

Chapter II

Exporting Data

In This Chapter:

1. How the Export function works 1002
2. Setting up to export data 1007
3. The exporting process 1015

Overview

This chapter covers the DTU *Export* function that is used to export data from an AIQ TradingExpert Pro data base. With *Export*, you can export ticker data (stocks, warrants, indices, futures, and mutual funds), group and sector data, or market data to an external data file which can then be read by another application. The type and format of the exported file (called the Destination File) is specified by the user.

For AIQ TradingExpert Pro users who use TeleChart 2000, DTU will export AIQ ticker data directly into their TeleChart 2000 files.

1. How the Export function works

The DTU *Export* function exports data from your AIQ TradingExpert Pro data base to an external file, or to another charting software data base.

Exporting to a file (ASCII, PRN, or Excel)

The *Export* function exports AIQ TradingExpert Pro data to an external file. The file can be created in a variety of standard file formats including ASCII, PRN, or Excel formats. These are common data file formats used in a variety of applications.

- ASCII stands for American Standard Code of Information Interchange.
- DIF, which stands for Data Interchange Format, is a standard spreadsheet format.
- PRN is just a shortened version of the word print, since the file is more readable when printed.
- Excel is Microsoft's spreadsheet format.

See the Appendix for more information on the standard formats.

In setup, you specify the data items or fields that comprise each export file record and the exact sequence in which you want them to occur. Alternatively, you can accept a default export file field order. You should, therefore, know the requirements of the application that will be reading the exported file.

Fields are specified by selecting from a list of standard data fields for the class of data you are exporting. The fields that are available for export are different for each class of data.

Exporting to another data base (TeleChart 2000)

DTU transfers data from your AIQ TradingExpert Pro data base directly to TeleChart 2000, eliminating the need for an intermediate file. Since the transfer of data does not involve an intermediate file, you do not need to specify the fields that will be exported. DTU automatically transfers the required fields. The only setup information required is the location of the other application's data.

What data classes can be exported

Certain classes of data (groups, sectors, markets, etc.) can only be exported as ASCII, PRN, or Excel files. The classes of data that can be exported to a file and to the data bases of other applications are shown below.

| ASCII, PRN, or Excel Files | TeleChart 2000 |
|-------------------------------|----------------|
|-------------------------------|----------------|

| | |
|----------------|----------------|
| Stocks | Stocks |
| Warrants | Warrants |
| Indices | Indices |
| Futures | Futures |
| Mutual Funds | Mutual Funds |
| Groups | Groups |
| Sectors | Sectors |
| Groups/Sectors | Groups/Sectors |
| Markets | |

Note

The Groups/Sectors data class is used for exporting data for both groups and sectors.

What fields can be exported

In TradingExpert Pro, each data class has its own unique set of fields. For example, the following fields are stored for stock data in the TradingExpert Pro ticker data base: symbol, date, open, high, low, close, and volume.

When you export data to a file, DTU allows you to select which fields you want to include in the export file and the order in which those fields will occur in the file's records. You also have the option of simply accepting the default fields and field order for the class of data you are exporting. The fields with their codes and the default fields for each data class are listed on the next page.

Fields and Codes

DTU uses single character codes to identify fields. The fields available for export and their codes are as follows:

Common fields for all tickers (except Mutual Funds)

| | |
|---|-------------|
| S | symbol |
| N | description |
| D | date |
| I | ignore |
| O | open price |
| H | high price |
| L | low price |
| C | close price |
| V | volume |

Note

The Ignore field is a blank space.

Special Market fields

| | |
|---|------------------|
| 1 | advancing issues |
| 2 | declining issues |
| 3 | unchanged issues |
| 4 | total issues |
| 5 | advancing volume |
| 6 | declining volume |
| 7 | unchanged volume |
| 8 | total volume |
| X | new highs |
| Y | new lows |

Special Futures field

| | |
|---|---------------|
| T | open interest |
|---|---------------|

Mutual Funds fields

| | |
|---|-----------------------|
| S | symbol |
| N | description |
| D | date |
| I | ignore |
| A | adjusted price |
| U | unadjusted price |
| B | dividend distribution |

Default fields

The following tabulation lists the default field order for the nine data classes that can be exported from AIQ TradingExpert Pro. For a definition of field codes, see table on previous page.

Stocks, Warrants, Groups, Sectors, and Groups/Sectors

SDOHLCV

Indices

SDOHL

Futures

SDHLCVT

Mutual Funds

SDA

Markets

SDHLC12345678XY

2. Setting up to export data

Prior to exporting data for the first time, an initial setup is required. When exporting to a file, setup involves specifying the data record format for the type of file you want to create. When exporting data directly to another application, setup is simply a matter of specifying the location of the application's data. Once this initial setup is completed, exporting data in the same format is a quick and easy process.

DTU stores setup information in a file called a Specification File. If you need to export different classes of data, different file types, or files in different formats, you must create, name, and save a Specification File for each of the different data and file types and file formats. Most users will export only one type of file and will, therefore, need only one or two Specification Files. You may, however, create as many Specification Files as you require.

When exporting a file, a specific set of data fields is available for inclusion in the file. The fields available for export differ for most data classes. Markets require NYSE issue data while futures require open interest data. Some tickers (such as indices and warrants) do not have volume while mutual funds lack volume and have special prices.

In setting up specifications for the export of a file, you select which of the available fields you want to include and the order in which those fields will appear in a file record. The fields and the field order will, of course, be determined by the application that will read the file.

Creating a Specification File for ASCII, PRN, or Excel File Types

► To create a Specification File for a particular data class, proceed as follows:

1. Open the **DTU** application, and select **Export** from the **File** menu. The *Export Options* window is displayed.

Note

All data classes can be exported to an ASCII, PRN, or Excel file.

The screenshot shows the 'Export Options' dialog box with the following settings:

- Source:** Master list, User list (dropdown: \$JDOE_01), Selected tickers (empty text box).
- Range:** All Dates, Update Only, Date Range (From: 02/06/01, To: 02/06/01).
- Export Only:** Stocks, Warrants, Indices, Futures, Mutual Funds, Groups, Sectors, Groups/Sectors, Markets.
- Destination File Type:** ASCII, PRN, TeleChart 2000, Excel.
- Destination File:** Append, Replace, File Name: (empty text box), Browse... button.
- Specification Name:** Edit... button, {new} dropdown.

Export Options window

2. Select the File Type that you want to export (ASCII, PRN, or Excel) by clicking one of the option buttons in the section titled *Destination File Type*.
3. From the section titled *Export Only*, find the data class which represents the type of data that you will be exporting and click the appropriate option button.
4. Click the **Edit** command button which is located in the lower right section of the window. The *Specification Parameters* dialog box that appears is used for entering the necessary parameters for the export file. This dialog box, which is determined by the data class that you selected in the *Export Options* window, contains a section titled *Data Fields* which lists the fields available for export for the selected data class. The fields listed differ depending on the data class.

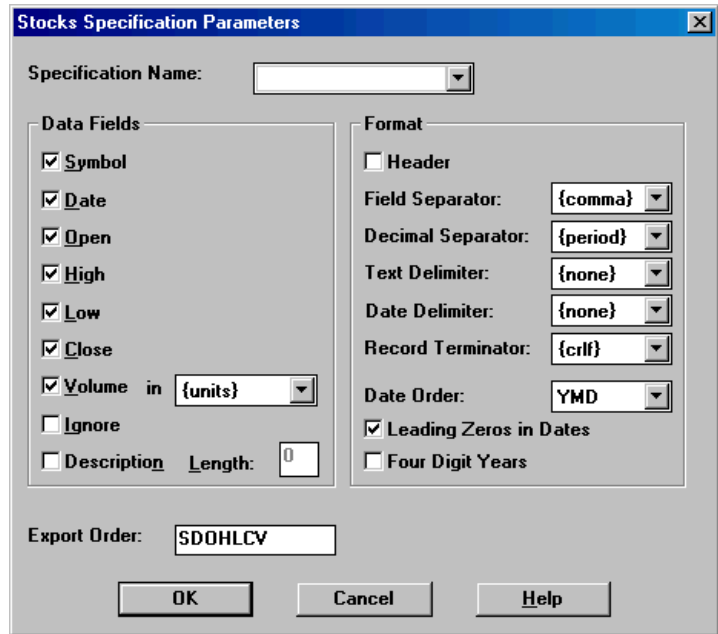
Note

For initial setup, you need to select only the data class (*Export Only*) and *Destination File Type* in the *Export Options* window. Other entries are made when you are ready to export (see section 3, The Exporting Process).

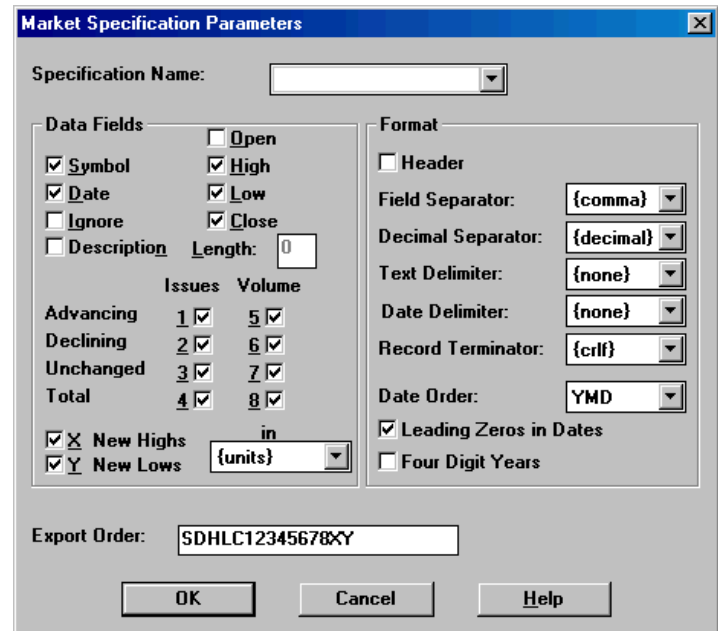
- To complete entries in the *Specification Parameters* dialog box, continue with step 6.

Note

The *Specification Parameters* dialog box for Warrants, Groups, and Sectors is identical to the one used for Stocks.



Stocks Specification Parameters dialog box



Market Specification Parameters dialog box

Indices Specification Parameters

Specification Name:

| Data Fields | Format |
|--|--|
| <input checked="" type="checkbox"/> Symbol | <input type="checkbox"/> Header |
| <input checked="" type="checkbox"/> Date | Field Separator: {comma} |
| <input checked="" type="checkbox"/> Open | Decimal Separator: {period} |
| <input checked="" type="checkbox"/> High | Text Delimiter: {none} |
| <input checked="" type="checkbox"/> Low | Date Delimiter: {none} |
| <input checked="" type="checkbox"/> Close | Record Terminator: {crlf} |
| <input type="checkbox"/> Volume in {units} | Date Order: YMD |
| <input type="checkbox"/> Ignore | <input checked="" type="checkbox"/> Leading Zeros in Dates |
| <input type="checkbox"/> Description Length: 0 | <input type="checkbox"/> Four Digit Years |

Export Order: SDOHLC

OK Cancel Help

Indices Specification Parameters dialog box

Futures Specification Parameters

Specification Name:

| Data Fields | Format |
|---|--|
| <input checked="" type="checkbox"/> Symbol | <input type="checkbox"/> Header |
| <input checked="" type="checkbox"/> Date | Field Separator: {comma} |
| <input type="checkbox"/> Open | Decimal Separator: {period} |
| <input checked="" type="checkbox"/> High | Text Delimiter: {none} |
| <input checked="" type="checkbox"/> Low | Date Delimiter: {none} |
| <input checked="" type="checkbox"/> Close | Record Terminator: {crlf} |
| <input checked="" type="checkbox"/> Volume in {units} | Date Order: YMD |
| <input checked="" type="checkbox"/> Open Interest | <input checked="" type="checkbox"/> Leading Zeros in Dates |
| <input type="checkbox"/> Ignore | <input type="checkbox"/> Four Digit Years |
| <input type="checkbox"/> Description Length: 0 | |

Export Order: SDHLCVT

OK Cancel Help

Futures Specification Parameters dialog box

Mutual Funds Specification Parameters

Specification Name:

| Data Fields | Format |
|--|--|
| <input checked="" type="checkbox"/> Symbol | <input type="checkbox"/> Header |
| <input checked="" type="checkbox"/> Date | Field Separator: {comma} |
| <input checked="" type="checkbox"/> Adjusted Price | Decimal Separator: {decimal} |
| <input type="checkbox"/> Unadjusted Price | Text Delimiter: {none} |
| <input type="checkbox"/> Dividend Distribution | Date Delimiter: {none} |
| <input type="checkbox"/> Ignore | Record Terminator: {crlf} |
| <input type="checkbox"/> Description Length: 0 | Date Order: YMD |
| | <input checked="" type="checkbox"/> Leading Zeros in Dates |
| | <input type="checkbox"/> Four Digit Years |

Export Order: SDA

OK Cancel Help

Mutual Funds Specification Parameters dialog box

6. In the text box at the top of the *Specifications Parameters* dialog box, type a name (eight characters maximum) for the Specification File. Do not include a file extension. The default file extension DTE (for DTU Export) will be added automatically.
7. In the *Data Fields* section, specify the data fields that are to be included in each record by clicking the appropriate option boxes. If you do not know which fields to include, you can accept the default fields (fields already checked). Note the following special instructions:

- *Volume:*

The text box to the right of *Volume* specifies whether the volume figure represents units (actual number of shares), tens, hundreds, or thousands. If you want to export data in whole units, then select *units*. If the system you are exporting to requires hundreds, select *hundreds*; if it requires thousands, enter *thousands*.

Warrants, Indices, and Mutual Funds data classes lack *Volume*.

For Market data class, the *Volume* text box is located to the right of *New Highs* and *New Lows*. *Volume* for Markets is derived from the NYSE Issues — *Advancing*, *Declining*, *Unchanged*, and *Total*. The *Volume* option boxes next to these Issues should be checked.

- *Ignore:*

The *Ignore* field is used for inserting blank spaces.

- *Description* and *Length:*

Description is taken from the TradingExpert Pro ticker description fields. In the *Length* text box you can specify the maximum number of characters that will be exported for each *Description* field.

8. In the section titled *Format*, make the following selections. Use the arrows in the text boxes for available choices:

- *Header:* Check this box if a file header is required. The header will list the names of the fields contained in the file.
- *Field Separator:* The character used to separate fields (tab, space, or comma).
- *Decimal Separator:* Select period or comma to separate decimal digits from whole number component of price data.
- *Text Delimiter:* The character used to indicate beginning and end of text (*none*, “, or ‘).

- *Record Terminator*: The character used to indicate end of record. Select *crlf* (carriage return - line feed), *cr* (carriage return), or *lf* (line feed).
 - *Date Order*: The order of month , day, and year (*MDY*, *DMY*, or *YMD*)
 - *Leading Zeros in Dates*: A check in this option box includes a leading zero in month and day (e.g., 01/07/96 instead of 1/7/96)
 - *Four Digit Years*: A check in this option box writes all years as four digit numbers (e.g., 1996 instead of 96)
9. The *Export Order* text box specifies the order in which the fields will appear. Each letter (or number for Market data class) corresponds to a field name (the letter shown is the underlined character in the field name). All of the fields selected above will initially appear in this text box in the same order as they are listed. To change the order, delete all fields and re-select in the correct order. You can also insert as many blank spaces as you want by adding the letter I in the appropriate locations.
 10. When you have completed all entries, click **OK** to save the Specification File and return to the *Export Options* window.

Creating a Specification File for TeleChart 2000 File Type

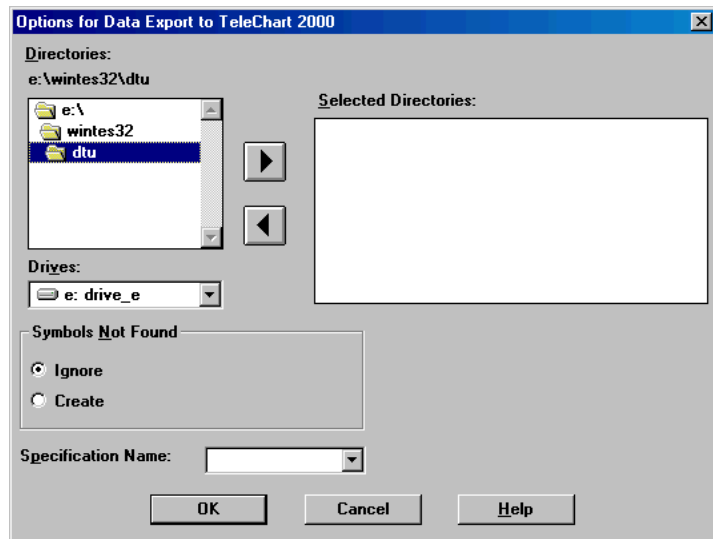
Exporting data from AIQ TradingExpert Pro for use in the TeleChart 2000 program is a process that moves data directly into your TeleChart 2000 proprietary files.

► *To create a Specification File for TeleChart 2000 File Type, proceed as follows:*

Note

For initial setup of a TeleChart 2000 Specification File, you need to select only the *Destination File Type* in the *Export Options* window. Other entries are made when you are ready to export (see section 3, The Exporting Process).

1. Open the **DTU** application, and select **Export** from the **File** menu. The *Export Options* window is displayed.
2. Select TeleChart 2000 as the *Destination File Type* by clicking on the **TeleChart 2000** option button.
3. Click the **Edit** command button which is located in the lower right section of the window. The dialog box that appears is titled *Options for Data Export to TeleChart 2000*.



Options for Data Export to TeleChart 2000

4. The upper section titled *Directories* is used for specifying the directory where your TeleChart 2000 data files are located. Continue as follows:
 - Select a drive from the text box below *Drives*.
 - The upper text box will show all of the directories available on this drive. Select a directory from this upper text box by double clicking on it. (The name of selected directory will appear above the text box.)

- Select as your default data directory **TC2000/DATA**. Do not select one of the alphabetically listed subdirectories.
 - To move this directory to the *Selected Directories* box, click the **right arrow**.
5. In the *Symbols Not Found* section, select **Ignore** or **Create**. During the export process, DTU checks your TeleChart 2000 data to see if you are exporting data for any tickers that are not contained in your TeleChart 2000 data base. If you want DTU to add symbols not found to your TeleChart 2000 data base, select **Create**. DTU will add the symbols to your TeleChart 2000 directory.
 6. In the text box at the bottom labeled *Specification Name*, type a name (eight characters maximum) for the Specification File. Do not include a file extension. The default file extension **TCE** will be added automatically.
 7. Click **OK** to save the Specification File and return to the *Export Options* window.

3. The exporting process

Note

To export data, you must first set up the specifications for the type of file that you want to export. Follow Section 2, *Setting up to export*.

When you have completed the setup for the data and the type of file that you plan to export, exporting data is a quick and easy process. You simply make a few selections on the *Export Options* window and click **OK**.

► *To export data, follow these steps:*

1. Open the **DTU** application and select **Export** from the **File** menu. The *Export Options* window is displayed.

The screenshot shows the 'Export Options' dialog box with the following settings:

- Source:** Master list, User list (dropdown: \$JDOE_01), Selected tickers (empty text box).
- Range:** All Dates, Update Only, Date Range (From: 02/06/01, To: 02/06/01).
- Export Only:** Stocks, Warrants, Indices, Futures, Mutual Funds, Groups, Sectors, Groups/Sectors, Markets.
- Destination File Type:** ASCII, PRN, TeleChart 2000, Excel.
- Destination File:** Append, Replace, File Name: (empty text box), Browse... button.
- Specification Name:** Edit... button, dropdown menu: {new}.

Export Options window

2. From the section titled *Source*, select one of the following:

- **Master List**
Exports all tickers of the data class specified in *Export Only* section
- **User List**
Select a user list from the adjacent text box. Exports all tickers in the selected list of the data class specified in *Export Only* section

- **Selected Tickers**

In the text box below, enter ticker symbols separated by semicolons. Exports all selected tickers of the data class specified in *Export Only* section

3. DTU gives you three choices for specifying a range of dates for the exported data. From the section titled *Range*, select one of the following options:
 - **All Dates**
For all exported tickers, the file will contain the entire history contained in your AIQ TradingExpert Pro Master Ticker List.
 - **Update only**
This option, which is available only when exporting to TeleChart 2000, updates your TeleChart 2000 files to the date corresponding to the most recent data in your AIQ TradingExpert Pro data files.
 - **Date Range**
For all exported tickers, the file will contain data for the range of time specified in the adjacent *From* and *To* text boxes.
4. From the section titled *Export Only*, find the data class which represents the type of data that you will be exporting and click the appropriate option button.
5. Select the File Type that you want to export by clicking one of the option buttons in the section titled *Destination File Type*.
6. Select one of the following options pertaining to the Destination File:
 - **Append**
Adds the exported data to any data that the Destination File already contains.
 - **Replace**
Deletes any existing data from the Destination File before writing the exported data to the file.

Important

The *Append*, *Replace*, and *Destination File Type* options are not applicable for TC 2000 files.

Note

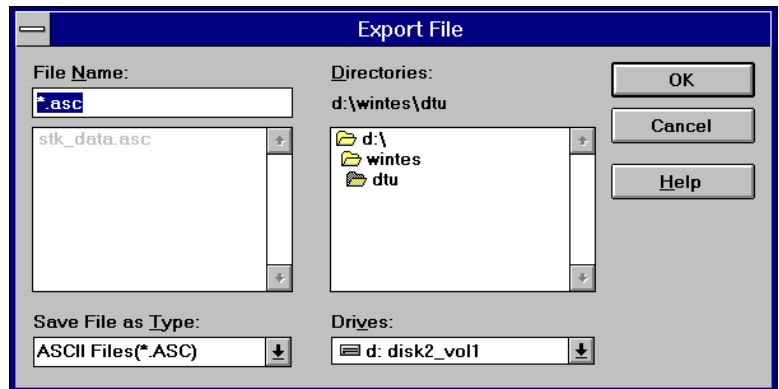
If you are exporting a group of tickers and want to use the ticker names as the file names, you can use a wildcard (*) in place of the File Name. For example, entering *.ASC names all exported files as follows: ticker symbol plus the file extension ASC (e.g., IBM.ASC).

Note

A Destination File Name is not required for TeleChart 2000.

7. In the text box labeled *File Name*, enter a path and name for the Destination File. You can also use the *Browse* command to more easily enter the Destination File path and name. To use *Browse*, do the following:

- Click the **Browse** command button to display the *Export File* dialog box.
- In this dialog box, select a drive from the text box labeled *Drives*.
- Select the export File Type from the text box labeled *Save File as Type*.
- Select a directory from the text box labeled *Directories*.
- Double click on this directory to display a list of all files of the specified type. The list of files will be shown in the adjacent text box.
- Select (by clicking) a file from this list (the selected name will then appear in the text box labeled *File Name*) or enter a new name in the *File Name* text box.
- Click **OK** to return to the *Export Options* window. The *Export Options* window will now display the selected file with path in the *File Name* text box. Continue with step 8.



Export File dialog box

8. From the text box labeled *Specification Name*, select the name of the Specification File that you created in setup (Section 2) for the export of the selected data class and file type.
9. Click **OK** to initiate the data export process for the specified data class and file type.

During the transfer of the source data to the export file, DTU shows you, in a special window, exactly what data is being exported. This enables you to follow the progress of the writing of the Destination File. Clicking **Cancel** at any time will halt the exporting process. When the export file is completed, the *Export Options* window reappears. The exported data file is now located in the drive and directory entered for the Destination File.