



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

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NSE DATA & ANALYTICS LIMITED
EXCHANGE PLAZA,
PLOT NO. C/1, G BLOCK,
BANDRA-KURLA COMPLEX,
BANDRA (E), MUMBAI 400 051.
INDIA.

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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
Version 1.8	Provision for NSE to serve as an alternative trading venue for the FO segment in the event of an outage at BSE, and vice versa.	13 April 2026
Version 1.9	1. Addition of Closing Auction in ST_SECURITY_ELIGIBILITY_PER_MARKET in File Name: security.txt in CM segment 2. Addition of BSE in section 5 – Abbreviations and Acronyms Used 3. Modified FAQ 1 in FAQ section	03 August 2026
Version 1.10	Addition of Electronic Gold Receipts Segment	04 May 2026

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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 real-time products and 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

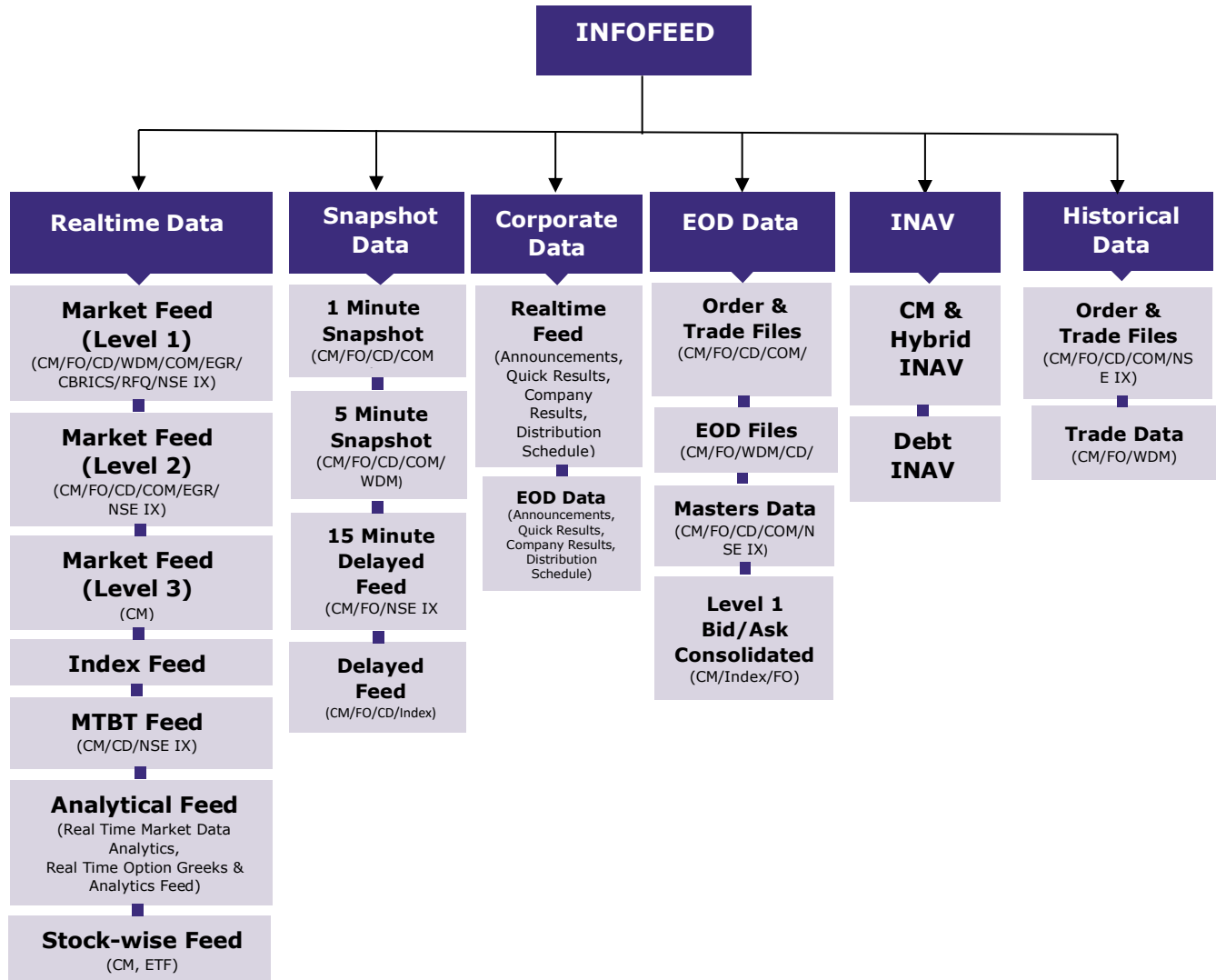
Historical data products

1. End of Day Data
2. Historical Data

The data products are provided through delivery modes mentioned below:

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

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



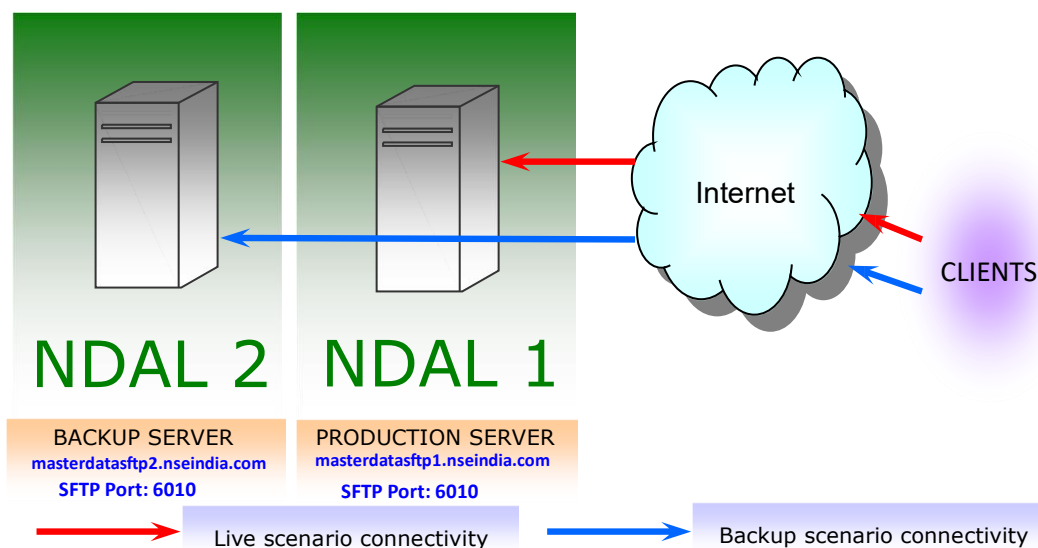
NSE Data & Analytics Limited (NDAL) offers a comprehensive portfolio of real-time and historical market data products sourced from NSEIL, covering the Capital Market (CM), Futures & Options (FO), Currency Derivatives (CD), Commodity Derivatives (COM), Electronic Gold Receipt (EGR), and NSE IX segments. These products provide market information ranging from low-latency intraday data streams to structured end-of-day datasets, catering to a broad spectrum of clients.

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

2. Connection Details

- Clients shall connect to the NDAL application servers over the Internet using the SFTP protocol from their whitelisted public static IP addresses.
- To ensure high availability and provide resilience against network or ISP-level failures, NDAL has deployed two production servers operating in an active-active configuration. Each server is accessible through its designated URL and port, as detailed in the deployment architecture section of this document.
- Active-Active Connectivity: Simultaneously establish connections to both production servers for enhanced availability and load distribution.
- Failover Connectivity: Connect to one server as the primary endpoint and automatically or manually switch to the alternate server in the event of primary server unavailability.
- This architecture is designed to provide a highly available and resilient connectivity framework, ensuring uninterrupted access to data services and supporting business continuity requirements.

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 SFTP Connection Details

Segment	Server	URL	Port
CM, F&O, CD, COM, EGR	Primary	masterdatasftp1.nseindia.com	6010
	Secondary	masterdatasftp2.nseindia.com	6010

2.4 Units

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

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 types depending on eligibility.

Directory Path	/<Product Root>/NIBIS/MASTERS_DATA
File Name	security.gz
Compression	Compressed (.gz)
Generation Frequency	Once (EOD)

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
INFO HEADER			
Market String	CHAR [6]	'NEATCM'	Market string
Version Number	CHAR [7]	Character	Version number (VV.RR.SS)
Date	LONG	Numeric	Unix timestamp in number of seconds elapsed since midnight 01-Jan-1980
INFO DATA			
Token	LONG	Numeric	Token number of the security. This is unique for a particular symbol-series combination.
Symbol	CHAR [10]	Character	Exchange-assigned security code
Series	CHAR [2]	Character	Exchange-defined trading category or 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 (Refer FAQ 4 for more information.)
Credit Rating	CHAR [17]	Character	Daily price range is provided in this field
Security Eligibility Per Market	ST_SECURITY_ELIGIBILITY_PER_MARKET [6]	Structure	Refer the table given below ST SECURITY ELIGIBILITY PER MARKET and FAQ
Board Lot Quantity	LONG	Numeric	The quantity entered while placing a Buy/Sell order should be a multiple of board lot quantity and greater than the minimum lot size.
Tick Size	LONG	Numeric	Tick size of the security
Security Name	CHAR [25]	Character	Security name.
SurvInd	SHORT	Numeric	Indicator for security in Surveillance Measure. Values range between 0 to 99.
Issue Start Date	LONG	Numeric	It is the first day an Initial Public Offering (IPO) or public debt issue opens for investors to place bids
Issue IP Date	LONG	Numeric	Interest Payment Date
Issue Maturity Date	LONG	Numeric	Not applicable
Freeze Percent	SHORT	Numeric	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	Indicates the date on which the particular security was listed for trading.
Expulsion Date	LONG	Numeric	Indicates the date on which the particular security was expelled.
Re-Admission Date	LONG	Numeric	Indicates the date on which the particular security was re-introduced.
Ex-Date	LONG	Numeric	Last date of trading before any corporate action.
Record Date	LONG	Numeric	It represents the cutoff date for shareholders to be eligible for specific corporate action.

No Delivery Start Date	LONG	Numeric	Date from when delivery of shares is stopped for book closure.
No Delivery End Date	LONG	Numeric	No delivery end date.
Participant In Mkt Index	CHAR [1]	Character	'1' – Security is present in NIFTY Index. '0' – Security is not present in NIFTY Index.
AON	CHAR [1]	Character	'1' – AON is allowed. '0' – AON is not allowed
MF	CHAR [1]	Character	'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 end.
Dividend	CHAR [1]	Character	'1' – Dividend '0' – No Dividend
Rights	CHAR [1]	Character	'1' – Rights '0' – No Rights
Bonus	CHAR [1]	Character	'1' – Rights '0' – No Rights
Interest	CHAR [1]	Character	'1' – Interest '0' – No Interest
AGM	CHAR [1]	Character	'1' – AGM '0' – No AGM
EGM	CHAR [1]	Character	'1' – EGM '0' – No EGM
MM Spread	LONG	Numeric	This is the spread value of 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	This is used as an identifier for different market securities. 0 = Not used. 1 = Securities (except SME) eligible in Normal market and Odd Lot markets 2 = IPO Session is being held security (including SME). 3 = Re-list Session is being held security (including SME). 4 = Illiquid security eligible for Call Auction session (CA2) (including SME). 5 = SME securities eligible in normal market.
Remarks	CHAR [25]	Character	Remarks
Local DB Update Date Time	LONG	Numeric	This is the local database update datetime.
Delete Flag	CHAR [1]	Character	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	CHAR [12]	Character	This field contains the ISIN of security.

ST_SECURITY_ELIGIBILITY_PER_MARKET

This provides security status for the below-mentioned market types in following order:

- 1) Normal Market
- 2) Odd lot Market
- 3) ~~Spot Market~~ Closing Auction
- 4) Auction Market
- 5) Additional market 1/ Call Auction 1
- 6) Additional market 2/ Call Auction 2

Field Name	Data Type	Value	Brief Description
ST_SECURITY_ELIGIBILITY_PER_MARKET			
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)
Eligibility	CHAR [1]	Character	'1' - Allowed to trade '0' - Not allowed to trade

3.2 Futures & Options Market Segment

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

Directory Path	/<Product Root>/NIBIS/MASTERS_DATA
File Name	contract.gz
Compression	Compressed (.gz)
Generation Frequency	Once (EOD)

3.2.1 File Name: contract.txt

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

Field Name	Data Type	Value	Brief Description
INFO HEADER			
Market String	CHAR [6]	'NEATFO'	Market string
Version Number	CHAR [5]	Character	Version number (VV.RR.SS)
INFO DATA			
Token	LONG	Numeric	Each token number is unique, and it indicates a unique contract.
Asset Token	LONG	Numeric	Asset Token represents the unique token assigned to the underlying asset from which one or more contracts are derived.
Instrument Type	CHAR [6]	Character	'FUTSTK' - Stock Futures 'OPTSTK' - Stock Options 'FUTIDX' - Index futures 'OPTIDX' - Index Options 'FUTINT' - Interest Futures 'UNDINT' - Interest Underlying
Symbol	CHAR [10]	Character	This field should contain the symbol of contract.
Series	CHAR [2]	Character	It is default 'XX' in FO segment. It is not used in FO segment
Filler	CHAR [1]	Character	Blank
Expiry Date	LONG	Numeric	Expiry date indicates the last day till which a particular contract is available for trading. Expiry date in number of seconds elapsed from midnight 01-Jan-1980

Strike Price	LONG	Numeric	The value will be in paisa for Options, and the value will be '-1' for Futures contracts
Option Type	CHAR [2]	Character	Describes the option type for option contracts. 'CA' – Call American 'CE' – Call European 'PE' – Put European 'PA' – Put American A indicates American option on which settlement can be done on any day till the expiry day. E indicates European option for which settlement can be done only on expiry day. It will be 'XX' for Futures contracts
Category	CHAR [1]	Character	The market hours on which the contract is available to trade. The following will be the values. '1' - Represents Regular market hours. '2' - Represents Extended market hours.
CA Level	SHORT	Numeric	Value shall be set to zero.
Reserved Identifier	CHAR [1]	Character	'1' – Unreserved Contract '0' – Reserved Contract
Permitted To Trade	SHORT	Numeric	0 = Listed but not permitted to trade 1 = Permitted to trade 2 = BSE listed (Refer FAQ4 for more information.)
Issue Rate	SHORT	Numeric	Value shall be set to zero
Contract Eligibility Per Market	ST_CONTRACT_ELIGIBILITY_PER_MARKET [4]	Structure	Refer to the table given below: ST CONTRACT ELIGIBILITY PER MARKET and FAQ3
Issue Start Date	LONG	Numeric	It is the first day an Initial Public Offering (IPO) or public debt issue opens for investors to place bids
Interest Payment Date	LONG	Numeric	Value should be zero.
Issue Maturity Date	LONG	Numeric	It is same as the expiry date and indicates the last day up to which the contract is available for trading. It can be extended under special circumstances.

Margin Percentage	LONG	Numeric	It is Initial margin percent to be collected on a contract. Value shall be set to zero.
Minimum Lot Quantity	LONG	Numeric	The quantity entered while placing a Buy/Sell order should be greater than minimum lot size.
Board Lot Quantity	LONG	Numeric	The quantity entered while placing a Buy/Sell order should be a multiple of board lot quantity and greater than the minimum lot size
Tick Size	LONG	Numeric	Tick size of the contract.
Issued Capital	DOUBLE	Numeric	Issue size of the contract
Freeze Quantity	LONG	Numeric	Any order placed having quantity greater than this quantity enters a freeze and requires exchange action before getting confirmed.
Warning Quantity	LONG	Numeric	It is meant for warning indication for Quantity.
Listing Date	LONG	Numeric	Indicates the date on which the particular contract was listed for trading.
Expulsion Date	LONG	Numeric	Indicates the date on which the particular contract was expelled.
Readmission Date	LONG	Numeric	Indicates the date on which the particular contract was re-introduced.
Record Date	LONG	Numeric	It represents the cutoff date for shareholders to be eligible for specific corporate action.
No Delivery Start Date	LONG	Numeric	Date from when delivery of shares is stopped for book closure.
No Delivery End Date	LONG	Numeric	No delivery end date
Low Price Range	LONG	Numeric	Any order placed at a price lower than this value goes into a freeze and requires exchange action before the order gets confirmed.
High Price Range	LONG	Numeric	Any order placed at a price higher than this value goes into a freeze and requires exchange action before the order gets confirmed.
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 from which the holder is allowed to exercise their option.
Exercise End Date	LONG	Numeric	This is the last date on which the holder of an option can exercise their right to buy or sell the underlying asset.
Ticker Selection	SHORT	Numeric	Ticker Selection
Old Token Number	LONG	Numeric	Not used
Credit Rating	CHAR [12]	Character	Credit rating of the contract
Name	CHAR [25]	Character	Contract name
EGMAGM	CHAR [1]	Character	'0'- No EGM/AGM '1'- EGM '2'- AGM '3'- Both EGM and AGM
Interest Dividend	CHAR [1]	Character	'0'- No Interest/Dividend '1'- Interest '2'- Dividend
Rights Bonus	CHAR [1]	Character	'0'- No Rights/Bonus '1'- Rights '2'- Bonus '3'- Both Rights and Bonus
MFAON	CHAR [1]	Character	'0' - MF/AON not allowed '1' - MF allowed '2' - AON allowed '3'- MF and AON allowed
Remarks	CHAR [24]	Character	Remarks
ExStyle	CHAR [1]	Character	'A' - American style Exercise allowed; hence exercise can be done on any date till the expiry date. 'E' - European style Exercise allowed; hence exercise can be done only on the expiry day.
ExAllowed	CHAR [1]	Character	Indicates whether exercise option is allowed for a particular contract.
ExRejectionAllowed	CHAR [1]	Character	Indicates whether exercise rejection is allowed for a particular contract.
PIAllowed	CHAR [1]	Character	Indicates whether position liquidation is allowed or not for a particular contract.

Settlement Indicator	CHAR [1]	Character	Indicates whether the contract is cash settled or physically settled. 'C' = Cash Settled 'P' = Physical Settled
Is Corporate Adjusted	CHAR [1]	Character	This field shows whether this Contract is Corporate Adjusted.
Symbol For Asset	CHAR [10]	Character	ID of the Instrument for the underlying asset of this contract
Instrument Of Asset	CHAR [6]	Character	Underlying asset type
Base Price	LONG	Numeric	Base price is the closing price of the contract
Delete Flag	CHAR [1]	Character	This indicates the status of the contract, whether the contract is deleted or not. 'N' – Active 'Y' – Deleted

ST_CONTRACT_ELIGIBILITY_PER_MARKET

This provides contract status for the mentioned market types in following order:

- 1) Normal Market
- 2) Odd lot Market
- 3) Spot Market
- 4) Auction Market

Field Name	Data Type	Value	Brief Description
ST_CONTRACT_ELIGIBILITY_PER_MARKET			
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)
Eligibility	CHAR [1]	Character	'1' - Allowed to trade '0' - Not allowed to trade
Filler	CHAR [1]	Character	Blank

3.2.2 File Name: spd_contract.txt

Directory Path	/<Product Root>/NIBIS/MASTERS_DATA
File Name	spd_contract.gz
Compression	Compressed (.gz)
Generation Frequency	Once (EOD)

Field Name	Data Type	Value	Brief Description
INFO HEADER			
Segment Indicator	CHAR [6]	NEATNI	Market string
Version number	CHAR [5]	Character	Version number (VV.RR.SS)
INFO DATA			
Token	LONG	Numeric	Token number of leg 1 contract of the spread combination
Token 2	LONG	Numeric	Token number of leg 2 contract of the spread combination
Instrument Name 1	CHAR [6]	Character	Contract 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]	Character	
Series 1	CHAR [2]	Character	
Expiry Date 1	LONG	Numeric	
Strike Price 1	LONG	Numeric	
Option Type 1	CHAR [2]	Character	
CA Level 1	LONG	Numeric	
Instrument Name 2	CHAR [6]	Character	Contract Information 2: This will contain instrument name, symbol, series, strike price, option type and corporate action level of leg 2 contract.
Symbol 2	CHAR [10]	Character	
Series 2	CHAR [10]	Character	
Expiry Date 2	CHAR [2]	Character	
Strike Price 2	LONG	Numeric	
Option Type 2	LONG	Numeric	
CA Level 2	CHAR [2]	Character	
Reference Price	LONG	Numeric	Settlement price of leg 1 contract will be the base for calculating price difference ranges
Day Low Price Diff Range	LONG	Numeric	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	LONG	Numeric	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.

Op High Price Diff Range	LONG	Numeric	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	LONG	Numeric	Board lot quantity of leg 1 contract
Minimum Lot Quantity 1	LONG	Numeric	Min lot quantity of leg 1 contract
Tick Size 1	LONG	Numeric	Tick size of leg 1 contract
Board Lot Quantity 2	LONG	Numeric	Board lot quantity of leg 2 contract
Minimum Lot Quantity 2	LONG	Numeric	Min lot quantity of leg 2 contract
Tick Size 2	LONG	Numeric	Tick size of leg 2 contract
Eligibility	CHAR [1]	Character	The flag will be set to 1 if the combination is allowed to trade.
Delete Flag	CHAR [1]	Character	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

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

Directory Path	/<Product Root>/NIBIS/MASTERS_DATA
File Name	cd_contract.gz
Compression	Compressed (.gz)
Generation Frequency	Once (EOD)

3.3.1 File Name: cd_contract.txt

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

Field Name	Data Type	Value	Brief Description
INFO HEADER			
Market String	CHAR [6]	'NEATCD'	Market string
Version Number	CHAR [5]	Character	Version number (VV.RR.SS)
INFO DATA			
Token	LONG	Numeric	Each token number is unique, and it indicates a unique contract.
Asset Token	LONG	Numeric	Asset Token represents the unique token assigned to the underlying asset from which one or more contracts are derived.
Instrument Type	CHAR [6]	Character	'OPTCUR' – Currency Options 'OPTIRC' – Interest Rate Options 'FUTCUR' – Currency Futures 'FUTIRT' – Interest Rate Futures 'FUTIRC' – Cash Settled Interest Rate Futures Following are used as underlying tokens : 'UNDCUR' – Underlying Currency 'INDEX' – Underlying Index 'UNDIRC' – Underlying Cash Settles Interest Rates 'UNDIRT' – Underlying Interest Rates
Symbol	CHAR [10]	Character	This field should contain the symbol of contract.
Series*	CHAR [2]	Character	Value shall be set to 'XX'.
Filler	CHAR [1]	Character	Blank

Expiry Date	LONG	Numeric	Expiry date indicates the last day till which a particular contract is available for trading. Expiry date in number of seconds elapsed from midnight 01-Jan-1980.
Strike Price*	LONG	Numeric	The value will be in paisa for Options, and the value will be '-1' for Futures contracts.
Option Type*	CHAR [2]	Character	The options contracts shall be European styled which can be exercised only on the expiration date. 'CE' – Call European 'PE' – Put European 'E' indicates European option for which settlement can be done only on expiry day. It will be 'XX' for Futures contracts.
Precision	CHAR [1]	Character	This contains the number of digits after decimal for every price field of the contract`. e.g. '4' (four digits after decimal is the precision for the price fields)
CA Level	SHORT	Numeric	Value shall be set to 0.
Reserved Identifier	CHAR [1]	Character	'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	Value shall be set to 0.
Contract Eligibility Per Market	ST_CONTRACT_ELIGIBILITY_PER_MARKET [4]	Structure	Refer to the table given below ST CONTRACT ELIGIBILITY PER MARKET and FAQ3
Issue Start Date	LONG	Numeric	It is the first day an Initial Public Offering (IPO) or public debt issue opens for investors to place bids.
Interest Payment Date	LONG	Numeric	Interest Payment Date
Issue Maturity Date	LONG	Numeric	It is same as the expiry date and indicates the last day up to which the contract is available for trading. It can be extended under special circumstances.

Margin Percentage	LONG	Numeric	It is Initial margin percent to be collected on a contract. Value shall be set to 0.
Minimum Lot Quantity	LONG	Numeric	The quantity entered while placing a Buy/Sell order should be greater than minimum lot size.
Board Lot Quantity	LONG	Numeric	The quantity entered while placing a Buy/Sell order should be a multiple of board lot quantity and greater than the minimum lot size.
Tick Size	LONG	Numeric	Tick size of the contract.
Issued Capital*	DOUBLE	Numeric	Value shall be set to 1E+12.
Freeze Quantity	LONG	Numeric	Any order placed having quantity greater than this quantity, enters a freeze and requires exchange action before getting confirmed
Warning Quantity	LONG	Numeric	It is meant for warning indication for quantity
Listing Date	LONG	Numeric	Indicates the date on which the particular contract was listed for trading
Expulsion Date*	LONG	Numeric	Value shall be set to 0.
Readmission Date*	LONG	Numeric	Value shall be set to 0.
Record Date*	LONG	Numeric	Value shall be set to 0.
No Delivery Start Date*	LONG	Numeric	Value shall be set to 0.
No Delivery End Date*	LONG	Numeric	Value shall be set to 0.
Low Price Range	LONG	Numeric	Any order placed at a price lower than this value goes into a freeze and requires exchange action before the order gets confirmed.
High Price Range	LONG	Numeric	Any order placed at a price higher than this value goes into a freeze and requires exchange action before the order gets confirmed.
ExDate*	LONG	Numeric	Value shall be set to 0.
Book Closure Start Date*	LONG	Numeric	Value shall be set to 0.
Book Closure End Date*	LONG	Numeric	Value shall be set to 0.
Local LDB Update Date Time	LONG	Numeric	This is the local database update datetime.

Exercise Start Date*	LONG	Numeric	This is the starting date from which the holder is allowed to exercise their option. Value shall be set to zero for Futures contracts and non-zero for Options contracts.
Exercise End Date*	LONG	Numeric	This is the last date on which the holder of an option can exercise their right to buy or sell the underlying asset. Value shall be set to zero for Futures contracts and non-zero for Options contracts.
Ticker Selection*	SHORT	Numeric	Not applicable
Multiplier	LONG	Numeric	Multiplier for the particular contract
Credit Rating*	CHAR [12]	Character	Not applicable
Name	CHAR [26]	Character	Contract name
EGM/AGM*	CHAR [1]	Character	'0'- No EGM/AGM
Interest Dividend*	CHAR [1]	Character	'0'- No Interest/Dividend
Rights Bonus*	CHAR [1]	Character	'0'- No Rights/Bonus
MFAON*	CHAR [1]	Character	'0'- MF/AON not allowed
Remarks	CHAR [24]	Character	Remarks
ExStyle*	CHAR [1]	Character	Value shall be set to 'E'. 'E' - European style Exercise allowed; hence exercise can be done only on the expiry day.
ExAllowed*	CHAR [1]	Character	Value shall be set to 'N'.
ExRejectionAllowed*	CHAR [1]	Character	Value shall be set to 'N'.
PIAllowed*	CHAR [1]	Character	Value shall be set to 'N'.
Checksum*	CHAR [1]	Character	Not used
Is Corporate Adjusted*	CHAR [1]	Character	Value shall be set to 'N'.
Symbol For Asset	CHAR [10]	Character	ID of the Instrument for the underlying asset of this contract
Instrument Of Asset*	CHAR [6]	Character	Not applicable
Base Price	LONG	Numeric	Base price of the contract
Delete Flag	CHAR [1]	Character	This indicates whether the contract is deleted or not. 'N' - Active 'Y' - Deleted

Note: * denotes not applicable for Currency Futures Contract.

ST_CONTRACT_ELIGIBILITY_PER_MARKET

This provides contract status for the mentioned market types in following order:

- 1) Normal Market
- 2) Odd lot Market*
- 3) Spot Market*
- 4) Auction Market*

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

Note: * denotes not applicable for Currency Futures Contract.

3.3.2 File Name: cd_spd_contract.txt

Directory Path	/<Product Root>/NIBIS/MASTERS_DATA
File Name	cd_spd_contract.gz
Compression	Compressed (.gz)
Generation Frequency	Once (EOD)

Field Name	Data Type	Value	Brief Description
INFO HEADER			
Segment Indicator	CHAR [6]	NEATCD	Market string
Version number	CHAR [5]	Character	Version number (VV.RR.SS)
INFO DATA			
Token 1	LONG	Numeric	Token number of leg 1 contract of the spread combination
Token 2	LONG	Numeric	Token number of leg 2 contract of the spread combination
Instrument Name 1	CHAR [6]	Character	Contract 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]	Character	
Series 1	CHAR [2]	Character	
Expiry Date 1	LONG	Numeric	
Strike Price 1	LONG	Numeric	
Option Type 1	CHAR [2]	Character	
CA Level 1	LONG	Numeric	
Instrument Name 2	CHAR [6]	Character	Contract Information2 - This will contain an instrument name, symbol, series, strike price, option type and corporate action level of leg 2 contract
Symbol 2	CHAR [10]	Character	
Series 2	CHAR [2]	Character	
Expiry Date 2	LONG	Numeric	
Strike Price 2	LONG	Numeric	
Option Type 2	CHAR [2]	Character	
CA Level 2	LONG	Numeric	
Reference Price	LONG	Numeric	Settlement price of leg 1 contract will be the base for calculating price difference ranges
Day Low Price Diff Range	LONG	Numeric	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	LONG	Numeric	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	LONG	Numeric	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	LONG	Numeric	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	LONG	Numeric	Board lot quantity of leg 1 contract
Minimum Lot Quantity 1	LONG	Numeric	Min lot quantity of leg 1 contract
Tick Size 1	LONG	Numeric	Tick size of leg 1 contract
Board Lot Quantity 2	LONG	Numeric	Board lot quantity of leg 2 contract
Minimum Lot Quantity 2	LONG	Numeric	Min lot quantity of leg 2 contract
Tick Size 2	LONG	Numeric	Tick size of leg 2 contract
Eligibility	CHAR [1]	Character	The flag will be set to 1 if the combination is allowed to trade.
Delete Flag	CHAR [1]	Character	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

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

Directory Path	/<Product Root>/NIBIS/MASTERS_DATA
File Name	co_contract.gz
Compression	Compressed (.gz)
Generation Frequency	Once (EOD)

3.4.1 File Name: co_contract.txt

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

Field Name	Data Type	Value	Brief Description
INFO HEADER			
Market String	CHAR [6]	'NEATCO'	Market string
Version Number	CHAR [5]	Character	Version number (VV.RR.SS)
INFO DATA			
Token	LONG	Numeric	Each token number is unique, and it indicates a unique contract.
Underlying Token	LONG	Numeric	Asset Token represents the unique token assigned to the underlying asset from which one or more contracts are derived.
Instrument Type	CHAR [6]	Character	'FUTBLN' – Bullion Futures 'FUTBAS' – Base Metals Futures 'FUTENR' – Energy Futures 'OPTBLN' – Bullion Options 'OPTFUT' – Options on Futures Following is used as underlying token : 'UNDCOM' – Underlying Commodity
Symbol	CHAR [10]	Character	This field should contain the symbol of contract.
Series*	CHAR [2]	Character	Value shall be set to 'XX'.
Filler	CHAR [1]	Character	Blank
Expiry Date	LONG	Numeric	Expiry date indicates the last day till which a particular contract is available for trading. Expiry date in number of seconds elapsed from midnight 01-Jan-1980.
Strike Price*	LONG	Numeric	The value will be in paisa for Options, and the value will be '-1' for Futures contracts.

Option Type*	CHAR [2]	Character	The options contracts shall be European styled which can be exercised only on the expiration date. 'CE' – Call European 'PE' – Put European 'E' indicates European option for which settlement can be done only on expiry day. It will be 'XX' for Futures contracts.
Precision	CHAR [1]	Character	This contains the number of digits after decimal for every price field of the contract`. e.g. '2' (two digits after decimal is the precision for the price fields)
CA Level	SHORT	Numeric	Value shall be set to 0.
Filler	CHAR [1]	Character	Blank
Reserved Identifier	CHAR [1]	Character	'0' – Unreserved Contract '1' – Reserved Contract
Permitted To Trade	SHORT	Numeric	0 = Listed but not permitted to trade 1 = Permitted to trade
Issue Rate*	SHORT	Numeric	Value shall be set to 0.
Contract Eligibility Per Market	ST_CONTRACT_ELIGIBILITY_PER_MARKET [4]	Structure	Refer to the table given below ST CONTRACT ELIGIBILITY PER MARKET and FAQ3 .
Issue Start Date	LONG	Numeric	It is the first day an Initial Public Offering (IPO) or public debt issue opens for investors to place bids.
Interest Payment Date	LONG	Numeric	Interest payment date of the issue.
Issue Maturity Date	LONG	Numeric	It is same as the expiry date and indicates the last day up to which the contract is available for trading. It can be extended under special circumstances.
Margin Percentage	LONG	Numeric	It is Initial margin percent to be collected on a contract. Value shall be set to 0.
Minimum Lot Quantity	LONG	Numeric	The quantity entered while placing a Buy/Sell order should be greater than minimum lot size.
Board Lot Quantity	LONG	Numeric	The quantity entered while placing a Buy/Sell order should be a multiple of board lot quantity and greater than the minimum lot size.
Tick Size	LONG	Numeric	Tick size of the contract.
Issued Capital*	DOUBLE	Numeric	Value shall be set to 1E+12.

Freeze Quantity	LONG	Numeric	Any order placed having quantity greater than this enters a freeze and requires exchange action before getting confirmed.
Warning Quantity	LONG	Numeric	It is meant for warning indication for quantity.
Listing Date	LONG	Numeric	It indicates the date on which the particular contract was listed for trading.
Expulsion Date*	LONG	Numeric	Value shall be set to 0.
Readmission Date*	LONG	Numeric	Value shall be set to 0.
Record Date*	LONG	Numeric	Value shall be set to 0.
No Delivery Start Date*	LONG	Numeric	Value shall be set to 0.
No Delivery End Date*	LONG	Numeric	Value shall be set to 0.
Low Price Range	LONG	Numeric	Any order placed at a price lower than this value goes into a freeze and requires exchange action before the order gets confirmed.
High Price Range	LONG	Numeric	Any order placed at a price higher than this value goes into a freeze and requires exchange action before the order gets confirmed.
ExDate*	LONG	Numeric	Value shall be set to 0.
Book Closure Start Date*	LONG	Numeric	Value shall be set to 0.
Book Closure End Date*	LONG	Numeric	Value shall be set to 0.
Local LDB Update Date Time	LONG	Numeric	This is the local database update datetime.
Exercise Start Date*	LONG	Numeric	This is the starting date from which the holder is allowed to exercise their option. Value shall be set to zero for Futures contracts & non-zero for Options contracts.
Exercise End Date*	LONG	Numeric	This is the last date on which the holder of an option can exercise their right to buy or sell the underlying asset. Value shall be set to zero for Futures contracts and non-zero for Options contracts.
Ticker Selection*	SHORT	Numeric	Not applicable

Multiplier	LONG	Numeric	Multiplier for the particular contract
Quality Spec	CHAR [12]	Character	Quality Specifications of contract
Name	CHAR [26]	Character	Contract name
EGM/AGM*	CHAR [1]	Character	'0'- No EGM/AGM
Interest Dividend*	CHAR [1]	Character	'0'- No Interest/Dividend
Rights Bonus*	CHAR [1]	Character	'0'-No Rights/Bonus
MFAON	CHAR [1]	Character	'0'- MF/AON not allowed
Commodity Spec	CHAR [24]	Character	This field will contain the following details: Price Quote; Trading Lot; Delivery Lot; Unit.
ExStyle*	CHAR [1]	Character	Value shall be set to 'E'. 'E' - European style Exercise allowed; hence exercise can be done only on the expiry day.
ExAllowed*	CHAR [1]	Character	Value shall be set to 'N'.
ExRejectionAllowed*	CHAR [1]	Character	Value shall be set to 'N'.
PIAllowed*	CHAR [1]	Character	Value shall be set to 'N'.
Checksum*	CHAR [1]	Character	Not used
Is Corporate Adjusted*	CHAR [1]	Character	Value shall be set to 'N'.
Symbol For Asset	CHAR [10]	Character	ID of the Instrument for the underlying asset of this contract
Launch Day Indicator	CHAR [6]	Character	'Y' - Indicating Launch Day of new underlying for futures contracts ' ' - Indicating other contracts
Base Price	LONG	Numeric	Base price of the contract
Delete Flag	CHAR [1]	Character	This indicates whether the contract is deleted or not. 'N' - Active 'Y' - Deleted

Note: * denotes not applicable for Commodity Futures Contract.

ST_CONTRACT_ELIGIBILITY_PER_MARKET

This provides contract status for the mentioned market types in following order:

- 1) Normal Market
- 2) Odd lot Market*
- 3) Spot Market*
- 4) Auction Market*

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

Note: * denotes not applicable for Commodity Futures Contract.

3.5 Electronic Gold Receipts Segment

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

Directory Path	/<Product Root>/NIBIS/MASTERS_DATA
File Name	security_eg.gz
Compression	Compressed (.gz)
Generation Frequency	Once (EOD)

3.5.1 File Name: security_eg.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
INFO HEADER			
Market String	CHAR [6]	'NEATEG'	Market string
Version Number	CHAR [7]	Character	Version number (VV.RR.SS)
Date	LONG	Numeric	Unix timestamp in number of seconds elapsed since midnight 01-Jan-1980
INFO DATA			
Token	LONG	Numeric	Token number of the security. This is unique for a particular symbol-series combination.
Symbol	CHAR [10]	Character	Exchange assigned security code
Series	CHAR [2]	Character	Exchange-defined trading category or series of a security.
Instrument Type	SHORT	Numeric	This field contains the instrument type of security. It can be one of the following: 1 = Equities 2 = Preference Shares 3 = Debentures 4 = Warrants 5 = 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 (Refer FAQ 4 for more information.)
Credit Rating	CHAR [17]	Character	Daily price range is provided in this field

Security Eligibility Per Market	ST_SECURITY_ELIGIBILITY_PER_MARKET [6]	Structure	Refer the table given below ST SECURITY ELIGIBILITY PER MARKET and FAQ .
Board Lot Quantity	LONG	Numeric	The quantity entered while placing a Buy/Sell order should be a multiple of board lot quantity and greater than the minimum lot size.
Tick Size	LONG	Numeric	Tick size of the security
Security Name	CHAR [25]	Character	Security name
SurvInd	SHORT	Numeric	Indicator for security in Surveillance Measure. Values range between 0 to 99.
Issue Start Date	LONG	Numeric	It is the first day an Initial Public Offering (IPO) or public debt issue opens for investors to place bids.
Issue IP Date	LONG	Numeric	Interest Payment Date
Issue Maturity Date	LONG	Numeric	Not applicable
Freeze Percent	SHORT	Numeric	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	Indicates the date on which the particular security was listed for trading.
Expulsion Date	LONG	Numeric	Indicates the date on which the particular security was expelled.
Re-Admission Date	LONG	Numeric	Indicates the date on which the particular security was re-introduced.
Ex-Date	LONG	Numeric	Last date of trading before any corporate action.
Record Date	LONG	Numeric	It represents the cutoff date for shareholders to be eligible for specific corporate action.
No Delivery Start Date	LONG	Numeric	Date from when delivery of shares is stopped for book closure.
No Delivery End Date	LONG	Numeric	No delivery end date.
Participant In Mkt Index	CHAR [1]	Character	'1' – Security is present in NIFTY Index. '0' – Security is not present in NIFTY Index.
AON	CHAR [1]	Character	'1' – AON is allowed. '0' – AON is not allowed
MF	CHAR [1]	Character	'1' – MF is allowed. '0' – MF is not allowed

Settlement Type	SHORT	Numeric	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 end.
Dividend	CHAR [1]	Character	'1' – Dividend '0' – No Dividend
Rights	CHAR [1]	Character	'1' – Rights '0' – No Rights
Bonus	CHAR [1]	Character	'1' – Rights '0' – No Rights
Interest	CHAR [1]	Character	'1' – Interest '0' – No Interest
AGM	CHAR [1]	Character	'1' – AGM '0' – No AGM
EGM	CHAR [1]	Character	'1' – EGM '0' – No EGM
MM Spread	LONG	Numeric	This is the spread value of 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	This is used as an identifier for different market securities. 0 = Not used 1 = Securities (except SME) eligible in Normal market and Odd Lot markets 2 = IPO Session is being held security (including SME) 3 = Re-list Session is being held security (including SME) 4 = Illiquid security eligible for Call Auction session (CA2) (including SME) 5 = SME securities eligible in normal market
Remarks	CHAR [25]	Character	Remarks
Local DB Update Date Time	LONG	Numeric	This is the local database update datetime.
Delete Flag	CHAR [1]	Character	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	CHAR [12]	Character	This field contains the ISIN of security.

ST_SECURITY_ELIGIBILITY_PER_MARKET

This provides security status for the below-mentioned market types in following order:

- 1) Normal Market
- 2) Odd lot Market
- 3) Spot Market
- 4) Auction Market
- 5) Additional market 1/ Call Auction 1
- 6) Additional market 2/ Call Auction 2

Field Name	Data Type	Value	Brief Description
ST_SECURITY_ELIGIBILITY_PER_MARKET			
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)
Eligibility	CHAR [1]	Character	'1' - Allowed to trade '0' - Not allowed to trade

4. SFTP Access, Setup and Usage

File transfer shall be performed over SFTP (Secure File Transfer Protocol) over the Internet.

4.1 Client Inputs and Prerequisites

The client shall provide the following details with NSE Data & Analytics Limited (NDAL):

- SSH RSA Public Key of the client system
- Static Public IP address for SFTP access

These details are mandatory for enabling secure access.

Only the public key (id_rsa.pub) shall be shared with NDAL after the successful generation of the key pair (public and private keys).

4.2 NDAL Deliverables

Upon successful processing, NDAL shall provide the following access details:

- [SFTP server URL / host name](#)
- [SSH port number](#)
- User ID (to be provisioned by NDAL)
- [Remote directory path](#)

4.3 General Guidelines

- File transfer shall be performed over a secure SFTP channel using SSH key-based authentication.
- Password-based authentication shall not be supported. Access shall be granted only upon successful registration of the client's SSH RSA public key with NDAL.
- Clients should ensure that the private key corresponding to the registered public key is securely stored and not shared.
- Clients are responsible for configuring their local systems and SFTP client tools for establishing the connection and downloading files.
- NDAL does not provide SFTP software or support for client-side configuration and setup.

4.4 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.

4.4.1 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.

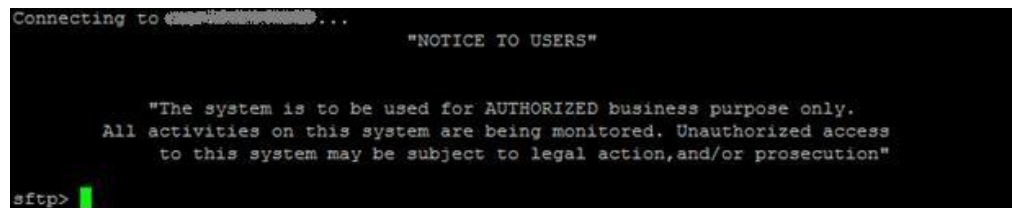
4.4.2 SFTP Login

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 192.168.1.100...
"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>
```

4.4.3 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.

4.4.4 Ending the SFTP session.

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

4.4.5 SFTP commands help.

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

4.5 SFTP on Windows platform

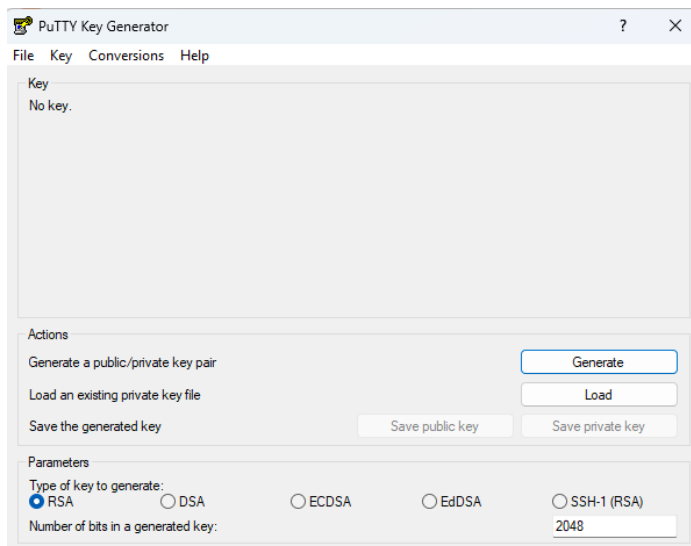
4.5.1 Generation of the SSH RSA key-pair on Windows

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

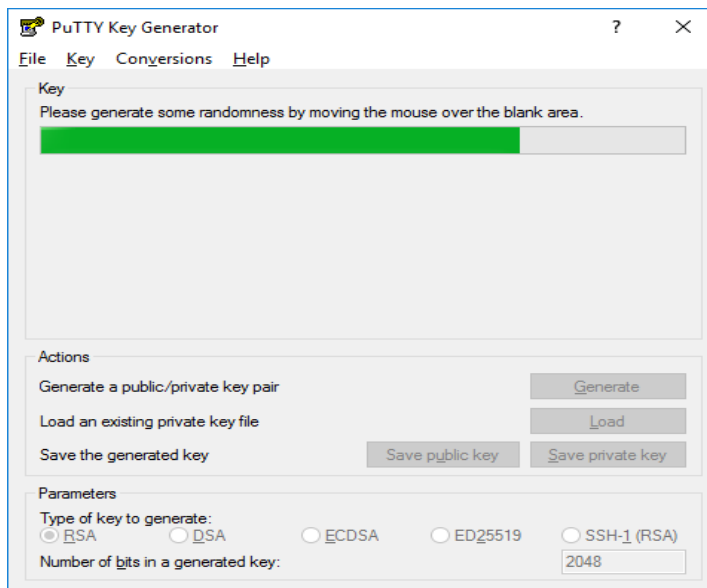
Download the PuttyGen application (freely available on the Internet). Then follow these steps to generate the key-pair:

- Start the PuttyGen application.

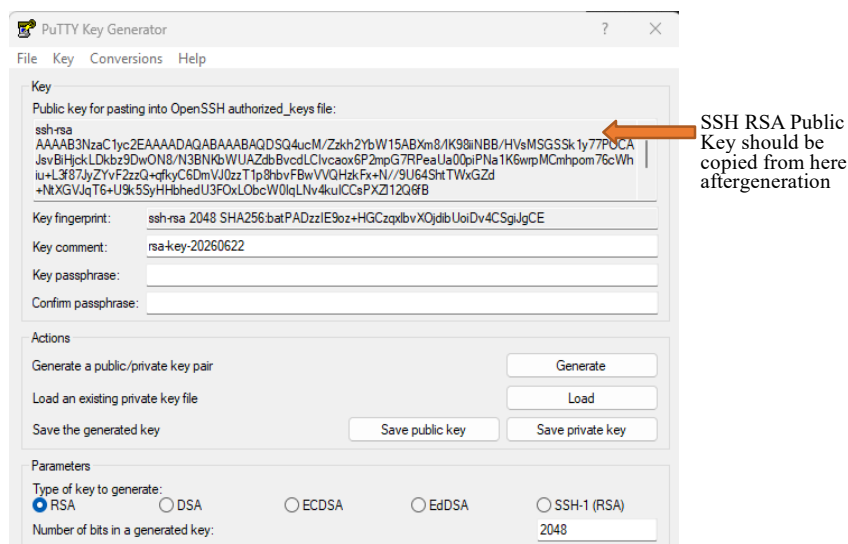
You will be presented with a dialog which looks something like this:



- Select "SSH2RSA" with 2048-bit size or greater.
- Click Generate and move the mouse randomly within the window. PuTTYgen uses these movements to collect entropy (randomness), which is essential for secure key generation. The progress bar will advance as sufficient randomness is gathered.



- The duration of this step may vary depending on the chosen key size. Once the progress bar is complete, PuTTYgen will begin the key generation process, which may take a few seconds to a few minutes.
- Upon completion, the generated public key will be displayed in the window.
- 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 NDAL.

- Copy the public key content as presented on the screen (selected area in the below screenshot) 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 NDAL when requesting for SFTP credentials.

4.5.2 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.

4.6 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 "SFTP (Secure File Transfer) Access, Setup and Usage" section is intended as a guide used to understand and become familiarized with this transfer protocol.

5. Abbreviations and Acronyms Used

BOD	Begin Of Day Information
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
MM	Market Maker
NSE	National Stock Exchange
VV.RR.SS	Version. Release. Sub-release
BSE	Bombay Stock Exchange
CBRICS	Corporate Bond Reporting and Integrated Clearing System
RFQ	Request For Quote
MTBT	Multicast Tick By Tick
EGR	Electronic Gold Receipts

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~~ Closing Auction
4. **Auction Market**
5. Call Auction1
6. **Call Auction2**

- 2) Do security or contract files contain dummy symbols and if they exist, how do they 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.

4) How are BSE-listed securities with duplicate symbols identified and handled in Cash Market segment?

When ingesting and processing BSE-listed securities, our system applies predefined rules to identify BSE-exclusive instruments and systematically resolve any symbol duplication to ensure uniqueness within NSE systems.

Identification of BSE-exclusive securities:

- All BSE-exclusive securities are internally identified by appending the "\$" character to the symbol in the NSE symbol field.
- This suffix is used by the system to distinguish BSE-exclusive securities from NSE-listed securities.

Handling of duplicate symbols:

If a symbol with the "\$" suffix already exists in the system, the following system-driven resolution logic is applied to generate a unique symbol:

1. First Iteration:
 - The system compares the first nine characters of the incoming symbol.
 - If a duplicate is detected, the 9th character is removed and replaced with "\$".
2. Second and Third Iterations:
 - If duplication persists, the system continues truncating the symbol by one additional character from the right in each iteration (up to a maximum of three iterations).
 - After each truncation, "\$" is appended to maintain the BSE-exclusive identifier.
3. Post Third Iteration
 - If a unique symbol cannot be generated even after three iterations, the system skips processing of the affected record.

Example:

Scenario	Original Symbol	Modified Symbol	Explanation
1	INDIAHOTE	INDIAHOTE\$	Since symbol is less than 10 characters, suffix "\$" appended in system.
2	INDIAHOTEL	INDIAHO\$\$	After considering first 9 characters and appending \$, is already present in the system then 9th character "E" shall be replaced by "\$".
3	INDIAHOTELS	INDIAH\$\$\$	After considering first 8 characters, as per scenario 2, is already present in the system then 8th character "T" shall be replaced by "\$".

Additional Notes:

- The symbol resolution logic is fully automated and handled internally.
- All security packets may contain a mix of NSE-listed and BSE-exclusive securities, with BSE-exclusive securities identifiable through the applied symbol conventions.

5) How to identify BSE listed contracts in Futures and Options segment?

BSE exclusive contracts shall have "\$" suffixed in the associated symbol field at NSE. Below are the examples.

Contract Name	Expiry Date	Strike Price	Option Type	Contract Description
Options Contracts				
NSDL\$	26APR2026	143000	PE	NSDL26APR1430PE
REGAL\$	26APR2026	143000	CE	REGAL26APR1430CE
BLUEJACK\$\$	26APR2026	143000	CE	BLUEJACK\$26APR1430CE
Futures Contract				
BLUEJAC\$\$\$	26APR2026	-	XX	BLUEJAC\$\$26APRFUT

Please note that examples provided are for illustration purposes only.

7. Support Information

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