

TECH TIP

CONDITIONAL RUNNING TOTAL USING VARIABLES BI PUBLISHER

BI Publisher allows the use of variables in a template. The variable is assigned, updated, and displayed using the set_variable and get_variable syntax. This Tech Tip outlines a simple example to create a running total variable and then how to provide further flexibility by applying a condition to it.

The following is the custom report sample XML used for this Tech Tip.

xml version="1.0" encoding="UTF-8"?
<data_ds></data_ds>
<uuu_p_p_record_no></uuu_p_p_record_no>
•••
<uuu_p_datetimeformatf></uuu_p_datetimeformatf>
<co></co>
<project id="">1160</project>
<project no="">P-0023</project>
<pre><project name="">Hospital Manhattan Expansion</project></pre>
<record no="">CO-0001</record>
<title>Change Order 1</title>
<status>Approved</status>
<initial amt="">9000.0</initial>
line="list-source-style-source-style-list-source-style-source-style-list-source-style-list-source-style-list-source-style-list-source-style-list-source-style-source-style-style-source-style-list-source-style-list-source
<0>
<pre><project id="">1160</project></pre>
<pre><project no="">P-0023</project></pre>
<pre><project name="">Hospital Manhattan Expansion</project></pre>
<record no="">CO-0002</record>
<title>Change Order 2</title>
<pre><status>Approved</status></pre>
<initial amt="">3500</initial>
<a block="" of="" state="" state<="" td="" the="">
0
<0>
<project id="">1160</project>
<project no="">P-0023</project>
<pre><project name="">Hospital Manhattan Expansion</project></pre>
<pre><record no="">co-0003</record></pre>
— — — — — — — — — — — — — — — — — — — —
<title>Change Order 3</title>
<status>Approved</status>
<initial_amt>3000.0</initial_amt>
<adjusted_amt>-700.0</adjusted_amt>
<project_id>1160</project_id>
<pre><project_no>P-0023</project_no> </pre>
<pre><project_name>Hospital Manhattan Expansion</project_name></pre>
<record_no>CO-0004</record_no>
<title>Change Order 4</title>
<status>Approved</status>
<initial_amt>4000.0</initial_amt>
<pre><adjusted_amt>1000.0</adjusted_amt></pre>

These tech tips are offered free of charge in the spirit of sharing knowledge with others. They do not include technical support, should you have a problem with them. We are always interested in how they can be improved, please do not hesitate to email us your comments. These tips have been thoroughly tested by our consultants in a variety of environments. Please read these tech tips thoroughly and be sure that you understand them before thrying to use them. We can not be responsible for issues that develop hecause of the configuration of your hardware, technical environment or application of the tech memos. If you are not sure, then we urge not source thencil technical support or your local support consultant for assistance.

CONDITIONAL RUNNING TOTAL USING VARIABLES

The initial RTF design template includes a Repeating Group (form fields F and E) for each <CO> row in the XML. Sorted in ascending order by Record No.

ecord No	Title	Initial Amount	· · · · ·	Final Approved Amount
Record No	nue	Anoun	Anount	Anoun
F rec_no	TITLE	\$999.00	\$999.00	\$999.00 E

Example for BI Publisher Properties for form field F in the Record No column.

BI Publisher Properties	×	Bl Publisher Properties	×	BI Publisher Properties X
Properties Sorting Advanced		Properties Sorting Advanced		Properties Sorting Advanced
		Sort By	_	Code
For Each CO	/	RECORD_NO V Ascending V Date/Text	\sim	<pre><?for-each:CO?><?sort:RECORD_NO;'ascending';data-type='text'?> ^</pre>
Absolute Path		Then By	_	
Group By	/	Then By	\sim	
Break: No Break ~			\sim	
Data already sorted		Then By	_	×
	_		\sim	Text to display F
Word Properties OK Cano	el	Word Properties OK Car	ncel	Word Properties OK Cancel

Form Fields:

Column	Form Field	Code in Advanced tab
Record No	F	for-each:CO? sort:RECORD_NO;'ascending';data-type='text'?
Record No	rec_no	RECORD_NO?
Title	TITLE	TITLE?
Initial Amount	\$999.00	INITIAL_AMT?
Adjusted Amount	\$999.00	adjusted_amt?
Final Approved Amount	\$999.00	INITIAL_AMT+ADJUSTED_AMT?
Final Approved Amount	E	end for-each?

Final Approved Amount is the sum of INITIAL_AMT and ADJUSTED_AMT.

The previewed output in PDF:



CONDITIONAL RUNNING TOTAL USING VARIABLES

Title	Initial Amount		
hange Order 1	\$9,000.00	\$500.00	\$9,500.00
hange Order 2	\$3,500.00	\$300.00	\$3,800.00
hange Order 3	\$3,000.00	(\$700.00)	\$2,300.00
hange Order 4	\$4,000.00	\$1,000.00	\$5,000.00
	hange Order 2 hange Order 3	hange Order 2 \$3,500.00 hange Order 3 \$3,000.00	hange Order 2 \$3,500.00 \$300.00 hange Order 3 \$3,000.00 (\$700.00)

Running Total using a Variable

This example will provide a running total for the Initial Amount.

Create a new form field selecting the Initial Amt tag

V	ïew	AC	ROBAT	Bl Publis	her	Desigr	n Layou
	123 Fiel	ld		Condi	tional l	Format	🔁 PDF
Fie	ld						×
Fin	d					Find	Next
	Field						^
			blisher T I 64bit	emplate Bu	ilder f	or	
	T	fell m	ne more				
	÷) Co					
			Project lo Project N				
			Project N				
			Record I				
		🔲	Title				
		🔲	Status				
		🔲	Initial Am	t			
		🔲	Adjusted	Amt			× .
Exa	mple		90	0.00			
			_				
Calculation V On Grouping							rouping
	Force L	TRD	irection				
[Inse	ert		Close		Help	1

The variable INITIAL_RUN_TOT is declared and set (assigned) to a value of 0. The \$_XDOCTX syntax allows the variable to be accessible throughout the RTF template (global document text).

<?xdoxslt:set_variable(\$_XDOCTX, 'INITIAL_RUN_TOT', 0)?>

Once declared the variable value can be updated accordingly using the following code. In this example, INITIAL_RUN_TOT is updated within the repeating group. Using the set_variable syntax, the variable is retrieved for each row in the repeating group and the INITIAL_AMT value is added to the INITIAL_RUN_TOT value.



<?xdoxslt:set_variable(\$_XDOCTX, 'INITIAL_ RUN_TOT', xdoxslt:get_variable(\$_XDOCTX, 'INITIAL_ RUN_TOT') + INITIAL_AMT)?>

To display the INITIAL_RUN_TOT value the get_variable syntax is used.

<?xdoxslt:get_variable(\$_XDOCTX, 'INITIAL_RUN_TOT')?>

A new form field is used to display the Initial Amount Running Total. In the Properties tab, select any 'Data Field' with Number as the 'Type' selection. Enter an appropriate 'Format' (format mask) and 'Text to display' (as below). The key addition is the display code to enter in the Advanced tab.

BI Publisher Properties	×	BI Publisher Properties
Properties Advanced		Properties Advanced
General Data Field INITIAL AMT V		
Text to display \$999.00		xdoxslt:get_variable(\$_XDOCTX, 'INITIAL_ RUN_TO'</td
Formatting Type Number ~		
Format \$#,##0.00;(\$#,##0.00) ~		
Force LTR		
Data Aggregation Function		
Scope Normal		
Word Properties OK	Cancel	Word Properties OK

The variable declaration syntax is placed at the top of the report outside of the reporting group. The updated code is placed within the repeating group. For easier viewing for this example, the code is entered directly rather than within a form field. The display form field is included in an additional column.

xdoxslt:set_v</th <th>variable (\$_XDOCTX,</th> <th>'INITIAL_RUN_TOT', 0)?></th> <th></th> <th></th> <th></th> <th></th>	variable (\$_XDOCTX,	'INITIAL_RUN_TOT', 0)?>				
				Initial		
			Initial	Amount	Adjusted	Final Approved
Record No	Title		Amount	Running Total	Amount	Amoun
F rec_no	TITLE	xdoxslt:set_variable(\$_XDOCTX, 'INITIAL_RUN_TOT',<br xdoxslt:get_variable(\$_XDOCTX, 'INITIAL_RUN_TOT') + INITIAL_AMT)?>	\$999.00	\$999.00	\$999.00	\$999.00 E

Previewing the output in PDF:



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CONDITIONAL RUNNING TOTAL USING VARIABLES

			Initial Amount					
Record No) Title	Initial Amount	Running Total	Adjusted Amount	Final Approved Amoun			
CO-0001	Change Order 1	\$9,000.00	\$9,000.00	\$500.00	\$9,500.00			
CO-0002	Change Order 2	\$3,500.00	\$12,500.00	\$300.00	\$3,800.00			
CO-0003	Change Order 3	\$3,000.00	\$15,500.00	(\$700.00)	\$2,300.00			
CO-0004	Change Order 4	\$4,000.00	\$19,500.00	\$1,000.00	\$5,000.00			

Conditional Running Total using a Variable

This example will include a condition of adding to the running total if the Adjusted Amount value is greater than 0. The variable ADJUST_RUN_TOT is declared as before but the update code is modified to support the condition. The value ADJUSTED_AMT is enclosed within an if else condition. If ADJUSTED_AMT is greater than 0 then this value is added to the retrieved ADJUST_RUN_TOT variable otherwise 0 is added (remains the same).

<?xdoxslt:set_variable(\$_XDOCTX, 'ADJUST_RUN_TOT', xdoxslt:get_variable(\$_XDOCTX, 'ADJUST_ RUN_TOT') + xdoxslt:ifelse(ADJUSTED_AMT > 0, ADJUSTED_AMT, 0)?>

A new form field is added as in the previous example with the display code referencing the new variable.

<?xdoxslt:get_variable(\$_XDOCTX, 'INITIAL_RUN_TOT')?>

The additional code has been added just like the previous example.

				Initial		Adjusted	
			Initial	Amount	Adjusted	Amount	Final Approv
Record No	Title		Amount	Running Total	Amount	Running Total	Amou
rec_no	TITLE	xdoxslt:set_variable(\$_XDOCTX, 'INITIAL_ RUN_TOT',</td <td>\$999.00</td> <td>\$999.00</td> <td>\$999.00</td> <td>\$999.00</td> <td>\$999.00</td>	\$999.00	\$999.00	\$999.00	\$999.00	\$999.00
		xdoxslt:get_variable(\$_XDOCTX, 'INITIAL_RUN_TOT') + INITIAL_AMT)?>					
		xdoxslt:set_variable(\$_XDOCTX, 'ADJUST_ RUN_TOT',</td <td></td> <td></td> <td></td> <td></td> <td></td>					
		xdoxslt:get variable(\$ XDOCTX, 'ADJUST RUN TOT') +					
		xdoxslt:ifelse(ADJUSTED_AMT > 0, ADJUSTED_AMT, 0))?>					

Previewing the output in PDF:

		Initial Amount	Adjusted Amount
Record No	Title	Initial Running Adjusted Amount Total Amount	Running Total Final Approved Amoun
CO-0001	Change Order 1	\$9,000.00 \$9,000.00 \$500.00	\$500.00 \$9,500.00
CO-0002	Change Order 2	\$3,500.00 \$12,500.00 \$300.00	\$800.00 \$3,800.00
CO-0003	Change Order 3	\$3,000.00 \$15,500.00 (\$700.00)	\$800.00 \$2,300.00
CO-0004	Change Order 4	\$4,000.00 \$19,500.00 \$1,000.00	\$1,800.00 \$5,000.00

