



A new sub-section called Calculations is now available in the Property Palette for Display and Text Items, this allows the Developer to create an Item which is based on values held in other Items, previous to this Developers needed to create items and populate them (and maintain them) using Post-Insert, When-Validate-Item etc triggers.

With Calculated Items all of the above processing is unnecessary, as the block functionality will take care of it.

Calculated Items cannot be Database Items.



Calculated Items can be defined as two entirely different modes ...

- Formula
- Summary





A Formula is based on a calculation of items which exist in the form and is the more simpler of the modes to utilise.

In this example the Formula consists of multiplying two items from the same Block together, each item is referenced using the bind notation, a different formula could include system variables, parameters or hard coded values.

| | |
|--------------------|--------------------------------|
| ■ Calculation Mode | Formula |
| ■ Formula | :si_no_in_stock*:si_unit_price |

In addition SQL functions can be used such as decode, substr etc so usage is not restricted to numeric calculations.



A Summary performs the same functionality as a group function in SQL, therefore it will produce one value for an entire block rather than differing values for each row.

Unlike a Function, a Summary can be created outside of the Block it performs its calculation on, therefore there are more settings when a Summary mode is selected ...

| | |
|--|----------------|
| <input checked="" type="checkbox"/> Calculation Mode | Summary |
| ◦ Formula | |
| <input checked="" type="checkbox"/> Summary Function | Sum |
| <input checked="" type="checkbox"/> Summarized Block | ORDER_DETAILS |
| <input checked="" type="checkbox"/> Summarized Item | SI_NO_IN_STOCK |



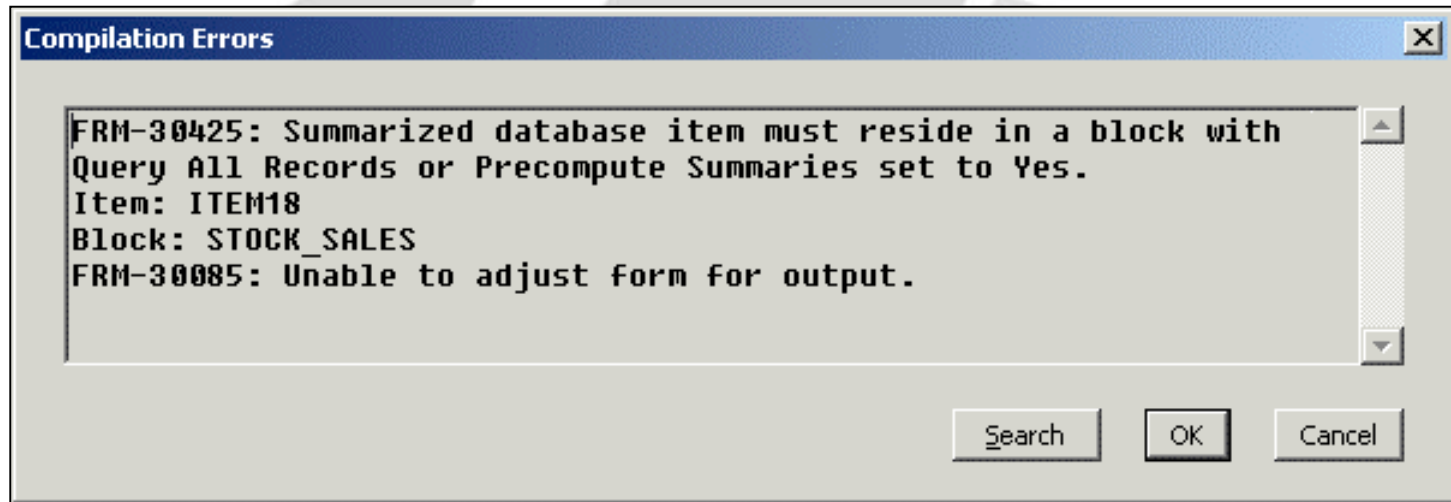
In the previous example, a Summary item has been defined to 'sum' the values of the :order_details.si_no_in_stock item ..

Because this will return one value the Developer should set the 'Number of Items Displayed' to one if the block is multi-row

Note that when a Formula is changed to a Summary then the existing Formula will remain, in some circumstances this will cause a compilation error so it is recommended that the Developer remove this code before closing the Property Palette



The following error message is displayed occasionally when a Summary is created ...



The setting of the Block properties must allow the Summary to calculate the totals based on all records in the table not just those currently in the Form's buffer.