Accessing NASDAQ Historical TotalView-ITCH Data via SFTP

To access NASDAQ Historical TotalView-ITCH Data via SFTP, simply connect to ITCHData SFTP Server using your favorite SFTP client, or custom developed software using the following information:

Address : **sftp://itchdata.nasdaq.com**
Port : **22** *(default)*
Username : Your NASDAQ Historical TotalView-ITCH Account Username
Password : Your NASDAQ Historical TotalView-ITCH Account Password

You can also access ITCHData SFTP Server via a web browser using the following URL format: **sftp://username:password@itchdata.nasdaq.com**

When you connect to ITCHData SFTP Server, you should see sub-directory file folders:

SFTP Sub-Directory	Version of Historical ITCH Data	Date Range
ITCHFiles_v5	Raw Data Formats: TotalView-ITCH 5.0 Data File Format:	Most recent three months, beginning April 8, 2014
NOIIFiles_v5	Raw Data Formats: TotalView-ITCH 5.0 NOII, timestamp and system event messages (Types "I", "T" and "S") only Data File Format: BinaryFile	Most recent three months, beginning April 8, 2014
ITCHFiles_v41	Raw Data Formats: TotalView-ITCH 4.1 Data File Format:	Most recent three months, beginning May 3, 2010
ITCHFilesArchives_v41	Raw Data Formats: TotalView-ITCH 4.1 Data File Format: BinaryFile	Files three months or older dating back to May 3, 2010 Note: This sub-directory will be created on or about August 2, 2010.

SFTP Sub-Directory	Version of Historical ITCH Data	Date Range
NOIIFiles_v41	Raw Data Formats: TotalView-ITCH 4.1 NOII, timestamp and system event messages (Types "I", "T" and "S") only Data File Format: BinaryFile	Most recent three months, beginning May 3, 2010
NOIIFileArchives_v41	Raw Data Formats: TotalView-ITCH 4.1 NOII, timestamp and system event messages (Types "I", "T" and "S") only Data File Format: BinaryFile	Files three months or older dating back to May 3, 2010 Note: This sub-directory will be created on or about August 2, 2010.
ITCHFiles_v4	Raw Data Formats: TotalView-ITCH 4.0 Data File Format: BinaryFile	Most recent three months through May 31, 2010 Note: This directory will be deleted on or about August 2, 2010.
ITCHFilesArchive_v4	Raw Data Formats: TotalView-ITCH 4.0 Data File Format:	Files from January 12, 2009 to May 7, 2010
ITCHFiles_NOII	Raw Data Formats: TotalView-ITCH 4.0 – NOII, timestamp and system event messages (Types "I", "T" and "S") only Data File Format: BinaryFile	Most recent three months through May 31, 2010 Note: This directory will be deleted on or about August 2, 2010.
NOIIFileArchives_v4 (New Directory Name as of May 3, 2010)	Raw Data Formats: TotalView-ITCH 4.0 – NOII, timestamp and system event messages only Data File Format: BinaryFile	Files from January 12, 2009 to May 7, 2010

SFTP Sub-Directory	Version of Historical ITCH Data	Date Range
ITCHFilesArchive_v4f	Raw Data Foramts: TotalView-ITCH 4.0f Data File Format: BinaryFile	June 15, 2009 to August 31, 2009 Note: The TotalView-ITCH 4.0f files include flash / display indicator on order messages. NASDAQ OMX only supported flash orders for limited time period during summer of 2009.
ITCHFilesArchive_v3	Raw Data Formats: TotalView-ITCH 3.0 Data File Format:	Historical TotalView-ITCH files from August 13, 2007 to January 16, 2009
ITCHFilesArchive_v2	Raw Data Formats: TotalView-ITCH 2.0 Data File Format:	Historical ITCH data prior to August 17, 2007

Within these sub-directories, the files will use the following naming convention:

For the <u>full</u> TotalView-ITCH 5.0, TotalView-ITCH 4.1, TotalView-ITCH 4.0 and TotalView-ITCH 4.0f files:

> **SMMDDYY-v#.txt.gz**
> **S** : a prefix which identifies the file as "SoupFile" or "BinaryFile"
> **MM** : two digit month parameter
> **DD** : two digit date parameter
> **YY** : two digit year parameter
> **v** : prefix to identify the version number
> **#** : Version number of the TotalView-ITCH data formats being accessed; 50 - NASDAQ TotalView-ITCH 5.0; 41 = NASDAQ TotalView-ITCH 4.1; 4 = NASDAQ TotalView-ITCH 4.0; 4f = NASDAQ TotalView-ITCH 4.0f
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> **Example:** If you want to download a file for ITCH Data version 5.0 from May 28, 2014, you should download the file named **S052814-v50.txt.gz.**
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> If you want to download a file for ITCH Data version 4.0 from June 30, 2009, you should download the file named **S063009-v4.txt.gz.** Please note that the file extension ".gz" indicates that NASDAQ OMX used the gzip standard for data compression. For details on this compression standard, please refer to http://www.gzip.org/.
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> Please note that the firms should use the BinaryFile protocol to process the TotalView-ITCH 5.0, TotalView-ITCH 4.1, TotalView-ITCH 4.0 and TotalView-ITCH 4.0f files.

For the NOII only data file using TotalView-ITCH 5.0, TotalView-ITCH 4.1, TotalView-ITCH 4.0:

SMMDDYY-v#-NOII.txt.gz
S : a prefix which identifies the file as "SoupFile" or "BinaryFile"
MM : two digit month parameter
DD : two digit date parameter
YY : two digit year parameter
v : prefix to identify the version number
: Version number of the TotalView-ITCH data formats being accessed; 50 = NASDAQ TotalView-ITCH 5.0; 41 = NASDAQ TotalView-ITCH 4.1; 4 = NASDAQ TotalView-ITCH 4.0
NOII: Indicates that the data file contains only Net Order Imbalance Indicator and related data.

Example: If you want to download a file for NOII Data version 4.1 from May 28, 2010, you should download the file named **S052810-v41-NOII.txt.gz.**

If you want to download a file for ITCH Data version 4.0 from June 30, 2009, you should download the file named **S063009-v4-NOII.txt.gz.** Please note that the file extension ".gz" indicates that NASDAQ OMX used the gzip standard for data compression.

Please note that the NOII data files contain the following message types from the TotalView-ITCH 5.0, TotalView-ITCH 4.1 and TotalView-ITCH 4.0 data feed formats:

- Net Order Imbalance Indicator (Type "I")
- Timestamp – Seconds (Type "T")
- System Event (Type "S")

Because the NOII file is a subset of the full TotalView-ITCH data set, firms should use the BinaryFile protocol to process the NOII data files.

For older versions of the TotalView-ITCH files:

SMMDDYY-v#.zip
S : a prefix which identifies the file as "Soup File"
MM : two digit month parameter
DD : two digit date parameter
YY : two digit year parameter
v : prefix to identify the version number
: Version number of the TotalView-ITCH data formats being accessed (allowable versions are "2" or "3").

Example: If you want to download a file for ITCH Data version 2 from June 3rd, 2007, you should download the file named **S060307-v2.zip**.

Please note that firms should use the SoupFile protocol to process the TotalView-ITCH 3.0 and TotalView-ITCH 2.0 files.

If you are experiencing problems accessing the Historical TotalView-ITCH product, please contact Clientsuccess@nasdaq.com.