The choices for single select are Radio button, Drop Down, List Box and Image Button.

Radio Button – Standard Radio Button single select. When "optional" an extra radio button "No option selected" appears automatically.

Drop Down – Standard Drop Down. Note that one selection is "no value." A different display type should be considered if value is "required".

List Box – Standard List Box. If set as "optional," the choice "No option selected" appears automatically. Scrolling depends on the template. If there are a larger number of values, the user will be able to scroll through them

Image Button – Image button allows inserting graphic instead in text. If text needs to be displayed along with the image, it must be imbedded in the image.

Multiple Select choices are Check Box and List Box – Multi Select.

Check Box – Standard Check Box

List Box Multi Select - Multi select is accomplished by using the standard "shift-click" or "control-click" functi

Free input is also allowed. Choices here are Free Input Match First Upper, Free Input Match First Lower and Free Input No Matching.

Free Input Match is most frequently used for the input of a number where there is a relationship that changes with quantity. One example would be change in list price based on number of pieces ordered.

Free input Match First Upper

Match First Upper will match the next higher break point if not an exact match. Example: break points could be standard extension cord length of 6,12,25,50ft. If user enters 28 the break point of 50 will be "matched" as 50 is the first upper. However, users input is retained and saved as the input can be used in calculations and formulas. In this example <*Value(example

attribute)*> would be 28 not 50.

Free input Match First Lower

Match First Lower will match the next lower break point if not an exact match. Example: break points watt ratings for light bulbs of 25, 60, 100 watts. If user enters 35 the break point of 25 will be “matched” as the first lower.

Free input Match No Matching

This allows user to input without restrictions. This could be used for special instructions, comments or feedback.

There are also two functions that are not user inputs, Hidden Calculated Match First Upper and Hidden Calculated Match First Lower, but depend on other input made by the user.

Hidden Calculated Match First Upper

This attribute is not visible to the user. It can be a formula or logical expression. The results of this are dependent on values of other attributes and that the hidden expression calculates. One example could be converting unit of measure. The output can be just the results of the calculation if break points are not specified. Or can match first upper if break points are specified.

Hidden Calculated Match First Lower

This is the same as Hidden Calculated Match First Lower, except would match to first lower if breakpoints were specified.

Examples of displays: Drop Down, List box, Radio Buttons and Check Boxes are shown in Figure 17-3.

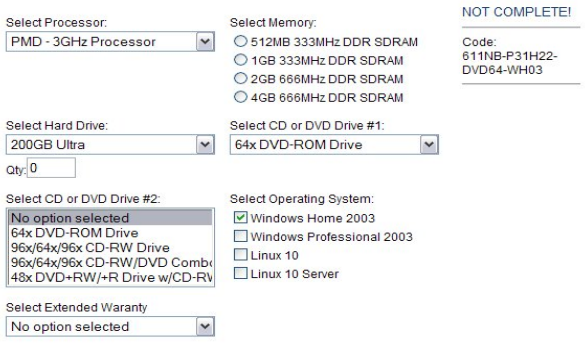

Figure 17-3 Display Examples

Custom Range Error Text - Enter custom error message. This message is associated with Free Input and will be displayed if an invalid value is entered.

Step – Enter Step number here.

Sub Rank – Enter Sub Rank number. This number is sequence that the attribute value will be displayed for selection on the user page.

Graphical placement of attributes is shown in Figure 17-4. In addition to being able to place attributes into 1, 2 or 3 vertical columns, it is also possible to position attributes anywhere in the configuration layer using absolute coordinates in pixels.

Admin side:
In order to specify attributes absolute position on the screen, administrator needs to provide X and Y coordinates. Upper left corner is position 0,0. Optionally, administrator can specify the width, height, and the background color for each attribute.

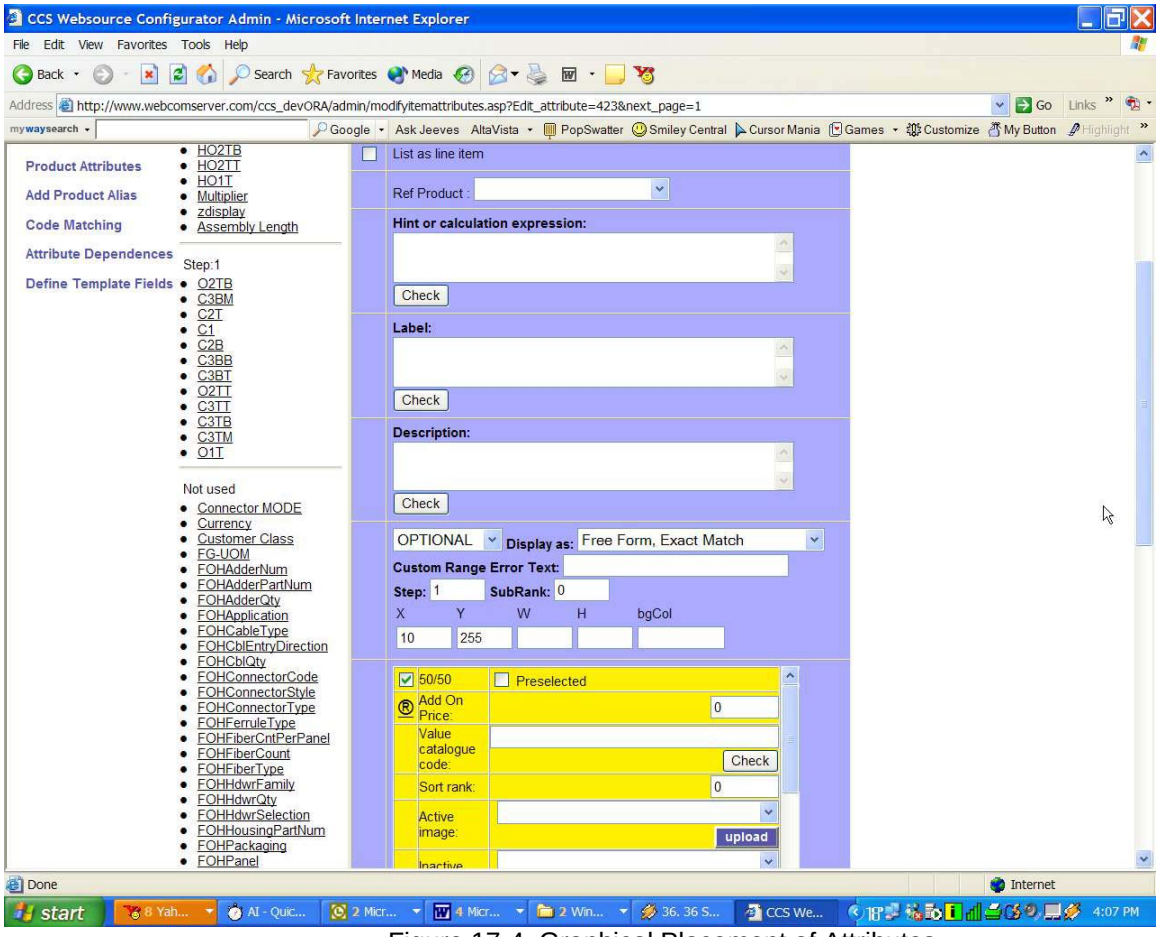

Figure 17-4 Graphical Placement of Attributes

User Side:

Below, Figure 17-5 is an example how attributes can be position in a left to right tree structure on the screen. Please note that some attributes in the below example have been designated as “Display as”: Display only, therefore user can view those attributes but cannot edit them.

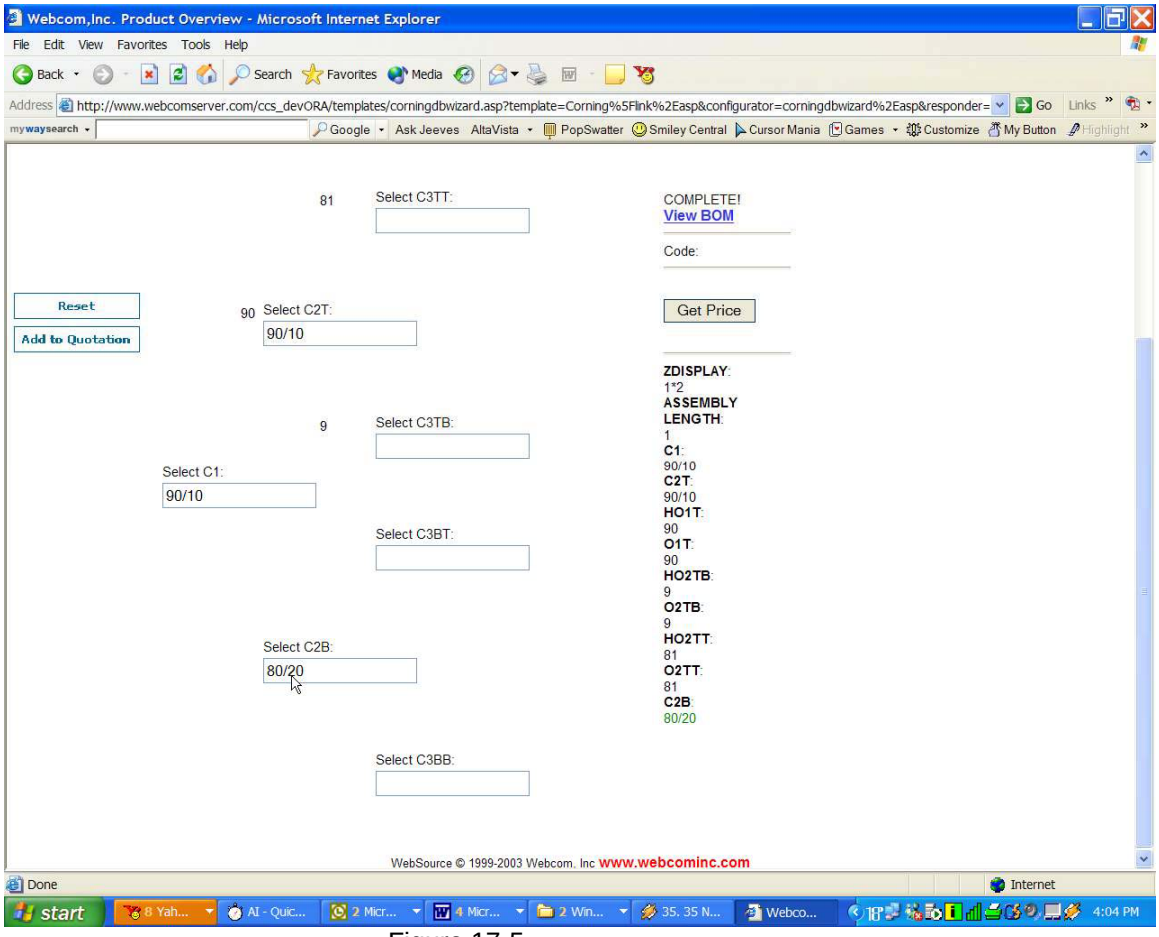

Figure 17-5

Following Graphical Placement are the attribute values associated directly with the product that is being defined. The attribute values that are associated with the specific product need to be selected and additional information completed to model the information for the product. It should be noted that frequently not all values of an attribute are used as can be seen under “Not Used” below the last step.

The first line of the attribute has a check box followed by the attribute display value. If the particular attribute value is needed for the specific product, select the check box. Note if all the attribute values will be used in the product a “Select All” button is available at the top of the page (Figure 17-1). This button only selects the values to be displayed to the user. Additional product specific information still needs to be completed.

At the end of the first line there is a second check box labeled "Pre-selected." If there is a "Default" value, select this box.

The next line is "Add On Price." The base price of the product was defined in "Product Definition" Figure 15-1. Fill in the pricing adder of this particular attribute value.

Value Catalog Code – Fill in the value associated with this particular product attribute that is used to define it in the catalog number structure. Refer to Product Definition, page 15-3, for details.

Sort Rank –It is not necessary that the attribute value appear in the same order as listed in the attribute value definition list. This sequence can be modified for the user by inserting the desired sequence display rank here. Display rank is shown low to high.

The following attribute descriptions refer to Figure 17-6 which is found on the next page.

Active Image – This image will appear in place of the attribute display value in the configurator. The user can make selection based on images.

Inactive Image – This value is not used in the configurator. It is displayed in the responder and is therefore Inactive for configuration.

Default Quantity – If the attribute needs a quantity and the default quantity is other than "1," fill in the quantity.

Price Calculation Expression – If the price adder for the attribute value is not static and is related to other attributes, the formula that calculates the price is filled in here

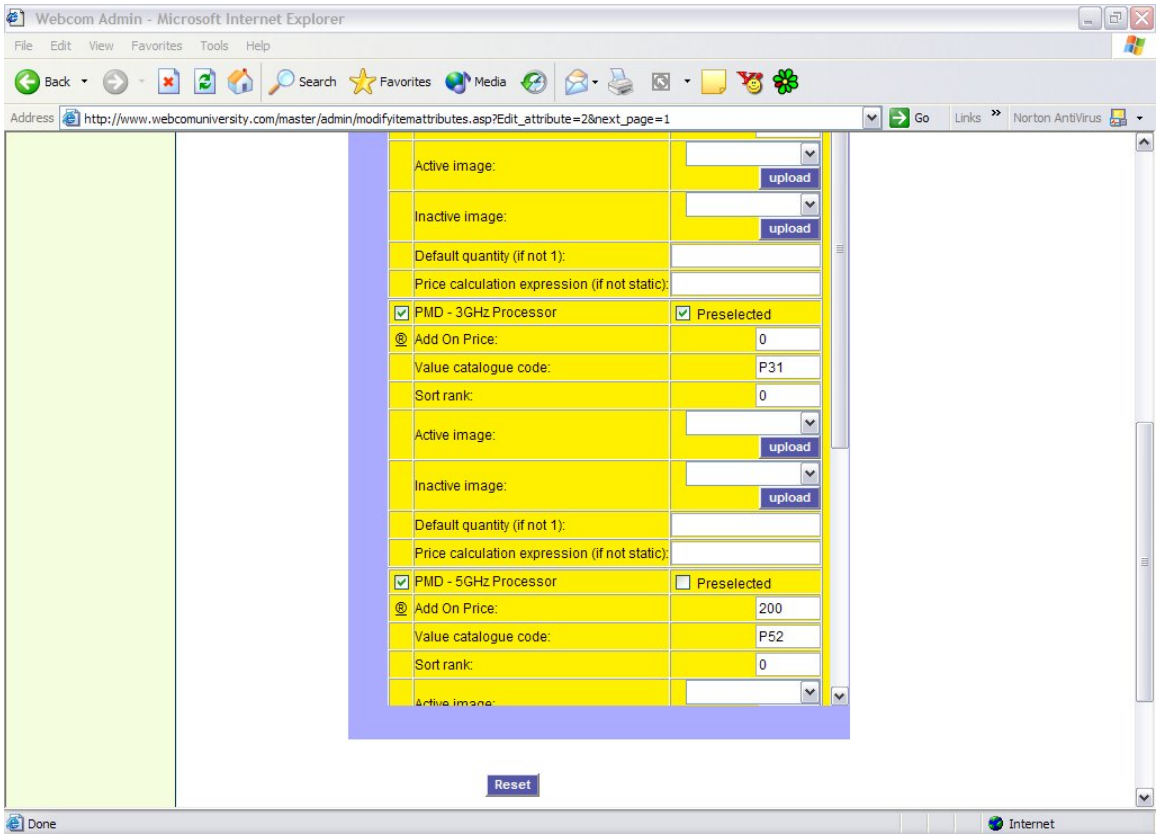

Figure 17-6 Define Product Attribute Values

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