

# Use of Variable in Report Painter/Writer



## Applies to:

Any business organization having reports developed using Report Painter/Report Writer. This is applicable from R/3 4.6 Version. For more information, visit the [Enterprise Resource Planning homepage](#).

## Summary

This article displays the process of creation of variable to be used in Report Painter/Report Writer to calculate period and year based on selection parameter based on which data to be fetched at displayed in report output.

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**Created on:** 19th May 2010

## Author Bio

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## Introduction

As a solution provider you may have to create variables for calculation of period and year based on selection parameter based on which data to be fetched at displayed in report output developed in Report Painter/Report Writer.

## Objective

The objective of this article is to explain step by step process for creation of variable and the procedure how the period and year will be calculated and assignment of the same in report painter/writer report developed.

## Business Requirement

Business may ask for the report say cost center report based on specific GL Account/cost element to know the variance in actual expenses incurred for a particular quarter in fiscal year with comparative values of the same or other quarter in previous fiscal year. Since in SAP the concept of quarter is not is not used, the business requirement can be met by the use of variable that will identify the periods based on the quarter entered in the selection parameter.

## Solution

### Steps involved:

#### Step – I

To determine variables to be created and the formula to be defined to ascertain at the period related to the quarter.

Quarter		1	2	3	4
Starting Period of the quarter		1	4	7	10
<b>Variable</b>					
ZQ1	External Variable (for selection parameter)	1	Quarter (1)	This is for fiscal year entered in selection screen	
ZQ2	IF 'ZQ1' >=2 THEN 'ZQ1'+2 ELSE 1	1	4	5	6
ZQ3	IF'ZQ2' >= 5 THEN 'ZQ2'+2 ELSE 'ZQ2'	1	4	7	8
ZQ4	IF'ZQ3' >= 8 THEN 'ZQ3'+2 ELSE 'ZQ3'	1	4	7	10
ZQ5	'ZQ4'	1	4	7	10
ZQ6	'ZQ5'+2	3	6	9	12
<b>Variable</b>					
ZQ1A	External Variable (for selection parameter)	1	Quarter (2)	This is for another fiscal year in selection screen	
ZQ2A	IF 'ZQ1A' >=2 THEN 'ZQ1A'+2 ELSE 1	1	4	5	6
ZQ3A	IF'ZQ2A' >= 5 THEN 'ZQ2A'+2 ELSE 'ZQ2A'	1	4	7	8
ZQ4A	IF'ZQ3A' >= 8 THEN 'ZQ3A'+2 ELSE 'ZQ3A'	1	4	7	10
ZQ5A	'ZQ4A'	1	4	7	10
ZQ6A	'ZQ5A'+2	3	6	9	12

For determination of fiscal year, standard variable can be used or can be created in the similar way as of period.

#### Step – II

## Procedure

Access the activity using one of the following navigation options:

SAP Menu	Information Systems→Adhoc Reports→Report Painter →Report Writer→Variable
Transaction Code	GS11
User Actions and Values	Creation of external variable for selection screen Creation for internal/formula variable Assign variable in report that is to be developed. Assign the report to report group Execute the report.
Result	Report displays the data for specified quarter and year.

Creation of external variable for selection screen

**Create Variable: Initial Screen**

General data

Variable

Reference field

Table   
Field name

Variable type


Value  
 Formula  
 Set

Copy from

Variable

Continue or Enter

### Change Formula Variable: Basic Data

 Type change: Value


Formula variable

Table  EC-PCA: Totals Table

Field name  Period

Description

Proposal

Formula  



Variable

Formula exit

+ - \* /

Entry fields on selection screens

Internal variable

Authorization group   

Save.

Similarly create other external variable.

## Creation of internal/formula variable

**Change Formula Variable: Basic Data**

Type change: Value

Formula variable: ZQ2

Table: GLPCT EC-PCA: Totals Table

Field name: RPMAX Period

Description: Period

Proposal

Formula: IF 'ZQ1' >=2 THEN 'ZQ1'+2 ELSE 1

Variable

Formula exit

+ - \* /

Entry fields on selection screens

Internal variable

Authorization group

**Change Formula Variable: Basic Data**

Type change: Value

Formula variable: ZQ4

Table: GLPCT EC-PCA: Totals Table

Field name: RPMAX Period

Description: Period

Proposal

Formula: IF 'ZQ3' >= 8 THEN 'ZQ3'+2 ELSE 'ZQ3'

Variable

Formula exit

+ - \* /

Entry fields on selection screens

Internal variable

Authorization group

Similarly create other internal variable.

Assignment of variable in the report

**Report Painter: Display Report**

Report Painter toolbar:

Report	ZOPEX1	Opex	Analysis Report	Horizontal page 1 /
Section	0001	Opex	Analysis Repor	
Standard layout	SAP			

Format group:                    0                    0                    0                    0

Lead column	Qtr &ZQ1, &8AYEAR1	Qtr &ZQ1A, &8AYEAR2	Absolute Difference	Difference %
- Total	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
Total	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX	XXX,XXX,XXX
.				
.				
.				

Element definition: Qtr &ZQ1, &8AYEAR1

Basic key figure: HSL

Characteristic values

Selected characteristics						
Name	From	text	To	text	M	
Record Type	@					
Version	@					
Fiscal Year	<input checked="" type="checkbox"/> 8AYEAR1	Fiscal Ye ...				
Period	<input checked="" type="checkbox"/> ZQ5	Period	<input checked="" type="checkbox"/> ZQ6	Period		

Available characteristics:

- Name
- Original client
- Partner Pr.Ctr
- Currency
- Base Unit
- Debit/Credit
- Distr. key currency
- Dist. key quantities
- Functional Area
- Trading Partner
- Plant

Buttons:  Cancel

Assign report to report to report group

### Change Report Group: Reports

Report definition

Library: ZPC      2Wire PCA Reports  
 Table: GLPCT      EC-PCA: Totals Table  
 Report group: Z0P1      Opex Analysis Report

Report	Description	Status
Z0PEX1	Opex Analysis Report	10/30/2007

Execute the report

### Opex Analysis Report: Selection

Variation Output Parameters... Data Source... Extract Parameters...

Selection values

Fiscal Year (1)	2006
Fiscal Year (2)	2007
Quarter (1)	1
Quarter (2)	1

Selection groups

Company Code(s)

Or value(s) 5000 to 5999



## Opex Analysis Report

Variation: Profit Center

2Wire Inc.,  
Quarterly Opex Analysis Report

Profit Center/Group: OPEX OPEX

Lead column	Qtr 1, 2006	Qtr 1, 2007	Absolute Difference
931100 IT-Development Personnel			
931200 IT-Development OpEx			
933100 Facilities Personnel			
933200 Facilities OpEx			
610000 Gross Salaries	5,821,938	7,258,547	1,436,609-
610010 Bonus	160,433	893,930	733,497-
610300 Stock Based Comp Exp	419,889		419,889
610040 Commissions	350,952	497,295	146,342-
610020 Vacation	350,400	447,347	96,947-
610030 Payroll Taxes	563,112	808,926	245,815-
610050 Other Payroll Expenses	27,668	50,284	22,616-
610060 Employee Benefits	631,772	763,611	131,839-
611010 ER 401K Match Expense		6,300	6,300-
610070 Worker's Compensation	65,713	92,757	27,045-
610080 Consulting	444,474	292,598	151,876
610090 Telephone	101,806	183,413	81,607-
610095 Cellular Phone	135,549	133,120	2,430
630060 Temp Help	356,970	621,678	264,708-
630000 Recruitment Fees	204,490	249,053	44,562-
630010 Relocation Expenses		39,771	39,771-
630020 Employee Tuition/Dev	7,513	27,558	20,045-
630040 Dues & Subscription	40,121	64,330	24,209-
630050 Employee Welfare	52,809	62,231	9,421-
640000 Air Travel	235,997	331,566	95,568-
640010 Auto Rental	28,557	35,726	7,168-
640020 Auto Mileage/Fuel	57,507	80,788	23,282-
640030 Hotel/Lodging	140,366	261,990	121,624-
640040 Meals & Entertainment	152,674	160,915	8,241-
650010 ASIC Design	695,603	781,714	86,111-

## Opex Analysis Report

Variation: Profit Center

2Wire Inc.,  
Quarterly Opex Analysis Report

Profit Center/Group: 5400 Sales NA Personal

Lead column	Qtr 1, 2006	Qtr 1, 2007	Absolute Difference
931100 IT-Development Personnel			
931200 IT-Development OpEx			
933100 Facilities Personnel			
933200 Facilities OpEx			
610000 Gross Salaries	163,074	233,017	69,943-
610010 Bonus		3,782	3,782-
610300 Stock Based Comp Exp	114,680		114,680
610040 Commissions	93,977	178,251	84,274-
610020 Vacation	8,873	28,212	19,339-
610030 Payroll Taxes	19,901	36,014	16,113-
610060 Employee Benefits	19,689	26,422	6,734-
611010 ER 401K Match Expense		200	200-
610070 Worker's Compensation	1,981	2,343	362-
610090 Telephone	921	856	65
610095 Cellular Phone	6,220	7,852	1,632-
630060 Temp Help			
630000 Recruitment Fees	109	1,000	891-
630040 Dues & Subscription		421	421-
630050 Employee Welfare	927		927
640000 Air Travel	27,519	34,859	7,340-
640010 Auto Rental	7,009	5,227	1,782
640020 Auto Mileage/Fuel	12,499	8,183	4,316
640030 Hotel/Lodging	18,288	21,286	2,999-
640040 Meals & Entertainment	83,470	40,537	42,933
650030 Outside Services		195	195-
650040 Small Equipment Purchases		186	186-
650050 Small Fur/OE Purch	1,581		1,581
650080 Hardware/Software Purchases	7,510	5,304	2,206
660400 Depreciation	457		457

## Related contents

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

For more information, visit the [Enterprise Resource Planning homepage](#).

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