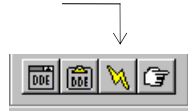


DDE – Excel into Aspen

Creating a Symbol using DDE

Aspen Graphics allows the user to create his/her own "symbol" in Excel and import that information into the Aspen data files. This utility can be used to export both an array of historical data or live (updating) data from a spreadsheet program into Aspen. The first step in either case is to define the symbol in your Aspen system. To do this, click on the third custom Aspen button in Excel.



The **Create Symbol DDE Helper** (see figure 4) appears which allows you to enter all the relevant information about the symbol you are creating.

Create Symbol DDE Helper

Symbol: Description:

Scale: Exchange:

Type: Base 100

Currency:

Amount/Pt:

Volatility:

Minimum Tick:

Expiration Date:

Trading Hours

	Start	End	TZ
Session 1:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Session 2:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Session 3:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Session 4:	<input type="text"/>	<input type="text"/>	<input type="text"/>

Options

Strike Price:

Underlying Symbol:

Strike Scale:

Put/Call: Put Call

Option Type: European American

OK

Cancel

Figure 4

Table 1 defines and provides an example for each field in the Create Symbol Dialog box:

Before naming your symbol, check to make sure there is not an existing symbol trading with that name. In Aspen, bring up the page Superquote, then type in the name that you want to use for the symbol you are creating. If the message “<name_of_symbol> undefined” appears, it is okay to use that name for your symbol. If it is quoted, try a more descriptive name for your symbol.

FIELD	WHAT TO ENTER	EXAMPLE
Symbol	Name of Symbol.	Corn Spread
Description	Description of Symbol, appearing on a chart or Superquote.	July/Sept. Spread
Scale	Increments in which a symbol trades (same as “Units” on Superquote).	$\frac{1}{8}$
Exchange	Exchange on which the instrument will trade (for synthetic symbols based on real symbols, use the exchange for the real symbol).	CBOT
Type	Type of Instrument (stock, future, option, etc.).	Future
Base 100	Only for interest rate futures subtracted from 100.	(leave blank)
Currency	Currency in which the instrument trades.	US Dollars
Amount/Pt	Dollar value of a one-point move (same as “Dollars” on Superquote).	50
Volatility	Base volatility at-the-money; optional.	(leave blank)
Minimum Tick	Minimum number of ticks per trade (If the smallest amount a symbol can uptick or downtick is $\frac{1}{8}$, the minimum tick should be 1).	1
Expiration	Date of Expiration of your symbol.	12/31/97
Trading Hours	Session start and ending times, and time zone of exchange (left blank, these will default to the exchange entered above).	(leave blank)
If symbol Type is an Option, these additional fields need to be entered:		
Strike Price	Strike price of the option.	285
Underlying Symbol	Symbol for the underlying instrument of the option.	Cn7
Strike Scale	Minimum strike units.	1
Put/Call	What kind of option is being created?	Call
Option Type	American (exercise before or at expiration) or European (exercise at expiration only).	American

Table 1

Once the fields from Table 1 have entries and **OK** is selected, your new symbol is automatically entered in your Aspen Symbol Info List. It will now be defined on your Aspen system but there won't be any price data for it yet.

Exporting historical data from Excel into Aspen

Make sure that an entry for your created symbol has been made in the Symbol Info List so that it will accept the data you want to export.

The order of the data in Excel is very important. You **MUST** have the data in the same order as the data file that you want to write to. Table 2 is an example of daily data in Excel that can be written to **days.dat** file in Aspen:

First Cell ↓	Second Cell ↓					
Corn Spread	hloc					← Top Row
5/1/97	6:00	16	13.75	14	16	
5/2/97	6:00	15.75	14.5	14.5	15.25	
5/5/97	6:00	16.5	15	15	16.5	
5/6/97	6:00	16.5	16	16.5	16	
5/7/97	6:00	16.5	15	16.5	15	
5/8/97	6:00	15	14.5	15	14.75	

Table 2

This is called an array of data. In addition to the date, time, high, low, open and close for each day, there is a **top row** of information which tells Aspen where to assign this new data. The **first cell** of the top row contains the name of the symbol you created. The **second cell** is a code which signifies the order of the data in the table. Table 2 lists the five choices for the contents of the second cell:

Contents of 2 nd Cell	Type of Data	Aspen Datafile	Order of Data in the array
TICKHIST	Tick data	Ticks.dat	Date, Time, Price, Volume
HLOC,15	15 minute data	Bars.dat	Date, Time, High, Low, Open, Close
HLOCV,15	15 minute data	Bars.dat	Date, Time, High, Low, Open, Close, Volume, Open Interest
HLOC	Daily data	Days.dat	Date, Time, High, Low, Open, Close
HLOCV	Daily data	Days.dat	Date, Time, High, Low, Open, Close, Volume, Op Int

Table 3

To export the data into Aspen, highlight the entire array (Top Row and Body), and single-left click on the fourth custom Aspen button.



Using the AspenTick Function

The AspenTick function allows dynamic links to be created from Excel to be exported to Aspen in real time. The AspenTick value will automatically update in Aspen each time the value changes in Excel. First, create a symbol using the method described in the section **Creating a Symbol Using DDE**.

The **AspenTick** function sends information to Aspen as tick data. It will be written to the **ticks.dat** data file. You'll be able to see it in a tick or intraday chart or in a quote window. You won't be able to view this data on a daily (or higher time frame) chart, because those charts reference the **days.dat** datafile. To chart information from Excel on a daily chart, use the method described in the previous section **Exporting Historical Data from Excel**.

Once you have a cell in Excel that is producing the values you want to export to Aspen, follow these steps:

1. Single-left click on **Insert** from the Excel menubar.
2. Single-left click on **Function...**
3. In the Function Category window on the left, select **ALL**.
4. In the Function Name section on the right, double-left click on **AspenTick**.
The AspenTick Setup Window (see figure 5) will be displayed:

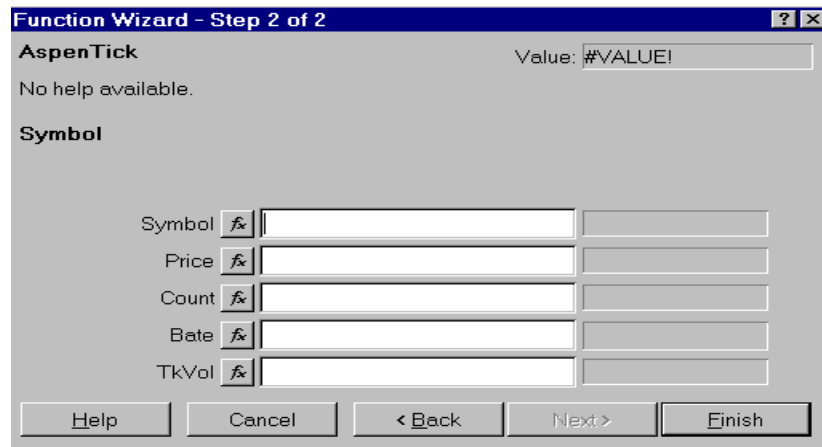


Figure 5

Name of field	What to Enter
Symbol	Enter the name of the symbol you created.
Price	Single-left click on the cell which contains the value that you want to link to Aspen.
The next three fields are optional:	
Count	To have this link update only when its value changes, enter a zero (0). If this field is left blank, the link will update any time any link on the spreadsheet updates.
Bate	If you want to define the price as a TRADE, BID, ASK, SETTLE, OPEN or CLOSE, enter that quote code here. If left blank, it will default to Trade.
TkVol	Enter the tick volume associated with the price. If left blank, the value will be 1.

Table 4

5. A single-left click on **Finish** will return you to the spreadsheet.
6. Switch back to Aspen and display a tick chart (0 minute), and enter the name of the symbol you created. You should see dots plotted on the chart as the value updates in Excel.