



EOD DATA

WHOLESALE DEBT MARKET

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TECHNICAL SPECIFICATIONS FOR END OF DAY DATA

WHOLESALE DEBT MARKET

A. INTRODUCTION

NSE Data & Analytics Limited disseminates the NSEIL End of Day (EOD) data to various information agencies, electronic and print media, financial institutes and websites. The EOD vendors connect to the NIBISLIVE server that contains the EOD data files, through Internet and FTP to the server with a valid user name and password. The user name and password authentication provides the secured login to the server. The EOD files are populated on the server in the evening of each trading day.

B. PRODUCT DETAILS

The EOD data is a delayed data services that contains the End of Day bhavcopy information along with security and trade details. This includes the data for Wholesale Debt Market. This data includes Market activity reports and other details that gives vide information about the market. The list of files populated on NIBISLIVE server along with their scheduled time is listed below table.

C. CONNECTIVITY

All vendors need to connect internet and SFTP to the NIBISLIVE server with an IP address 203.199.75.115. The SFTP connection requires a User Name for logging in and that is provided by NSE Data & Analytics Ltd. after the vendors subscribes for it.

**Refer section F for details on SFTP connectivity.*

D. DATA DETAILS

The EOD data is provided in current date folder /EOD/WDM on each trading day. The WDM data is provided daily in single zipped file "DLYDDMMYYYY.ZIP". This file includes 6 different types of file and the list of these files is shown in table No. 1.

Sr. No.	File Name	Market Type	Number of Files	Time (approx.)
1.	TRDDDMM.XLS	WDM	01	18:00 hrs
2.	TRDDDMM.CSV	WDM	01	18:00 hrs
3.	DMRDDMM.DOC	WDM	01	18:00 hrs
4.	LEGEND.DOC	WDM	01	18:00 hrs
5.	ADDYYYYMMDD.CSV	WDM	01	18:00 hrs
6.	MATYYYYMMDD.CSV	WDM	01	18:00 hrs

Table No. 1

Further, every day a ZCYC_DDMMYYYY.ZIP is also provided in current date folder /EOD/WDM. This file contains a single file, the details of the same is shown in table no 2.

Sr. No.	File Name	Market Type	Number of Files	Time (approx.)
7.	ZCYC_DDMMYYYY.XLS	WDM	01	18:15 hrs

Table No. 2

The Weekly data is provided in file “WKLYDDMMYYYY.ZIP” on last working day of every week. This file includes 4 types of files and the list of these files is shown in table No. 3.

Sr. No.	File Name	Market Type	Number of Files	Time (approx.)
8.	ADDDMMYYYY.CSV	WDM	01	18:00 hrs
9.	MATDDMMYYYY.CSV	WDM	01	18:00 hrs
10.	TNDDMMYYYY.DOC	WDM	01	18:00 hrs
11	WTRDDMMYYYY.DOC	WDM	01	18:00 hrs

Table No. 3

Also the Monthly data is provided in file “MLYMMYYYY.ZIP” on every month end. This file includes 3 types of files and the list of these files is shown in table No. 4.

Sr. No.	File Name	Market Type	Number of Files	Time (approx.)
12.	TROVMMYY.XLS	WDM	01	18:00 hrs
13.	PARTMMYY.XLS	WDM	01	18:00 hrs
14.	LTPMMYY.XLS	WDM	01	18:00 hrs

Table No.4

E. DETAILS OF DATA FILES

1. FILE NAME: TRDDMM.XLS

This file contains trading details of securities traded in WDM segment on a trading day.

Data Structure: a)

Sec Type

b) Security

c) Issue Name

d) Trade Type /Term

e) Number of Trades

f) Traded Value (Rs Crs)

g) Low Price / Rate

- h) High Price / Rate
- i) Last Trade Price / Rate
- j) Value Weighted Average Price/Rate
- k) Weighted Yield

2. FILE NAME: TRDDMM.CSV

This file contains trading details of securities traded in WDM segment on a trading day.

Data Structure: a)

- Sec Type
- b) Security
- c) Issue Name
- d) Trade Type
- e) Number of Trades
- f) Trade Value
- g) Low Price
- h) High Price
- i) LTP
- j) WGT AVG PRI
- k) WGT Yield

3. FILE NAME: DMRDDMM.DOC

This file contains category wise traded value during the day list of the top three Government and Non-government securities traded.

Data Structure:

- Market Report
- Top Traded Securities
- MIBID / MIBOR Detail
Mumbai Inter-bank Bid Rate (MIBID) and NSE Mumbai Inter-bank Offer Rate (MIBOR)

4. FILE NAME: LEGEND.DOC

This file contains the details of Legend for daily market reports.

Data Structure

5. FILE NAME: ADDYYYYMMDD.CSV

This file contains the details of the issues added during the day.

Data Structure a)

- Sec Type
- b) Security

- c) Issue Name
- d) Issue Description
- e) Coupon
- f) Issue Date
- g) Maturity date
- h) Next IP Date
- i) Coupon frequency
- j) Rating
- k) Listed

6. FILE NAME: MATYYYYMMDD.CSV

This file contains the details of the issues matured during the day

Data Structure

- a) Sec Type
- b) Security
- c) Issue Name
- d) Issue Description
- e) Coupon
- f) Issue Date
- g) Maturity date
- h) Rating
- i) Listed

7. FILE NAME: ZCYC_DDMMYYYY.XLS

This file contains ZCYC (Zero Coupon Yield Curve) details as explained below.

The information is provided in different sheets

Data Structure:

Calc

This sheet contains spot rate calculation based on ZCYC parameters for different maturity.

Chart

This contains the Plot of estimated ZCYC chart for Spot Interest rates and Maturity in years.

Model & Market Price a.

- a. Issue Name
- b. Security name
- c. Days to Settlement
- d. Accrued Interest
- e. Market Price
- f. Model Price
- g. Price Error
- h. Market Yield

- i. Model Yield
- j. Yield Error

Param

This contains the today's param along with the previous trading day.

Par_Month

This contains the param of all trading days of that month

8. FILE NAME: ADDDDMMYYYY.CSV

This file contains the details of the issues added for the week.

Data Structure a)

- Sec Type
- b) Security
- c) Issue Name
- d) Issue Description
- e) Coupon
- f) Issue Date
- g) Maturity date
- h) Next IP Date
- i) Coupon frequency
- j) Rating
- k) Listed

9. FILE NAME: MATDDMMYYYY.CSV

This file contains the details of the issues matured for the week.

Data Structure

- a) Sec Type
- b) Security
- c) Issue Name
- d) Issue Description
- e) Coupon
- f) Issue Date
- g) Maturity date
- h) Rating
- i) Listed

10. FILE NAME: TNDDMMYYYY.DOC

This file contains details of top 10 issues in terms of volume traded during the week.

Data Structure

- a) Serial Number
- b) Security Type
- c) Security Name
- d) Issue Name
- e) Traded Value (Rs Crs)
- f) Percentage (%) of Total Traded Value
- g) No of Trades

11. FILE NAME: WTRDDMMYYYY.DOC

This file contains the details of securities traded during the week.

Data Structure

- a) Serial Number
- b) Sec Type
- c) Security Name
- d) Issue Name
- e) Trade Type
- f) Number of Trades
- g) Traded Value (Rs in Lakhs)
- h) Low Price
- i) High Price
- j) Last Trade Price
- k) Last Traded Yield
- l) Last Traded Date
- m) Value Weighted Average Price/Rate
- n) Weighted Yield

12. FILE NAME: TROVMMYY.XLS

This file contains turnover details.

Data Structure**□ Year –wise**

- a) Year
- b) Net Traded Value (Rs Cr)
- c) Average Daily Value (Rs.Cr)
- d) Number of trades
- e) Average Trade Size (Rs. Cr)

□ Month -Wise

- a) Month
- b) Net Traded Value (Rs Cr)

- c) Average Daily Value (Rs Cr)
- d) Number of trades
- e) Average Trade Size (Rs Cr)

13. FILE NAME: PARTMMYY.XLS

This file contains the list of participants as on month end.

Data Structure

- a) Serial Number
- b) Participant Name
- c) Telephone Number
- d) Fax Number

14. FILE NAME: LTPMMYY.XLS

This file contains details of the last traded prices of securities available for trading on WDM segment as on the last date of previous.

Data Structure

- a) Security Name
- b) Issue Name
- c) Security Type
- d) Issue Description
- e) Issue Date
- f) Maturity Date
- g) Coupon Date
- h) Last IP Date
- i) Next IP date
- j) Coupon Frequency
- k) Rating
- l) Listed
- m) Last Trade Date
- n) Last Trade Quantity (Rs in Lakhs)
- o) Last Trade Price

F. 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 form the Exchange.

The following details will be provided once the request is processed by the Exchange:

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

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

a) 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 generally 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.

1. Generation of the SSH RSA key-pair on Linux : Generate the new key-pair with 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 the 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 the 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 something 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, 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 user name of the machine. This is used for demo purpose only. The same will differ as per your server and user names.

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 [redacted]...
"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> █
```

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. Ending the SFTP session

The SFTP "bye" command may be used for terminating the session

5. SFTP commands help

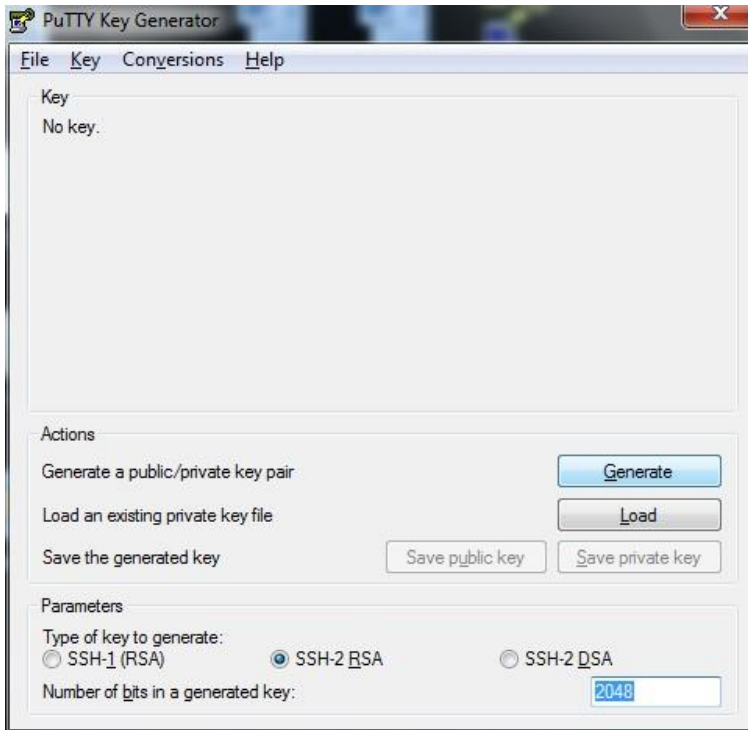
Help may be obtained with SFTP commands by typing the "help" command at the SFTP prompt.

b) SFTP on Windows platform

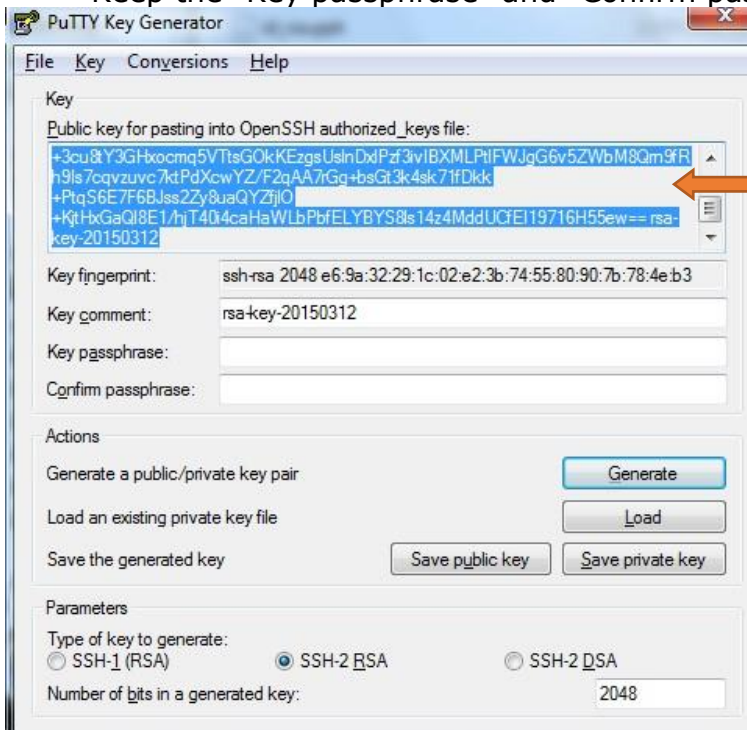
1. Generation of the SSH RSA key-pair on Windows: This guide explains how to generate the SSH RSA key-pair using the PuttyGen application.

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.



SSH RSA Public Key should be copied from here after generation

- 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 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 Exchange when requesting for SFTP credentials.

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.

c) Further support

Apart from the above guide, many of the online resources can be referred 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.

G. CONTACT DETAILS

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