

Trade Import Expert™

User's Guide

Trade Import Expert - [Client: SOFTWARE INTELLIGENCE INC] Filename: trade.txt

File Edit View Tools Window Help

Save Print Copy Paste Undo Redo Find Help

Unknown Report Errors Account Odd Lot Mismatch Price Restrict Daily Bid OTC

Input Excel Tabular Country Total Buy Sell Cover Short Buy+ Sell+ Exempt

| status | tkr | ric | cusip | sedol | isin | descript |
|--------------------------|---------|----------|-----------|---------|--------------|-----------------------|
| 1 RIC undefined: KMH... | KMH | KMH.N | 485170401 | | | KANSAS CTY STHRN |
| 2 Order | KE | KE.N | 500228101 | 2496050 | US002281013 | KOGER EQUITY |
| 3 Order | ATS | ATS.N | 00203R105 | 2059453 | US00203R1059 | APT SATELLITE |
| 4 Order | EW | EW.N | 28176E108 | 2567116 | US28176E1082 | EDWARDS LIFESCI |
| 5 Order | IBN | IBN.N | 4510NG104 | 2569286 | US4510NG1040 | ICICI BANK LTD |
| 6 Order | ENR | ENR.N | 29266R108 | 2569297 | US29266R1086 | ENERGIZER HLDGS |
| 7 Order | ROG | ROG.N | 775133101 | 2746700 | US7751331015 | ROGERS CORP |
| 8 Order | POL | POL.N | 73179P106 | 2624561 | US73179P1066 | POLYONE |
| 9 Order | FSA | FSA.N | 31769P308 | 2616193 | US31769P3082 | FINL SECURITY |
| 10 Order | HED | HED.N | 422070102 | 2640299 | US4220701027 | HEAD N.U. |
| 11 Order | HIR PRA | HIR_pa.N | 60467Q102 | | US60467Q1022 | HIRANT TR CONU PFD |
| 12 Order | CGX | CGX.N | 209341106 | 2222772 | US2093411062 | CONSOL GRAPHICS |
| 13 Order | KRC | KRC.N | 49427F108 | 2495529 | US49427F1084 | KILROY REALTY |
| 14 Order | SKP | SKP.N | 78402P104 | 2806927 | US78402P1049 | SCPIE HLDG |
| 15 Order | AMH | AMH.N | 03072M108 | 2631497 | US03072M1080 | AMERUS GROUP CO |
| 16 Order | DCS | DCS.N | 257692103 | 2276478 | US2576921033 | DONCASTERS PLC |
| 17 Order | ALP PRR | ALP_pr.N | 010388205 | 2494418 | US0103882058 | ALABAMA PWR CL R |
| 18 Order | ENE PRR | ENE_pr.N | 29357P201 | 2624215 | US29357P2011 | ENRON CORP PR R |
| 19 Conflict: Ticker/C... | NLI | NLI.N | 629407107 | 2457518 | US6294071070 | NTL |
| 20 Order | KRB PRC | KRB_pc.N | 55263U206 | | US55263U2060 | MBNA CP PR C |
| 21 Order | AJA | AJA.N | 037735818 | 2612890 | US0377358181 | APPALACHIAN PWR STK A |
| 22 Order | ACR | ACR.N | 028913101 | 2016038 | US0289131015 | AMER RETIRE |
| 23 Order-Mismatch | KRT PR | KRT_p.N | 50076E202 | | US50076E2028 | KRANZCO RLTY PR |
| 24 Order | ANS | ANS.N | 009417106 | 2020930 | US0094171065 | AIRNET SYSTEMS |
| 25 Order | ABN | ABN.N | 000937102 | 2003739 | US0009371024 | ABN AMRO HLDG |
| 26 Order | CWN PRA | CWN_pa.N | 228186201 | 2040093 | US2281862019 | CROWN AMER PR A |
| 27 Order | PE PRX | PE_px.N | 69331A201 | | US69331A2015 | PECO EGY PR X |
| 28 Order | HC | HC.N | 410768105 | 2035497 | US4107681052 | HANOVER COMP |
| 29 Order | BK PRC | BK_pc.N | 096564208 | 2480428 | US0965642087 | BNV CAP PR C |
| 30 Order | EOP | EOP.N | 294741103 | 2038430 | US2947411037 | EQUITY OFFICE |
| 31 Order | GPE PRU | GPE_pv.N | 373333202 | 2680790 | US3733332023 | GEORGIA PWR PR U |

Mismatch. BY 158 KRT_p KRT_p.N 50076E202 USA 19.200 KRAMONT REALTY PFD 08/19/01 13:52:41

File Name: d:\demote presentation files\

Ranges: Start [] Stop []

Side: BL B- BC Deduce S+ SL SS EX

Search: []

Alerts: Sec Conflict Price Acct

Reconciliation: Buy Sell Total

| | Count | Shares | USD Ref. Principal |
|---|-------|----------|--------------------|
| T | 2,71 | 4,705,08 | 101,523,850 |
| B | 2,71 | 4,705,08 | 101,523,850 |
| S | 0 | 0 | 0.00 |
| C | 0 | 0 | 0.00 |
| S | 0 | 0 | 0.00 |
| - | 0 | 0 | 0.00 |
| + | 0 | 0 | 0.00 |
| E | 0 | 0 | 0.00 |
| I | 3,41 | U | 866 |
| A | 2,79 | P | 0 |
| | 2 | | |

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1. OVERVIEW

Trade Import Expert™

Trade Import Expert™ from Software Intelligence, Inc. solves the time critical, error-prone task of translating unstructured files into validated trade lists. *TIE™* can convert a document into an order instantly.

The Business Problem

When a program trade arrives at an agency desk, traders focus on how to convert the file instead of on how to trade the list. While converting the file a trader's attention may be diverted from trading for minutes. A typical trader might use *Excel™*, a custom program, or a combination of both, to extract the information required to create and confirm the order. If the desk is trading several large market orders simultaneously, the task of conversion becomes unmanageable. *Trade Import Expert™* solves this problem.

The Business Solution

With *Trade Import Expert™* the computer does the work. *TIE™* computes the trade list from the input file instantly. It reads the input, extracts the orders, reconciles its results, generates a summary and a bid sheet, and outputs a fully validated trade list.

In addition, *TIE™* detects semantic errors and filters out unwanted text. *TIE™* can be used as a trading desk's primary list converter, or as a reference tool, providing secondary order confirmation. After a list is converted, it can be routed as a FIX message, saved to a database, or integrated into a trading application with an API.

2. TIE™ BASICS

Overview

Trade Import Expert™ (TIE™) translates unstructured files into validated trade lists.

TIE™ Organization: The Folders



TIE™'s folder system works like a pipeline. There are *Input* folders (*Input*, *Excel™* and *Tabular*), *Output* folders (*Country*, *Total*, *Buy*, *Sell*, *Cover*, *Short*, *Buy-*, *Sell+*, *Exempt*, and *Unknown*), and *Report* folders (*Trade Summary Report*, *Errors*, *Account*, *Odd Lot*, *Mismatch*, *Price*, *Restrict*, *Daily*, *Bid*, *International Liquidity*, *US Liquidity*, and *OTC Market Maker*- the last three are optional reports and not pictured here). Each of the folder tabs displays an initial (**I**, **O**, or **R**) indicating whether it is an input, output or report folder.

The *Input* and *Excel™* folders send original data downstream into the *Tabular* folder where data can be edited, “set”, and where order feedback and error messages guide the user in the appropriate steps to convert the order.

The *Tabular* folder sends its converted results downstream into the *Country*, *Total*, ‘*Side*’, and *Unknown* folders. Any editing changes made in the *Total* folder will be reflected in the *Country*, ‘*Side*’ and *Report* folders.

Inputting Orders in TIE™

Overview

TIE™ provides four ways to input an order: drag and drop, file open, copy and paste, and manual entry.

Drag and Drop

From *Exploring* or from *Outlook Express*, users may click on a file and drag a file into TIE™.

File Open

Files may be opened from the file menu located in the upper left of the TIE™ screen. Select **File > Open**. A dialog box pops up allowing users to navigate through their directories, select a file, and open it into the TIE™ screen. The file will display in TIE™'s *Tabular* folder.

Copy and Paste

Data from any text or *Excel™* document can be copied and pasted into the TIE™ grid from the clipboard.

Manual Entry

Data may be entered manually in the *Excel™* folder. When data entry is complete, the user must click on the *Convert* button for the data to be processed and appear in the *Tabular* folder. Click on the *Tabular* folder to view errors and status.

Processing Orders: The Convert Button

Clicking the *Convert* button processes the data. Any time data is “set”, accounts are “set”, a client is “set”, or any editing change are made, the user must click on the *Convert* button to process the new information.

The “Set” Buttons

Manually Setting Order Attributes

In *TIE™* we refer to data that gives information about an order as an “order attribute”. Order attributes include: side, shares, accounts, security identifiers (such as cusip, sedol, ISIN, etc.). There are a series of order attribute “Set” buttons located on *TIE™*'s toolbar for manually setting order attributes.

Setting an order attribute identifies the type of data in a cell, range, or column. It guarantees that the data will not be ambiguous.

Example: A share quantity may resemble a quick code, sedol, kassenverein, etc. Country codes, currency codes, exchange abbreviations, account names and tickers may resemble each other. By setting a cell, range, or column containing data, the data is designated and will not create ambiguity conflicts.

Setting Security Identifiers

When more than one security identifier (such as ticker, cusip, sedol, valoren, ISIN, etc) appears in a list, setting one security identifier gives that identifier precedence over the others.

Example: For instance, if tickers and cusips are the security identifiers in a list and there is a ticker/cusip conflict (the ticker and cusip don't match the same security), setting the cusip column will give the cusips precedence. The security selection will be made based on the cusips. This will resolve the conflict(s). The tickers will be ignored except when a cusip is not known, in which case *TIE* will look for the next identifier present in that row (i.e. - ticker).

Eliminating Superfluous Data

The more concise the data is, the more easily the file will convert. It is always a good idea to cut away columns of unnecessary data.

Note: If *TIE™* does not recognize the data in a certain column it may ask the user to “Cut or Set” the column. These instructions will appear in the *Status Column* of the *Tabular* folder for rows containing ambiguity.

Checking For Errors

The fastest way to see security rows that did not convert into orders is to click on the *Unknown* folder tab. The *Unknown* folder displays only the rows that could not be converted.

Note: The *Tabular* folder is the central folder for viewing and editing a trade list. Error messages are displayed in the *Status Column* for each row of data in the *Tabular* folder that did not convert to an order, unless the status reads “Order.” Clicking on a row in the *Tabular* folder displays the expanded error message or order details in the *Status Bar* at the bottom of the screen.

Correcting Errors

Making corrections in the Tabular folder

The user may manually edit, set, or cut data in the *Tabular* folder and click on the *Convert* button to have the new results applied to the *Output* and *Report* folders.

Making corrections in the Unknown folder

The user may manually edit, set, or cut data in the *Unknown* folder and click on the *Convert* button to have the results applied to the *Output* and *Report* folders. The changes will not be applied to the *Tabular* folder, however, because the *Tabular* folder is “upstream” from the *Unknown* folder.

Note: It is recommended that editing changes be made in the *Tabular* folder if the trader wants to be able to view the input list with the editing corrections applied. However, for trade lists containing several hundred or several thousand rows of data, using the *Unknown* folder is the fastest way to locate and correct errors.

Reference Dialog Boxes

TIE™’s toolbar includes a series of buttons marked with the letters “REF”. Each button brings up a reference dialog box. These are reference tools for the trader’s convenience. They can be used to look up exchange rates, transaction costs, side abbreviations, security data, client accounts and more. The reference dialog boxes also provide the user the ability to update, delete, and add new data.

There are a total of seven reference dialog boxes. These include the: *Set Client* dialog box, *Security Reference*, *Account Reference*, *Side Reference*, *Country Reference*, *FX (Foreign Exchange Reference)*, and *Client Reference*.

FastFind

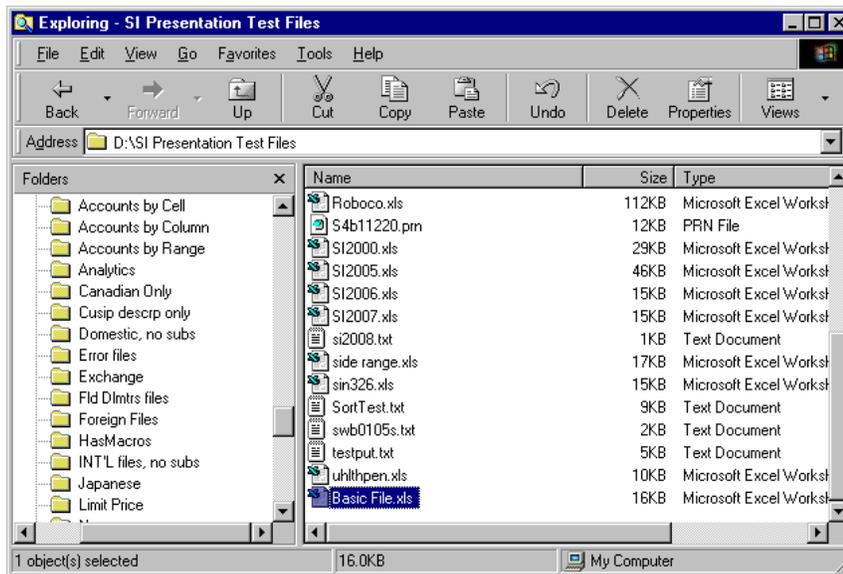
To search for information using *FastFind*, select a cell by clicking on it, hold down the Shift key and click right on the mouse. **Shift + Right Click**

Basic File Conversion

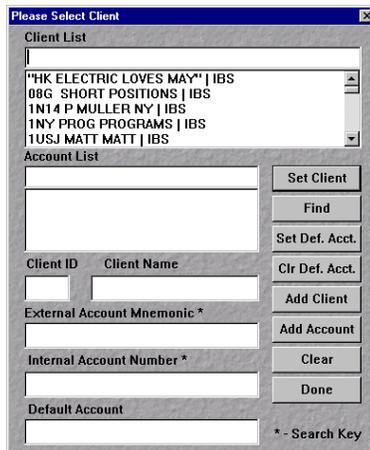
1. Input an order into TIE™

There are several ways a user may do this:

- From Windows® Exploring locate the file and drag it onto the TIE™ grid. (From Outlook Express® a user may drag email attachments directly onto the TIE™ grid.)
- From non-Windows® platforms select File > Open from TIE™'s menu and navigate to the file in the directory.
- Files may be copied and pasted into the TIE™ grid.



2. Set the Client



The *Set Client* dialog box will appear.

To set the client:

1. Scroll through the Client list and click on the client.
2. Click the *Set Client* button
3. Click the *Done* button to close the dialog box.

3. View the Trade List

To view and edit the trade list click on the *Tabular* folder tab, if you are not already in the *Tabular* folder.

| status | cusip | description | *tkr | side | *account | *account2 | SL |
|--------|----------|------------------------------|-------|------|----------|-----------|-----|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | 00176510 | AHR CORP/DE | AHR | B | 400 | 300 | 70 |
| 4 | 25766110 | DONALDSON LUFKIN & JENNETTE | DLJ | B | 3100 | 2200 | 50 |
| 5 | 86953610 | SUPERVALU INC | SUU | B | 1200 | 800 | 20 |
| 6 | 89652210 | TRINITY INDUSTRIES | TRN | B | 3300 | 2300 | 50 |
| 7 | 35728810 | FREMONT GENERAL CORP | FHT | B | 2300 | 1600 | 30 |
| 8 | 05548210 | BJ SERVICES CO | BJS | B | 700 | 500 | 10 |
| 9 | 85178210 | SPRINGS INDUSTRIES -CL A | SHI | B | 1300 | 900 | 20 |
| 10 | 02264510 | ALZA CORP | AZA | C | 300 | 200 | 50 |
| 11 | 03783310 | APPLE COMPUTER INC | AAPL | C | 7900 | 5500 | 10 |
| 12 | 17275810 | CISCO SYSTEMS INC | CSCO | C | 2700 | 1900 | 40 |
| 13 | 19121610 | COCA-COLA CO | KO | C | 300 | 200 | 50 |
| 14 | 34583810 | FOREST LABORATORIES -CL A | FRX | C | 2000 | 1400 | 30 |
| 15 | 53567810 | LINEAR TECHNOLOGY CORP | LLTC | C | 700 | 500 | 10 |
| 16 | 55284810 | MGIC INVESTMENT CORP/VI | MTG | C | 1800 | 1300 | 30 |
| 17 | 76132810 | REUTERS GROUP PLC -ADR | RTRSV | C | 1906 | 1386 | 30 |
| 18 | 78644910 | SAFEGUARD SCIENTIFICS INC | SFE | C | 6700 | 4700 | 10 |
| 19 | 82655210 | SIGMA-ALDRICH | SIAL | C | 600 | 400 | 10 |
| 20 | 15231210 | GENTEX CORP | GTX | S | -2400 | -1700 | -70 |
| 21 | 17119610 | CHRYSLER CORP | C | S | -800 | -600 | -20 |
| 22 | 20093610 | CONDISCO INC | COO | S | -1900 | -1300 | -60 |
| 23 | 24702510 | DELL COMPUTER CORP | DELL | S | -1900 | -1300 | -60 |
| 24 | 34537010 | FORD MOTOR CO | F | S | -1000 | -700 | -30 |
| 25 | 38119710 | GOLDEN STATE BANCORP INC | GSB | S | -1300 | -900 | -40 |
| 26 | 41387510 | HARRIS CORP | HRS | S | -2900 | -2000 | -90 |
| 27 | 48007410 | JONES APPAREL GROUP INC | JNY | S | -600 | -400 | -20 |
| 28 | 52490810 | LEHMAN BROTHERS HOLDINGS INC | LEH | S | -900 | -600 | -30 |

The *Tabular* folder will display status messages in the *Status Column* for each row of data in a list.

Click on any row to show the expanded order status in the *Status Bar* at the bottom of the screen.

In the picture above, note that row 21 has been highlighted. The *Status bar* at the bottom of the screen shows the errors (company description mismatch) and the order summary (side: SL, shares: 1,400, ticker: C, RIC, C.N, cusip: 172967101, country: USA, price: 50.860, and the company name from the database: Citigroup Inc.).

4. Cut out extra columns

Cut out any unnecessary data that may cause conflicts.

To remove the column:

1. Click on the column header (this will highlight the entire column).
2. Click on the Cut button with the scissors icon located on TIE's Toolbar.

5. **Set Order Attributes**

To Set the Security Identifier:

In this example we will use the cusip as our security identifier.

1. Click on the (security identifier) cusip column header so that the entire column is highlighted.
2. Click on the *Set Cusip* button.

An asterisk will appear in the column header once a column has been "set."

You may also set individual cells by highlighting the cell, clicking on the security id "set" button and then clicking the "Convert" button.

To Set the Price:

In this example we will set the price column as Local Price.

1. Click on the Price column header to highlight the entire column.
2. Click on the *Set Local Price* button.

You may only set one price column: either *Local Price* or *USD Price*, but not both. TIE™ will base its reference price calculations on the price column you have set.

To Set the Shares:

1. Click on the Share column header to highlight the entire column.
2. Click on the *Set Share* button.

6. **Convert the Order**

To Convert the Order:

Click on the *Convert* button.

Basic Editing

By clicking on a row containing a "Mismatch" message in the *Status Column*, we can read the company name that the security identifiers point to in the *Status Bar*. If these client names are different, the client data will have to be verified and corrected.

To check the security identifiers, use *FastFind* to search by company name.:

- 1) Place the cursor over company description cell
- 2) hold down the shift key and simultaneously click on the right mouse button. *TIE™* will instantly perform a company search and bring up the *Security Reference* dialog box with its findings.
- 3) Double click on one of the company names in the list box to view the security data.

To select data you wish to copy and paste into TIE:

1. Highlight the data (In the picture, above, the cusip has been highlighted.)
2. Press **Ctrl+C** to copy the data.
3. Click on the *TIE* grid.
4. Highlight the cell or the data you would like to replace with the new data.
5. Press **Ctrl+V** to paste the data into the cell.

(In the picture below, we have highlighted and replaced the cusip.)

| | | | | | | |
|------------------|-------------------------|-----------|-----|----|----|----|
| 6 Order-Mismatch | AIRTOUCH COMMUNICATIONS | 00949T209 | ATI | CM | 63 | US |
|------------------|-------------------------|-----------|-----|----|----|----|

6. Or use *FastFind's* special *FastFind Paste* feature that allows you to replace all the security identifiers in the row simply by clicking on the Paste button in the *Security Reference* dialog box.
7. Click on the *Convert* button to reconvert the order.

NOTE: In the example above, had the cusip column been previously set, it would have to be re-set after editing and then converted by clicking on the *Convert* button to process the new data.

3. CONVERSION PROCEDURES

Converting Canadian and Dually Listed Securities

TIE™ has a variety of options for handling dually listed securities. Since many US and Canadian companies share the same tickers and cusips, *TIE™* will default to the US ticker and cusip. The user may select other options for converting Canadian and Dually Listed securities.

Reporting Dually Listed Securities

Dually listed securities are reported in the following locations:

- the *Tabular* folder *Status Bar*
- the *Comments* field of the *Total* and side folders
- the *Dually Listed Securities* section of the *Report* folder

Alerting the user of Canadian securities in a list

TIE™ provides the user the option of being alerted when a Canadian security appears in a list. From the *Tools Menu* select *Advanced Features*. The *Advanced Features* dialog box has a "Prompt User for Canadian Securities" option. Placing a check in the check-box enables a prompt that comes up each time a user drags in or converts a list containing Canadian securities.

Note: Once the *Canadian Prompt* is checked it will remain on when opening up new grid sheets.

Changing the security selection of a Dually Listed Security:

Changing individual securities

If a user wants to change the country of an individual security (i.e.: from Canadian to US or visa-versa), this can be done in the *Total* folder by editing the *Country* cell for that security.

Once edited, tabbing out of the cell will reconvert the dually listed security's data to correspond with the country selected. *TIE™* will only allow editing in the *Total* folder's country column when a security is dually listed, and will only allow the "USA" or "CAN" country abbreviations.

Selecting Canadian Securities each time a USA/CAN Dually Listed security appears – *Advanced Features* option

If the user wants *TIE™* to select the Canadian security each time a dually listed security appears in a list, *TIE™* provides a check box to "Choose Canadian when Dually listed". From the *Tools Menu*, select *Advanced Features*. Placing a check in the check box will cause *TIE* to default to the Canadian security instead of the US.

Note: The check box will remain checked or unchecked according to the user's last setting when a new file is dragged in over a previous file. The check box defaults to unchecked (choosing US securities when dually listed) each time a new grid sheet is opened.

Changing the country selection of dually listed securities for an entire list when uploading to the Trade Execution System

When Canadian and/or dually listed securities are present in a list, *TIE™'s Trade Execution System Upload* dialog box will include two check-boxes. One uploads any dually listed securities to *Trade Execution System* as US (this is also the default if neither box is checked). The other uploads any dually listed securities to *Trade Execution System* as Canadian.

Note: If the user wants dually listed securities to appear as Canadian in the *Country* folder and all subsequent reports, then the designation must be made during the conversion process. This can be done by editing the security data in the *Tabular* folder, editing the country in the *Total* folder, or by selecting the "Choose Canadian when Dually listed" check-box in *Advanced Features* under the *Tools* menu and converting.

Processing Excel™ Spread Sheets

Opening an Excel™ Spread Sheet

An *Excel™* spreadsheet can be dragged into the *Trade Import Expert™* grid or may be opened by using the *Open File* dialog box via the *File* menu or the *Open File* button located on the toolbar. When an *Excel™* spread sheet contains more than one worksheet, the trader can select worksheets in *TIE™'s Excel™* folder.

Viewing an Excel™ Spread Sheet

To view the contents of an *Excel™* file, click on the *Excel™* folder tab. *TIE™'s Excel™* folder displays the *Excel™* grid as well as any *Excel™* sheet tabs and a special scroll bar at the bottom of the screen. *TIE™* will display the *Excel™* worksheet that corresponds with the highlighted *Excel™* tab.

Selecting an Excel™ Worksheet

To select a specific worksheet from a multiple-worksheet file, the user must click on the *Excel* folder, and then click on the worksheet tab. Clicking on a specific worksheet tab will highlight that tab and display the corresponding data.

Processing an Excel™ Worksheet

To enter an *Excel™* worksheet, into the *Tabular* folder for conversion, make sure the worksheet has been selected, by checking to see that the tab is highlighted and the appropriate list is being displayed, then click on the *Convert* button. This will enter the data into the *Tabular* folder, where it can be viewed, edited, and attributes can be set.

Editing an Excel™ Worksheet – see Chapter 4

See Chapter 4: Editing Procedures: Editing in the Various Folders: Editing in the *Excel™* Folder for special editing options in the *Excel™* folder.

Removing Columns

To Remove a Column:

1. Highlight the column to be removed by clicking on the header of that column.
2. Click on "cut" in the right-click mouse menu, the edit menu, or the button with the scissors icon, located at the top of the screen.

Options:

- To remove more than one column at the same time, simply highlight all the columns to be removed and click on the “cut” option.
- To include additional columns that are not adjacent, hold down the control key while you relocate the mouse and continue highlighting the desired columns.

Note: This feature is only supported in the Tabular, Excel™ and Unknown folders.

Setting Ranges**Using the Range Edit Controls**

Ranges may be specified by using the *Range* edit controls located in the *Control Panel* to the right of the grid. The range is specified by typing the row numbers of the first and last rows in a range into the “Start” and “Stop” *Range* edit controls.

**Highlighting a Range**

A range may be designated by highlighting a group of rows. To create a selection range, hold down the left mouse button and drag the mouse to highlight the range area. When a range or group is selected it will be highlighted in reverse video. Once a range or group is highlighted the user may click on the *Convert* button to generate orders. Only those securities within a specified range will be converted into orders. This allows a trader to convert a partial list or to convert the list in sections.

Setting Accounts**Setting Accounts by Cell**

When accounts are listed horizontally or, side by side, they must be set by cell.

1. Place the cursor on the cell containing the account name to be set. Highlight that cell.
2. If more than one cell is to be highlighted and they are adjacent, drag the mouse across to highlight each account cell.
3. If more than one cell is to be highlighted and they are not adjacent, hold down the control key, while you relocate the mouse and highlight each additional cell.
4. When all the cells are highlighted, click on the *Set Sub Acct* button.
5. Click on the *Convert* button.

Setting Accounts by Column

When account names are listed vertically in a column, they must be set by column.

1. Click on the header of the column to be set.
2. Click on the *Set Sub-Account* button.
3. Click on the *Convert* button.

Setting Accounts by Range

When accounts are grouped by range (account headings followed by a group of securities in that account), each row or cell containing an account heading must be highlighted, set, and converted.

1. Place the cursor over the status column, and click on the row containing the account name. This will highlight the entire row.
2. To highlight, set, and convert multiple rows of accounts, hold down the control key on the keyboard while you continue this procedure until all accounts have been highlighted.
3. Let go the control key and click the *Set Sub Acct* button.
4. Click on the *Convert* button.

Setting Attributes

Setting Attribute Cells

What it does:

- Setting a cell identifies the data in that cell.
- Setting an attribute guarantees that the data will not be confused with other data similar in character.

Example: Many lists contain columns of three character data which could match account names, country codes, tickers, sides, etc. TIE will generate conflicts when there is ambiguous data. Setting data resolves conflicts quickly.

To Set a cell:

1. Highlight the cell to be set.
2. Click the desired "Set" button (i.e.: *Set Ticker*, *Set Sub-Account*, *Set Sedol*).
3. Click the *Convert* button.

Once a column has been set, an asterisk will appear in the column header.

Re-Setting a Cell:

Data that was previously set must be re-set and converted once it has been edited. This allows the new data to be interpreted and the appropriate output folders and reports to be updated accordingly.

Setting Attribute Columns

What it does:

- Setting a column gives precedence to that column.

Example: If there is a ticker/sedol conflict and the user sets the sedol column, TIE will convert the trade using the sedol.

- Setting a column guarantees that the data in that column will not be confused with any other data similar in character.

Example: Many lists contain columns of three character data, which could match account names, country codes, tickers, sides, etc. TIE will generate conflicts when there is ambiguous data.

Setting or cutting a column ahead of time cuts down on the number of possible conflicts a trader will have to resolve.

To Set a column:

1. Select a column by clicking on its header. This will highlight the column.
2. Click the appropriate "Set" button (i.e.: *Set Ticker*, *Set Sub-Account*, *Set Sedol*).
3. Click the *Convert* button.

Once a column has been set, an asterisk will appear following the word in the column header.

Re-Setting a column:

Making changes to data in a column that has already been set, requires that the column be re-set and converted. This processes the new data and updates the output folders and reports accordingly.

Setting Attribute Ranges**What it does:**

- Setting a range gives precedence to attribute data in that range.
- Setting an attribute guarantees that the data will not be confused with any other data similar in character.

Example: Many lists contain columns of three character data which can match account names, country codes, tickers, sides, etc. TIE will generate conflicts when there is ambiguous data. Setting data resolves conflicts quickly.

Setting a range:

1. Select a range by highlighting the cells to be set.
2. To select or highlight the cells, hold down the mouse's left-click button and drag the mouse over the selection of cells.
3. Click the desired "Set" button (i.e.: *Set Ticker*, *Set Sub-Account*, *Set Sedol*).
4. Click the *Convert* button.

Once a column has been set, an asterisk will appear in the column header, when the column is wide enough for it to be displayed.

Re-Setting a range:

Any data that was previously set must be re-set and converted once it has been edited. This allows the new data to be interpreted and the appropriate output folders and reports to be updated accordingly.

Side Processing

Advanced Features

TIE™ prompts the user to set the side manually unless the user selects to have *TIE™* deduce the side from the sign of the shares. To have *TIE™* deduce the side, go to the *Tools* menu and select *Advanced Features*. Place a check in the check box beside "Deduce the Side from Sign of Shares" in the *Advanced Features* dialog box.

Precedence

TIE™ gives precedence to synonyms over the sign of the shares when both appear in a list. For example, if a list says "Short Sale" at the top of the page and all the shares have minus signs in front of them, *TIE™* will convert the shares as Sell Shorts. If the words "Short Sale" are deleted, and only the minus signs remain, *TIE™* will convert the list as "Sells".

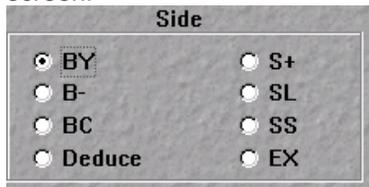
Side Synonyms

TIE™ recognizes 54 side synonyms including foreign words and the Japanese Symbols for "buy" and "sell". The synonyms in *TIE™*'s database can be viewed in the *Side Reference* dialog box, where additional synonyms can be temporarily added.

If side abbreviations are listed for each row in a trade list, the side column can be set so that the abbreviations won't cause ambiguity conflicts with tickers and other data.

Side Radio Buttons

The *Side Radio Buttons* are located on the *Control Panel* to the right of the *TIE™* screen.



The side for an entire order can be changed by clicking on one of the *Side Radio Buttons*, and then clicking on the *Convert* button. This feature saves time by eliminating the tedious process of having to edit the side in every row. Side changes are instantly updated in the *Summary Grid* located on the *Control Panel* and in all related output folders and reports.

A portion of a list may also be changed by highlighting a range of rows or specifying row numbers in the *Range* edit controls. Please note that only the securities within the specified range will be converted into orders.

Side by Range

When a list contains side synonyms as section headers, rather than for every row, *TIE™*'s side by range processing interprets them as the side assigned to all orders following the synonym.

The screenshot displays the 'SIDE BY RANGE TEST' window in Trade Import Expert. The window is divided into a main list area and a summary table on the right.

Main List Area:

| Side | Symbol | Company Name | Quantity |
|--------------|--------|--------------------------------|----------|
| BUY | | | |
| | 205680 | ABITIBI-CONSOLIDATED CORP | 500 |
| | 201320 | ALCAN ALUMINIUM | 500 |
| | 207628 | BANK OF NOVA SCOTIA | 800 |
| | 202464 | BARRICK GOLD CORP | 800 |
| | 208993 | BCE INC. | 1000 |
| | 210972 | BOMBARDIER B | 600 |
| SELL | | | |
| | 216616 | CAMECO CORP | 200 |
| | 217221 | CAN OCCIDENTAL PET | 300 |
| | 217797 | CANADIAN PAC LTD COM NPV | 600 |
| | 217228 | CANADIAN TIRE A | 200 |
| | 209259 | EDPERBRASCAN CORP CL A LTD UTG | 400 |
| COVER | | | |
| | 295666 | GEORGE WESTON | 300 |
| | 245776 | IMASCO | 800 |
| | 245424 | IMPERIAL OIL CO | 900 |
| | 209398 | LAIDLAW INC. COM NPV | 700 |
| SHORT | | | |
| | 252298 | LOEWEN GROUP | 200 |
| | 255447 | MAGNA INTL A | 100 |
| | 207730 | NATL BANK CANADA | 400 |
| | 263464 | NEUBRIDGE NETWORKS | 300 |

Summary Table (Right Panel):

| | Count | Shares | USD Ref. Principal |
|---|-------|--------|--------------------|
| T | 19 | 9,600 | 87,404.29 |
| B | 6 | 4,200 | 40,672.55 |
| S | 5 | 1,700 | 20,104.18 |
| C | 4 | 2,700 | 15,490.98 |
| + | 4 | 1,000 | 11,136.58 |
| - | 0 | 0 | 0.00 |
| + | 0 | 0 | 0.00 |
| E | 0 | 0 | 0.00 |
| I | 24 | 0 | 5 |
| A | 0 | P | 0 |

4. EDITING PROCEDURES

Aligning Data

To align data:

1. Select a column by clicking on its header.
2. Hold down the *Control* key on the keyboard and click the right mouse button to shift the alignment of the data from left justified to right justified, or visa-versa.

Note: This feature is only supported in the *Tabular* and *Unknown* folders.

Bisecting Columns

To bisect a column:

1. Place the cursor in the header row of the column to be bisected. Position the cursor on the right field delimiter of that column (or the right edge of the screen when no columns are present), until the cursor arrow becomes a line with a double-pointed arrow crossing through it.
2. Simultaneously hold down the *Control* key and press the left click button on the mouse. Drag the field delimiter to the left.
3. When you have positioned the field delimiter, release the left click button on the mouse.

Note: During bisect and merge operations the column's new width is displayed in character units in its header region. *This feature is only supported in the Tabular and Unknown folders.*

Copying and Pasting

Copying Function

There are three ways to copy a highlighted selection of data: 1) click on the *Copy* button, 2) right click on the mouse and select "copy" from the pop-up menu, or 3) hold down the *Control* key on the keyboard and type the letter "C". *TIE™* supports each of these methods.

Copying and Pasting Data

TIE™ allows the user to copy data, such as a sedol, from the screen and paste it into a reference dialog box edit control, another location on the screen, or a text document outside of *TIE™*. Data can also be copied from reference dialog box edit controls, and pasted into a list in the *Tabular* or *Excel* folders, or a text document outside of *TIE™*.

Note: A large string of data, or data occupying more than one will be considered by *TIE™* to be a new trade list. Pasting it into *TIE™* will clear the screen, insert the pasted data, and bring up the *Set Client Dialog Box*.

Copying a List and Pasting it into TIE™

The user can copy a list from a text or *Excel™* file, click anywhere on the *TIE™* screen and paste in the list. *TIE™* will automatically clear any data on the screen, input the new information and bring up the *Set Client Dialog Box*.

Editing in the Various Folders

Editing in the Bid Folder

Editing in the *Bid* folder is not supported.

Editing in the Country Folder

Editing in the *Country* folder is not supported. The *Country* folder is comprised of summary data. This data is automatically updated when changes are made to prices, number of securities, share quantities, sides, or countries in any of the other output folders. Revisions to accounts can only be made in the *Tabular* folder. Revisions made in the *Tabular* folder are updated to the *Country* folder when the *Convert* button is clicked.

Editing in the Daily Folder

Editing is not supported in the *Daily* folder. The *Daily* folder is a running log of all orders uploaded to the trading system on any given day.

Editing in the Excel™ Folder

The *Excel*™ folder provides editing capabilities at the cell, row, column or range level. Editing of individual cells is done in the cell rather than in a formula bar. Cut and delete operations are available on ranges of rows and columns.

Adding and deleting columns and Formatting data

Double clicking the Right Mouse Button over the *Excel*™ grid in the *Excel*™ folder brings up the *Tidestone Formula Once Workbook Designer*™ which offers the standard suite of *Excel*™ editing and formatting tools.

Once the order is entered, click on the *Convert* button to process the data; the *Set Client* dialog box will appear. Once the client is set, check the *Tabular* folder for order status and error screening.

Cutting and Deleting

To cut or delete a row or column, simply highlight it and click on the Cut button or the press the delete key on the keyboard. Cutting will remove the entire row, where deleting will remove the data from the row.

Cutting or Deleting More Than One Row at a time

The *Excel*™ folder supports cut and delete operations on ranges of rows. To cut or delete a range of rows, create a selection range. To create a selection range, hold down the left mouse button and drag the mouse to highlight the range area. To group non-consecutive rows hold down the control key and select rows by clicking the left mouse button on each row. When a range or group is selected it will be highlighted in reverse video. Once a range or group is highlighted the user may cut the rows using the Cut button on the toolbar or press the delete key on the keyboard to remove just the data.

Manually Entering Orders

Entering the Order

Orders can be entered manually in the *Excel™* folder. Click on a sell, type in the data and tab or mouse to the next cell and continue.

Formatting the List

Double clicking the Right Mouse Button over the *Excel™* grid in the *Excel™* folder brings up the *Tidestone Formula Once Workbook Designer™* which offers the standard suite of *Excel™* editing and formatting tools.

Converting the Order

Once the order is entered, click on the *Convert* button to process the data; the *Set Client* dialog box will appear. Once the client is set, check the *Tabular* folder for order status and error screening.

Saving the List

In TIE's *Excel™* folder, Double-Click Right on the Mouse to bring up the *Tidestone Workbook Designer™*. Click on the *Workbook Designer* "Save" button. Make sure to specify the file type (e.g. *Excel™ 97*).

Processing the Editing Changes

To process editing changes made in the *Excel™* folder or to enter a manual order into the *Tabular* folder, click on the *Convert* button in the toolbar. This will display the changes or new order in the *Tabular* folder.

Widening Columns

Columns may be widened to accommodate larger data by clicking on the right field delimiter in the column header and dragging it to the right.

Editing in the Input Folder

Editing in the *Input* folder is not supported. The *Input* folder contains raw data and provides the trader with an unmodified original list for the purpose of cross-referencing. The data in this folder remains unchanged regardless of what editing is done to the order in other folders.

Editing in the Report Folders

The copy feature is the only editing feature supported, allowing a user to copy report data for pasting into other documents.

Editing in the Tabular Folder

TIE™'s *Tabular* folder provides versatile editing capabilities. The *Tabular* folder allows editing at the cell, row, column, and range levels. The *Tabular* folder supports the following operations: edit, cut, copy, paste, delete, sort, align right/left, bisect, merge, and transpose.

Aligning Data

To align the data in a column, select the column by clicking on its header. Hold down the *Control* key on the keyboard and click the right mouse button to shift the alignment from left justified to right justified or visa-versa. **CTRL + right click.**

Bisecting Columns

To bisect a column, place the cursor in the header row of the column to be bisected. Position the cursor on the right field delimiter (or the right edge of the screen when no columns are present), until the cursor arrow becomes a line with a double-pointed arrow crossing through it. Keeping the cursor there, hold down the control key while pressing

the left click button on the mouse and drag the field delimiter to the left. When you have positioned the field delimiter, release the left click button on the mouse. **Position cursor, CTRL + left click, drag left.**

Copying

The *Tabular* folder supports copying a highlighted selection of data onto the clipboard for pasting into a fresh *TIE™* grid. Another useful feature is that the trader can copy data from a reference dialog box and insert it into a cell or row in the *TIE™* grid. This enables quick editing of sedols, tickers, account names, etc. The reverse can also be done, for example, the user can copy a sedol from the grid and paste it into the sedol edit control in the *Security Reference* dialog box, to search for that security. This saves time and prevents potential typos that can occur manually.

To copy data, highlight the cell, row, or range to be copied and click on the Copy button on the toolbar or press **CTRL + C**.

Cutting and Deleting a Row

To cut or delete a row, simply highlight it and click on the Cut button or the press the delete key on the keyboard. Cutting will remove the entire row, where deleting will remove the data from the row.

Cutting or Deleting More Than One Row at a time

To cut or delete a range of rows, create a selection range. To create a selection range, hold down the left mouse button and drag the mouse to highlight the range area. To group non-consecutive rows hold down the control key and select rows by clicking the left mouse button on each row. When a range or group is selected it will be highlighted in reverse video. Once a range or group is highlighted the user may cut the rows using the Cut button on the toolbar or press the delete key on the keyboard to remove just the data.

Merging Columns

To merge two columns, place the cursor in the header row, on the field delimiter between the two columns to be merged. Adjust the mouse position until the cursor arrow becomes a line with a double-pointed arrow crossing through it. Keeping the cursor there, hold down the control key on your keyboard while you press the left click button on your mouse and drag the field delimiter to the right. When you have positioned the field delimiter, release the left click button on the mouse. **Position cursor, CTRL + left click, drag right.**

Pasting

Inputting a Trade List

The *Tabular* folder supports pasting data on the clipboard into the *TIE™* grid. The user can paste data from almost any kind of document into *TRADE IMPORT EXPERT™* for conversion.

Making Editing Changes

The user can paste data copied from one of the reference dialog boxes into a cell in the *TIE™* grid. This enables quick editing of sedols, tickers, account names, etc., and prevents potential typos that can occur manually.

Looking Up Reference Data

The user can copy data from the *TIE™* grid and paste it into an edit control of a reference dialog box to search for the data. This saves time and prevents potential typos that can occur manually.

Looking Up Reference Data

The user can copy data from the *TIE*™ grid and paste it into an edit control of a reference dialog box to search for the data. This saves time and prevents potential typos that can occur manually.

To Paste Data

To paste individual data, place the cursor where the data is to be located. Highlight the cell or row, and click on the *Paste* button on the toolbar, press **Ctrl + V**, or select "Paste" from the right click mouse menu.

To paste a file or large grouping of data into the grid place the mouse anywhere on the *TIE* screen and click on the *Paste* button on the toolbar, press **Ctrl + V** or select "Paste" from the right click mouse menu.

Note: Pasting more than one row of data into *TIE*™ clears the screen and inserts the data from the clipboard as a new trade list.

Ranges

Ranges may be specified by using the *Range* edit controls located in the *Control Panel* to the right of the *TIE*™ grid. A range may also be designated by highlighting a group of rows. To create a selection range, hold down the left mouse button and drag the mouse to highlight the range area. When a range is selected it will be highlighted in reverse video. Once a range is highlighted the user may click on the *Convert* button to generate orders.

Only those securities within a specified range will be converted into orders. This allows a trader to convert list in sections if needed, or to convert only a partial list if required.

Side Radio Buttons

The *Side Radio Buttons* are located on the *Control Panel* to the right of the *TIE*™ screen.

The side for an entire order can be changed by clicking on one of the *Side Radio Buttons*, and then clicking on the *Convert* button. This feature saves time by eliminating the tedious process of having to edit the side in every row. Side changes are instantly updated in the *Summary Grid* located on the *Control Panel* and in all related output folders and reports.

A portion of a list may also be changed by highlighting a range of rows or specifying row numbers in the *Range* edit controls. Please note that only the securities within the specified range will be converted into orders.

Sorting a List

To sort a list, select the column containing the sort criteria by clicking on its column header. Hold down the *Control* key on the keyboard and double click the left mouse button. Double clicking a second time will reverse the sort order. **CTRL + left double-click.**

Note: Please note that every row in a list will be sorted. If internal headings are included in the trade list, sorting may possibly do away with helpful input organization.

Transpose

To transpose data in a list where the upper and lower case letters need to be reversed, click on the column header to highlight the column, then hold down the Shift key and left

double click. (Example: RICs are sometimes sent with the upper and lower case letters in reverse.)

Shift + left double click.

Editing in the Total and side folders

Editing in the *Total* and "side" folders, also known as the *Output* folders, can be done on most attributes.

Sorting

The list may be sorted by any data category simply by holding down the control key and double clicking on the column header. This feature makes locating specific securities fast and easy. Securities can be grouped by side or alphabetically by ticker, RIC, or company name. They can be grouped according to share quantity or even by comments. The sort feature adds flexibility to *Total* and side folders for cross-referencing, editing and proof reading. Sorting in the output folders will not affect any output or upload results. **CTRL + left double-click.**

Column Width

The column width can be adjusted in all the output folders, making if possible to display numbers, names, or memos, etc. that extend beyond the standard column width. To adjust column width, place the mouse on a field delimiter in the column header area. When the cursor becomes a line with a double arrow crossing through it, click left on the mouse and drag the field delimiter to the appropriate width. **Position cursor, left click and drag.**

Sides

Editing the side changes the color of the row to correspond with the color of the new side. Simultaneously, that order becomes viewable in the specific side output folder. Side changes are instantly updated in the *Summary Grid* located on the *Control Panel* and in the related output folders and reports.

Identifiers

Editing an identifier (ticker, RIC, cusip, sedol, etc.) so that it represents a different security instantly updates the other identifiers in the row, along with the company name, country, closing price and principals. The output folders, reports, and *Summary Grid* are also instantly updated.

Shares

Share quantities may be edited when there are no sub-accounts. When a share quantity is edited, related principals and share totals are instantly recalculated and the output folders, reports, and the *Summary Grid* are simultaneously updated.

When there are sub-accounts, the share quantities and allocations must be edited in the *Tabular* folder, and the order reconverted. Attempts to edit allocation shares in the output folders will result in a warning message and any typing will revert to the original data.

Prices

Local and USD prices may be edited in the *Total* and side folders. Editing one will update the other. *TIE™* recalculates all principals using exchange rates where required, and instantly updates the output folders, reports and *Summary Grid*.

Country

The country may only be edited for securities that are dually listed. *TIE*™ restricts the country editing to these cases only.

Company name

The company field cannot be edited. The company name is displayed exactly as it appears in the database.

Industry

The industry field cannot be edited.

Principals

Principals cannot be edited. Changes must be made to the prices or share quantities in order to be reflected in the principals. Attempts to edit principals will result in the data reverting back to the original data when the user exits the cell.

Exchange, Destination and Restriction

These may be edited in the security rows but not in the allocation rows.

Memos and Comments

The *Memo* and *Comments* fields cannot be edited.

Note: The *Memo* column displays information from the *Tabular* folder which can be edited and reset in the *Tabular* folder.

Editing in the Unknown folder

Data in the *Unknown* folder may be edited at the cell, row, column or range level. The *Unknown* folder supports the following operations: edit, align left or right, cut, paste, delete, bisect, and merge.

Corrections made in the *Unknown* folder can be applied incrementally to the converted list. To apply the corrections, click on the *Convert* button. Orders recognized from the resulting corrections will be inserted in the trade list and removed from the *Unknown* folder.

To display expanded error messages for a row, click on the row. The error messages will appear on the application status bar.

Note: Editing and converting while in the *Unknown* folder will produce corrections in the output and report folders. Those corrections will not appear in the *Tabular* folder, which is an input folder. Reconverting from *Tabular* converts the original input, overriding (losing) any changes made in the *Unknown* folder. If the user plans on making additional editing changes in *Tabular*, then all corrections should be made in the *Tabular* folder.

FastFind

TIE™ can instantly conduct searches for data in the *Tabular*, *Unknown*, *Total*, and side folders. (i.e.: ticker, RIC, sedol, side, account, country, company name, etc.) **Shift + Right Click**

To search for data:

1. Position the cursor over the cell.
2. Hold down the shift key and click the right mouse button.
TIE™ will bring up the appropriate reference dialog box with completed results of the search, and display the search results in the *Status Bar* at the bottom of the screen.

Entering an Order Manually

Entering an Order

Orders can be entered manually in the *Excel*™ folder. Click on a sell, type in the data and tab or mouse to the next cell and continue.

Formatting the Order Entry

Double clicking the Right Mouse Button over the *Excel*™ grid in the *Excel*™ folder brings up the *Tidestone Formula Once Workbook Designer*™ which offers the standard suite of *Excel*™ editing and formatting tools.

Converting the Order

Once the order is entered, click on the *Convert* button to process the data; the *Set Client* dialog box will appear. Once the client is set, check the *Tabular* folder for order status and error screening.

Saving a Manually Entered Order as a File

In TIE's *Excel*™ folder, Double-Click Right on the Mouse to bring up the *Tidestone Workbook Designer*™. Click on the *Workbook Designer* "Save" button. Make sure to specify the file type (e.g. *Excel*™ 97).

Merging Columns

To Merge Columns:

1. Place your cursor in the header row on the field delimiter between the two columns to be merged. Adjust the mouse position until the cursor arrow becomes a line with a double arrow crossing through it.
2. Hold down the control key, then press the left click button on the mouse and drag the field delimiter to the right.
3. When you have positioned the field delimiter, release the left click button.

Note: During bisect and merge operations the column's new width is displayed in character units in its header region. *This feature is only supported in the Tabular and Unknown folders.*

Moving Field Delimiters

To Move or Drag a Field Delimiter:

1. Place your cursor over any field delimiter in the header row of the grid. The cursor will display a line with a double arrow running through it.
 2. Hold down the control key, and press the left click button on the mouse.
 3. While holding these down simultaneously, drag the mouse/field delimiter left or right.
- Dragging a delimiter to the left and releasing will bisect a column by adding a new delimiter.
 - Dragging a delimiter to the right and releasing will merge columns.

Note: If columns have been set, they will have to be reset after any field delimiter has been moved. *This feature is only supported in the Tabular folder.*

Sorting Data

To sort a list:

1. Select the column containing the data the list will be sorted by and click on its column header.
2. Hold down the *Control* key on the keyboard and double click the left mouse button.
3. Double clicking a second time will reverse the sort order.

Note: Every row in a list will be sorted. If internal headings are included in the trade list, sorting may possibly do away with helpful input organization.

This feature is supported in the Tabular folder and all output folders with the exception of the Unknown folder.

Transposing upper & lower case letters

To Transpose

1. Select the data (the cell or column) to transpose by highlighting it.
2. Hold down the *Shift* key and double-click on the left mouse button.
Shift + Left Double Click

5. UPLOAD PROCEDURES

Upload procedures will vary from client to client as these are customized to integrate with each firm's specific systems and according to their requirements.

Files may be saved to a directory, as a FIX message, emailed to a client, or uploaded to various execution systems.

For more detailed information regarding your company's specific upload procedures, request a customized Users Guide from Software Intelligence, Inc. or email sales@softintel.com.

Standard Upload Procedures

Typically one or more save/upload button will appear on *TIE™*'s toolbar. Each upload button brings up a dialog box for that execution system. Below are the instructions for some standard features that may be included in the upload dialog boxes.

Selecting Security Identifier

The security identifier is selected by scrolling through the list box and double clicking on the selection. This determines the identifier that will be used for the upload. If no identifier is selected, *TIE™* defaults to the identifier the client sent.

Selecting the Client Name

When the client has already been set using the *Set Client* dialog box, the client name will be pre-selected in the *Trade Execution System* upload dialog box. If the client name edit control is left blank a warning will appear, the dialog box will close, and the user will have to click on the upload button to begin the process again.

Selecting USA or CAN for Dually Listed USA/CAN securities in the list

When a list contains securities that trade both in US and Canada, two radio buttons will appear in the upper right corner of the dialog box. These determine whether dually listed securities are to be uploaded as Canadian or US. To select a radio button, click the mouse on it, so that a black circle appears in the center. If no selection is made, *TIE™* will default to the country displayed in the *Total* folder. (Please note that the country column in the *Total* folder can be edited to change the country for individual dually listed securities.)

Selecting UKM or IRE for Dually Listed IRE/UKM securities in the list

When a list contains Irish securities that trade on the London exchange, two radio buttons appear in the upper right corner of the dialog box. When the UKM radio button is selected, orders will be uploaded with UKM as the country. When the IRE radio button is selected, orders will be uploaded with IRE as the country. To select a radio button, click the mouse on it, so that a black circle appears in the center. If neither button is selected, *TIE™* will default to the country displayed in the *Total* folder. (Please note that the country column in the *Total* folder may be edited to change the country for individual securities.)

Aggregating Allocations

TIE™ gives the user the option of aggregating allocations in the upload, or uploading them individually. *TIE™*'s default mode is to aggregate allocations in the upload.

Optional Updating of the Daily Summary Report

Test files can be uploaded without being added to the *Daily Summary Report*. A check is provided for this option. The box has a default check in it to add the upload to the *Daily Summary Report*.

Saved Output Files

A copy of *TIE*™'s output file is automatically saved to the user's directory each time an order is uploaded to the *Trade Execution System*.

6. FEATURES

Account Reference

The Account Reference dialog box allows the user to look up all the accounts for a particular client, to look up specific account names, and to add, delete and update account information.

Click on the button marked, *ACCT REF* or select *Account Reference* in the right-click pop-up menu.

The screenshot shows the 'Account Reference' dialog box. It has a title bar with the text 'Account Reference' and a close button. The dialog is divided into several sections:

- Client Name:** A text box containing 'TEST CLIENT'. Below it is a list box with the following items: 'TEST CLIENT', 'TETON | IBS', 'TEXAS | IBS', and 'TEXAS TEACHERS | EM'. The 'TEST CLIENT' item is selected.
- External Account Mnemonic:** A text box containing 'ACCOUNT 3'. Below it is a list box with the following items: 'ACCOUNT 1', 'ACCOUNT 2', and 'ACCOUNT 3'. The 'ACCOUNT 3' item is selected.
- External Account Mnemonic *:** A text box containing 'ACCOUNT 3'.
- Internal Account Number *:** A text box containing '12345678'.
- Buttons:** A vertical stack of buttons on the right side: 'Find', 'Add', 'Delete', 'Update', 'Clear', and 'Done'.

Adjust Font Display Resolution

The *Adjust Font Display Resolution* feature allows users to adjust the display resolution on systems in large font mode. If *Trade Import Expert™* cannot display its entire window when it first starts, the *Windows™ NT* driver is probably in large font mode. When this occurs the grid is visible but the control panel is not. A simple click of the large/small font button "B/b" on the tool bar will adjust for screen font problems.

Advanced Features

Advanced Features can be found in the *Tools Menu* located on *TIE™'s Menu Bar*. The *Advanced Features* dialog box contains check-boxes allowing the user the option of 1) having *TIE™* deduce the side of a list based on the sign of the shares, 2) having *TIE™* prompt the user when Canadian securities are present in a list, and 3) having *TIE™* choose the Canadian securities when identifiers in a list are dually listed.

Alert Lights

Trade Import Expert™ warns the trader, through a series of *alert* lights, if there are problems with any of the security data in a trade list.

TIE™ generates *alerts* for four different situations:

- Unknown security identifiers
- Conflicts between security identifiers
- Prices out of range
- Allocation imbalances

A green LED indicates no conflict. A gray LED means that the alert is not applicable. A red LED indicates a conflict.



- The **Security Alert** lets the user know if there are unknown security identifiers in a list.
- The **Conflict Alert** lets the user know if there are securities in a list that have not been converted into orders due to data conflicts.
- The **Price Alert** indicates whether the prices given in a list are +/- 5% over or under the prior night's closing price.
- The **Allocation Alert** indicates any sub-account allocation imbalances, and will only be lit when sub-accounts are present in a list.

Related Summaries, Error Messages and Reports:

- Counts of the *conflicts* and *alerts* are displayed in the last row of the *Summary Grid*.
- Messages describing the conflicts are displayed in the *Status Column* of the *Tabular* folder and in the *Status Bar* at the bottom of the screen when an individual row is highlighted.
- When prices are out of range, the % the price is off will be displayed in the *Comments* field of the output folders.
- Complete lists of conflicts and errors can be found in the *Report* and the *Errors* output folders.

Bid Report

TIE™ generates a bid sheet for each converted trade list. *TIE™* calculates the commission, tax, clearing costs, and basis points for aggregate shares broken down by country and side.

| Country Code | Country / Side | Region | Total # | Total Shares | USD Closing Principal | | | |
|--------------------|-----------------|------------|----------|--------------|-----------------------|-----------|---------------|---------------|
| AUL | Australia / BY | FE | 1 | 20,300 | \$68,619.20 | | | |
| AUL | Australia / SL | FE | 1 | 3,500 | \$35,909.64 | | | |
| AUS | Austria / BY | EU | 1 | 150 | \$4,227.50 | | | |
| BEL | Belguim / BY | EU | 2 | 1,870 | \$408,242.64 | | | |
| FRA | France / BY | EU | 2 | 303,325 | \$54,169,235.75 | | | |
| FRA | France / SL | EU | 3 | 14,050 | \$2,797,463.35 | | | |
| GFR | Germany / BY | EU | 1 | 650 | \$98,362.81 | | | |
| USD Sell Principal | Comm. Rate | Comm. Cost | Buy Rate | Buy Cost | Sell Rate | Sell Cost | Clearing Rate | Clearing Cost |
| \$0.00 | 0.01% | \$6.86 | 0.15% | \$102.93 | 0.15% | \$0.00 | 60 | \$60.00 |
| \$35,909.64 | 0.01% | \$3.59 | 0.15% | \$0.00 | 0.15% | \$53.86 | 60 | \$60.00 |
| \$0.00 | 0.1% | \$4.23 | 0.0% | \$0.00 | 0.0% | \$0.00 | 150 | \$150.00 |
| \$0.00 | 0.05% | \$204.12 | 0.0% | \$0.00 | 0.0% | \$0.00 | 16 | \$32.00 |
| \$0.00 | 0.0% | \$0.00 | 0.0% | \$0.00 | 0.0% | \$0.00 | 62 | \$124.00 |
| \$2,797,463.35 | 0.0% | \$0.00 | 0.0% | \$0.00 | 0.0% | \$0.00 | 62 | \$186.00 |
| \$0.00 | 0.0% | \$0.00 | 0.0% | \$0.00 | 0.0% | \$0.00 | 12 | \$12.00 |
| Total Cost | Total Cost BP's | | | | | | | |
| \$169.79 | 0.25% | | | | | | | |
| \$117.46 | 0.33% | | | | | | | |
| \$154.23 | 3.65% | | | | | | | |
| \$236.12 | 0.06% | | | | | | | |
| \$124.00 | 0.0% | | | | | | | |
| \$186.00 | 0.01% | | | | | | | |
| \$12.00 | 0.01% | | | | | | | |

Canadian and Dually Listed Processing

TIE™ has a variety of options for handling dually listed securities. *TIE™* will default to the US ticker unless the Canadian security is specified by a unique security identifier (i.e. RIC). *TIE™* will default to the UK security unless the Irish security has been specified.

Reporting of Dually Listed Securities

1. The *Status Bar* of the *Tabular* folder will display "Dually Listed" at the beginning of the security summary, when applicable. Click on an individual security row to view the security summary in the *Status Bar*.
2. Dually listed securities are noted in the *Comments* field of the *Total* and *side* folders.
3. Dually listed securities are reported in the *Dually Listed Securities* section of the *Trade Summary Report*.

Alerting the user of Canadian securities and/or dually listed securities in a list

TIE™ provides the user the option of being alerted when a Canadian security appears in a list. From the *Tools Menu* select *Advanced Features*. Placing a check in the "Prompt User for Canadian Securities" check-box enables a prompt that will come up each time a user drags in or converts an order.

Note: Once the *Canadian Prompt* is checked it will remain on when opening up new grid sheets.

Changing the security selection of a Dually Listed Security

Changing individual securities

If a user wants to change the country of an individual security, this can be done in the *Total* and side folders by editing the *Country* cell for that security.

Once edited, tabbing out of the cell will reconvert the dually listed security's data to correspond with the country selected.

Note: *TIE™* will only allow editing of the country column when a security is dually listed, and will only allow the USA or CAN country abbreviations.

Changing the security selection for an entire list

If the user wants *TIE™* to select the Canadian security each time a dually listed security appears in a list, *TIE™* provides a check-box to "Choose Canadian when Dually listed". This check box is located in the *Advanced Features* dialog box under the *Tools* menu.

Note: The check box will remain checked or unchecked according to the user's last setting when a new file is dragged in over a previous file, but the check box defaults to unchecked (choosing US securities when dually listed) each time a new grid sheet is opened.

Changing the security selection in an entire list when uploading to the Trade Execution System

When Canadian and/or dually listed securities are present in a list, *TIE™'s Trade Execution System Upload* dialog box will include radio buttons that allow the user to upload securities as UKM, IRE, CAN, or USA (depending upon what is in the list). *TIE™* defaults to the country displayed in the *Total* folder when no radio button is selected.

Clear

The *Clear* button clears the active *TIE™* grid and all corresponding folders, except the *Daily* folder.

Note: Other grids containing lists will remain intact and may be accessed by clicking on the *Window* menu in the toolbar and selecting a display type or an individual file name.

Clear Refresh Timer

Trade Import Expert™ has an automated *Refresh Timer* that refreshes reference data daily at 7am local time. Trade lists open in *TIE™* at that time are closed automatically, and the data *TIE™* is drawing from is updated. This gives the user access to updated reference data, including changes in tickers, prices, restricteds, foreign exchange rates, etc.

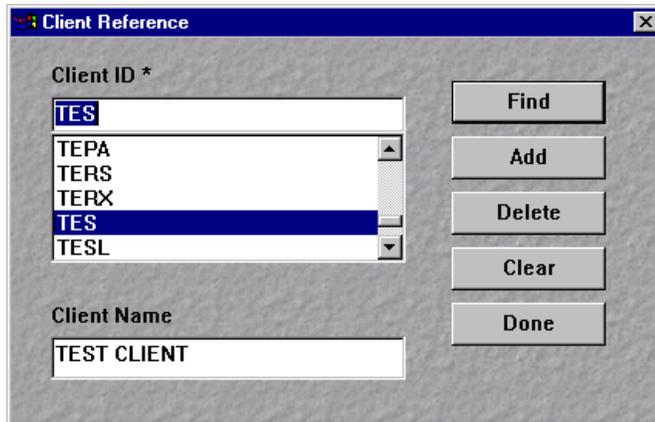
The *Refresh Timer* is a feature that is pre-enabled. If the user chooses not to have the reference data updated automatically at the pre-set hour, it can be disabled by selecting *Clear Refresh Timer* from the *Tools* menu at the top of the screen. Once it has been disabled, it will no longer refresh each morning until it is set again.

Client Reference

The *Client Reference* dialog box allows the user to search for, verify, add, and delete client names and IDs.

The *Client Reference* dialog box has a scrolling list box for the *Client ID* and an edit control for the *Client Name*.

Click on the button marked, *CLIENT REF* or highlight and click on *Client Reference* in the right-click pop-up menu.



Converting Lists Simultaneously

Trade Import Expert™ allows multiple lists to be converted simultaneously. To process multiple lists simultaneously, create multiple *TIE™* grids by clicking on the *New* button on the toolbar. Each new grid has a unique name that is displayed on its window's header bar. Once a file has been opened or dragged into the grid, the header bar will display the file name and a client name. The various windows may be viewed and accessed by clicking on the *Window* menu in the toolbar and selecting a display type or an individual file name.

Copy

The *Copy* button allows the user to copy a highlighted selection of data onto the clipboard for pasting into the *TIE™* grid or into another editable document or grid such as *Microsoft Word™* or *Excel™*. A trader can also copy data from one of the reference dialog boxes and insert it into a cell or row in the *TIE™* grid. This enables quick editing of sedols, tickers, account names, etc. The reverse can also be done, for example, a user can copy a sedol from the grid and paste it into the sedol edit control in the *Security Reference* dialog box, to search for that security. This saves time and prevents potential typos that can occur manually. Traders can also copy a converted list from the *Total* folder and paste them into *Microsoft Excel™* to run analytics.

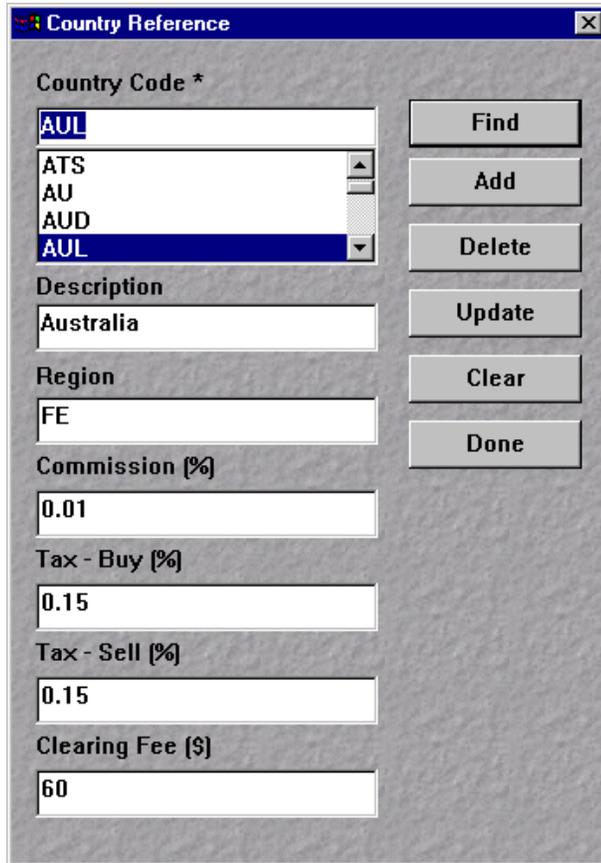
Country Reference

The *Country Reference* dialog box allows the user to search for, verify, add, and delete country abbreviations.

To access the *Country Reference*, click on the button marked, *CTRY REF*, or highlight and click on *Country Reference* in the right-click pop-up menu.

The *Country Reference* includes a scrolling list box of country abbreviations and edit controls for the country abbreviation and the country name ("description"), region, commission rate, buy tax rate, sell tax rate, and clearing fees.

The data displayed in the *Country Reference* is the data used to compute transaction fees in the *Bid* folder.



Country Reference

Country Code *

AUL

ATS
AU
AUD
AUL

Find
Add
Delete
Update
Clear
Done

Description
Australia

Region
FE

Commission (%)
0.01

Tax - Buy (%)
0.15

Tax - Sell (%)
0.15

Clearing Fee (\$)
60

Cut

Clicking on the *Cut* button or holding down the *Control* key while pressing "C" on the keyboard will permanently remove the highlighted column(s) or any column(s) containing highlighted data. The cut feature works in the *Tabular* folder, *Unknown* folder, *Excel* folder, and all output folders.

Daily Summary Report

The *Daily* folder provides a daily summary report of all trade lists uploaded into the trading system. The *Daily Summary Report* includes the time the trade list was uploaded, the client, type and strategy of the trade, the region (domestic or international), the total number of buy shares, sell shares, and aggregate shares, the buy principal, sell principal, net principal, and total principal. Grand totals of these numbers are given at the bottom of the summary and updated each time a new order is uploaded.

| Time | Client | Type | Strategy | Region |
|--------------|---|--------|----------|---------------|
| 12:14:46 | GSAT GSAM GOLDMAN SACHS ASSET MGM IBS | AGENCY | CLOSE | International |
| 12:16:08 | GEC GENERAL ELECTRIC IBS | OTHER | CLOSE | International |
| 12:17:29 | SAW STANDISH AYER & WOOD IBS | RISK | OTHER | International |
| 12:18:35 | HARTFORD EM | AGENCY | CLOSE | Domestic |
| 12:20:00 | ROB ROBECO IBS | RISK | VWAP | Domestic |
| 12:21:30 | EAM EAGLE ASSET MGMT. IBS | OTHER | OTHER | International |
| 12:23:32 | IBJ EM | AGENCY | CLOSE | Domestic |
| 12:25:16 | SING GOVT OF SINGAPORE IBS | OTHER | OTHER | Domestic |
| 12:28:04 | BANKERS TRUST EM | AGENCY | CLOSE | Domestic |
| 12:28:50 | ACADIAN ASSET MANAGEMENT IBS | AGENCY | CLOSE | Domestic |
| 12:30:08 | BEA BEA ASSOCIATES IBS | AGENCY | CLOSE | International |
| 12:31:04 | BGIB BGI LONDON IBS | OTHER | OTHER | International |
| 12:32:38 | VNG VANGUARD IBS | RISK | OTHER | International |
| 12:33:49 | FPRO FRIENDS PROVIDENT IBS | OTHER | OTHER | International |
| TOTAL | | | | |

| Buy Shares | Sell Shares | Total Shares | Buy Principal | Sell Principal | Net Principal | Total Principal |
|-------------------|-------------------|-------------------|---------------------------|-------------------------|---------------------------|---------------------------|
| 53,395,329 | 4,100 | 53,399,429 | \$3,295,932,709.18 | \$438,700.00 | \$3,295,494,009.18 | \$3,296,371,409.18 |
| 0 | 65,539 | 65,539 | \$0.00 | \$857,154.49 | (\$857,154.49) | \$857,154.49 |
| 117,800 | 89,050 | 206,850 | \$650,541.11 | \$673,133.58 | (\$22,592.47) | \$1,323,674.69 |
| 194,000 | 135,300 | 329,300 | \$7,507,131.25 | \$7,735,956.25 | (\$228,825.00) | \$15,243,087.50 |
| 988,525 | 864,600 | 1,853,125 | \$58,846,470.31 | \$47,270,250.00 | \$11,576,220.31 | \$106,116,720.31 |
| 142,300 | 0 | 142,300 | \$10,483,308.04 | \$0.00 | \$10,483,308.04 | \$10,483,308.04 |
| 1,758 | 2,000 | 3,758 | \$105,941.13 | \$104,187.50 | \$1,753.63 | \$210,128.63 |
| 136,500 | 33,000 | 169,500 | \$8,289,200.00 | \$1,885,125.00 | \$6,404,075.00 | \$10,174,325.00 |
| 552,258 | 0 | 552,258 | \$11,686,476.43 | \$0.00 | \$11,686,476.43 | \$11,686,476.43 |
| 26,600 | 0 | 26,600 | \$646,393.75 | \$0.00 | \$646,393.75 | \$646,393.75 |
| 16,128,090 | 18,085,876 | 34,213,966 | \$57,806,720.78 | \$17,119,329.63 | \$40,687,391.16 | \$74,926,050.41 |
| 168,344 | 0 | 168,344 | \$1,955,357.06 | \$0.00 | \$1,955,357.06 | \$1,955,357.06 |
| 374,518 | 0 | 374,518 | \$2,280,699.15 | \$0.00 | \$2,280,699.15 | \$2,280,699.15 |
| 0 | 8,166,558 | 8,166,558 | \$0.00 | \$149,785,571.65 | (\$149,785,571.65) | \$149,785,571.65 |
| 72,226,022 | 27,446,023 | 99,672,045 | \$3,456,190,948.19 | \$225,869,408.11 | \$3,230,321,540.08 | \$3,682,060,356.30 |

Data Refresh

Trade Import Expert™ offers a data refresh option. This gives the user access to the most up to date reference data, including changes in tickers, prices, restricteds, foreign exchange rates, etc.

By selecting *Refresh Reference Data* from the *Tools* menu at the top of the screen, all lists currently open in *TIE™* will be closed automatically, and the data *TIE™* is drawing from will be updated. The user also has the option of selecting *Set Refresh Timer* so that the data will be refreshed at a pre-set time. The pre-set *Refresh* time is 7am, local time. A *Clear Refresh Timer* option is also available, if a user decides not to have the reference data updated automatically at the pre-set hour.

Display Allocation Detail

Trade Import Expert™ processes sub-account allocations for orders, when sub-accounts have been recognized or “set” during order conversion. The *Total* folder and side output folders share a feature that displays the allocation detail for each order. To view the order/allocation detail, click on the button marked, *SUB ACCT* on the tool bar. Allocation rows are displayed in italic font beneath the order row. An allocation row contains the following attributes: ticker, allocation share quantity, client mnemonic, account mnemonic, account number, and the allocation’s principal.

The allocation detail can be toggled on or off by clicking the *SUB ACCT* detail button on the toolbar. If an order contains no sub-accounts or no accounts have been set, clicking the button will have no effect.

Editing

Input data may be edited in the *Excel™*, and *Tabular* folders. *Processed* data may be edited in the *Unknown*, *Total*, and *Side* output folders. The editing features available depend upon which tabbed folder is selected. The *Excel* and *Tabular* folders provide the most flexibility. Folders that do not allow editing include: the *Input* folder, which displays original text file data, and the *Country* folder and report folders, which are comprised of summary data.

Error Reporting

Trade Import Expert™ gives the trader feedback on errors in a trade list through a variety of features. These include: *Alert Lights*, *Reconciliation Lights*, the *Summary Grid*, *Status Column*, *Status Bar*, the *Total* folder *Comments* field, the *Trade Summary*, *Errors*, *Mismatch*, *Odd Lot*, *Price*, and *Restricted* reports.

Counts of the *conflicts* and *alerts* are displayed in the last row of the *Summary Grid*. Messages describing the order status (conflicts, errors, potential problems) are displayed in the *Status Column* of the *Tabular* folder and in the *Status Bar* at the bottom of the screen when an individual row is highlighted.

When prices are out of range, the % the price is off will be displayed in the *Comments* field of the output folders. Closing prices that are zero (missing from the data base) will be listed in the *Trade Summary* and the *Price* reports. Odd lot share quantities are displayed in the *Status Bar* at the bottom of the *Tabular* screen when an individual row is highlighted, and are noted in the *Comments* field of the *Total* and side output folders.

Complete lists of conflicts, errors, mismatches, odd lots, restricteds, zero prices and prices out of range can be found in the *Report*, *Errors*, *Mismatch*, *Odd Lot*, *Restricted* and *Price* report folders.

The *Trade Summary Report* displays the *TIE™* kick outs and the *Trade Execution System* kick outs after a file has been uploaded.

European Attributes

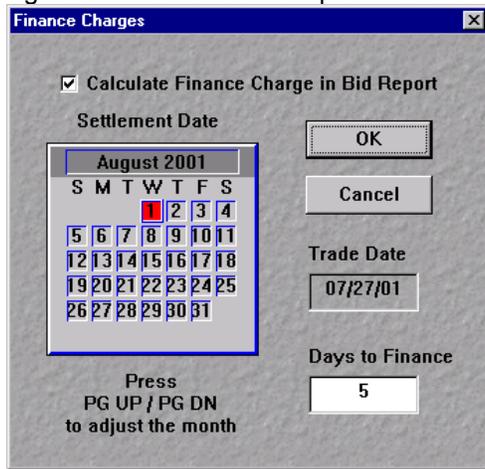
Trade Import Expert™ has the ability to recognize, convert lists, and upload by European attributes when *European Attributes* is enabled. This feature is turned on or off in the Registry. When it is enabled a special *European Attributes* toolbar will be added to the current toolbar. *TIE™* can upload trade lists by Sicovam, Valoren, Kassenverein, ISIN, and A client's internal security symbol, in addition to Ticker, Quick Code, Cusip, RIC, and Sedol.

FastFind

Trade Import Expert™ provides intelligent search capabilities. In the *Tabular*, *Unknown*, *Total* and "side" folders, users can instantly search for data by pressing the shift key on the keyboard and double-clicking the right mouse button on a cell. *TIE™* instantly conducts a search for the data (i.e.: ticker, ric, sedol, side, account, country, company name, etc.)

Finance Charge

A user may include or exclude finance charges from the *Bid Report* by selecting a check box from TIE™'s menu: **Tools > Advanced Features > Include Finance Charge**. A calendar for selecting the settlement date is opened from TIE™'s menu: **Tools > Set Finance Date**.

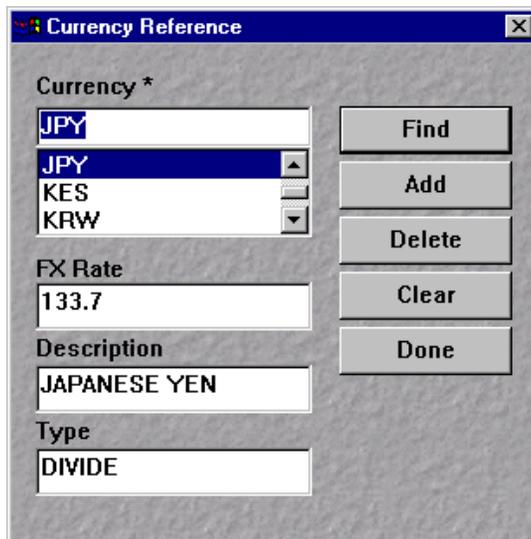


Foreign Exchange Reference

The *Foreign Exchange Reference (FX)* dialog box allows the user to search for, confirm, or revise exchange rates for foreign currencies.

The *Foreign Exchange Reference* includes a scrolling list box of currency codes, and four edit controls, which display the currency abbreviation, the corresponding exchange rate, the country, and the type of exchange (multiply or divide).

To access the *Foreign Exchange Reference*, click on the button marked, *FX REF*, or highlight and click on *FX Reference* in the right-click pop-up menu.



Upload Reconciliation

TIE™ reconciles its output files with the data that trades in the execution system, saving traders from having to reconcile the two manually.

An *Upload Report* appears in a pop-up dialog box when the upload is complete.

Execution system kick outs appear in the first section of the *Trade Summary Report*, and the trading system's model names are added to the *Country* folder where orders are grouped according to country, side and account.

Upload to the Trade Execution System

TIE™ allows the user to upload a converted list to any number of *Trade Execution Systems*. The save button will bring up a dialog box asking for the user's name, the strategy and execution type, the identifier the order should be uploaded by, and the name of the client.

When a list contains securities that trade both in US and Canada, two radio buttons appear in the upper right corner of the dialog box, giving the user the option of uploading dually listed securities as Canadian or US. If no selection is made, *TIE™* will default to the country displayed in the *Total* folder.

When a list contains Irish securities that trade on the London exchange, two radio buttons appear in the upper right corner of the dialog box. If the UKM radio button is selected, orders will be uploaded with UKM as the country. If the IRE radio button is selected, orders will be uploaded with IRE as the country. If neither button is selected, *TIE™* will default to the country displayed in the *Total* folder.

A check box gives the user the option of aggregating allocations in the upload, or uploading them individually. *TIE™*'s default mode is to aggregate allocations in the upload.

A second check box gives the user the option of uploading test files to *Trade Execution System* without having them added to the *Daily Summary Report*. The check box has a default check to add the upload to the *Daily Summary Report*.

As soon as the *Save* button in the dialog box is clicked, the order is uploaded to the trading system and the order information is automatically logged in the *Daily Summary Report*.

International Toolbar



The International toolbar contains five buttons used for setting international security identifiers:

1. The **Set ISIN** button allows the user to designate an ISIN cell, range or column, differentiating it from other similar data and giving the ISIN(s) precedence over identifiers that have not been set.
2. The **Set Kassenverein** button allows the user to designate a kassenverein cell, range or column, differentiating it from other similar data and giving the kassenverein(s) precedence over identifiers that have not been set.
3. The **Set Sicovam** button allows the user to designate a sicovam cell, range or column, differentiating it from other similar data and giving the sicovam(s) precedence over identifiers that have not been set.
4. The **Set Valoren** button allows the user to designate a valoren cell, range or column, differentiating it from other similar data and giving the valoren(s) precedence over identifiers that have not been set.

Mismatch Reporting

TIE™ flags securities whenever the company description the client sent does not match the company description in the securities database.

- *Description Mismatch* error messages appear in the *Status* column and the *Status Bar* of the *Tabular* folder.
- *Description Mismatches* are flagged with the word "Mismatch" in the *Comments* field of the *Total* folder and all corresponding side folders.
- The *Mismatch Report* folder contains a complete list of *Mismatches* found in a trade list.

The list of *Mismatches* is recorded in the *Trade Summary Report*.

New

The *New* button allows the user to create a new grid without clearing what is currently on the screen.

TIE™ is a multiple-document interface (MDI) application, allowing multiple documents to exist simultaneously. Normally a user may drag in or open a file over a file that has already been converted, automatically clearing the previous list. *New* allows the user to bring up a fresh *TIE™* grid so that they can have more than one trade list open on the screen at a time.

Odd Lot Reporting

Trade Import Expert™ detects and reports odd lot share quantities. *TIE™* warns the trader of *Odd Lots* rather than preventing an order with an error message.

1. Highlighting a security row in the *Tabular* folder, displays the trade information for the order in the *Status Bar* at the bottom of the screen. The words “Odd Lot” will begin the string of order data reported in the *Status Bar* when the share quantity is not equivalent to the designated lot size.
2. Odd Lots are reported in the *Comments* field of the *Total* and side output folders.
3. Complete lists of odd lots, are found in the *Trade Summary Report*, and *Odd Lot* report folders.

Note: Only Odd Lots for Japanese securities will be displayed in the *Status* column of the *Tabular* folder.

Open File

The *Open File* button brings up the *File Open* dialog box. This allows a user to select a file from the directory and open it directly into *TIE™*.

Order Status

A status column is provided in the *Tabular* and *Unknown* folders. This column lists the status for each security in a trade list.

If the security has been converted, it will display the word “Order” for that row. If the security row contains errors or discrepancies, these will be noted by error messages.

A detailed display of the order summary or error message can be seen in the *Status Bar* at the bottom of the screen when the particular row is highlighted.

Paste

The *Paste* feature allows the user to paste data from the clipboard into the *TIE™* grid. This enables the user to paste data from almost any kind of document into *Trade Import Expert™* for conversion. Data can be copied from one of the reference dialog boxes and pasted into a cell or row in the *TIE™* grid. The reverse can also be done, for example, the user can copy a sedol from the grid and paste it into the sedol edit control in the *Security Reference* dialog box, to search for that security. This saves time and prevents potential typos that can occur manually. It also enables quick editing of sedols, tickers, account names, etc.

Price out of Range

When client prices are provided, *Trade Import Expert™* compares those prices with the prior night's closing prices. If there is a discrepancy in a price of plus or minus 5% or greater, *TIE™* alerts the trader with a red *Price Alert Light* and calculates the percentage of discrepancy between the prices.

The *Price Off by... %* message is displayed in the *Status Bar* at the bottom of the *Tabular* grid when a security row is highlighted. It is also noted in the *Comments* field of the *Total* folder and side output folders. The *Report* includes a *Price Off by...%* section when applicable. All securities having a price discrepancy may also be viewed in the *Price* report folder.

Range Edit Control and Highlighted Ranges



Range Edit Control

Ranges may be specified by using the *Range* edit controls located in the *Control Panel* to the right of the grid. The range is specified by typing the row numbers of the first and last rows of the range into the "Start" and "Stop" *Range* edit controls. Only those securities within a specified range will be converted into orders. This allows a trader to convert a list in sections, or to convert only a partial list.

Highlighted Ranges

A range may also be designated by highlighting a group of rows. To create a selection range, hold down the left mouse button and drag the mouse to highlight the range area. When a range is selected it will be highlighted in reverse video. Once a range is highlighted the user may click on the *Convert* button to generate orders. Only those securities within a specified range will be converted into orders. This allows a trader to convert a list in sections, or to convert only a partial list.

Report Folder

The *Report* folder contains the *Trade Summary Report*: a comprehensive summary of a trade list. It summarizes countries, counts, shares, sides, local and USD reference principals, and USD closing principal. The *Report* can include the following sections when relevant: *TIE™* kick outs, sub-accounts, description mismatches, prices that are zero, prices that are out of range, errors, conflicts, unknown lines, securities matched by synonyms, odd lots, and, securities on the restricted list, dually listed securities, duplicate securities per account, and dummy accounts in use.

The Account, Errors, Mismatch, Odd Lot, Price and Restricted sections of the Report are displayed in six individual report folders.

Resize Window

All *Trade Import Expert™* windows can be resized. To resize a window, click on the perimeter of the window until the cursor arrow becomes a double arrow, and then drag the perimeter to expand or condense the window. Another way to resize the window is by using the *maximize/minimize* button in the upper right hand corner of the window.

Restricted Reporting

Restricted securities are listed in the *Restricted Report*, and *Restricted* section of the *Trade Summary Report*. The *Total* folder, side output folders, and *Liquidity Reports* have a restricted column marked "Rst". Securities on the restricted list display a "Y" in the restricted column.

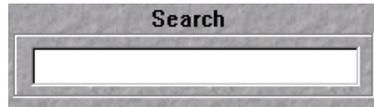
Right Click Menu

Clicking on the right mouse button displays a selection menu that includes the set features, convert command, reference tools, and several editing functions found on *TIE™*'s toolbar.

Save

The upload button(s) send orders to the trade execution system(s) and automatically save copies of the output file, the *Trade Summary Report*, *Bid*, and *Daily* reports to the user's directory. Files are saved as: **filename.username.yymmddhhmmss.report**.

Search Edit Control



The *Search Edit Control* allows the user to locate data in a list, such as a sedol or a company name by typing it into the edit control. *TIE™* will highlight the first row it finds containing matching data. The *Search Edit Control* is case sensitive.

Searching

Trade Import Expert™ provides a variety of searching capabilities. Traders have easy access to security data and client information directly through *TIE™*, in addition to being able to search for data in a trade list.

Searching for Information

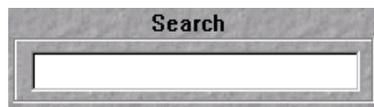
- Client names and IDs – use the ***Client Reference***
- Client names, IDs, and a listing of accounts– use the ***Set Client*** dialog box
- Client accounts, account mnemonics, internal account numbers – use the ***Account Reference***
- Country abbreviations and descriptions – use the ***Country Reference***
- Foreign currency exchange rates, currency codes, and countries – use the ***FX Reference***
- Side abbreviations which are automatically recognized – use the ***Side Reference***
- Security data including: Ticker, RIC, Cusip, Sedol, Quick Code, Company name and related security information – use the ***Security Reference***

FastFind

TIE™ will instantly search for data a user has highlighted and open the appropriate reference dialog box to display the search findings when the user employs *FastFind*.

To search for information using *FastFind*, select a cell by clicking on it, hold down the Shift key and right click the mouse.

Searching for data in a List



The *Search Edit Control*, located on *TIE™*'s *Control Panel*, allows the user to locate data in a list, such as a sedol or a company name by typing it into the edit control.

TIE™ will highlight the first row it finds containing matching data. The *Search Edit Control* is case sensitive.

Security ID

The *Security ID* button allows the user to manually over-ride any “kick-outs.” By setting an identifier cell or column as a *Security ID* cell or column the order(s) will be uploaded to the trading system, including those where the identifier is unknown. This button acts as a failsafe, when there are data errors or problems that might otherwise prevent a specific security from being traded. The upload results for the securities will display the selected identifier, as it appears in the list, and for those that were “unknown”, “ZZZ” will appear instead of corresponding security data. The “unknown” securities will be represented by the country classification of “ZZZ” in the output folders and reports.

Security Reference

The *Security Reference* dialog box allows the user to search for, add, delete, and update security information.

The *Security Reference* displays the following information, based on the data available in the database: Ticker/Quick Code, Cusip, RIC, Sedol, A client's internal security symbol, Canadian Ric, Canadian Sedol, Country, Issuer, Currency, Exchange, Restricted, Security comments, ISIN, Kassenverein, Valoren, Sicovam, Closing Price, Lot Size, OTC, and 21 day average volume. Only the edit control marked with an asterisk may be used for searching, but all fields may be updated).

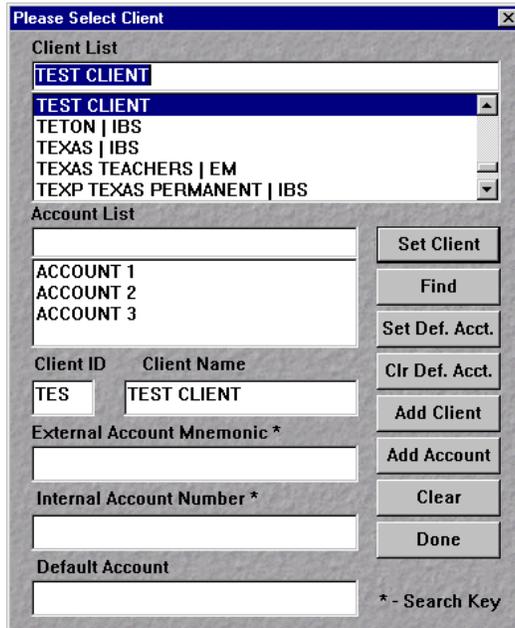
To access the *Security Reference*, click on the button marked, *SEC REF* or click on *Security Reference* in the right-click pop-up menu. The *Security Reference* may also be accessed by **FastFind** (hold down the shift key and right click on the mouse over selected data in a list.)

The screenshot shows the 'Security Reference' dialog box with the following fields and controls:

- Ticker*: [] Cusip *: F9836J103 RIC *: WIID.PA [Find] [Add]
- Bloomberg Code *: [] Sedol *: 4938646 [Delete] [Update]
- Canadian RIC: [] Canadian Sedol: [] [Clear] [Paste]
- Sicovam *: 005254 Kassenverein *: [] Valoren *: [] ISIN *: FR0000052540 [Done]
- Local Price: 0 Ctry: FRA Issuer: FRF Exch: PAR Rst: [] OTC: []
- Security Comments: [] 21 Day Vol: 0 Lot Size: 0
- Company Search * Contains Begins Equals
- Company List (double click) [FRA]
 - WELCOM INTL INNO STK
 - WEB VALLEY STK
 - WEBER ET BROUTIN STK
 - WELCOM INTL INNO STK
 - WILLEME STK
 - WILLEME STK

Set Client

The *Set Client* button brings up a dialog box that allows the user to set or add clients and accounts, and to set a default account when required. Once the user sets a client, the client name will appear along with the file name in *TIE™*'s header bar. The client name will also be pre-selected in the upload dialog box when uploading the order into the trading system.



Set Refresh Timer



Trade Import Expert™ has an automated refresh timer that refreshes reference data daily at 7am local time. Lists open in *TIE™* at 7am are closed automatically, and the data *TIE™* is drawing from is updated.

This gives the user access to the most up to date reference data, including changes in tickers, prices, restricteds, foreign exchange rates, etc.

TIE™'s *Refresh* feature pre-enabled. If the user decides not to have the reference data updated automatically at the pre-set hour, it can be disabled by selecting *Clear Refresh Timer* from the *Tools* menu at the top of the screen. Once it has been disabled, it will no longer refresh every morning until it is set again.

To set the *Refresh Timer*, click on *Set Refresh Timer* in the *Tools* menu.

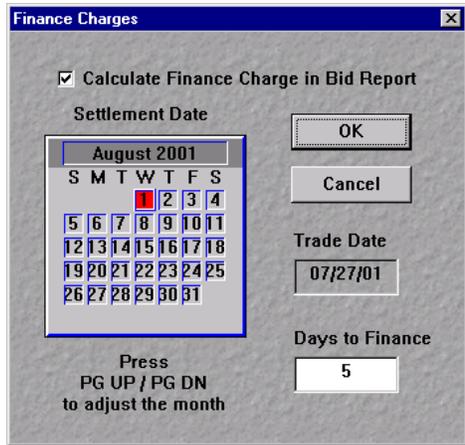
Set Finance Date Calendar

TIE™ calculates the number of days to finance an order and includes finance charges included in the *Bid Report*.

To open the *Finance Calendar* select *Tools > Set Finance Date*.

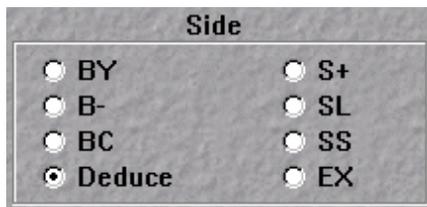
The settlement date is selected by clicking appropriate day on the calendar. The month can be changed by paging up and paging down.

If the user opts not to include finance charges in the *Bid Report*, a check box in the *Set Finance Date Calendar* dialog box temporarily omits the Finance Charge calculation.



Note: The user may enable or disable this feature by checking or un-checking the "Include Finance Charges" check box found under *Tools > Advanced Features*.

Side Radio Buttons



The side for an entire order can be changed by clicking on one of the side radio buttons, and then clicking the *Convert* button on the toolbar. Side changes are instantly updated in the *Summary Grid* located on the *Control Panel* and in all related output folders and reports.

Side Reference

The *Side Reference* dialog box allows the user to find, insert, and delete side abbreviations.

The *Side Reference* provides a drop-down list box control of the fundamental sides, and a Synonym drop-down list box displaying side synonyms in the database. The synonym edit control is used for adding additional synonyms. A list of the seven primary side abbreviations is displayed on the dialog box.

To access the *Side Reference*, click on the button marked *SIDE REF*, or click on *Side Reference* in the right-click pop-up menu.



Side Selection

Using Side Radio Buttons

Sides may be designated or changed manually by editing the side abbreviation in a list, or automatically through selecting one of the *Side* radio buttons on the *Control Panel* and clicking on the *Convert* button. Selecting a side using the radio buttons will change the side for the entire order. Selecting a range and a side via the side radio buttons will convert only the selection range of orders and will apply the side to that range.

Adding side abbreviations for TIE™ to recognize

Side abbreviations that are not automatically recognized may be temporarily added by using the *Side Reference* dialog box. See *Side Reference* under *Reference Dialog Boxes* for information on how add side synonyms in the *Side Reference* dialog box.

Setting a Side Column

A side column in a list may be “set” so that the side designations will not conflict with accounts or tickers. This is done by highlighting the side column, clicking on the *Set Side* button on the toolbar, and converting the order.

Sorting

In the *Total* and side output folders, a list may be sorted by any data category simply by double clicking on the column header.

This feature makes locating specific securities fast and easy. Securities can be grouped by side, grouped alphabetically by ticker, RIC, or company name. They can be grouped according to share quantity or even by comments. The sort feature adds flexibility to *Total* and side folders for cross-referencing, editing and proof reading. Sorting in the output folders will not affect any output or upload results.

Sorting can also be done in the *Tabular* folder, but users must be careful when there are column headers or account headers in a list, as it may jumble the organization.

Status Bar

The *Status Bar* displays: 1) Order Summaries 2) Error Messages and 3) Reference Dialog Box Function Confirmation

Order Summary and Error Status

When a row in the *Tabular* folder is highlighted the *Status Bar* will display an order summary for that row, or, an expanded error message if the row contains an error.

Reference Dialog Box Function Confirmation

The *Status Bar* provides function confirmation for the *Reference Dialog Boxes*. (e.g.: if the user adds a side abbreviation, it will display either “added side ____...” or “could not add side____...”

The *Status Bar* is located at the bottom of the *TIE™* screen.

This picture illustrates a order summary.

| | | | | | | | |
|-------------------|------------------|------|--------|-----------|---------|---|---------|
| 51 Order | AIRBORNE FREIGHT | ABF | ABF.N | 009266107 | 2011260 | N | 32.00 |
| 52 Order | AIRBORNE FREIGHT | ABF | ABF.N | 009266107 | 2011260 | N | 32.00 |
| 53 Order | AIRBORNE FREIGHT | ABF | ABF.N | 009266107 | 2011260 | N | 32.00 |
| 54 Order-Mismatch | AMER BANKNOTE | ABN | ABN.N | 024490104 | 2910862 | N | 0.3125 |
| 55 Order-Mismatch | AMER BANKNOTE | ABN | ABN.N | 024490104 | 2910862 | N | 0.3125 |
| 56 Order-Mismatch | AMER BANKNOTE | ABN | ABN.N | 024490104 | 2910862 | N | 0.3125 |
| 57 Order | AMER BUS PRODS | ABP | ABP.N | 024763104 | 2024945 | N | 15.1875 |
| 58 Order | AMER BUS PRODS | ABP | ABP.N | 024763104 | 2024945 | N | 15.1875 |
| 59 Order | AMER BUS PRODS | ABP | ABP.N | 024763104 | 2024945 | N | 15.1875 |
| 60 Order | ARCTIC CAT INC | ACAT | ACAT.0 | 039670104 | 2047500 | 0 | 8.375 |
| 61 Order | ARCTIC CAT INC | ACAT | ACAT.0 | 039670104 | 2047500 | 0 | 8.375 |
| 62 Order | ARCTIC CAT INC | ACAT | ACAT.0 | 039670104 | 2047500 | 0 | 8.375 |

Mismatch. BY 200 ABN ABN.N 000937102 USA 22.188 ABN AMRO HLDG

In this illustration, the security has a “Mismatch” error message in the Status column. By highlighting that row and checking the company description in the Status Bar, the trader can quickly see that the client sent the wrong ticker for the security named in the list. This feature aids the trader in finding errors quickly, and helps prevent trading the wrong security.

Status Column

The *Tabular* folder's *Status Column* displays status messages for each row containing order information.

When a row is successfully converted, it will read: "Order". It may also display error messages such as "Order – Mismatch" (meaning the company name in the list does not match the company name in the database). It informs the user when a security identifier is "undefined" and when there are "conflicts" between security identifiers in a given row.

| status | ric |
|--------------------|--------|
| 1 Click on shares. | RIC |
| 2 | |
| 3 Order | IBM.N |
| 4 Order | CAT.N |
| 5 Order | SUN.N |
| 6 Order | NVT.N |
| 7 Order | BLU.N |
| 8 Click on shares. | SKI.N |
| 9 Order | MSFT.O |
| 10 Order | ABB.N |
| 11 Order | ABBK.O |
| 12 Order | 10M.N |
| 13 Order-Odd Lot | 7723.T |
| 14 Order-Odd Lot | 4634.T |

Sub-Account Allocation Processing

Trade Import Expert™ processes sub-account allocations for orders, when sub-accounts are recognized or "set" during order conversion. The *Total* folder and side output folders share a feature that displays allocation detail for each order. To view the order/allocation detail, click on the button marked, *SUB ACCT* on the tool bar. Allocation rows are displayed in italic font beneath the order row. The allocation row contains the following attributes: ticker, allocation share quantity, client mnemonic, account mnemonic, internal account number, and the allocation's principal.

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Report <input checked="" type="checkbox"/> Errors <input checked="" type="checkbox"/> Account <input checked="" type="checkbox"/> Odd Lot <input checked="" type="checkbox"/> Mismatch <input checked="" type="checkbox"/> Price <input checked="" type="checkbox"/> Restrict <input checked="" type="checkbox"/> Daily <input checked="" type="checkbox"/> Bid | | | | | | | | | | |
|--|-----|--------|-------|----|--------|-------------|-----------|-----------|-----------|---------|
| <input checked="" type="checkbox"/> Input <input checked="" type="checkbox"/> Excel <input checked="" type="checkbox"/> Tabular <input type="checkbox"/> Country <input checked="" type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input type="checkbox"/> Cover <input type="checkbox"/> Short <input type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | | | | | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
| 1 | BY | RKY | RKY.N | N | 2,800 | 50.250 | 50.250 | USA | 217016104 | 2222642 |
| 2 | BY | RKY | RKY.N | | 200 | | | BARKNID | 253071829 | |
| 3 | BY | RKY | RKY.N | | 2,600 | | | WPGOLDNID | 253151427 | |

The *Country Folder* contains a summary of a trade list by country, further summarized by side and account.

The *Trade Summary Report* and the *Account* report folders contain complete summaries for each account, including: total count, shares, and USD and local principals, by side.

Synonym Matching

Trade Import Expert™ has the ability to interpret and match securities by synonyms. If a client sends an order with a mixed list of tickers and synonyms, *TIE™* will match the synonyms with tickers in the database. A list of securities matched by synonym can be found in the *Trade Summary Report*. Synonym matches are displayed on the *Tabular* folder's *Status Bar* when individual security rows are highlighted, and in the *Total* folder's *Comments* field.

TIE™ recognizes synonyms using a period: **VIA.B**, no space: **VIAB**, space: **VIA B**, single quote: **VIA'B**, and a forward slash: **VIA/B**.

| Report | R Errors | R Account | R Odd Lot | R Mismatch | R Price | R |
|--------------------------------------|-----------|-----------|-----------|------------|---------|---|
| Tabular | 0 Country | 0 Total | 0 Buy | 0 Sell | 0 Cover | 0 |
| Comments | | | | | | |
| Security AKO A by synonym | | | | | | |
| Security ANZ PR by synonym | | | | | | |
| Security AO PRA by synonym | | | | | | |
| Security DD PRA by synonym Mismatch. | | | | | | |

Summary Grid

The *Summary Grid* provides the user an instant side, share, and principal reference while converting an order. It is located in the *Control Panel* on the right side of the *TIE™* grid.

| | Count | Shares | USD Ref. Principal |
|----------|-----------|----------------|---------------------|
| T | 32 | 874,700 | \$38,892,265 |
| B | 11 | 440,700 | \$16,371,112 |
| S | 21 | 434,000 | \$22,521,153 |
| C | 0 | 0 | \$0.00 |
| S | 0 | 0 | \$0.00 |
| - | 0 | 0 | \$0.00 |
| + | 0 | 0 | \$0.00 |
| E | 0 | 0 | \$0.00 |
| I | 46 | U | 14 |
| A | 0 | P | 0 |

The following is a list of the totals included in the *Summary Grid*:

- T = total count, shares, principal
- B = total buy count, buy shares, buy principal
- S = total sell count, sell shares, sell principal
- C = total cover count, cover shares, cover principal
- S = total short count, short shares, short principal
- = total buy minus count, buy minus shares, buy minus principal
- + = total sell plus count, sell plus shares, sell plus principal
- E = total exempt count, exempt shares, exempt principal
- I = total number of lines in an order
- U = total number of unknown lines/data in an order
- A = total number of alerts
- P = total number of price exceptions

Toolbar



TIE™'s standard toolbar contains thirty-three separate features. Feature descriptions are arranged alphabetically below.

1. The **Account Reference** button brings up a dialog box that allows the user search for, verify, and update a client's accounts.
2. The **Adjust Font Display Resolution** button allows the user to adjust the display resolution on systems with a manual font mode. If *Trade Import Expert™* cannot display its entire window when it first starts, the *Windows™ NT* driver is probably in large font mode. When this occurs the grid is visible but the control panel is not. To adjust for screen font problems, click the large/small font button "B/b" on the tool bar.
3. The **Clear** button clears the active data being displayed on the screen. If the user does not wish to clear a file that is open on the screen, but wishes to open another file into *TIE™ 3.4*, then the *New* button should be used.
4. The **Client Reference** button brings up a dialog box that allows the user to search for, verify, add, and delete client names and IDs.
5. The **Convert** button is used after setting attributes and making editing changes. Clicking the *Convert* button processes new information and updates the data in the output folders.
6. The **Copy** button allows the user to copy a highlighted selection of data onto the clipboard for pasting into *TIE™* or other editable document or grid such as *Microsoft Word* or *Excel*. The trader can copy data from a reference dialog box and insert it into a cell or row in the *TIE™* grid. This enables quick editing of sedols, tickers, account names, etc. The reverse can also be done, for example, the user can copy a sedol from the grid and paste it into the sedol edit control in the *Security Reference* dialog box, to search for that security. This saves time and prevents potential typos that can occur manually.
7. The **Country Reference** button brings up a dialog box that allows the user to search for, verify, add, and delete country abbreviations.
8. The **Cut** button: Clicking on the *Cut* button will permanently remove the highlighted column(s) and/or column(s) containing highlighted data.
9. The **Toggle Allocation View** button is used while in *Total* folder or any of the side folders. Click on the button to display the sub-accounts. Click on the button again, to hide the sub-accounts.
10. The **Foreign Exchange Reference (FX)** button brings up a dialog box that allows the user to search for, confirm, or revise exchange rates for foreign currencies.

11. The **Save To Trade Execution System** button brings up a dialog box asking for the user's name, the strategy and execution type, the security identifier the order should be uploaded by, and the name of the client. As soon as the Save button in the dialog box is clicked, the order is uploaded to the trading system.
12. The **New** button allows the user to bring up a new *TIE™* grid without clearing what is currently on the screen. *New* allows the user to have more than one trade list open on the screen at a time.
13. The **Open File** button brings up a dialog box that allows a user to select a file from the directory and open it into *TIE™* 3.4. If a file is currently active on the screen, it will be automatically cleared once the directory file is opened. When a user wants to keep a existing data on the screen, and also bring in a new order, then the user must click the *New* button first before opening a new file.
14. The **Paste** button allows the user to paste data on the clipboard into the *TIE™* grid. This enables the user to paste data from most documents into *Trade Import Expert™* for conversion. The trader can also paste data copied from a reference dialog into a cell or row in the *TIE™* grid or from the *TIE™* grid into an edit control in a dialog box. This enables quick editing and searching, and prevents potential typos that can occur manually.
15. The **Print** button enables the user to print the contents of a folder that is actively displayed on the screen.
16. The **Security ID** button allows the user to prevent kick-outs. By setting an identifier cell, range or column as *Security ID*, the data set will be uploaded to the trading system even when it is not recognized in the database. This button acts as a failsafe, when there are data errors or problems that might otherwise prevent a specific security from being traded.
17. The **Security Reference** button brings up a dialog box that allows the user to search for, add, delete, and update security information.
18. The **Set BBID or Set Bloomberg Code** button allows the user to designate a column, cell, or range of cells containing Bloomberg codes
19. The **Set Client** button brings up a dialog box that allows the user to set or add clients and accounts, and to set a default account when required. Once the user sets a client, the client name will appear along with the file name in *TIE™*'s header bar. The client name will also be pre-selected in the upload dialog box when uploading the order into the trading system.
20. The **Set Country** button allows the user the designate a column, cell, or range of cells containing country codes, so that they will not conflict with tickers or other data.
21. The **Set Cusip** button allows the user to designate a cusip cell, range or column, differentiating it from other similar data and giving the cusip(s) precedence over identifiers that have not been set.

22. The **Set Description** button allows the user to designate the company description column, differentiating it from other text columns that might be contained in a list.
23. The **Set Local Price** button allows the user to designate local reference prices to be used in the order conversion. The calculated local reference principals will be included in the *Total* and side folders, as well as the *Trade Summary Report*.
24. The **Set Memo** button allows the user to include a column of information from an input file in the *Trade Execution System* upload. The memo data can be viewed in *Total* and side folders.
25. The **Set RIC** button allows the user to designate a RIC cell, range or column, differentiating it from other similar data and giving the RIC(s) precedence over identifiers that have not been set.
26. The **Set Sedol** button allows the user to designate a sedol cell, range, or column, differentiating it from other similar data and giving the sedol(s) precedence over identifiers that have not been set.
27. The **Set Share** button allows the user to designate a share cell, range, or column, differentiating it from other cells or columns of similar data. In the case of orders with sub-accounts the share column refers to the total shares column, while the allocation shares are designated by setting accounts.
28. The **Set Side** button allows the user to designate a side cell, range, or column, differentiating it from other similar data and preventing conflicts that might arise with tickers or accounts sharing the same abbreviation.
29. The **Set Sub-Accounts** button allows the user to designate specific sub-accounts, by cell, range or column.
30. The **Set Ticker** button allows the user to designate a ticker cell, range or column, differentiating it from similar data and giving the ticker(s) precedence over identifiers that have not been set.
31. The **Set USD** button allows the user to designate USD reference prices to be used in the order conversion. The calculated USD reference principals will be included in the *Total* and side folders, as well as the *Report* that is generated for the converted order.
32. The **Side Reference** button brings up a dialog box that allows the user to search for, confirm, and temporarily add side abbreviations.

Trade List Reconciliation

Trade Import Expert™ will reconcile results when the input data contains trade summary information. *Reconciliation* LEDs give immediate visual feedback on the results of the conversion.



If no trade summary information is provided, the LEDs will remain grayed. If there are trade summary records in a list and the numbers correspond to the sum of the buys, sells or totals, then *TIE™* will set the appropriate LEDs green. If sum(s) are not equivalent, the LEDs will be red.

7. INPUT FOLDERS

Input Folders



TIE™ has three input folders: the *Input* folder, for viewing raw or unprocessed input data, the *Excel™* folder for *Excel™* worksheets and manual trade entry, and the *Tabular* folder for viewing and editing columnized input.

Input Folder

| Fund | B/S | Num | Cusip | Name | Shares | Prc | Symbol |
|------|-----|-----|----------|----------------------|--------|----------|--------|
| LS1 | BUY | 1 | 30229010 | EXXON CORP | 200 | 80.6250 | XON |
| LS1 | BUY | 2 | 26864810 | EMC CORP/MASS | 300 | 57.2500 | EMC |
| LS1 | BUY | 3 | 60705910 | MOBIL CORP | 100 | 104.0625 | MOB |
| LS1 | BUY | 4 | 55268810 | MCI WORLDCOM INC | 200 | 77.4375 | WCOM |
| LS1 | BUY | 5 | 00195710 | A T & T CORP | 300 | 50.8750 | T |
| LS1 | BUY | 6 | 06050510 | BANK OF AMERICA CORP | 200 | 60.6250 | BAC |

The *Input* folder displays a file's data exactly as it is received (raw input). All field delimiters including tabs, commas, and spaces are displayed as they are read. The *Input* folder does not process field delimiters.

TIE™'s *Input* folder provides syntax highlighting of side synonyms, helping the user to quickly spot the side(s) that have been designated in a list's text.

After editing changes have been made in other folders for conversion, the original input the client sent can be viewed in the *Input* folder.

Excel™ Folder

| | A | B | C | D | E | F | G |
|----|--------------|-----------|-------------------|-------------------------|------------|--------|----|
| 3 | | | | | | | Pr |
| 4 | Action Sedol | Shares | Asset Description | Trade Date | Settle Dab | Broker | Pr |
| 5 | | | | | | | |
| 6 | SELL | 00949T100 | 668 | AIRTOUCH COMM. | | | |
| 7 | SELL | 35906P105 | 1207 | FRONTIER CORP. | | | |
| 8 | SELL | 716941109 | 1939 | PHARMACIA & UPJOHN INC. | | | |
| 9 | SELL | 4563640 | 1508 | (ATS) MAYR-MELNHOF | | | |
| 10 | SELL | 6624608 | 4977 | NATL AUSTRALIA BK LTD | | | |
| 11 | SELL | 5051252 | 1767 | (FNM) UPM-KYMMENE OYJ | | | |
| 12 | SELL | 5479702 | 3083 | (FNM) TIETO CORP. | | | |

TIE™'s *Excel™* folder is for processing *Excel™* worksheets and for manual order entry.

When a client's *Excel™* file has multiple sheets, tabs and scroll bars appear at the bottom of *TIE™*'s *Excel™* folder so that any worksheet in the group may be selected and converted. Once a worksheet has been selected, the user clicks on the *Convert* button to enter the data into the *Tabular* folder. *TIE™* processes only the worksheet that has been selected.

The *Excel™* folder processes formulas but does not execute *Excel™* macros. Editing can be done at the cell, column, row, or range level. See the section on *Editing in the Excel™ folder* for more detailed information on the editing features provided.

Tabular Folder

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Report <input checked="" type="checkbox"/> Errors <input checked="" type="checkbox"/> Account <input checked="" type="checkbox"/> Odd Lot <input checked="" type="checkbox"/> Mismatch <input checked="" type="checkbox"/> Price <input checked="" type="checkbox"/> Restrict <input checked="" type="checkbox"/> Daily <input checked="" type="checkbox"/> Bid | | | | | | |
|--|-----------|------|-----|--------------|------------------|--|
| <input checked="" type="checkbox"/> Input <input checked="" type="checkbox"/> Excel <input checked="" type="checkbox"/> Tabular <input type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input type="checkbox"/> Cover <input type="checkbox"/> Short <input type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | |
| status | cusip | tkr | sid | shares | description | |
| 1 | Account 1 | | | | | |
| 2 Order | 02355110 | AHC | SS | 00002200.000 | AMERADA HESS | |
| 3 Cusip undefined: 0... | 00867710 | AHM | B | 00013300.000 | AHMANSON HF & CO | |
| 4 Order | 02687410 | AIG | S | 00008000.000 | AM INTNL GROUP | |
| 5 Order | 03095410 | AIT | SS | 00011500.000 | AMERITECH CORP | |
| 6 Order | 03822210 | AMAT | SS | 00006100.000 | APPLIED MATLS | |
| 7 Order | 00790310 | AMD | BC | 00001200.000 | ADVANC MICRO DEV | |
| 8 Order | 03251110 | APC | S | 00000900.000 | ANADARKO PETE CO | |
| 9 Order | 04082510 | ARC | S | 00006600.000 | ATLANTIC RICH | |
| 10 Order | 04420410 | ASH | SS | 00000900.000 | ASHLAND INC | |
| 11 Order | 02581610 | AXP | SS | 00003600.000 | AMER EXPRESS | |
| 12 Order | 09702310 | BA | S | 00005500.000 | BOEING CO | |
| 13 Order | 11041930 | BAB | SS | 00003100.000 | BRITISH AIRWAYS | |
| 14 Order-Mismatch | 06605010 | BAC | B | 00006500.000 | BANKAMERICA | |
| 15 Order-Mismatch | 07251010 | BAY | SS | 00008000.000 | BAY NETWORKS INC | |

The *Tabular* folder displays input data as an editable grid of rows and columns. *TIE™* automatically computes the column boundaries from the input file and provides “guesses” as to a column’s type. *TIE™*’s guesses are displayed in the *Tabular* folder’s column headers. These guesses may be manually overridden using the “Set” attribute buttons.

The *Tabular* folder gives a user instant order feedback in its *Status Column* and on its *Status Bar*. Errors, Mismatches, Undefined Security IDs, Conflicts, Odd Lots, Dually Listed Securities, Unknown Side symbols, Unknown Accounts, and Duplicate Security per Account(s) are reported in these status fields.

There are a wide variety of editing features available in the *Tabular* folder. The user may adjust a column’s width, change data alignment, manually edit data, sort the list, automatically search reference data using *FastFind*, automatically edit data using *FastFind Paste*, automatically transpose characters from upper case ‘A’ to lower case ‘a’ and the reverse, copy and paste, and bisect and merge columns.

8. OUTPUT FOLDERS

Output Folders



TIE™ has ten output folders. The first folder, the *Country* folder contains a summary by country, further summarized by side and/or accounts when a trade list includes multiple sides and/or accounts. The second folder, the *Total* folder, contains a mixed list of all orders recognized. The next seven folders contain orders filtered by side. The last folder, the *Unknown* folder, contains all data that was unrecognized or has errors. The *Unknown* folder is an input/output folder that is used to display and correct errors. Corrections made in the *Unknown* folder may be applied incrementally to the converted list.

Buy Folder

| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
|----|-----|--------|-------|----|--------|-------------|-----------|---------|-----------|---------|
| 1 | BY | BAC | BAC.N | N | 6,500 | 47.063 | 47.063 | USA | 060505104 | 2295677 |
| 2 | BY | BKB | BKB.N | N | 6,800 | 0.000 | 0.000 | USA | 06605R106 | 2075556 |
| 3 | BY | BHY | BHY.N | N | 3,900 | 64.063 | 64.063 | USA | 110122108 | 2126335 |
| 4 | BY | CA | CA.N | N | 400 | 64.000 | 64.000 | USA | 204912109 | 2214832 |
| 5 | BY | CAG | CAG.N | N | 2,000 | 22.750 | 22.750 | USA | 205887102 | 2215460 |
| 6 | BY | CAH | CAH.N | N | 10,000 | 58.313 | 58.313 | USA | 14149Y108 | 2175672 |
| 7 | BY | CBE | CBE.N | N | 1,500 | 42.813 | 42.813 | USA | 216669101 | 2222307 |
| 8 | BY | DAL | DAL.N | N | 9,300 | 50.750 | 50.750 | USA | 247361108 | 2261708 |
| 9 | BY | EDS | EDS.N | N | 1,900 | 65.938 | 65.938 | USA | 285661104 | 2312736 |
| 10 | BY | EK | EK.N | N | 6,500 | 61.000 | 61.000 | USA | 277461109 | 2300601 |

The *Buy* folder displays the details for each “Buy” order in a list.

From left to right it displays the following information: side, ticker, RIC, exchange, total number of shares, local price, USD price, country, cusip, sedol, company name, industry, Bloomberg Code, ISIN, kassenverein, valoren, sicovam, local principal, USD principal, destination, restriction, memo, and comments including: odd lots, prices out of range and description mismatches.

In addition, it provides details for all orders with sub-account allocations. These may be

viewed by clicking on the button marked “Sub Acct”.  The button can be toggled to display either the order totals or the sub-account details.

All cells in the *Buy* folder may be edited. Certain fields have input validation (example: the side field will only take valid sides, the ticker field will only take valid tickers, etc... otherwise the data reverts back to the original data).

Buy- Folder

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Report <input checked="" type="checkbox"/> Errors <input checked="" type="checkbox"/> Account <input checked="" type="checkbox"/> Odd Lot <input checked="" type="checkbox"/> Mismatch <input checked="" type="checkbox"/> Price <input checked="" type="checkbox"/> Restrict <input checked="" type="checkbox"/> Daily <input checked="" type="checkbox"/> Bid | | | | | | | | | | |
|--|-----|--------|-------|----|------------|-------------|-----------|---------|-----------|---------|
| <input type="checkbox"/> Input <input type="checkbox"/> Excel <input type="checkbox"/> Tabular <input type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input type="checkbox"/> Cover <input type="checkbox"/> Short <input checked="" type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | | | | | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
| 1 | B- | AAG | AAG.N | N | 8,620,000 | 16.938 | 16.938 | USA | 023840101 | 2835255 |
| 2 | B- | AAM | AAM.N | N | 14,741,000 | 0.750 | 0.750 | USA | 00253A101 | 2005111 |
| 3 | B- | AAS | AAS.N | N | 24,245,000 | 21.313 | 21.313 | USA | 03071P102 | 2013545 |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |

The *Buy-* folder displays the details for each “Buy-” order in a list.

From left to right it displays the following information: side, ticker, RIC, exchange, total number of shares, local price, USD price, country, cusip, sedol, company name, industry, Bloomberg Code, ISIN, kassenverein, valoren, sicovam, local principal, USD principal, destination, restriction, memo, and comments including: odd lots, prices out of range and description mismatches.

In addition, it provides details for all orders with sub-account allocations. These may be

viewed by clicking on the button marked “Sub Acct”.  The button can be toggled to display either the order totals or the sub-account details.

All cells in the *Buy-* folder may be edited. Certain fields have input validation (*example: the side field will only take valid sides, the ticker field will only take valid tickers, etc... otherwise the data reverts back to the original data*).

Buy To Cover Folder

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Report <input checked="" type="checkbox"/> Errors <input checked="" type="checkbox"/> Account <input checked="" type="checkbox"/> Odd Lot <input checked="" type="checkbox"/> Mismatch <input checked="" type="checkbox"/> Price <input checked="" type="checkbox"/> Restrict <input checked="" type="checkbox"/> Daily <input checked="" type="checkbox"/> Bid | | | | | | | | | | |
|--|-----|--------|---------|----|--------|-------------|-----------|---------|-----------|---------|
| <input type="checkbox"/> Input <input type="checkbox"/> Excel <input type="checkbox"/> Tabular <input type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input checked="" type="checkbox"/> Cover <input type="checkbox"/> Short <input type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | | | | | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
| 1 | BC | AMD | AMD.N | N | 1,200 | 39.750 | 39.750 | USA | 007903107 | 2007849 |
| 2 | BC | BFI | BFI.N | N | 9,800 | 0.000 | 0.000 | USA | 115885105 | 2147648 |
| 3 | BC | CSC | CSC.N | N | 6,300 | 90.813 | 90.813 | USA | 205363104 | 2215200 |
| 4 | BC | DANKY | DANKY.O | O | 5,400 | 9.969 | 9.969 | USA | 236277109 | 2253578 |
| 5 | BC | DE | DE.N | N | 5,000 | 46.375 | 46.375 | USA | 244199105 | 2261203 |
| 6 | BC | DIS | DIS.N | N | 2,300 | 34.750 | 34.750 | USA | 254687106 | 2270726 |
| 7 | BC | G | G.N | N | 5,000 | 39.438 | 39.438 | USA | 375766102 | 2369301 |
| 8 | BC | GD | GD.N | N | 2,600 | 50.750 | 50.750 | USA | 369550108 | 2365161 |
| 9 | BC | GNE | GNE.N | N | 7,800 | 0.000 | 0.000 | USA | 368710307 | 2364425 |
| 10 | BC | HNZ | HNZ.N | N | 1,200 | 38.125 | 38.125 | USA | 423074103 | 2419240 |

The *Buy to Cover (Cover)* folder displays the details for each “Cover” order in a list.

From left to right it displays the following information: side, ticker, RIC, exchange, total number of shares, local price, USD price, country, cusip, sedol, company name, industry, Bloomberg Code, ISIN, kassenverein, valoren, sicovam, local principal, USD principal, destination, restriction, memo, and comments including: odd lots, prices out of range and description mismatches.

In addition, it provides details for all orders with sub-account allocations. These may be

viewed by clicking on the button marked “Sub Acct”.  The button can be toggled to display either the order totals or the sub-account details.

All cells in the *Cover* folder may be edited. Certain fields have input validation (example: the side field will only take valid sides, the ticker field will only take valid tickers, etc... otherwise the data reverts back to the original data).

Country Folder

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Report <input checked="" type="checkbox"/> Errors <input checked="" type="checkbox"/> Account <input checked="" type="checkbox"/> Odd Lot <input checked="" type="checkbox"/> Mismatch <input checked="" type="checkbox"/> Price <input checked="" type="checkbox"/> Restrict <input checked="" type="checkbox"/> Daily <input checked="" type="checkbox"/> Bid | | | | | | | | | | |
|--|---------|------|-----------|-------|-------|---------|--------------|------|-------|--|
| <input checked="" type="checkbox"/> Input <input type="checkbox"/> Excel <input type="checkbox"/> Tabular <input checked="" type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input type="checkbox"/> Cover <input type="checkbox"/> Short <input type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | | | | | |
| | Country | Side | Account | Model | Count | Shares | Local | Ref. | Value | |
| 1 | CAN | BY | Account 2 | | 1 | 600 | 39,000.00 | CAD | | |
| 2 | CAN | SL | Account 2 | | 1 | 7,100 | 177,500.00 | CAD | | |
| 3 | CAN | SS | Account 1 | | 1 | 8,000 | 600,000.00 | CAD | | |
| 4 | USA | BC | Account 1 | | 2 | 11,000 | 47,700.00 | USD | | |
| 5 | USA | BC | Account 2 | | 27 | 139,300 | 6,698,862.50 | USD | | |
| 6 | USA | BY | Account 1 | | 7 | 31,100 | 1,274,193.75 | USD | | |
| 7 | USA | BY | Account 2 | | 15 | 103,700 | 6,252,662.50 | USD | | |
| 8 | USA | SL | Account 1 | | 6 | 30,100 | 2,056,800.00 | USD | | |
| 9 | USA | SL | Account 2 | | 19 | 119,700 | 7,083,331.25 | USD | | |
| 10 | USA | SS | Account 1 | | 8 | 39,800 | 2,830,718.75 | USD | | |
| 11 | USA | SS | Account 2 | | 26 | 81,500 | 3,913,087.50 | USD | | |

The *Country* folder contains a summary of the trade list organized by country, side and account. This includes counts (number of securities traded), total shares, local and USD values, further summarized by side and/or accounts, when a trade list includes multiple sides and/or accounts.

The *Country* folder also provides reconciliation confirmation for uploads. *TIE*™ reconciles the upload results with *TIE*™'s output data and displays the execution system model names, or the word "Error" if un-reconciled, in the model field.

Sides in the *Country* folder are color coded according to Buys and Sells (Green and Red). Note that in the picture above the "BY" as well as the "BC" account summaries are in Green, and the "SL" as well as the "SS" account summaries are in Red.

Sell Folder

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Report <input checked="" type="checkbox"/> Errors <input checked="" type="checkbox"/> Account <input checked="" type="checkbox"/> Odd Lot <input checked="" type="checkbox"/> Mismatch <input checked="" type="checkbox"/> Price <input checked="" type="checkbox"/> Restrict <input checked="" type="checkbox"/> Daily <input checked="" type="checkbox"/> Bid | | | | | | | | | | |
|--|-----|--------|--------|----|--------|-------------|-----------|---------|-----------|---------|
| <input checked="" type="checkbox"/> Input <input type="checkbox"/> Excel <input type="checkbox"/> Tabular <input type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input checked="" type="checkbox"/> Sell <input type="checkbox"/> Cover <input type="checkbox"/> Short <input type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | | | | | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
| 1 | SL | RIG | RIG.N | N | 8,000 | 106.250 | 106.250 | USA | 026874107 | 2027342 |
| 2 | SL | APC | APC.N | N | 900 | 36.000 | 36.000 | USA | 032511107 | 2032380 |
| 3 | SL | ARC | ARC.N | N | 6,600 | 75.063 | 75.063 | USA | 040825103 | 2061618 |
| 4 | SL | BA | BA.N | N | 5,500 | 47.625 | 47.625 | USA | 097023105 | 2108601 |
| 5 | SL | BNI | BNI.N | N | 3,600 | 24.563 | 24.563 | USA | 121891104 | 2154927 |
| 6 | SL | C | C.N | N | 5,500 | 59.750 | 59.750 | USA | 172967101 | 2297907 |
| 7 | SL | CI | CI.N | N | 700 | 77.438 | 77.438 | USA | 125509109 | 2196479 |
| 8 | SL | COST | COST.O | O | 3,700 | 51.875 | 51.875 | USA | 22160K105 | 2701271 |
| 9 | SL | CPQ | CPQ.N | N | 3,300 | 30.188 | 30.188 | USA | 204493100 | 2214456 |
| 10 | SL | ETR | ETR.N | N | 4,100 | 24.250 | 24.250 | USA | 293646103 | 2317087 |

The *Sell* folder displays the details for each "Sell" order in a list.

From left to right it displays the following information: side, ticker, RIC, exchange, total number of shares, local price, USD price, country, cusip, sedol, company name, industry, Bloomberg Code, ISIN, kassenverein, valoren, sicovam, local principal, USD principal, destination, restriction, memo, and comments including: odd lots, prices out of range and description mismatches.

In addition, it provides details for all orders with sub-account allocations. These may be

viewed by clicking on the button marked “Sub Acct”.  The button can be toggled to display either the order totals or the sub-account details.

All cells in the *Sell* folder may be edited. Certain fields have input validation (*example: the side field will only take valid sides, the ticker field will only take valid tickers, etc... otherwise the data reverts back to the original data*).

Sell+ Folder

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Report <input checked="" type="checkbox"/> Errors <input checked="" type="checkbox"/> Account <input checked="" type="checkbox"/> Odd Lot <input checked="" type="checkbox"/> Mismatch <input checked="" type="checkbox"/> Price <input checked="" type="checkbox"/> Restrict <input checked="" type="checkbox"/> Daily <input checked="" type="checkbox"/> Bid | | | | | | | | | | |
|--|-----|--------|--------|----|------------|-------------|-----------|---------|-----------|---------|
| <input checked="" type="checkbox"/> Input <input type="checkbox"/> Excel <input type="checkbox"/> Tabular <input type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input type="checkbox"/> Cover <input type="checkbox"/> Short <input type="checkbox"/> Buy- <input checked="" type="checkbox"/> Sell+ | | | | | | | | | | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
| 1 | S+ | POP | POP.N | N | 13,364,000 | 16.313 | 16.313 | USA | 732827100 | 2694423 |
| 2 | S+ | POS | POS.N | N | 19,475,000 | 111.000 | 111.000 | USA | 148867104 | 2178596 |
| 3 | S+ | POSS | POSS.O | O | 12,052,000 | 9.250 | 9.250 | USA | 737407106 | 2696366 |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |

The *Sell+* folder displays the details for each “Sell+” order in a list.

From left to right it displays the following information: side, ticker, RIC, exchange, total number of shares, local price, USD price, country, cusip, sedol, company name, industry, Bloomberg Code, ISIN, kassenverein, valoren, sicovam, local principal, USD principal, destination, restriction, memo, and comments including: odd lots, prices out of range and description mismatches.

In addition, it provides details for all orders with sub-account allocations. These may be

viewed by clicking on the button marked “Sub Acct”.  The button can be toggled to display either the order totals or the sub-account details.

All cells in the *Sell+* may be edited. Certain fields have input validation (*example: the side field will only take valid sides, the ticker field will only take valid tickers, etc... otherwise the data reverts back to the original data*).

Sell Short Folder

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Report <input checked="" type="checkbox"/> Errors <input checked="" type="checkbox"/> Account <input checked="" type="checkbox"/> Odd Lot <input checked="" type="checkbox"/> Mismatch <input checked="" type="checkbox"/> Price <input checked="" type="checkbox"/> Restrict <input checked="" type="checkbox"/> Daily <input checked="" type="checkbox"/> Bid | | | | | | | | | | |
|--|-----|--------|--------|----|--------|-------------|-----------|---------|-----------|---------|
| <input type="checkbox"/> Input <input type="checkbox"/> Excel <input type="checkbox"/> Tabular <input type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input type="checkbox"/> Cover <input checked="" type="checkbox"/> Short <input type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | | | | | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
| 1 | SS | AHC | AHC.N | N | 2,200 | 58.188 | 58.188 | USA | 023551104 | 2023748 |
| 2 | SS | AIT | AIT.N | N | 11,500 | 0.000 | 0.000 | USA | 030954101 | 2027739 |
| 3 | SS | AMAT | AMAT.O | O | 6,100 | 142.375 | 142.375 | USA | 038222105 | 2046552 |
| 4 | SS | ASH | ASH.N | N | 900 | 33.813 | 33.813 | USA | 044204105 | 2053444 |
| 5 | SS | AXP | AXP.N | N | 3,600 | 148.938 | 148.938 | USA | 025816109 | 2026082 |
| 6 | SS | BAB | BAB.N | N | 3,100 | 63.250 | 63.250 | USA | 110419306 | 2127059 |
| 7 | SS | BAY | BAY.TO | TO | 8,000 | 75.000 | 49.295 | CAN | 21922F107 | 2205030 |
| 8 | SS | BGEN | BGEN.O | O | 11,900 | 88.063 | 88.063 | USA | 090597105 | 2098456 |
| 9 | SS | CC | CC.N | N | 500 | 47.188 | 47.188 | USA | 172737108 | 2199326 |
| 10 | SS | CPB | CPB.N | N | 2,700 | 33.500 | 33.500 | USA | 134429109 | 2162845 |

The *Sell Short (Short)* folder displays the details for each “Short” order in a list.

From left to right it displays the following information: side, ticker, RIC, exchange, total number of shares, local price, USD price, country, cusip, sedol, company name, industry, Bloomberg Code, ISIN, kassenverein, valoren, sicovam, local principal, USD

principal, destination, restriction, memo, and comments including: odd lots, prices out of range and description mismatches.

In addition, it provides details for all orders with sub-account allocations. These may be

viewed by clicking on the button marked “Sub Acct”.  The button can be toggled to display either the order totals or the sub-account details.

All cells in the *Short* folder may be edited. Certain fields have input validation (*example: the side field will only take valid sides, the ticker field will only take valid tickers, etc... otherwise the data reverts back to the original data*).

Short Exempt Folder

| <input type="checkbox"/> Input <input type="checkbox"/> Excel <input type="checkbox"/> Tabular <input type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input type="checkbox"/> Cover <input type="checkbox"/> Short <input type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | | | | | |
|---|-----|--------|-------|----|------------|-------------|-----------|---------|-----------|---------|
| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input type="checkbox"/> Report <input type="checkbox"/> Errors <input type="checkbox"/> Account <input type="checkbox"/> Odd Lot <input type="checkbox"/> Mismatch <input type="checkbox"/> Price <input type="checkbox"/> Restrict <input type="checkbox"/> Daily <input type="checkbox"/> Bid | | | | | | | | | | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
| 1 | EX | EAR | EAR.A | A | 62,694,000 | 4.500 | 4.500 | USA | 422360305 | 2434050 |
| 2 | EX | EBF | EBF.N | N | 16,439,000 | 8.125 | 8.125 | USA | 293389102 | 2316103 |
| 3 | EX | EDE | EDE.N | N | 16,314,000 | 21.875 | 21.875 | USA | 291641108 | 2313803 |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |

The *Short Exempt (Exempt)* folder displays the details for each “Short Exempt” order in a list.

From left to right it displays the following information: side, ticker, RIC, exchange, total number of shares, local price, USD price, country, cusip, sedol, company name, industry, Bloomberg Code, ISIN, kassenverein, valoren, sicovam, local principal, USD principal, destination, restriction, memo, and comments including: odd lots, prices out of range and description mismatches.

In addition, it provides details for all orders with sub-account allocations. These may be

viewed by clicking on the button marked “Sub Acct”.  The button can be toggled to display either the order totals or the sub-account details.

All cells in the *Exempt* folder may be edited. Certain fields have input validation (*example: the side field will only take valid sides, the ticker field will only take valid tickers, etc... otherwise the data reverts back to the original data*).

Total Folder

| <input type="checkbox"/> Exempt <input type="checkbox"/> Unknown <input type="checkbox"/> Report <input type="checkbox"/> Errors <input type="checkbox"/> Account <input type="checkbox"/> Odd Lot <input type="checkbox"/> Mismatch <input type="checkbox"/> Price <input type="checkbox"/> Restrict <input type="checkbox"/> Daily <input type="checkbox"/> Bid | | | | | | | | | | |
|---|-----|--------|---------|----|---------|-------------|-----------|---------|-----------|---------|
| <input type="checkbox"/> Input <input type="checkbox"/> Excel <input type="checkbox"/> Tabular <input type="checkbox"/> Country <input type="checkbox"/> Total <input type="checkbox"/> Buy <input type="checkbox"/> Sell <input type="checkbox"/> Cover <input type="checkbox"/> Short <input type="checkbox"/> Buy- <input type="checkbox"/> Sell+ | | | | | | | | | | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol |
| 1 | SL | CSCO | CSCO.O | O | 17,000 | 112.313 | 112.313 | USA | 17275R102 | 2198163 |
| 2 | SL | ERICY | ERICY.O | O | 23,000 | 32.313 | 32.313 | USA | 294821400 | 2319931 |
| 3 | SL | MSFT | MSFT.O | O | 5,200 | 107.000 | 107.000 | USA | 594918104 | 2588173 |
| 4 | SL | WCOM | WCOM.O | O | 11,000 | 45.063 | 45.063 | USA | 552680106 | 2732561 |
| 5 | SL | BA | BA.N | N | 16,100 | 47.625 | 47.625 | USA | 097023105 | 2108601 |
| 6 | BY | TRV | TRV.A | A | 90,800 | 4.875 | 4.875 | USA | 885502104 | 2405926 |
| 7 | BY | DH | DH.N | N | 11,500 | 69.938 | 69.938 | USA | 239753106 | 2259101 |
| 8 | BY | HLT | HLT.N | N | 81,700 | 9.063 | 9.063 | USA | 432848109 | 2428008 |
| 9 | BY | BHV | BHV.N | N | 108,700 | 64.063 | 64.063 | USA | 110122108 | 2126335 |
| 10 | BY | WLA | WLA.N | N | 4,600 | 94.813 | 94.813 | USA | 934488107 | 2940803 |

The *Total* folder displays the details for each order in a list.

Sides are color coded according to the colors displayed in the *Summary Grid*: Buy:Green, Sell:Red, Cover:White, Short:Purple, Buy-:Turquoise, Sell+:Violet, Exempt:Pale Green.

From left to right it displays the following information: side, ticker, RIC, exchange, total number of shares, local price, USD price, country, cusip, sedol, company name, industry, Bloomberg Code, ISIN, kassenverein, valoren, sicovam, local principal, USD principal, destination, restriction, memo, and comments including: odd lots, prices out of range and description mismatches.

In addition, it provides details for all orders with sub-account allocations. These may be



viewed by clicking on the button marked "Sub Acct". The button can be toggled to display the order totals or the sub-account details.

| 0 Exempt | | 0 Unknown | | R Report | | R Errors | | R Account | | R Odd Lot | | R Mismatch | | R Price | | R Restrict | | R Daily | | R Bid | |
|----------|-----|-----------|-------|-----------|--------|-------------|-----------|-----------|-----------|-----------|--|------------|--|---------|--|------------|--|---------|--|---------|--|
| I Input | | I Excel | | I Tabular | | 0 Country | | 0 Total | | 0 Buy | | 0 Sell | | 0 Cover | | 0 Short | | 0 Buy- | | 0 Sell+ | |
| | B/S | Ticker | RIC | Ex | Shares | Local Price | USD Price | Country | Cusip | Sedol | | | | | | | | | | | |
| 1 | BY | RKY | RKY.N | N | 2,800 | 50.250 | 50.250 | USA | 217016104 | 2222642 | | | | | | | | | | | |
| 2 | BY | RKY | RKY.N | | 200 | | | BANKNIB | 253071829 | | | | | | | | | | | | |
| 3 | BY | RKY | RKY.N | | 2,600 | | | WPGOLDNIB | 253151427 | | | | | | | | | | | | |

All cells in the *Total* folder may be edited. Certain fields have input validation (example: the side field will only take valid sides, the ticker field will only take valid tickers, etc... otherwise the data reverts back to the original data).

Unknown Folder

| I Input | | I Excel | | I Tabular | | 0 Country | | 0 Total | | 0 Buy | | 0 Sell | | 0 Cover | | 0 Short | | 0 Buy- | | 0 Sell+ | |
|--------------------------------|--|-----------|------|-----------|--------|-----------|------------|-----------|--|-----------|--|------------|--|---------|--|------------|--|---------|--|---------|--|
| 0 Exempt | | 0 Unknown | | R Report | | R Errors | | R Account | | R Odd Lot | | R Mismatch | | R Price | | R Restrict | | R Daily | | R Bid | |
| Error Messages | | side | ctry | price | shares | sedol | descr | | | | | | | | | | | | | | |
| 1 Symbol undefined: 527368... | | Buy | ESP | 7610.000 | 3200 | 5273681 | BANCO BILE | | | | | | | | | | | | | | |
| 2 Symbol undefined: 525478... | | Buy | ESP | 7630.000 | 2100 | 5254783 | BANCO SANT | | | | | | | | | | | | | | |
| 3 Symbol undefined: 488770... | | Buy | FRF | 701.000 | 436 | 4887704 | SANOFI | | | | | | | | | | | | | | |
| 4 Symbol undefined: 488082... | | Buy | ESP | 6770.000 | 4800 | 4880822 | TELEFONICA | | | | | | | | | | | | | | |
| 5 Symbol undefined: 478550... | | Buy | CHF | 535.000 | 300 | 4785507 | SCHWEIZ BA | | | | | | | | | | | | | | |
| 6 Symbol undefined: 478372... | | Buy | CHF | 2490.000 | 100 | 4783727 | UBS INHABE | | | | | | | | | | | | | | |
| 7 Symbol undefined: 096766... | | Buy | GBP | 440.000 | 7000 | 0967666 | WILLIAMS | | | | | | | | | | | | | | |
| 8 Symbol undefined: 088600... | | Buy | GBP | 994.500 | 3100 | 0886006 | THAMES WAT | | | | | | | | | | | | | | |
| 9 Symbol undefined: 085963... | | Buy | GBP | 649.500 | 5000 | 0859633 | ROYAL & SU | | | | | | | | | | | | | | |
| 10 Symbol undefined: 059660... | | Buy | GBP | 3696.000 | 13448 | 0596606 | NISYS | | | | | | | | | | | | | | |

The *Unknown* folder contains input data that could not be converted. It displays the unrecognized lines and error messages as seen in the *Tabular* folder, but with the converted orders filtered out.

Editing in the *Unknown* folder includes the same features as the *Tabular* folder, allowing for: column bisect, merge, cut, and alignment operations, as well as setting attributes.

Editing and converting while in the Unknown folder will produce corrections in the output and report folders, but not in the Tabular, Input, or Excel® folders, which are input folders and are located "up stream" in the order process. If the user plans on making additional editing changes in the Tabular folder after making corrections, then the corrections should be made in the Tabular folder to avoid the loss of those changes when the order is reconverted. Reverting while in Tabular will convert the data that is in the Tabular folder, and changes previously made in the Unknown folder will be lost.

For lengthy trade lists the *Unknown* folder is a very useful tool for spotting errors and making rapid changes to convert an order quickly.

9. REPORTS/REPORT FOLDERS

Report Folders



TIE™ has a series of report folders, which vary according to client requirements. Standard report tabs are pictured above; additional reports (*not pictured*) such as *Liquidity* and *OTC* are described in this User's Guide. Custom reports can be created and new report tabs added to the interface.

The folder tab marked "Report" contains the *Trade Summary Report* for the converted list. It summarizes countries, accounts, security counts, shares, sides, local and USD reference principals, and USD closing principal. The *Report* can include the following sections when relevant: *Sub-Accounts*, *Kick Outs*, *Description Mismatches*, *Prices that are Zero*, *Prices that are Out of Range*, *Errors*, *Conflicts*, *Unknown Lines*, *securities Matched by Synonym*, *Odd Lots*, and, securities that are on the *Restricted* list.

The next six report folder tabs to the right of the *Report* folder tab {*Errors*, *Account*, *Odd Lot*, *Mismatch*, *Price*, and *Restrict*} show the individual sections of the *Report*. This allows the trader to view trade specifics, without having to scroll through a larger report.

The *Daily* folder tab indicates the *Daily Summary Report*. The *Daily* folder contains a daily summary report of all trade lists uploaded into the trading system(s).

The *Bid* folder tab marks the *Bid Report*. The *Bid* folder displays bid information for the converted trade list. *TIE™* calculates the commission, tax, and clearing cost, and finance cost (*optional*), for the order by country and side, and displays the results in dollars and basis points. Bid reports are automatically saved to the user's archive directory when an order is uploaded.

Account Report

| Model | Country | Side | Count | Shares | Local Client Principal | USD |
|--|---------|------|-------|--------|------------------------|--------------------|
| SUB ACCOUNTS for d:\si test files\accounts by range\bg: | | | | | | |
| ACCOUNT SUMMARY for Account Mnemonic: ADIRONDACK (abbrev: ADIRONDACK), Client: TEST CLII | | | | | | |
| | AUL | BY | 1 | 20,300 | 116,928.00 AUD | |
| | AUL | SL | 1 | 3,500 | 61,190.50 AUD | |
| | JPN | BY | 2 | 115 | 94,350,000.00 JPY | |
| | MAL | BY | 1 | 9,000 | 110,700.00 MYR | |
| BUYS | | | 4 | 29,415 | | 801,978 801,978 |
| SELLS | | | 1 | 3,500 | | 35,909 35,909 |

The Account Report

The *Account Report* provides a summary of each sub-account represented in a trade list. To view the *Account Report*, click on the *Account* folder tab.

Each account's summary includes security counts and share quantities by country and by side, as well as, Local and USD client principals and the USD closing principal.

When a list has been successfully uploaded into *Trade Execution System*, the *Model* created for each account will appear in the first column of the report. The model names indicate that the accounts have been reconciled. If an account did not reconcile the first column will read "Error."

Note: The *Account Report* shows *Trade Execution System* account abbreviations when there is no internal account number and the client's external account name is greater than seven characters.

Bid Report

| |
|---------------------------------|
| Global Portfolio Trading |
| BID Report |

The Bid Report

The *Bid Report* is a transaction cost report for the converted trade list. To view the *Bid Report*, click on the folder tab marked *Bid*.

Bid Report Calculations

TIE™ calculates the commission, buy and sell taxes, clearing costs, finance cost (optional), and summarizes these by country and side. The total costs are displayed in USD and in basis points.

| Global Portfolio Trading | | | | | | | | | | |
|------------------------------|---------------------|-------------------------|-------------------------|------------------------|---------------------|--------------------|---------------------|-------------------------|---------------------|-----------------|
| BID Report | | | | | | | | | | |
| Trade Date | Settlement Date | Day Count | | | | | | | | |
| 7/25/01 | 7/30/01 | 5 | | | | | | | | |
| Country Name | Buy Names | Buy Shares | Buy USD Principal | Avg. Buy USD Principal | Sell Names | Sell Shares | Sell USD Principal | Avg. Sell USD Principal | Finance C | |
| Australia | | 3 | 548,700 | \$3,367,279.14 | | 1 | 1,075 | \$20,502.14 | \$20,502.14 | \$2,900 |
| Belgium | | 2 | 13,000 | \$485,239.60 | | 0 | 0 | \$0.00 | \$0.00 | \$320 |
| Brazil | | 0 | 0 | \$0.00 | | 1 | 16,932,750 | \$212,291,194.03 | \$212,291,194.03 | \$0 |
| Canada | | 2 | 26,200 | \$505,678.61 | | 0 | 0 | \$0.00 | \$0.00 | \$400 |
| Denmark | | 1 | 56,500 | \$1,312,860.38 | | 0 | 0 | \$0.00 | \$0.00 | \$950 |
| Finland | | 1 | 19,000 | \$161,732.28 | | 1 | 25,000 | \$455,553.75 | \$455,553.75 | \$410 |
| France | | 5 | 31,850 | \$3,997,441.38 | | 0 | 0 | \$0.00 | \$0.00 | \$2,680 |
| Germany | | 4 | 48,630 | \$2,278,442.63 | | 2 | 12,950 | \$216,734.08 | \$108,367.04 | \$1,670 |
| Hong Kong | | 1 | 1,000 | \$11,474.65 | | 0 | 0 | \$0.00 | \$0.00 | \$0 |
| Italy | | 0 | 0 | \$0.00 | | 1 | 110,000 | \$953,754.18 | \$953,754.18 | \$640 |
| Japan | | 2 | 555,000 | \$3,681,748.54 | | 9 | 146,490 | \$5,679,095.75 | \$631,010.64 | \$440 |
| Netherlands | | 4 | 43,600 | \$1,658,420.97 | | 0 | 0 | \$0.00 | \$0.00 | \$1,110 |
| Norway | | 1 | 40,400 | \$310,214.68 | | 0 | 0 | \$0.00 | \$0.00 | \$310 |
| Portugal | | 1 | 53,900 | \$341,224.73 | | 0 | 0 | \$0.00 | \$0.00 | \$220 |
| Sweden | | 2 | 36,400 | \$214,358.66 | | 0 | 0 | \$0.00 | \$0.00 | \$100 |
| Switzerland | | 2 | 490 | \$1,286,938.20 | | 0 | 0 | \$0.00 | \$0.00 | \$560 |
| UK | | 4 | 114,300 | \$1,463,042.94 | | 0 | 0 | \$0.00 | \$0.00 | \$1,200 |
| USA | | 3 | 93,740 | \$2,932,553.40 | | 8 | 170,188 | \$2,544,378.81 | \$318,047.35 | \$4,950 |
| TOTALS | | 38.00 | 1,682,710 | \$24,088,658.79 | | 23 | \$17,398,453 | \$222,161,212.74 | | \$18,920 |
| Total Principal | | | \$246,169,863.54 | Cost in BPs | | | | | | |
| Total Finance Cost | | | \$18,938.39 | 0.00769% | | | | | | |
| Total Commission Cost | | | \$306,116.71 | 0.12435% | | | | | | |
| Total Buy Tax Cost | | | \$17,326.45 | 0.00704% | | | | | | |
| Total Sell Tax Cost | | | \$11,956.85 | 0.00486% | | | | | | |
| Total Clearing Cost | | | \$2,326.00 | 0.00094% | | | | | | |
| Total Cost | | | \$356,664.40 | 0.14489% | | | | | | |
| Sell Names | Sell Shares | Sell USD Principal | Avg. Sell USD Principal | Finance Cost | Comm. Cost | Tax Buy Cost | Tax Sell Cost | Clearing Cost | Total Cost | BPs |
| 1 | 1,075 | \$20,502.14 | \$20,502.14 | \$2,900.50 | \$1,893.89 | \$5,050.92 | \$30.75 | \$240.00 | \$9,916.06 | 0.2927% |
| 0 | 0 | \$0.00 | \$0.00 | \$325.71 | \$242.62 | \$0.00 | \$0.00 | \$32.00 | \$600.33 | 0.12372% |
| 1 | 16,932,750 | \$212,291,194.03 | \$212,291,194.03 | \$0.00 | \$297,207.67 | \$0.00 | \$0.00 | \$150.00 | \$297,357.67 | 0.14007% |
| 0 | 0 | \$0.00 | \$0.00 | \$408.70 | \$252.84 | \$0.00 | \$0.00 | \$56.00 | \$717.54 | 0.1419% |
| 0 | 0 | \$0.00 | \$0.00 | \$953.17 | \$919.00 | \$0.00 | \$0.00 | \$110.00 | \$1,982.17 | 0.15098% |
| 1 | 25,000 | \$455,553.75 | \$455,553.75 | \$414.34 | \$308.64 | \$0.00 | \$0.00 | \$190.00 | \$912.99 | 0.1479% |
| 0 | 0 | \$0.00 | \$0.00 | \$2,683.21 | \$799.49 | \$0.00 | \$0.00 | \$310.00 | \$3,792.70 | 0.09488% |
| 2 | 12,950 | \$216,734.08 | \$108,367.04 | \$1,674.84 | \$499.04 | \$0.00 | \$0.00 | \$72.00 | \$2,245.88 | 0.09001% |
| 0 | 0 | \$0.00 | \$0.00 | \$9.43 | \$5.74 | \$14.06 | \$0.00 | \$20.00 | \$49.22 | 0.42899% |
| 1 | 110,000 | \$953,754.18 | \$953,754.18 | \$640.19 | \$190.75 | \$0.00 | \$0.00 | \$50.00 | \$880.94 | 0.09237% |
| 9 | 146,490 | \$5,679,095.75 | \$631,010.64 | \$448.81 | \$0.00 | \$3,681.75 | \$11,926.10 | \$132.00 | \$16,188.66 | 0.17294% |
| 0 | 0 | \$0.00 | \$0.00 | \$1,113.19 | \$331.68 | \$0.00 | \$0.00 | \$132.00 | \$1,576.87 | 0.09508% |
| 0 | 0 | \$0.00 | \$0.00 | \$310.21 | \$217.15 | \$0.00 | \$0.00 | \$110.00 | \$637.36 | 0.20546% |
| 0 | 0 | \$0.00 | \$0.00 | \$229.04 | \$409.47 | \$170.61 | \$0.00 | \$250.00 | \$1,059.12 | 0.31039% |
| 0 | 0 | \$0.00 | \$0.00 | \$108.65 | \$42.87 | \$0.00 | \$0.00 | \$110.00 | \$261.52 | 0.122% |
| 0 | 0 | \$0.00 | \$0.00 | \$564.14 | \$257.39 | \$1,093.90 | \$0.00 | \$40.00 | \$1,955.42 | 0.15194% |
| 0 | 0 | \$0.00 | \$0.00 | \$1,202.50 | \$0.00 | \$7,315.21 | \$0.00 | \$80.00 | \$8,597.72 | 0.58766% |
| 8 | 170,188 | \$2,544,378.81 | \$318,047.35 | \$4,951.75 | \$2,738.47 | \$0.00 | \$0.00 | \$242.00 | \$7,932.21 | 0.14483% |
| 23 | \$17,398,453 | \$222,161,212.74 | | \$18,938.39 | \$306,116.71 | \$17,326.45 | \$11,956.85 | \$2,326.00 | \$356,664.40 | 0.14489% |

Printing the Bid Report

The Bid Report, which requires scrolling in order to view all the contents, prints in landscape mode and is automatically resized to print on one page width, using standard 8.5" x 11" paper.

Click the Print button on TIE™'s toolbar to print a hard copy report.

Saving the Bid Report

Clicking on the Bid Report tab activates a save command that automatically saves a copy of the Bid Report to the user's Report directory. The bid file is saved as an Excel™ worksheet whose name is the file name plus the suffix ".user.date/time.bid.xls".

Daily Summary Report

| |
|--------------------------|
| Global Portfolio Trading |
| Daily Summary Report |

The Daily Summary Report

The *Daily Summary Report* logs and summarizes trade lists uploaded into the trading system for a specific day. To view the *Daily Summary Report* click on the report folder tab marked *Daily*.

The *Daily Summary Report* includes: the time a list was uploaded, the client name, the type and strategy of the trade, the region (domestic or international), the number of buy shares, sell shares, and total shares, the buy principal, sell principal, net principal, and total principal both for the individual uploads and cumulatively for the day. Grand totals are given at the bottom of the summary and updated each time a new order is uploaded.

| Time | Client | Type | Strategy | Region |
|--------------|---|--------|----------|---------------|
| 12:14:46 | GSAT GSAM GOLDMAN SACHS ASSET MGM IBS | AGENCY | CLOSE | International |
| 12:16:08 | GEC GENERAL ELECTRIC IBS | OTHER | CLOSE | International |
| 12:17:29 | SAW STANDISH AYER & WOOD IBS | RISK | OTHER | International |
| 12:18:35 | HARTFORD EM | AGENCY | CLOSE | Domestic |
| 12:20:00 | ROB ROBECO IBS | RISK | VWAP | Domestic |
| 12:21:30 | EAM EAGLE ASSET MGMT. IBS | OTHER | OTHER | International |
| 12:23:32 | IBJ EM | AGENCY | CLOSE | Domestic |
| 12:25:16 | SING GOVT OF SINGAPORE IBS | OTHER | OTHER | Domestic |
| 12:28:04 | BANKERS TRUST EM | AGENCY | CLOSE | Domestic |
| 12:28:50 | ACADIAN ASSET MANAGEMENT IBS | AGENCY | CLOSE | Domestic |
| 12:30:08 | BEA BEA ASSOCIATES IBS | AGENCY | CLOSE | International |
| 12:31:04 | BGIB BGI LONDON IBS | OTHER | OTHER | International |
| 12:32:38 | YNG VANGUARD IBS | RISK | OTHER | International |
| 12:33:49 | FPRO FRIENDS PROVIDENT IBS | OTHER | OTHER | International |
| TOTAL | | | | |

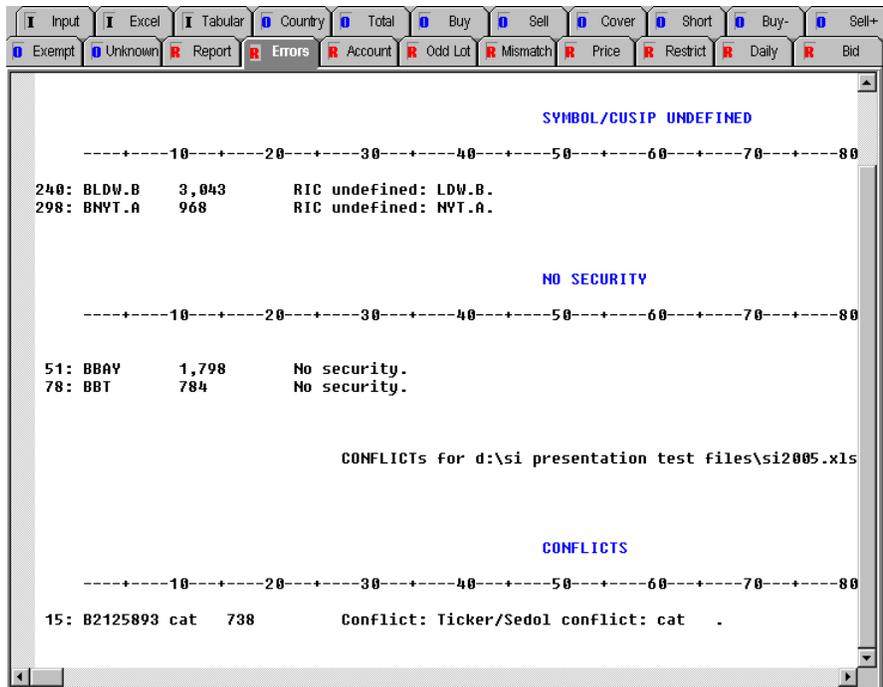
| Buy Shares | Sell Shares | Total Shares | Buy Principal | Sell Principal | Net Principal | Total Principal |
|-------------------|-------------------|-------------------|---------------------------|-------------------------|---------------------------|---------------------------|
| 53,395,329 | 4,100 | 53,399,429 | \$3,295,932,709.18 | \$438,700.00 | \$3,295,494,009.18 | \$3,296,371,409.18 |
| 0 | 65,539 | 65,539 | \$0.00 | \$857,154.49 | (\$857,154.49) | \$857,154.49 |
| 117,800 | 89,050 | 206,850 | \$650,541.11 | \$673,133.58 | (\$22,592.47) | \$1,323,674.69 |
| 194,000 | 135,300 | 329,300 | \$7,507,131.25 | \$7,735,956.25 | (\$228,825.00) | \$15,243,087.50 |
| 988,525 | 864,600 | 1,853,125 | \$58,846,470.31 | \$47,270,250.00 | \$11,576,220.31 | \$106,116,720.31 |
| 142,300 | 0 | 142,300 | \$10,483,308.04 | \$0.00 | \$10,483,308.04 | \$10,483,308.04 |
| 1,758 | 2,000 | 3,758 | \$105,941.13 | \$104,187.50 | \$1,753.63 | \$210,128.63 |
| 136,500 | 33,000 | 169,500 | \$8,289,200.00 | \$1,885,125.00 | \$6,404,075.00 | \$10,174,325.00 |
| 552,258 | 0 | 552,258 | \$11,686,476.43 | \$0.00 | \$11,686,476.43 | \$11,686,476.43 |
| 26,600 | 0 | 26,600 | \$646,393.75 | \$0.00 | \$646,393.75 | \$646,393.75 |
| 16,128,090 | 18,085,876 | 34,213,966 | \$57,806,720.78 | \$17,119,329.63 | \$40,687,391.16 | \$74,926,050.41 |
| 168,344 | 0 | 168,344 | \$1,955,357.06 | \$0.00 | \$1,955,357.06 | \$1,955,357.06 |
| 374,518 | 0 | 374,518 | \$2,280,699.15 | \$0.00 | \$2,280,699.15 | \$2,280,699.15 |
| 0 | 8,166,558 | 8,166,558 | \$0.00 | \$149,785,571.65 | (\$149,785,571.65) | \$149,785,571.65 |
| 72,226,022 | 27,446,023 | 99,672,045 | \$3,456,190,948.19 | \$225,869,408.11 | \$3,230,321,540.08 | \$3,682,060,356.30 |

Errors Report

The Errors Report

The *Errors Report* provides a summary of security errors and conflicts found in a trade list. It can be viewed by clicking on the *Errors* report folder tab.

The *Errors Report* shows the user the location of an error in a list by providing the row number and a ruler showing the line positions of the data.



Liquidity Reports (International and US)

US Liquidity Report

The US Liquidity Report is multi-tabbed with a Summary page and a breakdown according to side. TIE™ displays each security's ticker, exchange, number of shares trading, 21-day Liquidity, 21-day Average Volume, Closing Price, and a Restricted "Y" mark if a security is on the Restricted list. The *Liquidity Report* summary tables show both the number of shares and the number of securities that are trading as NYSE, AMEX, OTC market makers, and OTC non-market makers, and each category's percent of the list's total principal.

International Liquidity Report

The International Liquidity Report is multi-tabbed with a Summary page and a breakdown according to side. TIE™ displays each security's symbol, number of shares trading, 21-day Liquidity, 21-day Average Volume, Closing Price, and a Restricted "Y" mark if a security is on the Restricted list. The *International Liquidity Report* summary tables show the number of securities and shares that fall within designated liquidity ranges. The aggregate portfolio value and weight of the securities is given for each range.

Mismatch Report

The Mismatch Report

The *Mismatch Report* provides a summary of all orders where the company description in a list does not exactly match the company name found in the security database.

The *Mismatch Report* includes the row number, the first 80 characters of the client's input line followed by a slash (/) and then the company name from the security database. This organization facilitates quick comparisons.

| COMPANY DESCRIPTION DOES NOT MATCH | | | | | | | | |
|------------------------------------|-------|----|----|----|----|----|------------------|----|
| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| FORD MTR CO DEL | 3500 | | | | | | / FORD MOTOR CO | |
| GENERAL MTRS CORP | 2600 | | | | | | / GENERAL MOTOR | |
| LIMITED INC | 13700 | | | | | | / THE LIMITED W | |
| LYONDELL CHEMICAL CO | 38300 | | | | | | / LYONDELL PETRI | |
| SPRINT CORP | 9600 | | | | | | / SPRINT PCS GRI | |
| TRICON GLOBAL RESTAURA | 6900 | | | | | | / TRICON GLOBAL | |
| BARD C R INC | 2200 | | | | | | / CAPSTAR BROAD | |
| CARDINAL HEALTH INC | 4800 | | | | | | / CARDINAL HLTH | |
| CONSOLIDATED EDISON IN | 1300 | | | | | | / CONSOL ED OF I | |
| E M C CORP MASS | 3000 | | | | | | / EMC CORP | |
| RATIONAL SOFTWARE CORP | 1200 | | | | | | / RATIONAL SFTW | |

Description Mismatch error messages appear in the *Status Column* of the *Tabular* folder when an order is converted. The user can click on a row to read the summary for that order on the *Status Bar* at the bottom of the screen. The *Status Bar* will display the company name from the database. The *Mismatch Report* gives a trader the additional flexibility of being able to view all the mismatches in a list at once. This allows the user to quickly determine which securities (if any) need to be corrected.

Odd Lot Report

The Odd Lot Report

The *Odd Lot Report* provides a summary of orders whose number of shares is inconsistent with the security's lot size.

This report displays the Ticker, RIC, Cusip or Sedol, Shares, Side, Country, Price, Principal, Company Name, and Lot Size.

NOTE: Japanese Odd Lots:
Odd lots for Japanese orders are also displayed in the *Status Column* of the *Tabular* folder.

NOTE: Other places Odd Lots are noted:
Odd lots for all other countries (including Japan) are noted in the *Tabular* folder's *Status Bar* when an individual order row is clicked on.
Odd Lot messages also appear in the *Comments* field of the *Total* folder and the "side" folders.

OTC Market Maker Report

The OTC Report

The OTC Market Maker Report shows all OTC securities in a list and breaks them into two categories:

- *Market Makers*: the OTC securities for which the firm makes a market.
- *Non-Market Makers*: the OTC securities for which the firm does not make a market.

Price Report

The Price Report

The *Price Report* is a two-sectioned report that summarizes price errors in a converted trade list.

Reporting Zero Prices

The first section, *Price is Zero*, displays all the securities in a trade list that have a closing price of zero in the database.

TIE™ recognizes that information in a database can be incomplete; therefore, *TIE™* automatically searches for the converted orders that have zero as their closing price and displays them in the *Price Report*. This feature enables traders to easily locate and correct the data errors.

Reporting Client Prices that are Out of Range

The second section, *Price is off by +/- 5%*, shows the securities in a trade list whose client reference price is out of range when compared to the closing price by an amount greater than or equal to plus or minus 5%.

The *Price Out of Range* section displays a percentage value for the discrepancy between the client reference price and the closing price.

| Contry | Price | Principal | Company | Comments |
|--|-------|----------------|----------------------|-----------------------|
| PRICE IS ZERO for d:\si test files\testsamples\test92399.xls | | | | |
| PRICE IS ZERO | | | | |
| AUL | 0.000 | 0.00 USD | AAPC LTD ACCOR ASIA | Mismatch. |
| PRICE OFF by +/- 5% for d:\si test files\testsamples\test92399.xls | | | | |
| PRICE OUT OF RANGE | | | | |
| AUL | 1.015 | 97,261.00 USD | ADVANCE PROPERTY FUN | Price off -21.83%. |
| AUL | 4.665 | 219,743.05 USD | WESTFIELD HOLDINGS L | Price off 10.67%. Mis |
| AUL | 0.698 | 209.51 USD | GANDEL RETAIL TRUST | Price off -5.31%. Mis |
| AUL | 1.696 | 125,503.74 USD | NATIONAL FOODS LTD | Price off -7.84%. |
| AUL | 0.739 | 84,073.30 USD | NATIONAL MUTUAL PROP | Price off -8.62%. |

The *Price Report* displays the Ticker, RIC, Cusip or Sedol, Shares, Side, Country, Price, Principal, and Company Name, for each security with a price error.

Report Folder – see *Trade Summary Report*

Restricted Report

The Restricted Report

The *Restricted Report* provides a summary of the securities in a trade list that are restricted. To view the *Restricted Report*, click on the report folder tab marked *Restrict*.

NOTE: Other places Restricteds are noted:

- A Restricted column is found in the *Total* and “side” folders. The column marked “Rst” will contain a “Y” if the security is Restricted.
- The US and International Liquidity Reports include a column marked “Rst” where the individual securities are itemized. This column will contain a “Y” when the security is Restricted.

Trade Summary Report

The Trade Summary Report

The *Trade Summary Report* provides a comprehensive summary of a trade list. It can be viewed by clicking on the folder tab marked *Report*.

The securities in the trade list are summarized by country, count, shares, and side. The local and USD reference principals, and the USD closing principal are calculated and displayed for each of the summary criteria.

| TRADE SUMMARY for | | | | | | |
|-------------------|------|-------|---------|------------------------|--------------|--|
| clipboard | | | | | | |
| Country | Side | Count | Shares | Local Client Principal | USD Client P | |
| USA | BY | 8 | 25,500 | 655,725.00 USD | 655,72 | |
| USA | BC | 13 | 53,392 | 5,637,840.00 USD | 5,637,84 | |
| USA | SL | 13 | 37,600 | 1,392,837.50 USD | 1,392,83 | |
| USA | SS | 12 | 44,000 | 1,579,687.50 USD | 1,579,68 | |
| BUYS | | 8 | 25,500 | | 655,72 | |
| | | | | | 655,72 | |
| SELLS | | 13 | 37,600 | | 1,392,83 | |
| | | | | | 1,392,83 | |
| SHORTS | | 12 | 44,000 | | 1,579,68 | |
| | | | | | 1,579,68 | |
| COVERED | | 13 | 53,392 | | 5,637,84 | |
| | | | | | 5,637,84 | |
| TOTALS | | 46 | 160,492 | | 9,266,09 | |
| | | | | | 9,266,09 | |

for

| USD Client Principal | USD Closing Principal | Exchange Rate |
|------------------------------------|-----------------------|---------------|
| 655,725.00 USD | 655,725.00 USD | 1.000000 |
| 5,637,840.00 USD | 5,637,840.00 USD | 1.000000 |
| 1,392,837.50 USD | 1,392,837.50 USD | 1.000000 |
| 1,579,687.50 USD | 1,579,687.50 USD | 1.000000 |
| <hr/> | | |
| 655,725.00 USD Client Principal | | |
| 655,725.00 USD Closing Principal | | |
| 1,392,837.50 USD Client Principal | | |
| 1,392,837.50 USD Closing Principal | | |
| 1,579,687.50 USD Client Principal | | |
| 1,579,687.50 USD Closing Principal | | |
| 5,637,840.00 USD Client Principal | | |
| 5,637,840.00 USD Closing Principal | | |
| <hr/> | | |
| 9,266,090.00 USD Client Principal | | |
| 9,266,090.00 USD Closing Principal | | |

Trade Summary Report Sections

The *Trade Summary Report* can include the following sections when relevant: kick outs, sub-accounts, duplicate securities, dummy accounts in use, dually listed securities, description mismatches, prices that are zero, prices that are out of range, errors, conflicts, unknown lines, securities matched by synonyms, odd lots, and securities that are on the restricted list.



Specific sections of the *Report* are displayed in the six folders to the right of the *Report Folder*. For more detailed information on these sections of the *Trade Summary Report*, please refer to the information provided for each of the individual reports.

Upload Reports

The *Upload Reports* give the user confirmation of upload results.

Upload Reports will vary according to client specifications and system requirements.

10. ERROR DETECTION

Alert Lights

Trade Import Expert™ warns the trader, through a series of *Alert* lights, if there are problems with security data in a trade list.

TIE™ generates alerts for four different situations:

- Unknown security identifiers
- Conflicts between security identifiers
- Prices out of range
- Allocation imbalances

A green LED indicates no conflict. A gray LED means that the alert is not applicable. A red LED indicates a conflict.



The **Security Alert** lets the user know if there are any unknown security identifiers in a list.

The **Conflict Alert** lets the user know if there are securities in a list that have not been converted into orders due to data conflicts.

The **Price Alert** indicates whether the prices given in a list are +/- 5% over or under the prior night's closing price.

The **Allocation Alert** indicates sub-account allocation imbalances, and will only be lit when sub-accounts are present in a list.

Dually Listed Warning

Trade Import Expert™ warns the trader when there are dually listed securities in a list.

Default Security Selection

When a dually listed security identifier has been sent by the client *TIE™* will select the default security. {US/Canadian dually listed securities, *TIE™* defaults to the US security. UKM/IRE dually listed securities, *TIE™* defaults to the Irish security.}

Dually Listed Warnings appear in:

1. *Tabular* folder *Status Bar* when an individual order row is highlighted
2. *Total* folder *Comments Field*
3. *Report* folder (*Trade Summary Report*) *Dually Listed Securities* section

Duplicate Internal Accounts Warning

TIE™ warns the user when different account names used in the list share the same internal account number. These accounts will be listed in the *Account Report* and in the *Duplicate Internal Accounts* section of the *Trade Summary Report*.

Duplicate Security per Account Warning

Securities that are listed more than once under the same account are noted with a "Duplicate Account" warning in the *Tabular* folder *Status Column*, the *Total* folder *Comments field*, and in the *Trade Summary* and *Account Reports*.

Errors Report

The *Errors Report* folder provides a two-sectioned summary of the security errors and conflicts found in a trade list.

Mismatch Reporting

TIE™ will warn users of securities in a list whose company description does not match the company description in the securities database.

Mismatch Report Folder

| COMPANY DESCRIPTION DOES NOT MATCH | | |
|------------------------------------|-------------|------------------------|
| 10 | 20 | 30 |
| FORD MTR CO DEL | 3500 | / FORD MOTOR CO |
| GENERAL MTRS CORP | 2600 | / GENERAL MOTOR |
| LIMITED INC | 13700 | / THE LIMITED W |
| LYONDELL CHEMICAL CO | 38300 | / LYONDELL PETRI |
| SPRINT CORP | 9600 | / SPRINT PCS GRI |
| TRICON GLOBAL RESTAURA | 6900 | / TRICON GLOBAL |
| BARD C R INC | 2200 | / CAPSTAR BROAD |
| CARDINAL HEALTH INC | 4800 | / CARDINAL HLTH |
| CONSOLIDATED EDISON IN | 1300 | / CONSOL ED OF I |
| E M C CORP MASS | 3000 | / EMC CORP |
| RATIONAL SOFTWARE CORP | 1200 | / RATIONAL SFTW |

The *Mismatch Report* folder provides a summary of the company description mismatches in a trade list. Description mismatches refer to orders where the company description provided in the trade list does not match the company name found in the security database.

The *Mismatch Report* includes: the line number, the first 80 characters of the client's input line, followed by a slash (/) and the company name from the security database. This organization facilitates quick comparisons.

Mismatch Warnings appear in:

1. *Tabular* folder *Status Column*
2. *Total* folder *Comments Field*
3. *Report* folder (*Trade Summary Report*) *Company Description Does Not Match* section
4. *Mismatch Report*

| | | | |
|-------------------|------|------------------------|-------|
| 27 Order | AMR | AMR CORP | 15400 |
| 28 Order | AR | ASARCO INC | 2200 |
| 29 No security. | ASND | ASCEND COMMUNICATIONS | 3100 |
| 30 Order-Mismatch | CRB | BARD C R INC | 2200 |
| 31 Order | BGEN | BIOGEN INC | 4700 |
| 32 Order-Mismatch | CAH | CARDINAL HEALTH INC | 4800 |
| 33 Order | CDP | CONSOLIDATED PAPERS IN | 2300 |

Mismatch. SL 2,200 CRB CRB.N 14067G105 USA 0.000 CAPSTAR BROADCST

Odd Lot Reporting

Trade Import Expert™ detects and reports odd lot share quantities. *TIE™* warns the trader of *Odd Lots* rather than preventing an order with an error message.

Odd Lot Report

Trade Import Expert™'s *Odd Lot Report* provides a summary of all orders where the number of shares being traded is inconsistent with the security's lot size.

Odd Warnings appear in:

1. *Tabular* folder *Status Bar* when an individual order row is highlighted; warnings display the security's lot size
2. *Total* and side output folders *Comments field*
3. *Trade Summary Report*, *Odd Lot* section
4. *Odd Lot Report*
5. Odd Lot warnings for Japanese securities appear the *Tabular* folder *Status Column*

Order Status

A *Status Column* is provided in the *Tabular* and *Unknown* folders. This column lists the status of each security in a trade list.

Securities that have been converted, will display the word "Order" in the *Status Column*.

If a security row contains errors or discrepancies, these will be noted by error messages.

A detailed display of the order or error message can be seen in the *Status Bar* at the bottom of the screen when the individual row is highlighted.

Price Error Reporting

Price Out of Range

When a client provides reference prices in a trade list, *Trade Import Expert™* compares those prices with the prior night's closing prices. If there is a discrepancy in a price of plus or minus 5% or greater, *TIE™* alerts the trader and calculates the percentage of discrepancy in prices.

- A red *Price Alert* light indicates that one or more of the prices in a list is off.

Price Out of Range Warnings appear in:

1. *Tabular* folder *Status Bar* when an individual order row is highlighted; the warning will read: *Price Off by... %*
2. *Price Off by... %* messages are noted in the *Comments* field of the *Total* and side folders.
3. The *Trade Summary Report* includes a *Price Off by...%* section, when applicable.
4. The *Price* report folder displays securities with a price discrepancy.

Price Report Folder

The *Price Report* is a two-sectioned report which summarizes the securities in a trade list that have a zero price in the database, and the securities in a trade list whose reference prices are out of range from the prior night's closing prices by greater than or equal to plus or minus 5%.

Reconciliation

Trade List Reconciliation

Trade Import Expert™ will reconcile results when the input data contains trade summary information. *Reconciliation* LEDs give immediate visual feedback on the results of the conversion.



If no trade summary information is provided, the LEDs will remain grayed. If there are trade summary records and the numbers correspond to the sum of the buys, sells or totals, then *TIE™* will set the appropriate LEDs green. If there are discrepancies between the trade summary records and the sum of the buys, sells or totals, then the appropriate LEDs will be red.

Upload Reconciliation

TIE™ reconciles its results with the *Trade Execution System* upload results, saving the traders from having to manually reconcile the two. *Trade Execution System* model names created during the upload are displayed in the *TIE's Country* folder. When the results of the conversion do not match the results of the upload, the word "error" will be displayed in the *Model* column of the *Country* folder.

Restricted Reporting

Restricted Report

The *Restricted Report* provides a summary of all the securities in a trade list that are restricted.

Restricted Warnings appear in:

1. the *Trade Summary Report's Restricted* section, when applicable.
2. the *Restricted Report* folder
3. the *Total* and side folders include a restricted column marked "Rst"; when a "Y" appears in the column the security is restricted
4. the *Liquidity Reports* detail pages include a restricted column marked "Rst"; when a "Y" appears in the column the security is restricted

Security Comments Warning

The Security comments warning is used to help notify traders of any product with special circumstances (i.e. - one that is illiquid - or, perhaps it's local ownership of shares for 'foreigners' is full. etc..). It does not cause a kickout, but is printed on the upload reports for review.

Security Comment Warnings appear in:

1. the *Status Column* and *Status Bar* of the *Tabular* folder.
2. the *Comments* field of the *Total* and side folders.
3. a *Security comments* section is included in the *Trade Summary Report*.

Status Bar

The *Status Bar*, located at the bottom of the *TIE™* screen, serves several purposes:

- Security Summary
- Error Status
- Reference Dialog Box Function Confirmation

Security Summary

While in the *Tabular* folder, a user can highlight a row with an “Order” status to view a summary of the security in the *Status Bar*.

The summary includes: Side, Total Aggregate Shares, the A client’s internal security symbol, RIC, Cusip, Country, Price (client/reference price when included in the list; the closing price if no client price is given) the Company Name, and odd lot, mismatch, or synonym notations when applicable.

Error Status

While in the *Tabular* and *Unknown* folders, a user can highlight a row containing an error message in the *Status Column* to view the extended error message in the *Status Bar*.

Reference Dialog Box Function Confirmation

When using a reference dialog box, the *Status Bar* gives the user feedback on the functions performed. It confirms search findings, updates, deletions and additions, and will let the user know when no match was found for a search, or if data could not be updated.

This picture illustrates a security summary in the Status Bar.

| | | | | | | | |
|-------------------|------------------|------|--------|-----------|---------|---|---------|
| 51 Order | AIRBORNE FREIGHT | ABF | ABF.N | 009266107 | 2011260 | N | 32.00 |
| 52 Order | AIRBORNE FREIGHT | ABF | ABF.N | 009266107 | 2011260 | N | 32.00 |
| 53 Order | AIRBORNE FREIGHT | ABF | ABF.N | 009266107 | 2011260 | N | 32.00 |
| 54 Order-Mismatch | AMER BANKNOTE | ABN | ABN.N | 024490104 | 2910862 | N | 0.3125 |
| 55 Order-Mismatch | AMER BANKNOTE | ABN | ABN.N | 024490104 | 2910862 | N | 0.3125 |
| 56 Order-Mismatch | AMER BANKNOTE | ABN | ABN.N | 024490104 | 2910862 | N | 0.3125 |
| 57 Order | AMER BUS PRODS | ABP | ABP.N | 024763104 | 2024945 | N | 15.1875 |
| 58 Order | AMER BUS PRODS | ABP | ABP.N | 024763104 | 2024945 | N | 15.1875 |
| 59 Order | AMER BUS PRODS | ABP | ABP.N | 024763104 | 2024945 | N | 15.1875 |
| 60 Order | ARCTIC CAT INC | ACAT | ACAT.0 | 039670104 | 2047500 | 0 | 8.375 |
| 61 Order | ARCTIC CAT INC | ACAT | ACAT.0 | 039670104 | 2047500 | 0 | 8.375 |
| 62 Order | ARCTIC CAT INC | ACAT | ACAT.0 | 039670104 | 2047500 | 0 | 8.375 |

Mismatch. BY 200 ABN ABN.N 000937102 USA 22.188 ABN AMRO HLDG

In this illustration, the security has a “Mismatch” error message in the Status column. By clicking on the row and checking the company description in the Status Bar, the trader can quickly see that the client sent the wrong ticker for the security named in the list. This feature aids the trader in finding errors, making corrections quickly, and helps prevent trading the wrong security.

Status Column

The *Tabular* folder’s *Status Column* displays status messages for each row containing order information. Clicking on a cell in the *Status Column* displays order and/or error detail on the *Status Bar*.

When a row is successfully converted, it will read: “Order”. It may also display error messages such as “Order – Mismatch” (see the previous illustration). It informs the

user when a security identifier is undefined or when there are conflicts between more than one security identifier in a given row.

Users may sort by the *Status Column*, bringing all the rows with errors to the top. The *Status Column* is also present in the *Unknown* folder.

| status | ric |
|--------------------|--------|
| 1 Click on shares. | RIC |
| 2 | |
| 3 Order | IBM.N |
| 4 Order | CAT.N |
| 5 Order | SUN.N |
| 6 Order | NYT.N |
| 7 Order | BLU.N |
| 8 Click on shares. | SKI.N |
| 9 Order | MSFT.O |
| 10 Order | ABT.N |
| 11 Order | ABBK.O |
| 12 Order | IOM.N |
| 13 Order-Odd Lot | 7723.T |
| 14 Order-Odd Lot | 4634.T |

Summary Grid

The *Summary Grid* provides the user an instant side, share, and principal reference while converting an order. It is located in the *Control Panel* to the right side of the *TIE™* screen.

| | Count | Shares | USD Ref. Principal |
|---|-------|---------|--------------------|
| T | 32 | 874,700 | \$38,892,265 |
| B | 11 | 440,700 | \$16,371,112 |
| S | 21 | 434,000 | \$22,521,153 |
| C | 0 | 0 | \$0.00 |
| S | 0 | 0 | \$0.00 |
| - | 0 | 0 | \$0.00 |
| + | 0 | 0 | \$0.00 |
| E | 0 | 0 | \$0.00 |
| I | 46 | U | 14 |
| A | 0 | P | 0 |

The following is a list of the totals included in the *Summary Grid*:

- T = total count, shares, principal
- B = total buy count, buy shares, buy principal
- S = total sell count, sell shares, sell principal
- C = total cover count, cover shares, cover principal
- S = total short count, short shares, short principal
- = total buy minus count, buy minus shares, buy minus principal
- +
- E = total exempt count, exempt shares, exempt principal
- I = total number of lines in an order
- U = total number of unknown lines/data in an order
- A = total number of alerts
- P = total number of price exceptions

Trade Summary Report

The *Trade Summary Report* can include the following sections when they apply to a list:

- *Trade Execution System* kick outs
- *TIE* kick outs
- unknown sub-accounts
- duplicate accounts
- company description mismatches
- prices that are zero
- prices that are out of range
- errors
- conflicts
- unknown lines
- odd lots
- restricted securities
- dually listed securities
- securities matched by synonyms
- security comments warnings.

Note: Not all of these are errors, but they are noted so that the trader is aware the information may need to be confirmed before trading.

Unknown Account Warning

TIE™ recognizes client names and their accounts. When *TIE™* detects accounts in the trade list it automatically generates the allocations. If information within a range of account names is not recognized as an existing client account, *TIE™* will display a “cut or set column” request or post an “Unknown Account” message in the *Tabular* folder’s *Status Column*.

Unknown Side Warning

TIE™ recognizes over 62 different side synonyms in a variety of languages, as well as the symbols that indicate buy or sell shares. If information within a range of recognized side synonyms is not recognized as an existing synonym, *TIE™* will display an “Unknown Side” message in the *Tabular* folder’s *Status Column*. If no indication of the side is given in the list, a pop-up warning request the user

Upload Reconciliation

TIE™ reconciles each row in the *Country* folder with models created by the execution system. The trades are grouped by side and country. If the count of securities and total shares for each country and side are an exact match with those in the model, *TIE™* will insert the execution system’s model name into the *Country* folder. If they do not match, *TIE™* will insert the word “Error” in place of a model name.

11. ERROR MESSAGES: CAUSES & RESOLUTIONS

Click on Shares

Problem:

- TIE cannot determine the share quantity

Causes:

- More than one column contains numerical data
- Share quantities are listed across multiple accounts

Solution:

1. Set all accounts when applicable.
2. Set the share column when applicable.
3. Convert the order.

Option:

1. Cut or set other columns containing numerical data.
2. Convert the order.

Conflict Messages

TIE™ reports conflicts in security identifiers. When the client sends more than one security ID, but the ID's point to two different securities, TIE™ catches the error and prevents an order. To resolve the issue, the user should set the correct identifier or edit the information to correct the problem and reconvert the order.

Other data that matches security attributes can also create conflicts.

Examples of Conflicts and Resolutions

Conflict: Account/Side

Problem:

- TIE cannot determine if the data is an account or a side.

Cause:

- A string of characters matches a client's account name as well as a side synonym.

Solution:

1. Cut or set the column containing the symbol with the conflict.
2. If the symbol is an account, set the column or cell as account.
3. If the symbol is a side, set the side column or cell as side
4. Convert the order.

Conflict: Account/Ticker

Problem:

- TIE cannot determine if the data is an account or a ticker.

Cause:

- A string of characters matches a ticker as well as a client account name.

Solution:

1. Cut or set the column or cell containing the symbol with the conflict.
2. Convert the order.

Conflict: Country/Account**Problem:**

- TIE cannot determine if data refers to a country or to an account.

Cause:

- A string of characters matches a country code and a client account.

Solution:

1. Cut or set the column containing the symbol with the conflict.
2. If the symbol is an account, set the account column, range, or cell
3. Convert the order.

Conflict: Country/Ticker**Problem:**

- TIE cannot determine if the data refers to a country or a ticker.

Cause:

- A string of characters matches a country code and a ticker.

Solution:

1. Set or Cut the column containing the symbol with the conflict
2. Convert the order.

Conflict: Cusip/Valoren**Problem:**

- TIE cannot determine which security is to be traded.

Cause:

- Two nine-digit numbers match the cusip and valoren of two different securities.

Solution:

1. Set the column containing the correct security identifier.
2. Set the share column (to circumvent nine-digit shares that may resemble security identifiers).
3. Convert the order.

Option:

1. Edit or replace the incorrect identifier.
2. Convert the order.

Conflict: Exchange/Ticker**Problem:**

- TIE cannot determine if data refers to an exchange or a ticker

Cause:

- A string of characters matches both an exchange and a ticker

Solution:

1. Set or cut the column containing the symbol with the conflict
2. Convert the order.

Conflict: Kassenverein/Sicovam**Problem:**

- TIE cannot determine which security is to be traded.

Cause:

- Two six-digit numbers match the kassenverein and sicovam of different securities.

Solution:

1. Set the column containing the correct security identifier.
2. Set the share column (six-digit shares may resemble security identifiers).
3. Convert the order.

Option:

Edit or replace the incorrect identifier and re-convert the order.

Conflict: Kassenverein/Sedol**Problem:**

- TIE cannot determine which security is to be traded.

Cause:

- Two six-digit numbers match the kassenverein and sedol of two different securities.

Solution:

1. Set the column containing the correct security identifier.
2. Set the share column (six-digit shares may resemble security identifiers).
3. Convert the order.

Option:

- Edit or replace the incorrect identifier and re-convert the order.

Conflict: Sedol/Cusip**Problem:**

- TIE cannot determine which security is to be traded.

Causes:

- The sedol and the cusip refer to two different securities.
- A share quantity matches a security identifier.

Solution:

1. Set the column containing the correct security identifier.
2. Set the share column (share quantities may resemble security identifiers).
3. Convert the order.

Option:

- Edit or replace the incorrect identifier and re-convert the order.

Conflict: Sedol/Sicovam**Problem:**

- TIE cannot determine which security is to be traded.

Cause:

- Two six-digit numbers match the sedol and sicovam of two different securities.

Solution:

1. Set the column containing the correct security identifier.
2. Set the share column (six-digit shares may resemble security identifiers).
3. Convert the order.

Option:

1. Edit or replace the incorrect identifier.
2. Convert the order.

Conflict: Sedol/Ticker**Problem:**

- TIE cannot determine the security

Cause:

- The ticker and the sedol refer to two different securities.

Solution:

1. Set the column containing the correct identifier to give it precedence.
2. Convert the order.

Option 1:

1. Edit the incorrect data so that it corresponds with the security.
2. Convert the order.

Option 2:

1. Delete the incorrect identifier.
2. Convert the order.

Conflict: Ticker/Cusip**Problem:**

- TIE cannot determine the security.

Cause:

- The ticker and the cusip refer to two different securities.

Solution:

1. Set the column containing the correct identifier to give it precedence.
2. Convert the order.

Option 1:

1. Edit the incorrect identifier so that it corresponds with the security to be traded.
2. Convert the order.

Option 2:

1. Delete the incorrect identifier
2. Convert the order.

Conflict: Ticker/Side**Problem:**

- TIE cannot determine if the data is a ticker or a side.

Cause:

- A string of characters matches a ticker as well as a side synonym.

Solution:

1. Cut or set the column containing the symbol with the conflict.
2. Set the ticker or side columns when applicable.
3. Convert the order.

Conflict: Ticker w/RIC**Problem:**

- TIE cannot determine the security

Cause:

- The ticker and the RIC refer to two different securities

Solutions:

1. Set the column containing the correct identifier to give it precedence.
2. Convert the order.

Option 1:

1. Edit the incorrect data so that it corresponds with the correct security.

2. Convert the order.

Option 2:

1. Delete the incorrect identifier.
2. Convert the order.

Cusip Undefined

Problem:

- The cusip is not recognized.

Causes:

- Incorrect client data
- Delisted cusip
- Product database is incomplete

Solution:

1. Replace or edit the cusip so that it is correct.
2. Convert the order.

Found 2

TIE™ reports when it finds duplicate security identifiers in an order row. The simplest way to correct the problem is to set or cut one of the columns.

Example:**Found 2 Tickers****Problem:**

- TIE cannot determine which ticker to use.

Cause:

- More than one piece of data in the row matches a ticker.

Solution:

1. Set or cut the columns indicated.
2. Convert the order.

Mismatch

Problem:

- The company name in the client list does not match company description in the database.

Causes:

- The company name listed and the identifiers given refer to two different securities.
- The company name given and the name in the database differ in spelling.
- The company name given and the name in the database differ in word order.

Solutions:***If an incorrect security has been selected:***

1. Edit and correct the security identifiers.
2. Convert the order.

If a correct security has been selected:

1. The message can be disregarded, since an order has been processed.
2. Continue with the conversion.
3. Convert the order.

No Security***Problem:***

- TIE does not detect a security.

Causes:

- No security has been identified.
- The identifiers given are unknown.
- The security has been delisted.

Solution:

1. Edit and correct any unknown identifiers.
2. Set the security identifier column(s).
3. Convert the order.

No Shares***Problem:***

- TIE cannot determine the share quantity.

Causes:

- No share quantity has been included in the row.
- The share quantity has a decimal and is being interpreted as a price.
- The share quantity resembles a security identifier (i.e. sedol, quick code).
- The share quantity for every row is the same.

Solution:

1. Add the share quantity if it is missing.
2. Set the share column.
3. Convert the order.

Odd Lot

Trade Import Expert™ detects and reports odd lot share quantities. When the number of shares being traded is not an exact multiple of the security's specified lot size, *TIE™* warns the trader rather than preventing an order.

Odd Lots for Japanese securities are displayed in the *Status Column* of the *Tabular* folder. Odd Lots for Japanese and all other securities are displayed in the *Tabular* folder's *Status Bar* when an individual row is clicked on, and are reported in the *Comments* field of the *Total* and "side" output folders. A complete list of the odd lots, is found in the *Trade Summary Report*, and *Odd Lot* reports.

Security Comments

The *Security Comments* warning is used to help notify traders of any product with special circumstances (i.e. - one that is illiquid - or, perhaps it's local ownership of shares for 'foreigners' is full. etc.). It does not cause a kick out, but is printed on the upload reports for review and may cause the salesman to call the client and get something changed.

Sedol Undefined

Problem:

- The sedol is not recognized.

Causes:

- Incorrect client data
- Delisted sedol
- Product database is incomplete

Solution:

1. Edit the sedol so that it is correct.
2. Convert the order.

Option:

1. Replace the sedol with another security identifier.
Convert the order.

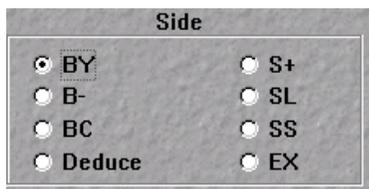
Note: Columns previously “set” must be re-set and converted after editing.

Set Side Manually Warning

The *Set Side Manually Warning* is not an error, but a “safety net” feature; *TIE* prompts the user to discern and designate the side of the order when no side information given and the share quantities are all positive numbers.



TIE™ will not assume the side of an order is “Buy” when no side has been indicated and all the shares are positive numbers. In this situation *TIE*™ forces the user to set the side manually. To do this, select a side by clicking on a *Side Radio Button* on *TIE*™'s *Control Panel*. A dot will appear in the circle beside the side synonym. Re-Convert the order.



Symbol Undefined

Problem:

- The security has no internal security symbol.

Causes:

- Incorrect client data
- Delisted ticker
- Product database is incomplete
- None of the identifiers are found in the product database

Solution:

1. Replace or edit the ticker so that it is correct.
2. Replace or edit other identifiers so that one or all are correct.
3. Set the column containing the corrected identifier.
4. Convert the order.

Option:

1. Temporarily update the security data using the *Security Reference* dialog box.
2. Edit or add the necessary security data.
3. Click the *Update* button on the *Security Reference* dialog box.
4. Click the *Done* button on the *Security Reference* dialog box to close it.
Convert the order.

Unknown Side

Problem:

- The abbreviation is not recognized.

Causes:

- Incorrect client data
- The abbreviation is not a standard abbreviation

Solution 1:

1. Replace or edit the side so that it is correct.
2. Convert the order.

Solution 2:

1. Temporarily add the side abbreviation(s) to *TIE™*'s side data, using the *Side Reference* dialog box.
2. Convert the order.

Note: Columns previously "set" must be re-set and converted after editing.

Unknown Account

TIE™ recognizes client names and their accounts. When *TIE™* detects accounts in the trade list it automatically generates the allocations. If information within a range of account names is not recognized as an existing client account, *TIE™* will warn the user in one of two ways:

- If the account names are listed horizontally across a page, *TIE*™ will generate a “Cut or set column with account...” message, indicating the column in question.
- When the accounts are listed vertically in a column, on consecutive rows, *TIE*™ will generate an “Unknown Account” message for any row that has an unrecognized account name in the account column.

Problem:

- Information that appears to be an account is not found in the client account data in the database.

Causes:

- The account is new
- The account is missing from the database
- The information is not an account

Solutions:

If a column is in question, cut or set the column and reconvert.

If a cell is in question, set the cell or the column containing the cell and reconvert the order.

12. PROBLEM SOLVING SCENARIOS

Merged Data

Problem:

There is no separation between data items. The order cannot be converted because some significant data is merged with other data.

Do you have something that looks like this?

| status | descriptio | description | shares |
|-----------------|------------|---------------|----------------|
| 1 | TicAccount | Side CUSIP | Ordered Traded |
| 2 No security. | CDISI24 | COVER12507110 | 100 |
| 3 No security. | ER SI24 | COVER30158610 | 800 |
| 4 No security. | RCLSI24 | COVERU7780T10 | 500 |
| 5 No security. | COVER | Tot: 3 | 1,400 |
| 6 No security. | CGXSI24 | SELL 20934110 | 800 |
| 7 No security. | SELL | Tot: 1 | 800 |
| 8 No security. | FFDSI24 | SHORT30423130 | 800 |
| 9 No security. | HP SI24 | SHORT42345210 | 400 |
| 10 No security. | NSCSI24 | SHORT65584410 | 100 |
| 11 No security. | SNUSI24 | SHORT87161C10 | 500 |
| 12 No security. | SW SI24 | SHORT86157210 | 400 |
| 13 No security. | SHORT | Tot: 5 | 2,200 |
| 14 | | | |

That is because the client's input data looked like this...

| TicAccount | Side | CUSIP | Ordered | Traded | Leaves | AvgPrice |
|------------|-------|----------|---------|--------|--------|----------|
| CDISI24 | COVER | 12507110 | 100 | 0 | 100 | 0.0000 |
| ER SI24 | COVER | 30158610 | 800 | 0 | 800 | 0.0000 |
| RCLSI24 | COVER | U7780T10 | 500 | 0 | 500 | 0.0000 |
| COVER | Tot: | | 3 | 1,400 | | |
| CGXSI24 | SELL | 20934110 | 800 | 0 | 800 | 0.0000 |
| SELL | Tot: | | 1 | 800 | | |
| FFDSI24 | SHORT | 30423130 | 800 | 0 | 800 | 0.0000 |
| HP SI24 | SHORT | 42345210 | 400 | 0 | 400 | 0.0000 |
| NSCSI24 | SHORT | 65584410 | 100 | 0 | 100 | 0.0000 |
| SNUSI24 | SHORT | 87161C10 | 500 | 0 | 500 | 0.0000 |
| SW SI24 | SHORT | 86157210 | 400 | 0 | 400 | 0.0000 |
| SHORT | Tot: | | 5 | 2,200 | | |

Solution:

It's not a problem. All you have to do is bisect the columns to separate the data and reconvert the order.

1. Place a field delimiter to create two separate columns. Position the cursor on the header bar, over the closest field delimiter to the right of where you will be placing the new one. When the cursor becomes a double arrow with a horizontal line running through it, hold down the *Control* key and then press the left mouse button and drag the

field delimiter to the left. This action creates a new field delimiter. Release the left mouse button when the new field delimiter is positioned where you want it.

In the following example a field delimiters have been placed so that they bisect the formerly merged data.

| status | *tk | *accoun | *side | cusip | *shares |
|--------------------------|-----|---------|-------|----------|----------------|
| 1 | Tic | Account | Side | CUSIP | Ordered Traded |
| 2 Order | CDI | SI24 | COVER | 12507110 | 100 |
| 3 Order-Mismatch | ER | SI24 | COVER | 30158610 | 800 |
| 4 Order | RCL | SI24 | COVER | 07780T10 | 500 |
| 5 Symbol undefined: ... | | COVER | Tot: | 3 | 1,400 |
| 6 Order | CGX | SI24 | SELL | 20934110 | 800 |
| 7 Symbol undefined: ... | | SELL | Tot: | 1 | 800 |
| 8 Order | FFD | SI24 | SHORT | 30423130 | 800 |
| 9 Order | HP | SI24 | SHORT | 42345210 | 400 |
| 10 Order | NSC | SI24 | SHORT | 65584410 | 100 |
| 11 Order | SNU | SI24 | SHORT | 87161C10 | 500 |
| 12 Order-Mismatch | SW | SI24 | SHORT | 86157210 | 400 |
| 13 Symbol undefined: ... | | SHORT | Tot: | 5 | 2,200 |
| 14 | | | | | |

(Field delimiters are created when dragging to the left, only; dragging field delimiters to the right merges columns).

2. Reconvert the order. Click on the *Convert* button to process the new data.

Merged Data with No Clear Division Point

Problem:

There is no separation between data items. The order cannot be converted because significant data is merged with other data, and the alignment of the data leaves no clear division point for a column bisect.

Do you have something that looks like this?

| status | ? | side | descripti | shares | descripti |
|----------------|---|------|-----------|--------|---------------------------|
| 1 No security. | | SELL | BR43.500 | 29,800 | Burlington Res Inc 122014 |
| 2 No security. | | BUY | DEC32.625 | 39,400 | Digital Equip Corp 253849 |
| 3 No security. | | BUY | G80.875 | 7,900 | Gillette Company 375766 |
| 4 No security. | | BUY | SLB98.875 | 6,400 | Schlumberger Ltd 8068571 |
| 5 No security. | | BUY | STJ37.500 | 34,300 | St Jude Med Inc 790849 |
| 6 No security. | | BUY | SWK38.375 | 33,500 | Stanley Wks 854616 |
| 7 | | BUY | TWX42.875 | 15,900 | Time Warner Inc 887315 |

Solution:

It's not a problem. You need to create columns by dragging in field delimiters to separate the data and reconvert the order. For data that does not line up correctly, the simple trick of realigning the data from left to right, or right to left as you go, will create the justified edges you need in order to place a field delimiter.

1. Select the column. Click on the column header to highlight the entire column.

| status | ? | side | descripti | shares | description |
|----------------|---|------|-----------|--------|----------------------------|
| 1 No security. | | SELL | BR43.500 | 29,800 | Burlington Res Inc 1220141 |
| 2 No security. | | BUY | DEC32.625 | 39,400 | Digital Equip Corp 2538491 |
| 3 No security. | | BUY | G80.875 | 7,900 | Gillette Company 3757661 |
| 4 No security. | | BUY | SLB98.875 | 6,400 | Schlumberger Ltd 80685710 |
| 5 No security. | | BUY | STJ37.500 | 34,300 | St Jude Med Inc 7908491 |
| 6 No security. | | BUY | SWK38.375 | 33,500 | Stanley Wks 8546161 |
| 7 | | BUY | TWX42.875 | 15,900 | Time Warner Inc 8873151 |
| 8 | | | | | |

2. Realign the data. Hold down the *Control* key on your keyboard and click the right mouse button.

| status | ? | side | descripti | shares | description |
|----------------|---|------|-----------|--------|----------------------------|
| 1 No security. | | SELL | BR43.500 | 29,800 | Burlington Res Inc 1220141 |
| 2 No security. | | BUY | DEC32.625 | 39,400 | Digital Equip Corp 2538491 |
| 3 No security. | | BUY | G80.875 | 7,900 | Gillette Company 3757661 |
| 4 No security. | | BUY | SLB98.875 | 6,400 | Schlumberger Ltd 80685710 |
| 5 No security. | | BUY | STJ37.500 | 34,300 | St Jude Med Inc 7908491 |
| 6 No security. | | BUY | SWK38.375 | 33,500 | Stanley Wks 8546161 |
| 7 | | BUY | TWX42.875 | 15,900 | Time Warner Inc 8873151 |

3. Place a field delimiter to create two separate columns. Hold down the *Control* key and position the cursor on the header bar, over the closest field delimiter to the right of where you will be placing it. When the cursor becomes a double arrow with a horizontal line running through it, press the left mouse button and drag the field delimiter to the left. This action creates a new field delimiter. Release the left mouse button when the new field delimiter is positioned where you want it.

| status | ? | *side | *tk | *price | *shares | descripti |
|-------------------------|---|-------|-----|--------|---------|----------------------------|
| 1 Order | | SELL | BR | 43.500 | 29,800 | Burlington Res Inc 1220141 |
| 2 Symbol undefined: ... | | BUY | DEC | 32.625 | 39,400 | Digital Equip Corp 2538491 |
| 3 Order | | BUY | G | 80.875 | 7,900 | Gillette Company 3757661 |
| 4 Order | | BUY | SLB | 98.875 | 6,400 | Schlumberger Ltd 80685710 |
| 5 Order | | BUY | STJ | 37.500 | 34,300 | St Jude Med Inc 7908491 |
| 6 Order-Mismatch | | BUY | SWK | 38.375 | 33,500 | Stanley Wks 8546161 |
| 7 Order | | BUY | TWX | 42.875 | 15,900 | Time Warner Inc 8873151 |

(Field delimiters are created when dragging to the left. Dragging field delimiters to the right merges columns).

Multiple Conflicts

Problem:

The order has conflicts on every row and setting one or two columns doesn't get rid of them.

Do you have something that looks like this?

| status | ctry | price | side | shares | ctry | price | ctry | shares |
|--------------------------|-------|----------|---------|----------|-----------|---------|-------|--------|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| Currency | Price | SecType | Lotsize | Exchange | Spot Rate | Country | Buy S | |
| 5 Conflict: Ticker/S... | EUR | 282.2703 | CS | 1 | FRS | 0.9562 | FR | - |
| 6 Conflict: Ticker/S... | EUR | 101.3572 | CS | 1 | FRS | 0.9562 | FR | - |
| 7 Conflict: Ticker/S... | EUR | 135.6848 | CS | 1 | FRS | 0.9562 | FR | - |
| 8 Click on shares. F... | USD | 50.6250 | AD | 1 | US | 1.0000 | GB | 147 |
| 9 Conflict: Country/... | GBP | 10.5682 | CS | 1 | UK | 1.5773 | GB | - |
| 10 Conflict: Country/... | GBP | 6.0934 | CS | 1 | UK | 1.5773 | GB | - |
| 11 Click on shares. F... | JPY | 8.7386 | CS | 1,000 | JPT0 | 0.0094 | JP | - |
| 12 Found 3 sides: , ... | JPY | 273.4592 | CS | 100 | JPT0 | 0.0094 | JP | - |
| 13 Conflict: Ticker/S... | EUR | 50.2196 | CS | 1 | ASE | 0.9562 | NL | - |
| 14 Conflict: Ticker/S... | EUR | 132.9118 | CS | 1 | ASE | 0.9562 | NL | - |
| 15 Conflict: Ticker/S... | EUR | 191.2879 | CS | 1 | ASE | 0.9562 | NL | - |
| 16 Conflict: Ticker/S... | SEK | 100.0518 | CS | 1 | SWED | 0.1136 | SE | - |
| 17 Click on shares. F... | USD | 57.8125 | AD | 1 | US | 1.0000 | TW | - |
| 18 Click on shares. F... | USD | 41.1250 | CS | 1 | OTC | 1.0000 | US | 178 |
| 19 Click on shares. F... | USD | 45.7500 | CS | 1 | OTC | 1.0000 | US | 178 |
| 20 Click on shares. F... | USD | 47.8125 | CS | 1 | US | 1.0000 | US | 147 |
| 21 Click on shares. F... | USD | 48.4375 | CS | 1 | US | 1.0000 | US | 139 |
| 22 Click on shares. F... | USD | 65.6250 | CS | 1 | US | 1.0000 | US | 108 |
| 23 Click on shares. F... | USD | 41.8125 | CS | 1 | US | 1.0000 | US | 162 |
| 24 Click on shares. F... | USD | 102.7500 | CS | 1 | US | 1.0000 | US | 68 |
| 25 Click on shares. F... | USD | 29.8750 | CS | 1 | US | 1.0000 | US | 234 |
| 26 Click on shares. F... | USD | 53.9375 | CS | 1 | US | 1.0000 | US | 116 |
| 27 Click on shares. F... | USD | 92.8750 | CS | 1 | OTC | 1.0000 | US | - |

Solution:

You can follow the error message instructions and set and cut columns until all conflicts are resolved or you can take pro-active measures with files that contain many columns of data by consolidating your data (the more concise the file, the faster the conversion).

1. Look the file over initially and cut all unneeded columns.
2. Set any accounts.
3. Convert the order.

This is the fastest way to convert a "busy" file.

Keep in mind if you want a column such as "section type" in the pictured example, above, to appear in *Trade Execution System* upload results, you can set the column as a memo by highlighting the column and clicking on the *Set Memo* button, then clicking on the *Convert* button. Setting or cutting this column will prevent possible side and ticker conflicts ("CS" pictured in the "section type" column, above, is both a known side and a known ticker).

No Columns

Problem:

The order to be converted has no columns.

Do you have something that looks like this?

| description | | | | | |
|-------------------------------------|--------|--------------------|-----|----------|----------|
| XXXXXXXXXXXX | | | | | |
| COPENHAGEN DENMARK | | | | | |
| ACCT NAME: XXXXXXXXXXXXXXXX MARKETS | | | | | |
| BIC: XXXXXXXXXXXX | | | | | |
| CASH ACCT: XXXXXXXXXXXX-0 | | | | | |
| ----- | | | | | |
| BUY | 415558 | DANISCO A/S | 550 | 454.4500 | 249947.5 |
| BUY | 416129 | BANG & OLUFSEN HLG | 300 | 490.0000 | 147000.0 |
| ----- | | | | | |
| ACCOUNT CODE: | | BANK1 | | | |
| BROKER NAME: | | XXXXXXX | | | |
| COUNTRY OF TRADE: | | Germany | | | |
| CURRENCY CODE: | | DEM | | | |
| CURRENCY OF TRADE: | | DEM | | | |

Solution:

It's not a problem. You will have to create columns by dragging the far right field delimiter to the left, and then re-dragging each placed delimiter, creating new delimiters, across the screen from one placement point to the next.

1. Create a field delimiter. Hold down the *Control* key on your keyboard. Position the cursor on the far right edge of the header bar until the cursor arrow becomes a double arrow with a horizontal line running through it. Press the left mouse button and drag the field delimiter to the left. This action creates a new field delimiter. Release the left mouse button when the field delimiter positioned where you want it.

| status | | | | | | 61 | ? |
|--------|-------------------------------------|--------|--------------------|-----|----------|-------|---|
| 55 | XXXXXXXXXXXX | | | | | | |
| 56 | COPENHAGEN DENMARK | | | | | | |
| 57 | ACCT NAME: XXXXXXXXXXXXXXXX MARKETS | | | | | | |
| 58 | BIC: XXXXXXXXXXXX | | | | | | |
| 59 | CASH ACCT: XXXXXXXXXXXX-0 | | | | | | |
| 60 | ----- | | | | | | |
| 61 | BUY | 415558 | DANISCO A/S | 550 | 454.4500 | 24994 | |
| 62 | BUY | 416129 | BANG & OLUFSEN HLG | 300 | 490.0000 | 14700 | |
| 63 | ----- | | | | | | |
| 64 | ACCOUNT CODE: | | BANK1 | | | | |
| 65 | BROKER NAME: | | XXXXXXX | | | | |
| 66 | COUNTRY OF TRADE: | | Germany | | | | |
| 67 | CURRENCY CODE: | | DEM | | | | |
| 68 | CURRENCY OF TRADE: | | DEM | | | | |
| 69 | TRADE DATE: | | 19980416 | | | | |

2. Create and place a new field delimiter. Hold down the *Control* key again. Position the cursor on the header bar, over the closest field delimiter to the right of where you will be placing the new delimiter. When the cursor arrow becomes a double arrow with a horizontal line running through it, press the left mouse button and drag the field delimiter to the left. Release the left mouse button when the new field delimiter positioned where you want it. (*Field delimiters are created when dragging to the left, only; dragging field delimiters to the right merges columns*).

| status | description | | ? | ? | ? |
|--------|---------------------------------------|--------------------|-----|----------|-------|
| 55 | XXXXXXXXXXXX | | | | |
| 56 | COPE NHAGEN DE NMARK | | | | |
| 57 | ACCT NAME: XX XXXXXXXXXXXXXXX MARKETS | | | | |
| 58 | BIC: XXXXXXXX XX | | | | |
| 59 | CASH ACCT: XX XXXXXXXXXXXX-0 | | | | |
| 60 | ---- | | | | |
| 61 | BUY 415558 | DANISCO A/S | 550 | 454.4500 | 24994 |
| 62 | BUY 416129 | BANG & OLUFSEN HLG | 300 | 490.0000 | 14700 |
| 63 | ---- | | | | |
| 64 | ACCO UNT CODE: | BANK1 | | | |
| 65 | BROK ER NAME: | XXXXXX | | | |
| 66 | COUN TRY OF TR ADE: | Germany | | | |
| 67 | CURR ENCY CODE : | DEM | | | |
| 68 | CURR ENCY OF T RADE: | DEM | | | |

3. Continue the same steps until all necessary field delimiters are in place.

| status | descr | ? | ? | ? | ? |
|--------|---------------------------------------|--------------------|-----|----------|----|
| 55 | XXXXX XXXXXXXX | | | | |
| 56 | COPE NHAGEN DE NMARK | | | | |
| 57 | ACCT NAME: XX XXXXXXXXXXXXXXX MARKETS | | | | |
| 58 | BIC: XXXXXXXX XX | | | | |
| 59 | CASH ACCT: XX XXXXXXXXXXXX-0 | | | | |
| 60 | ---- | | | | |
| 61 | BUY 415558 | DANISCO A/S | 550 | 454.4500 | 24 |
| 62 | BUY 416129 | BANG & OLUFSEN HLG | 300 | 490.0000 | 14 |
| 63 | ---- | | | | |
| 64 | ACCO UNT CODE: | BANK1 | | | |
| 65 | BROK ER NAME: | XXXXXX | | | |
| 66 | COUN TRY OF TR ADE: | Germany | | | |
| 67 | CURR ENCY CODE : | DEM | | | |
| 68 | CURR ENCY OF T RADE: | DEM | | | |

4. Convert the order.

| status | *sid | *sed01 | description | shares | price | pr |
|--------|---------------------------------------|-------------|--------------------|--------|----------|----|
| 55 | XXXX | XXXXXXXXXX | | | | |
| 56 | COPE NHAGEN DE NMARK | | | | | |
| 57 | ACCT NAME: XX XXXXXXXXXXXXXXX MARKETS | | | | | |
| 58 | BIC: XXXXXXXX XX | | | | | |
| 59 | CASH ACCT: XX XXXXXXXXXXXX-0 | | | | | |
| 60 | ---- | | | | | |
| 61 | Order-Mismatch | BUY 4155586 | DANISCO A/S | 550 | 454.4500 | 2 |
| 62 | Order | BUY 4161293 | BANG & OLUFSEN HLG | 300 | 490.0000 | 1 |
| 63 | ---- | | | | | |
| 64 | ACCO UNT CODE: | BANK1 | | | | |
| 65 | BROK ER NAME: | XXXXXX | | | | |
| 66 | COUN TRY OF TR ADE: | Germany | | | | |
| 67 | CURR ENCY CODE : | DEM | | | | |
| 68 | CURR ENCY OF T RADE: | DEM | | | | |

Parallel Orders

Problem:

Orders are listed in parallel columns. *TIE*™ is reading two security identifiers, two company names, and two share quantities on every order row, and is unable to convert the file.

Do you have something that looks like this?

| status | description | tkr | shares | description | tkr | shares |
|--------------------------|-------------------|--------|--------|-------------------|--------|----------|
| 1 Found 2 sides: BUY... | BUYS | | | SELLS | | |
| 2 | COMPANY NAME | TICKER | SHARES | COMPANY NAME | TICKER | SHARES |
| 3 Found 2 tickers: A... | ARMCO INC | AS | 25,000 | ALUMINUM CO AMER | AA | (25,000) |
| 4 Found 2 tickers: B... | BETHLEHEM STL COR | BS | 25,000 | ALLERGAN INC | AGN | (25,000) |
| 5 Found 2 tickers: C... | CORRECTIONS CORP | CCA | 25,000 | AMERICAN HOME PRO | AHP | (25,000) |
| 6 Found 2 tickers: C... | COMPUTER SCIENCES | CSC | 25,000 | ALCAN ALUMINIUM L | AL | (25,000) |
| 7 Found 2 tickers: A... | DEERE & CO | DE | 30,000 | AVON PRODS INC | AUP | (25,000) |
| 8 Found 2 tickers: D... | DOLLAR GEN CORP | DG | 25,000 | BALL CORP | BLL | (10,000) |
| 9 Found 2 tickers: D... | DOW JONES & CO IN | DJ | 25,000 | COLGATE PALMOLIVE | CL | (25,000) |
| 10 Found 2 tickers: D... | DIME BANCORP INC | DME | 10,000 | DU PONT E I DE NE | DD | (75,000) |
| 11 Found 2 tickers: E... | ECHLIN INC | ECH | 25,000 | F H C CORP | FHC | (5,000) |
| 12 Found 2 tickers: E... | LAUDER ESTEE COS | EL | 25,000 | HILTON HOTELS COR | HLT | (25,000) |
| 13 Found 2 tickers: G... | GANNETT INC | GCI | 25,000 | HERCULES INC | HPC | (25,000) |
| 14 Found 2 tickers: H... | HEINZ H J CO | HNZ | 25,000 | ITT INDS INC IND | IIN | (25,000) |
| 15 Found 2 tickers: H... | HELMERICH & PAYNE | HP | 25,000 | INTL PAPER CO | IP | (25,000) |
| 16 Found 2 tickers: K... | KAUFMAN & BROAD H | KBH | 10,000 | MORGAN J P & CO I | JPM | (25,000) |
| 17 Found 2 tickers: K... | KEANE INC | KEA | 25,000 | LONGS DRUG STORES | LDG | (5,000) |
| 18 Found 2 tickers: K... | KANSAS CITY SOUTH | KSU | 25,000 | LITTON INDS INC | LIT | (15,000) |
| 19 Found 2 tickers: L... | LEHMAN BROS HLDGS | LEH | 15,000 | MORTON INTL INC I | MII | (25,000) |
| 20 Found 2 tickers: O... | OFFICE DEPOT INC | ODP | 25,000 | MIRAGE RESORTS IN | MIR | (50,000) |
| 21 Found 2 tickers: P... | PULTE CORP | PHM | 10,000 | MINNESOTA MNG & H | MMH | (50,000) |
| 22 Order-Mismatch | TRANSOCEAN OFFSHO | RIG | 25,000 | MONSANTO CO | HTC | (25,000) |
| 23 Found 2 tickers: S... | SEAGATE TECHNOLOG | SEG | 25,000 | NALCO CHEM CO | NLC | (15,000) |
| 24 Found 2 tickers: S... | SERVICE CORP INTL | SRV | 25,000 | NORFOLK SOUTHERN | NSC | (50,000) |
| 25 Found 2 tickers: T... | TYCO INTL LTD NEW | TYC | 25,000 | PARKER HANNIFIN C | PH | (25,000) |
| 26 Found 2 tickers: W... | WATSON PHARMACEUT | WPI | 25,000 | ROHM & HAAS CO | ROH | (10,000) |
| 27 | | | | | | |

Solution:

It's not a problem. You will have to convert this order in two passes.

1. Highlight the first three columns of "Buy" order information.

| status | description | tkr | shares | description | tkr | shares |
|--------------------------|-------------------|--------|--------|-------------------|--------|----------|
| 1 Found 2 sides: BUY... | BUYS | | | SELLS | | |
| 2 | COMPANY NAME | TICKER | SHARES | COMPANY NAME | TICKER | SHARES |
| 3 Found 2 tickers: A... | ARMCO INC | AS | 25,000 | ALUMINUM CO AMER | AA | (25,000) |
| 4 Found 2 tickers: B... | BETHLEHEM STL COR | BS | 25,000 | ALLERGAN INC | AGN | (25,000) |
| 5 Found 2 tickers: C... | CORRECTIONS CORP | CCA | 25,000 | AMERICAN HOME PRO | AHP | (25,000) |
| 6 Found 2 tickers: C... | COMPUTER SCIENCES | CSC | 25,000 | ALCAN ALUMINIUM L | AL | (25,000) |
| 7 Found 2 tickers: A... | DEERE & CO | DE | 30,000 | AVON PRODS INC | AUP | (25,000) |
| 8 Found 2 tickers: D... | DOLLAR GEN CORP | DG | 25,000 | BALL CORP | BLL | (10,000) |
| 9 Found 2 tickers: D... | DOW JONES & CO IN | DJ | 25,000 | COLGATE PALMOLIVE | CL | (25,000) |
| 10 Found 2 tickers: D... | DIME BANCORP INC | DME | 10,000 | DU PONT E I DE NE | DD | (75,000) |
| 11 Found 2 tickers: E... | ECHLIN INC | ECH | 25,000 | F H C CORP | FHC | (5,000) |
| 12 Found 2 tickers: E... | LAUDER ESTEE COS | EL | 25,000 | HILTON HOTELS COR | HLT | (25,000) |
| 13 Found 2 tickers: G... | GANNETT INC | GCI | 25,000 | HERCULES INC | HPC | (25,000) |
| 14 Found 2 tickers: H... | HEINZ H J CO | HNZ | 25,000 | ITT INDS INC IND | IIN | (25,000) |
| 15 Found 2 tickers: H... | HELMERICH & PAYNE | HP | 25,000 | INTL PAPER CO | IP | (25,000) |
| 16 Found 2 tickers: K... | KAUFMAN & BROAD H | KBH | 10,000 | MORGAN J P & CO I | JPM | (25,000) |
| 17 Found 2 tickers: K... | KEANE INC | KEA | 25,000 | LONGS DRUG STORES | LDG | (5,000) |
| 18 Found 2 tickers: K... | KANSAS CITY SOUTH | KSU | 25,000 | LITTON INDS INC | LIT | (15,000) |
| 19 Found 2 tickers: L... | LEHMAN BROS HLDGS | LEH | 15,000 | MORTON INTL INC I | MII | (25,000) |
| 20 Found 2 tickers: O... | OFFICE DEPOT INC | ODP | 25,000 | MIRAGE RESORTS IN | MIR | (50,000) |
| 21 Found 2 tickers: P... | PULTE CORP | PHM | 10,000 | MINNESOTA MNG & H | MMH | (50,000) |
| 22 Order-Mismatch | TRANSOCEAN OFFSHO | RIG | 25,000 | MONSANTO CO | HTC | (25,000) |
| 23 Found 2 tickers: S... | SEAGATE TECHNOLOG | SEG | 25,000 | NALCO CHEM CO | NLC | (15,000) |
| 24 Found 2 tickers: S... | SERVICE CORP INTL | SRV | 25,000 | NORFOLK SOUTHERN | NSC | (50,000) |
| 25 Found 2 tickers: T... | TYCO INTL LTD NEW | TYC | 25,000 | PARKER HANNIFIN C | PH | (25,000) |
| 26 Found 2 tickers: W... | WATSON PHARMACEUT | WPI | 25,000 | ROHM & HAAS CO | ROH | (10,000) |
| 27 | | | | | | |

- Click on the *Convert* button to convert the orders.

| status | description | tkr | shares | ??? | ??? | ??? |
|-------------------|-------------------|--------|--------|-------------------|--------|----------|
| 1 | BUYS | | | SELLS | | |
| 2 | COMPANY NAME | TICKER | SHARES | COMPANY NAME | TICKER | SHARES |
| 3 Order | ARMCO INC | AS | 25,000 | ALUMINUM CO AMER | AA | (25,000) |
| 4 Order | BETHLEHEM STL COR | BS | 25,000 | ALLERGAN INC | AGN | (25,000) |
| 5 Order-Mismatch | CORRECTIONS CORP | CCA | 25,000 | AMERICAN HOME PRO | AHP | (25,000) |
| 6 Order | COMPUTER SCIENCES | CSC | 25,000 | ALCAN ALUMINIUM L | AL | (25,000) |
| 7 Order | DEERE & CO | DE | 30,000 | AVON PRODS INC | AUP | (25,000) |
| 8 Order | DOLLAR GEN CORP | DG | 25,000 | BALL CORP | BLL | (10,000) |
| 9 Order | DOW JONES & CO IN | DJ | 25,000 | COLGATE PALMOLIVE | CL | (25,000) |
| 10 Order | DIME BANCORP INC | DME | 10,000 | DU PONT E I DE NE | DD | (75,000) |
| 11 Order-Mismatch | ECHLIN INC | ECH | 25,000 | F M C CORP | FMC | (5,000) |
| 12 Order-Mismatch | LAUDER ESTEE COS | EL | 25,000 | HILTON HOTELS COR | HLT | (25,000) |
| 13 Order | GANNETT INC | GCI | 25,000 | HERCULES INC | HPC | (25,000) |
| 14 Order | HEINZ H J CO | HNZ | 25,000 | ITT INDS INC IND | IIN | (25,000) |
| 15 Order | HELMERICH & PAYNE | HP | 25,000 | INTL PAPER CO | IP | (25,000) |
| 16 Order | KAUFMAN & BROAD H | KBH | 10,000 | MORGAN J P & CO I | JPH | (25,000) |
| 17 Order | KEANE INC | KEA | 25,000 | LONGS DRUG STORES | LDG | (5,000) |
| 18 Order | KANSAS CITY SOUTH | KSU | 25,000 | LITTON INDS INC | LIT | (15,000) |
| 19 Order | LEHMAN BROS HLDGS | LEH | 15,000 | MORTON INTL INC I | MII | (25,000) |
| 20 Order | OFFICE DEPOT INC | ODP | 25,000 | MIRAGE RESORTS IN | MIR | (50,000) |
| 21 Order | PULTE CORP | PHM | 10,000 | MINNESOTA MNG & M | MMM | (50,000) |
| 22 Order-Mismatch | TRANSOCEAN OFFSHO | RIG | 25,000 | MONSANTO CO | MTC | (25,000) |
| 23 Order | SEAGATE TECHNOLOG | SEG | 25,000 | NALCO CHEM CO | NLC | (15,000) |
| 24 Order | SERVICE CORP INTL | SRV | 25,000 | NORFOLK SOUTHERN | NSC | (50,000) |
| 25 Order | TYCO INTL LTD NEW | TYC | 25,000 | PARKER HANNIFIN C | PH | (25,000) |
| 26 Order | WATSON PHARMACEUT | WPI | 25,000 | ROHM & HAAS CO | ROH | (10,000) |
| 27 | | | | | | |

BY 10,000 PHM PHM.N 745867101 USA 22.438 PULTE CORP

- Upload the orders.

Process the second section of the trade list the same way:

- Highlight the second set of three columns of "Sell" order information.

| status | description | tkr | shares | description | tkr | shares |
|--------------------------|-------------------|--------|--------|-------------------|--------|----------|
| 1 Found 2 sides: BUY... | BUYS | | | SELLS | | |
| 2 | COMPANY NAME | TICKER | SHARES | COMPANY NAME | TICKER | SHARES |
| 3 Found 2 tickers: A... | ARMCO INC | AS | 25,000 | ALUMINUM CO AMER | AA | (25,000) |
| 4 Found 2 tickers: B... | BETHLEHEM STL COR | BS | 25,000 | ALLERGAN INC | AGN | (25,000) |
| 5 Found 2 tickers: C... | CORRECTIONS CORP | CCA | 25,000 | AMERICAN HOME PRO | AHP | (25,000) |
| 6 Found 2 tickers: C... | COMPUTER SCIENCES | CSC | 25,000 | ALCAN ALUMINIUM L | AL | (25,000) |
| 7 Found 2 tickers: A... | DEERE & CO | DE | 30,000 | AVON PRODS INC | AUP | (25,000) |
| 8 Found 2 tickers: D... | DOLLAR GEN CORP | DG | 25,000 | BALL CORP | BLL | (10,000) |
| 9 Found 2 tickers: D... | DOW JONES & CO IN | DJ | 25,000 | COLGATE PALMOLIVE | CL | (25,000) |
| 10 Found 2 tickers: D... | DIME BANCORP INC | DME | 10,000 | DU PONT E I DE NE | DD | (75,000) |
| 11 Found 2 tickers: E... | ECHLIN INC | ECH | 25,000 | F M C CORP | FMC | (5,000) |
| 12 Found 2 tickers: E... | LAUDER ESTEE COS | EL | 25,000 | HILTON HOTELS COR | HLT | (25,000) |
| 13 Found 2 tickers: G... | GANNETT INC | GCI | 25,000 | HERCULES INC | HPC | (25,000) |
| 14 Found 2 tickers: H... | HEINZ H J CO | HNZ | 25,000 | ITT INDS INC IND | IIN | (25,000) |
| 15 Found 2 tickers: H... | HELMERICH & PAYNE | HP | 25,000 | INTL PAPER CO | IP | (25,000) |
| 16 Found 2 tickers: K... | KAUFMAN & BROAD H | KBH | 10,000 | MORGAN J P & CO I | JPH | (25,000) |
| 17 Found 2 tickers: K... | KEANE INC | KEA | 25,000 | LONGS DRUG STORES | LDG | (5,000) |
| 18 Found 2 tickers: K... | KANSAS CITY SOUTH | KSU | 25,000 | LITTON INDS INC | LIT | (15,000) |
| 19 Found 2 tickers: L... | LEHMAN BROS HLDGS | LEH | 15,000 | MORTON INTL INC I | MII | (25,000) |
| 20 Found 2 tickers: O... | OFFICE DEPOT INC | ODP | 25,000 | MIRAGE RESORTS IN | MIR | (50,000) |
| 21 Found 2 tickers: P... | PULTE CORP | PHM | 10,000 | MINNESOTA MNG & M | MMM | (50,000) |
| 22 Order-Mismatch | TRANSOCEAN OFFSHO | RIG | 25,000 | MONSANTO CO | MTC | (25,000) |
| 23 Found 2 tickers: S... | SEAGATE TECHNOLOG | SEG | 25,000 | NALCO CHEM CO | NLC | (15,000) |
| 24 Found 2 tickers: S... | SERVICE CORP INTL | SRV | 25,000 | NORFOLK SOUTHERN | NSC | (50,000) |
| 25 Found 2 tickers: T... | TYCO INTL LTD NEW | TYC | 25,000 | PARKER HANNIFIN C | PH | (25,000) |
| 26 Found 2 tickers: W... | WATSON PHARMACEUT | WPI | 25,000 | ROHM & HAAS CO | ROH | (10,000) |
| 27 | | | | | | |

- Click on the *Convert* button to convert the orders.
- Upload the orders.

13. REFERENCE DIALOG BOXES

Account Reference

The *Account Reference* dialog box allows the user to look up accounts by client, to look up specific account names, and to add, delete and update account information.

To access the *Account Reference* dialog box, click on the button marked “ACCT REF”



on the toolbar or highlight and click on “Account Reference” in the right-click popup menu.

 A screenshot of the "Account Reference" dialog box. The window title is "Account Reference". It contains several fields and buttons:

- Client Name:** A list box with "TEST CLIENT" selected. Other options include "TETON | IBS", "TEXAS | IBS", and "TEXAS TEACHERS | EM".
- External Account Mnemonic:** A list box with "ACCOUNT 3" selected. Other options include "ACCOUNT 1" and "ACCOUNT 2".
- External Account Mnemonic *:** A text field containing "ACCOUNT 3".
- Internal Account Number *:** A text field containing "12345678".
- Buttons:** A vertical stack of buttons: "Find", "Add", "Delete", "Update", "Clear", and "Done".

The *Account Reference* is organized to include a list box of clients, a list box for findings, and edit controls for both External Account Mnemonics and Internal Account Numbers.

Searching by Account Name

1. Type an account name into the External Account Mnemonic edit control.
2. Click on the “Find” button.

Searching by Internal Account Number

1. Type an internal account number in the Internal Account Number edit control.
2. Click on the “Find” button.

Searching by Client

1. Select a client by scrolling through the client list and double clicking on a client name. The client’s name will appear in the Client Name edit control.

2. Double click again on the client name, and the client's accounts will appear in the External Account Mnemonic list box.
3. Scroll through the list and double click on any account name to view its external account mnemonic and internal account number. The client's account information for the selected account will be displayed in the External Account Mnemonic and Internal Account Number edit controls.

Adding an Account

1. Select a client by scrolling through the client list and double clicking on a client name. The client's name will appear in the Client Name edit control.
2. Type the account name to be added in the External Account Mnemonic edit control.
3. Type the corresponding internal account number in the Internal Account Number edit control.
4. Click on the "Add" button.

Deleting an Account

1. Find the account, using any one of the search methods listed above.
2. Double click on the account in the External Account Mnemonic list box. The account information will be displayed in the External Account Mnemonic and the Internal Account Number edit controls.
3. Click on the "Delete" button.

Updating an Account

1. Find the account, using any one of the search methods listed above.
2. Double click on the account in the External Account Mnemonic list box. The account information will be displayed in the External Account Mnemonic and the Internal Account Number edit controls.
3. Edit the Account Mnemonic and/or the Internal Account Number.
4. Click on the "Update" button.

Changes made are saved up until the time reference data is refreshed. Permanent changes must be referred to the department that handles updating the database.

Clearing the Edit Controls

Click on the *Clear* button.

Closing the Dialog Box

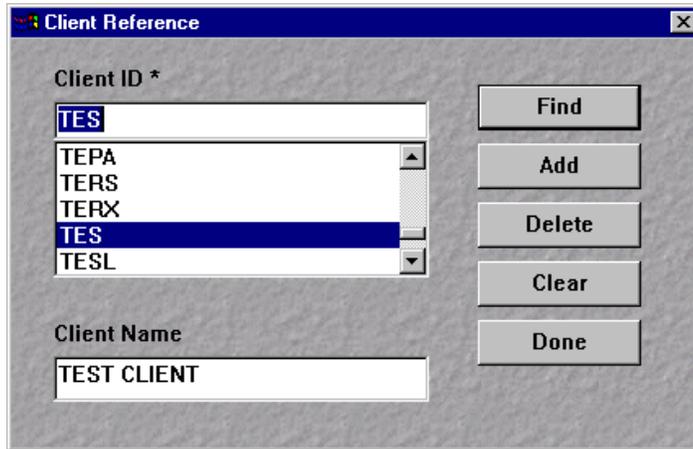
Click on the *Done* button or the "X" button located in the upper right corner of the dialog box.

Client Reference

The *Client Reference* dialog box allows the user to search for, verify, add, and delete client names and Ids.

To access the *Client Reference* dialog box, click on the button marked “client REF” on

the toolbar  or highlight and click on “Client Reference” in the right-click popup menu.



The *Client Reference* is organized with a scrolling list box and an edit control for the *Client ID* and an edit control for the *Client Name*.

Searching for a Client

1. Scroll through the *Client ID* list box.
2. Highlight and double click on the client ID.

Adding a Client

1. Type a two to four-character client ID in the *Client ID* edit control.
2. Type the corresponding client name in the *Client Name* edit control.
3. Click on the *Add* button.

If the client ID is already being used, TIE™ will not be able to add the new ID and client. Check the Status Bar after clicking on the Add button for confirmation that the new client has been added.

Note: If TIE™ is restarted or the data is refreshed, changes made by the user will be lost. Permanent changes (additions and deletions) must be made directly to the database. These features are intended to speed up the conversion process for traders when there is no time to wait for database corrections.

Deleting a Client

1. Scroll through the *Client ID* list box.
2. Highlight and double click on the client ID of the client to be deleted.
3. Click on the *Delete* button.

Clearing the Edit Controls

Click on the *Clear* button.

Closing the Dialog Box

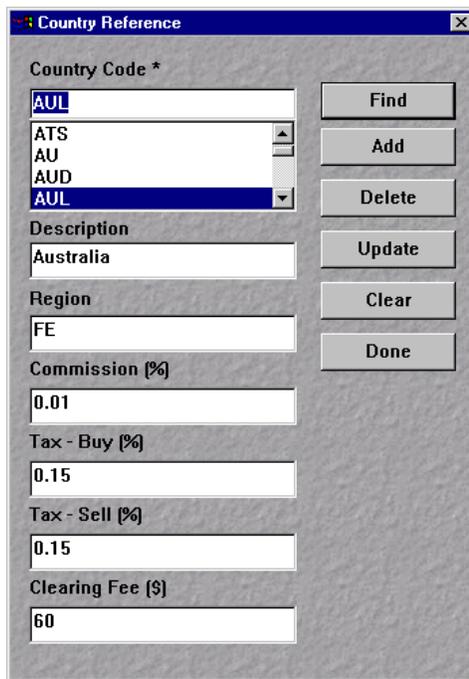
Click on the *Done* button or the “X” button located in the upper right corner of the dialog box.

Country Reference

The *Country Reference* dialog box allows the user to search for, verify, add, update and delete country abbreviations, regions, commission rates, tax rates, and clearing fees.

To access the *Country Reference* dialog box, click on the button marked, “CTRY REF”

on the toolbar  or highlight and click on “Country Reference” in the right-click popup menu.



The *Country Reference* dialog box includes a scrolling list box of country abbreviations and edit controls for the country abbreviation, country name, region code, commission rate, buy tax rate, sell tax rate, and clearing fee.

The *Country Reference* displays the data used to compute transaction fees in the *Bid* folder.

Searching for a Country

1. Scroll through the *Country Code* list box.
2. Click on the country abbreviation.

Adding a Country

1. Type a country abbreviation in the *Country Code* edit control at the top of the dialog box.
2. Type the country name in the *Description* edit control.
3. Enter any fees or rates in the appropriate edit controls.
4. Click on the *Add* button.

Updating Regions, Rates and Fees

1. Edit the region, rate, or fee.
2. Click on the *Update* button.

Deleting a Country

1. Scroll through the *Country Code* list box.
2. Click on the country abbreviation for the country to be deleted.
3. Click on the *Delete* button.

Clearing the Edit Controls

Click on the *Clear* button.

Closing the Dialog Box

Click on the *Done* button or the “X” button located in the upper right corner of the dialog box.

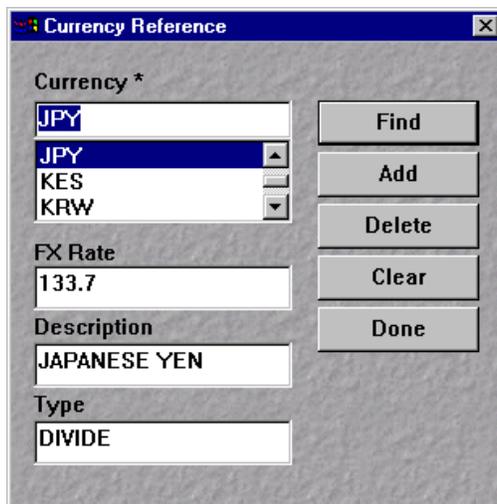
Foreign Exchange Reference

The *Foreign Exchange Reference (FX Reference)* dialog box allows the user to search for, confirm, or revise exchange rates for foreign currencies.

To access the *Foreign Exchange Reference (FX Reference)*, click on the button



marked, “FX REF” on the toolbar or highlight and click on “FX Reference” in the right-click popup menu.



The *Foreign Exchange Reference* dialog box includes a scrolling list box of currency codes, and edit controls for the currency abbreviation (*Currency**), the exchange rate (*FX Rate*), the country (*Description*), and the type of exchange (*Type*).

Searching for a Currency

1. Scroll through the *Currency* list box.
2. Highlight and click on the currency abbreviation

Adding a Currency

1. Type the currency abbreviation into the *Currency* edit control.
2. Type the foreign exchange rate into the *FX Rate* edit control.
3. Type the country name into the *Description* edit control.
4. Type “multiply” or “divide” as the conversion type into the *Type* edit control.
5. Click on the *Add* button.

Deleting a Currency

1. Scroll through the *Currency* list box.
2. Highlight and click on the currency abbreviation in the list box.
3. Click on the *Delete* button.

Clearing the Edit Controls

Click on the *Clear* button.

Closing the Dialog Box

Click on the *Done* button or the “X” button located in the upper right corner of the dialog box.

Security Reference

The *Security Reference* dialog box allows the user to search for, add, delete, and update security information.

To access the *Security Reference*, click on the button marked, “SEC REF” on the

toolbar  or highlight and click on “Security Reference” in the right-click popup menu.

The *Security Reference* displays the following information based on the data available in the database: Ticker/Quick Code, Cusip, RIC, Sedol, Canadian RIC, Canadian Sedol, Sicovam, Kassenverein, Valoren, ISIN, Price, Country, Issuer, Currency, Exchange, Restricted, Security comments, and Lot size. A *Company Search* edit control allows for searches by company name, and a *Company List* list box displays all matching companies. Scroll bars appear when the list exceeds the display area of the list box.

Edit Controls with an asterisk*

In the *Security Reference* dialog box only the edit controls marked with an asterisk may be used for searching. (All *Security Reference* fields may be updated.)

Searching by Company

1. Type the company name in the *Company Search* edit control.
2. Click on the *Find* button.

Company Search Options

Several options can broaden or narrow the company search:

- A. The user can type the first word or just the first letters of a company name.
- B. The user can click the radio button for *Contains* to find all company names that contain a particular word or group of characters.
- C. The user may click the radio button for *Begins* to limit the findings to company names that begin with a particular word or group of characters.
- D. The user may click the radio button for *Equals* to limit the findings to only those companies whose name is an exact match to what the user has typed.
- E. The user may also limit the search to companies found within a particular country. To do this the user clicks on the down arrow button on the *Country* list box to select a country code, and then proceeds with one of the company search methods, above.

Searching by a Security Identifier

1. Type or paste a security identifier into its corresponding edit control.
2. Click on the *Find* button.

Please note that the *RIC* edit control is case sensitive.

Updating Security Information

All of the displayed security data may be updated.

1. Find the security to be updated.
2. Type or paste changes into the appropriate edit control(s)
3. Click on the *Update* button.

Adding a Security

The minimum data required to add a security is a ticker, cusip, or sedol, an A client's internal security symbol, and a country code.

1. Type or paste the security identifier into the appropriate edit control.
2. Type or paste the country code into the *Country* edit control.
3. Type or paste any other security data into the appropriate edit controls.
4. Click on the *Add* button.

Deleting a Security

1. Find the security to be deleted.
2. Click on the *Delete* button.

Clearing the Edit Controls

Click on the *Clear* button.

Closing the Dialog Box

Click on the *Done* button or the "X" button located in the upper right corner of the dialog box.

Set Client Dialog Box

The *Set Client* dialog box serves the primary purpose of assigning a client name to the order file being converted, it has the secondary function of allowing a user to set a default account when all orders in a list will be part of one account.

The *Set Client* dialog box pops up automatically when a new file is opened. It can be used like a reference dialog box providing the user with the following reference capabilities: searching for a client mnemonic, displaying a client's ID, searching for accounts: by client, by external account mnemonic, and by internal account number, adding and deleting clients, adding and deleting accounts, and setting and clearing default accounts.

When the user “sets” a client, the client name will appear along with the file name in *TIE™*'s header bar. The client name will also be pre-selected in the upload dialog box when uploading the order into the trading system. In addition, *TIE™* will automatically identify known client accounts in a list. When the account names are unique *TIE™* will identify the accounts and convert the order with sub-account allocations.



To access the *Set Client* dialog box, click on the *Set Client* button  or highlight and click on “Select Client” in the right-click popup menu.

Setting a Client

1. Scroll through the *Client* list box; highlight and click on a client name.
2. Click on the *Set Client* button.

Adding a Client

1. Type a client ID in the *Client ID* edit control.
2. Type the client name in the *Client Name* edit control to the right of the *Client ID*.
3. Click on the *Add Client* button.

Viewing a Client's Accounts

1. Scroll through the *Client* list box; highlight and click on a client name.
2. If the client has accounts in the database, they will be displayed in the *Account* list box.
3. To view an account's internal account number, highlight and click on the account name in the *Account* list box.

Searching by Account Mnemonic

1. Check that no client is selected. The *Client* edit control should be clear. If a client name is highlighted, click on the *Clear* button.
2. Type or paste an external account mnemonic into the *External Account Mnemonic* edit control.
3. Click on the *Find* button.
4. All accounts with that mnemonic will be displayed in the *Account* list box, followed by a separator line and a client ID. Click on any of the account listings to view its internal account number and client information.

Searching by Internal Account Number

1. Check that no client is selected. The *Client* edit control should be clear. If a client name is highlighted, click on the *Clear* button.
2. Type or paste an internal account number into the *Internal Account Number* edit control.
3. Click on the *Find* button.
4. If an account with that internal account number is found, the client name will be highlighted in the *Client* list box, and the external account mnemonic will be displayed in the *External Account Mnemonic* edit control.

Adding an Account

1. Select and set the client.
2. Enter the account name in the *External Account Mnemonic* edit control.
3. Enter the internal account number in the *Internal Account Number* edit control, or leave it blank.
4. Click on the *Add Account* button.

Setting a Default Account

1. Select the client by highlighting and clicking on the client name in the *Client* list box.
2. Select a client account by highlighting and clicking on the account name in the *Account* list box.
3. When the account is selected, click on the *Set Default Account* button.
4. Type and account name into the Default account edit control and click *Set Default Account*.

Clearing a Default Account

1. Select the client by highlighting and clicking on the client name in the *Client* list box.
2. Select the client account by highlighting and clicking on the account name in the *Account* list box.
3. When the account is selected, click on the *Clear Default Account* button.
4. Reconvert the order.
or
1. If the default account already appears in the edit control, simply click on the *Clear Default Account* button.
2. Reconvert the order.

Clearing the Edit Controls

Click on the *Clear* button.

Closing the Dialog Box

Click on the *Done* button or the “X” button located in the upper right corner of the dialog box.

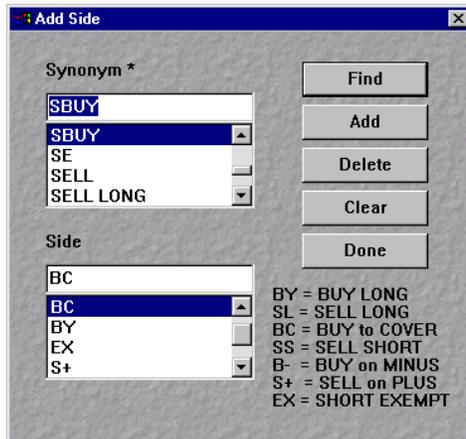
Side Reference

The *Side Reference* dialog box is used to find, add, and delete side synonyms. A side synonym is a word or set of words, which TIE recognizes as a side. TIE translates side synonyms into one the seven fundamental sides: buy, sell, buy cover, sell short, buy on a down tick, sell on an up tick, and short exempt.

To access the *Side Reference* dialog box, click on the button marked, "SIDE REF"



or highlight and click on "Side Reference" in the right-click popup menu.



The *Side Reference* provides a list box of the side synonyms TIE™ recognizes and a list box displaying the fundamental sides. The *Synonym* edit control enables the user to add additional side synonyms. Descriptions of the seven primary side abbreviations are displayed in the lower right corner of the dialog box.

Searching for a Side Synonym

1. Type a synonym into the *Synonym* edit control or scroll through the *Synonym* list box.
2. Click on the synonym to see its corresponding side displayed in the *Side* edit control.

Adding a Side Synonym

1. Type or paste the synonym to be added into the *Synonym* edit control.
2. Highlight and click on the corresponding side abbreviation in the *Side* list box.

Deleting a Side Synonym

1. Highlight and click on the synonym to be deleted in the *Synonym* list box.
2. Click on the *Delete* button.

Clearing the Edit Controls

Click on the *Clear* button.

Closing the Dialog Box

Click on the *Done* button or the "X" button located in the upper right corner of the dialog box.

14. UPDATING DATA

Additions, Deletions and Updates

Reference dialog boxes facilitate speedy revisions when instant results are needed. Additions, deletions and updates are only temporary and only effect the single user's application. If *TIE™* is restarted or the data is refreshed, changes made by the user will be lost. Permanent changes must be made directly to the database. These features are intended to speed up the conversion process for traders when there is no time to wait for database corrections.

If data being added or updated already exists in the database, *TIE™* cannot add or update the data without the user deleting an existing duplication, first. Check the *Status Bar* after clicking on the *Add* or *Update* buttons for confirmation that data has been successfully added or updated.

Adding Accounts

The user may add external account mnemonics and internal account numbers in the *Set Client* dialog box or the *Account Reference* dialog box.

To add an account using the Account Reference dialog box:

Open the *Account Reference* dialog box by clicking on the button marked *Acct Ref*.

1. Select a client name from the *Client* list box by clicking on it.
2. Type an account name in the *External Account Mnemonic* edit control.
3. Type an internal account number in the *Internal Account Number* edit control
4. Click on the *Add* button.

To add an account using the Set Client dialog box:

1. Open the *Set Client* dialog box by clicking on the button marked *Set Client*.
2. Select a client from the *Client List* box and click on it.
3. Enter the account name in the *External Account Mnemonic* edit control.
4. Enter the internal account number in the *Internal Account Number* edit control.
5. Click on the *Add Account* button.

Adding Client Names

The user may temporarily add client names and client IDs using the *Set Client* dialog box or the *Client Reference* dialog box.

To add a client using the Client Reference dialog box:

1. Open the *Client Reference* dialog box by clicking on the button marked *Client Ref*.
2. Type a client ID in the *Client ID* edit control. (Client IDs should be between two and four characters in length.)
3. Type the corresponding client name in the *Client Name* edit control.
4. Click on the *Add* button.

To add a client using the Set Client dialog box:

1. Open the *Set Client* dialog box by clicking on the button marked *Set Client*.
2. Type a client ID in the *Client ID* edit control. (Client IDs should be between two and four characters in length.)
3. Type the client name in the *Client Name* edit control to the right of the *Client ID*.
4. Click on the *Add Client* button.

Adding Securities

Securities can be added using the *Security Reference* dialog box. The minimum data required to add a security is an unused ticker, cusip, or sedol and a country code. Foreign securities must also include an unused A client's internal security symbol.

1. Open the *Security Reference* dialog box by clicking on the button marked *Sec Ref*.
2. Type or paste the security identifier into the appropriate edit control.
3. Type or paste the country code into the *Country* edit control.
4. Type or paste other security data into the appropriate edit controls.
5. Click on the *Add* button.

Updating Account Information

Account information such as account names and internal account numbers can be updated using the *Account Reference* dialog box.

1. Open the *Account Reference* dialog box by clicking on the button marked *Acct Ref*.
2. Select a client name from the *Client* list box by clicking on it.
3. Select the client account from the *External Account Mnemonic* list box by clicking on it.
4. Edit the information that appears in the *External Account Mnemonic* and *Internal Account Number* edit controls.
5. Click on the *Update* button for existing information to be revised.

Updating Commissions, Taxes, and Clearing Fees

To make changes to commissions, taxes or clearing fees, use the *Country Reference* dialog box. Edit the information to be updated and click on the *Update* button. The temporary changes will be saved until the reference data is refreshed or the application is closed and restarted.

Updating Exchange Rates

Exchange rates are stored in the *TIE™ Input Directory* in a file called *fxrate.txt*. To update the exchange rates that *TIE™* displays in the *Foreign Exchange (FX) Reference* and for all its conversion calculations, the *fxrate.txt* file must be edited and the changes saved. This file is updated nightly. To have changes made to this file contact the person in charge of data management.

To refresh *TIE™*'s reference data, go to *Tools* in the menu bar and click on *Refresh Reference Data*. This process can take as long as restarting *TIE™*, so it is recommended that this not be done during heavy trading activity.

Updating Security Data

The *Security Reference* dialog box is used to temporarily update security data. All data displayed in the edit controls of the *Security Reference* can be updated.

1. Open the *Security Reference* dialog box by clicking on the button marked *Sec Ref*.
2. Find the security to be updated.
3. Type or paste changes into the appropriate edit control(s)
4. Click on the *Update* button.

Updating Prices

If the *Total* folder contains a price of zero for a security it is due to a missing price in the database. The *Total* folder displays the prior night's closing prices from the database, unless client reference prices are provided.

Editing a client Reference Price:

A client reference price may be edited in the *Excel™*, *Tabular*, or *Total* folders, and the editing change will be reflected in all reference price calculations in the *Total*, *Side*, *Country* and *Report* folders.

When a price is edited in an *Input* folder (the *Excel™* and *Tabular* folders are *Input* folders) then the user must click on the *Convert* button, to process the changes. Once converted, the totals in the *Output* and *Report* folders will reflect the new price information.

When a price is edited in the *Total* folder (which is an *Output* folder) it is not necessary to re-convert the order. The changes are immediately processed and reflected in the other *Output* and *Report* folders as soon as the user tabs out of the edited cell.

Note: Re-converting the order will re-process the data from the *Tabular* folder, eliminating changes made to the data in the *Total* folder.

Editing a Zero Closing Price:

A zero closing price may be temporarily modified using the *Security Reference* dialog box.

1. Open the *Security Reference* dialog box, by clicking on the button marked *Sec Ref*.
2. Find the security by entering an identifier into one of the security identifier edit controls and clicking on the *Find* button.
3. Type the new price in the *Price* edit control.
4. Click on the *Update* button.

Note:

- A notice should appear in the *Status Bar* that the security has been updated.
- After the security is updated, the user must reconvert the order. The new closing price will be reflected in the closing principals in the *Country*, *Total*, *Side*, *Bid*, and *Report* folders, once the order has been re-converted.
- Remember that these on-the-fly changes are only temporary; if *TIE™* is restarted or the reference data is refreshed, prior-editing changes made by the user will be cleared. Permanent changes must be made directly to the database.

15. TECHNICAL INFORMATION

Implementation

The *Trade Import Expert*™ is a Microsoft Foundation Class (MFC 4.0) multiple document interface (MDI) application written entirely in C++ with MSVC 6.0. It uses RogueWave *Tools.h++* Version 7.09, the *Formula One* Version 6.0 from TideStone Technologies, *Objective Grid 7.0* from RogueWave/Stingray Software, *Objective Toolkit 6.0* from RogueWave/Stingray Software, *Objective Edit 6.0* from RogueWave/Stingray Software and *Component Toolbox OCX v3.0* from DBI Technologies. The parsing algorithms were invented and implemented by Software Intelligence, Inc., with patents pending.

Minimum Hardware/Software Requirements

200 Pentium Processor or greater

128 megabytes RAM (based upon including 50,000 tickers & 1,000 client accounts).

Virtual Memory – 256 megabytes (based upon including 50,000 tickers & 1,000 accounts).

Windows NT 4.0 Service Pack 3 or greater

QUICK REFERENCE – KEY STROKES

| <u>Function</u> | <u>Key sequence</u> |
|------------------------|-----------------------------|
| Alignment | CONTROL + RIGHT CLICK |
| Copy | CONTROL + C |
| Cut | CONTROL + X |
| FastFind | SHIFT + RIGHT CLICK |
| Paste | CONTROL + V |
| Sort | CONTROL + LEFT DOUBLE CLICK |
| Transpose | SHIFT + LEFT DOUBLE CLICK |
| TIE™ menu | RIGHT CLICK |

GLOSSARY

- account by range -** Account by range processing refers to processing account names when they are listed as headings preceding a group of securities. All securities listed following an account heading will display allocations for that account.
- Account Reference -** The *Account Reference* is a dialog box that allows the user to look up all the accounts for a particular client, to look up specific account names, and to add, delete and update account information.
- alert -** In *TIE™*, alert refers to the alert lights on the control panel.
- The **Security Alert** lets the user know if there are any unknown security identifiers in a list.
 - The **Conflict Alert** lets the user know if there are securities in a list that have not been converted into orders due to data conflicts.
 - The **Price Alert** indicates whether the prices given in a list are +/- 5% over or under the prior night's closing price.
 - The **Allocation Alert** indicates sub-account allocation imbalances, and will only be lit when sub-accounts are present in a list.
- Allocation Alert -** The *Allocation Alert* is one of four *Alert Lights* located in *TIE™'s Control Panel*, to the right of the grid. The *Allocation Alert* indicates sub-account allocation imbalances, and will only be lit when sub-accounts are present in a list.
- A green LED indicates the accounts reconcile. A gray LED means that the alert is not applicable. A red LED indicates the accounts do not reconcile.
- attribute -** In *TIE™*, the word attribute refers to characteristic data or criteria including: security identifiers, share quantities, memos, etc.
- cell -** In a data grid, a cell is an individual compartment of any size in which data can be entered; it is designated by borders on four sides. A row can be comprised of many cells or the entire row can be one cell, depending upon how the grid has been formatted. A column consists of cells in consecutive rows that line up one on top of the other.
- client ID -** A client ID, or client identifier, is the internal abbreviation or code assigned to a client. Client IDs are used to look up client names and client account information. The client ID is a two to four-character mnemonic. *TIE™'s* dialog boxes list clients by client ID, followed by the client name.

- Client Reference -** The *Client Reference* is a dialog box that allows the user to search for, verify, add, and delete client names and IDs.
- columnized input -** Columnized input is client data that has been organized into columns. *Trade Import Expert™* determines where columns should be placed during the initial conversion process when an order is opened in *TIE*. The columnized input can be viewed in the *Tabular* folder.
- conflict -** In *TIE™*, conflict refers to discrepancies or ambiguities in security data.
- Example: When two identifiers given for one security don't match the same security, it creates a conflict. The would-be order will have a conflict message in the *Status Column* of the *Tabular* folder letting the trader know to check, resolve, or designate the data.
- Conflict Alert -** The *Conflict Alert* is one of four *Alert Lights* located in *TIE™*'s *Control Panel*, to the right of the grid. The *Conflict Alert* lets the user know if there are securities in a list that have not been converted into orders due to data conflicts.
- A green LED indicates no conflict. A gray LED means that the alert is not applicable. A red LED indicates a conflict.
- convert -** In *TIE™*, convert means to interpret input data and process an order which can be uploaded to a trade execution system.
- Each time the user sets columns or edits data, these changes become new input to be read by the computer; thus after data has been edited, added, deleted or designated by a set feature, the order must be reconverted. When an order is successfully converted the status of the security row in the *Tabular* folder will read, "Order," and the order data will be visible in the subsequent folders.
- Country Reference -** The *Country Reference* is a dialog box that allows the user to search for, verify, add, and delete country abbreviations.
- cusip -** A cusip is a unique security identifier for US and Canadian securities. A cusip is eight digits followed by a ninth check digit. *TIE™* recognizes both eight and nine digit cusips. *TIE™* also recognizes seven digit cusips by pre-pending a leading zero character.

- cut -** In *TIE™*, cut means to permanently remove data from the grid. Cut differs from delete in that delete removes just the data from within cells, rows, or columns, where cut removes the entire selected cell and its associated column, selected row, or selected column.
- In word processing, data that is cut is temporarily moved to a clipboard, making it possible to reinsert the data using a “paste” feature. Data that has been cut is temporarily saved only until a new cut or copy operation has replaced it with new data. In word processing cut differs from delete in that delete permanently removes the data, where cut gives the user the option of removing it and relocating it or putting it back. This is not true, when working in a data grid in TIE™. In a data grid, cut permanently removes the data and its compartments.*
- delete -** To delete means to permanently remove. In *TIE™*, delete removes data from within cells, rows, and columns. Delete differs from cut in that delete removes just the data from within cells, rows, or columns, where cut removes the entire selected cell and its associated column, selected row, or selected column.
- errors -** In *Trade Import Expert™*, “error” refers to conflicts and other discrepancies that prevent a security listing from being converted into an order. (For example: the security identifier may be unknown or there may be missing shares.) Specific error messages may be looked up under the section titled “*Error Messages.*”
- exchange -** A marketplace for the trading of financial instruments.
- Examples:
- | <u>Exchange</u> | <u>Abbreviation</u> | <u>Suffix/Exchange Code</u> |
|---|---------------------|-----------------------------|
| New York Stock Exchange | NYSE | N |
| American Stock Exchange | AMEX | A |
| National Association of Securities Dealers Automated Quote System | NASDAQ | O or OB |
| Toronto Stock Exchange | TSE | TO |
| London Stock Exchange | LSE | L |
- external account mnemonic -** An external account mnemonic is a client account name.
- Foreign Exchange Reference -** The *Foreign Exchange Reference (FX Reference)* is a dialog box that allows the user to search for, confirm, or revise exchange rates for foreign currencies.
- internal account number -** An internal account number is an in-house account number that has been assigned to a client’s account.
- ISIN -** An ISIN is an international security identifier. Every ISIN begins with a country code, and then contains a string of numbers ending with a check digit. In the case of US securities, the ISIN is usually comprised of the country code, the cusip, and a check digit.
- kassenverein -** A kassenverein is a six digit German security identifier.

- odd lot -** An odd lot is any number of shares which is not an exact multiple of a round lot and therefore has a remainder. *The lot size is the number of shares of a security that an exchange is supposed to trade. A round lot is an exact multiple of the lot size (usually 100, or 1,000).*
- Price Alert -** The *Price Alert* is one of four *Alert Lights* located in *TIE™'s Control Panel*, to the right of the grid. The *Price Alert* indicates whether the prices given in a list are +/- 5% over or under the prior night's closing price.
- A green LED indicates that the client reference prices are near or match the closing prices. A gray LED means that the alert is not applicable. A red LED indicates that one or more of the client's reference prices is off by plus or minus 5% or more.
- quick code -** A quick code is a Japanese security mnemonic, or identifier. A quick code is four digits in length.
- range -** In *Trade Import Expert™*, a range refers to a selection of consecutive rows of data. Highlighting a group of consecutive rows in a list is selecting a range of rows.
- Range Edit Controls -** The *Range Edit Controls* are located on *Trade Import Expert™'s Control Panel* to the right of the grid. The edit controls allow a trader to specify line numbers and convert only the rows of security data between and including those two rows.
- Ric -** Reuters Interchange Code. The RIC usually consists of the ticker, a dot, and the exchange the security trades on as a suffix. Preferred securities and class A-Z securities include additional codes, such as *_p*, *_a-z* (Example: IBM_p.N).
Note: RICs are case specific. *TIE™'s* edit controls and conversions of RICs are case sensitive.
- Security Alert -** The *Security Alert* is one of four *Alert Lights* located in *TIE™'s Control Panel*, to the right of the grid. The *Security Alert* lets the user know if there are unknown security identifiers in a list.
- A green LED indicates the data in a list is identified, and trades listed have been converted into orders. A gray LED means that the alert is not applicable. A red LED indicates security data that is not recognized or converted.
- security ID -** The security ID or security identifier in *Trade Import Expert™* refers to the data used to identify a security during the conversion and uploading of an order.
- When a trade list is uploaded, security identifiers that have been "set" specifically as *Security ID* (as opposed to ticker, *sedol*, etc.) will override all other identification criteria in the list. This enables the user to be able to upload data that *TIE™* does not recognize as an identifier (identifiers not found in the database).
- Security Reference -** The *Security Reference* is a dialog box that allows the user to search for, add, delete, and update security information.

- sedol -** A sedol is a security identifier issued by the London Stock Exchange. A sedol is six digits in length, sometimes followed by a seventh check digit. *TIE*™ recognizes both six and seven digit sedols.
- side by range -** Side by Range processing refers to processing sides when they are listed has headings preceding groups of securities. All securities listed following a side heading will be converted to that side.
- Side Reference -** The *Side Reference* is a dialog box that allows the user to search for, confirm, and temporarily add side abbreviations.
- side synonym -** A side synonym is a side abbreviation. Common side synonyms are recognized by *TIE*™ and included in the *Side Reference* dialog box.
- ticker -** A ticker is the mnemonic under which a security trades on a US stock exchange. Tickers are three characters long on the NYSE and up to 5 characters on the NASDAQ.

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