

Dynamic Calculation using VBA in Bex Reports.



Applies to:

Bex Reporting using Workbooks in BI 7.0. For more information, visit the [Business Intelligence homepage](#)

Summary

This article is a step by step guidance for using VBA Code in a Bex Workbook Requirement is to calculate Ratings based on Ratio field in Bex Report. As Bex is not capable of filling with a constant Value, the Options we have are:

- 1) Add this field to Info Provider and use a Routine in the update Rule or
- 2) Write VBA code in the workbook.

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Author Bio

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Table of Contents

Bex Report:	3
Requirement of Constant values in Report:.....	4
Visual Basic Editor:	4
VB Code:.....	5
Related Content.....	8
Disclaimer and Liability Notice.....	9

Bex Report:

There is a report with characteristics and KFs as Below

- Material
- Material Freight Class

And Key Figures Weight, FoB Cost and Ratio

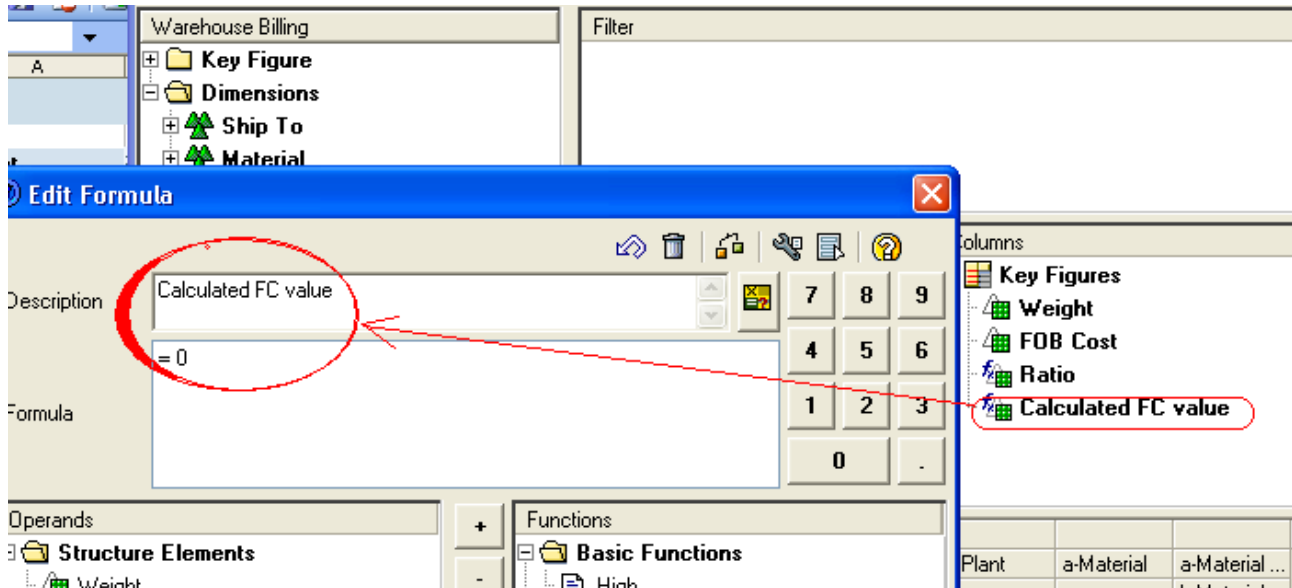
Material		Material Freight Class	Weight	FOB Cost	Ratio
10UPC5510	A5 BULK CO	F	46 LB	\$ 985.79	26.34
10UPCX34	MEDIA FOR	F	4,382 LB	\$ 526.30	0.15
10UPCX45	10UPCX45	Not assigned	1,046 LB	\$ 0.00	0.00
10UPCX46	MEDIA FOR	F	7,308 LB	\$ 1,321.07	0.22
2LCA	DXC960MD	N	0 LB	\$ 1.00	62.00
2NPF970/B	2NPF970/B	F	319 LB	\$ 4,844.48	18.82
2NPQM91D/B	2NPQM91D/B	F	1 LB	\$ 151.38	177.09
2UPCC13	2UPCC13	F	1,221 LB	\$ 592.90	0.60
2UPCC14	2UPCC14	F	13,901 LB	\$ 1,624.59	0.14
2UPCC15	2UPCC15	F	1,021 LB	\$ 989.70	1.20
2UPCR154H	2UPCR154H	F	13,984 LB	\$ 2,324.88	0.21
2UPCR155H	2UPCR155H	F	334 LB	\$ 401.68	1.49
2UPCR156H	2UPCR156H	F	31 LB	\$ 0.00	0.00
2UPCR156HF	2UPCR156HF	F	1,805 LB	\$ 1,758.24	1.21
2UPCR204	2UPCR204	Not assigned	18,861 LB	\$ 0.00	0.00
2UPCR205	2UPCR205	Not assigned	195 LB	\$ 0.00	0.00
2UPCR206	2UPCR206	Not assigned	1,344 LB	\$ 0.00	0.00
2UPCR46A	2UPCR46A	J	1,176 LB	\$ 448.60	0.47
2UPCR68A/1	2UPCR68A/1	Not assigned	114 LB	\$ 0.00	0.00
2UPCR710	2UPCR710	Not assigned	518 LB	\$ 0.00	0.00
2UPCR710.B	2UPCR710.B	Not assigned	1 LB	\$ 0.00	0.00
2UPCT14PF	2UPCT14PF	Not assigned	7,410 LB	\$ 0.00	0.00
2YPCR154AS	2YPCR154AS	Not assigned	24,990 LB	\$ 0.00	0.00
A20X86BERMX	A20X86BER	Not assigned	7 LB	\$ 0.00	0.00
A20X86BRMX	A20X86BRM	Not assigned	32 LB	\$ 0.00	0.00

Requirement of Constant values in Report:

Based on above report the requirement is to have another field calculated FC which should be based on below logic

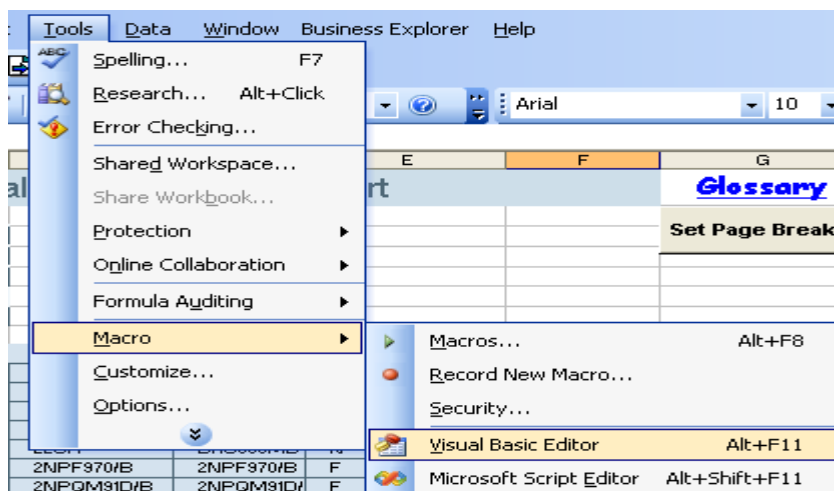
- 0.00 < Ratio < 5.00 = A
- 5.00 <= Ratio < 10.00 = B
- 10.00 <= Ratio < 25.00 = C
- 25.00 <= Ratio < 50.00 = D
- 50.00 <= Ratio = E

To solve this first we need to a formula variable to Query and set its value to some value like "0"

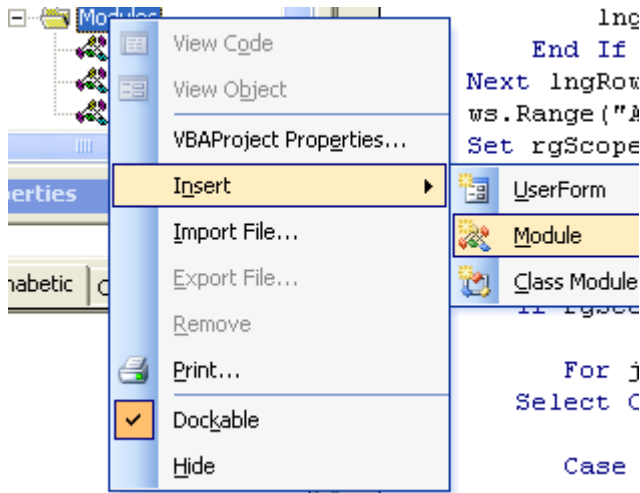


Visual Basic Editor:

Then goto Macro and Visual Basic Editor



Insert New Module.



VB Code:

Add Below Code there

```
Set ws = ThisWorkbook.ActiveSheet
```

```
    lngLastRow = ws.Range("A65000").End(xlUp).Row
```

```
For lngRow = lngLastRow - 1 To 1 Step -1
```

```
    If ws.Range("A" & lngRow).Font.Bold Then Exit For
```

```
    If IsEmpty(ws.Range("A" & lngRow)) Then
```

```
        lngRow = ws.Range("A" & lngRow).End(xlUp).Row + 1
```

```
    End If
```

```
Next lngRow
```

```
ws.Range("A" & lngRow).Select
```

```
Set rgScope = ActiveCell.CurrentRegion
```

```
lngLastRow = rgScope.Rows.Count + rgScope.Row - 1
```

```
For i = 1 To 10
```

```
    If rgScope.Rows.Cells(1, i).Value = "Calculated FC value" Then
```

```
        For j = 2 To lngLastRow - 8
```

```
            Select Case rgScope.Rows.Cells(j, i - 1).Value
```

```
                Case Is >= 50
```

```
                    rgScope.Rows.Cells(j, i) = "E"
```

```
                Case Is >= 25
```

```
                    rgScope.Rows.Cells(j, i) = "D"
```

Case Is >= 10

```
rgScope.Rows.Cells(j, i) = "C"
```

Case Is >= 5

```
rgScope.Rows.Cells(j, i) = "B"
```

Case Is < 5

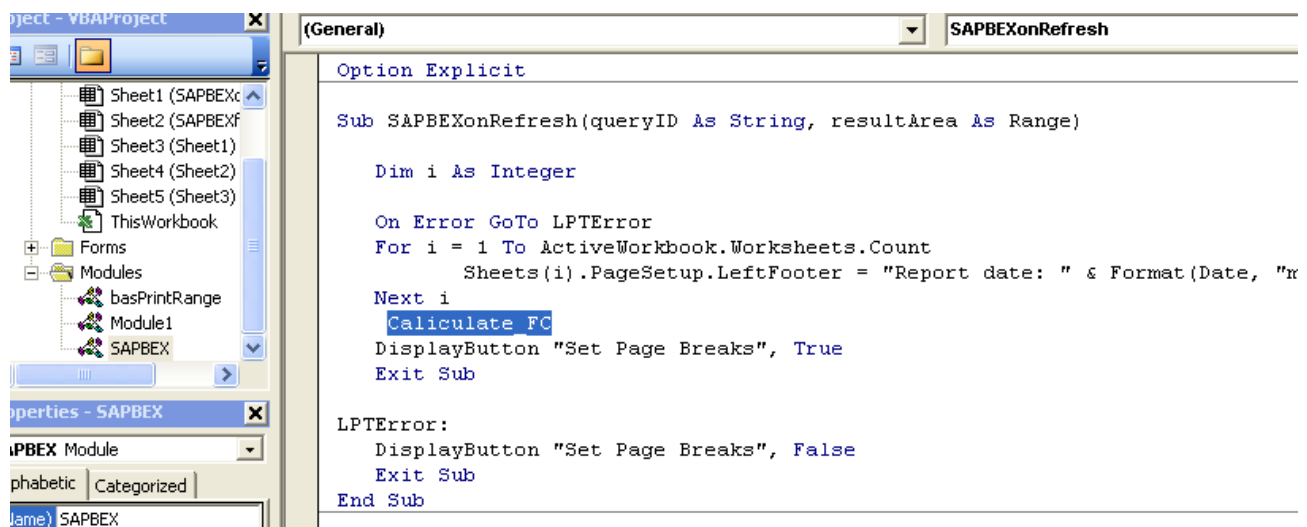
```
rgScope.Rows.Cells(j, i) = "A"
```

Case Else

```
rgScope.Rows.Cells(j, i) = "X"
```

End Select

And call the Module Name in **SAPBEXon Refresh**.



When Report is executed we can see the new ratings calculated in the Result area:

Material		Material Freight C	Weight	FOB Cost	Ratio	Calculated FC value
10UPC5510	A5 BULK CO	F	46 LB	\$ 985.79	26.34	D
10UPCX34	MEDIA FOR	F	4,382 LB	\$ 526.30	0.15	A
10UPCX45	10UPCX45	Not assigned	1,046 LB	\$0.00	0.00	A
10UPCX46	MEDIA FOR	F	7,308 LB	\$ 1,321.07	0.22	A
2LCA	DXC960MD	N	0 LB	\$ 1.00	62.00	E
2NPF970/B	2NPF970/B	F	319 LB	\$ 4,844.48	18.82	C
2NPQM91D/B	2NPQM91D/	F	1 LB	\$ 151.38	177.09	E
2UPCC13	2UPCC13	F	1,221 LB	\$ 592.90	0.60	A
2UPCC14	2UPCC14	F	13,901 LB	\$ 1,624.59	0.14	A
2UPCC15	2UPCC15	F	1,021 LB	\$ 989.70	1.20	A
2UPCR154H	2UPCR154H	F	13,984 LB	\$ 2,324.88	0.21	A
2UPCR155H	2UPCR155H	F	334 LB	\$ 401.68	1.49	A
2UPCR156H	2UPCR156H	F	31 LB	\$0.00	0.00	A
2UPCR156HF	2UPCR156HI	F	1,805 LB	\$ 1,758.24	1.21	A
2UPCR204	2UPCR204	Not assigned	18,861 LB	\$0.00	0.00	A
2UPCR205	2UPCR205	Not assigned	195 LB	\$0.00	0.00	A
2UPCR206	2UPCR206	Not assigned	1,344 LB	\$0.00	0.00	A
2UPCR46A	2UPCR46A	J	1,176 LB	\$ 448.60	0.47	A
2UPCR68A/I	2UPCR68A/I	Not assigned	114 LB	\$0.00	0.00	A
2UPCR710	2UPCR710	Not assigned	518 LB	\$0.00	0.00	A
2UPCR710.B	2UPCR710.B	Not assigned	1 LB	\$0.00	0.00	A
2UPCT46E	2UPCT46E	Not assigned	7,410 LB	\$0.00	0.00	A

Related Content

[How to integrate Bex with VB](#)

http://help.sap.com/saphelp_nw04/helpdata/en/ba/45583ca544eb51e10000000a114084/frameset.htm

<https://www.sdn.sap.com/irj/scn/thread?messageID=1719655>

For more information, visit the [Business Intelligence homepage](#).

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