	CHAR [1]	Character	'1' - Preopen (Only for Normal market) '2' - Open '3' - Suspended '4' - Preopen extended '5' - Stock Open With Market

3.3.2 File Name: cd_spd_contract.txt

Field	Type	Max Field Length	Brief Description
HEADER RECORDS			
Segment Indicator	CHAR	6	Market Indicator
Version number	CHAR	5	Version number (VV.RR.SS)
DATA RECORDS			
Token 1	NUMBER	6	Token number of leg 1 contract of the spread combination
Token 2	NUMBER	6	Token number of leg 2 contract of the spread combination
Instrument Name 1	CHAR	6	Security Information 1 - This will contain instrument name, symbol, series, strike price, option type and corporate action level of leg 1 contract
Symbol 1	CHAR	10	
Series 1	CHAR	2	
Expiry Date 1	NUMBER	10	
Strike Price 1	NUMBER	10	
Option Type 1	CHAR	2	
CA Level 1	NUMBER	7	
Instrument Name 2	CHAR	6	SecurityInformation2 - This will contain an instrument name, symbol, series, strike price, option type and corporate action level of leg 2 contract
Symbol 2	CHAR	10	
Series 2	CHAR	2	
Expiry Date 2	NUMBER	10	
Strike Price 2	NUMBER	10	

Option Type 2	CHAR	2	
CA Level 2	NUMBER	7	
Reference Price	NUMBER	10	Settlement price of leg 1 contract will be the base for calculating price difference ranges
Day Low Price Diff Range	NUMBER	10	Day low price difference range for the combination. It may be changed intraday. Note: The value can be a positive number/ negative number or zero.
Day High Price Diff Range	NUMBER	10	Day high price difference range for the combination. It may be changed intraday. Note: The value can be a positive number or zero.
Op Low Price Diff Range	NUMBER	10	Minimum price difference at which the spread order could be placed without being rejected by the system. It may be changed intraday and can be flexed to the day Low price difference. Note: The value can be a positive number/ negative number or zero.
Op High Price Diff Range	NUMBER	10	Maximum price difference at which the spread order could be placed without being rejected by the system It may be changed intraday and can be flexed to the day high price difference. Note: The value can be a positive number or zero.
Board Lot Quantity 1	NUMBER	9	Board lot quantity of leg 1 contract
Minimum Lot Quantity 1	NUMBER	9	Min lot quantity of leg 1 contract
Tick Size 1	NUMBER	9	Tick size of leg 1 contract
Board Lot Quantity 2	NUMBER	9	Board lot quantity of leg 2 contract
Minimum Lot Quantity 2	NUMBER	9	Min lot quantity of leg 2 contract

Tick Size 2	NUMBER	9	Tick size of leg 2 contract
Eligibility	CHAR	1	The flag will be set to 1 if the combination is allowed to trade.
Delete Flag	CHAR	1	This will contain one of the following values to denote whether the spread combination is deleted or not. 'Y' - Active 'N' - Delete

3.4 Commodity Derivatives Market Segment

3.4.1 File Name: co_contract.txt

Field Name	Data Type	Value	Brief Description
HEADER RECORD			
Market String	CHAR [6]	'NSE'	Market string
Version Number	CHAR [5]	Alphanumeric	Version number (VV.RR.SS)
DATA RECORDS			
Token	LONG	Numeric	Token number of the security being updated. This is unique for a particular symbol-series combination.
Asset Token	LONG	Numeric	Token Number of the asset
Instrument Name	CHAR [6]	Alphanumeric	Instrument Name
Symbol	CHAR [10]	Alphanumeric	This field should contain the symbol of security.
Series	CHAR [2]	Alphanumeric	This field should contain a series of a security.
Reserved	CHAR [1]	Alphanumeric	Not Used
Expiry Date	LONG	Numeric	Expiry date in number of seconds elapsed from midnight 01-Jan-1980
Strike Price	LONG	Numeric	Strike Price

Option Type	CHAR [2]	Alphanumeric	Option Type
Precision	CHAR [1]	Alphanumeric	
CA Level	SHORT	Numeric	Corporate Action level of the security
Reserved	CHAR [1]	Alphanumeric	Not Used
Permitted To Trade	SHORT	Numeric	'0' - Listed but not permitted to trade '1' - Permitted to trade
Issue Rate	SHORT	Numeric	Price of the issue
Security Eligibility Per Market	ST_SECURITY_ELIGIBILITY_PER_MARKET [4]	Structure	Refer to the table given below <u>ST SECURITY ELIGIBILITY PER MARKET</u> and <u>FAQ</u>
Issue Start Date	LONG	Numeric	Date of issue of the security
Interest Payment Date	LONG	Numeric	Interest Payment Date
Issue Maturity Date	LONG	Numeric	Maturity Date
Margin Percentage	LONG	Numeric	It is Initial margin percent to be collected on a contract
Minimum Lot Quantity	LONG	Numeric	It is minimum lot of the order which can be placed
Board Lot Quantity	LONG	Numeric	Regular lot size
Tick Size	LONG	Numeric	Tick size or Min spread size
Issued Capital	DOUBLE	Numeric	Issue size of the security
Freeze Quantity	LONG	Numeric	Freeze quantity
Warning Quantity	LONG	Numeric	Warning quantity
Listing Date	LONG	Numeric	Date of listing
Expulsion Date	LONG	Numeric	Date of expulsion
Readmission Date	LONG	Numeric	Date of readmission
Record Date	LONG	Numeric	Date of record changed

No Delivery Start Date	LONG	Numeric	Date from when physical delivery of share certificates is stopped for book closure
No Delivery End Date	LONG	Numeric	No delivery end date
Low Price Range	LONG	Numeric	Minimum price at which order can be placed without causing a price freeze
High Price Range	LONG	Numeric	Maximum price at which order can be placed without causing a price freeze
ExDate	LONG	Numeric	Last date of trading before any corporate action
Book Closure Start Date	LONG	Numeric	Date at which the record books in the company for shareholder names starts
Book Closure End Date	LONG	Numeric	Date at which the record books in the company for shareholder names ends
Local LDB Update Date Time	LONG	Numeric	This is the local database update datetime
Exercise Start Date	LONG	Numeric	This is the starting date for Exercise
Exercise End Date	LONG	Numeric	This is the last date for Exercise
Ticker Selection	SHORT	Numeric	
Multiplier	LONG	Numeric	Contain multiplier for the particular contract
Credit Rating	CHAR [12]	Alphanumeric	Credit rating of the security
Name	CHAR [26]	Alphanumeric	Security name
EGM/AGM	CHAR [1]	Alphanumeric	'0'- No EGM/AGM '1'- EGM '2'- AGM '3'- Both EGM and AGM

Interest Dividend	CHAR [1]	Alphanumeric	'0'- No Interest/Dividend '1'- Interest '2'- Dividend
Rights Bonus	CHAR [1]	Alphanumeric	'0'- No Rights/Bonus '1'- Rights '2'- Bonus '3'- Both Rights and Bonus
MFAON	CHAR [1]	Alphanumeric	'0' - MF/AON not allowed '1' - MF allowed '2' - AON allowed '3' - MF and AON allowed
Remarks	CHAR [24]	Alphanumeric	Remarks
ExStyle	CHAR [1]	Alphanumeric	'A' - American style Exercise allowed. 'E' - European style Exercise allowed.
ExAllowed	CHAR [1]	Alphanumeric	Exercise is allowed on this contract if this Flag is set to true
ExRejectionAllowed	CHAR [1]	Alphanumeric	Exercise rejection is allowed on this contract if this bit is set to true
PIAllowed	CHAR [1]	Alphanumeric	Position liquidation is allowed on this contract if this flag is set to true
CheckSum	CHAR [1]	Alphanumeric	Not Used
Is Corporate Adjusted	CHAR [1]	Alphanumeric	This field shows whether this Contract is Corporate Adjusted
Symbol For Asset	CHAR [10]	Alphanumeric	ID of the Instrument for the underlying asset of this contract
Instrument Of Asset	CHAR [6]	Alphanumeric	Underlying asset type
Base Price	LONG	Numeric	Base price of the security
Delete Flag	CHAR [1]	Alphanumeric	This indicates the status of the security, whether the security is deleted or not. 'N' - Active 'Y' - Deleted

ST_SECURITY_ELIGIBILITY_PER_MARKET

Field Name	Data Type	Value	Brief Description
ST_SECURITY_ELIGIBILITY_PER_MARKET			
Eligibility	CHAR [1]	Character	'1' - Allowed to trade '0' - Not allowed to trade
Security Status	CHAR [1]	Character	'1' – Preopen (Only for Normal market) '2' – Open '3' – Suspended '4' – Preopen extended '5' – Stock Open With Market

4. About SFTP (Secure File Transfer Protocol)

The file transfer takes place over SFTP (Secure FTP) protocol over the Internet.

The Info Vendor requires to provide the Exchange with the SSH RSA Public Key of their machine for receiving login details from the Exchange.

The following details will be provided once the Exchange processes the request:

- Server IP
- SSH Service Port
- User ID
- File Path

General information on SFTP has been provided in the following sections for popular OS platforms.

4.1 SFTP on Linux platform

The OpenSSH suite, which comes pre-installed in most Linux distributions, can be used for transferring files securely using SFTP.

The SSH key-pair is generated in the ".ssh" directory in the user's home directory.

It is highly recommended that you consult your systems administrator to generate/locate the key-pair and set up SFTP for you.

Continue reading for information on how to generate the key-pair.

4.1.1 Generation of the SSH RSA key-pair on Linux

- Generate the new key-pair with the following command:
`ssh-keygen -t rsa -C "user@host"`
- You will receive the following prompt:
`Generating public/private rsa key pair.
Enter file in which to save the key."`
Press Enter to continue with the defaults.

You will receive the following prompt:

`Enter file in which to save the key`

```
(/host/users/user/.ssh/id_rsa):
```

Press Enter to continue with the defaults.

- If a file already exists with the same name, then you will receive the following prompt:

```
/host/users/user/.ssh/id_rsa already exists.
```

```
Overwrite (y/n) ?
```

Type "y" and press Enter to overwrite.

- You will be prompted to enter a passphrase as follows:

```
Enter passphrase (empty for no passphrase) :
```

Press Enter to continue without a passphrase.

You will be prompted to re-enter the passphrase:

```
Enter same passphrase again:
```

Press Enter again to continue without a passphrase.

- After you enter a passphrase, you will be presented with the "Fingerprint" (or ID) of your SSH key.

It will look like this:

```
Your identification has been saved in  
/host/users/user/.ssh/id_rsa.
```

```
Your public key has been saved in  
/host/users/user/.ssh/id_rsa.pub.
```

```
The key fingerprint is:
```

```
87:c4:85:90:91:16:39:de:c2:26:49:4a:b3:38:80:97 user@host
```

After generating public key, the user needs to share the Public Key file with exchange for requesting the credentials.

NOTE: In above steps the words "host" and "user" are used to represent the host name and username of the machine. This is used for demo purposes only. The same will differ as per your server and usernames.

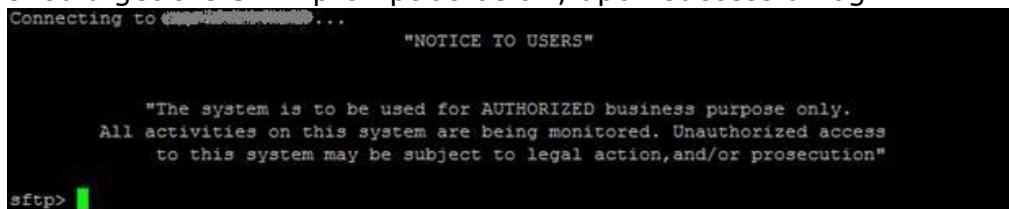
4.1.2 SFTP Login

Login to the Exchange Server over SFTP using the following command:

```
sftp -o PORT=6010 remote_user@remote_host
```

Where remote user is the User ID provided to you by the Exchange upon sharing your Public Key and remote host is the Exchange Server IP.

You should get the SFTP prompt as below, upon successful login:



Connecting to ...
"NOTICE TO USERS"

"The system is to be used for AUTHORIZED business purpose only.
All activities on this system are being monitored. Unauthorized access
to this system may be subject to legal action, and/or prosecution"

sftp> [green arrow]

4.1.3 Fetching files over SFTP

The SFTP “get” command may be used at the SFTP prompt for fetching the files while logged into the host over SFTP.

4.1.4 Ending the SFTP session.

The SFTP “bye” command may be used for terminating the session.

4.1.5 SFTP commands help.

Help may be obtained with SFTP commands by typing the “help” command at the SFTP prompt.

4.2 SFTP on Windows platform

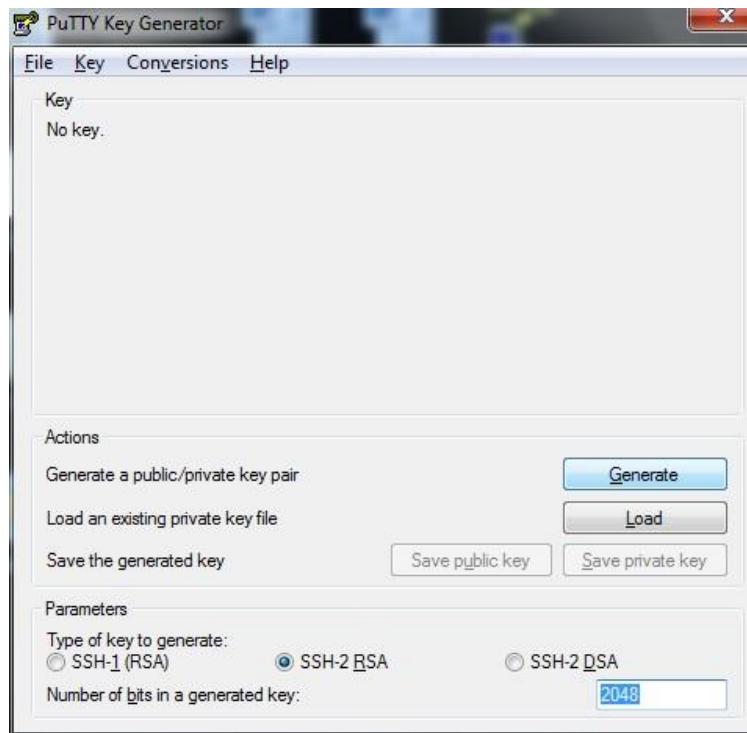
4.2.1 Generation of the SSH RSA key-pair on Windows

This guide explains how to generate the SSH RSA key-pair using the PuttyGen application.

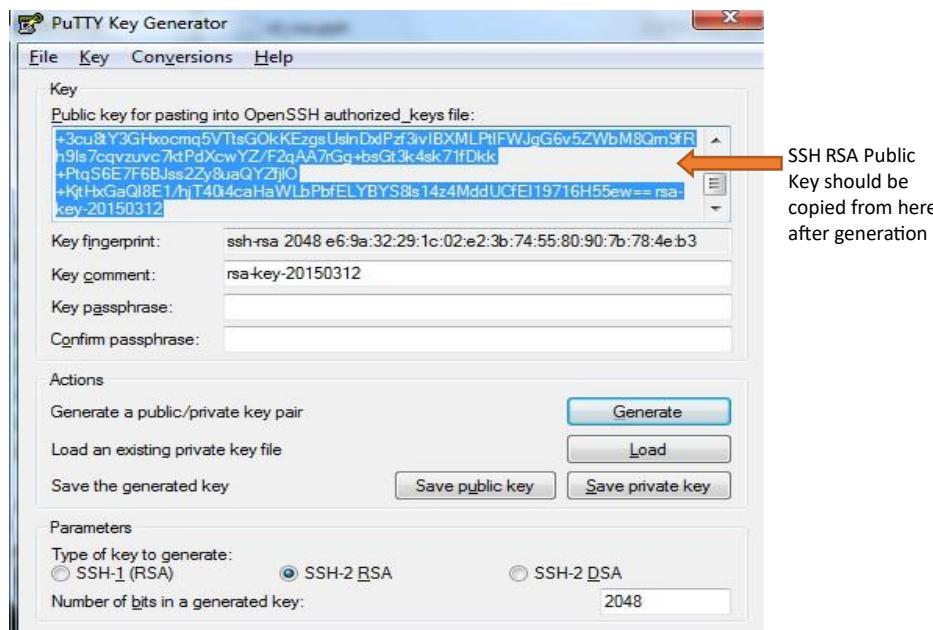
Download the PuttyGen application (freely available on the Internet). Then follow these steps to generate the key-pair:

- Start the PuttyGen application.

You will be presented with a dialog which looks something like this:



- Select “SSH2RSA” with 2048-bit size or greater.
- Press the “Generate” button.
- After generating the key, you will be shown the screen below. Keep the “Key passphrase” and “Confirm passphrase” as blank.



- Create a blank file with the name "id_rsa.pub." This will be the public key file which will be populated with your Public Key and shared with the Exchange.
- Copy the public key content as presented on the screen (selected area in the screenshot below) and paste into newly created public key file (id_rsa.pub) and save the file.
- Share this Public Key File (id_rsa.pub) with the Exchange when requesting SFTP credentials.

4.2.2 SFTP Client Software on Windows

There are multiple SFTP Client Programs (paid for and free) available for transferring files over SFTP.

One such software is WinSCP, available for free from the WinSCP website. This program is intuitive, user friendly and can be used in interactive mode (GUI) as well as from the command line (for automation/batch processing).

Information on using WinSCP can be found on the WinSCP website.

4.3 Further support

Apart from the above guide, many of the online resources can be referred to on the World Wide Web for more information on how to set up and use SFTP at the Client's site on various OS platforms.

Note: This "About SFTP" section is intended as a guide used to understand and become familiarized with this transfer protocol. It may be noted that the Exchange does not provide SFTP software or support for configuring and using SFTP at Client site.

5. Abbreviations and Acronyms Used

EOD	Information Sent at End of Day
CM	Cash Market
F&O/FAO	Future & Options Market
CD	Currency Derivatives Market
COM	Community Derivatives Market
AGM	Annual General Meeting
AON	All Or None
EGM	Extraordinary General Meeting
MF	Minimum Fill
NEAT	National Exchange for Automated Trading
NNF	Non-Neat Front End
NSE	National Stock Exchange
VV.RR.SS	Version. Release. Sub-release

6. FAQ

1) How to identify the market types in the security.txt file for CM segment?

The security.txt file does not populate the market type. It contains 12 fields as depicted below:

|6|1|2|0|2|0|2|1|1|0|1|0|

There are 12 consecutive fields which indicate Security status and Eligibility for 6 Markets.

In these 12 fields the set of the first 2 fields represents the **Normal market** and the set of next 2 fields represents the **odd lot market** and so on.

The market types are in below orders:

1. **Normal Market**
2. **Odd lot Market**
3. **Spot Market**
4. **Auction Market**
5. **Call Auction1**
6. **Call Auction2**

2) Do security or contract files contain dummy symbols and if they exist, how to identify them?

Yes, the security file contains the dummy symbol.

The symbol with the last characters "NSETEST" represents the dummy symbol.

3) Which are the market types in FO, CD and COM segment (in contract.gz and cd_contract.gz respectively)?

In FO, CD and COM segments there are 4 market types.

1. **Normal Market**
2. **Odd lot Market**
3. **Spot Market**
4. **Auction Market**

For e.g., |2|1||2|0||2|0||3|0|

Here,

|2|1|: 2 is the Security status and 1 is for eligibility for the **Normal market**.

|2|0|: 2 is the Security status and 0 is for eligibility for the **Odd lot market**.

|2|0|: 2 is the Security status and 0 is for eligibility for the **Spot market**.

|3|0|: 3 is for the Security status and 0 is for eligibility for the **Auction market**.

||: This field is used for an unused indicator.

7. Support Information

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