TECHNICAL DOCUMENT

DELAYED SNAPSHOT DATA

BSE NSE MARKET FEED

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INDEX

BSE & NSE DELAYED FEED

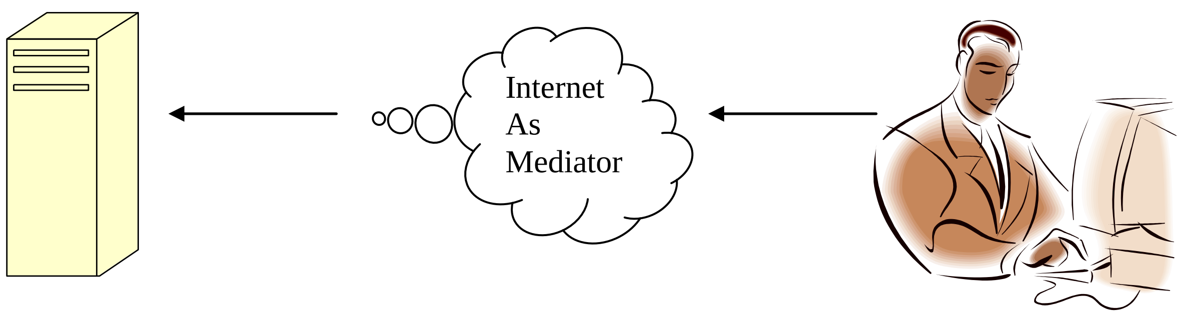
1. INTRODUCTION

Dion Global provides BSE & NSE Market data on delay basis. The delayed quotes are provided by way of ASCII data files that can be downloaded by the customer at any time from the FTP Server hosted by Dion Global. The customer will connect to the server through Internet and use FTP client software to download the files. The files on this server are generated on regular interval basis. The customer will be given a unique User ID and password which is active only for the agreed period. At Dion Global FTP server files will be available for last 30 days to download.

2. CONNECTION DETAILS

The vendors can connect to the Dion Global FTP server through Internet using FTP client software. The server IP address is **ftp://203.200.1.78**

Structural Diagram



(Dion Server) **(Dion Vendor)**

ftp://203.200.1.78/BSE
And
ftp://203.200.1.78/NSEEQDE

The Vendor will connect the Dion FTP server with the specify User ID and Password provided by Dion and download the files frequently and the same will be updated at their premises.

3. DATA DETAILS

BSE

The ASCII data files are generated at a regular interval during the market hours.

The BSEYYYYMMDD_SNO.CSV files contains trade/Order information of the scrip along with their open, high, low, close (OHLC) prices that are being traded. The file contains a single record for each scrip that is traded. These files are generated only during period of 09:05 hrs. to 16.00 hrs.

The YYYYMMDD stands for the <4 digit year> followed by <2 digit month > followed by <2 digit day>

For example a file BSE Equity Market statistics file generated at 10:45 A.M on 8th January 2012 will be named as BSE20120108_1.CSV

NSE

The ASCII data files are generated at a regular interval during the market hours. These are NSEYYYYMMDD_SNO.CSV

The NSEYYYYMMDD_SNO.CSV files contains equity market statistics and Trade/Order information of the scrip along with their open, high, low, close (OHLC) prices that are being traded. The file contains a single record for each scrip that is traded. These files are generated only during period of 09:15 hrs. to 16.00 hrs.

The YYYYMMDD stands for the <4 digit year> followed by <2 digit month > followed by <2 digit day>

For example a file NSE Equity Market statistics file generated at 10:45 A.M on 8th January 2012 will be named as NSE20120108_1.CSV.

4. DATA STRUCTURE DETAILS

4.1. BSE MARKET

The BSEYYYYMMDD_SNO.CSV is generated in /BSEDELAYEDFEEDS/YYYYMMDD folder on the server.

File name - BSEYYYYMMDD_SNO.CSV		
Field	**DATA TYPE / LENGTH**	**DESCRIPTION**
TickerName	Varchar (12)	Dion Unique code
LastTradeTime	Datetime	Last trade time
LastTradePrice	Float (8)	Last trade price
HighPrice	Float (8)	Day’s high price
LowPrice	Float (8)	Day’s low price
OpenPrice	Float (8)	Day’s open price
ClosePrice	Float (8)	Previous Day’s close price
BidPrice	Float (8)	Best bid price available in market
OfferPrice	Float (8)	Best offer price available in market
BidQty	Float (8)	Best bid quantity available in market
OfferQty	Float (8)	Best offer quantity available in market
TotalTradedQty	Float (8)	Total traded quantity

4.2. NSE MARKET

The NSEYYYYMMDD_SNO.CSV is generated in /NSEDELAYEDFEEDS/NSEEQ/Data/ YYYYMMDD folder on the server.

File name - NSEYYYYMMDD_SNO.CSV		
Field	**DATA TYPE / LENGTH**	**DESCRIPTION**
Token	SmallInt	That is unique no given by exchange for each security
Symbol	Varchar(20)	Trading Symbol of the security
Series	Char(3)	Trading Series of the security
TickerName	Varchar(30)	Dion Unique code
LastTradeTime	DateTime	Last trade time
LastTradePrice	Float(8)	Last trade price
HighPrice	Float(8)	Day's high price
LowPrice	Float(8)	Day's low price
OpenPrice	Float(8)	Day's open price
ClosePrice	Float(8)	Day's close price
BestBuyPrice	Float(8)	Best bid price available in market
BestSellPrice	Float(8)	Best offer price available in market
BestBuyQty	Float(8)	Best bid quantity available in market
BestSellQty	Float(8)	Best offer quantity available in market
TotalTradedQty	Float(8)	Total traded quantity
TotalTradedValue	Float(8)	Total traded value
LTQ	Float(8)	Last traded quantity
AvgTradedPrice	Float(8)	Weighted average price
PreviousClose	Float(8)	Previous Day's close price

5. Master Data
The Master data file contains Four Master for Price Data base they are as follow:

5.1 SECURITY MASTER
5.2 LISTING MASTER
5.3 EXCHANGE MASTER
5.4 INDEX MASTER

These files are uploaded on below mention URL daily in the EOD. And the formats for these files are in .xml

http://www.download.dionglobal.com/portals/VendorName/VendorName.asp

5.1 SECURITY MASTER

File name - SecurityMaster.xml		
Field	**DATA TYPE / LENGTH**	**DESCRIPTION**
CompanyCode	Decimal(9,12)	This code is given by us to identify each company
SecurityTypeCode	Tinyint(1)	To build a securitycode (this is for our purpose)
SecuritySubTypeCode	Tinyint(1)	To build a securitycode (this is for our purpose)
SerialNumber	Tinyint(1)	To build a securitycode (this is for our purpose)
SecurityCode	Char(21)	This is a unique code given by Dion for each security
TickerName	Char(12)	This is a short company name to identify the company (This is also a unique ticker name)
IssuePrice	Smallmoney(4,10)	Issue price @ the time of public issue (not compulsory)
Description	Char(75)	This field contains full name of the security (either company name or security name)
DateOfIssue	Smalldatetime(4)	Issue date @ the time of public issue (not compulsory)
DateOfExpiry	Smalldatetime(4)	This is given for bond or any other security which gets expired after certain period (not compulsory)
FaceValue	Smallmoney(4)	Face value of the security
MarketLot	Smallint(2)	Market lot of the security
ISINCode	Char(12)	This code is given by the depositories (NSDL/CDSL)
Remarks	Varchar(256)	Any remark related to the security
ReasonForModification	Char(50)	Any remark related to the security
IsItActiveSecurity	Bit(1)	This indicates whether the security is Active or Inactive
LastModifiedOn	Datetime(8)	Last modification made in the database
DeleteFlag	Bit(1)	Currently not using

To get the Companies from the Security Master

Select * from SECURITYMASTER where ((SecurityTypeCode = 5 and SecuritySubTypeCode = 4 and SerialNumber=1 and isitactivesecurity=1)
or (SecurityTypeCode = 5 and SecuritySubTypeCode = 1 and SerialNumber=1 and isitactivesecurity=1)
or (SecurityTypeCode = 5 and SecuritySubTypeCode = 3 and SerialNumber=1 and isitactivesecurity=1))
or TickerName in ('Ind-SwiftLab', 'JindalWorldW'))

To get the Indices from the Security Master

Select * from SECURITYMASTER where SecurityTypeCode = 26 and SecuritySubTypeCode = 5 and isitactivesecurity=1

Sample XML file shown below:


```
<?xml version="1.0" encoding="iso-8859-1" ?>
- <SecurityMaster>
  - <Item>
        <CompanyCode>11310005</CompanyCode>
        <SecurityTypeCode>5</SecurityTypeCode>
        <SecuritySubTypeCode>4</SecuritySubTypeCode>
        <SerialNumber>1</SerialNumber>
        <SecurityCode>011310005.00005004001</SecurityCode>
        <TickerName>RNTPlantatio</TickerName>
        <IssuePrice />
        <Description>RNT Plantations Ltd.</Description>
        <DateOfIssue />
        <DateOfExpiry />
        <FaceValue>10</FaceValue>
        <MarketLot>100</MarketLot>
        <ISINCode>INE733C01014</ISINCode>
      - <Remarks>
            - <![CDATA[ Information For RNT Plantations Ltd. ]]>
        </Remarks>
        <ReasonForModification>Not listed in BSE</ReasonForModification>
        <IsItActiveSecurity>False</IsItActiveSecurity>
        <LastModifiedOn>27/04/2007</LastModifiedOn>
        <DeleteFlag>False</DeleteFlag>
    </Item>
  </SecurityMaster>
```

5.2 LISTING MASTER

File name - ListingMaster.xml		
Field	**DATA TYPE / LENGTH**	**DESCRIPTION**
SecurityCode	Char(21)	This is a unique code given by Dion for each security
ExchangeCode	Smallint(2)	This is a unique code given by Dion for each exchange i.e. 47 for BSE, 50 for NSE
ExchangeGroup	Char(8)	This group is given by the exchanges (A, B, S, T, TS, Z etc)
ScripCode1GivenByExchange	Char(20)	This code/symbol is given by the exchanges to identify a particular company
ScripCode2GivenByExchange	Char(35)	This is a Bolt ID given by the BSE
DateOfListing	Datetime(8)	This date relates when the company got listed on the stock exchange
DateOfDeListing	Datetime(8)	This date relates when the company got de-listed on the stock exchange
DateOfReEnlisting	Datetime(8)	This date relates when the company got Re-listed (after the suspension) on the stock exchange
FirstTradedDate	Datetime(8)	First traded date of the security when it got listed on the exchange
FirstTradedPrice	Smallmoney(4,10)	First traded price of the security when it got listed on the exchange
LastTradedDate	Datetime(8)	Latest/current date of the security when it last traded
LastTradedPrice	Smallmoney(4,10)	Latest/current price of the security when it last traded
FiftyTwoWeekHigh	Smallmoney(4,10)	52 week High of the security
FiftyTwoWeekLow	Smallmoney(4,10)	52 week Low of the security
HighDate	Datetime(8)	52 week High Date of the security
LowDate	Datetime(8)	52 week Low Date of the security
CircuitBreaker	Smallint(2,5)	Upper/Lower filter fixed by the exchanges
ReasonForModification	Char(50)	Any remark related to the security
LastModifiedOn		Last modification made in database
DeleteFlag		True indicate active entries in database

Sample XML file shown below:

```
<?xml version="1.0" encoding="iso-8859-1" ?>
- <ListingMaster>
  - <Item>
      <SecurityCode>014070078.00005001001</SecurityCode>
      <ExchangeCode>47</ExchangeCode>
      <ExchangeGroup>B</ExchangeGroup>
      <ScripCode1GivenByExchange>532117</ScripCode1GivenByExchange>
      <ScripCode2GivenByExchange>PLATINUM</ScripCode2GivenByExchange>
      <DateOfListing>09/01/1997</DateOfListing>
      <DateOfDeListing />
      <DateOfReEnlisting />
      <FirstTradedDate>09/01/1997</FirstTradedDate>
      <FirstTradedPrice>16</FirstTradedPrice>
      <LastTradedDate>05/11/2009</LastTradedDate>
      <LastTradedPrice>0.57</LastTradedPrice>
      <FiftyTwoWeekHigh>1.02</FiftyTwoWeekHigh>
      <FiftyTwoWeekLow>0.35</FiftyTwoWeekLow>
      <HighDate>08/06/2009</HighDate>
      <LowDate>30/03/2009</LowDate>
      <CircuitBreaker>5</CircuitBreaker>
      <ReasonForModification>Porting</ReasonForModification>
      <LastModifiedOn>05/11/2009</LastModifiedOn>
      <DeleteFlag>False</DeleteFlag>
  </Item>
</ListingMaster>
```


5.3 EXCHANGE MASTER

File name - ExchangeMaster.xml		
Field	**DATA TYPE / LENGTH**	**DESCRIPTION**
ExchCode	Smallint(2,5)	ExchangeCode
ExchName	Char(100)	ExchangeName
ShortName	Char(10)	ShortNameOfExchange
OrgType	Char(50)	BusinessOrganisationType
OwnFunds	Money(8,19)	OwnFunds
DateOfInc	Char(15)	DateOfIncorporation
DateOfRecg	Char(15)	DateOfRecognitionBySEBI_MOF
Address	Char(200)	Address
CompListed	Smallint(2)	NoOfCompaniesListed
SecListed	Smallint(2)	NoOfSecuritiesListed
Contact	Char(50)	ContactPerson
Desig	Char(50)	Designation
Phone	Char(50)	Phone
Fax	Char(30)	Fax
EMail	Char(50)	EMail
URL	Char(100)	URL
ExCutive	Char(50)	ExecutiveDirector
TradeMech	Char(50)	TradingMechanism
LastTrDate	Smalldatetime(4)	LastTradedDate
LastTrVolm	Int(4)	LastTradedVolume
LastTrVal	Money(8,19)	LastTradedValue
CurrCode	Char(3)	CurrencyCode
PriceRate	Money(8,19)	PriceFileSubscriptionRate
SubStartDt	Datetime(8)	SubscriptionStartDate
SubsEndDate	Datetime(8)	SubscriptionEndDate
Periodicit	Char(15)	PeriodicityOfSubscription
DataFile	Char(30)	DataFileName
Remarks	Char(100)	Remarks
CreatedOn	Datetime(8)	CreatedOn
CreatedBy	Char(10)	CreatedBy
Modifyon	Datetime(8)	LastModifiedOn
ModifyBy	Char(10)	LastModifiedBy
Reason	Char(50)	ReasonForModification
DeleteFlag	Bit(1)	DeleteFlag

Sample XML file shown below:


```
<?xml version="1.0" encoding="iso-8859-1" ?>
- <ExchangeMaster>
  - <Item>
      <ExchCode>47</ExchCode>
      <ExchName>The Stock Exchange, Mumbai</ExchName>
      <ShortName>BSE</ShortName>
      <OrgType>Voluntary Association of Persons</OrgType>
      <OwnFunds>0</OwnFunds>
      <DateOfInc>1875</DateOfInc>
      <DateOfRecg>1957</DateOfRecg>
    - <Address>
        - <![CDATA[ Phiroze Jeejeebhoy Towers, Dalal Street, MUMBAI 400
            023. ]]>
      </Address>
      <CompListed>5874</CompListed>
      <SecListed>7374</SecListed>
      <Contact>Rajnikant Patel</Contact>
      <Desig>Executive Director</Desig>
      <Phone>+91 22 2655 581,626,860,861</Phone>
      <Fax>+91 22 2655665</Fax>
      <EMail>pro@bseindia.com</EMail>
      <URL>http://www.bseindia.com</URL>
      <ExCutive />
      <TradeMech>Quote Driven</TradeMech>
      <LastTrDate />
      <LastTrVolm>0</LastTrVolm>
      <LastTrVal>0</LastTrVal>
      <CurrCode>INR</CurrCode>
      <PriceRate>0</PriceRate>
      <SubStartDt />
      <SubsEndDate />
      <Periodicit>Yearly</Periodicit>
      <DataFile>QEddmmyy.dbf</DataFile>
    - <Remarks>
        - <![CDATA[ Stock exchange name changed from The Stock Exchange,
            Mumbai to as above. ]]>
      </Remarks>
      <CreatedOn>17/12/2005</CreatedOn>
      <CreatedBy>WALTER</CreatedBy>
      <Modifyon>17 Dec 2005 00:00:00</Modifyon>
      <ModifyBy>WALTER</ModifyBy>
      <Reason>Due to change in Executive Director</Reason>
      <DeleteFlag>False</DeleteFlag>
  </Item>
</ExchangeMaster>
```


5.4 INDEX MASTER

File name - IndexMaster.xml		
Field	**DATA TYPE / LENGTH**	**DESCRIPTION**
IndexCode	Char(21)	Unique code given by Dion for that particular Index
IndexName	Char(50)	Name of the Index
SecurityCode	Char(21)	This is a unique code given by Dion for each security
ReasonForModification	Char(50)	Any remark related to the security
LastModifiedOn	Datetime(8)	Last modification made in database
DeleteFlag	Bit(1)	True indicate active entries in database

Sample XML file shown below:


```
  <?xml version="1.0" encoding="iso-8859-1" ?>
- <IndexMaster>
  - <Item>
        <SecurityCode>010510001.00005004001</SecurityCode>
        <IndexCode>017023928.00026005002</IndexCode>
        <IndexName>BSE 200 Index (200 Cos)</IndexName>
        <Reason>Porting</Reason>
        <Modifyon>30/12/2000 00:00</Modifyon>
        <DeleteFlag>False</DeleteFlag>
    </Item>
  </IndexMaster>
```


5. CONTACT INFO

Following are the contact numbers for further technical assistance:

Name	Mr. Chandrashekar Rao
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