

DDE – Aspen into Excel

Dynamic Data Exchange (DDE) allows information from Aspen to be transferred directly to a spreadsheet program. The links between Aspen and the spreadsheet are live. As information comes into the Aspen program or as Aspen calculates a value, it is immediately updated in the spreadsheet.

Links can contain quote information, historical data arrays, special option quote fields, and the outputs of Aspen formulas.

Programs that Can Utilize DDE with Aspen

Microsoft Excel is the only spreadsheet program that we currently recommend with regards to DDE, although customers have successfully used DDE with other programs such as Lotus 1-2-3.

Creating a DDE Link

You can create a DDE link from within either Aspen or Excel. Aspen *must* be running for the link to be created. In the following examples, we will create the four different types of links from within the Excel program.

If you create the DDE link from within Excel, your link will automatically be pasted into the highlighted cell(s), so make sure you have selected the appropriate cells **before** you create the link. You only need to select the cell where you want the link to begin.

Create a Live Quote Link

To create a Live Quote Link, follow these steps:

1. A single-left click on the first (left-most) of the custom Aspen buttons on the Excel toolbar will display the DDE Link Generator Helper Dialog Box (see figure 1).



If these buttons are not displayed on your Excel toolbar, call Aspen's Technical Support for assistance.

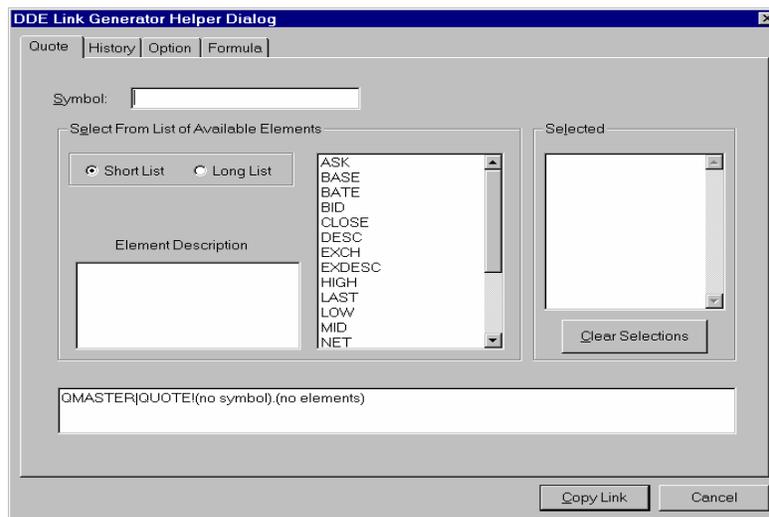


Figure 1

2. Type the symbol to be linked to the spreadsheet in the Symbol field.

DO NOT HIT ENTER!

3. Select the **quote elements** you want in the link from the list in the middle of the menu. A *single* left click displays a description of your selection in the **Element Description** box. A *double* left click sends the element to the **Selected** box (a double-left click on an element in the Selected box puts it *back* in the original list).

The elements you select will be displayed in Excel in the order chosen, from left to right, as an indivisible array. *You won't be able switch the fields around* once they are pasted into Excel, so carefully plan how you will want to view the link.

4. Select the **Copy Link** button in the lower right-hand corner. The link will be pasted into the specified cell(s) in Excel.

Create a Historical Link

To create a Historical Link, follow these steps:

1. Select the cell on the spreadsheet where you want the link to begin.
2. Single-left click on the first DDE button from the toolbar.
3. A single-left click on the History tab will display the following Link Generator Helper Screen (see figure 2).

Figure 2

4. In the **Symbol** field, type in the symbol to be linked to the spreadsheet.
5. Under **Interval**, select the time base for the historical data to be exported. If you select Intraday, specify the number of minutes per bar in the **Span field**. For example, if you would like to export 15 minute data, enter **15** in the **Span field**.
6. The middle section is where the time span of the historical link is defined. If you do not enter a value in any of these fields, the link pasted will contain 30 periods beginning with the most recent period.
7. Select the **quote elements** for the link. By default, all the quote elements are selected for you; deselect any unwanted elements with a single-left click.
8. Select the **Copy Link** button in the lower-right-hand corner. The link will now be pasted in the cell(s) you selected.

If the data array you want to paste into Excel contains more than 30 periods, then you must first paste your link, then *highlight all the cells needed* (for example, if you have 50 periods in your link, you need to select cells 1-50), tap the **F2** one time, then hold down the **Ctrl Shft** keys, and tap the **Enter** key one time.

Start Date and End Date

The Start Date defines the earliest data for your link. The End Date defines the most recent data in the link. Start and End Dates must be entered in MM/DD/YY format. For example, to enter the start date of March 1, 1997, type in *3/1/97*.

Start Time and End Time

If you selected an *Intraday* interval, a Start Time and End Time can also be entered. Times must be entered in HH:MM format, using 24-hour syntax. For example, if you wanted to enter an end time of 1:00 p.m., you would enter **13:00** in the End Time field.

Max Days

The Max Days field allows you to limit the number of days in the link if you selected a Daily interval. For example, if you would like to link the last 20 days of data, you would enter **20** in the Max Days field.

Periods

The Periods field allows you to limit the total number of periods, regardless of the type of interval selected. If you want to link 100 15-minute periods to the spreadsheet, enter the number **100** in the Periods field.

If you do not want to specify either Max Days or Periods for the link, enter a 0 in both fields. Leaving these fields blank will return an error message.

Option

A single left click on the Option tab will display the following Link Generator Helper Box (see figure 3).

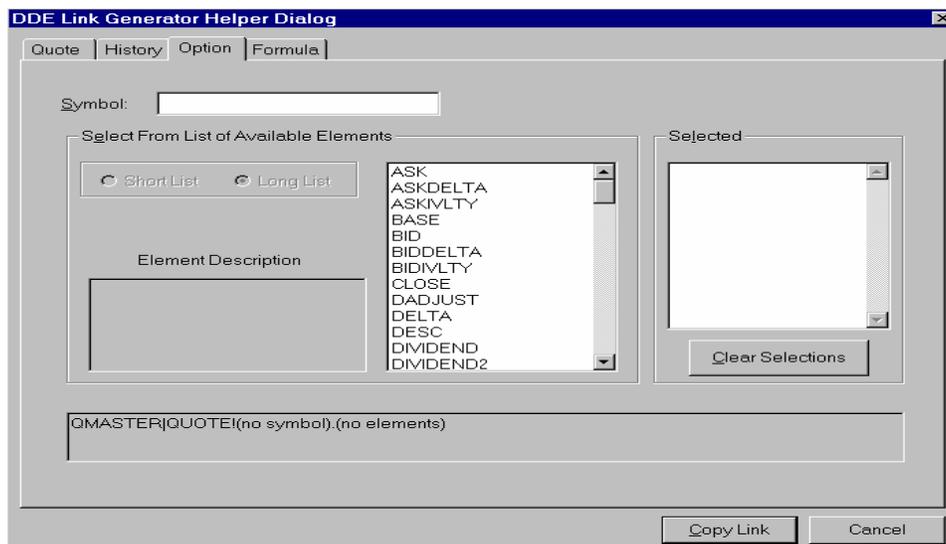


Figure 3

The Option Link Generator window looks identical to Quotes, but has fields pertaining specifically to options analysis.

To create an Option Quote Link, follow these steps:

1. Type the symbol to be linked to the spreadsheet in the Symbol field.

DO NOT HIT ENTER!

2. Select the **quote elements** you want in the link from the list in the middle of the menu. A *single* left click displays a description of your selection in the **Element Description** box. A *double* left click sends the element to the **Selected** box (a double-left click on an element in the Selected box puts it *back* in the original list).

The elements you select will be displayed in Excel in the order chosen, from left to right, as an indivisible array. *You won't be able switch the fields around* once they are pasted into Excel, so carefully plan how you will want to view the link.

3. Select the **Copy Link** button in the lower right-hand corner. The link will be pasted into the specified cell(s) in Excel.

Formula

Any Aspen formula or function can be linked to a spreadsheet. To link to a spreadsheet, follow these steps:

1. Single-left click on the **Formula** tab.
2. Enter the name of the formula and the symbol(s) to be used in the formula on the top line of the window.

Example: IntrVal(sph7)

Aspen exports the output or the value of the formula to Excel; it does not export the formula itself.

3. Select the **Copy Link** button in the lower-right-hand corner. The output of the formula will be pasted in the selected cell.

Creating a Link in Aspen

To create a DDE link in Aspen, follow these steps:

1. Single-left click on **DDE** from the menubar.
2. Single-left click on **Create Link**. A DDE Link Generator Box will appear.
3. Type the symbol to be linked to the spreadsheet in the Symbol field.

DO NOT HIT ENTER!

4. Select the **quote elements** you want in the link from the list in the middle of the menu. A *single* left click displays a description of your selection in the **Element Description** box. A *double* left click sends the element to the **Selected** box (a double-left click on an element in the Selected box puts it *back* in the original list).

The elements you select will be displayed in Excel in the order chosen, from left to right, as an indivisible array. *You won't be able switch the fields around* once they are pasted into Excel, so carefully plan how you will want to view the link.

5. Select the **Copy Link** button in the lower right-hand corner. The link will be pasted into the specified cell(s) in Excel.

If you create the DDE link from within Aspen, your link is sent to the Windows® clipboard until you designate which cell(s) in Excel you would like the link to be pasted.

6. Import the link from the clipboard to Excel by following these steps:
 - a. Activate the Excel spreadsheet where you want the link.
 - b. Highlight the cell(s) into which the link will be pasted.
 - c. Click on the second custom Aspen button in Excel.

