NYSE TECHNOLOGIES℠

Document title

MONTHLY TAQ USER GUIDE

Version
1.3

Date
7 Nov 2012

PREFACE

DOCUMENT HISTORY

The following table provides a description of all changes to this document.

VERSION NO.	DATE	CHANGE DESCRIPTION
1.0.9	10/30/2006	Initial distribution
1.0.9a	08/31/2010	Formatted into new template
1.1	10/21/2010	Updated following review
1.2	10/16/2012	References to Amex replaced with MKT Changed document name to "Monthly TAQ User Guide" Document rebranded with new NYSE Technologies template
1.3	11/07/2012	Updated values in the 'EX' fields in Table 5 (Consolidated Trade Binary File) and Table 7 (Consolidated Quote Binary File)

CONTACT INFORMATION

■ Telephone: +1 212 383 3640 (International)

■ Telephone: 866 873 7422 (Toll free, US only)

■ Email: service.desk@nyx.com

FURTHER INFORMATION

■ For additional product information, visit: http://www.nyxdata.com/Data-Products/Daily-Monthly-TAQ-Package

■ For updated capacity figures, visit our capacity pages at: http://www.nyxdata.com/capacity

■ For a full glossary, visit: http://www.nyxdata.com/glossary/

CONTENTS

1.   TAQ DATABASE OVERVIEW

The Monthly TAQ database contains intraday transactions data (trades and quotes) for all securities listed on the New York Stock Exchange (NYSE) and NYSE MKT, as well as NASDAQ National Market System (NMS) and SmallCap issues.

Monthly TAQ does not include transaction data that is reported outside of the Consolidated Tape hours of operation. As of August 2000, those hours were 8:00am to 6:30pm EST. As of March 4, 2004, the tape opens at 4:00am EST. Trading in NYSE-listed securities between 8:00am – 9:30am by other markets are also not in TAQ.

Monthly TAQ is available for purchase directly from NYSE Euronext. Individual months are available, as well as annual subscriptions. The product is currently delivered on multiple DVDs containing data for one month and is distributed approximately four weeks after the last trading day of each month.

In order to retrieve trades and quotes data for specific days and ticker symbols, a data extract program, TAQ3.exe, is provided. This is available for Windows 9x, NT and XP environments.

Please note that information on the counterparties involved in the trade is NOT included.

2.   INSTALLING AND USING THE TAQ3 DATA EXTRACTION PROGRAM

2.1   HARDWARE AND SOFTWARE REQUIREMENTS

The Monthly TAQ data extraction program is a 32-bit Windows program that runs on Windows 95, 98, NT and Windows XP. It will not run on prior versions of Windows.

Table 1 TAQ3.exe Requirements

SYSTEM	REQUIREMENTS
CPU	80486 or better
RAM	8mb
Operating System	Windows 9x, NT or XP
Program Disk Space	1mb for the program
Data Extractions Disk Space	Varies, but 3MB minimum per day, 500mb recommended for multiday

Note: The new version of TAQ3 (January 2005) was written in Object Pascal which has an 'INT64' data type to handle the new, larger eight-byte integers. You may not have the ability to handle eight-byte integers if you are running a version of your C compiler or UNIX operating system that is not current. In the latest compilers the 'integer' and 'long integer' data types are synonymous as four-byte integers. You will need the latest compiler/operating system that has a new data type such as the 'INT64' data type mentioned above.

2.2   INSTALLING TAQ3

For the latest information regarding TAQ3, see the file `README.TXT` located in the `TAQWIN32` subdirectory on the DVD.

To Install the TAQ3 Data Extraction Program:

1.   Insert the TAQ3 DVD-ROM in your DVD-ROM drive.

2.   Open Windows Explorer and copy the `TAQWIN32` directory from the TAQ3 DVD-ROM and paste it onto any local or network destination hard drive.

3.   Run `TAQ3.EXE` from the destination hard drive.

4.   When you first run the program, it will prompt you for the location of the data files. This can be either the DVD-ROM that TAQ3 is delivered on, or you can specify another mass storage location where you copy multiple TAQ3 files for ease of use and better extraction speeds.

5.   Exit the program to save your configuration before running any data extractions.

2.3   USING TAQ3

The TAQ3 program allows you to filter and extract just the data you require and output the results in multiple data formats. When you first open the program, a list of all the pre-defined job files is presented to the user. You can run an existing job, run multiple jobs at sequentially, or create a new job. All the jobs are saved in a text file in defined format that can be edited directly using any text editor.
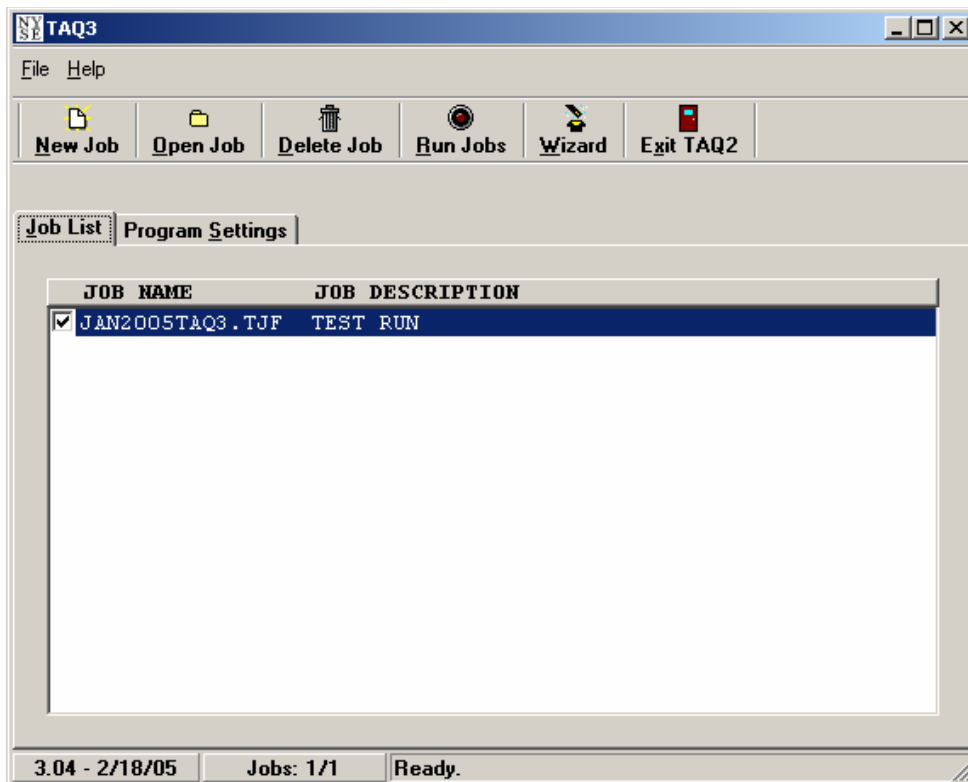
You can also run jobs from the command line to allow batch processing. For example:

`C:\taqwin32\Taq c:\taqwin32\jobs\nyse_tech.tjf`

When running jobs from the command line, the user is not prompted for any menu choices.

Sample Job File

```
[JOB SETTINGS]
JOB DESCRIPTION=NYSE Technology Stocks
JOB INPUT FILE=F:\TAQ\TAQ3\LISTS\NYSE TECH STOCKS.LST
INPUT OPTIONS=0
OUTPUT OPTIONS=1
TIME FORMAT=1
DATE FORMAT=3
NUMBER FORMAT=1
INPUT LIST TYPE=2
OUTPUT FORMAT=2
INCLUDE QUOTES=1
INCLUDE TRADES=1
INCLUDE V2 FIELDS=0
INCLUDE STATS=1
INCLUDE HEADER=0
INCLUDE MAST=0
INCLUDE DIV=0
OVERWRITE OUTPUT=1
JOB ACTIVE=1
START DATE=9/1/99
END DATE=9/7/99
[ITEM GROUP]
ITEM COUNT=20
ITEM NAME1=ADI
ITEM NAME2=AMD
ITEM NAME3=AOL
:
```

```
:
ITEM NAME20=WDC
[QUOTE FIELDS]
QTIM=1
BID=1
OFR=1
QSEQ=1
BIDSIZ=1
OFRSIZ=1
MODE=1
EX=1
MMID=1
BEX=1
AEX=1
CUR=1
[TRADE FIELDS]
TTIM=1
PRICE=1
SIZ=1
TSEQ=1
G127=1
CORR=1
COND=1
EX=1
TISS=1
OC=1
CUR=1
[EXCHANGES]
AMEX=1
BOSTON=1
CINCINNATI=1
MIDWEST=1
NYSE=1
PACIFIC=1
NASD=1
PHILADELPHIA=1
INSTINET=1
CBOE=1
[OUTPUT FILE GROUP]
QUOTES FILE NAME=f:\taq\TAQ3\output\nyse tech stocks quotes.txt
TRADES FILE NAME=f:\taq\TAQ3\output\nyse tech stocks trades.txt
TRADES STATS NAME=f:\taq\TAQ3\output\nyse tech stocks stats.txt
N t Alth h d i Mid t it t Chi St k E h
```

2.3.1   Creating a TAQ Job File

As of January 2006, due to the large size of the quote file, data for most dates has been split into two quote file and two quote index files. As of February 2006, all dates will be split, with one file holding ticker symbols beginning with the letters "A-M" and one holding quote data for the letters "N-Z." The trade data will not change.

This change means that whether you use the TAQ3 program, or write your own code, you will need to access two files for a given date to retrieve all of the data. Instructions can be found in the README file in the TAQOUT directory on your DVD.

Exchanges

As of May 15, 2006, NASDAQ trades and quotes in NYSE-listed, NYSE MKT-listed and NYSE Arca-listed stocks will appear on TAQ with an exchange code of "D" only.

"T" will no longer appear for trades in NASDAQ stocks as of June 28, 2006.

These trades will have an exchange identifier of "Q". You can only view these trades from `TAQ3.EXE` by selecting all exchanges.

NASDAQ executions will be represented with a "Q" while "D" will include Trade Reporting Facility (TRF) prints and ADF trades and quotes.

To create a TAQ Job File follow the steps within the program:

2.3.1.1   Select Data (Step 1)
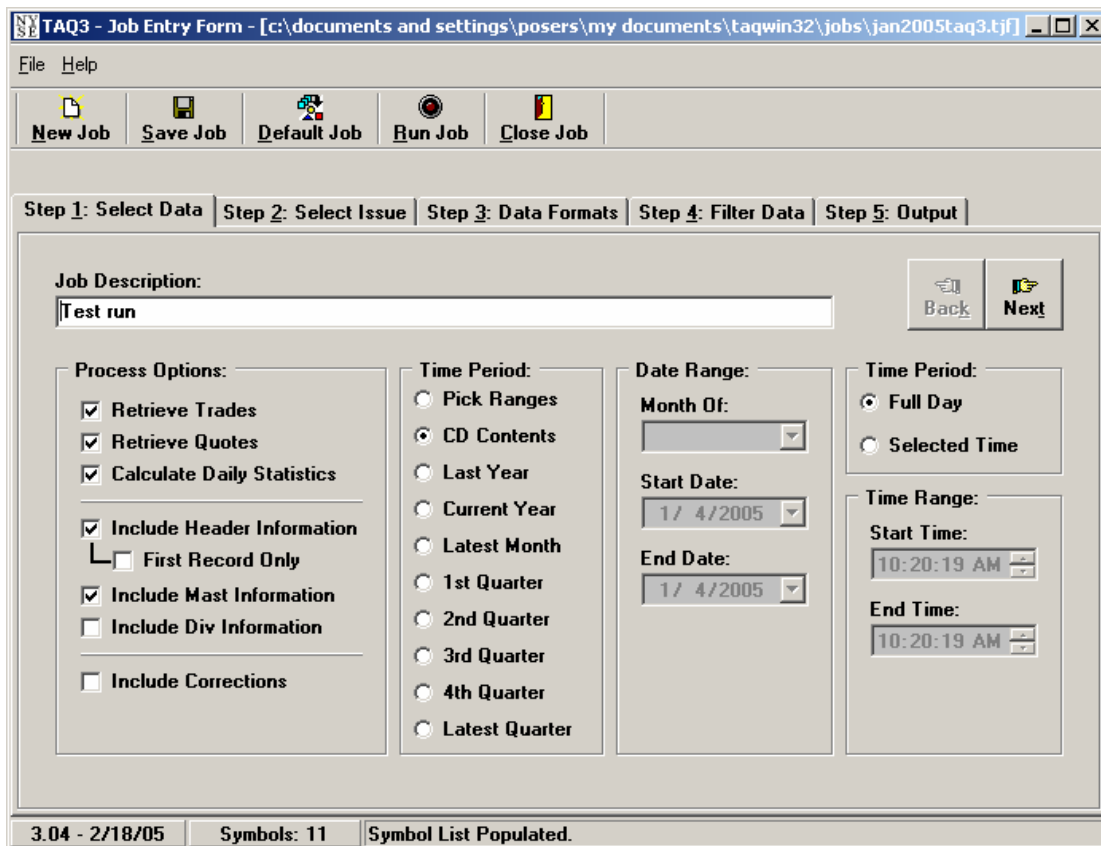
Table 2 Select Data Fields

Complete the fields, the following fields are available:

FIELD	DESCRIPTION
Job Description	This is used to describe the job in detail. It is not the file name.
Process Options	You can choose to extract trades, quotes, statistics, or any combination thereof. **Include Header Information** Creates a line at the top of the output file with the names of the fields. This is convenient if loading the data into a spreadsheet or identifying the fields while viewing the data. First Record Only allows the header only to be shown once for the entire output. **Include MAST Information** Specifies if you want to include security master file information. This information is shown at the beginning of each security's data within each extraction file. **Include DIV Information** For NYSE listed stocks only. Specifies whether the

FIELD	DESCRIPTION
	dividend information should be included prior to each security's data within each extraction file. **Include Corrections** Additional records that describe the type of error a trade may have had (see CORR in the CT Binary File).
Job Options	An Active job will be included in the "Run Jobs" option when you first start the program. This attribute can be modified at any time.
From/To dates	Choose the date range you wish to extract. If the date range is outside the range of data contained the current TAQ DVD-ROM, the program will prompt you to load the correct DVD. If you have copied all the data to a mass storage device, the program will automatically traverse each DVD in sequential order to extract the data.
Time Range	Choose Selected Time in the Time Period box, then time of day you wish to extract in Time Range.

2.3.1.2   Issue (Step 2)
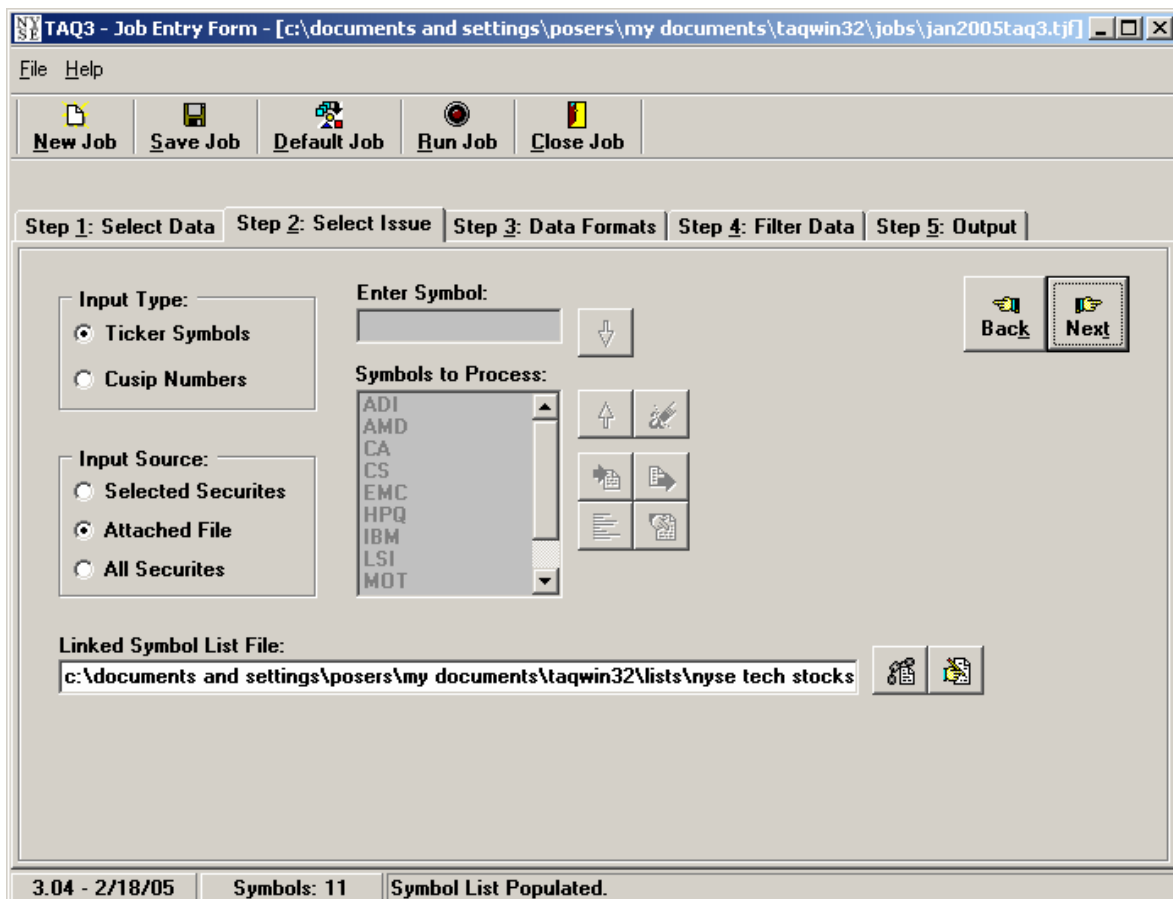
Table 3 Issue Fields

Complete the fields, the following fields are available:

FIELD	DESCRIPTION
Input Type	Choose whether you want to choose securities by Ticker Symbol or by CUSIP Number.
Input Source	Specifies whether you want to choose all the securities, selected securities as specified in the ticker symbol window, or whether you want to link to an ASCII file containing ticker symbols (one ticker symbol per line).
Linked File	If Attached File is chosen, then specify the location and name of the tickersymbol/CUSIP-number input file.
Enter Symbol	Use this field to enter symbols then press the Enter key or the down arrow button located to the right of the field after each symbol to add it to the Symbols to Process list. To find out what each button in this section means, hover your mouse pointer over each button for a description.

2.3.1.3   Saving the Ticker Symbols or CUSIP Numbers to a List File

After you have entered tickers into the input box, you can optionally save them to a linked List file by

clicking .

The following window is displayed.
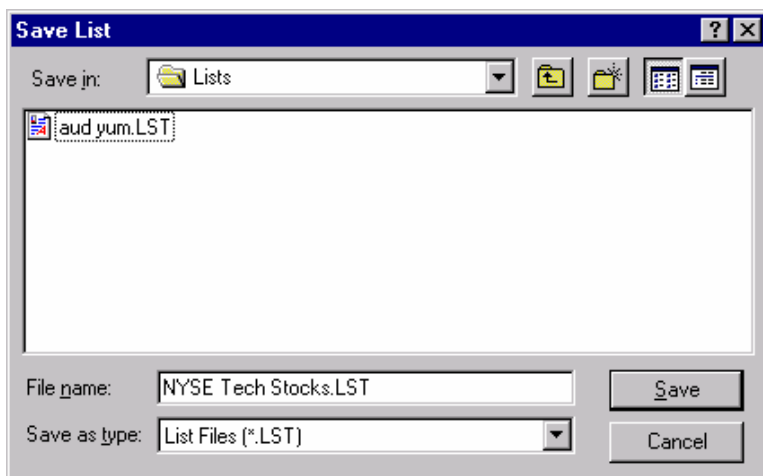
Enter the filename and click Save.

2.3.1.4   Linking a List File

Under the "Input Source" items, select "Attached File" then below under "Linked File", click the Link List

button .

Choose the list file you created by highlighting the name and click Open:
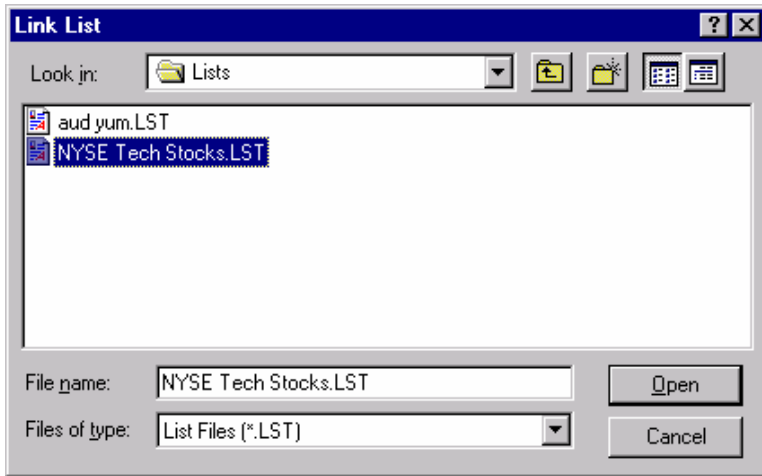
You can edit this list by clicking the "Edit the Input List" button in the "Linked File section (button on the far right) . The following window is displayed.
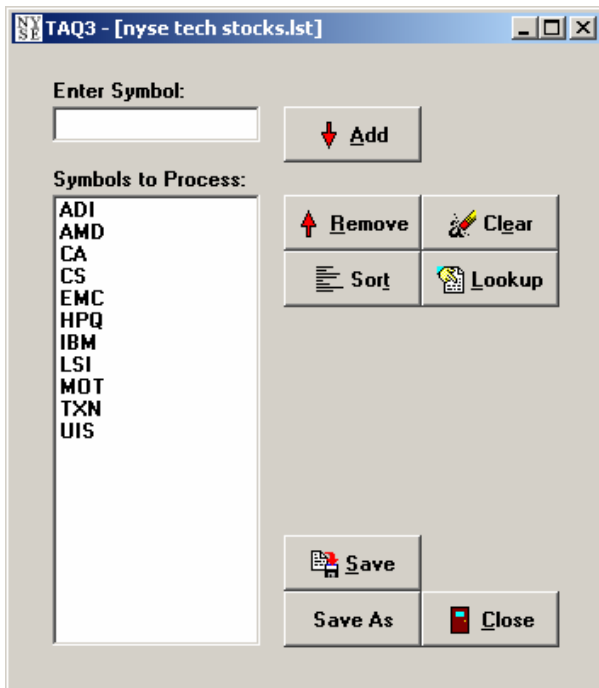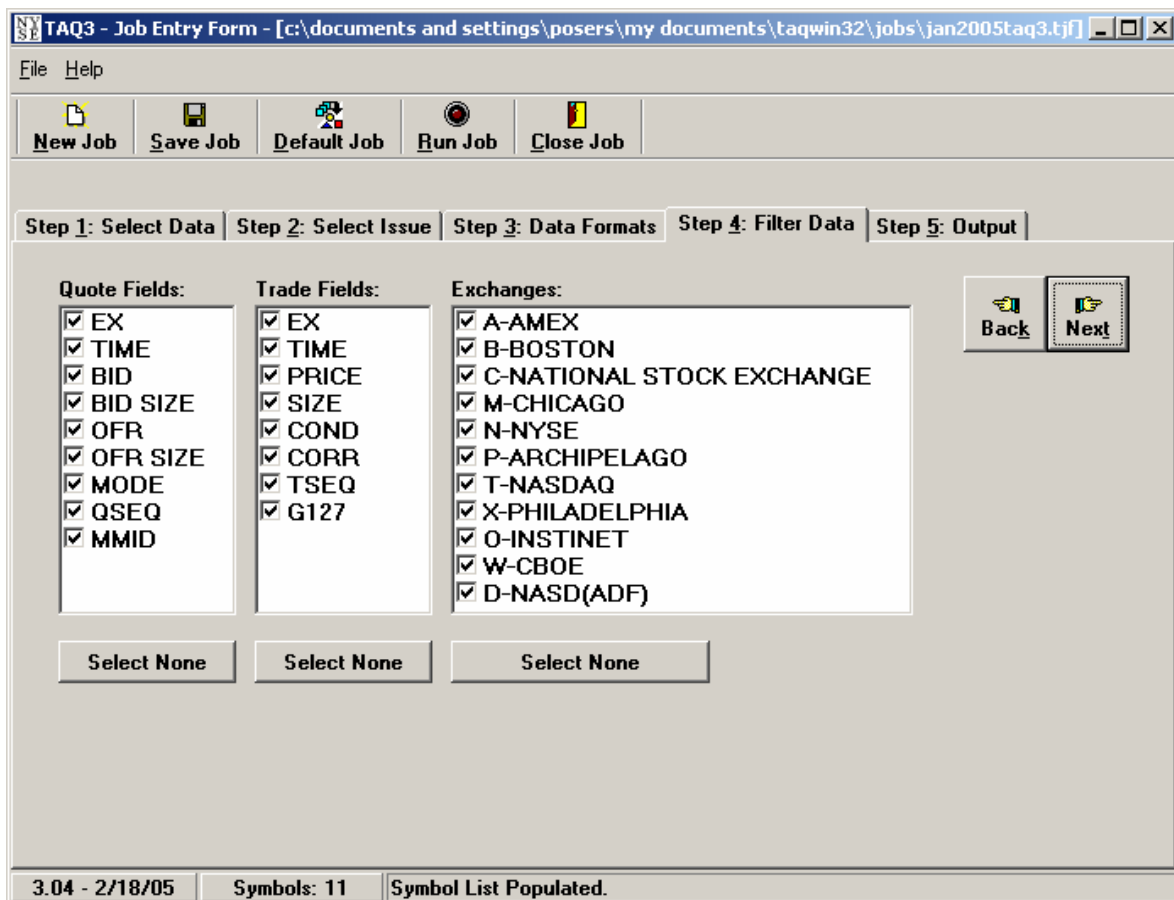
You will see the Ticker Symbols or CUSIP numbers you entered. Click the Lookup button for assistance in locating tickers from Master file.

2.3.1.5   Data Formats (Step 3)
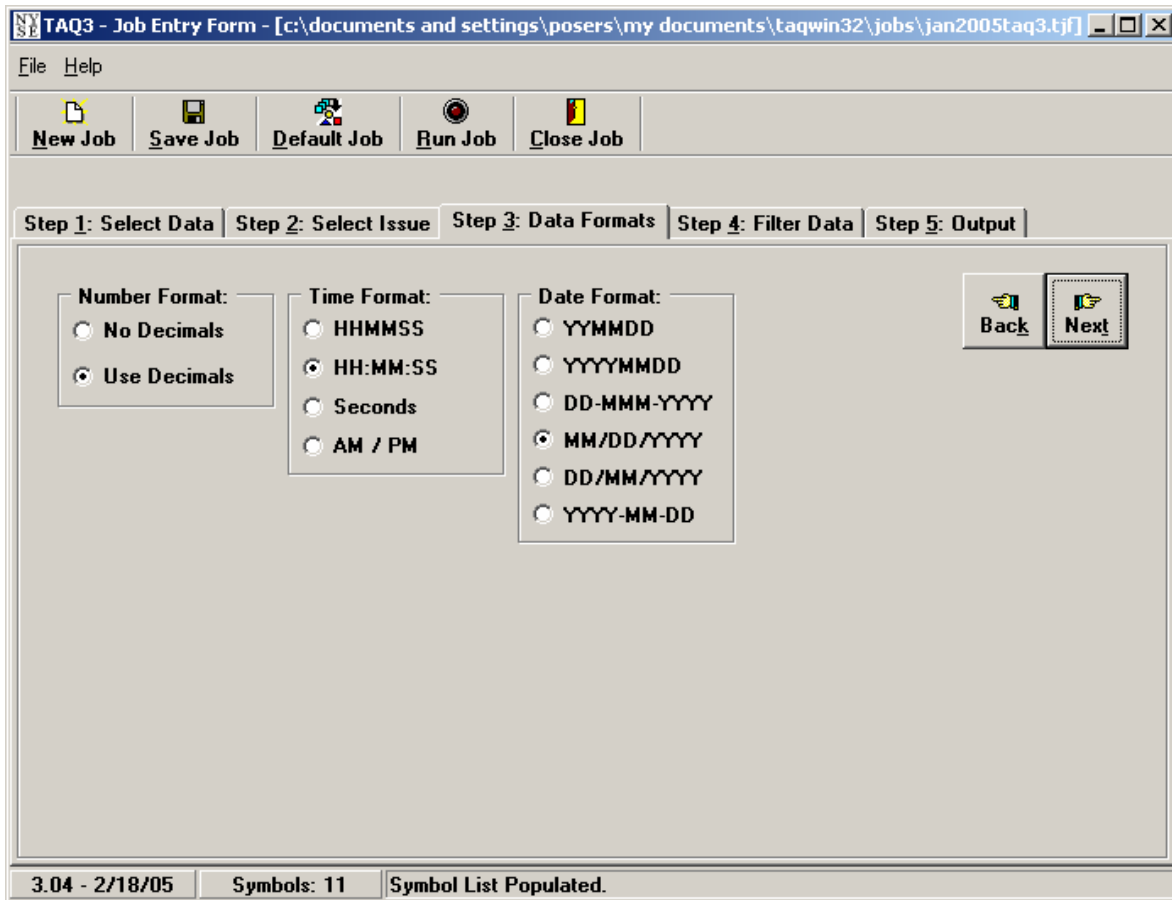
This step allows you to choose the how your data will be formatted. The options are self-explanatory.

2.3.1.6   Filter Data (Step 4)

Additionally, you can filter your data extractions by particular stock exchanges:

Notes: Instinet (O) now clears under NASD so this code will not be in current DVD's. It was only valid during January and February 1993.

QSEQ and TSEQ are not available from January 1, 2005 and going forward. The check box for those fields will be locked out if the dates you select do not include data prior to that date.

As of May 15, 2006, NASDAQ trades and quotes in NYSE-listed, NYSE MKT-listed and NYSE Arca-listed stocks will appear on TAQ with an exchange code of "D" only. T will no longer appear as of the end of June 2006.

NASDAQ executions will be represented with a "Q" while "D" will include Trade Reporting Facility (TRF) prints and ADF trades and quotes.

2.3.1.7   Output (Step 5)

The output can go to a file or screen and you can view the output by clicking the View Output button. There are four of the output types described below and ASCII can be brought into many applications. If you need space or are finished with previous queries you can check the Overwrite Existing Files box. To create output files just enter a filename in the space provided. By default, if a directory is not specified, the program will automatically save the files to the Output subdirectory of the main program directory.
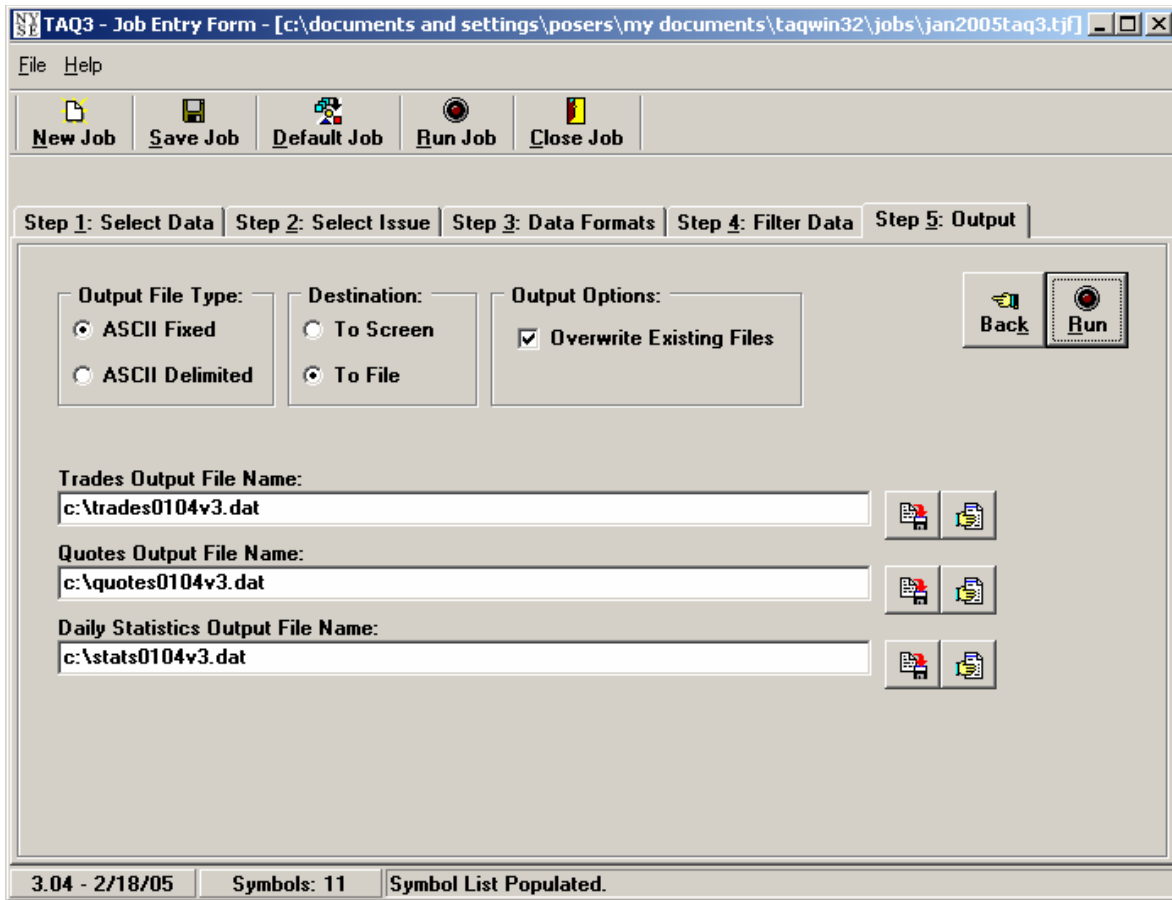
3.   FILE DESCRIPTIONS

3.1   DATE FILE (DATE2.DAT)

The Date file `DATE2.DAT` is written in character format with a fixed record length of 44 bytes (46 bytes including the carriage return and line feed). It contains trading dates beginning with January 1993 and four fields that indicate the start/end position in each of the binary index files for each trading date. Also, a field indicating which DVD-ROM (since there are more than one per month) and a data format of new versions.

Table 4 Date file

FIELD NAME	LAYOUT	DESCRIPTION
TDATE	Character 8 bytes	Transaction date. Format: yyyymmdd
CQIDXB	Character 8 bytes	Start position in Qyyyymmx.IDX
CQIDXE	Character 8 bytes	End position in Qyyyymmx.IDX
CTIDXB	Character 8 bytes	Start position in Tyyyymmx.IDX
CTIDXE	Character 8 bytes	End position in Tyyyymmx.IDX
Space	Character 1 byte	
DISK	Character 2 bytes	Disk where the data resides. If this field is blank, the entire data set is contained on 1 disk for that month. Letters are used to designate the disk. For example: "A" is disk 1, "B" is disk 2, etc.
Space	Character 1 byte	
DATAFMT	Character 1 byte	Data Format. Over the years there have been changes to the data format. Please refer to the user documentation contained on each DVD to obtain the correct format for each version. This document contains changes for TAQ3 version 1.0 (DATAFMT = 3). DATAFMT = 0 was for pre- April, 1994 and DATAFMT=1 was the version through December 31, 1999 and DATAFMT=2 was the version through December 31, 2004.

3.2   CT BINARY FILE (TYYYYMMX.BIN)

The Consolidated Trade binary file, `TYYYYMMX.BIN`, is written in binary integer format with a fixed record length of 19 bytes (without ending carriage return or line feed). The letter 'x' in the filename is the letter of the DVD the file resides on.

Note 1: Beginning in June 1995, the trade time for NYSE and NYSE MKT issues is the Consolidated Trade System (CTS) time stamp. Beginning in March 1997, the trade time for NASDAQ issues is the NTDS time

stamp. Previously, the time shown for all trades was the time the message was received by IGS, which is approximately 3 seconds later than the CTS time stamp.

Note 2: Market-On-Close (MOC) Prints[1]. When there is an imbalance in MOC orders, the imbalance is executed at the close of trading against the bid or offer on the NYSE, as appropriate, thereby setting the closing price. (An imbalance of buy orders would be executed against the offer. An imbalance of sell orders would be executed against the bid.) The remaining buy and sell MOC orders are then paired off at the closing price set by the imbalance trade. The "pair-off" trade should be reported as "stopped stock". (See the `G127` field.)

Note 3: Prior to August 1993, conditions of "A" and "D" were assigned the values of acquisition and distribution, respectively. These actions were governed by NYSE Rule 392, which was rescinded in August 1993. An "Exchange Distribution" or "Exchange Acquisition" occurred when a member or member firm, acting as either agent or principal, asked another member or member firm to buy or sell a block of a security. This action required Exchange approval and was done only when the regular market could not absorb the supply.

Table 5 Consolidated Trade Binary File

FIELD NAME	LAYOUT	DESCRIPTION
TTIM	Binary 4 bytes	Trade time. This number reflects the time at which the trade entered CTS. Format: cumulative number of seconds since midnight.
PRICE	Binary 4 bytes	Actual trade price per share. Truncated to four implied decimal places.
SIZ	Binary 4 bytes	Number of shares traded.
G127	Binary 2 bytes	Combined "G", Rule 127, and stopped stock trade indicator. This field applies only to NYSE trades. As of June 28, 2006, this data will always be shown as a zero (0). For example, a trade that is Display Book-reported (40) and complies with Rule 127 (100) would appear as 140 in the file. ■ 0 = Does not qualify as "G", Rule 127, or stopped stock trade ■ 2 = "G" trade buyer and seller ■ 3 = "G" trade buyer ■ 4 = "G" trade seller ■ 10 = Elect box stroked ■ 20 = Percent box stroked ■ 40 = A Display Book-reported trade. ■ 100 = Rule 127 trade ■ 200 = Stopped stock trade

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[1] See Reference Material.

FIELD NAME	LAYOUT	DESCRIPTION
		■ "G" trade - A member firm trading for its own account must publicly identify that the order is principal. (See *NYSE Constitution and Rules*, ¶2090, Rule 90.)
		■ Rule 127 – An NYSE trade reported as having been executed as a block position. (See *NYSE Constitution*, ¶2127, Rule 127.)
		■ Stopped stock - A guarantee by the specialist that an order will be executed at a specific price. (See *NYSE Constitution*, ¶2116, Rule 116.)
CORR	Binary 2 bytes	Correction Indicator. Beginning in June 1995, corrections to corrections are permissible. TAQ shows only the original trade and final correction. No interim corrections are shown. **Good trades:** ■ 0 = Regular trade that was not corrected, changed, or signified as cancel or error. ■ 1 = Original trade which was later corrected. This record contains the original time and the corrected data for the trade. ■ 2 = Symbol correction (out of time sequence). **Original trade records:** ■ 7 = Trade cancelled due to error. ■ 8 = Trade cancelled. ■ 9 = Trade cancelled due to symbol correction. **Correction instructions:** ■ 10 = Cancel record (associated with 8). ■ 11 = Error record (associated with 7). ■ 12 = Correction record (associated with 1; contains corrected time and original data).
COND	Character 2 bytes	Sale Condition. These conditions apply to trades on all exchanges except as indicated. More than one code can be displayed in the field (up to two codes). ■ **Regular Way (blank or *)** A trade made without any stated conditions. **Note**: Effective June 7, 1995 the standard settlement cycle was changed from five business days to three business days. ■ **Cash-Only Basis (A)** All trading in that issue for that day is on a 'cash only' basis. Every trade for that day will have a condition of A. (See Note 3 at the beginning of this section.) ■ **Bunched (B)** A trade representing an aggregate of two or more regular trades (other than the opening or reopening trade) that were executed within the same 60 second period at the same price.

FIELD NAME	LAYOUT	DESCRIPTION
		■ **Cash Sale (C)** A transaction which calls for the delivery and payment of securities on the same day the trade took place.
		■ **Next day Settlement Only (D)** All trading in that issue for that day is for 'next day settlement' only. Every trade for that day will have a condition of D. (See **Note 3** at the beginning of this section.)
		■ **NYSE Direct+ (E)** The high-speed electronic connection for immediate automatic execution (Auto-X) of limit orders up to 1,099 shares.
		■ **BSE Instant Liquidity Access (E)** The Boston Stock Exchange auto execution product, known as ILA. Allows for immediate electronic execution when BSE BBO is equal to the NBBO.
		■ **Bunched sold (G)** A bunched trade not reported within 90 seconds of execution.
		■ **Rule 127 trade (J)** (NYSE only) An NYSE trade reported as having been executed as a block position. (See *NYSE Constitution and Rules*, ¶2127, Rule 127.)
		■ **Rule 155 trade (K)** (NYSE MKT only) A specialist must give precedence to agency orders in any stock before executing a purchase or sale for the same stock in which he/she has an interest. (See *MKT Constitution and Rules*, ¶9295, Rule 155.)
		■ **Sold last (L)** A transaction that occurs in sequence but is reported to the tape at a later time; there are no intervening trades between the time the transaction occurs and when it is reported.
		■ **Next day (N)** Calls for delivery of securities on the first business day following the day of the contract.
		■ **Opened Last (O)** An opening trade that occurs in sequence but is reported to the tape at a later time.
		■ **Prior Reference Price (P)** (NASD only) An executed trade that occurred in a marketplace where members execute certain transactions that actually relate to an obligation to trade at an earlier point in the trading day or that refer to prior referenced price.
		■ **Seller (R)** "Seller's Option". Delivery date is specified by the seller and must be between two and sixty calendar days following the day of the contract (but not on the third business day after the trade date, which is considered regular way). (See *NYSE Constitution and Rules*, ¶2064, Rule 64.)
		Note: Beginning in June 1995, values over 60 are permissible. Any value over 99 has been changed to 99.
		■ **Split Trade (S)** (NASD only) An execution that takes place in two markets. The market-maker in the first market agrees to execute a portion of an order at a price realized in another market, to which the

FIELD NAME	LAYOUT	DESCRIPTION
		balance of the order is forwarded for execution.
		■ **Pre- and Post-Market Close Trades (T)** (NASD only) A trade that occurred within the current trading day, but is executed outside of the current market hours and within the market reporting hours. These trades include:
		– European market between 9:06 and 9:13 EST
		– U.S. market between 4:00 and 9:30 EST
		– U.S. market between 16:00 and 20:00 EST.
		■ **Pre- and Post-Market Trades Out of Order (U)** As of September 1, 2005, NASDAQ required early pre-CT hours trades to be reported with a condition code of U. These trades can be reported to the tape anytime between 8:00AM and 6:30PM. Firms may have posted trades with this condition code as early as May 2005.
		■ **Average Price Trades (W)** A trade where the price reported is an average of the prices for transactions during all or any portion of the trading day. Applies to NASDAQ NMS and SmallCap issues and to listed (CTS) issues only during European Market session.
		■ **Opened after trading halt if reporter checked the open box (X)** – Information unavailable at this time.
		■ **Sold Sale (Z)** A transaction that is reported to the tape at a time later than it occurred and when other trades occurred between the time of the transaction its report time.
		■ **Crossing Session (8, 9)** One record per symbol for executed volume entered as one-sided orders (9) and one record per symbol for executed volume entered as two-sided orders (i.e., matched) at the closing price (8). There are no individual records for executed one-sided or two-sided orders.
		(For details on Crossing Session, see *NYSE Market Surveillance Information Memo 91-19*, June 5, 1991.)
EX	Character 1 byte	Exchange on which the trade occurred, (see Exchanges).
		■ A – NYSE MKT Stock Exchange
		■ B – NASDAQ OMX BX Stock Exchange
		■ C – National Stock Exchange
		■ D – FINRA
		■ I – International Securities Exchange
		■ J – Direct Edge A Stock Exchange
		■ K – Direct Edge X Stock Exchange

FIELD NAME	LAYOUT	DESCRIPTION
		■ M – Chicago Stock Exchange
		■ N – New York Stock Exchange
		■ T – NASDAQ OMX Stock Exchange
		■ P – NYSE Arca SM
		■ S – Consolidated Tape System
		■ T/Q – NASDAQ Stock Exchange
		■ W – CBOE Stock Exchange
		■ X – NASDAQ OMX PSX Stock Exchange
		■ Y – BATS Y-Exchange
		■ Z – BATS Exchange

3.3   CT INDEX FILE (TYYYYMMX.IDX)

The Consolidated Trade index file, `TYYYYMMX.IDX`, is written in binary integer format with a fixed record length of 22 bytes (without ending carriage return or line feed). The letter 'x' in the filename is the letter of the DVD the file resides on.

The `TDATE` field is 4 binary bytes in the format: `yyyymmdd`.

Table 6 Consolidated Trade index file

FIELD NAME	LAYOUT	DESCRIPTION
SYMBOL	Character 10 bytes	Stock symbol.
TDATE	Binary 4 bytes	Transaction date. Format: yyyymmdd
BEGREC	Binary 4 bytes	Start position.
ENDREC	Binary 4 bytes	End position.

3.4   CQ BINARY FILE (QYYYYMMX.BIN)

As of January 2006, due to the large size of the quote file, data for most dates has been split into two quote file and two quote index files. As of February 2006, all dates will be split, with one file holding ticker symbols beginning with the letters "A-M" and one holding quote data for the letters "N-Z." The trade data will not change.

This change means that whether you use the TAQ3 program, or write your own code, you will need to access two files for a given date to retrieve all of the data. Instructions can be found in the `README` file in the `TAQOUT` directory on your DVD.

As of May 15, 2006, NASDAQ trades and quotes in NYSE-listed, NYSE MKT-listed and NYSE Arca-listed stocks will appear on TAQ with an exchange code of "D" only. T for NASDAQ.

The Consolidated Quote binary file, `Qyyyymmx.BIN`, is written in binary integer format with a fixed record length of 27 bytes (without ending carriage return or line feed). The letter 'x' in the filename is the letter of the DVD the file resides on.

Note 1: For January 4, 1993 through April 6, 1993, the bid and offer sizes for NASDAQ NMS issues are invalid. They have been zero-filled.

Note 2: NASDAQ NMS quotes after 4:00 p.m. (EST) may contain zero bid or offer sizes. These are valid end-of-day quotes. NASD quotes with mode 12 and zeroes in the `BIDSIZ`, `OFRSIZ`, `BID`, and `OFR` fields represent quotes withdrawn by the market maker (MMID) submitting the zero quotes.

Note 3: Beginning in August 1993, the data files include a market maker identification field with every NASD quote in exchange-listed issues. The addition of this field makes it possible to accurately calculate the BBO among NASDAQ market makers and all market centers.

Note 4: Beginning in March 1996, the quote time for NYSE and NYSE MKT issues is the Consolidated Quote System (CQS) time stamp. Beginning in November 1996, the quote time for NASDAQ issues is the NQDS time stamp. Previously, the time shown for all quotes was the time the message was received by IGS, which is approximately three seconds later than the CQS time stamp.

Table 7 Consolidated Quote Binary File

FIELD NAME	LAYOUT	DESCRIPTION
QTIM	Binary 4 bytes	Quote time. This number reflects the time at which the quote entered CQS. Format: cumulative number of seconds since midnight.
BID	Binary 4 bytes	Bid price. Truncated to four implied decimal places.
OFR	Binary 4 bytes	Offer price. Truncated to four implied decimal places.
BIDSIZ	Binary 4 bytes	Bid size in number of round lots (100 share units).
OFRSIZ	Binary 4 bytes	Offer size in number of round lots (100 share units).
ODE	Binary 2 bytes	Quote condition. These conditions apply to quotes on all exchanges except as indicated. ■ **Zero (0)** Invalid field for that issue (e.g., NASDAQ NMS issue). ■ **Slow Quote on the Offer (1)** Slow quote, eligible for NBBO ■ **Pre-Oct . 2006:Depth on offer side (1)** Indicated more size behind the quote being disseminated for the offer. This depth may be at the ask price of the quote or at a price immediately outside the disseminated ask quote. ■ **Slow quote on the bid side (2)** Slow quote eligible for NBBO ■ **Pre-Oct. 2006: Depth on bid side (2)** Similar to Mode 1 in indicating depth, but only for bid quotation. ■ **Closing quote (3)** Indicates the last quote from a participant for that

FIELD NAME	LAYOUT	DESCRIPTION
		security during the trading day. There may be two closing quotes per symbol at the same price for market-on-close (MOC) transactions.[2]
		■ **News dissemination (4)** A regulatory halt used when relevant news influencing the stock is disseminated. Trading is suspended until the resultant impact has been assessed.
		■ **Slow quote on the offer due to an LRP or Gap Quote (5)** A non-firm quote that, as of Reg. NMS activation will not be eligible for NBBO and may me traded through
		■ **Pre-Oct. 2006: Fast trading (5)** Used during extremely active periods of short duration. While in this mode, quotes are entered on a "best efforts" basis.
		■ **Depth on bid and offer (6)** Indicated more size behind the reported quote for both bid and offer. The depth may be either at or immediately outside the quote.
		■ **Order imbalance (7)** A non-regulatory halt used when there is a severe buy or sell order imbalance. To prevent a disorderly market, trading is temporarily suspended.
		■ **Closed market maker (NASD) (8)** This condition is disseminated by each market maker to signify either the last quote of the day or the premature close of a market maker for the day. In the latter case, the market maker can re-open by transmitting a quote accompanied by Mode 12.
		■ **Non-firm quote (9)** A regulatory halt used when the level of trading activity in a security is such that the Exchange cannot collect, process, and disseminate quotes that accurately reflect market conditions. The specialist, with Floor Official approval, may switch to "non-firm mode" for 30 minutes[2]. (See *NYSE Constitution and Rules*, ¶2060, Rule 60.)
		■ **Opening quote (10)** The first quote disseminated from a given market center for each security.
		■ **News pending (11)** Indicates a regulatory trading halt or delayed opening due to an expected news announcement which may influence trading in the stock. A trading halt or opening delay may be reversed once the news has been disseminated.
		■ **Regular (NASD open) (12)** Indicates normal trading environment. May be used by NASD market makers in place of Mode 10 to indicate the first quote of the day or if a market maker re-opens a security during the day (see Mode 8).
		■ **Trading halt due to related security (13)** A non-regulatory halt used when events relating to one security will affect the price and

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[2] See Reference Material

FIELD NAME	LAYOUT	DESCRIPTION
		performance of another security (e.g., a tender offer).
		■ **Trading halt in view of common (14)** A non-regulatory trading halt used when matters that affect the common stock of a company may affect the performance of other classes of securities for the same company.
		■ **Slow quote on the bid due to an LRP or Gap Quote (15)** A non-firm quote that, as of Reg. NMS activation will not be eligible for NBBO and may me traded through
		■ **Pre-Oct. 2006: Order influx (15)** A non-regulatory halt used when there is a severe influx of buy and sell orders. To prevent a disorderly market, trading is temporarily suspended.
		■ **No open/no resume (16)** Indicates a trading halt or an opening delay is to be in effect for the rest of the trading day. Generally, a trading halt condition indicating the reason for the halt or delay is indicated prior to the input of Mode 16.
		■ **Pre-Opening Indication (17)** Indicates the probable trading range (bid and offer sizes, no prices) of a security that is not opening delayed or halted.
		■ **Equipment Change-over (18)**
		■ **Related Security News dissemination (19)** A regulatory halt used when news relating to one security will affect trading in an associated security. For example, news pertaining to the common issues of a company may affect the preferred issues.
		■ **Related Security News pending (20)** Same as above but refers to expected news.
		■ **Slow quote on the bid and offer due to an LRP or Gap Quote (22)** A non-firm quote that, as of Reg. NMS activation will not be eligible for NBBO and may me traded through
		■ **Slow quote due to a set-slow list (23)** Some stocks are always slow and not available for electronic trading.
		■ **Syndicate Bid (24)**
		■ **Pre-Syndicate Bid (25)**
		■ **Penalty Bid (25)**
		■ **Additional Information (27)** A regulatory halt or delayed opening used if more disclosure of information for the security is requested by the exchange. If inadequate information is disclosed during a trading halt or delayed opening due to news dissemination (mode 4) or news pending (mode 11), the reason could subsequently be reported as mode 27.
		■ **Additional Information due to related security (28)** A regulatory halt or delayed opening used if more disclosure of information for the security is

FIELD NAME	LAYOUT	DESCRIPTION
		requested for a related security.
		■ **Resume (29)** Used with zero-filled bid and offer sized to indicate that quoting is no longer suspended for a security that was halted or delayed.
EX	Character 1 byte	Exchange on which the quote occurred.
		■ A – NYSE MKT Stock Exchange
		■ B – NASDAQ OMX BX Stock Exchange
		■ C – National Stock Exchange
		■ D – FINRA
		■ I – International Securities Exchange
		■ J – Direct Edge A Stock Exchange
		■ K – Direct Edge X Stock Exchange
		■ M – Chicago Stock Exchange
		■ N – New York Stock Exchange
		■ T – NASDAQ OMX Stock Exchange
		■ P – NYSE Arca SM
		■ S – Consolidated Tape System
		■ T/Q – NASDAQ Stock Exchange
		■ W – CBOE Stock Exchange
		■ X – NASDAQ OMX PSX Stock Exchange
		■ Y – BATS Y-Exchange
		■ Z – BATS Exchange
MMID	Character 4 bytes	Identifies the NASDAQ market maker for each NASD quote.
		Note: This field was added in August 1993.
		Beginning in March 1997, the values AA, AI, IA, and II were replaced with blanks. Previously, these values identified aggregate CAES and non-CAES quotes

3.5   CQ INDEX FILE (QYYYYMMX.IDX)

The Consolidated Quote index file, `QYYYYMMX.IDX`, is written in binary integer format with a fixed record length of 22 bytes (without ending carriage return or line feed). The letter 'x' in the filename is the letter of the DVD the file resides on.

The `QDATE` field is 4 binary bytes in the format: `yyyymmdd`.

Table 8 Consolidated Quote Index file

Field Name	Layout	Description
SYMBOL	Character 10 bytes	Stock symbol.
QDATE	Binary 4 bytes	Quote date. Format: yyyymmdd
BEGREC	Binary 4 bytes	Start position.
ENDREC	Binary 4 bytes	End position.

3.6   MASTER TABLE (MYYYYMM.TAB)

The Master table contains reference information about the stocks in the trade and quote files. Some fields apply only to NYSE and/or NYSE MKT issues, and are blank or zero-filled when not applicable to the issue.

For those issues that clear through the National Securities Clearing Corp. (NSCC), there is at least one record. If an issue does not clear through the NSCC, a record will not appear in the master file.

Any time a change occurs in any field pertaining to an issue, there is a new record with a new effective date. Historical records are not carried forward. There is one exception to this rule: if a company changes its name or symbol while retaining its CUSIP, the file will contain two separate unrelated records with the same CUSIP number.

The Master file, `MYYYYMM.TAB`, is written in character format with a fixed record length of 91 bytes (93 bytes including carriage return and line feed).

Note 1: For January 1993 data, there are five symbols that traded but do not appear in the master file: ARN (American Re Corp), BTZWI (Berlitz Int Inc), SPY (Spider Tr Unit), TIDED (Tide West Oil Co), and VEIX (VAALCO Energy Inc). Master information pertaining to these symbols is available via the NYSE Internet account, and was included with the February 1993 master file.

Note 2: Only listed companies that have been quoted or traded appear in the Master Table.

Table 9 Master Table

FIELD NAME	LAYOUT	DESCRIPTION
SYMBOL	Character 10 bytes	Stock symbol.
NAME	Character 30 bytes	Company name.

FIELD NAME	LAYOUT	DESCRIPTION
CUSIP	Character 12 bytes	CUSIP number, which uniquely identifies a security. The Committee on Uniform Security Identification Procedure (CUSIP) assigns the first nine digits/characters. ■ Digits/characters 1-6 identify the issuer ■ Digits/characters 7-9 identify the issue The last three digits are applied by the NSCC to distinguish between NYSE, MKT, and NASD issues: <table><tr><th>Issue Type</th><th>Extension</th></tr><tr><td>NYSE</td><td>000</td></tr><tr><td>NYSE when issued</td><td>100</td></tr><tr><td>MKT</td><td>001</td></tr><tr><td>MKT when issued</td><td>101</td></tr><tr><td>NASD</td><td>002</td></tr><tr><td>NASD when issued</td><td>102</td></tr></table>
Etx	Character 10 bytes	There is one column for each exchange indicating whether it trades equities in this symbol. Each column contains either a 1 (trades equities) or 0 (no equities). The x suffix refers to the following exchange codes: ■ N = NYSE ■ A = NYSE MKT ■ B = Boston ■ 2 = blank columns ■ P = Pacific (NYSE Arca) ■ X = Philadelphia ■ T = NASD ■ O = OTC ■ W = CBOE **Note**: T indicates that the NASD trades the stock as a non-primary market; O indicates that the NASD trades the stock as a primary market. Therefore, when ETO=1, NASD is the primary market center even though ETT=0.
ITS	Character 1 byte	Intermarket Trading System (ITS) eligibility indicator. ■ 1 = ITS-eligible stock ■ 0 = Not an ITS-eligible stock **Note**: NYSE-listed stocks that trade in sixteenths cannot trade through ITS. NYSE MKT-listed stocks that trade in sixteenths are supported by ITS only if

FIELD NAME	LAYOUT	DESCRIPTION
		the trading price is less than $5.
ICODE	Character 4 byte	NYSE industry code.
SHARESOUT	Character 10 bytes	Issued and outstanding shares in thousands. This number includes treasury shares.
UOT	Character 4 bytes	Number of shares in a round lot.
DENOM	Character 1 byte	Trading denomination (i.e., tick size) of the stock: ■ B = decimal ■ 3 = 1/8 ■ 4 = 1/16 ■ 5 = 1/32 ■ 6 = 1/64 ■ 7 = 1/128 ■ 8 = 1/256
TYPE	Character 1 byte	Common stock indicator: ■ 0 = common ■ 1 = preferred ■ 2 = warrant ■ 3 = right ■ 4 = other ■ 5 = derivative
DATEF	Character 8 bytes	Effective date for that record in the format yyyymmdd.

3.7   DIVIDEND FILE (DYYYYMM.TAB)

The Dividend file, `DYYYYMM.TAB`, contains one record for each symbol that either paid a dividend or redistributed stock during the month. In rare cases, a symbol may have two records for one month. The file is written in character format with a fixed record length of 53 bytes (55 including carriage return and line feed).

Warning: At this point in time, dividend and stock split data included in TAQ are known to be inaccurate for some securities. We are attempting to correct this problem and will keep all users informed of any changes in the reliability of these data. Currently, we recommend using other data sources to verify the data included in TAQ.

Table 10 Dividend file

FIELD NAME	LAYOUT	DESCRIPTION
SYMBOL	Character 10 bytes	Stock symbol.
CUSIP	Character 12 bytes	CUSIP number, which uniquely identifies a security. The Committee on Uniform Security Identification Procedure (CUSIP) assigns the first nine digits. ■ Digits/characters 1-6 identify the issuer ■ Digits/characters 7-9 identify the issue The last three digits are applied by the NSCC to distinguish between NYSE, NYSE MKT and NASD issues. **Issue Type** **Extension** NYSE 000 NYSE when issued 100 MKT 001 MKT when issued 101 NASD 002 NASD when issued 102
DIV	Character 10 bytes	Amount of cash dividend if stock is ex-dividend on this date. Five implied decimal places.
Blank	1 byte	
SPLIT/ADJ	Character 10 bytes	Amount of the adjustment made to the price of the symbol due to a stock split, stock distribution, or stock dividend. Rounded up to nearest eighth. Five implied decimal places.
Blank	2 bytes	
DATEF	Character 8 bytes	Date of stock split or dividend.

APPENDIX A: NASDAQ MARKET MAKERS

NASDAQ Market Makers mnemonics can be found using the National Securities Clearing Corporation (NSCC) Directory or at the NSCC website www.nscc.com where an electronic version can be downloaded.

APPENDIX B: STOCK SUFFIX TABLE

B.1   NYSE AND NYSE MKT ISSUES

All securities on the NYSE and NYSE MKT are identified by a three-character symbol. The following table lists the valid four- to seven-character suffix identifiers.

Table 11 NYSE and NYSE MKT Stock Suffix

DESCRIPTION	SUFFIX SYMBOL
Class	A A
Class A Called	ACL
Class A Convertible	ACV
Class A When Issued	AWI
Class B	B
Class B Called	BCL
Class B Convertible	BCV
Class B When Issued	BWI
Called	CL
Certificate	CT
Convertible	CV
Convertible Called	CVCL
Ex-Dividend	XD
Ex-Rights	XRT
Without Warrants	XW
Part Called	PTCL
Preferred	PR
Preferred A through Preferred Z PRA through	PRZ
Preferred Called	PRCL
Preferred When Issued	PRWI
Rock Island Certificate UP	CTUP
Rights	RT
Rights When Issued	PRWI
Special	SP
Stamped	SD

DESCRIPTION	SUFFIX SYMBOL
Warrants	WS
Warrants Class A	WSA
Warrants Class B	WSB
Warrants When Issued	WSWI
With Warrants	WW
When Distributed	WD
When Issued	WI

B.2   NASDAQ ISSUES

Stock symbols. A unique four- or five-letter symbol assigned to a NASDAQ security. If a fifth letter appears, it identifies the issue as other than a single issue of common stock or capital stock. A list of fifth-letter identifiers and a description of what each represent follows:

Table 12 NASDAQ Stock Suffix

DESCRIPTION	SUFFIX
Class A	A
Class B	B
Issuer qualification exception - the issuer has been granted a continuance in NASDAQ under an exception to the qualification standards for a limited period.	C
New	D
Delinquent in required filings with the SEC	E
Foreign	F
First convertible bond	G
Second convertible bond, same company	H
Third convertible bond, same company	I
Voting	J
Nonvoting	K
Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units	L
Fourth preferred, same company	M
Third preferred, same company	N
Second preferred, same company	O
First preferred, same company	P

DESCRIPTION	SUFFIX
Bankruptcy - The issuer is involved in bankruptcy proceedings.	Q
Rights	R
Shares of beneficial interest	S
With warrants or with rights	T
Units	U
When-issued and when-distributed	V
Warrants	W
ADR (American Depositary Receipt)	Y
Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units	Z

Source: NASDAQ website: http://www.nasdaq.com/reference/glossary.stm

B.3   SUFFIX DEFINITIONS

Table 13 Suffix Definitions

| SUFFIX	DEFINITION
Called	An issue being redeemed by its issuing corporation under definite conditions before maturity.
Certificate	Refers to a negotiable certificate representing deposit of stock with a pending change in its condition.
Convertible	A preferred share which its owner may convert into common stock or another security, usually in the same company, in accordance with the terms of issue.
Preferred	A class of stock with priority over common stock in regard to earnings and/or liquidations.
Rights	Represent the privilege to subscribe (in proportion to the number of shares owned) to new or additional securities, usually at or below the current market price. Rights ordinarily have market values of their own and are actively traded. In most cases they must be exercised within a relatively short period of time.
Stamped	Indicates rights and privileges different from securities of the same issue, class, or series not stamped.
Warrant	Indicates a certificate giving its holder the right to purchase securities at a stipulated price, either within a specified time limit or perpetually.
When Distributed	Signifies a short form of "when, as, and if distributed" (see When Issued).
When Issued	Means a short form of "when, as, and if issued"; indicates a transaction in a security authorized for issuance, but not yet issued. All "when issued"

SUFFIX	DEFINITION
	transactions are on an "if" basis, to be settled if and when the actual security is issued.
With Warrants	A security with a warrant attached that entitles the holder to purchase another security at stipulated price(s), either within a specified time or in perpetuity. Warrants may be immediately detachable from their underlying securities or detachable after specified periods.
Without Warrants	A security from which the warrant(s) has been removed.

APPENDIX C: NYSE TRADING SYSTEMS

Figure 1 NYSE Trading Systems
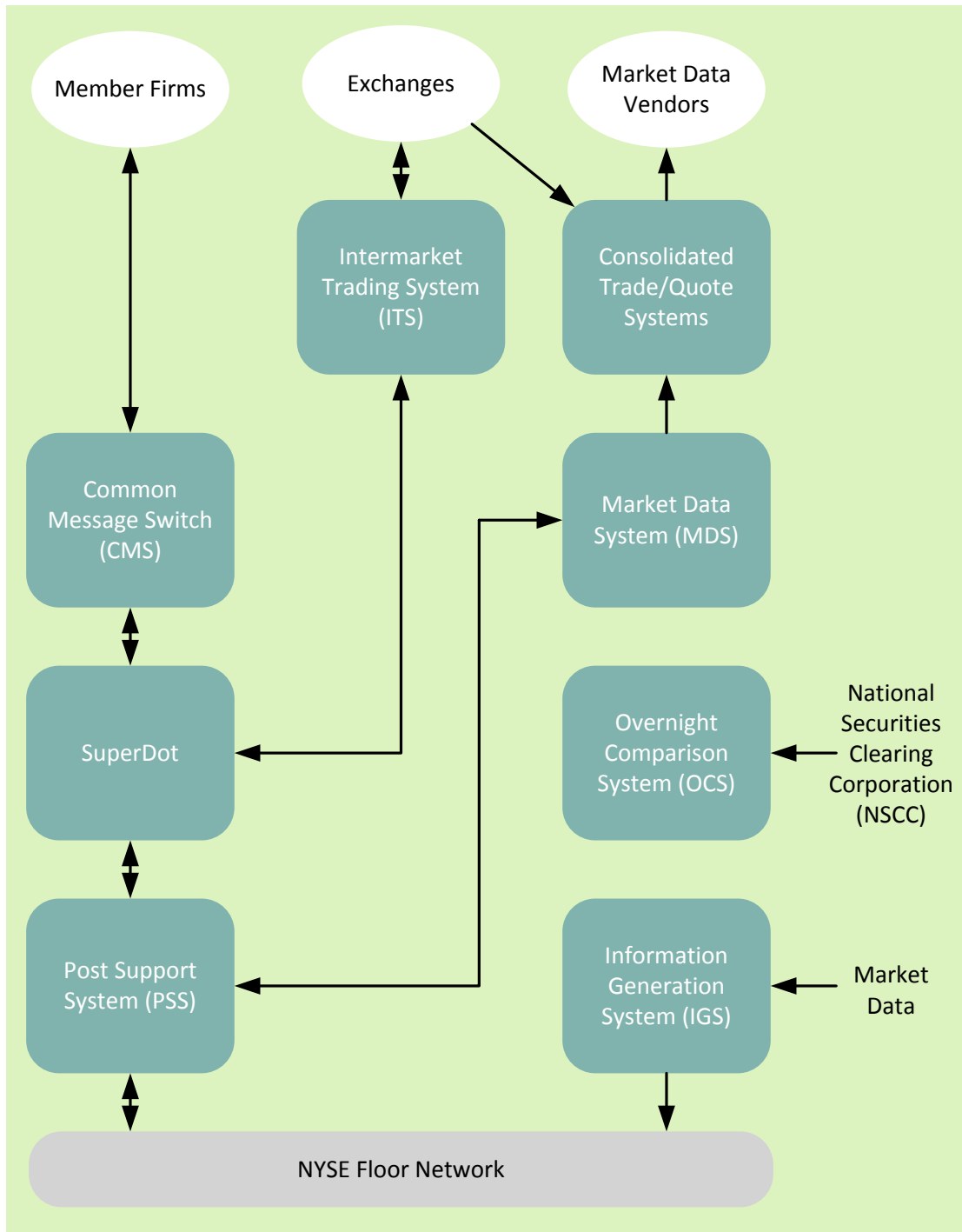
Source: NYSE Equity Systems & Business Development

APPENDIX D: NYSE INDUSTRY CODES

Table 14 Industry Codes

INDUSTRY	GROUP CODE
INDUSTRIALS	100
Aerospace	102
Aircraft	102A
Parts and Equipment	102B
Business Supplies and Services	104
Machines and Equipment (Excl. Computers)	104A
Supplies	104B
Services	104C
Chemicals	106
Diversified Chemicals	106A
Specialized	106B
Computers, Data Processing	108
Computer Systems	108A
Data Processing, Software	108B
Peripheral Devices and Supplies	108C
Construction	110
Residential	110A
Industrial	110B
Cement	110C
Lumber, Wood	110D
Other Building Materials and Products	110E
Electrical Equipment	112
Electronics	114
Semi Conductors and Other Components	114A
Telecommunications Equipment	114B
Test, Control Instruments and Systems	114C
Other Systems and Equipment	114D

INDUSTRY	GROUP CODE
Environmental Control	116
Foods, Beverages	118
Beverages	118A
Branded Food Products	118B
Processing and Production	118C
Wholesalers	118D
Health and Beauty Products	120
Personal Health Products	120A
Toiletries, Cosmetics, Perfumes	120B
Health Care Services	122
Equipment and Supplies	122A
Health Care Facilities	122B
Household Goods	124
Appliances	124A
Furnishings and Fixtures	124B
Housekeeping Products	124C
House-wares	124D
Industrial Machinery and Equipment	126
Heavy Machinery	126A
Machine Tools	126B
Measuring and Control Devices	126C
Transmissions and Engines	126D
Other Industrial Equipment	126E
Lodging, Restaurants	128
Hotels, Motels	128A
Restaurants	128B
Mining, Refining, Fabricating	130
Aluminum	130A
Coal	130B
Gold, Silver	130C

INDUSTRY	GROUP CODE
Steel, Iron	130D
Other Non-Ferrous Metals	130E
Motor Vehicles	132
Auto and Truck	132A
Parts and Equipment	132B
Oil and Gas	134
Crude Production	134A
Contract Drilling, Exploration	134B
Integrated Domestic Refiners	134C
Integrated International Refiners	134D
Non-Integrated Refiners	134E
Services and Equipment	134F
Packaging	136
Glass	136A
Metal	136B
Paper	136C
Other	136D
Paper Production	138
Pharmaceuticals	140
Publishing	142
Newspaper Chains	142A
Magazines	142B
Books	142C
Recreation Services and Products	144
Broadcasting	144A
Gaming Operations and Services	144B
Leisure Time Products	144C
Motion Pictures, Entertainment Services	144D
Outdoor Recreational Vehicles and Equipment	144E

INDUSTRY	GROUP CODE
Retail Trade	146
Department Store Chains	146A
Discount Variety Chains	146B
Drug Store Chains	146C
Supermarkets, Food Stores	146D
Hardware, Furniture Stores	146E
Specialty Apparel Ships	146F
Other Retail Operations	146G
Textiles, Apparel	148
Textile and Mill Products	148A
Clothing Companies	148B
Shoes	148C
Tires, Rubber	150
Tobacco	152
Wholesalers, Distributors	154
Consumer Products (Non-Food)	154A
Industrial Products	154B
Multi-Industry	170
Other	180
Manufacturing	180A
Services	180B
TRANSPORTATION	200
Air	202
Passenger Airlines	202A
Freight Airlines	220B
Rail	204
Trucking	206
Other Transportation Services	208
UTILITIES	300
Electric Services	302

INDUSTRY	GROUP CODE
Gas Services	304
Distribution and Integrated Natural Gas Cos.	304A
Natural Gas Transmission Companies	304B
Other Gas Services	304C
Telecommunications	306
Water Supply Companies	308
Multi-Service Companies	310
FINANCE, REAL ESTATE	400
Banks	402
Multinational	402A
Regional	402B
Savings and Loan Associations	402C
Brokerage Services	404
Closed-End Investment Companies	406
Bond Funds	406A
Stock Funds	406B
Specialty Funds	406C
Finance Companies	408
Insurance	410
Brokers, Agents	410A
Carriers	410B
Trusts	412
Real Estate Investment Trusts (REITS)	412A
Oil Royalty Trust	412B
Other Trusts	412C
Real Estate	414
Diversified Financial Services	416