

PRODUCT'S HIERARCHY

Product's Hierarchy feature enables the administrator to configure one product from another, and another from another... as shown in Figure 51-1:

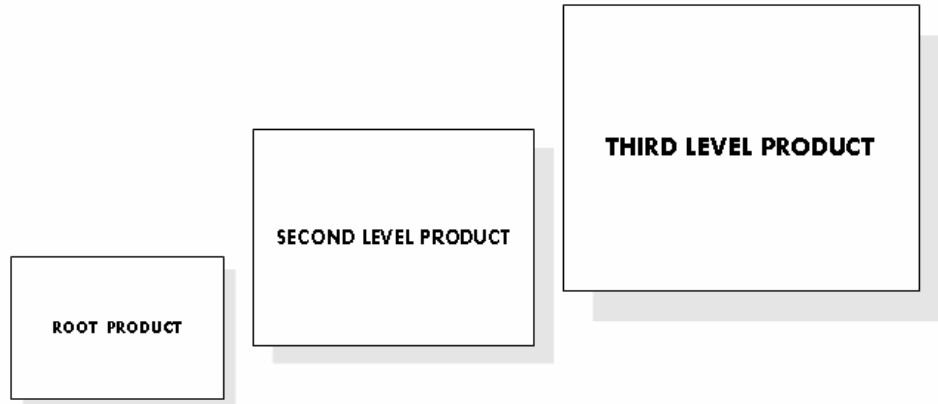


Figure 0-1 – Product's Hierarchy

Attributes from Root Product are sent to second level product and third level product.

Inheritance is also present: Second level product and third level product (or deeper, fourth, fifth...etc if needed) have the same Properties as the Root product and all products "below" them (the 3rd has the properties from the 2nd, the 4th has the properties from the 3rd etc).

The tag `<*XValue()*>` is used for Product Hierarchy (Nested Products).

Here is the syntax for using attribute values that are set in parent or child products (Subproducts).

If the Parent Product wants to use a value set in a Subproduct:

`<*XValue(Subproduct/Attribute)*>` where:

Subproduct is the attribute name in the Parent product that is setup to be a Subproduct. Attribute is the attribute name in the Subproduct that you want to retrieve.

If the Subproduct wants to use a value set in a Parent product:

`<*XValue(.. /Attribute)*>` where:

../ means go up one level in the nested product hierarchy and look at the value in Attribute.

One thing to keep in mind is that attribute values of the same name are not "passed" automatically from Parent to Child or vice versa. Rules need to be setup to do that.

An **example** would be if you are modeling a computer and a monitor as separate products, and the monitor is setup as a Subproduct within Computer. Both products have Color as an attribute, and the color of the monitor must be the same as the color of the computer. In the Monitor product you would have a rule that would say:

Condition: [EQ](<*XValue(..../Color)*>,Black) (If the Color attribute one product level above is set to Black)

Action: <*SELATV(Color:Black)*> (Select Color:Black in Monitor)

If roles were reversed and the Monitor color restricted the color of the computer, then a rule in the Computer product could look like this:

Condition: [EQ](<*XValue(Monitor Child/Color)*>,Black) (If the Monitor Child attribute in the Computer product (which has been setup to reference the Monitor product) has a color of black)

Action: <*SELATV(Color:Black)*> (Select Color:Black in Computer)

You can use the <*Xvalue*> tag just about anywhere. If you just wanted to display the value of the Monitor color somewhere in the Computer Product, <*Xvalue(Monitor Child/Color)*> would return the value of Color in the Monitor Child subproduct.

If you have several nested products, you can get the value of anything in that hierarchy:

<*XValue(PrinterChild/TonerChild/Attribute)*>

This would mean go to the attribute named "PrinterChild1" (which points to a product (say Printer)) and then in the Printer product, go to an attribute in it that is called TonerChild (which points to a product called Toner), and in the Toner product, retrieve the value of Attribute.

If the value of something in the Computer product was needed in the Toner product:

<* XValue(..../Attribute) *>

This tag in the Toner product would go up two product levels to Computer and retrieve the value for Attribute.

How to make Product's Hierarchy:

First make the Root Product

Then make the x and in the "Ref Product" drop down choose the name of the Root Product and in the "Display as" drop down choose "Subproduct", as shown in Figure 51-2:

The screenshot shows a configuration interface with the following elements:

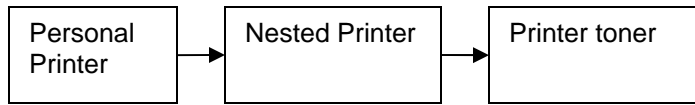
- A label "inter" followed by a blue button labeled "Select All".
- A label "em" followed by "Ref Product :", a dropdown menu showing "Personal Printer", and a blue button labeled "CLEAR".
- A label "Display as:" followed by a dropdown menu showing "Subproduct".
- A label "je Error Text:" followed by an empty text input field.

Figure 51-2 Subproduct

From one Subproduct another can be configured and in this way create the hierarchical structure.

Subproducts are Line Items. To clarify here is an **Example**:

The following is the hierarchical structure that is needed:



First create the product “Personal Printer” with attribute “Personal Printer”. The “Ref Product” is “Personal Printer” itself, as shown in figure 51-3:

The screenshot shows a configuration window for a product named "Personal Printer". The window has a title bar with a checkmark and the text "Personal Printer" and "Select All". Below the title bar, there is a checkbox for "List as line item" and a "Ref Product" dropdown menu set to "Personal Printer" with a "CLEAR" button. Below this, there are fields for "REQUIRED" (a dropdown), "Display as:" (a dropdown set to "Radio Button"), "Custom Range Error Text:" (a text input), "Step:" (a text input set to "1"), and "SubRank:" (a text input set to "1"). There are three tabs: "Properties" (selected), "Triggers", and "Attribute Values". Under the "Properties" tab, there is a "Hint or calculation expression:" field with a "Check" button. Below that is a "Label:" field with the text "Reliable personal printer" and a "Check" button. At the bottom is a "Description:" field with the text "Personal color printer" and a "Check" button.

Figure 51-3 Personal Printer as Root Product

Second create Attribute “Nested Printer” – Ref product is “Personal Printer”, in “Display as” drop down choose “Subproduct”, as shown in Figure 51-4:

Figure 51-4 Nested Printer as Second Level Product

Third create the product “Printer toner”, with attribute “Printer toner” and Ref Product “Printer toner”, as shown on figure 51-5:

Figure 51-5 Print Toner Attribute – Print Toner

Fourth in the product “Personal Printer” create the attribute “Nested Toner” with Ref Product “Printer toner” and in “Display as” drop down choose “Subproduct”, as shown in Figure 51-6:

Figure 51-6 Nested Toner Attribute in Personal Printer

User Side:

The link “Configure Nested Printer” is shown in Figure 51-7:

Figure 51-7 User Side

Clicking the link “Configure Nested Printer” opens a new window with a separate responder. On the left side are the buttons “Save” and “Cancel” instead of “Reset” and “Add to Quotation”.

Save - saves this values and goes back to the Configurator

Cancel – goes back to Configurator without saving

This is shown in Figure 51-8.

re	cel	Reliable personal printer	Complete
		<input checked="" type="radio"/> HP Deskjet 9800	
		Select Nested Toner:	Part Number: Personal Printer-HP 9800 De
		<input type="button" value="Configure Nested Toner"/>	Total Price: 370.00
		NOT SELECTED	Personal Printer:
		Select Color:	HP Deskjet 9800
		<input checked="" type="radio"/> No option selected	
		<input type="radio"/> Blue	
		<input type="radio"/> Red	

Figure 51-8 Nested Printer

To go to the next Level, click the “Configure Nested Toner” link, as shown in figure 51-9:



The screenshot shows a configuration window with a sidebar on the left containing three menu items. The main area contains a section titled "Pls select" with two radio button options: "Black-and-white" and "Color". To the right of this section is a table with a blue header row containing the text "Not Complete" and a white data row containing the text "Part Number: Printer Toner-".

Not Complete
Part Number: Printer Toner-

Figure 51-9 Printer Toner

The same procedures would be followed by the user to configure, save or cancel Print Toner